1994 Annual Groundwater Monitoring Report
Union Pacific Railroad Yard
Sacramento, California

Prepared *for*

Union Pacific Railroad Company

By

Dames & Moore

April 1995

DAMES & MOORE

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April 19, 1995

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Attention: Mr. Jose Salcedo

Re: Transmittal
1994 Annual Groundwater Monitoring Report
Union Pacific Railroad Yard
Sacramento, California
Dames & Moore Project No. 00173-080-044

Dear Mr. Salcedo:

Union Pacific Railroad Company (UPRR) has requested that Dames & Moore transmit the above-referenced report. Presented in the report are the following:

- analytical results for 1994 quarterly groundwater monitoring;
- a discussion of the extent of impacted groundwater;
- an evaluation of constituent trends in groundwater; and
- proposed changes to the sampling and analysis schedule for the 1995 groundwater monitoring year.

SAC13.08.wpd

If you have any questions or require any clarification, please contact Jim Brake at (916) 387-7530.

Sincerely,

DAMES & MOORE

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Enclosure

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1994 ANNUAL GROUNDWATER MONITORING REPORT
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

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1994 ANNUAL GROUNDWATER MONITORING REPORT
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SACRAMENTO, CALIFORNIA

1.0 INTRODUCTION

This report presents a summary of the results of quarterly groundwater monitoring conducted by Dames & Moore during the 1994 calendar year at the Union Pacific Railroad (UPRR) Yard (the Site), Sacramento, California (Figure 1). Also presented in this report are Dames & Moore's recommendations for modifying the 1995 quarterly groundwater monitoring program.

1.1 GROUNDWATER INVESTIGATION BACKGROUND

Groundwater investigations were initiated at the site in 1987 with the installation, sampling, and chemical analysis of eight groundwater monitoring wells (MW-1 through MW-8 on Figure 2), as part of the Phase 1 Remedial Investigation (Dames & Moore, 1988). Phase 2 Remedial Investigations began in 1989 with the installation of an additional 17 groundwater monitoring wells (MW-11 through MW-27 shown on Figure 2). In addition, all 25 groundwater monitoring wells were sampled and analyzed in 1989 (Dames & Moore, 1990a). In February of 1990, a three-well cluster (MW-28, MW-29, and MW-30, Figure 2) was installed along the eastern site boundary. In January and February 1990, most of the 28 groundwater monitoring wells were sampled and chemically analyzed (Dames & Moore, 1991c). Analytical results of the January/February sampling indicated that groundwater in the first hydrostratigraphic zone (HSZ) on-site and, to a lesser extent, the second HSZ, had been impacted by aromatic and chlorinated volatile organic compounds (VOCs), and that off-site groundwater was likely affected (Dames & Moore, 1991c).

In April and May 1990, 24 cone penetration tests (CPT) were performed, and 54 Hydropunch™ (HP) in-situ groundwater samples collected and chemically analyzed. These samples were collected to aid in the assessment of the off-site extent of aromatic and chlorinated VOCs in groundwater in the first HSZ (Dames & Moore, 1990b). Additionally, three groundwater monitoring wells, MW-31, MW-32, and MW-33, were installed on-site, and samples from all 31 groundwater monitoring wells were collected and chemically analyzed. CPT, HP, and groundwater monitoring well locations are shown on Figure 2. CPT and HP data indicated that off-site groundwater in the first HSZ (approximately 45 to 55 feet below ground surface) contained chlorinated VOCs (primarily 1,1-dichloroethylene (1,1-DCE), 1,2-dichloroethane (1,2-DCA), and trichloroethylene (TCE)), to a distance of at least 1,200 feet down gradient from the site (Dames & Moore, 1990b).

In September and October 1990, an additional 50 CPTs were completed and 92 HP samples were collected and chemically analyzed to further evaluate the downgradient extent of groundwater impacts. Additionally, all 31 groundwater monitoring wells were sampled in September 1990 and February 1991. Groundwater samples were chemically analyzed for aromatic and chlorinated VOCs, arsenic, chromium, lead, and nickel (Dames & Moore, January 1991a). In February 1991, an additional three CPTs were performed and 19 HP samples collected and chemically analyzed to further evaluate the upgradient extent of groundwater impacts in the Central Fill area (Dames & Moore, 1991a). Analytical results from HP and groundwater monitoring well samples indicated that the chlorinated VOC plume originates in the Central Fill area and extends southeast approximately 4,800 feet downgradient in the first HSZ (Dames & Moore, 1991a).

In March 1991, a Sampling and Analysis Plan (SAP) for Quarterly Groundwater Monitoring (Dames & Moore, 1991b) was submitted to DTSC. The SAP included a sampling and analysis schedule for the 31 existing monitoring wells. The first round of quarterly groundwater monitoring under this plan was conducted in April 1991.

In May and November of 1991, four additional on-site and six off-site groundwater monitoring wells were installed and sampled (Dames & Moore, 1991d, Dames & Moore, 1992a). Groundwater monitoring well locations are shown on Figure 2. Two of the on-site wells, MW-42 and MW-43, were completed in the first HSZ in the Central Fill area to aid in evaluating the source area of chlorinated VOC-impacted groundwater. The other two on-site wells, MW-40 and MW-41, were completed in the second and third HSZs, respectively, to further evaluate the vertical extent of chlorinated VOCs in groundwater. The off-site installations consisted of five first HSZ groundwater monitoring wells (MW-34, MW-35, MW-36, MW-38 and MW-39), and one second HSZ groundwater monitoring well (MW-37), all installed along the axis of the chlorinated VOC plume. These groundwater monitoring wells were sampled after installation. Analytical results for groundwater samples from first HSZ wells were generally consistent with analytical results for HP samples. Additionally, analytical results indicated that chlorinated VOC impacts to second HSZ groundwater extend at least 1,200 feet off-site (Dames & Moore, 1992a).

In March 1992, a revised sampling and analysis schedule for quarterly groundwater monitoring was proposed to the DTSC (Dames & Moore, 1992b). The modifications proposed were as follows:

- Sample groundwater monitoring wells in which there had previously been no detections of aromatic or chlorinated VOCs only on an annual basis with the exception of MW-29 and MW-30 located downgradient of the former Oil House area;
- Selected groundwater monitoring wells consistently having low levels (less than 10 micrograms per liter ($\mu g/l$)) of chlorinated VOCs would be sampled on a semi-annual basis; and

- Arsenic, chromium, lead and nickel would be analyzed on a semi-annual basis for most groundwater monitoring wells.

In correspondence dated May 6, 1992, the DTSC approved the revised sampling and analysis schedule.

In April 1992, dedicated sampling systems were installed in 28 of the most frequently monitored wells. Dedicated systems were installed because they allow for more consistent sampling protocol and minimize potential for cross-contamination of groundwater samples caused by using non-dedicated sampling equipment.

In May 1992, 20 additional CPTs were completed and 18 HP in-situ groundwater samples collected off-site from the second HSZ (Dames & Moore, 1992c). CPT and HP locations are shown on Figure 2. Second HSZ sample locations were selected outside the known lateral extent of chlorinated VOCs in the first HSZ. Results of analysis of those HP samples suggested that groundwater impacts in the second HSZ generally appear not to exceed the lateral extent of impacts within the first HSZ.

In October 1992, monitoring well MW-44 was completed in the second HSZ adjacent to MW-38. The purpose of this well is to further evaluate the downgradient extent of second HSZ groundwater impacts. Analytical results from initial groundwater sampling indicated that low level impacts to the second HSZ extend approximately 2,000 feet off-site.

During 1992, quarterly groundwater monitoring was conducted in January, May/June, August, and October. Results of the first, second, and third quarter groundwater monitoring rounds were provided in data transmittals (Dames & Moore, 1992b, 1992e, and 1992f). Results from the fourth quarter groundwater monitoring round and a discussion of all 1992 results were presented in the 1992 Annual Groundwater Monitoring Report (Dames & Moore, 1993a). In this report a revised sampling and analysis schedule for quarterly groundwater monitoring was proposed to the DTSC. The modifications proposed in the revised sampling and analysis schedule were as follows:

- Monitoring wells in which reported arsenic, chromium, lead and nickel concentrations historically have not exceeded 10 μg/L would no longer be monitored for these metals;
- Monitoring wells in which reported arsenic, chromium, lead and nickel concentrations historically exceeded 10 μg/L, but remained below MCLs, would be monitored annually;
- The detection limit for nickel would be lowered to the range of 1 to 10 μg/L; and
- Monitoring for aromatic compounds would be conducted annually in most wells, with the exception of the following wells which would be monitored quarterly.
    - monitoring wells MW-42 and MW-43 in the Central Fill area of the site; and

- monitoring wells MW-4, MW-12, MW-13, and MW-14 in the Former Oil House area of the site, and MW-28, MW-29, MW-30, and MW-31 downgradient of the Former Oil House area of the site.

The revised sampling and analysis schedule was adopted starting with the second quarter 1993 sampling round.

Monthly groundwater monitoring of the on-site groundwater operable unit #1 (GW-1) groundwater Interim Remedial Measure (IRM) extraction wells (MW-4 and MW-32) and treatment system effluent began in 1993. The GW-1 IRM extraction wells and treatment system began operation in April 1993. Monthly monitoring was conducted to assess concentrations of chlorinated VOCs, aromatics, TPH-gasoline, and nickel from the extraction wells and the treatment system effluent.

During 1993, quarterly groundwater monitoring rounds were conducted in January, April, June/July, and September. Results of the first, second and third quarter groundwater monitoring rounds were provided in data transmittals (Dames & Moore, 1993b, 1993c, and 1993d). Results from the fourth quarter groundwater monitoring round and a discussion of all 1993 results were presented in the 1993 Annual Groundwater Monitoring Report (Dames & Moore, 1993a). A revised sampling and analysis schedule for quarterly groundwater monitoring was proposed to the DTSC in this report. The modifications proposed in the revised sampling and analysis schedule were as follows:

- ❑ Monitoring wells in which reported arsenic, chromium, and nickel concentrations historically have not exceeded background levels for Sacramento County (Johnson, 1985) would no longer be evaluated for these metals;
- ❑ Monitoring wells in which reported arsenic, chromium, lead, and nickel concentrations have historically exceeded background levels (Johnson, 1985), but remained below MCLs, would be evaluated annually;
- ❑ Lead would no longer be evaluated in samples collected from any wells in the quarterly monitoring program. Lead had not been detected at levels exceeding background levels (Johnson, 1985) between 1991 and 1993;
- ❑ Extraction wells MW-4 and MW-32 would be sampled monthly and samples analyzed for chlorinated and aromatic VOCs, TPH-gasoline, and nickel; and
- ❑ Monitoring wells completed in Plume B (GW-2) would no longer be evaluated for aromatic VOCs, with the exception of MW-7, MW-25, MW-26, and MW-27, which would be evaluatd annually.

The revised sampling schedule was adopted beginning with the second quarter 1994 sampling round.

2.0 PURPOSE AND SCOPE OF 1994 GROUNDWATER INVESTIGATIONS

The scope of groundwater investigation and monitoring conducted during 1994 consisted of:

- ❑ Completion of 13 CPT exploratory holes and collection of 25 HP groundwater samples in the first HSZ off-site, along 19th and 21st Avenues;
- ❑ Installation of off-site monitoring wells MW-45, MW-46, and MW-47, completed in the first HSZ, second HSZ, and third HSZ, respectively;
- ❑ Installation of on-site well MW-48 in the first HSZ, and on-site piezometers P-10 and P-11 in the first HSZ, in the northeastern portion of the active railyard;
- ❑ Incorporation of MW-45 through MW-48 into the groundwater monitoring program beginning with the July 1994 monitoring round;
- ❑ On-site installation of first HSZ piezometer P-1, aquitard piezometers P-2A and P-2B, and second HSZ piezometers P-3 and P-4 in the vicinity of first and second HSZ well pair MW-32/MW-40;
- ❑ Off-site installation of first HSZ piezometers P-5, P-7, and P-9, and second HSZ piezometers P-6 and P-8 in the vicinity of first and second HSZ well pair MW-38/MW-44;
- ❑ Completion of first and second HSZ aquifer pumping tests near the site boundary, using well pair MW-32/MW-40 as pumping wells;
- ❑ Completion of off-site first and second HSZ aquifer pumping tests in well pair MW-38/MW-44.
- ❑ Quarterly groundwater monitoring in January, April, July and October of 1994; and
- ❑ Monthly groundwater monitoring of the on-site GW-1 IRM extraction wells and treatment system effluent.

The purpose of these activities was to:

- ❑ Further evaluate the downgradient extent of chlorinated VOC impacts to groundwater the first and second HSZ;
- ❑ Further evaluate whether groundwater in the third HSZ has been impacted;
- ❑ Further evaluate the extent of hydrocarbon impacts in shallow groundwater within the active railroad yard;
- ❑ Provide groundwater level monitoring points for aquifer pumping tests and for enhanced definition of the water table for the first HSZ and the piezometric surface for the second HSZ;
- ❑ Provide estimates of aquifer properties for the first and second HSZ;

- ❑ Assess seasonal variations in aromatic and chlorinated VOCs, arsenic, chromium, lead and nickel concentrations in groundwater within the first and second HSZs;

- ❑ Assess concentrations of chlorinated VOCs, aromatics, TPH-gasoline, and nickel from extraction wells MW-4 and MW-32, and treatment system effluent.

The GW-1 IRM extraction wells and treatment system have been in operation since April 16, 1993. Groundwater is being extracted from first HSZ wells MW-4 and MW-32 at flow rates of approximately 20 and 13 gallons per minute, respectively. The GW-2 groundwater extraction system began operation on October 26, 1994. Groundwater is being extracted from first HSZ well EW-1, located in the southeast corner of the site (Figure 2) at a flow rate of 10 gallons per minute.

Both GW-1 and GW-2 groundwater influent is treated using an air stripper and discharged, under permit with the County of Sacramento, to the 114-inch combination sewer/storm trunk line in the northern portion of the site. The air stream from the air stripper is routed through activated carbon vessels to remove volatiles and organic compounds, then discharged to the atmosphere under permit with the Sacramento Metropolitan Air Quality Management District (SMAQMD). During 1994, the extraction wells were shut down for a few weeks during August and October while aquifer pumping tests were being conducted in the first and second HSZs both on and off-site.

Analytical results for the first three quarters of groundwater sampling including tabulated results, groundwater elevation contour maps, and laboratory analytical reports, were provided to the DTSC in the form of data transmittals (Dames & Moore, 1994b, 1994c, and 1994d). Analytical results for fourth-quarter groundwater monitoring, and a discussion of 1994 groundwater investigation and monitoring results are provided in this report.

3.0 GROUNDWATER SAMPLING PROTOCOL

A summary of groundwater monitoring well sampling protocol is presented in this section. A detailed description of sampling and analysis procedures is provided in Appendix A. The following steps were undertaken during quarterly groundwater monitoring:

- ❑ Water-level measurements were collected from extraction wells, groundwater monitoring wells, piezometers, and soil vapor extraction wells for each sampling round as follows:
  - ° from 38 monitoring wells in January 1994;
  - ° from 28 monitoring wells in April 1994;
  - ° from 43 monitoring wells, 9 piezometers, and 2 soil vapor extraction (SVE) wells in June 1994; and
  - ° from 1 extraction well, 43 monitoring wells, 12 piezometers, and 2 SVE wells during October 1994.
- ❑ Groundwater monitoring wells were sampled according to the sampling and analysis schedule provided in Table 1;
- ❑ Prior to sampling, all groundwater monitoring wells were purged using submersible pumps (using dedicated systems, where available) until pH, electrical conductivity (EC), and temperature stabilized and at least three casing volumes of water had been extracted;
- ❑ Groundwater samples from wells containing dedicated sampling systems were collected from a sampling port in the discharge line;
- ❑ Groundwater samples from wells without dedicated sampling systems were collected using a disposable polyethylene bailer;
- ❑ Extraction well samples were collected from sampling ports located at the well heads;
- ❑ Groundwater sample containers were labeled, stored on ice in coolers, logged onto chain-of-custody forms, and shipped to a DTSC-certified laboratory for analysis;
- ❑ Groundwater samples were analyzed for chlorinated and aromatic VOCs, arsenic, chromium, lead, and nickel according to the sampling and analysis schedule provided in Table 1;
- ❑ All non-dedicated sampling equipment was properly decontaminated prior to sampling each well;
- ❑ For quality assurance/quality control (QA/QC) purposes, field blanks, rinse blanks, and blind duplicates were collected at a quantity equivalent to or greater than ten percent of the wells sampled; and
- ❑ QA/QC data validation was performed on analytical laboratory data upon receipt.

4.0 GROUNDWATER INVESTIGATION AND MONITORING RESULTS

This section presents a summary of the results of groundwater investigations and groundwater monitoring conducted during 1994. A discussion of hydrogeology, groundwater analytical results, distribution and sources of constituents in groundwater and constituent trends in groundwater are presented.

4.1 HYDROGEOLOGY

This section presents a discussion of site hydrogeology. A summary of stratigraphy and groundwater hydrogeology is provided and has been augmented with the 1994 groundwater investigation and monitoring results.

4.1.1 Stratigraphy

Interpretation of lithologic, geophysical, and CPT logs in conjunction with previously developed data indicates that a sequence of fluvial sediments composed of interbedded sands, silts, and clays underlies the area of investigation. The degree of homogeneity, thickness, and lateral extent of the sedimentary layers are variable. This interpretation concurs with previous stratigraphic interpretations of the area (Dames & Moore, 1990b, 1991a, 1991c, 1991d, 1992a, 1992c, 1993a, 1994a, 1994e, and 1994f). A cross section along the axis of GW-1, interpreted from the data, is provided as Figure 3. Well completion details are provided in Table A-2 of Appendix A.

The primary pertinent subsurface hydrogeologic features identified during previous investigations are the following:

- The first HSZ: this unit is a generally correlatable, permeable, saturated sand zone between approximately 30 and 65 feet below ground surface (bgs). It pinches out south of Sutterville Road, beyond which is a clay to silty clay that contains sand to silty sand and silt lenses and stringers;
- A clay to silty clay zone: this zone is generally 10 to 20 feet thick and underlies the first HSZ;
- The second HSZ: this zone is comprised of silty sand to clayey sand layers between approximately 70 and 84 feet bgs; and
- The third HSZ: this zone consists of silty sand to sand from approximately 105 to 115 feet bgs beneath the eastern portion of the site, and 115 to 125 feet bgs off-site.

The sandy layers in the second HSZ range in thickness from two to eight feet and are generally encountered at most off-site monitoring well and CPT locations completed below 75 feet. However, at several CPT locations on the west flank of the investigation area, no sand unit was encountered at depth, and the lithology was interpreted to be interbedded silty clay, clayey silt, and clay.

4.1.2 Groundwater Hydrogeology

Static water levels were measured in January, April, June, and October of 1994 and are listed in Table 2. Detailed shallow-groundwater contour maps were provided with data transmittals to the DTSC for the first three quarterly sampling rounds (Dames & Moore, 1994b, 1994c, 1994d). Detailed fourth quarter groundwater contour maps for the first and second HSZ are presented in Figures 4 and 5, respectively. Summary groundwater contour maps for the first and second HSZ for all four quarters are provided in Figures 6 and 7, respectively.

Groundwater flow direction and gradient have generally been consistent over the last six years. The groundwater flow direction is to the southeast. The hydraulic gradient for the first HSZ is approximately 0.002 in the northern portion of the site. The gradient increases to approximately 0.003 in the central portion of the site and remains fairly constant to the southeast.

Figure 8 graphically depicts groundwater elevations between 1988 and 1994. The graph includes water-level measurements from wells along a transect that extends from the north end of the site to the southeast extent of the investigation area. From the graph, it is apparent that groundwater elevations fluctuate seasonally and that the highest and lowest groundwater levels generally occur in the spring and fall, respectively. Additionally, groundwater elevations decreased approximately three feet between 1988 and 1992. This decrease correlates with successive years of below average annual precipitation. During the winter of 1993, groundwater elevations increased approximately two feet. This water-level rise correlates with a period of above-average annual precipitation. Since the winter of 1993, groundwater elevations have steadily decreased. This decrease correlates with the below-average annual precipitation during the winter of 1994.

Comparison of first HSZ groundwater elevations measured in most on-site and off-site wells with groundwater elevations in second HSZ wells shows a downward vertical gradient between the two zones. A downward, but much smaller, gradient also exists between the second and third zones. However, during pumping tests and ongoing extraction from MW-4 and MW-32 in the first HSZ for the GW-1/GW-2 IRM, the vertical gradient is reversed, becoming upward in the vicinity of the pumping or extraction wells.

4.2 GROUNDWATER ANALYTICAL RESULTS

Detailed discussions of groundwater analytical results are presented in the RI/FS Report (Dames & Moore, 1991c), the Addendum RI/FS Report (Dames & Moore, 1991d), the 1992 and 1993 Annual Groundwater Monitoring Reports (Dames & Moore, 1993a, 1994a), and the Draft Additional Characterization of Off-Site Groundwater, Operable Unit GW-1 Report (Dames & Moore, 1994e). The following discussion of groundwater analytical results from quarterly monitoring for the 1994 calendar year augments these previous discussions. Tables 3 and 4 summarize analytical groundwater results from 1988 to 1994; comprehensive analytical results for 1994 are provided in Appendix B. Figure 2 shows locations of all on-site and off-site wells referenced in the discussions.

4.2.1 Metals

Analyses for arsenic, chromium, lead, and nickel were performed on groundwater samples according to the sampling and analysis schedule provided in Table 1. In general, metals analyses were performed on groundwater samples collected from most wells for the first sampling round and for a lesser number of wells during the third sampling round. Summary analytical results are presented in Table 3. A brief discussion of metals analytical results is provided below.

Arsenic

Arsenic was reported for groundwater samples from 2 of 11 first HSZ wells (MW-13 and MW-22), and in none of the 5 second HSZ wells sampled in 1994. Arsenic was not detected in samples collected from either of the two third HSZ wells. Reported concentrations of arsenic range from 15 to 33 μg/l with the highest concentrations (>20 μg/L) reported for groundwater samples collected from MW-13. The federal and state maximum contaminant limit (MCL) for arsenic in drinking water is 50 μg/l. Background levels for arsenic in groundwater within Sacramento County range from 0 to 20 μg/l (Johnson, 1985). Reported levels of arsenic are below the MCL and are generally within the range of background levels.

Chromium (total)

Chromium, as total chromium, was reported in groundwater samples collected from 9 of 18 first HSZ wells, 4 of 6 second HSZ wells, and both of the third HSZ wells in 1994. Reported concentrations of chromium range from 5.2 to 46 μg/l with the highest concentrations reported for groundwater samples collected from MW-11 and MW-12. The federal MCL for chromium in drinking water is 50 μg/l. None of the reported concentrations of chromium for groundwater samples collected in 1994 exceed the MCL. Background concentrations of chromium in groundwater for Sacramento County range from 1 to 20 μg/l, (Johnson, 1985). In general, reported levels of chromium are within the range of background levels.

Lead

Lead was reported in groundwater samples collected from 4 of 22 first HSZ wells, 1 of 6 second HSZ wells, and in 1 third HSZ well sampled in 1994. Reported concentrations for lead range from 3.4 to 12 μg/l. The federal MCL for lead in drinking water is 50 μg/l. Background concentrations of lead in groundwater for Sacramento County reportedly range from <1 to 9 μg/l (Johnson, 1985). Reported levels of lead in on-site and off-site groundwater monitoring well samples are below the MCL, and are generally within the range of background levels.

Nickel

Nickel was reported for groundwater samples collected from 25 of 31 first HSZ wells, 6 of 7 second HSZ wells, and in 1 third HSZ well sampled in 1994. Reported nickel concentrations range from 6.0 to 590 μg/l with the highest concentrations (200 μg/l or greater) reported for groundwater samples collected from first HSZ wells MW-19, MW-21, MW-25, MW-39, MW-43, and MW-45. The federal MCL for nickel in drinking water of 100 μg/l became effective in January 1994. Previously, no state or federal MCL existed. Nickel concentrations reported for groundwater samples collected from a total of 10 wells exceed the MCL (Table 3).

Reported background concentrations of nickel in groundwater for Sacramento County reportedly range from 1 to 12 μg/l (Johnson, 1985). Reported nickel concentrations for groundwater samples collected from 30 on-site and off-site monitoring wells exceed the background range for Sacramento County.

4.2.2 Chlorinated VOCs

Analyses for chlorinated VOCs in groundwater samples collected during the 1994 monitoring program were performed according to the sampling and analysis schedule (Table 1). Chlorinated VOC analyses were performed on groundwater samples collected from 44, 28, 39, and 31 monitoring wells during the first, second-, third-, and fourth-quarter groundwater monitoring rounds, respectively. Summary analytical results are presented in Table 4. A brief discussion of each compound detected in groundwater samples collected and analyzed during the 1994 calendar year follows.

1,1,1-Trichloroethane (1,1,1-TCA)

The compound 1,1,1-TCA was reported in groundwater samples collected from 14 of 37 first HSZ wells, 2 of 7 second HSZ wells, and from neither of the third HSZ wells in 1993. Reported concentrations of 1,1,1-TCA range from 0.50 to 6.2 μg/l. All reported detections of 1,1,1-TCA were below the MCL for 1,1,1-TCA of 200 μg/l in drinking water.

1,1,2-Trichloroethane (1,1,2-TCA)

The compound 1,1,2-TCA was reported in groundwater samples collected from 2 of 37 first HSZ wells, none of the 7 second HSZ wells, and neither of the third HSZ wells, in 1994. Reported concentrations of 1,1,2-TCA range from 0.88 to 4.3 μg/l. All reported detections of 1,1,2-TCA were below the MCL for 1,1,2-TCA of 32 μg/l in drinking water.

1,1-Dichloroethane (1,1-DCA)

The compound 1,1-DCA was reported in groundwater samples collected from 21 of 37 first HSZ wells, 5 of 7 second HSZ wells, and for neither of the third HSZ wells in 1994. Reported concentrations of 1,1-DCA range from 0.51 to 310 μg/l with the highest concentrations (>50 μg/l) reported for groundwater samples collected from wells MW-42 and MW-43. These two wells are located in the Central Fill area of the site (Figure 2). Reported concentrations of 1,1-DCA in samples from 9 of the 21 first HSZ wells and 4 of the 7 second HSZ wells exceed the MCL for 1,1-DCA of 5 μg/l.

1,2-Dichloroethane (1,2-DCA)

The compound 1,2-DCA was reported in groundwater samples collected from 9 of 37 first HSZ wells, and 2 of 7 second HSZ wells in 1994. No detections were reported for either of the third HSZ wells. Reported concentrations of 1,2-DCA range from 0.53 to 73.0 μg/l with the highest concentrations (>50 μg/l) reported for groundwater samples collected from MW-13, located in the Former Oil House area (Figure 2). 1,2-DCA was reported for off-site groundwater samples collected from 6 first and 2 second HSZ monitoring wells, at concentrations ranging from 0.53 to 3.9 μg/l. All 1994 reported detections exceed the MCL for 1,2-DCA in drinking water of 0.5 μg/l.

1,1-Dichloroethylene (1,1-DCE)

The compound 1,1-DCE is the most widely distributed chlorinated VOC constituent detected in groundwater both on- and off-site. Figure 9 shows concentration contours for 1,1-DCE in the first HSZ. In 1994, 1,1-DCE was reported in samples collected from 25 of 37 first HSZ monitoring wells, 6 of 7 second HSZ monitoring wells, and neither of the third HSZ wells. Figure 10 shows concentration contours for 1,1-DCE in the second HSZ.

Reported concentrations of 1,1-DCE range from 0.61 to 160 μg/l, with the highest concentrations (>100 μg/l) reported for samples collected from on-site wells MW-13 and MW-42, and offsite wells MW-34, MW-36, MW-38 and MW-40. Reported concentrations of 1,1-DCE in groundwater samples collected from 21 of the first and 4 of the second HSZ wells exceed the MCL of 6 μg/l.

Carbon Tetrachloride

Carbon tetrachloride was reported in groundwater samples collected from 4 of 37 first HSZ wells, 3 of 7 second HSZ wells, and neither of the third HSZ wells in 1994. All of the samples with reported detections of carbon tetrachloride were from off-site wells, including: first HSZ wells MW-29, MW-38, MW-39, and MW-45, and second HSZ wells MW-37, MW-44, and MW-46. Reported concentrations of carbon tetrachloride range from 0.55 to 6.1 μg/l. Carbon tetrachloride was not reported for any groundwater samples collected from wells located on-site. The furthest upgradient detections have been reported in groundwater samples collected from well MW-29 during the first round of groundwater sampling in 1992 (1.5 μg/l) and during the third round of groundwater sampling in 1994 (3.7 μg/l). Carbon tetrachloride was not detected for groundwater samples collected from MW-29 during 1993 groundwater sampling. MW-29 is located in a vacant lot along the eastern site boundary. The highest 1994 reported concentration of carbon tetrachloride, 6.1 μg/l, was reported in a groundwater sample from MW-44. All reported detections of carbon tetrachloride exceed the MCL in drinking water of 0.5 μg/l.

Chloroform

Chloroform was reported for groundwater samples collected from 12 of 35 first HSZ wells, 4 of 7 second HSZ wells, and in neither of the third HSZ wells in 1994. Reported concentrations of chloroform range from 0.66 to 5.1 μg/l. Chloroform was also reported in one rinsate blank. Chloroform may be present in water as a constituent used for decontamination of public water supply systems (chlorination), and as a potential laboratory contaminant. None of the reported concentrations of chloroform exceed the MCL in drinking water of 200 μg/l.

Perchloroethylene (PCE) (Tetrachloroethene)

The compound PCE was reported in groundwater samples collected from 9 of 37 first HSZ wells, none of the 7 second HSZ wells, and neither of the third HSZ wells in 1994. Reported PCE concentrations range from 0.52 to 4.8 μg/l. PCE was reported in groundwater samples collected from 1 off-site first HSZ well, MW-34. None of the reported concentrations of PCE exceed the MCL for PCE in drinking water of 5 μg/l.

Trichloroethylene (TCE) (Trichloroethene)

The compound TCE was reported for groundwater samples collected from 17 of 37 first HSZ wells, 3 of 7 second HSZ wells, and neither of the third HSZ wells sampled in 1994. Reported TCE concentrations range from 0.5 to 22 μg/l with the highest concentrations (>10 μg/l) reported for groundwater samples collected from first HSZ wells MW-13, MW-31 and MW-34, and second HSZ well

MW-40. TCE was reported for groundwater samples collected from all 7 off-site first HSZ wells and 2 off-site second HSZ wells. Reported concentrations of TCE for groundwater samples collected from 9 of the first HSZ wells and one of the second HSZ wells exceed the MCL for TCE in drinking water of 5 μg/l.

Vinyl Chloride

Vinyl chloride was reported for groundwater samples collected from MW-43 during each of the four sampling rounds in 1994. Reported concentrations of vinyl chloride range from 7.2 to 10.0 μg/l, which exceed the MCL for vinyl chloride in drinking water of 0.5 μg/l.

4.2.3 Aromatic VOCs

Analyses for aromatic VOCs in groundwater samples were performed on groundwater samples from 41, 11, 15, and 14 monitoring wells during the first, second, third and fourth quarterly groundwater monitoring rounds, respectively. Summary analytical results are presented in Table 4. A brief discussion of each compound detected in groundwater samples collected and analyzed during the 1994 monitoring year follows.

Benzene

Benzene was reported for groundwater samples collected from 5 of 37 first HSZ monitoring wells, none of the 7 second HSZ wells, and neither of the two third HSZ wells sampled in 1994. Reported concentrations range from 0.51 to 4,200 μg/l. Groundwater samples with benzene detections were collected from three wells in the Former Oil House area (MW-4, MW-13, and MW-14 shown on Figure 2) with the highest concentrations (> 100 μg/l) reported for groundwater samples collected from wells MW-4 and MW-13. The reported concentrations of benzene from MW-4, MW-13, and MW-14 exceed the MCL for benzene in drinking water of 1 μg/l (Table 3).

Toluene

Toluene was reported in groundwater samples collected from 2 of 37 first HSZ monitoring wells, none of the 7 second HSZ wells, and neither of the third HSZ wells in 1994. Reported concentrations range from 6.9 to 180 μg/l. All groundwater samples with toluene detections were collected from wells in the Former Oil House area (MW-4 and MW-13 shown in Figure 2) with the highest concentrations (> 100 μg/l) reported for samples collected from MW-13. None of the reported concentrations exceed the MCL for toluene in drinking water of 1,000 μg/l.

Ethylbenzene

As was the case with toluene, the groundwater samples with reported ethylbenzene detections were collected from two wells in the Former Oil House area (MW-4 and MW-13 shown in Figure 2). The highest concentration of ethylbenzene (250 μg/l) was reported for the sample collected from MW-13. None of the reported concentrations exceed the MCL for ethylbenzene in drinking water of 680 μg/l.

Xylene

Xylene was reported for groundwater samples collected from 2 of 37 first HSZ monitoring wells sampled in 1994. No detections were reported for either second or third HSZ wells. Reported concentrations range from 8.6 to 288 μg/l. All xylene detections were reported for groundwater samples collected from on-site wells MW-4 and MW-13 located in the Former Oil House area (Figure 2). None of the reported concentrations exceed the MCL for xylene in drinking water of 1,750 μg/l.

4.3 DISTRIBUTION AND POTENTIAL SOURCES OF CONSTITUENTS IN GROUNDWATER

Groundwater investigations to date have focused on assessing the lateral and vertical extent of chlorinated and aromatic VOCs, arsenic, chromium, lead, and nickel in groundwater in the first and second HSZs, both on- and off-site. Impacted groundwater has been grouped into two different plumes:

- Plume A (GW-1, Feasibility Study Supplement, Dames & Moore, 1992e): first and second HSZ impacted on- and off-site by chlorinated VOCs originating primarily in the Central Fill area of the site, and encompassing a smaller plume of aromatic compounds originating primarily in the former Oil House area; and

- Plume B (GW-2, Feasibility Study Supplement, Dames & Moore, 1992e): first HSZ aquifer impacted by low concentrations (near MCLs) of chlorinated VOCs, as well as nickel originating in the southern portion of the site.

As described above in Section 4.2.2, the compound 1,1-DCE is the most widely distributed constituent in groundwater, both on- and off-site. The lateral distribution of Plume A and Plume B in the first HSZ is approximated with concentration contours of 1,1-DCE presented in Figure 9. Concentration contours are based on third quarter 1994 groundwater monitoring well analytical results, supplemented with existing HP analytical results.

The upgradient limit and potential source area of chlorinated VOCs in groundwater appears to be just south of groundwater monitoring well MW-2 in the Central Fill area of the site. Plume A extends from the Central Fill area to approximately 5,200 feet southeast of the site and ranges from 250 to 500 feet in

width. Plume B underlies the southeastern part of the site, including the former maintenance shop (round house) location, and extends off-site to the south.

Within the northern portion of Plume A (first 700 feet downgradient of the source area), chlorinated VOCs appear to be limited to the upper portion of the first HSZ. Further downgradient, chlorinated VOCs are present at the base of the first HSZ. From the Former Oil House area, approximately 1,500 feet downgradient of the source area, and extending downgradient to the area where the first HSZ sand pinches out, higher concentrations of chlorinated VOCs are generally observed at the base of the first HSZ than in the upper portion.

Near the southern end of the Plume A, low concentrations (<25 μg/l) of 1,1,1-TCA, 1,1-DCA, 1,1-DCE, 1,2-DCA and carbon tetrachloride have been reported for samples collected from first HSZ well MW-39 (Figure 2 and Figure 9). In the furthest downgradient well, MW-45, only 1,2-DCA, chloroform, and carbon tetrachloride have been detected and at lower levels than in MW-39. This suggests that MW-45 is situated near the southern or downgradient extent of Plume A.

Chlorinated VOCs have been detected in groundwater samples from second HSZ wells MW-12, MW-27, MW-28, MW-37, MW-40, and MW-44. The highest concentrations of chlorinated VOCs in the second HSZ were reported for samples collected from MW-40 located along the eastern site boundary (Figure 2 and Figure 10). Lower concentrations of chlorinated VOCs were detected in MW-37 and MW-44, further downgradient. The extent of off-site chlorinated VOCs in the second HSZ does not appear to exceed the lateral extent of VOC impacts in the first HSZ.

To date, the third HSZ has been evaluated by collection of groundwater samples from wells MW-41 and MW-47. Well MW-41 is located adjacent to MW-12 in the former Oil House area. MW-47 is located off-site adjacent to first and second HSZ wells MW-36 and MW-37 on the north side of the Sacramento Children's Home. Analytical results reported for groundwater samples collected from well MW-41 have shown no detectable levels of chlorinated VOCs in 11 rounds of groundwater monitoring. MW-47 was installed in June 1994, and has shown no detections of chlorinated VOCs in 2 rounds of sampling. This suggests that the vertical extent of chlorinated VOCs in groundwater is confined to the upper two HSZs both on- and off-site.

Carbon tetrachloride has not been detected in on-site monitoring wells. The furthest upgradient detections have been reported for samples collected from first HSZ well MW-29 (Figure 2). MW-29 is located adjacent to a former gas station as referenced in the RI/FS Report (Dames & Moore, 1991c). The source of the carbon tetrachloride detected in first and second HSZ wells off-site may be the former gas station, or may be associated with sewers in the area, but does not appear to be located on the site.

In the Former Oil House area, benzene has been reported at concentrations greater than ten parts per million in the upper portion of the first HSZ. The source of benzene, as well as other aromatic compounds in the Former Oil House area, appears to be underground fuel storage tanks previously removed from the area. Analytical results from HP and groundwater monitoring well sampling performed to date suggest that aromatic hydrocarbons in groundwater are generally restricted to the Former Oil House area of the site and have not migrated off-site.

Concentrations of nickel are elevated with respect to Sacramento County background levels (Johnson, 1985) and appear to be associated with the chlorinated VOC Plume A and Plume B. Within Plume A, concentrations of nickel have been reported for samples collected from four groundwater monitoring wells (MW-34, MW-39, MW-42, and MW-43) in several monitoring rounds. The reported concentrations exceed the MCL of 100 μg/L. However, the concentrations of nickel in samples from MW-34 and MW-42 have been steadily decreasing, and have been less than the MCL in 1993 and 1994. Within Plume B, nickel concentrations have been reported for samples collected from nine groundwater monitoring wells (MW-6, MW-7, MW-17, MW-19, MW-21, MW-23, MW-24, MW-25 and MW-26) in several monitoring rounds. These reported concentrations also exceed the MCL of 100 μg/l. Concentrations of nickel in samples from MW-6, MW-7, and MW-26 decreased to less than the MCL by the third quarter of 1994. Nickel has also been reported at concentrations exceeding the MCL in samples collected during one sampling round in 1991 from upgradient groundwater sampling wells MW-1 and MW-2. No source of nickel (other than background sources), either in soil or groundwater, has been identified at the site.

4.4 CONSTITUENT CONCENTRATION TRENDS IN GROUNDWATER

An evaluation of trends of constituent concentrations in groundwater was performed for selected wells and constituents of concern. Graphs of constituent concentrations over the duration of the groundwater monitoring program are provided in Figures 11 through 22, and a graph of water level variation for selected wells is provided as Figure 8. Non-detects were plotted as one-half of the reported detection limit. Figures 11 and 12 depict nickel concentrations in samples collected from selected monitoring wells in the southern portion of the site where nickel concentrations are or have been elevated. Figures 13 through 22 are graphs of 1,1-DCE, 1,1-DCA, 1,2-DCA, and benzene concentrations for selected monitoring wells located along the axis of Plume A from upgradient to downgradient. The following observations were made from these graphs:

- Nickel concentrations have fluctuated greatly in most wells in the groundwater monitoring program, but appear to have generally decreased from 1991 through 1994 (Figures 11 and 12);
- A slight decreasing trend in concentrations of 1,1-DCE began in the fourth quarter of 1992, and was noted in the 1993 Annual Groundwater Monitoring Report (Dames &

Moore, 1994a). This trend continued in 1994. However, some exceptions to the trend exist and are noted below.

- Concentrations of 1,1-DCE in samples from MW-43 at the northern extent of the plume have remained relatively constant (Figure 13).
- Concentrations of 1,1-DCE in samples from MW-13, screened in the upper portion of the first HSZ, appear to have increased slightly between 1993 and 1994 (Figure 15).
- Concentrations of 1,1-DCE in samples from first HSZ wells MW-29 and MW-30 show a slight decreasing trend, while concentrations in samples from MW-28 at the same location within the second HSZ have remained relatively constant (Figure 17).
- A slightly increasing trend in 1,1-DCE concentrations is shown for samples from off-site second HSZ well MW-37 (Figure 20). Concentrations of 1,1-DCE in all other second HSZ wells appear to be remaining relatively constant.
- In the first HSZ, the overall trend of decreasing concentrations of 1,1-DCE appears to be reversed in wells downgradient of MW-36. Downgradient of MW-36, 1,1-DCE concentrations are increasing (Figure 22).

- The trend of decreasing concentrations of benzene in samples from MW-13, which was noted in the 1993 Annual Groundwater Monitoring Report (Dames & Moore, 1994a) continued into 1994, but at a decreasing rate.
- Since extraction of groundwater from MW-4 and MW-32 for treatment began in 1993, a trend of decreasing VOC concentrations in these wells has been observed.

5.0 CONCLUSIONS

Conclusions based on 1994 and previous groundwater investigations and monitoring are as follows:

- Chlorinated VOCs in groundwater occur in two plumes:
  - Plume A (GW-1), which originates in the Central Fill area of the site, impacts the first and second HSZs; and
  - Plume B (GW-2), which originates generally in the south part of the inactive portion of the site, impacts only the first HSZ.
- With a few noted exceptions, the trend of decreasing chlorinated VOC concentrations that began in 1992 appears to have continued through 1994, but at a decreased rate;
- The trend of decreasing chlorinated VOC concentrations appears to be reversed downgradient from MW-36 to MW-39, which shows an upward trend;
- Chlorinated VOC concentrations reported in samples collected from groundwater monitoring well MW-39 at the southern end of Plume A, have been greater than the MCL for 1,1-DCE since September 1992;
- The downgradient extent of chlorinated VOC impacts to groundwater in the second HSZ does not appear to extend beyond the chlorinated VOC impacts in the first HSZ;
- Carbon tetrachloride impacts to off-site groundwater do not appear to originate from the site;
- Aromatic compound impacts to groundwater appear to be restricted to the upper portion of the first HSZ in the Former Oil House area on-site, and to originate from previously removed underground storage tanks;
- No source of nickel (other than background sources) has been identified at the site and background levels (for the vicinity of the site) are uncertain. Reported nickel concentrations appear to vary with time and no temporal trends are apparent. However, 1994 nickel concentrations have generally decreased relative to 1991 and 1992 concentrations;
- The groundwater monitoring sampling and analysis program for 1994 (Table 1) provided adequate monitoring of existing wells.

6.0 RECOMMENDATIONS

Based on the results of groundwater monitoring to date, Dames & Moore recommends retaining the groundwater monitoring and analysis schedule as presented in the 1993 Annual Groundwater Monitoring Report (Dames & Moore, 1994a), with the following modifications:

- MW-45, MW-46, and MW-47 will be evaluated quarterly during 1995 for arsenic, chromium, nickel, chlorinated VOCs and aromatic VOCs; and

- MW-48, P-10, and P-11 will be evaluated quarterly for TPH-gasoline and TPH-diesel.

6.0 RECOMMENDATIONS

Based on the results of groundwater monitoring to date, Dames & Moore recommends retaining the groundwater monitoring and analysis schedule as presented in the 1993 Annual Groundwater Monitoring Report (Dames & Moore, 1994a), with the following modifications:

- MW-45, MW-46, and MW-47 will be evaluated quarterly during 1995 for arsenic, chromium, nickel, chlorinated VOCs and aromatic VOCs; and

- MW-48, P-10, and P-11 will be evaluated quarterly for TPH-gasoline and TPH-diesel.

Dames & Moore, 1993d, Transmittal of Third Quarter 1993 Groundwater Monitoring Data, Union Pacific Railroad Yard, Sacramento, California, September.

Dames & Moore, 1994a, 1993 Annual Groundwater Monitoring Report, Union Pacific Railroad Yard, Sacramento, California, February.

Dames & Moore, 1994b, Transmittal of First Quarter 1994 Groundwater Monitoring Data, Union Pacific Railroad Yard, Sacramento, California, April.

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Johnson, K.L., 1985, Chemical Quality of Groundwater in Sacramento and Western Placer Counties, California: U.S. Geological Survey Water Resources Investigation Report 85-4164.

TABLES

TABLE 1
1994 SAMPLING AND ANALYSIS SCHEDULE
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Screen Interval (feet bgs)	Total Depth	Hydrostrati-graphic Zone	Parameter					
				601	602	As	Cr	Ni	Pb
MW-1	15-35	46	1	A	A	E	E	A	E
MW-2	37-57	66	1	Q	A	E	E	A	E
MW-3	15-25	31	1	A	A	E	E	E	E
MW-4*	34-54	60	1	M	M	E	E	M	E
MW-5	37-47	51	1	A	E	E	A	A	E
MW-6	30-50	54	1	A	E	E	A	A	E
MW-7	33-43	46	1	Q	A	E	S	S	E
MW-8	37.5-52.5	59.5	1	S	A	E	E	A	E
MW-11	50-55	56	1	Q	A	E	S	A	E
MW-12	69-79	82	2	Q	Q	A	A	S	E
MW-13	26-41	45	1	Q	Q	S	E	A	E
MW-14	52.5-57.5	58	1	Q	Q	A	A	A	E
MW-15	26-41	44	1	S	A	E	A	A	E
MW-16	51.8-56.8	57.5	1	Q	A	E	E	A	E
MW-17	26.5-41.5	45	1	S	A	E	E	S	E
MW-18	52-57	57.5	1	Q	A	E	E	A	E
MW-19	26-41	42	1	S	A	E	E	S	E
MW-20	52-57	59	1	Q	A	E	E	E	E
MW-21	24-39	40	1	S	E	E	E	S	E
MW-22	45.5-50.5	52.5	1	A	E	A	E	E	E
MW-23	25.5-40.5	42	1	S	E	E	E	S	E
MW-24	34-39	45	1	A	E	E	E	S	E
MW-25	26-41	41.5	1	S	A	E	E	S	E
MW-26	38-43	50	1	Q	A	E	E	S	E
MW-27	56.5-66.5	73	2	S	A	E	E	A	E
MW-28	69-79	85	2	Q	Q	E	E	A	E
MW-29	26-41	42	1	Q	Q	E	E	A	E
MW-30	51-56	57	1	Q	Q	E	E	A	E
MW-31	49-54	54.5	1	Q	Q	E	A	A	E
MW-32*	51.5-56.5	57	1	M	M	E	A	M	E

TABLE 1 (Continued)
1994 SAMPLING AND ANALYSIS SCHEDULE
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Screen Interval (feet bgs)	Total Depth	Hydrostrati-graphic Zone	Parameter					
				601	602	As	Cr	Ni	Pb
MW-33	23.5-38.5	39	1	Q	A	E	A	A	E
MW-34	56-61	62	1	Q	A	E	E	S	E
MW-35	27-42	44	1	Q	A	E	E	E	E
MW-36	33.5-48.5	49	1	Q	A	A	A	Q	A
MW-37	75-85	86	2	Q	A	A	A	S	A
MW-38	36-48.5	49	1	Q	A	E	E	A	E
MW-39	33-48	49	1	Q	A	E	E	S	E
MW-40	72.5-82.5	83	2	Q	A	E	E	S	E
MW-41	104.5-114.5	115.5	3	Q	A	E	E	E	E
MW-42	20.5-35.5	37	1	Q	Q	E	E	S	E
MW-43	20-35	37	1	Q	Q	E	E	S	E
MW-44	73.5-78.5	81	2	Q	A	A	A	A	E

M - Monthly (for extraction wells only)
Q - Quarterly
S - Semi-annually
A - Annually
E - Eliminated
601 - EPA method for chlorinated volatile organic compounds analysis
602 - EPA method for aromatic compound analysis
* - Groundwater IRM extraction wells began extracting groundwater in April 1993

TABLE 2
GROUNDWATER ELEVATION DATA, 1988–1994
(Elevation in feet mean sea level datum)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

DATE	MW–1	MW–2	MW–3	MW–4	MW–5	MW–6	MW–7	MW–8	MW–11	MW–12	MW–13
02/19/88	0.00	–0.85	–0.61	–3.50	–3.37	–3.64	–5.73	–5.40	---	---	---
03/02/88	–0.02	–0.92	–0.62	–3.49	–3.44	–3.70	–4.83	–4.21	---	---	---
04/14–15–16/88	0.04	–1.22	–1.26	–3.71	–3.70	–3.96	–5.07	–4.47	---	---	---
07/15/88	–0.32	–2.24	–2.39	–4.50	–4.62	–4.85	–5.86	–5.24	---	---	---
08/19/88	–0.53	*	–2.97	–4.94	–5.05	–5.28	–6.25	–5.64	---	---	---
01/06/89	–1.92	*	–2.50	–5.42	–5.44	–5.68	–6.76	–6.16	---	---	---
10/09/89	–1.52	–2.83	–2.68	–5.43	–5.46	–5.72	–6.85	–6.21	–4.99	–5.63	–5.48
02/21/90	–1.29	–1.22	–0.24	–4.12	–4.20	–4.50	–5.83	–5.10	–3.48	–4.47	–4.21
06/15/90	–0.86	–1.99	–2.01	–4.66	–4.61	–4.90	–6.07	–5.44	–4.20	–4.93	–4.73
09/20/90	–1.89	–3.76	–4.05	–6.14	–6.15	–6.40	–7.47	–6.85	–5.74	–6.38	–6.18
02/05/91	–3.18	–3.85	–3.81	–6.60	–6.57	–6.84	–7.94	–7.37	–6.04	–6.82	–6.69
04/22/91	–2.05	–2.37	–2.22	–5.12	–5.07	–5.37	–6.59	–5.93	–4.64	–5.38	–5.18
07/30/91	–2.40	–3.98	–4.14	–6.43	–6.47	–6.73	–7.79	–7.17	–6.01	–6.65	–6.47
12/27/91	–3.82	–5.04	–5.20	–7.47	–7.41	–7.67	–8.72	–8.15	–7.05	–7.66	–7.53
01/22/92	–3.84	–4.72	–4.64	–7.28	–7.18	–7.46	–8.54	–7.98	–6.83	–7.49	–7.33
05/08/92	–2.37	–3.05	–2.97	–5.70	–5.46	–5.85	–7.04	–6.44	–5.41	–5.96	–5.76
09/29/92	–3.18	–4.95	–5.22	–7.21	–7.24	–7.49	–8.54	–7.92	–6.82	–7.42	–7.27
11/02/92	–3.67	–5.22	–5.26	–7.5	–7.49	–7.72	–8.80	–8.18	–7.11	–7.69	–7.58
01/12 – 01/13/93	–3.30	–3.29	–1.74	–7.11	–6.26	–6.54	–7.92	–7.12	–5.51	–6.45	–6.22
04/07/93	0.35	0.33	0.83	–2.71	–2.57	–2.92	–4.37	–3.61	–2.14	–3.03	–2.77
06/28/93	0.11	–1.27	–1.33	**	–3.99	–4.29	–5.48	–4.96	–3.72	–4.35	–4.77
09/20/93	––	–2.47	––	**	––	––	–6.27	––	–4.37	–5.00	–4.87
01/04/94	–1.48	–2.67	–2.56	**	––	–5.45	–6.58	–6.00	–4.80	–5.47	–5.35
04/11/94	–1.35	–2.31	–2.37	**	–5.00	–5.31	–6.39	–5.92	–4.79	–5.39	–5.83
06/29/94	–1.28	–2.78	–2.97	**	–5.35	–5.65	–6.69	–6.20	–5.11	–5.68	–6.09
10/25/94	–2.11	–3.81	–4.02	**	–6.21	–6.46	–7.5	–6.91	–5.82	–6.41	–6.29

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TABLE 2
GROUNDWATER ELEVATION DATA, 1988–1994
(Elevation in feet mean sea level datum)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

DATE	MW–14	MW–15	MW–16	MW–17	MW–18	MW–19	MW–20	MW–21	MW–22	MW–23	MW–24
10/09/89	–5.55	–5.56	–5.56	–6.03	–6.09	–6.77	–6.85	–6.43	–6.41	–6.10	–6.10
02/21/90	–4.31	–4.29	–4.29	–4.82	–4.95	–5.82	–5.91	–5.35	–5.33	–4.96	–4.94
06/15/90	–4.80	–4.79	–4.79	–5.28	–5.36	–6.05	–6.12	–5.64	–5.62	–5.30	–5.27
09/20/90	–6.26	–6.26	–6.25	–6.69	–6.76	–7.37	–7.45	–7.07	–7.04	–6.77	–6.75
02/05/91	–6.76	–6.71	–6.71	–7.23	–7.29	–7.97	–8.03	–7.55	–7.53	–7.22	–7.18
04/22/91	–5.27	–5.22	–5.23	–5.77	–5.85	–6.57	–6.65	–6.13	–6.13	–5.80	–5.77
07/30/91	–6.53	–6.57	–6.55	–7.00	–7.06	–7.70	–7.76	–7.38	–7.35	–7.09	–7.07
12/27/91	–7.60	–7.57	–7.57	–8.02	–8.08	–8.69	–8.76	–8.33	–8.32	–8.04	–8.02
01/22/92	–7.41	–7.37	–7.36	–7.86	–7.92	–8.56	–8.64	–8.16	–8.15	–7.82	–7.82
05/08/92	–5.84	–5.79	–5.8	–6.32	–6.38	–7.08	–7.15	–6.64	–6.61	–6.25	–6.23
09/29/92	–7.32	–7.36	–7.36	–7.78	–7.85	–8.47	–8.52	–8.14	–8.12	–7.86	–7.85
11/02/92	–7.63	–7.26	–7.26	–7.58	–8.13	–8.71	–8.82	–8.38	–8.40	–8.10	–8.08
01/12 – 01/13/93	–6.28	–6.26	–6.27	–6.79	–6.94	–7.66	–7.97	–7.42	–7.43	–6.99	–6.92
04/07/93	–2.86	–2.83	–2.83	–3.45	–3.57	–4.42	–4.48	–3.85	–3.84	–3.39	–3.37
06/28/93	–4.70	–4.42	–4.49	–4.91	–4.97	–5.66	–5.70	–5.10	–5.10	–4.70	–4.67
09/20/93	–4.91	––	–4.94	––	–5.57	––	–6.22	––	––	––	––
01/04/94	–5.40	–5.38	–5.38	–5.89	–5.97	–6.61	–6.66	–6.19	–6.18	–5.85	–5.83
04/11/94	–5.75	–5.45	–5.51	–5.91	–5.98	–6.60	–6.61	–6.07	–6.07	–5.69	–5.67
06/29/94	–6.03	–5.75	–5.8	–6.17	–6.24	–6.82	–6.85	–6.35	–6.35	–6.02	–6.0
10/25/94	––	–6.34	–6.35	–6.77	–6.85	–7.47	–7.48	–7.12	–7.11	–6.83	–6.84

SAC21A1.WK1

TABLE 2
GROUNDWATER ELEVATION DATA, 1988–1994
(Elevation in feet mean sea level datum)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

DATE	MW–25	MW–26	MW–27	MW–28	MW–29	MW–30	MW–31	MW–32	MW–33	MW–34	MW–35
10/09/89	–7.47	–7.46	–7.46	---	---	---	---	---	---	---	---
02/21/90	–6.55	–6.55	–6.54	–5.35	–5.01	–5.07	---	---	---	---	---
06/15/90	–6.70	–6.70	–6.69	–5.66	–5.34	–5.37	–5.51	–6.04	–4.21	---	---
09/20/90	–8.05	–8.05	–8.04	–7.04	–6.73	–6.76	–6.88	–7.34	–5.75	---	---
02/05/91	–8.55	–8.55	–8.53	–7.59	–7.31	–7.40	–7.48	–7.93	–7.04	---	---
04/22/91	–7.26	–7.27	–7.25	–6.16	–5.86	–5.90	–6.02	–6.57	–4.63	---	---
07/30/91	–8.39	–8.38	–8.37	–7.32	–7.04	–7.07	–7.19	–7.66	–6.01	–8.34	–8.30
12/27/91	–9.29	–9.30	–9.29	–8.33	–8.10	–8.13	–8.26	–8.70	–7.06	–9.38	–9.39
01/22/92	–9.13	–9.14	–9.13	–8.15	–7.91	–7.94	–8.07	–8.54	–6.84	–9.28	–9.29
05/08/92	–7.69	–7.69	–7.68	–6.72	–6.41	–6.45	–6.58	–7.09	–5.23	–8.38	–7.89
09/29/92	–9.09	–9.09	–9.08	–8.08	–7.83	–7.86	–7.95	–8.39	–6.82	–9.11	–9.11
11/02/92	–9.34	–9.33	–9.33	–8.37	–8.10	–8.13	–8.27	–8.74	–7.13	–9.37	–9.40
01/12 – 01/13/93	–8.53	–8.54	–8.55	–7.24	–6.92	–6.93	–7.15	–7.83	–5.46	–8.76	–8.78
04/07/93	–5.11	–5.12	–5.14	–4.46	–3.53	–3.73	–3.79	–4.41	–2.17	–5.38	–5.38
06/28/93	–5.95	–5.97	–5.97	–4.90	–4.70	–4.96	–5.21	--	–3.74	–6.22	–6.17
09/20/93	--	–6.73	--	–6.02	–5.88	–5.90	–6.13	--	–4.38	–7.03	–6.98
01/04/94	–7.12	–7.13	–7.13	–6.18	–5.96	–5.96	–6.18	--	–4.82	–7.38	–7.38
04/11/94	–6.88	–6.89	–6.89	--	--	--	--	--	–4.81	--	--
06/29/94	–7.14	–7.16	–7.15	–6.77	–6.67	–6.59	--	--	–5.12	–7.32	–7.33
10/25/94	–7.99	–8.00	–7.99	–7.03	–6.79	–6.81	–6.96	**	–5.83	–8.03	–8.06

SAC21A1.WK1

TABLE 2
GROUNDWATER ELEVATION DATA, 1988–1994
(Elevation in feet mean sea level datum)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

DATE	MW–36	MW–37	MW–38	MW–39	MW–40	MW–41	MW–42	MW–43	MW–44	MW–45	MW–46	MW–47
07/30/91	---	---	---	–13.73	–7.83	–6.66	–5.07	–4.24	---	---	---	---
12/27/91	–10.71	–10.91	–13.05	–14.67	–8.82	–7.66	–6.13	–5.30	---	---	---	---
01/22/92	–10.69	–10.85	–13.02	–14.64	–8.65	–7.49	–5.88	–4.99	---	---	---	---
05/08/92	–9.46	–9.66	–11.97	–13.69	–7.24	–5.98	–4.25	–3.32	---	---	---	---
09/29/92	–10.28	–10.61	–12.84	–14.51	–8.50	–7.41	–5.98	–5.20	---	---	---	---
11/02/92	–10.63	–10.88	–13.07	–14.67	–8.84	–7.70	–6.08	–5.15	–13.13	---	---	---
01/12 – 01/13/93	–10.34	–10.43	–12.74	–14.50	–9.88	–6.46	–4.46	–3.59	–12.77	---	---	---
04/07/93	–7.19	–7.43	–10.16	–12.29	--	–3.03	–1.05	0.01	–10.26	---	---	---
06/28/93	–7.42	–7.65	–9.89	–11.60	–5.53	–4.31	–2.48	–1.57	–10.01	---	---	---
09/20/93	–8.09	–8.46	–10.50	–12.26	–6.60	–4.96	–3.46	–2.72	–10.69	---	---	---
01/04/94	–8.67	–8.85	–10.96	–12.61	–6.67	–5.46	--	–2.94	–11.02	---	---	---
04/11/94	--	--	--	--	--	–5.35	–3.57	–2.61	--	---	---	---
06/29/94	–8.73	–8.30	–10.77	–12.16	–6.87	–5.64	–3.96	–3.05	–10.62	–13.67	–12.37	–10.17
10/25/94	–9.23	–9.52	11.60	–13.18	–7.49	–6.40	–4.97	–4.01	–11.64	–14.79	–13.38	–10.58

TABLE 2
GROUNDWATER ELEVATION DATA, 1988–1994
(Elevation in feet mean sea level datum)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

DATE	MW–48	EW–1	P–1	P–2A	P–2B	P–3	P–4	P–5	P–6	P–7
06/29/94	–2.23	– – –	–7.20	–7.20	7.18	–6.87	–6.54	–10.72	–10.85	– – –
10/25/94	–3.34	–8.55	–7.20	–7.06	–7.15	–7.52	–7.3	–11.67	–11.75	–11.39

DATE	P–8	P–9	P–10	P–11	SVE–4	SVE–5
06/29/94	– – –	– – –	–2.52	–2.50	– – –	– – –
10/25/94	–11.48	–11.73	–3.59	–3.58	–4.59	–6.09

* Lock on well cover was vandalized, rendering well inaccessible.
– – – Prior to well installation.
– – Not measured
** Extraction well for groundwater treatment system. Unable to measure water level in this well.

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100	50
	Background Concentration[1]	0–20	1–20	1–12	<1–9
MW–01	03/03/88	4.0	--	--	--
	04/14/88	5.0	30	--	--
	09/20/89	--	--	--	--
	05/10/90	9.0	--	--	--
	09/05/90	--	--	--	--
	01/21/91	--	--	--	--
	04/22/91	--	5.0	130	--
	01/29/92	--	8.0	--	--
	07/09/93	NA	NA	--	NA
	01/17/94	NA	NA	NA	--
MW–02	03/03/88	3.0	--	--	--
	04/14/88	--	120	--	--
	09/20/89	--	--	--	--
	05/17/90	1.0	--	20	--
	09/11/90	--	--	--	--
	01/22/91	--	--	--	--
	04/22/91	4.0	5.7	140	--
	08/01/91	--	--	--	--
	11/07/91	--	--	--	--
	02/07/92	--	--	--	--
	08/25/92	--	--	--	1.0
	01/19/93	--	6.0	12	--
	07/01/93	NA	NA	6.3	NA
	01/05/94	NA	NA	--	NA
MW–03	03/03/88	4.0	--	--	--
	04/14/88	3.0	40	--	--
	09/20/89	--	--	--	16
	02/13/90	NA	NA	NA	20
	05/10/90	9.0	--	--	20
	09/05/90	--	--	--	--
	01/22/91	--	--	--	--
	04/23/91	--	1.5	--	--
	08/01/91	--	--	--	--
	01/29/92	--	--	--	--
	07/09/93	NA	NA	NA	5.7
	01/17/94	NA	NA	--	NA

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100	50
	Background Concentration[1]	0–20	1–20	1–12	<1–9
MW–04	03/03/88	6.0	--	140	--
	04/18/88	5.0	10.0	160	--
	09/20/89	--	--	34	12
	02/15/90	NA	NA	NA	10
	05/23/90	--	4.5	99	--
	09/18/90	--	--	71	--
	05/01/91	6.1	--	11	--
	02/05/91	--	33	200	--
	08/14/91	5.0	--	--	--
	11/07/91	5.0	--	--	--
	01/28/92	--	--	--	--
	08/26/92	--	14	--	--
	01/20/93	--	14	8.0	--
	04/15/93	NA	NA	8.9	NA
	04/18/93	NA	NA	5.0	NA
	04/23/93	NA	NA	6.5	NA
	04/30/93	NA	NA	5.0	NA
	05/06/93	NA	NA	7.1	NA
	05/14/93	NA	NA	10	NA
	06/17/93	NA	NA	14	NA
	07/12/93	NA	NA	6.7	NA
	08/03/93	NA	NA	10	NA
	09/10/93	NA	NA	12	NA
	10/07/93	NA	NA	8.0	NA
	11/08/93	NA	NA	7.8	NA
	01/14/94	NA	NA	7.8	NA
	04/07/94	NA	NA	9.6	NA
	07/08/94	NA	NA	8.0	NA
	09/14/94	NA	NA	17.0	NA
	10/10/94	NA	NA	25.0	NA
MW–05	03/04/88	--	10	--	--
	04/15/88	--	--	--	--
	09/20/89	9.3	--	159	--
	05/17/90	2.0	--	70	--
	09/12/90	--	14	--	--
	01/22/91	--	11	100	--
	04/23/91	--	7.2	81	--
	08/12/91	--	--	--	--
	11/13/91	--	--	--	--
	01/28/92	--	--	--	--
	01/22/93	--	7.0	42	--
	01/17/94	NA	--	47	NA

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100	50
	Background Concentration[1]	0–20	1–20	1–12	<1–9
MW–06	03/04/88	5.0	--	--	--
	04/15/88	--	40	--	--
	09/20/89	--	7.1	39	--
	05/17/90	2.0	--	100	--
	09/11/90	--	21	42	--
	01/24/91	7.0	15	--	--
	04/23/91	5.8	5.4	40	--
	08/12/91	--	--	120	1.0
	11/13/91	--	7.0	110	--
	01/28/92	--	--	180	--
	08/28/92	--	5.0	110	--
	01/22/93	--	--	16	--
	07/09/93	NA	NA	36	NA
	01/17/94	NA	--	36	NA
MW–07	03/04/88	4.0	10	50	--
	04/15/88	9.0	470	230	
	09/15/89	--	5.0	405	--
	05/23/90	--	111	215	10
	09/07/90	--	15	250	--
	01/30/91	7.0	200	200	--
	04/26/91	--	18	130	--
	08/07/91	--	14	150	--
	11/13/91	--	15	140	--
	02/07/92	--	15	180	--
	08/31/92	--	24	--	--
	10/23/92	NA	NA	--	NA
	01/29/93	--	17	47	--
	07/07/93	NA	10	62	NA
	01/10/94	NA	12	71	--
	07/21/94	NA	NA	39.0	NA
MW–08	03/03/88	--	--	--	--
	04/18/88	5.0	40		
	09/20/89	--	--	--	--
	02/13/90	NA	NA	NA	30
	05/23/90	--	--	12	24
	09/13/90	--	--	--	--
	01/30/91	6.0	--	--	70
	04/26/91	--	8.8	29	--
	08/12/91	--	--	--	--
	11/11/91	--	--	--	--
	01/28/92	--	6.0	--	--
	08/28/92	--	--	--	--
	01/27/93	--	--	19	--
	01/17/94	NA	NA	21	--

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100	50
	Background Concentration[1]	0–20	1–20	1–12	<1–9
MW–11	09/06/89	9.7	27	160	57
	02/15/90	NA	NA	NA	20
	05/18/90	--	47	76	--
	09/17/90	--	47	55	--
	01/30/91	--	200	--	--
	04/26/91	--	38	32	--
	08/15/91	--	25	--	--
	11/07/91	--	19	--	--
	01/27/92	--	28	--	--
	08/26/92	--	48	--	--
	01/14/93	--	47	--	--
	07/02/93	NA	55	NA	NA
	01/05/94	NA	46	8.7	--
	07/05/94	NA	41	NA	NA
MW–12	09/11/89	28	18	15	--
	02/15/90	NA	NA	NA	--
	05/22/90	--	10	51	15
	09/18/90	--	10	71	--
	02/04/91	--	50	200	--
	05/01/91	--	6.6	78	--
	08/15/91	--	5.0	--	--
	11/07/91	--	--	--	--
	01/28/92	--	--	120	--
	08/26/92	--	11	--	--
	10/26/92	NA	NA	--	NA
	01/20/93	--	9.0	85	--
	07/02/93	NA	NA	93	NA
	01/07/94	--	26	94	--
	07/05/94	NA	NA	88	NA
MW–13	09/13/89	18	--	14	--
	02/15/90	NA	NA	NA	--
	05/25/90	30	--	10	--
	09/18/90	36	--	--	--
	02/05/91	20	--	100	--
	04/30/91	33	--	7.0	--
	08/07/91	40	--	--	1.0
	11/07/91	38	--	--	--
	02/07/92	43	--	--	--
	08/26/92	42	--	2.0	--
	01/20/93	21	--	6.0	--
	07/02/93	33	NA	NA	NA
	01/07/94	21	NA	8.4	NA
	07/05/94	28	NA	NA	NA

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100	50
	Background Concentration[1]	0–20	1–20	1–12	<1–9
MW–14	09/13/89	--	--	169	--
	02/15/90	NA	NA	NA	--
	05/22/90	--	16	174	--
	09/18/90	--	13	160	--
	02/04/91	--	21	300	--
	05/01/91	--	37	98	--
	08/14/91	6.0	36	--	--
	11/22/91	--	16	--	--
	02/07/92	--	20	--	--
	08/27/92	--	22	--	--
	01/20/93	--	36	12	3.0
	07/02/93	NA	NA	14	NA
MW–15	09/07/89	6.0	--	--	--
	02/07/90	NA	NA	NA	30
	05/16/90	4.0	30	70	--
	09/14/90	5.0	--	52	--
	01/24/91	--	12	--	--
	04/25/91	--	11	51	--
	08/05/91	--	18	--	--
	11/05/91	--	7.0	--	--
	01/30/92	--	6.0	--	--
	08/27/92	--	--	--	--
	01/25/93	13	--	9.6	--
	07/09/93	NA	NA	73	NA
	01/17/94	NA	5.2	55	--
MW–16	09/07/89	6.0	--	--	--
	02/07/90	NA	NA	NA	30
	05/16/90	2.0	--	--	--
	09/14/90	--	10	--	--
	01/24/91	7.0	11	--	--
	04/25/91	--	5.7	20	--
	08/13/91	5.0	5.0	--	--
	11/07/91	--	--	--	--
	01/30/92	--	5.0	--	--
	08/27/92	--	9.0	--	--
	01/21/93	--	7.0	--	--
	01/06/94	NA	5.2	--	--

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100	50
	Background Concentration[1]	0–20	1–20	1–12	<1–9
MW–17	09/21/89	--	--	--	--
	02/07/90	NA	NA	NA	30
	05/18/90	--	7.2	67	12
	09/13/90	--	--	50	--
	01/25/91	7.0	9.0	200	--
	04/29/91	--	6.9	170	--
	08/06/91	--	5.0	170	--
	11/05/91	--	--	--	--
	01/30/92	--	6.0	110	--
	08/27/92	--	7.0	200	--
	01/25/93	--	--	34	--
	07/09/93	NA	NA	70	NA
	01/17/94	NA	NA	79	--
	06/30/94	NA	NA	190	NA
MW–18	09/21/89	--	--	10	--
	02/07/90	NA	NA	NA	40
	05/18/90	--	5.5	13	21
	09/13/90	--	--	--	--
	01/25/91	6.0	7.0	--	--
	04/29/91	--	6.5	24	--
	08/13/91	6.0	6.0	--	--
	11/05/91	--	--	--	--
	01/30/92	--	--	--	--
	08/27/92	--	7.0	--	--
	01/21/93	--	12	--	--
	01/06/94	NA	NA	--	--
MW–19	09/14/89	--	--	14	--
	02/13/90	NA	NA	NA	20
	05/14/90	8.0	--	60	50
	09/07/90	--	--	45	--
	01/24/91	10	--	--	--
	04/29/91	--	16	69	--
	08/05/91	--	5.0	--	--
	11/11/91	--	--	120	--
	01/30/92	--	5.0	170	--
	08/28/92	--	--	370	--
	01/25/93	--	8.4	84	--
	07/09/93	NA	NA	96	NA
	01/16/94	--	--	100	--
	06/30/94	NA	NA	590	NA

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100	50
	Background Concentration[1]	0–20	1–20	1–12	<1–9
MW–20	09/14/89	––	––	––	––
	02/13/90	NA	NA	NA	––
	05/14/90	8.0	––	––	40
	09/07/90	––	––	––	––
	01/24/91	7.0	––	––	––
	04/29/91	––	15	5.3	––
	08/14/91	6.0	8.0	––	––
	11/11/91	––	––	––	––
	01/30/92	––	––	––	––
	08/28/92	––	7.0	––	––
	01/25/93	––	9.8	26	––
	01/06/94	NA	5.4	NA	––
MW–21	09/08/89	8.4	––	15	––
	05/15/90	6.0	––	380	40.0
	09/07/90	––	29.0	300	––
	01/23/91	5.0	7.0	300	––
	04/25/91	––	8.4	310	––
	08/07/91	––	––	190	––
	11/11/91	––	––	400	––
	01/30/92	––	5.0	370	––
	08/28/92	––	––	350	––
	01/29/93	––	––	200	––
	07/08/93	NA	NA	140	NA
	01/16/94	NA	––	400	––
	07/07/94	NA	NA	140	NA
MW–22	09/08/89	24	––	17	––
	05/15/90	9.0	––	––	20
	09/07/90	––	––	––	––
	01/23/91	––	––	––	––
	04/25/91	––	6.9	––	––
	08/14/91	6.0	––	––	––
	11/11/91	––	––	––	––
	01/30/92	6.0	5.0	––	1.0
	01/29/93	––	5.5	6.6	––
	01/16/94	5.9	NA	NA	12

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100	50
	Background Concentration[1]	0–20	1–20	1–12	<1–9
MW–23	09/08/89	9.7	--	--	--
	05/15/90	3.0	--	450	30
	09/06/90	--	--	250	--
	01/23/91	--	--	400	--
	04/23/91	--	6.5	360	--
	08/02/91	--	7.0	250	--
	11/11/91	--	--	180	--
	01/24/92	--	--	470	--
	08/28/92	--	--	280	--
	01/22/93	--	6.0	200	--
	07/08/93	NA	NA	170	NA
	01/16/94	NA	NA	170	--
	07/13/94	NA	NA	160	NA
MW–24	09/08/89	15	--	--	--
	05/15/90	5.0	--	420	30
	09/06/90	--	--	110	--
	01/23/91	--	--	100	2.0
	04/24/91	--	2.9	240	--
	08/01/91	--	--	300	--
	11/13/91	--	--	130	--
	01/24/92	--	--	190	--
	01/22/93	--	--	98	--
	07/08/93	NA	NA	190	NA
	01/16/94	--	NA	140	--
	07/13/94	NA	NA	78	NA
MW–25	09/11/89	11	--	--	--
	05/16/90	3.0	--	200	--
	09/12/90	--	11	130	--
	01/29/91	8.0	10	300	--
	04/24/91	--	--	240	--
	08/02/91	--	9.0	210	--
	11/13/91	--	7.0	250	--
	01/23/92	--	5.0	910	--
	09/01/92	--	--	760	--
	01/27/93	--	5.5	330	--
	07/08/93	NA	NA	220	NA
	01/16/94	--	--	220	NA
	07/07/94	NA	NA	250	NA

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	[illegible]	[illegible]
	MCL	50	50	100	50
	Background Concentration[1]	0–20	1–20	1–12	<1–9
MW–26	09/11/89	11	––	––	––
	05/16/90	––	––	200	––
	09/12/90	––	––	260	––
	01/29/91	––	––	300	––
	04/24/91	––	8.0	240	––
	08/13/91	––	6.0	250	––
	11/13/91	––	––	750	––
	01/27/92	––	––	720	––
	09/01/92	––	10	[illegible]	[illegible]
	10/23/92	NA	NA	160	NA
	01/28/93	––	13	[illegible]	[illegible]
	07/07/93	NA	NA	120	NA
	01/10/94	––	20	[illegible]	[illegible]
	07/07/94	NA	NA	95	NA
MW–27	09/15/89	––	19	––	––
	05/21/90	––	––	37	23
	09/17/90	––	––	49	––
	01/29/91	––	8.0	––	––
	04/24/91	––	6.1	38	––
	08/13/91	––	––	––	1.0
	11/13/91	––	––	––	––
	01/23/92	––	––	––	––
	09/01/92	––	6.0	[illegible]	––
	01/28/93	––	8.3	[illegible]	––
	07/08/93	NA	NA	91	NA
	01/16/94	NA	––	[illegible]	––
	07/07/94	NA	NA	[illegible]	[illegible]
MW–28	02/15/90	NA	NA	NA	––
	05/25/90	––	4.4	26	16
	09/19/90	––	49	52	––
	02/01/91	––	10	––	1.0
	04/30/91	––	6.0	32	––
	08/13/91	––	5.0	––	2.0
	11/05/91	––	––	––	––
	01/30/92	––	––	––	––
	08/31/92	––	9.0	––	2.0
	01/13/93	––	17	––	––
	01/11/94	NA	9.1	82	[illegible]

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100	50
	Background Concentration[1]	0–20	1–20	1–12	<1–9
MW–29	02/15/90	NA	NA	NA	20
	05/25/90	--	--	15	--
	09/06/90	--	--	--	--
	02/01/91	--	--	--	10
	04/30/91	--	3.0	58	--
	08/15/91	--	--	--	--
	11/05/91	--	--	--	--
	01/30/92	--	--	--	--
	08/31/92	--	--	--	--
	01/14/93	--	--	--	--
	01/11/94	NA	NA	18	10
MW–30	02/15/90	NA	NA	NA	20
	05/24/90	5.0	--	174	63
	09/05/90	--	--	190	--
	02/04/91	--	--	200	2.0
	04/30/91	--	7.9	130	--
	08/15/91	--	8.0	--	--
	11/05/91	--	6.0	--	--
	01/31/92	--	9.0	--	--
	08/31/92	--	8.0	--	--
	01/14/93	--	6.0	--	--
	07/06/93	NA	NA	26	NA
	01/10/94	NA	NA	17	--
	07/01/94	NA	NA	12	NA
MW–31	05/24/90	9.0	--	201	30.0
	09/19/90	--	--	200	--
	02/01/91	--	--	200	1.0
	05/01/91	--	13	73	--
	08/15/91	--	21	--	--
	11/22/91	--	16	--	--
	01/31/92	--	13	--	1.0
	08/31/92	--	--	--	--
	01/21/93	--	--	10	--
	07/07/93	NA	NA	13	NA
	01/11/94	NA	6.0	8.5	--
	07/01/94	NA	NA	7.0	NA

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100	50
	Background Concentration[1]	0–20	1–20	1–12	<1–9
MW–32	05/24/90	--	7.4	169	10
	09/19/90	--	--	120	--
	02/01/91	--	40	200	4.0
	05/01/91	--	12	65	--
	08/16/91	--	--	--	--
	11/22/91	--	--	--	--
	01/29/92	--	--	--	--
	09/04/92	--	--	--	--
	01/26/93	13	6.1	46	--
	04/15/93	NA	NA	21	NA
	04/18/93	NA	NA	13	NA
	04/23/93	NA	NA	18	NA
	04/30/93	NA	NA	18	NA
	05/06/93	NA	NA	17	NA
	05/14/93	NA	NA	19	NA
	06/17/93	NA	NA	150	NA
	07/12/93	NA	NA	20	NA
	08/03/93	NA	NA	23	NA
	09/10/93	NA	NA	24	NA
	10/06/93	NA	NA	20	NA
	11/08/93	NA	NA	20	NA
	01/14/94	NA	NA	18	NA
	04/07/94	NA	NA	18	NA
	07/08/94	NA	NA	17	NA
	09/14/94	NA	NA	16	NA
MW–33	05/18/90	--	--	17	35
	09/14/90	--	--	--	--
	01/30/91	8.0	200	--	--
	04/30/91	--	3.5	56	--
	08/07/91	--	5.0	--	1.0
	11/05/91	--	--	--	--
	01/24/92	--	--	--	--
	08/26/92	--	--	--	--
	01/14/93	--	--	--	--
	07/02/93	NA	NA	15	NA
	01/06/94	NA	--	--	NA
MW–34	07/02/91	--	7.0	300	--
	08/16/91	--	6.0	230	--
	11/13/91	--	--	190	--
	01/23/92	--	--	160	--
	09/01/92	--	5.0	--	16
	10/26/92	NA	NA	130	NA
	01/21/93	--	--	83	--
	07/07/93	NA	NA	80	NA
	01/12/94	NA	NA	63	--
	07/20/94	NA	NA	51	NA

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TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100	50
	Background Concentration[1]	0–20	1–20	1–12	<1–9
MW–35	07/02/91	--	5.0	--	--
	08/08/91	6.0	9.0	--	--
	11/13/91	--	--	--	--
	01/23/92	--	--	--	--
	09/01/92	--	--	--	--
	01/21/93	--	--	8.0	--
MW–36	12/12/91	--	--	--	--
	01/23/92	--	--	110	--
	09/04/92	--	10	120	--
	10/21/92	NA	NA	--	NA
	01/27/93	--	11	93	--
	04/13/93	NA	NA	32	NA
	07/07/93	NA	NA	79	NA
	09/28/93	NA	NA	87	NA
	01/12/94	--	--	NA	--
	07/20/94	NA	NA	50	NA
MW–37	12/12/91	--	--	--	--
	01/23/92	--	--	--	--
	09/04/92	--	--	--	--
	01/27/93	--	--	--	--
	07/07/93	NA	NA	12	NA
	09/28/93	NA	NA	93	NA
	01/12/94	--	--	NA	--
	07/20/94	NA	NA	--	NA
MW–38	12/12/91	--	--	--	--
	01/24/92	--	--	--	--
	09/04/92	--	7.0	100	--
	01/26/93	--	7.7	86	--
	04/09/93	NA	NA	73	NA
	07/06/93	NA	NA	80	NA
	09/27/93	NA	NA	92	NA
	01/10/94	--	8.6	93	11
	07/14/94	NA	NA	75	NA
MW–39	06/28/91	10	17	--	1.0
	08/06/91	--	17	--	--
	11/13/91	--	--	--	--
	01/24/92	--	--	180	--
	09/04/92	--	10	170	--
	10/21/92	NA	NA	100	NA
	01/27/93	--	8.1	130	--
	07/06/93	NA	NA	280	NA
	01/12/94	NA	--	380	NA
	07/14/94	NA	NA	220	NA

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100	50
	Background Concentration[1]	0–20	1–20	1–12	<1–9
MW–40	06/28/91	5.0	4.0	--	--
	08/15/91	--	7.0	--	--
	11/22/91	--	5.0	--	--
	01/29/92	--	--	100	--
	08/31/92	--	5.0	--	--
	01/26/93	--	--	110	--
	07/15/93	NA	NA	93	NA
	01/11/94	--	NA	46	NA
	06/30/94	NA	NA	43	NA
MW–41	06/28/91	15	5.0	--	--
	08/12/91	7.0	--	--	--
	11/05/91	6.0	6.0	--	--
	01/31/92	7.0	7.0	--	--
	08/25/92	--	11	--	--
	01/20/93	--	9.0	--	--
	01/07/94	--	11	NA	NA
MW–42	06/28/91	8.0	--	200	1.0
	08/08/91	--	10	190	--
	11/07/91	--	--	160	--
	02/07/92	--	--	160	3.0
	08/25/92	--	5.0	--	12
	01/19/93	--	6.0	60	--
	07/01/93	NA	NA	72	NA
	01/05/94	--	--	61	--
	07/07/94	NA	NA	40	NA
MW–43	06/28/91	10	--	200	--
	11/07/91	--	--	160	--
	08/16/91	--	--	220	--
	02/07/92	--	--	180	--
	08/25/92	--	--	120	--
	08/25/92	--	--	120	--
	10/22/92	NA	NA	170	NA
	01/19/93	--	--	130	--
	07/01/93	NA	NA	140	NA
	01/05/94	--	NA	130	NA
	07/13/94	NA	NA	210	NA

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100	50
	Background Concentration[1]	0–20	1–20	1–12	<1–9
MW–44	10/27/92	5.0	9.0	--	--
	01/26/93	22	7.5	19	--
	04/09/93	--	9.0	8.7	--
	07/06/93	--	8.2	15	--
	09/27/93	--	8.1	13	--
	01/10/94	--	11	21	--
	07/14/94	--	10	21	3.4
MW–45	07/20/94	--	6.0	57	4.5
	11/02/94	--	12	480	--
MW–46	07/20/94	--	6.0	9.1	--
	11/02/94	--	6.5	74	--
MW–47	07/21/94	--	12	--	--
	08/21/94	--	10	--	7.6
	11/04/94	--	9.4	15.0	5.6

MCL Maximum Contaminant Level for drinking water, EPA or DHS, whichever is more stringent.
-- Not detected.
NA Not analyzed.
1 Background Concentration–Values were obtained from: Johnson. K.L., 1985. Chemical Quality of Groundwater in Sacramento and Western Placer Counties, California. U.S. Geological Survey Water Resources Investigation Report, 85–4164.

TABLE 4
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988 – 1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Sampled	B 1[1]	T 1000	X 1,750	E 680	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL_4 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride
MW-01	03/03/88	—	—	—	—	—	—	—	—	—	0.8	—	—	—	—	—	NA	—
	09/20/89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	—
	05/10/90	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	09/05/90	—	—	—	—	—	—	—	—	—	1.0	—	—	—	—	—	NA	—
	01/21/91	—	—	—	—	—	—	—	—	—	0.80	—	—	—	NA	NA	NA	—
	01/29/92	—	—	—	—	—	—	—	—	—	1.7	—	—	—	NA	NA	NA	—
	07/09/93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	—
	01/17/94	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
MW-02	03/03/88	—	—	—	—	—	—	—	—	—	0.6	—	—	—	280	—	NA	—
	09/20/89	—	1.4	—	—	—	—	—	—	—	—	—	—	—	—	50*	NA	—
	05/17/90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	—
	09/11/90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	—
	01/22/91	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	04/22/91	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	08/01/91	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	11/07/91	8.4	1.2	8.3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	02/07/92	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	05/26/92	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	08/25/92	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	10/20/92	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	01/19/93	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	04/07/93	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	07/01/93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	—
	09/21/93	NA	NA	NA	NA	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	01/05/94	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	04/12/94	NA	NA	NA	NA	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	07/05/94	NA	NA	NA	NA	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	10/25/94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-03	03/03/88	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	—
	09/20/89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	—
	05/10/90	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	09/05/90	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	01/22/91	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	08/01/91	—	—	—	—	—	—	—	—	NA	—	—	—	—	NA	NA	NA	—
	01/29/92	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	07/09/93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	—
	01/17/94	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—

SAC21A3.WK1

TABLE 4
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Sampled	B 1[(1)]	T 1000	X 1,750	E 680	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL_4 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride
MW-04	03/03/88	11	4.5	6	1.5	22	—	12	130	42	—	—	—	—	1100	300	NA	—
	09/20/89	210	—	—	—	—	—	7.1	—	120	—	—	—	—	—	3000	NA	—
	02/15/90	190	3.5	7.5	2.1	5.3	—	12	250	46	—	—	5.7	—	NA	NA	NA	—
	05/23/90	130	4.9	2.1	6.3	4.1	—	5.8	5.5	45	—	—	4.9	—	—	650	NA	—
	09/18/90	98	4.1	2.7	4.3	2.4	—	6	30	38	—	—	4.5	—	—	—	NA	—
	02/05/91	17	—	—	—	1.2	—	6	45	16	—	—	4.2	—	NA	NA	NA	—
	05/01/91	580	—	24	12	—	—	11	15	93	—	—	0.89	—	NA	NA	NA	—
	08/14/91	—	0.6	13	2.5	—	—	13	27	—	—	—	1.4	—	NA	NA	NA	—
	11/07/91	1200	26	8.7	26	—	—	19	40	—	—	—	—	—	NA	NA	NA	—
	01/28/92	940	12	3.4	18	0.6	—	12	16	170	—	—	1.4	—	NA	NA	NA	—
	05/29/92	210	7.5	9.3	6.7	2.4	—	15	110	20	—	—	7.8	—	NA	NA	NA	—
	08/26/92	230	2.4	1.7	4.1	1.3	—	14	120	13	—	1.3	8.6	—	NA	NA	NA	—
	10/20/92	260	—	—	—	—	—	—	32	—	—	—	—	—	NA	NA	NA	—
	01/20/93	180	5.6	4.2	8.9	—	—	7.5	73	12	—	—	5.0	—	NA	NA	NA	—
	04/17/93	350	35	93	18	1.3	—	8.8	37	20	—	—	6.1	—	NA	2,300	NA	—
	04/18/93	200	19	46	10	1.4	—	5.8	44	14	—	0.82	4.8	—	NA	980	NA	—
	04/23/93	160	16	32	8.4	1.4	—	5.0	39	9.2	—	—	3.8	—	NA	—	NA	—
	04/30/93	200	22	37	7.6	1.5	—	5.0	62	—	—	—	4.5	—	NA	NA	NA	—
	05/06/93	200	30	30	9.7	1.4	—	4.8	42	10	—	—	3.9	—	NA	1,100	NA	—
	05/14/93	220	26	45	7.3	—	—	5.7	46	9.2	—	—	4.6	—	NA	1,200	NA	—
	06/17/93	270	40	50	9.7	1.4	—	5.2	66	7.9	—	—	3.2	—	NA	1,400	NA	—
	07/12/93	210	23	28	7.1	1.2	—	4.5	55	6.0	—	—	—	—	NA	910	NA	—
	08/03/93	170	27	31	9.2	1.3	—	4.5	64	5.7	—	—	2.9	—	NA	NA	NA	—
	09/10/93	110	7.5	—	—	1.3	—	4.5	53	3.5	—	0.82	3.0	—	NA	630	NA	—
	09/24/93	93	8.7	—	—	—	—	—	42	—	—	—	—	—	NA	NA	NA	—
	10/07/93	150	19	—	—	1.8	—	5.8	69	5.4	—	1.1	4.3	—	NA	520	NA	—
	11/08/93	110	15	21	5.1	1.6	—	5.0	65	4.4	—	1.2	3.7	—	NA	750	NA	—
	01/14/94	110	14	19	4.4	1.3	—	4.6	52	3.4	—	1.1	2.9	—	NA	510	NA	—
	02/11/94	110	14	17	4.3	1.8	—	4.6	64	4.6	—	1.5	3.0	—	—	330	—	—
	03/02/94	110	13	16	4.0	1.2	—	3.9	41	3.3	—	1.4	2.6	—	—	580	—	—
	04/07/94	120	14	19	3.7	1.5	—	3.6	53	2.7	—	1.3	2.7	—	NA	660	NA	—
	05/05/94	61	6.9	8.6	2.2	0.66	—	3.3	37	2.9	—	1.0	2.4	—	—	380	—	—
	06/08/94	75	—	—	—	—	—	2.9	37	1.8	—	0.88	2.1	—	—	415	—	—
	07/08/94	88	12	13	3.6	1.1	—	3.2	39	—	—	1.0	—	—	NA	150	NA	—
	09/14/94	84	11	17	3.5	—	—	2.4	38	2.1	—	0.70	1.6	—	—	310	—	—
	10/10/94	110	12	15	7.4	1.3	—	2.4	39	2.5	—	1.2	2.8	—	—	430	—	—
	11/08/94	96	13	17	4.5	0.62	—	3.8	33	3.3	—	1.1	2.6	—	—	—	—	—
	12/07/94	94	12	16	4.5	1.0	—	3.4	33	2.9	—	1.4	2.5	—	—	—	—	—
MW-05	03/04/88	—	—	—	—	—	—	—	—	—	4.9	—	—	—	—	—	NA	—
	09/20/89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60	NA	—
	05/17/90	—	—	—	—	—	—	—	—	—	2.6	—	—	—	—	—	NA	—
	09/12/90	—	—	—	—	—	—	—	—	—	2.3	—	—	—	—	—	NA	—
	08/12/91	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	01/28/92	—	—	—	—	—	—	—	—	—	1.2	—	—	—	NA	NA	NA	—
	01/22/93	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	01/17/94	—	—	—	—	—	—	—	—	—	2.1	—	—	—	NA	NA	NA	—
MW-06	03/04/88	—	—	—	—	—	—	—	—	—	0.6	—	—	—	—	—	NA	—
	09/20/89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	—

SAC21A3.WK1

TABLE 4
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Sampled	B 1[(1)]	T 1000	X 1,750	E 680	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL_4 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride
	05/17/90	—	—	—	—	—	—	—	—	—	1.5	—	—	—	NA	NA	NA	—
	09/11/90	—	—	—	—	—	—	—	—	—	2.0	—	—	—	—	—	NA	—
	08/12/91	—	—	—	—	—	—	—	—	—	6.2	—	—	—	NA	NA	NA	—
	01/28/92	—	—	—	—	—	—	—	—	—	2.1	—	—	—	NA	NA	NA	—
	08/28/92	—	—	—	—	—	—	—	—	—	0.85	—	—	—	NA	NA	NA	—
	01/22/93	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	07/09/93	—	—	—	—	—	—	—	—	—	1.6	—	—	—	—	—	NA	—
	01/17/94	—	—	—	—	—	—	—	—	—	1.8	—	—	—	NA	NA	NA	—
MW-07	03/04/88	—	—	—	—	25	—	15	17	1.6	1.9	—	1.0	—	—	—	NA	—
	09/15/89	—	—	—	—	26	—	15	0.5	3.1	1.1	—	1.1	—	—	50	NA	—
	02/07/90	—	—	—	—	11	—	9.9	58	—	2.6	—	0.6	—	NA	NA	NA	—
	05/17/90	—	—	—	—	9.7	—	9.2	8.1	—	3	—	—	—	—	—	NA	—
	09/07/90	—	—	—	—	6.4	—	6.1	19	—	2.5	—	—	—	—	—	NA	—
	01/30/91	NA	NA	NA	NA	5.1	—	4.3	15	—	2.6	—	—	—	NA	NA	NA	—
	04/26/91	NA	NA	NA	NA	4.6	—	4.5	11	—	3.0	—	—	—	NA	NA	NA	—
	08/07/91	—	—	—	—	8.1	—	12	28	—	4.1	—	—	—	NA	NA	NA	—
	02/07/92	—	—	—	—	7.2	—	12	32	—	4.9	—	—	—	NA	NA	NA	—
	06/02/92	—	—	—	—	4.2	—	6.8	21	—	4.1	—	—	—	NA	NA	NA	—
	08/31/92	—	—	—	—	5.2	—	8.5	39	—	4.5	—	—	—	NA	NA	NA	—
	10/23/92	—	—	—	—	3.7	—	5.9	21	—	4.7	—	—	—	NA	NA	NA	—
	01/29/93	—	—	—	—	1.4	—	3.6	9.6	—	1.8	—	—	—	NA	NA	NA	—
	04/14/93	NA	NA	NA	NA	1.9	—	3.7	9.8	—	4.0	—	—	—	NA	NA	NA	—
	07/07/93	—	—	—	—	0.93	—	2.9	11	—	3.3	—	—	—	NA	NA	NA	—
	09/24/93	NA	NA	NA	NA	—	—	—	3.4	—	2.1	—	—	—	NA	NA	NA	—
	01/10/94	—	—	—	—	—	—	1.3	6.2	—	2.2	—	—	—	NA	NA	NA	—
	04/14/94	NA	NA	NA	NA	—	—	0.59	3.7	—	2.4	—	—	—	NA	NA	NA	—
	07/21/94	NA	NA	NA	NA	—	—	0.71	NA	NA	2.1	—	—	—	NA	NA	NA	—
	11/02/94	—	—	—	—	—	—	0.62	5.4	—	2.0	—	—	—	—	—	—	—
MW-08	03/03/88	—	—	—	—	—	—	0.9	—	—	—	0.8	—	—	—	—	NA	—
	09/20/89	—	2.5	—	—	—	—	—	—	—	—	1.5	—	—	—	—	NA	—
	05/23/90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	—
	09/13/90	—	—	—	—	0.6	—	—	3.8	—	—	—	—	—	—	—	NA	—
	01/30/91	NA	NA	NA	NA	—	—	—	1.8	—	—	—	—	—	NA	NA	NA	—
	04/26/91	NA	NA	NA	NA	—	—	—	1.8	—	—	3.2	—	—	NA	NA	NA	—
	08/12/91	—	—	—	—	—	—	—	9.6	—	—	21.0	—	—	NA	NA	NA	—
	11/11/91	NA	NA	NA	NA	0.7	—	—	2.5	—	—	5.3	—	—	NA	NA	NA	—
	01/28/92	—	—	—	—	—	—	—	1.8	—	—	8.8	—	—	NA	NA	NA	—
	08/28/92	—	—	—	—	—	—	—	0.71	—	—	—	7.1	—	NA	NA	NA	—
	01/27/93	—	—	—	—	—	—	—	0.61	—	—	3.7	—	—	NA	NA	NA	—
	07/08/93	NA	NA	NA	NA	—	—	—	—	—	—	4.8	—	—	NA	—	NA	—
	01/17/94	—	—	—	—	—	—	—	—	—	0.60	2.8	—	—	NA	NA	NA	—
	07/05/94	NA	NA	NA	NA	—	—	—	—	—	—	3.1Uz	—	—	NA	NA	NA	—

TABLE 4
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Sampled	B 1[1]	T 1000	X 1,750	E 680	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL_4 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride
MW-13	09/13/89	5,700	343	147	—	—	0.8	13.2	—	360	—	—	0.6	—	3100	51000	NA	—
	11/02/89	6,700	210	88	50	—	—	20	24	270	—	—	—	—	NA	NA	NA	—
	02/15/90	10,500	400	1600	150	—	—	40	55	200	—	—	—	—	NA	NA	NA	—
	05/25/90	12,000	250	530	1200	—	—	35	1.8	250	—	—	—	—	2400	46000	NA	—
	09/18/90	7,300	310	620	410	—	—	27	15	210	—	—	—	—	—	12000	NA	—
	02/05/91	10,000	390	600	—	0.6	—	36	25	96	—	—	—	—	NA	NA	NA	—
	04/30/91	7,900	260	520	340	0.5	—	17	14	120	—	—	—	—	NA	NA	NA	—
	08/07/91	11,000	440	760	450	1.1	—	24	9.6	108	—	—	1.5	—	NA	NA	NA	—
	11/07/91	41,000	1,600	3,900	180	—	—	160	210	—	—	—	—	—	NA	NA	NA	—
	02/07/92	11,000	630	1,300	780	—	—	34	31	—	—	5.6	—	—	NA	NA	NA	—
	06/04/92	9900	380	500	570	—	—	35	18	160	—	—	—	—	NA	NA	NA	—
	08/26/92	13,000	340	780	520	—	—	39	13	180	—	—	0.8	—	NA	NA	NA	—
	10/27/92	9,600	330	740	500	—	—	34	13	170	—	—	0.91	—	NA	NA	NA	—
	01/20/93	7,300	290	520	340	—	—	46	8.8	150	—	—	—	—	NA	NA	NA	—
	04/13/93	7,500	340	600	330	—	—	30	8.7	130	—	—	0.68	—	NA	NA	NA	—
	07/02/93	4,900	230	360	290	—	—	26	66	89	—	—	—	—	NA	NA	NA	—
	09/22/93	3,800	66	110	190	—	—	21	27	81	—	—	6.5	—	NA	NA	NA	—
	01/07/94	4,100	180	280	250	—	—	27	100	73	—	—	16	—	NA	NA	NA	—
	04/13/94	2,200	67	79	130	—	—	40	140	61	—	—	22	—	NA	NA	NA	—
	07/05/94	1,800Jh	43Jh	36Jh	120Jh	—	—	48Jh	78Jh	57Jh	—	—	11Jh	—	NA	NA	NA	—
	10/29/94	2,200	100	96	130	—	—	40	99	39	—	—	—	—	—	—	—	—
MW-14	09/13/89	—	12.3	—	—	22	7.1	9.4	15.1	3.7	2.5	—	5.6	—	—	100	NA	—
	11/02/89	—	—	—	—	20	6.3	9.3	75	7.7	2.5	—	4.7	—	NA	NA	NA	—
	02/15/90	3.6	—	0.6	—	8.9	1.1	9.6	380	1.0	—	—	8.0	—	NA	NA	NA	—
	05/22/90	2.2	—	—	—	4.1	—	5.8	11	1.4	—	—	5.9	—	—	—	NA	—
	09/18/90	—	—	—	—	2.3	—	5.0	47	—	—	—	5.7	—	—	—	NA	—
	02/04/91	—	—	—	—	1.3	—	4.4	47	—	—	—	6.2	—	NA	NA	NA	—
	05/01/91	—	—	—	—	0.88	—	3.1	18	—	—	—	4.9	—	NA	NA	NA	—
	08/14/91	0.7	—	—	—	1.6	—	4.8	50	—	—	0.6	9.7	—	NA	NA	NA	—
	11/22/91	—	—	—	—	1.9	—	6.3	150	1.5	—	—	5.6	—	NA	NA	NA	—
	02/07/92	—	—	—	—	3.1	—	12	100	—	0.5	0.6	9.4	—	NA	NA	NA	—
	06/01/92	15	—	—	—	5.1	0.7	28	120	3.7	0.8	—	10	—	NA	NA	NA	—
	08/27/92	—	—	—	—	3.3	—	43	142	—	—	—	12	—	NA	NA	NA	—
	10/26/92	—	—	—	—	—	—	36	200	—	—	—	13	—	NA	NA	NA	—
	01/20/93	—	—	—	—	1.7	—	20	140	—	—	0.8	7	—	NA	NA	NA	—
	04/13/93	1.5	—	—	—	1.8	0.59	12	99	—	—	0.65	7.9	—	NA	NA	NA	—
	07/02/93	8.7	—	—	—	—	—	2.1	36.0	—	—	—	0.85	—	NA	NA	NA	—
	09/22/93	0.79	—	—	—	1.0	0.61	7.7	80	0.50	—	1.1	6.0	—	NA	NA	NA	—
	01/07/94	—	—	—	—	—	—	—	42	—	—	—	—	—	NA	NA	NA	—
	04/13/94	0.63	—	—	—	0.58	—	4.9	44	—	—	—	7.8	—	NA	NA	NA	—
	07/05/94	1.6Jh	—	—	—	0.94Jh	—	3.50Jh	28.00Jh	—	—	—	5.50Jh	—	NA	NA	NA	—

SAC21A3.WK1

TABLE 4
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Sampled	B 1[1]	T 1000	X 1,750	E 680	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL_4 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride
MW-15	09/07/89	—	—	—	—	—	—	—	—	—	—	2.2	—	—	—	—	NA	—
	02/07/90	—	—	—	—	0.5	—	—	5.8	—	—	2.8	—	—	NA	NA	NA	—
	05/16/90	—	—	—	—	—	—	—	—	—	—	3.5	—	—	NA	NA	NA	—
	09/14/90	—	—	—	—	1.1	—	—	0.58	—	—	6.2	—	—	—	—	NA	—
	01/24/91	NA	NA	NA	NA	0.7	—	—	1.2	—	—	—	6.8	—	NA	NA	NA	—
	04/25/91	NA	NA	NA	NA	0.53	—	—	0.82	—	—	—	6.7	—	NA	NA	NA	—
	08/05/91	—	—	—	—	—	—	—	—	—	—	7.8	—	—	NA	NA	NA	—
	11/05/91	NA	NA	NA	NA	1.3	—	—	2.1	—	—	12	—	—	NA	NA	NA	—
	01/30/92	—	—	—	—	—	—	—	1.6	—	—	10	—	—	NA	NA	NA	—
	08/27/92	—	—	—	—	—	—	—	—	—	—	10	—	—	NA	NA	NA	—
	01/25/93	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	07/09/93	—	—	—	—	—	—	—	—	—	—	5.8	—	—	NA	NA	NA	—
	01/17/94	—	—	—	—	—	—	—	—	—	—	3.4	—	—	NA	NA	NA	—
	07/05/94	NA	NA	NA	NA	—	—	—	—	—	0.54Jh	2.4UJh	—	—	NA	NA	NA	—
MW-16	09/07/89	—	3.9	—	—	0.8	—	0.7	—	—	0.5	—	—	—	—	—	NA	—
	02/07/90	—	—	—	—	2	—	1.8	29	—	—	—	—	—	NA	NA	NA	—
	05/16/90	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	09/14/90	—	—	—	—	1.3	—	—	2.3	—	—	—	—	—	—	—	NA	—
	01/24/91	NA	NA	NA	NA	—	—	—	2.6	—	—	—	—	—	NA	NA	NA	—
	04/25/91	NA	NA	NA	NA	0.83	—	—	2.8	—	—	—	—	—	NA	NA	NA	—
	08/13/91	—	—	—	—	1.5	—	—	8.3	—	—	—	—	—	NA	NA	NA	—
	11/07/91	NA	NA	NA	NA	1.6	—	—	5.7	—	—	—	—	—	NA	NA	NA	—
	01/30/92	—	—	—	—	0.6	—	—	9.0	—	—	—	—	—	NA	NA	NA	—
	06/04/92	—	—	—	—	1.9	—	—	2.7	—	—	—	—	—	NA	NA	NA	—
	08/27/92	—	—	—	—	—	—	—	3.9	—	—	—	—	—	NA	NA	NA	—
	10/23/92	—	—	—	—	0.81	—	—	3.2	—	—	—	—	—	NA	NA	NA	—
	01/21/93	—	—	—	—	—	—	—	2.6	—	—	—	—	—	NA	NA	NA	—
	04/12/93	NA	NA	NA	NA	0.64	—	—	—	—	—	—	—	—	NA	NA	NA	—
	06/29/93	NA	NA	NA	NA	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	09/23/93	NA	NA	NA	NA	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	01/06/94	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	04/14/94	NA	NA	NA	NA	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	07/05/94	NA	NA	NA	NA	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	10/26/94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

SAC21A3.WK1

TABLE 4
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Sampled	B 1[1]	T 1000	X 1,750	E 680	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL_4 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride
MW-17	09/21/89	—	1.3	—	—	1.1	—	0.5	—	—	2.6	—	0.7	—	—	—	NA	—
	02/07/90	—	—	—	—	0.8	—	0.6	36	—	—	—	0.5	—	NA	NA	NA	—
	05/18/90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	—
	09/13/90	—	—	—	—	—	—	—	4.0	—	—	—	—	—	—	—	NA	—
	01/25/91	—	—	—	—	—	—	—	3.0	—	—	—	—	—	NA	NA	NA	—
	04/29/91	—	—	—	—	—	—	—	3.8	—	—	—	—	—	NA	NA	NA	—
	08/06/91	—	—	—	—	—	—	—	3.7	—	—	—	—	—	NA	NA	NA	—
	11/05/91	NA	NA	NA	NA	0.6	—	—	2.8	—	—	—	—	—	NA	NA	NA	—
	01/30/92	—	—	—	—	—	—	—	1.2	—	—	—	—	—	NA	NA	NA	—
	08/27/92	—	—	—	—	—	—	—	0.8	—	—	—	—	—	NA	NA	NA	—
	01/25/93	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	07/09/93	—	—	—	—	—	—	—	1.0	—	—	—	—	—	NA	NA	NA	—
	01/17/94	—	—	—	—	—	—	—	0.61	—	—	1.1	—	—	NA	NA	NA	—
	06/30/94	NA	NA	NA	NA	—	—	—	—	—	—	1.3Uz	—	—	NA	NA	NA	—
MW-18	09/21/89	—	1.3	—	—	1.9	0.8	3.4	0.5	—	1.5	—	9.4	—	—	50	NA	—
	11/02/89	—	—	—	—	6.9	1.0	7.8	92	—	0.5	—	13	—	NA	NA	NA	—
	02/07/90	—	—	—	—	4	—	4.8	230	—	—	—	8.1	—	NA	NA	NA	—
	05/18/90	—	—	—	—	2.4	—	2.8	3.2	—	—	1.0	10	—	—	—	NA	—
	09/13/90	—	—	—	—	3.3	—	3.9	19	—	—	—	4.4	—	—	—	NA	—
	01/25/91	—	—	—	—	0.90	—	1.4	22	—	—	—	2.9	—	NA	NA	NA	—
	04/29/91	—	—	—	—	0.94	—	1.1	20	—	—	—	2.3	—	NA	NA	NA	—
	08/13/91	—	—	—	—	1.5	—	1.2	18	—	—	—	3.8	—	NA	NA	NA	—
	11/05/91	NA	NA	NA	NA	2.2	3.8	2.0	18	—	—	—	—	—	NA	NA	NA	—
	01/30/92	—	—	—	—	1.0	—	0.8	25	—	—	—	2.8	—	NA	NA	NA	—
	06/01/92	—	—	—	—	1.4	—	0.6	13	—	—	—	2.2	—	NA	NA	NA	—
	08/27/92	—	—	—	—	0.94	—	—	16	—	—	—	3.2	—	NA	NA	NA	—
	10/26/92	—	—	—	—	2.6	—	—	—	—	—	—	3.0	—	NA	NA	NA	—
	01/21/93	—	—	—	—	0.77	—	—	14	—	—	—	1.6	—	NA	NA	NA	—
	04/14/93	NA	NA	NA	NA	1.3	—	—	12	—	—	—	1.5	—	NA	NA	NA	—
	06/30/93	NA	NA	NA	NA	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	09/24/93	NA	NA	NA	NA	—	—	—	5.4	—	—	—	—	—	NA	NA	NA	—
	01/06/94	—	—	—	—	—	—	—	5.2	—	—	—	0.68	—	NA	NA	NA	—
	04/14/94	NA	NA	NA	NA	—	—	—	3.7	—	—	—	0.52	—	NA	NA	NA	—
	06/30/94	NA	NA	NA	NA	—	—	—	2.8	—	—	—	0.50	—	NA	NA	NA	—
	10/26/94	—	—	—	—	—	—	—	2.7	—	—	—	—	—	—	—	—	—

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TABLE 4
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL R
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Sampled	B 1[1]	T 1000	X 1,750	E 680	1,1,1 2
MW-22	09/08/89	—	—	—	—	—
	02/07/90	—	—	—	—	—
	05/15/90	—	—	—	—	—
	09/07/90	—	—	—	—	—
	01/23/91	NA	NA	NA	NA	—
	04/25/91	NA	NA	NA	NA	—
	08/14/91	—	—	—	—	—
	01/30/92	—	—	—	—	—
	01/29/93	—	—	—	—	—
	01/16/94	—	—	—	—	—
MW-23	09/08/89	—	—	—	—	—
	05/15/90	—	—	—	—	—
	09/06/90	—	—	—	—	—
	04/23/91	NA	NA	NA	NA	—
	08/02/91	—	—	—	—	—
	11/11/91	NA	NA	NA	NA	—
	01/24/92	—	—	—	—	—
	08/28/92	—	—	—	—	—
	01/22/93	—	—	—	—	—
	07/08/93	NA	NA	NA	NA	—
	01/16/94	—	—	—	—	—
	07/13/94	NA	NA	NA	NA	—
MW-24	09/08/89	—	—	—	—	—
	05/15/90	—	—	—	—	—
	09/06/90	—	—	—	—	—
	09/06/90	—	—	—	—	—
	08/11/91	—	—	—	—	—
	01/24/92	—	—	—	—	—
	01/22/93	—	—	—	—	—
	01/16/94	—	—	—	—	—
MW-25	09/11/89	—	4.1	—	—	—
	02/07/90	—	—	—	—	—
	05/16/90	—	—	—	—	—
	09/12/90	—	—	—	—	—
	01/29/91	NA	NA	NA	NA	—
	04/24/91	NA	NA	NA	NA	—
	08/02/91	—	—	—	—	0.6
	01/23/92	—	—	—	—	2.1
	09/01/92	—	—	—	—	4.4
	01/27/93	—	—	—	—	2.2
	07/08/93	NA	NA	NA	NA	2.8
	01/16/94	—	—	—	—	1.3
	07/07/94	NA	NA	NA	NA	1.0

SAC21A3.WK1

TABLE 4
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Sampled	B 1[1]	T 1000	X 1,750	E 680	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL_4 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride
MW-19	09/14/89	—	—	—	—	—	—	—	—	—	0.9	1	—	—	—	—	NA	—
	05/18/90	—	—	—	—	—	—	—	—	—	—	1.4	—	—	NA	NA	NA	—
	09/07/90	—	—	—	—	—	—	—	6.8	—	—	1.5	—	—	—	—	NA	—
	01/24/91	NA	NA	NA	NA	—	—	—	5.9	—	—	—	1.7	—	NA	NA	NA	—
	04/29/91	NA	NA	NA	NA	—	—	—	4.2	—	—	—	1.9	—	NA	NA	NA	—
	08/05/91	—	—	—	—	—	—	—	2.4	—	—	3.2	—	—	NA	NA	NA	—
	11/11/91	NA	NA	NA	NA	—	—	—	3.7	—	—	2.8	—	—	NA	NA	NA	—
	01/30/92	—	—	—	—	—	—	—	2.9	—	—	3.6	—	—	NA	NA	NA	—
	08/28/92	—	—	—	—	—	—	—	1.5	—	—	2.0	—	—	NA	NA	NA	—
	01/25/93	—	—	—	—	—	—	—	8.9	—	—	1.5	—	—	NA	NA	NA	—
	07/09/93	—	—	—	—	—	—	—	5.9	—	—	0.8	—	—	NA	NA	NA	—
	01/16/94	—	—	—	—	—	—	—	7.1	—	—	—	—	—	NA	NA	NA	—
	06/30/94	NA	NA	NA	NA	—	—	—	9.3	—	0.95	—	—	—	NA	NA	NA	—
MW-20	09/14/89	—	—	—	—	0.7	—	—	—	—	—	—	—	—	—	—	NA	—
	05/14/90	—	—	—	—	1.4	—	0.9	—	—	—	—	—	—	NA	NA	NA	—
	09/07/90	—	—	—	—	0.92	—	—	9.6	—	—	—	—	—	—	—	NA	—
	01/24/91	NA	NA	NA	NA	—	—	—	9.8	—	—	—	—	—	NA	NA	NA	—
	04/29/91	NA	NA	NA	NA	—	—	—	8.9	—	—	—	—	—	NA	NA	NA	—
	08/14/91	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	11/11/91	NA	NA	NA	NA	0.7	—	—	11	—	—	—	—	—	NA	NA	NA	—
	01/30/92	—	—	—	—	0.6	—	—	11	—	—	—	—	—	NA	NA	NA	—
	06/02/92	—	—	—	—	0.8	—	—	7.2	—	—	—	—	—	NA	NA	NA	—
	08/28/92	—	—	—	—	—	—	—	8.3	—	—	—	—	—	NA	NA	NA	—
	10/23/92	—	—	—	—	—	—	—	7.3	—	—	—	—	—	NA	NA	NA	—
	01/25/93	—	—	—	—	—	—	—	4.0	—	—	—	—	—	NA	NA	NA	—
	04/13/93	NA	NA	NA	NA	—	—	—	3.5	—	—	—	—	—	NA	NA	NA	—
	06/29/93	NA	NA	NA	NA	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	09/24/93	NA	NA	NA	NA	—	—	—	0.51	—	—	—	—	—	NA	NA	NA	—
	01/06/94	—	—	—	—	—	—	—	0.66	—	—	—	—	—	NA	NA	NA	—
	04/14/94	NA	NA	NA	NA	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	06/30/94	NA	NA	NA	NA	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	10/26/94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-21	09/08/89	—	—	—	—	—	—	—	—	—	1.6	—	—	—	—	—	NA	—
	05/15/90	—	—	—	—	—	—	0.6	—	—	4.2	—	—	—	NA	NA	NA	—
	09/07/90	—	—	—	—	—	—	—	2.1	—	1.9	—	—	—	—	—	NA	—
	01/23/91	NA	NA	NA	NA	—	—	—	0.8	—	2.4	—	—	—	NA	NA	NA	—
	04/25/91	NA	NA	NA	NA	—	—	—	4.7	—	2.5	—	—	—	NA	NA	NA	—
	08/07/91	—	—	—	—	—	—	—	0.9	—	5.1	—	—	—	NA	NA	NA	—
	11/11/91	NA	NA	NA	NA	—	—	—	—	—	4.8	—	—	—	NA	NA	NA	—
	01/30/92	—	—	—	—	—	—	—	2.7	—	5.1	—	—	—	NA	NA	NA	—
	08/28/92	—	—	—	—	—	—	—	0.6	—	4.0	—	—	—	NA	NA	NA	—
	01/29/93	—	—	—	—	—	—	—	1.3	—	2.0	—	—	—	NA	NA	NA	—
	07/08/93	NA	NA	NA	NA	—	—	—	—	—	2.4	—	—	—	NA	NA	NA	—
	01/16/94	—	—	—	—	—	—	1.0	6.1	—	1.4	—	—	—	NA	NA	NA	—
	07/07/94	NA	NA	NA	NA	—	—	—	1.9	—	2.2	—	—	—	NA	NA	NA	—

SAC21A3.WK1

TABLE 4
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Sampled	B 1[1]	T 1000	X 1,750	E 680	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL_4 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride
MW-26	09/11/89	—	—	—	—	—	—	1.0	—	—	2.6	—	—	—	—	50	NA	—
	02/07/90	—	—	—	—	—	—	3.2	14	—	1.3	—	—	—	NA	NA	NA	—
	05/16/90	—	—	—	—	—	—	1.6	—	—	1.1	—	—	—	—	—	NA	—
	09/12/90	—	—	—	—	—	—	2.1	5	—	1.6	—	—	—	—	—	NA	—
	01/29/91	NA	NA	NA	NA	—	—	1.6	3.6	—	1.0	—	—	—	NA	NA	NA	—
	04/24/91	NA	NA	NA	NA	—	—	2.4	3.4	—	1.4	—	—	—	NA	NA	NA	—
	08/13/91	—	—	—	—	0.6	—	4.0	8.1	—	1.5	—	—	—	NA	NA	NA	—
	01/27/92	—	1.4	—	—	1.1	—	4.8	5.1	—	2.0	—	—	—	NA	NA	NA	—
	06/04/92	—	—	—	—	4.4	—	8.6	8.2	0.6	2.7	—	—	—	NA	NA	NA	—
	09/01/92	—	—	—	—	3.7	—	12	19	—	3.6	—	—	—	NA	NA	NA	—
	10/23/92	—	—	—	—	2.4	—	10	9.4	—	3.1	—	—	—	NA	NA	NA	—
	01/28/93	—	—	—	—	3.2	—	13	15	0.9	2.5	—	—	—	NA	NA	NA	—
	04/08/93	—	—	—	—	3.9	—	13	9.1	0.78	2.9	—	—	—	NA	NA	NA	—
	07/07/93	—	—	—	—	3.3	—	14	14	—	2.3	—	—	—	NA	NA	NA	—
	09/23/93	NA	NA	NA	NA	3.0	—	9.4	15	3.6	1.9	—	—	—	NA	NA	NA	—
	01/10/94	—	—	—	—	2.6	—	11	15	0.70	2.0	—	—	—	NA	NA	NA	—
	04/14/94	NA	NA	NA	NA	1.9	—	10	16	—	2.4	—	—	—	NA	NA	NA	—
	07/07/94	NA	NA	NA	NA	1.4	—	6.6	9.3	—	2.3	—	—	—	NA	NA	NA	—
	10/29/94	—	—	—	—	1.1	—	7.1	12	—	1.9	—	—	—	—	—	—	—
MW-27	09/15/89	—	—	—	—	—	—	—	—	—	5.5	—	—	—	—	—	NA	—
	05/21/90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	—
	09/17/90	—	—	—	—	—	—	—	0.99	—	1.1	—	—	—	—	—	NA	—
	01/29/91	NA	NA	NA	NA	—	—	—	—	—	0.7	—	—	—	NA	NA	NA	—
	04/24/91	NA	NA	NA	NA	—	—	—	1.1	—	1.4	—	—	—	NA	NA	NA	—
	08/13/91	—	—	—	—	—	—	—	—	—	0.9	—	—	—	NA	NA	NA	—
	01/23/92	—	—	—	—	—	—	—	0.83	—	1.3	—	—	—	NA	NA	NA	—
	09/01/92	—	—	—	—	—	—	—	—	—	3.0	—	—	—	NA	NA	NA	—
	01/28/93	—	—	—	—	—	—	—	—	—	1.7	—	—	—	NA	NA	NA	—
	07/08/93	NA	NA	NA	NA	—	—	—	—	—	3.1	—	—	—	NA	—	NA	—
	01/16/94	—	—	—	—	—	—	0.76	1.1	—	2.4	—	—	—	NA	NA	NA	—
	07/07/94	NA	NA	NA	NA	—	—	2.2Js	2.4Js	—	2.2Js	—	—	—	NA	NA	NA	—

SAC21A3.WK1

TABLE 4
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Sampled	B	T	X	E	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	Chloroform	PCE	TCE	CCL_4	TPH	TPH/Gas	TPH/D	Vinyl Chloride
		1[1]	1000	1,750	680	200	32	5	6	0.5	100	5	5	0.5	NE	NE	NE	
MW-28	02/15/90	—	—	—	—	—	—	5.8	1	—	0.7	—	—	—	NA	—	NA	—
	05/21/90	—	—	—	—	—	—	9.5	—	—	—	—	—	—	—	—	NA	—
	09/19/90	—	—	—	—	—	—	9	4	—	—	—	—	—	—	—	NA	—
	02/01/91	—	—	—	—	—	—	13	4.3	—	—	—	—	—	NA	NA	NA	—
	04/30/91	—	—	—	—	—	—	8.1	3.9	—	—	—	—	—	NA	NA	NA	—
	08/13/91	—	—	—	—	—	—	13	—	—	—	—	—	—	NA	NA	NA	—
	11/05/91	—	—	—	—	—	—	14	9.4	—	—	—	—	—	NA	NA	NA	—
	01/30/92	—	—	—	—	—	—	17	24	—	—	—	—	—	NA	NA	NA	—
	05/28/92	—	—	—	—	—	—	9.5	6.0	—	—	—	—	—	NA	NA	NA	—
	08/31/92	—	—	—	—	—	—	20	31	—	—	—	—	—	NA	NA	NA	—
	10/22/92	—	—	—	—	—	—	18	21	—	—	—	—	—	NA	NA	NA	—
	01/13/93	—	—	—	—	—	—	13	22	—	—	—	—	—	NA	NA	NA	—
	04/12/93	—	—	—	—	—	—	12	11	—	—	—	—	—	NA	NA	NA	—
	06/30/93	—	—	—	—	—	—	4.1	—	—	—	—	—	—	NA	NA	NA	—
	09/28/93	—	—	—	—	—	—	8.6	8.7	—	—	—	—	—	NA	NA	NA	—
	01/11/94	—	—	—	—	—	—	5.9	4.2	—	—	—	—	—	NA	NA	NA	—
	04/25/94	—	—	—	—	—	—	10	17	—	—	—	—	—	NA	NA	NA	—
	07/01/94	—	—	—	—	—	—	4.6	4.2	—	—	—	—	—	NA	NA	NA	—
	10/31/94	—	—	—	—	—	—	6.3	7.0	—	—	—	—	—	—	—	—	—
MW-29	02/15/90	—	—	—	—	8.5	—	10	190	22	1.8	—	0.9	—	NA	50	NA	—
	04/23/90	—	—	—	—	5.0	—	14	72	16	1.2	—	0.87	—	NA	NA	NA	—
	05/25/90	6.2	—	—	—	4.6	—	4.1	8.6	14	—	—	—	—	—	—	NA	—
	09/06/90	—	—	—	—	3.2	—	4.4	38	11	1.3	—	0.76	1.3	—	—	NA	—
	02/01/91	—	—	—	—	—	—	1.9	33	4.7	—	—	—	—	NA	NA	NA	—
	04/30/91	—	—	—	—	—	—	2.4	16	6.6	0.57	—	—	0.68	NA	NA	NA	—
	08/07/91	—	—	—	—	1.3	—	4.5	29	11	0.9	—	0.9	1.0	NA	NA	NA	—
	11/05/91	—	—	—	—	1.4	—	3.7	21	7.1	1.0	—	0.8	1.1	NA	NA	NA	—
	01/30/92	—	—	—	—	0.7	—	2.0	26	5.2	1.2	—	0.7	1.5	NA	NA	NA	—
	05/29/92	—	—	—	—	1.1	—	4.3	19	—	0.8	—	1.2	—	NA	NA	NA	—
	08/31/92	—	—	—	—	0.91	—	3.9	27	7.9	1.3	—	0.8	—	NA	NA	NA	—
	10/22/92	—	—	—	—	0.87	—	2.3	18	6.1	0.56	—	—	—	NA	NA	NA	—
	01/14/93	—	—	—	—	—	—	1.1	13	3.2	—	—	—	—			NA	—
	04/12/93	—	—	—	—	—	—	1.2	5.0	3.0	—	—	0.51	—	NA	NA	NA	—
	06/30/93	—	—	—	—	—	—	—	—	2.3	—	—	—	—	NA	NA	NA	—
	09/28/93	—	—	—	—	—	—	0.81	8.8	2.6	—	—	0.66	—	NA	NA	NA	—
	01/11/94	—	—	—	—	—	—	0.73	7.9	2.3	—	—	0.68	—	NA	NA	NA	—
	04/25/94	—	—	—	—	—	—	1.1	9.0	2.7	2.0	—	—	1.6	NA	NA	NA	—
	07/01/94	—	—	—	—	—	—	0.73	3.6	1.6	4.0	—	0.59	3.7	NA	NA	NA	—
	10/31/94	—	—	—	—	—	—	—	3.4	1.5	1.7	—	—	1.3	—	—	—	—

TABLE 4
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Sampled	B 1[1]	T 1000	X 1,750	E 680	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL_4 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride
MW-30	02/15/90	—	—	—	—	4.5	2.3	18	820	—	1.5	—	4.8	—	NA	60	NA	—
	04/23/90	1.1	—	—	—	30.0	—	12	470	31	—	—	8.2	—	NA	NA	NA	—
	05/24/90	2.4	—	—	—	22.0	3	19	48	4.8	1.1	—	6.8	—	—	60	NA	—
	09/05/90	1.2	—	—	—	14.0	—	11	150	—	—	—	—	—	—	—	NA	—
	02/04/91	—	—	—	—	6.3	—	8.2	160	—	—	—	—	—	NA	NA	NA	—
	04/30/91	—	—	—	—	5.9	—	9.0	75	—	—	—	—	—	NA	NA	NA	—
	08/15/91	—	—	—	—	4.4	—	6.8	84	—	—	—	6.4	—	NA	NA	NA	—
	11/05/91	—	—	—	—	8.5	—	11	88	—	—	—	9.4	—	NA	NA	NA	—
	01/31/92	—	—	—	—	1.8	—	7.0	140	—	—	0.8	8.0	—	NA	NA	NA	—
	05/28/92	—	—	—	—	3.0	—	10	61	—	—	—	9.5	—	NA	NA	NA	—
	08/31/92	—	—	—	—	6.9	—	14	130	—	—	—	10	—	NA	NA	NA	—
	10/22/92	—	—	—	—	3.3	—	17	116	—	—	—	10	—	NA	NA	NA	—
	01/14/93	—	—	—	—	1.3	—	6.2	93	—	—	—	6.3	—	NA	NA	NA	—
	04/12/93	—	—	—	—	1.9	—	8.7	46	—	—	—	8.1	—	NA	NA	NA	—
	07/06/93	—	—	—	—	1.3	—	8.6	78	—	—	—	7.2	—	NA	NA	NA	—
	09/28/93	—	—	—	—	—	—	12	99	—	—	—	6.4	—	NA	NA	NA	—
	01/10/94	—	—	—	—	—	—	7.7	99	—	—	—	6.5	—	NA	NA	NA	—
	04/25/94	—	—	—	—	1.4	—	4.9	66	—	—	—	8.6	—	NA	NA	NA	—
	07/01/94	—	—	—	—	0.67	—	3.3	44	—	—	—	7.7	—	NA	NA	NA	—
	10/31/94	—	—	—	—	—	—	2.0	45	—	—	—	8.3	—	—	—	—	—
MW-31	05/24/90	1.1	—	—	—	39	2.7	22	54	0.6	1.7	—	10	—	—	60	NA	—
	09/19/90	0.63	—	—	—	20	—	15	160	—	—	—	7.6	—	—	—	NA	—
	02/01/91	—	—	—	—	—	—	7.6	150	—	—	—	—	—	NA	NA	NA	—
	05/01/91	—	—	—	—	5.9	—	12	110	—	—	—	7.3	—	NA	NA	NA	—
	08/15/91	—	—	—	—	6.2	—	10	120	—	—	—	6.6	—	NA	NA	NA	—
	11/22/91	—	—	—	—	6.3	—	17	140	—	—	0.62	9.3	—	NA	NA	NA	—
	01/31/91	—	—	—	—	4.3	0.6	16	310	—	0.6	1.1	12	—	NA	NA	NA	—
	05/28/92	—	—	—	—	3.5	—	10	130	—	—	—	12	—	NA	NA	NA	—
	08/31/92	—	—	—	—	5.5	—	9.6	170	—	—	—	10	—	NA	NA	NA	—
	10/21/92	—	—	—	—	—	—	7.5	121	—	—	—	11	—	NA	NA	NA	—
	01/21/93	—	—	—	—	2.1	—	8.5	82	—	—	—	12	—	NA	NA	NA	—
	04/12/93	—	—	—	—	1.7	—	4.2	46	—	—	—	8.2	—	NA	NA	NA	—
	07/07/93	—	—	—	—	1.7	—	5.3	43	—	—	0.71	14	—	NA	NA	NA	—
	09/28/93	—	—	—	—	—	—	—	50	—	—	—	—	—	NA	NA	NA	—
	01/11/94	—	—	—	—	—	—	—	54	—	—	—	7.8	—	NA	NA	NA	—
	04/26/94	—	—	—	—	0.65	—	2.5	53	—	—	0.89	11	—	NA	NA	NA	—
	07/01/94	—	—	—	—	0.50	—	1.6	40	—	—	—	9	—	NA	NA	NA	—
	10/31/94	—	—	—	—	0.78	—	2.0	40	—	—	—	11	—	—	—	—	—

SAC21A3.WK1

TABLE 4
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988 – 1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Sampled	B 1[1]	T 1000	X 1,750	E 680	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL_4 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride
MW-32	05/24/90	—	—	—	—	20	0.9	21	45	—	0.9	0.6	13	—	—	60	NA	—
	09/19/90	—	—	—	—	15	—	18	180	—	—	—	11	—	—	—	NA	—
	02/01/91	—	—	—	—	—	—	6.1	130	—	—	—	5.0	—	NA	NA	NA	—
	05/01/91	—	—	—	—	6.4	—	11	160	—	—	—	11	—	NA	NA	NA	—
	08/16/91	—	—	—	—	5.2	—	7.5	140	—	—	—	8.8	—	NA	NA	NA	—
	11/22/91	—	—	—	—	4.0	—	7.4	88	—	—	—	8.9	—	NA	NA	NA	—
	01/29/92	—	—	—	—	3.3	—	8.7	240	—	—	0.9	16	—	NA	NA	NA	—
	05/29/92	—	—	—	—	3.9	—	8.6	90	—	—	—	15	—	NA	NA	NA	—
	09/04/92	—	—	—	—	—	—	7.1	155	—	—	—	11	—	NA	NA	NA	—
	10/22/92	—	—	—	—	—	—	—	96	—	—	—	11	—	NA	NA	NA	—
	01/26/93	—	—	—	—	1.2	—	4.5	58	—	—	—	8.9	—	NA	NA	NA	—
	04/15/93	—	—	—	—	2	—	3.1	47	—	—	—	9.6	—	NA	—	NA	—
	04/18/93	—	—	—	—	1.4	—	2.8	37	—	—	0.5	6.5	—	NA	—	NA	—
	04/23/93	—	—	—	—	1.6	—	3.1	40	—	—	—	6.9	—	NA	—	NA	—
	04/30/93	—	—	—	—	1.3	—	3.2	45	—	—	—	6.7	—	NA	NA	NA	—
	05/16/93	—	—	—	—	1.3	—	3.8	45	—	—	—	7.3	—	NA	—	NA	—
	05/14/93	—	—	—	—	—	—	3.6	44	—	—	—	6.9	—	NA	—	NA	—
	06/17/93	—	—	—	—	—	—	3.1	43	—	—	—	7.4	—	NA	—	NA	—
	07/12/93	—	—	—	—	0.72	—	2.6	46	—	—	—	5.9	—	NA	—	NA	—
	08/03/93	—	—	—	—	—	—	2.7	44	—	—	—	5.3	—	NA	—	NA	—
	09/10/93	—	—	—	—	0.90	—	2.8	38	—	—	—	5.1	—	NA	—	NA	—
	09/27/93	NA	NA	NA	NA	—	1.3	4.0	43	—	—	4.6	7.5	—	NA	NA	NA	—
	10/07/93	—	—	—	—	1.3	—	4.2	52	0.60	—	—	7.2	—	NA	—	NA	—
	11/08/93	—	—	—	—	1.4	—	4.0	49	0.70	—	—	7.2	—	NA	—	NA	—
	01/14/94	—	—	—	—	—	—	—	44	—	—	—	—	—	—	NA	NA	—
	02/11/94	—	—	—	—	1.4	—	4.5	58	0.53	—	0.53	7.4	—	—	—	—	—
	03/02/94	—	—	—	—	1.2	—	4.3	41	0.70	—	—	7.2	—	—	—	—	—
	04/07/94	—	—	—	—	1.2	—	4.0	52	—	—	—	6.8	—	NA	—	NA	—
	05/05/94	—	—	—	—	0.67	—	3.7	33	—	—	—	6.5	—	—	—	—	—
	06/08/94	—	—	—	—	0.81	—	4.0	39	0.65	—	—	6.2	—	—	—	—	—
	07/08/94	—	—	—	—	1.0	—	3.8	44	0.98	—	—	4.9	—	NA	—	NA	—
	09/14/94	—	—	—	—	0.50	—	0.80	19	—	—	—	4.10	—	—	—	—	—
	10/10/94	—	—	—	—	0.86	—	2.0	26	—		—	6.3	—	—	—	—	—
	11/08/94	—	—	—	—	—	—	1.4	25	—	—	—	5.4	—	—	—	—	—
	12/07/94	—	—	—	—	0.93	—	4.2	39	—	—	—	6.5	—	—	—	—	—

SAC21A3.WK1

TABLE 4
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Sampled	B 1[1]	T 1000	X 1,750	E 680	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL_4 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride
MW-33	05/18/90	—	—	—	—	17	—	8.1	38	—	—	—	1.4	—	—	—	NA	—
	09/14/90	—	—	—	—	10	—	—	120	—	—	—	—	—	—	—	NA	—
	01/30/91	—	—	—	—	3.4	—	2.0	31	—	—	—	—	—	NA	NA	NA	—
	04/30/91	—	—	—	—	2.4	—	2.1	33	—	—	—	—	—	NA	NA	NA	—
	08/07/91	—	—	—	—	6.7	—	5.4	85	—	—	—	1.0	—	NA	NA	NA	—
	11/05/91	—	—	—	—	8.1	—	6.2	100	—	—	—	—	—	NA	NA	NA	—
	01/24/92	—	—	—	—	3.0	—	2.7	97	—	—	—	—	—	NA	NA	NA	—
	06/02/92	—	—	—	—	4.4	—	4.6	95	—	—	—	0.8	—	NA	NA	NA	—
	08/26/92	—	—	—	—	3.4	—	7.0	170	—	—	—	1.6	—	NA	NA	NA	—
	10/20/92	—	—	—	—	4.1	—	2.6	131	—	—	—	—	—	NA	NA	NA	—
	01/14/93	—	—	—	—	—	—	—	6.1	—	—	—	—	—	NA	NA	NA	—
	04/09/93	NA	NA	NA	NA	—	—	—	7.6	—	—	—	—	—	NA	NA	NA	—
	07/02/93	—	—	—	—	2.1	—	3.3	110	—	—	—	—	—	NA	NA	NA	—
	09/22/93	NA	NA	NA	NA	2.1	—	3.5	92	—	—	—	—	—	NA	NA	NA	—
	01/06/94	—	—	—	—	1.5	—	2.5	75	—	—	—	0.58	—	NA	NA	NA	—
	04/13/94	NA	NA	NA	NA	1.3	—	2.5	75	—	—	—	0.60	—	NA	NA	NA	—
	07/05/94	NA	NA	NA	NA	1.4Jh	NA	2.2Jh	87Jh	—	—	—	0.69Jh	—	NA	NA	NA	—
	10/26/94	—	—	—	—	0.67	—	1.60	66	—	—	—	—	—	—	—	—	—
MW-34	07/02/91	—	—	—	—	17	1.3	17.0	470	—	1.2	—	15	—	NA	NA	NA	—
	08/16/91	—	—	—	—	24	—	20.0	510	—	—	—	—	—	NA	NA	NA	—
	12/12/91	0.9	—	—	—	18	1.1	28.0	318	1.7	2.3	1.4	26	—	NA	NA	NA	—
	01/23/92	—	—	—	—	19	4.9	25.0	370	2.3	1.7	0.86	20	—	NA	NA	NA	—
	06/03/92	—	—	—	—	11	1.2	21	270	0.6	1.2	—	24	—	NA	NA	NA	—
	09/01/92	—	—	—	—	13	—	25	480	—	—	—	30	—	NA	NA	NA	—
	10/26/92	—	—	—	—	—	—	—	380	—	—	—	31	—	NA	NA	NA	—
	01/21/93	—	—	—	—	1.3	—	3.3	68	—	—	—	5.6	—	NA	NA	NA	—
	04/09/93	NA	NA	NA	NA	3.9	—	9.2	94	—	—	—	15	—	NA	NA	NA	—
	07/07/93	—	—	—	—	4.1	0.64	13	190	—	—	0.75	24	—	NA	NA	NA	—
	09/28/93	NA	NA	NA	NA	2.7	—	9.4	130	—	—	0.53	18	—	NA	NA	NA	—
	01/12/94	—	—	—	—	2.2 UJF	—	8.7	120	—	—	0.54	17UJF	—	NA	NA	NA	—
	04/26/94	NA	NA	NA	NA	1.4	—	6.2	120	—	—	0.84	16	—	NA	NA	NA	—
	07/20/94	NA	NA	NA	NA	1.3	—	5.9	86	—	—	—	17	—	NA	NA	NA	—
	11/01/94	—	—	—	—	1.5	—	5.4	86	—	—	0.52	15	—	—	—	—	—

SAC21A3.WK1

TABLE 4
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Sampled	B	T	X	E	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	Chloroform	PCE	TCE	CCl_4	TPH	TPH/Gas	TPH/D	Vinyl Chloride
		1[1]	1000	1,750	680	200	32	5	6	0.5	100	5	5	0.5	NE	NE	NE	
MW-35	07/02/91	—	—	—	—	6.8	—	4.8	220	—	0.7	—	3.8	—	NA	NA	NA	—
	08/08/91	—	—	—	—	40	—	41	880	—	—	—	19	—	NA	NA	NA	—
	12/12/91	—	—	—	—	2.6	—	2.8	92	—	1.9	0.7	2.6	—	NA	NA	NA	—
	01/23/92	—	—	—	—	5.4	—	5.8	140	—	1.0	—	3.9	—	NA	NA	NA	—
	06/01/92	—	—	—	—	2.4	—	2.4	49	—	0.8	—	4.8	—	NA	NA	NA	—
	09/01/92	—	—	—	—	5.8	—	—	135	—	—	—	—	—	NA	NA	NA	—
	10/26/92	—	—	—	—	—	—	—	94	—	—	—	5.8	—	NA	NA	NA	—
	01/21/93	—	—	—	—	1.3	—	2.8	58	—	—	—	3.7	—	NA	NA	NA	—
	04/09/93	NA	NA	NA	NA	1.2	—	1.2	36	—	—	—	2.7	—	NA	NA	NA	—
	07/07/93	—	—	—	—	1.2	—	1.5	45	—	—	—	4.7	—	NA	NA	NA	—
	09/28/93	NA	NA	NA	NA	0.72	—	0.78	32	—	—	—	3.0	—	NA	NA	NA	—
	01/12/94	—	—	—	—	0.66	—	0.52	27	—	—	—	3.1	—	NA	NA	NA	—
	04/26/94	NA	NA	NA	NA	—	—	—	10	—	—	—	2.2	—	NA	NA	NA	—
	07/20/94	NA	NA	NA	NA	—	—	—	7.6	—	—	—	2.0	—	NA	NA	NA	—
	11/01/94	—	—	—	—	—	—	—	3.6	—	—	—	1.5	—	—	—	—	—
MW-36	12/12/91	—	—	—	—	15	—	12	290	1.6	3.4	0.7	8.8	1.4	NA	NA	NA	—
	01/23/92	0.53	1.4	—	—	21	3.0	13	330	2.7	2.6	—	8.9	—	NA	NA	NA	—
	06/01/92	—	—	—	—	12	—	9.6	180	0.7	2.0	—	8.3	—	NA	NA	NA	—
	09/04/92	—	—	—	—	14	—	—	210	—	—	—	—	—	NA	NA	NA	—
	10/21/92	—	—	—	—	—	—	—	110	—	—	—	—	—	NA	NA	NA	—
	01/27/93	—	—	—	—	4.5	—	5.0	110	1.1	0.66	—	5.8	—	NA	NA	NA	—
	04/13/93	NA	NA	NA	NA	4.4	—	4.2	75	—	0.92	—	5.6	—	NA	NA	NA	—
	07/07/93	—	—	—	—	2.6	—	3.5	60	—	1.0	—	5.1	—	NA	NA	NA	—
	09/28/93	NA	NA	NA	NA	—	—	—	53	—	—	—	—	—	NA	NA	NA	—
	01/12/94	—	—	—	—	—	—	—	110	—	—	—	5.8	—	NA	NA	NA	—
	04/26/94	NA	NA	NA	NA	1.2	—	2.0	76	—	—	—	4.5	—	NA	NA	NA	—
	07/20/94	NA	NA	NA	NA	0.96	—	1.8	42	—	—	—	4.4	—	NA	NA	NA	—
	11/04/94	—	—	—	—	—	—	0.51	30	—	—	—	1.9	—	—	—	—	—
MW-37	12/12/91	—	—	—	—	1.0	—	3.6	9.3	7.1	4.6	0.6	0.6	1.3	NA	NA	NA	—
	01/23/92	—	—	—	—	—	—	4.4	8.5	9.7	3.1	—	—	1.8	NA	NA	NA	—
	06/01/92	—	—	—	—	—	—	2.6	6.0	6.2	3.8	—	0.5	1.5	NA	NA	NA	—
	09/04/92	—	—	—	—	0.95	—	3.6	16	7.4	4.2	—	—	1.4	NA	NA	NA	—
	10/21/92	—	—	—	—	1.1	—	2.9	13	4.9	2.5	—	—	0.84	NA	NA	NA	—
	01/27/93	—	—	—	—	—	—	2.7	9.2	5.5	2.3	—	—	0.61	NA	NA	NA	—
	04/13/93	NA	NA	NA	NA	—	—	2.9	8.0	6.5	3.9	—	—	0.99	NA	NA	NA	—
	07/07/93	—	—	—	—	—	—	2.8	7.9	5.8	3.1	—	—	0.78	NA	NA	NA	—
	09/28/93	NA	NA	NA	NA	0.55	—	3.2	16	5.8	2.8	—	0.50	0.84	NA	NA	NA	—
	01/12/94	—	—	—	—	—	—	3.7	20	6.2	2.4	—	0.57	0.61	NA	NA	NA	—
	04/26/94	NA	NA	NA	NA	—	—	3.1	20	7.7	2.5	—	—	0.55	NA	NA	NA	—
	07/20/94	NA	NA	NA	NA	0.51	—	4.3	31	7.2	2.7	—	0.75	0.57	NA	NA	NA	—
	11/04/94	—	—	—	—	—	—	5.0	40	9.5	2.5	—	0.98	—	—	—	—	—

SAC21A3.WK1

TABLE 4
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Sampled	B 1[1]	T 1000	X 1,750	E 680	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL_4 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride
MW-38	12/12/91	—	—	—	—	13	—	9.1	260	4.0	4.2	—	8.6	2.2	NA	NA	NA	—
	01/24/92	—	—	—	—	11	—	5.7	250	2.7	2.8	—	5.7	1.3	NA	NA	NA	—
	06/03/92	—	—	—	—	14	—	8.6	150	2.2	3.6	—	8.7	1.9	NA	NA	NA	—
	09/04/92	—	—	—	—	21	—	—	350	—	—	—	—	—	NA	NA	NA	—
	10/27/92	—	—	—	—	22	—	13	230	—	—	—	14	—	NA	NA	NA	—
	01/26/93	—	—	—	—	10	—	7.3	140	1.7	2.4	—	7.7	1.3	NA	NA	NA	—
	04/09/93	NA	NA	NA	NA	9.4	—	7.1	84	1.3	3.4	—	6.3	1.3	NA	NA	NA	—
	07/06/93	—	—	—	—	4.5	—	2.9	140	0.52	1.3	—	4.2	0.76	NA	NA	NA	—
	09/27/93	NA	NA	NA	NA	8.0	—	—	130	—	—	—	—	—	NA	NA	NA	—
	01/10/94	—	—	—	—	—	—	—	120	—	—	—	—	—	NA	NA	NA	—
	04/15/94	NA	NA	NA	NA	6.2	—	6.6	130	0.89	2.1 J	—	7.7	0.85	NA	NA	NA	—
	07/14/94	NA	NA	NA	NA	4.7	—	5.8	130	0.68	1.9	—	7.4	0.86	NA	NA	NA	—
	11/01/94	—	—	—	—	3.5	—	4.9	150	0.54	1.6	—	6.3	1.0	—	—	—	—
MW-39	06/28/91	—	—	—	—	0.6	—	—	0.7	2.9	4.0	—	—	1.8	NA	NA	NA	—
	08/06/91	—	—	—	—	0.6	—	1.0	1.0	2.1	3.3	—	—	2.4	NA	NA	NA	—
	12/12/91	—	—	—	—	1.0	—	1.2	3.2	2.5	4.9	0.6	—	2.4	NA	NA	NA	—
	01/24/92	—	—	—	—	0.7	—	0.8	4.1	1.6	3.1	—	—	1.4	NA	NA	NA	—
	06/03/92	—	—	—	—	1.1	—	1.3	4.1	1.6	3.1	—	—	2.0	NA	NA	NA	—
	09/04/92	—	—	—	—	1.6	—	1.7	12	1.8	4.2	—	—	2.8	NA	NA	NA	—
	10/21/92	—	—	—	—	1.6	—	1.2	7.7	—	2.3	—	—	1.8	NA	NA	NA	—
	01/27/93	—	—	—	—	1.4	—	1.6	11	1.6	2.7	—	—	1.9	NA	NA	NA	—
	04/09/93	NA	NA	NA	NA	1.7	—	1.5	10	1.1	2.7	—	0.63	1.7	NA	NA	NA	—
	07/06/93	—	—	—	—	1.4	—	1.5	18	0.92	2.0	—	—	1.4	NA	NA	NA	—
	09/27/93	NA	NA	NA	NA	2.0	—	2.0	20	0.95	2.5	—	0.73	1.4	NA	NA	NA	—
	01/12/94	—	—	—	—	2.3	—	2.6	34	1.3	2.5	—	1.1	1.6	NA	NA	NA	—
	04/15/94	NA	NA	NA	NA	2.5	—	2.8	34	1.2	2.6 JC	—	1.4	1.8	NA	NA	NA	—
	07/14/94	NA	NA	NA	NA	2.4	—	3.0	41	1.0	2.5	—	1.5	1.5	NA	NA	NA	—
	11/02/94	—	—	—	—	2.9	—	3.3	64	0.91	2.5	—	2.3	1.8	—	—	—	—
MW-40	06/28/91	—	—	—	—	4.0	—	19	110	—	—	—	46	—	NA	NA	NA	—
	08/15/91	—	—	—	—	3.8	—	15	140	—	—	—	30	—	NA	NA	NA	—
	11/22/91	—	—	—	—	2.4	—	12	95	—	—	—	27	—	NA	NA	NA	—
	01/29/92	—	—	—	—	4.2	—	25	190	—	0.6	—	40	—	NA	NA	NA	—
	05/29/92	—	—	—	—	5.2	—	25	170	—	0.6	—	38	—	NA	NA	NA	—
	08/31/92	—	—	—	—	8.4	—	35	370	—	—	—	52	—	NA	NA	NA	—
	10/22/92	—	—	—	—	6.9	—	—	220	29	—	—	49	—	NA	NA	NA	—
	01/26/93	—	—	—	—	3.3	—	27	170	—	—	—	32	—	NA	NA	NA	—
	04/13/93	NA	NA	NA	NA	3.7	—	26	120	—	—	—	38	—	NA	NA	NA	—
	07/15/93	NA	NA	NA	NA	1.7	—	17	110	—	—	—	16	—	NA	NA	NA	—
	09/27/93	NA	NA	NA	NA	—	—	15	120	—	—	16	—	—	NA	NA	NA	—
	01/11/94	—	—	—	—	—	—	11	100	—	—	—	12	—	NA	NA	NA	—
	04/25/94	NA	NA	NA	NA	0.87	—	11	120	—	—	—	13	—	NA	NA	NA	—
	06/30/94	NA	NA	NA	NA	0.81	—	10	93	—	—	—	12	—	NA	NA	NA	—
	11/01/94	—	—	—	—	1.8	—	17	160	—	—	—	21	—	—	—	—	—

SAC21A3.WK1

TABLE 4
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Sampled	B 1[1]	T 1000	X 1,750	E 680	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL_4 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride
MW-41	06/28/91	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	08/12/91	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	11/05/91	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	01/31/92	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	05/26/92	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	08/25/92	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	10/20/92	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	01/20/93	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	06/30/93	NA	NA	NA	NA	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	09/22/93	NA	NA	NA	NA	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	01/07/94	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	04/13/94	NA	NA	NA	NA	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	07/05/94	NA	NA	NA	NA	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	10/26/94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-42	06/28/91	—	—	—	—	11	—	110	340	—	2.0	—	4.0	—	NA	NA	NA	—
	08/08/91	6.3	—	—	—	42.0	8.1	370	1500	—	8.7	—	19.0	—	NA	NA	NA	—
	11/07/91	1.2	—	—	—	6.9	1.9	69	270	—	1.4	1.1	3.9	—	NA	NA	NA	—
	02/07/92	1.6	—	—	—	8.7	2.2	100	480	0.7	2.5	1.6	5.5	—	NA	NA	NA	—
	06/04/92	3.3	—	—	—	7.0	2.6	80	220	0.9	2.0	3.4	5.8	—	NA	NA	NA	—
	08/25/92	1.2	—	—	—	5.5	2.6	110	260	1.6	1.9	4.2	7.2	—	NA	NA	NA	—
	10/27/92	—	—	—	—	—	—	110	340	—	—	28	—	—	NA	NA	NA	—
	01/19/93	—	—	—	—	5.3	1.2	60	180	—	1.1	3.0	4.3	—	NA	NA	NA	—
	04/08/93	—	—	—	—	5.9	1.7	44	95	0.54	1.4	2.9	3.8	—	NA	NA	NA	—
	07/01/93	0.72	—	—	—	3.1	0.89	50	120	—	0.76	2.7	—	—	NA	NA	NA	—
	09/21/93	—	—	—	—	3.5	1.1	45	120	—	0.80	2.6	—	—	NA	NA	NA	—
	01/05/94	0.51	—	—	—	4.3	1.8	54	130	—	0.84	4.0	3.2	—	NA	NA	NA	—
	04/12/94	0.54	—	—	—	4.5	1.8	50	120	—	0.90	4.8	3.6	—	NA	NA	NA	—
	07/07/94	—	—	—	—	3.1	1.7	46	92	—	0.78	3.3	2.6	—	NA	NA	NA	—
	10/26/94	0.70	—	—	—	2.8	0.88	89	50	—	—	3.6	2.3	—	—	—	—	—
MW-43	06/28/91	—	—	—	—	—	—	330	33	—	—	—	—	—	NA	NA	NA	—
	08/16/91	—	—	—	—	—	—	200	21	—	—	—	—	—	NA	NA	NA	—
	11/07/91	—	—	—	—	—	2.0	170	30	1.9	—	0.6	2.5	—	NA	NA	NA	5.6
	02/07/92	—	—	—	—	0.7	2.2	220	45	2.3	—	1.4	4.3	—	NA	NA	NA	7.4
	06/02/92	—	—	—	—	—	2.5	210	32	2.5	—	—	4.7	—	NA	NA	NA	10.0
	08/25/92	0.6	—	—	—	—	1.9	260	—	2.0	—	1.1	5.4	—	NA	NA	NA	7.9
	10/22/92	—	—	—	—	—	—	240	28	—	—	—	—	—	NA	NA	NA	—
	01/19/93	—	—	—	—	—	1.0	110	24	1.1	—	0.9	2.8	—	NA	NA	NA	—
	04/08/93	—	—	—	—	—	3.3	210	33	3.2	—	1.0	4.9	—	NA	NA	NA	5.7
	07/01/93	—	—	—	—	—	—	—	25	—	—	—	—	—	NA	NA	NA	11.0
	09/21/93	0.70	—	—	—	—	2.8	220	23	2.8	—	0.98	—	—	NA	NA	NA	—
	01/05/94	—	—	—	—	—	1.0	290	25	—	—	—	3.7	—	NA	NA	NA	7.6
	04/12/94	0.55	—	—	—	—	4.3	310	43	3.9	—	1.3	7.4	—	NA	NA	NA	10.0
	07/13/94	—	—	—	—	—	3.3	260	37	2.9	—	1.0	6.2	—	NA	NA	NA	8.1
	10/26/94	0.52	—	—	—	—	2.1	200	15	2.2	—	1.4	6.4	—	—	—	—	9.2

SAC21A3.WK1

TABLE 4
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988–1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Sampled	B 1[1]	T 1000	X 1,750	E 680	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL_4 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride
MW-44	10/27/92	—	—	—	—	—	—	0.69	2.0	4.3	7.2	—	—	9.6	NA	NA	NA	—
	01/26/93	—	—	—	—	—	—	—	0.96	1.9	3.6	—	—	4.1	NA	NA	NA	—
	04/09/93	NA	NA	NA	NA	—	—	—	0.79	2.5	5.1	—	—	5.3	NA	NA	NA	—
	07/06/93	—	—	—	—	—	—	—	—	2.4	3.6	—	—	5.6	NA	NA	NA	—
	09/27/93	NA	NA	NA	NA	—	—	—	1.2	2.4	4.4	4.5	—	5.9	NA	NA	NA	—
	01/10/94	—	—	—	—	—	—	—	0.77	2.1	3.6	—	—	3.9	NA	NA	NA	—
	04/15/94	NA	NA	NA	NA	—	—	—	1.1	2.5	4.4 JC	—	—	6.1	NA	NA	NA	—
	07/14/94	NA	NA	NA	NA	—	—	—	1.2	1.9	4.0	—	—	4.9	NA	NA	NA	—
	11/01/94	—	—	—	—	—	—	—	—	1.7	2.8	—	—	5.1	—	—	—	—
MW-45	07/20/94	—	—	—	—	—	—	—	—	0.55	2.2	—	—	1.3	NA	NA	NA	—
	11/02/94	—	—	—	—	—	—	—	—	0.76	1.7	—	—	1.4	—	—	—	—
MW-46	07/20/94	—	—	—	—	—	—	—	—	—	2.6	—	—	0.89	NA	NA	NA	—
	11/01/94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	11/02/94	—	—	—	—	—	—	—	—	—	2.2	—	—	0.79	—	—	—	—
MW-47	07/21/94	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	—
	11/94/94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-48	07/21/94	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	—	—	—
	11/03/94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

(1) – Values in shaded row are drinking water Maximum Contaminant Levels (MCL) established by DHS or EPA, whichever is more stringent.
NE – Not Established

\+ – Detections of Benzene, Toluene, and Xylene appear to be due to field contamination. Analysis of duplicate sample showed no detections.
++ – Detections of Benzene, Toluene, Xylene, and Ethylbenzene appear to be due to field contamination.
Analysis of samples from other monitoring rounds were mostly non–detection for these constituents.
-- – Not Detected.
NA – Not Analyzed.
* – At or near detection limits.
UJf,UJh,Jc,Uz,Jh – See Table 8 for key to data qualifiers.

B – Benzene
T – Toluene
X – Xylene
E – Ethylbenzene
TCA – Trichloroethane
DCA – Dichloroethane
DCE – Dichloroethene
PCE – Tetrachloroethene
CCL_4 – Carbon Tetrachloride
TPH – Total Petroleum Hydrocarbons
TPH/gas – Total Petroleum Hydrocarbon as gasoline
TPH/D – Total Petroleum Hydrocarbon as diesel

TABLE 5
PROPOSED 1995 SAMPLING AND ANALYSIS SCHEDULE
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

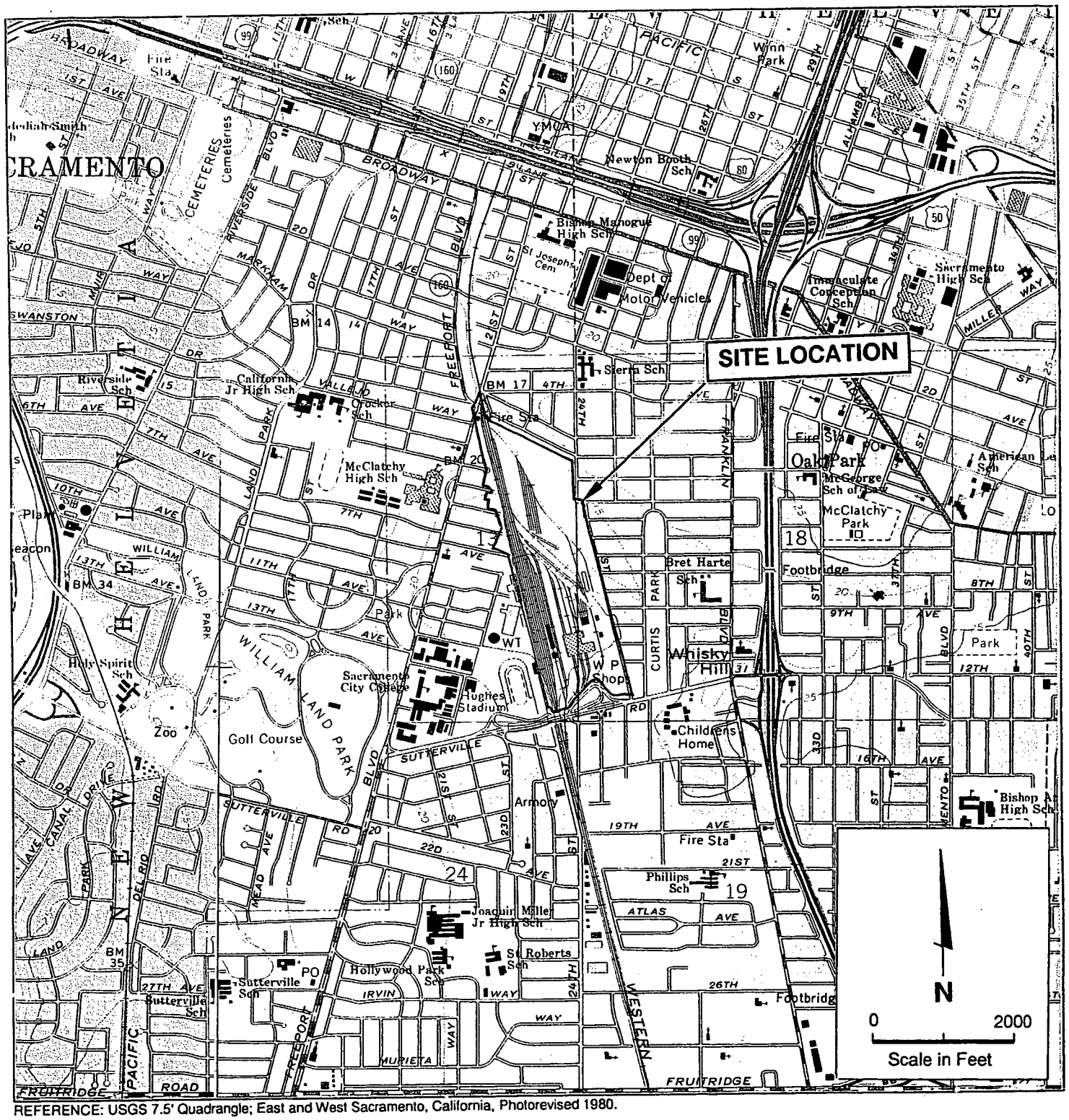
Well	Screen Interval (feet bgs)	Total Depth	Hydrostrati-graphic Zone	Parameter					
				601	602	As	Cr	Ni	Pb
MW-1	15-35	46	1	A	A	E	E	A	E
MW-2	37-57	66	1	Q	A	E	E	A	E
MW-3	15-25	31	1	A	A	E	E	E	E
MW-4[1]	34-54	60	1	M	M	E	E	M	E
MW-5	37-47	51	1	A	E	E	A	A	E
MW-6	30-50	54	1	A	E	E	A	A	E
MW-7	33-43	46	1	Q	A	E	S	S	E
MW-8	37.5-52.5	59.5	1	S	A	E	E	A	E
MW-11	50-55	56	1	Q	A	E	S	A	E
MW-12	69-79	82	2	Q	Q	A	A	S	E
MW-13	26-41	45	1	Q	Q	S	E	A	E
MW-14	52.5-57.5	58	1	Q	Q	A	A	A	E
MW-15	26-41	44	1	S	A	E	A	A	E
MW-16	51.8-56.8	57.5	1	Q	A	E	E	A	E
MW-17	26.5-41.5	45	1	S	A	E	E	S	E
MW-18	52-57	57.5	1	Q	A	E	E	A	E
MW-19	26-41	42	1	S	A	E	E	S	E
MW-20	52-57	59	1	Q	A	E	E	E	E
MW-21	24-39	40	1	S	E	E	E	S	E
MW-22	45.5-50.5	52.5	1	A	E	A	E	E	E
MW-23	25.5-40.5	42	1	S	E	E	E	S	E
MW-24	34-39	45	1	A	E	E	E	S	E
MW-25	26-41	41.5	1	S	A	E	E	S	E
MW-26	38-43	50	1	Q	A	E	E	S	E
MW-27	56.5-66.5	73	2	S	A	E	E	A	E
MW-28	69-79	85	2	Q	Q	E	E	A	E
MW-29	26-41	42	1	Q	Q	E	E	A	E
MW-30	51-56	57	1	Q	Q	E	E	A	E
MW-31	49-54	54.5	1	Q	Q	E	A	A	E
MW-32[1]	51.5-56.5	57	1	M	M	E	A	M	E
MW-33	23.5-38.5	39	1	Q	A	E	A	A	E

TABLE 5 (Continued)
PROPOSED 1995 SAMPLING AND ANALYSIS SCHEDULE
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Screen Interval (feet bgs)	Total Depth	Hydrostrati-graphic Zone	Parameter					
				601	602	As	Cr	Ni	Pb
MW-34	56-61	62	1	Q	A	E	E	S	E
MW-35	27-42	44	1	Q	A	E	E	E	E
MW-36	33.5-48.5	49	1	Q	A	A	A	Q	E
MW-37	75-85	86	2	Q	A	A	A	S	E
MW-38	36-48.5	49	1	Q	A	E	E	A	E
MW-39	33-48	49	1	Q	A	E	E	S	E
MW-40	72.5-82.5	83	2	Q	A	E	E	S	E
MW-41	104.5-114.5	115.5	3	Q	A	E	E	E	E
MW-42	20.5-35.5	37	1	Q	Q	E	E	S	E
MW-43	20-35	37	1	Q	Q	E	E	S	E
MW-44	73.5-78.5	81	2	Q	A	A	A	A	E
MW-45	31.5-46.5	48	1	Q	Q	Q	Q	Q	E
MW-46	69-79	82	2	Q	Q	Q	Q	Q	E
MW-47	114-124	126	3	Q	Q	Q	Q	Q	E
MW-48[2]	19.5-34.5	35	1	E	E	E	E	E	E
P-10[2]	20.5-35.5	36.5	1	E	E	E	E	E	E
P-11[2]	19.0-34.0	34	1	3	3	3	3	3	3
EW-1[2]	25-50	51	1	M	E	E	E	M	E

M - Monthly (for extraction wells only)
Q - Quarterly
S - Semi-annually
A - Annually
E - Eliminated
601 - EPA method for chlorinated volatile organic compounds analysis
602 - EPA method for aromatic compound analysis
(1) - Groundwater IRM extraction wells. Started up in April 1993.
(2) - MW-48 is sampled quarterly for total petroleum hydrocarbons as gasoline and diesel

FIGURES



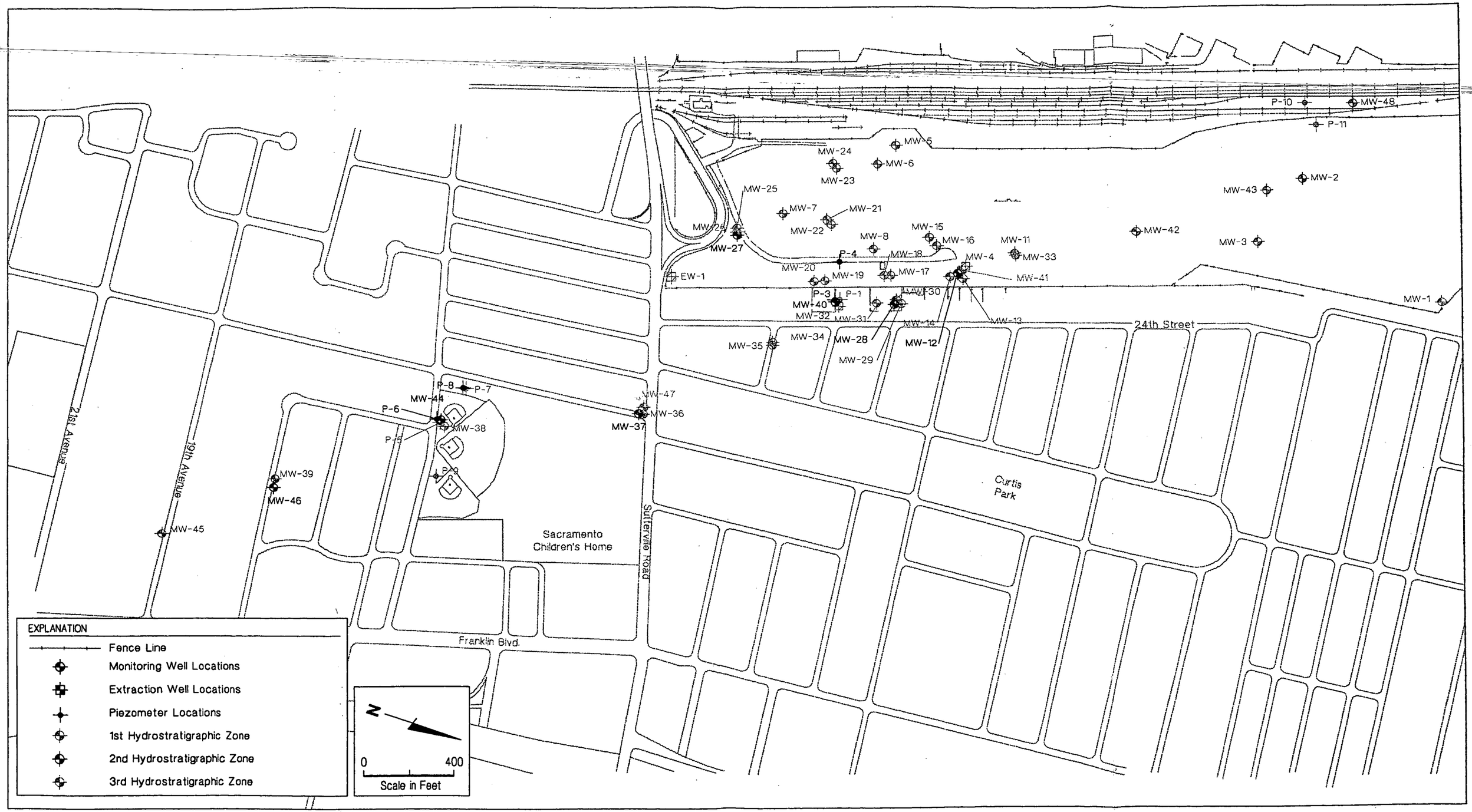
REFERENCE: USGS 7.5' Quadrangle; East and West Sacramento, California, Photorevised 1980.

SITE VICINITY MAP

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Union Pacific Railroad Yard
Sacramento, California

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00173080

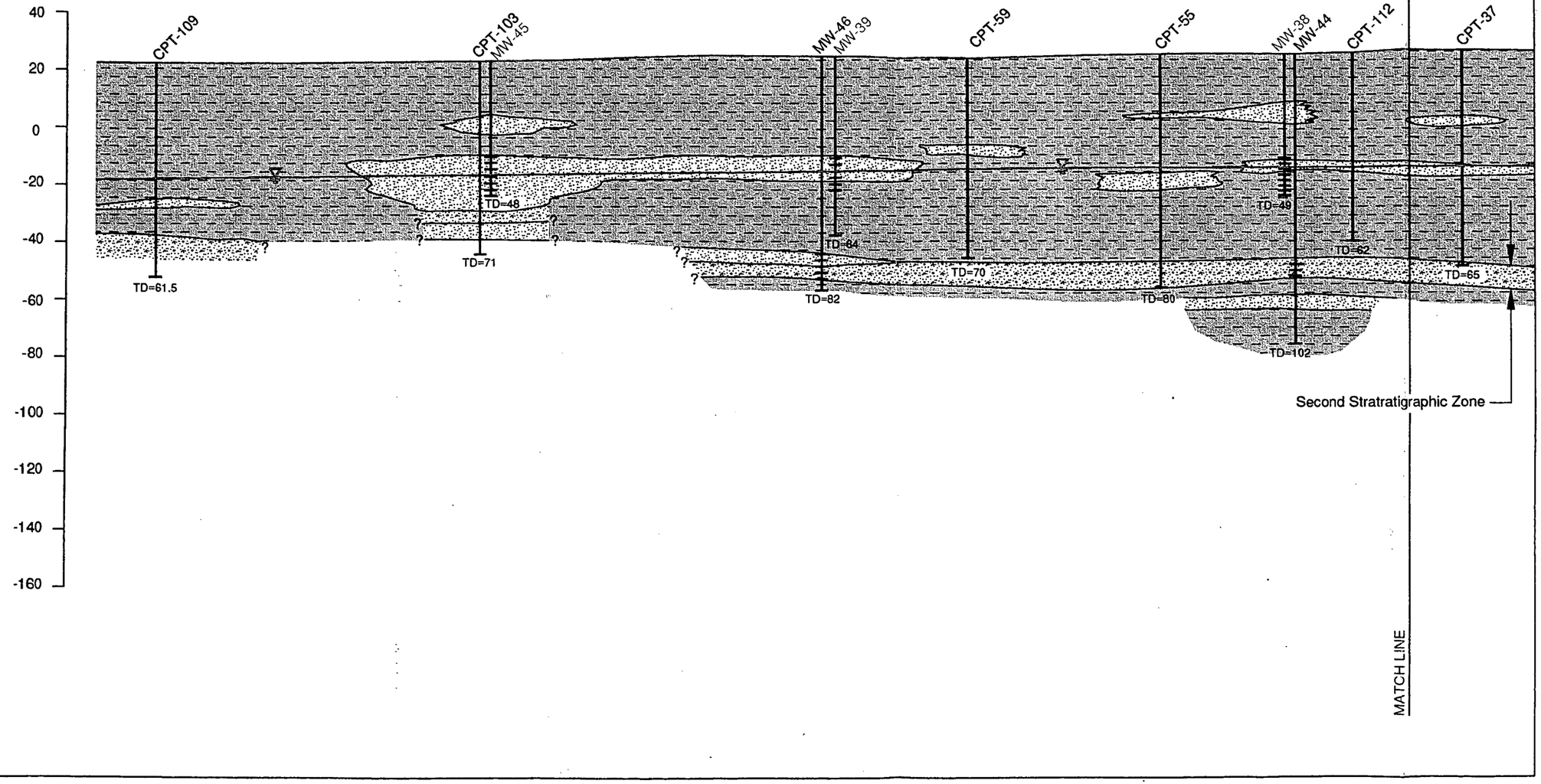
FIGURE 1

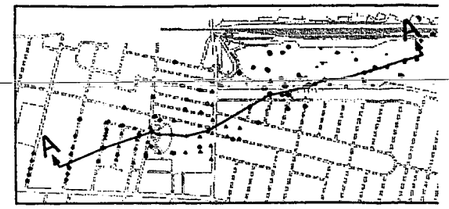


SITE MAP
1994 Annual Groundwater Monitoring Report
Union Pacific Railroad Yard
Sacramento, California
FIGURE 2

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SOUTH
A





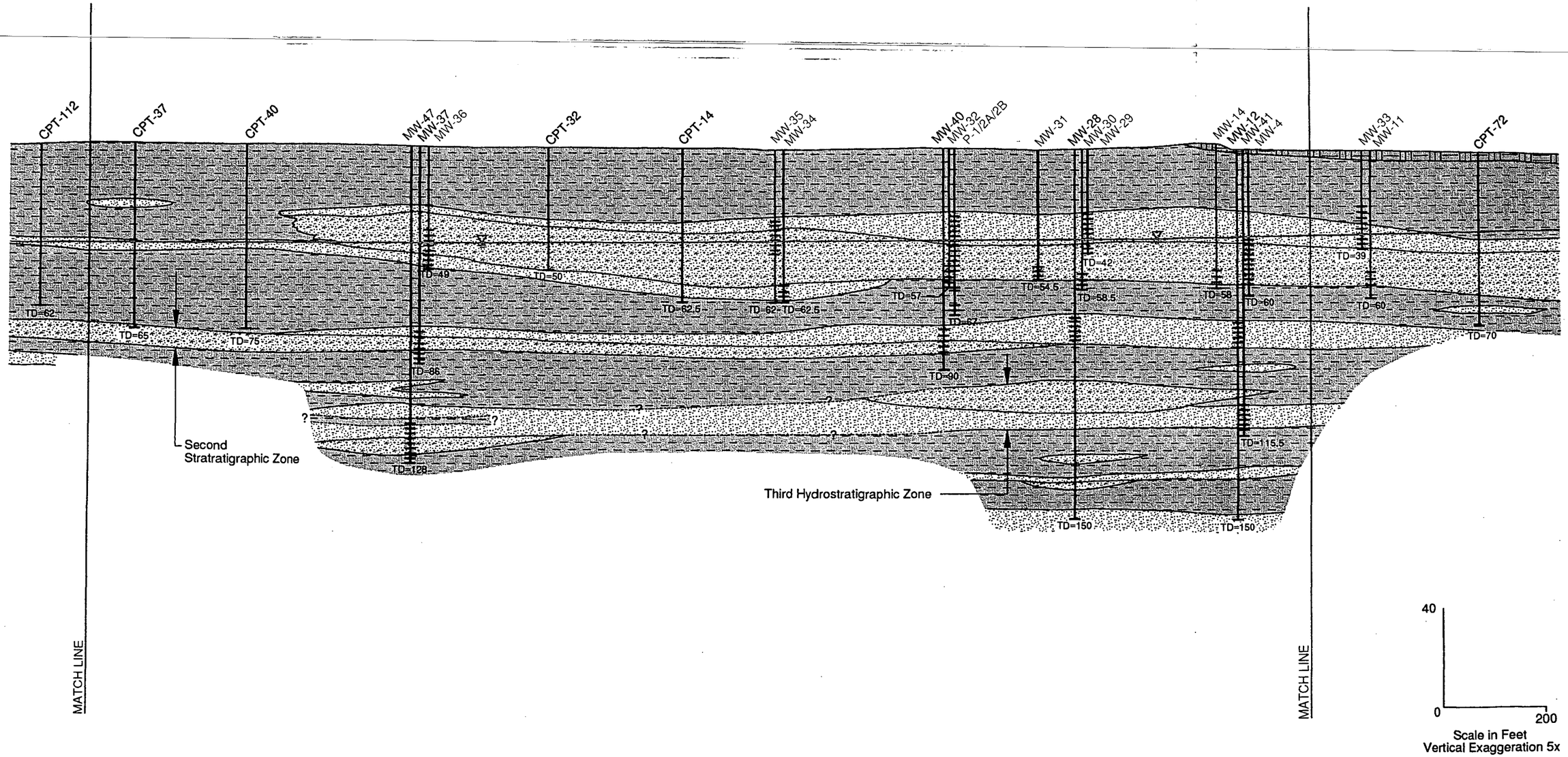
Site Location Map
Not to Scale

EXPLANATION

MW-45	Monitoring Well
	Screen Interval
TD=70	Total Depth of Boring in Feet
CPT	Cone Penetration Test
TD=33	Total Depth of CPT in Feet
	Geologic Contact
—?—	Geologic Contact Uncertain
	Static Water, October 1994
	Artificial Fill, Imported or Disturbed Soil Containing Demolitio Debris and Other Manmade Materia
	Fine to Medium Grain Sand (SP)
	Fine Silty Sand (SM)
	Interbedded Clayey Silt (ML) to Silty Clay (CL)

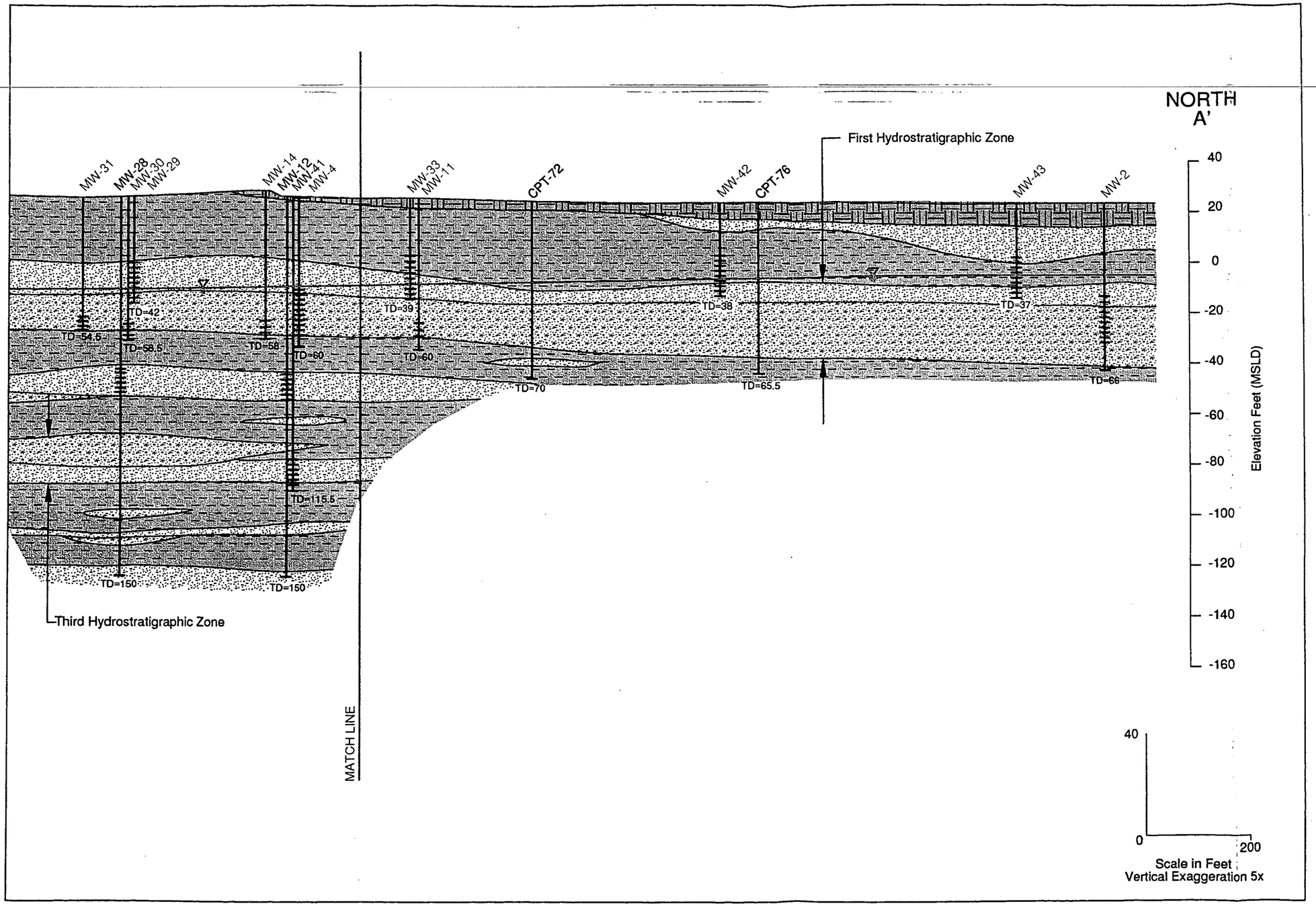
GENERALIZED HYDROSTRATIGRAPHIC CROSS SECTION A-A'
1994 Annual Groundwater Monitoring Report
Union Pacific Railroad Yard
Sacramento, California

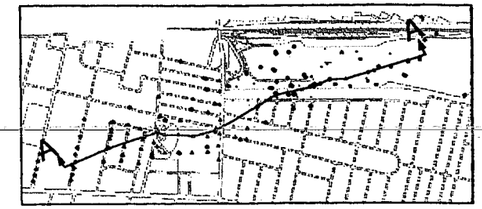
FIGURE 3



00173-080-6055-044 caw 6055g 1/20/94

FIGURE 3 Cor





Site Location Map
Not to Scale

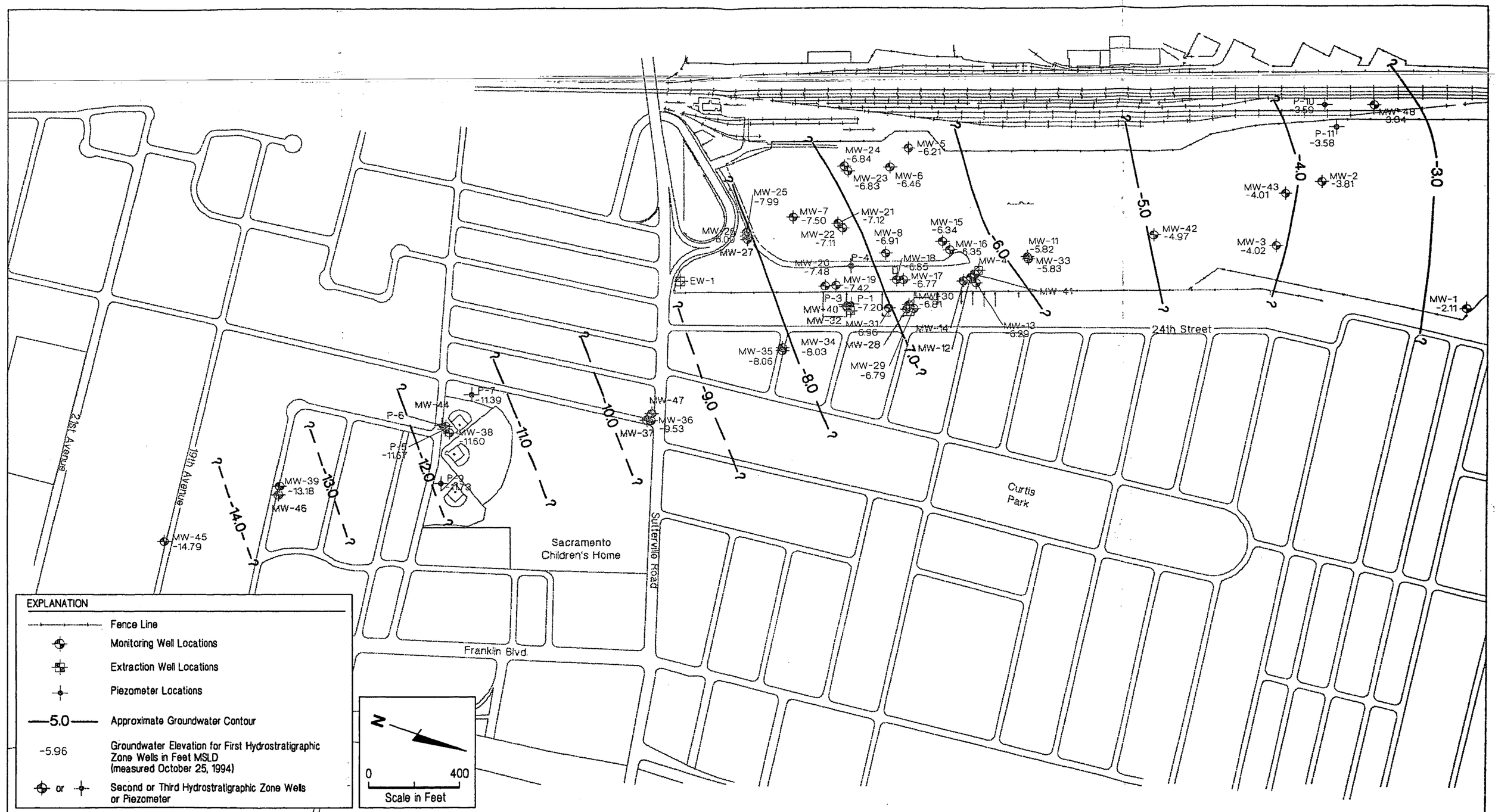
EXPLANATION

MW-45	Monitoring Well
	Screen Interval
TD=70	Total Depth of Boring in Feet
CPT	Cone Penetration Test
TD=33	Total Depth of CPT in Feet
	Geologic Contact
—?—	Geologic Contact Uncertain
	Static Water, October 1994
	Artificial Fill, Imported or Disturbed Soil Containing Demolition Debris and Other Manmade Materials
	Fine to Medium Grain Sand (SP)
	Fine Silty Sand (SM)
	Interbedded Clayey Silt (ML) to Silty Clay (CL)

GENERALIZED HYDROSTRATIGRAPHIC CROSS SECTION A-A'

1994 Annual Groundwater Monitoring Report
Union Pacific Railroad Yard
Sacramento, California

FIGURE 3



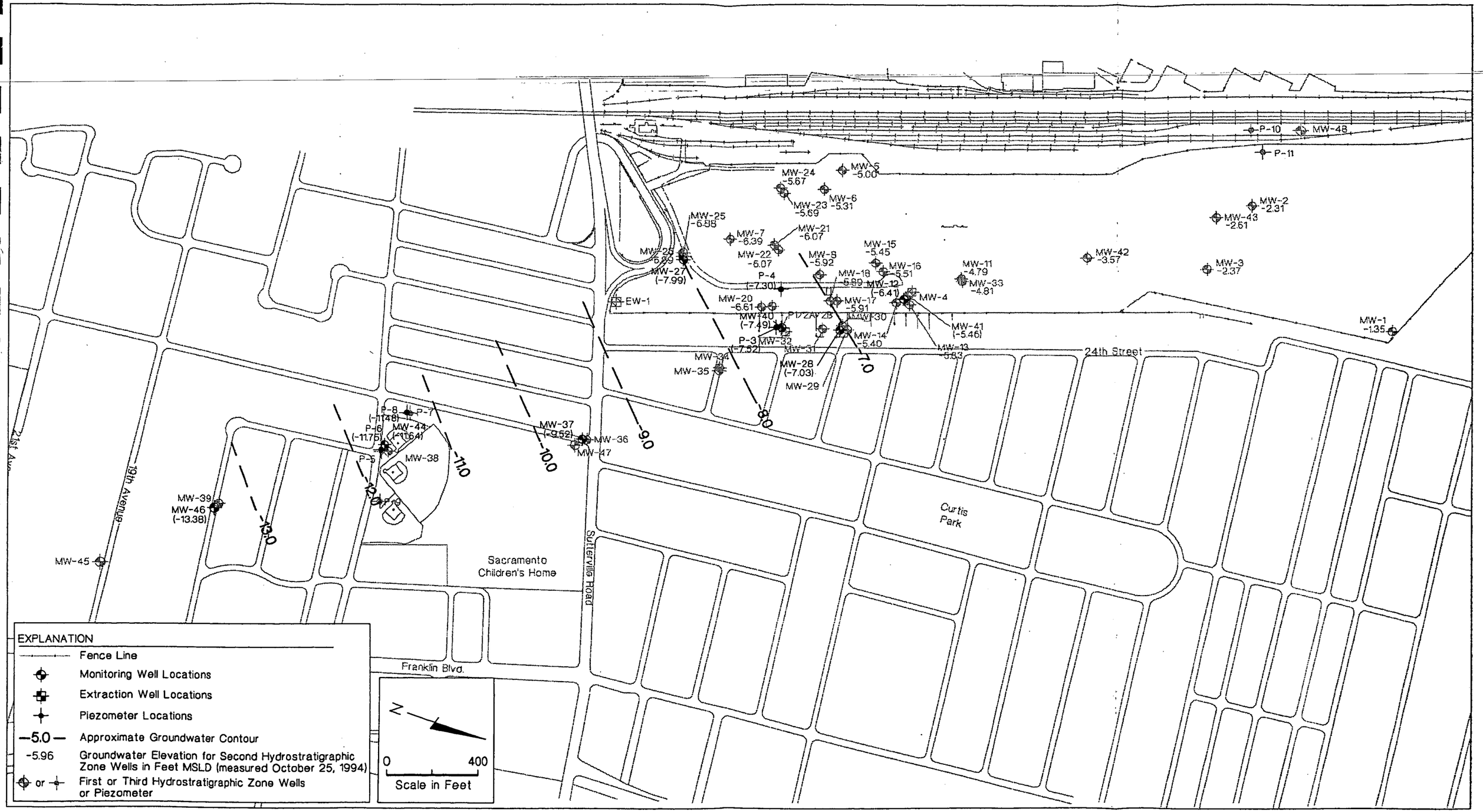
GROUNDWATER ELEVATION CONTOURS FIRST HYDROSTRATIGRAPHIC ZONE OCTOBER 1994

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Union Pacific Railroad Yard
Sacramento, California

FIGURE 4

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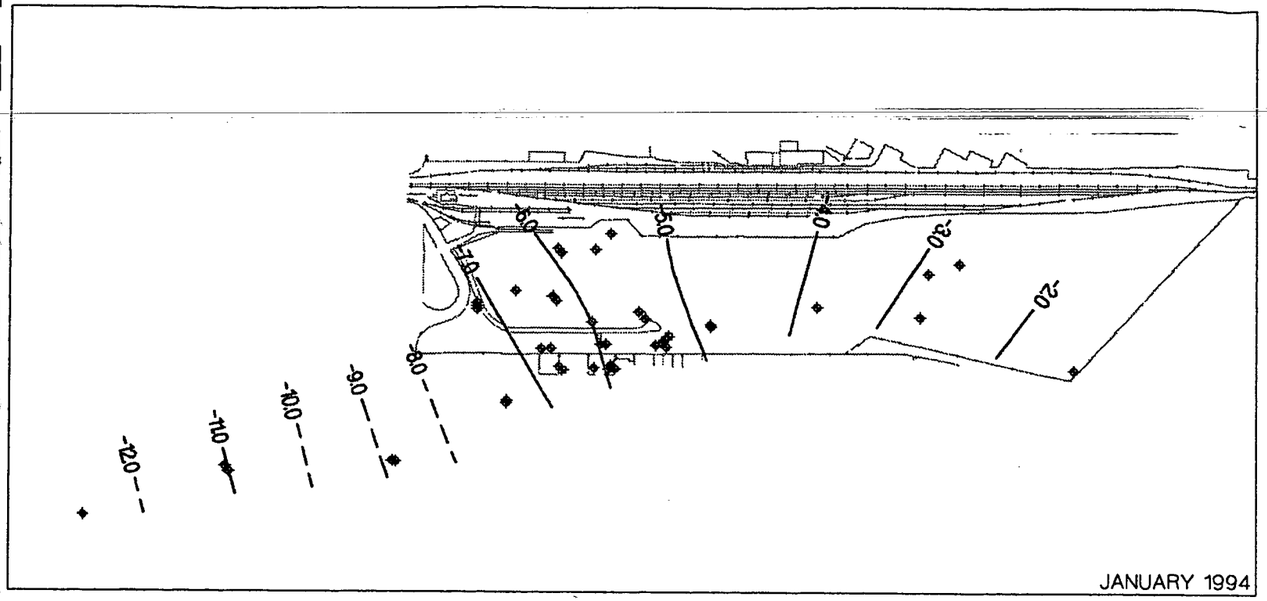
GROUNDWATER ELEVATION CONTOURS SECOND HYDROSTRATIGRAPHIC ZONE OCTOBER 1994

1994 Annual Groundwater Monitoring Report
Union Pacific Railroad Yard
Sacramento, California

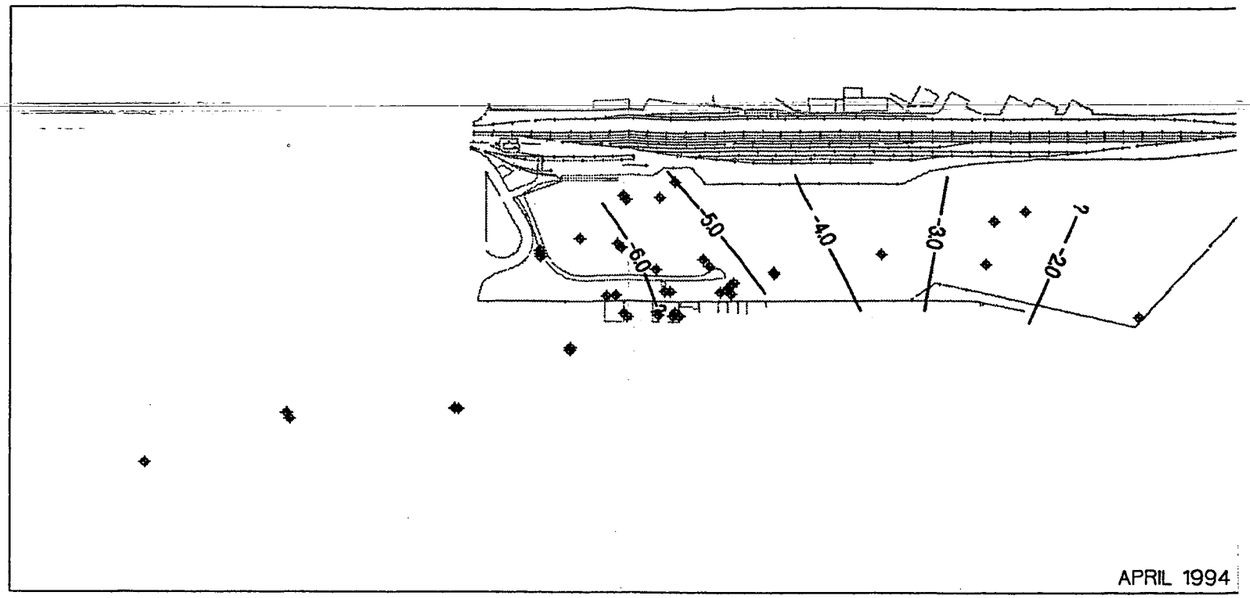
FIGURE 5

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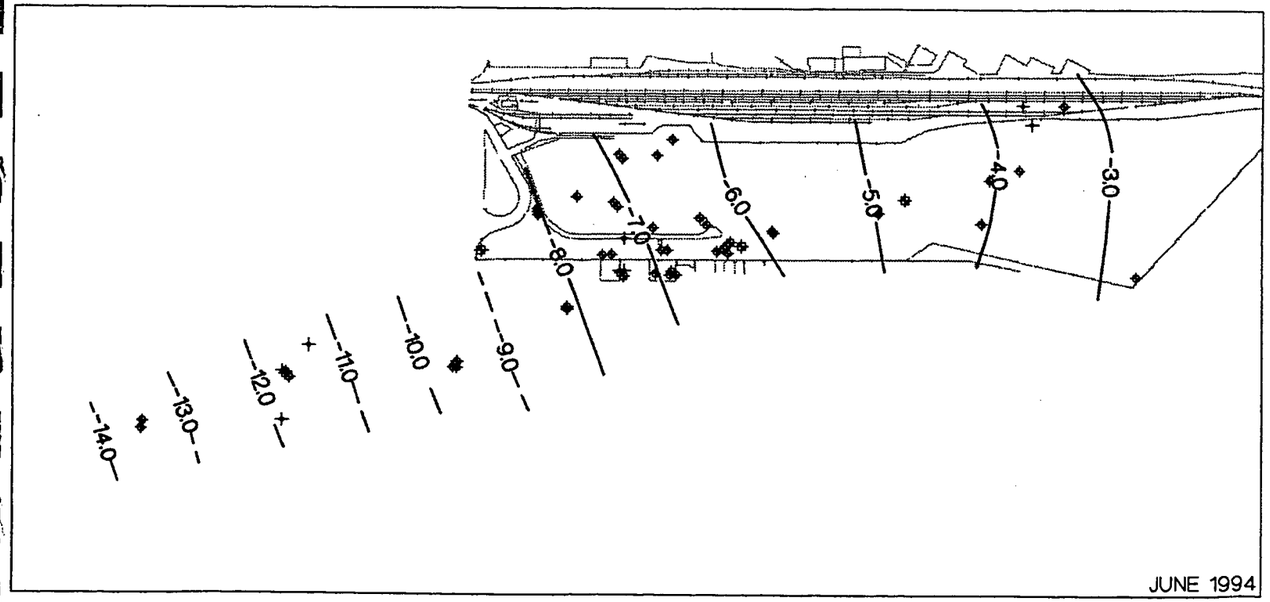
00173-080-6055-044 caw 1/20/95 6055b



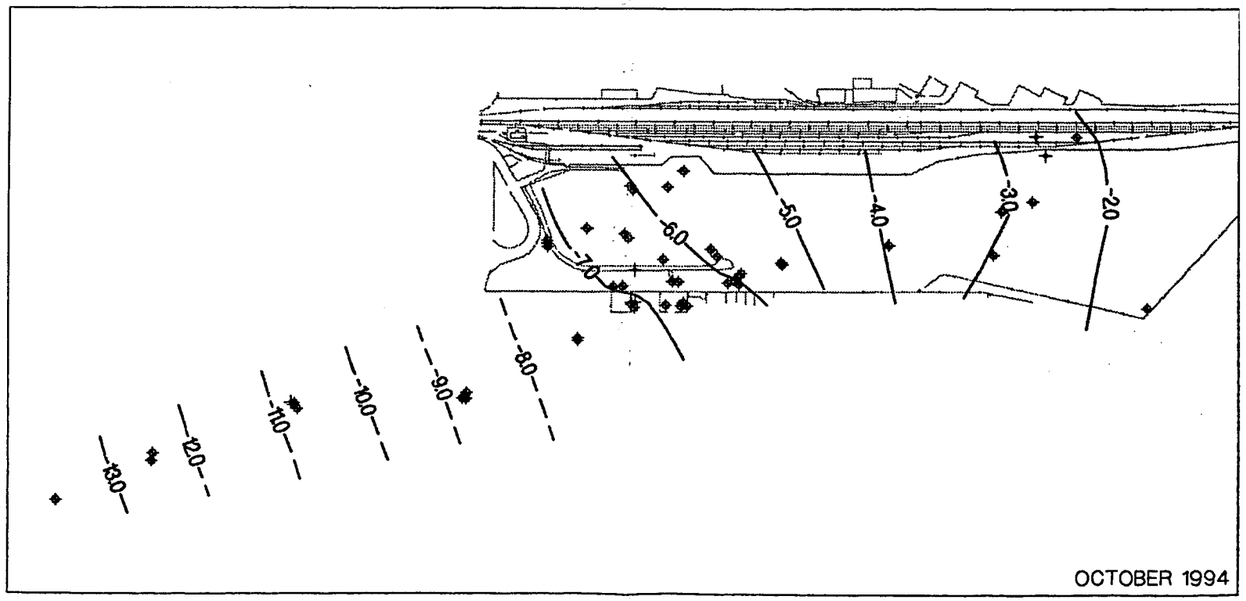
JANUARY 1994



APRIL 1994



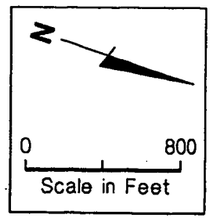
JUNE 1994



OCTOBER 1994

EXPLANATION

- Fence Line
- Monitoring Well Locations
- -11.0 — Groundwater Contours (Dashed Where Inferred)



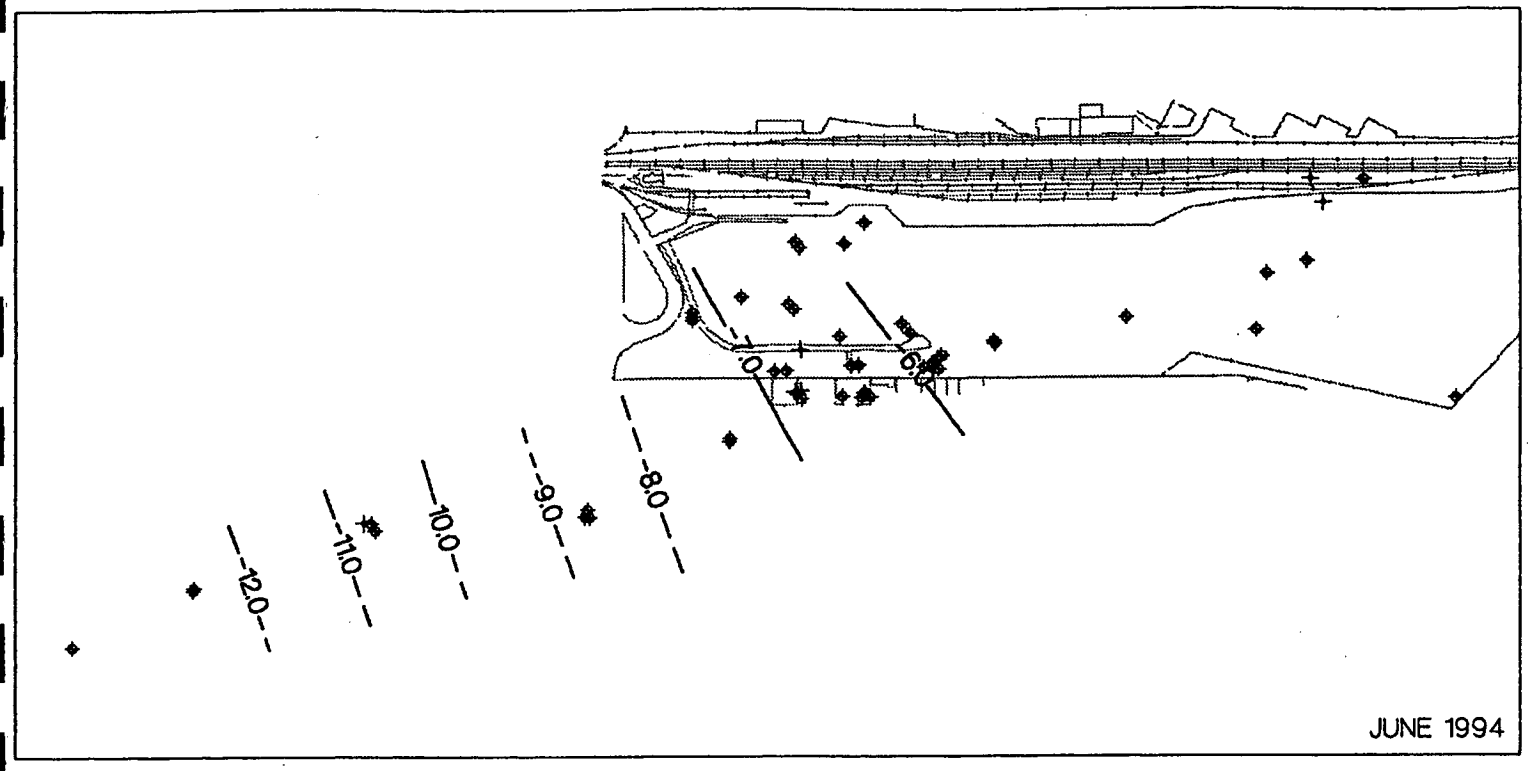
DAMES & MOORE

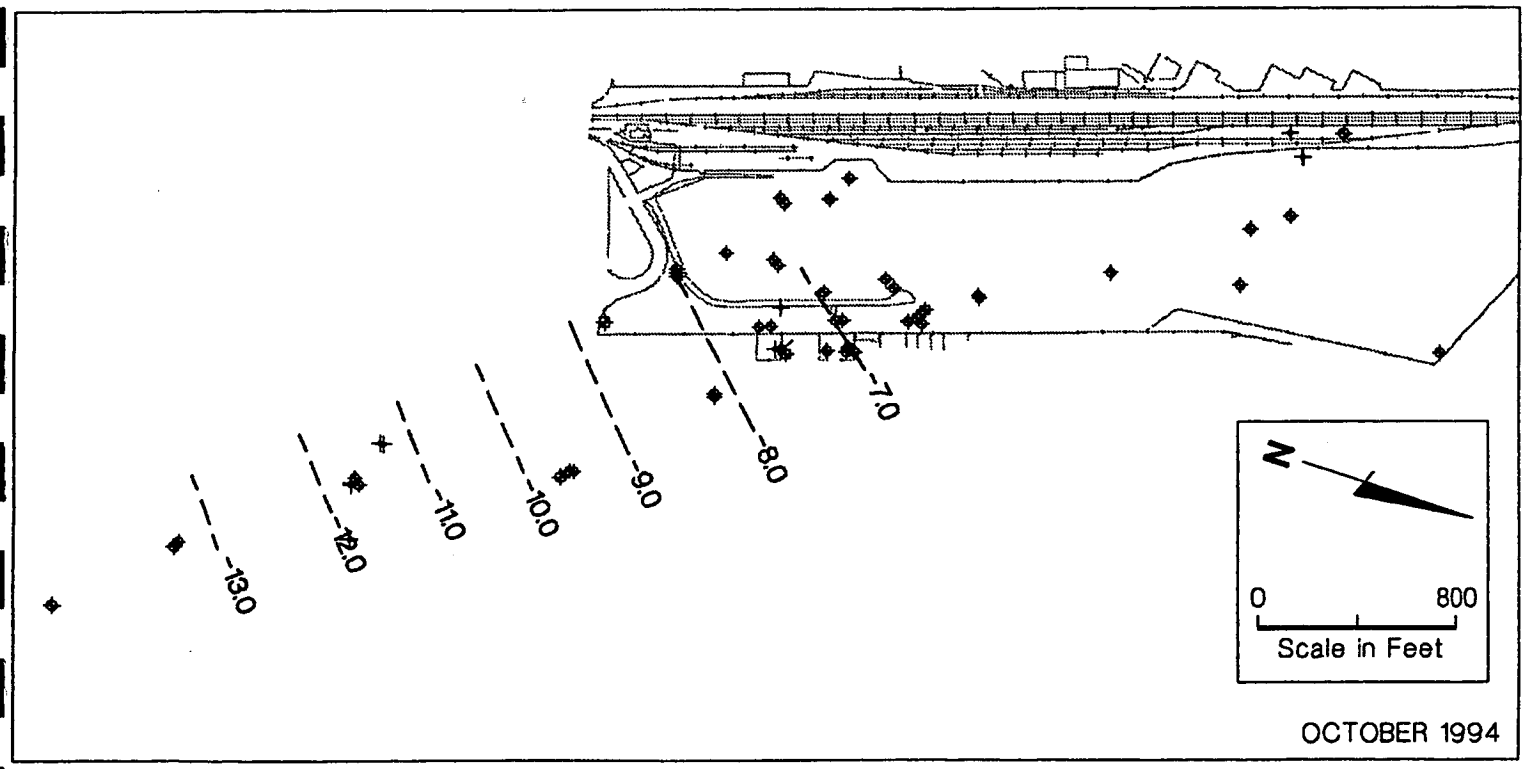
00173-080-6055-044 CAW 6055i 1/23/95

FIRST HYDROSTRATIGRAPHIC ZONE GROUNDWATER ELEVATION CONTOURS JANUARY, APRIL, JUNE, AND OCTOBER 1994

1994 Annual Groundwater Monitoring Report
Union Pacific Railroad Yard
Sacramento, California

FIGURE 6





EXPLANATION

Fence Line

Monitoring Well Locations

-11.0 Groundwater Contours (Dashed Where Inferred)

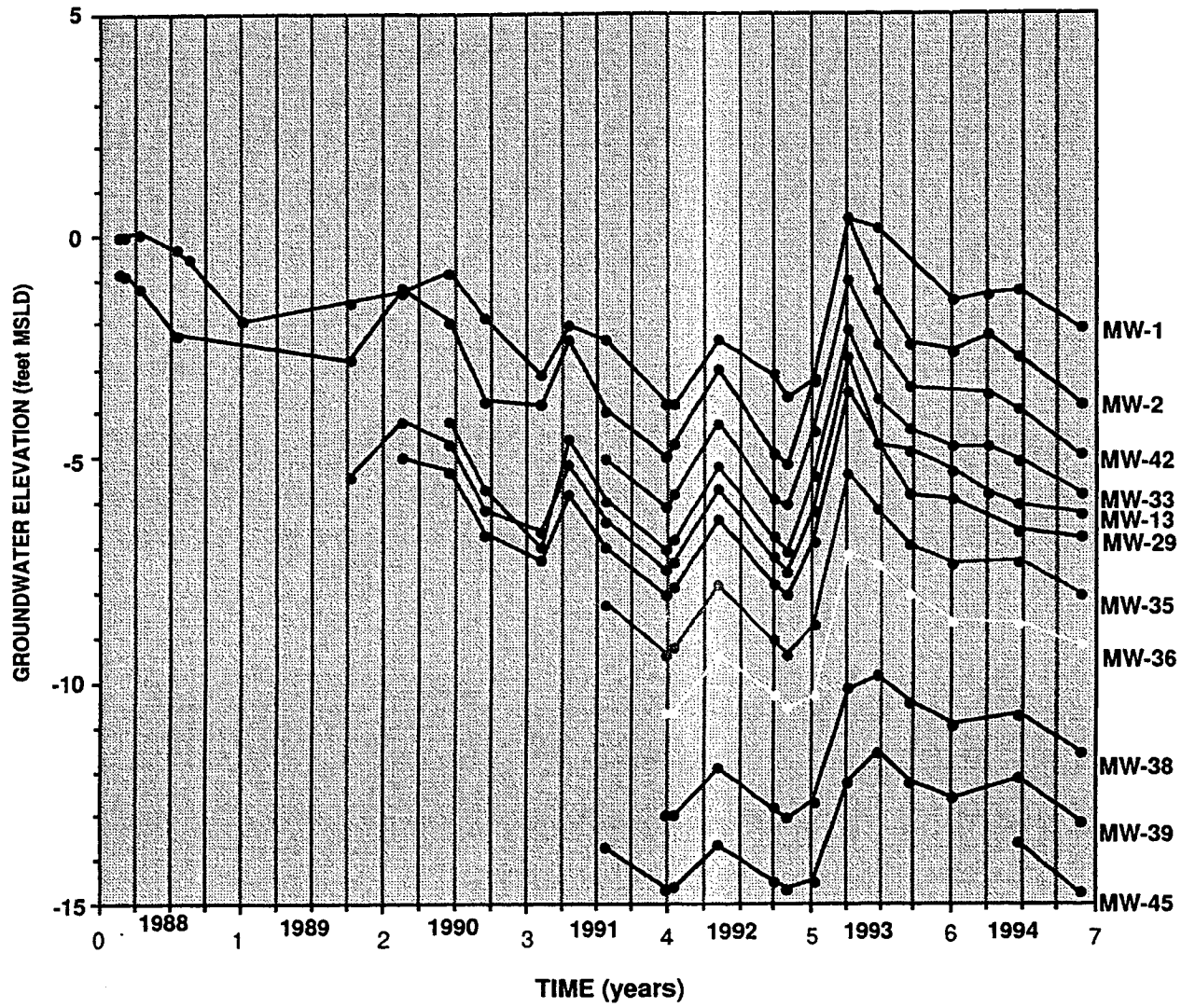
SECOND HYDROSTRATIGRAPHIC ZONE GROUNDWATER ELEVATION CONTOURS JUNE AND OCTOBER 1994

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Sacramento, California

FIGURE 7

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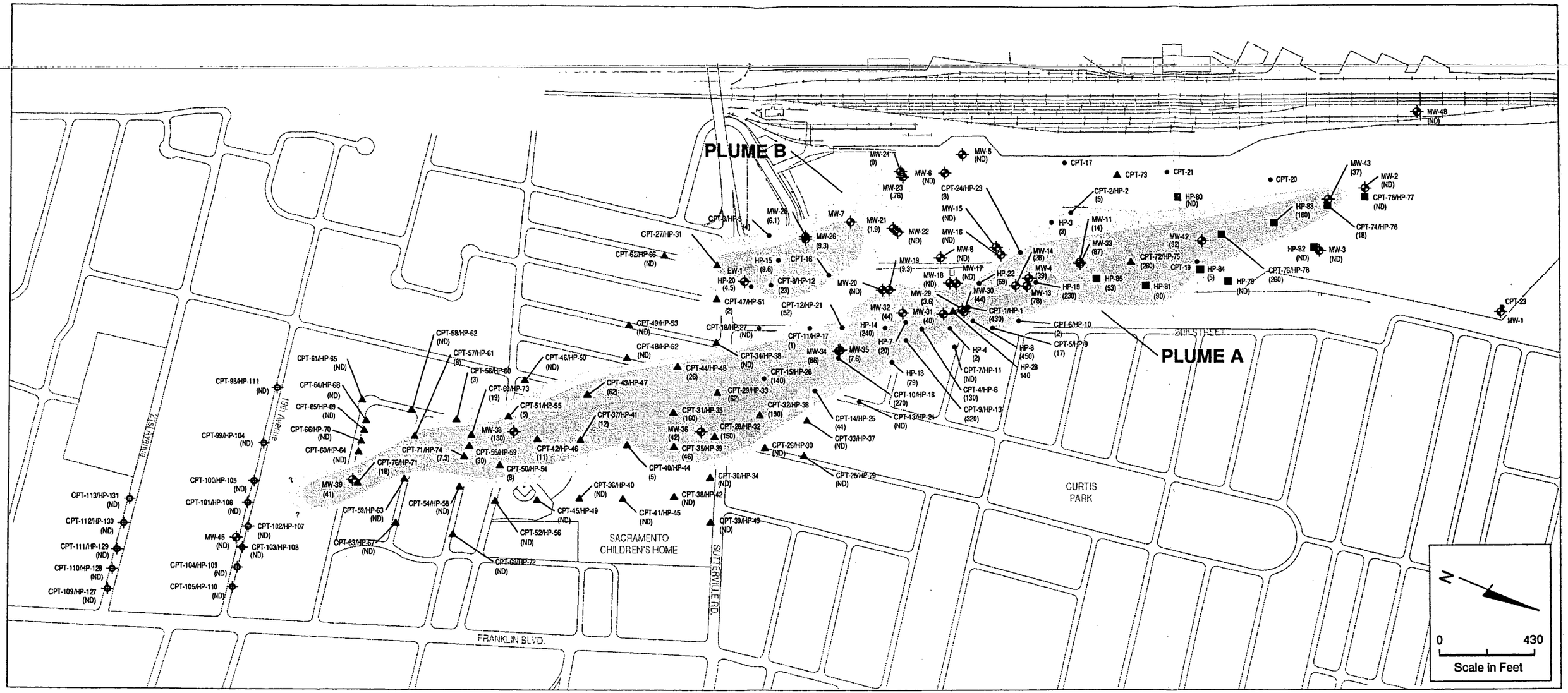
FIRST HYDROSTRATIGRAPHIC ZONE GROUNDWATER ELEVATIONS 1988-1994

1994 Annual Groundwater Monitoring Report
Union Pacific Railroad Yard
Sacramento, California

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00173.080.6506.044 6506a caw 1/23/95

FIGURE 8



EXPLANATION

EXPLORATORY HOLES

- ● April-May, 1990 Locations
- ▲ September-October 1990 Locations
- ■ February 1991 Locations
- ⊕ April 1994 Locations

CPT-13 Cone Penetration Test

HP-2 Hydropunch Water Sample

⊕ MW-31 (40) Monitoring Well Location Completed in First Hydrostratigraphic Zone/1,1-DCE Concentration in ug/L from Third Quarter 1994 Sampling Round

● (450) 1,1-DCE Concentration in ug/L from Hydropunch Sample

100 Contour in ug/L

6 Contour in ug/L

ND Contour in ug/L

Fence Line

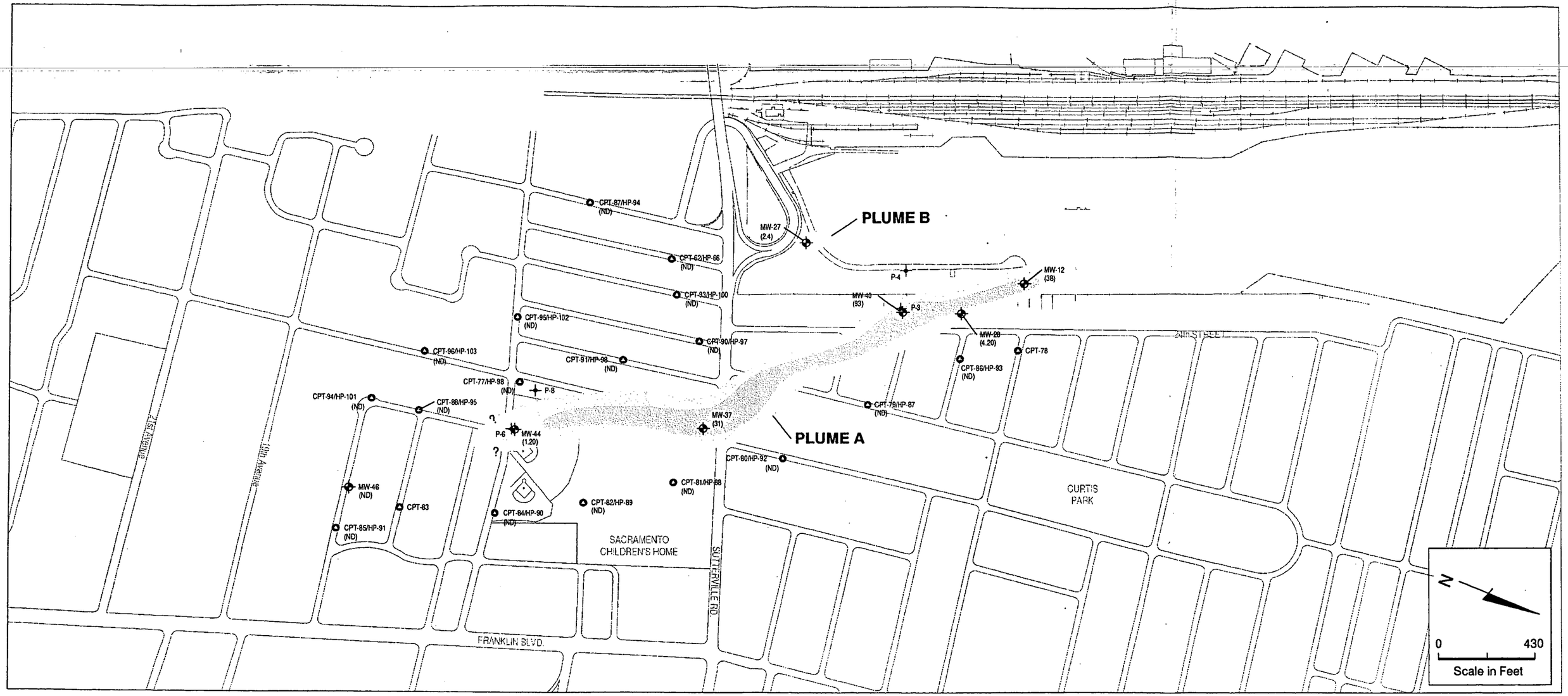
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00173-080-044 6055f-ps sjr 1/30/95

FIRST HYDROSTRATIGRAPHIC ZONE 1,1-DCE CONCENTRATION CONTOURS

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Union Pacific Railroad Yard
Sacramento, California

FIGURE 9



EXPLANATION

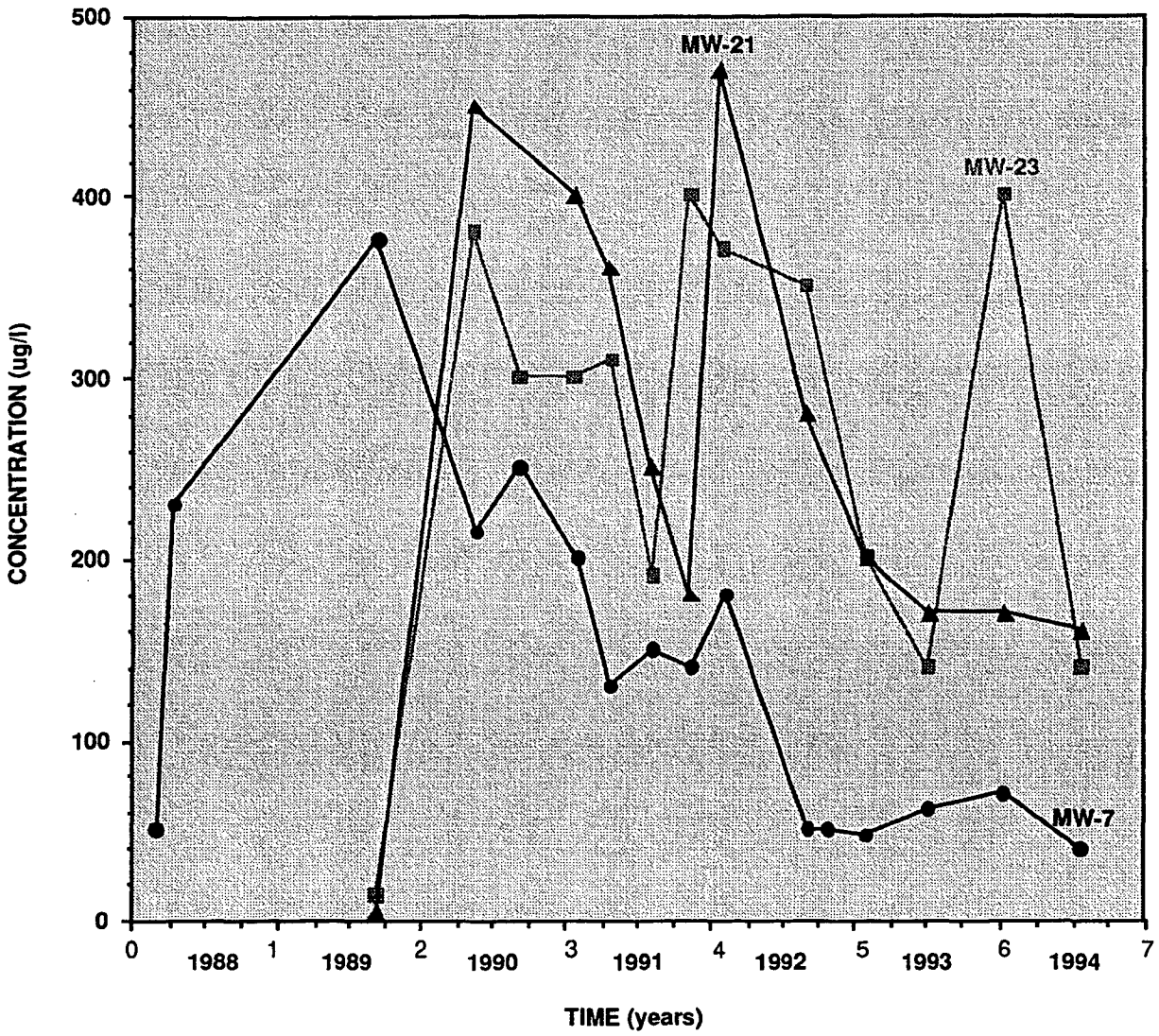
EXPLORATORY HOLES

- ○ May-June 1992 Locations
- CPT-78 Cone Penetration Test
- HP-93 Hydropunch Water Sample

- ⊕ MW-44 (1.2) Monitoring Well Location Completed in Second Hydrostratigraphic Zone/1,1-DCE Concentration in ug/L from Third Quarter 1994 Sampling Round
- ○ (450) 1,1-DCE Concentration in ug/L from Hydropunch Sample
- 6 Contour in ug/L
- ND Contour in ug/L
- Fence Line

SECOND HYDROSTRATIGRAPHIC ZONE
1,1-DCE CONCENTRATION CONTOURS
1994 Annual Groundwater Monitoring Report
Union Pacific Railroad Yard
Sacramento, California
FIGURE 10

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00173-080-044 8055e-ps sjr 1/30/95



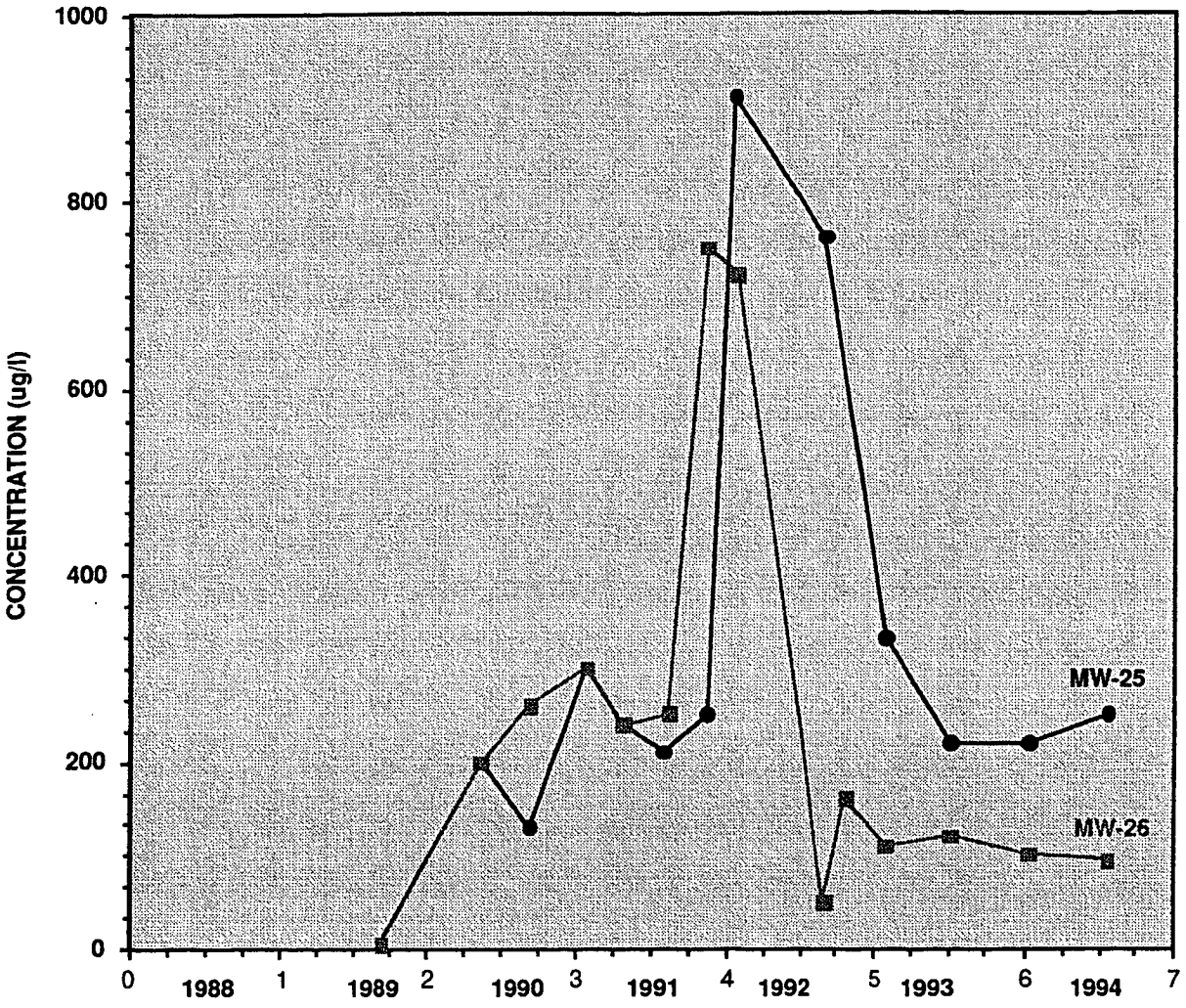
NICKEL CONCENTRATION vs. TIME
MW-7, MW-21, and MW-23

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Union Pacific Railroad Yard
Sacramento, California

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00173.080.6506.044 6506G caw 1/23/95

FIGURE 11



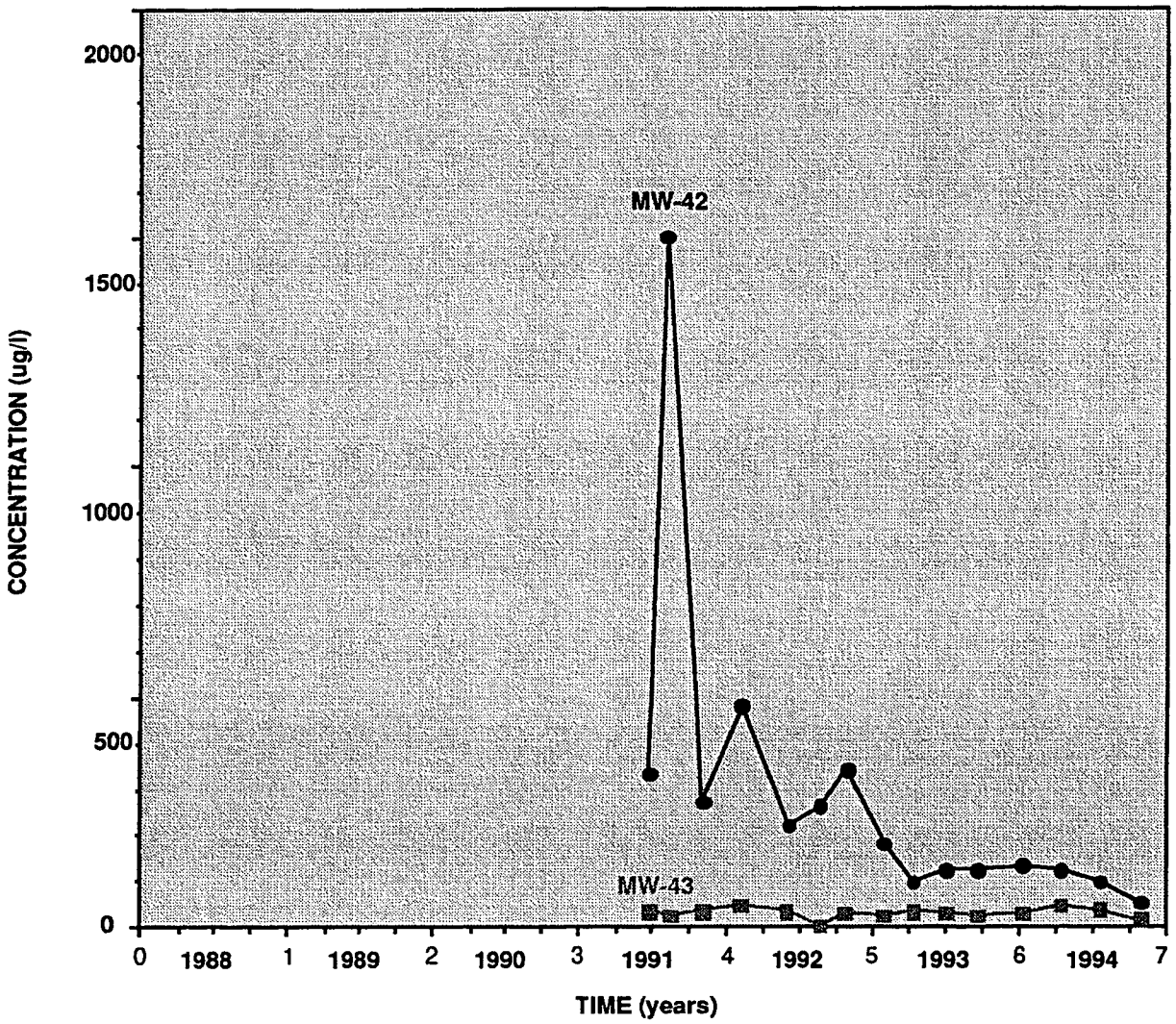
NICKEL CONCENTRATION vs. TIME
MW-25 and MW-26

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Union Pacific Railroad Yard
Sacramento, California

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FIGURE 12



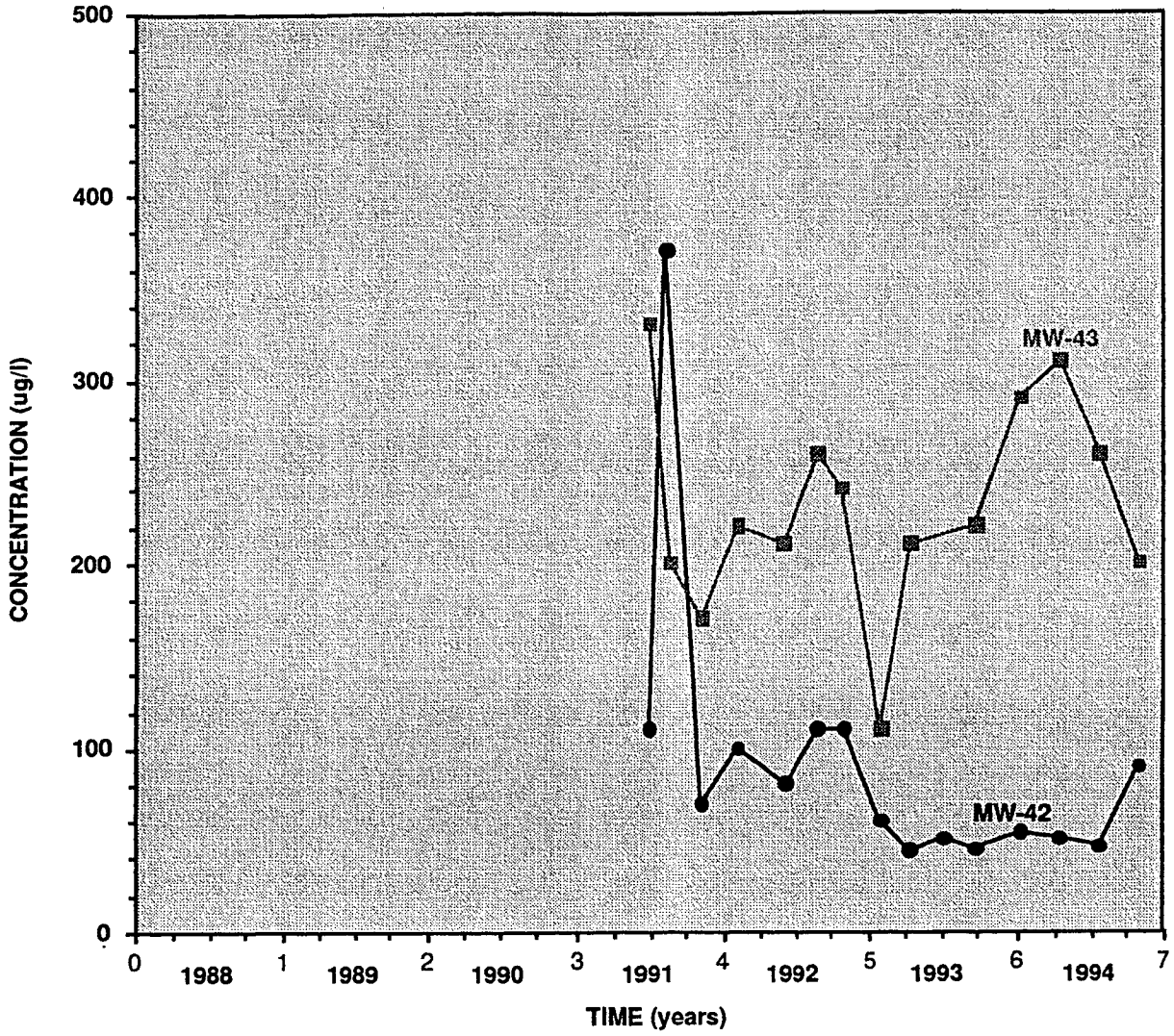
1,1-DCE CONCENTRATION vs. TIME
MW-42 and MW-43

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FIGURE 13



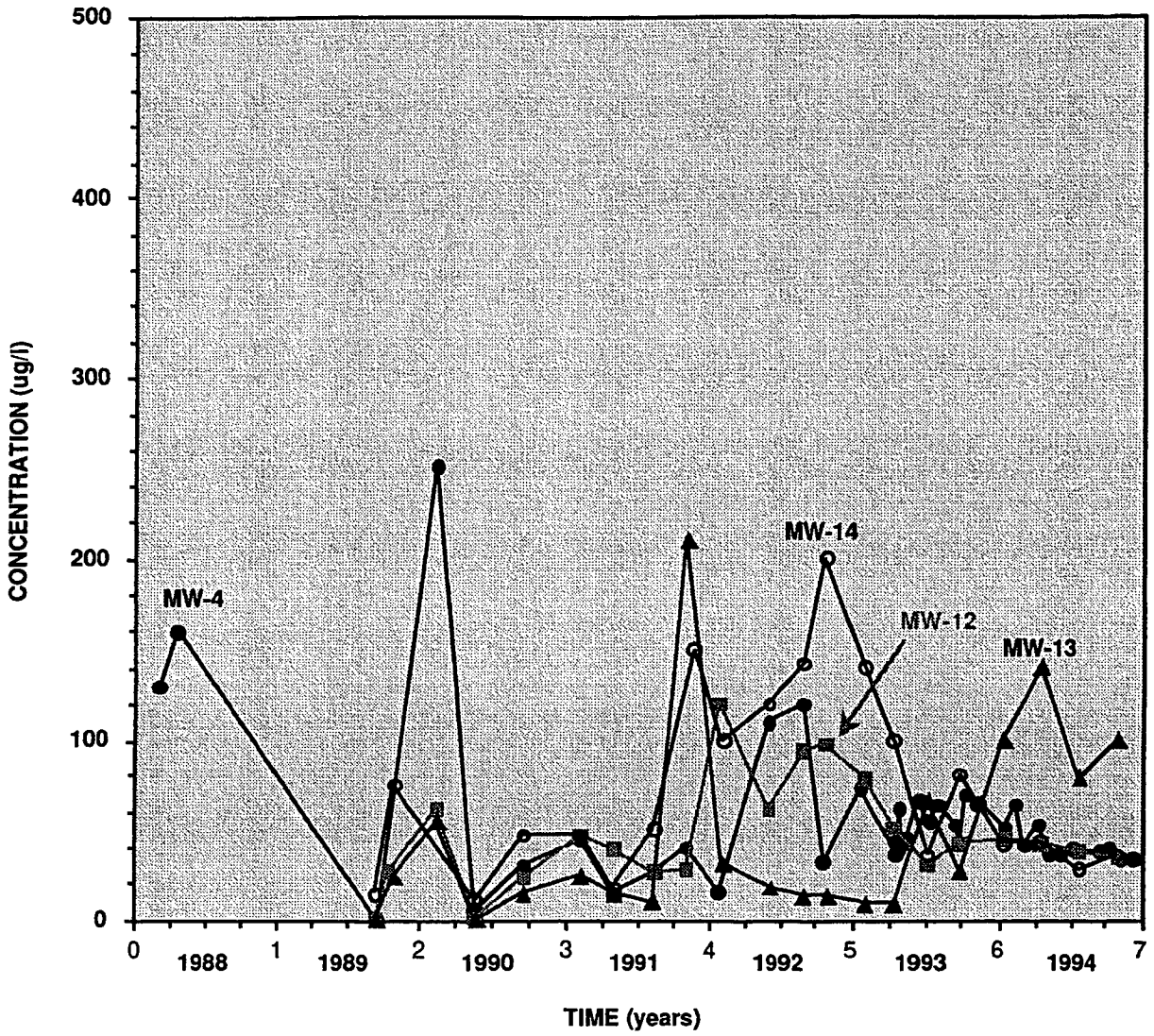
1,1-DCA CONCENTRATION vs. TIME
MW-42 and MW-43

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Union Pacific Railroad Yard
Sacramento, California

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FIGURE 14



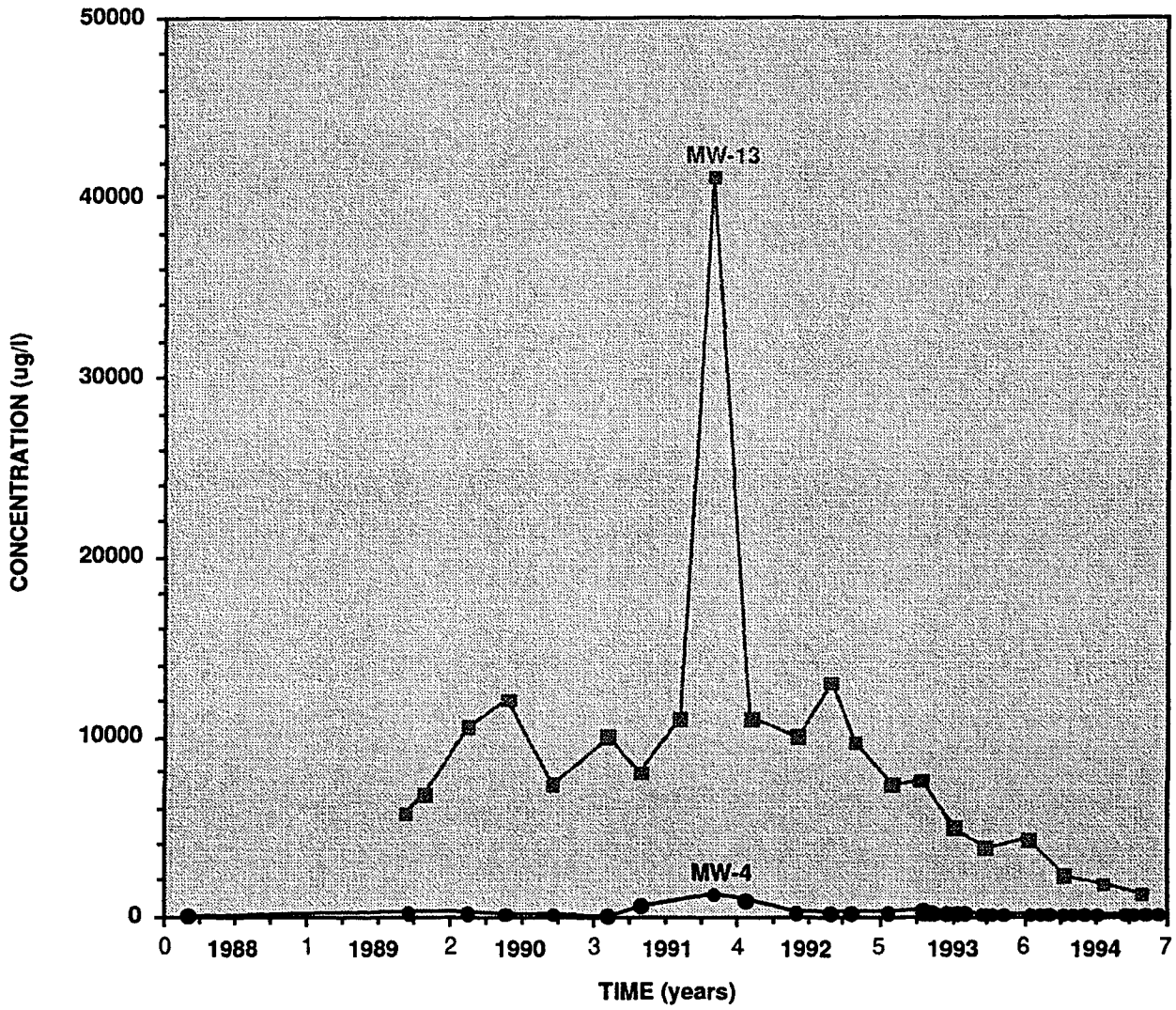
1,1-DCE CONCENTRATION vs. TIME
MW-4, MW-12, MW-13 and MW-14

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Union Pacific Railroad Yard
Sacramento, California

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FIGURE 15



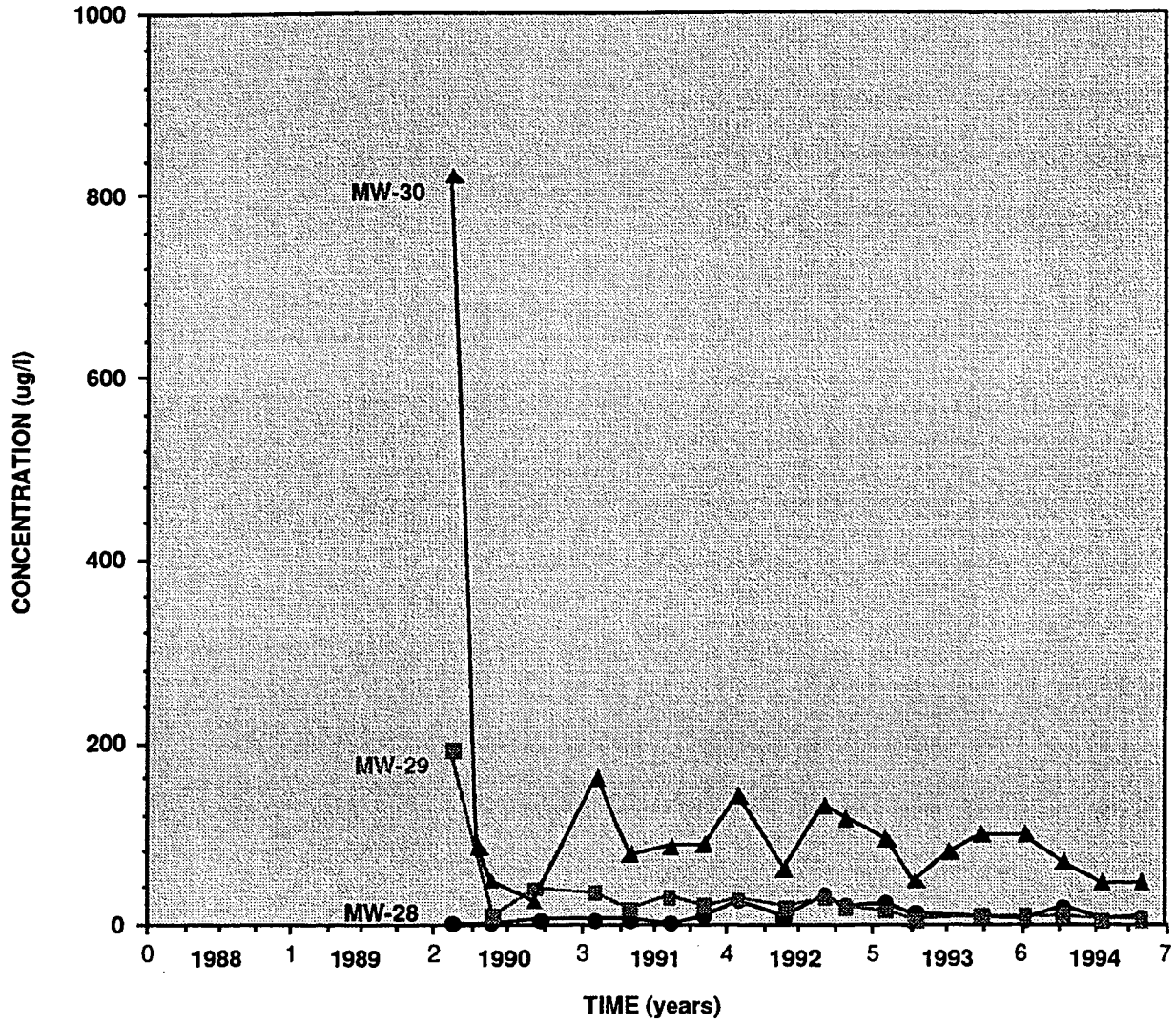
BENZENE CONCENTRATION vs. TIME
MW-4 and MW-13

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Union Pacific Railroad Yard
Sacramento, California

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FIGURE 16



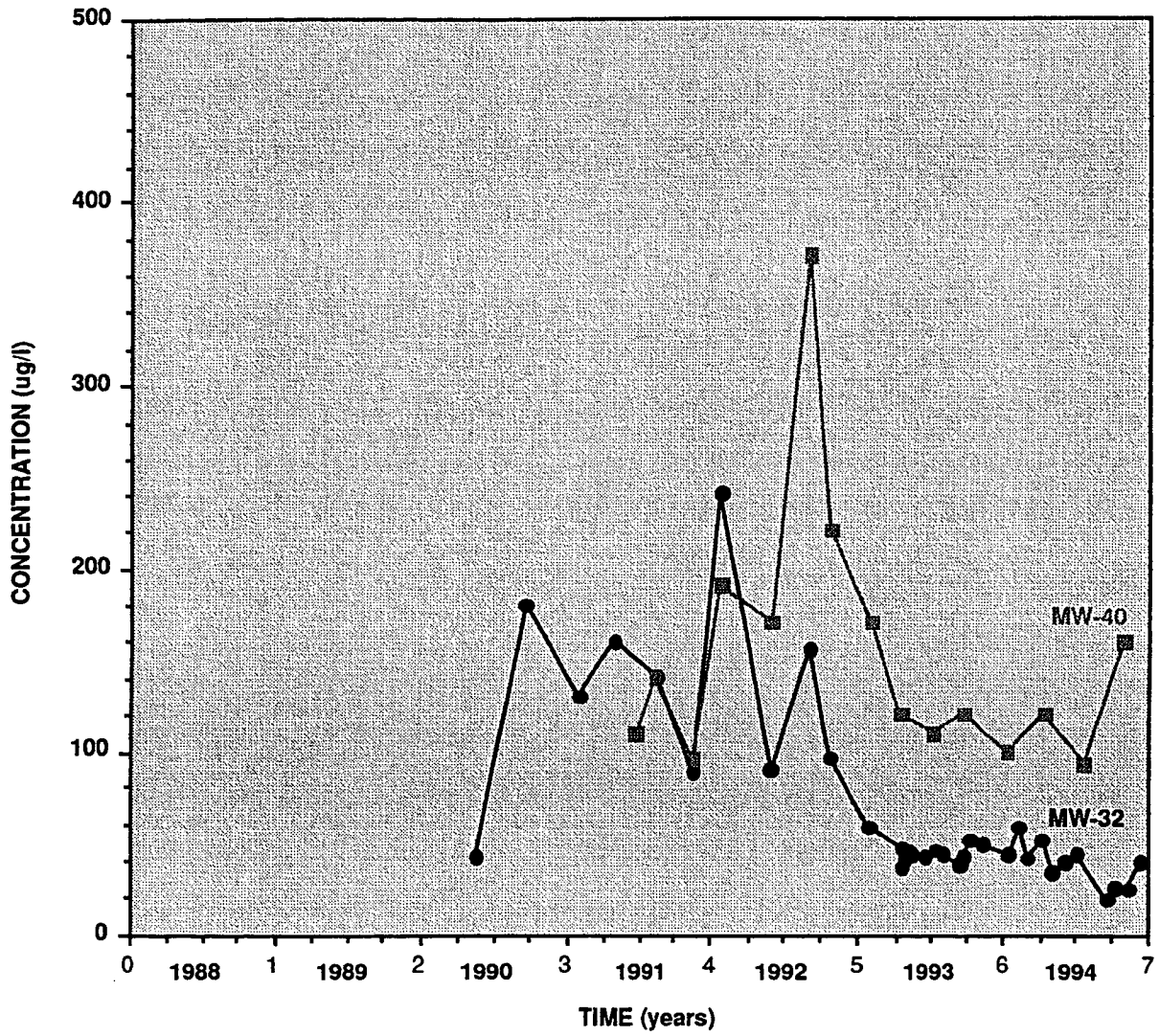
1,1-DCE CONCENTRATION vs. TIME
MW-28, MW-29 and MW-30

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Union Pacific Railroad Yard
Sacramento, California

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00173.080.6506.044 6506C caw 1/23/95

FIGURE 17



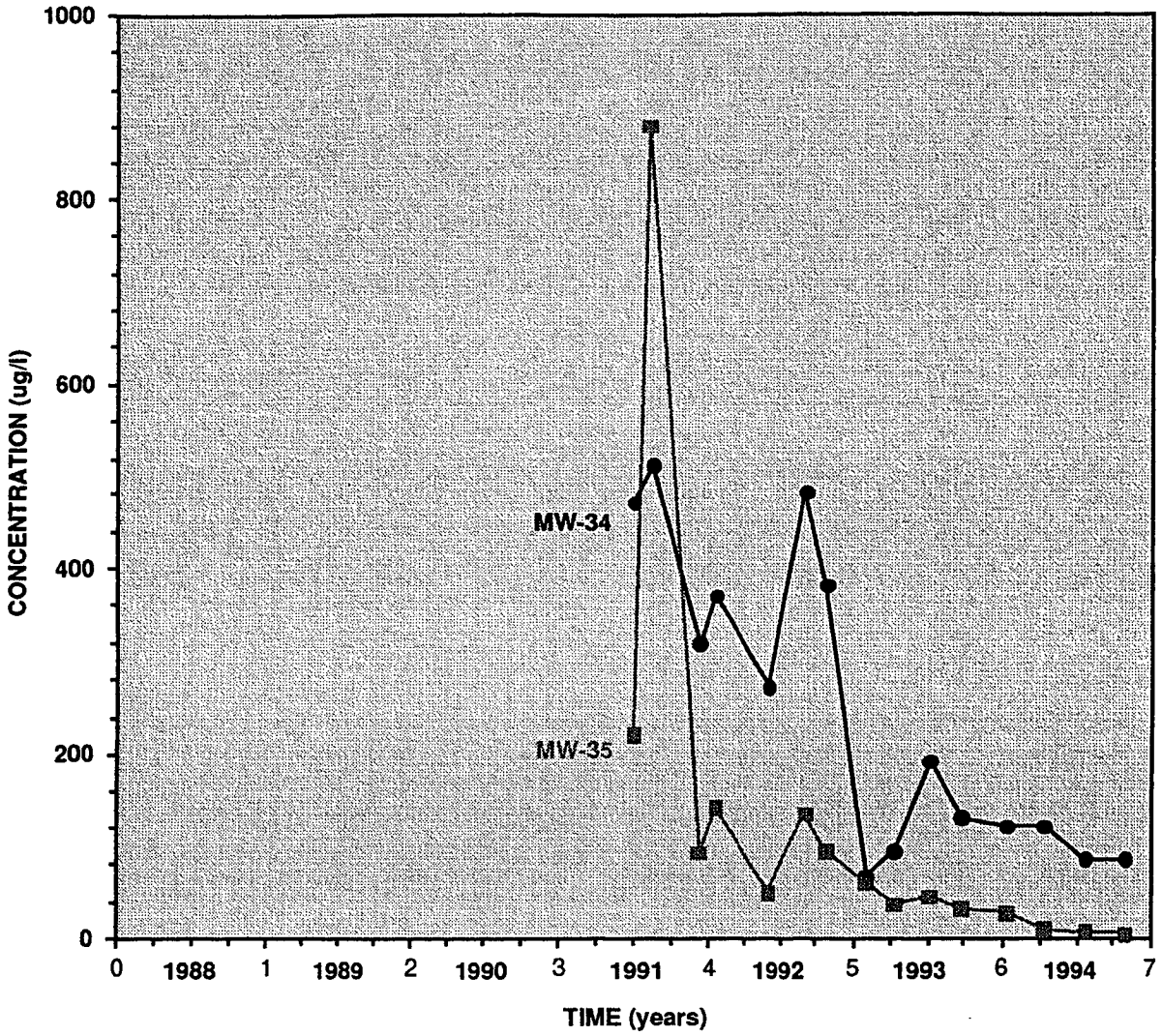
1,1-DCE CONCENTRATION vs. TIME
MW-32 and MW-40

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00173.080.6506.044 6506D caw 1/23/95

FIGURE 18



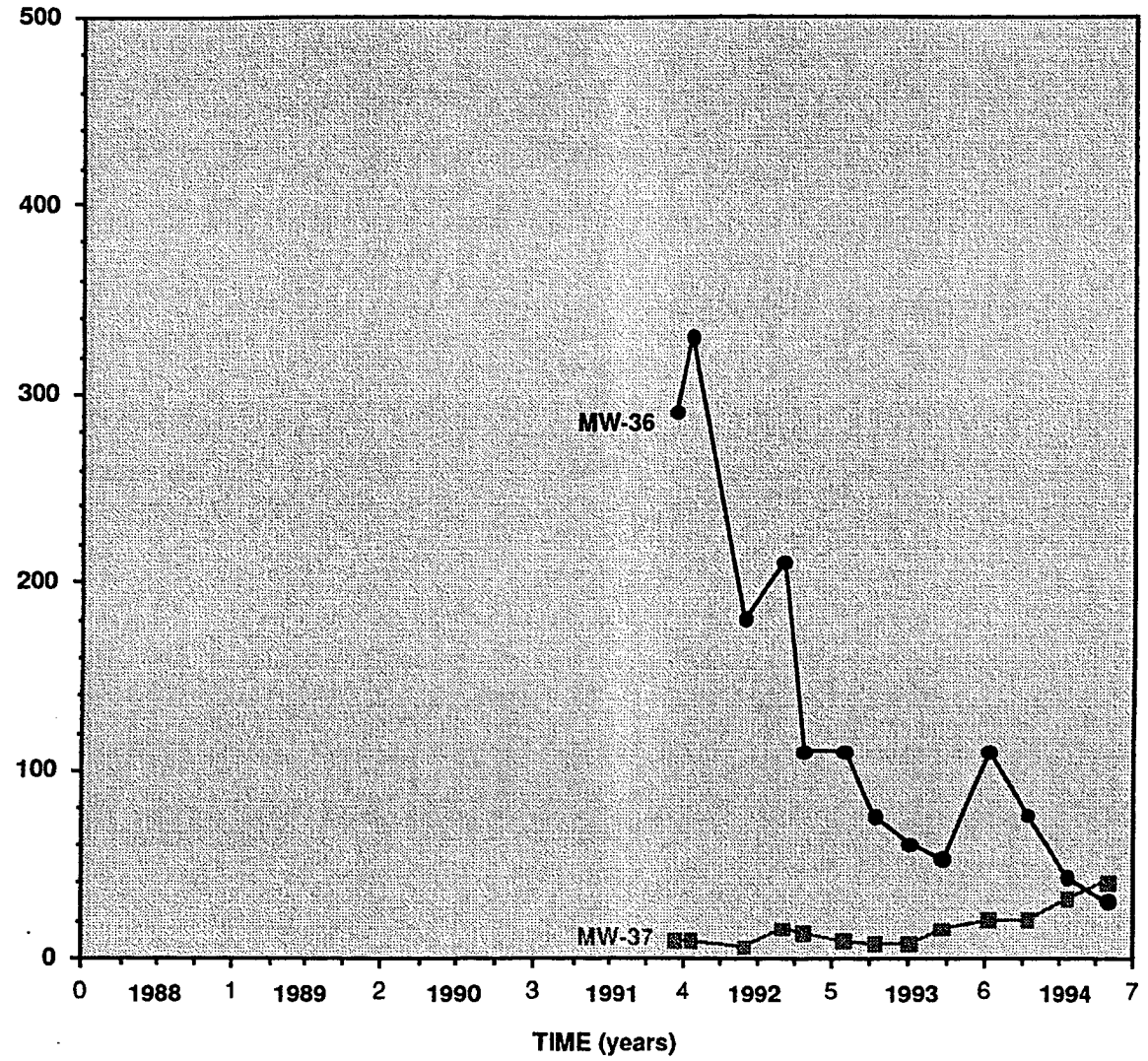
1,1-DCE CONCENTRATION vs. TIME
MW-34 and MW-35

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Union Pacific Railroad Yard
Sacramento, California

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00173.080.6506.044 6506E caw 1/23/95

FIGURE 19



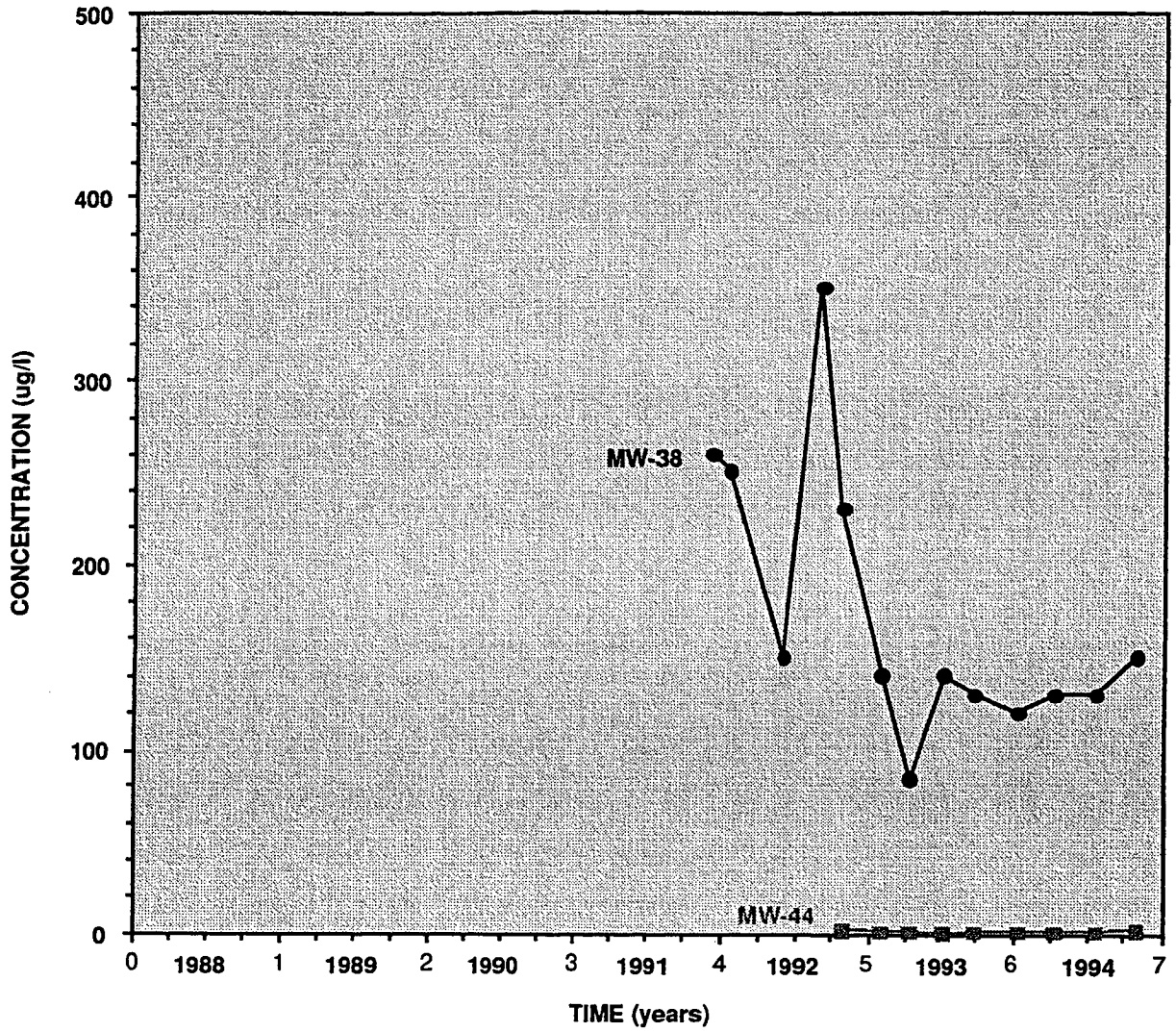
1,1-DCE CONCENTRATION vs. TIME
MW-36 and MW-37

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Union Pacific Railroad Yard
Sacramento, California

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00173.080.6506.044 6506K caw 1/23/95

FIGURE 20



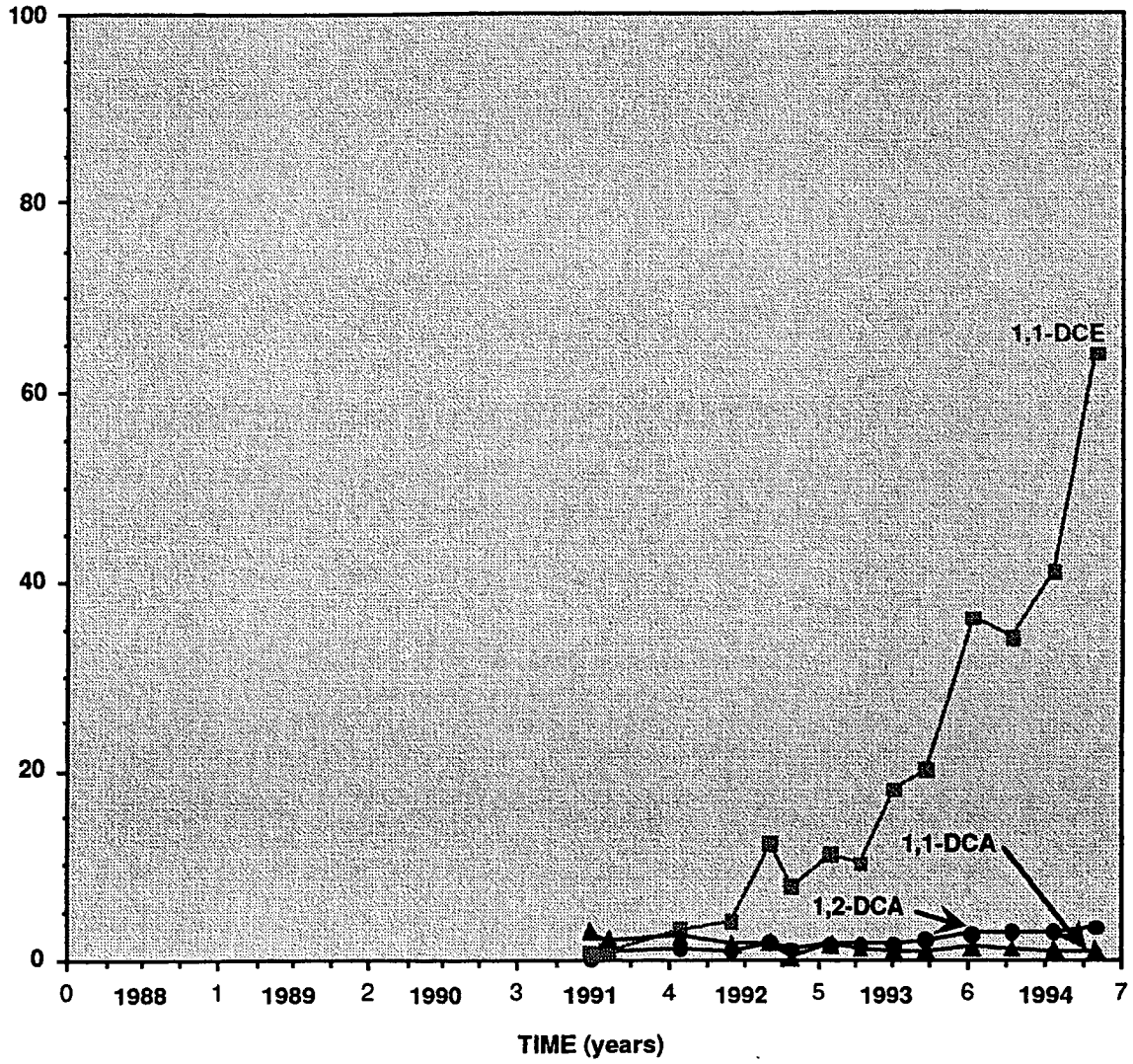
1,1-DCE CONCENTRATION vs. TIME
MW-38 and MW-44

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Union Pacific Railroad Yard
Sacramento, California

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FIGURE 21



1,1-DCA, 1,1-DCE and 1,2-DCA CONCENTRATION vs. TIME MW-39

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Union Pacific Railroad Yard
Sacramento, California

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FIGURE 22

Appendix A

APPENDIX A

GROUNDWATER SAMPLING METHODOLOGY

DRAFT
1994 ANNUAL GROUNDWATER MONITORING REPORT
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

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APPENDIX A

A.1 GROUNDWATER SAMPLING COLLECTION AND HANDLING PROCEDURES

Groundwater sampling was performed by Dames & Moore staff who have been properly trained in groundwater collection, handling, and preservation techniques. Quarterly sampling rounds were initiated by sampling monitoring wells with the lowest contaminant concentration and proceeded to those with the highest. Static water levels were measured prior to purging each well.

A.1.1 MEASUREMENT OF STATIC WATER LEVEL ELEVATION

The depth to static water level was measured in all of the wells on a quarterly basis. Water level measurements were completed in a four-hour period to approximate an instantaneous representation of the piezometric surface. Water level measurements were also made before purging and sampling were conducted. The depth to water was measured from the top of the PVC well casing at the PERMANENTLY marked reference point at which the well casing elevation was surveyed. Measurements were made using an electronic water level indicator instrument. Measurements were repeated until two consecutive depth readings were within 0.01 feet. Before and after each use, the water level indicator was thoroughly rinsed with deionized water.

A.1.2 MONITORING WELL EVACUATION

Subsequent to measurement of depth to water and prior to sampling, each monitoring well was purged to ensure that the sample contained groundwater representative of the formation. Purging was accomplished by evacuating a minimum of three casing volumes of water (EPA, November 1986). A casing volume (in gallons) was calculated in the following manner:

$$Casing\ Volume = \pi r^2 h$$

Where:
- π = 3.14
- r = casing radius in feet
- h = height of water in the well casing calculated as the total depth of the well minus depth to water in feet

For a 4-inch-diameter well casing, this equation becomes:

$$Casing\ Volume = 7.48\ gallons/ft^3 \times 3.14 \times 0.1667\ ft^2 \times h$$

$$= 0.652h$$

A Teflon bailer or Grundfos RediFlo2 submersible pump was used for purging the monitoring wells. Purge water volumes were recorded on field sampling record forms. The purge water was discharged directly into a tank trailer. As necessary, the purge water was transferred from the tank trailer into a 3,000-gallon well purge water holding tank located on-site.

Field parameters were measured and recorded during purging. Field parameters included temperature, pH, and electrical conductivity, which were measured using portable field instruments. These instruments were calibrated with bottled standards daily. To measure these field parameters, each water sample was collected in a clean beaker, and the clean dry probe was inserted into the water. These parameters usually begin to stabilize as fresh formation water enters the well after removal of the first casing volume of borehole water. Once three casing volumes were removed, these parameters were measured approximately once per minute for about four minutes. If significant variation was encountered, purging and measurements continued until the measurements stabilized. Stabilization is considered achieved when pH does not vary more than 0.1 unit, temperature does not vary more than 1°C, and electrical conductivity does not vary by more than 10 percent. The field parameters, together with field observations of color, turbidity, and odor, were recorded on the field sampling record forms.

A.1.3 SAMPLE COLLECTION

Samples were withdrawn using new disposable polyethylene bailers fitted with VOA attachments, or dedicated Grundfos Redo-Flo2 submersible pumps where installed. Samples were collected in the following order:

1) Chlorinated Volatile Organic Compounds (CVOCs)/Aromatic Compounds
2) Metals

While filling VOAs through the discharge line of the dedicated system, the flow rate was reduced to 100 ml/min. Care was taken to minimize turbulence by positioning the bottle so that water flowed smoothly down the inner surface. Except for the 40-milliliter (ml) VOA vials, each sample container was filled to within 0.5 inch of the top, preserved as specified in Table A-1, sealed tightly, and properly labeled. The 40-ml VOA vials were completely filled and capped, leaving no head space. Sample handling and preservation information is summarized in Table A-1.

A.1.4 FIELD FILTRATION

Samples to be analyzed for dissolved metals were filtered in the field through a 0.45-micron in-line disposable filter. Samples for the other chemical constituents were not filtered. Filters were attached to the sampling port for monitoring wells with dedicated submersible pumps and filtered

samples were collected at a rate of 100 ml/min. Samples from monitoring wells collected using disposal bailers were pumped through filters using a peristaltic pump.

A.1.5 DECONTAMINATION OF EQUIPMENT

Field equipment used for measuring pH, temperature, specific conductance, and depth to water were rinsed with de-ionized water at the completion of each sampling event. Teflon bailers and non-dedicated submersible pumps used for purging were decontaminated using a steam cleaner or a nonphosphate detergent, followed by rinses with tap water and de-ionized water. Rinsate samples were collected for laboratory testing.

A.1.6 SAMPLE CONTAINERS

After well evacuation and stabilization of the field parameters, samples were collected in appropriate containers supplied by the analytical laboratory. The specific containers used for each type of test are summarized in Table A-1.

A.1.7 SAMPLE PRESERVATION

Sample preservation procedures followed the guidelines given in Table 3.19 of the California Department of Health Services (May 1986) Decision Tree Manual. Samples were preserved upon collection by cooling them in ice chests maintained at or below 4°C and, where appropriate, by addition of preservatives. Coolant was added as necessary to maintain the temperature during shipment to a DTSC-certified hazardous material laboratory for analysis. Sample handling and preservation methods are summarized in Table A-1.

A.1.8 SAMPLE IDENTIFICATION

Each sample collected (including Quality Assurance samples) were labeled in order to provide unique information by which the sample was to be identified from the time of collection to its final disposition. This information included:

- Site name;
- Field sample ID number;
- Collection date and time;
- Collector's name;
- Sample preservation data; and
- Sample analyses.

The field sample ID number included the designation "MW" (for monitoring well), and a two-digit well number. Blind duplicates (Section 6.1.2) were given a false well number of 51 or higher in sequence, and referenced on the field sample record form. Trip blanks, rinsate blanks, and field blanks were designated TB, RB, or RB together with a two-digit number starting with 01 for each quarterly sampling round. Sample labels were completed using waterproof ink.

A.1.9 CHAIN-OF-CUSTODY PROCEDURES

Chain-of-custody protocol was used to document sample custody transfer from the field to the analytical laboratory. A chain-of-custody form accompanied the samples. This form was signed and dated, noting the time at each transfer of custody by those relinquishing and receiving the samples. Samples were properly packaged and sealed for shipment in a cooled ice chest. A custody record accompanied each shipment, with the method of shipment being noted. The original chain-of-custody form remained with the samples; the originator and other appropriate persons in the chain of custody retained copies.

A.1.10 ANALYTICAL TEST METHODS

Methods selected for chemical analyses are shown in Table A-1, together with the precision, accuracy, and method detection reporting limits for each method specified by the EPA (1983, 1986).

A.1.10.1 Organic Compounds

The following test methods were used for organic compounds:

- EPA 601: CVOCs
- EPA 602: Aromatic compounds

A.1.10.2 Metals (As, Cr, Ni, Pb)

The following test methods were used for metals:

Method Reference	Method	Parameter
7060	Graphite Furnace AA	Arsenic
7191	Graphite furnace AA	Chromium
6010	ICP	Nickel
7421	Graphite Furnace AA	Lead

A.1.11 PURGE WATER HANDLING AND DISPOSAL

Purge water was pumped into a tank mounted on a trailer. When the tank was filled, the purge water was transferred to the on-site 3,000-gallon storage tank. Within 60 days of completion of the quarterly sampling round, a sample was extracted from the storage tank. The sample was analyzed for CVOCs and aromatic compounds. Once the analytical results were received, Sacramento City and County permission to discharge was requested under Sacramento County Special Sewer Use Permit No. 164. Upon receipt of permission, the purge water was discharged to a nearby storm drain through 3/4-inch-diameter hosing under gravity flow.

A.2 GROUNDWATER SAMPLING QUALITY ASSURANCE/QUALITY CONTROL

Quality assurance measures were an integral part of the quarterly sampling program to validate the collected data. Quality control procedures were followed to document the quality assurance measures.

A.2.1 FIELD SAMPLING QUALITY ASSURANCE/QUALITY CONTROL

Field sampling quality assurance was implemented through standard sample collection procedures.

A.2.1.1 Quality Assurance Measures

Field sampling quality assurance measures included standardized procedures for purging, sample withdrawal, containers, sample preservation, labeling, transportation, and chain-of-custody documentation as discussed above in Sections A.1 and A.2.

A.2.1.2 Quality Control Samples

Blind duplicate groundwater samples, rinse blanks, and field blanks were collected at a minimum rate of 10 percent of the samples submitted for analysis. Travel blanks were included with sample shipments. Procedures for identifying and labeling blind duplicates, field blanks, and trip blanks are discussed in Section A.1.8.

Travel Control Blanks

To evaluate the potential for sample contamination during shipment, a travel control blank accompanied each ice chest shipped to the laboratory. Travel control blanks were provided by the laboratory prior to sampling. One travel control blank was placed in each ice chest prior to sample placement. The travel control blanks were labeled TC-1, TC-2, etc. Travel control blanks were analyzed for CVOCs and aromatics by EPA methods 601 and 602, respectively.

Field Blanks

To evaluate the potential for sample contamination caused by ambient field conditions (vapors present in air), field blanks were collected. Field blanks were collected using the de-ionized water source used for decontamination. Field blanks were prepared adjacent to monitoring wells being sampled. Collection of each field blank was noted on the field sampling record form. Field

blanks were analyzed for CVOCs and aromatic compounds by EPA methods 601 and 602, respectively.

To evaluate the potential for sample contamination caused by decontamination procedures, rinse blanks were collected. Rinse blanks were collected by pouring de-ionized water through all the equipment used for purging and sampling, after it had been decontaminated. Collection of each rinse blank was recorded on the field sampling record form.

A.2.1.3 Field Equipment Maintenance and Calibration

All equipment used during the field investigation was checked at least on a daily basis to ensure it was functioning properly. Preventive maintenance was emphasized to reduce the need for corrective action. Manufacturers' manuals were used as guides for maintenance requirements; for equipment without such manuals, generally-accepted procedures were used.

The pH meter, and electrical conductivity (EC) meter were calibrated at the beginning of each sampling day and at any other time out-of-calibration operation was suspected.

Commercial standards in a three-point range were utilized for pH probe calibration, and the probes of the meters exposed to them sequentially. The standards ranged from 4 to 10 units (pH meter) and from 0 to 10,000 μmhos/cm (EC meter). Maintenance and calibration records were kept with each instrument.

A.2.2 ANALYTICAL LABORATORY QA/QC

All laboratory analysis was performed by D&M Laboratories. D&M Laboratories is certified by the DTSC as a Hazardous Materials Laboratory. D&M Laboratories provided summary QA/QC tables for each sample batch.

A.2.2.1 Laboratory Analyses

Analytical activities used by the laboratory as QC checks included:

- Method blank;
- Standards;
- Calibration check samples;
- Replicate analyses; and
- Matrix spike samples

The laboratory performed analyses in accordance with their QA Plan with regard to check sample frequency, handling, preparation, and analytical procedures.

A.2.2.2 Data Validation

Data validation was performed by Dames & Moore on analytical results received from the laboratory. The purpose of data validation is to ensure data meet the quality required for the investigation and to identify data that does not meet data quality objectives or quality assurance criteria set forth in the Draft Quality Assurance Project Plan for Union Pacific Railroad Yard, Sacramento, California (Dames & Moore, May 1994).

Dames & Moore performed a detailed validation on 10 percent of the analytical data, based on the U.S.E.P.A. National Functional Guidelines for Laboratory Data Review, 1989. This level of validation consists of a detailed review of sample data, including verification of data calculations for calibration and quality control samples to assess that data are consistent with method requirements. The remaining 90 percent of the data was reviewed using Dames & Moore standard operating procedures for data validation. This review includes an assessment of holding times, method blank performance, instrument calibration, precision of duplicate measurements, and matrix-specific biases.

A.3 REFERENCES

California Department of Health Services, Toxic Substances Control Division, May 1986, the California Site Mitigation Decision Tree Manual.

U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Waste, EPA-600/4-79/020.

U.S. Environmental Protection Agency, November 1986. Test Methods for Evaluating Solid Waste: Physical and Chemical Test Methods: U.S. EPA SW-846, 3rd Edition.

TABLE A-1
DATA QUALITY OBJECTIVES, SAMPLE HANDLING, AND PRESERVATION METHODS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

PARAMETER	METHOD	CONTAINER	VOLUME	PRESERVATIVE	HOLDING TIME	DETECTION LIMIT[1]	ACCURACY[1]	PRECISION (RPD)[1]
Specific Cond.	SOP	Field	N/A	N/A	N/A	10 μmhos/cm	N/A	N/A
pH	SOP	Field	N/A	N/A	N/A	0.05 units	N/A	N/A
Temperature	SOP	Field	N/A	N/A	N/A	N/A	N/A	N/A
Arsenic	7060	P,G	1 L	HNO_3 pH<2	6 months	5 μg/L	80-120%	0-25%
Chromium	7191					5 μg/L	80-120%	0-25%
Nickel	7521					5 μg/L	80-120%	0-25%
Lead	7421					3 μg/L	80-120%	0-25%
Volatile Organics	8010A	Glass vial with Teflon-lined cap	40 ml	Cool, 4°C	14 days	0.5-1.0 μg/L	60-140%	<25%
Aromatic Hydrocarbons	8020A		40 ml	Cool, 4°C HC1 pH<2	14 days	0.5 μg/L	70-130%	<20%

(1) Source: U.S. EPA 1983, 1986a

P Plastic

G Glass

RPD Relative Percent Difference

TABLE A-2
SUMMARY OF WELL CONSTRUCTION DETAILS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Completed	Ground Elev. (feet MSLD)	Top of Casing Elev.[A] (feet MSLD)	Completed Depth (feet)	Boring Diam. (inches)	Well Casing Diam. (inches)	Screened Interval (feet bgs)	Filter Pack Interval (feet bgs)	Dedicated Pump Intake (feet bgs)
AS-1	07/05/94	—	23.39	46.25	8	2	39.5-44.5	38-46.25	—
EW-1**	06/03/94	23.90	24.44	51.0	12	4	25-50	23-51	44
MP-1A	07/08/94	—	24.04	45.0	12	1	19-27	17-27	—
MP-1B	07/08/94	—	24.04	45.0	12	1	31.36	29-36	—
MP-1C	07/08/94	—	24.04	45.0	12	1	40-45	38-45	—
MP-2A	07/12/94	—	22.88	46.5	12	1	19-27	17-27	—
MP-2B	07/12/94	—	22.88	46.5	12	1	31-36	29-36	—
MP-2C	07/12/94	—	22.88	46.5	12	1	40-45	38-45	—
MW-1	01/20/88	17.15	18.67	46.0	12	4	15-35	12-46	—
MW-2	01/25/88	21.93	23.62	66.0	12	4	37-57	34-66	46.7
MW-3	01/23/88	15.22	16.76	31.0	12	4	15-25	13-31	—
MW-4*	02/03/88	24.68	26.17	60.0	12	4	34-54	30.5-57	—
MW-5	02/09/88	24.60	28.00	51.0	12	4	37-47	31.5-51	—
MW-6	02/15/88	24.63	26.50	54.0	12	4	30-50	26.5-54	—
MW-7	01/29/88	24.78	26.29	46.0	12	4	33-43	29-46	38.6
MW-8	02/06/88	24.85	26.66	59.5	12	4	37.5-52.5	28-59	—
MW-11	08/09/89	23.9	26.29	56.0	12	4	50-55	48-56	52.26
MW-12	08/30/89	25.5	28.37	82.0	10.5[B]	4	69-79	67-82	74.0
MW-13	08/16/89	25.8	27.88	45.0	12	4	26-41	24-43	38.5
MW-14	08/17/89	26.8	29.21	58.0	12	4	52.5-57.5	49.5-58	54.9
MW-15	08/21/89	25.1	27.32	44.0	12	4	26-41	24-41	—
MW-16	08/23/89	25.1	27.37	57.5	12	4	51.8-56.8	49.8-57.5	54.4
MW-17	09/12/89	25.2	27.55	45.0	12	4	26.5-41.5	24-43	—

TABLE A-2 (continued)
SUMMARY OF WELL CONSTRUCTION DETAILS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Completed	Ground Elev. (feet MSLD)	Top of Casing Elev.[A] (feet MSLD)	Completed Depth (feet)	Boring Diam. (inches)	Well Casing Diam. (inches)	Screened Interval (feet bgs)	Filter Pack Interval (feet bgs)	Dedicated Pump Intake (feet bgs)
MW-18	09/13/89	25.1	27.64	57.5	12	4	52-57	50-57.5	54.7
MW-19	09/08/89	24.5	27.05	42.0	12	4	26-41	24-42	—
MW-20	09/11/89	24.7	27.15	59.0	12	4	52-57	50-59	54.6
MW-21	08/31/89	24.3	26.46	40.0	12	4	24-39	22-40	—
MW-22	09/06/89	24.8	27.35	52.5	12	4	45.5-50.5	43.5-52.5	—
MW-23	08/28/89	24.5	26.68	42.0	12	4	25.5-40.5	23.5-42	—
MW-24	08/30/89	24.9	27.13	45.0	12	4	34-39	32-45	—
MW-25	08/03/89	23.7	26.13	41.5	12	4	26-41	24-41.5	—
MW-26	08/04/89	23.7	26.04	50.0	12	4	38-43	35-44	40.6
MW-27	09/07/89	23.8	26.53	73.0	10.5[B]	4	56.5-66.5	54.5-70	61.5
MW-28	02/07/90	25.15	25.14	85.0	12[B]	4	69.0-79.0	65.6-80.5	74.7
MW-29	01/22/90	25.24	25.22	42.0	12	4	26.0-41.0	24.0-42.0	39.1
MW-30	01/24/90	26.19	25.16	57.0	12	4	51.0-56.0	49.0-57.0	53.9
MW-31	04/26/90	25.34	25.28	54.5	12	4	49.0-54.0	47.0-54.5	51.7
MW-32[C]	04/24/90	25.02	24.96	57.0	12	4	51.5-56.5	49.5-57.0	—
MW-33	04/27/90	23.8	25.46	39.0	12	4	23.5-38.5	21.5-39.0	35.7
MW-34	5/22/91	24.5	24.45	62.0	10	4	56-61	55-62	59.0
MW-35	5/22/91	24.5	24.51	44.0	10	4	27-42	25-44	39.5
MW-36	11/15/91	25.4	25.36	49.0	10	4	33.5-48.5	31-49	42.6
MW-37	11/21/91	25.4	25.43	86.0	10[B]	4	75-85	73-86	79.9
MW-38	11/15/91	26.2	26.27	49.0	10	4	36-48.5	34-49	45.0
MW-39	5/21/91	24.4	24.41	49.0	10	4	33-48	31-49.5	44.5
MW-40	5/20/91	25.0	25.06	83.0	10[B]	4	72.5-82.5	71.5-83	77.5

TABLE A-2 (continued)
SUMMARY OF WELL CONSTRUCTION DETAILS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Completed	Ground Elev. (feet MSLD)	Top of Casing Elev.[A] (feet MSLD)	Completed Depth (feet)	Boring Diam. (inches)	Well Casing Diam. (inches)	Screened Interval (feet bgs)	Filter Pack Interval (feet bgs)	Dedicated Pump Intake (feet bgs)
MW-41	5/15/91	25.2	27.48	115.5	10[B]	4	104.5-114.5	103.5-115.5	109.6
MW-42	5/23/91	21.7	23.62	37.0	10	4	20.5-35.5	18.5-37	33.0
MW-43	5/23/91	21.2	22.82	37.0	10	4	20-35	18-37	31.3
MW-44	10/14/92	26.1	26.25	81.0	10[B]	4	73.5-78.5	72.5-81	76.0
MW-45	06/07/94	23.01	23.01	48.0	12	4	31.5-46.5	29-48	40.2
MW-46	06/09/94	24.25	24.25	82.0	8.75	4	69-79	67.5-82	72.8
MW-47	06/25/94	25.69	25.69	126.0	8.75	4	114-124	111-126	118.2
MW-48	05/31/94	—	24.21	36.5	12	4	19.5-34.5	18-36.5	—
P-1	06/10/94	—	28.64	65.7	12	1	27.5-52.5	25-53.5	—
P-2A	06/10/94	—	28.64	65.7	12	1	56.25-57.25	55.4-58.1	—
P-2B	06/10/94	—	28.64	65.7	12	1	64.7-65.7	63.5-65.7	—
P-3	06/21/94	25.36	25.36	85.9	9.5	2	73.5-83.5	69-84.9	—
P-4	06/22/94	—	26.83	86.0	9.5	2	74-84	70-86	—
P-5	06/13/94	26.05	26.05	50.0	8	2	34-49	32-50	—
P-6	06/20/94	26.08	26.08	82.0	9.5	2	71-79	69.2-82	—
P-7	10/06/94	25.5	25.5	49.5	8	2	32.5-49.5	30-49.5	—
P-8	10/05/94	25.88	25.88	80.0	8	2	71.5-78.5	67.7-80	—
P-9	10/06/94	27.24	27.24	49.0	8	2	34-49	30.5-49	—
P-10	06/01/94	—	26.09	36.5	12	4	20.5-35.5	18.5-36.5	—
P-11	06/02/94	—	23.93	34.0	12	4	18-33	16-34	—

TABLE A-2 (continued)
SUMMARY OF WELL CONSTRUCTION DETAILS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Completed	Ground Elev. (feet MSLD)	Top of Casing Elev.[A] (feet MSLD)	Completed Depth (feet)	Boring Diam. (inches)	Well Casing Diam. (inches)	Screened Interval (feet bgs)	Filter Pack Interval (feet bgs)	Dedicated Pump Intake (feet bgs)
SVE-1	07/06/94	—	22.66	31.5	8	2	14.5-29.5	13-31.5	—
SVE-2	07/07/94	—	22.36	30.0	8	2	14.5-29.5	13-30	—
SVE-3	07/06/94	—	23.13	31.5	8	2	14.5-29.5	13-31.5	—
SVE-4	07/08/94	—	23.83	30.0	8	2	14.5-29.5	13-30	—
SVE-5	07/11/94	—	25.87	34.0	8	2	17.5-32.5	16-34	—

[A] Measured from stand pipe rim or surface vault rim.
[B] Direct mud rotary drilled.
— Indicates dedicated pump not installed in well.
* Began operation as groundwater IRM extraction well in April 1993.
* Began operation as groundwater IRM extraction well in October 1994.
MSLD Mean Sea Level Datum.

Appendix B

APPENDIX B

1993 GROUNDWATER ANALYTICAL RESULTS - TABLES

HOW TO READ APPENDIX B DATA QUALIFIERS

KEY →	A	B	C ¦ D
Example Data →	<	5.200	JB ¦ Uz

KEY

A < Signifies that analyte level is less than indicated value.
B Indicated value in units as noted in table footnote.
C Data qualifier(s) assigned by reporting laboratory.
D Data qualifier(s) assigned by Consultant's data review team.

DATA VALIDATION QUALIFIERS

The following definitions provide brief explanations of the qualifiers assigned in the data review process. Validation reason codes for GC/MS Organics, GC Organics, and Metals are recorded by the data reviewers and retained in review support documentation for the data review process.

FLAG DATA QUALIFIER DEFINITION

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

c Calibration failure; poor or unstable response.
f Field duplicate imprecision.
h Holding time violation.
l Laboratory control sample recovery failure.
m Matrix spike/matrix spike duplicate recovery failure.
s Surrogate spike recovery failure (GC organics and GC/MS organics only).
z Method blank contamination.

TABLE B-1 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS

METALS

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

	SAMPLE		MW-01	MW-02	MW-03		MW-04	MW-04	MW-04
	DATE		01/17/94	01/05/94	01/17/94		01/14/94	02/11/94	03/02/94
	QA	MCL							
ANALYTE		ug/L							
ARSENIC		50	-	-	-		-	-	-
CHROMIUM		50	-	-	-		-	-	-
COPPER		1300	-	-	-		-	-	-
LEAD		50	< 3.0	-	-		-	-	-
NICKEL		100	-	< 5.0	< 5.0	UJc	7.8	13.0	24.0

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
- = Parameter not analyzed.

TABLE B-1 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS

METALS

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

SAMPLE		MW-04	MW-04	MW-04	MW-04	MW-04	MW-04
DATE		04/07/94	05/05/94	06/08/94	07/08/94	09/14/94	10/10/94
QA							
ANALYTE	MCL ug/L						
ARSENIC	50	-	-	-	-	-	-
CHROMIUM	50	-	-	-	-	-	-
COPPER	1300	-	-	-	-	-	-
LEAD	50	-	-	-	-	-	-
NICKEL	100	9.6	6.0	< 5.0	8.0	17.0	25.0

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. DATE refers to date sampled.

< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.

MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

- = Parameter not analyzed.

TABLE B-1 (cont.) 01/31/95
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	SAMPLE DATE / QA	MCL ug/L	MW-04 11/08/94	MW-04 12/07/94	MW-05 01/17/94	MW-06 01/17/94	MW-07 01/10/94	MW-07 07/21/94
ARSENIC		50	-	-	-	-	-	-
CHROMIUM		50	-	-	< 5.0	< 5.0	12.0	-
COPPER		1300	-	-	-	-	-	-
LEAD		50	-	-	-	-	< 3.0	-
NICKEL		100	22.0	30.0	47.0 |Jc	36.0 |Jc	71.0 |Jl	39.0 |Jl

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. DATE refers to date sampled.
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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
- = Parameter not analyzed.

TABLE B-1 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS

METALS

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

SAMPLE		MW-07		MW-08		MW-11		MW-11		MW-12		MW-12
DATE		07/21/94		01/17/94		01/05/94		07/05/94		01/07/94		07/05/94
QA	MCL	DUPLICATE										
	ug/L	SAMPLE										
ANALYTE												
ARSENIC	50	-		-		-		-		< 5.0	UJc	-
CHROMIUM	50	-		-		46.0		41.0		26.0		-
COPPER	1300	-		-		-		-		-		-
LEAD	50	-		< 3.0		< 3.0	Jl	-		< 3.0	UJc	-
NICKEL	100	46.0	Jl	21.0	Jc	8.7	Jl	-		94.0	Jl	88.0

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. DATE refers to date sampled.

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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

- = Parameter not analyzed.

TABLE B-1 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS

METALS

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

SAMPLE		MW-13	MW-13	MW-13	MW-15	MW-16	MW-17
DATE		01/07/94	01/07/94	07/05/94	01/17/94	01/06/94	01/17/94
QA			DUPLICATE				
ANALYTE	MCL ug/L		SAMPLE				
ARSENIC	50	21.0 |Jc	21.0 |Jc	28.0	-	-	-
CHROMIUM	50	-	-	-	5.2	5.2	-
COPPER	1300	-	-	-	-	-	-
LEAD	50	-	-	-	< 3.0	< 3.0	< 3.0
NICKEL	100	< 5.0	8.4 |Jc	-	55.0 |Jc	< 5.0	79.0 |Jc

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. DATE refers to date sampled.

< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.

MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

- = Parameter not analyzed.

TABLE B-1 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS

METALS

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

SAMPLE		MW-17	MW-18	MW-19	MW-19	MW-20	MW-21
DATE		06/30/94	01/06/94	01/16/94	06/30/94	01/06/94	01/16/94
QA	MCL						
ANALYTE	ug/L						
ARSENIC	50	-	-	< 5.0	-	-	-
CHROMIUM	50	-	-	< 5.0	-	5.4	< 5.0
COPPER	1300	-	-	-	-	-	< 5.0
LEAD	50	-	< 3.0	< 3.0	-	< 3.0	< 3.0
NICKEL	100	190.0	< 5.0	100.0 |Jc	590.0	-	400.0 |Jc

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. DATE refers to date sampled.

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- = Parameter not analyzed.

TABLE B-1 (cont.) 01/31/95
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-21	MW-22	MW-23	MW-23	MW-24	MW-24
DATE		07/07/94	01/16/94	01/16/94	07/13/94	01/16/94	07/13/94
QA							
ANALYTE	MCL ug/L						
ARSENIC	50	-	5.9	-	-	< 5.0	-
CHROMIUM	50	-	-	-	-	-	-
COPPER	1300	-	-	-	-	-	-
LEAD	50	-	12.0	< 3.0	-	< 3.0	-
NICKEL	100	140.0	-	170.0 |Jc	160.0	140.0 |Jc	78.0

All units reported as ug/L (ppb)

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- = Parameter not analyzed.

TABLE B-1 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS

METALS

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

ANALYTE	SAMPLE DATE / QA	MCL ug/L	MW-25 01/16/94		MW-25 07/07/94		MW-26 01/10/94		MW-26 07/07/94		MW-27 01/16/94		MW-27 07/07/94	
ARSENIC		50	< 5.0		-		< 5.0		-		-		-	
CHROMIUM		50	< 5.0		-		20.0		-		< 5.0		-	
COPPER		1300	-		-		-		-		-		-	
LEAD		50	-		-		-		-		< 3.0		-	
NICKEL		100	220.0	Jc	250.0		100.0	Jl	95.0		68.0	Jc	52.0	

All units reported as ug/L (ppb)

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- = Parameter not analyzed.

TABLE B-1 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS

METALS

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

ANALYTE	SAMPLE DATE / QA	MCL ug/L	MW-28 01/11/94		MW-29 01/11/94		MW-30 01/10/94		MW-30 07/01/94		MW-31 01/11/94		MW-31 07/01/94	
ARSENIC		50	-		-		-		-		-		-	
CHROMIUM		50	9.1		-		-		-		6.0		-	
COPPER		1300	-		-		-		-		-		-	
LEAD		50	< 3.0		10.0		< 3.0		-		< 3.0		-	
NICKEL		100	83.0	J1	18.0	J1	17.0	J1	12.0		8.5	J1	7.0	

All units reported as ug/L (ppb)

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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

- = Parameter not analyzed.

TABLE B-1 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS

METALS

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

SAMPLE DATE / QA / ANALYTE	MCL ug/L	MW-32 01/14/94	MW-32 02/11/94	MW-32 03/02/94	MW-32 04/07/94	MW-32 05/05/94	MW-32 06/08/94
ARSENIC	50	-	-	-	-	-	-
CHROMIUM	50	-	-	-	-	-	-
COPPER	1300	-	-	-	-	-	-
LEAD	50	-	-	-	-	-	-
NICKEL	100	18.0	20.0	21.0	18.0	18.0	15.0

All units reported as ug/L (ppb)

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- = Parameter not analyzed.

TABLE B-1 (cont.) 01/31/95
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-32	MW-32	MW-32	MW-32	MW-32	MW-33
DATE		07/08/94	09/14/94	10/10/94	11/08/94	12/07/94	01/06/94
QA							
ANALYTE	MCL ug/L						
ARSENIC	50	-	-	-	-	-	-
CHROMIUM	50	-	-	-	-	-	< 5.0
COPPER	1300	-	-	-	-	-	-
LEAD	50	-	-	-	-	-	-
NICKEL	100	17.0	16.0	18.0	14.0	22.0	< 5.0

All units reported as ug/L (ppb)

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- = Parameter not analyzed.

TABLE B-1 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS

METALS

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

ANALYTE	SAMPLE DATE / QA	MCL ug/L	MW-34 01/12/94	MW-34 01/12/94 DUPLICATE SAMPLE	MW-34 07/20/94	MW-36 01/12/94	MW-36 07/20/94	MW-36 07/21/94 DUPLICATE SAMPLE
ARSENIC		50	-	-	-	< 5.0	-	-
CHROMIUM		50	-	-	-	< 5.0	-	-
COPPER		1300	-	-	-	-	-	-
LEAD		50	< 3.0	< 3.0	-	< 3.0	-	-
NICKEL		100	63.0 |Jl	57.0 |Jl	51.0 |Jl	-	50.0 |Jl	49.0 |Jl

All units reported as ug/L (ppb)

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- = Parameter not analyzed.

TABLE B-1 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS

METALS

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

ANALYTE	SAMPLE DATE / QA	MCL ug/L	MW-37 01/12/94	MW-37 07/20/94	MW-38 01/10/94	MW-38 01/10/94 DUPLICATE SAMPLE	MW-38 07/14/94	MW-39 01/12/94
ARSENIC		50	< 5.0	-	< 5.0	< 5.0	-	-
CHROMIUM		50	< 5.0	-	6.7	8.6	-	< 5.0
COPPER		1300	-	-	-	-	-	-
LEAD		50	< 3.0	-	11.0	< 3.0 |UJf	-	-
NICKEL		100	-	< 5.0	87.0 |Jl	93.0 |Jl	75.0	380.0 |Jl

All units reported as ug/L (ppb)

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- = Parameter not analyzed.

TABLE B-1 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS

METALS

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

SAMPLE		MW-45		MW-45		MW-46		MW-46		MW-47		MW-47
DATE		07/20/94		11/02/94		07/20/94		11/02/94		07/21/94		08/21/94
QA												
ANALYTE	MCL ug/L											
ARSENIC	50	< 5.0		< 5.0		< 5.0		< 5.0		< 5.0		< 5.0
CHROMIUM	50	6.0		12.0		6.0		6.5		12.0		10.0
COPPER	1300	-		-		-		-		-		-
LEAD	50	4.5		< 3.0		< 3.0		< 3.0		< 3.0		7.6
NICKEL	100	57.0	Jl	480.0		9.1	Jl	74.0		< 5.0		< 5.0

All units reported as ug/L (ppb)

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- = Parameter not analyzed.

TABLE B-1 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS

METALS

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

ANALYTE	SAMPLE DATE / QA	MCL ug/L	MW-47 11/04/94	MW-47 11/04/94 DUPLICATE SAMPLE	RB-01 01/06/94 RINSATE BLANK	RB-01 07/01/94 RINSATE BLANK	RB-02 01/10/94 RINSATE BLANK	RB-03 01/12/94 RINSATE BLANK
ARSENIC		50	< 5.0	< 5.0	< 5.0	-	< 5.0	-
CHROMIUM		50	9.4	9.5	< 5.0	-	< 5.0	-
COPPER		1300	-	-	-	-	-	-
LEAD		50	5.6	5.4	< 3.0	-	10.0	-
NICKEL		100	15.0	9.7	< 5.0	9.0	< 5.0	< 5.0

All units reported as ug/L (ppb)

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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

- = Parameter not analyzed.

TABLE B-1 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS

METALS

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

	SAMPLE		RB-05	RB-07	TRIP BLANK
	DATE		01/17/94	07/21/94	09/14/94
	QA	MCL	RINSATE	RINSATE	TRIP
		ug/L	BLANK	BLANK	BLANK
ANALYTE					
ARSENIC		50	-	-	-
CHROMIUM		50	-	-	-
COPPER		1300	-	-	-
LEAD		50	-	-	-
NICKEL		100	< 5.0	< 5.0	17.0

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. DATE refers to date sampled.

< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.

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- = Parameter not analyzed.

TABLE B-2 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		FB-01	FB-01	FB-01	FB-02	FB-02	FB-02
DATE		04/13/94	07/01/94	10/29/94	04/25/94	07/13/94	11/02/94
QA	MCL	FIELD	FIELD	FIELD	FIELD	FIELD	FIELD
	ug/L	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
ANALYTE							
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

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< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	MCL ug/L	FB-01 04/13/94 FIELD BLANK	FB-01 07/01/94 FIELD BLANK	FB-01 10/29/94 FIELD BLANK	FB-02 04/25/94 FIELD BLANK	FB-02 07/13/94 FIELD BLANK	FB-02 11/02/94 FIELD BLANK
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		FB-03	FB-03	FB-04	FB-04	MW-01	MW-02
DATE		04/26/94	07/14/94	07/21/94	11/04/94	01/17/94	01/05/94
QA	MCL	FIELD	FIELD	FIELD	FIELD		
	ug/L	BLANK	BLANK	BLANK	BLANK		
ANALYTE							
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 1.00	< 0.50	< 1.00	< 1.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		FB-03	FB-03	FB-04	FB-04	MW-01	MW-02
DATE		04/26/94	07/14/94	07/21/94	11/04/94	01/17/94	01/05/94
QA	MCL	FIELD	FIELD	FIELD	FIELD		
	ug/L	BLANK	BLANK	BLANK	BLANK		
ANALYTE							
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-02	MW-02	MW-02	MW-03	MW-04	MW-04
DATE		04/12/94	07/05/94	10/26/94	01/17/94	01/14/94	02/11/94
QA	MCL ug/L						
ANALYTE							
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	UJh < 0.50	< 0.50	1.30	1.80
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	UJh < 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	UJh < 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	UJh < 0.50	< 0.50	4.60	4.60
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	UJh < 0.50	< 0.50	52.00	64.00
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	UJh < 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	UJh < 0.50	< 0.50	3.40	4.60
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	UJh < 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	UJh < 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	UJh < 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	UJh < 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	UJh < 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	UJh < 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 0.50	UJh < 0.50	< 1.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	UJh < 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	UJh < 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	UJh < 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	UJh < 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-02	MW-02	MW-02	MW-03	MW-04	MW-04
DATE		04/12/94	07/05/94	10/26/94	01/17/94	01/14/94	02/11/94
QA	MCL						
ANALYTE	ug/L						
CHLOROMETHANE	-	< 1.00	< 1.00	UJh < 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	UJh < 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	UJh < 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	UJh < 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	UJh < 0.50	< 0.50	1.10	1.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	UJh < 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	UJh < 0.50	< 0.50	2.90	3.00
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	UJh < 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	UJh < 1.00	< 1.00	< 1.00	< 1.00

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-04	MW-04	MW-04	MW-04	MW-04	MW-04
DATE		03/02/94	04/07/94	05/05/94	06/08/94	07/08/94	09/14/94
QA	MCL						
ANALYTE	ug/L						
1,1,1-TRICHLOROETHANE	200.0	1.20	1.50	0.66	< 0.50	1.10	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	3.90	3.60	3.30	2.90	3.20	2.40
1,1-DICHLOROETHENE	6.0	41.00	53.00	37.00	37.00	39.00	38.00
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	3.30	2.70	2.90	1.80	< 0.50	2.10
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 1.00	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-04	MW-04	MW-04	MW-04	MW-04	MW-04
DATE		03/02/94	04/07/94	05/05/94	06/08/94	07/08/94	09/14/94
QA							
ANALYTE	MCL ug/L						
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	1.40	1.30	1.00	0.88	1.00	0.70
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	2.60	2.70	2.40	2.10	< 0.50	1.60
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-04	MW-04	MW-04	MW-05	MW-06	MW-07
DATE		10/10/94	11/08/94	12/07/94	01/17/94	01/17/94	01/10/94
QA	MCL ug/L						
ANALYTE							
1,1,1-TRICHLOROETHANE	200.0	1.30	0.62	1.00	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	2.40	3.80	3.40	< 0.50	< 0.50	1.30
1,1-DICHLOROETHENE	6.0	39.00	33.00	33.00	< 0.50	< 0.50	6.20
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	2.50	3.30	2.90	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 1.00	< 0.50	< 1.00	< 1.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	2.10	1.80	2.20

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-04	MW-04	MW-04	MW-05	MW-06	MW-07
DATE		10/10/94	11/08/94	12/07/94	01/17/94	01/17/94	01/10/94
QA	MCL ug/L						
ANALYTE							
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	1.20	1.10	1.40	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	2.80	2.60	2.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	MCL ug/L	MW-07 04/14/94	MW-07 07/21/94	MW-07 07/21/94 DUPLICATE SAMPLE	MW-07 11/02/94	MW-07 11/02/94 DUPLICATE SAMPLE	MW-08 01/17/94
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	0.59	0.71	0.74	0.62	0.70	< 0.50
1,1-DICHLOROETHENE	6.0	3.70	< 0.50	< 0.50	5.40	6.00	< 0.50
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	2.40	2.10	2.20	2.00	2.00	0.60

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	MCL ug/L	MW-07 04/14/94	MW-07 07/21/94	MW-07 07/21/94 DUPLICATE SAMPLE	MW-07 11/02/94	MW-07 11/02/94 DUPLICATE SAMPLE	MW-08 01/17/94
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.80
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-08	MW-11	MW-11	MW-11	MW-11	MW-12
DATE		07/05/94	01/05/94	04/13/94	07/05/94	10/26/94	01/07/94
QA	MCL ug/L						
ANALYTE							
1,1,1-TRICHLOROETHANE	200.0	< 0.50 |UJh	< 0.50	< 0.50	< 0.50 |UJh	< 0.50	< 5.00
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50 |UJh	< 0.50	< 0.50	< 0.50 |UJh	< 0.50	< 5.00
1,1,2-TRICHLOROETHANE	32.0	< 0.50 |UJh	< 0.50	< 0.50	< 0.50 |UJh	< 0.50	< 5.00
1,1-DICHLOROETHANE	5.0	< 0.50 |UJh	1.70	2.40	1.90 |Jh	0.72	12.00
1,1-DICHLOROETHENE	6.0	< 0.50 |UJh	15.00	18.00	14.00 |Jh	8.60	45.00
1,2-DICHLOROBENZENE	600.0	< 0.50 |UJh	< 0.50	< 0.50	< 0.50 |UJh	< 0.50	< 5.00
1,2-DICHLOROETHANE	0.5	< 0.50 |UJh	< 0.50	< 0.50	< 0.50 |UJh	< 0.50	< 5.00
1,2-DICHLOROETHENE	-	< 0.50 |UJh	0.79	0.56	< 0.50 |UJh	< 0.50	< 5.00
1,2-DICHLOROPROPANE	5.0	< 0.50 |UJh	< 0.50	< 0.50	< 0.50 |UJh	< 0.50	< 5.00
1,3-DICHLOROBENZENE	-	< 0.50 |UJh	< 0.50	< 0.50	< 0.50 |UJh	< 0.50	< 5.00
1,4-DICHLOROBENZENE	5.0	< 0.50 |UJh	< 0.50	< 0.50	< 0.50 |UJh	< 0.50	< 5.00
BROMODICHLOROMETHANE	100.0	< 0.50 |UJh	< 0.50	< 0.50	< 0.50 |UJh	< 0.50	< 5.00
BROMOFORM	100.0	< 0.50 |UJh	< 0.50	< 0.50	< 0.50 |UJh	< 0.50	< 5.00
BROMOMETHANE	-	< 0.50 |UJh	< 1.00	< 0.50	< 0.50 |UJh	< 0.50	< 10.00
CARBON TETRACHLORIDE	0.5	< 0.50 |UJh	< 0.50	< 0.50	< 0.50 |UJh	< 0.50	< 5.00
CHLOROBENZENE	30.0	< 0.50 |UJh	< 0.50	< 0.50	< 0.50 |UJh	< 0.50	< 5.00
CHLOROETHANE	-	< 1.00 |UJh	< 1.00	< 1.00	< 1.00 |UJh	< 1.00	< 10.00
CHLOROFORM	100.0	< 0.50 |UJh	< 0.50	< 0.50	< 0.50 |UJh	< 0.50	< 5.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-08		MW-11		MW-11		MW-11		MW-11		MW-12
DATE		07/05/94		01/05/94		04/13/94		07/05/94		10/26/94		01/07/94
QA	MCL											
ANALYTE	ug/L											
CHLOROMETHANE	-	< 1.00	UJh	< 1.00		< 1.00		< 1.00	UJh	< 1.00		< 10.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	UJh	< 0.50		< 0.50		< 0.50	UJh	< 0.50		< 5.00
DIBROMOCHLOROMETHANE	100.0	< 0.50	UJh	< 0.50		< 0.50		< 0.50	UJh	< 0.50		< 5.00
METHYLENE CHLORIDE	5.0	< 1.00	UJh	< 1.00		< 1.00		< 1.00	UJh	< 1.00		< 10.00
TETRACHLOROETHENE	5.0	3.10	Uz	< 0.50		< 0.50		< 0.50	UJh	< 0.50		< 5.00
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	UJh	< 0.50		< 0.50		< 0.50	UJh	< 0.50		< 5.00
TRICHLOROETHENE	5.0	< 0.50	UJh	1.70		1.50		1.60	Jh	0.70		< 5.00
TRICHLOROFLUOROMETHANE	150.0	< 1.00	UJh	< 1.00		< 1.00		< 1.00	UJh	< 1.00		< 10.00
VINYL CHLORIDE	0.5	< 1.00	UJh	< 1.00		< 1.00		< 1.00	UJh	< 1.00		< 10.00

All units reported as ug/L (ppb)

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	SAMPLE DATE / QA	MCL ug/L	MW-12 04/13/94	MW-12 07/05/94		MW-12 10/29/94	MW-13 01/07/94	MW-13 01/07/94 DUPLICATE SAMPLE	MW-13 04/13/94
1,1,1-TRICHLOROETHANE		200.0	< 0.50	< 0.50	UJh	< 0.50	< 5.00	< 0.50	< 5.00
1,1,2,2-TETRACHLOROETHANE		1.0	< 0.50	< 0.50	UJh	< 0.50	< 5.00	< 0.50	< 5.00
1,1,2-TRICHLOROETHANE		32.0	< 0.50	< 0.50	Jh	< 0.50	< 5.00	< 0.50	< 5.00
1,1-DICHLOROETHANE		5.0	16.00	14.00	Jh	12.00	27.00	29.00	40.00
1,1-DICHLOROETHENE		6.0	42.00	38.00	Jh	35.00	100.00	100.00	140.00
1,2-DICHLOROBENZENE		600.0	< 0.50	< 0.50	UJh	< 0.50	< 5.00	< 0.50	< 5.00
1,2-DICHLOROETHANE		0.5	< 0.50	< 0.50	UJh	< 0.50	73.00	70.00	61.00
1,2-DICHLOROETHENE		-	< 0.50	< 0.50	UJh	< 0.50	< 5.00	< 0.50	< 5.00
1,2-DICHLOROPROPANE		5.0	< 0.50	< 0.50	UJh	< 0.50	< 5.00	< 0.50	< 5.00
1,3-DICHLOROBENZENE		-	< 0.50	< 0.50	UJh	< 0.50	< 5.00	< 0.50	< 5.00
1,4-DICHLOROBENZENE		5.0	< 0.50	< 0.50	UJh	< 0.50	< 5.00	< 0.50	< 5.00
BROMODICHLOROMETHANE		100.0	< 0.50	< 0.50	UJh	< 0.50	< 5.00	< 0.50	< 5.00
BROMOFORM		100.0	< 0.50	< 0.50	UJh	< 0.50	< 5.00	< 0.50	< 5.00
BROMOMETHANE		-	< 1.00	< 1.00	UJh	< 1.00	< 10.00	< 1.00	< 10.00
CARBON TETRACHLORIDE		0.5	< 0.50	< 0.50	UJh	< 0.50	< 5.00	< 0.50	< 5.00
CHLOROBENZENE		30.0	< 0.50	< 0.50	UJh	< 0.50	< 5.00	< 0.50	< 5.00
CHLOROETHANE		-	< 1.00	< 1.00	UJh	< 1.00	< 10.00	< 1.00	< 10.00
CHLOROFORM		100.0	< 0.50	< 0.50	UJh	< 0.50	< 5.00	< 0.50	< 5.00

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA ANALYTE	MCL ug/L	MW-12 04/13/94	MW-12 07/05/94		MW-12 10/29/94	MW-13 01/07/94	MW-13 01/07/94 DUPLICATE SAMPLE	MW-13 04/13/94
CHLOROMETHANE	-	< 1.00	< 1.00	UJh	< 1.00	< 10.00	< 1.00	< 10.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	UJh	< 0.50	< 5.00	< 0.50	< 5.00
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	UJh	< 0.50	< 5.00	< 0.50	< 5.00
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	UJh	< 1.00	< 10.00	< 1.00	< 10.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	UJh	< 0.50	< 5.00	< 0.50	< 5.00
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	UJh	< 0.50	< 5.00	< 0.50	< 5.00
TRICHLOROETHENE	5.0	2.10	3.00	UJh	3.60	16.00	17.00	22.00
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	UJh	< 1.00	< 10.00	< 1.00	< 10.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	UJh	< 1.00	< 10.00	< 1.00	< 10.00

All units reported as ug/L (ppb)

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-13	MW-13	MW-14	MW-14	MW-14	MW-14
DATE		07/05/94	10/29/94	01/07/94	04/13/94	07/05/94	07/05/94
QA	MCL						DUPLICATE
ANALYTE	ug/L						SAMPLE
1,1,1-TRICHLOROETHANE	200.0	< 5.00 |UJh	< 5.00	< 5.00	0.58	0.94 |Jh	0.83 |Jh
1,1,2,2-TETRACHLOROETHANE	1.0	< 5.00 |UJh	< 5.00	< 5.00	< 0.50	< 0.50 |UJh	< 0.50 |UJh
1,1,2-TRICHLOROETHANE	32.0	< 5.00 |UJh	< 5.00	< 5.00	< 0.50	< 0.50 |UJh	< 0.50 |UJh
1,1-DICHLOROETHANE	5.0	48.00 |Jh	40.00	< 5.00	4.90	3.50 |Jh	3.80 |Jh
1,1-DICHLOROETHENE	6.0	78.00 |Jh	99.00	42.00	44.00	28.00 |Jh	37.00 |Jh
1,2-DICHLOROBENZENE	600.0	< 5.00 |UJh	< 5.00	< 5.00	< 0.50	< 0.50 |UJh	< 0.50 |UJh
1,2-DICHLOROETHANE	0.5	57.00 |Jh	39.00	< 5.00	< 0.50	< 0.50 |UJh	< 0.50 |UJh
1,2-DICHLOROETHENE	-	< 5.00 |UJh	6.90	< 5.00	< 0.50	< 0.50 |UJh	< 0.50 |UJh
1,2-DICHLOROPROPANE	5.0	< 5.00 |UJh	< 5.00	< 5.00	< 0.50	< 0.50 |UJh	< 0.50 |UJh
1,3-DICHLOROBENZENE	-	< 5.00 |UJh	< 5.00	< 5.00	< 0.50	< 0.50 |UJh	< 0.50 |UJh
1,4-DICHLOROBENZENE	5.0	< 5.00 |UJh	< 5.00	< 5.00	< 0.50	< 0.50 |UJh	< 0.50 |UJh
BROMODICHLOROMETHANE	100.0	< 5.00 |UJh	< 5.00	< 5.00	< 0.50	< 0.50 |UJh	< 0.50 |UJh
BROMOFORM	100.0	< 5.00 |UJh	< 5.00	< 5.00	< 0.50	< 0.50 |UJh	< 0.50 |UJh
BROMOMETHANE	-	< 10.00 |UJh	< 10.00	< 10.00	< 1.00	< 1.00 |UJh	< 1.00 |UJh
CARBON TETRACHLORIDE	0.5	< 5.00 |UJh	< 5.00	< 5.00	< 0.50	< 0.50 |UJh	< 0.50 |UJh
CHLOROBENZENE	30.0	< 5.00 |UJh	< 5.00	< 5.00	< 0.50	< 0.50 |UJh	< 0.50 |UJh
CHLOROETHANE	-	< 10.00 |UJh	< 10.00	< 10.00	< 1.00	< 1.00 |UJh	< 1.00 |UJh
CHLOROFORM	100.0	< 5.00 |UJh	< 5.00	< 5.00	< 0.50	< 0.50 |UJh	< 0.50 |UJh

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-13		MW-13		MW-14	MW-14	MW-14		MW-14	
DATE		07/05/94		10/29/94		01/07/94	04/13/94	07/05/94		07/05/94	
QA	MCL									DUPLICATE	
ANALYTE	ug/L									SAMPLE	
CHLOROMETHANE	-	< 10.00	UJh	< 10.00		< 10.00	< 1.00	< 1.00	UJh	< 1.00	UJh
CIS-1,3-DICHLOROPROPENE	-	< 5.00	UJh	< 5.00		< 5.00	< 0.50	< 0.50	UJh	< 0.50	UJh
DIBROMOCHLOROMETHANE	100.0	< 5.00	UJh	< 5.00		< 5.00	< 0.50	< 0.50	UJh	< 0.50	UJh
METHYLENE CHLORIDE	5.0	< 10.00	UJh	< 10.00		< 10.00	< 1.00	< 1.00	UJh	< 1.00	UJh
TETRACHLOROETHENE	5.0	< 5.00	UJh	< 5.00		< 5.00	< 0.50	< 0.50	UJh	< 0.50	UJh
TRANS-1,3-DICHLOROPROPENE	-	< 5.00	UJh	< 5.00		< 5.00	< 0.50	< 0.50	UJh	< 0.50	UJh
TRICHLOROETHENE	5.0	11.00	Jh	< 5.00		< 5.00	7.80	5.50	Jh	5.60	Jh
TRICHLOROFLUOROMETHANE	150.0	< 10.00	UJh	< 10.00		< 10.00	< 1.00	< 1.00	UJh	< 1.00	UJh
VINYL CHLORIDE	0.5	< 10.00	UJh	< 10.00		< 10.00	< 1.00	< 1.00	UJh	< 1.00	UJh

All units reported as ug/L (ppb)

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-14	MW-15	MW-15		MW-16	MW-16	MW-16	
DATE		10/29/94	01/17/94	07/05/94		01/06/94	04/14/94	07/05/94	
QA	MCL								
ANALYTE	ug/L								
1,1,1-TRICHLOROETHANE	200.0	0.55	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50	UJh
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	Uz	< 0.50	< 0.50	< 0.50	UJh
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50	UJh
1,1-DICHLOROETHANE	5.0	7.00	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50	UJh
1,1-DICHLOROETHENE	6.0	36.00	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50	UJh
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50	UJh
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50	UJh
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50	UJh
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50	UJh
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50	UJh
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50	UJh
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50	UJh
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50	UJh
BROMOMETHANE	-	< 1.00	< 1.00	< 0.50	UJh	< 1.00	< 0.50	< 0.50	UJh
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50	UJh
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50	UJh
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00	< 1.00	UJh
CHLOROFORM	100.0	< 0.50	< 0.50	0.54	Jh	< 0.50	< 0.50	< 0.50	UJh

All units reported as ug/L (ppb)

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-14	MW-15	MW-15		MW-16	MW-16	MW-16	
DATE		10/29/94	01/17/94	07/05/94		01/06/94	04/14/94	07/05/94	
QA	MCL								
ANALYTE	ug/L								
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00	< 1.00	UJh
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50	UJh
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50	UJh
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00	< 1.00	UJh
TETRACHLOROETHENE	5.0	< 0.50	3.40	2.40	UJh	< 0.50	< 0.50	< 0.50	UJh
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50	UJh
TRICHLOROETHENE	5.0	6.20	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50	UJh
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00	< 1.00	UJh
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00	< 1.00	UJh

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-16	MW-17	MW-17	MW-18	MW-18	MW-18
DATE		10/26/94	01/17/94	06/30/94	01/06/94	04/14/94	06/30/94
QA	MCL ug/L						
ANALYTE							
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	< 0.50	0.61	< 0.50	5.20	3.70	2.80
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 1.00	< 0.50	< 1.00	< 0.50	< 0.50
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-16	MW-17	MW-17		MW-18	MW-18	MW-18
DATE		10/26/94	01/17/94	06/30/94		01/06/94	04/14/94	06/30/94
QA	MCL							
ANALYTE	ug/L							
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	1.10	1.30	Uz	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50		0.68	0.52	0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-18	MW-19	MW-19	MW-20	MW-20	MW-20
DATE		10/26/94	01/16/94	06/30/94	01/06/94	04/14/94	06/30/94
QA	MCL ug/L						
ANALYTE							
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	2.70	7.10	9.30	0.66	< 0.50	< 0.50
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 1.00	< 0.50	< 1.00	< 0.50	< 0.50
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	0.95	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-18	MW-19	MW-19	MW-20	MW-20	MW-20
DATE		10/26/94	01/16/94	06/30/94	01/06/94	04/14/94	06/30/94
QA	MCL						
ANALYTE	ug/L						
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-20	MW-21	MW-21	MW-22	MW-23	MW-23
DATE		10/26/94	01/16/94	07/07/94	01/16/94	01/16/94	07/13/94
QA							
ANALYTE	MCL ug/L						
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	1.00	< 0.50	< 0.50	0.54	0.71
1,1-DICHLOROETHENE	6.0	< 0.50	6.10	1.90	< 0.50	< 0.50	0.76
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 1.00	< 0.50	< 1.00	< 1.00	< 0.50
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	1.40	2.20	2.00	2.00	1.50

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-20	MW-21	MW-21	MW-22	MW-23	MW-23
DATE		10/26/94	01/16/94	07/07/94	01/16/94	01/16/94	07/13/94
QA	MCL						
ANALYTE	ug/L						
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00 UJc	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-24	MW-25	MW-25	MW-26	MW-26	MW-26
DATE		01/16/94	01/16/94	07/07/94	01/10/94	04/14/94	07/07/94
QA	MCL						
ANALYTE	ug/L						
1,1,1-TRICHLOROETHANE	200.0	< 0.50	1.30	1.00	2.60	1.90	1.40
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	5.90	4.80	11.00	10.00	6.60
1,1-DICHLOROETHENE	6.0	< 0.50	6.30	6.10	15.00	16.00	9.30
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	0.70	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	0.52	< 0.50	0.96	0.76	0.58
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 1.00	< 1.00	< 0.50	< 1.00	< 0.50	< 0.50
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	0.90	1.50	1.80	2.00	2.40	2.30

All units reported as ug/L (ppb)

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-24	MW-25	MW-25	MW-26	MW-26	MW-26	
DATE		01/16/94	01/16/94	07/07/94	01/10/94	04/14/94	07/07/94	
QA	MCL							
ANALYTE	ug/L							
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	1.30	
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00 |UJc	< 1.00	< 1.00	< 1.00 |UJc	
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-26	MW-27	MW-27		MW-28	MW-28	MW-28
DATE		10/29/94	01/16/94	07/07/94		01/11/94	04/25/94	07/01/94
QA	MCL							
ANALYTE	ug/L							
1,1,1-TRICHLOROETHANE	200.0	1.10	< 0.50	< 0.50	UJs	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	UJs	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	UJs	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	7.10	0.76	2.20	Js	5.90	10.00	4.60
1,1-DICHLOROETHENE	6.0	12.00	1.10	2.40	Js	4.20	17.00	4.20
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	UJs	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	UJs	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	UJs	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	UJs	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	UJs	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	UJs	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	UJs	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	UJs	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 1.00	< 0.50	UJs	< 1.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	UJs	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	UJs	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	UJs	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	1.90	2.40	2.20	Js	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-26	MW-27	MW-27	MW-28	MW-28	MW-28
DATE		10/29/94	01/16/94	07/07/94	01/11/94	04/25/94	07/01/94
QA	MCL						
ANALYTE	ug/L						
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	UJs < 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	UJs < 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	UJs < 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	UJs < 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	UJs < 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	UJs < 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	UJs < 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	UJs < 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	UJs < 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-28	MW-29	MW-29	MW-29	MW-29	MW-30
DATE		10/31/94	01/11/94	04/25/94	07/01/94	10/31/94	01/10/94
QA	MCL						
ANALYTE	ug/L						
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00
1,1-DICHLOROETHANE	5.0	6.30	0.73	1.10	0.73	< 0.50	7.70
1,1-DICHLOROETHENE	6.0	7.00	7.90	9.00	3.60	3.40	99.00
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00
1,2-DICHLOROETHANE	0.5	< 0.50	2.30	2.70	1.60	1.50	< 5.00
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00
BROMOMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 10.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	1.60	3.70	1.30	< 5.00
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 10.00
CHLOROFORM	100.0	< 0.50	< 0.50	2.00	4.00	1.70	< 5.00

All units reported as ug/L (ppb)

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-28	MW-29	MW-29	MW-29	MW-29	MW-30
DATE		10/31/94	01/11/94	04/25/94	07/01/94	10/31/94	01/10/94
QA	MCL						
ANALYTE	ug/L						
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 10.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 10.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00
TRICHLOROETHENE	5.0	< 0.50	0.68	< 0.50	0.59	< 0.50	6.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 10.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 10.00

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-30	MW-30	MW-30	MW-31	MW-31	MW-31
DATE		04/25/94	07/01/94	10/31/94	01/11/94	04/26/94	07/01/94
QA	MCL						
ANALYTE	ug/L						
1,1,1-TRICHLOROETHANE	200.0	1.40	0.67	< 0.50	< 5.00	0.65	0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	4.90	3.30	2.00	< 5.00	2.50	1.60
1,1-DICHLOROETHENE	6.0	66.00	44.00	45.00	54.00	53.00	40.00
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50
BROMOMETHANE	-	< 1.00	< 1.00	< 1.00	< 10.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 10.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50

All units reported as ug/L (ppb)

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	SAMPLE DATE / QA	MCL ug/L	MW-33 01/06/94	MW-33 04/13/94	MW-33 07/05/94		MW-33 10/26/94		MW-34 01/12/94	MW-34 01/12/94 DUPLICATE SAMPLE	
1,1,1-TRICHLOROETHANE		200.0	1.50	1.30	1.40	Jh	0.67		2.20	< 5.00	UJf
1,1,2,2-TETRACHLOROETHANE		1.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50		< 0.50	< 5.00	
1,1,2-TRICHLOROETHANE		32.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50		< 0.50	< 5.00	
1,1-DICHLOROETHANE		5.0	2.50	2.50	2.20	Jh	1.60		8.70	5.80	
1,1-DICHLOROETHENE		6.0	75.00	75.00	87.00	Jh	66.00		120.00	120.00	
1,2-DICHLOROBENZENE		600.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50		< 0.50	< 5.00	
1,2-DICHLOROETHANE		0.5	< 0.50	< 0.50	< 0.50	UJh	< 0.50		< 0.50	< 5.00	
1,2-DICHLOROETHENE		-	< 0.50	< 0.50	< 0.50	UJh	< 0.50		< 0.50	< 5.00	
1,2-DICHLOROPROPANE		5.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50		< 0.50	< 5.00	
1,3-DICHLOROBENZENE		-	< 0.50	< 0.50	< 0.50	UJh	< 0.50		< 0.50	< 5.00	
1,4-DICHLOROBENZENE		5.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50		< 0.50	< 5.00	
BROMODICHLOROMETHANE		100.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50		< 0.50	< 5.00	
BROMOFORM		100.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50		< 0.50	< 5.00	
BROMOMETHANE		-	< 1.00	< 0.50	< 0.50	UJh	< 0.50		< 1.00	< 10.00	
CARBON TETRACHLORIDE		0.5	< 0.50	< 0.50	< 0.50	UJh	< 0.50		< 0.50	< 5.00	
CHLOROBENZENE		30.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50		< 0.50	< 5.00	
CHLOROETHANE		-	< 1.00	< 1.00	< 1.00	UJh	< 1.00		< 1.00	< 10.00	
CHLOROFORM		100.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50		< 0.50	< 5.00	

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	SAMPLE DATE / QA	MCL ug/L	MW-33 01/06/94	MW-33 04/13/94	MW-33 07/05/94		MW-33 10/26/94		MW-34 01/12/94	MW-34 01/12/94 DUPLICATE SAMPLE	
CHLOROMETHANE		-	< 1.00	< 1.00	< 1.00	UJh	< 1.00		< 1.00	< 10.00	
CIS-1,3-DICHLOROPROPENE		-	< 0.50	< 0.50	< 0.50	UJh	< 0.50		< 0.50	< 5.00	
DIBROMOCHLOROMETHANE		100.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50		< 0.50	< 5.00	
METHYLENE CHLORIDE		5.0	< 1.00	< 1.00	< 1.00	UJh	< 1.00		< 1.00	< 10.00	
TETRACHLOROETHENE		5.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50		0.54	< 5.00	UJf
TRANS-1,3-DICHLOROPROPENE		-	< 0.50	< 0.50	< 0.50	UJh	< 0.50		< 0.50	< 5.00	
TRICHLOROETHENE		5.0	0.58	0.60	0.69	Jh	< 0.50		17.00	13.00	
TRICHLOROFLUOROMETHANE		150.0	< 1.00	< 1.00	< 1.00	UJh	< 1.00		< 1.00	< 10.00	
VINYL CHLORIDE		0.5	< 1.00	< 1.00	< 1.00	UJh	< 1.00		< 1.00	< 10.00	

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE		MW-34	MW-34	MW-34	MW-34	MW-35	MW-35
QA	MCL	04/26/94	07/20/94	11/01/94	11/01/94 DUPLICATE	01/12/94	04/26/94
ANALYTE	ug/L				SAMPLE		
1,1,1-TRICHLOROETHANE	200.0	1.40	1.30	1.50	1.40	0.66	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	6.20	5.90	5.40	5.40	0.52	< 0.50
1,1-DICHLOROETHENE	6.0	120.00	86.00	86.00	81.00	27.00	10.00
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-34	MW-34	MW-34	MW-34	MW-35	MW-35
DATE		04/26/94	07/20/94	11/01/94	11/01/94	01/12/94	04/26/94
QA					DUPLICATE		
ANALYTE	MCL ug/L				SAMPLE		
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	0.84	< 0.50	0.52	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	16.00	17.00	15.00	13.00	3.10	2.20
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-35	MW-35	MW-36	MW-36	MW-36	MW-36
DATE		07/20/94	11/01/94	01/12/94	04/26/94	07/20/94	07/21/94
QA	MCL						DUPLICATE
ANALYTE	ug/L						SAMPLE
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 5.00	1.20	0.96	0.80
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 5.00	2.00	1.80	1.60
1,1-DICHLOROETHENE	6.0	7.60	3.60	110.00	76.00	42.00	58.00
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 0.50	< 10.00	< 0.50	< 0.50	< 0.50
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 10.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	MCL ug/L	MW-35 07/20/94	MW-35 11/01/94	MW-36 01/12/94	MW-36 04/26/94	MW-36 07/20/94	MW-36 07/21/94 DUPLICATE SAMPLE
CHLOROMETHANE	-	< 1.00	< 1.00	< 10.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 10.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	2.00	1.50	5.80	4.50	4.40	3.90
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 10.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 10.00	< 1.00	< 1.00	< 1.00

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-36	MW-37	MW-37	MW-37	MW-37	MW-37
DATE		11/04/94	01/12/94	04/26/94	04/26/94	07/20/94	11/04/94
QA					DUPLICATE		
ANALYTE	MCL ug/L				SAMPLE		
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	0.51	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	0.51	3.70	3.10	3.00	4.30	5.00
1,1-DICHLOROETHENE	6.0	30.00	20.00	20.00	20.00	31.00	40.00
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	6.20	7.70	7.40	7.20	9.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50
CARBON TETRACHLORIDE	0.5	< 0.50	0.61	0.55	0.58	0.57	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	2.40	2.50	2.40	2.70	2.50

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-36	MW-37	MW-37	MW-37	MW-37	MW-37
DATE		11/04/94	01/12/94	04/26/94	04/26/94	07/20/94	11/04/94
QA					DUPLICATE		
	MCL				SAMPLE		
ANALYTE	ug/L						
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	1.90	0.57	< 0.50	< 0.50	0.75	0.98
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-38	MW-38	MW-38	MW-38	MW-38	MW-39
DATE		01/10/94	01/10/94	04/15/94	07/14/94	11/01/94	01/12/94
QA			DUPLICATE				
ANALYTE	MCL ug/L		SAMPLE				
1,1,1-TRICHLOROETHANE	200.0	< 5.00	< 10.00	6.20	4.70	3.50	2.30
1,1,2,2-TETRACHLOROETHANE	1.0	< 5.00	< 10.00	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 5.00	< 10.00	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 5.00	< 10.00	6.60	5.80	4.90	2.60
1,1-DICHLOROETHENE	6.0	120.00	120.00	130.00	130.00	150.00	34.00
1,2-DICHLOROBENZENE	600.0	< 5.00	< 10.00	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 5.00	< 10.00	0.89	0.68	0.54	1.30
1,2-DICHLOROETHENE	-	< 5.00	< 10.00	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 5.00	< 10.00	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 5.00	< 10.00	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 5.00	< 10.00	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 5.00	< 10.00	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 5.00	< 10.00	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 10.00	< 20.00	< 0.50	< 0.50	< 0.50	< 1.00
CARBON TETRACHLORIDE	0.5	< 5.00	< 10.00	0.85	0.86	1.00	1.60
CHLOROBENZENE	30.0	< 5.00	< 10.00	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 10.00	< 20.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 5.00	< 10.00	2.10 |Jc	1.90	1.60	2.50

All units reported as ug/L (ppb)

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	MCL ug/L	MW-38 01/10/94	MW-38 01/10/94 DUPLICATE SAMPLE	MW-38 04/15/94	MW-38 07/14/94	MW-38 11/01/94	MW-39 01/12/94
SAMPLE DATE QA							
CHLOROMETHANE	-	< 10.00	< 20.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 5.00	< 10.00	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 5.00	< 10.00	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 10.00	< 20.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 5.00	< 10.00	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 5.00	< 10.00	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 5.00	< 10.00	7.70	7.40	6.30	1.10
TRICHLOROFLUOROMETHANE	150.0	< 10.00	< 20.00	< 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 10.00	< 20.00	< 1.00	< 1.00	< 1.00	< 1.00

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-39	MW-39	MW-39	MW-39	MW-40	MW-40
DATE		01/12/94	04/15/94	07/14/94	11/02/94	01/11/94	04/25/94
QA	MCL	DUPLICATE					
ANALYTE	ug/L	SAMPLE					
1,1,1-TRICHLOROETHANE	200.0	2.40	2.50	2.40	2.90	< 5.00	0.87
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50
1,1-DICHLOROETHANE	5.0	2.60	2.80	3.00	3.30	11.00	11.00
1,1-DICHLOROETHENE	6.0	36.00	34.00	41.00	64.00	100.00	120.00
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50
1,2-DICHLOROETHANE	0.5	1.20	1.20	1.00	0.91	< 5.00	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50
BROMOMETHANE	-	< 1.00	< 0.50	< 0.50	< 0.50	< 10.00	< 0.50
CARBON TETRACHLORIDE	0.5	1.60	1.80	1.50	1.80	< 5.00	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 10.00	< 1.00
CHLOROFORM	100.0	2.50	2.60 |Jc	2.50	2.50	< 5.00	< 0.50

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-39	MW-39	MW-39	MW-39	MW-40	MW-40
DATE		01/12/94	04/15/94	07/14/94	11/02/94	01/11/94	04/25/94
QA	MCL	DUPLICATE					
	ug/L	SAMPLE					
ANALYTE							
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 10.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 10.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50
TRICHLOROETHENE	5.0	1.20	1.40	1.50	2.30	12.00	13.00
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	< 10.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 10.00	< 1.00

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-40	MW-40	MW-41	MW-41	MW-41	MW-41	
DATE		06/30/94	11/01/94	01/07/94	04/13/94	04/13/94	07/05/94	
QA	MCL					DUPLICATE		
	ug/L					SAMPLE		
ANALYTE								
1,1,1-TRICHLOROETHANE	200.0	0.81	1.80	< 0.50	< 0.50	< 0.50	< 0.50	UJh
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh
1,1-DICHLOROETHANE	5.0	10.00	17.00	< 0.50	< 0.50	< 0.50	< 0.50	UJh
1,1-DICHLOROETHENE	6.0	93.00	160.00	< 0.50	< 0.50	< 0.50	< 0.50	UJh
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh
BROMOMETHANE	-	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	UJh
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	UJh
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh

All units reported as ug/L (ppb)

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< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	MCL ug/L	MW-40 06/30/94	MW-40 11/01/94	MW-41 01/07/94	MW-41 04/13/94	MW-41 04/13/94 DUPLICATE SAMPLE	MW-41 07/05/94	
SAMPLE DATE QA								
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	UJh
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	UJh
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh
TRICHLOROETHENE	5.0	12.00	21.00	< 0.50	< 0.50	< 0.50	< 0.50	UJh
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	UJh
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	UJh

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-41	MW-41	MW-42	MW-42	MW-42	MW-42
DATE		10/26/94	10/26/94	01/05/94	04/12/94	07/07/94	10/26/94
QA	MCL		DUPLICATE				
	ug/L		SAMPLE				
ANALYTE							
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	4.30	4.50	3.10	2.80
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	1.80	1.80	1.70	0.88
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	54.00	50.00	46.00	89.00
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	130.00	120.00	92.00	50.00
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 0.50	< 1.00	< 1.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	0.84	0.90	0.78	< 0.50

All units reported as ug/L (ppb)

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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA ANALYTE	MCL ug/L	MW-41 10/26/94	MW-41 10/26/94 DUPLICATE SAMPLE	MW-42 01/05/94	MW-42 04/12/94	MW-42 07/07/94	MW-42 10/26/94
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	4.00	4.80	3.30	3.60
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	3.20	3.60	2.60	2.30
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00 UJc	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-43	MW-43	MW-43	MW-43	MW-43	MW-44
DATE		01/05/94	04/12/94	07/13/94	07/13/94	10/26/94	01/10/94
QA	MCL				DUPLICATE		
ANALYTE	ug/L				SAMPLE		
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	1.00	4.30	3.30	3.00	2.10	< 0.50
1,1-DICHLOROETHANE	5.0	290.00	310.00	260.00	300.00	200.00	< 0.50
1,1-DICHLOROETHENE	6.0	25.00	43.00	37.00	33.00	15.00	0.77
1,2-DICHLOROBENZENE	600.0	< 0.50	0.57	0.61	0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	3.90	2.90	2.70	2.20	2.10
1,2-DICHLOROETHENE	-	5.10	9.60	8.50	8.20	10.00	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.90
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.60

All units reported as ug/L (ppb)

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA ANALYTE	MCL ug/L	MW-43 01/05/94	MW-43 04/12/94	MW-43 07/13/94	MW-43 07/13/94 DUPLICATE SAMPLE	MW-43 10/26/94	MW-44 01/10/94
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	1.30	1.00 |Uz	0.98 |Uz	1.40	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	3.70	7.40	6.20	5.90	6.40	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	7.60	10.00	8.10	7.20	9.20	< 1.00

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-44	MW-44	MW-44	MW-44	MW-45	MW-45
DATE		04/15/94	04/15/94	07/14/94	11/01/94	07/20/94	11/02/94
QA	MCL		DUPLICATE				
ANALYTE	ug/L		SAMPLE				
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	1.10	1.00	1.20	< 0.50	< 0.50	< 0.50
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	2.50	2.10	1.90	1.70	0.55	0.76
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	6.10	5.80	4.90	5.10	1.30	1.40
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	4.40 |Jc	4.30 |Jc	4.00	2.80	2.20	1.70

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-44	MW-44	MW-44	MW-44	MW-45	MW-45
DATE		04/15/94	04/15/94	07/14/94	11/01/94	07/20/94	11/02/94
QA	MCL		DUPLICATE				
ANALYTE	ug/L		SAMPLE				
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA ANALYTE	MCL ug/L	MW-46 07/20/94	MW-46 11/02/94	MW-47 07/21/94	MW-47 08/21/94	MW-47 11/04/94	MW-47 11/04/94 DUPLICATE SAMPLE
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50 UJh	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50 UJh	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50 UJh	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50 UJh	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50 UJh	< 0.50	< 0.50	< 0.50
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50 UJh	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50 UJh	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50 UJh	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50 UJh	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50 UJh	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50 UJh	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50 UJh	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50 UJh	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 1.00	< 1.00	< 1.00 UJh	< 1.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	0.89	0.79	< 0.50 UJh	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50 UJh	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00 UJh	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	2.60	2.20	< 0.50 UJh	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE / QA / ANALYTE	MCL ug/L	MW-46 07/20/94	MW-46 11/02/94	MW-47 07/21/94		MW-47 08/21/94	MW-47 11/04/94	MW-47 11/04/94 DUPLICATE SAMPLE
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-48	RB-01	RB-01	RB-01	RB-02	RB-02
DATE		07/21/94	01/06/94	04/13/94	07/01/94	01/10/94	04/25/94
QA	MCL		RINSATE	RINSATE	RINSATE	RINSATE	RINSATE
	ug/L		BLANK	BLANK	BLANK	BLANK	BLANK
ANALYTE							
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	1.00	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-48	RB-01	RB-01	RB-01	RB-02	RB-02
DATE		07/21/94	01/06/94	04/13/94	07/01/94	01/10/94	04/25/94
QA	MCL		RINSATE	RINSATE	RINSATE	RINSATE	RINSATE
	ug/L		BLANK	BLANK	BLANK	BLANK	BLANK
ANALYTE							
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	MCL ug/L	RB-03 01/12/94 RINSATE BLANK	RB-03 04/26/94 RINSATE BLANK	RB-05 01/17/94 RINSATE BLANK	RB-07 07/21/94 RINSATE BLANK	RB-15 07/05/94 RINSATE BLANK		RB-31 10/31/94 RINSATE BLANK
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
BROMOMETHANE	-	< 1.00	< 1.00	< 1.00	< 0.50	< 0.50	UJh	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	UJh	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		RB-03	RB-03	RB-05	RB-07	RB-15		RB-31
DATE		01/12/94	04/26/94	01/17/94	07/21/94	07/05/94		10/31/94
QA	MCL	RINSATE	RINSATE	RINSATE	RINSATE	RINSATE		RINSATE
	ug/L	BLANK	BLANK	BLANK	BLANK	BLANK		BLANK
ANALYTE								
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	UJh	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	UJh	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	UJh	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	UJh	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		RB-35	RB-36	RB-39	TB-01	TB-01	TB-01
DATE		07/20/94	11/04/94	11/02/94	01/05/94	04/12/94	06/30/94
QA	MCL	RINSATE	RINSATE	RINSATE	TRIP	TRIP	TRIP
	ug/L	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
ANALYTE							
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		RB-35	RB-36	RB-39	TB-01	TB-01	TB-01
DATE		07/20/94	11/04/94	11/02/94	01/05/94	04/12/94	06/30/94
QA	MCL	RINSATE	RINSATE	RINSATE	TRIP	TRIP	TRIP
	ug/L	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
ANALYTE							
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	MCL ug/L	TB-01 10/26/94 TRIP BLANK	TB-02 01/06/94 TRIP BLANK	TB-02 04/13/94 TRIP BLANK	TB-02 07/05/94 TRIP BLANK		TB-02 10/31/94 TRIP BLANK	TB-03 01/07/94 TRIP BLANK	
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	UJc
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	
BROMOMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00	
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00	
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50	

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		TB-01	TB-02	TB-02	TB-02		TB-02	TB-03
DATE		10/26/94	01/06/94	04/13/94	07/05/94		10/31/94	01/07/94
QA	MCL	TRIP	TRIP	TRIP	TRIP		TRIP	TRIP
	ug/L	BLANK	BLANK	BLANK	BLANK		BLANK	BLANK
ANALYTE								
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		TB-03	TB-03	TB-03	TB-04	TB-04	TB-04
DATE		04/14/94	07/07/94	11/01/94	01/10/94	04/15/94	07/13/94
QA	MCL	TRIP	TRIP	TRIP	TRIP	TRIP	TRIP
	ug/L	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
ANALYTE							
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 1.00	< 1.00	< 1.00	< 0.50	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		TB-03	TB-03		TB-03	TB-04	TB-04	TB-04
DATE		04/14/94	07/07/94		11/01/94	01/10/94	04/15/94	07/13/94
QA	MCL	TRIP	TRIP		TRIP	TRIP	TRIP	TRIP
ANALYTE	ug/L	BLANK	BLANK		BLANK	BLANK	BLANK	BLANK
CHLOROMETHANE	-	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	UJc	< 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	MCL ug/L	TB-04 11/03/94 TRIP BLANK	TB-05 01/16/94 TRIP BLANK	TB-05 04/25/94 TRIP BLANK	TB-05 07/20/94 TRIP BLANK		TB-06 01/12/94 TRIP BLANK	TB-06 04/26/94 TRIP BLANK
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
BROMOMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		TB-04	TB-05	TB-05	TB-05		TB-06	TB-06
DATE		11/03/94	01/16/94	04/25/94	07/20/94		01/12/94	04/26/94
QA	MCL	TRIP	TRIP	TRIP	TRIP		TRIP	TRIP
	ug/L	BLANK	BLANK	BLANK	BLANK		BLANK	BLANK
ANALYTE								
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	UJh	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	UJh	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		TRIP BLANK	TRIP BLANK	TRIP BLANK
DATE		09/14/94	11/08/94	12/07/94
QA	MCL	TRIP	TRIP	TRIP
	ug/L	BLANK	BLANK	BLANK
ANALYTE				
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 0.50	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		TRIP BLANK	TRIP BLANK	TRIP BLANK
DATE		09/14/94	11/08/94	12/07/94
QA	MCL	TRIP	TRIP	TRIP
	ug/L	BLANK	BLANK	BLANK
ANALYTE				
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-3
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		FB-01	FB-01	FB-01	FB-02	FB-02	FB-02	FB-03	FB-04
DATE		04/13/94	07/01/94	10/29/94	04/25/94	07/13/94	11/02/94	04/26/94	07/21/94
QA	MCL	FIELD	FIELD	FIELD	FIELD	FIELD	FIELD	FIELD	FIELD
	ug/L	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
ANALYTE									
BENZENE	1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
ETHYL BENZENE	680	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TOLUENE	1000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
XYLENE	1750	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-3 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		FB-04	MW-01	MW-02	MW-03	MW-04	MW-04	MW-04	MW-04
DATE		11/04/94	01/17/94	01/05/94	01/17/94	01/14/94	02/11/94	03/02/94	04/07/94
QA	MCL	FIELD							
	ug/L	BLANK							
ANALYTE									
BENZENE	1	< 0.50	< 0.50	< 0.50	< 0.50	110.00	110.00	110.00	120.00
ETHYL BENZENE	680	< 0.50	< 0.50	< 0.50	< 0.50	4.40	4.30	4.00	3.70
TOLUENE	1000	< 0.50	< 0.50	< 0.50	< 0.50	14.00	14.00	13.00	14.00
XYLENE	1750	< 0.50	< 0.50	< 0.50	< 0.50	19.00	17.00	16.00	19.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-3 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	MCL ug/L	MW-04 05/05/94	MW-04 06/08/94	MW-04 07/08/94	MW-04 09/14/94	MW-04 10/10/94	MW-04 11/08/94	MW-04 12/07/94	MW-05 01/17/94
SAMPLE DATE									
QA									
BENZENE	1	61.00	75.00	88.00	84.00	110.00	96.00	94.00	< 0.50
ETHYL BENZENE	680	2.20	< 0.50	3.60	3.50	7.40	4.50	4.50	< 0.50
TOLUENE	1000	6.90	< 0.50	12.00	11.00	12.00	13.00	12.00	< 0.50
XYLENE	1750	8.60	< 0.50	13.00	17.00	15.00	17.00	16.00	< 0.50

All units reported as ug/L (ppb)

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< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-3 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-06	MW-07	MW-08	MW-11	MW-12	MW-12	MW-12	MW-12
DATE		01/17/94	01/10/94	01/17/94	01/05/94	01/07/94	04/13/94	07/05/94	10/29/94
QA	MCL ug/L								
ANALYTE									
BENZENE	1	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
ETHYL BENZENE	680	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
TOLUENE	1000	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
XYLENE	1750	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-3 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	MCL ug/L	MW-13 01/07/94	MW-13 01/07/94 DUPLICATE SAMPLE	MW-13 04/13/94	MW-13 07/05/94	MW-13 10/29/94	MW-14 01/07/94	MW-14 04/13/94	MW-14 07/05/94
SAMPLE DATE QA									
BENZENE	1	4100.00	4200.00	2200.00	1800.00	2200.00	< 5.00	0.63	1.60
ETHYL BENZENE	680	250.00	240.00	130.00	120.00	130.00	< 5.00	< 0.50	< 0.50
TOLUENE	1000	180.00	160.00	67.00	43.00	100.00	< 5.00	< 0.50	< 0.50
XYLENE	1750	280.00	250.00	79.00	36.00	96.00	< 5.00	< 0.50	< 0.50

All units reported as ug/L (ppb)

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TABLE B-3 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE / QA / ANALYTE	MCL ug/L	MW-14 07/05/94 DUPLICATE SAMPLE	MW-14 10/29/94	MW-15 01/17/94	MW-16 01/06/94	MW-17 01/17/94	MW-18 01/06/94	MW-19 01/16/94	MW-20 01/06/94
BENZENE	1	1.90	1.40	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
ETHYL BENZENE	680	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TOLUENE	1000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
XYLENE	1750	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-3 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-21	MW-22	MW-23	MW-24	MW-25	MW-26	MW-27	MW-28
DATE		01/16/94	01/16/94	01/16/94	01/16/94	01/16/94	01/10/94	01/16/94	01/11/94
QA									
ANALYTE	MCL ug/L								
BENZENE	1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
ETHYL BENZENE	680	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TOLUENE	1000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
XYLENE	1750	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-3 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE		MW-28 04/25/94	MW-28 07/01/94	MW-28 10/31/94	MW-29 01/11/94	MW-29 04/25/94	MW-29 07/01/94	MW-29 10/31/94	MW-30 01/10/94
QA	MCL ug/L								
ANALYTE									
BENZENE	1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00
ETHYL BENZENE	680	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00
TOLUENE	1000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00
XYLENE	1750	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-3 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	SAMPLE DATE / QA	MCL ug/L	MW-30 04/25/94	MW-30 07/01/94	MW-30 10/31/94	MW-31 01/11/94	MW-31 04/26/94	MW-31 07/01/94	MW-31 10/31/94	MW-32 01/14/94
BENZENE		1	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 5.00
ETHYL BENZENE		680	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 5.00
TOLUENE		1000	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 5.00
XYLENE		1750	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 5.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-3 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-32	MW-32	MW-32	MW-32	MW-32	MW-32	MW-32	MW-32
DATE		02/11/94	03/02/94	04/07/94	05/05/94	06/08/94	07/08/94	09/14/94	10/10/94
QA	MCL								
ANALYTE	ug/L								
BENZENE	1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
ETHYL BENZENE	680	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TOLUENE	1000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
XYLENE	1750	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-3 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	SAMPLE DATE / QA	MCL ug/L	MW-32 11/08/94	MW-32 12/07/94	MW-33 01/06/94	MW-34 01/12/94	MW-34 01/12/94 DUPLICATE SAMPLE	MW-35 01/12/94	MW-36 01/12/94	MW-37 01/12/94
BENZENE		1	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 5.00	< 0.50
ETHYL BENZENE		680	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 5.00	< 0.50
TOLUENE		1000	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 5.00	< 0.50
XYLENE		1750	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 5.00	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-3 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	SAMPLE DATE / QA	MCL ug/L	MW-38 01/10/94	MW-38 01/10/94 DUPLICATE SAMPLE	MW-39 01/12/94	MW-39 01/12/94 DUPLICATE SAMPLE	MW-40 01/11/94	MW-41 01/07/94	MW-42 01/05/94	MW-42 04/12/94
BENZENE		1	< 5.00	< 10.00	< 0.50	< 0.50	< 5.00	< 0.50	0.51	0.54
ETHYL BENZENE		680	< 5.00	< 10.00	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
TOLUENE		1000	< 5.00	< 10.00	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
XYLENE		1750	< 5.00	< 10.00	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-3 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	SAMPLE DATE / QA	MCL ug/L	MW-42 07/07/94	MW-42 10/26/94	MW-43 01/05/94	MW-43 04/12/94	MW-43 07/13/94	MW-43 07/13/94 DUPLICATE SAMPLE	MW-43 10/26/94	MW-44 01/10/94
BENZENE		1	< 0.50	0.70	< 0.50	0.55	< 0.50	< 0.50	0.52	< 0.50
ETHYL BENZENE		680	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TOLUENE		1000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
XYLENE		1750	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-3 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	SAMPLE DATE / QA	MCL ug/L	MW-45 07/20/94	MW-45 11/02/94	MW-46 07/20/94	MW-46 11/02/94	MW-47 07/21/94	MW-47 08/21/94	MW-47 11/04/94	MW-47 11/04/94 DUPLICATE SAMPLE
BENZENE		1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
ETHYL BENZENE		680	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TOLUENE		1000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
XYLENE		1750	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-3 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-48	MW-48	RB-01	RB-01	RB-01	RB-02	RB-02	RB-03
DATE		07/21/94	09/24/94	01/06/94	04/13/94	07/01/94	01/10/94	04/25/94	01/12/94
QA	MCL			RINSATE	RINSATE	RINSATE	RINSATE	RINSATE	RINSATE
	ug/L			BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
ANALYTE									
BENZENE	1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
ETHYL BENZENE	680	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TOLUENE	1000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
XYLENE	1750	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-3 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		RB-03	RB-05	RB-31	TB-01	TB-01	TB-01	TB-02	TB-02
DATE		04/26/94	01/17/94	10/31/94	01/05/94	04/12/94	10/26/94	01/06/94	04/13/94
QA	MCL	RINSATE	RINSATE	RINSATE	TRIP	TRIP	TRIP	TRIP	TRIP
	ug/L	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
ANALYTE									
BENZENE	1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
ETHYL BENZENE	680	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TOLUENE	1000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
XYLENE	1750	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-3 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		TB-02	TB-02	TB-03	TB-03	TB-03	TB-04	TB-04	TB-04
DATE		07/05/94	10/31/94	01/07/94	07/07/94	11/01/94	01/10/94	07/13/94	11/03/94
QA	MCL	TRIP	TRIP	TRIP	TRIP	TRIP	TRIP	TRIP	TRIP
	ug/L	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
ANALYTE									
BENZENE	1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
ETHYL BENZENE	680	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TOLUENE	1000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
XYLENE	1750	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-3 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		TB-05	TB-05	TB-05	TB-06	TB-06	TRIP BLANK	TRIP BLANK
DATE		01/16/94	04/25/94	07/20/94	01/12/94	04/26/94	09/14/94	12/07/94
QA	MCL	TRIP	TRIP	TRIP	TRIP	TRIP	TRIP	TRIP
	ug/L	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
ANALYTE								
BENZENE	1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.52	< 0.50
ETHYL BENZENE	680	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TOLUENE	1000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
XYLENE	1750	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-4
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
FIELD PARAMETERS AND TPH
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE	DATE	TEMPERATURE degrees C	EC-F umhos/cm	pH-F	TURBIDITY NTU	TPH/-GASOLINE ug/L (ppb)	TPH/-DIESEL ug/L (ppb)
MW-02	01/05/94	19.2	623.00	7.37	-	-	-
MW-02	04/12/94	20.3	595.00	6.99	0.62	-	-
MW-02	07/06/94	20.1	755.00	7.05	-	-	-
MW-02	10/26/94	68.7	909.00	6.98	0.97	-	-
MW-04	01/14/94	-	-	-	-	510	-
MW-04	02/11/94	-	-	-	-	330	-
MW-04	03/02/94	-	-	-	-	580	-
MW-04	04/07/94	-	-	-	-	660	-
MW-04	05/05/94	-	-	-	-	380	-
MW-04	06/08/94	-	-	-	-	415	-
MW-04	07/08/94	-	-	-	-	150	-
MW-04	09/14/94	-	-	-	-	310	-
MW-04	10/10/94	-	-	-	-	430	-
MW-04	11/08/94	-	-	-	-	470	-
MW-04	12/07/94	-	-	-	-	430	-
MW-07	01/10/94	19.3	880.00	7.71	-	-	-
MW-07	04/14/94	20.4	1020.00	7.31	1.22	-	-
MW-07	07/21/94	20.6	921.00	7.57	-	-	-
MW-07	11/02/94	67.6	871.00	7.31	0.63	-	-
MW-08	07/06/94	21.1	831.00	7.49	-	-	-
MW-11	01/05/94	18.8	990.00	7.91	-	-	-
MW-11	04/13/94	19.8	1006.00	7.38	0.41	-	-
MW-11	07/06/94	20.3	1111.00	7.36	-	-	-
MW-11	10/26/94	68.2	1111.00	7.27	1.13	-	-
MW-12	01/07/94	19.0	1341.00	7.21	-	-	-
MW-12	04/13/94	19.8	1301.00	7.32	0.37	-	-
MW-12	07/05/94	19.9	1344.00	7.38	-	-	-
MW-12	10/29/94	67.4	1169.00	7.12	0.61	-	-
MW-13	01/07/94	18.7	845.00	7.01	-	-	-
MW-13	04/13/94	19.8	836.00	6.93	0.81	-	-

DATE refers to date sampled.
- = Parameter not analyzed.

TABLE B-4 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
FIELD PARAMETERS AND TPH
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE	DATE	TEMPERATURE degrees C	EC-F umhos/cm	pH-F	TURBIDITY NTU	TPH/-GASOLINE ug/L (ppb)	TPH/-DIESEL ug/L (ppb)
MW-13	07/05/94	20.0	967.00	6.69	-	-	-
MW-13	10/29/94	67.6	881.00	6.57	1.99	-	-
MW-14	01/07/94	18.9	1119.00	7.49	-	-	-
MW-14	04/13/94	20.0	1173.00	7.39	0.59	-	-
MW-14	07/05/94	20.2	1233.00	7.31	-	-	-
MW-14	10/29/94	67.8	1113.00	7.01	1.59	-	-
MW-15	07/06/94	21.7	670.00	7.41	-	-	-
MW-16	01/06/94	19.4	974.00	7.24	-	-	-
MW-16	04/14/94	19.9	1003.00	7.29	0.29	-	-
MW-16	07/05/94	20.3	877.00	7.39	-	-	-
MW-16	10/26/94	68.8	858.00	7.48	1.13	-	-
MW-17	06/30/94	21.2	799.00	7.37	-	-	-
MW-18	01/06/94	19.3	1190.00	7.15	-	-	-
MW-18	04/14/94	20.0	1266.00	7.19	0.17	-	-
MW-18	06/30/94	20.2	1229.00	7.16	-	-	-
MW-18	10/26/94	68.3	1120.00	7.44	0.44	-	-
MW-19	01/16/94	19.8	799.00	7.51	-	-	-
MW-19	06/30/94	21.4	855.00	7.21	-	-	-
MW-20	01/06/94	19.2	1043.00	7.17	-	-	-
MW-20	04/14/94	20.1	1085.00	7.26	0.06	-	-
MW-20	06/30/94	20.4	1042.00	7.29	-	-	-
MW-20	10/26/94	68.2	1061.00	7.45	0.13	-	-
MW-21	01/16/94	19.6	843.00	7.27	-	-	-
MW-21	07/07/94	21.0	951.00	7.49	-	-	-
MW-22	01/16/94	19.7	716.00	7.31	-	-	-
MW-23	01/16/94	19.3	918.00	7.51	-	-	-

DATE refers to date sampled.
- = Parameter not analyzed.

TABLE B-4 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
FIELD PARAMETERS AND TPH
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE	DATE	TEMPERATURE degrees C	EC-F umhos/cm	pH-F	TURBIDITY NTU	TPH/-GASOLINE ug/L (ppb)	TPH/-DIESEL ug/L (ppb)
MW-23	07/13/94	21.6	871.00	7.21	-	-	-
MW-24	01/16/94	19.6	819.00	7.38	-	-	-
MW-24	07/13/94	21.3	851.00	7.17	-	-	-
MW-25	01/16/94	19.5	968.00	7.39	-	-	-
MW-25	07/07/94	22.2	969.00	7.27	-	-	-
MW-26	01/10/94	19.7	997.00	7.41	-	-	-
MW-26	04/14/94	20.3	1064.00	7.27	1.12	-	-
MW-26	07/07/94	20.7	958.00	7.33	-	-	-
MW-26	10/29/94	68.9	884.00	7.29	0.99	-	-
MW-27	01/16/94	19.3	1011.00	7.37	-	-	-
MW-27	07/07/94	20.2	1083.00	7.26	-	-	-
MW-28	01/11/94	18.9	1204.00	7.16	-	-	-
MW-28	04/25/94	19.3	1322.00	7.19	0.29	-	-
MW-28	07/01/94	19.8	1340.00	7.28	-	-	-
MW-28	10/31/94	67.6	1123.00	7.17	0.51	-	-
MW-29	01/11/94	19.8	796.00	7.21	-	-	-
MW-29	04/25/94	20.4	857.00	7.10	0.46	-	-
MW-29	07/01/94	20.8	933.00	7.36	-	-	-
MW-29	10/31/94	69.5	859.00	7.14	0.77	-	-
MW-30	01/10/94	19.3	953.00	7.27	-	-	-
MW-30	04/25/94	19.9	1015.00	7.16	0.29	-	-
MW-30	07/01/94	20.1	1028.00	7.26	-	-	-
MW-30	10/31/94	68.8	992.00	7.23	1.01	-	-
MW-31	01/11/94	19.9	972.00	7.02	-	-	-
MW-31	04/26/94	20.0	983.00	7.02	0.53	-	-
MW-31	07/01/94	20.6	1082.00	7.20	-	-	-
MW-31	10/31/94	68.7	1018.00	7.14	-	-	-
MW-32	01/14/94	-	-	-	-	< 50	-

DATE refers to date sampled.
- = Parameter not analyzed.

TABLE B-4 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
FIELD PARAMETERS AND TPH
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE	DATE	TEMPERATURE degrees C	EC-F umhos/cm	pH-F	TURBIDITY NTU	TPH/-GASOLINE ug/L (ppb)	TPH/-DIESEL ug/L (ppb)
MW-32	02/11/94	-	-	-	-	< 50	-
MW-32	03/02/94	-	-	-	-	< 50	-
MW-32	04/07/94	-	-	-	-	< 50	-
MW-32	05/05/94	-	-	-	-	< 50	-
MW-32	06/08/94	-	-	-	-	< 50	-
MW-32	07/08/94	-	-	-	-	< 50	-
MW-32	09/14/94	-	-	-	-	< 50	-
MW-32	10/10/94	-	-	-	-	< 50	-
MW-32	11/08/94	-	-	-	-	< 50	-
MW-32	12/07/94	-	-	-	-	< 50	-
MW-33	01/06/94	18.9	513.00	7.66	-	-	-
MW-33	04/13/94	19.8	556.00	7.30	1.07	-	-
MW-33	07/06/94	20.3	672.00	7.38	-	-	-
MW-33	10/26/94	68.5	667.00	7.53	0.91	-	-
MW-34	01/12/94	19.2	796.00	7.47	-	-	-
MW-34	04/26/94	19.6	856.00	7.20	1.13	-	-
MW-34	07/20/94	20.0	898.00	7.34	-	-	-
MW-34	11/01/94	67.3	919.00	7.56	0.67	-	-
MW-35	01/12/94	19.0	759.00	7.57	-	-	-
MW-35	04/26/94	19.8	964.00	7.13	0.97	-	-
MW-35	07/20/94	20.1	866.00	7.37	-	-	-
MW-35	11/01/94	67.4	801.00	7.66	0.39	-	-
MW-36	01/12/94	17.8	787.00	7.31	-	-	-
MW-36	04/26/94	18.6	789.00	7.21	2.02	-	-
MW-36	07/20/94	18.7	741.00	6.95	-	-	-
MW-36	11/04/94	65.5	740.00	7.37	1.12	-	-
MW-37	01/12/94	17.8	856.00	7.53	-	-	-
MW-37	04/26/94	18.3	882.00	7.24	1.01	-	-
MW-37	07/20/94	18.3	851.00	7.17	-	-	-
MW-37	11/04/94	65.1	843.00	7.43	1.10	-	-
MW-38	01/10/94	18.0	768.00	7.55	-	-	-

DATE refers to date sampled.
- = Parameter not analyzed.

TABLE B-4 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
FIELD PARAMETERS AND TPH
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE	DATE	TEMPERATURE degrees C	EC-F umhos/cm	pH-F	TURBIDITY NTU	TPH/-GASOLINE ug/L (ppb)	TPH/-DIESEL ug/L (ppb)
MW-38	04/15/94	18.6	852.00	7.19	0.52	-	-
MW-38	07/14/94	18.6	793.00	7.11	-	-	-
MW-38	11/01/94	64.8	770.00	7.24	0.41	-	-
MW-39	01/12/94	17.7	819.00	7.41	-	-	-
MW-39	04/15/94	18.7	879.00	7.31	0.37	-	-
MW-39	07/14/94	18.9	821.00	7.28	-	-	-
MW-39	11/01/94	65.1	781.00	7.20	0.61	-	-
MW-40	01/11/94	19.2	1323.00	7.63	-	-	-
MW-40	04/25/94	19.5	1372.00	7.14	0.19	-	-
MW-40	06/30/94	20.0	1398.00	7.28	-	-	-
MW-40	11/01/94	67.1	1080.00	7.66	0.37	-	-
MW-41	01/07/94	18.7	806.00	7.63	-	-	-
MW-41	04/13/94	19.6	783.00	7.60	0.49	-	-
MW-41	07/05/94	19.9	850.00	7.57	-	-	-
MW-41	10/26/94	67.2	866.00	7.71	0.54	-	-
MW-42	01/05/94	19.7	1086.00	7.09	-	-	-
MW-42	04/12/94	21.2	1032.00	6.78	0.82	-	-
MW-42	07/07/94	20.9	1089.00	6.94	-	-	-
MW-42	10/26/94	70.0	1108.00	7.05	0.28	-	-
MW-43	01/05/94	19.5	4500.00	6.91	-	-	-
MW-43	04/12/94	20.7	4300.00	7.06	0.59	-	-
MW-43	07/13/94	20.7	4000.00	7.11	-	-	-
MW-43	10/26/94	69.4	3840.00	7.00	1.27	-	-
MW-44	01/10/94	18.2	757.00	7.61	-	-	-
MW-44	04/15/94	18.7	817.00	7.39	0.41	-	-
MW-44	07/14/94	18.8	763.00	7.28	-	-	-
MW-44	11/01/94	65.4	734.00	7.50	0.61	-	-
MW-45	07/20/94	19.2	727.00	7.30	-	-	-
MW-45	11/02/94	67.2	7.22	6.74	113.20	-	-

DATE refers to date sampled.
- = Parameter not analyzed.

TABLE B-4 (cont.)
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
FIELD PARAMETERS AND TPH
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE	DATE	TEMPERATURE	EC-F	pH-F	TURBIDITY	TPH/-GASOLINE	TPH/-DIESEL
		degrees C	umhos/cm		NTU	ug/L (ppb)	ug/L (ppb)
MW-46	07/20/94	18.9	661.00	7.56	-	-	-
MW-46	11/01/94	65.7	668.00	7.14	3.13	-	-
MW-47	07/21/94	19.0	814.00	7.40	-	-	-
MW-47	08/21/94	19.9	914.00	7.53	-	-	-
MW-47	11/04/94	65.2	838.00	7.82	6.01	-	-
MW-48	07/21/94	20.1	589.00	7.51	-	< 50	<50
MW-48	11/03/94	67.0	570.00	7.19	1.10	< 50	<50

DATE refers to date sampled.
- = Parameter not analyzed.

Appendix C

APPENDIX C

1993 FOURTH QUARTER
GROUNDWATER MONITORING ANALYTICAL LABORATORY REPORTS

D&M LABORATORIES
ENVIRONMENTAL AND INDUSTRIAL HYGIENE SERVICES

3700 Lakeville Highway, Petaluma, CA 94954
Telephone: (707) 763-8245
FAX (707) 763-4065

DATA PACKAGE

RECEIVED
DEC 19 1994
By Rc

for

Union Pacific Railroad Company

Sacramento, CA

UPWL9411003/022/048

Donna Denney 12/16/94
Donna Denney
Project Manager

Stephanie Dobbs 12/16/94
Stephanie Dobbs
QA/QC Manager

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UPWL9411003/022/048

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Analytical Sequence: Nov 15 959
Associated Raw Data 961

Case Narrative - UPWL9411003/022/048
Water

Sample Containers:

Coolers, and trip blanks containing organic-free water were sent to the project office for sampling.

Sample Receipt:

Job# L9411003: A cooler was received on November 1, 1994. **One volatile sample was not labeled. The client identified the sample as MW-11. The temperature blank was not received, the client was informed, and we were told to proceed.** It was noted that the shipment was received cold.

Job# L9411022: A cooler was received on November 3, 1994. A temperature blank was received and it was noted on the COC that the temperature was 10° C.

Job# L9411048: A cooler was received on November 5, 1994. A temperature blank was received and it was noted on the COC that the temperature was 6° C.

A detailed inventory of the shipments was made and compared to the COCs. A unique laboratory job number was assigned to each shipment. Each sample was assigned a unique sample number. A table detailing these numbers follows this narrative.

Volatiles (EPA method 8010A/8020)

All initial calibrations were within control limits.

Job# L9411003: All continuing calibration standards on were within control limits when compared to Table 3 of SW-846, Methods 8010A and 8020, **with the following exceptions: The ending CCV on November 4 on GC-X ran at 20 mL instead of 40 mL, yielding 10 ppb instead of 20 ppb. The CCV was within acceptable limits when compared to the 20 ppb standard.**

Job# L9411022: All continuing calibration standards on were within control limits when compared to Table 3 of SW-846, Methods 8010A and 8020.

Job# L9411048: All continuing calibration standards on were within control limits when compared to Table 3 of SW-846, Methods 8010A and 8020.

The matrix spike and matrix spike duplicates were within acceptance limits.

The QC check samples (method blank spike) were within acceptance limits.

The surrogate recoveries for all samples were within acceptance limits.

All samples were analyzed within the recommended EPA holding time of 14 days.

SAMPLE CALCULATION:

Client Sample ID: MW-31

Lab Sample ID: L9411003-20

Raw Data Result File: NOV102B.08R

Analyte: 1,1-Dichloroethene

(area counts) / (calibration factor) = sample result

1149682.9 / 28891.4785 = 40 ug/L

Diesel (EPA Method SW-846 8015M)

The initial calibration was within control limits.

All continuing calibrations standards were within control limits.

The method and calibration blanks were within acceptance limits.

The matrix spike and matrix spike duplicate were within acceptance limits.

The surrogate recoveries for all samples were within acceptance range.

All samples were extracted within the EPA extraction holding time of 7 days, and analyzed within the analysis holding time of 40 days.

SAMPLE CALCULATION:

Client Sample: MW-48

Lab Sample: L9411048-2

Raw Data Result File: NOV14CB.15R

Analyte: o-Terphenyl (Surrogate)

(area counts of peak) x response factor x FV/IV = sample result

(1784388) x (4.34 E-05) x (1 ml/1.03 L) x (1 mg/1000 ug)
= 0.07519 mg/L

Atomic Absorption Metals: (EPA method 3050/7000)
As, Cr, Pb, Ni

All instrument calibrations were within control limits.

All matrix spikes, method blank spikes and duplicates were acceptable.

All samples were digested and analyzed within the EPA recommended holding time of 6 months.

SAMPLE CALCULATION:

Client Sample: MW-47

Lab Sample: L9411048-10

Raw Data Result File: N/A

Analyte: Nickel

(result from instrument in ug/L) x (1 mg/1000 ug) = sample result in mg/L

(14.65 ug/L) x (1 mg/1000 ug) = 0.015 mg/L

CLIENT ID - LAB ID
CROSS REFERENCE
UPWL9411003/022/048

DATE RECEIVED	CLIENT ID	LAB ID
01-NOV-94	MW-2	L9411003-1
	MW-43	L9411003-2
	MW-42	L9411003-3
	MW-11	L9411003-4
	MW-33	L9411003-5
	MW-16	L9411003-6
	MW-20	L9411003-7
	MW-18	L9411003-8
	MW-41	L9411003-9
	MW-141	L9411003-10
	MW-13	L9411003-11
	MW-14	L9411003-12
	MW-12	L9411003-13
	MW-26	L9411003-14
	FB-1	L9411003-15
	TB-01	L9411003-16
	MW-29	L9411003-17
	MW-30	L9411003-18
	MW-28	L9411003-19
	MW-31	L9411003-20
	ER-31	L9411003-21
	TB-02	L9411003-22
03-NOV-94	MW-38	L9411022-1
	MW-44	L9411022-2
	MW-35	L9411022-3
	MW-34	L9411022-4
	MW-134	L9411022-5
	MW-40	L9411022-6
	MW-45	L9411022-7
	MW-39	L9411022-8
	ER-39	L9411022-9
	MW-46	L9411022-10
	MW-7	L9411022-11
	MW-70	L9411022-12
	TB-03	L9411022-13
	FB-02	L9411022-14

05-NOV-94	P-10	L9411048-1
	MW-48	L9411048-2
	MW-148	L9411048-3
	ER-48	L9411048-4
	FB-3	L9411048-5
	P-11	L9411048-6
	MW-36	L9411048-7
	ER-36	L9411048-8
	MW-37	L9411048-9
	MW-47	L9411048-10
	MW-147	L9411048-11
	FB-4	L9411048-12
	TB-4	L9411048-13

L9411003

CHAIN-OF-CUSTODY RECORD

WHITE COPY - Original (Accompanies Samples) YELLOW COPY - Collector PINK COPY - Project Manager

Sample Number	DATE ~~Depth~~	Time	Sample Type	Container Type	VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	PEST/PCB 8080	PNA 610/8310	DIESEL 8015M	TPHIDQ 8015M	GAS/BTEX	TPH 418.1	PH	RCRA METALS (8)	PP METALS (13)	TTLC METALS (17)	Asbestos	FIELD NOTES:	Total Number Of Containers	Laboratory Note Number
MW-2	10-26-94	1123	W	3X40ml VOA	✓																	3
MW-43		1226	W	4X40ml VOA	✓	✓																4
MW-42		1325	W	4X40ml VOA	✓	✓																4
MW-11		1351	W	3X40ml VOA	✓																	3
MW-33		1436	W	3X40ml VOA	✓																	3
MW-16		1527	W	3X40ml VOA	✓																	3
MW-20		1606	W	3X40ml VOA	✓																	3
MW-18		1645	W	3X40ml VOA	✓																	3
MW-41		1750	W	3X40ml VOA	✓																	3
MW-141		1800	W	3X40ml VOA	✓																	3
MW-13	10-27-94	1321	W	4X40ml VOA	✓	✓																4
MW-14		1354	W	4X40ml VOA	✓	✓																4
MW-12		1431	W	4X40ml VOA	✓	✓																4
MW-26		1512	W	3X40ml VOA	✓																	3
FB-1		1600	W	4X40ml VOA	✓	✓																4
TB-01	10-26-94	0700	W	2X40ml VOA	✓	✓																2

SAMPLES RECEIVED IN GOOD CONDITION
NO BROKEN OR LEAKING CONTAINERS

COOLER CUSTODY SEALS INTACT ☐ NOT INTACT ☐ N/A

COOLER TEMPERATURE cold °C

RECEIVED
OCT 28 1994
DAMES & MOORE

RELINQUISHED BY: (Signature) DATE/TIME 10-31-94 RECEIVED BY: (Signature)

RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

Clients Name: DAMES & MOORE - ATTN: Jim BRAKE
Address: 8801 FOLSOM BLVD
City, State, Zip: SACRAMENTO, CA 95826
Phone: (916) 387-8800 Fax:
Laboratory Contact: DONNA DENNEY

CT00000

DAVID LABORATORIES
ENVIRONMENTAL AND INDUSTRIAL HYGIENE SERVICES
3700 Lakeville Highway, Petaluma, CA 94954
P.O. Box 808024, Petaluma, CA 94975-8024
Telephone: (707) 763-8245
FAX: (707) 763-4065

LABORATORY NOTES:
601/602 Samples preserved w/ HCl
Report Results to Jim BRAKE
-75 VOA's - FED.xp. -

1 of 2 ✓

JOB NO.: 00173-080-044 SHEET 1 OF 1
PROJECT UPRR SACRAMENTO
LOCATION Sutterville Rd
COLLECTOR Greg Fernald DATE OF COLLECTION 10-26-94/10-29-94

CHAIN-OF-CUSTODY RECORD

WHITE COPY - Original (Accompanies Samples) YELLOW COPY - Collector PINK COPY - Project Manager

Sample Number	~~DATE~~ ~~Depth~~	Time	Sample Type	Container Type	VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	PEST/PCB 8080	PNA 610/8310	DIESEL 8015M	TPHIDQ 8015M	GAS/BTEX	TPH 418.1	PH	RCRA METALS (8)	PP METALS (13)	TTLC METALS (17)	Asbestos	FIELD NOTES:	Total Number Of Containers	Laboratory Note Number
MW-29	10-31-94	1106	W	4X40ml VOA	✓	✓																5
MW-30	↓	1145	W	4X40ml VOA	✓	✓																4
MW-28		1221	W	4X40ml VOA	✓	✓																4
MW-31		1254	W	4X40ml VOA	✓	✓																4
ER-31		1315	W	4X40ml VOA	✓	✓																4
TB-02	↓	0700	W	2X40ml VOA	✓	✓																2

RECEIVED NOV 27

COOLER CUSTODY SEALS INTACT ☐ NOT INTACT ☐ N/A

COOLER TEMPERATURE cool °C

SAMPLES RECEIVED IN GOOD CONDITION
NO BROKEN OR LEAKING CONTAINERS

RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

10-31-94 1439

RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

Clients Name: DAMES & MOORE
Address: 8801 FOLSOM BLVD
City, State, Zip: SAC. CA, 95826
Phone: (916) 387-8800 Fax:
Laboratory Contact:

3700 Lakeville Highway, Petaluma, CA 94954
P.O. Box 808024, Petaluma, CA 94975-8024
Telephone: (707) 763-8245
FAX: (707) 763-4065

LABORATORY NOTES:

601/602 Samples preserved w/ HCl
Report Results to Jim Brake

2 of 2 VOA

JOB NO.: 00173-080-044 SHEET 1 OF 1

PROJECT UP SACRAMENTO

LOCATION Sutterville Rd

COLLECTOR Greg Fernald DATE OF COLLECTION 10-31-94

L9411022

CHAIN-OF-CUSTODY RECORD

WHITE COPY - Original (Accompanies Samples) YELLOW COPY - Collector PINK COPY - Project Manager

Sample Number	~~Depth~~ DATE	Time	Sample Type	Container Type	VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	PEST/PCB 8080	PNA 610/8310	DIESEL 8015M	TPHIDQ 8015M	GAS/BTEX	As, Cr, Ni, Pb	TPH 418.1	PH	RCRA METALS (8)	PP METALS (13)	TTLC METALS (17)	Asbestos				FIELD NOTES:	Total Number Of Containers	Laboratory Note Number
MW-38	11-1-94	1053	W	3X40ml VOA	✓																					
MW-44		1125	W	3X40ml VOA	✓																					
MW-35		1229	W	3X40ml VOA	✓																					
MW-34		1252	W	3X40ml VOA	✓																					
MW-134		1352	W	3X40ml VOA	✓																					
MW-40		1403	W	3X40ml VOA	✓																					
MW-45	11-2-94	1202	W	4X40ml VOA	✓	✓																				
MW-45	"	"	W	1X1L Poly									✓													
MW-39	11-2-94	1340	W	3X40ml VOA	✓																					
ER-39	11-2-94	1400	W	3X40ml VOA	✓																					
MW-46	11-2-94	1424	W	4X40ml VOA	✓	✓																				
MW-46	"	"	W	1X1L Poly									✓													
MW-7	11-2-94	1550	W	3X40ml VOA	✓																					
MW-70	11-2-94	1600	W	3X40ml VOA	✓																					
TB-03	11-1-94	0700	W	3X40ml VOA	✓	✓																				
TB-02	11-2-94	1610	W	4X40ml VOA	✓	✓																				

TB-02 (orig)

44 VOA's + 2 1/2 poly

COOLER CUSTODY SEALS INTACT ☐ NOT INTACT ☐ NA

COOLER TEMPERATURE 10 °C

SAMPLES RECEIVED IN GOOD CONDITION NO BROKEN OR LEAKING CONTAINERS

RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

Greg Fernald 11-2-94/ FedEx# 3904 5511

RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

LABORATORY NOTES:

601/602 Samples preserved w/ HCl

Metals Samples preserved w/ HNO3

Report Results to Jim Brake

Clients Name: DAMES & MOORE

Address: 8801 FOLSOM BLVD

City, State, Zip: SACRAMENTO, CA 95826

Phone: (916) 387-8800 Fax:

Laboratory Contact: DONNA DENNEY

JOB NO.: 00173-080-044 SHEET 1 OF 1

PROJECT UPRR SACRAMENTO

LOCATION Sutterville Rd

COLLECTOR Greg Fernald DATE OF COLLECTION 11-1/11-2-94

3700 Lakeville Highway, Petaluma, CA 94954
P.O. Box 808024, Petaluma, CA 94975-8024
Telephone: (707) 763-8245
FAX: (707) 763-4065

CURTIS & TOMPKINS LABORATORIES
ENVIRONMENTAL AND INDUSTRIAL HYGIENE SERVICES

CHAIN-OF-CUSTODY RECORD 794036

WHITE COPY - Original (Accompanies Samples) YELLOW COPY - Collector PINK COPY - Project Manager

Sample Number	~~Depth~~ DATE	Time	Sample Type	Container Type	VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	PEST/PCB 8080	PNA 610/8310	DIESEL 8015M	TPHID/O 8015M	GAS/BTEX	As, Cr, Ni, Pb	TPH 418.1	PH	RCRA METALS (8)	PP METALS (13)	TTLC METALS (17)	Asbestos	FIELD NOTES:	Total Number Of Containers	Laboratory Note Number
P-10	11-3-94	1115	W	2X1L Amber							✓												
MW-48		1200	W	2X1L Amber							✓												
MW-148		1215	W	2X1L Amber							✓												
ER-48		1230	W	2X1L Amber							✓												
FB-3		1310	W	2X1L Amber							✓												
P-11		1340	W	2X1L Amber							✓												
MW-36	11-4-94	0932	W	3X40ml VOA	✓																		
ER-36		0940	W	3X40ml VOA	✓																		
MW-37		1006	W	3X40ml VOA	✓																		
MW-47		1127	W	4X40ml VOA	✓	✓																	
MW-47		1127	W	1X1L Poly									✓										
MW-147		1140	W	4X40ml VOA	✓	✓																	
MW-147		1140	W	1X1L Poly									✓										
FB-4		1200	W	4X40ml VOA	✓	✓																	
TB-4	11-3-94	0700	W	2X40ml VOA	✓	✓																	

COOLER CUSTODY SEALS INTACT ☐ NOT INTACT ☐ N/A

COOLER TEMPERATURE 6 °C

SAMPLES RECEIVED IN GOOD CONDITION
NO BROKEN OR LEAKING CONTAINERS

RECEIVED BY LABORATORY: DATE 11/5/94 TIME 0929

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Greg Fernald	11-4-94 @ 1500	FedX 3190455892
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
	11/5/94 0929	K V Sanchez-L

Clients Name: DAMES & MOORE
Address: 8801 FOLSOM BLVD
City, State, Zip: SACRAMENTO, CA 95826
Phone (916) 387-8800 Fax:
Laboratory Contact: DONNA DENNEY

BC LABORATORIES
ENVIRONMENTAL AND INDUSTRIAL HYGIENE SERVICES
3700 Lakeville Highway, Petaluma, CA 94954
P.O. Box 808024, Petaluma, CA 94975-8024
Telephone: (707) 763-8245
FAX: (707) 763-4065

LABORATORY NOTES:

601/602 Samples Preserved w/ HCl
Metals Samples are field filtered and preserved w/ HNO3
Fed X - 23 VOA, 1 1L Amb, 2 Poly (AL)

JOB NO.: 00173-080-044 SHEET 1 OF 1

PROJECT UPRR SACRAMENTO

LOCATION Sutterville Rd

COLLECTOR Greg Fernald DATE OF COLLECTION 11-3/11-4-94

LABORATORY CHRONICLE - UPWL9411003

Sample Receipt:

Job # L9411003: The water samples were received by D & M Laboratories on November 1, 1994. Upon receipt, all samples were stored by the sample custodian, Debbie Powell. Waters for 8010A/8020 analysis were stored in the Volatiles refrigerator.

Job # L9411022: The water samples were received by D & M Laboratories on November 3, 1994. Upon receipt, all samples were stored by the sample custodian, Tami Robbins. Waters for metals analysis were stored in the walk-in refrigerator. Waters for 8010A/8020 analysis were stored in the Volatiles refrigerator.

Job # L9411048: The water samples were received by D & M Laboratories on November 5, 1994. Upon receipt, all samples were stored by the sample custodian, Katherine Sauceda. Waters for diesel and metals analysis were stored in the walk-in refrigerator. Waters for 8010A/8020 analysis were stored in the Volatiles refrigerator.

8010A/8020 Analysis:

Job # L9411003: The samples were logged out for analysis on November 2, 3, 4, 8, 9 and 11, 1994 by Dena Meierhenry and returned on the same day.

Job # L9411022: The samples were logged out for analysis on November 9, 11 and 12, 1994 by Dena Meierhenry and returned on the same day.

Job # L9411048: The samples were logged out for analysis on November 14 and 15, 1994 by Dena Meierhenry and returned on the same day.

Diesel Analysis:

Job # L9411048: The samples were logged out for extraction from the walk-in refrigerator on November 9, 1994 by Debbie Leibensberger. The bottles were returned to the walk-in on the following day.

Metals Analysis:

Job # L9411022: The samples were logged out for metals digestion from the walk-in by Priscilla Robinson on November 7, 1994 and returned the same day.

Refrigerator Location: 601/602

Job Number	Login Date	Init.	Location	Logout Date	Init.	Login Date	Logout Date	Init.	Login Date	Logout Date	Init.	Login Date	Disposal Date	Init.
L94 11 001														
002														
003	11-1	DP	Box + Gilderform	11/2	DM	11/7	11/3	DM	11/3	11/4	DM	11/4		
004	11-1	DP	TOP SHEETS	11/3	DM	11/8	11/4	DM	11/4					
005														
006														
007														
008														
009														
010														
011														
012	11-2	MM	R	11/4	DM	11/4								
013														
014														
015														
016														
017														
018														
019														
020														

003

11/8 (DM) 11/8 11/9 (DM) 11/9 11/11 (DM) 11/1

Q50000

Refrigerator Location: 601/602

Job Number	Login Date	Init.	Location	Logout Date	Init.	Login Date	Logout Date	Init.	Login Date	Logout Date	Init.	Login Date	Disposal Date	Init.
L9411 021	11/3/94	TMR	R	11/10	[illegible]	11/10								
022	11/3/94	TMR	R	11/9	[illegible]	"/7	11/11	[illegible]	11/11	11/12	[illegible]	11/12		
023														
024														
025														
026														
027														
028														
029														
030														
031														
032														
033														
034														
035														
036														
037														
038														
039	11/8/94	KVS	R3											
040														

00011

Refrigerator Location: WALK-IN

Job Number	Login Date	Init.	Location	Logout Date	Init.	Login Date	Logout Date	Init.	Login Date	Logout Date	Init.	Login Date	Disposal Date	Init.
L94 // 021	11/7	plh	A4	11/-/14	ST	11-9-94	11/7	plh	11/7	11/14	nt	11/14		
022	11/4/94	mr	A2	~~?~~	~~ST~~	~~11~~	11/7	plh	11/7					
023														
024														
025														
026														
027	11/5	KVS	B3	11/11	IT	11/11								
028	11/4	mr	A2											
029														
030														
031	11/7	plh	A3	11/7	plh		11/7	~~plh~~	11/7	11/9	LL	11/9		
032	11/4/94	mr	F	11/5	~~ST~~	11/5	11/7	14	11/7	11/11	KT	11/7		
033	11/4	mr	C5	11/14	(D)	11/14	11/14	(D)	11/14					
034														
035	11/8/94	KVS	B2	11/11	km	11								
036	11/4	mr	A2	11/11	(D)	11/7	11/7	(D)	11/7	11/11	km	11/11		
037	11/8/94	KVS	B4											
038														
039	11/10/94	mr	B2											
040	11/4/	mr	A2	11/7	14	11/7	11/7	(D)	11/7	11/8	LL	11/8		

032 F 11/7 RL 11/7 11/10 HH 11/11 ?? 11/14 12/5 HH 12/5

031 A3 —— 11/10 JF 11/10 11/14 LL 11/14 11/15 EL 11/15

040 11/10 RLH ~~RL~~ 11/10 11/14/94 mr 11/11 km 11/11 11/14 (D) 11/4

00008

Refrigerator Location: 601/602

Job Number	Login Date	Init.	Location	Logout Date	Init.	Login Date	Logout Date	Init.	Login Date	Logout Date	Init.	Login Date	Disposal Date	Init.
L94/1 041														
042														
043														
044														
045														
046														
047														
048	11/5/94	KNB	R3	11/14	[illegible]	11/14	11/15	[illegible]	11/15					
049														
050														
051	11/7	DP	FOAM-R	11/10	RCH	—								
052														
053														
054														
055														
056														
057														
058														
059	11-7	DP	R-	11/9	[illegible]	11/9	11/10	[illegible]	11/10	11/11	[illegible]	11/11		
060														

Refrigerator Location: WALK-IN

Job Number	Login Date	Init.	Location	Logout Date	Init.	Login Date	Logout Date	Init.	Login Date	Logout Date	Init.	Login Date	Disposal Date	Init.
L94// 041														
042														
043														
044		DP.	~~A-4~~ Floor (A)	11-9	~~HH~~	11-9	11-11	~~HH~~	11-11	11-12	~~HH~~	11-12		
045														
046	11/5/94	KVS	B3											
047														
048	11/8/94	KVS	B4	11-9	DP	11/10	11/14	[illegible]	11/14					
049			Floor (A)	11-14	~~HH~~	11-14	11-15	~~HH~~	11-15					
050	11/8/94	MR	A 3	11/14	[illegible]	11.14	11/14	RL	11/14	~~11/14~~	~~[illegible]~~	~~11/14~~		
051	11-8	DP	A-2=5 o'clock E-8 [illegible]	11/9	RL	11/9	11/9	RLH	11/9	11/9	RL	11/9		
052														
053														
054														
055														
056														
057	[illegible]	[illegible]	[illegible]											
058	11/8/94	KVS	B2	11/10	RLH	11/10	11/14	[illegible]	11/14	11/15	LL	11/15		
059														
060	11/8/94	KVS	B2	11/9	DL	11/10								

cooler DP.

DP. cooler

11051 11-10 HH 11/11 [illegible] 11/11 11/11 wsh 11/11 11/14 DP 11/14 11/14/[illegible] 11-14

11044 11-14 HH 11-14

11:51 11-16 RL 11-16 DP 11/16 12/5 HH 12/5

11/15/94 DP 11/15/9[illegible]

020000

METHOD SUMMARIES AND REFERENCES

Halogenated Volatiles by EPA Method 8010A:

Reference: SW846, 3rd Edition, Final Update 1, Revision 1, July 1992

Summary: Various halogenated volatile organic compounds are analyzed using a gas chromatograph equipped with an electrolytic conductivity detector (ELCD). The water samples are introduced through Purge-and-Trap EPA Method 5030. All positive responses are confirmed by the use of a second column.

Aromatic Volatiles by EPA Method 8020:

Reference: SW846, 3rd Edition, Final Update 1, Revision 1, July 1992

Summary: Various aromatic volatile organic compounds are analyzed using a gas chromatograph equipped with a photoionization detector (PID). The water samples are introduced through the Purge-and-Trap EPA Method 5030. The detector is in series with the ELCD allowing for simultaneous analysis of 8010 and 8020 compounds. All positive responses are confirmed by the use of a second column.

Diesel by EPA Method 8015A,Modified:

Reference: SW846, 3rd Edition, Final Update 1, Revision 1, July 1992

Summary: Diesel is analyzed using a gas chromatograph equipped with a flame ionization detector (FID). The water samples are extracted with dichloromethane. The extract is directly injected into the gas chromatograph. Calculations are based on area summations of diesel peaks.

Metals by Atomic Absorption EPA Method 7000A:

Reference: SW846, 3rd Edition, Final Update 1, Revision 1, July 1992

Summary: All samples undergo digestion before being analyzed by Atomic Absorption (AA). In furnace AA, the digest is placed in a graphite tube, evaporated to dryness, charred and atomized. A light beam is directed through the vapor and onto a detector that measures the amount of absorbed light.

DATA REPORT

L9411003
L9411022
L9411048

UPWL9411003/022/048

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-2
Lab Id: L9411003-1

Collected: 26-OCT-94
Received: 01-NOV-94
Reported: 11-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Bromoform	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Bromomethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Chlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Chloroethane	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Chloroform	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Chloromethane	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Methylene Chloride	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Trichloroethene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Surrogate:					
4-Bromofluorobenzene	91.6	-	%	04-NOV-94	04-NOV-94

Comments: None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-43
Lab Id: L9411003-2

Collected: 26-OCT-94
Received: 01-NOV-94
Reported: 11-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020					
Benzene	0.52	0.50	ug/L	04-NOV-94	04-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Bromoform	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Bromomethane	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Chlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Chloroethane	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Chloroform	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Chloromethane	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,1-Dichloroethane	200	2.5	ug/L	09-NOV-94	09-NOV-94
1,2-Dichloroethane	2.2	0.50	ug/L	04-NOV-94	04-NOV-94
1,1-Dichloroethene	15.	2.5	ug/L	09-NOV-94	09-NOV-94
1,2-Dichloroethene (Total)	10.	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Methylene Chloride	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Tetrachloroethene	1.4	0.50	ug/L	04-NOV-94	04-NOV-94
Toluene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,1,2-Trichloroethane	2.1	0.50	ug/L	04-NOV-94	04-NOV-94
Trichloroethene	6.4	0.50	ug/L	04-NOV-94	04-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Vinyl Chloride	9.2	1.0	ug/L	04-NOV-94	04-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
-	-				
Surrogate:	-				
4-Bromofluorobenzene (8010)	105.	-	%	04-NOV-94	04-NOV-94
4-Bromofluorobenzene (8020)	102.	-	%	04-NOV-94	04-NOV-94
-	-				
Comments:	None.				
-	-				
-	-				
-	-				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-42
Lab Id: L9411003-3

Collected: 26-OCT-94
Received: 01-NOV-94
Reported: 11-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020					
Benzene	0.70	0.50	ug/L	04-NOV-94	04-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Bromoform	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Bromomethane	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Chlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Chloroethane	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Chloroform	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Chloromethane	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,1-Dichloroethane	89.	2.5	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,1-Dichloroethene	50.	2.5	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Methylene Chloride	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Tetrachloroethene	3.6	0.50	ug/L	04-NOV-94	04-NOV-94
Toluene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,1,1-Trichloroethane	2.8	0.50	ug/L	04-NOV-94	04-NOV-94
1,1,2-Trichloroethane	0.88	0.50	ug/L	04-NOV-94	04-NOV-94
Trichloroethene	2.3	0.50	ug/L	04-NOV-94	04-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
-	-				
Surrogate:	-				
4-Bromofluorobenzene (8010)	102.	-	%	04-NOV-94	04-NOV-94
4-Bromofluorobenzene (8020)	102.	-	%	04-NOV-94	04-NOV-94
-	-				
Comments:	None.				
-	-				
-	-				
-	-				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-11
Lab Id: L9411003-4

Collected: 26-OCT-94
Received: 01-NOV-94
Reported: 11-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Bromoform	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Bromomethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Chlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Chloroethane	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Chloroform	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Chloromethane	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,1-Dichloroethane	0.72	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,1-Dichloroethene	8.6	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Methylene Chloride	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Trichloroethene	0.70	0.50	ug/L	04-NOV-94	04-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
-	-				
Surrogate:	-				
4-Bromofluorobenzene	92.6	-	%	04-NOV-94	04-NOV-94
-	-				
Comments:	None				
-	-				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-33
Lab Id: L9411003-5

Collected: 26-OCT-94
Received: 01-NOV-94
Reported: 14-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Bromoform	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Bromomethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Chlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Chloroethane	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Chloroform	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Chloromethane	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,1-Dichloroethane	1.6	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,1-Dichloroethene	66.	2.5	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Methylene Chloride	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
1,1,1-Trichloroethane	0.67	0.50	ug/L	04-NOV-94	04-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Trichloroethene	ND <	0.50	ug/L	04-NOV-94	04-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	04-NOV-94	04-NOV-94
Surrogate: 4-Bromofluorobenzene	91.6	-	%	04-NOV-94	04-NOV-94

Comments: None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-16
Lab Id: L9411003-6

Collected: 26-OCT-94
Received: 01-NOV-94
Reported: 11-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Bromoform	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Bromomethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Chlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Chloroethane	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Chloroform	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Chloromethane	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Methylene Chloride	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Trichloroethene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Surrogate:					
4-Bromofluorobenzene	106.	-	%	05-NOV-94	05-NOV-94

Comments: None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-20
Lab Id: L9411003-7

Collected: 26-OCT-94
Received: 01-NOV-94
Reported: 11-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Bromoform	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Bromomethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Chlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Chloroethane	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Chloroform	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Chloromethane	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Methylene Chloride	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Trichloroethene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Surrogate: 4-Bromofluorobenzene	96.6	-	%	05-NOV-94	05-NOV-94

Comments: None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-18
Lab Id: L9411003-8

Collected: 26-OCT-94
Received: 01-NOV-94
Reported: 11-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Bromoform	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Bromomethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Chlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Chloroethane	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Chloroform	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Chloromethane	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1-Dichloroethene	2.7	0.50	ug/L	05-NOV-94	05-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Methylene Chloride	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Trichloroethene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
-	-				
Surrogate:	-				
4-Bromofluorobenzene	85.1	-	%	05-NOV-94	05-NOV-94
-	-				
Comments:	None				
-	-				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-41
Lab Id: L9411003-9

Collected: 26-OCT-94
Received: 01-NOV-94
Reported: 11-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Bromoform	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Bromomethane	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Chlorobenzene	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Chloroethane	ND <	1.0	ug/L	03-NOV-94	03-NOV-94
Chloroform	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Chloromethane	ND <	1.0	ug/L	03-NOV-94	03-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Methylene Chloride	ND <	1.0	ug/L	03-NOV-94	03-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Trichloroethene	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	03-NOV-94	03-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	03-NOV-94	03-NOV-94
Surrogate:					
4-Bromofluorobenzene	101.	-	%	03-NOV-94	03-NOV-94

Comments: None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-141
Lab Id: L9411003-10

Collected: 26-OCT-94
Received: 01-NOV-94
Reported: 11-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Bromoform	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Bromomethane	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Chlorobenzene	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Chloroethane	ND <	1.0	ug/L	03-NOV-94	03-NOV-94
Chloroform	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Chloromethane	ND <	1.0	ug/L	03-NOV-94	03-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Methylene Chloride	ND <	1.0	ug/L	03-NOV-94	03-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Trichloroethene	ND <	0.50	ug/L	03-NOV-94	03-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	03-NOV-94	03-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	03-NOV-94	03-NOV-94
Surrogate:					
4-Bromofluorobenzene	100.	-	%	03-NOV-94	03-NOV-94

Comments: None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-13
Lab Id: L9411003-11

Collected: 29-OCT-94
Received: 01-NOV-94
Reported: 11-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020					
Benzene	2200	50.	ug/L	05-NOV-94	05-NOV-94
Bromodichloromethane	ND <	5.0	ug/L	05-NOV-94	05-NOV-94
Bromoform	ND <	5.0	ug/L	05-NOV-94	05-NOV-94
Bromomethane	ND <	10.	ug/L	05-NOV-94	05-NOV-94
Carbon Tetrachloride	ND <	5.0	ug/L	05-NOV-94	05-NOV-94
Chlorobenzene	ND <	5.0	ug/L	05-NOV-94	05-NOV-94
Chloroethane	ND <	10.	ug/L	05-NOV-94	05-NOV-94
Chloroform	ND <	5.0	ug/L	05-NOV-94	05-NOV-94
Chloromethane	ND <	10.	ug/L	05-NOV-94	05-NOV-94
Dibromochloromethane	ND <	5.0	ug/L	05-NOV-94	05-NOV-94
1,2-Dichlorobenzene	ND <	5.0	ug/L	05-NOV-94	05-NOV-94
1,3-Dichlorobenzene	ND <	5.0	ug/L	05-NOV-94	05-NOV-94
1,4-Dichlorobenzene	ND <	5.0	ug/L	05-NOV-94	05-NOV-94
1,1-Dichloroethane	40.	5.0	ug/L	05-NOV-94	05-NOV-94
1,2-Dichloroethane	39.	5.0	ug/L	05-NOV-94	05-NOV-94
1,1-Dichloroethene	99.	5.0	ug/L	05-NOV-94	05-NOV-94
1,2-Dichloroethene (Total)	6.9	5.0	ug/L	05-NOV-94	05-NOV-94
1,2-Dichloropropane	ND <	5.0	ug/L	05-NOV-94	05-NOV-94
Cis-1,3-Dichloropropene	ND <	5.0	ug/L	05-NOV-94	05-NOV-94
Trans-1,3-Dichloropropene	ND <	5.0	ug/L	05-NOV-94	05-NOV-94
Ethyl Benzene	130	5.0	ug/L	05-NOV-94	05-NOV-94
Methylene Chloride	ND <	10.	ug/L	05-NOV-94	05-NOV-94
1,1,2,2-Tetrachloroethane	ND <	5.0	ug/L	05-NOV-94	05-NOV-94
Tetrachloroethene	ND <	5.0	ug/L	05-NOV-94	05-NOV-94
Toluene	100	5.0	ug/L	05-NOV-94	05-NOV-94
1,1,1-Trichloroethane	ND <	5.0	ug/L	05-NOV-94	05-NOV-94
1,1,2-Trichloroethane	ND <	5.0	ug/L	05-NOV-94	05-NOV-94
Trichloroethene	ND <	5.0	ug/L	05-NOV-94	05-NOV-94
Trichlorofluoromethane	ND <	10.	ug/L	05-NOV-94	05-NOV-94
Vinyl Chloride	ND <	10.	ug/L	05-NOV-94	05-NOV-94
Xylenes (Total)	96.	5.0	ug/L	05-NOV-94	05-NOV-94
-	-				
Surrogate:	-				
4-Bromofluorobenzene (8010)	105.	-	%	05-NOV-94	05-NOV-94
4-Bromofluorobenzene (8020)	100.	-	%	05-NOV-94	05-NOV-94
-	-				
Comments:	See footnote 16.				
-	-				
-	-				
-	-				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-14
Lab Id: L9411003-12

Collected: 29-OCT-94
Received: 01-NOV-94
Reported: 11-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020					
Benzene	1.4	0.50	ug/L	02-NOV-94	02-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Bromoform	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Bromomethane	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Chlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Chloroethane	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Chloroform	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Chloromethane	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,1-Dichloroethane	7.0	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,1-Dichloroethene	36.	2.5	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Methylene Chloride	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Toluene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,1,1-Trichloroethane	0.55	0.50	ug/L	02-NOV-94	02-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Trichloroethene	6.2	0.50	ug/L	02-NOV-94	02-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
-	-				
Surrogate:	-				
4-Bromofluorobenzene (8010)	105.	-	%	02-NOV-94	02-NOV-94
4-Bromofluorobenzene (8020)	99.1	-	%	02-NOV-94	02-NOV-94
-	-				
Comments:	None.				
-	-				
-	-				
-	-				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-12
Lab Id: L9411003-13

Collected: 29-OCT-94
Received: 01-NOV-94
Reported: 11-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020					
Benzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Bromoform	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Bromomethane	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Chlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Chloroethane	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Chloroform	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Chloromethane	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,1-Dichloroethane	12.	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,1-Dichloroethene	35.	2.5	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Methylene Chloride	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Toluene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Trichloroethene	3.6	0.50	ug/L	02-NOV-94	02-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Surrogate:					
4-Bromofluorobenzene (8010)	111.	-	%	02-NOV-94	02-NOV-94
4-Bromofluorobenzene (8020)	99.6	-	%	02-NOV-94	02-NOV-94
Comments:	None.				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-26
Lab Id: L9411003-14

Collected: 29-OCT-94
Received: 01-NOV-94
Reported: 11-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Bromoform	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Bromomethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Chlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Chloroethane	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Chloroform	1.9	0.50	ug/L	02-NOV-94	02-NOV-94
Chloromethane	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,1-Dichloroethane	7.1	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,1-Dichloroethene	12.	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Methylene Chloride	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,1,1-Trichloroethane	1.1	0.50	ug/L	02-NOV-94	02-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Trichloroethene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Surrogate: 4-Bromofluorobenzene	97.5	-	%	02-NOV-94	02-NOV-94

Comments: None

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ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: FB-1
Lab Id: L9411003-15

Collected: 29-OCT-94
Received: 01-NOV-94
Reported: 12-DEC-94

Parameter	Value		RDL	Units	Extracted	Analyzed
8010/8020						
Benzene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Bromodichloromethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Bromoform	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Bromomethane	ND	<	1.0	ug/L	02-NOV-94	02-NOV-94
Carbon Tetrachloride	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Chlorobenzene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Chloroethane	ND	<	1.0	ug/L	02-NOV-94	02-NOV-94
Chloroform	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Chloromethane	ND	<	1.0	ug/L	02-NOV-94	02-NOV-94
Dibromochloromethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichlorobenzene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,3-Dichlorobenzene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,4-Dichlorobenzene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,1-Dichloroethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloroethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,1-Dichloroethene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloroethene (Total)	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloropropane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Cis-1,3-Dichloropropene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Trans-1,3-Dichloropropene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Ethyl Benzene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Methylene Chloride	ND	<	1.0	ug/L	02-NOV-94	02-NOV-94
1,1,2,2-Tetrachloroethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Tetrachloroethene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Toluene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,1,1-Trichloroethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,1,2-Trichloroethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Trichloroethene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Trichlorofluoromethane	ND	<	1.0	ug/L	02-NOV-94	02-NOV-94
Vinyl Chloride	ND	<	1.0	ug/L	02-NOV-94	02-NOV-94
Xylenes (Total)	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
-	-					
Surrogate:	-					
4-Bromofluorobenzene (8010)	91.3		-	%	02-NOV-94	02-NOV-94
4-Bromofluorobenzene (8020)	100.		-	%	02-NOV-94	02-NOV-94
-	-					
Comments:	None.					
-	-					
-	-					
-	-					

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: TB-01
Lab Id: L9411003-16

Collected: 26-OCT-94
Received: 01-NOV-94
Reported: 11-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020					
Benzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Bromoform	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Bromomethane	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Chlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Chloroethane	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Chloroform	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Chloromethane	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Methylene Chloride	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Toluene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Trichloroethene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
-	-				
Surrogate:	-				
4-Bromofluorobenzene (8010)	90.3	-	%	02-NOV-94	02-NOV-94
4-Bromofluorobenzene (8020)	99.8	-	%	02-NOV-94	02-NOV-94
-	-				
Comments:	None.				
-	-				
-	-				
-	-				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-29
Lab Id: L9411003-17

Collected: 31-OCT-94
Received: 01-NOV-94
Reported: 11-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020					
Benzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Bromoform	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Bromomethane	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Carbon Tetrachloride	1.3	0.50	ug/L	02-NOV-94	02-NOV-94
Chlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Chloroethane	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Chloroform	1.7	0.50	ug/L	02-NOV-94	02-NOV-94
Chloromethane	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloroethane	1.5	0.50	ug/L	02-NOV-94	02-NOV-94
1,1-Dichloroethene	3.4	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Methylene Chloride	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Toluene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Trichloroethene	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	02-NOV-94	02-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	02-NOV-94	02-NOV-94
-	-				
Surrogate:	-				
4-Bromofluorobenzene (8010)	92.9	-	%	02-NOV-94	02-NOV-94
4-Bromofluorobenzene (8020)	99.1	-	%	02-NOV-94	02-NOV-94
-	-				
Comments:	None.				
-	-				
-	-				
-	-				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-30
Lab Id: L9411003-18

Collected: 31-OCT-94
Received: 01-NOV-94
Reported: 11-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020					
Benzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Bromoform	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Bromomethane	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Chlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Chloroethane	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Chloroform	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Chloromethane	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1-Dichloroethane	2.0	0.50	ug/L	05-NOV-94	05-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1-Dichloroethene	45.	2.5	ug/L	05-NOV-94	05-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Methylene Chloride	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Toluene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Trichloroethene	8.3	0.50	ug/L	05-NOV-94	05-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
-	-				
Surrogate:	-				
4-Bromofluorobenzene (8010)	97.4	-	%	05-NOV-94	05-NOV-94
4-Bromofluorobenzene (8020)	102.	-	%	05-NOV-94	05-NOV-94
-	-				
Comments:	None.				
-	-				
-	-				
-	-				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-28
Lab Id: L9411003-19

Collected: 31-OCT-94
Received: 01-NOV-94
Reported: 11-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020					
Benzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Bromoform	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Bromomethane	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Chlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Chloroethane	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Chloroform	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Chloromethane	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1-Dichloroethane	6.3	0.50	ug/L	05-NOV-94	05-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1-Dichloroethene	7.0	0.50	ug/L	05-NOV-94	05-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Methylene Chloride	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Toluene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Trichloroethene	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	05-NOV-94	05-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	05-NOV-94	05-NOV-94
-	-				
Surrogate:	-				
4-Bromofluorobenzene (8010)	98.8	-	%	05-NOV-94	05-NOV-94
4-Bromofluorobenzene (8020)	102.	-	%	05-NOV-94	05-NOV-94
-	-				
Comments:	None.				
-	-				
-	-				
-	-				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-31
Lab Id: L9411003-20

Collected: 31-OCT-94
Received: 01-NOV-94
Reported: 14-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020					
Benzene	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
Bromoform	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
Bromomethane	ND <	1.0	ug/L	10-NOV-94	10-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
Chlorobenzene	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
Chloroethane	ND <	1.0	ug/L	10-NOV-94	10-NOV-94
Chloroform	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
Chloromethane	ND <	1.0	ug/L	10-NOV-94	10-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
1,1-Dichloroethane	2.0	0.50	ug/L	10-NOV-94	10-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
1,1-Dichloroethene	40.	0.50	ug/L	10-NOV-94	10-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
Methylene Chloride	ND <	1.0	ug/L	10-NOV-94	10-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
Toluene	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
1,1,1-Trichloroethane	0.78	0.50	ug/L	10-NOV-94	10-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
Trichloroethene	11.	0.50	ug/L	10-NOV-94	10-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	10-NOV-94	10-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	10-NOV-94	10-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	10-NOV-94	10-NOV-94
-	-				
Surrogate:	-				
4-Bromofluorobenzene (8010)	108.	-	%	10-NOV-94	10-NOV-94
4-Bromofluorobenzene (8020)	85.5	-	%	10-NOV-94	10-NOV-94
-	-				
Comments:	None.				
-	-				
-	-				
-	-				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: ER-31
Lab Id: L9411003-21

Collected: 31-OCT-94
Received: 01-NOV-94
Reported: 14-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020					
Benzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromoform	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromomethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Chlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Chloroethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Chloroform	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Chloromethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Methylene Chloride	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Toluene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trichloroethene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
-	-				
Surrogate:	-				
4-Bromofluorobenzene (8010)	93.4	-	%	11-NOV-94	11-NOV-94
4-Bromofluorobenzene (8020)	101.	-	%	11-NOV-94	11-NOV-94
-	-				
Comments:	None.				
-	-				
-	-				
-	-				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: TB-02
Lab Id: L9411003-22

Collected: 31-OCT-94
Received: 01-NOV-94
Reported: 14-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020					
Benzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromoform	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromomethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Chlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Chloroethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Chloroform	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Chloromethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Methylene Chloride	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Toluene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trichloroethene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Surrogate:					
4-Bromofluorobenzene (8010)	90.0	-	%	11-NOV-94	11-NOV-94
4-Bromofluorobenzene (8020)	101.	-	%	11-NOV-94	11-NOV-94
Comments:	None.				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-38
Lab Id: L9411022-1

Collected: 01-NOV-94
Received: 03-NOV-94
Reported: 16-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromoform	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromomethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Carbon Tetrachloride	1.0	0.50	ug/L	11-NOV-94	11-NOV-94
Chlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Chloroethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Chloroform	1.6	0.50	ug/L	11-NOV-94	11-NOV-94
Chloromethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethane	4.9	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethane	0.54	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethene	150	5.0	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Methylene Chloride	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,1-Trichloroethane	3.5	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trichloroethene	6.3	0.50	ug/L	11-NOV-94	11-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Surrogate:					
4-Bromofluorobenzene	84.2	-	%	11-NOV-94	11-NOV-94

Comments: None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-44
Lab Id: L9411022-2

Collected: 01-NOV-94
Received: 03-NOV-94
Reported: 16-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromoform	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromomethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Carbon Tetrachloride	5.1	0.50	ug/L	11-NOV-94	11-NOV-94
Chlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Chloroethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Chloroform	2.8	0.50	ug/L	11-NOV-94	11-NOV-94
Chloromethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethane	1.7	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Methylene Chloride	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trichloroethene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Surrogate:					
4-Bromofluorobenzene	102.		%	11-NOV-94	11-NOV-94

Comments: None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-35
Lab Id: L9411022-3

Collected: 01-NOV-94
Received: 03-NOV-94
Reported: 16-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromoform	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromomethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Chlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Chloroethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Chloroform	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Chloromethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethene	3.6	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Methylene Chloride	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trichloroethene	1.5	0.50	ug/L	11-NOV-94	11-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Surrogate:					
4-Bromofluorobenzene	96.6	-	%	11-NOV-94	11-NOV-94

Comments: None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-34
Lab Id: L9411022-4

Collected: 01-NOV-94
Received: 03-NOV-94
Reported: 16-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromoform	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromomethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Chlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Chloroethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Chloroform	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Chloromethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethane	5.4	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethene	86.	2.5	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Methylene Chloride	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Tetrachloroethene	0.52	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,1-Trichloroethane	1.5	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trichloroethene	15.	0.50	ug/L	11-NOV-94	11-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Surrogate:					
4-Bromofluorobenzene	89.2	-	%	11-NOV-94	11-NOV-94

Comments: None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-134
Lab Id: L9411022-5

Collected: 01-NOV-94
Received: 03-NOV-94
Reported: 16-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Bromoform	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Bromomethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Chlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Chloroethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Chloroform	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Chloromethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1-Dichloroethane	5.4	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1-Dichloroethene	81.	2.5	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Methylene Chloride	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1,1-Trichloroethane	1.4	0.50	ug/L	12-NOV-94	12-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trichloroethene	13.	0.50	ug/L	12-NOV-94	12-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Surrogate:					
4-Bromofluorobenzene	78.9	-	%	12-NOV-94	12-NOV-94

Comments: None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-40
Lab Id: L9411022-6

Collected: 01-NOV-94
Received: 03-NOV-94
Reported: 16-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Bromoform	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Bromomethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Chlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Chloroethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Chloroform	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Chloromethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1-Dichloroethane	17.	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1-Dichloroethene	160	2.5	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Methylene Chloride	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1,1-Trichloroethane	1.8	0.50	ug/L	12-NOV-94	12-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trichloroethene	21.	0.50	ug/L	12-NOV-94	12-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Surrogate: 4-Bromofluorobenzene	87.0	-	%	12-NOV-94	12-NOV-94

Comments: None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-45
Lab Id: L9411022-7

Collected: 02-NOV-94
Received: 03-NOV-94
Reported: 12-DEC-94

Parameter	Value	RDL	Units	Extracted	Analyzed
Metals by Graphite Furnace/Cold Vapor/Flame AA					
Arsenic- EPA 7060	ND<	0.0050	mg/L	07-NOV-94	08-NOV-94
Chromium - EPA 7191	0.012	0.0050	mg/L	07-NOV-94	08-NOV-94
Lead - EPA 7421	ND<	0.0030	mg/L	07-NOV-94	08-NOV-94
Nickel - EPA 7521	0.48	0.10	mg/L	07-NOV-94	08-NOV-94
Comments:					
8010/8020					
Benzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromoform	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromomethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Carbon Tetrachloride	1.4	0.50	ug/L	11-NOV-94	11-NOV-94
Chlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Chloroethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Chloroform	1.7	0.50	ug/L	11-NOV-94	11-NOV-94
Chloromethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethane	0.76	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Methylene Chloride	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Toluene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trichloroethene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Surrogate:					
4-Bromofluorobenzene (8010)	93.3	-	%	11-NOV-94	11-NOV-94
4-Bromofluorobenzene (8020)	100.	-	%	11-NOV-94	11-NOV-94
Comments:	None.				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-39
Lab Id: L9411022-8

Collected: 02-NOV-94
Received: 03-NOV-94
Reported: 16-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Bromoform	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Bromomethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Carbon Tetrachloride	1.8	0.50	ug/L	12-NOV-94	12-NOV-94
Chlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Chloroethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Chloroform	2.5	0.50	ug/L	12-NOV-94	12-NOV-94
Chloromethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1-Dichloroethane	3.3	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloroethane	0.91	0.50	ug/L	12-NOV-94	12-NOV-94
1,1-Dichloroethene	64.	2.5	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Methylene Chloride	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1,1-Trichloroethane	2.9	0.50	ug/L	12-NOV-94	12-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trichloroethene	2.3	0.50	ug/L	12-NOV-94	12-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Surrogate: 4-Bromofluorobenzene	87.6	-	%	12-NOV-94	12-NOV-94

Comments: None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: ER-39
Lab Id: L9411022-9

Collected: 02-NOV-94
Received: 03-NOV-94
Reported: 16-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Bromoform	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Bromomethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Chlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Chloroethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Chloroform	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Chloromethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Methylene Chloride	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trichloroethene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Surrogate: 4-Bromofluorobenzene	76.0	-	%	12-NOV-94	12-NOV-94

Comments: None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-46
Lab Id: L9411022-10

Collected: 02-NOV-94
Received: 03-NOV-94
Reported: 12-DEC-94

Parameter	Value	RDL	Units	Extracted	Analyzed
Metals by Graphite Furnace/Cold Vapor/Flame AA					
Arsenic- EPA 7060	ND<	0.0050	mg/L	07-NOV-94	08-NOV-94
Chromium - EPA 7191	0.0065	0.0050	mg/L	07-NOV-94	08-NOV-94
Lead - EPA 7421	ND<	0.0030	mg/L	07-NOV-94	08-NOV-94
Nickel - EPA 7521	0.074	0.025	mg/L	07-NOV-94	08-NOV-94
Comments:					
8010/8020					
Benzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Bromoform	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Bromomethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Carbon Tetrachloride	0.79	0.50	ug/L	12-NOV-94	12-NOV-94
Chlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Chloroethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Chloroform	2.2	0.50	ug/L	12-NOV-94	12-NOV-94
Chloromethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Methylene Chloride	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Toluene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trichloroethene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Surrogate:					
4-Bromofluorobenzene (8010)	82.0	-	%	12-NOV-94	12-NOV-94
4-Bromofluorobenzene (8020)	96.6	-	%	12-NOV-94	12-NOV-94
Comments:	None.				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: James & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-7
Lab Id: L9411022-11

Collected: 02-NOV-94
Received: 03-NOV-94
Reported: 16-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Bromoform	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Bromomethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Chlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Chloroethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Chloroform	2.0	0.50	ug/L	12-NOV-94	12-NOV-94
Chloromethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1-Dichloroethane	0.62	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1-Dichloroethene	5.4	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Methylene Chloride	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trichloroethene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
-	-				
Surrogate:	-				
4-Bromofluorobenzene	87.4	-	%	12-NOV-94	12-NOV-94
-	-				
Comments:	None				
-	-				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-70
Lab Id: L9411022-12

Collected: 02-NOV-94
Received: 03-NOV-94
Reported: 16-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Bromoform	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Bromomethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Chlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Chloroethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Chloroform	2.0	0.50	ug/L	12-NOV-94	12-NOV-94
Chloromethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1-Dichloroethane	0.70	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1-Dichloroethene	6.0	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Methylene Chloride	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trichloroethene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Surrogate: 4-Bromofluorobenzene	81.7	-	%	12-NOV-94	12-NOV-94

Comments: None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: TB-03
Lab Id: L9411022-13

Collected: 01-NOV-94
Received: 03-NOV-94
Reported: 16-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020					
Benzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromoform	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Bromomethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Chlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Chloroethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Chloroform	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Chloromethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Methylene Chloride	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Toluene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trichloroethene	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	11-NOV-94	11-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	11-NOV-94	11-NOV-94
-	-				
Surrogate:	-				
4-Bromofluorobenzene (8010)	95.3	-	%	11-NOV-94	11-NOV-94
4-Bromofluorobenzene (8020)	105.	-	%	11-NOV-94	11-NOV-94
-	-				
Comments:	None.				
-	-				
-	-				
-	-				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: FB-02
Lab Id: L9411022-14

Collected: 02-NOV-94
Received: 03-NOV-94
Reported: 16-NOV-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020					
Benzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Bromoform	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Bromomethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Chlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Chloroethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Chloroform	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Chloromethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Methylene Chloride	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Toluene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trichloroethene	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	12-NOV-94	12-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	12-NOV-94	12-NOV-94
-	-				
Surrogate:	-				
4-Bromofluorobenzene (8010)	86.5	-	%	12-NOV-94	12-NOV-94
4-Bromofluorobenzene (8020)	103.	-	%	12-NOV-94	12-NOV-94
-	-				
Comments:	None.				
-	-				
-	-				
-	-				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: P-10
Lab Id: L9411048-1

Collected: 03-NOV-94
Received: 05-NOV-94
Reported: 12-DEC-94

Parameter		Value		RDL	Units	Extracted	Analyzed
Quantitative Petroleum Hydrocarbons							
Gas		ND	<	0.15	mg/L	09-NOV-94	15-NOV-94
Mineral Spirits		ND	<	0.15	mg/L	09-NOV-94	15-NOV-94
Jet Fuel		ND	<	0.050	mg/L	09-NOV-94	15-NOV-94
Kerosene		ND	<	0.050	mg/L	09-NOV-94	15-NOV-94
Diesel		ND	<	0.050	mg/L	09-NOV-94	15-NOV-94
Waste Oil		ND	<	0.50	mg/L	09-NOV-94	15-NOV-94
-	-						
Surrogate	-						
o-Terphenyl		62.0	-		%	09-NOV-94	15-NOV-94
-	-						
Comments:	None						

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-48
Lab Id: L9411048-2

Collected: 03-NOV-94
Received: 05-NOV-94
Reported: 12-DEC-94

Parameter		Value		RDL	Units	Extracted	Analyzed
Quantitative Petroleum Hydrocarbons							
Gas		ND	<	0.15	mg/L	09-NOV-94	15-NOV-94
Mineral Spirits		ND	<	0.15	mg/L	09-NOV-94	15-NOV-94
Jet Fuel		ND	<	0.050	mg/L	09-NOV-94	15-NOV-94
Kerosene		ND	<	0.050	mg/L	09-NOV-94	15-NOV-94
Diesel		ND	<	0.050	mg/L	09-NOV-94	15-NOV-94
Waste Oil		ND	<	0.50	mg/L	09-NOV-94	15-NOV-94
-	-						
Surrogate	-						
o-Terphenyl		75.0		-	%	09-NOV-94	15-NOV-94
-	-						
Comments:	None						

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-148
Lab Id: L9411048-3

Collected: 03-NOV-94
Received: 05-NOV-94
Reported: 12-DEC-94

Parameter		Value		RDL	Units	Extracted	Analyzed
Quantitative Petroleum Hydrocarbons							
Gas		ND	<	0.15	mg/L	09-NOV-94	15-NOV-94
Mineral Spirits		ND	<	0.15	mg/L	09-NOV-94	15-NOV-94
Jet Fuel		ND	<	0.050	mg/L	09-NOV-94	15-NOV-94
Kerosene		ND	<	0.050	mg/L	09-NOV-94	15-NOV-94
Diesel		ND	<	0.050	mg/L	09-NOV-94	15-NOV-94
Waste Oil		ND	<	0.50	mg/L	09-NOV-94	15-NOV-94
-	-						
Surrogate	-						
o-Terphenyl		91.0		-	%	09-NOV-94	15-NOV-94
-	-						
Comments:	None						

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: ER-48
Lab Id: L9411048-4

Collected: 03-NOV-94
Received: 05-NOV-94
Reported: 12-DEC-94

Parameter		Value		RDL	Units	Extracted	Analyzed
Quantitative Petroleum Hydrocarbons							
Gas		ND	<	0.15	mg/L	09-NOV-94	21-NOV-94
Mineral Spirits		ND	<	0.15	mg/L	09-NOV-94	21-NOV-94
Jet Fuel		ND	<	0.050	mg/L	09-NOV-94	21-NOV-94
Kerosene		ND	<	0.050	mg/L	09-NOV-94	21-NOV-94
Diesel		ND	<	0.050	mg/L	09-NOV-94	21-NOV-94
Waste Oil		ND	<	0.50	mg/L	09-NOV-94	21-NOV-94
-	-						
Surrogate	-						
o-Terphenyl		65.0		-	%	09-NOV-94	21-NOV-94
-	-						
Comments:	None						

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: FB-3
Lab Id: L9411048-5

Collected: 03-NOV-94
Received: 05-NOV-94
Reported: 12-DEC-94

Parameter		Value		RDL	Units	Extracted	Analyzed
Quantitative Petroleum Hydrocarbons							
Gas		ND	<	0.15	mg/L	09-NOV-94	15-NOV-94
Mineral Spirits		ND	<	0.15	mg/L	09-NOV-94	15-NOV-94
Jet Fuel		ND	<	0.050	mg/L	09-NOV-94	15-NOV-94
Kerosene		ND	<	0.050	mg/L	09-NOV-94	15-NOV-94
Diesel		ND	<	0.050	mg/L	09-NOV-94	15-NOV-94
Waste Oil		ND	<	0.50	mg/L	09-NOV-94	15-NOV-94
-	-						
Surrogate	-						
o-Terphenyl		93.0		-	%	09-NOV-94	15-NOV-94
-	-						
Comments:	None						

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: P-11
Lab Id: L9411048-6

Collected: 03-NOV-94
Received: 05-NOV-94
Reported: 12-DEC-94

Parameter		Value		RDL	Units	Extracted	Analyzed
Quantitative Petroleum Hydrocarbons							
Gas		ND	<	0.15	mg/L	09-NOV-94	15-NOV-94
Mineral Spirits		ND	<	0.15	mg/L	09-NOV-94	15-NOV-94
Jet Fuel		ND	<	0.050	mg/L	09-NOV-94	15-NOV-94
Kerosene		ND	<	0.050	mg/L	09-NOV-94	15-NOV-94
Diesel		ND	<	0.050	mg/L	09-NOV-94	15-NOV-94
Waste Oil		ND	<	0.50	mg/L	09-NOV-94	15-NOV-94
-	-						
Surrogate	-						
o-Terphenyl		96.0		-	%	09-NOV-94	15-NOV-94
-	-						
Comments:	None						

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-36
Lab Id: L9411048-7

Collected: 04-NOV-94
Received: 05-NOV-94
Reported: 12-DEC-94

Parameter	Value	RDL	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Bromoform	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Bromomethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chloroethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Chloroform	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chloromethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1-Dichloroethane	0.51	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1-Dichloroethene	30.	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Methylene Chloride	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Trichloroethene	1.9	0.50	ug/L	14-NOV-94	14-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Surrogate: 4-Bromofluorobenzene	77.7	-	%	14-NOV-94	14-NOV-94

Comments: None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: ER-36
Lab Id: L9411048-8

Collected: 04-NOV-94
Received: 05-NOV-94
Reported: 12-DEC-94

Parameter	Value	RDL	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Bromoform	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Bromomethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chloroethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Chloroform	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chloromethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Methylene Chloride	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Trichloroethene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Surrogate:					
4-Bromofluorobenzene	78.8	-	%	14-NOV-94	14-NOV-94

Comments: None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-37
Lab Id: L9411048-9

Collected: 04-NOV-94
Received: 05-NOV-94
Reported: 12-DEC-94

Parameter	Value	RDL	Units	Extracted	Analyzed
Volatile Halogenated Hydrocarbons					
Bromodichloromethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Bromoform	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Bromomethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chloroethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Chloroform	2.5	0.50	ug/L	14-NOV-94	14-NOV-94
Chloromethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1-Dichloroethane	5.0	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloroethane	9.5	0.50	ug/L	14-NOV-94	14-NOV-94
1,1-Dichloroethene	40.	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Methylene Chloride	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Trichloroethene	0.98	0.50	ug/L	14-NOV-94	14-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Surrogate:					
4-Bromofluorobenzene	87.8	-	%	14-NOV-94	14-NOV-94

Comments: None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-47
Lab Id: L9411048-10

Collected: 04-NOV-94
Received: 05-NOV-94
Reported: 12-DEC-94

Parameter	Value	RDL	Units	Extracted	Analyzed
Metals by Graphite Furnace/Cold Vapor/Flame AA					
Arsenic- EPA 7060	ND<	0.0050	mg/L	14-NOV-94	15-NOV-94
Chromium - EPA 7191	0.0094	0.0050	mg/L	14-NOV-94	15-NOV-94
Lead - EPA 7421	0.0056	0.0030	mg/L	14-NOV-94	15-NOV-94
Nickel - EPA 7521	0.015	0.0050	mg/L	14-NOV-94	15-NOV-94
Comments:					
8010/8020					
Benzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Bromoform	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Bromomethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chloroethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Chloroform	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chloromethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Methylene Chloride	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Toluene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Trichloroethene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Surrogate:					
4-Bromofluorobenzene (8010)	83.5	-	%	14-NOV-94	14-NOV-94
4-Bromofluorobenzene (8020)	104.	-	%	14-NOV-94	14-NOV-94
Comments:	None.				

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D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: MW-147
Lab Id: L9411048-11

Collected: 04-NOV-94
Received: 05-NOV-94
Reported: 12-DEC-94

Parameter	Value	RDL	Units	Extracted	Analyzed
Metals by Graphite Furnace/Cold Vapor/Flame AA					
Arsenic- EPA 7060	ND<	0.0050	mg/L	14-NOV-94	15-NOV-94
Chromium - EPA 7191	0.0095	0.0050	mg/L	14-NOV-94	15-NOV-94
Lead - EPA 7421	0.0054	0.0030	mg/L	14-NOV-94	15-NOV-94
Nickel - EPA 7521	0.0097	0.0050	mg/L	14-NOV-94	15-NOV-94
-	-				
Comments:	-				
8010/8020					
Benzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Bromoform	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Bromomethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chloroethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Chloroform	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chloromethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Methylene Chloride	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Toluene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Trichloroethene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
-	-				
Surrogate:	-				
4-Bromofluorobenzene (8010)	73.8	-	%	14-NOV-94	14-NOV-94
4-Bromofluorobenzene (8020)	97.7	-	%	14-NOV-94	14-NOV-94
-	-				
Comments:	None.				
-	-				
-	-				
-	-				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: FB-4
Lab Id: L9411048-12

Collected: 04-NOV-94
Received: 05-NOV-94
Reported: 12-DEC-94

Parameter	Value	RDL	Units	Extracted	Analyzed
8010/8020					
Benzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Bromoform	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Bromomethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chloroethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Chloroform	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chloromethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Methylene Chloride	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Toluene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Trichloroethene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
-	-				
Surrogate:	-				
4-Bromofluorobenzene (8010)	87.9	-	%	14-NOV-94	14-NOV-94
4-Bromofluorobenzene (8020)	101.	-	%	14-NOV-94	14-NOV-94
-	-				
Comments:	None.				
-	-				
-	-				
-	-				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR, Sacramento
Sample Id: TB-4
Lab Id: L9411048-13

Collected: 03-NOV-94
Received: 05-NOV-94
Reported: 12-DEC-94

Parameter	Value	RDL	Units	Extracted	Analyzed
8010/8020					
Benzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Bromoform	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Bromomethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chloroethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Chloroform	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Chloromethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Methylene Chloride	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Toluene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Trichloroethene	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	14-NOV-94	14-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	14-NOV-94	14-NOV-94
-	-				
Surrogate:	-				
4-Bromofluorobenzene (8010)	78.7	-	%	14-NOV-94	14-NOV-94
4-Bromofluorobenzene (8020)	97.7	-	%	14-NOV-94	14-NOV-94
-	-				
Comments:	None.				
-	-				
-	-				
-	-				

QA/QC REPORT

L9411003
L9411022
L9411048

UPWL9411003/022/048

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: MX
Lab Id: WG6217-1

Reported: 29-NOV-94

Parameter	Value		RDL	Units	Extracted	Analyzed
8010/8020						
Benzene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Bromodichloromethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Bromoform	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Bromomethane	ND	<	1.0	ug/L	02-NOV-94	02-NOV-94
Carbon Tetrachloride	1.3		0.50	ug/L	02-NOV-94	02-NOV-94
Chlorobenzene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Chloroethane	ND	<	1.0	ug/L	02-NOV-94	02-NOV-94
Chloroform	1.7		0.50	ug/L	02-NOV-94	02-NOV-94
Chloromethane	ND	<	1.0	ug/L	02-NOV-94	02-NOV-94
Dibromochloromethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichlorobenzene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,3-Dichlorobenzene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,4-Dichlorobenzene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,1-Dichloroethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloroethane	1.5		0.50	ug/L	02-NOV-94	02-NOV-94
1,1-Dichloroethene	3.4		0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloroethene (Total)	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloropropane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Cis-1,3-Dichloropropene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Trans-1,3-Dichloropropene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Ethyl Benzene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Methylene Chloride	ND	<	1.0	ug/L	02-NOV-94	02-NOV-94
1,1,2,2-Tetrachloroethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Tetrachloroethene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Toluene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,1,1-Trichloroethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,1,2-Trichloroethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Trichloroethene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Trichlorofluoromethane	ND	<	1.0	ug/L	02-NOV-94	02-NOV-94
Vinyl Chloride	ND	<	1.0	ug/L	02-NOV-94	02-NOV-94
Xylenes (Total)	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
-	-					
Surrogate:	-					
4-Bromofluorobenzene (8010)	92.9	-		%	02-NOV-94	02-NOV-94
4-Bromofluorobenzene (8020)	99.1	-		%	02-NOV-94	02-NOV-94
-	-					
Comments:	MX = L9411003-17 (MW-29)					
-	-					
-	-					
-	-					

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Matrix Spike
Lab Id: WG6217-2

Reported: 29-NOV-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
8010/8020-QC							
1,1-Dichloroethene	22.5	ug/L	20	ug/L	95.6%	02-NOV-94	02-NOV-94
Trichloroethene	19.4	ug/L	20	ug/L	97.2%	02-NOV-94	02-NOV-94
Chlorobenzene-601	17.2	ug/L	20	ug/L	85.8%	02-NOV-94	02-NOV-94
Benzene	19.4	ug/L	20	ug/L	97%	02-NOV-94	02-NOV-94
Toluene	19.2	ug/L	20	ug/L	95.9%	02-NOV-94	02-NOV-94
Chlorobenzene-602	19.6	ug/L	20	ug/L	98.1%	02-NOV-94	02-NOV-94
-	-						
Surrogate:	-						
4-Bromofluorobenzene (8010)	82.7	%				02-NOV-94	02-NOV-94
4-Bromofluorobenzene (8020)	105.	%				02-NOV-94	02-NOV-94
-	-						
Comments:	None						
-	None						

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Matrix Spike Dup
Lab Id: WG6217-3

Reported: 11-NOV-94

Parameter	Value	Units	% Rec	RPD	Extracted	Analyzed
8010/8020-QC						
1,1-Dichloroethene	23.4	ug/L	99.8%	3.7	02-NOV-94	02-NOV-94
Trichloroethene	19.3	ug/L	96.4%	0.87	02-NOV-94	02-NOV-94
Chlorobenzene-601	16.6	ug/L	83.2%	3.1	02-NOV-94	02-NOV-94
Benzene	19.3	ug/L	96.4%	0.60	02-NOV-94	02-NOV-94
Toluene	18.9	ug/L	94.7%	1.2	02-NOV-94	02-NOV-94
Chlorobenzene-602	19.3	ug/L	96.6%	1.6	02-NOV-94	02-NOV-94
-	-					
Surrogate:	-					
4-Bromofluorobenzene (8010)	82.8	%			02-NOV-94	02-NOV-94
4-Bromofluorobenzene (8020)	103.	%			02-NOV-94	02-NOV-94
-	-					
Comments:	None					
-	None					

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank
Lab Id: WG6217-4

Reported: 11-NOV-94

Parameter	Value		Limit	Units	Extracted	Analyzed
8010/8020						
Benzene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Bromodichloromethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Bromoform	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Bromomethane	ND	<	1.0	ug/L	02-NOV-94	02-NOV-94
Carbon Tetrachloride	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Chlorobenzene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Chloroethane	ND	<	1.0	ug/L	02-NOV-94	02-NOV-94
Chloroform	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Chloromethane	ND	<	1.0	ug/L	02-NOV-94	02-NOV-94
Dibromochloromethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichlorobenzene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,3-Dichlorobenzene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,4-Dichlorobenzene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,1-Dichloroethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloroethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,1-Dichloroethene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloroethene (Total)	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,2-Dichloropropane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Cis-1,3-Dichloropropene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Trans-1,3-Dichloropropene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Ethyl Benzene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Methylene Chloride	ND	<	1.0	ug/L	02-NOV-94	02-NOV-94
1,1,2,2-Tetrachloroethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Tetrachloroethene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Toluene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,1,1-Trichloroethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
1,1,2-Trichloroethane	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Trichloroethene	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
Trichlorofluoromethane	ND	<	1.0	ug/L	02-NOV-94	02-NOV-94
Vinyl Chloride	ND	<	1.0	ug/L	02-NOV-94	02-NOV-94
Xylenes (Total)	ND	<	0.50	ug/L	02-NOV-94	02-NOV-94
-	-					
Surrogate:	-					
4-Bromofluorobenzene (8010)	89.8	-		%	02-NOV-94	02-NOV-94
4-Bromofluorobenzene (8020)	95.9	-		%	02-NOV-94	02-NOV-94
-	-					
Comments:	None.					
-	-					
-	-					
-	-					

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank Spike
Lab Id: WG6217-5

Reported: 11-NOV-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
8010/8020-QC							
1,1-Dichloroethene	18.0	ug/L	20	ug/L	90.2%	02-NOV-94	02-NOV-94
Trichloroethene	18.2	ug/L	20	ug/L	91%	02-NOV-94	02-NOV-94
Chlorobenzene-601	19.4	ug/L	20	ug/L	97.2%	02-NOV-94	02-NOV-94
Benzene	19.8	ug/L	20	ug/L	99.2%	02-NOV-94	02-NOV-94
Toluene	19.4	ug/L	20	ug/L	97.2%	02-NOV-94	02-NOV-94
Chlorobenzene-602	19.8	ug/L	20	ug/L	99.2%	02-NOV-94	02-NOV-94
-	-						
Surrogate:	-						
4-Bromofluorobenzene (8010)	91.5	%				02-NOV-94	02-NOV-94
4-Bromofluorobenzene (8020)	103.	%				02-NOV-94	02-NOV-94
-	-						
Comments:	None						
-	None						

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank
Lab Id: WG6217-6

Reported: 11-NOV-94

Parameter	Value		Limit	Units	Extracted	Analyzed
8010/8020						
Benzene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Bromodichloromethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Bromoform	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Bromomethane	ND	<	1.0	ug/L	04-NOV-94	04-NOV-94
Carbon Tetrachloride	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Chlorobenzene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Chloroethane	ND	<	1.0	ug/L	04-NOV-94	04-NOV-94
Chloroform	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Chloromethane	ND	<	1.0	ug/L	04-NOV-94	04-NOV-94
Dibromochloromethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichlorobenzene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,3-Dichlorobenzene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,4-Dichlorobenzene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,1-Dichloroethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloroethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,1-Dichloroethene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloroethene (Total)	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloropropane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Cis-1,3-Dichloropropene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Trans-1,3-Dichloropropene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Ethyl Benzene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Methylene Chloride	ND	<	1.0	ug/L	04-NOV-94	04-NOV-94
1,1,2,2-Tetrachloroethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Tetrachloroethene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Toluene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,1,1-Trichloroethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,1,2-Trichloroethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Trichloroethene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Trichlorofluoromethane	ND	<	1.0	ug/L	04-NOV-94	04-NOV-94
Vinyl Chloride	ND	<	1.0	ug/L	04-NOV-94	04-NOV-94
Xylenes (Total)	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
-	-					
Surrogate:	-					
4-Bromofluorobenzene (8010)	112.		-	%	04-NOV-94	04-NOV-94
4-Bromofluorobenzene (8020)	101.		-	%	04-NOV-94	04-NOV-94
-	-					
Comments:	None.					
-	-					
-	-					
-	-					

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank Spike
Lab Id: WG6217-7

Reported: 11-NOV-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
8010/8020-QC							
1,1-Dichloroethene	24.5	ug/L	20	ug/L	122%	04-NOV-94	04-NOV-94
Trichloroethene	21.8	ug/L	20	ug/L	109%	04-NOV-94	04-NOV-94
Chlorobenzene-601	21.4	ug/L	20	ug/L	107%	04-NOV-94	04-NOV-94
Benzene	20.1	ug/L	20	ug/L	101%	04-NOV-94	04-NOV-94
Toluene	19.2	ug/L	20	ug/L	96%	04-NOV-94	04-NOV-94
Chlorobenzene-602	19.4	ug/L	20	ug/L	97.1%	04-NOV-94	04-NOV-94
-	-						
Surrogate:	-						
4-Bromofluorobenzene (8010)	88.9	%				04-NOV-94	04-NOV-94
4-Bromofluorobenzene (8020)	97.1	%				04-NOV-94	04-NOV-94
-	-						
Comments:	None						
-	None						

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: MX
Lab Id: WG6220-1

Reported: 10-NOV-94

Parameter	Value		Limit	Units	Extracted	Analyzed
8010/8020						
Benzene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Bromodichloromethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Bromoform	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Bromomethane	ND	<	1.0	ug/L	04-NOV-94	04-NOV-94
Carbon Tetrachloride	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Chlorobenzene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Chloroethane	ND	<	1.0	ug/L	04-NOV-94	04-NOV-94
Chloroform	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Chloromethane	ND	<	1.0	ug/L	04-NOV-94	04-NOV-94
Dibromochloromethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichlorobenzene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,3-Dichlorobenzene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,4-Dichlorobenzene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,1-Dichloroethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloroethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,1-Dichloroethene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloroethene (Total)	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloropropane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Cis-1,3-Dichloropropene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Trans-1,3-Dichloropropene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Ethyl Benzene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Methylene Chloride	ND	<	1.0	ug/L	04-NOV-94	04-NOV-94
1,1,2,2-Tetrachloroethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Tetrachloroethene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Toluene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,1,1-Trichloroethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,1,2-Trichloroethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Trichloroethene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Trichlorofluoromethane	ND	<	1.0	ug/L	04-NOV-94	04-NOV-94
Vinyl Chloride	ND	<	1.0	ug/L	04-NOV-94	04-NOV-94
Xylenes (Total)	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
-	-					
Surrogate:	-					
4-Bromofluorobenzene (8010)	80.4	-		%	04-NOV-94	04-NOV-94
4-Bromofluorobenzene (8020)	91.6	-		%	04-NOV-94	04-NOV-94
-	-					
Comments:	MX = L9411012-4 (MW-90-4)					
-	-					
-	-					
-	-					

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Matrix Spike
Lab Id: WG6220-2

Reported: 10-NOV-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
8010/8020-QC							
1,1-Dichloroethene	22.6	ug/L	20	ug/L	113%	04-NOV-94	04-NOV-94
Trichloroethene	21.8	ug/L	20	ug/L	109%	04-NOV-94	04-NOV-94
Chlorobenzene-601	22.3	ug/L	20	ug/L	111%	04-NOV-94	04-NOV-94
Benzene	21.8	ug/L	20	ug/L	109%	04-NOV-94	04-NOV-94
Toluene	21.3	ug/L	20	ug/L	106%	04-NOV-94	04-NOV-94
Chlorobenzene-602	21.2	ug/L	20	ug/L	106%	04-NOV-94	04-NOV-94
-	-						
Surrogate:	-						
4-Bromofluorobenzene (8010)	101.	%				04-NOV-94	04-NOV-94
4-Bromofluorobenzene (8020)	106.	%				04-NOV-94	04-NOV-94
-	-						
Comments:	None						
-	None						

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Matrix Spike Dup
Lab Id: WG6220-3

Reported: 10-NOV-94

Parameter	Value	Units	% Rec	RPD	Extracted	Analyzed
8010/8020-QC						
1,1-Dichloroethene	23.6	ug/L	118%	4.6	04-NOV-94	04-NOV-94
Trichloroethene	22.4	ug/L	112%	2.6	04-NOV-94	04-NOV-94
Chlorobenzene-601	22.9	ug/L	114%	2.3	04-NOV-94	04-NOV-94
Benzene	22.4	ug/L	112%	2.8	04-NOV-94	04-NOV-94
Toluene	22.1	ug/L	111%	3.6	04-NOV-94	04-NOV-94
Chlorobenzene-602	22.2	ug/L	110%	4.5	04-NOV-94	04-NOV-94
-	-					
Surrogate:	-					
4-Bromofluorobenzene (8010)	108.	%			04-NOV-94	04-NOV-94
4-Bromofluorobenzene (8020)	104.	%			04-NOV-94	04-NOV-94
-	-					
Comments:	None					
-	None					

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank
Lab Id: WG6220-4

Reported: 10-NOV-94

Parameter	Value		Limit	Units	Extracted	Analyzed
8010/8020						
Benzene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Bromodichloromethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Bromoform	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Bromomethane	ND	<	1.0	ug/L	04-NOV-94	04-NOV-94
Carbon Tetrachloride	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Chlorobenzene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Chloroethane	ND	<	1.0	ug/L	04-NOV-94	04-NOV-94
Chloroform	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Chloromethane	ND	<	1.0	ug/L	04-NOV-94	04-NOV-94
Dibromochloromethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichlorobenzene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,3-Dichlorobenzene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,4-Dichlorobenzene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,1-Dichloroethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloroethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,1-Dichloroethene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloroethene (Total)	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,2-Dichloropropane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Cis-1,3-Dichloropropene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Trans-1,3-Dichloropropene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Ethyl Benzene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Methylene Chloride	ND	<	1.0	ug/L	04-NOV-94	04-NOV-94
1,1,2,2-Tetrachloroethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Tetrachloroethene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Toluene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,1,1-Trichloroethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
1,1,2-Trichloroethane	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Trichloroethene	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
Trichlorofluoromethane	ND	<	1.0	ug/L	04-NOV-94	04-NOV-94
Vinyl Chloride	ND	<	1.0	ug/L	04-NOV-94	04-NOV-94
Xylenes (Total)	ND	<	0.50	ug/L	04-NOV-94	04-NOV-94
-	-					
Surrogate:	-					
4-Bromofluorobenzene (8010)	76.4		-	%	04-NOV-94	04-NOV-94
4-Bromofluorobenzene (8020)	95.5		-	%	04-NOV-94	04-NOV-94
-	-					
Comments:	None.					
-	-					
-	-					
-	-					

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank Spike
Lab Id: WG6220-5

Reported: 10-NOV-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
8010/8020-QC							
1,1-Dichloroethene	22.4	ug/L	20	ug/L	112%	04-NOV-94	04-NOV-94
Trichloroethene	22.1	ug/L	20	ug/L	110%	04-NOV-94	04-NOV-94
Chlorobenzene-601	21.8	ug/L	20	ug/L	109%	04-NOV-94	04-NOV-94
Benzene	21.6	ug/L	20	ug/L	108%	04-NOV-94	04-NOV-94
Toluene	21.6	ug/L	20	ug/L	108%	04-NOV-94	04-NOV-94
Chlorobenzene-602	21.6	ug/L	20	ug/L	108%	04-NOV-94	04-NOV-94
-	-						
Surrogate:	-						
4-Bromofluorobenzene (8010)	94.5	%				04-NOV-94	04-NOV-94
4-Bromofluorobenzene (8020)	94.2	%				04-NOV-94	04-NOV-94
-	-						
Comments:	None						
-	None						

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank
Lab Id: WG6220-6

Reported: 11-NOV-94

Parameter	Value		Limit	Units	Extracted	Analyzed
8010/8020						
Benzene	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
Bromodichloromethane	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
Bromoform	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
Bromomethane	ND	<	1.0	ug/L	10-NOV-94	10-NOV-94
Carbon Tetrachloride	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
Chlorobenzene	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
Chloroethane	ND	<	1.0	ug/L	10-NOV-94	10-NOV-94
Chloroform	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
Chloromethane	ND	<	1.0	ug/L	10-NOV-94	10-NOV-94
Dibromochloromethane	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
1,2-Dichlorobenzene	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
1,3-Dichlorobenzene	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
1,4-Dichlorobenzene	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
1,1-Dichloroethane	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
1,2-Dichloroethane	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
1,1-Dichloroethene	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
1,2-Dichloroethene (Total)	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
1,2-Dichloropropane	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
Cis-1,3-Dichloropropene	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
Trans-1,3-Dichloropropene	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
Ethyl Benzene	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
Methylene Chloride	ND	<	1.0	ug/L	10-NOV-94	10-NOV-94
1,1,2,2-Tetrachloroethane	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
Tetrachloroethene	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
Toluene	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
1,1,1-Trichloroethane	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
1,1,2-Trichloroethane	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
Trichloroethene	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
Trichlorofluoromethane	ND	<	1.0	ug/L	10-NOV-94	10-NOV-94
Vinyl Chloride	ND	<	1.0	ug/L	10-NOV-94	10-NOV-94
Xylenes (Total)	ND	<	0.50	ug/L	10-NOV-94	10-NOV-94
-	-					
Surrogate:	-					
4-Bromofluorobenzene (8010)	76.8	-		%	10-NOV-94	10-NOV-94
4-Bromofluorobenzene (8020)	99.1	-		%	10-NOV-94	10-NOV-94
-	-					
Comments:	None.					
-	-					
-	-					
-	-					

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank Spike
Lab Id: WG6220-7

Reported: 11-NOV-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
8010/8020-QC							
1,1-Dichloroethene	21.0	ug/L	20	ug/L	105%	10-NOV-94	10-NOV-94
Trichloroethene	20.5	ug/L	20	ug/L	102%	10-NOV-94	10-NOV-94
Chlorobenzene-601	23.3	ug/L	20	ug/L	117%	10-NOV-94	10-NOV-94
Benzene	21.7	ug/L	20	ug/L	108%	10-NOV-94	10-NOV-94
Toluene	21.7	ug/L	20	ug/L	108%	10-NOV-94	10-NOV-94
Chlorobenzene-602	21.9	ug/L	20	ug/L	110%	10-NOV-94	10-NOV-94
-	-						
Surrogate:	-						
4-Bromofluorobenzene (8010)	109.	%				10-NOV-94	10-NOV-94
4-Bromofluorobenzene (8020)	103.	%				10-NOV-94	10-NOV-94
-	-						
Comments:	None						
-	None						

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank
Lab Id: WG6220-8

Reported: 14-NOV-94

Parameter	Value		Limit	Units	Extracted	Analyzed
8010/8020						
Benzene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Bromodichloromethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Bromoform	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Bromomethane	ND	<	1.0	ug/L	11-NOV-94	11-NOV-94
Carbon Tetrachloride	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Chlorobenzene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Chloroethane	ND	<	1.0	ug/L	11-NOV-94	11-NOV-94
Chloroform	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Chloromethane	ND	<	1.0	ug/L	11-NOV-94	11-NOV-94
Dibromochloromethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichlorobenzene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,3-Dichlorobenzene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,4-Dichlorobenzene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethene (Total)	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloropropane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Cis-1,3-Dichloropropene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Trans-1,3-Dichloropropene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Ethyl Benzene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Methylene Chloride	ND	<	1.0	ug/L	11-NOV-94	11-NOV-94
1,1,2,2-Tetrachloroethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Tetrachloroethene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Toluene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,1-Trichloroethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,2-Trichloroethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Trichloroethene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Trichlorofluoromethane	ND	<	1.0	ug/L	11-NOV-94	11-NOV-94
Vinyl Chloride	ND	<	1.0	ug/L	11-NOV-94	11-NOV-94
Xylenes (Total)	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
-	-					
Surrogate:	-					
4-Bromofluorobenzene (8010)	75.6	-		%	11-NOV-94	11-NOV-94
4-Bromofluorobenzene (8020)	97.0	-		%	11-NOV-94	11-NOV-94
-	-					
Comments:	None.					
-	-					
-	-					
-	-					

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank Spike
Lab Id: WG6220-9

Reported: 14-NOV-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
8010/8020-QC							
1,1-Dichloroethene	20.2	ug/L	20	ug/L	101%	11-NOV-94	11-NOV-94
Trichloroethene	20.7	ug/L	20	ug/L	104%	11-NOV-94	11-NOV-94
Chlorobenzene-601	22.8	ug/L	20	ug/L	114%	11-NOV-94	11-NOV-94
Benzene	19.4	ug/L	20	ug/L	97.2%	11-NOV-94	11-NOV-94
Toluene	19.2	ug/L	20	ug/L	95.9%	11-NOV-94	11-NOV-94
Chlorobenzene-602	19.5	ug/L	20	ug/L	97.6%	11-NOV-94	11-NOV-94
-	-						
Surrogate:	-						
4-Bromofluorobenzene (8010)	115.	%				11-NOV-94	11-NOV-94
4-Bromofluorobenzene (8020)	105.	%				11-NOV-94	11-NOV-94
-	-						
Comments:	None						
-	None						

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: MX
Lab Id: WG6218-1

Reported: 14-NOV-94

Parameter	Value		Limit	Units	Extracted	Analyzed
8010/8020						
Benzene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Bromodichloromethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Bromoform	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Bromomethane	ND	<	1.0	ug/L	11-NOV-94	11-NOV-94
Carbon Tetrachloride	1.4		0.50	ug/L	11-NOV-94	11-NOV-94
Chlorobenzene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Chloroethane	ND	<	1.0	ug/L	11-NOV-94	11-NOV-94
Chloroform	1.7		0.50	ug/L	11-NOV-94	11-NOV-94
Chloromethane	ND	<	1.0	ug/L	11-NOV-94	11-NOV-94
Dibromochloromethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichlorobenzene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,3-Dichlorobenzene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,4-Dichlorobenzene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethane	0.76		0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethene (Total)	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloropropane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Cis-1,3-Dichloropropene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Trans-1,3-Dichloropropene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Ethyl Benzene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Methylene Chloride	ND	<	1.0	ug/L	11-NOV-94	11-NOV-94
1,1,2,2-Tetrachloroethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Tetrachloroethene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Toluene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,1-Trichloroethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,2-Trichloroethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Trichloroethene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Trichlorofluoromethane	ND	<	1.0	ug/L	11-NOV-94	11-NOV-94
Vinyl Chloride	ND	<	1.0	ug/L	11-NOV-94	11-NOV-94
Xylenes (Total)	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
-	-					
Surrogate:	-					
4-Bromofluorobenzene (8010)	93.3		-	%	11-NOV-94	11-NOV-94
4-Bromofluorobenzene (8020)	100.		-	%	11-NOV-94	11-NOV-94
-	-					
Comments:	MX = L9411022-7 (MW-45)					
-	-					
-	-					
-	-					

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Matrix Spike
Lab Id: WG6218-2

Reported: 14-DEC-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
8010/8020-QC							
1,1-Dichloroethene	22.2	ug/L	20	ug/L	111.%	11-NOV-94	11-NOV-94
Trichloroethene	21.6	ug/L	20	ug/L	108.%	11-NOV-94	11-NOV-94
Chlorobenzene-601	23.8	ug/L	20	ug/L	119.%	11-NOV-94	11-NOV-94
Benzene	20.3	ug/L	20	ug/L	101.%	11-NOV-94	11-NOV-94
Toluene	20.0	ug/L	20	ug/L	100%	11-NOV-94	11-NOV-94
Chlorobenzene-602	20.2	ug/L	20	ug/L	101.%	11-NOV-94	11-NOV-94
-	-						
Surrogate:	-						
4-Bromofluorobenzene (8010)	120.	%				11-NOV-94	11-NOV-94
4-Bromofluorobenzene (8020)	108.	%				11-NOV-94	11-NOV-94
-	-						
Comments:	None						
-	None						

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Matrix Spike Dup
Lab Id: WG6218-3

Reported: 14-NOV-94

Parameter	Value	Units	% Rec	RPD	Extracted	Analyzed
8010/8020-QC						
1,1-Dichloroethene	22.6	ug/L	113%	2.0	11-NOV-94	11-NOV-94
Trichloroethene	22.4	ug/L	112%	3.7	11-NOV-94	11-NOV-94
Chlorobenzene-601	23.7	ug/L	119%	0.070	11-NOV-94	11-NOV-94
Benzene	20.8	ug/L	104%	2.4	11-NOV-94	11-NOV-94
Toluene	20.1	ug/L	100%	0.050	11-NOV-94	11-NOV-94
Chlorobenzene-602	20.3	ug/L	101%	0.12	11-NOV-94	11-NOV-94
-	-					
Surrogate:	-					
4-Bromofluorobenzene (8010)	113.	%			11-NOV-94	11-NOV-94
4-Bromofluorobenzene (8020)	97.7	%			11-NOV-94	11-NOV-94
-	-					
Comments:	None					
-	None					

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank
Lab Id: WG6218-4

Reported: 14-NOV-94

Parameter	Value		Limit	Units	Extracted	Analyzed
8010/8020						
Benzene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Bromodichloromethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Bromoform	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Bromomethane	ND	<	1.0	ug/L	11-NOV-94	11-NOV-94
Carbon Tetrachloride	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Chlorobenzene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Chloroethane	ND	<	1.0	ug/L	11-NOV-94	11-NOV-94
Chloroform	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Chloromethane	ND	<	1.0	ug/L	11-NOV-94	11-NOV-94
Dibromochloromethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichlorobenzene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,3-Dichlorobenzene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,4-Dichlorobenzene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,1-Dichloroethene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloroethene (Total)	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,2-Dichloropropane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Cis-1,3-Dichloropropene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Trans-1,3-Dichloropropene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Ethyl Benzene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Methylene Chloride	ND	<	1.0	ug/L	11-NOV-94	11-NOV-94
1,1,2,2-Tetrachloroethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Tetrachloroethene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Toluene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,1-Trichloroethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
1,1,2-Trichloroethane	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Trichloroethene	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
Trichlorofluoromethane	ND	<	1.0	ug/L	11-NOV-94	11-NOV-94
Vinyl Chloride	ND	<	1.0	ug/L	11-NOV-94	11-NOV-94
Xylenes (Total)	ND	<	0.50	ug/L	11-NOV-94	11-NOV-94
-	-					
Surrogate:	-					
4-Bromofluorobenzene (8010)	75.6	-		%	11-NOV-94	11-NOV-94
4-Bromofluorobenzene (8020)	97.0	-		%	11-NOV-94	11-NOV-94
-	-					
Comments:	None.					
-	-					
-	-					
-	-					

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank Spike
Lab Id: WG6218-5

Reported: 14-NOV-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
8010/8020-QC							
1,1-Dichloroethene	20.2	ug/L	20	ug/L	101%	11-NOV-94	11-NOV-94
Trichloroethene	20.7	ug/L	20	ug/L	104%	11-NOV-94	11-NOV-94
Chlorobenzene-601	22.8	ug/L	20	ug/L	114%	11-NOV-94	11-NOV-94
Benzene	19.4	ug/L	20	ug/L	97.2%	11-NOV-94	11-NOV-94
Toluene	19.2	ug/L	20	ug/L	95.9%	11-NOV-94	11-NOV-94
Chlorobenzene-602	19.5	ug/L	20	ug/L	97.6%	11-NOV-94	11-NOV-94
-	-						
Surrogate:	-						
4-Bromofluorobenzene (8010)	115.	%				11-NOV-94	11-NOV-94
4-Bromofluorobenzene (8020)	105.	%				11-NOV-94	11-NOV-94
-	-						
Comments:	None						
-	None						

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank
Lab Id: WG6218-6

Reported: 14-NOV-94

Parameter	Value		Limit	Units	Extracted	Analyzed
8010/8020						
Benzene	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
Bromodichloromethane	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
Bromoform	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
Bromomethane	ND	<	1.0	ug/L	12-NOV-94	12-NOV-94
Carbon Tetrachloride	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
Chlorobenzene	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
Chloroethane	ND	<	1.0	ug/L	12-NOV-94	12-NOV-94
Chloroform	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
Chloromethane	ND	<	1.0	ug/L	12-NOV-94	12-NOV-94
Dibromochloromethane	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichlorobenzene	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
1,3-Dichlorobenzene	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
1,4-Dichlorobenzene	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
1,1-Dichloroethane	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloroethane	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
1,1-Dichloroethene	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloroethene (Total)	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
1,2-Dichloropropane	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
Cis-1,3-Dichloropropene	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
Trans-1,3-Dichloropropene	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
Ethyl Benzene	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
Methylene Chloride	ND	<	1.0	ug/L	12-NOV-94	12-NOV-94
1,1,2,2-Tetrachloroethane	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
Tetrachloroethene	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
Toluene	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
1,1,1-Trichloroethane	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
1,1,2-Trichloroethane	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
Trichloroethene	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
Trichlorofluoromethane	ND	<	1.0	ug/L	12-NOV-94	12-NOV-94
Vinyl Chloride	ND	<	1.0	ug/L	12-NOV-94	12-NOV-94
Xylenes (Total)	ND	<	0.50	ug/L	12-NOV-94	12-NOV-94
-	-					
Surrogate:	-					
4-Bromofluorobenzene (8010)	72.6	-		%	12-NOV-94	12-NOV-94
4-Bromofluorobenzene (8020)	99.5	-		%	12-NOV-94	12-NOV-94
-	-					
Comments:	None.					
-	-					
-	-					
-	-					

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank Spike
Lab Id: WG6218-7

Reported: 14-NOV-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
8010/8020-QC							
1,1-Dichloroethene	22.5	ug/L	20	ug/L	113%	12-NOV-94	12-NOV-94
Trichloroethene	23.8	ug/L	20	ug/L	119%	12-NOV-94	12-NOV-94
Chlorobenzene-601	22.9	ug/L	20	ug/L	115%	12-NOV-94	12-NOV-94
Benzene	22.9	ug/L	20	ug/L	114%	12-NOV-94	12-NOV-94
Toluene	22.8	ug/L	20	ug/L	114%	12-NOV-94	12-NOV-94
Chlorobenzene-602	22.9	ug/L	20	ug/L	115%	12-NOV-94	12-NOV-94
-	-						
Surrogate:	-						
4-Bromofluorobenzene (8010)	108.	%				12-NOV-94	12-NOV-94
4-Bromofluorobenzene (8020)	108.	%				12-NOV-94	12-NOV-94
-	-						
Comments:	None						
-	None						

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: MX
Lab Id: WG6281-1

Reported: 12-DEC-94

Parameter	Value	RDL	Units	Extracted	Analyzed
8010/8020					
Benzene	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
Bromodichloromethane	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
Bromoform	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
Bromomethane	ND <	1.0	ug/L	15-NOV-94	15-NOV-94
Carbon Tetrachloride	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
Chlorobenzene	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
Chloroethane	ND <	1.0	ug/L	15-NOV-94	15-NOV-94
Chloroform	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
Chloromethane	ND <	1.0	ug/L	15-NOV-94	15-NOV-94
Dibromochloromethane	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
1,1-Dichloroethane	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
1,2-Dichloroethane	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
1,1-Dichloroethene	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
1,2-Dichloropropane	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
Ethyl Benzene	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
Methylene Chloride	ND <	1.0	ug/L	15-NOV-94	15-NOV-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
Tetrachloroethene	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
Toluene	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
Trichloroethene	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
Trichlorofluoromethane	ND <	1.0	ug/L	15-NOV-94	15-NOV-94
Vinyl Chloride	ND <	1.0	ug/L	15-NOV-94	15-NOV-94
Xylenes (Total)	ND <	0.50	ug/L	15-NOV-94	15-NOV-94
-	-				
Surrogate:	-				
4-Bromofluorobenzene (8010)	105.	-	%	15-NOV-94	15-NOV-94
4-Bromofluorobenzene (8020)	103.	-	%	15-NOV-94	15-NOV-94
-	-				
Comments:	MX = L9411106-8 (MW-12)				
-	-				
-	-				
-	-				

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Matrix Spike
Lab Id: WG6281-2

Reported: 12-DEC-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
8010/8020-QC							
1,1-Dichloroethene	22.6	ug/L	20	ug/L	113.%	15-NOV-94	15-NOV-94
Trichloroethene	23.1	ug/L	20	ug/L	115.%	15-NOV-94	15-NOV-94
Chlorobenzene-601	23.6	ug/L	20	ug/L	118.%	15-NOV-94	15-NOV-94
Benzene	21.3	ug/L	20	ug/L	107.%	15-NOV-94	15-NOV-94
Toluene	21.2	ug/L	20	ug/L	106.%	15-NOV-94	15-NOV-94
Chlorobenzene-602	21.4	ug/L	20	ug/L	107.%	15-NOV-94	15-NOV-94
-	-						
Surrogate:	-						
4-Bromofluorobenzene (8010)	117.	%				15-NOV-94	15-NOV-94
4-Bromofluorobenzene (8020)	112.	%				15-NOV-94	15-NOV-94
-	-						
Comments:	None						
-	None						

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Matrix Spike Dup
Lab Id: WG6281-3

Reported: 12-DEC-94

Parameter	Value	Units	% Rec	RPD	Extracted	Analyzed
8010/8020-QC						
1,1-Dichloroethene	22.2	ug/L	111.%	2.0	15-NOV-94	15-NOV-94
Trichloroethene	21.7	ug/L	108.%	6.2	15-NOV-94	15-NOV-94
Chlorobenzene-601	23.5	ug/L	118.%	0.48	15-NOV-94	15-NOV-94
Benzene	20.6	ug/L	103.%	3.5	15-NOV-94	15-NOV-94
Toluene	20.2	ug/L	101.%	4.8	15-NOV-94	15-NOV-94
Chlorobenzene-602	20.3	ug/L	102.%	5.2	15-NOV-94	15-NOV-94
-	-					
Surrogate:	-					
4-Bromofluorobenzene (8010)	117.	%			15-NOV-94	15-NOV-94
4-Bromofluorobenzene (8020)	112.	%			15-NOV-94	15-NOV-94
-	-					
Comments:	None					
-	None					

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank
Lab Id: WG6281-6

Reported: 12-DEC-94

Parameter	Value		RDL	Units	Extracted	Analyzed
8010/8020						
Benzene	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
Bromodichloromethane	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
Bromoform	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
Bromomethane	ND	<	1.0	ug/L	14-NOV-94	14-NOV-94
Carbon Tetrachloride	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
Chlorobenzene	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
Chloroethane	ND	<	1.0	ug/L	14-NOV-94	14-NOV-94
Chloroform	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
Chloromethane	ND	<	1.0	ug/L	14-NOV-94	14-NOV-94
Dibromochloromethane	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichlorobenzene	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
1,3-Dichlorobenzene	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
1,4-Dichlorobenzene	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
1,1-Dichloroethane	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloroethane	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
1,1-Dichloroethene	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloroethene (Total)	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
1,2-Dichloropropane	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
Cis-1,3-Dichloropropene	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
Trans-1,3-Dichloropropene	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
Ethyl Benzene	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
Methylene Chloride	ND	<	1.0	ug/L	14-NOV-94	14-NOV-94
1,1,2,2-Tetrachloroethane	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
Tetrachloroethene	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
Toluene	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
1,1,1-Trichloroethane	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
1,1,2-Trichloroethane	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
Trichloroethene	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
Trichlorofluoromethane	ND	<	1.0	ug/L	14-NOV-94	14-NOV-94
Vinyl Chloride	ND	<	1.0	ug/L	14-NOV-94	14-NOV-94
Xylenes (Total)	ND	<	0.50	ug/L	14-NOV-94	14-NOV-94
-	-					
Surrogate:	-					
4-Bromofluorobenzene (8010)	75.7		-	%	14-NOV-94	14-NOV-94
4-Bromofluorobenzene (8020)	103.		-	%	14-NOV-94	14-NOV-94
-	-					
Comments:	None.					
-	-					
-	-					
-	-					

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank Spike
Lab Id: WG6281-7

Reported: 12-DEC-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
8010/8020-QC							
1,1-Dichloroethene	20.0	ug/L	20	ug/L	100%	14-NOV-94	14-NOV-94
Trichloroethene	21.6	ug/L	20	ug/L	108.%	14-NOV-94	14-NOV-94
Chlorobenzene-601	23.9	ug/L	20	ug/L	119.%	14-NOV-94	14-NOV-94
Benzene	22.9	ug/L	20	ug/L	115.%	14-NOV-94	14-NOV-94
Toluene	23.1	ug/L	20	ug/L	115.%	14-NOV-94	14-NOV-94
Chlorobenzene-602	23.4	ug/L	20	ug/L	117.%	14-NOV-94	14-NOV-94
-	-						
Surrogate:	-						
4-Bromofluorobenzene (8010)	101.	%				14-NOV-94	14-NOV-94
4-Bromofluorobenzene (8020)	105.	%				14-NOV-94	14-NOV-94
-	-						
Comments:	None						
-	None						

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank
Lab Id: WG6339-1

Reported: 12-DEC-94

Parameter	Value	RDL	Units	Extracted	Analyzed
Quantitative Petroleum Hydrocarbons					
Gas	ND <	0.15	mg/L	09-NOV-94	22-NOV-94
Mineral Spirits	ND <	0.15	mg/L	09-NOV-94	22-NOV-94
Jet Fuel	ND <	0.050	mg/L	09-NOV-94	22-NOV-94
Kerosene	ND <	0.050	mg/L	09-NOV-94	22-NOV-94
Diesel	ND <	0.050	mg/L	09-NOV-94	22-NOV-94
Waste Oil	ND <	0.50	mg/L	09-NOV-94	22-NOV-94
Surrogate					
o-Terphenyl	83.0		%	09-NOV-94	22-NOV-94
Comments:	None				

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Water Spike
Lab Id: WG6339-2

Reported: 12-DEC-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
Quantitative Petroleum Hydrocarbons							
Gas	ND <	mg/L				09-NOV-94	15-NOV-94
Mineral Spirits	ND <	mg/L				09-NOV-94	15-NOV-94
Jet Fuel	ND <	mg/L				09-NOV-94	15-NOV-94
Kerosene	ND <	mg/L				09-NOV-94	15-NOV-94
Diesel	0.88	mg/L	1	mg/L	88.%	09-NOV-94	15-NOV-94
Waste Oil	ND <	mg/L				09-NOV-94	15-NOV-94
-	-						
Surrogate	-						
o-Terphenyl	109.	%				09-NOV-94	15-NOV-94
-	-						
Comments:	None						
-	-						
-	-						
-	-						
-	-						

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Water Spike Duplicat
Lab Id: WG6339-3

Reported: 12-DEC-94

Parameter	Value	Units	% Rec	RPD	Extracted	Analyzed
Quantitative Petroleum Hydrocarbons						
Gas	ND <	mg/L			09-NOV-94	22-NOV-94
Mineral Spirits	ND <	mg/L			09-NOV-94	22-NOV-94
Jet Fuel	ND <	mg/L			09-NOV-94	22-NOV-94
Kerosene	ND <	mg/L			09-NOV-94	22-NOV-94
Diesel	0.83	mg/L	83.%	6.1	09-NOV-94	22-NOV-94
Waste Oil	ND <	mg/L			09-NOV-94	22-NOV-94
-	-					
Surrogate	-					
o-Terphenyl	116.	%			09-NOV-94	22-NOV-94
-	-					
Comments:	None					
-	-					
-	-					
-	-					
-	-					

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: MX
Lab Id: WG6245-1

Reported: 12-DEC-94

Parameter	Value	RDL	Units	Extracted	Analyzed
Metals by Graphite Furnace/Cold Vapor/Flame AA					
Arsenic- EPA 7060	ND<	0.0050	mg/L	07-NOV-94	08-NOV-94
Chromium - EPA 7191	ND<	0.0050	mg/L	07-NOV-94	08-NOV-94
Lead - EPA 7421	ND<	0.0030	mg/L	07-NOV-94	08-NOV-94
Nickel - EPA 7521	ND<	0.0050	mg/L	07-NOV-94	08-NOV-94

Comments: MX=L9411012-4.

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Matrix Spike
Lab Id: WG6245-2

Reported: 12-DEC-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
Metals by Graphite Furnace/Cold Vapor/Flame AA							
Arsenic- EPA 7060	0.0239	mg/L	.025	mg/L	96.%	07-NOV-94	08-NOV-94
Chromium - EPA 7191	0.0496	mg/L	.05	mg/L	99.%	07-NOV-94	08-NOV-94
Lead - EPA 7421	0.0304	mg/L	.025	mg/L	122.%	07-NOV-94	08-NOV-94
Nickel - EPA 7521	0.0469	mg/L	.05	mg/L	94.%	07-NOV-94	08-NOV-94

Comments:

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Matrix Spike Dup
Lab Id: WG6245-3

Reported: 12-DEC-94

Parameter	Value	Units	% Rec	RPD	Extracted	Analyzed
Metals by Graphite Furnace/Cold Vapor/Flame AA						
Arsenic- EPA 7060	0.0239	mg/L	96.%	0.0	07-NOV-94	08-NOV-94
Chromium - EPA 7191	0.0515	mg/L	103.%	3.8	07-NOV-94	08-NOV-94
Lead - EPA 7421	0.0293	mg/L	117.%	3.7	07-NOV-94	08-NOV-94
Nickel - EPA 7521	0.0502	mg/L	100%	6.8	07-NOV-94	08-NOV-94
-	-					
Comments:	-					

R01000

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank
Lab Id: WG6245-4

Reported: 12-DEC-94

Parameter	Value	RDL	Units	Extracted	Analyzed
Metals by Graphite Furnace/Cold Vapor/Flame AA					
Arsenic- EPA 7060	ND<	0.0050	mg/L	07-NOV-94	08-NOV-94
Chromium - EPA 7191	ND<	0.0050	mg/L	07-NOV-94	08-NOV-94
Lead - EPA 7421	ND<	0.0030	mg/L	07-NOV-94	08-NOV-94
Nickel - EPA 7521	ND<	0.0050	mg/L	07-NOV-94	08-NOV-94
-	-				
Comments:	-				

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank Spike
Lab Id: WG6245-5

Reported: 12-DEC-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
Metals by Graphite Furnace/Cold Vapor/Flame AA							
Arsenic- EPA 7060	0.0244	mg/L	.025	mg/L	98.%	07-NOV-94	08-NOV-94
Chromium - EPA 7191	0.0537	mg/L	.05	mg/L	107.%	07-NOV-94	08-NOV-94
Lead - EPA 7421	0.0235	mg/L	.025	mg/L	94.%	07-NOV-94	08-NOV-94
Nickel - EPA 7521	0.0474	mg/L	.05	mg/L	95.%	07-NOV-94	08-NOV-94

Comments:

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: MX
Lab Id: WG6300-1

Reported: 12-DEC-94

Parameter	Value	RDL	Units	Extracted	Analyzed
Metals by Graphite Furnace/Cold Vapor/Flame AA					
Arsenic- EPA 7060	ND<	0.0050	mg/L	14-NOV-94	15-NOV-94
Chromium - EPA 7191	ND<	0.0050	mg/L	14-NOV-94	15-NOV-94
Lead - EPA 7421	0.00666	0.0030	mg/L	14-NOV-94	15-NOV-94
Nickel - EPA 7521	ND<	0.0050	mg/L	14-NOV-94	15-NOV-94

Comments: MX = L9411050-1

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Matrix Spike
Lab Id: WG6300-2

Reported: 12-DEC-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
Metals by Graphite Furnace/Cold Vapor/Flame AA							
Arsenic- EPA 7060	0.0250	mg/L	.025	mg/L	100%	14-NOV-94	15-NOV-94
Chromium - EPA 7191	0.0456	mg/L	.05	mg/L	91.%	14-NOV-94	15-NOV-94
Lead - EPA 7421	0.0371	mg/L	.025	mg/L	122.%	14-NOV-94	15-NOV-94
Nickel - EPA 7521	0.0464	mg/L	.05	mg/L	93.%	14-NOV-94	15-NOV-94

Comments:

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Matrix Spike Dup
Lab Id: WG6300-3

Reported: 12-DEC-94

Parameter	Value	Units	% Rec	RPD	Extracted	Analyzed
Metals by Graphite Furnace/Cold Vapor/Flame AA						
Arsenic- EPA 7060	0.0240	mg/L	96.%	4.1	14-NOV-94	15-NOV-94
Chromium - EPA 7191	0.0454	mg/L	93.%	0.40	14-NOV-94	15-NOV-94
Lead - EPA 7421	0.0349	mg/L	113.%	6.1	14-NOV-94	15-NOV-94
Nickel - EPA 7521	0.0469	mg/L	94.%	11.	14-NOV-94	15-NOV-94

Comments:

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank
Lab Id: WG6300-4

Reported: 12-DEC-94

Parameter	Value	RDL	Units	Extracted	Analyzed
Metals by Graphite Furnace/Cold Vapor/Flame AA					
Arsenic- EPA 7060	ND<	0.0050	mg/L	14-NOV-94	15-NOV-94
Chromium - EPA 7191	ND<	0.0050	mg/L	14-NOV-94	15-NOV-94
Lead - EPA 7421	ND<	0.0030	mg/L	14-NOV-94	15-NOV-94
Nickel - EPA 7521	ND<	0.0050	mg/L	14-NOV-94	15-NOV-94

Comments:

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank Spike
Lab Id: WG6300-5

Reported: 12-DEC-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
Metals by Graphite Furnace/Cold Vapor/Flame AA							
Arsenic- EPA 7060	0.0290	mg/L	.025	mg/L	116.%	14-NOV-94	15-NOV-94
Chromium - EPA 7191	0.0526	mg/L	.05	mg/L	105.%	14-NOV-94	15-NOV-94
Lead - EPA 7421	0.0273	mg/L	.025	mg/L	109.%	14-NOV-94	15-NOV-94
Nickel - EPA 7521	0.0488	mg/L	.05	mg/L	98.%	14-NOV-94	15-NOV-94
-	-						
Comments:	-						

TABLE B-2 (cont.) 01/31/95
1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-30	MW-30	MW-30	MW-31	MW-31	MW-31
DATE		04/25/94	07/01/94	10/31/94	01/11/94	04/26/94	07/01/94
QA							
ANALYTE	MCL ug/L						
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 10.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 10.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 5.00	0.89	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50
TRICHLOROETHENE	5.0	8.60	7.70	8.30	7.80	11.00	9.00
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 10.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 10.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-31	MW-32	MW-32	MW-32	MW-32	MW-32
DATE		10/31/94	01/14/94	02/11/94	03/02/94	04/07/94	05/05/94
QA	MCL ug/L						
ANALYTE							
1,1,1-TRICHLOROETHANE	200.0	0.78	< 5.00	1.40	1.20	1.20	0.67
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	2.00	< 5.00	4.50	4.30	4.00	3.70
1,1-DICHLOROETHENE	6.0	40.00	44.00	58.00	41.00	52.00	33.00
1,2-DICHLOROBENZENE	600.0	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 5.00	0.53	0.70	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 1.00	< 10.00	< 1.00	< 1.00	< 0.50	< 0.50
CARBON TETRACHLORIDE	0.5	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 10.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-31	MW-32	MW-32	MW-32	MW-32	MW-32
DATE		10/31/94	01/14/94	02/11/94	03/02/94	04/07/94	05/05/94
QA							
ANALYTE	MCL ug/L						
CHLOROMETHANE	-	< 1.00	< 10.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 10.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 5.00	0.53	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	11.00	< 5.00	7.40	7.20	6.80	6.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 10.00	< 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 10.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-32	MW-32	MW-32	MW-32	MW-32	MW-32
DATE		06/08/94	07/08/94	09/14/94	10/10/94	11/08/94	12/07/94
QA	MCL ug/L						
ANALYTE							
1,1,1-TRICHLOROETHANE	200.0	0.81	1.00	0.50	0.86	< 0.50	0.93
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	4.00	3.80	0.80	2.00	1.40	4.20
1,1-DICHLOROETHENE	6.0	39.00	44.00	19.00	26.00	25.00	39.00
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	0.65	0.98	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 1.00	< 1.00	< 0.50	< 1.00	< 0.50	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
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TABLE B-2 (cont.) 01/31/95

1994 MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-32	MW-32	MW-32	MW-32	MW-32	MW-32
DATE		06/08/94	07/08/94	09/14/94	10/10/94	11/08/94	12/07/94
QA	MCL ug/L						
ANALYTE							
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	6.20	4.90	4.10	6.30	5.40	6.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."