

March 7, 2003

Alameda County Department of  
Environmental Health  
1131 Harbor Bay Parkway, 2<sup>nd</sup> Floor  
Alameda, CA 94502

Attention: Scott Seery

Subject: Report of Groundwater Monitoring Conducted On February 5, 2003  
Corwood Car Wash UST Site, 6973 Village Parkway  
Dublin, California  
GA Project No. 106-02-03

Ladies and Gentlemen:

Gribi Associates is pleased to submit this groundwater monitoring report on behalf of R. L. Woodward Industries, Inc. for the Corwood Car Wash underground storage tank (UST) site located at 6973 Village Parkway in Dublin, California (see Figure 1 and Figure 2). This letter report documents the monitoring of one groundwater monitoring well at the site.

## **DESCRIPTION OF SAMPLING ACTIVITIES**

On February 7, 2003, Gribi Associates conducted groundwater monitoring activities for the site well MW-1. Groundwater monitoring was conducted in accordance with California LUFT Field Manual guidelines as follows:

- After unlocking and opening the monitoring well, the water level was measured to the nearest 0.01 foot with an electronic probe.
- Using a disposable PVC bailer, a single bail of groundwater was taken from the well to check for the presence or absence of floating free product.
- The well was purged of approximately three well volumes. During purging, temperature, pH, conductivity, and turbidity of the well water were periodically monitored and recorded until they stabilized. All purged water was stored onsite in a sealed 55-gallon metal drum. A groundwater sampling data sheet for MW-1 is contained in Appendix A.
- After purging the required volume of water, groundwater was poured directly from the bailer into two half-liter amber jars and three 40-ml VOC vials. Each container was then tightly sealed with a teflon-lined septum, making sure that no air bubbles were present in the containers. Each container was then labeled and placed in cold storage for transport to the analytical laboratory under formal chain-of-custody.

## RESULTS OF GROUNDWATER MONITORING

### Hydrologic Conditions

Groundwater was encountered in MW-1 at a depth of about 6.5 feet below surface grade. Purged groundwater from MW-1 exhibited no hydrocarbon odors or sheens.

### Laboratory Analytical Results

The groundwater sample from MW-1 was analyzed for the following parameters with standard method turn around time on results.

USEPA 8015M Total Petroleum Hydrocarbons as Gasoline (TPH-G)  
USEPA 8020/602 Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)  
USEPA 8260B Oxygenates (DIPE, ETBE, MTBE, TAME, TBA, EDB, 1,2-DCA)  
USEPA 8015M Total Petroleum Hydrocarbons as Diesel (TPH-D)

Groundwater analytical results are summarized in Table 1. The laboratory data report, which includes laboratory chromatograms for all analyses, is contained in Appendix B.

| Sample ID | Sample Date | GW Depth <sup>1</sup> | Concentration |        |        |         |         |         |         |      |                     |
|-----------|-------------|-----------------------|---------------|--------|--------|---------|---------|---------|---------|------|---------------------|
|           |             |                       | TPH-D         | TPH-MO | TPH-G  | B       | T       | E       | X       | MTBE | OXY                 |
| MW-1      | 01/08/01    | 8.28                  | <0.050        | --     | 0.670  | 0.00082 | 0.017   | 0.028   | 0.120   | 1.70 | <0.001 <sup>2</sup> |
|           | 07/27/01    | 8.19                  | <0.050        | <0.100 | 0.490  | <0.0025 | <0.0025 | <0.0025 | <0.0025 | 0.93 | <0.001 <sup>2</sup> |
|           | 02/05/03    | 6.40                  | <0.050        | --     | <0.005 | <0.0005 | <0.0005 | <0.0005 | <0.001  | 0.13 | <0.001 <sup>2</sup> |

TPH-D = Total Petroleum Hydrocarbons as Diesel  
TPH-MO = Total Petroleum Hydrocarbons as Motor Oil  
TPH-G = Total Petroleum Hydrocarbons as Gasoline  
B = Benzene  
T = Toluene  
E = Ethylbenzene  
X = Xylenes  
MTBE = Methyl-t-Butyl Ether, USEPA Method 8260B

OXY = Oxygenates, except MTBE. Includes tert-Butanol (TBA), Diisopropyle ether (DIPE), Ethyl-tert-butyl ether (ETBE), tert-Amylmethyl ether (TAME), 1,2-Dibromomethane (EDB), and 1,2-Dichloroethane (1,2-DCA).  
<0.050 = Not detected above the expressed value.  
1 = Groundwater depth measured from top of casing  
2 = No detectable levels of TBA, DIPE, ETBE, TAME, EDB, & 1,2-DCA.

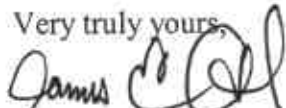
## CONCLUSIONS

Laboratory analytical results from this sampling event show a significant decrease in gasoline-range hydrocarbons, with the MTBE concentration in the MW-1 groundwater sample falling more than 92 percent since January 2001, from 1.70 parts per million (ppm) in January 2001 to 0.13 ppm in February 2003 (see Figure 3). We believe that this decrease is the result of the combined effect of previous source removal (UST removal and overexcavation) activities conducted in early 2000 and subsequent natural attenuation processes. Also, these results, as well as previous soil and groundwater hydrocarbon results for the site, indicate that the original mass of hydrocarbons released was relatively small.

Although Alameda County Department of Environmental Health issued a letter on January 31, 2003 directing additional investigative activities at the site, we believe strongly that these requirements are excessive and unwarranted, given the minimal subsurface impacts beneath the site. Soil hydrocarbon impacts, as shown on Figure 4, are very limited, with the highest concentrations adjacent to the former east dispenser island and no soil hydrocarbon impacts at the downgradient (south) property boundary. Groundwater hydrocarbon impacts, as shown on Figure 5, are limited primarily to MTBE, and these MTBE impacts are clearly attenuating, both with respect to distance (decrease from WS-2 to IB-2 to IB-4) and time (92 percent decrease in MW-1 from January 2001 to February 2003).

In May 2002, Alameda County Department of Environmental Health requested that a sensitive receptors survey be conducted as a requirement to evaluate this site for regulatory closure. Results of this survey (*Sensitive Receptor Survey*, Gribi Associates, May 17, 2002) indicate that there are no water supply wells within at least a 1,500 foot radius from the project site and that the nearest surface water body is more than 700 feet distant from the site. Weighing these conditions against the limited soil and groundwater impacts, as well as the significant degree of source removal conducted during UST removal activities and the low permeability silts and clays present beneath the site, we believe that this site clearly should be designated as a low risk site and should be granted regulatory closure.

We appreciate this opportunity to provide this report for your review. Please contact us if there are questions or if additional information is required.

Very truly yours,  
  
James E. Gribi  
Registered Geologist  
California No. 5843

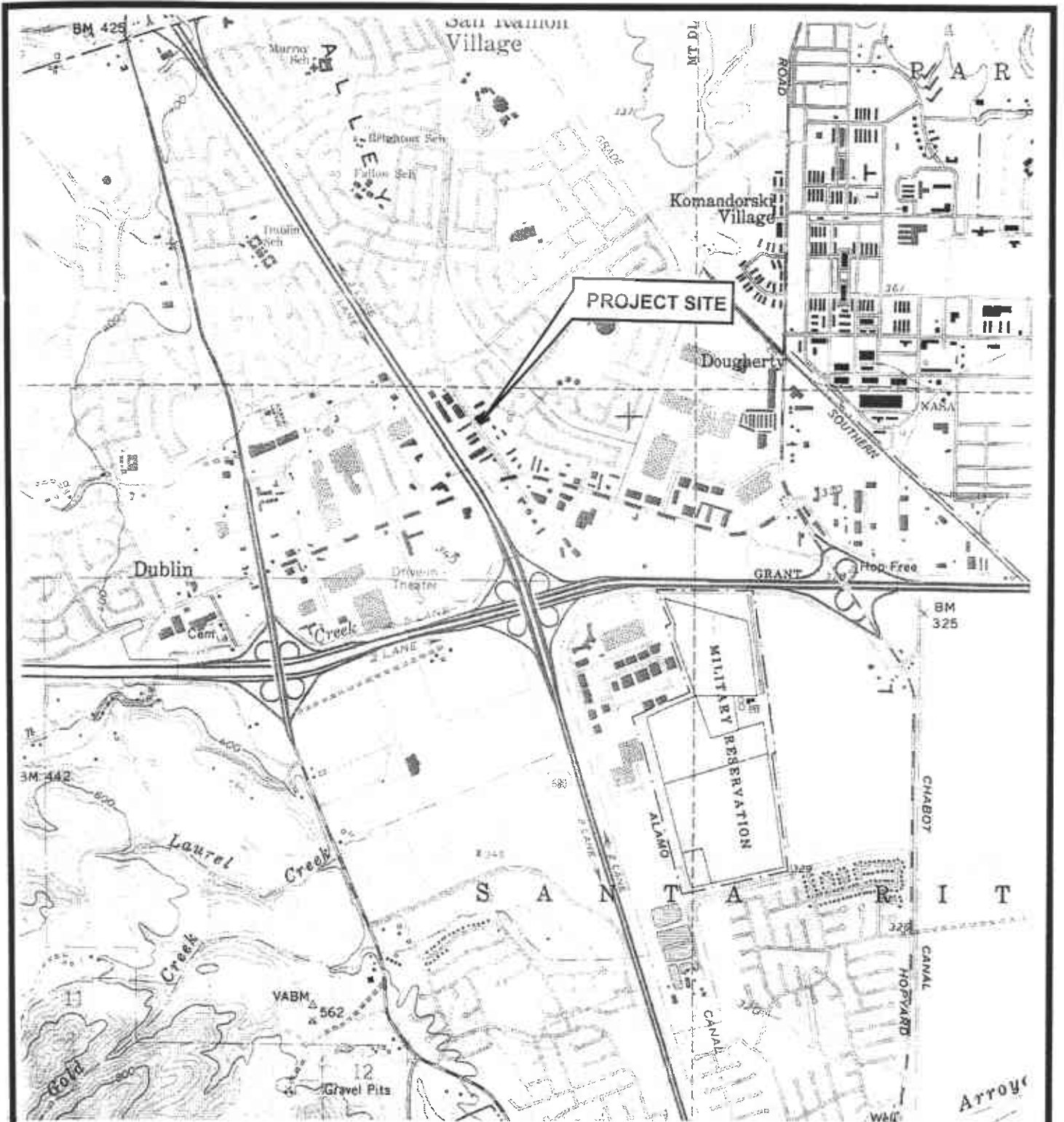


JEG:ct  
Enclosure

File: C:\Documents and Settings\All Users\Documents\PROJECTS\Corwood\CW\Corwood-qm-2-03.wpd

c Mr. Roger Woodward, R. L. Woodward Industries, Inc.

**GRIBI Associates**



TOPOGRAPHY FROM USGS DUBLIN  
7.5-MINUTE QUADRANGLE MAP, (TOPO! 1997)



Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)



|                       |                 |
|-----------------------|-----------------|
| DESIGNED BY:          | CHECKED BY:     |
| DRAWN BY: JG          | SCALE: 1:24,000 |
| PROJECT NO: 106-02-01 |                 |

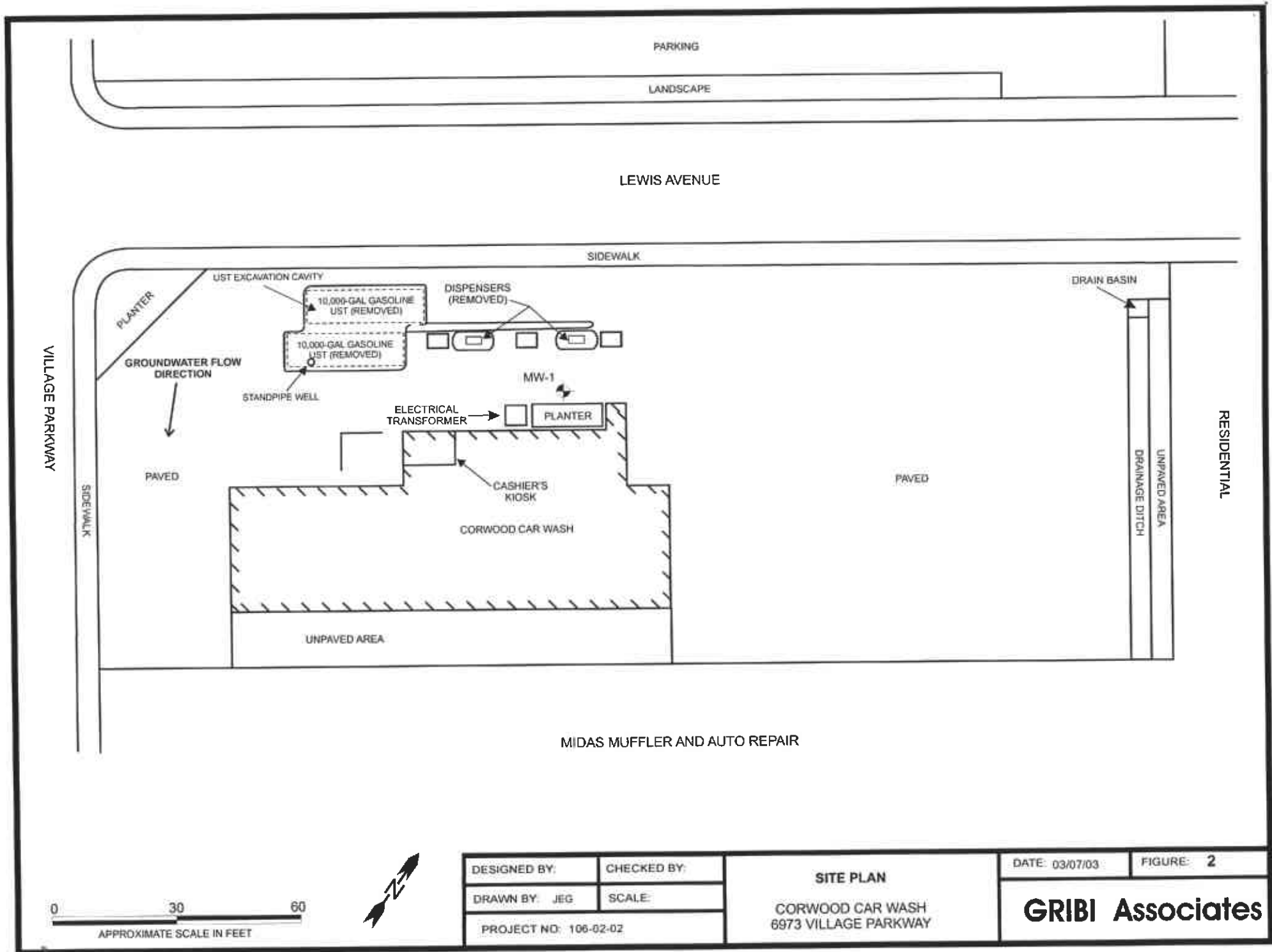
**SITE VICINITY MAP**

CORWOOD CAR WASH  
6973 VILLAGE PARKWAY

DATE: 02/28/00

FIGURE: 1

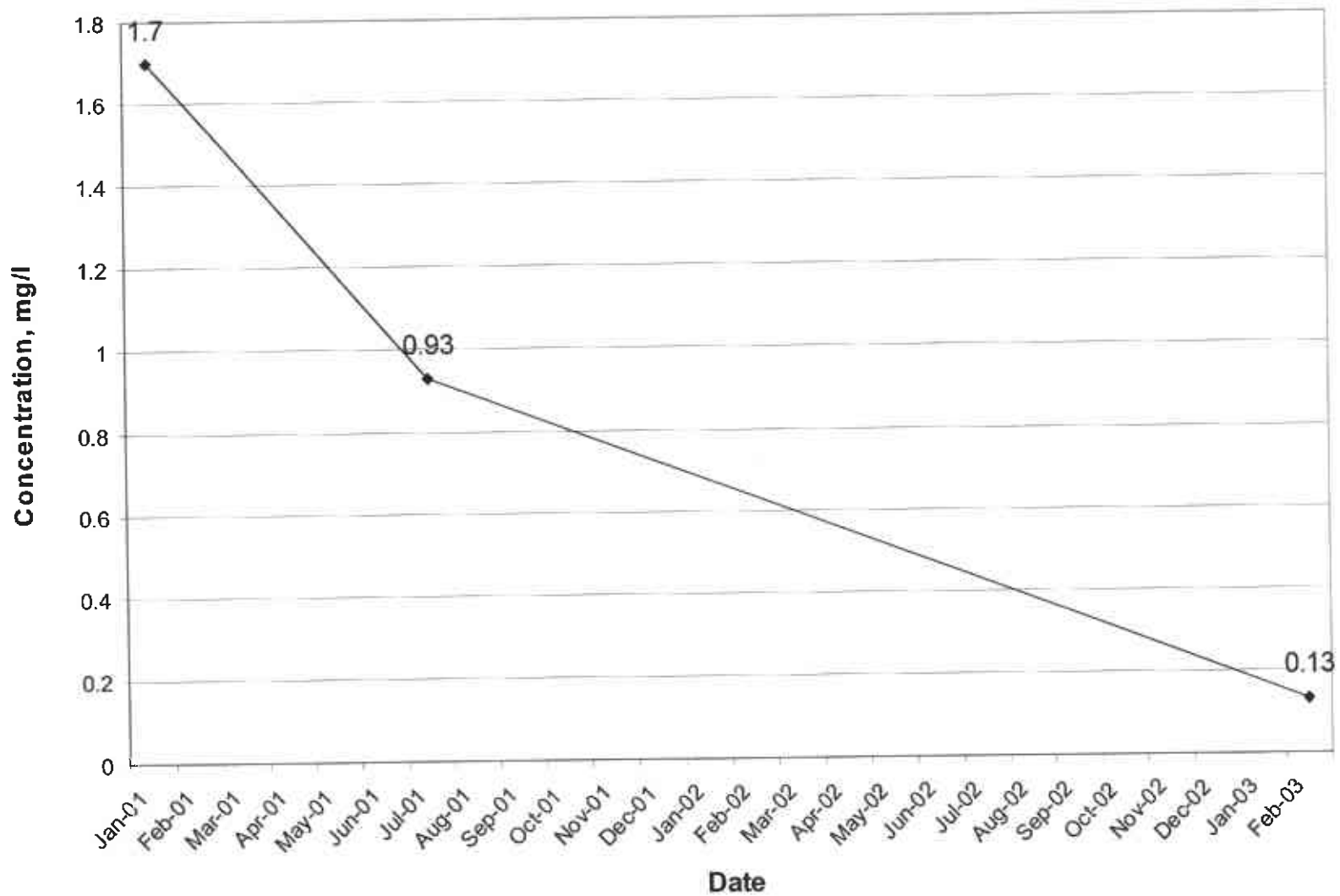
**GRIBI Associates**



|                       |             |
|-----------------------|-------------|
| DESIGNED BY:          | CHECKED BY: |
| DRAWN BY: JEG         | SCALE:      |
| PROJECT NO: 106-02-02 |             |

|  |
|--|
| <b>SITE PLAN</b>                         |
| CORWOOD CAR WASH<br>6973 VILLAGE PARKWAY |

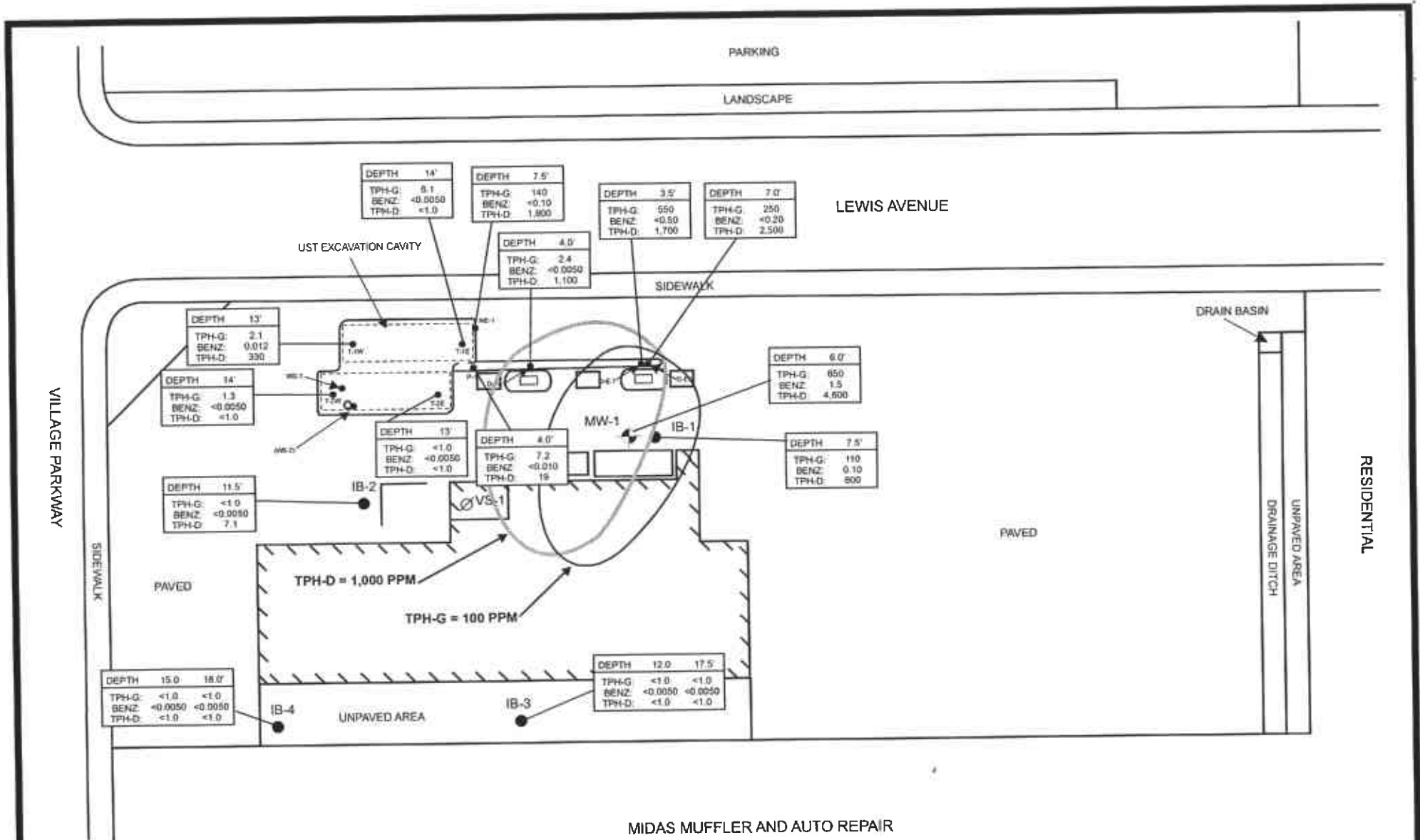
|                         |           |
|-------------------------|-----------|
| DATE: 03/07/03          | FIGURE: 2 |
| <b>GRIBI Associates</b> |           |



|                       |             |
|-----------------------|-------------|
| DESIGNED BY:          | CHECKED BY: |
| DRAWN BY: JEG         | SCALE:      |
| PROJECT NO: 106-02-02 |             |

**GROUNDWATER MTBE RESULTS  
IN MW-1**  
CORWOOD CAR WASH  
6973 VILLAGE PARKWAY

|                         |           |
|-------------------------|-----------|
| DATE: 03/07/03          | FIGURE: 3 |
| <b>GRIBI Associates</b> |           |



- ⊘ - SOIL VAPOR SAMPLE LOCATION
- ⊕ - GROUNDWATER MONITORING WELL LOCATION
- - INVESTIGATIVE BORING LOCATION



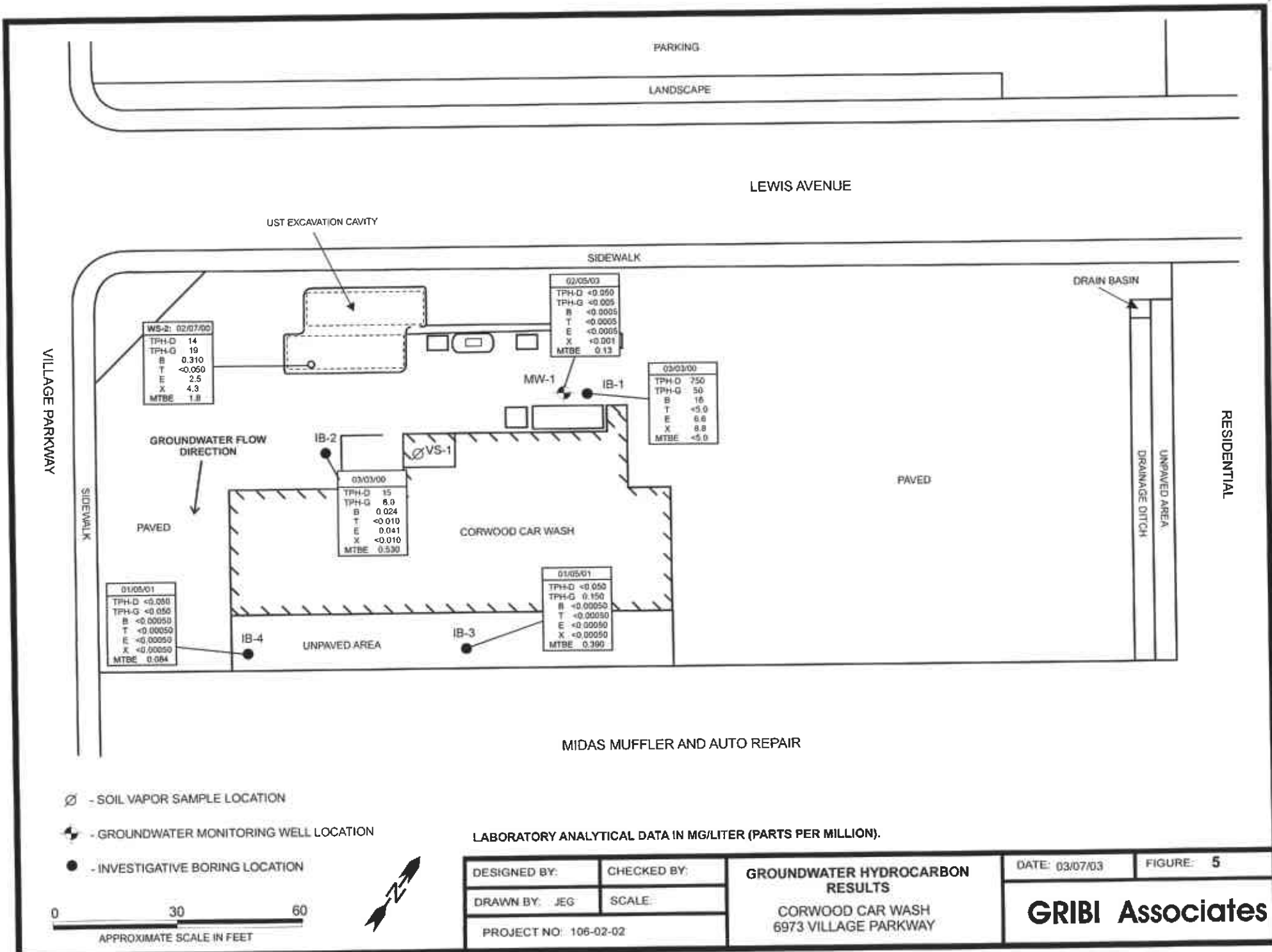
LABORATORY ANALYTICAL DATA IN MG/KG (PARTS PER MILLION).

|                       |             |
|-----------------------|-------------|
| DESIGNED BY:          | CHECKED BY: |
| DRAWN BY: JEG         | SCALE:      |
| PROJECT NO: 106-02-02 |             |

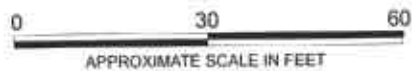
**SOIL TPH-G, BENZENE, & TPH-D RESULTS**  
CORWOOD CAR WASH  
6973 VILLAGE PARKWAY

DATE: 03/07/03      FIGURE: 4

**GRIBI Associates**



- ⊗ - SOIL VAPOR SAMPLE LOCATION
- ⊕ - GROUNDWATER MONITORING WELL LOCATION
- - INVESTIGATIVE BORING LOCATION



LABORATORY ANALYTICAL DATA IN MG/LITER (PARTS PER MILLION).

|                       |             |
|-----------------------|-------------|
| DESIGNED BY:          | CHECKED BY: |
| DRAWN BY: JEG         | SCALE:      |
| PROJECT NO: 106-02-02 |             |

|  |
|--|
| <b>GROUNDWATER HYDROCARBON RESULTS</b>   |
| CORWOOD CAR WASH<br>6973 VILLAGE PARKWAY |

|                         |           |
|-------------------------|-----------|
| DATE: 03/07/03          | FIGURE: 5 |
| <b>GRIBI Associates</b> |           |



**APPENDIX A**

**GROUNDWATER MONITORING FIELD DATA RECORD**

**GROUNDWATER SAMPLING RECORD**

**GRIBI Associates**

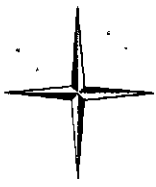
|   |   |
|---|---|
| Well No. <u>M10-1</u>                     | Well Loc.                                 |
| Project Name <u>Corwood CW</u>            | Project No.                               |
| Date: <u>2/5/03</u> Time                  | TOC Elevation      GW Elevation           |
| Depth to Water <u>6.40</u>                | Well Depth <u>20.15</u> Well Diameter     |
| Purge Water, 2": Wtr Column X 0.163 X 3 = | Purge Water, 4": Wtr Column X 0.653 X 3 = |
| Purge/Sample Method <u>bailey</u>         | Lab Analyses                              |
| Weather Conditions                        | Laboratory                                |

| Time  | Volume Purged | Temp. | Cond. | pH   | Visual        |
|-------|---------------|-------|-------|------|---------------|
| 10 00 | 1             | 62.3  | 4.21  | 6.27 | Clr - mky brn |
|       | 2             | 61.7  | 4.62  | 6.58 | NO O/S        |
|       | 3             | 61.3  | 4.42  | 6.58 | Clr - NO O/S  |
|       | 4             | 61.3  | 5.03  | 6.52 |               |
|       | 5             | 61.6  | 5.47  | 6.52 |               |
|       | 6             | 62.0  | 5.79  | 6.47 | ↓             |
|       | 7             | 62.1  | 5.80  | 6.41 | ↓             |
| 10 20 | 8             | 62.4  | 5.77  | 6.37 | ↓             |
|       |               |       |       |      |               |
|       |               |       |       |      |               |
|       |               |       |       |      |               |
|       |               |       |       |      |               |

Remarks

**APPENDIX B**

**LABORATORY DATA REPORT AND  
CHAIN-OF-CUSTODY RECORD**



# SunStar Laboratories, Inc.

---

14 February 2003

Jim Gribi  
Gribi Associates  
1350 Hates St. -- Suite C-14  
Benicia, CA 94510  
RE: CORWOOD CW

Enclosed are the results of analyses for samples received by the laboratory on 02/11/03 10:38. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

John Shepler  
Laboratory Director

# SunStar Laboratories, Inc.

3002 Dow Avenue, Suite 212  
 Tustin, CA 92780  
 1-800-781-6777

Lab Number

T300112

Report

Due Date:

|  |  |                                |  |
|--|--|--------------------------------|--|
| Client<br>Gribi Associates             |  | Date<br>2/7/2003               |  |
| Address<br>1350 Hayes Street, Ste C-14 |  | Project Name                   |  |
| City, State & Zip<br>Benicia, CA 94510 |  | Collector's Name<br>CORWOOD CW |  |
| Contact<br>Jim Gribi                   |  | Client's Project Number        |  |
| Phone<br>707/748-7743                  |  | Batch Number                   |  |
| Fax<br>707/748-7763                    |  | Location (City)                |  |

|  |  |  |  |                       |
|--|--|--|--|-----------------------|
| P.O. Number  | Email Results <input checked="" type="checkbox"/> Y <input type="checkbox"/> N | Page 1 of 1  | Proposal Number  |                       |
| <b>SAMPLE TYPE CODES</b><br>DW = drinking water TB = travel blank<br>WW = waste water SD = solid<br>MW = monitoring well SO = soil<br>HW = hazardous waste SL = sludge<br>Compliance Monitoring<br>Y N |  | S<br>a<br>m<br>p<br>l<br>e<br><br>T<br>y<br>p<br>e<br><br>C<br>o<br>m<br>p<br>l<br>i<br>a<br>n<br>c<br>e<br><br>T<br>y<br>p<br>e<br><br>R<br>e<br>q<br>u<br>e<br>s<br>t<br>e<br>d<br><br><b>TPH-G/BTEX/MTBE</b><br><b>TPH-D</b><br><b>OXYGENATES</b> | Analyses<br>Requested<br><br><br><br><br><br><br><br><i>Lab ID</i> |                       |
| <b>TURNAROUND TIME REQUESTED</b><br>Standard<br>RUSH<br>Special  |  |  |  | Lab Director Approval |
| <b>CLIENT'S SAMPLE ID/LOCATION</b><br>Date Time  |  |  |  |                       |

| CLIENT'S SAMPLE ID/LOCATION | Date     | Time | W | 5 | X | X | X |  |  |  | Spl. No. |
|-----------------------------|----------|------|---|---|---|---|---|--|--|--|----------|
| MW-1                        | 2/5/2003 |      | W | 5 | X | X | X |  |  |  | 01       |
|                             |          |      |   |   |   |   |   |  |  |  |          |
|                             |          |      |   |   |   |   |   |  |  |  |          |
|                             |          |      |   |   |   |   |   |  |  |  |          |
|                             |          |      |   |   |   |   |   |  |  |  |          |
|                             |          |      |   |   |   |   |   |  |  |  |          |
|                             |          |      |   |   |   |   |   |  |  |  |          |
|                             |          |      |   |   |   |   |   |  |  |  |          |
|                             |          |      |   |   |   |   |   |  |  |  |          |
|                             |          |      |   |   |   |   |   |  |  |  |          |
|                             |          |      |   |   |   |   |   |  |  |  |          |
|                             |          |      |   |   |   |   |   |  |  |  |          |
|                             |          |      |   |   |   |   |   |  |  |  |          |

| Instructions/Comments/Special Requirements: | Detection Levels | Soil      | Water    |
|---|------------------|-----------|----------|
|   | TPH-G&D          | 1.0 ppm   | 50.0 ppb |
|   | BTEX/MTBE/VOCs   | 0.005 ppm | 0.5 ppb  |
|   | O&G              | 50.0 ppm  | 5.0 ppm  |

| SAMPLE RECEIPT  | Date   | Time    | Samples Relinquished By | Samples Received By |
|---|--------|---------|-------------------------|---------------------|
| Received Cold <input checked="" type="checkbox"/> Y <input type="checkbox"/> N            | 2/8/03 | 6:50 AM | James C. Col            | Bill Hanley         |
| Custody Seals <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N |        |         |                         |                     |
| Seals Intact <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N  |        |         |                         |                     |
| No. of Containers 5   | 2/1/03 | 10:30   | Cal Overnight           | P.D.                |

Gribi Associates  
1350 Hates St. -- Suite C-14  
Benicia CA, 94510

Project: CORWOOD CW  
Project Number: [none]  
Project Manager: Jim Gribi

Reported:  
2/14/03

**ANALYTICAL REPORT FOR SAMPLES**

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|-----------|---------------|--------|--------------|---------------|
| MW-1      | T300112-01    | Water  | 2/5/03       | 2/11/03       |

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



John Shepler, Laboratory Director

Gribi Associates  
1350 Hates St. -- Suite C-14  
Benicia CA, 94510

Project: CORWOOD CW  
Project Number: [none]  
Project Manager: Jim Gribi

Reported:  
2/14/03

**Extractable Petroleum Hydrocarbons by 8015**  
**SunStar Laboratories, Inc.**

| Analyte  | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| MW-1 (T300112-01) Water    Sampled: 02/05/03 12:00    Received: 02/11/03 10:38 |        |                    |       |          |         |          |          |           |       |
| Diesel Range Hydrocarbons  | ND     | 50                 | ug/l  | 1        | 3021302 | 02/13/03 | 02/13/03 | EPA 8015m |       |

SunStar Laboratories, Inc.

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John Shepler, Laboratory Director

|   |   |                      |
|---|---|----------------------|
| Gribi Associates<br>1350 Hates St. -- Suite C-14<br>Benicia CA, 94510 | Project: CORWOOD CW<br>Project Number: [none]<br>Project Manager: Jim Gribi | Reported:<br>2/14/03 |
|---|---|----------------------|

**Volatile Organic Compounds by EPA Method 8260B**  
**SunStar Laboratories, Inc.**

| Analyte   | Result     | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|---|------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>MW-1 (T300112-01) Water    Sampled: 02/05/03 12:00    Received: 02/11/03 10:38</b> |            |                    |       |          |         |          |          |           |       |
| 1,2-Dibromoethane (EDB)   | ND         | 1.0                | ug/l  | 1        | 3021305 | 02/13/03 | 02/13/03 | EPA 8260B |       |
| 1,2-Dichloroethane  | ND         | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Benzene   | ND         | 0.50               | "     | "        | "       | "        | "        | "         |       |
| Di-isopropyl ether  | ND         | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene  | ND         | 0.50               | "     | "        | "       | "        | "        | "         |       |
| Ethyl tert-butyl ether  | ND         | 1.0                | "     | "        | "       | "        | "        | "         |       |
| <b>Methyl tert-butyl ether</b>  | <b>130</b> | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Tert-amyl methyl ether  | ND         | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Tert-butyl alcohol  | ND         | 5.0                | "     | "        | "       | "        | "        | "         |       |
| Toluene   | ND         | 0.50               | "     | "        | "       | "        | "        | "         |       |
| m,p-Xylene  | ND         | 1.0                | "     | "        | "       | "        | "        | "         |       |
| o-Xylene  | ND         | 0.50               | "     | "        | "       | "        | "        | "         |       |
| <i>Surrogate: Toluene-d8</i>  |            | 99.0 %             |       | 86-115   | "       | "        | "        | "         |       |
| <i>Surrogate: 4-Bromofluorobenzene</i>  |            | 101 %              |       | 86-115   | "       | "        | "        | "         |       |
| <i>Surrogate: Dibromofluoromethane</i>  |            | 106 %              |       | 86-118   | "       | "        | "        | "         |       |

SunStar Laboratories, Inc.

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John Shepler, Laboratory Director



Gribi Associates  
1350 Hates St. -- Suite C-14  
Benicia CA, 94510

Project: CORWOOD CW  
Project Number: [none]  
Project Manager: Jim Gribi

Reported:  
2/14/03

**Purgeable Petroleum Hydrocarbons by 8015**  
**SunStar Laboratories, Inc.**

| Analyte  | Result | Reporting<br>Limit | Units  | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--|--------|--------------------|--------|----------|---------|----------|----------|-----------|-------|
| MW-1 (T300112-01) Water Sampled: 02/05/03 12:00 Received: 02/11/03 10:38 |        |                    |        |          |         |          |          |           |       |
| Gasoline Range Hydrocarbons  | ND     | 50                 | ug/l   | 1        | 3021304 | 02/13/03 | 02/13/03 | EPA 8015m |       |
| Surrogate: 4-Bromofluorobenzene  |        | 97.8 %             | 65-135 |          | "       | "        | "        | "         |       |

SunStar Laboratories, Inc.

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John Shepler, Laboratory Director

Gribi Associates  
1350 Hates St. -- Suite C-14  
Benicia CA, 94510

Project: CORWOOD CW  
Project Number: [none]  
Project Manager: Jim Gribi

Reported:  
2/14/03

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**SunStar Laboratories, Inc.**

| Analyte | Result | Reporting<br>Limit Units | Spike<br>Level | Source<br>Result | %REC | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------------|----------------|------------------|------|----------------|-----|--------------|-------|

**Batch 3021302 - EPA 3510C H2O**

**Blank (3021302-BLK1)**

Diesel Range Hydrocarbons

ND 50 ug/l

Prepared & Analyzed: 02/13/03

**LCS (3021302-BS1)**

Diesel Range Hydrocarbons

3950 50 ug/l

Prepared & Analyzed: 02/13/03

5000 79.0 75-125

**LCS Dup (3021302-BSD1)**

Diesel Range Hydrocarbons

4390 50 ug/l

Prepared & Analyzed: 02/13/03

5000 87.8 75-125 10.6 20

SunStar Laboratories, Inc.

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John Shepler, Laboratory Director

Gribi Associates  
 1350 Hates St. - Suite C-14  
 Benicia CA, 94510

Project: CORWOOD CW  
 Project Number: [none]  
 Project Manager: Jim Gribi

Reported:  
 2/14/03

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**SunStar Laboratories, Inc.**

| Analyte | Result | Reporting<br>Limit Units | Spike<br>Level | Source<br>Result | %REC<br>%REC | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------------|----------------|------------------|--------------|----------------|-----|--------------|-------|
|---------|--------|--------------------------|----------------|------------------|--------------|----------------|-----|--------------|-------|

**Batch 3021305 - EPA 5030 Water MS**

**Blank (3021305-BLK1)**

Prepared & Analyzed: 02/13/03

|  |      |          |      |  |      |        |  |  |  |
|--|------|----------|------|--|------|--------|--|--|--|
| 1,2-Dibromoethane (EDB)                | ND   | 1.0 ug/l |      |  |      |        |  |  |  |
| 1,2-Dichloroethane                     | ND   | 1.0 "    |      |  |      |        |  |  |  |
| Benzene                                | ND   | 0.50 "   |      |  |      |        |  |  |  |
| Di-isopropyl ether                     | ND   | 1.0 "    |      |  |      |        |  |  |  |
| Ethylbenzene                           | ND   | 0.50 "   |      |  |      |        |  |  |  |
| Ethyl tert-butyl ether                 | ND   | 1.0 "    |      |  |      |        |  |  |  |
| Methyl tert-butyl ether                | ND   | 1.0 "    |      |  |      |        |  |  |  |
| Tert-amyl methyl ether                 | ND   | 1.0 "    |      |  |      |        |  |  |  |
| Tert-butyl alcohol                     | ND   | 5.0 "    |      |  |      |        |  |  |  |
| Toluene                                | ND   | 0.50 "   |      |  |      |        |  |  |  |
| m,p-Xylene                             | ND   | 1.0 "    |      |  |      |        |  |  |  |
| o-Xylene                               | ND   | 0.50 "   |      |  |      |        |  |  |  |
| <i>Surrogate: Toluene-d8</i>           | 39.7 | "        | 40.0 |  | 99.2 | 86-115 |  |  |  |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 40.3 | "        | 40.0 |  | 101  | 86-115 |  |  |  |
| <i>Surrogate: Dibromofluoromethane</i> | 41.7 | "        | 40.0 |  | 104  | 86-118 |  |  |  |

**LCS (3021305-BS1)**

Prepared & Analyzed: 02/13/03

|  |      |           |      |  |      |        |  |  |  |
|--|------|-----------|------|--|------|--------|--|--|--|
| Benzene                                | 113  | 0.50 ug/l | 100  |  | 113  | 75-125 |  |  |  |
| Toluene                                | 113  | 0.50 "    | 100  |  | 113  | 75-125 |  |  |  |
| <i>Surrogate: Toluene-d8</i>           | 39.9 | "         | 40.0 |  | 99.8 | 86-115 |  |  |  |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 42.0 | "         | 40.0 |  | 105  | 86-115 |  |  |  |
| <i>Surrogate: Dibromofluoromethane</i> | 41.2 | "         | 40.0 |  | 103  | 86-118 |  |  |  |

**Matrix Spike (3021305-MS1)**

Source: T300113-16

Prepared & Analyzed: 02/13/03

|  |      |           |      |    |      |        |  |  |  |
|--|------|-----------|------|----|------|--------|--|--|--|
| Benzene                                | 116  | 0.50 ug/l | 100  | ND | 116  | 75-125 |  |  |  |
| Toluene                                | 112  | 0.50 "    | 100  | ND | 112  | 75-125 |  |  |  |
| <i>Surrogate: Toluene-d8</i>           | 39.6 | "         | 40.0 |    | 99.0 | 86-115 |  |  |  |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 44.5 | "         | 40.0 |    | 111  | 86-115 |  |  |  |
| <i>Surrogate: Dibromofluoromethane</i> | 41.3 | "         | 40.0 |    | 103  | 86-118 |  |  |  |

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John Shepler, Laboratory Director

Gribi Associates  
1350 Hates St. -- Suite C-14  
Benicia CA, 94510

Project: CORWOOD CW  
Project Number: [none]  
Project Manager: Jim Gribi

Reported:  
2/14/03

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**SunStar Laboratories, Inc.**

| Analyte | Result | Reporting<br>Limit Units | Spike<br>Level | Source<br>Result | %REC | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------------|----------------|------------------|------|----------------|-----|--------------|-------|

**Batch 3021305 - EPA 5030 Water MS**

**Matrix Spike Dup (3021305-MSD1)**

Source: T300113-16

Prepared & Analyzed: 02/13/03

|                                 |      |           |      |    |      |        |      |    |  |
|---------------------------------|------|-----------|------|----|------|--------|------|----|--|
| Benzene                         | 111  | 0.50 ug/l | 100  | ND | 111  | 75-125 | 4.41 | 20 |  |
| Toluene                         | 108  | 0.50 "    | 100  | ND | 108  | 75-125 | 3.64 | 20 |  |
| Surrogate: Toluene-d8           | 40.3 | "         | 40.0 |    | 101  | 86-115 |      |    |  |
| Surrogate: 4-Bromofluorobenzene | 37.9 | "         | 40.0 |    | 94.8 | 86-115 |      |    |  |
| Surrogate: Dibromofluoromethane | 40.0 | "         | 40.0 |    | 100  | 86-118 |      |    |  |

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Gribi Associates  
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 Benicia CA, 94510

Project: CORWOOD CW  
 Project Number: [none]  
 Project Manager: Jim Gribi

Reported:  
 2/14/03

**Purgeable Petroleum Hydrocarbons by 8015 - Quality Control**  
**SunStar Laboratories, Inc.**

| Analyte | Result | Reporting<br>Limit Units | Spike<br>Level | Source<br>Result | %REC | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------------|----------------|------------------|------|----------------|-----|--------------|-------|

**Batch 3021304 - EPA 5030 Water GC**

**Blank (3021304-BLK1)**

Prepared & Analyzed: 02/13/03

|  |      |         |      |  |      |        |  |  |  |
|--|------|---------|------|--|------|--------|--|--|--|
| Gasoline Range Hydrocarbons            | ND   | 50 ug/l |      |  |      |        |  |  |  |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 44.7 | "       | 50.0 |  | 89.4 | 65-135 |  |  |  |

**LCS (3021304-BS1)**

Prepared & Analyzed: 02/13/03

|  |      |         |      |  |      |        |  |  |  |
|--|------|---------|------|--|------|--------|--|--|--|
| Gasoline Range Hydrocarbons            | 5450 | 50 ug/l | 5500 |  | 99.1 | 75-125 |  |  |  |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 48.7 | "       | 50.0 |  | 97.4 | 65-135 |  |  |  |

**Matrix Spike (3021304-MS1)**

Source: T300113-16

Prepared & Analyzed: 02/13/03

|  |      |         |      |    |      |        |  |  |  |
|--|------|---------|------|----|------|--------|--|--|--|
| Gasoline Range Hydrocarbons            | 4790 | 50 ug/l | 5500 | ND | 87.1 | 65-135 |  |  |  |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 37.7 | "       | 50.0 |    | 75.4 | 65-135 |  |  |  |

**Matrix Spike Dup (3021304-MSD1)**

Source: T300113-16

Prepared & Analyzed: 02/13/03

|  |      |         |      |    |      |        |      |    |  |
|--|------|---------|------|----|------|--------|------|----|--|
| Gasoline Range Hydrocarbons            | 5300 | 50 ug/l | 5500 | ND | 96.4 | 65-135 | 10.1 | 20 |  |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 49.7 | "       | 50.0 |    | 99.4 | 65-135 |      |    |  |

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1350 Hates St. -- Suite C-14  
Benicia CA, 94510

Project: CORWOOD CW  
Project Number: [none]  
Project Manager: Jim Gribi

Reported:  
2/14/03

### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference

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John Shepler, Laboratory Director