

# CAMBRIA

STP  
4022 ✓

February 26, 2002

Amir Gholami  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

Amir 3/18/02  
AC  
MAR 01 2002

Re: **Fourth Quarter 2001 Monitoring Report**  
Shell-branded Service Station  
2120 Montana Street  
Oakland, California  
Incident #98995740  
Cambria Project #244-0733-002



Dear Mr. Gholami:

On behalf of Equiva Services LLC, Cambria Environmental Technology, Inc. (Cambria) is submitting this groundwater monitoring report in accordance with the reporting requirements of 23 CCR 2652d. The site is located at the northwest corner of Montana Street and Fruitvale Avenue in Oakland, California (Figures 1 and 2).

## REMEDIATION SUMMARY

**Mobile Groundwater Extraction (GWE):** As recommended in our August 15, 2001 *Agency Response*, Cambria began weekly GWE in August 2001 from wells MW-1 and TBW-N using a vacuum truck. Based on the lack of significant separate-phase hydrocarbons (SPH) in the wells, the mobile GWE frequency was reduced from weekly to biweekly in November 2001 and discontinued in January 2002. Cumulative groundwater purge volume and estimated mass removal data are presented in Table 1. Figures 3 and 4 show methyl tertiary butyl ether (MTBE) concentrations and mass removal estimates over time for wells MW-1 and TBW-N, respectively. The cumulative estimated mass of total petroleum hydrocarbons as gasoline and MTBE removed by GWE to date at the site is 5.34 pounds and 3.67 pounds, respectively. Cambria also coordinated periodic SPH thickness gauging. Table 2 summarizes SPH thicknesses in wells MW-1 and TBW-N, and estimated SPH removed by manual bailing and/or GWE. Approximately 2.68 pounds of SPH have been removed at the site through manual bailing and GWE.

Oakland, CA  
San Ramon, CA  
Sonoma, CA

**Cambria  
Environmental  
Technology, Inc.**

1144 65th Street  
Suite B  
Oakland, CA 94608  
Tel (510) 420-0700  
Fax (510) 420-9170

**FOURTH QUARTER 2001 ACTIVITIES**

**Groundwater Monitoring:** Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged and sampled the site wells, calculated groundwater elevations, and compiled the analytical data. Cambria prepared a vicinity map which includes previously submitted well survey information (Figure 1) and a groundwater elevation contour map (Figure 2). As requested in July 23, 2001 and August 14, 2001 Alameda County Health Care Services Agency letters, the groundwater gradient was estimated and is shown on Figure 2. Blaine's report, presenting the laboratory report and supporting field documents, is included as Attachment A.

**ANTICIPATED FIRST QUARTER 2002 ACTIVITIES**

**Groundwater Monitoring:** Blaine will check monthly for SPH, gauge and sample all wells quarterly, and tabulate the data. Cambria will prepare a monitoring report.

**Mobile GWE:** Based on the lack of significant SPH in the wells, mobile GWE from wells MW-1 and TBW-N was discontinued in January 2002. The wells were allowed to equilibrate until February 7, 2002 and then checked for SPH. During the February 7 site visit, no SPH was measured in wells MW-1 and TBW-N (Table 2). GWE will be resumed on a monthly basis beginning in late February 2002.

**Plume Delineation and Soil Vapor Extraction (SVE) Pilot Test Work Plan:** Cambria recommends both onsite and offsite plume delineation to help determine the most practical remediation technology. We also recommend conducting an SVE pilot test. Cambria will submit a work plan describing our proposed scope of work during the first quarter 2002.

**CLOSING**

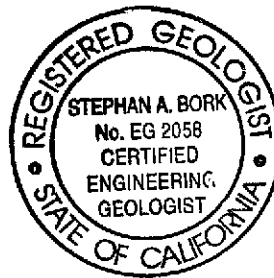
We appreciate the opportunity to work with you on this project. Please call Jacquelyn Jones at (510) 420-3316 if you have any questions or comments.

Sincerely,  
**Cambria Environmental Technology, Inc**



*Stephan A. Bork*  
for: Jacquelyn L. Jones  
Project Geologist

*[Signature]*  
Stephan A. Bork, C.E.G., C.HG.  
Associate Hydrogeologist



- Figures:
- 1 - Vicinity/Area Well Survey Map
  - 2 - Groundwater Elevation Contour Map
  - 3 - MTBE and Mass Removal – Well MW-1
  - 4 - MTBE and Mass Removal – Well TBW-N

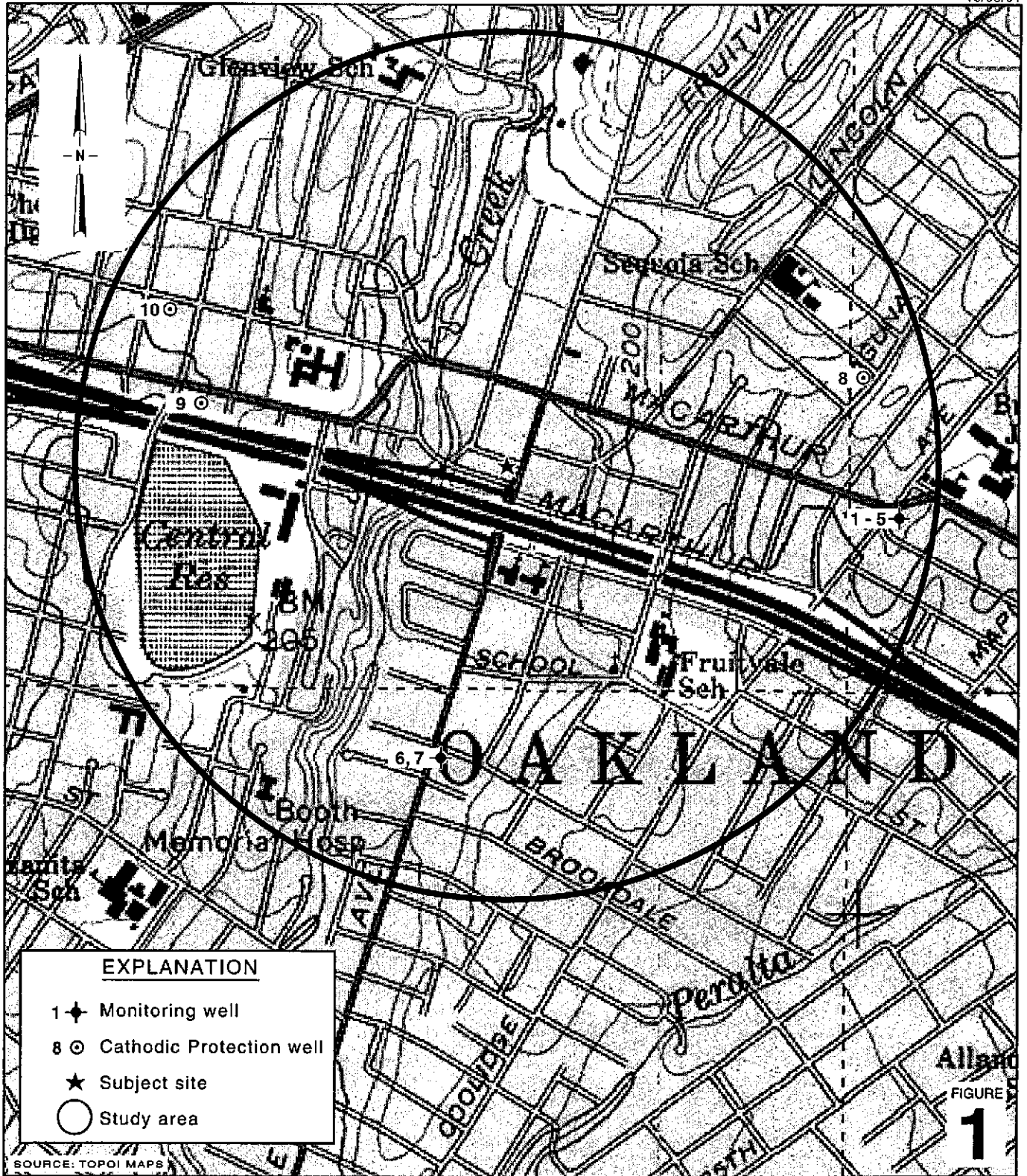
- Tables:
- 1 - Groundwater Extraction – Mass Removal Data
  - 2 - Separate-Phase Hydrocarbon Removal Data

Attachment: A - Blaine Groundwater Monitoring Report and Field Notes

cc: Karen Petryna, Equiva Services LLC, P.O. Box 7869, Burbank, California 91510-7869

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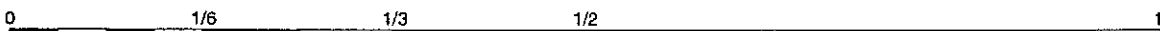
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**EXPLANATION**

- 1 ◆ Monitoring well
- 8 ○ Cathodic Protection well
- ★ Subject site
- Study area

SOURCE: TOPOI MAPS



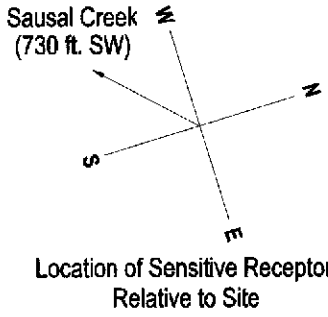
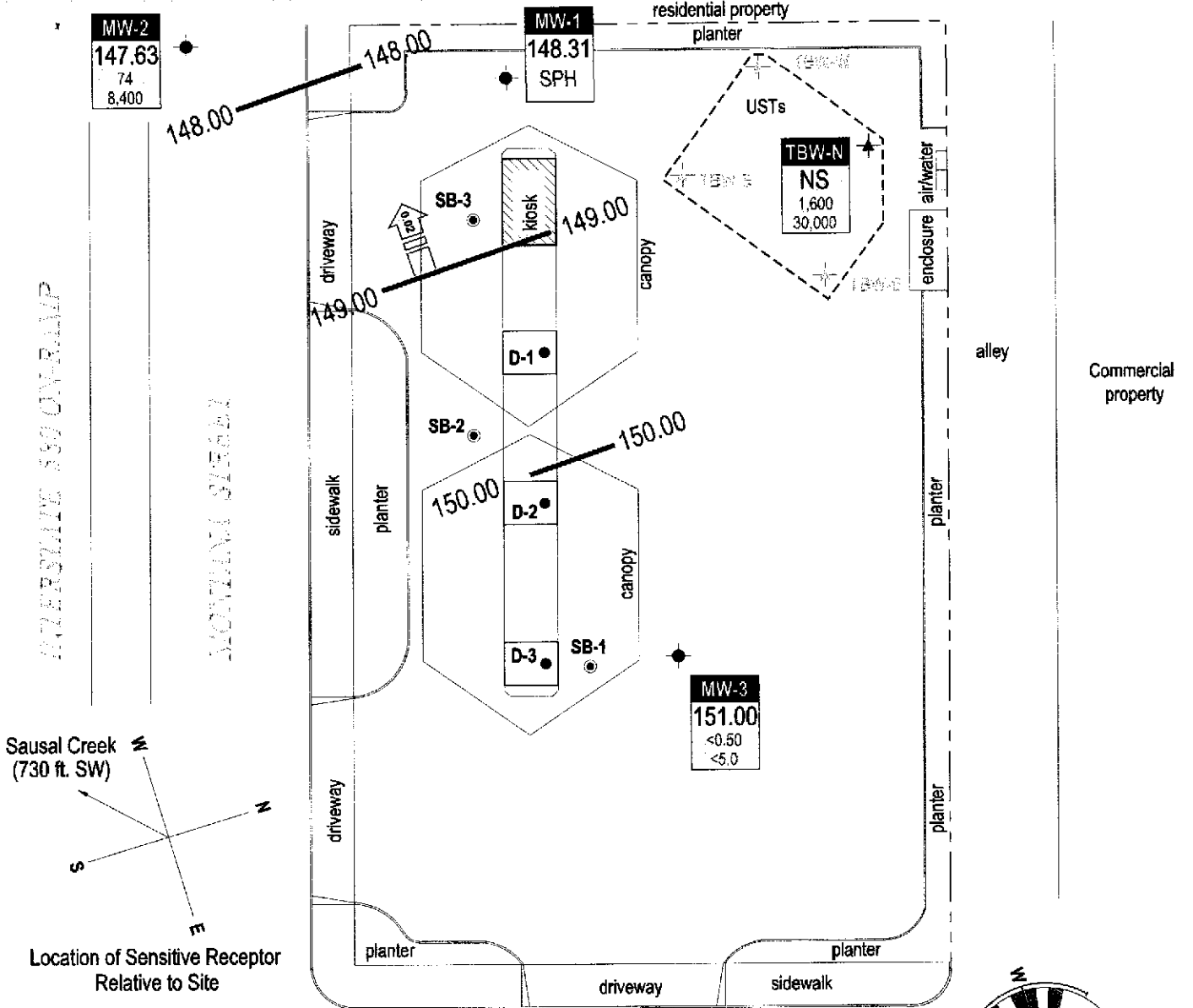
SCALE : 1" = 1/8 MILE

**Shell-branded Service Station**  
 2120 Montana Street  
 Oakland, California  
 Incident #98995740



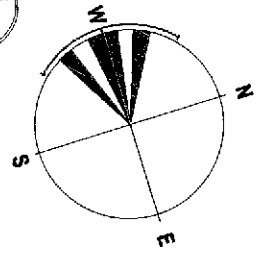
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**Vicinity / Area Well  
 Survey Map**  
 (1/2-Mile Radius)

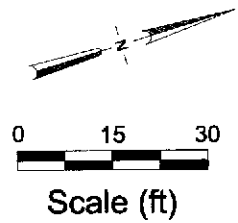


**EXPLANATION**

- MW-1 ● Monitoring well location
  - TBW-N ★ Tank backfill well location
  - SB-1 ● Cambria soil boring location (10/99)
  - D-1 ● Cambria soil sampling location (11/97)
  - NS Not surveyed
  - SPH Separate-phase hydrocarbons present, well not sampled
  - XX.XX Groundwater flow direction and gradient (ft/ft)
  - XX.XX Groundwater elevation contour, in feet above mean sea level (msl), approximately located, dashed where inferred
- |                 |   |
|-----------------|---|
| Well            | Well designation  |
| ELEV            | Groundwater elevation, in feet above msl  |
| Benzene<br>MTBE | Benzene and MTBE concentrations are in parts per billion and are analyzed by EPA Method 8260. |



Groundwater Gradient Direction (1q01 through 4q01)



FIGURE

**2**

G:\OAKLAND\2120MONTANA\FIGURES\MCM01-MP.DWG

**Shell-branded Service Station**  
 2120 Montana Street  
 Oakland, California  
 Incident #98995740

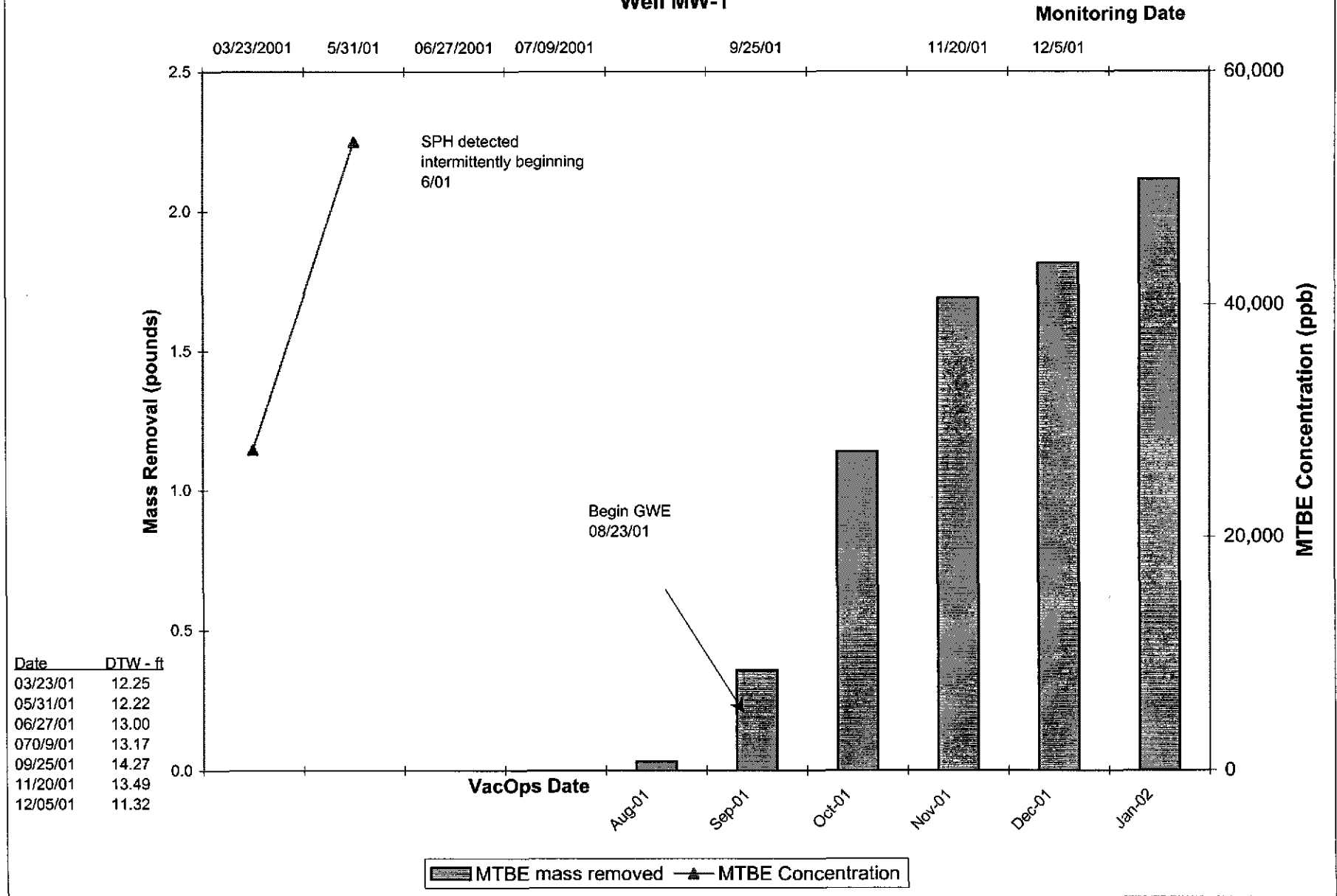


C A M B R I A

**Groundwater Elevation Contour Map**

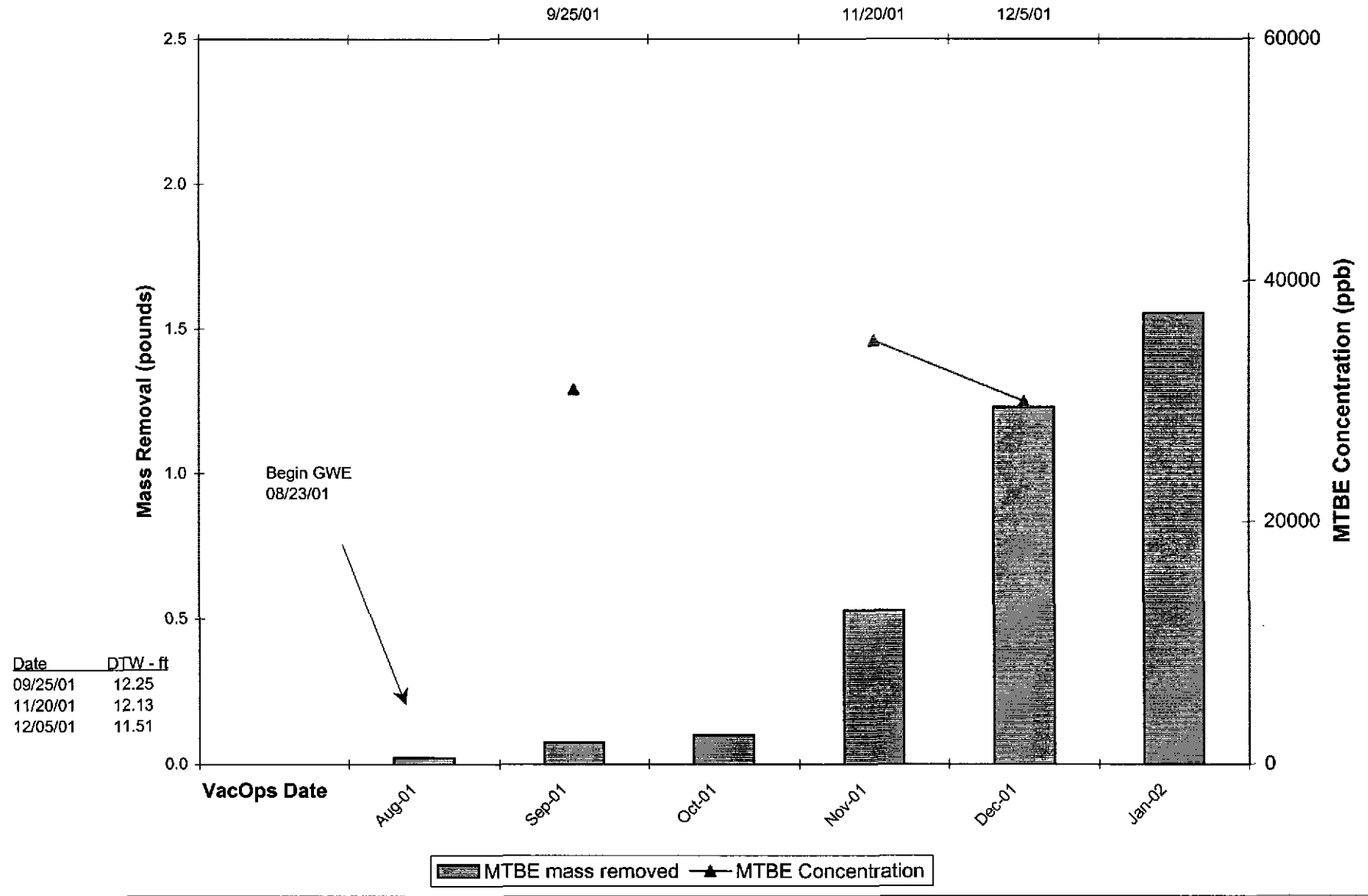
December 5, 2001

**Figure 3**  
**MTBE and Mass Removal**  
**Well MW-1**



**Figure 4**  
**MTBE and Mass Removal**  
**Well TBW-N**

Monitoring Date



**Table 1: Groundwater Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995740, 2120 Montana St., Oakland, California**

| Date Purged | Well ID | Volume Pumped (gal) | Cumulative Volume Pumped (gal) | Date Sampled | TPPH                     |                       |                       | Benzene                     |                          |                          | MTBE                     |                       |                       |
|-------------|---------|---------------------|--------------------------------|--------------|--------------------------|-----------------------|-----------------------|-----------------------------|--------------------------|--------------------------|--------------------------|-----------------------|-----------------------|
|             |         |                     |                                |              | TPPH Concentration (ppb) | TPPH Removed (pounds) | TPPH To Date (pounds) | Benzene Concentration (ppb) | Benzene Removed (pounds) | Benzene To Date (pounds) | MTBE Concentration (ppb) | MTBE Removed (pounds) | MTBE To Date (pounds) |
| 08/23/01    | MW-1    | 100                 | 100                            | 03/23/01     | 16,600                   | 0.01385               | 0.01385               | 753                         | 0.00063                  | 0.00063                  | 27,500                   | 0.02295               | 0.02295               |
| 08/30/01    | MW-1    | 40                  | 140                            | 03/23/01     | 16,600                   | 0.00554               | 0.01939               | 753                         | 0.00025                  | 0.00088                  | 27,500                   | 0.00918               | 0.03213               |
| 09/09/01    | MW-1    | 500                 | 640                            | 03/23/01     | 16,600                   | 0.06926               | 0.08865               | 753                         | 0.00314                  | 0.00402                  | 27,500                   | 0.11473               | 0.14686               |
| 09/21/01    | MW-1    | 320                 | 960                            | 03/23/01     | 16,600                   | 0.04433               | 0.13298               | 753                         | 0.00201                  | 0.00603                  | 27,500                   | 0.07343               | 0.22029               |
| 09/29/01    | MW-1    | 600                 | 1,560                          | 03/23/01     | 16,600                   | 0.08311               | 0.21609               | 753                         | 0.00377                  | 0.00980                  | 27,500                   | 0.13768               | 0.35797               |
| 10/05/01    | MW-1    | 362                 | 1,922                          | 03/23/01     | 16,600                   | 0.05014               | 0.26623               | 753                         | 0.00227                  | 0.01208                  | 27,500                   | 0.08307               | 0.44104               |
| 10/12/01    | MW-1    | 700                 | 2,622                          | 03/23/01     | 16,600                   | 0.09696               | 0.36319               | 753                         | 0.00440                  | 0.01647                  | 27,500                   | 0.16063               | 0.60167               |
| 10/19/01    | MW-1    | 350                 | 2,972                          | 03/23/01     | 16,600                   | 0.04848               | 0.41167               | 753                         | 0.00220                  | 0.01867                  | 27,500                   | 0.08031               | 0.68198               |
| 10/29/01    | MW-1    | 1,995               | 4,967                          | 03/23/01     | 16,600                   | 0.27634               | 0.68801               | 753                         | 0.01254                  | 0.03121                  | 27,500                   | 0.45779               | 1.13978               |
| 11/02/01    | MW-1    | 700                 | 5,667                          | 03/23/01     | 16,600                   | 0.09696               | 0.78497               | 753                         | 0.00440                  | 0.03561                  | 27,500                   | 0.16063               | 1.30041               |
| 11/16/01    | MW-1    | 800                 | 6,467                          | 03/23/01     | 16,600                   | 0.11081               | 0.89579               | 753                         | 0.00503                  | 0.04063                  | 27,500                   | 0.18358               | 1.48398               |
| 11/30/01    | MW-1    | 900                 | 7,367                          | 03/23/01     | 16,600                   | 0.12466               | 1.02045               | 753                         | 0.00565                  | 0.04629                  | 27,500                   | 0.20652               | 1.69050               |
| 12/14/01    | MW-1    | 300                 | 7,667                          | 03/23/01     | 16,600                   | 0.04155               | 1.06200               | 753                         | 0.00188                  | 0.04817                  | 27,500                   | 0.06884               | 1.75934               |
| 12/28/01    | MW-1    | 250                 | 7,917                          | 03/23/01     | 16,600                   | 0.03463               | 1.09663               | 753                         | 0.00157                  | 0.04974                  | 27,500                   | 0.05737               | 1.81671               |
| 01/12/02    | MW-1    | 1,300               | 9,217                          | 03/23/01     | 16,600                   | 0.18007               | 1.27670               | 753                         | 0.00817                  | 0.05791                  | 27,500                   | 0.29831               | 2.11502               |
| 08/23/01    | TBW-N   | 85                  | 85                             | 09/25/01     | 120,000                  | 0.08511               | 0.08511               | 3,200                       | 0.00227                  | 0.00227                  | 31,000                   | 0.02199               | 0.02199               |
| 08/30/01    | TBW-N   | 0                   | 85                             | 09/25/01     | 120,000                  | 0.00000               | 0.08511               | 3,200                       | 0.00000                  | 0.00227                  | 31,000                   | 0.00000               | 0.02199               |
| 09/09/01    | TBW-N   | 0                   | 85                             | 09/25/01     | 120,000                  | 0.00000               | 0.08511               | 3,200                       | 0.00000                  | 0.00227                  | 31,000                   | 0.00000               | 0.02199               |
| 09/21/01    | TBW-N   | 200                 | 285                            | 09/25/01     | 120,000                  | 0.20026               | 0.28538               | 3,200                       | 0.00534                  | 0.00761                  | 31,000                   | 0.05174               | 0.07372               |
| 09/29/01    | TBW-N   | 0                   | 285                            | 09/25/01     | 120,000                  | 0.00000               | 0.28538               | 3,200                       | 0.00000                  | 0.00761                  | 31,000                   | 0.00000               | 0.07372               |
| 10/05/01    | TBW-N   | 0                   | 285                            | 09/25/01     | 120,000                  | 0.00000               | 0.28538               | 3,200                       | 0.00000                  | 0.00761                  | 31,000                   | 0.00000               | 0.07372               |
| 10/12/01    | TBW-N   | 100                 | 385                            | 09/25/01     | 120,000                  | 0.10013               | 0.38551               | 3,200                       | 0.00267                  | 0.01028                  | 31,000                   | 0.02587               | 0.09959               |
| 10/19/01    | TBW-N   | 0                   | 385                            | 09/25/01     | 120,000                  | 0.00000               | 0.38551               | 3,200                       | 0.00000                  | 0.01028                  | 31,000                   | 0.00000               | 0.09959               |
| 10/29/01    | TBW-N   | 5                   | 390                            | 09/25/01     | 120,000                  | 0.00501               | 0.39052               | 3,200                       | 0.00013                  | 0.01041                  | 31,000                   | 0.00129               | 0.10088               |
| 11/02/01    | TBW-N   | 10                  | 400                            | 09/25/01     | 120,000                  | 0.01001               | 0.40053               | 3,200                       | 0.00027                  | 0.01068                  | 31,000                   | 0.00259               | 0.10347               |
| 11/16/01    | TBW-N   | 400                 | 800                            | 09/25/01     | 120,000                  | 0.40053               | 0.80106               | 3,200                       | 0.01068                  | 0.02136                  | 31,000                   | 0.10347               | 0.20694               |
| 11/30/01    | TBW-N   | 1,100               | 1,900                          | 11/20/01     | 72,000                   | 0.66087               | 1.46193               | 2,200                       | 0.02019                  | 0.04155                  | 35,000                   | 0.32126               | 0.52820               |



**Table 1: Groundwater Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995740, 2120 Montana St., Oakland, California**

| Date Purged                     | Well ID | Volume Pumped (gal) | Cumulative Volume Pumped (gal) | Date Sampled | TPPH                          |                       |                               | Benzene                     |                          |                                  | MTBE                          |                       |                               |
|---------------------------------|---------|---------------------|--------------------------------|--------------|-------------------------------|-----------------------|-------------------------------|-----------------------------|--------------------------|----------------------------------|-------------------------------|-----------------------|-------------------------------|
|                                 |         |                     |                                |              | TPPH Concentration (ppb)      | TPPH Removed (pounds) | TPPH Removed To Date (pounds) | Benzene Concentration (ppb) | Benzene Removed (pounds) | Benzene Removed To Date (pounds) | MTBE Concentration (ppb)      | MTBE Removed (pounds) | MTBE Removed To Date (pounds) |
| 12/14/01                        | TBW-N   | 2,000               | 3,900                          | 12/05/01     | 76,000                        | 1.26834               | 2.73027                       | 1,600                       | 0.02670                  | 0.06826                          | 30,000                        | 0.50066               | 1.02886                       |
| 12/28/01                        | TBW-N   | 800                 | 4,700                          | 12/05/01     | 76,000                        | 0.50734               | 3.23761                       | 1,600                       | 0.01068                  | 0.07894                          | 30,000                        | 0.20026               | 1.22912                       |
| 01/12/02                        | TBW-N   | 1,300               | 6,000                          | 12/05/01     | 76,000                        | 0.82442               | 4.06203                       | 1,600                       | 0.01736                  | 0.09629                          | 30,000                        | 0.32543               | 1.55455                       |
| <b>Total Gallons Extracted:</b> |         |                     | <b>15,217</b>                  |              | <b>Total Pounds Removed:</b>  |                       | <b>5.33874</b>                |                             |                          | <b>0.15421</b>                   | <b>Total Pounds Removed:</b>  |                       | <b>3.66958</b>                |
|                                 |         |                     |                                |              | <b>Total Gallons Removed:</b> |                       | <b>0.87520</b>                |                             |                          | <b>0.02112</b>                   | <b>Total Gallons Removed:</b> |                       | <b>0.59187</b>                |

**Abbreviations & Notes:**

TPPH = Total purgeable hydrocarbons as gasoline

MtBE = Methyl tert-butyl ether

ppb = Parts per billion

gal = Gallon

Mass removed based on the formula: volume extracted (gal) x concentration (µg/L) x (g/10<sup>6</sup>µg) x (pound/453.6g) x (3.785 L/gal)

Volume removal data based on the formula: density (in gms/cc) x 9.339 (ccxlbs/gmsxgals)

TPPH, benzene, and MTBE analyzed by EPA Method 8260

Concentrations based on most recent groundwater monitoring results

If concentration is less than the laboratory detection limit, one half of the detection limit concentration is used in the mass removal calculation.

Groundwater extracted by vacuum trucks provided by Onyx. Water disposed of at a Martinez Refinery.

**Table 2. Separate-Phase Hydrocarbon Removal Data - Shell-branded Service Station, 2120 Montana Street, Oakland, California, Incident # 98995740**

| Well ID | Date     | SPH Thickness (ft) | SPH Removed (lbs) | Cumulative SPH Removed (lbs) |
|---------|----------|--------------------|-------------------|------------------------------|
| MW-1    | 06/27/01 | 0.15               | 1.61              | 1.61                         |
| MW-1    | 07/09/01 | 0.31               | 0.00              | 1.61                         |
| MW-1    | 08/10/01 | 0.30               | 0.00              | 1.61                         |
| MW-1    | 08/17/01 | 0.00               | 0.00              | 1.61                         |
| MW-1    | 08/31/01 | 0.44               | 0.00              | 1.61                         |
| MW-1    | 09/25/01 | 0.43               | 0.32              | 1.93                         |
| MW-1    | 09/28/01 | 0.17               | 0.00              | 1.93                         |
| MW-1    | 10/01/01 | 0.00               | 0.67              | 2.60                         |
| MW-1    | 10/19/01 | 0.00               | 0.00              | 2.60                         |
| MW-1    | 10/22/01 | 0.00               | 0.00              | 2.60                         |
| MW-1    | 10/26/01 | 0.00               | 0.00              | 2.60                         |
| MW-1    | 10/29/01 | 0.00               | 0.00              | 2.60                         |
| MW-1    | 11/02/01 | 0.00               | 0.00              | 2.60                         |
| MW-1    | 11/05/00 | 0.00               | 0.00              | 2.60                         |
| MW-1    | 11/09/01 | 0.00               | 0.00              | 2.60                         |
| MW-1    | 11/16/01 | 0.00               | 0.00              | 2.60                         |
| MW-1    | 11/19/01 | 0.00               | 0.00              | 2.60                         |
| MW-1    | 11/20/01 | 0.05               | 0.00              | 2.60                         |
| MW-1    | 11/30/01 | 0.05               | 0.00              | 2.60                         |
| MW-1    | 12/03/01 | 0.00               | 0.00              | 2.60                         |
| MW-1    | 12/05/01 | 0.05               | 0.00              | 2.60                         |
| MW-1    | 02/07/02 | 0.00               | 0.00              | 2.60                         |
|         |          |                    |                   |                              |
| TBW-N   | 08/10/01 | 0.11               | 0.00              | 0.00                         |
| TBW-N   | 08/17/01 | 0.00               | 0.00              | 0.00                         |
| TBW-N   | 08/31/01 | 0.35               | 0.00              | 0.00                         |
| TBW-N   | 09/25/01 | 0.00               | 0.00              | 0.00                         |
| TBW-N   | 10/01/01 | 0.00               | 0.00              | 0.00                         |
| TBW-N   | 10/19/01 | 0.08               | 0.00              | 0.00                         |
| TBW-N   | 10/22/01 | 0.06               | 0.08              | 0.08                         |
| TBW-N   | 10/26/01 | 0.06               | 0.00              | 0.08                         |
| TBW-N   | 10/29/01 | 0.03               | 0.00              | 0.08                         |
| TBW-N   | 11/02/01 | 0.00               | 0.00              | 0.08                         |
| TBW-N   | 11/05/01 | 0.00               | 0.00              | 0.08                         |
| TBW-N   | 11/09/01 | 0.00               | 0.00              | 0.08                         |
| TBW-N   | 11/16/01 | 0.00               | 0.00              | 0.08                         |
| TBW-N   | 11/19/01 | 0.00               | 0.00              | 0.08                         |
| TBW-N   | 11/20/01 | 0.00               | 0.00              | 0.08                         |

**Table 2. Separate-Phase Hydrocarbon Removal Data - Shell-branded Service Station, 2120 Montana Street, Oakland, California, Incident # 98995740**

| Well ID                      | Date     | SPH Thickness (ft) | SPH Removed (lbs) | Cumulative SPH Removed (lbs) |
|------------------------------|----------|--------------------|-------------------|------------------------------|
| TBW-N                        | 12/03/01 | 0.02               | 0.00              | 0.08                         |
| TBW-N                        | 12/05/01 | 0.00               | 0.00              | 0.08                         |
| TBW-N                        | 02/07/02 | 0.00               | 0.00              | 0.08                         |
| <b>Total Pounds Removed:</b> |          |                    |                   | <b>2.68</b>                  |

**Abbreviations and Notes:**

SPH = Separate-phase hydrocarbons

ft = Feet

lbs = Pounds

SPH removal based on the following conversions:

1 liter equals 1.61 pounds

A 4"-inch diameter well contains 0.65 gallons per foot

1 gallon equals 3.79 liters

All mass removal data estimated.

**ATTACHMENT A**

Blaine Groundwater Monitoring Report  
and Field Notes

**BLAINE**  
TECH SERVICES, INC.



1680 ROGERS AVENUE  
SAN JOSE, CA 95112-1105  
(408) 573-7771 FAX  
(408) 573-0555 PHONE  
CONTRACTOR'S LICENSE #746684  
www.blainetech.com

January 9, 2002

Karen Petryna  
Equiva Services LLC  
P.O. Box 7869  
Burbank, CA 91510-7869

Fourth Quarter 2001 Groundwater Monitoring at  
Shell-branded Service Station  
2120 Montana Street  
Oakland, CA

Monitoring performed on November 20 and  
December 5, 2001

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### Groundwater Monitoring Report 011205-CW-1

This report covers the routine monitoring of groundwater wells at this Shell-branded facility. In accordance with standard procedures that conform to Regional Water Quality Control Board requirements, routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated purge volume (if applicable), elapsed evacuation time (if applicable), total volume of water removed (if applicable), and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater (if applicable) is, likewise, collected and transported to the Martinez Refining Company.

Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL CONCENTRATIONS**. The full analytical report for the most recent samples and the field data sheets are attached to this report.

At a minimum, Blaine Tech Services, Inc. field personnel are certified on completion of a forty hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. Our activities at this site consisted of objective data and sample collection only. No interpretation of analytical results, defining of hydrological conditions or formulation of recommendations was performed.

Please call if you have any questions.

Yours truly,

Leon Gearhart  
Project Coordinator

LG/mrb

attachments: Cumulative Table of WELL CONCENTRATIONS  
Certified Analytical Report  
Field Data Sheets

cc: Anni Kreml  
Cambria Environmental Technology, Inc.  
1144 65<sup>th</sup> Street, Suite C  
Oakland, CA 94608-2411

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**2120 Montana Street**  
**Oakland, CA**

| Well ID | Date | TPPH<br>(ug/L) | B<br>(ug/L) | T<br>(ug/L) | E<br>(ug/L) | X<br>(ug/L) | MTBE<br>8020<br>(ug/L) | MTBE<br>8260<br>(ug/L) | TOC<br>(MSL) | Depth to<br>Water<br>(ft.) | GW<br>Elevation<br>(MSL) | SPH<br>Thickness<br>(ft.) |
|---------|------|----------------|-------------|-------------|-------------|-------------|------------------------|------------------------|--------------|----------------------------|--------------------------|---------------------------|
|---------|------|----------------|-------------|-------------|-------------|-------------|------------------------|------------------------|--------------|----------------------------|--------------------------|---------------------------|

|      |          |          |        |       |      |        |    |         |        |        |        |      |
|------|----------|----------|--------|-------|------|--------|----|---------|--------|--------|--------|------|
| MW-1 | 3/19/01  | NA       | NA     | NA    | NA   | NA     | NA | NA      | 159.59 | 12.14  | 147.45 | ND   |
| MW-1 | 3/23/01  | 16,600   | 753    | 1,720 | 407  | 2,330  | NA | 27,500  | 159.59 | 12.25  | 147.34 | ND   |
| MW-1 | 5/31/01  | <20,000d | 1,000d | 920d  | 490d | 2,000d | NA | 54,000d | 161.13 | 12.22  | 148.91 | ND   |
| MW-1 | 6/27/01  | NA       | NA     | NA    | NA   | NA     | NA | NA      | 159.59 | 13.00b | NA     | ND   |
| MW-1 | 7/9/01   | NA       | NA     | NA    | NA   | NA     | NA | NA      | 159.59 | 13.17  | 146.67 | 0.31 |
| MW-1 | 9/25/01  | NA       | NA     | NA    | NA   | NA     | NA | NA      | 159.59 | 14.27  | 145.66 | 0.43 |
| MW-1 | 11/20/01 | NA       | NA     | NA    | NA   | NA     | NA | NA      | 159.59 | 13.49  | 146.14 | 0.05 |
| MW-1 | 12/5/01  | NA       | NA     | NA    | NA   | NA     | NA | NA      | 159.59 | 11.32  | 148.31 | 0.05 |

|      |         |          |      |       |       |       |    |         |        |       |        |    |
|------|---------|----------|------|-------|-------|-------|----|---------|--------|-------|--------|----|
| MW-2 | 3/19/01 | NA       | NA   | NA    | NA    | NA    | NA | NA      | 158.03 | 11.60 | 146.43 | ND |
| MW-2 | 3/23/01 | 4,450    | 280  | 41.0  | 62.1  | 63.0  | NA | 16,600  | 158.03 | 11.76 | 146.27 | ND |
| MW-2 | 5/31/01 | <20,000a | 820a | <200a | <200a | <200a | NA | 63,000a | 158.03 | 11.40 | 146.63 | ND |
| MW-2 | 6/27/01 | <50,000  | 610  | 4.0   | 13    | 9.2   | NA | 47,000  | 158.03 | 12.65 | 145.38 | ND |
| MW-2 | 9/25/01 | <2,000   | 41   | <20   | <20   | <20   | NA | 6,400   | 158.03 | 12.89 | 145.14 | ND |
| MW-2 | 12/5/01 | <2,000   | 74   | <20   | <20   | <20   | NA | 8,400   | 158.03 | 10.40 | 147.63 | ND |

|      |         |       |        |        |        |        |    |       |        |       |        |    |
|------|---------|-------|--------|--------|--------|--------|----|-------|--------|-------|--------|----|
| MW-3 | 3/19/01 | NA    | NA     | NA     | NA     | NA     | NA | NA    | 161.13 | 11.42 | 149.71 | ND |
| MW-3 | 3/23/01 | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | NA | 1.26  | 161.13 | 11.42 | 149.71 | ND |
| MW-3 | 5/31/01 | <50e  | <0.50e | <0.50e | <0.50e | <0.50e | NA | <5.0e | 159.59 | 13.00 | 146.59 | ND |
| MW-3 | 6/27/01 | <50   | <0.50  | <0.50  | <0.50  | <0.50  | NA | <0.50 | 161.13 | 12.32 | 148.81 | ND |
| MW-3 | 9/25/01 | <50   | <0.50  | <0.50  | <0.50  | <0.50  | NA | <0.50 | 161.13 | 12.50 | 148.63 | ND |
| MW-3 | 12/5/01 | <50   | <0.50  | <0.50  | <0.50  | <0.50  | NA | <5.0  | 161.13 | 10.13 | 151.00 | ND |

|       |              |         |       |       |       |        |    |        |    |       |    |    |
|-------|--------------|---------|-------|-------|-------|--------|----|--------|----|-------|----|----|
| TBW-N | 09/25/2001 c | 120,000 | 3,200 | 2,800 | 4,000 | 18,000 | NA | 31,000 | NM | 12.25 | NM | ND |
| TBW-N | 11/20/01     | 72,000  | 2,200 | 3,600 | 2,600 | 14,000 | NA | 35,000 | NM | 12.13 | NM | ND |
| TBW-N | 12/5/01      | 76,000  | 1,600 | 3,200 | 2,900 | 15,000 | NA | 30,000 | NM | 11.51 | NM | ND |

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**2120 Montana Street**  
**Oakland, CA**

| Well ID | Date | TPPH<br>(ug/L) | B<br>(ug/L) | T<br>(ug/L) | E<br>(ug/L) | X<br>(ug/L) | MTBE<br>8020<br>(ug/L) | MTBE<br>8260<br>(ug/L) | TOC<br>(MSL) | Depth to<br>Water<br>(ft.) | GW<br>Elevation<br>(MSL) | SPH<br>Thickness<br>(ft.) |
|---------|------|----------------|-------------|-------------|-------------|-------------|------------------------|------------------------|--------------|----------------------------|--------------------------|---------------------------|
|---------|------|----------------|-------------|-------------|-------------|-------------|------------------------|------------------------|--------------|----------------------------|--------------------------|---------------------------|

Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to May 31, 2001, analyzed by EPA Method 8015.

BTEX = benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to May 31, 2001, analyzed by EPA Method 8020.

MTBE = methyl-tertiary-butyl ether

TOC = Top of Casing Elevation

GW = Groundwater

TBW-N = tank backfill well-north

NA = Not analyzed

ND = Not detected

NM = Not measured

ug/L = parts per billion

msl = Mean sea level

ft = Feet

<n = Below detection limit

Notes:

a = Resampled on June 27, 2001, due to possible mislabeling.

b = Separate phase hydrocarbons encountered during purge; groundwater elevation may not be accurate.

c = Sample TBW-N was analyzed once within hold time, but the analyte concentrations all exceeded the instrument working ranges. The sample was diluted and re-analyzed out of hold time. The diluted analysis is reported because it more accurately reflects the concentrations present.

d = These results are listed as MW-3 on analytical report due to possible mislabeling in field or laboratory. Resampled on June 27, 2001, to confirm mislabeling.

e = These results are listed as MW-1 on analytical report due to possible mislabeling in field or laboratory. Resampled on June 27, 2001, to confirm mislabeling.

Survey data provided by Cambria Environmental Technology, May 2001.

When separate phase hydrocarbons are present, ground water elevation is adjusted using the relation:

corrected ground water elevation = Top-of-casing elevation - depth to water + (0.8 x hydrocarbon thickness).





Report Number : 23512

Date : 12/3/2001

Nick Sudano  
Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112-1105

Subject : 1 Water Sample  
Project Name : 2120 Montana Street, Oakland  
Project Number : 011120-JD-2  
P.O. Number : 98995740

Dear Mr. Sudano,

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

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

Sincerely,

A handwritten signature in black ink that reads "Joel Kiff". The signature is written in a cursive style with a large initial "J".

Joel Kiff



Report Number : 23512

Date : 12/3/2001

Project Name : 2120 Montana Street, Oakland

Project Number : 011120-JD-2

Sample : TBW-N

Matrix : Water

Lab Number : 23512-01

Sample Date : 11/20/2001

| Parameter                          | Measured Value | Method Reporting Limit | Units      | Analysis Method | Date Analyzed |
|------------------------------------|----------------|------------------------|------------|-----------------|---------------|
| <b>Benzene</b>                     | <b>2200</b>    | 25                     | ug/L       | EPA 8260B       | 11/27/2001    |
| <b>Toluene</b>                     | <b>3600</b>    | 25                     | ug/L       | EPA 8260B       | 11/27/2001    |
| <b>Ethylbenzene</b>                | <b>2600</b>    | 25                     | ug/L       | EPA 8260B       | 11/27/2001    |
| <b>Total Xylenes</b>               | <b>14000</b>   | 25                     | ug/L       | EPA 8260B       | 11/27/2001    |
| <b>Methyl-t-butyl ether (MTBE)</b> | <b>35000</b>   | 1000                   | ug/L       | EPA 8260B       | 11/28/2001    |
| <b>TPH as Gasoline</b>             | <b>72000</b>   | 5000                   | ug/L       | EPA 8260B       | 11/27/2001    |
| Toluene - d8 (Surr)                | 98.8           |                        | % Recovery | EPA 8260B       | 11/27/2001    |
| 4-Bromofluorobenzene (Surr)        | 109            |                        | % Recovery | EPA 8260B       | 11/27/2001    |

Approved By:  Joel Kiff

Report Number : 23512

Date : 12/3/2001

Project Name : **2120 Montana Street,**

Project Number : **011120-JD-2**

23512 Quality Control Data - Method Blank

| Parameter                          | Measured Value | Method Reporting Limit | Units      | Analysis Method | Date Analyzed |
|------------------------------------|----------------|------------------------|------------|-----------------|---------------|
| <b>Benzene</b>                     | < 0.50         | 0.50                   | ug/L       | EPA 8260B       | 11/25/2001    |
| <b>Toluene</b>                     | < 0.50         | 0.50                   | ug/L       | EPA 8260B       | 11/25/2001    |
| <b>Ethylbenzene</b>                | < 0.50         | 0.50                   | ug/L       | EPA 8260B       | 11/25/2001    |
| <b>Total Xylenes</b>               | < 0.50         | 0.50                   | ug/L       | EPA 8260B       | 11/25/2001    |
| <b>Methyl-t-butyl ether (MTBE)</b> | < 5.0          | 5.0                    | ug/L       | EPA 8260B       | 11/25/2001    |
| <b>TPH as Gasoline</b>             | < 50           | 50                     | ug/L       | EPA 8260B       | 11/25/2001    |
| Toluene - d8 (Surr)                | 98.6           |                        | % Recovery | EPA 8260B       | 11/25/2001    |
| 4-Bromofluorobenzene (Surr)        | 104            |                        | % Recovery | EPA 8260B       | 11/25/2001    |

Approved By:  Joel Kiff

Report Number : 23512

Date : 12/3/2001

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : 2120 Montana Street,

Project Number : 011120-JD-2

| Parameter            | Spiked Sample | Sample Value | Spike Level | Spike Dup. Level | Spiked Sample Value | Duplicate Spiked Sample Value | Units | Analysis Method | Date Analyzed | Spiked Sample Percent Recov. | Duplicate Spiked Sample Percent Recov. | Relative Percent Diff. | Spiked Sample Percent Recov. Limit | Relative Percent Diff. Limit |
|----------------------|---------------|--------------|-------------|------------------|---------------------|-------------------------------|-------|-----------------|---------------|------------------------------|--|------------------------|------------------------------------|------------------------------|
| Spike Recovery Data  |               |              |             |                  |                     |                               |       |                 |               |                              |  |                        |                                    |                              |
| Benzene              | 23516-01      | <0.50        | 19.6        | 19.2             | 18.9                | 18.9                          | ug/L  | EPA 8260B       | 11/25/2009    | 96.0                         | 98.6                                   | 2.67                   | 70-130                             | 25                           |
| Toluene              | 23516-01      | <0.50        | 19.6        | 19.2             | 19.0                | 17.5                          | ug/L  | EPA 8260B       | 11/25/2009    | 96.8                         | 91.3                                   | 5.80                   | 70-130                             | 25                           |
| Tert-Butanol         | 23516-01      | <5.0         | 98.2        | 96.1             | 84.4                | 83.5                          | ug/L  | EPA 8260B       | 11/25/2008    | 85.9                         | 86.9                                   | 1.21                   | 70-130                             | 25                           |
| Methyl-t-Butyl Ether | 23516-01      | <0.50        | 19.6        | 19.2             | 20.3                | 21.3                          | ug/L  | EPA 8260B       | 11/25/2001    | 103                          | 111                                    | 7.06                   | 70-130                             | 25                           |

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Approved By:  Joel Kiff

Report Number : 23512

Date : 12/3/2001

**QC Report : Laboratory Control Sample (LCS)**

Project Name : **2120 Montana Street,**


Project Number : **011120-JD-2**

| Parameter            | Spike Level | Units | Analysis Method | Date Analyzed | LCS Percent Recov. | LCS Percent Recov. Limit |
|----------------------|-------------|-------|-----------------|---------------|--------------------|--------------------------|
| Benzene              | 40.0        | ug/L  | EPA 8260B       | 11/25/200     | 96.7               | 70-130                   |
| Toluene              | 40.0        | ug/L  | EPA 8260B       | 11/25/200     | 97.8               | 70-130                   |
| Tert-Butanol         | 200         | ug/L  | EPA 8260B       | 11/25/200     | 85.9               | 70-130                   |
| Methyl-t-Butyl Ether | 40.0        | ug/L  | EPA 8260B       | 11/25/200     | 97.4               | 70-130                   |

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Approved By:

  
Joel Kiff

LAB: KiFP

# EQUIVA Services LLC Chain Of Custody Record

Lab Identification (if necessary):

Address:

City/State/Zip:

Equiva Project Manager to be invoiced:

- SCIENCE & ENGINEERING
- TECHNICAL SERVICES
- CRMT HOUSTON

Karen Petryna

2352

INCIDENT NUMBER (S&E ONLY)

9 8 9 9 5 7 4 0

SAP or CRMT NUMBER (TS/CRMT)

DATE: 11/20/01

PAGE: 1 of 1

Blaine Tech Services  
1603 Rogers Avenue, San Jose, CA 95112  
Phone: 408-573-0555 FAX: 408-573-7771 E-MAIL: nsudano@blainetech.com

LOG CODE: BTSS -

SITE ADDRESS (Street and City): 2120 Montana Street, Oakland

GLOBAL ID NO: T0600101805

EDF DELIVERABLE TO (Responsible Party or Designee): Anni Krem! PHONE NO.: 510-420-3335 E-MAIL: akrem!@cambria-env.com CONSULTANT PROJECT NO.: BTS # 01112050-2

SAMPLER NAME(S) (Print): Shawn O'Bryan LAB USE ONLY

TURNAROUND TIME (BUSINESS DAYS)  
 10 DAYS  5 DAYS  72 HOURS  48 HOURS  24 HOURS  LESS THAN 24 HOURS

LA KWQCB REPORT FORMAT  UST AGENCY:

GC/MS MTBE CONFIRMATION: HIGHEST \_\_\_\_\_ HIGHEST per BORING \_\_\_\_\_ ALL \_\_\_\_\_

SPECIAL INSTRUCTIONS OR NOTES: TEMPERATURE ON RECEIPT C° \_\_\_\_\_

| REQUESTED ANALYSIS   |     |                        |                          |                           |                 |          |                 |             |                                   |                                     |  | FIELD NOTES:<br>Container/Preservative<br>or PID Readings<br>or Laboratory Notes |
|----------------------|-----|------------------------|--------------------------|---------------------------|-----------------|----------|-----------------|-------------|-----------------------------------|-------------------------------------|--|--|
| TPH - Gas, Purgeable | BTX | MTBE (8021B - 5ppb RL) | MTBE (8260B - 0.5ppb RL) | Oxygenates (5) by (8260B) | Ethanol (8260B) | Methanol | 1,2-DCA (8260B) | EDB (8260B) | TPH - Diesel, Extractable (8015m) | MTBE (8260B) Confirmation, See Note |  |  |
|                      |     |                        |                          |                           |                 |          |                 |             |                                   |                                     |  | -01  |

| LAB USE ONLY | Field Sample Identification | SAMPLING        |               | MATRIX   | NO. OF CONT. |
|--------------|-----------------------------|-----------------|---------------|----------|--------------|
|              |                             | DATE            | TIME          |          |              |
|              | <u>TBW-P</u>                | <u>11/20/01</u> | <u>5:16 W</u> | <u>W</u> | <u>3</u>     |
|              |                             |                 |               |          |              |

|   |  |                       |                    |
|---|--|-----------------------|--------------------|
| Relinquished by: (Signature) <u>[Signature]</u> | Received by: (Signature) _____                                 | Date: <u>11/21/01</u> | Time: _____        |
| Relinquished by: (Signature) _____              | Received by: (Signature) _____                                 | Date: _____           | Time: <u>10:20</u> |
| Relinquished by: (Signature) _____              | Received by: (Signature) <u>John Cutler / K eff Analytical</u> | Date: <u>11/21/01</u> | Time: <u>10:20</u> |

DISTRIBUTION: White with final report, Green to F&E, Yellow and Pink to Client

10/15/00 Revision

O&D Graphic 7741 89R-9702



Report Number : 23715

Date : 12/19/01

Nick Sudano  
Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112-1105

Subject : 3 Water Samples  
Project Name : 2120 Montana Street, Oakland  
Project Number : 011205-CW1  
P.O. Number : 98995740

Dear Mr. Sudano,

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

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

Sincerely,

A handwritten signature in black ink that reads "Joel Kiff". The signature is written in a cursive style with a large, looped "J" and "K".

Joel Kiff



Report Number : 23715

Date : 12/19/01

Project Name : 2120 Montana Street, Oakland

Project Number : 011205-CW1

Sample : MW-2

Matrix : Water

Lab Number : 23715-01

Sample Date :12/5/01

| Parameter                   | Measured Value | Method Reporting Limit | Units      | Analysis Method | Date Analyzed |
|-----------------------------|----------------|------------------------|------------|-----------------|---------------|
| Benzene                     | 74             | 20                     | ug/L       | EPA 8260B       | 12/15/01      |
| Toluene                     | < 20           | 20                     | ug/L       | EPA 8260B       | 12/15/01      |
| Ethylbenzene                | < 20           | 20                     | ug/L       | EPA 8260B       | 12/15/01      |
| Total Xylenes               | < 20           | 20                     | ug/L       | EPA 8260B       | 12/15/01      |
| Methyl-t-butyl ether (MTBE) | 8400           | 200                    | ug/L       | EPA 8260B       | 12/15/01      |
| TPH as Gasoline             | < 2000         | 2000                   | ug/L       | EPA 8260B       | 12/15/01      |
| Toluene - d8 (Surr)         | 95.0           |                        | % Recovery | EPA 8260B       | 12/15/01      |
| 4-Bromofluorobenzene (Surr) | 92.1           |                        | % Recovery | EPA 8260B       | 12/15/01      |

Approved By:  Joel Kiff





Report Number : 23715

Date : 12/19/01

Project Name : 2120 Montana Street, Oakland

Project Number : 011205-CW1

Sample : MW-3

Matrix : Water

Lab Number : 23715-02

Sample Date :12/5/01

| Parameter                   | Measured Value | Method Reporting Limit | Units      | Analysis Method | Date Analyzed |
|-----------------------------|----------------|------------------------|------------|-----------------|---------------|
| Benzene                     | < 0.50         | 0.50                   | ug/L       | EPA 8260B       | 12/13/01      |
| Toluene                     | < 0.50         | 0.50                   | ug/L       | EPA 8260B       | 12/13/01      |
| Ethylbenzene                | < 0.50         | 0.50                   | ug/L       | EPA 8260B       | 12/13/01      |
| Total Xylenes               | < 0.50         | 0.50                   | ug/L       | EPA 8260B       | 12/13/01      |
| Methyl-t-butyl ether (MTBE) | < 5.0          | 5.0                    | ug/L       | EPA 8260B       | 12/13/01      |
| TPH as Gasoline             | < 50           | 50                     | ug/L       | EPA 8260B       | 12/13/01      |
| Toluene - d8 (Surr)         | 94.2           |                        | % Recovery | EPA 8260B       | 12/13/01      |
| 4-Bromofluorobenzene (Surr) | 90.9           |                        | % Recovery | EPA 8260B       | 12/13/01      |

Approved By:  \_\_\_\_\_  
Joel Kiff



Report Number : 23715

Date : 12/19/01

Project Name : 2120 Montana Street, Oakland

Project Number : 011205-CW1

Sample : TBW-N

Matrix : Water

Lab Number : 23715-03

Sample Date :12/5/01

| Parameter                          | Measured Value | Method Reporting Limit | Units      | Analysis Method | Date Analyzed |
|------------------------------------|----------------|------------------------|------------|-----------------|---------------|
| <b>Benzene</b>                     | <b>1600</b>    | 100                    | ug/L       | EPA 8260B       | 12/12/01      |
| <b>Toluene</b>                     | <b>3200</b>    | 100                    | ug/L       | EPA 8260B       | 12/12/01      |
| <b>Ethylbenzene</b>                | <b>2900</b>    | 100                    | ug/L       | EPA 8260B       | 12/12/01      |
| <b>Total Xylenes</b>               | <b>15000</b>   | 100                    | ug/L       | EPA 8260B       | 12/12/01      |
| <b>Methyl-t-butyl ether (MTBE)</b> | <b>30000</b>   | 1000                   | ug/L       | EPA 8260B       | 12/12/01      |
| <b>TPH as Gasoline</b>             | <b>76000</b>   | 10000                  | ug/L       | EPA 8260B       | 12/12/01      |
| Toluene - d8 (Surr)                | 96.8           |                        | % Recovery | EPA 8260B       | 12/12/01      |
| 4-Bromofluorobenzene (Surr)        | 95.5           |                        | % Recovery | EPA 8260B       | 12/12/01      |

Approved By:  Joel Kiff

Report Number : 23715

Date : 12/19/01

**QC Report : Method Blank Data**

Project Name : **2120 Montana Street, Oakland**

Project Number : **011205-CW1**

| <u>Parameter</u>            | <u>Measured Value</u> | <u>Method Reporting Limit</u> | <u>Units</u> | <u>Analysis Method</u> | <u>Date Analyzed</u> |
|-----------------------------|-----------------------|-------------------------------|--------------|------------------------|----------------------|
| Benzene                     | < 0.50                | 0.50                          | ug/L         | EPA 8260B              | 12/11/01             |
| Toluene                     | < 0.50                | 0.50                          | ug/L         | EPA 8260B              | 12/11/01             |
| Ethylbenzene                | < 0.50                | 0.50                          | ug/L         | EPA 8260B              | 12/11/01             |
| Total Xylenes               | < 0.50                | 0.50                          | ug/L         | EPA 8260B              | 12/11/01             |
| Methyl-t-butyl ether (MTBE) | < 0.50                | 0.50                          | ug/L         | EPA 8260B              | 12/11/01             |
| TPH as Gasoline             | < 50                  | 50                            | ug/L         | EPA 8260B              | 12/11/01             |
| Toluene - d8 (Surr)         | 98.5                  |                               | %            | EPA 8260B              | 12/11/01             |
| 4-Bromofluorobenzene (Surr) | 92.9                  |                               | %            | EPA 8260B              | 12/11/01             |

| <u>Parameter</u> | <u>Measured Value</u> | <u>Method Reporting Limit</u> | <u>Units</u> | <u>Analysis Method</u> | <u>Date Analyzed</u> |
|------------------|-----------------------|-------------------------------|--------------|------------------------|----------------------|
|------------------|-----------------------|-------------------------------|--------------|------------------------|----------------------|

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Approved By: Joel Kiff



Report Number : 23715

Date : 12/19/01

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : 2120 Montana Street,

Project Number : 011205-CW1

| Parameter            | Spiked Sample | Sample Value | Spike Level | Spike Dup. Level | Spiked Sample Value | Duplicate Spiked Sample Value | Units | Analysis Method | Date Analyzed | Spiked Sample Percent Recov. | Duplicate Spiked Sample Percent Recov. | Relative Percent Diff. | Spiked Sample Recov. Limit | Relative Percent Diff. Limit |
|----------------------|---------------|--------------|-------------|------------------|---------------------|-------------------------------|-------|-----------------|---------------|------------------------------|--|------------------------|----------------------------|------------------------------|
| Benzene              | 23681-06      | <0.50        | 40.2        | 39.6             | 37.9                | 39.8                          | ug/L  | EPA 8260B       | 12/11/01      | 94.3                         | 100                                    | 6.32                   | 70-130                     | 25                           |
| Toluene              | 23681-06      | <0.50        | 40.2        | 39.6             | 39.6                | 33.0                          | ug/L  | EPA 8260B       | 12/11/01      | 98.6                         | 83.4                                   | 16.7                   | 70-130                     | 25                           |
| Tert-Butanol         | 23681-06      | <5.0         | 201         | 198              | 205                 | 206                           | ug/L  | EPA 8260B       | 12/11/01      | 102                          | 104                                    | 1.85                   | 70-130                     | 25                           |
| Methyl-t-Butyl Ether | 23681-06      | 2.3          | 40.2        | 39.6             | 40.2                | 40.2                          | ug/L  | EPA 8260B       | 12/11/01      | 94.4                         | 95.6                                   | 1.31                   | 70-130                     | 25                           |

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Approved By:  Joel Kiff

QC Report : Laboratory Control Sample (LCS)

Report Number : 23715

Date : 12/19/01

Project Name : 2120 Montana Street,

Project Number : 011205-CW1

| Parameter            | Spike Level | Units | Analysis Method | Date Analyzed | LCS Percent Recov. | LCS Percent Recov. Limit |
|----------------------|-------------|-------|-----------------|---------------|--------------------|--------------------------|
| Benzene              | 40.0        | ug/L  | EPA 8260B       | 12/11/01      | 97.6               | 70-130                   |
| Toluene              | 40.0        | ug/L  | EPA 8260B       | 12/11/01      | 98.7               | 70-130                   |
| Tert-Butanol         | 200         | ug/L  | EPA 8260B       | 12/11/01      | 101                | 70-130                   |
| Methyl-t-Butyl Ether | 40.0        | ug/L  | EPA 8260B       | 12/11/01      | 93.3               | 70-130                   |

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Approved By:

  
Joel Kiff

LAB: KJH

# EQUIVA Services LLC Chain Of Custody Record

Lab Identification (if necessary):

Address:

City State Zip

Equiva Project Manager to be Invoiced:

SCIENCE & ENGINEERING

TECHNICAL SERVICES

CRMT HOUSTON

Karen Petryna

23715

INCIDENT NUMBER (SEE ONLY)

9 8 9 9 5 7 4 0

SAP or CRMT NUMBER (TSC/CRMT)

DATE: 12-05-01

PAGE: 1 of 1

|  |                             |  |  |   |  |
|--|-----------------------------|--|--|---|--|
| SAMPLING COMPANY:<br><b>Blaine Tech Services</b>                   |                             | LOG CODE:<br><b>BTSS</b>   | SITE ADDRESS (Street and City):<br><b>2120 Montana Street, Oakland</b> |   | GLOBAL ID NO:<br><b>T0600101805</b>      |
| ADDRESS:<br><b>1680 Rogers Avenue, San Jose, CA 95112</b>          |                             | EDF DELIVERABLE TO (Responsible Party or Division):<br><b>Anni Kreml</b> |  | PHONE NO.:<br><b>510-420-3335</b>               | E-MAIL:<br><b>akrem1@cambria-env.com</b> |
| PROJECT CONTACT (Hardcopy or PDF Report to):<br><b>Nick Sudano</b> |                             | SAMPLER NAME(S) (Print):<br><b>Chris Wagner</b>                          |  | CONSULTANT PROJECT NO:<br><b>BTs #011205-CW</b> |  |
| TELEPHONE:<br><b>408-573-0555</b>                                  | FAX:<br><b>408-573-7771</b> | E-MAIL:<br><b>nsudano@blainetech.com</b>                                 |  | LAB USE ONLY                                    |  |

TURNAROUND TIME (BUSINESS DAYS)  
 10 DAYS  5 DAYS  72 HOURS  48 HOURS  24 HOURS  LESS THAN 24 HOURS

REQUESTED ANALYSIS

LA - RWQCB REPORT FORMAT  UST AGENCY: \_\_\_\_\_

GC/MS MTBE CONFIRMATION: HIGHEST \_\_\_\_\_ HIGHEST per BORING \_\_\_\_\_ ALL \_\_\_\_\_

SPECIAL INSTRUCTIONS OR NOTES: \_\_\_\_\_ TEMPERATURE ON RECEIPT C: \_\_\_\_\_

| LAB USE ONLY | Field Sample Identification | SAMPLING |      | MATRIX | NO. OF CONT. | TPH - Gas, Purgeable | BTEX | MTBE (8021B - 5ppb RL) | MTBE (8260B - 0.5ppb RL) | Oxygenates (6) by (8260B) | Ethanol (8260B) | Methanol | 1,2-DCA (8260B) | EDB (8260B) | TPH - Diesel, Extractable (8015m) | MTBE (8260B) Confirmation, See Note | FIELD NOTES:<br>Container/Preservative or PID Readings or Laboratory Notes |
|--------------|-----------------------------|----------|------|--------|--------------|----------------------|------|------------------------|--------------------------|---------------------------|-----------------|----------|-----------------|-------------|-----------------------------------|-------------------------------------|--|
|              |                             | DATE     | TIME |        |              |                      |      |                        |                          |                           |                 |          |                 |             |                                   |                                     |  |
|              | MW-2                        | 12/5     | 1236 | W      | 3            | X                    | X    | X                      |                          |                           |                 |          |                 |             |                                   |                                     |  |
|              | MW-3                        | 12/5     | 1114 | ↓      | ↓            | X                    | X    | X                      |                          |                           |                 |          |                 |             |                                   |                                     | 01   |
|              | TBW-N                       | 12/5     | 1324 | ↓      | ↓            | X                    | X    | X                      |                          |                           |                 |          |                 |             |                                   |                                     | 02<br>03   |

|  |  |                        |                      |
|--|--|------------------------|----------------------|
| Requested by (Signature):<br><i>Chris Wagner</i> | Received by (Signature):                       | Date:                  | Time:                |
| Requested by (Signature):                        | Received by (Signature):                       | Date:                  | Time:                |
| Requested by (Signature):                        | Received by (Signature):<br><i>Harold B...</i> | Date:<br><u>120601</u> | Time:<br><u>1120</u> |

NOTE: TYPH White with final report, Green to File, Yellow and Pink to Client



## EQUIVA WELL MONITORING DATA SHEET

|                                 |                                   |
|---------------------------------|-----------------------------------|
| BTS #: 011205-CW-1              | Site: 2120 Montana St. Oakland    |
| Sampler: CHEIS U.               | Date: 12-05-01                    |
| Well I.D.: MW-1                 | Well Diameter: <u>2</u> 3 4 6 8   |
| Total Well Depth: 14.27         | Depth to Water: 11.32             |
| Depth to Free Product:          | Thickness of Free Product (feet): |
| Referenced to: <u>PVC</u> Grade | D.O. Meter (if req'd): YSI HACH   |

Purge Method: ~~Bailer~~ Disposable Bailer ~~Macheteburg~~ Electric Submersible ~~Water~~ Peristaltic Extraction Pump ~~Other~~

Sampling Method: ~~Bailer~~ Disposable Bailer Extraction Port Dedicated Tubing ~~Other~~

| $.5 \text{ (Gals.)} \times 3 = 1.5 \text{ Gals.}$ 1 Case Volume      Specified Volumes      Calculated Volume | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td><u>0.16</u></td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </table> | Well Diameter | Multiplier                  | Well Diameter | Multiplier | 1" | 0.04 | 4" | 0.65 | 2" | <u>0.16</u> | 6" | 1.47 | 3" | 0.37 | Other | radius <sup>2</sup> * 0.163 |
|---|---|---------------|-----------------------------|---------------|------------|----|------|----|------|----|-------------|----|------|----|------|-------|-----------------------------|
| Well Diameter   | Multiplier  | Well Diameter | Multiplier                  |               |            |    |      |    |      |    |             |    |      |    |      |       |                             |
| 1"  | 0.04  | 4"            | 0.65                        |               |            |    |      |    |      |    |             |    |      |    |      |       |                             |
| 2"  | <u>0.16</u>   | 6"            | 1.47                        |               |            |    |      |    |      |    |             |    |      |    |      |       |                             |
| 3"  | 0.37  | Other         | radius <sup>2</sup> * 0.163 |               |            |    |      |    |      |    |             |    |      |    |      |       |                             |

| Time | Temp (°F) | pH | Cond. | Turbidity | Gals. Removed | Observations                      |
|------|-----------|----|-------|-----------|---------------|-----------------------------------|
|      |           |    |       |           | .5            | NO sample due to presence of SPH. |
|      |           |    |       |           | 1.0           |                                   |
|      |           |    |       |           | 1.5           |                                   |
|      |           |    |       |           |               |                                   |
|      |           |    |       |           |               |                                   |
|      |           |    |       |           |               |                                   |

Did well dewater? Yes No      Gallons actually evacuated: 0

Sampling Time:      Sampling Date: 12-05-01

Sample I.D.: MW-1      Laboratory: Kiff Sequoia Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Other: \_\_\_\_\_

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Other: \_\_\_\_\_

|                    |            |      |             |      |
|--------------------|------------|------|-------------|------|
| D.O. (if req'd):   | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV   | Post-purge: | mV   |



## EQUIVA WELL MONITORING DATA SHEET

|                                 |                                   |
|---------------------------------|-----------------------------------|
| BTS #: 011205-CW-1              | Site: 2120 Montano St. Oakland    |
| Sampler: CHRIS W.               | Date: 12-05-01                    |
| Well I.D.: MW-2                 | Well Diameter: <u>2</u> 3 4 6 8   |
| Total Well Depth: 12-89         | Depth to Water: 10.40             |
| Depth to Free Product:          | Thickness of Free Product (feet): |
| Referenced to: <u>PVC</u> Grade | D.O. Meter (if req'd): YSI HACH   |

Purge Method: Bailer      Waterra      Sampling Method: ~~Bailer~~  
Disposable Bailer      Peristaltic      Disposable Bailer  
Grinding      Extraction Pump      ~~Extraction Port~~  
 Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing

Other: \_\_\_\_\_

| $4 \text{ (Gals.)} \times 3 = 1.2 \text{ Gals.}$ | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td><u>0.16</u></td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table> | Well Diameter     | Multiplier                  | Well Diameter | Multiplier | 1" | 0.04 | 4" | 0.65 | 2" | <u>0.16</u> | 6" | 1.47 | 3" | 0.37 | Other | radius <sup>2</sup> * 0.163 |
|--|---|-------------------|-----------------------------|---------------|------------|----|------|----|------|----|-------------|----|------|----|------|-------|-----------------------------|
| Well Diameter                                    | Multiplier  | Well Diameter     | Multiplier                  |               |            |    |      |    |      |    |             |    |      |    |      |       |                             |
| 1"   | 0.04  | 4"                | 0.65                        |               |            |    |      |    |      |    |             |    |      |    |      |       |                             |
| 2"   | <u>0.16</u>   | 6"                | 1.47                        |               |            |    |      |    |      |    |             |    |      |    |      |       |                             |
| 3"   | 0.37  | Other             | radius <sup>2</sup> * 0.163 |               |            |    |      |    |      |    |             |    |      |    |      |       |                             |
| 1 Case Volume                                    | Specified Volumes   | Calculated Volume |                             |               |            |    |      |    |      |    |             |    |      |    |      |       |                             |

| Time | Temp (°F) | pH  | Cond. | Turbidity | Gals. Removed | Observations |
|------|-----------|-----|-------|-----------|---------------|--------------|
| 1224 | 61.5      | 6.9 | 840   | 117       | .4            | ok           |
| 1226 | 63.4      | 6.8 | 878   | 122       | .8            | ↓            |
| 1227 | 64.0      | 6.9 | 899   | 112       | 1.2           |              |
|      |           |     |       |           |               |              |
|      |           |     |       |           |               |              |
|      |           |     |       |           |               |              |

Did well dewater? Yes  No  Gallons actually evacuated: 1.2

Sampling Time: 1236      Sampling Date: 12-05-01

Sample I.D.: MW-2      Laboratory: Kiff Sequoia Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

EB I.D. (if applicable): @ Time      Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

|                  |            |      |             |      |
|------------------|------------|------|-------------|------|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| ORP (if req'd):  | Pre-purge: | mV   | Post-purge: | mV   |

## EQUIVA WELL MONITORING DATA SHEET

|                                 |                                   |
|---------------------------------|-----------------------------------|
| BTS #: 011205-CW-1              | Site: 2120 Montana St. Oakland    |
| Sampler: CHRIS U.               | Date: 12-05-01                    |
| Well I.D.: MW-3                 | Well Diameter: <u>2</u> 3 4 6 8   |
| Total Well Depth: 12.50         | Depth to Water: 10.13             |
| Depth to Free Product:          | Thickness of Free Product (feet): |
| Referenced to: <u>PVC</u> Grade | D.O. Meter (if req'd): YSI HACH   |

Purge Method: Bailer      Waterra      Sampling Method: Bailer  
 Disposable Bailer      Peristaltic      Disposable Bailer  
Middleburg      Extraction Pump      Extraction Port  
 Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing

Other: \_\_\_\_\_

| $\underline{.40} \text{ (Gals.)} \times \underline{3} = \underline{1.20} \text{ Gals.}$ <p>1 Case Volume      Specified Volumes      Calculated Volume</p> | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td><u>0.16</u></td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table> | Well Diameter | Multiplier                  | Well Diameter | Multiplier | 1" | 0.04 | 4" | 0.65 | 2" | <u>0.16</u> | 6" | 1.47 | 3" | 0.37 | Other | radius <sup>2</sup> * 0.163 |
|--|---|---------------|-----------------------------|---------------|------------|----|------|----|------|----|-------------|----|------|----|------|-------|-----------------------------|
| Well Diameter  | Multiplier  | Well Diameter | Multiplier                  |               |            |    |      |    |      |    |             |    |      |    |      |       |                             |
| 1"   | 0.04  | 4"            | 0.65                        |               |            |    |      |    |      |    |             |    |      |    |      |       |                             |
| 2"   | <u>0.16</u>   | 6"            | 1.47                        |               |            |    |      |    |      |    |             |    |      |    |      |       |                             |
| 3"   | 0.37  | Other         | radius <sup>2</sup> * 0.163 |               |            |    |      |    |      |    |             |    |      |    |      |       |                             |

| Time | Temp (°F) | pH  | Cond. | Turbidity | Gals. Removed | Observations |
|------|-----------|-----|-------|-----------|---------------|--------------|
| 1104 | 63.9      | 6.9 | 719   | 7200      | .4            | cloudy       |
| 1105 | 63.9      | 6.5 | 783   | 7200      | .8            | ↓            |
| 1107 | 64.4      | 6.5 | 743   | 7200      | 1.2           |              |
|      |           |     |       |           |               |              |
|      |           |     |       |           |               |              |
|      |           |     |       |           |               |              |

Did well dewater? Yes No      Gallons actually evacuated: 1.2

Sampling Time: 1114      Sampling Date: 12-05-01

Sample I.D.: MW-3      Laboratory: Kiff Sequoia Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

EB I.D. (if applicable): @ Time      Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

|                  |                    |      |             |      |
|------------------|--------------------|------|-------------|------|
| D.O. (if req'd): | Pre-purge:         | mg/L | Post-purge: | mg/L |
|                  | O.R.P. (if req'd): | mV   | Post-purge: | mV   |

## EQUIVA WELL MONITORING DATA SHEET

|                                 |                                   |
|---------------------------------|-----------------------------------|
| BTS #: 011205-CW-1              | Site: 2120 Montana St. Oakland    |
| Sampler: CHRIS                  | Date: 12.05.01                    |
| Well I.D.: TBW-N                | Well Diameter: 2 3 <u>4</u> 6 8   |
| Total Well Depth: 12.25         | Depth to Water: 11.51             |
| Depth to Free Product:          | Thickness of Free Product (feet): |
| Referenced to: <u>PVC</u> Grade | D.O. Meter (if req'd): YSI HACH   |

|   |  |   |
|---|--|---|
| Purge Method: Bailer<br>Disposable Bailer<br>Middleburg<br><u>Electric Submersible</u><br>Other _____ | Waterra<br>Peristaltic<br>Extraction Pump<br>Other _____ | Sampling Method: Bailer<br>Disposable Bailer<br>Extraction Port<br>Dedicated Tubing<br>Other: _____ |
|---|--|---|

| .5 (Gals.) X 3 = 1.5 Gals.<br>I Case Volume      Specified Volumes      Calculated Volume | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td><u>0.65</u></td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table> | Well Diameter | Multiplier                  | Well Diameter | Multiplier | 1" | 0.04 | 4" | <u>0.65</u> | 2" | 0.16 | 6" | 1.47 | 3" | 0.37 | Other | radius <sup>2</sup> * 0.163 |
|---|---|---------------|-----------------------------|---------------|------------|----|------|----|-------------|----|------|----|------|----|------|-------|-----------------------------|
| Well Diameter   | Multiplier  | Well Diameter | Multiplier                  |               |            |    |      |    |             |    |      |    |      |    |      |       |                             |
| 1"  | 0.04  | 4"            | <u>0.65</u>                 |               |            |    |      |    |             |    |      |    |      |    |      |       |                             |
| 2"  | 0.16  | 6"            | 1.47                        |               |            |    |      |    |             |    |      |    |      |    |      |       |                             |
| 3"  | 0.37  | Other         | radius <sup>2</sup> * 0.163 |               |            |    |      |    |             |    |      |    |      |    |      |       |                             |

| Time | Temp (°F) | pH  | Cond. | Turbidity | Gals. Removed | Observations        |
|------|-----------|-----|-------|-----------|---------------|---------------------|
| 1315 | 64.3      | 6.9 | 1543  | 29        | .5            | 640<br>particulates |
| 1316 | 66.3      | 6.8 | 1532  | 28        | 1.0           | ↓                   |
| 1317 | 66.9      | 6.8 | 1530  | 19        | 1.5           | ↓                   |
|      |           |     |       |           |               |                     |
|      |           |     |       |           |               |                     |
|      |           |     |       |           |               |                     |

Did well dewater? Yes  No  Gallons actually evacuated: 1.5

Sampling Time: 1324 Sampling Date: 12.05.01

Sample I.D.: TBW-N Laboratory: Kiff Sequoia Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

|                    |            |      |             |      |
|--------------------|------------|------|-------------|------|
| D.O. (if req'd):   | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV   | Post-purge: | mV   |

WELL GAUGING DATA

Project # 01120-50-2 Date 11/20/01 Client Equiva

Site 2120 Montara St, Oakland, CA

| Well ID               | Well Size (in.) | Sheen / Odor | Depth to Immiscible Liquid (ft.) | Thickness of Immiscible Liquid (ft.) | Volume of Immiscibles Removed (ml) | Depth to water (ft.) | Depth to well bottom (ft.) | Survey Point: TOB or <u>ESC</u> |
|-----------------------|-----------------|--------------|----------------------------------|--------------------------------------|------------------------------------|----------------------|----------------------------|---------------------------------|
| * TBW-1               | 4               |              |                                  |                                      |                                    | 12.13                | 12.70                      | ↓                               |
| * MW-1                | 2               |              | 13.44                            | .05                                  |                                    | 13.49                | —                          | ↓                               |
| * Stingers in wells * |                 |              |                                  |                                      |                                    |                      |                            |                                 |
|                       |                 |              |                                  |                                      |                                    |                      |                            |                                 |
|                       |                 |              |                                  |                                      |                                    |                      |                            |                                 |
|                       |                 |              |                                  |                                      |                                    |                      |                            |                                 |
|                       |                 |              |                                  |                                      |                                    |                      |                            |                                 |
|                       |                 |              |                                  |                                      |                                    |                      |                            |                                 |
|                       |                 |              |                                  |                                      |                                    |                      |                            |                                 |
|                       |                 |              |                                  |                                      |                                    |                      |                            |                                 |
|                       |                 |              |                                  |                                      |                                    |                      |                            |                                 |
|                       |                 |              |                                  |                                      |                                    |                      |                            |                                 |
|                       |                 |              |                                  |                                      |                                    |                      |                            |                                 |
|                       |                 |              |                                  |                                      |                                    |                      |                            |                                 |
|                       |                 |              |                                  |                                      |                                    |                      |                            |                                 |
|                       |                 |              |                                  |                                      |                                    |                      |                            |                                 |
|                       |                 |              |                                  |                                      |                                    |                      |                            |                                 |
|                       |                 |              |                                  |                                      |                                    |                      |                            |                                 |
|                       |                 |              |                                  |                                      |                                    |                      |                            |                                 |
|                       |                 |              |                                  |                                      |                                    |                      |                            |                                 |
|                       |                 |              |                                  |                                      |                                    |                      |                            |                                 |

## EQUIVA WELL MONITORING DATA SHEET

|                                     |  |
|-------------------------------------|--|
| BTS #: 011120-50-2                  | Site: 28995740                         |
| Sampler: O'Brien                    | Date: 11/20/01                         |
| Well I.D.: MW-1                     | Well Diameter: 3 4 6 8                 |
| Total Well Depth: -                 | Depth to Water: 13.49                  |
| Depth to Free Product: 13.44        | Thickness of Free Product (feet): 0.05 |
| Referenced to: <del>PVE</del> Grade | D.O. Meter (if req'd): YSI HACH        |

Purge Method: Bailer      Waterra      Sampling Method: Bailer  
 Disposable Bailer      Peristaltic      Disposable Bailer  
 Middleburg      Extraction Pump      Extraction Port  
 Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing

Other: \_\_\_\_\_

| _____ (Gals.) X _____ = _____ Gals.<br>1 Case Volume      Specified Volumes      Calculated Volume | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> + 0.163</td> </tr> </table> | Well Diameter | Multiplier                  | Well Diameter | Multiplier | 1" | 0.04 | 4" | 0.65 | 2" | 0.16 | 6" | 1.47 | 3" | 0.37 | Other | radius <sup>2</sup> + 0.163 |
|--|--|---------------|-----------------------------|---------------|------------|----|------|----|------|----|------|----|------|----|------|-------|-----------------------------|
| Well Diameter  | Multiplier   | Well Diameter | Multiplier                  |               |            |    |      |    |      |    |      |    |      |    |      |       |                             |
| 1"   | 0.04   | 4"            | 0.65                        |               |            |    |      |    |      |    |      |    |      |    |      |       |                             |
| 2"   | 0.16   | 6"            | 1.47                        |               |            |    |      |    |      |    |      |    |      |    |      |       |                             |
| 3"   | 0.37   | Other         | radius <sup>2</sup> + 0.163 |               |            |    |      |    |      |    |      |    |      |    |      |       |                             |

| Time                               | Temp (°F) | pH | Cond. | Turbidity | Gals. Removed | Observations |
|------------------------------------|-----------|----|-------|-----------|---------------|--------------|
| * No sample taken - SPH in well    |           |    |       |           |               |              |
| - Did not bail per clients request |           |    |       |           |               |              |
|                                    |           |    |       |           |               |              |
|                                    |           |    |       |           |               |              |
|                                    |           |    |       |           |               |              |
|                                    |           |    |       |           |               |              |
|                                    |           |    |       |           |               |              |

|  |  |
|--|--|
| Did well dewater?    Yes    No                         | Gallons actually evacuated: _____          |
| Sampling Time: _____                                   | Sampling Date: _____                       |
| Sample I.D.: . .                                       | Laboratory: Kiff    Sequoia    Other _____ |
| Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Other: |  |
| EB I.D. (if applicable): _____ @ _____                 | Duplicate I.D. (if applicable): _____      |
| Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Other: |  |
| D.O. (if req'd):    Pre-purge: _____ <sup>mg/L</sup>   | Post-purge: _____ <sup>mg/L</sup>          |
| O.R.P. (if req'd):    Pre-purge: _____ mV              | Post-purge: _____ mV                       |

## EQUIVA WELL MONITORING DATA SHEET

|                                 |                                   |
|---------------------------------|-----------------------------------|
| BTS #: <u>D1120-50-2</u>        | Site: <u>9859 5740</u>            |
| Sampler: <u>O'Brien</u>         | Date: <u>11/20/01</u>             |
| Well I.D.: <u>TBW-N</u>         | Well Diameter: 2 3 <u>4</u> 6 8   |
| Total Well Depth: <u>12.70</u>  | Depth to Water: <u>12.13</u>      |
| Depth to Free Product:          | Thickness of Free Product (feet): |
| Referenced to: <u>PVC</u> Grade | D.O. Meter (if req'd): YSI HACH   |

|  |   |  |
|--|---|--|
| Purge Method: <u>Disposable Bailer</u><br>Middleburg<br>Electric Submersible | Waterra<br>Peristaltic<br>Extraction Pump<br>Other: _____ | Sampling Method: <u>Disposable Bailer</u><br>Extraction Port<br>Dedicated Tubing<br>Other: _____ |
|--|---|--|

| $\underline{.4} \text{ (Gals.)} \times \underline{3} = \underline{1.2} \text{ Gals.}$ 1 Case Volume      Specified Volumes      Calculated Volume | <table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </table> | Well Diameter | Multiplier                  | Well Diameter | Multiplier | 1" | 0.04 | 4" | 0.65 | 2" | 0.16 | 6" | 1.47 | 3" | 0.37 | Other | radius <sup>2</sup> * 0.163 |
|---|--|---------------|-----------------------------|---------------|------------|----|------|----|------|----|------|----|------|----|------|-------|-----------------------------|
| Well Diameter   | Multiplier   | Well Diameter | Multiplier                  |               |            |    |      |    |      |    |      |    |      |    |      |       |                             |
| 1"  | 0.04   | 4"            | 0.65                        |               |            |    |      |    |      |    |      |    |      |    |      |       |                             |
| 2"  | 0.16   | 6"            | 1.47                        |               |            |    |      |    |      |    |      |    |      |    |      |       |                             |
| 3"  | 0.37   | Other         | radius <sup>2</sup> * 0.163 |               |            |    |      |    |      |    |      |    |      |    |      |       |                             |

| Time | Temp (°F) | pH  | Cond. | Turbidity | Gals. Removed | Observations |
|------|-----------|-----|-------|-----------|---------------|--------------|
| 1502 | 70.1      | 7.3 | 1412  | 7200      | .5            |              |
| 1510 | 69.8      | 7.0 | 1359  | 7200      | 1.0           |              |
| 1512 | 69.8      | 6.8 | 1242  | 7200      | 1.25          |              |
|      |           |     |       |           |               |              |
|      |           |     |       |           |               |              |
|      |           |     |       |           |               |              |

Did well dewater? Yes  No  Gallons actually evacuated: 1.25

Sampling Time: 1516 Sampling Date: 11/20/01

Sample I.D.: TBW-N Laboratory: Riff Sequoia Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Other: \_\_\_\_\_

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time Duplicate I.D. (if applicable): \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Other: \_\_\_\_\_

|                    |            |      |             |      |
|--------------------|------------|------|-------------|------|
| D.O. (if req'd):   | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV   | Post-purge: | mV   |