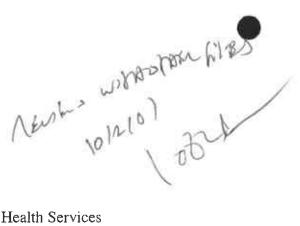


August 30, 2001



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

RE: 2001 First Quarter Groundwater Monitoring Heating Oil UST

Former Sears Retail Center #1058

2633 Telegraph Avenue Oakland, California Case I.D. #STID 1082 For Sears, Roebuck & Co.

Dear Mr. Gholami

It has been brought to my attention that the wrong set of Figures was included in the 2001 First Quarter Groundwater Monitoring report for the above listed site. Please replace Figures 2 and 3 with the figures enclosed with this letter. Please feel free to contact me or at 714.835.6886 if you have questions or comments.

Respectfully Submitted,

URS CORPORATION

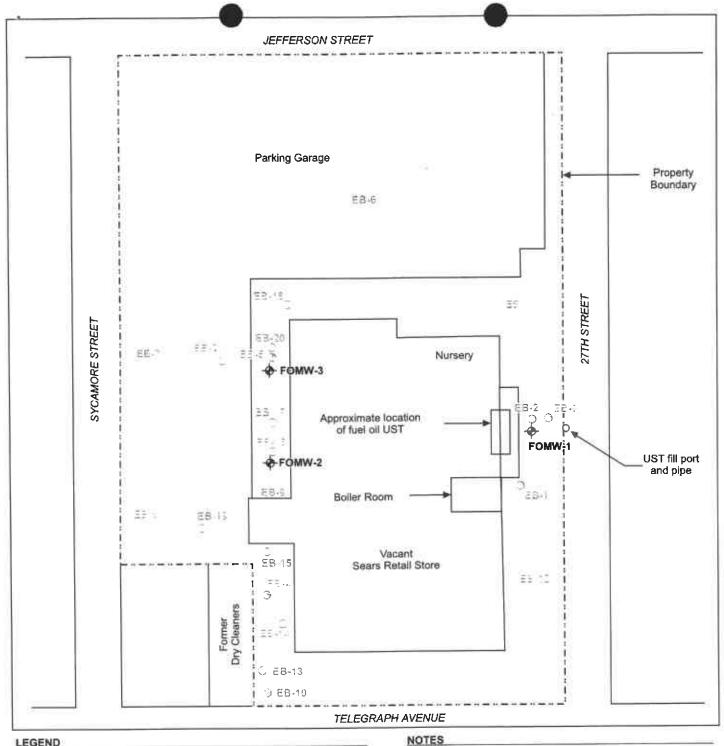
J.S. Rowlands, R.G., C.HG.

Project Manager

cc: Mr. Scott DeMuth, Sears Roebuck and Co.

Mr. Ryan Hartley, URS Corporation

Mr. Tim Lester, Environmental Equalizers



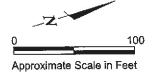
LEGEND

Approximate location of exploratory boring (Lowney, May 1998)

- Approximate location of exploratory boring (Lowney, April 1998)
- Approximate location of exploratory boring (SECOR, November 1998)
- Fuel oil monitoring well locations (URS/Dames & Moore)

Reference: Lowney Associates (1998)

SECOR (1998)

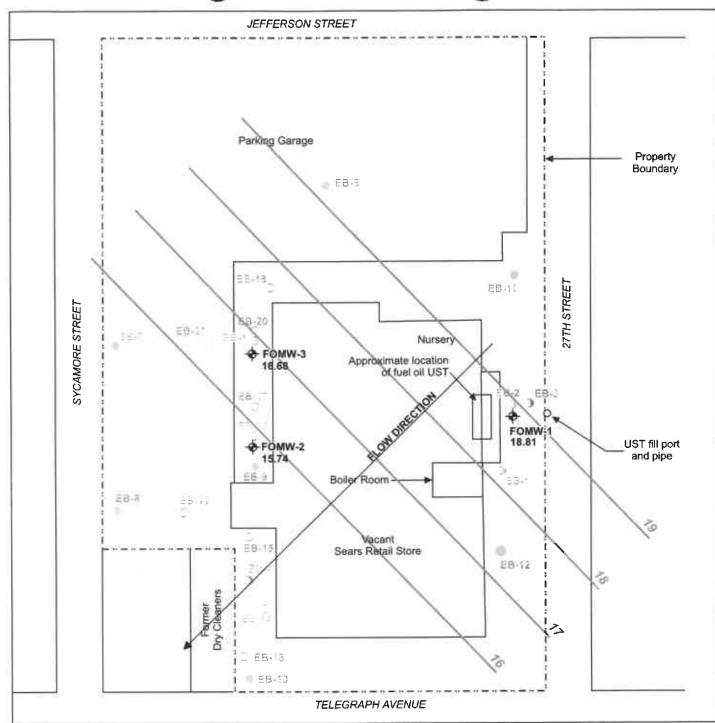


#### SITE PLAN SHOWING **BORING AND MONITORING WELL LOCATIONS**

Sears Roebuck & Company Site Assesment

2001 00188-248-170 Oakland, California





LEGEND

Approximate location of exploratory boring (Lowney, May 1998)

Approximate location of exploratory boring (Lowney, April 1998)

Approximate location of exploratory boring (SECOR, November 1998)

+ Fuel oil monitoring well locations (URS/Dames & Moore)

15.52 Water level measurements in feet above Mean Sea Level Datum (MSLD)

— 16 Groundwater contours for Oct. 2000 in feet above Mean Sea Level Datum (MSLD)

Reference: Lowney Associates (1998) SECOR (1998)



#### NOTES

(1) Groundwater analytical results presented in tables 1 and 2.

# 2001 FIRST QUARTER GROUNDWATER LEVELS AND CONTOURS

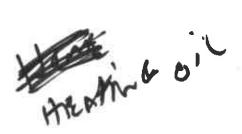
June 2001 22-00000139.01 Sears Roebuck & Company Site Assessment Oakland, California





July 6, 2001

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



RE:

2001 First Quarter Groundwater Monitoring
Former Sears Retail Center #1058
2633 Telegraph Avenue
Oakland, California
Case I.D. #STID 1082
For Sears, Roebuck & Co.

Dear Mr. Gholami

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 2001. Please feel free to contact me or Taras Kruk at (714) 835-6886 if you have questions or comments.

Respectfully Submitted,

**URS CORPORATION** 

J.S. Rowlands, R.G., C.HG.

Project Manager

cc: Mr. Scott DeMuth, Sears Roebuck and Co.

Mr. Ryan Hartley, URS Corporation

Mr. Tim Lester, Environmental Equalizers

# URS

REPORT
2001 FIRST QUARTER
GROUNDWATER MONITORING
FORMER SEARS RETAIL CENTER #1058
2633 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA
CASE I.D. # STID 1082
FOR SEARS, ROEBUCK & CO.

URS Job No. 22-00000139.01 July 6, 2001

#### TABLE OF CONTENTS

| 1.0   | INTRODU        | CTION   | . 1 |
|-------|----------------|---|-----|
| 2.0   | SITE DES       | CRIPTION  | . 1 |
| 2.    | l REGIO        | NAL GEOLOGY AND HYDROGEOLOGY  | . 2 |
| 3.0   | BACKGR         | OUND  | . 3 |
| 4.0   | HEALTH         | AND SAFETY PLAN   | . 4 |
| 5.0   | QUARTE         | RLY GROUNDWATER MONITORING  | . 5 |
| 5.    | I GROUN        | DWATER GAUGING AND CONTOURING   | - 5 |
| 5.    |                | NG AND SAMPLING METHODS   |     |
| 5.    |                | ATORY ANALYSIS PROGRAM  |     |
| 5.    |                | MANAGEMENT  |     |
| 6.0   | MONITO         | RING RESULTS  | . 7 |
| 6.    |                | OW GROUNDWATER CONDITIONS   |     |
| 6.    | 2 LABOR        | ATORY ANALYTICAL RESULTS  | . 7 |
| 7.0   | DISCUSSI       | ON  | . 8 |
| 8.0   | SCHEDUI        | _E  | . 5 |
|       |                |   |     |
| 9.0   | REFEREN        | NCES  | 10  |
| TAI   | BLES           |   |     |
| Tab   | le 1           | Historical Summary of Groundwater Levels and Field Parameters   |     |
| Tab   | le 2           | Historical Summary of Groundwater Analyses Results  |     |
| FIG   | URES           |   |     |
| Figu  | ire 1          | Vicinity Map  |     |
| _     | ire 2<br>ire 3 | Site Plan Showing Soil Boring and Groundwater Monitoring Well Locations Site Plan Showing Groundwater Elevation Contours and Flow Direction |     |
| ı ığı |                | one I am onowing Groundwater Dictation Comounts and I for Discount  |     |
| API   | PENDICIE       | S   |     |
| App   | endix A        | Laboratory Reports and Chain of Custody Documents   |     |
| App   | endix B        | URS Data Validation Reports   |     |

REPORT
2001 FIRST QUARTER
GROUNDWATER MONITORING
FORMER SEARS RETAIL CENTER #1058
2633 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA
CASE I.D. # STID 1082
URS JOB NO. 22-00000139.01
FOR SEARS, ROEBUCK & CO.

#### 1.0 INTRODUCTION

This report has been prepared by URS Corporation (URS; formerly as Dames & Moore) on behalf of Sears, Roebuck & Co. (Sears). It presents results of the 2001 First Quarter Groundwater Monitoring conducted at the above-referenced site (Figure 1). The former Sears retail center (Site) is located at 2633 Telegraph Avenue. The groundwater monitoring event consisted of "post purge" groundwater sample collection from two of three monitoring wells (FOMW-1, FOMW-2, FOMW-3) installed on the Site during May 2000. Monitoring well FOMW-1 was not sampled due to the presence of separate phase product in the well casing. The purpose of the groundwater monitoring was to assess groundwater conditions in the vicinity of a slurry-filled 10,000-gallon fuel oil underground storage tank (UST, Figure 2). The work is being performed under the regulatory oversight of the Alameda County Environmental Health Service (ACEHS).

#### 2.0 SITE DESCRIPTION

The Site is bounded by 27<sup>th</sup> Street to the north, Telegraph Avenue to the east, Sycamore Street to the south, and Northgate Avenue to the west (Figure 2). The property is occupied by a vacant Sears retail store (currently undergoing redevelopment) that was constructed in 1930 and an above-grade parking garage that was constructed in the 1960's. Prior to the construction of the store, single and multi-family residences dating to the turn of the century occupied the site. The former Sears retail center is three stories tall (approximately 120,000 square feet) with a basement. Sears no longer owns the site but maintains responsibility for environmental issues related to the slurry-filled 10,000 fuel oil UST. The Site elevation is approximately 30 feet above mean sea level (MSL), which slopes gently to the south towards San Francisco Bay.

A slurry-filled 10,000-gallon fuel oil UST is located at the northern end of the retail center along 27<sup>th</sup> Street. It is constructed of single-walled steel with product piping that extends into a nearby

-1-

basement (former boiler room) of the retail center. The top of the UST is located beneath the loading dock of the store approximately 25 to 30 feet below ground surface (bgs). It is accessible through an opening in the loading dock where a 5 feet by 5 feet shaft extends down to the UST. The UST is contained in a concrete vault estimated to be about 10 feet high and 30 feet long. The product piping was sealed and capped when the UST was taken out of commission sometime during the 1960's. The site is currently being redeveloped and portions of the former Sears building, including the loading dock area, are being demolished.

#### 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 Site is located on the eastern flank of The San Francisco Basin, a broad Franciscan depression. The basement rock is respectively overlain by the Santa Clara Formation, the Alameda Formation, and the Temescal Formation. These formations consist of unconsolidated sediments ranging in total thickness to approximately 1000 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 for organic clays and alluvial fan deposits of sands, gravels and silts. The uppermost Holocene Temescal Formation is an alluvial deposit ranging in thickness from one to 50 feet and consists primarily of silts and clays with a basal gravel unit. (CRWQCB, San Francisco Bay Region, June 1999).

The site is located within the Oakland sub-area 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 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 (CRWQCB, San Francisco Bay Region, June 1999).

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#### 3.0 BACKGROUND

Lowney Associates (Lowney) performed a "Phase I Environmental Site Assessment (ESA) and Soil and Groundwater Quality Evaluation" in April, 1998 and a "Phase II Soil and Groundwater Evaluation," in July, 1998. The first assessment included advancing five exploratory borings in three areas of recognized environmental concerns for collection of soil samples and groundwater grab samples (Figure 2). Borings EB-1, EB-2, and EB-3 were driven in an area between the boiler room and a suspect pipe in the 27th Street sidewalk. Two borings were drilled within 10-feet of an adjacent dry cleaners (EB-4) and in the vicinity of a possible former tire and oil shop at the southwest corner of the retail store (EB-5). Detectable concentrations of total petroleum hydrocarbons (TPH) ranging from 79 milligrams per kilogram (mg/kg) to 9,500 mg/kg were present in soil samples collected from borings EB-1, EB-2, EB-3 and EB-5. Benzene was not detected in any of the soil samples submitted for chemical analysis.

During the second assessment conducted by Lowney, seven additional borings were advanced down gradient of the anticipated groundwater flow direction to collect selected soil and groundwater grab samples (Figure 2). The investigation also confirmed the location and existence of the 10,000-gallon UST beneath the loading dock of the retail center and identified the piping beneath the sidewalk of 27th Street as the UST fill line. Soil samples collected from borings EB-6 through EB-12 contained non-detectable (ND) concentrations of TPH and benzene, toluene, ethylbenzene, total xylenes (BTEX).

Groundwater grab samples were collected by Lowney during the two assessments from borings EB-1 through EB-6, EB-10, EB-11, and EB-12. Groundwater grab samples collected from borings EB-1, EB-2, EB-3, and EB-5 contained detectable concentrations of TPH ranging from 38,000 micrograms per liter ( $\mu$ g/L) to 480,000  $\mu$ g/L. Groundwater grab samples collected from borings EB-2 and EB-4 contained detectable concentrations of benzene at 4.8  $\mu$ g/L and 4.3  $\mu$ g/L, respectively. The remaining groundwater grab samples contained ND concentrations of TPH and BTEX.

SECOR International Incorporated (SECOR) subsequently performed an additional soil and groundwater investigation during November 1998 to further assess subsurface soils and groundwater near the southeastern corner of the property. The scope of work was approved by the ACEHS and included the advancement of nine soil borings (EB-13 through EB-21) for the collection of soil and groundwater grab samples (Figure 2). Soil samples collected from borings EB-19, EB-20, and EB-21 contained detectable concentrations of TPH ranging from 4 mg/kg to 160 mg/kg. All soil samples, excluding EB-20-7, analyzed during the investigation contained ND concentrations of BTEX. Soil sample EB-20-7 contained 0.044 mg/kg of ethylbenzene and ND concentrations of

-3-

benzene, toluene and total xylenes.

Groundwater grab samples collected by SECOR from borings EB-13, EB-14, EB-15 and EB-18 contained TPH concentrations ranging from ND to 2,300  $\mu$ g/L. The groundwater grab samples collected from borings EB-13, EB-15 and EB-18 contained ND concentrations of BTEX. Groundwater grab sample EB-14 contained ND concentrations of benzene and toluene, 3.2  $\mu$ g/L ethylbenzene, and 6.1  $\mu$ g/L total xylenes.

URS installed three groundwater monitoring wells (FOMW-1, FOMW-2, FOMW-3) on the Site in May 2000 (Figure 2). The monitoring wells were located adjacent to, and south of the slurry-filled UST. Soil samples collected from the borings contained concentrations of total extractable petroleum hydrocarbons (TEPH) as diesel fuel or bunker oil ranging from ND to 3,200 mg/kg. BTEX and methyl tertiary butyl ether (MTBE) were not detected in any of the soil samples analyzed. Groundwater samples have been collected from the wells on a quarterly basis since June 2000. Analytical results for previous quarterly sampling events are provided on Table 2.

#### 4.0 HEALTH AND SAFETY PLAN

Prior to initiating the field activities, URS prepared a site-specific Health & Safety plan to:

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

URS field personnel reviewed the Health & Safety plan prior to commencing the field procedures. Field monitoring activities were recorded and the Health and Safety Plan and maintained in the project files at URS's San Francisco office. A copy of the Health and Safety Plan remained onsite during field operations.

#### 5.0 QUARTERLY GROUNDWATER MONITORING

The 2001 First Quarter Groundwater Monitoring was performed on March 27, 2001. The monitoring was performed on the three groundwater wells (FOMW-1, FOMW-2, and FOMW-3). The monitoring consisted of groundwater gauging of all three wells, and purging, sampling and analysis of two of the wells (FOMW-2 and FOMW-3). A description of the monitoring procedures is presented below.

#### 5.1 GROUNDWATER GAUGING AND CONTOURING

Prior to sampling, each groundwater monitoring well was observed for the presence of free product using a disposable polyethylene bailer. Separate phase product was observed floating in well FOMW-1 with a measured thickness of approximately 0.01 foot. Due to the presence of the separate phase product, well FOMW-1 was not purged and sampled. Water levels were gauged using a Solinst water level indicator relative to the surveyed top of casing. Based on results of the water level measurements, an interpretive groundwater contour map was generated by standard three-point convention. Groundwater depths and elevations are listed in Table 1. A Site map showing groundwater flow direction is provided as Figure 3.

#### 5.2 PURGING AND SAMPLING METHODS

Prior to sample collection, wells FOMW-2 and FOMW-3 were purged of approximately three to five well casing volumes using a using a Grundfos RediFlo 2<sup>TM</sup> well pump. Water purged from the wells was monitored for field parameters, including temperature, pH, electrical conductivity, turbidity, dissolved oxygen, and oxygen reduction potential (redox). The measured field parameters are listed on Table 1.

The purging of wells FOMW-2 and FOMW-3 was terminated when temperature, pH, and conductivity measurements stabilized. Following the purging and well recovery to at least 80% of original static water levels (or after one hour of recovery), groundwater samples were collected for laboratory analysis by lowering a disposable polyethylene bailer approximately one to two feet below the air-water interface. Water samples were collected from the monitoring wells using pre-cleaned, disposable polyethylene bailers. Prior to sampling, each bailer was fitted with a low-flow velocity sampling port to minimize sample turbulence and volatilization. The down-hole pump was cleaned prior to use, and between wells by washing in a solution of Alconox™, rinsing with tap water, final

2001-1stQtr.doc -5-

rinsing with deionized water, and air drying. The polyethylene tubing connected to the pump was changed between each well.

Sample containers and handling procedures 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. A duplicate sample was collected from well FOMW-2 and labeled MW-6. An equipment blank (EB-1) was collected by pouring deionized water over the pump housing into sample containers following decontamination procedures. A trip blank, prepared by the laboratory remained in the ice chest during sample collection and transport. The sealed and labeled samples were placed in ice chests maintained and temperature of 4 to 7 degrees centigrade and transported to a California Department of Health Services (CDHS) accredited laboratory for analysis. Chain-of-custody records were maintained throughout the sampling program.

#### 5.3 LABORATORY ANALYSIS PROGRAM

Groundwater samples submitted to the CDHS-accredited laboratory were analyzed for TEPH as diesel-fuel by modified EPA 8015, and for volatile organic compounds (VOCs) as benzene, toluene, ethylbenzene, total xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA method 8260A. As part of the attenuation monitoring program, the groundwater samples were also analyzed for dissolved methane by EPA method 3810M, nitrate and sulfate by EPA method 9056, total alkalinity by EPA 310.1, total dissolved solids (TDS) by EPA 160.1, hydrocarbon degraders by ASTM G-22, and heterotrophic plate count by SM 9215A.

#### 5.4 WASTE MANAGEMENT

Liquid wastes (well purge water) were collected and stored in 55-gallon DOT-approved drums. Containers were numbered to identify the source of the wastes. The containers were stored onsite and properly disposed following review of the chemical analysis data.

#### 6.0 MONITORING RESULTS

#### 6.1 SHALLOW GROUNDWATER CONDITIONS

The groundwater potentiometric surface beneath the site occurs at depths ranging from approximately 9 to 11 feet bgs or an elevation of 16 to 18 feet above MSL. The water bearing zones are moderately confined, as water levels ascended within drill rods after penetration of the coarser-grained water bearing units during well installation. Water level measurements collected during the 2001 First Quarter Groundwater Monitoring indicate groundwater flow is to the southeast with an approximate gradient of 0.015 foot per foot. Groundwater elevations beneath the site have increased an average of 0.3 feet since the last monitoring event conducted in October 2000. Groundwater flow direction and gradient have remained consistent since the initial monitoring event conducted in June 2000. Groundwater elevations and flow directions are presented in Table 1 and shown on Figure 3.

#### 6.2 LABORATORY ANALYTICAL RESULTS

Chemical analyses results of the soil and groundwater samples collected during this investigation are presented in Table 2. The CDHS-accredited laboratory reports and chain-of-custody forms are provided as Appendix A. The groundwater samples collected from monitoring well FOMW-3 contained 170 µg/L TEPH as diesel fuel. TEPH were not detected in the sample collected from well FOMW-2. None of the groundwater samples collected and submitted for chemical analysis during this quarter contained detectable concentrations of VOCs as BTEX or MTBE.

URS conducted a check of data completeness for the analytical laboratory reports. Results indicate that "these data are usable, as qualified, for their intended purpose." URS's Data Validation Reports are included as Appendix B.

#### 7.0 DISCUSSION

Results of the 2001 First Quarter Groundwater Monitoring indicate that petroleum hydrocarbons within the diesel fuel range are present in shallow groundwater beneath the Site in the vicinity of the slurry-filled UST. VOCs associated with petroleum fuel products such as BTEX and MTBE were not detected in any groundwater samples collected during this quarter or the three previous sampling events conducted since the quarterly groundwater sampling program was initiated in June 2000. Results of the physical and biological testing are typical of nonaggressive oxidizing conditions. They also imply that conditions exist for biodegradation of residual petroleum hydrocarbons in the soil and groundwater.

Based on beneficial uses of groundwater in the Site vicinity, and the constituent concentrations detected during this and previous investigations, there appears to be no significant risk of petroleum hydrocarbon exposure to any sensitive receptors in the area. As introduced in the 2000 Second Quarter report, URS plans to further evaluate site conditions related to the petroleum hydrocarbon plume and establish closure conditions for the slurry-filled UST in accordance with the Urban Land Redevelopment (URL) Program. In order to establish closure criteria, the following additional investigative activities are proposed for the Site:

- Install one well downgradient of FOMW-1 to further delineate the petroleum hydrocarbon impacted plume.
- Drill two continuous core soil borings for additional soil characterization on the perimeter of the UST vault.
- Completely fill the UST vault and access manway with slurry to eliminate the potential of unauthorized entry into the vault.
- After one additional quarter of groundwater monitoring following the additional well
  installation and continuous soil coring and analysis program; complete a site closure analysis
  in accordance with the URL Program guidance document.

Given our current understanding of the petroleum hydrocarbon plume conditions, the Site will likely conform with URL Program closure criteria.

#### 8.0 SCHEDULE

This report represents the fourth submittal for quarterly groundwater monitoring at the site. The next groundwater sampling event has been scheduled for late June 2001. URS proposes to install one additional groundwater monitoring well and two additional soil borings in the area of the slurry filled UST during the third quarter 2001. Demolition and re-development activities are scheduled to begin at the site during June 2001. Options regarding permanent closure of the UST vault are currently being evaluated. The site will be evaluated for closure in accordance with the URL Program during the Fourth Quarter 2001. URS will continue to notify ACEHS personnel of upcoming field activities.

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

Respectfully Submitted,

**URS Corporation** 

Taras B. Kruk, R.G., C.HG.

Project Director

J.S. Rowlands, R.G., C.HG.

Project Manager

#### 9.0 REFERENCES

- California Regional Water Quality Control Board—San Francisco Bay Region Groundwater Committee (RWQCB), 1999. East Bay Plain Groundwater Basin Beneficial Use Evaluation Report. June 1999, 106 p.
- Dames & Moore, 2000. Site Assessment and Groundwater Monitoring Work Plan, Former Sears Retail Center #1058, 2633 Telegraph Avenue, Oakland, California, February 24.
- URS/Dames & Moore, 2001. Well Installation and 2000 Second Quarter Groundwater Monitoring, Former Sears Retail Center #1058, 2633 Telegraph Avenue, Oakland, California, January 30.
- Figuers, S., 1998. Groundwater Study and Water Supply History of the East Bay Plain, Alameda and Contra Costa Counties, California, 12 p.
- Lowney, 1998. Phase I Environmental Site Assessment and Soil and Groundwater Quality Evaluation, 2633 Telegraph Avenue, Oakland, California, April 21.
- Lowney, 1998. Soil and Groundwater Quality Evaluation, 2633 Telegraph Avenue, Oakland, California, July 6.
- Muir, Kenneth S., 1993. Geologic Framework of the East Bay Plain Groundwater Basin, Alameda, California. Prepared for the Alameda County Flood Control and Water Conservation District, August 1993.
- SECOR, 1998. Summary Report Subsurface Investigation and Site Closure Tasks, 2633 Telegraph Avenue, Oakland, California, December 8.
- URS, 2001. 2000 Third Quarter Groundwater Monitoring, Former Sears Retail Center #1058, 2633 Telegraph Avenue, Oakland, California, January 30.
- URS, 2001. 2000 Fourth Quarter Groundwater Monitoring, Former Sears Retail Center #1058, 2633 Telegraph Avenue, Oakland, California, June 21, 2001.

Table 1
Historical Groundwater Levels and Parameters
Sears Retail Center Store No. 1058
Oakland, California

|            |           |       |           | GROUND      | WATER LEVE | ELS         | GROUND    | WATER | SAMPLI | NG FIEL | D PARAME  | TERS    |
|------------|-----------|-------|-----------|-------------|------------|-------------|-----------|-------|--------|---------|-----------|---------|
| Monitoring |           |       | Product   | Depth to    | Casing     | Groundwater |           | ·     |        |         | Dissolved | Ferrous |
| Well       | Date      |       | Thickness | Groundwater | Elevation  | Elevation   | Temp.     | pН    | Cond   | Redox   | Oxygen    | lron    |
| No.        | Collected | Notes | (ft)      | (feet bgs)  | (MSL)      | (MSL)       | (Celcius) |       | (uS)   | (mV)    | (mg/l)    | (%)     |
| FOMW-1     | 6/8/00    | 1,2   | 0.00      | 9.59        | 27.81      | 18.22       | 18.3      | 6.72  | 659    | 13      | 0.28      | NA      |
|            | 10/10/00  | SP    | 0.01      | 9.91        | 27.81      | 17.90       | NA        | NA    | NA     | NA      | NA        | NA      |
|            | 12/15/00  | SP    | 0.01      | 9.44        | 27.81      | 18.37       | NA        | NA    | NA     | NA      | NA        | NA      |
|            | 3/27/01   | SP    | 0.01      | 9           | 27.81      | 18.81       | NA        | NA    | NA     | NA      | NA        | NA      |
| FOMW-2     | 6/8/00    |       | 0.00      | 11.14       | 26.65      | 15.51       | 14.7      | 7     | 673    | 10      | 2.92      | NA      |
|            | 10/10/00  |       | 0.00      | 12.34       | 26.65      | 14.31       | 15.8      | 7.58  | 420    | 0       | NA        | NA      |
| Ì          | 12/15/00  |       | 0.00      | 11.05       | 26.65      | 15.6        | 14.0      | 7.09  | 1210   | NA      | 0.15      | NA      |
|            | 3/27/01   |       | 0.00      | 10.91       | 26.65      | 15.74       | 15.4      | 7.62  | 305    | 92      | 0.61      | NA      |
| FOMW-3     | 6/8/00    | 2     | 0.00      | 10.48       | 26.8       | 16.32       | 15.0      | 6.87  | 689    | 23      | 0.22      | NA      |
|            | 10/10/00  |       | 0.00      | 11.15       | 26.8       | 15.65       | 15.6      | 7.66  | 430    | 39      | NA        | NA      |
|            | 12/15/00  |       | 0.00      | 10.36       | 26.8       | 16.44       | 14.1      | 7.31  | 1400   | 45      | 0.15      | NA      |
|            | 3/27/01   |       | 0.00      | 10.12       | 26.8       | 16.68       | NA        | NA    | NA     | NA      | NA        | NA      |

Notes:

MSL - Mean Sea Level

Groundwater Elevation reference to MSL

Groundwater Elevation = Top of casing elevation - Depth to Water

- 1 Sheen observed on water surface.
- 2 Petroleum odor in groundwater
- SP = Separate phase product in well
- NA: Not analyzed/Not available

#### TABLE 2 HISTORICAL SUMMARY OF GROUNDWATER MONITORING RESULTS SEARS RETAIL STORE NO. 1058 OAKLAND, CALIFORNIA

|            |          |       |      |     | L    | ABORA     | TOR    | Y ANA | LYTIC  | CAL F | RESULT | S  |        |            |         |         | P      | HYSICAL PARA | METERS    |             |                         |
|------------|----------|-------|------|-----|------|-----------|--------|-------|--------|-------|--------|----|--------|------------|---------|---------|--------|--------------|-----------|-------------|-------------------------|
| Monitoring |          |       |      |     | Vola | atile Org | ganics | by GC | /MS 82 | 260A  |        |    | 7      | ГЕРН       |         |         |        | Total        | Dissolved | Hydrocarbon | Heterotrophic           |
| Well       | Sample   |       | В    |     |      | Т         |        | E     | 7      | K     | МТВ    | E  | Diesel | Bunker Oil | Nitrate | Sulfate | TDS    | Alkalinity   | Methane   | Degraders   | Plate Count<br>(CFU/ML) |
| No.        | Date     | Notes | (ug/ | L)  | (u   | ig/L)     | (u     | ig/L) | (ug    | /L)   | (ug/L  | .) | (ug/L) | (ug/L)     | (mg/L)  | (mg/L)  | (mg/L) | (mg/L)       | (ug/ML)   | (CFU/ML)    |                         |
| FOMW-1     | 6/8/00   |       | <    | 0.5 | <    | 0.5       | <      | 0.5   | <      | 1     | < 5    | 5  | < 50   | J 1200     | NA      | NA      | 360    | 230          | < 0.01    | 390         | 4000                    |
|            | 10/10/00 | SP    |      | NA  |      | NA        |        | NA    |        | NA    | N      | A  | NA     | NA         | NA      | NA      | NA     | NA           | NA        | NA          | NA                      |
|            | 12/15/00 | SP    | < 1  | 0.5 | <    | 0.5       | <      | 0.5   | <      | 1     | < 5    |    | 260    | < 50       | NA      | NA      | NA     | NA           | NA        | NA          | NA                      |
|            | 12/15/00 | ı     | < 1  | 0.5 | <    | 0.5       | <      | 0.5   | <      | 1     | < 5    |    | 370    | < 50       | NA      | NA      | NA     | NA           | NA        | NA          | NA                      |
|            | 3/27/01  | SP    | í    | NA  |      | NA        |        | NA    |        | NA    | N.     | A  | NA     | NA         | NA      | NA      | NA     | NA           | NA        | NA          | NA                      |
| FOMW-2     | 6/8/00   |       | < (  | 0.5 | <    | 0.5       | <      | 0.5   | <      | 1     | < 5    |    | < 50   | < 50       | NA      | NA      | 250    | 150          | < 0.01    | 1           | 110                     |
|            | 10/10/00 | HE0   | < (  | 0.5 | <    | 0.5       | <      | 0.5   | <      | 1     | < 5    |    | < 50   | < 50       | NA      | NA      | 260    | 140          | < 0.01    | 170         | 1600                    |
|            | 12/15/00 |       | < (  | 0.5 | <    | 0.5       | <      | 0.5   | <      | 1     | < 5    |    | < 50   | < 50       | 7.8     | 30      | 210    | 190          | < 0.01    | 550         | 1000                    |
|            | 3/27/01  | ***   | < (  | 0.5 | <    | 0.5       | <      | 0.5   | <      | 1     | < 5    |    | < 50   | NA         | 8.4     | 47      | 290    | 130          | < 0.01    | 30          | 170                     |
|            | 3/27/01  | 1     | < (  | 0.5 | <    | 0.5       | <      | 0.5   | <      | 1     | < 5    |    | < 50   | NA         | 9.1     | 47      | 320    | 130          | < 0.01    | 40          | 70                      |
| FOMW-3     | 6/8/00   | 144   | < (  | 0.5 | <    | 0.5       | <      | 0.5   | <      | i     | < 5    |    | < 50   | J 1200     | NA      | NA      | 330    | 190          | < 0.01    | 440         | 110000                  |
|            | 6/8/00   | 1     | < (  | 0.5 | <    | 0.5       | <      | 0.5   | <      | I     | < 5    |    | < 50   | J 1100     | NA      | NA      | 330    | 180          | < 0.01    | 50          | 8000                    |
|            | 10/10/00 | 1/22  | < (  | 0.5 | <    | 0.5       | <      | 0.5   | <      | 1     | < 5    |    | 230    | < 50       | NA      | NA      | 300    | 170          | < 0.01    | 800         | 4000                    |
|            | 12/15/00 | (44   | < (  | 0.5 | <    | 0.5       | <      | 0.5   | <      | 1     | < 5    |    | 100    | < 50       | 3.2     | 30      | 290    | 190          | < 0.01    | 1200        | 1800                    |
|            | 3/27/01  | 7,55  | < (  | 0.5 | <    | 0.5       | <      | 0.5   | <      | 1     | < 5    |    | 170    | NA NA      | 3.3     | 51      | 420    | 130          | < 0.01    | 400         | 300                     |

Notes:

TPH - Total extractable petroleum hydrocarbons B T E X - Benzene, Toluene, Ethylbenzene, Total Xylenes MTBE - Methyl tertiary-butyl ether

TDS = Toal Dissolved Soilds

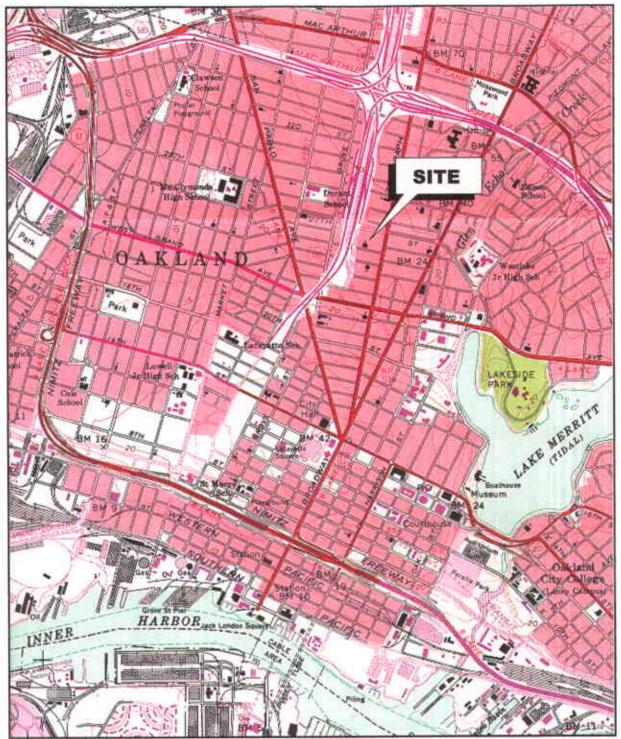
1: Duplicate sample

J - Bunker-C detections were quatitated against the diesel standard and flagged as estimated concentrations

< - Analyte not detected above indicated method detection limit

NA: Not analyzed/Not available.

SP: Separate Phase Product



Source: USGS, Oakland West Quadrangle, California, 7,5 Minute Series Topographic, 1959 (photorevised, 1980)

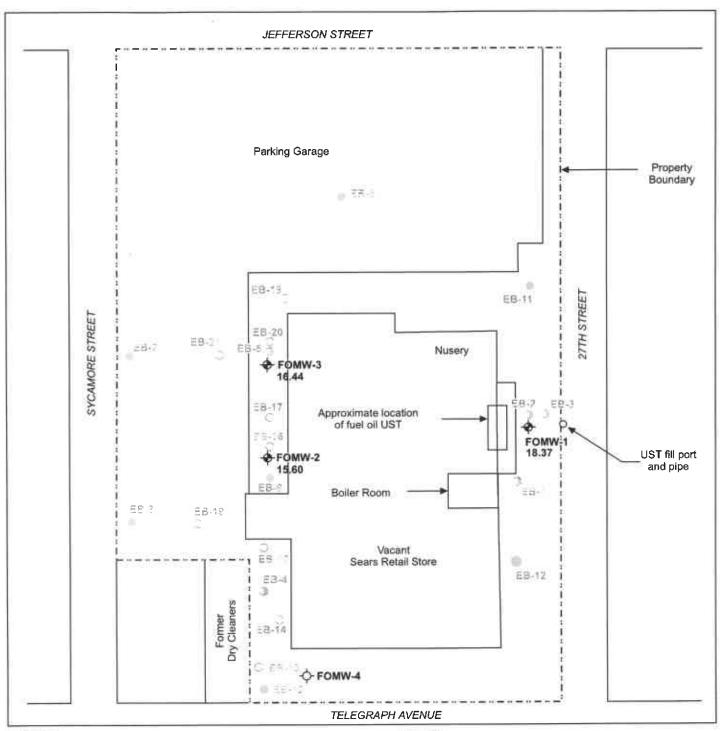


#### SITE LOCATION MAP

Sears Roebuck & Company Site Assessment Oakland, California

June 2001

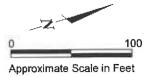




#### LEGEND

- Approximate location of exploratory boring (Lowney, May 1998)
- Approximate location of exploratory boring (Lowney, April 1998)
  - Approximate location of exploratory boring (SECOR, November 1998)
- Groundwater monitoring well locations (URS/Dames & Moore)
- Proposed monitoring well location

Reference: Lowney Associates (1998) SECOR (1998)



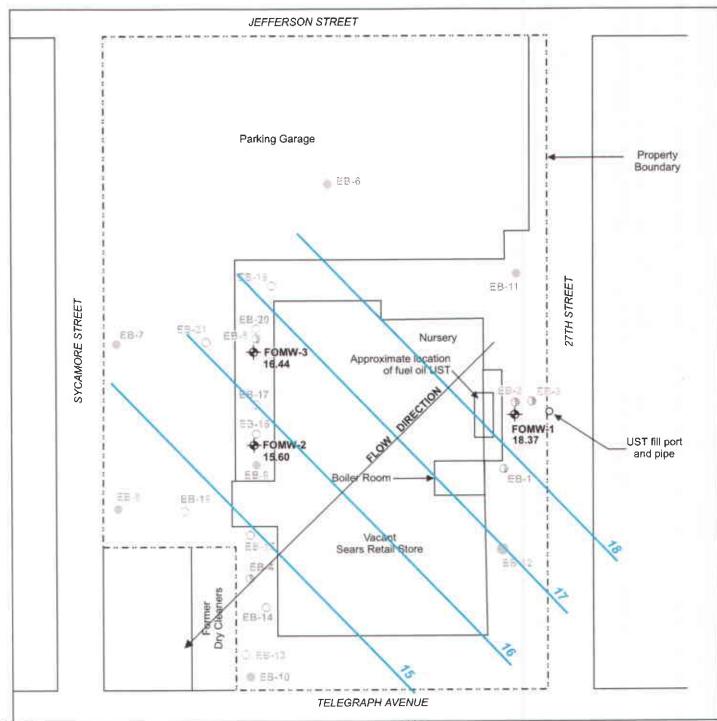
# SITE PLAN SHOWING BORING AND MONITORING WELL LOCATIONS

Sears Roebuck & Company
June 2001 Site Assessment
22-00000139.01 Oakland, California



NOTES

FIGURE 2



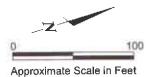
#### LEGEND

- Approximate location of exploratory boring (Lowney, May 1998)
- Approximate location of exploratory boring (Lowney, April 1998)
- Approximate location of exploratory boring (SECOR, November 1998)
- Groundwater monitoring well locations (URS/Dames & Moore)

#### NOTES

- (1) Ground water grab samples were collected at EB-1 to EB-5, EB-6, EB-10, EB-11, EB-12, EB-13, EB-14, EB-15 and EB-18.
- (2) Soil and groundwater anlaytical results presented in tables 1 and 2
- (3) Groundwater elevations in feet above mean sea level (MSL)

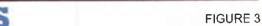
Reference: Lowney Associates (1998) SECOR (1998)



# SITE PLAN SHOWING GROUNDWATER ELEVATIONS AND CONTOUR MAP - DEC. 2000

Sears Roebuck & Company Site Assessment Oakland, California

April 2001



#### APPENDIX A

LABORATORY REPORTS AND CHAIN OF CUSTODY DOCUMENTS

Submission #: 2001-03-0523

Date: April 4, 2001

#### **URS-Santa Ana**

2020 East 1st St Suite 400 Santa Ana, CA 92705

Attn.: Scott Rowlands

Project: 00188248.5150

Oakland, Sears

Attached is our report for your samples received on Wednesday March 28, 2001 This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

The report contains a Case Narrative detailing sample receipt and analysis.

Please note that any unused portion of the samples will be discarded after May 12, 2001 unless you have requested otherwise. We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919. You can also contact me via email. My email address is: asalimpour@chromalab.com

Sincerely,

Afsaneh Salimpour

Printed on: 04/04/2001 13:11

Absarch Salingroe

Environmental Services (CA 1094)

Submission #: 2001-03-0523

Date: April 4, 2001

To: URS-Santa Ana Attn.: Scott Rowlands

#### **CASE NARRATIVE**

#### **General and Sample Comments**

We (STL ChromaLab) received 5 Water samples, on Mar 28 2001 12:00PM.

#### Analysis Comments and Flags by QC Batch

Diesel Water QC Batch#: 2001/03/29.03-10

FOMW-3 Lab#: 2001-03-0523-003

Compound Flag(s)

ndp Hydrocarbon reported does not match the pattern of our Diesel standard

1220 Quarry Lane \* Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 \* Facsimile: (925) 484-1096
CA DHS ELAP#1096

Printed on: 04/04/2001 13:11

Page 2 of 2

Submission #: 2001-03-0523

MTBE - Volatile Organics by GC/MS

REVISED

**URS-Santa Ana** 

⊠ 2020 East 1st St Suite 400

Santa Ana, CA 92705

Attn: Scott Rowlands

Phone: (714) 648-2793 Fax: (714) 667-7147

Project #: 00188248.5150

Project: Oakland, Sears

#### Samples Reported

| Sample ID | Matrix | Date Sampled     | Lab# |
|-----------|--------|------------------|------|
| EB-1      | Water  | 03/27/2000 14:00 | 2    |
| FOMW-3    | Water  | 03/27/2001 15:20 | 3    |
| FOMW-2    | Water  | 03/27/2001 17:20 | 4    |
| MW-6      | Water  | 03/27/2001 17:00 | 5    |

Environmental Services (CA 1094)

**URS-Santa Ana** 

Test Method:

8260A

Attn.: Scott Rowlands

Prep Method:

5030

Submission #: 2001-03-0523

REVISED

MTBE - Volatile Organics by GC/MS

Sample ID:

EB-1

Lab Sample ID: 2001-03-0523-002

Project:

To:

00188248.5150

Received:

03/28/2001 12:00

Oakland, Sears

Extracted:

04/02/2001 11:42

Sampled:

03/27/2000 14:00

QC-Batch:

2001/04/02-01.39

Matrix:

Water

| Compound              | Result | Rep.Limit | Units | Dilution | Analyzed         | Flag |
|-----------------------|--------|-----------|-------|----------|------------------|------|
| MTBE                  | ND     | 5.0       | ug/L  | 1.00     | 04/02/2001 11:42 |      |
| Benzene               | ND     | 0.5       | ug/L  | 1.00     | 04/02/2001 11:42 |      |
| Ethylbenzene          | ND     | 0.5       | ug/L  | 1.00     | 04/02/2001 11:42 |      |
| Toluene               | ND     | 0.5       | ug/L  | 1.00     | 04/02/2001 11:42 |      |
| Total xylenes         | ND     | 1.0       | ug/L  | 1.00     | 04/02/2001 11:42 |      |
| Surrogate(s)          |        |           |       |          |                  |      |
| 1,2-Dichloroethane-d4 | 96.7   | 76-114    | %     | 1.00     | 04/02/2001 11:42 |      |

**URS-Santa Ana** 

Environmental Services (CA 1094)

Test Method:

8260A

Submission #: 2001-03-0523

Prep Method:

5030

Attn.: Scott Rowlands

MTBE - Volatile Organics by GC/MS

Rep.Limit

5.0

0.5

0.5

0.5

1.0

76-114

%

REVISED

Sample ID:

FOMW-3

Lab Sample ID: 2001-03-0523-003

00188248.5150

Received:

03/28/2001 12:00

Project:

To:

Oakland, Sears

Sampled:

03/27/2001 15:20

Result

ND

ND

ND

ND

ND

105.0

Extracted: QC-Batch:

1.00

04/02/2001 18:09 2001/04/02-01.39

Matrix:

Compound

Ethylbenzene

Total xylenes

Surrogate(s)

1,2-Dichloroethane-d4

MTBE

Benzene

Toluene

Water

|       |          | . <u>.</u>       |      |
|-------|----------|------------------|------|
| Units | Dilution | Analyzed         | Flag |
| ug/L  | 1.00     | 04/02/2001 18:09 | •    |
| ug/L  | 1.00     | 04/02/2001 18:09 |      |
| ug/L  | 1.00     | 04/02/2001 18:09 |      |
| ug/L  | 1.00     | 04/02/2001 18:09 |      |
| ug/L  | 1.00     | 04/02/2001 18:09 |      |

04/02/2001 18:09

Printed on: 05/31/2001 11:34

Page 3 of 9

Environmental Services (CA 1094)

**URS-Santa Ana** To:

Test Method:

8260A

Attn.: Scott Rowlands

Prep Method:

5030

Submission #: 2001-03-0523

MTBE - Volatile Organics by GC/MS

REVISED

Sample ID:

FOMW-2

Lab Sample ID: 2001-03-0523-004

Received:

03/28/2001 12:00

Project:

00188248.5150 Oakland, Sears

Extracted:

04/02/2001 19:18

Sampled:

03/27/2001 17:20

QC-Batch:

2001/04/02-01.39

Matrix:

Water

| Compound                           | Result | Rep.Limit | Units | Dilution | Analyzed         | Flag |
|------------------------------------|--------|-----------|-------|----------|------------------|------|
| MTBE                               | ND     | 5.0       | ug/L  | 1.00     | 04/02/2001 19:18 |      |
| Benzene                            | ND     | 0.5       | ug/L  | 1.00     | 04/02/2001 19:18 |      |
| Ethylbenzene                       | ND     | 0.5       | ug/L  | 1.00     | 04/02/2001 19:18 |      |
| Toluene                            | ND     | 0.5       | ug/L  | 1.00     | 04/02/2001 19:18 |      |
| Total xylenes                      | ND     | 1.0       | ug/L  | 1.00     | 04/02/2001 19:18 |      |
| Surrogate(s) 1,2-Dichloroethane-d4 | 103.2  | 76-114    | %     | 1.00     | 04/02/2001 19:18 |      |

**URS-Santa Ana** 

Environmental Services (CA 1094)

8260A Test Method:

REVISED. 5030 Prep Method:

Submission #: 2001-03-0523

MTBE - Volatile Organics by GC/MS

Sample ID:

Attn.: Scott Rowlands

MW-6

Lab Sample ID: 2001-03-0523-005

Project:

To:

00188248.5150

Received:

03/28/2001 12:00

Oakland, Sears

Sampled:

03/27/2001 17:00

Extracted:

04/02/2001 12:42

Matrix:

Water

QC-Batch:

2001/04/03-01.39

| Compound                           | Result | Rep.Limit | Units | Dilution | Analyzed         | Flag |
|------------------------------------|--------|-----------|-------|----------|------------------|------|
| MTBE                               | ND     | 5.0       | ug/L  | 1.00     | 04/02/2001 12:42 |      |
| Benzene                            | ND     | 0.50      | ug/L  | 1.00     | 04/02/2001 12:42 |      |
| Ethylbenzene                       | ND     | 0.50      | ug/L  | 1.00     | 04/02/2001 12:42 |      |
| Toluene                            | ND     | 0.50      | ug/L  | 1.00     | 04/02/2001 12:42 |      |
| Total xylenes                      | ND     | 1.0       | ug/L  | 1.00     | 04/02/2001 12:42 |      |
| Surrogate(s) 1,2-Dichloroethane-d4 | 104.7  | 76-114    | %     | 1.00     | 04/02/2001 12:42 |      |

Submission #: 2001-03-0523

Environmental Services (CA 1094)

**URS-Santa Ana** To:

Test Method:

8260A

Attn.: Scott Rowlands

Prep Method:

5030

REVISEL

#### **Batch QC Report**

MTBE - Volatile Organics by GC/MS

Method Blank

Water

QC Batch # 2001/04/02-01.39

MB:

2001/04/02-01.39-004

Date Extracted: 04/02/2001 11:13

| Compound              | Result | Rep.Limit | Units | Analyzed         | Flag |
|-----------------------|--------|-----------|-------|------------------|------|
| Benzene               | ND     | 0.5       | ug/L  | 04/02/2001 11:13 |      |
| Ethylbenzene          | ND     | 0.5       | ug/L  | 04/02/2001 11:13 |      |
| Toluene               | ND     | 0.5       | ug/L  | 04/02/2001 11:13 |      |
| Total xylenes         | ND.    | 1.0       | ug/L  | 04/02/2001 11:13 |      |
| MTBE                  | ND     | 5.0       | ug/L  | 04/02/2001 11:13 |      |
| Surrogate(s)          |        |           | 2/    | 04/00/0004 44.43 |      |
| 1,2-Dichloroethane-d4 | 102.8  | 76-114    | %     | 04/02/2001 11:13 |      |

Environmental Services (CA 1094)

To: **URS-Santa Ana**  Test Method:

8260A

Attn.: Scott Rowlands

Prep Method:

5030

REVISED

#### **Batch QC Report**

MTBE - Volatile Organics by GC/MS

Method Blank

Water

QC Batch # 2001/04/03-01.39

Submission #: 2001-03-0523

MB:

2001/04/03-01.39-004

Date Extracted: 04/03/2001 11:14

| Compound              | Result | Rep.Limit | Units | Analyzed         | Flag |
|-----------------------|--------|-----------|-------|------------------|------|
| Benzene               | ND     | 0.5       | ug/L  | 04/03/2001 11:14 |      |
| Ethylbenzene          | ND     | 0.5       | ug/L  | 04/03/2001 11:14 |      |
| Toluene               | ND     | 0.5       | ug/L  | 04/03/2001 11:14 |      |
| Total xylenes         | ND     | 1.0       | ug/L  | 04/03/2001 11:14 |      |
| MTBE                  | ND     | 5.0       | ug/L  | 04/03/2001 11:14 |      |
| Surrogate(s)          | !<br>1 |           |       |                  |      |
| 1,2-Dichloroethane-d4 | 104.2  | 76-114    | %     | 04/03/2001 11:14 |      |

Submission #: 2001-03-0523

Environmental Services (CA 1094)

To: URS-Santa Ana

Test Method:

8260A

Attn: Scott Rowlands

Prep Method:

5030

#### **Batch QC Report**

MTBE - Volatile Organics by GC/MS

REVISED

Laboratory Control Spike (LCS/LCSD)

Water

QC Batch # 2001/04/02-01.39

LCS:

2001/04/02-01.39-002

Extracted: 04/02/2001 10:15

Analyzed

04/02/2001 10:15

LCSD: 2001/04

2001/04/02-01.39-003 Extr

Extracted: 04/02/2001 10:49

Analyzed 04/02

04/02/2001 10:49

| Compound                              | Conc. | [ ug/L ] | Exp.Conc. | [ ug/L ] | Recovery [%] |       | RPD | Ctrl. Limi | its [%] | Flags |      |
|---------------------------------------|-------|----------|-----------|----------|--------------|-------|-----|------------|---------|-------|------|
| •                                     | LCS   | LCSD     | LCS       | LCSD     | LCS          | LCSD  | [%] | Recovery   | RPD     | LCS   | LCSD |
| Benzene                               | 48.5  | 49.3     | 50.0      | 50.0     | 97.0         | 98.6  | 1.6 | 69-129     | 20      |       |      |
| Toluene                               | 49.0  | 47.9     | 50.0      | 50.0     | 98.0         | 95.8  | 2.3 | 70-130     | 20      |       |      |
| Surrogate(s)<br>1,2-Dichloroethane-d4 | 505   | 518      | 500       | 500      | 101.0        | 103.6 |     | 76-114     |         |       |      |

Environmental Services (CA 1094)

**URS-Santa Ana** 

Attn.: Scott Rowlands

Test Method: 8260A

Prep Method: 5030 BEVISED

**Batch QC Report** 

MTBE - Volatile Organics by GC/MS

Matrix Spike (MS/MSD)

Water

QC Batch # 2001/04/02-01.39

Submission #: 2001-03-0523

Sample ID: FOMW-3

Lab Sample ID: 2001-03-0523-003

MS:

2001/04/02-01.39-022 Extracted: 04/02/2001 18:32 Analyzed: 04/02/2001 18:32 Dilution: 1.0

MSD:

2001/04/02-01.39-023 Extracted: 04/02/2001 18:55 Analyzed: 04/02/2001 18:55 Dilution: 1.0

| Conc. |                    | ug/L }                           | Exp.Conc.                                     | [ ug/L ]   | Recovery [%]   |   | RPD   | Ctrl. Limits [%]   |   | Flags   |  |
|-------|--------------------|----------------------------------|---|--|--|---|---|--|---|---|--|
| MS    | MSD                | Sample                           | MS  | MSD  | MS   | MSD   | [%]   | Recovery   | RPD   | MS  | MSD  |
| 46.7  | 49.9               | ND                               | 50.0  | 50.0   | 93.4   | 99.8  | 6.6   | 69-129   | 20  |   |  |
| 45.6  | 48.6               | ND                               | 50.0  | 50.0   | 91.2   | 97.2  | 6.4   | 70-130   | 20  |   |  |
| 531   | 544                |                                  | 500   | 500  | 106.2  | 108.8   |   | 76-114   |   |   |  |
|       | MS<br>46.7<br>45.6 | MS MSD<br>46.7 49.9<br>45.6 48.6 | MS MSD Sample<br>46.7 49.9 ND<br>45.6 48.6 ND | MS MSD Sample MS 46.7 49.9 ND 50.0 45.6 48.6 ND 50.0 | MS         MSD         Sample         MS         MSD           46.7         49.9         ND         50.0         50.0           45.6         48.6         ND         50.0         50.0 | MS         MSD         Sample         MS         MSD         MS           46.7         49.9         ND         50.0         50.0         93.4           45.6         48.6         ND         50.0         50.0         91.2 | MS         MSD         Sample         MS         MSD         MS         MSD           46.7         49.9         ND         50.0         50.0         93.4         99.8           45.6         48.6         ND         50.0         50.0         91.2         97.2 | MS         MSD         Sample         MS         MSD         MSD         [%]           46.7         49.9         ND         50.0         50.0         93.4         99.8         6.6           45.6         48.6         ND         50.0         50.0         91.2         97.2         6.4 | MS         MSD         Sample         MS         MSD         MSD         [%]         Recovery           46.7         49.9         ND         50.0         50.0         93.4         99.8         6.6         69-129           45.6         48.6         ND         50.0         50.0         91.2         97.2         6.4         70-130 | MS         MSD         Sample         MS         MSD         MSD         [%]         Recovery         RPD           46.7         49.9         ND         50.0         50.0         93.4         99.8         6.6         69-129         20           45.6         48.6         ND         50.0         50.0         91.2         97.2         6.4         70-130         20 | MS         MSD         Sample         MS         MSD         MSD         [%]         Recovery         RPD         MS           46.7         49.9         ND         50.0         50.0         93.4         99.8         6.6         69-129         20           45.6         48.6         ND         50.0         50.0         91.2         97.2         6.4         70-130         20 |

Printed on: 05/31/2001 11:34

Page 9 of 9

# STL ChromaLab Environmental Services (CA 1094)

Submission #: 2001-03-0523

Alkalinity (Total)

**URS-Santa Ana** 

2020 East 1st St Suite 400

Santa Ana, CA 92705

Attn: Scott Rowlands

Phone: (714) 648-2857 Fax: (714) 667-7147

The cook is the cook

Project #: 00188248.5150

Filone. (7 14) 040 2007

Project: Oakland, Sears

#### Samples Reported

| Sample ID | Matrix | Date Sampled     | Lab# |  |
|-----------|--------|------------------|------|--|
| FOMW-3    | Water  | 03/27/2001 15:20 | 3    |  |
| FOMW-2    | Water  | 03/27/2001 17:20 | 4    |  |
| MW-6      | Water  | 03/27/2001 17:00 | 5    |  |

Printed on: 04/04/2001 10:51

Environmental Services (CA 1094)

**URS-Santa Ana** 

Attn.: Scott Rowlands

Test Method:

310.1

Lab Sample ID: 2001-03-0523-004

Prep Method:

310.1

Submission #: 2001-03-0523

Alkalinity (Total)

Sample iD:

To:

FOMW-2

00188248.5150

Oakland, Sears

03/27/2001 17:20

Received:

03/28/2001 12:00

Extracted:

03/30/2001

QC-Batch:

2001/04/02-01.58

Sampled: Matrix:

Project:

Water

| Compound           | Result | Rep.Limit | Units | Dilution | Analyzed   | Flag |
|--------------------|--------|-----------|-------|----------|------------|------|
| Alkalinity (Total) | 130    | 5.0       | mg/L  | 1.00     | 03/30/2001 |      |

Submission #: 2001-03-0523

Environmental Services (CA 1094)

To: **URS-Santa Ana**  Test Method:

310.1

Attn.: Scott Rowlands

Prep Method:

310.1

Alkalinity (Total)

Sample ID:

MW-6

Lab Sample ID: 2001-03-0523-005

Project:

00188248.5150 Oakland, Sears

Received:

03/28/2001 12:00

Extracted:

03/30/2001

Sampled:

03/27/2001 17:00

QC-Batch:

2001/04/02-01.58

Matrix:

Water

| Compound           | Result | Rep.Limit | Units | Dilution | Analyzed   | Flag |
|--------------------|--------|-----------|-------|----------|------------|------|
| Alkalinity (Total) | 130    | 5.0       | mg/L  | 1.00     | 03/30/2001 |      |

Environmental Services (CA 1094)

To: URS-Santa Ana

Test Method:

310.1

Submission #: 2001-03-0523

Attn: Scott Rowlands

Prep Method:

310.1

Batch QC Report

Alkalinity (Total)

Laboratory Control Spike (LCS/LCSD)

Water

QC Batch # 2001/04/02-01.58

LCS: LCSD: 2001/04/02-01.58-002 2001/04/02-01.58-003 Extracted: 03/30/2001 Extracted: 03/30/2001 Analyzed Analyzed 03/30/2001 03/30/2001

| Compound           | Conc. | [ mg/L ] Exp.Conc. [ mg/L ] Recovery [%] |      | g/L] Recovery [%] |         | ecovery [%] RPD Ctrl. Limits |            | I Flags |     |      |
|--------------------|-------|--|------|-------------------|---------|------------------------------|------------|---------|-----|------|
|                    | LCS   | LCSD                                     | LCS  | LCSD              | LCS LCS | o [%]                        | Recovery R | RPD     | LCS | LCSD |
| Aikalinity (Total) | 2360  | 2360                                     | 2500 | 2500              | 94.4 94 | 4 0.0                        | 80-120     | 20      |     |      |

Printed on: 04/04/2001 10:51

Page 6 of 6

Submission #: 2001-03-0523

Diesel

**URS-Santa Ana** 

⊠ 2020 East 1st St Suite 400

Santa Ana, CA 92705

Attn: Scott Rowlands

Phone: (714) 648-2857 Fax: (714) 667-7147

Project #: 00188248.5150

Project: Oakland, Sears

#### Samples Reported

| Sample ID | Matrix | Date Sampled     | Lab# |
|-----------|--------|------------------|------|
| FOMW-3    | Water  | 03/27/2001 15:20 | 3    |
| FOMW-2    | Water  | 03/27/2001 17:20 | 4    |
| MW-6      | Water  | 03/27/2001 17:00 | 5    |

**URS-Santa Ana** 

To:

Environmental Services (CA 1094)

Oakland, Sears

Test Method: 8015M

Submission #: 2001-03-0523

Attn.: Scott Rowlands Prep Method: 3510/8015M

Diesel

Sample ID: FOMW-3 Lab Sample ID: 2001-03-0523-003

Project: 00188248.5150 Received: 03/28/2001 12:00

Extracted: 03/29/2001 12:21

OC-Batch: 2001/03/29-03.10

Sampled: 03/27/2001 15:20 QC-Batch: 2001/03/29-03.10 Matrix: Water

Analyzed Flag Dilution Units Result Rep.Limit Compound 03/30/2001 03:08 ndp ug/L 1.00 Diesel 170 50 Surrogate(s) 03/30/2001 03:08 1.00 o-Terphenyl 103.3 60-130 %

8015M Test Method:

Prep Method: 3510/8015M

Submission #: 2001-03-0523

Diesel

Rep.Limit

60-130

50

FOMW-2 Sample ID:

**URS-Santa Ana** 

Attn.: Scott Rowlands

Lab Sample ID: 2001-03-0523-004

Project:

To:

00188248.5150

Received:

03/28/2001 12:00

Oakland, Sears

Sampled:

03/27/2001 17:20

Result

100.5

ND

Extracted:

03/29/2001 12:21

Matrix:

Water

QC-Batch:

1.00

%

2001/03/29-03.10

| IV | 10 | W | ١٨. |  |
|----|----|---|-----|--|
|    |    |   |     |  |
|    |    |   |     |  |

Compound

Surrogate(s)

o-Terphenyl

Diesel

| Units | Dilution | Analyzed         | Flag |
|-------|----------|------------------|------|
| ug/L  | 1.00     | 03/30/2001 03:47 |      |

03/30/2001 03:47

Environmental Services (CA 1094)

**URS-Santa Ana** 

Attn.: Scott Rowlands

Test Method:

8015M

Prep Method:

3510/8015M

**Batch QC Report** Diesel

Method Blank

To:

Water

QC Batch # 2001/03/29-03.10

Submission #: 2001-03-0523

MB:

2001/03/29-03.10-001

Date Extracted: 03/29/2001 12:21

| Compound                    | Result | Rep.Limit | Units | Analyzed         | Flag |
|-----------------------------|--------|-----------|-------|------------------|------|
| Diesel                      | ND     | 50        | ug/L  | 03/30/2001 01:13 |      |
| Surrogate(s)<br>o-Terphenyl | 105.0  | 60-130    | %     | 03/30/2001 01:13 |      |

Environmental Services (CA 1094)

To: **URS-Santa Ana**  Test Method: 8015M

Attn: Scott Rowlands

Prep Method:

3510/8015M

Submission #: 2001-03-0523

**Batch QC Report** 

Diesel

Laboratory Control Spike (LCS/LCSD)

Water

QC Batch # 2001/03/29-03.10

LCS: LCSD:

2001/03/29-03.10-002 2001/03/29-03.10-003 Extracted: 03/29/2001 12:21 Extracted: 03/29/2001 12:21 Analyzed 03/30/2001 02:30 Analyzed

03/30/2001 01:52

| Compound     | Conc. | [ ug/L ] | Exp.Conc. | [ ug/L ] | Recov | ery [%] | RPD | Ctrl. Lim | its [%] | Flag | gs   |
|--------------|-------|----------|-----------|----------|-------|---------|-----|-----------|---------|------|------|
|              | LCS   | LCSD     | LCS       | LCSD     | LCS   | LCSD    | [%] | Recovery  | RPD     | LCS  | LCSD |
| Dîesel       | 1030  | 953      | 1250      | 1250     | 82.4  | 76.2    | 7.8 | 60-130    | 25      |      |      |
| Surrogate(s) |       |          |           |          | -     |         |     |           |         |      |      |
| o-Ternhenyl  | 20.9  | 20.6     | 20.0      | 20.0     | 104.5 | 103.0   |     | 60-130    | į       | !    |      |

STL ChromaLab
Environmental Services (CA 1094)

Submission #: 2001-03-0523

To: URS-Santa Ana

Test Method: 8015M

Attn: Scott Rowlands

Prep Method: 3510/8015M

Legend & Notes

Diesel

**Analyte Flags** 

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

Gases by 3810M

**URS-Santa Ana** 

≥ 2020 East 1st St Suite 400

Santa Ana, CA 92705

Attn: Scott Rowlands

Phone: (714) 648-2857 Fax: (714) 667-7147

Project #: 00188248.5150

Project: Oakland, Sears

#### **Samples Reported**

| Sample ID | Matrix | Date Sampled     | Lab# |
|-----------|--------|------------------|------|
| FOMW-3    | Water  | 03/27/2001 15:20 | 3    |
| FOMW-2    | Water  | 03/27/2001 17:20 | 4    |
| MW-6      | Water  | 03/27/2001 17:00 | 5    |

Environmental Services (CA 1094)

To: **URS-Santa Ana**  Test Method:

3810M

Submission #: 2001-03-0523

Attn.: Scott Rowlands

Prep Method:

3810

Gases by 3810M

Sample ID:

FOMW-3

Lab Sample ID: 2001-03-0523-003

Project:

00188248.5150

Received:

03/28/2001 12:00

Oakland, Sears

Extracted:

03/30/2001 10:00

Sampled:

03/27/2001 15:20

Matrix:

Water

QC-Batch:

2001/03/30-01.37

| Compound | Result | Rep.Limit | Units | Dilution | Analyzed         | Flag |
|----------|--------|-----------|-------|----------|------------------|------|
| Methane  | ND     | 0.010     | ug/ml | 1.00     | 03/30/2001 12:44 | _    |

Environmental Services (CA 1094)

To: **URS-Santa Ana**  Test Method:

3810M

Submission #: 2001-03-0523

Attn.: Scott Rowlands

Prep Method:

3810

Gases by 3810M

Sample ID:

FOMW-2

Lab Sample ID: 2001-03-0523-004

Project:

00188248.5150

Received:

03/28/2001 12:00

Oakland, Sears

Sampled:

03/27/2001 17:20

Extracted:

03/30/2001 10:00

Matrix:

QC-Batch:

2001/03/30-01.37

|   | • | ٠. | • | <br>•• | ••• |  |
|---|---|----|---|--------|-----|--|
|   |   |    |   |        |     |  |
| _ |   | _  | _ |        |     |  |
|   |   |    | _ |        |     |  |
|   |   |    |   |        |     |  |

| Compound | Result | Rep.Limit | Units | Dilution | Analyzed         | Flag |
|----------|--------|-----------|-------|----------|------------------|------|
| Methane  | ND     | 0.010     | ug/ml | 1.00     | 03/30/2001 12:54 |      |

Environmental Services (CA 1094)

To: **URS-Santa Ana**  Test Method:

3810M

Submission #: 2001-03-0523

Attn.: Scott Rowlands

Prep Method:

3810

Gases by 3810M

Sample ID:

MW-6

Lab Sample ID: 2001-03-0523-005

Project:

00188248.5150

Received:

03/28/2001 12:00

Oakland, Sears

Sampled:

03/27/2001 17:00

Extracted:

03/30/2001 10:00

Matrix:

Water

QC-Batch:

2001/03/30-01.37

| Compound | Result | Rep.Limit | Units | Dilution | Analyzed         | Flag |
|----------|--------|-----------|-------|----------|------------------|------|
| Methane  | ND     | 0.010     | ug/ml | 1.00     | 03/30/2001 13:02 |      |

Submission #: 2001-03-0523

Environmental Services (CA 1094)

To: **URS-Santa Ana**  Test Method:

3810M

Attn.: Scott Rowlands

Prep Method:

3810

Batch QC Report Gases by 3810M

Method Blank

Water

QC Batch # 2001/03/30-01.37

MB:

2001/03/30-01.37-001

Date Extracted: 03/30/2001 10:00

| Compound | Result | Rep.Limit | Units | Analyzed         | Flag |
|----------|--------|-----------|-------|------------------|------|
| Methane  | ND     | 0.01      | ug/ml | 03/30/2001 10:25 |      |

### STL ChromaLab Environmental Services (CA 1094)

Submission #: 2001-03-0523

To:

**URS-Santa Ana** 

Attn: Scott Rowlands

Test Method:

3810M

Prep Method:

3810

#### **Batch QC Report**

Gases by 3810M

Laboratory Control Spike (LCS/LCSD)

Water

QC Batch # 2001/03/30-01.37

LCS: LCSD:

2001/03/30-01.37-002 2001/03/30-01.37-003 Extracted: 03/30/2001 10:00 Extracted: 03/30/2001 10:00 Analyzed Analyzed 03/30/2001 10:32 03/30/2001 10:40

| Compound | Conc.  | Conc. [ug/ml] Exp.Conc. [ug/m |        | Conc. [ug/ml] Exp.Conc. [ug/ml] Recovery [%] |       | Conc. [ug/ml] Exp |     | Recovery [%] RPI |     | Ctrl. Lim | its [%] | Flag | gs |
|----------|--------|-------------------------------|--------|--|-------|-------------------|-----|------------------|-----|-----------|---------|------|----|
|          | LCS    | LCSD                          | LCS    | LCSD   | LCS   | LCSD              | [%] | Recovery         | RPD | LCS       | LCSD    |      |    |
| Methane  | 0.0756 | 0.0753                        | 0.0721 | 0.0721                                       | 104.9 | 104.4             | 0.5 | 65-135           | 35  |           |         |      |    |

#### Misc Anions by Ion Chromatograph

**URS-Santa Ana** 

⊠ 2020 East 1st St Suite 400

Santa Ana, CA 92705

Attn: Scott Rowlands

Phone: (714) 648-2857 Fax: (714) 667-7147

Project #: 00188248.5150

Project: Oakland, Sears

#### Samples Reported

| Sample ID | Matrix | Date Sampled     | Lab# |
|-----------|--------|------------------|------|
| FOMW-3    | Water  | 03/27/2001 15:20 | 3    |
| FOMW-2    | Water  | 03/27/2001 17:20 | 4    |
| MW-6      | Water  | 03/27/2001 17:00 | 5    |

Environmental Services (CA 1094)

**URS-Santa Ana** 

Test Method:

9056

Submission #: 2001-03-0523

Attn.: Scott Rowlands

Prep Method:

9056

Misc Anions by Ion Chromatograph

Sample ID:

FOMW-3

Lab Sample ID: 2001-03-0523-003

Project:

To:

00188248.5150

Received:

03/28/2001 12:00

Oakland, Sears

Sampled:

03/27/2001 15:20

Extracted:

03/28/2001

Matrix:

QC-Batch:

2001/03/29-01.41

| Matrix: | Water |
|---------|-------|
|         |       |
|         |       |

| Compound | Result | Rep.Limit | Units | Dilution | Analyzed   | Flag |
|----------|--------|-----------|-------|----------|------------|------|
| Nitrate  | 3.3    | 1.0       | mg/L  | 1.00     | 03/28/2001 |      |
| Sulfate  | 51     | 10        | mg/L  | 10.00    | 03/28/2001 |      |

Environmental Services (CA 1094)

To: **URS-Santa Ana**  Test Method:

9056

Attn.: Scott Rowlands

Prep Method:

9056

Submission #: 2001-03-0523

Misc Anions by Ion Chromatograph

Sample ID:

FOMW-2

Lab Sample ID: 2001-03-0523-004

Project:

00188248.5150

Received:

03/28/2001 12:00

Oakland, Sears

03/28/2001

Sampled:

03/27/2001 17:20

Extracted:

3/29-01.41

Matrix:

| Compound | Result | Rep.Limit | Units | Dilution | Analyzed                 | Flag |
|----------|--------|-----------|-------|----------|--------------------------|------|
| Nitrate  | 8.4    | 1.0       | mg/L  | 1.00     | 03/28/2001<br>03/28/2001 |      |
| Sulfate  | 4/     | 10        | mg/L  | 10.00    | 03/20/2001               |      |

Environmental Services (CA 1094)

**URS-Santa Ana** 

Test Method:

9056

Attn.: Scott Rowlands

Prep Method:

9056

Submission #: 2001-03-0523

Misc Anions by Ion Chromatograph

Sample ID:

MW-6

Lab Sample ID: 2001-03-0523-005

Project:

To:

00188248.5150

Received:

03/28/2001 12:00

Oakland, Sears

Extracted:

03/28/2001

Sampled:

03/27/2001 17:00

QC-Batch:

2001/03/29-01.41

Matrix:

| Compound | Result | Rep.Limit | Units | Dilution | Analyzed   | Flag |
|----------|--------|-----------|-------|----------|------------|------|
| Nitrate  | 9.1    | 1.0       | mg/L  | 1.00     | 03/28/2001 |      |
| Sulfate  | 47     | 10        | mg/L  | 10.00    | 03/28/2001 |      |

Environmental Services (CA 1094)

**URS-Santa Ana** To:

Attn.: Scott Rowlands

Test Method: Prep Method: 9056

9056

### **Batch QC Report**

Misc Anions by Ion Chromatograph

Method Blank

Water

QC Batch # 2001/03/29-01.41

Submission #: 2001-03-0523

MB:

2001/03/29-01.41-001

Date Extracted: 03/28/2001

Result Rep.Limit Units Analyzed Flag Compound 03/28/2001 ND 1.0 mg/L Nitrate 03/28/2001 ND 1.0 mg/L Sulfate

Environmental Services (CA 1094)

**URS-Santa Ana** 

Attn: Scott Rowlands

To:

Test Method:

9056

Submission #: 2001-03-0523

Prep Method:

9056

#### **Batch QC Report**

Misc Anions by Ion Chromatograph

QC Batch # 2001/03/29-01.41 Laboratory Control Spike (LCS/LCSD) Water Extracted: 03/28/2001 Analyzed 2001/03/29-01.41-002 LCS:

Extracted: 03/28/2001 2001/03/29-01.41-003 LCSD:

03/28/2001 Analyzed 03/28/2001

| Compound | Conc. | [ mg/L ] | Exp.Conc. | [ mg/L ] | Recov | ery [%] | RPD | Ctrl. Lim | its [%] | Flag | gs   |
|----------|-------|----------|-----------|----------|-------|---------|-----|-----------|---------|------|------|
| :<br>!   | LCS   | LCSD     | LCS       | LCSD     | LCS   | LCSD    | [%] | Recovery  | RPD     | LCS  | LCSD |
| Nitrate  | 18.9  | 18.9     | 20.0      | 20.0     | 94.5  | 94.5    | 0.0 | 80-120    | 20      |      |      |
| Sulfate  | 18.8  | 18.8     | 20.0      | 20.0     | 94.0  | 94.0    | 0.0 | 80-120    | 20      | :    |      |

Environmental Services (CA 1094)

Submission #: 2001-03-0523

Total Dissolved Solids (TDS)

**URS-Santa Ana** 

2020 East 1st St Suite 400

Santa Ana, CA 92705

Attn: Scott Rowlands

Phone: (714) 648-2857 Fax: (714) 667-7147

Project #: 00188248.5150

Project: Oakland, Sears

#### Samples Reported

| Sample ID | Matrix | Date Sampled     | Lab# |
|-----------|--------|------------------|------|
| FOMW-3    | Water  | 03/27/2001 15:20 | 3    |
| FOMW-2    | Water  | 03/27/2001 17:20 | 4    |
| MW-6      | Water  | 03/27/2001 17:00 | 5    |

Test Method:

160.1

Submission #: 2001-03-0523

To: **URS-Santa Ana** Attn.: Scott Rowlands

Prep Method:

160.1

Total Dissolved Solids (TDS)

Sample ID:

FOMW-3

Lab Sample ID: 2001-03-0523-003

Project:

00188248.5150

Received:

03/28/2001 12:00

Oakland, Sears

Extracted:

03/29/2001 09:30

Sampled:

03/27/2001 15:20

QC-Batch:

2001/03/30-01.28

Matrix:

|          |        |           |       |          | <del></del>      |      |
|----------|--------|-----------|-------|----------|------------------|------|
| Compound | Result | Rep.Limit | Units | Dilution | Analyzed         | Flag |
| TDS      | 420    | 10        | mg/L  | 1.00     | 03/30/2001 10:00 | 1    |

**URS-Santa Ana** 

Environmental Services (CA 1094)

160.1 Test Method:

Prep Method:

160.1

Submission #: 2001-03-0523

Total Dissolved Solids (TDS)

Sample ID:

Attn.: Scott Rowlands

FOMW-2

Lab Sample ID: 2001-03-0523-004

Project:

To:

00188248.5150

Received:

03/28/2001 12:00

Oakland, Sears

Extracted:

03/29/2001 09:30

Sampled:

03/27/2001 17:20

QC-Batch:

2001/03/30-01.28

Matrix:

| Compound | Result | Rep.Limit | Units | Dilution | Analyzed         | Flag |
|----------|--------|-----------|-------|----------|------------------|------|
| TDS      | 290    | 10        | mg/L  | 1.00     | 03/30/2001 10:00 |      |

Environmental Services (CA 1094)

Test Method:

160.1

Attn.: Scott Rowlands

**URS-Santa Ana** 

Submission #: 2001-03-0523

Prep Method:

160.1

Total Dissolved Solids (TDS)

Sample ID:

MW-6

Lab Sample ID: 2001-03-0523-005

Project:

To:

00188248.5150

Received:

03/28/2001 12:00

Oakland, Sears

Extracted:

03/29/2001 09:30

Sampled:

03/27/2001 17:00

QC-Batch:

2001/03/30-01.28

Matrix:

| Compound | Result | Rep.Limit | Units | Dilution | Analyzed         | Flag |
|----------|--------|-----------|-------|----------|------------------|------|
| TDS      | 320    | 10        | mg/L  | 1.00     | 03/30/2001 10:00 |      |

Submission #: 2001-03-0523

Environmental Services (CA 1094)

To:

**URS-Santa Ana** 

Attn.: Scott Rowlands

Test Method:

160.1

Prep Method:

160.1

#### Batch QC Report

Total Dissolved Solids (TDS)

**Method Blank** 

Water

QC Batch # 2001/03/30-01.28

MB:

2001/03/30-01.28-001

Date Extracted: 03/29/2001 09:30

| Compound | Result | Rep.Limit | Units | Analyzed         | Flag |
|----------|--------|-----------|-------|------------------|------|
| TDS      | ND     | 10        | mg/L  | 03/30/2001 10:00 |      |

Submission #: 2001-03-0523

Environmental Services (CA 1094)

To: URS-Santa Ana

Test Method:

160.1

Attn: Scott Rowlands

Prep Method:

160.1

#### **Batch QC Report**

Total Dissolved Solids (TDS)

Laboratory Control Spike (LCS/LCSD)

Water

QC Batch # 2001/03/30-01.28

LCS: LCSD:

TDS

2001/03/30-01.28-002 2001/03/30-01.28-003

1080

1040

Extracted: 03/29/2001 09:30 Extracted: 03/29/2001 09:30

1000

108.0

104.0

3.8

Analyzed Analyzed

80-120

03/30/2001 10:00 03/30/2001 10:00

> Flags LCS LCSD

| <del></del> |       |          |           |          |              |     |            |        | _ |
|-------------|-------|----------|-----------|----------|--------------|-----|------------|--------|---|
| Compound    | Conc. | [ mg/L ] | Exp.Conc. | [ mg/L ] | Recovery [%] | RPD | Ctrl. Limi | ts [%] |   |
|             | LCS   | LCSD     | LCS       | LCSD     | LCS LCSD     | [%] | Recovery   | RPD    | ĺ |

1000

# CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

1220 Quarry Lane • Pleasanton, California 94566-4756

(925) 484-1919 • Fax (925) 484-1096

Reference #: O / O

Chain of Custody

3 DATE 3-27-01 PAGE \_\_\_\_\_ OF \_\_

PHOJ MGH STOFF ROLANDS ANALYSIS REPORT COMPANY 1285 ADDRESS 2020 E 1ST STREET ±1400 SANTA PANA CAM 17 METAL (EPA 6010/7470/7 SAMPLERS (SIGNATURE) (PHONE NO.) (1) alimDines SAMPLE (D. TIME MATRIX PRESERV. 3-27-08/400 H20 HCL 1720 HCL PROJECT INFORMATION SAMPLE RECEIPT 2. RELINQUISHED BY CAKIAN) SEARS TOTAL HO. OF CONTAINERS (TIME) (SIGNATURE) HEAD SPACE (TIME) 10/53 248 - 5750 CONFORMS TO RECORD STANDARD OTHER RECEIVED BY 2. RECEIVED BY (LABORATORY) SPECIAL INSTRUCTIONS/COMMENTS: Report: () Routine 11 Level 2 (1 Level 3 1) Level 4 (1 Electronic Report PLEASS SUB OUT RAYE COUNT (SIGNATURE) (PENNTED HAME) PRINTED HAME VHYLANDCARBONES



### Sample Receipt Checklist Client Name: URS - Sauta and Date/Time Received: Reference/Subm #: 2001-03.0523 Received by: Wewse Harrington Matrix: Soil Water Other Carrier name: Client - C/L - World Not Yes\_\_\_\_ No\_\_\_ Present\_ Shipping container/cooler in good condition? Yes\_\_\_ No\_\_\_ Present\_\_ Custody seals intact on shipping container/cooler? Yes No\_\_\_ Present\_\_\_ Custody seals intact on sample bottles? Yes No \_\_\_\_ Chain of custody present? Yes\_\_\_\_No\_\_\_ Chain of custody signed when relinquished and received? Yes\_\_\_\_ No\_\_\_\_ Chain of custody agrees with sample labels? Yes\_\_\_\_ No\_\_\_\_ Samples in proper container/bottle? Yes\_\_\_\_No\_\_\_ Sample containers intact? Yes\_\_\_\_No\_\_\_ Sufficient sample volume for indicated test? Yes\_\_\_\_No\_\_\_ All samples received within holding time? Temp: \_\_\_\_°C Yes\_\_\_\_ No\_\_\_\_ Container/Temp Blank temperature in compliance? Water - VOA vials have zero headspace? No VOA vials submitted Yes No Water - pH acceptable upon receipt? Yes No Checked by Voa chemist ☐ pH adjusted- Preservative used: ☐ HNO<sub>3</sub> ☐ HCl ☐ H<sub>2</sub>SO<sub>4</sub> ☐ NaOH ☐ ZnOAc Lot#(s)\_\_\_\_\_\_ Any No and/or NA (not applicable) response must be detailed in the comments section below. Client contacted: Date contacted: Person contacted: Regarding: Comments: no Trip blank recid. Corrective Action: forms\sample control\smprechk 2001.doc

PROJECT:

Sears Oakland; Oakland, CA

LABORATORY:

STL Chromalab, Pleasanton, CA

LAB NUMBER:

2001-03-0523

**SAMPLES:** 

FOMW-3, FOMW-2, MW-6

**MATRIX:** 

| Analysis               | TPH-Diesel<br>8015M |
|------------------------|---------------------|
| Holding Time           | <b>✓</b>            |
| Surrogate Recovery     | ✓                   |
| MS/MSD                 | NA                  |
| LCS (Blank Spike)      | ✓                   |
| Method Blanks          | 7                   |
| Duplicates             | NA                  |
| Field/Equipment Blanks | NA                  |
| Reporting Limits       | <b>√</b>            |
| Chromatography         | Note 1              |

 $<sup>\</sup>checkmark$  – QC criteria were met.

Notes:

1. In the case of sample FOMW-3, the sample chromatogram did not match that of the diesel standard used by the laboratory. Consequently, the reported diesel concentration in this sample was flagged "J," estimated.

#### Summary:

Based on this Level III validation, these data are usable, as qualified, for their intended purpose. None of these data were rejected.

PROJECT: Sears Oakland; Oakland, CA

LABORATORY: STL Chromalab, Pleasanton, CA

**LAB NUMBER:** 2001-03-0523

**SAMPLES:** FOMW-3, FOMW-2, MW-6

MATRIX: Water

| Analysis                    | Methane<br>3810M | Alkalinity<br>310.1 |
|-----------------------------|------------------|---------------------|
| Holding Time                | <b>√</b>         | 1                   |
| MS/MSD                      | NA               | NA                  |
| LCS (Blank Spike)           | ✓                | <b>√</b>            |
| Method Blanks               | ✓                | ✓                   |
| Duplicates                  | NA               | NA                  |
| Trip/Field/Equipment Blanks | NA               | NA                  |
| Reporting Limits            | ✓                | ✓                   |

✓ – QC criteria were met.

Notes: None

### Summary:

Based on this Level III validation, these data are usable for their intended purpose. None of these data were qualified or rejected.

URS Corporation K:\WP\GH\01DIH253.doc

PROJECT:

Sears Oakland; Oakland, CA

LABORATORY:

STL Chromalab, Pleasanton, CA

LAB NUMBER:

2001-03-0523

**SAMPLES:** 

EB-1, FOMW-3, FOMW-2, MW-6

**MATRIX:** 

Water

| Analysis                    | BTEX, MTBE<br>8260A |
|-----------------------------|---------------------|
| Holding Time                | ✓                   |
| Surrogate Recovery          | 1                   |
| MS/MSD                      | 1                   |
| LCS (Blank Spike)           | ✓                   |
| Method Blanks               | <b>√</b>            |
| Duplicates                  | NA                  |
| Trip/Field/Equipment Blanks | <b>✓</b>            |
| Reporting Limits            | ✓                   |

✓ – QC criteria were met.

Notes:

None

### Summary:

Based on this Level III validation, these data are usable for their intended purpose. None of these data were qualified or rejected.

PROJECT:

Sears Oakland; Oakland, CA

LABORATORY:

STL Chromalab, Pleasanton, CA

LAB NUMBER:

2001-03-0523

**SAMPLES:** 

FOMW-3, FOMW-2, MW-6

**MATRIX:** 

Water

| Analysis               | Nitrate, Sulfate<br>905.6 | Total Dissolved Solids (TDS)<br>160.1 |
|------------------------|---------------------------|---------------------------------------|
| Holding Time           | ✓                         | ✓                                     |
| MS/MSD                 | NA                        | NA                                    |
| LCS (Blank Spike)      | ✓                         | <b>√</b>                              |
| Method Blanks          | ✓                         | <b>✓</b>                              |
| Duplicates             | NA                        | NA                                    |
| Field/Equipment Blanks | NA                        | NA                                    |
| Reporting Limits       | Note 1                    | ✓                                     |

### $\checkmark$ – QC criteria were met.

Notes:

1. All samples were diluted by factors of ten in order to quantitate sulfate. Sulfate reporting limits were increased by factors of ten. Reported concentrations of sulfate exceeded the elevated reporting limits.

### Summary:

Based on this Level III validation, these data are usable for their intended purpose. None of these data were qualified or rejected.