HAZMAT 94 MAY 23 AMII: 31

FIRST QUARTER 1994 GROUNDWATER MONITORING REPORT

CARNATION DAIRY FACILITY 1310 14TH STREET OAKLAND, CALIFORNIA

5-19-94

PRESENTED TO:

ALAMEDA COUNTY HEALTH AGENCY DEPARTMENT OF ENVIRONMENTAL HEALTH DIVISION OF CLEAN WATER PROGRAM UST LOCAL OVERSIGHT PROGRAM 80 SWAN WAY, ROOM 200 OAKLAND, CALIFORNIA 94621

ON BEHALF OF:

NESTLE USA, INC. 800 NORTH BRAND BOULEVARD GLENDALE, CALIFORNIA 91203

PREPARED BY:

PARK ENVIRONMENTAL CORPORATION
4231 PACIFIC STREET
SUITE 7
ROCKLIN, CALIFORNIA 95677

MAY 19, 1994



ALCO HAZMAT 94 MAY 23 AHH: 31

May 19, 1994

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Ms. Jennifer Eberle Department of Environmental Health Hazardous Materials Division 80 Sway Way, Room 200 Oakland, CA 94601

Re: Ouarterly Groundwater Monitoring Report

Carnation Company 1310 14th Street Oakland, California

Dear Ms. Eberle:

Park Environmental Corporation (Park) is pleased to provide this Quarterly Groundwater Monitoring Report on behalf of Nestle USA, Inc. The report documents the work performed for the three month period of December, 1993 through February, 1994 at the Carnation site referenced above. Park anticipates performing groundwater sampling activities during the week of May 31, 1994 for the time period of March, April and May, 1994.

Please call **Park's** Rocklin office at 916/652-3861 if you have any questions concerning this transmittal.

Sincerely,

Park Environmental Corporation

Peter Frank, R.E.A. Project Geologist

PF:laa

cc: Mr. Binayak Acharya

Nestle USA, Inc.

800 Brand Boulevard

Glendale, CA 91203

Mr. Richard Hiett

CRWQCB

2101 Webster Street, Suite 500

Oakland, CA 94612

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1.0 INTRODUCTION

Nestle USA, Inc., (Nestle) has retained Park Environmental Corporation (**Park**) to provide environmental services at the former Carnation facility in Oakland, California. A site location map and plot plan are included as Figures 1 and 2 in Appendix A. Nestle has authorized **Park** to prepare this Quarterly Groundwater Monitoring Report, which includes brief groundwater sampling methodology and findings sections.

The Alameda County Health Agency (ACHA) is the lead environmental agency. This work was requested by Ms. Susan Hugo and Ms. Jennifer Eberle with the ACHA in accordance with the meeting between ACHA, Mr. Richard Hiett of the California Regional Water Quality Control Board, Mr. Walter Carey with Nestle, USA, and Mr. Richard Zipp with **Park**, on September 17, 1992. This site is referenced by the ACHA as 1310 14th Street.

1.1 Scope of Services

Specific tasks completed during this investigation included the following:

- Measure depth to water and/or free product thicknesses in 61 monitoring wells;
- Calculate groundwater flow direction in the vicinity of the free product plume and in the vicinity of the property boundaries;
- Purge, sample and analyze ten monitoring wells (MW-2, MW-3, MW-6, MW-25, MW-26, MW-27, MW-28, MW-29, MW-30 and MW-32) for total petroleum hydrocarbons as gasoline and diesel, benzene, toluene, ethylbenzene, and total xylenes (BTEX) and two samples (MW-26 and MW-32) for chlorinated volatile organic compounds using EPA Method 8015, 8020 and 601, respectively. In addition to the above mentioned analyses, modified EPA 8015 for gasoline tests were performed on an equipment blank and field duplicate sample for QA/QC purposes; and
- Prepare this Quarterly Monitoring Report documenting the findings.

2.0 GROUNDWATER MONITORING WELL SAMPLING METHODOLOGY

2.1 Groundwater Measurements

Prior to obtaining depth to groundwater measurements in the sampled wells, the wells were checked for the presence of free product utilizing a new disposable bailer for each well. Depth to groundwater measurements in the sampled wells and unsampled wells were made using a YSI model 3000 T-L-C Meter or Slope Indicator. Free product thicknesses were measured using a Free Product Interface Probe (manufactured by MMC). The depths to water or product were measured from the top of the well casing. Groundwater elevations were calculated using

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measurements from surveyed monitoring wells not containing free product. Results of these measurements are included in Table I in Appendix B. Groundwater measurements taken during the October, 1992, March 23, 1993, July 27, 1993 and November 4, 1993 groundwater sampling episodes are presented in Tables II, III, IV and V in Appendix B.

2.2 Monitoring Well Purging

Each monitoring well was purged with a submersible pump until at least three well volumes of water had been removed. All of the wells which were purged and sampled were constructed of 4-inch diameter PVC well casing (except MW-6 which is 2-inch in diameter). All purging and sampling equipment was washed in a solution of trisodium phosphate and rinsed in distilled water prior to each usage to reduce the potential for cross contamination between wells.

As groundwater was removed from the wells, pH, temperature and conductivity were monitored and recorded on a field data sheet. These field documents are kept in a permanent project file. A summary of the data obtained during the purging of the wells is presented in Table VI in Appendix B.

The wells were allowed to stand for a period of time to regain equilibrium prior to sampling. Groundwater purged from the wells was placed in DOT-approved 55 gallon drums, pending receipt of analytical results to select the appropriate disposition.

2.3 Groundwater Analyses

Analyses of the groundwater were performed by a California certified laboratory in accordance with State guidelines and EPA protocols. Groundwater samples from the ten monitoring wells were analyzed for TPH as gasoline and diesel and BTEX using EPA methods 8015 and 8020, respectively. The ten wells sampled were MW-2, MW-3, MW-6, MW-25, MW-26, MW-27, MW-28, MW-29, MW-30 and MW-32. In addition, groundwater from monitoring wells MW-26 and MW-32 was analyzed for chlorinated volatile organics using EPA method 601.

2.4 Groundwater Sampling

Proper sampling collection and handling are essential to assure the quality of the data obtained from the given sample. Each groundwater sample therefore was collected using a new sterile disposable bailer. The sampled water was placed in laboratory prepared 40 millimeter glass containers. The sample containers were filled with water to the top to expel air space and were sealed with teflon-lined caps. Water sample containers were labeled with the name of the sampler, the date, the job number, the preservative, and an identifying well number. The samples were then transported to Sierra Laboratories, in Anaheim, California. Full chain of custody protocol was followed during sample handling and delivery.

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3.0 FINDINGS

3.1 Groundwater Conditions

3.1.1 Groundwater Flow Direction and Hydraulic Gradient

Groundwater monitoring wells containing free product were not used for the calculations of groundwater flow direction or hydraulic gradient. Groundwater measurements taken by Park on February 24, 1994 indicate that groundwater flow beneath the site continues to be to the north-northeast, which is consistent with the previous measurements. The hydraulic gradient was calculated to be approximately 0.0028 or 0.28 feet per 100 feet beneath the site. Figure 3 in Appendix A shows graphically the flow direction of the groundwater. The measurements taken during this sampling episode show the groundwater elevation at about 5.77 feet above mean sea level (msl), which is in agreement with the previous sampling events. All data, pertaining to groundwater measurements, is summarized in Tables I, II, III, IV and V in Appendix B.

3.1.2 Occurrence of Free Product

Free product was identified in 33 of the 61 monitoring wells that **Park** monitored for this investigation. The thickness of free product ranged from 0.02 feet to 12.10 feet, with an average thickness of 1.85 feet in the measured wells. It is believed that the thickness of free product has been influenced by both the operation of an the on site vapor extraction system and by the seasonal fluctuation of groundwater.

The vapor extraction system operated for 21 days between the November 5, 1993 sampling event and the February 24, 1994 sampling event. During the extraction process, free product may migrate in the subsurface to an area where vacuum is being applied, thus creating an apparent increase in the free product thickness in the wells.

The seasonal rise and fall of groundwater may have an effect on the thickness of free product. As groundwater rises into the vadose zone, petroleum hydrocarbons trapped in the pore spaces of the soil are released to the top of the surface of the rising water, creating an apparent increase in free product thickness. Conversely, as the water level decreases, the free product recoats the soil in the vadose zone causing an apparent decrease in the thickness of free product. This cyclic pattern of thinning and thickening of free product is displayed on Chart I in Appendix C. Free product thicknesses from the last sampling date are summarized in Table I, II, III, IV and V.

3.1.3 Results of Laboratory Analyses

Laboratory test results of groundwater samples collected on February 24, 1994 for this investigation as well as previous quarterly sampling events are summarized in Table VII, in Appendix B. Results are also presented graphically on Figure 5 in Appendix A. Laboratory reports and chain of custody documents are included as Appendix D.

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4.0 LIMITATIONS

The monitoring services performed by **Park** were performed in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions.

The findings presented in this report are based on present conditions and past written and/or oral information provided by regulatory agencies or Nestle USA. Park will not be responsible for any use by or interpretation or subsequent damages by any third party. Conditional changes may occur through time by natural or man-made processes on this or adjacent properties.

5.0 SIGNATURES

This report was prepared by:

Park Environmental Corporation

Peter Frank, R.E.A. Project Geologist

This report was reviewed for technical content by:

RICHARD GEOLOGICA

ZIPP

No. 1096 CERTIFIED ENGINEERING

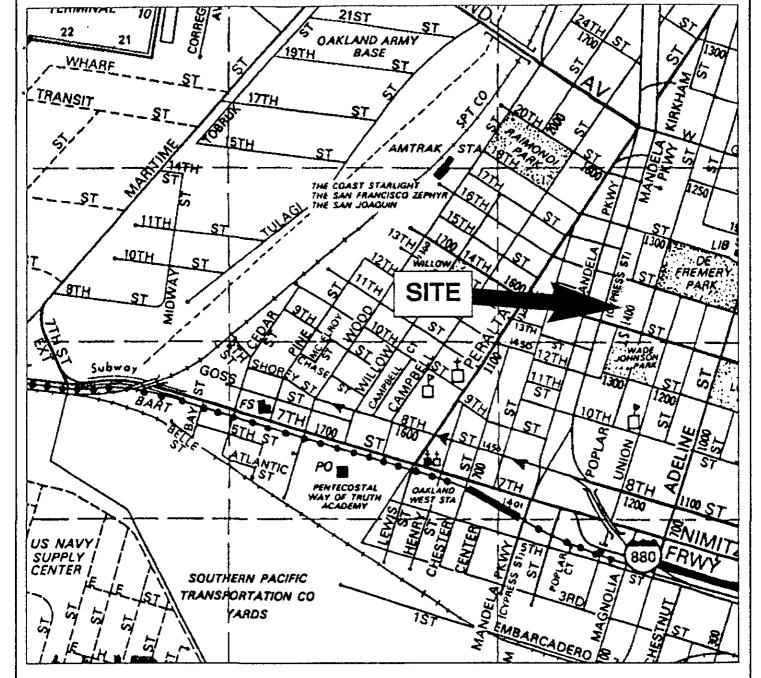
GEOLOGIST PE OF CALIFOR

Richard J/Zipp R.G., C.E.G

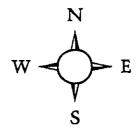
Principal Hydrogeologist

PF:laa

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REFERENCE 1992, ALAMEDA COUNTY, THOMAS GUIDE MAP, PAGE 7

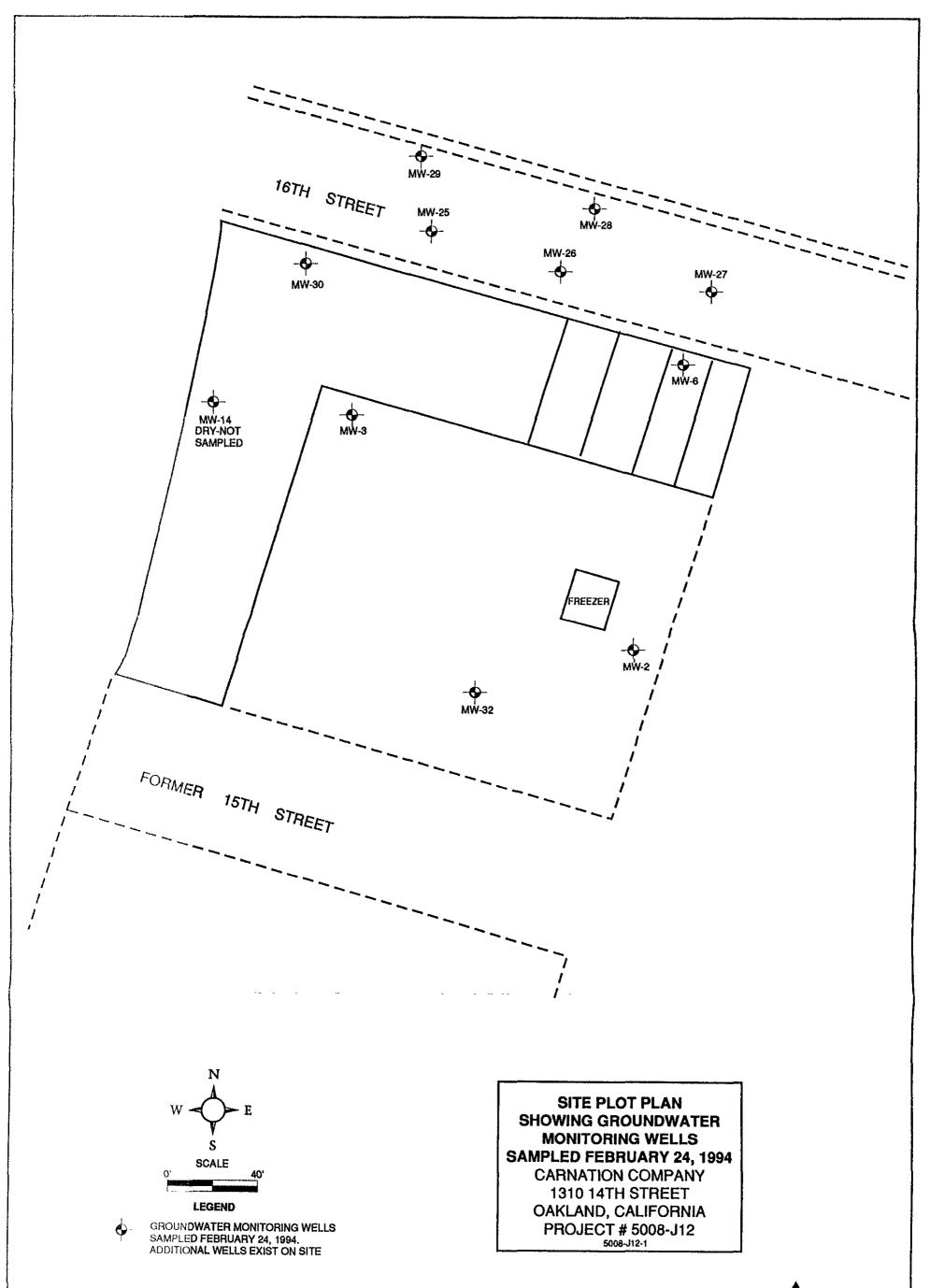


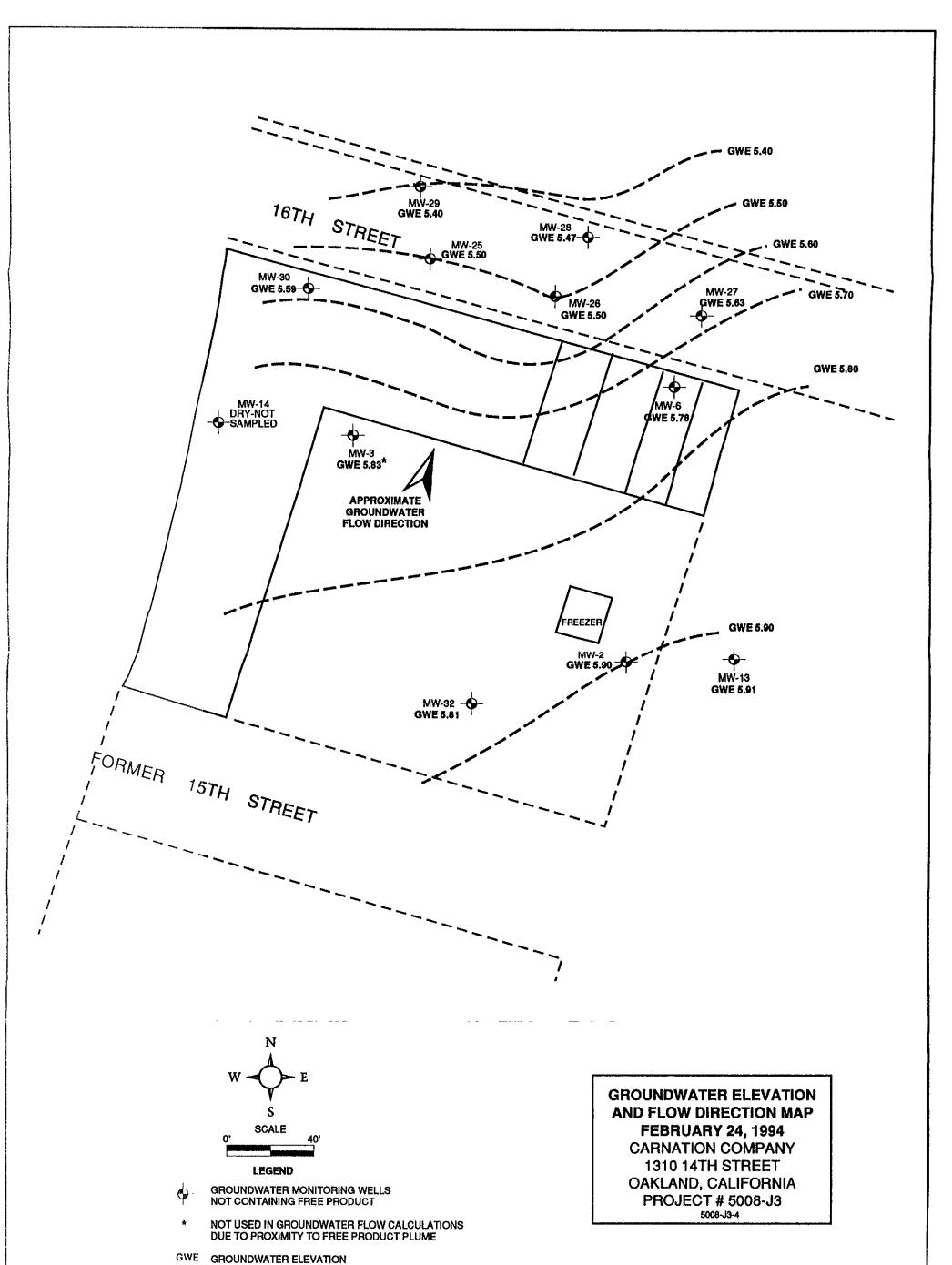
SCALE: 1 INCH EQUALS APPROXIMATELY 1,200 FEET

SITE LOCATION MAP

NESTLE/CARNATION COMPANY 1310 14TH STREET OAKLAND, CALIFORNIA PROJECT # 5008







INFERRED LINE OF EQUAL GROUNDWATER

ELEVATION

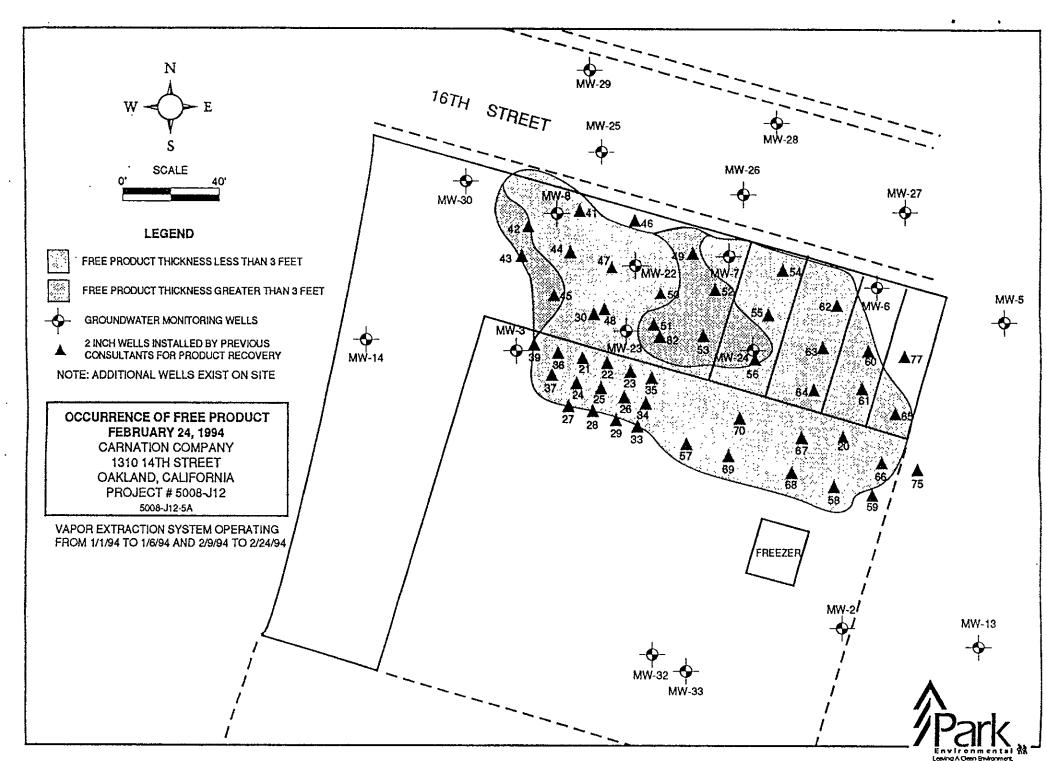


FIGURE 4

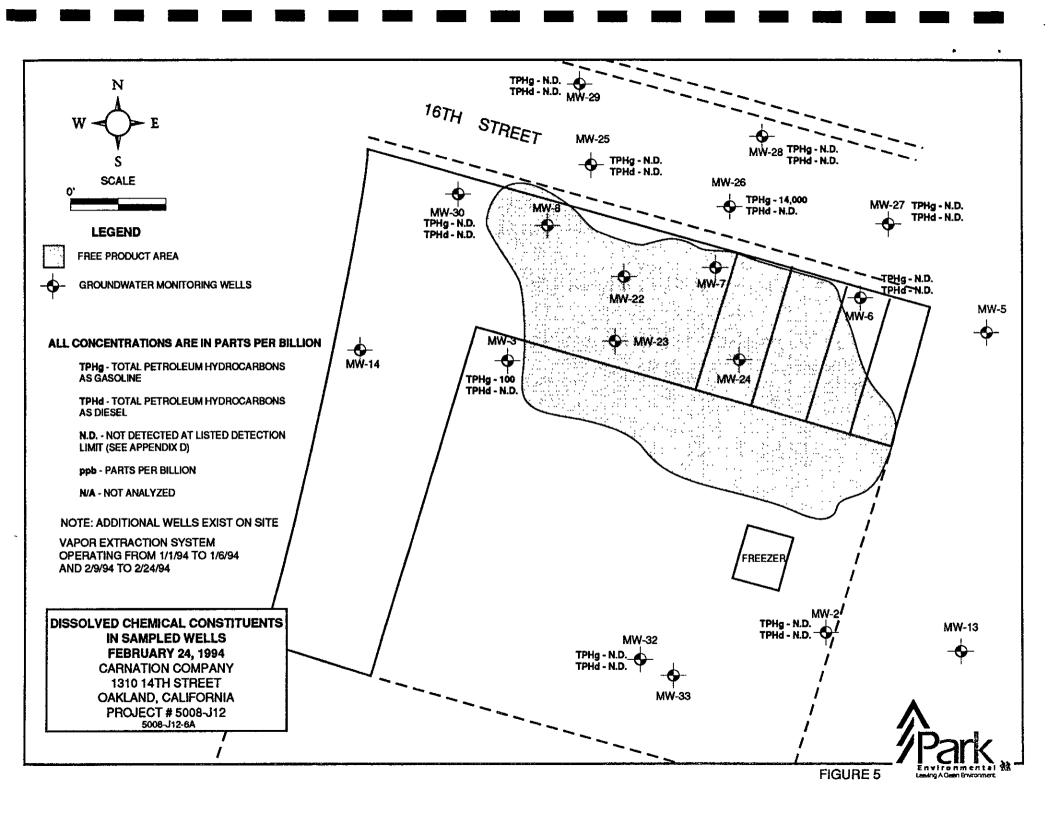


TABLE I GROUNDWATER MEASUREMENTS FEBRUARY 24, 1994

| Well No. | Depth to Product (FT)(TOC) | Depth to Water (FT)(TOC) | Casing Elevation (FT) | Product Thickness (FT) | Well Diameter (IN) | GWE (ET) |
|----------|----------------------------------|--------------------------------|-----------------------------|------------------------------|--------------------------|----------|
| MW-1 | - | 10.41 | 16.49 | - | 4 | 6.08 |
| MW-2 | • | 9.21 | 15.11 | - | 4 | 5.90 |
| MW-3* | - | 8.47 | 14.30 | - | 4 | 5.83 |
| MW-4 | - | 8.09 | 14.42 | - | 4 | 6.33 |
| MW-5 | - | 8.08 | 14.41 | - | 4 | 6.33 |
| MW-6 | - | 8.34 | 14.12 | - | 2 | 5.78 |
| MW-7 | 8.64 | 9.78 | 14.29 | 1.14 | 4 | NC |
| MW-8 | 8.55 | 8.99 | 14.20 | .44 | 2 | NC |
| MW-10 | - | 9.59 | 15.73 | - | 4 | 6.14 |
| MW-13 | - | 8.94 | 14.85 | - | 4 | 5.91 |
| MW-14 | - | No Water | 14.10 | - | 4 | - |
| MW-22 | 8.59 | 10.13 | 14.44 | 1.54 | 2 | NC |
| MW-23 | 8.87 | 8.94 | - | .07 | 2 | NC |
| MW-24 | 8.95 | - | 14.67 | 12.10 | 2 | NC |
| MW-25* | - | 7.36 | 12.86 | - | 4 | 5.50 |
| MW-26* | - | 7.21 | 12.71 | - | 4 | 5.50 |
| MW-27* | • | 8.41 | 14.04 | - | 4 | 5.63 |
| MW-28* | - | 7.98 | 13.45 | - | 4 | 5.47 |
| MW-29* | - | 7.20 | 12.60 | • | 4 | 5.40 |
| MW-30* | - | 8.95 | 14.54 | - | 4 | 5.59 |
| MW-32* | - | 8.95 | 14.76 | - | 4 | 5.81 |
| PR-20 | 8.20 | 9.35 | 14.36 | 1.15 | 2 | NC |
| PR-22 | 8.09 | 9.52 | 14.43 | 1.43 | 2 | NC |

TABLE I continued GROUNDWATER MEASUREMENTS FEBRUARY 24, 1994

| Well No. | Depth to Product (FT) (TOC) | Depth to Water (FT) (TOC) | Casing Elevation (FT) | Product Thickness (ET) | Well Diameter (IN) | GWE (FT) |
|----------|-----------------------------------|---------------------------|-----------------------------|------------------------------|--------------------------|-------------|
| PR-23 | 8.40 | 8.76 | 14.47 | 0.36 | 2 | NC |
| PR-26 | 8.51 | 9.05 | 14.38 | 0.54 | 2 | NC |
| PR-27 | - | 8.36 | - | - | 2 | - |
| PR-28 | • | 8.35 | - | | 2 | • |
| PR-33 | - | 8.32 | 14.36 | - | 2 | 6.04 |
| PR-34 | 8.37 | 9.54 | 14.49 | 1.17 | 2 | NC |
| PR-35 | 8.37 | 9.63 | 14.55 | 1.26 | 2 | NC |
| PR-36 | 8.35 | 9.48 | - | 1.13 | 2 | NC |
| PR-37 | 8.19 | 9.48 | • | 1.29 | 2 | NC |
| PR-38 | * | 8.75 | 14.47 | - | 2 | 5.72 |
| PR-41 | 7.72 | 8.25 | • | 0.53 | 2 | NC |
| PR-42 | - | 8.65 | - | - | 2 | - |
| PR-43 | - | 8.99 | - | - | 2 | - |
| PR-44 | 8.83 | 9.05 | - - | 0.22 | 2 | NC |
| PR-45 | 9.13 | 14.40 | • | 5.27 | 2 | NC |
| PR-46 | - | 8.93 | - | • | 2 | - |
| PR-47 | 8.89 | 9.30 | • | 0.41 | 2 | NC |
| PR-48 | 8.93 | 9.13 | - | 0.20 | 2 | NC |
| PR-49 | 8.81 | 12.05 | - | 3.24 | 2 | NC |
| PR-50 | 8.73 | 10.31 | - | 1.58 | 2 | NC |
| PR-51 | 8.03 | - | - | 6.57 | 2 | NC |
| PR-52 | 8.96 | 14.05 | - | 5.09 | 2 | NC |
| PR-53 | 8.73 | 11.74 | - | 3.01 | 2 | NC |
| PR-54 | 8.72 | 9.71 | • | 0.99 | 2 | NC |
| PR-55 | 9.17 | 9.24 | • | 0.7 | 2 | NC |
| PR-56 | 8.81 | 10.11 | - | 1.30 | 2 | NC |

TABLE I continued GROUNDWATER MEASUREMENTS FEBRUARY 24, 1994

| Well No | Depth to Product (FT) (TOC) | Depth to Water (FT) (TOC) | Casing Elevation (FT) | Product Thickness (FT) | Well Diameter (IN) | GWE (FT) |
|---------|-----------------------------------|---------------------------------|-----------------------|------------------------------|--------------------------|-------------|
| PR-57 | 7.72 | 14,12 | - | 6.40 | 2 | NC |
| PR-58 | 8.34 | 9.19 | - | 0.85 | 2 | NC |
| PR-59 | - | 8.39 | - | - | 2 | - |
| PR-60 | - | 9.21 | | - | 2 | |
| PR-61 | 8.75 | 9.14 | - | 0.39 | 2 | NC |
| PR-64 | 8.94 | 9.05 | - | 0.11 | 2 | NC |
| PR-65 | 8.25 | 8.27 | - | .02 | 2 | NC |
| PR-66 | - | 8.28 | - | • | 2 | - |
| PR-67 | 8.24 | 8.89 | - | 0.65 | 2 | NC |
| PR-75 | - | 9.03 | - | - | 2 | - |
| PR-77 | - | 8.57 | - | - | 2 | |
| V-90 | - | 9.70 | - | 1.41 | 4 | <u>-</u> |

TOC - Top of Casing

GWE - Groundwater Elevation

* - Groundwater Samples Obtained for this Investigation

NC - Not Calculated

Interface Probe Keck Model KIR-89

TABLE II GROUNDWATER DATA NOVEMBER 4, 1993

| Well ³ No. | Depth to Product (FT)(TOC) | Depth to Water (FT)(TOC) | Casing Elevation (FT) | Product Thickness (FT) | Well Diameter (IN) | GWE (FT) |
|-----------------------|----------------------------------|--------------------------------|-----------------------------|------------------------------|--------------------------|-------------|
| MW-1 | <u>-</u> | 11.73 | 16.49 | _ | 4 | 4.76 |
| MW-3* | <u>-</u> | 9.93 | 14.30 | - | 4 | 4.37 |
| MW-4 | - | 8.28 | 14.42 | | 4 | - |
| MW-5 | - | 9.99 | 14.41 | - | 4 | 4.42 |
| MW-6 | - | 9.72 | 14.12 | - | 2 | 4.40 |
| MW-7 | 9.76 | 10.55 | 14.29 | 0.79 | 4 | NC |
| MW-8 | 9.87 | 10.29 | 14.20 | 0.42 | 2 | NC |
| MW-9 | - | 10.29 | - | - | 4 | |
| MW-10 | - | 9.65 | 15.73 | <u>-</u> | 4 | 6.08 |
| MW-11 | • | 9.92 | 14.55 | <u>-</u> | 4 | 4.63 |
| MW-13 | - | 10.24 | 14.85 | - | 4 | 4.61 |
| MW-14 | - | No Water | 14.10 | - | 4 | - |
| MW-22 | 9.82 | 11.65 | 14.44 | 1.83 | 2 | NC |
| MW-23 | 9.89 | 11.10 | - | 1.21 | 2 | NC |
| MW-24 | 9.90 | 11.67 | 14.67 | 1.77 | 2 | NC |
| MW-25* | - | 8.54 | 12.86 | - | 4 | 4.32 |
| MW-26* | - | 8.40 | 12.71 | 1 | 4 | 4.31 |
| MW-27* | - | 9.72 | 14.04 | - | 4 | 4.32 |
| MW-28* | <u>.</u> | 9.23 | 13.45 | - | 4 | 4.22 |
| MW-29* | - | 8.37 | 12.60 | 1 | 4 | 4.23 |
| MW-30* | | 10.31 | 14.54 | - | 4 | 4.23 |
| MW-32* | - | 10.17 | 14.76 | - | 4 | 4.59 |
| PR-10 | - | - | - | - | 2 | - |
| PR-20 | 9.44 | 10.35 | 14.36 | 0.91 | 2 | NC |
| PR-21 | 9.87 | 10.50 | 14.37 | 0.63 | 2 | NC |
| PR-22 | 9.38 | 10.36 | 14.43 | 0.98 | 2 | NC |

TABLE II continued GROUNDWATER MEASUREMENTS NOVEMBER 4, 1993

| Well No. | Depth to Product (FT)(TOC) | Depth to Water (FT)(TOC) | Casing Elevation (FT) | Product Thickness (FT) | Well Diameter (IN) | GWE (FI) |
|----------|----------------------------------|--------------------------------|-----------------------------|------------------------|--------------------------|-------------|
| PR-23 | 9.51 | 10.18 | 14.47 | 0.67 | 2 | NC |
| PR-24 | - | 9.93 | - | - | - | - |
| PR-26 | 9.69 | 10.29 | 14.38 | 0.60 | 2 | NC |
| PR-27 | - | 9.79 | • | - | 2 | - |
| PR-28 | <u>-</u> | 9.76 | - | - | 2 | - |
| PR-33 | - | 9.76 | 14.36 | - | 2 | 4.60 |
| PR-34 | 9.79 | 10.45 | 14.49 | 0.66 | 2 | NC |
| PR-35 | 9.77 | 10.39 | 14.55 | 0.62 | 2 | NC |
| PR-37 | 9.71 | 10.12 | - | 0.41 | - | NC |
| PR-39 | • | 10.04 | - | - | - | - |
| PR-41 | 10.21 | 10.80 | <u>-</u> | 0.59 | 2 | NC |
| PR-42 | - | 10.33 | - | - | <u>.</u> | - |
| PR-43 | <u>-</u> | 10.33 | - | - | - | - |
| PR-44 | 10.27 | 10.51 | <u>-</u> | 0.24 | 2 | NC |
| PR-45 | 10.09 | 10.26 | <u>-</u> | 0.17 | 2 | NC |
| PR-46 | - | 10.71 | - | - | 2 | - |
| PR-47 | 9.98 | 10.73 | - | 0.75 | 2 | NC |
| PR-48 | 9.95 | 11.07 | <u>-</u> | 1.12 | 2 | NC |
| PR-49 | - | 10.20 | | - | 2 | - |
| PR-50 | 9.76 | 10.84 | | 1.08 | 2 | NC |
| PR-52 | 9.92 | 10.93 | - | 1.01 | 2 | NC |
| PR-53 | 9.68 | 10.83 | - | 1.15 | 2 | NC |
| PR-54 | 9.68 | 10.65 | - | 0.97 | 2 | NC |
| PR-55 | 9.61 | 11.09 | - | 1.48 | 2 | NC |
| PR-56 | 9.77 | 10.67 | <u>-</u> | 0.90 | 2 | NC |
| PR-57 | - | . - | - | | 2 | - |
| PR-58 | 9.50 | 10.46 | - | 0.96 | 2 | - |
| PR-59 | - | 9.67 | - | - | 2 | - |

TABLE II continued GROUNDWATER DATA NOVEMBER 4, 1993

| Well No. | Depth to Product (FT)(TOC) | Depth to Water (FT)(TOC) | Casing Elevation (FT) | Product Thickness (FT) | Well Diameter (IN) | GWE (FI) |
|----------|----------------------------------|--------------------------------|-----------------------------|------------------------------|--------------------------|-------------|
| PR-60 | - | 10.28 | <u>.</u> | | 2 | <u>-</u> |
| PR-61 | 10.08 | 10.33 | - | 0.25 | 2 | NC |
| PR-62 | 10.11 | 10.15 | - | 0.04 | 2 | NC |
| PR-64 | 9.82 | 11.31 | - | 1.49 | 2 | NC |
| PR-65 | 10.01 | 10.05 | - | 0.04 | 2 | NC |
| PR-66 | - | 9.78 | - | - | 2 | - |
| PR-67 | 9.44 | 10.49 | - | 1.05 | 2 | NC |
| PR-68 | - | 9.88 | - | - | 2 | - |
| PR-69 | <u> </u> | 9.20 | - | - | 2 | - |
| PR-70 | - | - | - | - | 2 | - |
| PR-74 | - | - | - | - | 2 | - |
| PR-75 | <u>-</u> | - | _ | - | 2 | - |
| PR-76 | - | 10.16 | - | - | 2 | - |
| PR-77 | - | 9.85 | - | - | 2 | - |
| V-89 | | - | - | - | 4 | - |
| V-90 | <u>-</u> | <u>-</u> | <u>-</u> | - | 4 | - |

TOC - Top of Casing

GWE - Groundwater Elevation

* - Groundwater Samples Obtained for this Investigation

NC - Not Calculated

TABLE III GROUNDWATER MEASUREMENTS JULY 26 AND 27, 1993

| Well No. | Depth to Product (FT) (TOC) | Depth to Water (FT) (TOC) | Casing Elevation (FT) | Product Thickness (FT) | Well Diameter (IN) | GWE (FT) |
|----------|-----------------------------------|---------------------------------|-----------------------------|------------------------------|--------------------|-------------|
| MW-1 | - | 10.54 | 16.49 | - | 4 | 5.95 |
| MW-2* | - | 9.55 | 15.11 | | 4 | 5.56 |
| MW-3* | - | 8.96 | 14.3 | - | 4 | 5.34 |
| MW-4 | - | - | 14.42 | | 4 | - - |
| MW-5* | - | 9.02 | 14.41 | - | 4 | 5.39 |
| MW-6* | - | 8.78 | 14.12 | - | 2 | 5.34 |
| MW-7 | 8.62 | 10.35 | 14.29 | 1.73 | 4 | NC |
| MW-8 | 8.93 | 9.43 | 14.2 | 0.5 | 2 | NC |
| MW-10 | 4 | 9.57 | 15.73 | - | 4 | 6.16 |
| MW-11 | - | 8.83 | 14.55 | - | 4 | 5.72 |
| MW-13* | - | 9.23 | 14.85 | • | 4 | 5.62 |
| MW-14 | - | No Water | 14.1 | - | 4 | - |
| MW-22 | 8.75 | 11.33 | 14.44 | 2.58 | 2 | NC |
| MW-24 | 8.78 | 11.16 | 14.67 | 2.38 | 2 | NC |
| MW-25* | - | 7.69 | 12.86 | - | 4 | 5.17 |
| MW-26* | - | 7.45 | 12.71 | - | 4 | 5.26 |
| MW-27* | - | 8.75 | 14.04 | | 4 | 5.29 |
| MW-28* | - | 8.27 | 13.45 | - | 4 | 5.18 |
| MW-29* | - | 7.5 | 12.6 | - | 4 | 5.10 |
| MW-30* | • | 8.39 | 14.54 | - | 4 | 5.15 |
| MW-32* | - | 9.15 | 14.76 | - | 4 | 5.61 |
| PR-20 | 8.32 | 10.01 | 14.36 | 1.69 | 2 | NC |
| PR-21 | 8.71 | 10.29 | 14.37 | 1.58 | 2 | NC |
| PR-22 | 8.58 | 10.17 | 14.43 | 1.59 | 2 | NC |
| PR-23 | 8.28 | 10.12 | 14.47 | 1.84 | 2 | NC |

TABLE III continued GROUNDWATER MEASUREMENTS JULY 26 AND 27, 1993

| Well No. | Depth to Product (FT) (TOC) | Depth to Water (FT) (TOC) | Casing Elevation (FT) | Product Thickness (FT) | Well Diameter (IN) | GWE (ET) |
|----------|-----------------------------------|---------------------------|-----------------------------|------------------------------|--------------------------|-------------|
| PR-26 | 8.41 | 10.21 | 14.38 | 1.80 | 2 | NC |
| PR-27 | - | 8.78 | - | - | 2 | - |
| PR-28 | - | 8.67 | - | - | 2 | - |
| PR-33 | - | 8.69 | 14.36 | <u>-</u> | 2 | 5.67 |
| PR-34 | 8.51 | 10.23 | 14.49 | 1.72 | 2 | NC |
| PR-35 | 8.56 | 10.27 | 14.55 | 1.71 | 2 | NC |
| PR-36 | 8.58 | 10.17 | - | 1.59 | 2 | NC |
| PR-37 | 8.50 | 9,91 | - | 1.41 | 2 | NC |
| PR-41 | 9.04 | 9.12 | - | 0.08 | 2 | NC |
| PR-43 | - | 9.36 | - | - | <u>-</u> | - |
| PR-44 | 9.27 | 9.66 | | 0.39 | 2 | NC |
| PR-45 | 9.11 | 9.46 | - | 0.35 | 2 | NC |
| PR-46 | • | 9.28 | - | - | 2 | - |
| PR-47 | 8.38 | 8.60 | - | 0.22 | 2 | NC |
| PR-48 | 8.85 | 10.71 | - | 1.86 | 2 | NC |
| PR-49 | - | 9.20 | | - | 2 | - |
| PR-50 | 8.82 | 9.85 | - | 1.03 | 2 | NC |
| PR-52 | 8.88 | 10.25 | - | 1.37 | 2 | NC |
| PR-53 | 8.61 | 10.42 | - | 1.81 | 2 | NC |
| PR-54 | 8.63 | 9.83 | - | 1.20 | 2 | NC |
| PR-55 | 8.35 | 10.75 | - | 2.40 | 2 | NC |
| PR-56 | 8.79 | 10.44 | - | 1.65 | 2 | NC |
| PR-58 | 8.33 | 10.21 | - | 1.88 | 2 | NC |
| PR-59 | - | 8.52 | - | - | 2 | - |
| PR-61 | 9.08 | 9.57 | - | 0.49 | 2 | NC |

TABLE III continued GROUNDWATER MEASUREMENTS JULY 26 AND 27, 1993

| Well No. | Depth to Product (FT) (FOC) | Depth to Water (ET) (TOC) | Casing Elevation (FT) | Product Thickness (FT) | Well Diameter (IN) | GWE (FT) |
|----------|-----------------------------------|---------------------------------|-----------------------------|------------------------------|--------------------------|-------------|
| PR-62 | 9.16 | 9.49 | • | 0.33 | 2 | NC |
| PR-64 | 8.72 | 10.73 | - | 2.01 | 2 | NC |
| PR-65 | 9.00 | 9.35 | • | 0.35 | 2 | NC |
| PR-66 | - | 8.68 | • | • | 2 | - |
| PR-67 | 8.54 | 9.46 | • | 0.92 | 2 | NC |
| PR-68 | - | 8.80 | - | - | 2 | - |
| PR-69 | - | 8.49 | - | - | 2 | - |
| PR-70 | 8.67 | 10.79 | <u>.</u> | 2.12 | 2 | NC |
| PR-74 | - | 8.86 | - | - | 2 | - |
| PR-76 | - | 9.14 | - | _ | 2 | • |
| PR-77 | - | 8.82 | - | - | 2 | • |

TOC - Top of Casing

GWE - Groundwater Elevation

* - Groundwater Samples Obtained for this Investigation

NC - Not Calculated

TABLE IV GROUNDWATER MEASUREMENTS MARCH 18 AND 19, 1994

| Well No. | Depth to Product (FT) (TOC) | Depth to Water (FT) (TOC) | Casing Elevation (FT) | Product Thickness (FT) | Well Diameter (IN) | GWE (FT) |
|----------|-----------------------------------|---------------------------------|-----------------------------|------------------------------|--------------------------|-------------|
| MW-1 | • | 8.51 | 16.49 | - | 4 | 7.98 |
| MW-2 | - | 7.47 | 15.11 | - | 4 | 7.64 |
| MW-3* | - | 7.23 | 14.30 | - | 4 | 7.07 |
| MW-4 | - | 7.00 | 14.42 | - | 4 | 7.42 |
| MW-5 | ** | 7.14 | 14.41 | - | 4 | 7.27 |
| MW-6 | - | 7.04 | 14.12 | - | 2 | 7.08 |
| MW-7 | 6.56 | 9.38 | 14.29 | 2.82 | 4 | NC |
| MW-8 | 7.34 | 7.64 | 14.20 | 0.30 | 2 | NC |
| MW-10 | - | • | 15.73 | - | 4 | • |
| MW-11 | - | 6.95 | 14.55 | - | 4 | 7.60 |
| MW-12 | | 7.62 | 15.28 | - | 4 | 7.66 |
| MW-13 | - | 8.62 | 14.82 | - | 4 | 7.47 |
| MW-14 | - | No Water | 14.10 | - | 4 | - |
| MW-22 | 6.98 | - | 14.44 | >3.0 | 2 | NC |
| MW-23 | 7.04 | 8.44 | | 1.40 | 4 | NC |
| MW-24 | 7.45 | - | 14.67 | >3.0 | 2 | NC |
| MW-25* | - | 6.14 | 12.86 | - | 4 | 6.72 |
| MW-26* | - | 5.83 | 12.71 | - | 4 | 6.88 |
| MW-27* | - | 7.23 | 14.04 | - | 4 | 6.81 |
| MW-28* | • | 6.65 | 13.45 | _ | 4 | 6.80 |
| MW-29* | - | 5.82 | 12.60 | - | 4 | 6.78 |
| MW-30* | - | 7.79 | 14.54 | - | 4 | 6.75 |
| MW-32* | - | 7.25 | 14.76 | - | 4 | 7.51 |
| PR-20 | 6.28 | 9.69 | 14.36 | 3.41 | 2 | NC |
| PR-21 | 6.60 | 9.36 | 14.37 | 2.76 | 2 | NC |

TABLE IV continued GROUNDWATER MEASUREMENTS MARCH 18 AND 19, 1994

| Well No. | Depth to Product (ET) (TOC) | Depth to Water (FT) (TOC) | Casing Elevation (FT) | Product Thickness (FT) | Well Diameter (IN) | GWE (FT) |
|----------|-----------------------------------|---------------------------------|-----------------------------|------------------------------|--------------------------|-------------|
| PR-22 | 6.5 | - | 14.43 | >3.0 | 2 | NC |
| PR-23 | 6.72 | 7.78 | 14.47 | 1.06 | 2 | NC |
| PR-26 | 6.54 | 8.59 | 14.38 | 2.05 | 2 | NC |
| PR-27 | - | 7.08 | - | - | 2 | |
| PR-28 | • | 6.92 | - | - | 2 | · • |
| PR-33 | - | 6.81 | 14.36 | - | 2 | 7.55 |
| PR-34 | 6.2 | 9.01 | 14.49 | 2.81 | 2 | NC |
| PR-35 | 6.56 | - | 14.55 | >3.0 | 2 | NC |
| PR-36 | 6.83 | 8.26 | - | 1.43 | 2 | NC |
| PR-37 | 6.05 | 8.4 | • | 2.35 | 2 | NC |
| PR-38 | - | 7.32 | 14.47 | • | 2 | 7.15 |
| PR-41 | 7.21 | 7.63 | - | 0.42 | 2 | NC |
| PR-43 | - | 7.69 | - | • | - | - |
| PR-44 | 7.72 | 7.91 | | 0.19 | 2 | NC |
| PR-45 | 7.49 | 7.59 | - | 0.1 | 2 | NC |
| PR-46 | - | 7.63 | - | - | 2 | • |
| PR-47 | 7.5 | 7.5 | • | SHEEN | 2 | NC |
| PR-48 | 6.73 | = | • | >3.0 | 2 | NC |
| PR-49 | - | 7.35 | - | - | 2 | 1 |
| PR-50 | 7.13 | 8.02 | - | 0.89 | 2 | NC |
| PR-51 | 6.67 | - | - | >3.0 | 2 | NC |
| PR-52 | 7.17 | 8.33 | • | 1.16 | 2 | NC |
| PR-53 | 6.49 | - | - | >3.0 | 2 | NC |
| PR-54 | 6.96 | 8.16 | • | 1.2 | 2 | NC |
| PR-55 | 7.03 | 8.34 | - | 1.31 | 2 | NC |

TABLE IV continued GROUNDWATER MEASUREMENTS MARCH 18 AND 19, 1994

| Well(No: | Depth to Product (FT) (TOC) | Depth to Water (FT) (TOC) | Casing Elevation (FT) | Product Thickness (FT) | Well Diameter (IN) | GWE (FT) |
|----------|-----------------------------|---------------------------------|-----------------------------|------------------------------|--------------------------|-------------|
| PR-61 | 7.28 | 7.63 | - | 0.5 | 2 | NC |
| PR-62 | 7.38 | 7.45 | - | 0.07 | 2 | NC |
| PR-64 | 6.43 | - | - | >3.0 | 2 | NC |
| PR-65 | 6.89 | 6.98 | - | 0.09 | 2 | NC |
| PR-66 | _ | 6.77 | - | - | 2 | - |
| PR-67 | 6.95 | 7.76 | _ | 0.81 | 2 | NC |
| PR-68 | - | 6.84 | - | - | 2 | - |
| PR-69 | - | 5.92 | <u>-</u> | - | 2 | - |
| PR-70 | 6.43 | 8.02 | - | 1.59 | 2 | NC |
| PR-76 | - | 7.74 | - | - | 2 | - |
| PR-77 | • | 7.52 | - | - | 2 | • |

TOC - Top of Casing

GWE - Groundwater Elevation

* - Groundwater Samples Obtained for this Investigation

NC - Not Calculated

TABLE V GROUNDWATER MEASUREMENTS OCTOBER 20, 1992

| Well No. | Depth to Product (FT) (TOC) | Depth to Water (FT) (TOC) | Casing Elevation (FT) | Product Thickness (FT) | Well Diameter (IN) | GWE (ET) |
|----------|-----------------------------------|---------------------------------|-----------------------------|------------------------------|--------------------------|-------------|
| MW-1 | - | 12060 | 16.49 | - | 4 | 3.89 |
| MW-3* | - | 10.23 | 14.3 | _ | 4 | 4.07 |
| MW-4 | - | No Water | 14.42 | - | 4 | 2 |
| MW-5 | - | 10.39 | 14.41 | | 4 | 4.02 |
| MW-6 | - | 10.13 | 14.12 | - | 2 | 3.99 |
| MW-7 | 10.17 | 10.84 | 14.29 | 0.67 | 4 | NC |
| MW-8 | 10.17 | 10.63 | 14.2 | 0.46 | 2 | NC |
| MW-10 | - | 11.25 | 15.73 | - | 4 | 4.48 |
| MW-13 | - | 10.62 | 14.85 | - | 4 | 4.23 |
| MW-14 | - | No Water | 14.1 | | 4 | - |
| MW-22 | 9.97 | 12.77 | 14.44 | 2.8 | 2 | NC |
| MW-24 | 10.2 | 12.24 | 14.67 | 2.04 | 2 | NC |
| MW-25* | * | 8.93 | 12.86 | - | 4 | 3.93 |
| MW-26* | - | 8.77 | 12.71 | - | 4 | 3.94 |
| MW-27* | - | 10.06 | 14.04 | • | 4 | 3.98 |
| MW-28* | - | 9.53 | 13.45 | - | 4 | 3.92 |
| MW-29* | - | 8.75 | 12.6 | - | 4 | 3.85 |
| MW-30* | - | 10.61 | 14.54 | - | 4 | 3.93 |
| MW-32* | - | 10.53 | 14.76 | - | 4 | 4.23 |
| PR-10 | - | 10.06 | - | - | 2 | - |
| PR-21 | 10.1 | 11.04 | 14.37 | 0.94 | 2 | NC |
| PR-22 | 10.05 | 10.75 | 14.43 | 0.7 | 2 | NC |
| PR-23 | 9.85 | 10.56 | 14.47 | 0.71 | 2 | NC |
| PR-26 | 10.01 | 10.81 | 14.38 | 0.8 | 2 | NC |
| PR-27 | ~ | 10.16 | <u>-</u> | - | 2 | - |

TABLE V continued GROUNDWATER MEASUREMENTS OCTOBER 20, 1992

| Well No. | Depth to | Depth to Water | Casing Elevation | Product Thickness | Well Diameter | GWE (FT) |
|----------|------------|-------------------|---------------------|----------------------|------------------|-------------|
| | (FT) (TOC) | (FT) (TOC) | (FT) | (FT) | (IN) | |
| PR-28 | - | 10.02 | <u>.</u> | _ | 2 | - |
| PR-33 | - | 10.01 | 14.36 | - | 2 | 4.35 |
| PR-34 | 10.1 | 10.8 | 14.49 | 0.7 | 2 | NC |
| PR-35 | 10.11 | 10.71 | 14.55 | 0.6 | 2 | NC |
| PR-38 | - | 10.5 | 14.47 | | 2 | 3.97 |
| PR-41 | 10.51 | 11.19 | - | 0.68 | 2 | NC |
| PR-43 | - | 10.7 | • | - | 2 | • |
| PR-44 | 10.5 | 11.12 | - | 0.62 | 2 | NC |
| PR-45 | 10.41 | 10.7 | - | 0.29 | 2 | NC |
| PR-46 | - | 10.61 | • | - | 2 | - |
| PR-47 | 10.07 | 12.52 | • | 2.45 | 2 | NC |
| PR-48 | 10.3 | 11.5 | - | 1.2 | 2 | NC |
| PR-49 | u | 10.56 | - | - | 2 | - |
| PR-50 | 10.03 | 11.68 | - | 1.6 | 2 | NC |
| PR-52 | 10.23 | 11.52 | - | 1.29 | 2 | NC |
| PR-53 | 10.02 | 11.31 | • | 1.29 | 2 | NC |
| PR-54 | 10.04 | 10.83 | * | 0.79 | 2 | NC |
| PR-55 | 9.97 | 11.83 | | 1.86 | 2 | NC |
| PR-56 | 10.12 | 11.29 | - | 1.17 | 2 | NC |
| PR-57 | _ | 9.81 | - | - | 2 | - |
| PR-58 | 9.92 | 11.02 | | 1.1 | 2 | NC |
| PR-59 | - | 9.96 | - | - | 2 | - |
| PR-60 | - | 10.64 | - | - | 2 | - |
| PR-61 | 10.44 | 10.78 | - | 0.34 | 2 | NC |
| PR-62 | 10.37 | 10.89 | - | 0.52 | 2 | NC |
| PR-64 | 10.17 | 11.65 | - | 1.51 | 2 | NC |

TABLE V continued GROUNDWATER MEASUREMENTS OCTOBER 20, 1992

| Well No. | Depth to Product (FT) (TOC) | Depth to Water (FT) (TOC) | Casing Elevation (FT) | Product Thickness (FT) | Well Diameter (IN) | GWE (FT) |
|----------|-----------------------------------|---------------------------|-----------------------------|------------------------------|--------------------------|-------------|
| PR-65 | - | 10.55 | _ | SHEEN | 2 | <u>-</u> |
| PR-66 | - | 10.05 | - | - | 2 | <u>-</u> |
| PR-68 | - | 10.22 | - | - | 2 | - |
| PR-69 | - | 9.93 | • | | 2 | • |
| PR-70 | 10.08 | 10.37 | | 0.29 | 2 | NC |
| PR-74 | - | 10.3 | - | - | 2 | - |
| PR-75 | <u>-</u> | 10.36 | - | - | 2 | - |
| PR-76 | _ | 10.58 | - | - | 2 | - |
| PR-77 | - | 10.11 | - | _ | 2 | - |
| V-89 | - | 9.7 | - | - | 4 | - |
| V-90 | • | 9.7 | - | - | 4 | - |

TOC - Top of Casing

GWE - Groundwater Elevation

* - Groundwater Samples Obtained for this Investigation

NC - Not Calculated

TABLE VI GROUNDWATER PURGING DATA FEBRUARY 25, 1994

| Well Number | Total Gallons Removed | pH | Specific Conductance x 1000 | Temperature in Fahrenheit |
|------------------|---------------------------------|--|---|--|
| MW-2-P | 5 | 7.4 | .70 | 63.9 |
| | 10 | 7.3 | .72 | 66.3 |
| | 15 | 7.1 | .75 | 66.0 |
| | 20 | 7.1 | .76 | 68.2 |
| | 25 | 7.0 | .74 | 68.4 |
| | 30 | 7.0 | .75 | 68.4 |
| MW-3 | 5 | 6.7 | .86 | 63.8 |
| | 10 | 6.7 | .88 | 65.3 |
| | 15 | 6.7 | .96 | 66.2 |
| | 20 | 6.6 | .96 | 66.5 |
| | 25 | 6.6 | .90 | 66.4 |
| MW-6* | 1 | 6.9 | .64 | 59.3 |
| | 2 | 6.8 | .53 | 59.7 |
| | 3 | 6.6 | .49 | 60.3 |
| | 4 | 6.6 | .49 | 60.1 |
| | 5 | 6.6 | .48 | 60.0 |
| MW-25** MW-26 | 5 5 15 20 25 30 | 7.3 6.9 6.7 6.6 6.5 6.5 | 0.71 .61 .63 .66 .64 .70 | 60.4 61.2 62.5 63.1 63.5 63.4 |
| MW-27 | 5 10 15 20 25 30 | 7.5 7.4 7.3 7.0 7.0 7.0 | .67 .52 .58 .59 .57 | 66.8 65.4 65.6 66.0 65.4 65.3 |

TABLE VI GROUNDWATER PURGING DATA continued FEBRUARY 25, 1994

| Well Number | Total Gallons Removed | PH | Specific Conductance x 1000 | Temperature in Fahrenheit |
|-------------|--------------------------|-----------|-----------------------------------|------------------------------|
| MW-28 | 5 | 8.1 | .13 | 61.9 |
| | 10 | 8.1 | .14 | 63.4 |
| | 15 | 8.1 | .14 | 64.5 |
| | 20 | 8.0 | .14 | 65.4 |
| | 25 | 8.0 | .16 | 65.7 |
| | 30 | 7.9 | .18 | 65.6 |
| | 35 | 7.9 | .20 | 66.0 |
| MW-29 | 5 | 7.9 | .20 | 61.9 |
| | 10 | 8.2 | .18 | 63.7 |
| | 15 | 8.2 | .17 | 64.8 |
| | 20 | 8.2 | .17 | 65.8 |
| | 25 | 8.1 | .16 | 65.5 |
| | 30 | 8.0 | .16 | 65.3 |
| MW-30 | 5 | 7.4 | .46 | 58.1 |
| | 10 | 7.3 | .48 | 60.0 |
| | 15 | 7.3 | .50 | 60.5 |
| | 20 | 7.2 | .52 | 61.9 |
| | 21 | 7.0 | .56 | 61.7 |
| | 22 | 6.9 | .57 | 62.0 |
| | 25 | 6.8 | .58 | 62.6 |
| MW-32** | 5 | 7.4 | .55 | 63.3 |
| | 10 | 7.4 | .55 | 65.1 |
| | 15 | 7.3 | .57 | 66.1 |
| | 20 | 7.2 | .58 | 67.6 |
| | 25 | 7.2 | .61 | 68.1 |

- * 2-inch well hand bailed using a new disposable bailer
- ** Well was pumped dry at approximately 5 gallons
- *** Well was pumped dry at approximately 25 gallons

| SAMPLE DATE | The second second | PH DIESEL | TPH MOTOR OIL | OIL/ GREASE | B | T | E | X | TOTAL LEAD | PCB | PESTI- CIDES | 8010 or 8240 COM- POUNDS | SAMPLER |
|----------------|-------------------|--------------|---------------------|----------------|-----------|-----------|-----------|-----------|---------------|-----|-----------------|-----------------------------------|---------|
| 3/23/93 | ND (100) | ND (1000) | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |
| 7/27/93 | ND (100) | ND (2500) | N/A | N/A | ND (l) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |
| 11/5/93 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | PARK |
| 2/25/94 | ND (100) | ND (1000) | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |

| SAMPLE | | Г Р Н 💉 | TPH MOTOR | OIL/ | | | | | TOTAL | PCB | PESTI- | 8010 or 8240 | SAMPLER |
|----------|------------|----------------|--------------|--------------|-----------|-------------|-------------|-------------|-------|------------|--------|-----------------|---------|
| DATE | GA GA | DIESEL | OIL | GREASE | B | T | E | X | LEAD. | | CIDES | COM- POUNDS | |
| 6-25-91 | ND (50) | ND (50) | ND (500) | ND (5000) | 22 | ND (0.5) | ND (0.5) | ND (0.5) | N/A | N/A | N/A | N/A | HLA |
| 9-17-91 | N/A | N/A | N/A | N/A | 64 | 3.6 | 3.8 | 2.8 | N/A | N/A | N/A | N/A | HLA |
| 12-16-91 | N/A | N/A | N/A | N/A | 100 | 8.1 | 2.9 | 5.9 | N/A | N/A | N/A | N/A | HLA |
| 3-23-92 | N/A | N/A | N/A | N/A | 31 | 0.7 | ND (0.6) | 2.2 | N/A | N/A | N/A | N/A | HLA |
| 6-23-92 | N/A | N/A | N/A | N/A | 2.5 | 1.0 | ND (0.6) | ND (0.6) | N/A | N/A | N/A | N/A | HLA |
| 10-20-92 | N/A | N/A | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |
| 3-23-93 | 300 | ND (1000) | N/A | N/A | 35 | 2.9 | 2.0 | 3.2 | N/A | N/A | N/A | N/A | PARK |
| 7-27-93 | 220 | ND (2500) | N/A | N/A | 97 | 1.0 | 4.0 | 1.1 | N/A | N/A | N/A | N/A | PARK |
| 11-5-93 | 170 | ND (1000) | N/A | N/A | 4.9 | ND | ND | 1.2 | N/A | N/A | N/A | N/A | PARK |
| 2-25-94 | 100 | ND (1000) | N/A | N/A | 42 (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |

| SAMPLE DATE | TPH) MÔTOI | | MOTOR | OIL/ GREASE | | | | | | РСВ | PESTI- CIDES | 8010 or 8240 COM- | SAMPLER | |
|----------------|-------------|--------------|-------|----------------|-----------|-----------|-----------|-----------|------|-----|-----------------|-------------------------|---------|--|
| | GAS | DIESEL: | | | В | T | E | X | LEAD | | | POUNDS | | |
| 3/23/93 | ND (100) | ND (1000) | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK | |
| 7/27/93 | ND (100) | ND (2500) | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK | |
| 11/5/93 | ND (100) | ND (1000) | N/A | N/A | ND (1) | ND (1) | ND (1) | 3.5 | N/A | N/A | N/A | N/A | PARK | |
| 2/25/94 | ND (100) | ND (1000) | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK | |

| SAMPLE DATE | 100 | -DIESEL | TPH MOTOR OIL | OIL GREASE | B | T | E | X | TOTAL LEAD | PCB | PESTI- CIDES | 8010 or 8240 COM- POUNDS | SAMPLER |
|----------------|-------------|--------------|---------------------|---------------|-----------|-----------|-----------|-----------|---------------|-----|-----------------|-----------------------------------|---------|
| 3/27/89 | ND (100) | ND (1000) | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |
| 7/27/93 | ND (100) | ND (2500) | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |
| 11/5/93 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | PARK |
| 2/25/94 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | PARK |

BLE Continued

Groundwater Chemical Constituent Results MW-26

| SAMPLE DATE | T GAS | PH. DIESEL | TPH MOTOR OIL | OIL/ GREASE | В | Ť | E | | TOTAL LEAD | PCB | PEST- ICIDES | 8010 or 8240 COMPOUNDS | SAMPLER |
|----------------|---------------|---------------|---------------------|----------------|------------|-----------|-------------|-----------|---------------|--------------|-----------------|------------------------------|---------|
| 9-13-89 | 6000 | 590 | N/A | 1000 | 1400 | 1300 | 110 | 1100 | ND (50) | ND (l) | ND (1) | N/A | AGE |
| 10-3-89 | 1900 | ND (50) | N/A | ND (2000) | 870 | 440 | 12 | 120 | ND (50) | ND (0.05) | N/A | N/A | AGE |
| 11-15-89 | 12, 000 | ND (500) | N/A | 230 | 4200 | 3000 | ND (100) | 840 | ND (50) | ND (500) | N/A | N/A | AGE |
| 6-25-91 | 300, 000 | 2100 | 1600 | ND (5000) | 4400 | 3600 | 260 | 4600 | N/A | N/A | N/A | 470 1,2 -DCA | HLA |
| 9-17-91 | N/A | N/A | N/A | N/A | 6200 | 5800 | 1.0 | 3900 | N/A | N/A | N/A | 610 1,2 -DCA | HLA |
| 12-16-91 | N/A | N/A | N/A | N/A | 5300 | 4500 | 450 | 1600 | N/A | N/A | N/A | 79 1,2 -DCA | HLA |
| 3-23-92 | N/A | N/A | N/A | N/A | 19, 000 | 2400 0 | 1600 | 8400 | N/A | N/A | N/A | N/A | HLA |
| 6-23-92 | N/A | N/A | N/A | N/A | 20, 000 | 2100 0 | 2200 | 1000 0 | N/A | N/A | N/A | 380 1,2 -DCA | HLA |
| 10-20-92 | N/A | N/A | N/A | N/A | 3700 | 1600 | 280 | 900 | N/A | N/A | N/A | 73 1,2 -DCA 1.9 TCE | PARK |
| 3-23-93 | 7000 | 1300 | N/A | N/A | 180 | 190 | 55 | 330 | N/A | N/A | N/A | ND 1 | PARK |
| 7-27-93 | 1800 | ND (2500) | N/A | N/A | 470 | 96 | 30 | 80 | N/A | N/A | N/A | 140 1,2 -DCA | PARK |
| 11-5-93 | 19, 000 | 9.4* | N/A | N/A | 4700 | 1300 | 9.0 | 1400 | N/A | N/A | N/A | 120 1,2 DCA | PARK |
| 2-25-94 | 14,000 100 | ND (1000) | N/A | N/A | 4800 | 570 | 200 | 860 | N/A | N/A | N/A | 28 1,2 DCA | PARK |

^{*} See Laboratory Report for result explanation - Appendix C

| SAMPLE | T | PH | TPH MOTOR | OïL/ | | | | | TOTAL | PCB | PEST- | 8010 or 8240 | SAMPLER |
|----------|-------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|------------|-------------|-------------|-----------------|---------|
| DATE | GAS | DIESEL | OIL | GREASE | В | T | E | X | LEAD | | ICIDES | COM- POUNDS | |
| 9-13-89 | ND (50) | 100 | N/A | ND (1000) | ND (0.4) | ND (0.3) | ND (0.3) | ND (0.7) | ND (50) | ND (1) | ND (.01) | N/A | AGE |
| 10-3-89 | ND (50) | 51 | N/A | ND (2000) | 12 | 14 | ND (1) | 6 | ND (50) | ND (.05) | N/A | N/A | AGE |
| 11-15-89 | ND (50) | ND (500) | N/A | 100 | ND (1) | 3.1 | ND (1) | ND (1) | ND (50) | ND (500) | N/A | N/A | AGE |
| 6-25-91 | ND (50) | ND (50) | N/A | N/A | 1.8 | ND (0.5) | ND (0.5) | ND (0.5) | N/A | N/A | N/A | N/A | HLA |
| 9-17-91 | N/A | N/A | N/A | N/A | ND (0.5) | ND (0.5) | ND (0.6) | ND (0.6) | N/A | N/A | N/A | N/A | HLA |
| 12-16-91 | N/A | N/A | N/A | N/A | 11 | 17 | 2.1 | 11 | N/A | N/A | N/A | N/A | HLA |
| 3-23-92 | N/A | N/A | N/A | N/A | ND (0.5) | ND (0.5) | ND (0.6) | ND (0.6) | N/A | N/A | N/A | N/A | HLA |
| 6-23-92 | N/A | N/A | N/A | N/A | 4.6 | 5.0 | 0.6 | 1.3 | N/A | N/A | N/A | N/A | HLA |
| 10-20-92 | N/A | N/A | N/A | N/A | ND (1) | 1.5 | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |
| 3-23-93 | ND (100) | ND (100) | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |
| 7-27-93 | ND (100) | ND (2500) | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |
| 11-5-93 | ND (100) | ND (1000) | N/A | N/A | ND (1) | ND (1) | ND (1) | 2.6 | N/A | N/A | N/A | N/A | PARK |
| 2-25-94 | ND (100) | ND (1000) | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |

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Groundwater Chemical Constituent Results MW-28

| SAMPLE DATE | GAS | TPH DIESEL | TPH MOTOR: OIL | OIL/ GREASE | В | T | E | X | TÖTÄL LEAD | РСВ | PEST- ICIDES | 8010 or 8240 COM- POUNDS | SAMPLER |
|----------------|-------------|---------------|----------------------|----------------|-------------|-------------|-------------|-------------|---------------|-------------|-----------------|-----------------------------------|---------|
| 9-13-89 | ND (50) | ND (50) | N/A | ND (1000) | ND (0.4) | ND (0.3) | ND (0.3) | ND (0.7) | ND (50) | ND (1) | ND (0.1) | N/A | AGE |
| 10-3-89 | 58 | ND (50) | N/A | ND (2000) | 8 | 14 | 1 | 8 | ND (50) | ND (0.5) | N/A | N/A | AGE |
| 11-15-89 | ND (50) | ND (500) | N/A | 50 | ND (1) | ND (1) | ND (1) | ND (1) | ND (1) | ND (50) | N/A | N/A | AGE |
| 6-25-91 | ND (50) | ND (50) | ND (500) | N/A | ND (0.5) | ND (0.5) | ND (0.5) | ND (0.5) | N/A | N/A | N/A | N/A | HLA |
| 9-17-91 | N/A | N/A | N/A | N/A | ND (0.5) | ND (0.5) | ND (0.6) | ND (0.6) | N/A | N/A | N/A | N/A | HLA |
| 12-16-91 | N/A | N/A | N/A | N/A | N/A | 0.69 | 3.5 | ND (0.6) | 18 | N/A | N/A | N/A | HLA |
| 3-23-92 | N/A | N/A | N/A | N/A | ND (0.5) | ND (0.5) | ND (0.6) | ND (0.6) | N/A | N/A | N/A | N/A | HLA |
| 6-23-92 | N/A | N/A | N/A | N/A | ND (0.5) | ND (0.5) | ND (0.6) | ND (0.6) | N/A | N/A | N/A | N/A | HLA |
| 10-20-92 | N/A | N/A | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |
| 3-23-93 | 110 | ND (1000) | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |
| 7-27-93 | ND (100) | ND (2500) | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |
| 11-5-93 | ND (100) | ND (1000) | N/A | N/A | ND (1) | ND (1) | ND (1) | 2.1 | N/A | N/A | N/A | N/A | PARK |
| 2-25-94 | ND (100) | ND (1000) | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |

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Groundwater Chemical Constituent Results MW-29

All values reported in micrograms per liter or ug/l

| SAMPLE | 1 | PH | TPH MOTOR | OIL/ | | | | | TOTAL | PCB | PEST- | 8010 or 8240 | SAMPLER |
|----------|-------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|------------|-------------|-------------|-----------------|---------|
| DATE | GAS | DIESEL | OIL | GREASE | В | T | E | X | LEAD | | ICIDES | COM- POUNDS | |
| 9-13-89 | ND (50) | ND (50) | N/A | ND (1000) | ND (0.4) | ND (0.3) | ND (0.3) | ND (0.7) | ND (50) | ND (1) | ND (0.1) | N/A | AGE |
| 10-3-89 | ND (50) | 65 | N/A | ND (2000) | 2.3 | 4.7 | ND (1) | 1.2 | ND (50) | ND (0.5) | N/A | N/A | AGE |
| 11-15-89 | ND (50) | ND (500) | N/A | 150 | ND (1) | ND (1) | ND (1) | ND (1) | ND (50) | ND (500) | N/A | N/A | AGE |
| 6-25-91 | ND (50) | ND (50) | ND (500) | ND (5000) | ND (5) | ND (5) | ND (5) | ND (5) | N/A | N/A | N/A | ND (5-10) | HLA |
| 9-17-91 | N/A | N/A | N/A | N/A | ND (0.5) | ND (0.5) | ND (0.6) | ND (0.6) | N/A | N/A | N/A | N/A | HLA |
| 12-16-91 | N/A | N/A | N/A | N/A | ND (0.5) | 0.62 | ND (0.6) | ND (0.6) | N/A | N/A | N/A | N/A | HLA |
| 3-23-92 | N/A | N/A | N/A | N/A | ND (0.5) | ND (0.5) | ND (0.6) | ND (0.6) | N/A | N/A | N/A | N/A | HLA |
| 6-23-92 | N/A | N/A | N/A | N/A | ND (0.5) | ND (0.5) | ND (0.6) | ND (0.6) | N/A | N/A | N/A | N/A | HLA |
| 10-20-92 | N/A | N/A | N/A | N/A | ND (1) | 3.5 | ND (1) | 2.9 | N/A | N/A | N/A | N/A | PARK |
| 3-23-93 | ND (100) | ND (1000) | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |
| 7-27-93 | ND (100) | ND (2500) | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |
| 11-5-93 | ND (100) | ND (1000) | N/A | N/A | ND (1) | ND (1) | 2.1 | 11 | N/A | N/A | N/A | N/A | PARK |
| 2-25-94 | ND (100) | ND (1000) | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |

TIBLE III command

Groundwater Chemical Constituent Results MW-30

All values reported in micrograms per liter or ug/l

| SAMPLE | Т | PH | TPH MOTOR | OIL | | | | | TOTAL | PCB | PEST- | 8010 or 8240 | SAMPLER |
|----------|-------------|--------------|--------------|--------|-------------|-------------|-------------|-------------|-------|-----|--------|-----------------|---------|
| DATE | GAS | DIESEL | OIL | GREASE | B | T | E | X | LEAD | | ICIDES | COM- POUNDS | |
| 9/17/91 | N/A | N/A | N/A | N/A | ND (0.5) | ND (0.5) | ND (0.6) | ND (0.6) | N/A | N/A | N/A | N/A | HLA |
| 12-16-91 | N/A | N/A | N/A | N/A | ND (0.5) | ND (0.5) | ND (0.6) | 1.1 | N/A | N/A | N/A | N/A | HLA |
| 3-23-92 | N/A | N/A | N/A | N/A | ND (0.5) | 6.9 | ND (0.6) | ND (0.6) | N/A | N/A | N/A | N/A | HLA |
| 6-23-92 | N/A | N/A | N/A | N/A | 2.3 | 4.7 | ND (0.6) | 4.2 | N/A | N/A | N/A | N/A | HLA |
| 10-20-92 | N/A | N/A | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |
| 3-23-93 | ND (100) | ND (1000) | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |
| 7-27-93 | ND (100) | ND (2500) | N/A | N/A | ND (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |
| 11-5-93 | ND (100) | ND (1000) | N/A | N/A | ND (1) | ND (1) | ND (1) | 2.8 | N/A | N/A | N/A | N/A | PARK |
| 2-25-94 | ND (100) | ND (1000) | N/A | N/A | 1.3 (1) | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | N/A | PARK |

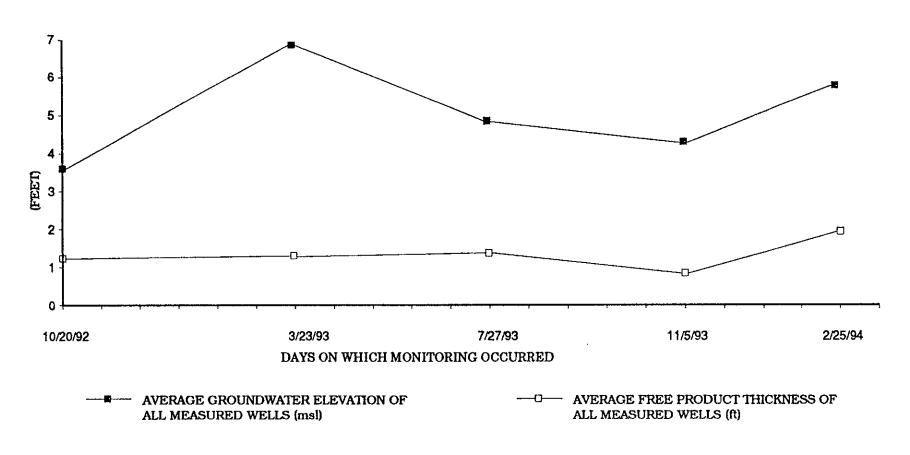
TABLE VA commued

Groundwater Chemical Constituent Results MW-32

All values reported in micrograms per liter or ug/l

| SAMPLE DATE | GAS - | PH DIESEĽ | TPH MOTOR OIL | OIL/ GREASE | В | T | E | X | TOTA L LEAD | PCB | PEST: ICIDES | 8010 or 8240 COM- POUNDS | SAMPLER |
|----------------|-------------|--------------|---------------------|----------------|------|-----------|-----------|-----------|-------------------|-----|-----------------|-----------------------------------|---------|
| 6-25-91 | 690 | ND (50) | ND (500) | ND (5000) | 550 | ND (5) | 7.6 | 11 | N/A | N/A | N/A | 14 1,2-DCA | HLA |
| 9-17-91 | N/A | N/A | N/A | N/A | 0.62 | 2.6 | 11 | 4.6 | N/A | N/A | N/A | 8.1 1,2-DCA | HLA |
| 12-16-91 | N/A | N/A | N/A | N/A | 64 | 0.92 | 1.5 | 1.7 | N/A | N/A | N/A | 4.2 1,2-DCA | HLA |
| 3-23-92 | N/A | N/A | N/A | N/A | 120 | 1.6 | 2 | 2.1 | N/A | N/A | N/A | 2 1,2-DCA | HLA |
| 6-23-92 | N/A | N/A | N/A | N/A | 170 | 250 | 42 | 200 | N/A | N/A | N/A | 7.9 1,2-DCA | HLA |
| 10-20-92 | N/A | N/A | N/A | N/A | 5.1 | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | 2.5 1,2-DCA | PARK |
| 3-23-93 | 440 | ND (1000) | N/A | N/A | 39 | 6.2 | 3.1 | 9.0 | N/A | N/A | N/A | 60 1,2 DCA | PARK |
| 7-27-93 | ND (100) | ND (2500) | N/A | N/A | 39 | 6.2 | 3.1 | 9.0 | N/A | N/A | N/A | 14 1,2 DCA | PARK |
| 11-5-93 | 170 | ND (1000) | N/A | N/A | 20 | ND (1) | 1.8 | 2.1 | N/A | N/A | N/A | 7.9 1,2 DCA | PARK |
| 2-25-94 | ND (100) | ND (1000) | N/A | N/A | 5.6 | ND (1) | ND (1) | ND (1) | N/A | N/A | N/A | ND (1) | PARK |

THE RELATIONSHIP BETWEEN THE CHANGE IN ELEVATION OF GROUNDWATER TO THE THICKNESS OF FREE PRODUCT







Date: March 10,1994

Park Environmental Corporation 5100 East Hunter Avenue Anaheim, California 92807

Attention: Mr. Peter Frank

Client Project Number:

5008-J12

Client Project Name:

N/A

Date Sampled:

Feb-25-94

Date Samples Received:

Mai-01-94

Sierra Project Number:

SP-996-93

Enclosed with this letter is the report on the chemo-physical analysis of samples from the project references shown above.

The samples were received by Sierra in a chilled state, intact, and with the chain of custody record attached.

Note that N.D means not detected at the appropriate reporting limit. The reporting limit is adjusted to reflect the dilution factor of the sample. The reporting limit is expressed in such cases in parentheses to the right of reported value. The detection limit for values without such a designation appears to the right of or at the bottom of the same page

All halogenated compounds detected by EPA Method 8010 were confirmed by analysis with a second column of dissimilar phase or site history analytical data.

Reviewed

Approved

The contents of this report pertain only to the samples investigated and do not necessarily apply to other apparently identical or similar materials.

This report is submitted for the exclusive use of the client to whom it is addressed. Unauthorized reproduction of this report or use of this laboratory's name for advertising or publicity purposes is strictly prohibited.

| Park Environmental Corporation | Sierra Client No. | 10000-92 | Date Sampled: | .02/25/94 |
|-------------------------------------|--------------------|--------------|----------------|-----------|
| 4231 Pacific Street, Suite 7 | Sierra Project No. | SP-996-94 | Date Received: | .03/01/94 |
| Anaheim, California 95677 | Client Project No. | 5008-J12 | Date Prepared: | .03/02/94 |
| | Client Project: | | Date Analyzed: | .03/02/94 |
| | N/A | | | |
| Sample Preparation: EPA Method 5030 | | | | |
| Sample Analysis: EPA 8010 (Halog | | Report Date: | .03/10/94 | |

Sample Type: Liquid Sample I.D. MW-26

| Sample LD: MAY-20 | | |
|---|---------------|------------------|
| | Sample Result | Method Detection |
| Compound | (μg/l) | Limit (µg/l) |
| | | |
| Chloromethane | ND | 1 |
| Vinyl chloride | ND | 1 |
| Bromomethane | ND | 1 |
| Chloroethane | ND | 1 |
| Trichlorofluoromethane | ND | 1 |
| 1,1-Dichloroethene (1,1-DCE) | ND | 1 |
| Methylene chloride | ND | 1 |
| trans-1,2-Dichloroethene (t-1,2-DCE) | ND | I |
| 1,1-Dichloroethane (1,1-DCA) | ND | 1 |
| cis-1,2-Dichloroethene (c-1,2-DCE) | ND | 1 |
| Chloroform | ND | i |
| 1,1,1-Trichloroethane (1,1,1-TCA) | ND | 1 |
| Carbon tetrachioride | ND | 1 |
| 1,2-Dichloroethane (1,2-DCA) | 28 | 1 |
| Trichloroethene (TCE) | ND | 1 |
| 1,2-Dichloropropaue (1,2-DCP) | ND | 1 |
| Bromodichloromethane | ND | 1 |
| 2-Chloroethylvinyl ether | ND | 1 |
| cis-1,3-Dichloropropene | ND | 1 |
| trans-1,3-Dichloropropene | ND | 1 |
| 1,1,2-Trichloroethane (1,1,2-TCA) | ND | 1 |
| Tetrachloroethene (PCE) | ND | 1 |
| Dibromochloromethane | ND | 1 |
| Chlorobenzene | ND | 1 |
| Bromoform | ND | 1 |
| 1,1,2,2-Tetrachloroethane (1,1,2,2-PCA) | ND | 1 |
| 1,3-Dichlorobenzene | ND | 1 |
| 1,4-Dichlorobenzene | ND | 1 |
| 1,2-Dichlorobenzene | ND | 1 |
| | | |

| Park Environmental Corporation | Sierra Client No. | 10000-92 | Date Sampled: | .02/25/94 |
|-------------------------------------|--------------------|-----------|----------------|-----------|
| 4231 Pacific Street, Suite 7 | Sierra Project No. | SP-996-94 | Date Received: | .03/01/94 |
| Anaheim, California 95677 | Client Project No. | 5008-J12 | Date Prepared: | .03/02/94 |
| | Client Projects | | Date Analyzed: | .03/02/94 |
| | N/A | | | |
| Sample Preparation: EPA Method 5030 | | | | |
| Sample Analysis: EPA 8010 (Halog | Report Date: | .03/10/94 | | |

Sample Type: Liquid Sample I.D. MW-32

| ounpe ma | Sample Result | Method Detection |
|---|---------------|------------------|
| Compound | (µg/l) | Limit (µg/l) |
| Zámbanta | (r.e) | 4.6. |
| Chloromethane | ND | 1 |
| Vinyl chloride | ND | 1 |
| Bromomethane | ND | 1 |
| Chloroethane | ND | 1 |
| Trichlorofluoromethane | ND | 1 |
| 1,1-Dichloroethene (1,1-DCE) | ND | 1 |
| Methylene chloride | ND | 1 |
| trans-1,2-Dichloroethene (t-1,2-DCE) | ND | 1 |
| 1,1-Dichloroethane (1,1-DCA) | ND | 1 |
| cis-1,2-Dichloroethene (c-1,2-DCE) | ND | 1 |
| Chloroform | ND | 1 |
| 1,1,1-Trichloroethane (1,1,1-TCA) | ND | 1 |
| Carbon tetrachloride | NĐ | 1 |
| 1,2-Dichloroethane (1,2-DCA) | ND | 1 |
| Trichloroethene (TCE) | ND | 1 |
| 1,2-Dichloropropane (1,2-DCP) | ND | 1 |
| Bromodichloromethane | ND | 1 |
| 2-Chloroethylvinyl ether | ND | 1 |
| cis-1,3-Dichloropropene | ND | 1 |
| trans-1,3-Dichloropropene | ND | 1 |
| 1,1,2-Trichloroethane (1,1,2-TCA) | ND | 1 |
| Tetrachloroethene (PCE) | ND | 1 |
| Dibromochloromethane | ND | 1 |
| Chlorobenzene | ND | 1 |
| Bromoform | ND | 1 |
| 1,1,2,2-Tetrachloroethane (1,1,2,2-PCA) | ND | 1 |
| 1,3-Dichlorobenzene | ND | 1 |
| 1,4-Dichlorobenzene | ND | 1 |
| 1,2-Dichlorobenzene | ND | 1 |
| | | |

Sierra Client No. Sierra Project No. Client Project No. 10000-92 SP-996-94 Date Sampled:

.02/25/94

SP-996-94 5008-J12

Date Received: Date Prepared:

ed: .03/01/94

Date Analyzed:

.03/03/94 .03/03/94

N/A

Sample Preparation:

EPA Method 5030

Sample Analysis:

8015-Modified (TPH as Gasoline-CADHS LUFT)

Client Project:

Report Date:

.03/10/94

and EPA 8020 (BTEX) in series

Sample Type: Liquid

| Client Sample I.D. | TPH μg/l | Benzene μg/l | Toluene μg/l | Ethylbenzene µg/l | Xylenes, Total μg/l |
|--------------------|-------------|-----------------|-----------------|----------------------|------------------------|
| MW-2 | ND | ND | ND | ND | ND |
| MW-3 | 100 | 42 | ND | ND | ND |
| MW-25 | ND | 2.1 | ND | ND | ND |
| MW-26 | 14000 | 4800 | 570 | 200 | 860 |
| MW-27 | ND | ND | ND | ND | ND |
| MW-28 | ND | ND | ND | ND | ND |
| MW-29 | ND | ND | ND | ND | ND |
| MW-30 | ND | 1.3 | ND | ND | ND |
| MW-32 | ND | 5.6 | ND | ND | ND |
| MW-6 | ND | ND | ND | ND | ND |
| Equip Blk | ND | N/A | N/A | N/A | N/A |
| Dup | ND | N/A | N/A | N/A | N/A |

| | TPH | Benzene | Toluene | Ethylbenzene | Xylenes, Total | |
|------------------|------|---------|---------|--------------|----------------|--|
| | μg/l | μg/l | μg/l | μg/l | μg/l | |
| | | | | | | |
| Detection Limit: | 100 | 1 | 1 | 1 | 1 | |

| Park Environmental | Corporation | Sierra Client No. | 10000-92 | Date Sampled: | .02/25/9 |
|---|--------------------|--------------------|-----------|----------------|-----------|
| 4231 Pacific Street, Suite 7 | | Sierra Project No. | SP-996-94 | Date Received: | .03/01/94 |
| Anaheim, California 95677 | | Client Project No. | 5008-J12 | Date Prepared: | .03/08/9 |
| | | Client Project: | | Date Analyzed: | .03/08/9 |
| | | N/A | | | |
| Sample Preparation: | Solvent Extraction | | | | |
| Sample Analysis: 8015-Modified (TPH as Diesel-CADHS LUFT) | | | | Report Date: | .03/10/9 |

Sample Type: Liquid

| Client Sample I.D. | TPH mg/l |
|--------------------|-------------|
| MW-2 | ND |
| MW-3 | ND |
| MW-25 | ND |
| MW-26 | ND |
| MW-27 | ND |
| MW-28 | ND |
| MW-29 | ND |
| MW-30 | ND |
| MW-32 | ND |
| MW-6 | ND |

TPH mg/l

Detection Limit:

1.0

Sierra Client No. Sierra Project No. Client Project No.

Client Project:

10000-92 SP-996-94 5008-J12

Date Sampled: Date Received: .02/25/94 .03/01/94

Date Prepared: .03/02/94

Date Analyzed: .03/02/94

N/A

Sample Preparation: EPA Method 5030

Sample Analysis: EPA 8010 (Halogenated Volatiles)

Report Date:

.03/10/94

Matrix/Spike Duplicate Report

| | 1,1-DCE (Range) | i,1,1-TCA (Range) | TCE (Range) | Chlorobenzene (Range) |
|------------------------|--------------------|----------------------|----------------|--------------------------|
| Matrix Spike | 83 | 93 | 83 | 87 |
| Recovery (%) | (28-167) | (41-138) | (35-146) | (38-150) |
| Matrix Spike Duplicate | 86 | 99 | 84 | 88 |
| Recovery (%) | (28-167) | (41-138) | (35-146) | (38-150) |
| Relative Per-cent | 3 | 5 | 1 | 1 |
| Difference | (0-30) | (0-30) | (0-30) | (0-30) |

Quality Control Reference Number:

G002-030294-G2B0016-025-026

Sierra Client No. Sierra Project No. Client Project No.

10000-92 SP-996-94 5008-J12

Date Sampled: .02/25/94 Date Received: Date Prepared:

.03/01/94 .03/03/94 .03/03/94

Client Project: N/A

Sample Preparation: EPA Method 5030 Sample Analysis: 8015-M as Gasoline

Report Date:

Date Analyzed:

.03/10/94

Matrix/Spike Duplicate Report

Sample Type: Liquid

TPH-Gasoline

(Range)

Matrix Spike Recovery (%) 96

102

5

(50-150)

Recovery (%)

Matrix Spike Duplicate

(50-150)

Relative Per-cent

Difference

(0-30)

Quality Control Reference Number:

G002-030394-G2A0023-138-139

| Park Environmental Corporation | Sierra Client No. | 10000-92 | Date Sampled: | .02/25/94 |
|-------------------------------------|--------------------|-----------|----------------|-----------|
| 4231 Pacific Street, Suite 7 | Sierra Project No. | SP-996-94 | Date Received: | .03/01/94 |
| Anaheim, California 95677 | Client Project No. | 5008-J12 | Date Prepared: | 03/03/94 |
| | Client Project: | | Date Analyzed: | .03/03/94 |
| | N/A | | | |
| Sample Preparation: EPA Method 5030 | | | | |
| Sample Analysis: EPA 8020 (BTEX) | | | Report Date: | .03/10/94 |

Matrix/Spike Duplicate Report

| Sample Type: Liquid | | | | |
|------------------------|----------|----------|--------------|----------------|
| | Benzene | Toluene | Ethylbenzene | Xylenes, Total |
| | (Range) | (Range) | (Range) | (Range) |
| Matrix Spike | 102 | 97 | 91 | 105 |
| Recovery (%) | (39-150) | (46-148) | (32-160) | (37-154) |
| Matrix Spike Duplicate | 105 | 105 | 100 | 113 |
| Recovery (%) | (39-150) | (46-148) | (32-160) | (37-154) |
| Relative Per-cent | 3 | 7 | 9 | 8 |
| Difference | (0-30) | (0-30) | (0-30) | (0-30) |

Quality Control Reference Number:

G002-030394-G2A0023-138-139

Sierra Client No. Sierra Project No. 10000-92 SP-996-94 5008-J12

Date Sampled: Date Received:

.02/25/94 .03/01/94 .03/08/94

Client Project No. Client Project:

Date Prepared: Date Analyzed:

.03/08/94

N/A

Sample Preparation:

Solvent Extraction

Sample Analysis:

8015-Modified (TPH as Diesel-CADHS LUFT)

Report Date:

.03/10/94

Matrix/Spike Duplicate Report

Sample Type: Liquid

TPH-Diesel

Matrix Spike

112

105

7

Recovery (%)

Matrix Spike Duplicate

Recovery (%)

Relative Per-cent

Difference

Quality Control Reference Number:

G002-030894-G2A0024-019-020

Sierra Client No. 10000-92 Sierra Project No. SP-996-94 Client Project No. 5008-J12 Client Project:

Date Sampled: .02/25/94 Date Received: Date Prepared: Date Analyzed: .03/02-03/08/94

.03/01/94 .03/02-03/08/94

N/A

Report Date:

.03/10/94

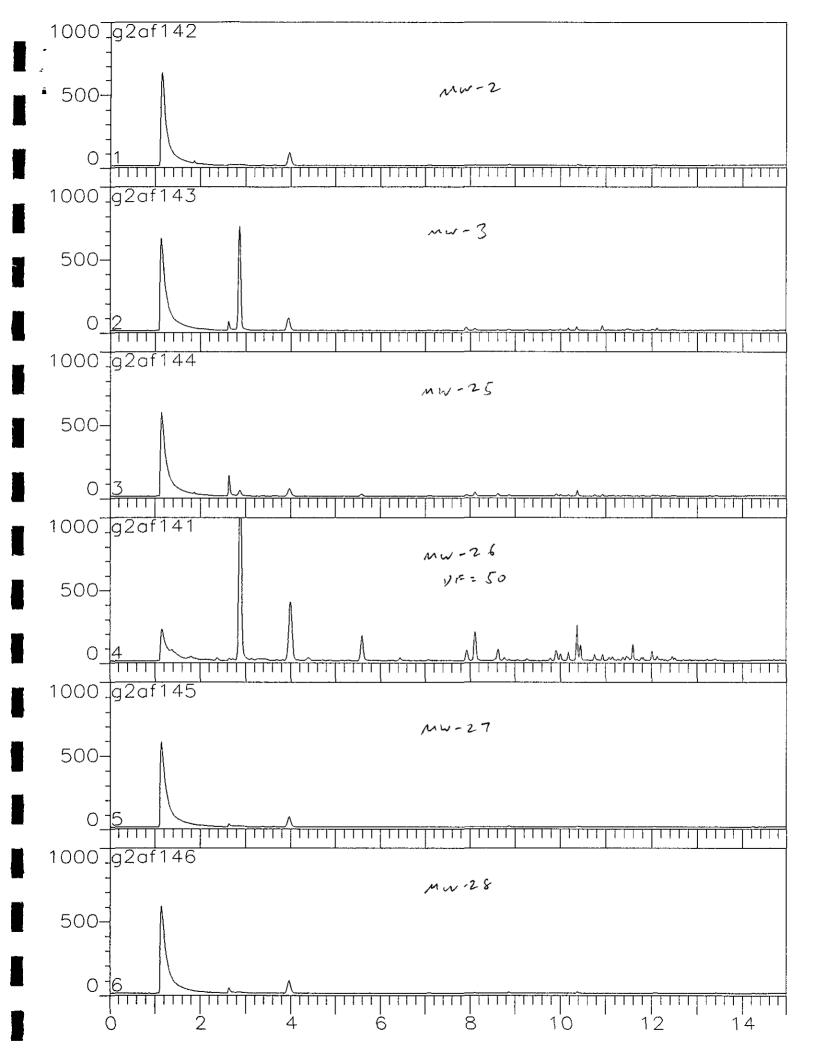
Surrogate Summary Report

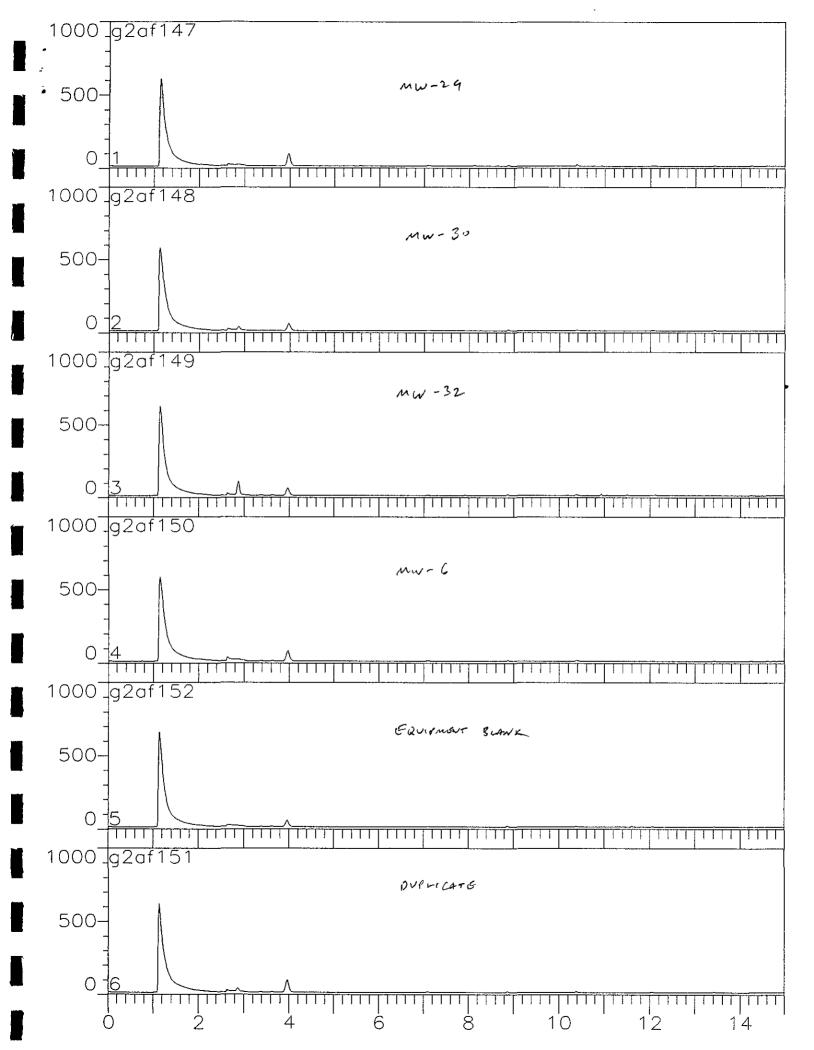
| Client Sample 1.D. | Analysis Type | Per-ce | nt Recovery |
|--------------------|--|-----------|-------------|
| | | <u>S1</u> | (Range) |
| 2/11/ 2 | 8015-Modified (TPH as Gasolme-CADHS LUFT)/EPA 8020 (BTEX) in series | 105 | (50-130) |
| MW-2 MW-3 | 8015-Modified (TPH as Gasoline-CADHS LUFT)/EPA 8020 (BTEX) in series | 96 | (50-130) |
| | 8015-Modified (TPH as Gasoline-CADHS LUFT)/EPA 8020 (BTEX) in series | 98 | (50-130) |
| MW-25 | 8015-Modified (TPH as Gasoline-CADHS LUFT)/EPA 8020 (BTEX) in series | 99 | (50-130) |
| MW-26 | | 100 | • |
| MW-27 | 8015-Modified (TPH as Gasolme-CADHS LUFT)/EPA 8020 (BTEX) in series | 97 | (50-130) |
| MW-28 | 8015-Modified (TPH as Gasoline-CADHS LUFT)/EPA 8020 (BTEX) in series | | (50-130) |
| MW-29 | 8015-Modified (TPH as Gasoline-CADHS LUFT)/EPA 8020 (BTEX) in series | 102 | (50-130) |
| MW-30 | 8015-Modified (TPH as Gasoline-CADHS LUFT)/EPA 8020 (BTEX) in series | 98 | (50-130) |
| MW-32 | 8015-Modified (TPH as Gasoline-CADHS LUFT)/EPA 8020 (BTEX) in series | 94 | (50-130) |
| MW-6 | 8015-Modified (TPH as Gasolme-CADHS LUFT)/EPA 8020 (BTEX) in series | 96 | (50-130) |
| 3437/ 3 | 8015-Modified (TPH as Diesel-CADHS LUFT) | 102 | (50-130) |
| MW-2 | | 102 | |
| MW-3 | 8015-Modified (TPH as Diesel-CADHS LUFT) | | (50-130) |
| MW-25 | 8015-Modified (TPH as Diesel-CADHS LUFT) | 103 | (50-130) |
| MW-26 | 8015-Modified (TPH as Diesel-CADHS LUFT) | 106 | (50-130) |
| MW-27 | 8015-Modified (TPH as Diesel-CADHS LUFT) | 108 | (50-130) |
| MW-28 | 8015-Modified (TPH as Diesel-CADHS LUFT) | 104 | (50-130) |
| MW-29 | 8015-Modified (TPH as Diesel-CADHS LUFT) | 104 | (50-130) |
| MW-30 | 8015-Modified (TPH as Diesel-CADHS LUFT) | 102 | (50-130) |
| MW-32 | 8015-Modified (TPH as Diesel-CADHS LUFT) | 104 | (50-130) |
| MW-6 | 8015-Modified (TPH as Diesel-CADHS LUFT) | 103 | (50-130) |
| Favis Utb | 8015-Modified (TPH as Gasoline-CADHS LUFT) | 93 | (50-130) |
| Equip Blk | • | 93 97 | |
| Dup | 8015-Modified (TPH as Gasoline-CADHS LUFT) | 71 | (50-130) |
| MW-26 | EPA 8010 (Halogenated Volatiles) | 91 | (30-160) |
| MW-32 | EPA 8010 (Halogenated Volatiles) | 93 | (30-160) |
| 171 77 -32 | DITI OTO (Halogenatu Tolantes) | 75 | (20-100) |

Park Environmental Corporation Sierra Client No. 10000-92 Date Sampled: .02/25/94 4231 Pacific Street, Suite 7 Sierra Project No. SP-996-94 Date Received: .03/01/94 Anaheim, California 95677 Client Project No. 5008-J12 Date Prepared: .03/02-03/08/94 Client Project: ,03/02-03/08/94 Date Analyzed: N/A Report Date: .03/10/94

Laboratory Control Sample Report

| <u>Parameter</u> | Analysis Type | Per-cent | Recovery | | | |
|-----------------------|------------------------------------|-----------------------|------------------|--|--|--|
| | | % | Range | | | |
| | | | | | | |
| TPH as Gasoline | EPA 8015-M | 92 | (50-150) | | | |
| | D. Mar C. annual Defendance Number | C002 02 | 0394-G2A0023-162 | | | |
| | Quality Control Reference Number: | G002-03 | US94-G2AUU23-102 | | | |
| Compound | Analysis Type | Per-cent | Recovery | | | |
| | - · · · · | <u>%</u> | Range | | | |
| Benzene | EPA 8020 (BTEX) | 97 | (39-150) | | | |
| Toluene | EPA 8020 (BTEX) | 91 | (46-148) | | | |
| Ethylbenzene | EPA 8020 (BTEX) | 94 | (32-160) | | | |
| Xylenes (Total) | EPA 8020 (BTEX) | 95 | (37-154) | | | |
| | Quality Control Reference Number: | G002-03 | 0394-G2A0023-162 | | | |
| Parameter | Analysis Type | Per-cent | Recovery | | | |
| | | <u>%</u> | Range | | | |
| TPH as Diesel | EPA 8015-M | 111 | (50-150) | | | |
| | Quality Control Reference Number: | G002-030 | 0894-G2A0024-018 | | | |
| Compound | Analysis Type | Per-cent | Recovery | | | |
| | | <u>%</u> | Range | | | |
| 1,1-Dichloroethene | EPA 8010 (Halogenated Volatiles) | 87 | (28-167) | | | |
| 1,1,1-Trichloroethane | EPA 8010 (Halogenated Volatiles) | 96 | (41-138) | | | |
| Chlorobenzene | EPA 8010 (Halogenated Volatiles) | 88 | (38-150) | | | |
| Trichloroethene (TCE) | EPA 8010 (Halogenated Volatiles) | 92 | (35-146) | | | |
| | Quality Control Reference Number: | G002-030294-G2B0016-0 | | | | |





SIERRA LABORATORIES

TEL: 714 • 758 • 9988 FAX: 714 • 758 • 9692

1525 Endeavour Place • Suite D • Anaheim, CA • 92801

CHAIN OF CUSTODY RECORD

N. 1000811

Date: 22594 Page 1 of 2

Lab Project No.: SP. 996-94

| Client: Park Enviro | onmenta | λ | Ctient Proj. Number/Proj. Name: Analyses Requested | | | | | | | | _ | | | | | | | | | |
|---|--|--------------|--|--------------------------------|--|-----------------------------------|---|------------------------------|---------------------------|----------------------------------|---------------------------------|------------------|---------------------|---------------------------------------|--------------------------|---------------------|--------------|-----------|---------------------------------------|-----|
| Client Address: 4231 Pacific Street, Sufe7 Rocklin, Ca 95677 | | | | 5008-112 | | | | Ē | | | en meds) | | 414.1 | | | | | | | |
| | | | | Turn Around Time Requested: | CADHS LUFT) # RTEX) in Sense CADHS LUFT) | odified (TPH as Diesel CADHS LUFT | втехо | | Атопиись & Надоденией | | EPA 6010 or EPA 7423 (Cucle one | | | | | | | | | |
| Client Tel. No.: 916-657-3861 | | | Rush 24-48 hours Rush 72-96 hours | | | | besel CA | | (surrects) | Aromak | | EPA 742 | FF. | | | | | | | |
| Client Tel. No.: 916-65 Client Fax No.: 916-65 Client Proj. Mgr.: | 52-4195 | | | - | Norm | | 8015 Modified (TPH as Gasolux of and EPA 8020 (Armanic Volaules 8015-Modified (TPH as Gasolux of 8015-Modified (TPH as Gasolux of | d sa Hen | EPA 8020 (Volume Aromates | EPA 8010 (Volatile Halogenateds) | - Interior | £ | to entire of | Organia Lead (CADHS LUFT) | | | | | | |
| Cheni Proj. Mgr.: PEXX 3V | une | 1 | <u> </u> | | Container | 1 | 8015 Modufied (and EPA 8020 (8015-Modufied (|) Pagliped (| 20 (Vol. | alo (Vola | 10/8020 | EPA 418 (TRPH) | | Lend (C | | | | | | |
| Client Sample No. | Date | Time | Matrix | Preservatives | Type | Containers | 8015 N and EP 8015-N | 8015-M | 08 V-13 | EPA 80 | EPA 80 | EPA 41 | John Lead | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | Comme | ents | |
| MW-Z | Feb25,190 | 4 | Water | HCI | VOA | 4 | X | X | | | | | | | | | | | | |
| MW-3 | | | \ | | | 4 | X- | X | _ | | | | | | | | _ | | | 1 |
| MW-25 | | | | | | 4 | | X | _ | \ Z | - 7 | - 144 | | | | | 1 | | | - |
| MW-26 MW-27 | | | | | | 1/4 AM | | X | - | X | Ž , | J | | | | _ | Royd | نها | VOAVIA | 15 |
| MW-28 | | | | | | + 4 | | 公 | | - | ļ | | | | - | | | | | - |
| mw-29 | | | | | | 4 | | $\langle \mathbf{x} \rangle$ | | | | | | | | + | + | | | |
| mw-30 | | | | | | 4 | X | X | | | | | | | | | | | | |
| mw-32 | | | | | | 6 | X | X | | X | | · - | | | | | | | | 1 |
| mw-6 | V | | , | ¥ | ₩ | 64- | X | X | | × | 1 | W | | | | | ROND | . 4 v | OA VIA | 15 |
| Sampler Signature: Howard | | | Shipped Via: | Airborne E | Apress | , ma | 4 | 4 x | W | To | otal I | Numi | ber o | of Co | ntaine | ers | Sample l | Disposal: | | |
| Company. Park Er | | | (Carrier/Waybill N | | <u> </u> | | -24 | 9 V | | Sι | ubmi | tted | to La | abora | atory | | | Return to | Ctient | |
| Relinquished By. Fruant-folg | <u>l</u> | Date 2/28/94 | Received By | with Int | Date: | 31.194 | The deliveranth authorization | ery of samp | oles an | d the sig | nature o | on this o | chain of ove und | custody ier SIER | y form con RR 4's Ter | istitutes ms and | | Lab Dispo | osal | |
| COMPANY: Park Environ | mental | Time 2 30 PM | Company: 5/1 | ERRA LAB | Time | 13:06 | Continuon | 3, 0 taxas 0 | nei wi | | а арон 1 | | ng ocean | een Ste. | ANA ZUU | CLIENT. | | Archive _ | mos. | |
| 3 Relinquished By: | | Date. | Received By: | | Date. | | , | 181 | | To | otal l | Num | ber c | of Co | ntaine | ers | | Other | | |
| Company: | | Time | Company: | | Time. | | <u> </u> | | | | eceiv | | | | | | | | · · · · · · · · · · · · · · · · · · · | |
| Relinquished By: | | Date: | Received By: | | Date: | | FOR LA | Hed | УК Ү | USE O. | NLY - | aampi | | - | | | sple Contair | er | | |
| Company: | | Time: | Company. | | Time | | Int | Xl | | | | | | 2 | Арргорі | rlate Pre | servalives | | | |
| Special Instructions: | | | | | | | San | | ş | | | | | | Siner S | u c | MANN. | st a | bove | |
| Rev 071693 | | | | | | | J 1/10 | | | | . "go i.s- | • T- • | | | Officer | | | | Personnel Copy |] ′ |
| | | | | | | | | DI. | ***** | ****** | · ** Bigg. | v A | comp | | res, tel | ~ w ~ t~aD(| лашту СОРУ, | Lield | * ersonner Coby | |

SIERRA LABORATORIES

1525 Endeavour Place • Suite D • Anaheim, CA • 92801

TEL: 714 • 758 • 9988 FAX: 714 • 758 • 9692

CHAIN OF CUSTODY RECORD

| Client: Park Enuly Client Address: 4231 | Client Proj. Numb | Analyses Requested | | | | | | | | | | | | | | | | | | | |
|---|-------------------|--------------------|--|---------------------|-------------------|--|---------------------|-----------------------|--|---------------------------|------------|--|----------|--------------|-------------------|----------|--------|--------|-------------|-------------------|--|
| Client Address: 4231 P. Rock Jin (| A 950 | Street 1277 | , Sujet | 500 | LUFT) in Senes | CLALL | Ē | | | enateds) | | • K | | | | | | | | | |
| | | | Turn Around Time Requested: | CADHS I | CADHS LUFT | CADHS LUFT | втехо | 2 | EPA 8010/8020 (Volume Aromanes & Halogen | | 21 (Cark | | | | | | | | | | |
| Client Tel. No.: 916-652-386 | | | Turn Around Time Immediate Attention Rush 22-96 hours Rush 22-96 | | | | | | | | | | | | | | | | | | |
| Client Fax No.: 916-652-4193 Client Proj. Mgr.: Percy Fruit | | | | | Norma. Mobile | | HALL | 8015-Modified (TPH as | H.H. | EPA 8020 (Volume Atomates | olstile Ha | to (Voluta | KPH) | PA 6030 | Lead (CADHS LUFT) | | | | | | |
| | | T | | | Container | No. of | S-Modufe EPA 802 | S-Modifie | 8015-Modúsed (TPH | 8020 (V | A) 0108 | 8010/803 | | lotal Lead E | | | | | | | |
| Client Sample No. | Date | Time | Matrix | Preservatives HC | Type V0A | Containers 2 | 08 at | § . | 108 | Ď | ĕ | á | <u>Š</u> | lota | in io | | | | | Comments | |
| Equipment Blank | 2/2-/4 | | Water | HCI | VOA | 2 | | 文 | | | | | | | | | | | | | <u>. </u> |
| CAQ.III. | 0,241. | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | | | |
| | 1 0 // | | | | | | | | | | | | | | | | | | | | |
| Sampler Signature: Howard | Hold | <u> </u> | Shipped Via | hrborne E | xpres | <u>S</u> | | , | , | | То | otal N | luml | er c | of Co | ontair | ners | | Sample | Disposal: | |
| | onMent | al . | (Carrier/Waybill No | o.) | \ | | <u> </u> | 4 | <u> </u> | | Su | Submitted to Laboratory Return to Client | | | | | | nt | | | |
| Relinquished By: Howard H | old 1 | Date 28/44 | Heceny a Buch | dha Arn | Date Date | | autho | orızatio | a to per | form th | e analys | nature o ses specil i upon in | ied abo | ove und | ier SIE | RR 4's T | erms a | nd . | | Lab Disposal | |
| Company: Part Enviro | inmental | 2=38 An | Company: ,5/ | EXRA LAG | Time | 3:06 | - | | | | | | | | | | | | | Archive | _ m os |
| Relinquished By: | | Date. | Received By: | | Date: | | ┨ , | 4 | | | ľ | otal N | | | | | ners | | | Other | |
| Company. | | Time: | Company: | | Time: | | FOR | LAR | DRAT | ORYI | Re SE O | eceive | ed by | y La | bora | tory | ns, | | L | | |
| Relinquished By: | | Date: | Received By: | | Date: | · | Ja | Chille | ed | | | | | ٠٠٠.٠٠ | | | | Samp | ole Contain | ner . | |
| Company: Special Instructions: | | Time: | Company: | | Time: | | Intact | | | | | Appropriate Preservatives | | | | | | | | | |
| opeciai zusu uctions: | | | | | | | 12 | Samp | te Şezi | lş | | | | | | Other | ~~~~ | | | - | • |
| Rev: 071693 | ··· | | | | | | 4 | Prope | erly La | | irios | 4375.1° | | | | Office | | | | Pink - Field Pers | |
| | | | | | | | | | - | | | . "ше | | unipi | | , I | FINA . | TEDOLE | y | THE - LIGHT LOLD | with a cobb |