



ENVIRONMENTAL ENGINEERING, INC  
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Alameda County

JUN 05 2003

Environmental Health

June 2, 2003

Mr. Scott Seery, CHMM  
Alameda County Department of  
Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

Project: 02-2691

Subject: Site Located at 7240 Dublin Boulevard, Dublin, California

Dear Scott:

Enclosed for your review is a copy of SOMA's "Second Quarter 2003 Groundwater Monitoring Report" for the subject property.

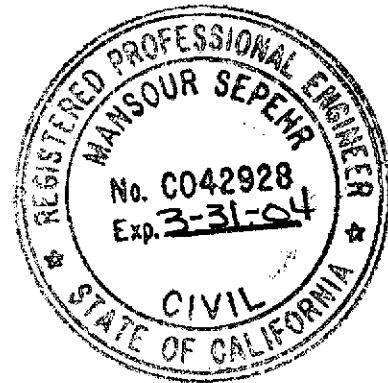
Thank you for your time in reviewing our report. Please do not hesitate to call me at (925) 244-6600, if you have any questions or comments.

Sincerely,

Mansour Sepehr, Ph.D., PE  
Principal Hydrogeologist

Enclosure

cc: Mr. Hooshang Hadjian w/enclosure  
Ms. Karen Streich, Chevron Products w/enclosure





**ENVIRONMENTAL ENGINEERING, INC**  
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**SECOND QUARTER 2003  
GROUNDWATER MONITORING REPORT  
Former Chevron Service Station  
7240 Dublin Boulevard  
Dublin, California**

**Project 2691**

**June 2, 2003**

**Prepared for:**


**Mr. Hooshang Hadjian  
7240 Dublin Boulevard  
Dublin, California**

**Prepared by:**

**SOMA Environmental Engineering, Inc.  
2680 Bishop Drive, Suite 203  
San Ramon, California**

## Certification

This report has been prepared by SOMA Environmental Engineering, Inc. on behalf of Mr. Hooshang Hadjian and Chevron Products, the current and previous property owners of 7240 Dublin Boulevard in Dublin, California, to comply with the California Regional Water Quality Control Board's requirements for the Second Quarter 2003 groundwater monitoring event.

  
\_\_\_\_\_  
Mansour Sepehr, Ph.D., P.E.  
Principal Hydrogeologist



Alameda County  
JUN 05 2003  
Environmental Health

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## **1.0 Introduction**

This monitoring report has been prepared by SOMA Environmental Engineering, Inc. (SOMA), on behalf of Mr. Hooshang Hadjian and Chevron Products, the current and previous property owners of 7240 Dublin Boulevard, Dublin, California (the "Site"), as shown in Figure 1. Currently, the Site is being used as a gasoline service station and a car wash facility and is known as Dublin Auto Wash. The Site is located in an area of mixed residential and commercial uses. San Ramon Creek runs adjacent to the Site from the northwest to the southeast.

This report summarizes the results of the Second Quarter 2003 groundwater monitoring event conducted on May 8, 2003 at the Site. Included in this report are the physical and chemical parameters measured in the field for each groundwater sample and the results of the laboratory analysis on the groundwater samples, which were analyzed for:

- Total petroleum hydrocarbons as gasoline (TPH-g);
- Benzene, toluene, ethylbenzene and total xylenes (collectively referred to as BTEX); and
- Methyl tertiary Butyl Ether (MtBE).

These activities were performed in accordance with the general guidelines of the California Regional Water Quality Control Board (CRWQCB).

### **1.1 Previous Activities**

The first environmental investigation at the Site began in early 1988 when Chevron Product Company (Chevron) hired EA Engineering, Science, and Technology, Inc. (EA) to conduct a soil vapor investigation at the Site. The results of the soil gas survey indicated elevated levels of hydrocarbons beneath the Site, especially around the southern pump island.

In October 1988, HEW Drilling Company installed three groundwater monitoring wells, EA-1 through EA-3. During the installation of the groundwater monitoring wells, groundwater was encountered at depths ranging between 15 to 23 feet below ground surface (bgs). The depths of the groundwater monitoring wells were 35 to 40 feet bgs. Following the installation of the groundwater monitoring wells, the quarterly groundwater monitoring programs began.

In February 1989, one 5,000-gallon and two 10,000-gallon underground storage tanks (USTs) were excavated and removed from the Site and replaced with three new USTs. During this activity, soil and groundwater samples were collected and analyzed for petroleum hydrocarbons. Following the USTs' removal and their upgrade, a total of 180 cubic yards of soil was removed from the Site and sent to Class I and Class II landfill facilities.

In March 1989, Western Geologic Resources, Inc. (WGR) drilled and sampled five soil boreholes in the area of the former pump island. In addition, nine soil samples were collected from the vicinity of the former product-line trenches at depths ranging from 2.5 feet to 10.5 feet bgs. Laboratory analyses results indicated total petroleum hydrocarbon (TPH) concentrations from non-detectable to 750 milligram per kilograms (mg/Kg). In May 1990, three vapor extraction wells were installed. Air samples collected from these wells contained a maximum of 29,000 parts per million (ppm) benzene at the beginning of the test and 5,300 parts per billion (ppb) after 2,049 minutes into the test. Following the installation of three vapor extraction wells, the soil vapor extraction (SVE) system began operating in March 1992. From December 1992 through June 1995, Geraghty & Miller operated the SVE system. Reportedly, during this period a total of 13,470 pounds of hydrocarbons were removed from the subsurface.

In September 1994, Groundwater Technology, Inc. (GTI) installed three groundwater monitoring wells, MW-1 through MW-3. The depths of these wells ranged between 21.5 to 26.5 feet bgs. In March 1995, elevated levels (up to

64,000 microgram per liter ( $\mu\text{g/L}$ ) of MtBE were reported for the first time in MW-3.

In February 1996, Bay Area Exploration Services, Inc. installed two groundwater monitoring wells, MW-4 and MW-5, each with a depth of 21.5 feet bgs. During the well installation, soil and groundwater samples were collected and analyzed for petroleum hydrocarbons. No petroleum hydrocarbons were detected in the soil or groundwater samples collected from these wells. Apparently, these wells are upgradient wells and have not been impacted by the petroleum hydrocarbons.

In December 1996, Weiss and Associates conducted a Risk Based Corrective Action (RBCA) and concluded that the Site is a "Low Risk" soil and groundwater petroleum release site and recommended the SVE system be shut down. Based on Weiss Associates' recommendation, the SVE system was shut down, however, the Alameda County Department of Environmental Health Services (ACDEHS) required quarterly groundwater monitoring and free product removal reports.

In February 1997, a leak in a stainless steel flex hose of dispenser No. 2 was discovered and reported to the ACDEHS. Subsequently, a new product delivery system was installed to replace the existing lines. Free product was also detected in MW-3. The results of subsequent groundwater monitoring events in 1998 and 1999 showed elevated levels of MtBE (up to 13,000  $\mu\text{g/L}$ ) and free product in MW-3.

Due to the occurrence of a new release at the Site, the Chevron Product Company believed that they should no longer be the responsible party for further site characterization, removal and monitoring of contaminants at the Site. Later on, Chevron negotiated with Mr. Hooshang Hadjian, and he subsequently assumed the responsibility for the new release at the Site.



Gettler-Ryan, Inc. (GRI) a subcontractor of Chevron monitored the eight existing groundwater monitoring wells at the Site until the First Quarter 2003. Currently, the wells at the Site are monitored by SOMA. Figure 2 illustrates the location of the existing groundwater monitoring wells.

In 2003, Mr. Hooshang Hadjian retained SOMA to conduct further characterization and remediation activities at the Site. In compliance with a request from the ACDEHS dated October 21, 2002, SOMA submitted a workplan to conduct soil and groundwater remediation at the Site. The workplan, dated March 31, 2002, proposed a conduit study, defining the contaminant plume, interim soil and groundwater remediation, mitigation control, and the preparation of a risk-based corrective action (RBCA) plan. The workplan was approved by the ACDEHS in a letter dated April 9, 2003. In April 2003, SOMA conducted an extensive soil and groundwater investigation at the Site. The results of this investigation will be reported in a June 2003 by SOMA.

## **2.0 Field Activities**

On May 8, 2003, SOMA's field crew conducted a groundwater monitoring event in accordance with the procedures and guidelines of the CRWQCB. During this event, eight wells were monitored. Figure 2 displays the locations of the monitoring wells.

The depths to groundwater were measured from the tops of the casings to the nearest 0.01 foot using an electric sounder. The top of the casing elevation data and the depth to groundwater at each groundwater monitoring well were used to calculate the groundwater elevation.

Prior to the collection of samples, each well was purged using a battery operated 2-inch diameter pump (Model ES-60 DC).

In order to ensure that the final samples were in equilibrium with (and representative of) the surrounding groundwater, several samples were taken for field measurements of pH, temperature and electrical conductivity (EC) during the purging. The field measurements were tested using a Hanna pH, conductivity, and temperature meter. The equipment was calibrated at the Site using standard solutions and procedures provided by the manufacturer. Appendix A details the field measurements taken during the monitoring event.

The purging continued until parameters for pH, temperature and EC stabilized or three casing volumes were purged. After purging, a disposable polyethylene bailer was used to collect sufficient samples from each monitoring well for laboratory analyses. The groundwater sample was transferred to three 40-mL VOA vials and preserved with hydrochloric acid. The vials were then sealed to prevent the development of air bubbles within the headspace. These samples were analyzed for TPH-g, BTEX, and MtBE. All groundwater samples were placed in an ice chest along with a chain of custody (COC) form and maintained at 4°C. On May 8, 2003, SOMA's field crew delivered the samples to Curtis & Tompkins, Ltd. Laboratory in Berkeley, California.

### **3.0 Laboratory Analysis**

Curtis & Tompkins, Ltd., a state certified laboratory, analyzed the groundwater samples for TPH-g, BTEX and MtBE. TPH-g was prepared using EPA Method 5030B and measured using EPA Method 8015B(M). BTEX and MtBE were prepared for laboratory analysis using EPA Method 5030B and measured using EPA Method 8021B. The presence of MtBE detected by EPA Method 8021B was confirmed using EPA Method 8260B.

## **4.0 Results**

The following sections provide the results of the field measurements and laboratory analyses for the May 8, 2003 groundwater monitoring event.

### **4.1 Field Measurements**

Table 1 presents the calculated groundwater elevation at each monitoring well. As shown in Table 1, depths to groundwater ranged from 7.26 feet in monitoring well EA-2 to 11.85 feet in monitoring well MW-1. The corresponding groundwater elevations ranged from 321.43 feet above mean sea level in monitoring well MW-2 to 323.48 feet in monitoring well MW-5.

A contour map of groundwater elevations is displayed in Figure 3. As shown in Figure 3, groundwater flows toward the southeast in the western portion of the Site, but groundwater flows toward the northwest in the eastern portion of the Site. Upon examination of monitoring well installation logs and the new lithologic data from SOMA's stratigraphic borehole S-1, it was determined that the existing monitoring wells penetrate through several water-bearing zones and are improperly screened. Therefore, the groundwater elevations data and flow direction derived from this data may not be representative of the actual groundwater flow beneath the Site. The geologic log of borehole S-1 is included in Appendix A.

Table 2 summarizes the field measurements of the physical and chemical properties of groundwater samples collected from the groundwater monitoring wells at the time of sampling. The pH of groundwater ranged from 6.49 in monitoring well MW-4 to 6.98 in monitoring well EA-1. The pH of groundwater remained fairly consistent beneath the Site. Temperature ranged from 15.88°C in monitoring well MW-1 to 20.22°C in monitoring well EA-3. The variation in temperature may reflect the changes in air temperature during the sampling

event. EC ranged from 990  $\mu\text{S}/\text{cm}$  in monitoring well EA-2 to 3,999  $\mu\text{S}/\text{cm}$  in monitoring well EA-3.

Appendix A contains the field measurements recorded during the Second Quarter 2003 monitoring event.

#### **4.2 Laboratory Analysis**

Table 3 presents the results of the laboratory analyses on the groundwater samples collected during the Second Quarter 2003 monitoring event. As shown in Table 3, the most impacted groundwater sample was collected from monitoring well MW-3.

TPH-g was only detected EA-1 and MW-3 with concentrations of 1,700  $\mu\text{g}/\text{L}$  and 5,700  $\mu\text{g}/\text{L}$ , respectively. Figure 4 displays a contour map of TPH-g concentrations in the groundwater on May 8, 2003. As shown in Figure 4, the highest TPH-g concentration was detected in close proximity to the fuel islands.

BTEX analytes were also only detected in EA-1 and MW-3. BTEX levels in all the other monitoring wells were not detected above the laboratory reporting limits. Benzene concentrations were found to be 11  $\mu\text{g}/\text{L}$  in EA-1 and 770  $\mu\text{g}/\text{L}$  in MW-3. Toluene, ethylbenzene and total xylenes concentrations in EA-1 were 0.97  $\mu\text{g}/\text{L}$ , 63  $\mu\text{g}/\text{L}$  and 161  $\mu\text{g}/\text{L}$ , respectively. Toluene, ethylbenzene and total xylenes concentrations in MW-3 were 69  $\mu\text{g}/\text{L}$ , 130  $\mu\text{g}/\text{L}$  and 365  $\mu\text{g}/\text{L}$ , respectively. Figure 5 displays a contour map of benzene concentrations in the groundwater on May 8, 2003. Similar to TPH-g, the highest benzene concentration was detected near the fuel islands.

MtBE was analyzed using EPA Method 8021B. The presence of MtBE detected by EPA Method 8021B was confirmed using EPA Method 8260B. As shown in Table 3, MtBE as analyzed using EPA Method 8260B was detected only in

monitoring wells EA-2, EA-3, MW-1, MW-2 and MW-3. Detectable MtBE concentrations ranged from 0.9 µg/L in EA-2 and 70,000 µg/L in MW-3. Figure 6 displays a map of MtBE concentrations in the groundwater on May 8, 2003 as analyzed using EPA Method 8260B. Similar to TPH-g and benzene, the highest MtBE concentration was detected in MW-3, which is located in close proximity of the fuel islands.

Appendix B contains the laboratory report and chain of custody form for the Second Quarter 2003 monitoring event.

This is the first quarter in which groundwater monitoring was conducted by SOMA. The historical chemical data for the Site, which was gathered by the previous consultant is presented in Appendix C. Collection of additional data is needed during future monitoring events to determine groundwater chemical trends over time.

## **5.0 CONCLUSION AND RECOMMENDATIONS**

The results of the May 8, 2003 groundwater monitoring event can be summarized as follows:

1. Based on SOMA's preliminary site characterization activities, the existing monitoring wells were found to penetrate through multiple layers and were improperly screened across at least three water-bearing zones. Therefore, the groundwater elevations data and flow direction derived from this data may not represent the actual flow of groundwater beneath the Site. To remedy this situation, SOMA recommends that when the site characterization is complete, these wells be decommissioned and replaced with properly screened monitoring wells within each water-bearing zone.

2. TPH-g and BTEX were only detected in EA-1 and MW-3. The highest TPH-g and BTEX concentrations detected during the Second Quarter 2003 monitoring event were observed in monitoring well MW-3, at levels of 5,700  $\mu\text{g/L}$ , 770  $\mu\text{g/L}$ , 69  $\mu\text{g/L}$ , 130  $\mu\text{g/L}$  and 365  $\mu\text{g/L}$ , respectively. The highest MtBE concentration was also detected in MW-3, at a level of 70,000  $\mu\text{g/L}$ . MW-3 is located in close proximity to the fuel islands.

## **6.0 Report Limitations**

This report is the summary of work done by SOMA, including observations and descriptions of the Site's conditions. It includes the analytical results produced by Curtis & Tompkins Laboratories for the current groundwater monitoring event. The number and location of the wells were selected to provide the required information, but may not be completely representative of the entire Site's conditions. All conclusions and recommendations are based on the results of the laboratory analysis. Conclusions beyond those specifically stated in this document should not be inferred from this report.

SOMA warrants that the services provided were done in accordance with the generally accepted practices in the environmental engineering and consulting field at the time of this sampling.

## 7.0 Reference

Gettler-Ryan, Inc., December 18, 2002. "Fourth Quarter Event of November 11, 2002 Groundwater Monitoring and Sampling Report, Chevron Service Station #9-2582, 7240 Dublin Boulevard, Dublin, California."

SOMA Environmental Engineering, Inc., March 31, 2003. "Third Revision of Workplan to Conduct Soil and Groundwater Remediation at Former Chevron Service Station, 7240 Dublin Boulevard, Dublin, California".



# Figures



Figure 1: Site vicinity map.

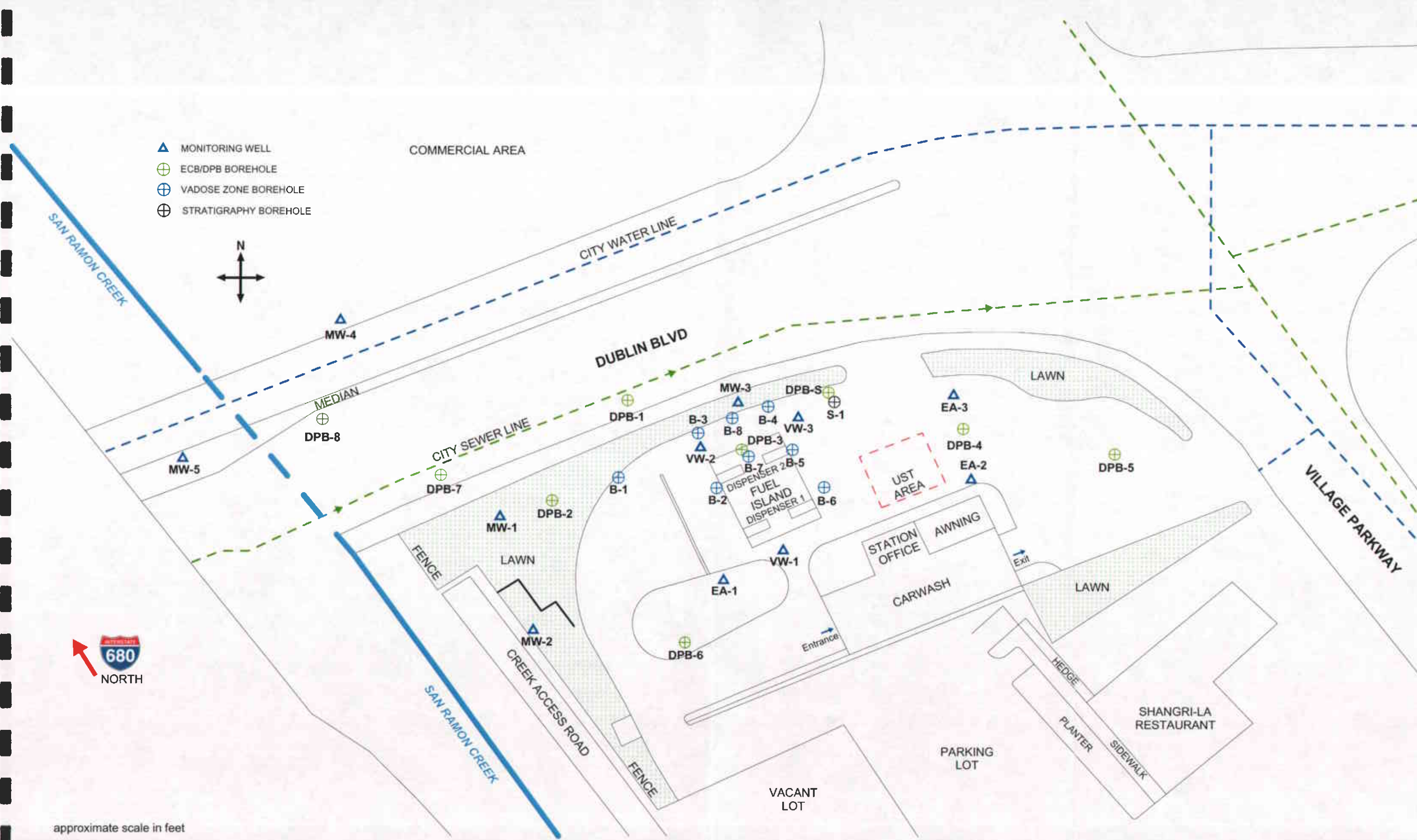
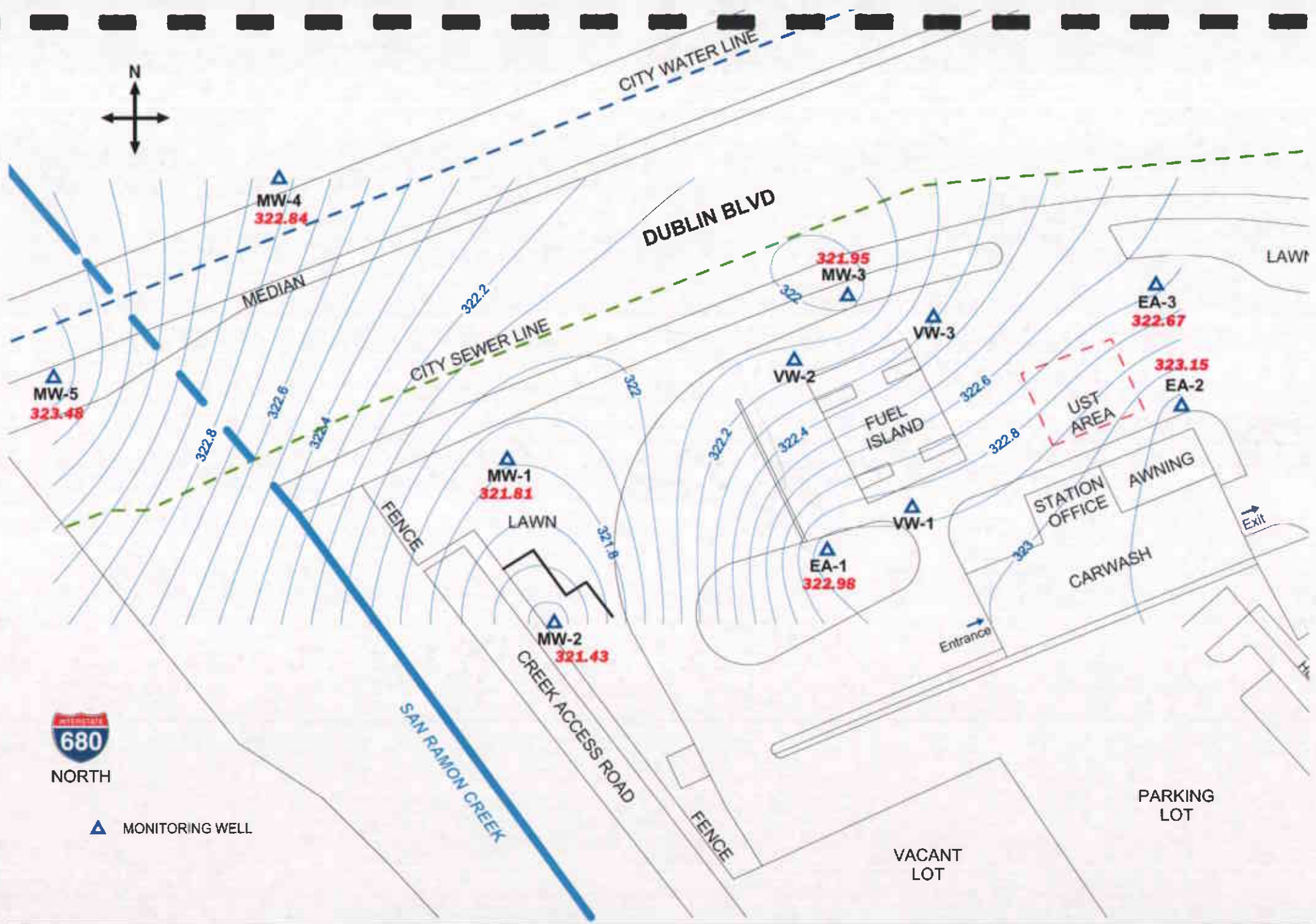


Figure 2: Site map showing monitoring wells, electrical conductivity boreholes, direct push boreholes, vadose zone boreholes, and stratigraphy borehole.





NORTH

▲ MONITORING WELL

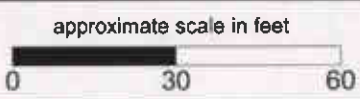


Figure 3: Groundwater elevation contour map in feet. May 8, 2003.



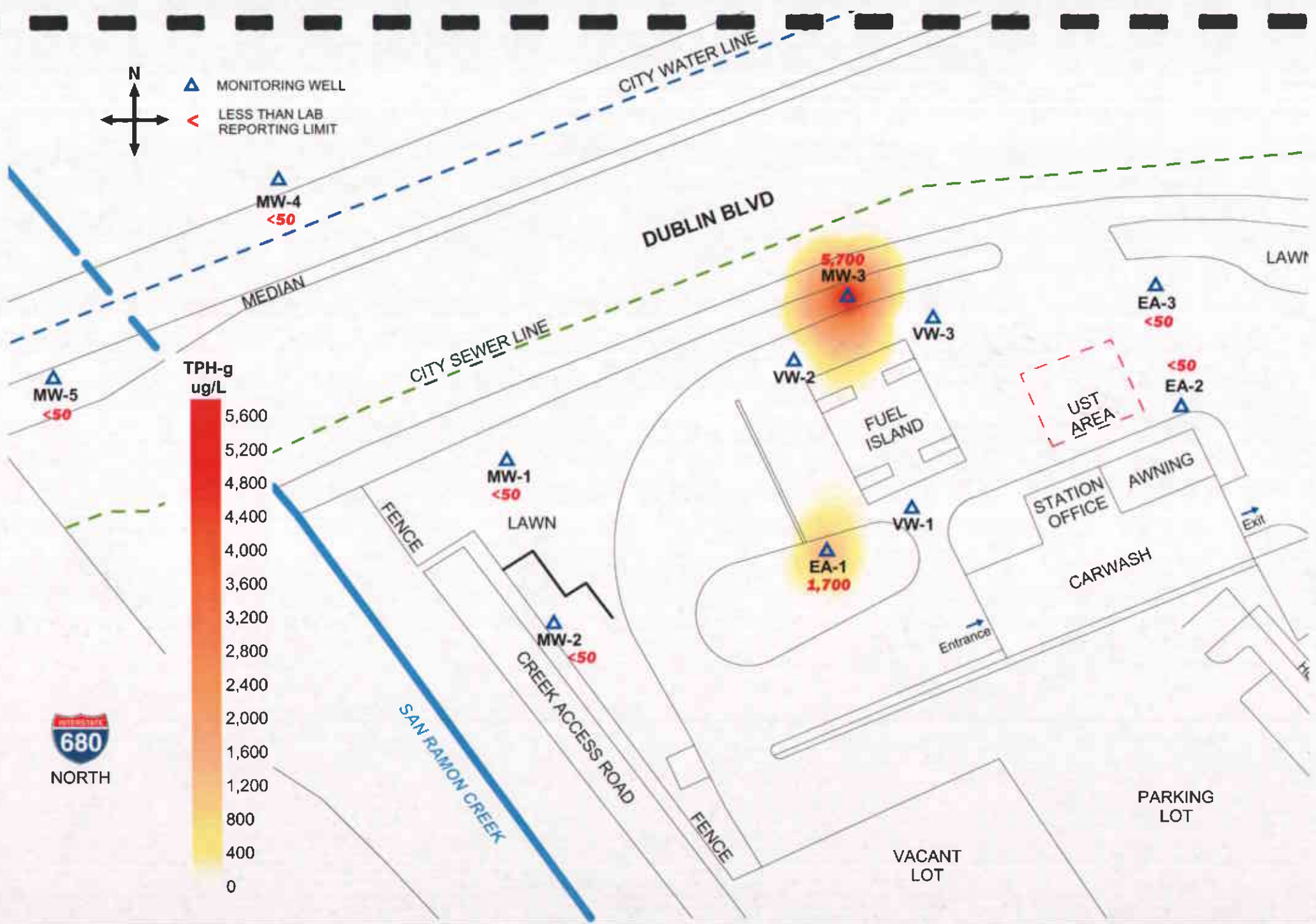


Figure 4: Contour map of TPH-g concentrations in the groundwater. May 8, 2003.



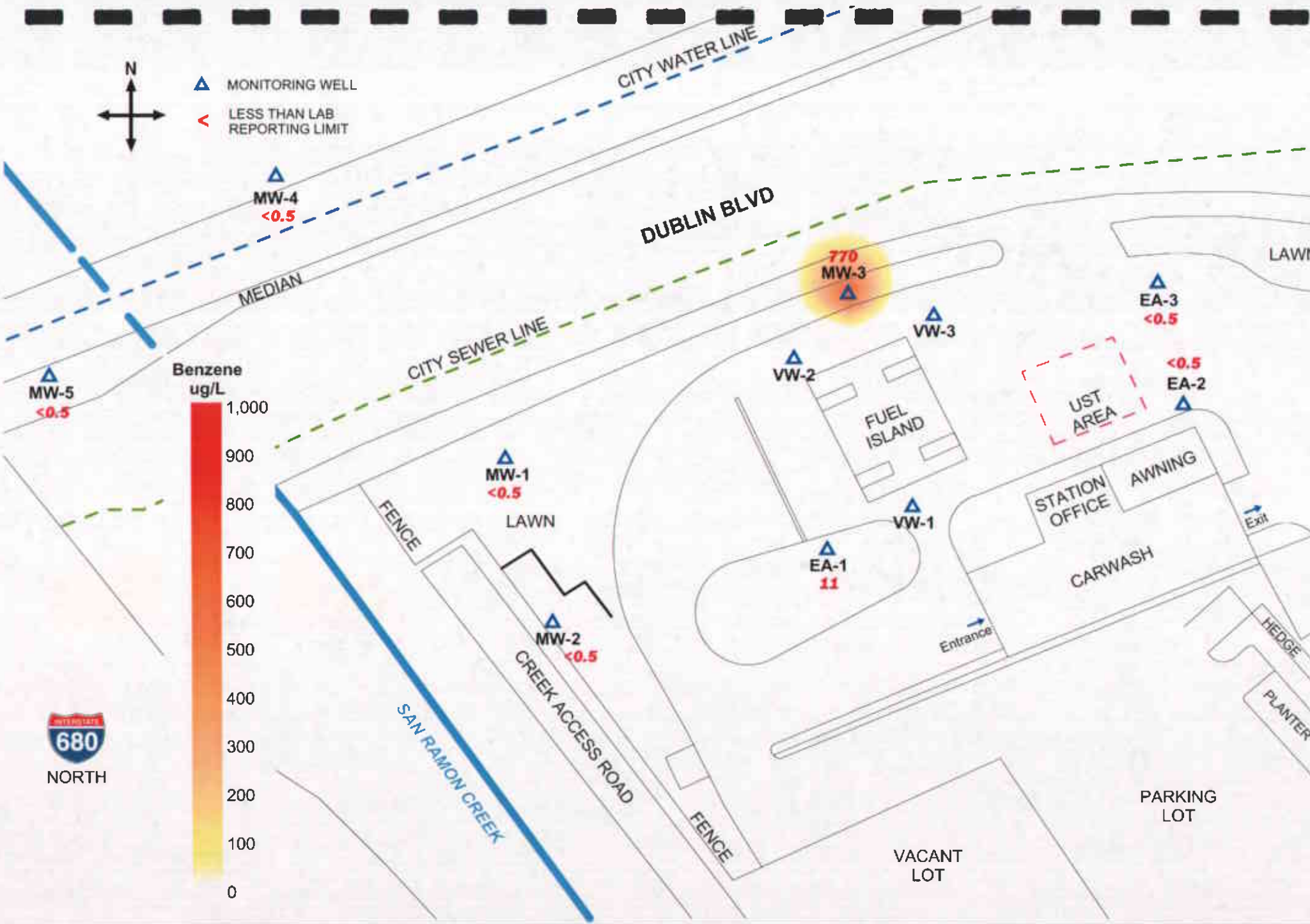


Figure 5: Contour map of benzene concentrations in groundwater. May 8, 2003.

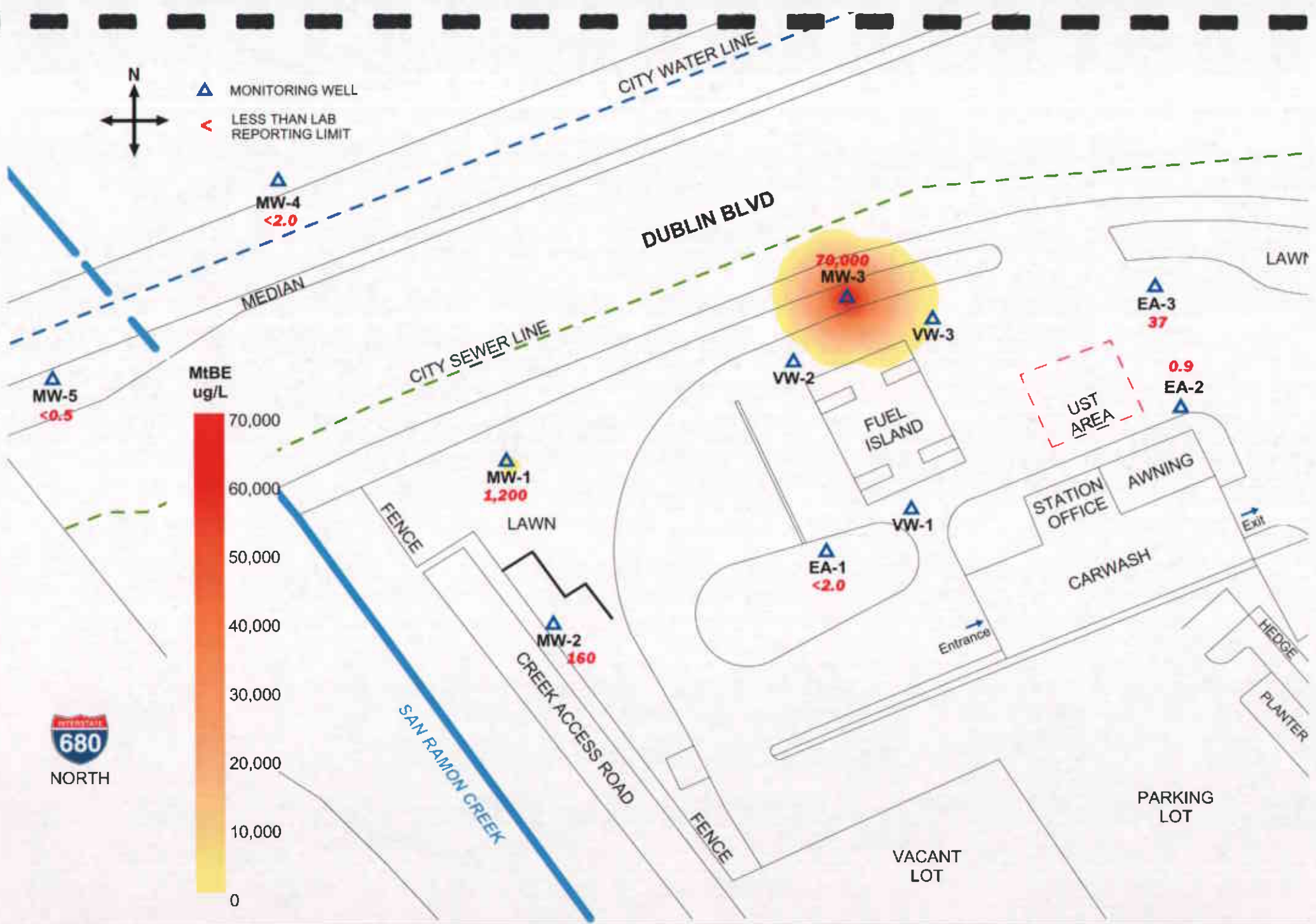


Figure 6: Contour map of MtBE concentrations in groundwater (EPA Method 8260B). May 8, 2003.

# Tables



**Table 1**  
**Groundwater Elevation Data**  
 May 8, 2003  
 7240 Dublin Boulevard, Dublin, CA

Monitoring Well	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)
EA-1	331.21	8.23	322.98
EA-2	330.41	7.26	323.15
EA-3	331.50	8.83	322.67
MW-1	333.66	11.85	321.81
MW-2	329.29	7.86	321.43
MW-3	332.86	10.91	321.95
MW-4	332.63	9.79	322.84
MW-5	333.04	9.56	323.48

**Table 2**  
**Groundwater Physical and Chemical Properties**  
 May 8, 2003  
 7240 Dublin Boulevard, Dublin, CA

Monitoring Well	pH	Temp (°C)	E.C. (mS/cm)
EA-1	6.98	18.56	1,970
EA-2	6.70	17.88	990
EA-3	6.87	20.22	3,999
MW-1	6.70	15.88	2,990
MW-2	6.67	17.66	2,510
MW-3	6.95	18.88	2,790
MW-4	6.49	18.55	3,650
MW-5	6.90	16.83	2,080

**Table 3**  
**Groundwater Analytical Data**  
 May 8, 2003  
 7240 Dublin Boulevard, Dublin CA

Monitoring Well	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8021B / 8260B <sup>1</sup> (µg/L)
EA-1	1,700	11	0.97 C	63	161	<2.0
EA-2	<50	<0.50	<0.50	<0.50	<0.50	2.2 / 0.9
EA-3	<50	<0.50	<0.50	<0.50	<0.50	39 / 37
MW-1	<50	<0.50	<0.50	<0.50	<0.50	1,300 / 1,200
MW-2	<50	<0.50	<0.50	<0.50	<0.50	180 / 160
MW-3	5,700	770	69	130	365	76,000 / 70,000
MW-4	<50	<0.50	<0.50	<0.50	<0.50	<2.0
MW-5	<50	<0.50	<0.50	<0.50	<0.50	3.4 / <0.5

Notes:

< : Not detected above laboratory reporting limits.

<sup>C</sup> Presence confirmed, but RPD between columns exceeds 40%.

<sup>1</sup> MtBE analyzed by EPA Method 8021B and confirmed by 8260B.

# **Appendix A**

## **Field Notes and Geologic Log of Borehole S-1**



ENVIRONMENTAL ENGINEERING, INC

Well No.: EA-1  
 Casing Diameter: 4 inches  
 Depth of Well: 40.0 feet  
 Top of Casing Elevation: 331.21 feet  
 Depth to Groundwater: 8.23 feet  
 Groundwater Elevation: 322.98 feet  
 Water Column Height: 31.77 feet  
 Purged Volume: 20 gallons

Project No.: 2691  
 Address: 7240 Dublin Blvd  
 Dublin, CA  
 Date: May 8, 2003  
 Sampler: Tony Perini  
 Eugene Fierro

Purging Method: Bailer  Pump

Sampling Method: Bailer  Pump

Color: No  Yes  Describe: \_\_\_\_\_

Sheen: No  Yes  Describe: \_\_\_\_\_

Odor: No  Yes  Describe: strong

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
3:08	1	7.05	20.11	1820
3:10	3	7.09	19.44	1800
3:12	8	6.93	19.05	1830
3:14	13	7.00	18.50	1830
3:16	16	6.82	18.77	1880
3:19	20	<del>7.00</del>	18.56	1970

6.98

Sampled 3:25 pm



ENVIRONMENTAL ENGINEERING, INC

Well No.: EA-2  
Casing Diameter: 4 inches  
Depth of Well: 40.3 feet  
Top of Casing Elevation: 330.41 feet  
Depth to Groundwater: 7.26 feet  
Groundwater Elevation: 323.15 feet  
Water Column Height: 33.04 feet  
Purged Volume: 20 gallons

Project No.: 2691  
Address: 7240 Dublin Blvd  
Dublin, CA  
Date: May 8, 2003  
Sampler: Tony Perini  
Eugene Fierro

Purging Method: Bailer  Pump   
Sampling Method: Bailer  Pump

Color: No  Yes  Describe: \_\_\_\_\_  
Sheen: No  Yes  Describe: \_\_\_\_\_  
Odor: No  Yes  Describe: like sulfur

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
12:03	1	6.66	18.88	9.94
12:05	4	6.76	19	9.96
12:06	6	6.65	18.83	9.99
12:07	8	6.87	18.33	10.05
12:12	14	6.65	18.77	10.05
12:15	20	6.70	17.88	9.90

12:20 Sampled



ENVIRONMENTAL ENGINEERING, INC

Well No.: EA-3  
Casing Diameter: 4 inches  
Depth of Well: 35.5 feet  
Top of Casing Elevation: 331.50 feet  
Depth to Groundwater: 8.83 feet  
Groundwater Elevation: 322.67 feet  
Water Column Height: 26.67 feet  
Purged Volume: 15 gallons

Project No.: 2691  
Address: 7240 Dublin Blvd  
Dublin, CA  
Date: May 8, 2003  
Sampler: Tony Perini  
Eugene Fierro

Purging Method: Bailer  Pump

Sampling Method: Bailer  Pump

Color: No  Yes  Describe: \_\_\_\_\_

Sheen: No  Yes  Describe: \_\_\_\_\_

Odor: No  Yes  Describe: like sulfur

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
1:25	4	6.94	20.50	3999
1:27	6	7.03	20.11	3999
1:29	8	7.00	20.38	2999
1:31	12	7.02	20.33	3999
1:33	15	6.87	20.22	3999

Sampled 1:35

EC was above the allowable equipment tolerance levels for the Hanna meter



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-1  
 Casing Diameter: 2 inches  
 Depth of Well: 25.07 feet  
 Top of Casing Elevation: 333.66 feet  
 Depth to Groundwater: 11.85 feet  
 Groundwater Elevation: 321.81 feet  
 Water Column Height: 13.22 feet  
 Purged Volume: 9.5 gallons

Project No.: 2691  
 Address: 7240 Dublin Blvd  
 Dublin, CA  
 Date: May 8, 2003  
 Sampler: Tony Perini  
 Eugene Fierro

Purging Method: Bailer  Pump

Sampling Method: Bailer  Pump

Color: No  Yes  Describe: muddy / grey  
 Sheen: No  Yes  Describe: \_\_\_\_\_  
 Odor: No  Yes  Describe: \_\_\_\_\_

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
1:58 PM	2	6.63	17.27	3,160
1:59	3	6.78	15.44	3,120
2:00	6	6.72	16.05	3,290
2:02	8	6.73	15.77	2,870
2:03	9.5	6.70	15.88	2,990
2:05	sampled			



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-2  
 Casing Diameter: 2 inches  
 Depth of Well: 20 feet  
 Top of Casing Elevation: 329.29 feet  
 Depth to Groundwater: 7.86 feet  
 Groundwater Elevation: 321.43 feet  
 Water Column Height: 12.14 feet  
 Purged Volume: 7 gallons

Project No.: 2691  
 Address: 7240 Dublin Blvd  
 Dublin, CA  
 Date: May 8, 2003  
 Sampler: Tony Perini  
 Eugene Fierro

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump   
 Color: No  Yes  Describe: cloudy  
 Sheen: No  Yes  Describe: \_\_\_\_\_  
 Odor: No  Yes  Describe: \_\_\_\_\_

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
2:20	1	7.20	18.88	3,040
2:22	3	6.66	18.11	2,480
2:23	5	6.66	17.72	2,590
2:24	7	6.67	17.66	2,510
2:25	sampled			





ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-3  
 Casing Diameter: 2 inches  
 Depth of Well: 82.5 feet  
 Top of Casing Elevation: 332.86 feet  
 Depth to Groundwater: 10.91 feet  
 Groundwater Elevation: 321.95 feet  
 Water Column Height: 11.59 feet  
 Purged Volume: 8 gallons

Project No.: 2691  
 Address: 7240 Dublin Blvd  
 Dublin, CA  
 Date: May 8, 2003  
 Sampler: Tony Perini  
 Eugene Fierro

Purging Method: Bailer  Pump

Sampling Method: Bailer  Pump

Color: No  Yes  Describe: blackish

Sheen: No  Yes  Describe: \_\_\_\_\_

Odor: No  Yes  Describe: strong

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
2:43	1	6.48	20.50	2,900
2:44	3	6.95	18.66	2,910
2:45	6	6.95	18.83	3,030
2:46	8	6.95	18.88	2,790
2:50	sampled			

Sampled 2:50



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-4  
 Casing Diameter: 2 inches  
 Depth of Well: 20 feet  
 Top of Casing Elevation: 332.63 feet  
 Depth to Groundwater: 9.79 feet  
 Groundwater Elevation: 322.84 feet  
 Water Column Height: 10.21 feet  
 Purged Volume: 8 gallons

Project No.: 2691  
 Address: 7240 Dublin Blvd  
 Dublin, CA  
 Date: May 8, 2003  
 Sampler: Tony Perini  
 Eugene Fierro

Purging Method: Bailer  Pump

Sampling Method: Bailer  Pump

Color: No  Yes  Describe: Grey + turbid

Sheen: No  Yes  Describe: \_\_\_\_\_

Odor: No  Yes  Describe: \_\_\_\_\_

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
11:13 am	2	6.72	18.27	3,600
11:15 am	4	6.64	18.22	3,360
11:16 am	6	6.53	18.33	3,670
11:18 am	8	6.49	18.55	3,650
11:30 am	sampled			



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-5  
 Casing Diameter: 2 inches  
 Depth of Well: 21.0 feet  
 Top of Casing Elevation: 333.04 feet  
 Depth to Groundwater: 9.54 feet  
 Groundwater Elevation: 323.48 feet  
 Water Column Height: 11.44 feet  
 Purged Volume: 7 gallons

Project No.: 2691  
 Address: 7240 Dublin Blvd  
 Dublin, CA  
 Date: May 8, 2003  
 Sampler: Tony Perini  
 Eugene Fierro

Purging Method: Bailer  Pump

Sampling Method: Bailer  Pump

Color: No  Yes  Describe: \_\_\_\_\_

Sheen: No  Yes  Describe: \_\_\_\_\_

Odor: No  Yes  Describe: \_\_\_\_\_

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
11:42	1	6.87	16.83	427
11:44	1	6.90	17.22	1,470
11:46	6	6.81	16.83	200
11:47	7	6.90	16.83	2,080
11:50	sampled			



# GEOLOGIC LOG OF BOREHOLE S-1

Boring Location:  
See Site Map.

Project: 2692  
 Site Location: 7240 Dublin Blvd  
 Dublin CA  
 Drilling Method: HSA  
 Driller: Woodward Drilling (Frank Ramirez)  
 Logged By: R Papler

Date Drilled: April 25, 2003  
 Casing Elevation: NA  
 Depth to 1st Groundwater: 6.5 ft  
 Approved By: M Sepehr PE

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS.	GEOLOGIC DESCRIPTION	continuous core SAMPLED Blow count per 1 ft	POTENTIAL WATER-BEARING ZONE AS PER EC LOGS
				4" concrete over 3" baserock		
0			CH	CLAY: dark grey brown, firm to stiff, moist, highly plastic. No petroleum hydrocarbon (PHC) odors.		UPPER-SHALLOW
0			CL	SANDY CLAY: dark gray brown, firm to stiff, moist, plastic, 30-40% very fine sand. No PHC odor.		
97	5		SM&ML	SILTY SAND & SANDY SILT: light gray brown, loose to medium dense, firm, moist to v. moist becoming wet at 5 to 6'. No PHC odor.	10	
115			CL	SILTY CLAY: dark gray brown, stiff to v. stiff, moist, plastic w/ stringer of moist v. fine sand at 7'. Moderate PHC odor.	17	
180	10		CL	As Above with some caliche below 11'	15	SHALLOW
56					23	
31					12	
20	15		SC/CL	CLAYEY SAND/SANDY CLAY: light gray brown, firm to stiff, moist, slightly to moderately plastic, 40-60% v. fine sand w/ v. moist stringers of med. to fine sand. Slight PHC odor	21	
15			CH	CLAY: gray, firm to stiff, moist, highly plastic w/ gastropod shells and carbonaceous deposits. No PHC odor.	18	
10			SM	SILTY SAND: brownish gray, loose to med. dense, v. moist to wet, fine to coarse, moderately sorted. No PHC odor.	32	
5	20		CL	SANDY CLAY: gray, stiff, moist, plastic, 30-40% v. fine sand w/ v. moist stringer of sandy silt at 19.5'. No PHC odor.	24	
			CL	GRAVELLY CLAY w/some Sand: It brownish gray, wet, 20-30% well rounded gravel to 1/2", <15% v. fine sand. No PHC odor.	28	
			CL	SILTY CLAY: gray brown mottled gray, moist, v. stiff, to hard, plastic w/ some caliche. No PHC odor	16	
25					19	



GEOLOGIC LOG OF BOREHOLE S-1

Boring Location:  
See Site Map.

Project: 2692  
Site Location: 7240 Dublin Blvd  
Dublin CA  
Drilling Method: HSA  
Driller: Woodward Drilling (Frank Ramirez)  
Logged By: R Papler

Date Drilled: April 25, 2003  
Casing Elevation: NA  
Depth to 1st Groundwater: NA  
Approved By: M Sepehr PE

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS.	GEOLOGIC DESCRIPTION	continuous blow counts	POTENTIAL WATER-BEARING ZONE AS PER EC LOGS
	0		CL	SILTY CLAY: gray brown mottled gray, moist, v. stiff, to hard, plastic w/ some caliche. No PHC odor	25	MIDDLE
	30		CL	As Above	33	
	30		CL	SANDY CLAY: gray, stiff, v. moist, plastic, 15-30% v. fine sand. No PHC odor.	28	
	30		CL	As Above	40	
	0		SP&ML	SAND interbedded w/ SANDY SILT: gray, loose to medium dense, wet, v. fine, well sorted. No PHC odor.	20	DEEPER
	35		SC/CL	CLAYEY SAND/SANDY CLAY: gray becoming grayish brown w/ depth, medium dense to dense, moist, plastic. No PHC odor.	38	
	35		SC/CL	As Above w/ stringer of wet silty sand at 36'	22	
	35		SC/CL	As Above w/ stringer of wet silty sand at 36'	37	
	40		SC	CLAYEY SAND: gry brown mottled gray, medium dense to dense, moist to v. moist, slightly plastic w/ stringers of wet silty sand at 41', 41.5', and 43'. No PHC odor.	20	DEEPER
	40		SC	As Above with stringers of wet silty sand at 41', 41.5', and 43'.	36	
	40		SC	As Above with stringers of wet silty sand at 41', 41.5', and 43'.	54	
	40		SC	As Above with stringers of wet silty sand at 41', 41.5', and 43'.	64	
	45		CL	SILTY CLAY: gray brown mottled gray, v. stiff to hard, moist, plastic w/ stringer of v. moist silty sand at 47.25' w/ abundant caliche at 45-46'. No PHC odor.	48	DEEPER
	45		CL	As Above with moist silty sand stringer at 47'	62	
	45		CL	As Above with moist silty sand stringer at 47'	15	
	45		CL	As Above with moist silty sand stringer at 47'	27	
	50			Total Depth: 49 ft bgs	18	

# **Appendix B**

## Laboratory Report and Chain of Custody Form



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900, Fax (510) 486-0532

A N A L Y T I C A L   R E P O R T

Prepared for:

SOMA Environmental Engineering Inc.  
2680 Bishop Dr.  
Suite 203  
San Ramon, CA 94583

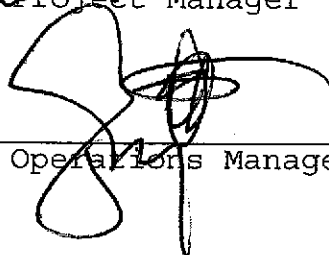
Date: 21-MAY-03  
Lab Job Number: 165186  
Project ID: 2691  
Location: 7240 Dublin Blvd DublinCA

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by:

  
Project Manager

Reviewed by:

  
Operations Manager

This package may be reproduced only in its entirety.



Laboratory Number: 165186  
Client: SOMA Environmental Engineering Inc.  
Project Number: 2691  
Request Date: 05/08/2003

### CASE NARRATIVE

This hardcopy data package contains sample results and batch QC results for 8 water samples received from the above referenced project on May 8, 2003. The samples were received cold and intact.

#### TVH/BTXE:

The recovery for surrogate trifluorotoluene in sample MW-3 is outside acceptance limits due to the coelution of the surrogate peak with hydrocarbon peaks. However, the associated surrogate bromofluorobenzene recovery is acceptable and therefore there is no affect on the data quality. No other analytical problems were encountered.

#### Purgeable Aromatics:

No analytical problems were encountered.



# CHAIN OF CUSTODY

## Analyses

**Curtis & Tompkins, Ltd.**  
Analytical Laboratory Since 1878  
2323 Fifth Street  
Berkeley, CA 94710  
(510)486-0900 Phone  
(510)486-0532 Fax

165186

C&T LOGIN # \_\_\_\_\_

**Sampler: Tony Perini / Mehran Nowroozi**

**Report To: Tony Perini / Joyce Bobek**

**Project No: 2691**

**Project Name: 7240 Dublin Blvd, Dublin CA**

**Company : SOMA Environmental**

**Turnaround Time: Standard**

**Telephone: 925-244-6600**

**Fax: 925-244-6601**

Lab No.	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative				
			Soil	Water	Waste		HCL	H2SO4	HNO3	ICE	
-1	EA-1	May 8, 03 3:25p		X		3 VOAS	X				
-2	EA-2	12:30p									
-3	EA-3	1:35p									
-4	MW-1	2:05p									
-5	MW-2	2:25p									
-6	MW-3	2:50p									
-7	MW-4	11:30am									
-8	MW-5	11:50am									

TPHg 8015	BTEX + mBE 8021 GC	MTBE Confirmation 8260 GCMS																			

Received  On Ice

Cold  Ambient  Intact

Preservation Correct?

Yes  No  N/A

**Notes: EDF OUTPUT REQUIRED**

<b>RELINQUISHED BY:</b>	<b>RECEIVED BY:</b>
<i>[Signature]</i>	<i>[Signature]</i>
5/8/03 5:30	5/8/03 5:30pm
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME



Curtis & Tompkins Laboratories Analytical Report

Lab #: 165186 Location: 7240 Dublin Blvd DublinCA  
 Client: SOMA Environmental Engineering Inc. Prep: EPA 5030B  
 Project#: 2691  
 Matrix: Water Sampled: 05/08/03  
 Units: ug/L Received: 05/08/03

Field ID: EA-1 Lab ID: 165186-001  
 Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL	Batch#	Analyzed	Analysis
Gasoline C7-C12	1,700	50	81442	05/12/03	8015B
MTBE	ND	2.0	81464	05/13/03	EPA 8021B
Benzene	11	0.50	81464	05/13/03	EPA 8021B
Toluene	0.97 C	0.50	81464	05/13/03	EPA 8021B
Ethylbenzene	63	0.50	81464	05/13/03	EPA 8021B
m, p-Xylenes	130	0.50	81464	05/13/03	EPA 8021B
o-Xylene	31	0.50	81464	05/13/03	EPA 8021B

Surrogate	%REC	Limits	Batch#	Analyzed	Analysis
Trifluorotoluene (FID)	156 *	68-145	81442	05/12/03	8015B
Bromofluorobenzene (FID)	125	66-143	81442	05/12/03	8015B
Trifluorotoluene (PID)	122	53-143	81464	05/13/03	EPA 8021B
Bromofluorobenzene (PID)	123	52-142	81464	05/13/03	EPA 8021B

Field ID: EA-2 Diln Fac: 1.000  
 Type: SAMPLE Batch#: 81405  
 Lab ID: 165186-002 Analyzed: 05/11/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
MTBE	2.2	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m, p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	124	68-145	8015B
Bromofluorobenzene (FID)	130	66-143	8015B
Trifluorotoluene (PID)	110	53-143	EPA 8021B
Bromofluorobenzene (PID)	120	52-142	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 ND= Not Detected  
 RL= Reporting Limit  
 Page 1 of 6

# GC19 TVH 'X' Data File (FID)

Sample Name : 165186-001,81442

FileName : G:\GC19\DATA\132x015.raw

Method : TVHBTXE

Start Time : 0.00 min

Scale Factor : 1.0

End Time : 26.80 min

Plot Offset : -1 mV

Sample #: b1

Date : 5/13/03 05:52 AM

Time of Injection: 5/12/03 11:01 PM

Low Point : -1.23 mV

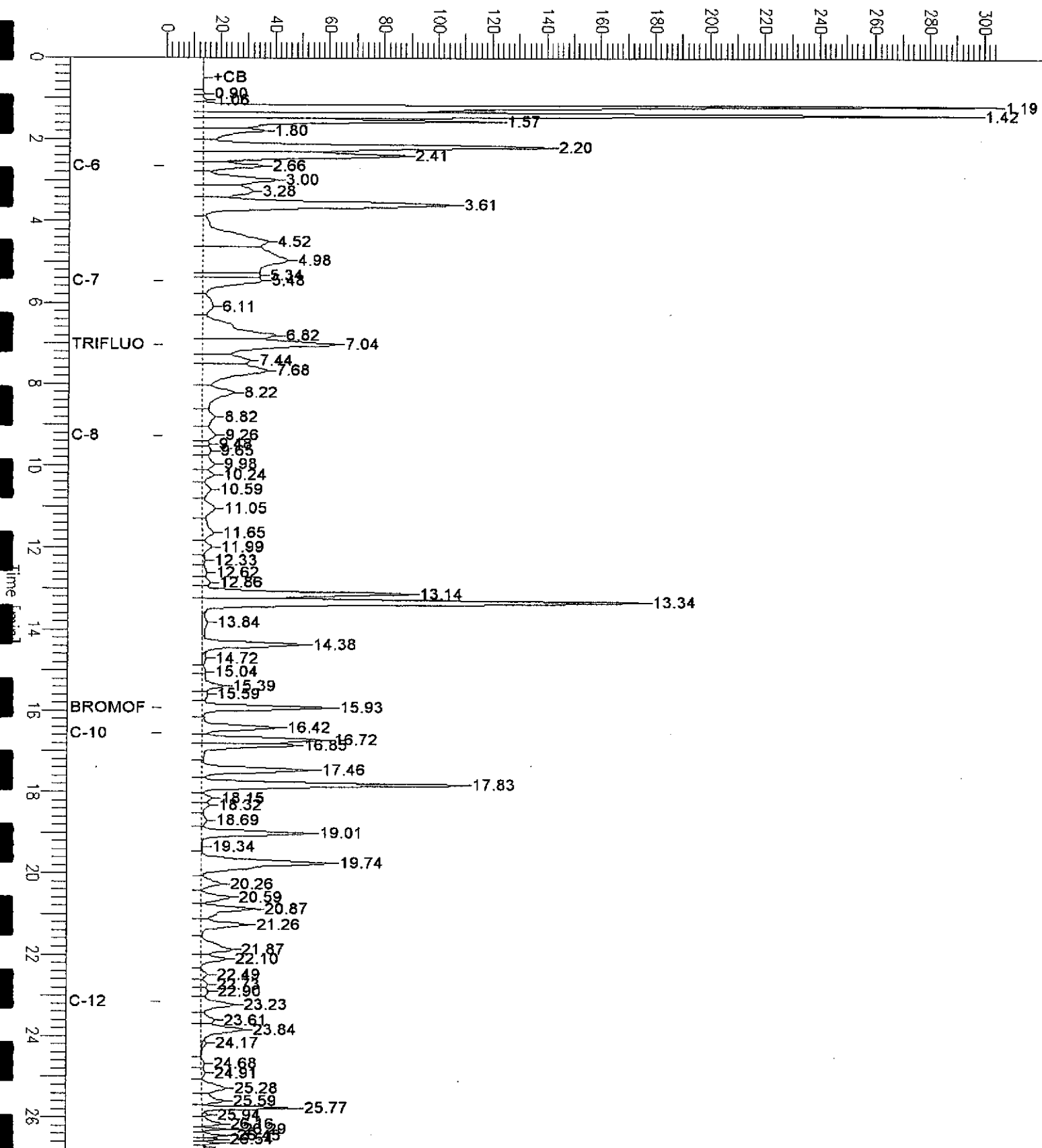
Plot Scale : 305.3 mV

Page 1 of 1

High Point : 304.10 mV

EA-1

Response [mV]





## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #: 165186	Location: 7240 Dublin Blvd DublinCA
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2691	
Matrix: Water	Sampled: 05/08/03
Units: ug/L	Received: 05/08/03

Field ID: EA-3	Diln Fac: 1.000
Type: SAMPLE	Batch#: 81405
Lab ID: 165186-003	Analyzed: 05/11/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
MTBE	39	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	123	68-145	8015B
Bromofluorobenzene (FID)	126	66-143	8015B
Trifluorotoluene (PID)	108	53-143	EPA 8021B
Bromofluorobenzene (PID)	112	52-142	EPA 8021B

Field ID: MW-1	Lab ID: 165186-004
Type: SAMPLE	

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	Analysis
Gasoline C7-C12	ND	50	1.000	81405	05/11/03	8015B
MTBE	1,300	4.0	2.000	81464	05/13/03	EPA 8021B
Benzene	ND	0.50	1.000	81405	05/11/03	EPA 8021B
Toluene	ND	0.50	1.000	81405	05/11/03	EPA 8021B
Ethylbenzene	ND	0.50	1.000	81405	05/11/03	EPA 8021B
m,p-Xylenes	ND	0.50	1.000	81405	05/11/03	EPA 8021B
o-Xylene	ND	0.50	1.000	81405	05/11/03	EPA 8021B

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	Analysis
Trifluorotoluene (FID)	119	68-145	1.000	81405	05/11/03	8015B
Bromofluorobenzene (FID)	128	66-143	1.000	81405	05/11/03	8015B
Trifluorotoluene (PID)	109	53-143	1.000	81405	05/11/03	EPA 8021B
Bromofluorobenzene (PID)	119	52-142	1.000	81405	05/11/03	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 ND= Not Detected  
 RL= Reporting Limit  
 Page 2 of 6



## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691		
Matrix:	Water	Sampled:	05/08/03
Units:	ug/L	Received:	05/08/03

Field ID:	MW-2	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	81405
Lab ID:	165186-005	Analyzed:	05/11/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
MTBE	180	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	122	68-145	8015B
Bromofluorobenzene (FID)	126	66-143	8015B
Trifluorotoluene (PID)	111	53-143	EPA 8021B
Bromofluorobenzene (PID)	118	52-142	EPA 8021B

Field ID:	MW-3	Lab ID:	165186-006
Type:	SAMPLE		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	Analysis
Gasoline C7-C12	5,700	50	1.000	81405	05/11/03	8015B
MTBE	76,000	200	100.0	81464	05/13/03	EPA 8021B
Benzene	770	50	100.0	81464	05/13/03	EPA 8021B
Toluene	69	0.50	1.000	81405	05/11/03	EPA 8021B
Ethylbenzene	130	0.50	1.000	81405	05/11/03	EPA 8021B
m,p-Xylenes	280	0.50	1.000	81405	05/11/03	EPA 8021B
o-Xylene	85	0.50	1.000	81405	05/11/03	EPA 8021B

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	Analysis
Trifluorotoluene (FID)	159 *	68-145	1.000	81405	05/11/03	8015B
Bromofluorobenzene (FID)	140	66-143	1.000	81405	05/11/03	8015B
Trifluorotoluene (PID)	157 *	53-143	1.000	81405	05/11/03	EPA 8021B
Bromofluorobenzene (PID)	135	52-142	1.000	81405	05/11/03	EPA 8021B

\*= Value outside of QC limits; see narrative

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

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# GC04 TVH 'J' Data File FID

Sample Name : 165186-006,81405

Sample #: a1

Page 1 of 1

FileName : G:\GC04\DATA\130J021.raw

Date : 5/12/03 10:33 AM

Method : TVHBTXE

Time of Injection: 5/11/03 01:47 AM

Start Time : 0.00 min

End Time : 26.00 min

Low Point : 8.05 mV

High Point : 1094.48 mV

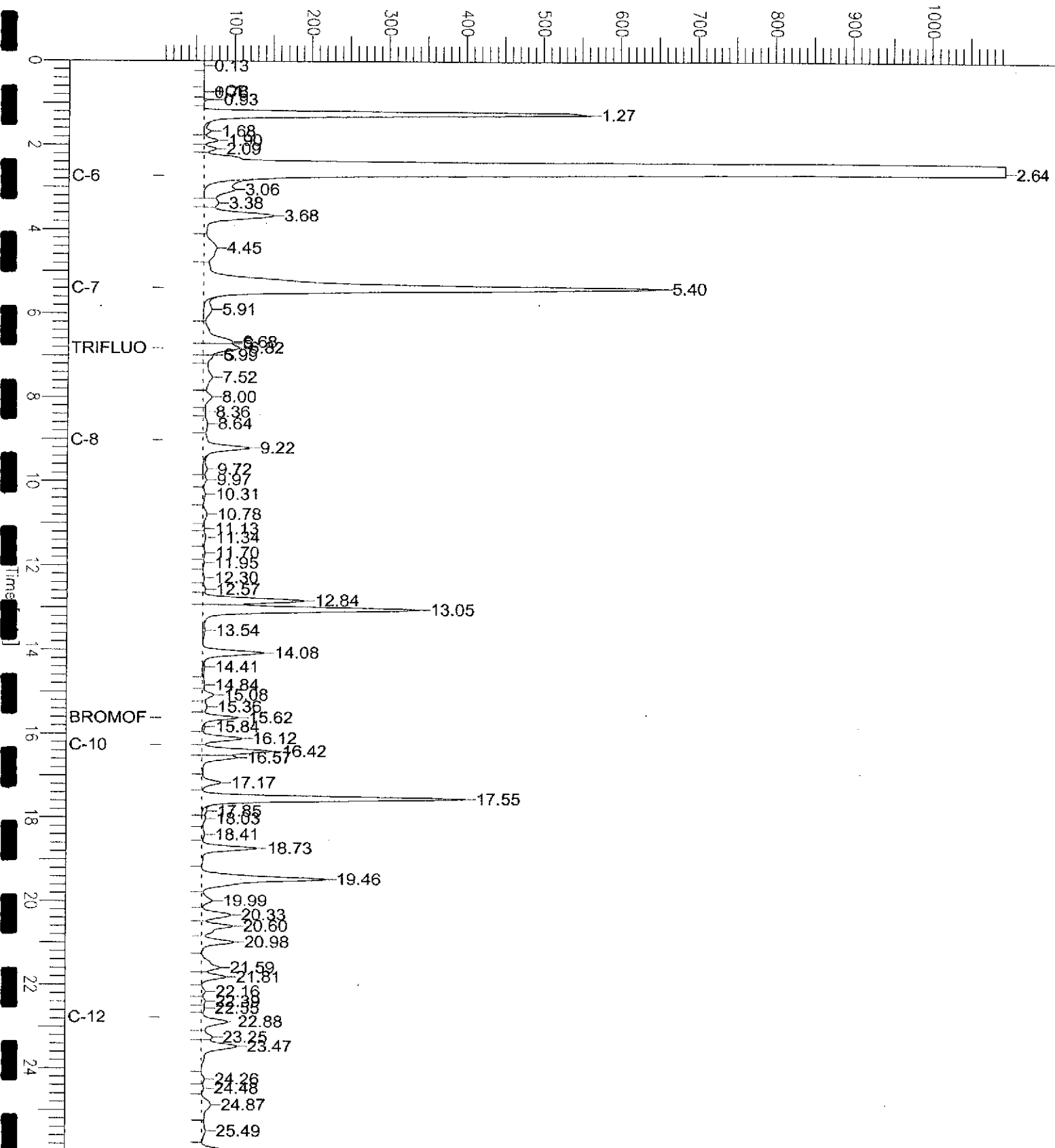
Scale Factor: 1.0

Plot Offset: 8 mV

Plot Scale: 1086.4 mV

MW-3

Response [mV]





## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691		
Matrix:	Water	Sampled:	05/08/03
Units:	ug/L	Received:	05/08/03

Field ID:	MW-4	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	81442
Lab ID:	165186-007	Analyzed:	05/12/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	116	68-145	8015B
Bromofluorobenzene (FID)	120	66-143	8015B
Trifluorotoluene (PID)	119	53-143	EPA 8021B
Bromofluorobenzene (PID)	124	52-142	EPA 8021B

Field ID:	MW-5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	81442
Lab ID:	165186-008	Analyzed:	05/12/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
MTBE	3.4	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	116	68-145	8015B
Bromofluorobenzene (FID)	122	66-143	8015B
Trifluorotoluene (PID)	119	53-143	EPA 8021B
Bromofluorobenzene (PID)	126	52-142	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 ND= Not Detected  
 RL= Reporting Limit

# GC04 TVH 'J' Data File FID

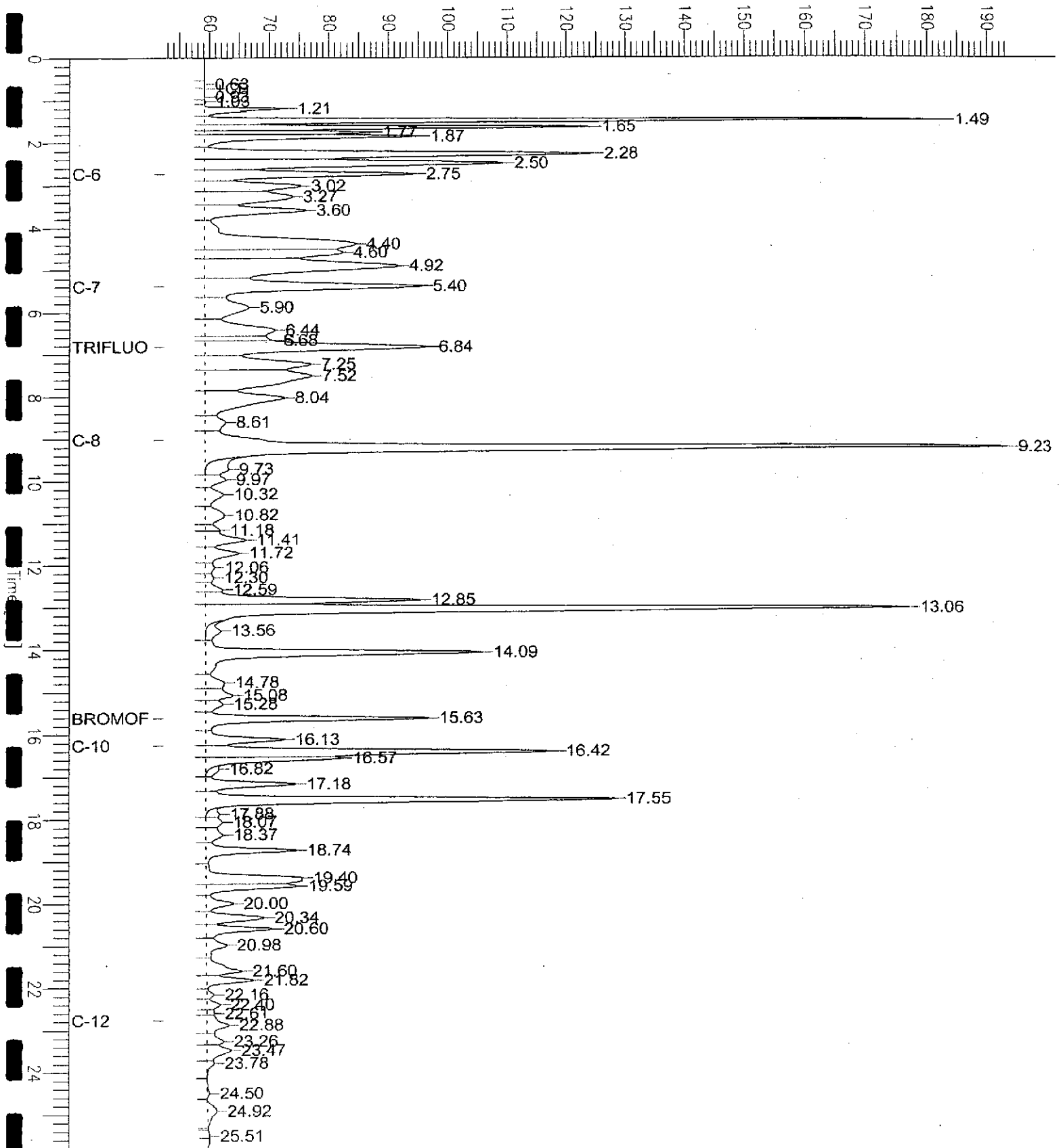
Sample Name : ccv/lcs,qc213405,81405,03ws0682,5/5000  
File Name : G:\GC04\DATA\130J002.raw  
Method : TVHBTXE  
Start Time : 0.00 min End Time : 26.00 min  
Scale Factor : 1.0 Plot Offset : 52 mV

Sample # :  
Date : 5/12/03 10:33 AM  
Time of Injection : 5/10/03 02:05 PM  
Low Point : 52.41 mV High Point : 193.31 mV  
Plot Scale : 140.9 mV

Page 1 of 1

*Gasoline*

Response [mV]







## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691		
Matrix:	Water	Sampled:	05/08/03
Units:	ug/L	Received:	05/08/03

Type:	BLANK	Batch#:	81405
Lab ID:	QC213403	Analyzed:	05/11/03
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	120	68-145	8015B
Bromofluorobenzene (FID)	116	66-143	8015B
Trifluorotoluene (PID)	110	53-143	EPA 8021B
Bromofluorobenzene (PID)	108	52-142	EPA 8021B

Type:	BLANK	Batch#:	81442
Lab ID:	QC213540	Analyzed:	05/12/03
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	100	68-145	8015B
Bromofluorobenzene (FID)	101	66-143	8015B
Trifluorotoluene (PID)	104	53-143	EPA 8021B
Bromofluorobenzene (PID)	103	52-142	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 ND= Not Detected  
 RL= Reporting Limit



Curtis & Tompkins Laboratories Analytical Report

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691		
Matrix:	Water	Sampled:	05/08/03
Units:	ug/L	Received:	05/08/03

Type:	BLANK	Batch#:	81464
Lab ID:	QC213637	Analyzed:	05/13/03
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	111	68-145	8015B
Bromofluorobenzene (FID)	110	66-143	8015B
Trifluorotoluene (PID)	95	53-143	EPA 8021B
Bromofluorobenzene (PID)	95	52-142	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 ND= Not Detected  
 RL= Reporting Limit  
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## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691		
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC213404	Batch#:	81405
Matrix:	Water	Analyzed:	05/10/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12		NA			
MTBE	20.00	20.29	101	59-135	EPA 8021B
Benzene	20.00	19.50	98	65-122	EPA 8021B
Toluene	20.00	20.26	101	67-121	EPA 8021B
Ethylbenzene	20.00	19.41	97	70-121	EPA 8021B
m,p-Xylenes	40.00	39.69	99	72-125	EPA 8021B
o-Xylene	20.00	20.19	101	73-122	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	117	68-145	8015B
Bromofluorobenzene (FID)	113	66-143	8015B
Trifluorotoluene (PID)	111	53-143	EPA 8021B
Bromofluorobenzene (PID)	111	52-142	EPA 8021B

NA= Not Analyzed



**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691	Analysis:	8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC213405	Batch#:	81405
Matrix:	Water	Analyzed:	05/10/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,912	96	79-120
MTBE		NA		
Benzene		NA		
Toluene		NA		
Ethylbenzene		NA		
m,p-Xylenes		NA		
o-Xylene		NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		131	68-145
Bromofluorobenzene (FID)		112	66-143
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		



## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691		
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC213541	Batch#:	81442
Matrix:	Water	Analyzed:	05/12/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12		NA			
MTBE	20.00	21.56	108	59-135	EPA 8021B
Benzene	20.00	21.55	108	65-122	EPA 8021B
Toluene	20.00	21.48	107	67-121	EPA 8021B
Ethylbenzene	20.00	21.16	106	70-121	EPA 8021B
m,p-Xylenes	40.00	42.60	107	72-125	EPA 8021B
o-Xylene	20.00	21.45	107	73-122	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	104	68-145	8015B
Bromofluorobenzene (FID)	115	66-143	8015B
Trifluorotoluene (PID)	106	53-143	EPA 8021B
Bromofluorobenzene (PID)	107	52-142	EPA 8021B

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691	Analysis:	8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC213542	Batch#:	81442
Matrix:	Water	Analyzed:	05/12/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,995	100	79-120
MTBE		NA		
Benzene		NA		
Toluene		NA		
Ethylbenzene		NA		
m,p-Xylenes		NA		
o-Xylene		NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		122	68-145
Bromofluorobenzene (FID)		110	66-143
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		



**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691	Analysis:	EPA 8021B
Type:	BS	Diln Fac:	1.000
Lab ID:	QC213638	Batch#:	81464
Matrix:	Water	Analyzed:	05/13/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	18.63	93	59-135
Benzene	20.00	19.17	96	65-122
Toluene	20.00	19.04	95	67-121
Ethylbenzene	20.00	18.69	93	70-121
m,p-Xylenes	40.00	37.34	93	72-125
o-Xylene	20.00	18.80	94	73-122

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		92	53-143
Bromofluorobenzene (PID)		93	52-142



Curtis & Tompkins Laboratories Analytical Report

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691	Analysis:	EPA 8021B
Type:	BSD	Diln Fac:	1.000
Lab ID:	QC213648	Batch#:	81464
Matrix:	Water	Analyzed:	05/13/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	18.80	94	59-135	1	20
Benzene	20.00	18.05	90	65-122	6	20
Toluene	20.00	17.95	90	67-121	6	20
Ethylbenzene	20.00	17.75	89	70-121	5	20
m,p-Xylenes	40.00	35.20	88	72-125	6	20
o-Xylene	20.00	17.72	89	73-122	6	20

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		90	53-143
Bromofluorobenzene (PID)		92	52-142

NA= Not Analyzed

RPD= Relative Percent Difference





## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691	Analysis:	8015B
Field ID:	ZZZZZZZZZZ	Batch#:	81405
MSS Lab ID:	165187-001	Sampled:	05/08/03
Matrix:	Water	Received:	05/08/03
Units:	ug/L	Analyzed:	05/10/03
Diln Fac:	1.000		

Type: MS Lab ID: QC213406

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	31.53	2,000	2,035	100	67-120
MTBE			NA		
Benzene			NA		
Toluene			NA		
Ethylbenzene			NA		
m,p-Xylenes			NA		
o-Xylene			NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		136	68-145
Bromofluorobenzene (FID)		129	66-143
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Type: MSD Lab ID: QC213407

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,048	101	67-120	1	20
MTBE		NA				
Benzene		NA				
Toluene		NA				
Ethylbenzene		NA				
m,p-Xylenes		NA				
o-Xylene		NA				

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		142	68-145
Bromofluorobenzene (FID)		133	66-143
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed

RPD= Relative Percent Difference



Curtis & Tompkins Laboratories Analytical Report

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691	Analysis:	8015B
Field ID:	ZZZZZZZZZZ	Batch#:	81442
MSS Lab ID:	165224-001	Sampled:	05/12/03
Matrix:	Water	Received:	05/12/03
Units:	ug/L	Analyzed:	05/12/03
Diln Fac:	1.000		

Type: MS Lab ID: QC213562

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<12.00	2,000	2,110	106	67-120
MTBE			NA		
Benzene			NA		
Toluene			NA		
Ethylbenzene			NA		
m,p-Xylenes			NA		
o-Xylene			NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		138	68-145
Bromofluorobenzene (FID)		129	66-143
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Type: MSD Lab ID: QC213563

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,109	105	67-120	0	20
MTBE		NA				
Benzene		NA				
Toluene		NA				
Ethylbenzene		NA				
m,p-Xylenes		NA				
o-Xylene		NA				

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		138	68-145
Bromofluorobenzene (FID)		130	66-143
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed  
RPD= Relative Percent Difference

**Purgeable Aromatics by GC/MS**

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691	Analysis:	EPA 8260B
Field ID:	EA-2	Batch#:	81502
Lab ID:	165186-002	Sampled:	05/08/03
Matrix:	Water	Received:	05/08/03
Units:	ug/L	Analyzed:	05/15/03
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	0.9	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	107	77-130
Toluene-d8	93	80-120
Bromofluorobenzene	101	80-120



Purgeable Aromatics by GC/MS

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691	Analysis:	EPA 8260B
Field ID:	EA-3	Batch#:	81502
Lab ID:	165186-003	Sampled:	05/08/03
Matrix:	Water	Received:	05/08/03
Units:	ug/L	Analyzed:	05/15/03
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	37	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	106	77-130
Toluene-d8	91	80-120
Bromofluorobenzene	95	80-120

**Purgeable Aromatics by GC/MS**

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691	Analysis:	EPA 8260B
Field ID:	MW-1	Batch#:	81502
Lab ID:	165186-004	Sampled:	05/08/03
Matrix:	Water	Received:	05/08/03
Units:	ug/L	Analyzed:	05/15/03
Diln Fac:	10.00		

Analyte	Result	RL
MTBE	1,200	5.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	77-130
Toluene-d8	85	80-120
Bromofluorobenzene	96	80-120

**Purgeable Aromatics by GC/MS**

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	81502
Lab ID:	165186-005	Sampled:	05/08/03
Matrix:	Water	Received:	05/08/03
Units:	ug/L	Analyzed:	05/15/03
Diln Fac:	1.429		

Analyte	Result	RL
MTBE	160	0.7

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	77-130
Toluene-d8	94	80-120
Bromofluorobenzene	98	80-120



Purgeable Aromatics by GC/MS

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691	Analysis:	EPA 8260B
Field ID:	MW-3	Batch#:	81502
Lab ID:	165186-006	Sampled:	05/08/03
Matrix:	Water	Received:	05/08/03
Units:	ug/L	Analyzed:	05/15/03
Diln Fac:	500.0		

Analyte	Result	RL
MTBE	70,000	250

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	77-130
Toluene-d8	86	80-120
Bromofluorobenzene	99	80-120



Purgeable Aromatics by GC/MS

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691	Analysis:	EPA 8260B
Field ID:	MW-5	Batch#:	81502
Lab ID:	165186-008	Sampled:	05/08/03
Matrix:	Water	Received:	05/08/03
Units:	ug/L	Analyzed:	05/15/03
Diln Fac:	1.000		

Analyte	Result	RI
MTBE	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	107	77-130
Toluene-d8	93	80-120
Bromofluorobenzene	99	80-120





Purgeable Aromatics by GC/MS

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC213772	Batch#:	81502
Matrix:	Water	Analyzed:	05/15/03
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5

Surrogate	*REC	Limits
1,2-Dichloroethane-d4	106	77-130
Toluene-d8	93	80-120
Bromofluorobenzene	102	80-120



Purgeable Aromatics by GC/MS

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC213860	Batch#:	81502
Matrix:	Water	Analyzed:	05/15/03
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	97	77-130
Toluene-d8	86	80-120
Bromofluorobenzene	97	80-120

## Purgeable Aromatics by GC/MS

Lab #:	165186	Location:	7240 Dublin Blvd DublinCA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2691	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	81502
Units:	ug/L	Analyzed:	05/15/03
Diln Fac:	1.000		

Type: BS Lab ID: QC213770

Analyte	Spiked	Result	%REC	Limits
MTBE	50.00	45.11	90	54-131

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	95	77-130
Toluene-d8	88	80-120
Bromofluorobenzene	91	80-120

Type: BSD Lab ID: QC213771

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	50.00	44.46	89	54-131	1	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	77-130
Toluene-d8	94	80-120
Bromofluorobenzene	93	80-120

# Appendix C

## Historical Data

Table 1  
 Groundwater Monitoring Data and Analytical Results  
 Chevron Service Station #9-2582  
 7240 Dublin Boulevard  
 Dublin, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPHT (ft.)	SPH						MTBE (ppb)	1,2-DCA (ppb)
					REMOVED (gallons)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)		
EA-1												
10/17/88	333.41	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
10/24/88	333.41	322.77	10.64	--	--	--	--	--	--	--	--	--
11/02/88	333.41	322.72	10.69	--	--	--	--	--	--	--	--	--
12/20/88	333.41	322.90	10.51	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/28/89	333.41	323.54	9.87	--	--	<250	<0.5	<0.5	<0.5	<0.5	--	--
08/02/89	333.41	323.07	10.34	--	--	<50	<0.1	<0.1	<0.1	<0.1	--	<0.1
11/06/89	333.41	322.76	10.65	--	--	<500	<3.0	<5.0	<5.0	<5.0	--	<5.0
01/25/90	333.41	322.81	10.60	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5
04/23/90	333.41	322.83	10.58	--	--	71	2.0	5.0	3.0	8.0	--	<0.5
08/01/90	333.41	322.53	10.88	--	--	300	86	21	10	33	--	--
10/24/91	333.41	322.29	11.12	--	--	280	69	13	11	16	--	--
01/31/91	333.41	322.25	11.16	--	--	460	160	11	17	17	--	--
08/21/91	333.41	322.61	10.80	--	--	2,400	400	220	44	120	--	--
08/21/91 (D)	333.41	--	--	--	--	2,300	390	210	42	120	--	--
10/07/91	333.41	322.62	10.79	--	--	--	--	--	--	--	--	--
01/28/92	333.41	322.62	10.79	--	--	3,600	320	360	110	310	--	--
01/28/92 (D)	333.41	--	--	--	--	3,000	290	320	99	270	--	--
06/05/92	333.41	322.57	10.84	--	--	1,700	290	89	61	130	--	--
09/30/92	333.41	322.35	11.06	--	--	2,100	160	260	80	350	--	--
12/30/92	333.41	323.26	10.15	Sheen, Odor	--	3,200	240	180	110	310	--	--
03/29/93	333.41	323.99	9.42	Odor	--	23,000	700	3,000	610	3,000	--	--
06/25/93	333.41	322.99	10.42	--	--	2,700	130	590	130	590	--	--
09/16/93	333.41	322.75	10.66	--	--	3,900	410	830	220	890	--	--
12/20/93	333.41	322.81	10.60	--	--	27,000	1,200	2,600	1,100	4,200	--	--
03/29/94	333.41	323.00	10.41	--	--	6,300	250	700	200	830	--	--
06/22/94	333.41	323.01	10.40	--	--	4,100	71	240	110	460	<30	<10

Table 1

## Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-2582

7240 Dublin Boulevard

Dublin, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPHT (ft.)	SPH		B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	1,2-DCA (ppb)
					REMOVED (gallons)	TPH-G (ppb)						
EA-1 (cont)												
09/20/94	333.41	323.04	10.37	--	--	8,500	1,200	1,300	370	1,400	--	--
10/04/94	333.41	323.07	10.34	--	--	7,600	97	360	150	620	--	--
11/30/94	333.41	323.95	9.46	--	--	8,800	180	490	240	900	--	--
03/02/95	331.03	321.07	9.96	--	--	6,900	82	570	210	970	--	--
06/15/95	331.03	321.23	9.80	--	--	4,800	44	210	160	620	<25	--
09/26/95	331.03	320.55	10.48	--	--	13,000	150	620	370	1,400	<125	--
12/28/95	331.03	320.89	10.14	--	--	11,000	74	250	200	750	79	--
02/29/96	331.03	322.29	8.74	--	--	17,000	59	480	350	1,600	<125	--
06/27/96	331.03	320.82	10.21	--	--	3,600	22	130	130	49	46	--
09/12/96	331.21	320.72	10.49	--	--	2,000	20	<10	18	44	<50	--
03/31/97	331.21	321.02	10.19	--	--	17,000	87	230	330	1,200	310	--
12/23/98	331.21	321.38	9.83	--	--	290	20	0.88	1.1	16	<2.5	--
03/25/99	331.21	322.08	9.13	--	--	500	21	<0.5	21	<0.5	18	--
02/03/00	331.21	322.16	9.05	--	--	2,310	35.7	90	21.8	147	1,280/365 <sup>3</sup>	--
01/23/01	331.21	INACCESSIBLE		--	--	--	--	--	--	--	--	--
05/01/01	331.21	321.39	9.82	0.00	0.00	7,710	19.9	12.6	22.3	64.0	31.8	--
08/28/01	331.21	321.17	10.04	0.00	0.00	4,800	69	<25	50	140	160	--
11/27/01	331.21	321.16	10.05	0.00	0.00	5,300	25	<5.0	30	120	<20	--
02/28/02	331.21	INACCESSIBLE - PAVED OVER				--	--	--	--	--	--	--
05/22/02	331.21	322.16	9.05	0.00	0.00	110	<1.0	<0.50	1.0	<1.5	<2.5	--
08/20/02	331.21	322.00	9.21	0.00	0.00	410	2.6	<0.50	8.5	29	<5.0	--
11/11/02	331.21	322.20	9.01	0.00	0.00	3,800	<0.50	1.3	17	47	<5.0	--

Table 1  
 Groundwater Monitoring Data and Analytical Results  
 Chevron Service Station #9-2582  
 7240 Dublin Boulevard  
 Dublin, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPHT (ft.)	SPH					X (ppb)	MTBE (ppb)	1,2-DCA (ppb)
					REMOVED (gallons)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)			
EA-2												
10/17/88	332.59	--	--	--	--	<50	<0.5	<0.5	<0.5	1.2	--	--
10/24/88	332.59	322.89	9.70	--	--	--	--	--	--	--	--	--
11/02/88	332.59	322.56	10.03	--	--	--	--	--	--	--	--	--
12/20/88	332.59	322.61	9.98	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/28/89	332.59	323.79	8.80	--	--	<250	<2	<0.5	<0.5	<0.5	--	<0.5
08/02/89	332.59	323.15	9.44	--	--	<50	<0.1	<0.1	<0.1	<0.1	--	<0.1
11/06/89	332.59	323.06	9.53	--	--	<500	<3.0	<5.0	<5.0	<5.0	--	<5.0
01/25/90	332.59	323.32	9.27	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5
04/23/90	332.59	323.24	9.35	--	--	<50	0.6	0.8	<0.5	2.0	--	<0.5
08/01/90	332.59	322.88	9.71	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
10/24/90	332.59	322.51	10.08	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/31/91	332.59	322.38	10.21	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/31/91 (D)	332.59	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
08/21/91	332.59	322.79	9.80	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
10/07/91	332.59	322.61	9.98	--	--	--	--	--	--	--	--	--
01/28/92	332.59	322.78	9.81	--	--	<50	0.8	<0.5	<0.5	<0.5	--	--
06/05/92	332.59	322.73	9.86	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/30/92	332.59	321.99	10.60	--	--	66	1.0	3.2	1.3	7.4	--	--
12/30/92	332.59	323.48	9.11	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/29/93	332.59	324.86	7.73	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
06/25/93	332.59	323.37	9.22	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
09/16/93	332.59	322.59	10.00	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
12/20/93	332.59	323.21	9.38	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/29/94	332.59	323.29	9.30	--	--	<50	<0.5	0.6	<0.5	<0.5	--	--
06/22/94	332.59	323.10	9.49	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/26/94	332.59	322.87	9.72	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--

Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-2582

7240 Dublin Boulevard

Dublin, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPHT (ft.)	SPH		B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	1,2-DCA (ppb)
					REMOVED (gallons)	TPH-G (ppb)						
EA-2 (cont)												
10/04/94	332.59	323.01	9.58	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
11/30/94	332.59	323.89	8.70	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/02/95	330.21	321.67	8.54	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/07/95	330.21	321.79	8.42	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
09/26/95	330.21	320.87	9.34	--	--	540	6.8	<0.5	47	29	13	--
12/28/95	330.21	321.37	8.84	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
02/29/96	330.21	322.77	7.44	--	--	<50	<0.5	<0.5	<0.5	1.5	<2.5	--
06/27/96	330.21	321.38	8.83	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
09/12/96	330.41	321.01	9.40	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
03/31/97	330.41	321.30	9.11	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
12/23/98	330.41	321.50	8.91	--	--	<50	<2.5	<0.5	<0.5	<0.5	<2.5	--
03/25/99	330.41	322.31	8.10	--	--	<50	<0.5	<0.5	<0.5	<0.5	2.7	--
02/03/00	330.41	322.05	8.36	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5/<2.0 <sup>3</sup>	--
01/23/01	330.41	321.33	9.08	0.00	0.00	441 <sup>1</sup>	1.27	0.542	40.3	31.0	72.9	--
05/01/01	330.41	321.54	8.87	0.00	0.00	SAMPLED ANNUALLY		--	--	--	--	--
08/28/01	330.41	320.96	9.45	0.00	0.00	SAMPLED ANNUALLY		--	--	--	--	--
11/27/01	330.41	320.91	9.50	0.00	0.00	SAMPLED ANNUALLY		--	--	--	--	--
02/28/02	330.41	321.36	9.05	0.00	0.00	<50	<0.50	<0.50	<0.50	<1.5	74	--
05/22/02	330.41	321.37	9.04	0.00	0.00	SAMPLED ANNUALLY		--	--	--	--	--
08/20/02	330.41	321.41	9.00	0.00	0.00	SAMPLED ANNUALLY		--	--	--	--	--
11/11/02	330.41	321.38	9.03	0.00	0.00	SAMPLED ANNUALLY		--	--	--	--	--



Page 1  
**Groundwater Monitoring Data and Analytical Results**  
 Chevron Service Station #9-2582  
 7240 Dublin Boulevard  
 Dublin, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPHT (ft.)	SPH						MTBE (ppb)	1,2-DCA (ppb)
					REMOVED (gallons)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)		
EA-3												
10/17/88	333.64	--	--	--	--	<50	1.8	<0.5	<0.5	3.0	--	--
10/24/88	333.64	322.61	11.03	--	--	--	--	--	--	--	--	--
11/02/88	333.64	322.61	11.03	--	--	--	--	--	--	--	--	--
12/20/88	333.64	322.68	10.96	--	--	240	90	1.2	13	3.3	--	--
03/28/89	333.64	322.87	9.77	--	--	2,300	380	130	240	910	--	--
08/02/89	333.64	322.99	10.65	--	--	<50	<0.1	<0.1	<0.1	<0.1	--	<0.1
11/06/89	333.64	322.86	10.78	--	--	<500	<3.0	<5.0	<5.0	<5.0	--	<5.0
01/25/90	333.64	322.98	10.66	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5
04/23/90	333.64	322.96	10.68	--	--	<50	0.8	<0.5	0.9	<0.5	--	<0.5
08/01/90	333.64	322.61	11.03	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
10/24/90	333.64	322.29	11.35	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/31/91	333.64	322.12	11.52	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
08/21/91	333.64	--	--	--	--	--	--	--	--	--	--	--
10/07/91	333.64	322.49	11.15	--	--	180	40	20	4.7	8.4	--	--
10/07/91 (D)	333.64	--	--	--	--	200	43	17	4.1	6.7	--	--
01/28/92	333.64	322.12	11.08	--	--	640	69	85	13	46	--	--
06/05/92	333.64	322.66	10.98	--	--	250	63	8.3	3.0	9.5	--	--
09/30/92	333.64	322.26	11.38	--	--	330	120	33	6.3	22	--	--
12/30/92	333.64	323.16	10.48	--	--	58	7.6	1.3	2.5	5.4	--	--
03/29/93	333.64	324.34	9.30	--	--	120	11	4.5	6.2	13	--	--
06/25/93	333.64	323.18	10.46	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
09/16/93	333.64	322.74	10.90	--	--	85	3.9	8.8	4.5	22	--	--
12/20/93	333.64	322.98	10.66	--	--	190	12	12	13	50	--	--
03/29/94	333.64	323.14	10.50	--	--	<50	<0.5	1.2	<0.5	0.9	--	--
06/22/94	333.64	323.00	10.64	--	--	<50	<0.5	<0.5	<0.5	<0.5	<3.0	<1.0
09/26/94	333.64	322.92	10.72	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--

Table 1

## Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-2582

7240 Dublin Boulevard

Dublin, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPHT (ft.)	SPH						MTBE (ppb)	1,2-DCA (ppb)
					REMOVED (gallons)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)		
EA-3 (cont)												
10/04/94	333.64	322.96	10.68	--	--	<50	<0.5	<0.5	<0.5	0.7	--	--
11/30/94	333.64	323.98	9.66	--	--	170	6.1	3.0	6.5	28	--	--
03/02/95	331.30	321.38	9.92	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/07/95	331.30	321.58	9.72	--	--	<50	<0.5	<0.5	<0.5	<0.5	3.2	--
09/26/95	331.30	320.70	10.60	--	--	2,000	140	<5.0	<5.0	190	280	--
12/28/95	331.30	321.48	9.82	--	--	<50	<0.5	<0.5	<0.5	<0.5	26	--
02/29/96	331.30	323.02	8.28	--	--	<50	2.1	<0.5	2.5	6.0	31	--
06/27/96	331.30	321.39	9.91	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
09/12/96	331.50	320.91	10.59	--	--	13,000	<20	<20	<20	<20	48	--
03/31/97	331.50	INACCESSIBLE		--	--	--	--	--	--	--	--	--
04/15/97	331.50	321.25	10.25	--	--	<125	2.0	<1.2	<1.2	<1.2	680	--
12/23/98	331.50	INACCESSIBLE		--	--	--	--	--	--	--	--	--
03/25/99	331.50	INACCESSIBLE		--	--	--	--	--	--	--	--	--
02/03/00	331.50	INACCESSIBLE		--	--	--	--	--	--	--	--	--
01/23/01	331.50	321.19	10.31	0.00	0.00	862 <sup>1</sup>	3.97	1.15	18.9	48.6	289	--
05/01/01	331.50	321.35	10.15	0.00	0.00	SAMPLED SEMI-ANNUALLY			--	--	--	--
08/28/01	331.50	320.94	10.56	0.00	0.00	<50	<0.50	<0.50	<0.50	<0.50	37	--
11/27/01	331.50	320.85	10.65	0.00	0.00	SAMPLED SEMI-ANNUALLY			--	--	--	--
02/28/02	331.50	321.13	10.37	0.00	0.00	<50	1.3	<0.50	2.0	1.8	90	--
05/22/02	331.50	321.23	10.27	0.00	0.00	SAMPLED SEMI-ANNUALLY			--	--	--	--
08/20/02	331.50	321.20	10.30	0.00	0.00	<50	<0.50	<0.50	<0.50	<1.5	40	--
11/11/02	331.50	322.45	9.05	0.00	0.00	SAMPLED SEMI-ANNUALLY			--	--	--	--

File 1  
**Groundwater Monitoring Data and Analytical Results**  
 Chevron Service Station #9-2582  
 7240 Dublin Boulevard  
 Dublin, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPHT (ft.)	SPH		B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	1,2-DCA (ppb)
					REMOVED (gallons)	TPH-G (ppb)						
MW-1												
10/04/94	333.56	320.76	12.80	--	--	2,100	150	170	61	320	--	--
11/30/94	333.56	321.18	12.38	--	--	1,500	210	17	73	130	--	--
03/02/95	333.56	320.68	12.88	--	--	2,600	510	<10	160	<10	--	--
06/07/95	333.56	320.98	12.58	--	--	710	160	<2.0	45	<2.0	<10	--
09/26/95	333.56	320.41	13.15	--	--	1,100	140	1.4	92	1.8	<5.0	--
12/28/95	333.56	320.47	13.09	--	--	750	96	2.5	61	7.4	37	--
02/29/96	333.56	321.39	12.17	--	--	250	17	<0.5	18	0.81	9.0	--
06/27/96	333.56	320.61	12.95	--	--	710	72	<2.0	92	2.2	<10	--
09/12/96	333.66	320.55	13.11	--	--	300	53	<0.5	32	0.65	21	--
03/31/97	333.66	320.67	12.99	--	--	<200	4.1	<2.0	4.8	<2.0	640	--
12/23/98	333.66	319.79	13.87	--	--	<50	<50	<0.5	<0.5	<0.5	3200	--
03/25/99	333.66	321.65	12.01	--	--	<50	<0.5	<0.5	<0.5	<0.5	5,200/5,200 <sup>1</sup>	--
02/03/00	333.66	321.75	11.91	--	--	<500	<5.0	<5.0	<5.0	<5.0	3,180/3,350 <sup>1</sup>	--
01/23/01	333.66	321.09	12.57	0.00	0.00	<50.0	<0.500	<0.500	<0.500	<0.500	4,420	--
05/01/01	333.66	321.06	12.60	0.00	0.00	SAMPLED SEMI-ANNUALLY			--	--	--	--
08/28/01	333.66	320.92	12.74	0.00	0.00	<50	<0.50	<0.50	<0.50	<0.50	4,800	--
11/27/01	333.66	320.96	12.70	0.00	0.00	SAMPLED SEMI-ANNUALLY			--	--	--	--
02/28/02	333.66	320.96	12.70	0.00	0.00	<50	<0.50	<0.50	<0.50	<1.5	1,400	--
05/22/02	333.66	321.28	12.38	0.00	0.00	SAMPLED SEMI-ANNUALLY			--	--	--	--
08/20/02	333.66	321.09	12.57	0.00	0.00	<50	<0.50	<0.50	<0.50	<1.5	1,400	--
11/11/02	333.66	322.35	11.31	0.00	0.00	SAMPLED SEMI-ANNUALLY			--	--	--	--

T 1  
**Groundwater Monitoring Data and Analytical Results**  
 Chevron Service Station #9-2582  
 7240 Dublin Boulevard  
 Dublin, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPHT (ft.)	SPH		B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	1,2-DCA (ppb)
					REMOVED (gallons)	TPH-G (ppb)						
MW-2												
10/04/94	329.18	320.62	8.56	--	--	2,300	160	280	96	480	--	--
11/30/94	329.18	320.85	8.33	--	--	1,600	170	16	110	120	--	--
03/02/95	329.18	320.83	8.35	--	--	1,200	220	5.6	140	36	--	--
06/07/95	329.18	320.56	8.62	--	--	160	25	<0.5	16	<0.5	240	--
09/26/95	329.18	320.47	8.71	--	--	150	15	<0.5	7.2	<0.5	120	--
12/28/95	329.18	320.40	8.78	--	--	400	34	1.3	26	5.1	170	--
02/29/96	329.18	321.36	7.82	--	--	120	29	<0.5	<0.5	<0.5	790	--
06/27/96	329.18	320.46	8.72	--	--	150	13	<0.5	7.0	<0.5	850	--
09/12/96	329.29	320.48	8.81	--	--	<1,000	18	<10	<10	<10	3,100	--
03/31/97	329.29	320.64	8.65	--	--	<500	<5.0	<5.0	<5.0	<5.0	1,400	--
12/23/98	329.29	320.97	8.32	--	--	<50	<0.5	<0.5	<0.5	<1.5	900	--
03/25/99	329.29	321.40	7.89	--	--	<50	2.6	<0.5	<0.5	<0.5	1,100/670 <sup>3</sup>	--
02/03/00	329.29	321.76	7.53	--	--	<125	<1.25	<1.25	<1.25	<1.25	1,020/1,100 <sup>3</sup>	--
01/23/01	329.29	321.11	8.18	0.00	0.00	<50.0	<0.500	<0.500	<0.500	<0.500	642	--
05/01/01	329.29	320.86	8.43	0.00	0.00	70.8	<0.500	<5.00	<5.00	<5.00	342	--
08/28/01	329.29	320.90	8.39	0.00	0.00	<50	<0.50	<0.50	<0.50	<0.50	530	--
11/27/01	329.29	320.83	8.46	0.00	0.00	210	<0.50	<0.50	<0.50	<1.5	260	--
02/28/02	329.29	320.81	8.48	0.00	0.00	<50	<0.50	<0.50	<0.50	<1.5	180	--
05/22/02	329.29	321.15	8.14	0.00	0.00	<50	<0.50	<0.50	<0.50	<1.5	180	--
08/20/02	329.29	321.05	8.24	0.00	0.00	<50	<0.50	<0.50	<0.50	<1.5	160	--
11/11/02	329.29	321.23	8.06	0.00	0.00	<50	<0.50	<0.50	<0.50	<1.5	130	--

Table 1  
 Groundwater Monitoring Data and Analytical Results  
 Chevron Service Station #9-2582  
 7240 Dublin Boulevard  
 Dublin, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPHT (ft.)	SPH		TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	1,2-DCA (ppb)
					REMOVED (gallons)								
MW-3													
10/04/94	332.73	320.67	12.06	--	--	6,300	610	750	68	670	--	--	--
11/30/94	332.73	321.35	11.38	--	--	17,000	3,600	490	430	610	--	--	--
03/02/95	332.73	320.76	11.97	--	--	8,500	2,200	<50	240	<50	64,000	--	--
06/07/95	332.73	321.19	11.54	--	--	3,000	710	18	220	44	3,100	--	--
09/26/95	332.73	320.37	12.36	--	--	<10,000	230	<100	130	<100	64,000	--	--
12/28/95	332.73	320.66	12.07	--	--	<12,500	760	<125	<125	<125	100,000	--	--
02/29/96	332.73	321.72	11.01	--	--	1,600	380	<10	84	17	33,000	--	--
06/27/96	332.73	320.80	11.93	--	--	1,400	<2.5	4.3	130	4.0	96,000	--	--
09/12/96	332.86	320.60	12.26	--	--	<10,000	560	<100	110	<100	100,000	--	--
03/31/97	332.86	320.82	12.04	--	--	<25,000	1,200	370	<250	380	130,000	--	--
12/23/98	332.86	320.02	12.92	0.10	0.079	--	--	--	--	--	--	--	--
03/25/99	332.86	320.34	12.56	0.05	0.05	--	--	--	--	--	--	--	--
02/03/00	332.86	321.74	11.12	--	--	92,100	4,780	11,400	2,270	15,800	137,000/162,000 <sup>3</sup>	--	--
01/23/01 <sup>4</sup>	332.86	321.08	11.78	0.00	0.00	60,600 <sup>2</sup>	4,810	7,500	1,870	11,000	148,000	--	--
05/01/01 <sup>4</sup>	332.86	322.20	10.66	0.00	0.00	56,000	3,760	5,640	<2,500	8,740	136,000	--	--
08/28/01 <sup>4</sup>	332.86	321.07	11.79	0.00	0.00	32,000	3,800	2,600	1,200	7,500	160,000	--	--
11/27/01 <sup>5</sup>	332.86	320.88	11.98	0.00	0.00	110,000	1,300	2,400	1,500	9,400	90,000	--	--
02/28/02	332.86	321.05	11.81	0.00	0.00	24,000	1,900	820	520	3,100	90,000	--	--
05/22/02	332.86	321.26	11.60	0.00	0.00	110,000	4,000	3,200	2,800	18,000	140,000	--	--
08/20/02	332.86	321.05	11.81	0.00	0.00	37,000	2,600	1,500	890	4,800	110,000	--	--
11/11/02	332.86	321.23	11.63	0.00	0.00	81,000	2,900	2,100	2,100	14,000	110,000	--	--

**Groundwater Monitoring Data and Analytical Results**

Chevron Service Station #9-2582

7240 Dublin Boulevard

Dublin, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPH							MTBE (ppb)	1,2-DCA (ppb)
				SPHT (ft.)	REMOVED (gallons)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)		
<b>MW-4</b>												
03/01/96	332.64	322.74	9.90	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
04/02/96	332.64	322.87	9.77	--	--	--	--	--	--	--	--	--
06/27/96	332.64	322.64	10.00	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
09/12/96	332.63	320.96	11.67	--	--	<50	<0.5	<0.5	<0.5	<0.5	3.5	--
03/31/97	332.63	322.04	10.59	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
12/23/98	332.63	322.26	10.37	--	--	<50	<0.5	<0.5	<0.5	<1.5	<2.5	--
03/25/99	332.63	322.72	9.91	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
02/03/00	332.63	322.31	10.32	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5/<2.0 <sup>3</sup>	--
01/23/01	332.63	322.09	10.54	0.00	0.00	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	--
05/01/01	332.63	322.31	10.32	0.00	0.00	SAMPLED ANNUALLY			--	--	--	--
08/28/01	332.63	322.06	10.57	0.00	0.00	SAMPLED ANNUALLY			--	--	--	--
11/27/01	332.63	322.34	10.29	0.00	0.00	SAMPLED ANNUALLY			--	--	--	--
02/28/02	332.63	322.33	10.30	0.00	0.00	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
05/22/02	332.63	322.51	10.12	0.00	0.00	SAMPLED ANNUALLY			--	--	--	--
08/20/02	332.63	322.20	10.43	0.00	0.00	SAMPLED ANNUALLY			--	--	--	--
11/11/02	332.63	322.74	9.89	0.00	0.00	SAMPLED ANNUALLY			--	--	--	--
<b>MW-5</b>												
03/01/96	333.20	322.58	10.62	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
04/02/96	333.20	323.06	10.14	--	--	--	--	--	--	--	--	--
06/27/96	333.20	322.98	10.22	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
09/12/96	333.04	322.19	10.85	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
03/31/97	333.04	322.60	10.44	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
12/23/98	333.04	322.83	10.21	--	--	<50	<0.5	<0.5	<0.5	<1.5	<2.5	--
03/25/99	333.04	323.12	9.92	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--

Table 1  
**Groundwater Monitoring Data and Analytical Results**  
 Chevron Service Station #9-2582  
 7240 Dublin Boulevard  
 Dublin, California

WELL ID/ DATE	TOC ( <i>ft.</i> )	GWE ( <i>mst</i> )	DTW ( <i>ft.</i> )	SPHT ( <i>ft.</i> )	SPH						MTBE ( <i>ppb</i> )	1,2-DCA ( <i>ppb</i> )
					REMOVED ( <i>gallons</i> )	TPH-G ( <i>ppb</i> )	B ( <i>ppb</i> )	T ( <i>ppb</i> )	E ( <i>ppb</i> )	X ( <i>ppb</i> )		
<b>MW-5 (cont)</b>												
02/03/00	333.04	323.41	9.63	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5/<2.0 <sup>3</sup>	--
01/23/01	333.04	322.69	10.35	0.00	0.00	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	--
05/01/01	333.04	322.70	10.34	0.00	0.00	SAMPLED ANNUALLY						--
08/28/01	333.04	322.60	10.44	0.00	0.00	SAMPLED ANNUALLY						--
11/27/01	333.04	322.87	10.17	0.00	0.00	SAMPLED ANNUALLY						--
02/28/02	333.04	322.84	10.20	0.00	0.00	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
05/22/02	333.04	322.66	10.38	0.00	0.00	SAMPLED ANNUALLY						--
08/20/02	333.04	322.68	10.36	0.00	0.00	SAMPLED ANNUALLY						--
11/11/02	333.04	323.01	10.03	0.00	0.00	SAMPLED ANNUALLY						--
<b>PVC</b>												
08/02/89	--	--	11.52	--	--	100,000	8,700	14,000	1,700	17,000	--	50
08/02/89 (D)	--	--	--	--	--	110,000	9,200	14,000	1,800	13,000	--	50
11/06/89	--	--	--	--	--	--	--	--	--	--	--	--
<b>EQUIPMENT BLANK</b>												
03/28/89	--	--	--	--	--	<250	<0.5	<0.5	<0.5	<0.5	--	--
<b>TRIP BLANK</b>												
07/28/89	--	--	--	--	--	<50	<0.1	<0.1	<0.1	<0.1	--	<0.1
11/06/89	--	--	--	--	--	<500	<3.0	<0.5	<0.5	<0.5	--	<0.5
01/25/90	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
08/01/90	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**

Chevron Service Station #9-2582

7240 Dublin Boulevard

Dublin, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPHT (ft.)	SPH REMOVED (gallons)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	1,2-DCA (ppb)
<b>TRIP BLANK (cont)</b>												
10/24/90	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/31/91	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
08/21/91	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
10/07/91	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/28/92	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/05/92	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/30/92	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/30/92	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/29/93	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
06/25/93	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
09/16/93	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
12/20/93	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/29/94	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/22/94	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/26/94	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
10/04/94	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
11/30/94	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/02/95	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
06/07/95	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
09/26/95	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
12/28/95	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
02/29/96	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
03/01/96	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
06/27/96	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
09/12/96	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
03/31/97	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--



Table 1  
**Groundwater Monitoring Data and Analytical Results**  
 Chevron Service Station #9-2582  
 7240 Dublin Boulevard  
 Dublin, California

WELL ID/ DATE	TOC (ft.)	GWE (msl)	DTW (ft.)	SPHT (ft.)	SPH							1,2-DCA (ppb)
					REMOVED (gallons)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	
<b>TRIP BLANK (cont)</b>												
12/23/98	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
03/25/99	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
02/03/00	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
01/23/01	--	--	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	--
05/01/01	--	--	--	--	--	<50.0	<0.500	<5.00	<5.00	<5.00	<0.500	--
08/28/01	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
<b>QA</b>												
11/27/01	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
02/28/02	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
05/22/02	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
08/20/02	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--
11/11/02	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5	--

T 1  
**Groundwater Monitoring Data and Analytical Results**

Chevron Service Station #9-2582

7240 Dublin Boulevard

Dublin, California

**EXPLANATIONS:**

Groundwater monitoring data and laboratory analytical results prior to January 23, 2001, were compiled from reports prepared by Blaine Tech Services, Inc.

TOC = Top of Casing

(ft.) = Feet

GWE = Groundwater Elevation

(msl) = Mean sea level

DTW = Depth to Water

SPHT = Separate Phase Hydrocarbon Thickness

SPH = Separate Phase Hydrocarbons

TPH-G = Total Petroleum Hydrocarbons as Gasoline

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

MTBE = Methyl tertiary butyl ether

1,2-DCA = 1,2-Dichloroethane

(ppb) = Parts per billion

-- = Not Measured/Not Analyzed

(D) = Duplicate

QA = Quality Assurance/Trip Blank

\* TOC elevations are relative to msl.

<sup>1</sup> Laboratory report indicates weathered gasoline C6-C12.

<sup>2</sup> Laboratory report indicates gasoline C6-C12.

<sup>3</sup> MTBE by EPA Method 8260.

<sup>4</sup> Absorbent sock in well.

<sup>5</sup> Absorbent sock removed from well.

Table 2  
**Groundwater Analytical Results - Oxygenate Compounds**  
 Chevron Service Station #9-2582  
 7240 Dublin Boulevard  
 Dublin, California

WELL ID/ DATE	METHANOL (ppb)	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)
EA-1 02/03/00	1,600	<5,000	<1,000	365	<10	<10	<10
EA-2 02/03/00	<1,000	<1,000	<200	<2.0	<2.0	<2.0	<2.0
MW-1 03/25/99	-	<25,000	<5,000	5,200	<100	<100	<100
02/03/00	<1,000	<33,300	<6,670	3,350	<66.7	<66.7	<66.7
MW-2 03/25/99	-	<500	<100	670	<2.0	<2.0	7.8
02/03/00	<1,000	<10,000	<2,000	1,100	<20	<20	<20
MW-3 02/03/00	<20,000	<1,000,000	<200,000	162,000	<2,000	<2,000	<2,000
MW-4 02/03/00	<1,000	<1,000	<200	<2.0	<2.0	<2.0	<2.0

## Groundwater Analytical Results - Oxygenate Compounds

Chevron Service Station #9-2582

7240 Dublin Boulevard

Dublin, California

WELL ID/ DATE	METHANOL (ppb)	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)
MW-5 02/03/00	<1,000	<1,000	<200	<2.0	<2.0	<2.0	<2.0
TRIP BLANK 03/25/99	--	<500	<100	<2.0	<2.0	<2.0	<2.0

**EXPLANATIONS:**

Groundwater laboratory analytical results were compiled from reports prepared by Blaine Tech Services, Inc.

TBA = Tertiary butyl alcohol

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary amyl methyl ether

(ppb) = Parts per billion

-- = Not Analyzed