Brunsing Associates, Inc.

August 16, 2005

Project No. 421

Ms. Joan Fleck
Regional Water Quality Control Board
North Coast Region
5550 Skylane Boulevard, Suite A
Santa Rosa, California 95403

Groundwater Monitoring Results - April 2005
Former Martinelli Chevron Station
4180 Montgomery Drive
Santa Rosa, California

Dear Ms. Fleck:

This report presents the results of groundwater monitoring conducted by Brunsing Associates, Inc. (BAI) at 4180 Montgomery Drive, Santa Rosa, California (Plate 1). The groundwater monitoring was performed on April 20, 2005 and was performed in response to a request by the Regional Water Quality Control Board (RWQCB).

Site History

The site has been used as a gasoline service station since at least 1956. In approximately 1956, a 550-gallon waste oil underground storage tank (UST) was installed at the site. In December 1992, a crack formed on the top of the UST when the tank fittings were being tightened during installation of a monitoring system. The tank was drained within two hours and use of the tank was discontinued. It is our understanding that, prior to the installation of the monitoring system, tank testing indicated that the tank was tight from 1956 to 1992.

In August 1993, the UST was removed by Martinelli Excavating. BAI staff collected one soil sample from the bottom of the excavation, at 8 feet below ground surface (bgs). The soil sample reportedly contained total petroleum hydrocarbons (TPH) as gasoline and TPH as motor oil at 40 and 20,000 milligrams per kilogram (mg/kg), respectively. The sample also reportedly contained benzene at 8.0 micrograms per kilogram (µg/kg);

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toluene at 57 μg/kg; xylenes at 190 μg/kg; tetrachloroethene (PCE) at 4,500 μg/kg; and 1,1,1-trichloroethane at 290 μg/kg, in addition to other solvents.

In September 1993, the tank pit was over-excavated, down to 10 feet bgs (Plate 2). No additional soil was removed from the sidewalls except for soil that caved in during excavation. An additional soil sample was collected from the bottom of the excavation. The sample reportedly contained TPH as motor oil at 920 mg/kg and PCE at 45 μg/kg. No soil samples were collected from the excavation sidewalls.

A field investigation was performed by BAI on June 22, 1995 which included collecting soil samples from four borings and collecting a groundwater sample from the boring located in the center of the excavation. TPH as gasoline, TPH as diesel, TPH as motor oil, halogenated volatile organics by EPA Test Method 8010, and benzene, toluene, ethylbenzene, and xylenes (BTEX) were not reported in the soil samples collected from borings B-1, B-3, and B-4 and the soil sample collected from boring B-2 at 20.5 feet bgs. The soil sample collected from boring B-2 at a depth of 15.5 feet bgs contained TPH as motor oil and PCE concentrations at 5,000 mg/kg and 290 μg/kg, respectively.

The groundwater sample collected from boring B-2 contained TPH as motor oil at 3.8 milligrams per liter (mg/l). PCE and 1,1,1-trichloroethane concentrations of 290 micrograms per liter (μg/l) and 1 μg/l, respectively, were also reported in the groundwater sample collected from boring B-2.

On August 29, 1997, BAI supervised the installation of monitoring wells MW-1, MW-2, and MW-3 (Plate 2). Soil samples collected for chemical analyses from depths of 15.5 feet bgs from each boring did not contain any of the analytes. The results of subsequent groundwater monitoring including collection of groundwater samples and water-level measurements are summarized in Tables 1 and 2. Well construction details are summarized in Table 3.

In December 1998, three gasoline USTs located east of the former waste oil tank were removed from the site. The tank removal soil sampling indicated that the tanks did not leak and an investigation of the three USTs was not necessary.

Additional over-excavation activities in the area of the former waste oil tank were initiated and completed on September 10, 2001 by Martinelli Excavating. The final dimensions of the excavation were approximately 14 feet by 14 feet by 19 feet deep. Groundwater was not encountered during excavation. During the over-excavation

activities, four sidewall samples and one bottom soil sample were collected for analyses. The over-excavation activities generated a total of approximately 57.6 tons of contaminated soil, which was subsequently hauled to Forward Landfill in Manteca, California for disposal. The bottom floor soil sample collected from a depth of approximately 19 feet bgs contained TPH as motor oil at a concentration of 28 mg/kg. The north and east sidewall samples collected from depths of approximately 12 feet bgs contained TPH as motor oil at 110 and 250 mg/kg, respectively. TPH as gasoline, petroleum oxygenates and lead scavengers, and volatile organic compounds were not detected in any of the samples.

On September 20 and 21, 2001, four soil borings were drilled and one groundwater monitoring well (MW-4) was installed to assess the extent of contamination. No groundwater was encountered during drilling and the three soil samples collected from the borings did not contain any of the parameters. A report prepared by BAI dated October 18, 2001 on the results of the drilling and sampling activities, including additional groundwater monitoring results, was submitted to the RWQCB.

Water Level Measurements

Depths to groundwater were measured in wells MW-1, MW-2, MW-3, and MW-4 on April 20, 2005 by BAI personnel. The cumulative depths to groundwater and groundwater elevations are included in Table 1. Based on groundwater elevation data from wells MW-2, MW-3, and MW-4, the groundwater flow direction was to the east-northeast with a gradient of 0.003 foot per foot. The groundwater monitoring field report and the monitoring well sampling protocol are included in Appendix A.

Groundwater Monitoring Results

Groundwater samples were collected on April 20, 2005 from monitoring wells MW-1, MW-2, MW-3, and MW-4. The groundwater samples were submitted to BACE Analytical and Field Services (BAFS) laboratory for analyses. The groundwater samples were analyzed for TPH as gasoline and volatile organic compounds, including petroleum oxygenates and lead scavengers, by EPA Test Method 8260. The analytical laboratory report is presented in Appendix B.

PCE was detected in the groundwater samples collected from wells MW-1, MW-2, MW-3, and MW-4 at concentrations of 73.4 μg/l, 48.5 μg/l, 92.5 μg/l, and 51.1μg/l, respectively. The PCE concentrations reported in the April 2005 samples decreased compared to the PCE concentrations reported in the January 2005 samples.

Discussion

The former UST was excavated and removed from the site in 1993. A soil sample collected from the bottom of the excavation at ten feet bgs reportedly contained 4,500 μg/kg of PCE. In 1995, a soil sample collected at 15.5 feet bgs from soil boring B-2, which was drilled through the former UST location, contained 290 μg/kg of PCE. The former UST location was over-excavated in 2001. Analysis of soil samples collected from the bottom of the excavation at 19 feet bgs and from the sidewalls at 12 feet bgs reported non-detectable concentrations of PCE. Based on these data, it appears that excavation was successful in removing PCE contaminated soil from the vicinity of the former UST location.

PCE continues to be detected in groundwater samples. Appendix C contains plots of PCE concentrations in groundwater versus time. In wells MW-1, MW-2, and MW-3, the PCE concentrations in groundwater appear to have remained stable or increase slightly between the start of monitoring in 1997 and when the final excavation work was performed in 2001. Following excavation in 2001, the concentrations of PCE in groundwater in all wells have increased significantly. During that interval, the depth to groundwater has remained below the level of the final excavation, except during two monitoring events when groundwater was still below the level of the deepest soil sample that contained PCE.

Based on this discussion, it appears that the source of PCE in groundwater at the site is at least partially from a source other than the former UST. BAI is aware of two dry cleaners in the area that could be a source for the PCE found in groundwater. BAI recommends that the drilling proposed for the site, be postponed until the RWQCB has evaluated other potential PCE sources near the site.

If you have any questions regarding this report, please contact David Conley or Diana Dickerson at (707) 838-3027.

Sincerely,

PROFESSIONAL GEOLOGIST
DAVID E. CONLEY
No. 4795
STATE OF CALIFORNIA

David E. Conley, P.G.
Senior Geologist

Diana M. Dickerson, P.G., R.E.A.
Principal Geologist

cc: Mr. Dean Martinelli
Ms. Betty Martinelli

Attachments:

Table 1. Cumulative Groundwater Elevation Data
Table 2. Cumulative Groundwater Chemistry Data
Table 3. Well Construction Details
Plate 1. Site Vicinity Map
Plate 2. Site Map
Plate 3. Groundwater Elevation Map, April 20, 2005
Appendix A. Groundwater Monitoring Protocol and Field Reports
Appendix B. Analytical Laboratory Report
Appendix C. PCE Concentration vs. Time Graphs

TABLES

Table 1. Cumulative Groundwater Elevation Data

4180 Montgomery Drive
Santa Rosa, California

Monitoring Well Number	Measurement Date	Top of Casing Elevation (feet above MSL)	Depth to Water (in feet)	Groundwater Elevation (feet above MSL)	Groundwater Flow Direction and Gradient (foot/foot)
MW-1	13-Sep-01	234.13	27.20	206.93	
MW-2	13-Sep-01	233.67	27.57	206.10	- -
MW-3	13-Sep-01	234.19	Dry	- -	
MW-1	22-Jan-02	234.13	17.35	216.78	
MW-2	22-Jan-02	233.67	17.07	216.60	north-northwest
MW-3	22-Jan-02	234.19	17.36	216.83	0.005
MW-4	22-Jan-02	233.92	17.55	216.37	
MW-1	13-Dec-02	234.13	26.43	207.70	
MW-2	13-Dec-02	233.67	26.21	207.46	west northwest
MW-3	13-Dec-02	234.19	Dry		0.007
MW-4	13-Dec-02	233.92	26.6	207.32	
MW-1	21-Mar-03	234.13	21.18	212.95	
MW-2	21-Mar-03	233.67	20.71	212.96	- -
MW-3	21-Mar-03	234.19	21.22	212.97	
MW-4	21-Mar-03	233.92	20.97	212.95	
MW-1	12-Jun-03	234.13	23.45	210.68	
MW-2	12-Jun-03	233.67	22.98	210.69	- -
MW-3	12-Jun-03	234.19	23.49	210.70	
MW-4	12-Jun-03	233.92	23.23	210.69	
MW-1	9-Sep-03	234.13	27.00	207.13*	
MW-2	9-Sep-03	233.67	26.84	206.83	- -
MW-3	9-Sep-03	234.19	Dry	Dry	
MW-4	9-Sep-03	233.92	26.60	207.32*	
MW-1	9-Mar-04	234.13	17.53	216.60	
MW-2	9-Mar-04	233.67	17.13	216.54	- -
MW-3	9-Mar-04	234.19	17.54	216.65	
MW-4	9-Mar-04	233.92	17.46	216.46	
MW-1	27-Jan-05	234.13	19.71	214.42	
MW-2	27-Jan-05	233.67	19.45	214.22	northwest
MW-3	27-Jan-05	234.19	19.80	214.39	0.005
MW-4	27-Jan-05	233.92	20.00	213.92	
MW-1	20-Apr-05	234.13	20.13	214.00	
MW-2	20-Apr-05	233.67	19.77	213.90	east-northeast
MW-3	20-Apr-05	234.19	20.21	213.98	0.003
MW-4	20-Apr-05	233.92	20.21	213.71	

MSL = Mean MSL = Mean Sea Level.
- - = Groundwater elevation, flow or gradient not calculated due to insufficient data, or elevation differences near standard range of measuring error (0.03 feet).
* water level near bottom of well may not be representative of formation water.

Table 1. Cumulative Groundwater Elevation Data
4180 Montgomery Drive
Santa Rosa, California

Monitoring Well Number	Measurement Date	Top of Casing Elevation (feet above MSL)	Depth to Water (in feet)	Groundwater Elevation (feet above MSL)	Groundwater Flow Direction and Gradient (foot/foot)
MW-1	19-Dec-97	234.13	22.36	211.77	
MW-2	19-Dec-97	233.67	21.79	211.88	west
MW-3	19-Dec-97	234.19	22.31	211.88	0.005
MW-1	30-Jan-98	234.13	16.46	217.67	
MW-2	30-Jan-98	233.67	15.95	217.72	west
MW-3	30-Jan-98	234.19	16.48	217.71	0.002
MW-1	25-Feb-98	234.13	15.47	218.66	
MW-2	25-Feb-98	233.67	16.93	216.74	east
MW-3	25-Feb-98	234.19	17.36	216.83	0.087
MW-1	30-Mar-98	234.13	17.73	216.40	
MW-2	30-Mar-98	233.67	17.44	216.23	northeast
MW-3	30-Mar-98	234.19	17.77	216.42	0.005
MW-1	17-Apr-98	234.13	18.99	215.14	
MW-2	17-Apr-98	233.67	18.60	215.07	north-northeast
MW-3	17-Apr-98	234.19	19.03	215.16	0.002
MW-1	6-May-98	234.13	20.35	213.78	
MW-2	6-May-98	233.67	19.92	213.75	north-northeast
MW-3	6-May-98	234.19	20.40	213.79	0.0008
MW-1	18-Jun-98	234.13	21.73	212.40	
MW-2	18-Jun-98	233.67	21.27	212.40	northwest
MW-3	18-Jun-98	234.19	21.78	212.41	0.0004
MW-1	9-Jul-98	234.13	22.93	211.20	
MW-2	9-Jul-98	233.67	22.47	211.20	northwest
MW-3	9-Jul-98	234.19	22.96	211.23	0.001
MW-1	7-Aug-98	234.13	24.26	209.87	
MW-2	7-Aug-98	233.67	23.79	209.88	northwest
MW-3	7-Aug-98	234.19	24.16	210.03	0.006
MW-1	8-Sep-98	234.13	25.43	208.70	
MW-2	8-Sep-98	233.67	24.95	208.72	- -
MW-3	8-Sep-98	234.19	Dry	- -	
MW-1	6-Oct-98	234.13	26.17	207.96	
MW-2	6-Oct-98	233.67	25.68	207.99	- -
MW-3	6-Oct-98	234.19	Dry	- -	
MW-1	16-Mar-01	234.13	20.12	214.01	
MW-2	16-Mar-01	233.67	19.81	213.86	northeast
MW-3	16-Mar-01	234.19	20.21	213.98	0.004

Table 2. Cumulative Groundwater Chemistry Data

4180 Montgomery Drive
Santa Rosa, California

Monitoring Well Number	Sampling Date	TPH as Gasoline (mg/l)	TPH as Diesel (mg/l)	TPH as Motor Oil (mg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (3) (µg/l)	Tetrachloroethene (3) (µg/l)
MW-1	19-Dec-97	<0.05	<0.05	<0.20	<0.50	<0.50	<0.50	<0.50	<5.0 (1)	**50 (2)**
MW-1	30-Mar-98	<0.05	<0.05	<0.20	<0.50	<0.50	<0.50	<0.50	<2.0	**26 (2)**
MW-1	18-Jun-98	<0.05	<0.05	<0.20	<0.50	<0.50	<0.50	<0.50	<5.0 (1)	**50 (2)**
MW-1	8-Sep-98	NA	NA	NA	NA	NA	NA	NA	NA	**39 (2)**
MW-1	16-Mar-01	<0.05	<0.05	NA	<0.50	<0.50	<0.50	<0.50	<1.0	**75**
MW-1	13-Sep-01	<0.05	NA	NA	<0.50	<0.50	<0.50	<0.50	<5.00	**9.32**
MW-1	22-Jan-02	<0.05	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	**18.8**
MW-1	13-Dec-02	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	**36.3**
MW-1	21-Mar-03	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	**74.1**
MW-1	12-Jun-03	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	**60.6**
MW-1	9-Mar-04	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	NA
MW-1	27-Jan-05	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	**121**
MW-1	20-Apr-05	<0.050	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	**73.4**
MW-2	19-Dec-97	<0.05	<0.05	<0.20	<0.50	<0.50	<0.50	<0.50	<5.0 (1)	**50 (2)**
MW-2	30-Mar-98	<0.05	<0.05	<0.20	<0.50	<0.50	<0.50	<0.50	<2.0	**32 (2)**
MW-2	18-Jun-98	<0.05	<0.05	<0.20	<0.50	<0.50	<0.50	<0.50	<5.0 (1)	**18 (2)**
MW-2	8-Sep-98	NA	NA	NA	NA	NA	NA	NA	NA	**59 (2)**
MW-2	16-Mar-01	<0.05	<0.05	NA	<0.50	<0.50	<0.50	<0.50	<0.50	**56**
MW-2	13-Sep-01	<0.05	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	**40.2**
MW-2	22-Jan-02	<0.05	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	**47.6**
MW-2	13-Dec-02	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	**58.8**
MW-2	21-Mar-03	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	**64.8**
MW-2	12-Jun-03	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	**45.1**
MW-2	9-Sep-03	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	**45.7**
MW-2	9-Mar-03	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	NA
MW-2	27-Jan-05	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	**73.0**
MW-2	20-Apr-05	<0.050	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	**48.5**

Table 2. Cumulative Groundwater Chemistry Data

4180 Montgomery Drive
Santa Rosa, California

Monitoring Well Number	Sampling Date	TPH as Gasoline (mg/l)	TPH as Diesel (mg/l)	TPH as Motor Oil (mg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (3) (µg/l)	Tetrachloroethene (3) (µg/l)
MW-3	19-Dec-97	<0.05	<0.05	<0.20	<0.50	<0.50	<0.50	<0.50	<5.0 (1)	**6.3 (2)**
MW-3	30-Mar-98	<0.05	<0.05	<0.20	<0.50	<0.50	<0.50	<0.50	<2.0	**39 (2)**
MW-3	18-Jun-98	<0.05	<0.05	<0.20	<0.50	<0.50	<0.50	<0.50	<5.0 (1)	**18 (2)**
MW-3	8-Sep-98	NA	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	16-Mar-01	<0.05	<0.05	NA	<0.50	<0.50	<0.50	<0.50	<2.5	**91**
MW-3	13-Sep-01	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	22-Jan-02	<0.05	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	**18.5**
MW-3	21-Mar-03	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	**20.2**
MW-3	12-Jun-03	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	**15.5**
MW-3	9-Mar-04	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	NA
MW-3	27-Jan-05	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	**212**
MW-3	20-Apr-05	0.050	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	**92.5**
MW-4	22-Jan-02	<0.05	<0.05	<0.25	<0.50	<0.50	<0.50	<0.50	<1.00	**33.5**
MW-4	21-Mar-03	<0.05	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	**41.4**
MW-4	12-Jun-03	<0.05	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	**72.7**
MW-4	9-Mar-04	<0.05	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	NA
MW-4	27-Jan-05	<0.05	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	**59.2**
MW-4	20-Apr-05	<0.050	NA	NA	<0.50	<0.50	<0.50	<0.50	<1.00	**51.1**

mg/l = milligrams per liter.
µg/l = micrograms per liter.
< = indicates not detected at given laboratory reporting limit.
NA = Not analyzed.
NS = Not sampled.
(1) = Analyses performed using EPA Test Method 8020.
(2) = Analyses performed using EPA Test Method 8010; other volatile organic compounds were not detected.
(3) = Analyses performed using EPA Test Method 8260 unless specified; other petroleum oxygenates and volatile organic compounds were not detected.
Dichlorodiflouromethane reported at 1.3 µg/l by EPA Test Method 8260 in the sample collected from well MW-2 on March 16, 2001.

Table 3. Well Construction Details
4180 Montgomery Drive
Santa Rosa, California

Well Number	Date Installed	Installed By	Borehole Diameter (inches)	Total Borehole Depth (feet)	Screened Interval (feet)	Total Well Depth (feet)	Casing Diameter (inches)	Screen Slot Size (inches)	PVC Casing Elevation (MSL)
MW-1	8/29/1997	BAI	8	28	8 to 28	28	2	0.020	234.13
MW-2	8/29/1997	BAI	8	29	8 to 29	29	2	0.020	233.67
MW-3	8/29/1997	BAI	8	26	8 to 26	26	2	0.020	234.19
MW-4	9/20/2001	BAI	7	27	17 to 27	27	2	0.020	233.92

MSL = Mean Sea Level

PLATES

APPROXIMATE SCALE
(Feet)

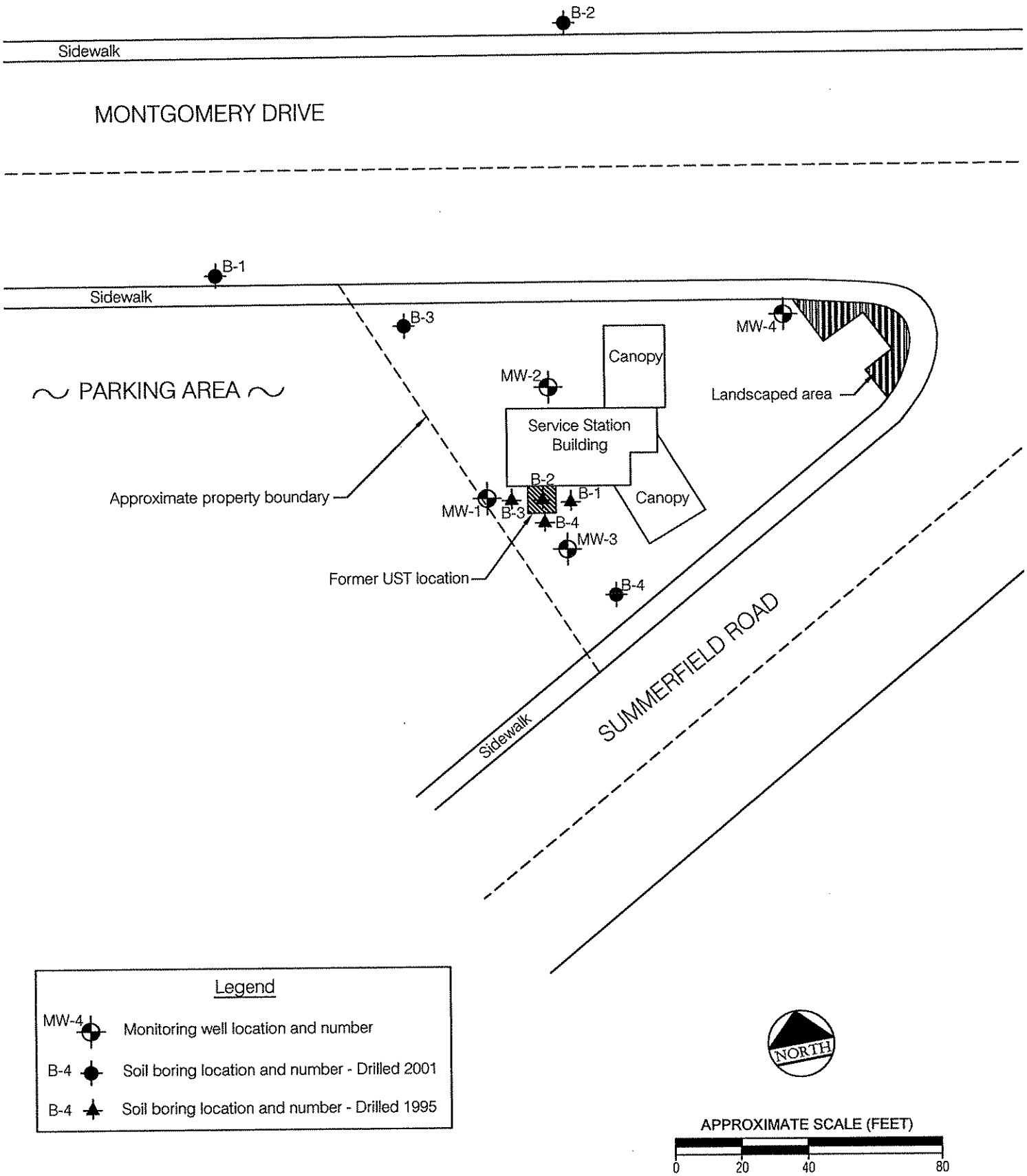
0 2200 4400

REFERENCE: Thomas Brothers Guide, Sonoma County, 1992

PROJECT NO.: 421		
DRAWN BY:	LM	1/12/95
CHECKED BY:	THN	8/24
APPROVED BY:	WMO	9/27/95
REVISED:		

BACE Environmental
A Division Of
Brunsing Associates, Inc.

PLATE 1
SITE VICINITY MAP
4180 Montgomery Drive
Santa Rosa, California

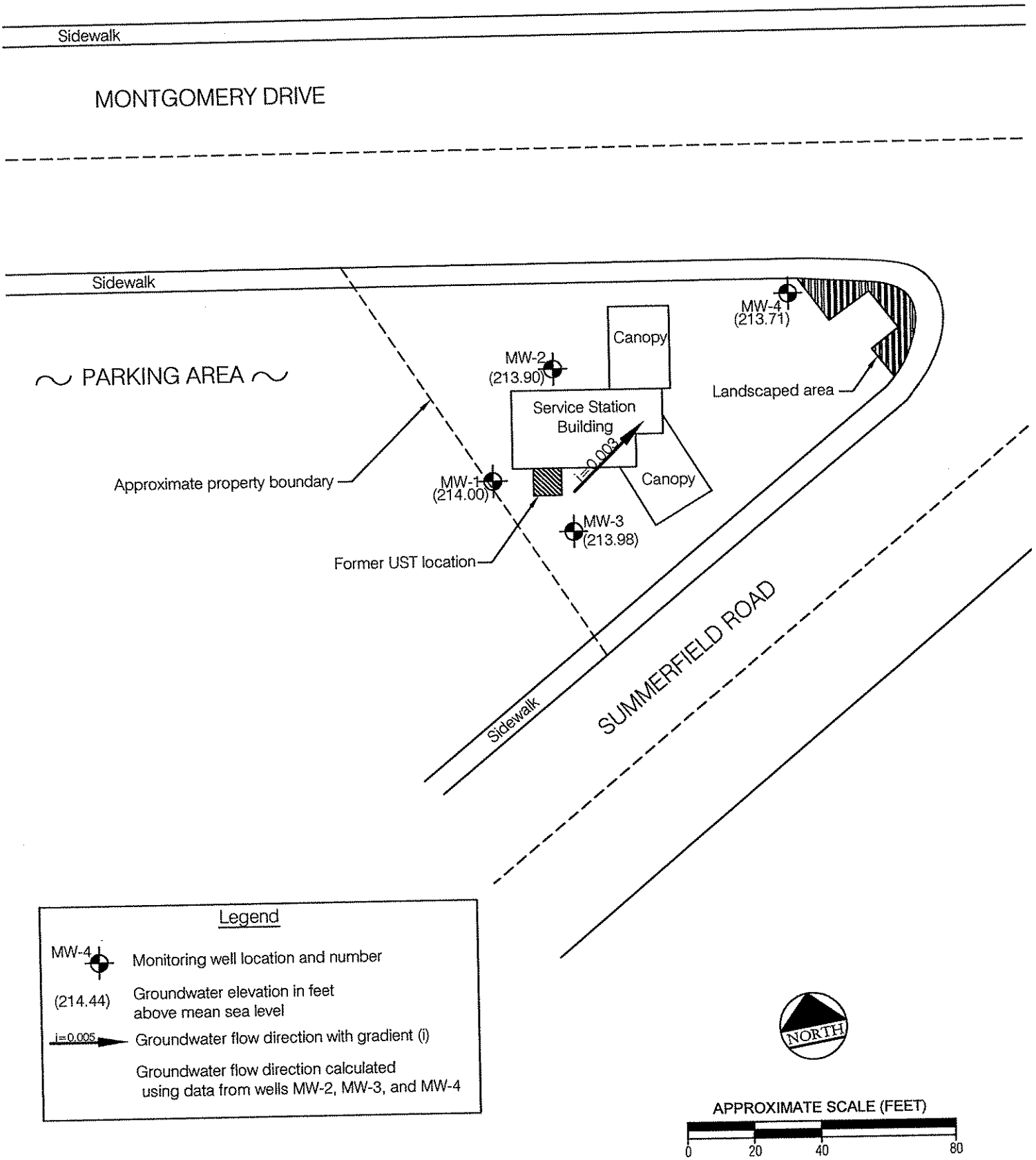


Brunsing Associates, Inc.
5468 Skylane Blvd., Suite 201
Santa Rosa, California 95403
Tel: (707) 838-3027

Job No.: 421
Appr.:
Date: 7/22/05

SITE MAP
MARTINELLI
4180 Montgomery Drive
Santa Rosa, California

PLATE
2



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Job No.: 421
Appr.:
Date: 7/22/05

GROUNDWATER ELEVATION MAP
APRIL 20, 2005
MARTINELLI
4180 Montgomery Drive
Santa Rosa, California

PLATE
3

APPENDIX A
Groundwater Monitoring Protocol and Field Reports

Groundwater Sampling Protocol

Monitoring Wells

Prior to purging a monitoring well, groundwater levels are measured with a Solinst electric depth measurement device, or an interface probe, in all wells that are to be measured. At sites where petroleum hydrocarbons are possible contaminants, the well is checked for floating product using a clear bailer, a steel tape with water/oil paste, or an interface probe, during the initial sampling round. If floating product is measured during the initial sampling round or noted during subsequent sampling rounds, floating product measurements are continued.

After the water level and floating product measurements are complete, the monitoring well is purged until a minimum of three casing volumes of water are removed, water is relatively clear of sediment, and pH, conductivity, and temperature measurements of the water become relatively stabile. If the well is purged dry, groundwater samples are collected after the water level in the well recovers to at least 80 percent of the original water column measured in the well prior to sampling, or following a maximum recovery period of two hours. The well is purged using a factory-sealed, disposable, polyethylene bailer, a four-inch diameter submersible Grundfos pump, a two-inch diameter ES-40 purge pump, or a peristaltic pump. The purge water is stored on-site in clean, 55-gallon drums.

A groundwater sample is collected from each monitoring well following re-equilibration of the well after purging. The groundwater sample is collected using a factory-sealed disposable, polyethylene bailer with a sampling port, or a factory-sealed Teflon bailer. A factory provided attachment designed for use with volatile organic compounds (VOCs) is attached to the polyethylene bailer sampling port when collecting samples to be analyzed for VOCs. The groundwater sample is transferred from the bailer into sample container(s) that are obtained directly from the analytical laboratory.

The sample container(s) is labeled with a self-adhesive tag. The following information is included on the tag:

- Project number
- Sample number
- Date and time sample is collected
- Initials of sample collector(s).

Individual log sheets are maintained throughout the sampling operations. The following information is recorded:

- Sample number
- Date and time well sampled and purged
- Sampling location
- Types of sampling equipment used
- Name of sampler(s)
- Volume of water purged.

Following collection of the groundwater sample, the sample is immediately stored on blue ice in an appropriate container. A chain-of-custody form is completed with the following information:

- Date the sample was collected
- Sample number and the number of containers
- Analyses required
- Remarks including preservatives added and any special conditions.

The original copy of the chain-of-custody form accompanies the sample containers to a California-certified laboratory. A copy is retained by BAI and placed in company files.

Reusable sampling equipment including thermometers, pH electrodes, and conductivity probes are cleaned both before and after their use at the site. The following cleaning procedures are used:

- Wash with a potable water and detergent solution or other solutions deemed appropriate
- Rinse with potable water
- Double-rinse with organic-free or deionized water
- Package and seal equipment in plastic bags or other appropriate containers to prevent contact with solvents, dust, or other contaminants.

In addition, the pumps are cleaned by pumping a potable water and detergent solution and deionized water through the system. Cleaning solutions are contained on-site in clean 55-gallon drums.

Domestic and Irrigation Wells

Groundwater samples collected from domestic or irrigation wells are collected from the spigot that is the closest to the well. Prior to collecting the sample, the spigot is allowed to flow for at least 5 minutes to purge the well. The sample is then collected directly into laboratory-supplied containers, sealed, labeled, and stored on blue ice in an appropriate container, as described above. A chain-of-custody form is completed and submitted with the samples to the analytical laboratory.

Brunsing Associates, Inc

FILE COPY

UST Fund Site: X Yes ___ No

FIELD REPORT

JOB NO: 421
INITIAL: CDS
DATE: 4-20-05

PROJECT: 4180 Montgomery Drive (Martinelli)
SUBJECT: Groundwater Sampling
PROJECT PHASE NUMBER: 04
VEHICLE USED: Ford F-150

Total Time: ___
End. Mileage: ___
Beg. Mileage: 9958
TOTAL MILEAGE: ___

TIME	DESCRIPTION OF WORK AND CONVERSATION RECORD
0800	LOAD EQUIPMENT AND SUPPLIES
0846	TO SITE
0913	ARRIVE AT SITE. SET-UP FOR GROUNDWATER SAMPLING.
	MEASURED TWO ROUNDS OF DISTANCE TO WATER AT WELLS MW-1,
	MW-2, MW-3 AND MW-4
	PERFORMED SAMPLING AT WELLS MW-1, MW-2, MW-3 AND MW-4.
	STORED PURGEWATER IN A DRUM INSIDE THE REFUSE ENCLOSURE.
	CLOSED ALL WELLS AND MONUMENTS
	DECON SAMPLING EQUIPMENT
	LOAD EQUIPMENT AND SUPPLIES.
	COMPLETED FIELD NOTES AND LOGGED SAMPLES ON A CHAIN OF CUSTODY.
1340	LEAVE SITE
1413	ARRIVE AT OFFICE. SUBMITTED SAMPLES FOR ANALYSIS.
	UNLOAD EQUIPMENT AND SUPPLIES.
1454	FINISHED WITH WORK.

DRUM COUNT:

Water = 1 Devlpmt Water =
Soil = Decon Water =

Brunsing Associates, Inc.

WATER LEVELS

PROJECT: 4180 Montgomery Drive (Martinelli)

PROJECT NUMBER: 421

INSTRUMENT TYPE: ET (WLP)

INITIALS: CDS

DATE: 4-20-05

WELL NUMBER	DEPTH TO PRODUCT	DISTANCE TO WATER	TIME (24 HOUR)	EQUILIBRATED (CHECK FOR YES)	NOTES
MW-1	Ø	20.12	0936		
MW-2	Ø	19.77	0938		
MW-3	Ø	20.21	0933		
MW-4	Ø	20.21	0939		
MW-1	Ø	20.13	0942	✓	
MW-2	Ø	19.77	0943	✓	
MW-3	Ø	20.21	0941	✓	
MW-4	Ø	20.21	0945	✓	

WELL SAMPLING

PROJECT: 4180 Montgomery Drive (Martinelli)

PROJECT NUMBER: 421

WELL # MW-1 PRECIP. IN LAST 5 DAYS: — WIND ✓

DATE: 4-20-05

STARTING TIME: 1219 FINISHING TIME: 1259

INITIALS: CDS

CALCULATION OF PURGE VOLUME

2" WELL DEPTH: 28.00 - D.T.W. 20.13 = H20 COLUMN: 7.87 X 0.5 = 3.94

4" WELL DEPTH: _____ - D.T.W. _____ = H20 COLUMN: _____ X 2.0 = _____

THEREFORE TOTAL PURGE GALLONS EQUALS 4 GALLONS

FIELD MEASUREMENTS

TIME	GALLONS REMOVED	pH	CONDUCTIVITY	TEMP.	OBSERVATIONS
1225	1	6.87	322	21.1	CLOUDY ORANGE-BROWN, NO ODOR, SANDY
1229	2.5	6.68	318	20.7	CLOUDY ORANGE-BROWN, NO ODOR, SANDY
1233	4	6.69	319	20.5	CLOUDY ORANGE-BROWN, NO ODOR, SANDY

SAMPLING: SAMPLE ANALYSIS: TPH-Gas | BTEX (8021) | | |

SAMPLE TIME: 1244 DID WELL GO DRY? NO

WATER LEVELS:

TIME	D.T.W.
1247	20.21

NOTES:

WELL SAMPLING

PROJECT: 4180 Montgomery Drive (Martinelli)

PROJECT NUMBER: 421

WELL # MW-2 PRECIP. IN LAST 5 DAYS: — WIND ✓

DATE: 4-20-05

STARTING TIME: 1117 FINISHING TIME: 1218

INITIALS: CDS

CALCULATION OF PURGE VOLUME

2" WELL DEPTH: 29.00 - D.T.W. 19.77 = H20 COLUMN: 9.23 X 0.5 = 4.62

4" WELL DEPTH: _____ - D.T.W. _____ = H20 COLUMN: _____ X 2.0 = _____

THEREFORE TOTAL PURGE GALLONS EQUALS 5 GALLONS

FIELD MEASUREMENTS

TIME	GALLONS REMOVED	pH	CONDUCTIVITY	TEMP.	OBSERVATIONS
1138	1	6.92	312	18.8	CLOUDY ORANGE-BROWN, NO ODOR, SANDY
1144	3	6.85	315	19.4	CLOUDY BROWN, NO ODOR, SANDY
1149	5	6.88	315	19.8	CLOUDY ORANGE-BROWN, NO ODOR, SANDY

SAMPLING: SAMPLE ANALYSIS: TPH-Gas | BTEX (8021) | | |

SAMPLE TIME: 1201 DID WELL GO DRY? NO

WATER LEVELS:	
TIME	D.T.W.
1208	19.80

NOTES:

WELL SAMPLING

PROJECT: 4180 Montgomery Drive (Martinelli)

PROJECT NUMBER: 421

WELL # MW-3 PRECIP. IN LAST 5 DAYS: — WIND ✓

DATE: 4-20-05

STARTING TIME: 0946 FINISHING TIME: 1027

INITIALS: CDS

CALCULATION OF PURGE VOLUME

2" WELL DEPTH: 25.00 - D.T.W. 20.21 = H20 COLUMN: 4.79 X 0.5 = 2.40

4" WELL DEPTH: _____ - D.T.W. _____ = H20 COLUMN: _____ X 2.0 = _____

THEREFORE TOTAL PURGE GALLONS EQUALS 2 GALLONS

FIELD MEASUREMENTS

TIME	GALLONS REMOVED	pH	CONDUCTIVITY	TEMP.	OBSERVATIONS
1000	0.50	6.61	383	19.9	CLOUDY BROWN, NO ODOR, SAND
1003	1	6.28	361	19.2	CLOUDY ORANGE-BROWN, NO ODOR, SAND
1006	2	6.63	329	20.8	CLOUDY ORANGE-BROWN, NO ODOR, SAN

SAMPLING: SAMPLE ANALYSIS: TPH-Gas | BTEX (8021) | | |

SAMPLE TIME: 1013 DID WELL GO DRY? NO

WATER LEVELS:	
TIME	D.T.W.
1018	20.23

NOTES:

WELL SAMPLING

PROJECT: 4180 Montgomery Drive (Martinelli) PROJECT NUMBER: 421

WELL # MW-4 PRECIP. IN LAST 5 DAYS: — WIND ✓ DATE: 4-20-05

STARTING TIME: 1028 FINISHING TIME: 1116 INITIALS: CDS

CALCULATION OF PURGE VOLUME

2" WELL DEPTH: 27.00 - D.T.W. 20.21 = H20 COLUMN: 6.79 X 0.5 = 3.40

4" WELL DEPTH: _____ - D.T.W. _____ = H20 COLUMN: _____ X 2.0 = _____

THEREFORE TOTAL PURGE GALLONS EQUALS 3 GALLONS

FIELD MEASUREMENTS

TIME	GALLONS REMOVED	pH	CONDUCTIVITY	TEMP.	OBSERVATIONS
1037	1	6.67	318	19.0	CLOUDY ORANGE-BROWN, NO ODOR, SAND
1039	2	6.76	312	19.5	CLOUDY ORANGE-BROWN, NO ODOR, SANDY
1042	3	6.80	311	19.8	CLOUDY BROWN, NO ODOR, SANDY

SAMPLING: SAMPLE ANALYSIS: TPH-Gas | | EPA-8260 | | | |

SAMPLE TIME: 1652 DID WELL GO DRY? NO

WATER LEVELS:	
TIME	D.T.W.
1059	20.21

NOTES:

APPENDIX B
Analytical Laboratory Report

Laboratory Report Project Overview

EDF 1.2a

Laboratory:	Bace Analytical, Windsor, CA
Lab Report Number:	4549R
Project Name:	4180 MONTGOMERY DRIVE
Work Order Number:	421
Control Sheet Number:	NA

Case Narrative

Bace Analytical, Windsor, CA

Report Date: 07/02/2005 Report Number: 4549R	Project: 4180 MONTGOMERY DRIVE Order #: 421

As per client request of 7/1/05 the analytical data for laboratory report number 4549 has been re-analyzed to include the full list of analytes for EPA Method 8260B. The data analysis was accomplished by means of Enviroquant GC/MS software using a valid full list calibration curve in use at the time of actual sample analysis. The initial laboratory report for this site was issued on 4/29/05 and provided results for the following analytes: BTEX, fuel oxygenates, and lead scavengers (EDA and EDB). The revised version of this report (4549R) has been added to the EDF database and is currently available for upload into Geotracker.

Approved by: William H Potter Date: 7/5/05

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run Sub
4549R	MW-1	4549R-1	WG	CS	8260TPH	SW5030B	04/20/2005	04/28/2005	04/28/2005	20050428B	24
4549R	MW-1	4549R-1	WG	CS	SW8260B	SW5030B	04/20/2005	04/28/2005	04/28/2005	20050428B	24
4549R	MW-2	4549R-2	WG	CS	8260TPH	SW5030B	04/20/2005	04/28/2005	04/28/2005	20050428B	25
4549R	MW-2	4549R-2	WG	CS	SW8260B	SW5030B	04/20/2005	04/28/2005	04/28/2005	20050428B	25
4549R	MW-3	4549R-3	WG	CS	8260TPH	SW5030B	04/20/2005	04/28/2005	04/28/2005	20050428B	26
4549R	MW-3	4549R-3	WG	CS	SW8260B	SW5030B	04/20/2005	04/28/2005	04/28/2005	20050428B	26
4549R	MW-4	4549R-4	WG	CS	8260TPH	SW5030B	04/20/2005	04/28/2005	04/28/2005	20050428B	27
4549R	MW-4	4549R-4	WG	CS	SW8260B	SW5030B	04/20/2005	04/28/2005	04/28/2005	20050428B	27
		4554-1	WG	NC	SW8260B	SW5030B	/ /	04/28/2005	04/28/2005	20050428B	16
		4554-2	WG	NC	8260TPH	SW5030B	/ /	04/28/2005	04/28/2005	20050428B	21
		4549RMB	WG	LB1	8260TPH	SW5030B	/ /	04/28/2005	04/28/2005	20050428B	1
		4549RMB	WG	LB1	SW8260B	SW5030B	/ /	04/28/2005	04/28/2005	20050428B	1
		4549RMS	WG	MS1	8260TPH	SW5030B	/ /	04/28/2005	04/28/2005	20050428B	19
		4549RMS	WG	MS1	SW8260B	SW5030B	/ /	04/28/2005	04/28/2005	20050428B	17
		4549RSD	WG	SD1	8260TPH	SW5030B	/ /	04/28/2005	04/28/2005	20050428B	20
		4549RSD	WG	SD1	SW8260B	SW5030B	/ /	04/28/2005	04/28/2005	20050428B	18

Bace Analytical, Windsor, CA

Lab Report No.: 4549R Date: 07/02/2005

Project Name:	4180 MONTGOMERY	Analysis:	Total Petroleum Hydrocarbons (TPH) by GC/MS
Project No:	421	Method:	8260TPH
		Prep Meth:	SW5030B

Field ID:	MW-1	Lab Samp ID:	4549R-1
Descr/Location:	MW-1	Rec'd Date:	04/20/2005
Sample Date:	04/20/2005	Prep Date:	04/28/2005
Sample Time:	1244	Analysis Date:	04/28/2005
Matrix:	Groundwater	QC Batch:	20050428B
Basis:	Not Filtered	Notes:	

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Gasoline Range Organics (C5-C12)	0.040	0.050	PQL		ND	MG/L	1
SURROGATE AND INTERNAL STANDARD RECOVERIES:							
4-Bromofluorobenzene		80-120	SLSA		101%		1

Approved by: [signature] Date: 7/5/05

Bace Analytical, Windsor, CA

Lab Report No.: 4549R Date: 07/02/2005

Project Name:	4180 MONTGOMERY	Analysis:	Total Petroleum Hydrocarbons (TPH) by GC/MS
Project No:	421	Method:	8260TPH
		Prep Meth:	SW5030B

Field ID:	MW-2	Lab Samp ID:	4549R-2
Descr/Location:	MW-2	Rec'd Date:	04/20/2005
Sample Date:	04/20/2005	Prep Date:	04/28/2005
Sample Time:	1201	Analysis Date:	04/28/2005
Matrix:	Groundwater	QC Batch:	20050428B
Basis:	Not Filtered	Notes:	

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Gasoline Range Organics (C5-C12)	0.040	0.050	PQL		ND	MG/L	1
SURROGATE AND INTERNAL STANDARD RECOVERIES:							
4-Bromofluorobenzene		80-120	SLSA		99%		1

Approved by: William H. Poty Date: 7/5/05

Bace Analytical, Windsor, CA

Lab Report No.: 4549R Date: 07/02/2005

Project Name:	4180 MONTGOMERY	Analysis:	Total Petroleum Hydrocarbons (TPH) by GC/MS
Project No:	421	Method:	8260TPH
		Prep Meth:	SW5030B

Field ID:	MW-3	Lab Samp ID:	4549R-3
Descr/Location:	MW-3	Rec'd Date:	04/20/2005
Sample Date:	04/20/2005	Prep Date:	04/28/2005
Sample Time:	1013	Analysis Date:	04/28/2005
Matrix:	Groundwater	QC Batch:	20050428B
Basis:	Not Filtered	Notes:	

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Gasoline Range Organics (C5-C12)	0.040	0.050	PQL		ND	MG/L	1
SURROGATE AND INTERNAL STANDARD RECOVERIES:							
4-Bromofluorobenzene		80-120	SLSA		101%		1

Approved by: Wallace H Poty Date: 7/5/05

Lab Report No.: 4549R Date: 07/02/2005

Project Name:	4180 MONTGOMERY	Analysis:	Total Petroleum Hydrocarbons (TPH) by GC/MS
Project No:	421	Method:	8260TPH
		Prep Meth:	SW5030B

Field ID:	MW-4	Lab Samp ID:	4549R-4
Descr/Location:	MW-4	Rec'd Date:	04/20/2005
Sample Date:	04/20/2005	Prep Date:	04/28/2005
Sample Time:	1052	Analysis Date:	04/28/2005
Matrix:	Groundwater	QC Batch:	20050428B
Basis:	Not Filtered	Notes:	

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Gasoline Range Organics (C5-C12)	0.040	0.050	PQL		ND	MG/L	1
SURROGATE AND INTERNAL STANDARD RECOVERIES:							
4-Bromofluorobenzene		80-120	SLSA		101%		1

Approved by: William H Poth Date: 7/5/05

Bace Analytical, Windsor, CA

Lab Report No.: 4549R Date: 07/02/2005

Project Name: 4180 MONTGOMERY
Project No: 421

Analysis: Volatile Organic Compounds by GC/MS
Method: SW8260B
Prep Meth: SW5030B

Field ID: MW-1
Descr/Location: MW-1
Sample Date: 04/20/2005
Sample Time: 1244
Matrix: Groundwater
Basis: Not Filtered

Lab Samp ID: 4549R-1
Rec'd Date: 04/20/2005
Prep Date: 04/28/2005
Analysis Date: 04/28/2005
QC Batch: 20050428B
Notes:

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Benzene	0.27	0.50	PQL		ND	UG/L	1
Bromochloromethane	0.43	0.50	PQL		ND	UG/L	1
Bromodichloromethane	0.31	0.50	PQL		ND	UG/L	1
Bromoform	0.40	0.50	PQL		ND	UG/L	1
Bromomethane	0.20	0.50	PQL		ND	UG/L	1
Carbon tetrachloride	0.40	0.50	PQL		ND	UG/L	1
Chlorobenzene	0.30	0.50	PQL		ND	UG/L	1
Dibromochloromethane	0.43	0.50	PQL		ND	UG/L	1
Chloroethane	0.35	0.50	PQL		ND	UG/L	1
Chloroform	0.33	0.50	PQL		ND	UG/L	1
Chloromethane	0.40	0.50	PQL		ND	UG/L	1
1,2-Dibromo-3-chloropropane	0.36	0.50	PQL		ND	UG/L	1
1,2-Dibromoethane	0.41	0.50	PQL		ND	UG/L	1
Dibromomethane	0.31	0.50	PQL		ND	UG/L	1
1,2-Dichlorobenzene	0.43	0.50	PQL		ND	UG/L	1
1,3-Dichlorobenzene	0.48	0.50	PQL		ND	UG/L	1
1,4-Dichlorobenzene	0.40	0.50	PQL		ND	UG/L	1
Dichlorodifluoromethane	0.36	0.50	PQL		ND	UG/L	1
1,1-Dichloroethane	0.27	0.50	PQL		ND	UG/L	1
1,2-Dichloroethane	0.35	0.50	PQL		ND	UG/L	1
1,1-Dichloroethene	0.36	0.50	PQL		ND	UG/L	1
trans-1,2-Dichloroethene	0.24	0.50	PQL		ND	UG/L	1
1,2-Dichloropropane	0.36	0.50	PQL		ND	UG/L	1
Ethylbenzene	0.24	0.50	PQL		ND	UG/L	1
Hexachlorobutadiene	0.57	1.00	PQL		ND	UG/L	1
Isopropylbenzene	0.43	0.50	PQL		ND	UG/L	1
Methylene chloride	0.22	0.50	PQL		ND	UG/L	1
Naphthalene	0.47	1.00	PQL		ND	UG/L	1
Styrene	0.41	0.50	PQL		ND	UG/L	1
1,1,1,2-Tetrachloroethane	0.38	0.50	PQL		ND	UG/L	1

Approved by: William H Poff Date: 7/5/05

Lab Report No.: 4549R Date: 07/02/2005

Project Name:	4180 MONTGOMERY	Analysis:	Volatile Organic Compounds by GC/MS
Project No:	421	Method:	SW8260B
		Prep Meth:	SW5030B

Field ID:	MW-1	Lab Samp ID:	4549R-1
Descr/Location:	MW-1	Rec'd Date:	04/20/2005
Sample Date:	04/20/2005	Prep Date:	04/28/2005
Sample Time:	1244	Analysis Date:	04/28/2005
Matrix:	Groundwater	QC Batch:	20050428B
Basis:	Not Filtered	Notes:	

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
1,1,2,2-Tetrachloroethane	0.25	0.50	PQL		ND	UG/L	1
Tetrachloroethene (PCE)	0.32	0.50	PQL		73.4	UG/L	1
Toluene	0.40	0.50	PQL		ND	UG/L	1
1,2,4-Trichlorobenzene	0.57	1.00	PQL		ND	UG/L	1
1,1,1-Trichloroethane	0.29	0.50	PQL		ND	UG/L	1
1,1,2-Trichloroethane	0.31	0.50	PQL		ND	UG/L	1
Trichloroethene (TCE)	0.40	0.50	PQL		ND	UG/L	1
1,2,3-Trichloropropane	0.35	0.50	PQL		ND	UG/L	1
Vinyl chloride	0.32	0.50	PQL		ND	UG/L	1
Bromobenzene	0.27	0.50	PQL		ND	UG/L	1
n-Butylbenzene	0.51	1.00	PQL		ND	UG/L	1
sec-Butylbenzene	0.49	1.00	PQL		ND	UG/L	1
tert-Butylbenzene	0.41	1.00	PQL		ND	UG/L	1
2-Chlorotoluene	0.40	0.50	PQL		ND	UG/L	1
4-Chlorotoluene	0.40	0.50	PQL		ND	UG/L	1
cis-1,2-Dichloroethene	0.34	0.50	PQL		ND	UG/L	1
1,3-Dichloropropane	0.34	0.50	PQL		ND	UG/L	1
Methyl-tert-butyl ether (MTBE)	0.38	1.00	PQL		ND	UG/L	1
n-Propylbenzene	0.37	0.50	PQL		ND	UG/L	1
1,2,3-Trichlorobenzene	0.57	1.00	PQL		ND	UG/L	1
1,3,5-Trimethylbenzene	0.42	1.00	PQL		ND	UG/L	1
Di-isopropyl ether (DIPE)	0.37	1.00	PQL		ND	UG/L	1
Ethyl tert-butyl ether (ETBE)	0.30	1.00	PQL		ND	UG/L	1
tert-Amyl methyl ether (TAME)	0.26	1.00	PQL		ND	UG/L	1
tert-Butyl alcohol (TBA)	2.4	10.	PQL		ND	UG/L	1
1,2,3-Trimethylbenzene	0.60	1.00	PQL		ND	UG/L	1
Xylenes	0.35	0.50	PQL		ND	UG/L	1

SURROGATE AND INTERNAL STANDARD RECOVERIES:

4-Bromofluorobenzene	86-115	SLSA	101%	1
Toluene-d8	88-110	SLSA	100%	1
Dibromofluoromethane	86-118	SLSA	97%	1

Approved by: William H Potts Date: 7/5/05

Bace Analytical, Windsor, CA

Lab Report No.: 4549R Date: 07/02/2005

Project Name: 4180 MONTGOMERY
Project No: 421

Analysis: Volatile Organic Compounds by GC/MS
Method: SW8260B
Prep Meth: SW5030B

Field ID: MW-2
Descr/Location: MW-2
Sample Date: 04/20/2005
Sample Time: 1201
Matrix: Groundwater
Basis: Not Filtered

Lab Samp ID: 4549R-2
Rec'd Date: 04/20/2005
Prep Date: 04/28/2005
Analysis Date: 04/28/2005
QC Batch: 20050428B
Notes:

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Benzene	0.27	0.50	PQL		ND	UG/L	1
Bromochloromethane	0.43	0.50	PQL		ND	UG/L	1
Bromodichloromethane	0.31	0.50	PQL		ND	UG/L	1
Bromoform	0.40	0.50	PQL		ND	UG/L	1
Bromomethane	0.20	0.50	PQL		ND	UG/L	1
Carbon tetrachloride	0.40	0.50	PQL		ND	UG/L	1
Chlorobenzene	0.30	0.50	PQL		ND	UG/L	1
Dibromochloromethane	0.43	0.50	PQL		ND	UG/L	1
Chloroethane	0.35	0.50	PQL		ND	UG/L	1
Chloroform	0.33	0.50	PQL		ND	UG/L	1
Chloromethane	0.40	0.50	PQL		ND	UG/L	1
1,2-Dibromo-3-chloropropane	0.36	0.50	PQL		ND	UG/L	1
1,2-Dibromoethane	0.41	0.50	PQL		ND	UG/L	1
Dibromomethane	0.31	0.50	PQL		ND	UG/L	1
1,2-Dichlorobenzene	0.43	0.50	PQL		ND	UG/L	1
1,3-Dichlorobenzene	0.48	0.50	PQL		ND	UG/L	1
1,4-Dichlorobenzene	0.40	0.50	PQL		ND	UG/L	1
Dichlorodifluoromethane	0.36	0.50	PQL		ND	UG/L	1
1,1-Dichloroethane	0.27	0.50	PQL		ND	UG/L	1
1,2-Dichloroethane	0.35	0.50	PQL		ND	UG/L	1
1,1-Dichloroethene	0.36	0.50	PQL		ND	UG/L	1
trans-1,2-Dichloroethene	0.24	0.50	PQL		ND	UG/L	1
1,2-Dichloropropane	0.36	0.50	PQL		ND	UG/L	1
Ethylbenzene	0.24	0.50	PQL		ND	UG/L	1
Hexachlorobutadiene	0.57	1.00	PQL		ND	UG/L	1
Isopropylbenzene	0.43	0.50	PQL		ND	UG/L	1
Methylene chloride	0.22	0.50	PQL		ND	UG/L	1
Naphthalene	0.47	1.00	PQL		ND	UG/L	1
Styrene	0.41	0.50	PQL		ND	UG/L	1
1,1,1,2-Tetrachloroethane	0.38	0.50	PQL		ND	UG/L	1

Approved by: [signature] Date: 7/5/05

Lab Report No.: 4549R Date: 07/02/2005

Project Name: 4180 MONTGOMERY
Project No: 421

Analysis: Volatile Organic Compounds by GC/MS
Method: SW8260B
Prep Meth: SW5030B

Field ID: MW-2
Descr/Location: MW-2
Sample Date: 04/20/2005
Sample Time: 1201
Matrix: Groundwater
Basis: Not Filtered

Lab Samp ID: 4549R-2
Rec'd Date: 04/20/2005
Prep Date: 04/28/2005
Analysis Date: 04/28/2005
QC Batch: 20050428B
Notes:

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
1,1,2,2-Tetrachloroethane	0.25	0.50	PQL		ND	UG/L	1
Tetrachloroethene (PCE)	0.32	0.50	PQL		48.5	UG/L	1
Toluene	0.40	0.50	PQL		ND	UG/L	1
1,2,4-Trichlorobenzene	0.57	1.00	PQL		ND	UG/L	1
1,1,1-Trichloroethane	0.29	0.50	PQL		ND	UG/L	1
1,1,2-Trichloroethane	0.31	0.50	PQL		ND	UG/L	1
Trichloroethene (TCE)	0.40	0.50	PQL		ND	UG/L	1
1,2,3-Trichloropropane	0.35	0.50	PQL		ND	UG/L	1
Vinyl chloride	0.32	0.50	PQL		ND	UG/L	1
Bromobenzene	0.27	0.50	PQL		ND	UG/L	1
n-Butylbenzene	0.51	1.00	PQL		ND	UG/L	1
sec-Butylbenzene	0.49	1.00	PQL		ND	UG/L	1
tert-Butylbenzene	0.41	1.00	PQL		ND	UG/L	1
2-Chlorotoluene	0.40	0.50	PQL		ND	UG/L	1
4-Chlorotoluene	0.40	0.50	PQL		ND	UG/L	1
cis-1,2-Dichloroethene	0.34	0.50	PQL		ND	UG/L	1
1,3-Dichloropropane	0.34	0.50	PQL		ND	UG/L	1
Methyl-tert-butyl ether (MTBE)	0.38	1.00	PQL		ND	UG/L	1
n-Propylbenzene	0.37	0.50	PQL		ND	UG/L	1
1,2,3-Trichlorobenzene	0.57	1.00	PQL		ND	UG/L	1
1,3,5-Trimethylbenzene	0.42	1.00	PQL		ND	UG/L	1
Di-isopropyl ether (DIPE)	0.37	1.00	PQL		ND	UG/L	1
Ethyl tert-butyl ether (ETBE)	0.30	1.00	PQL		ND	UG/L	1
tert-Amyl methyl ether (TAME)	0.26	1.00	PQL		ND	UG/L	1
tert-Butyl alcohol (TBA)	2.4	10.	PQL		ND	UG/L	1
1,2,3-Trimethylbenzene	0.60	1.00	PQL		ND	UG/L	1
Xylenes	0.35	0.50	PQL		ND	UG/L	1

SURROGATE AND INTERNAL STANDARD RECOVERIES:

4-Bromofluorobenzene	86-115	SLSA	99%	1
Toluene-d8	88-110	SLSA	100%	1
Dibromofluoromethane	86-118	SLSA	97%	1

Approved by: William R Pottz Date: 7/5/05

Lab Report No.: 4549R Date: 07/02/2005

Project Name: 4180 MONTGOMERY
Project No: 421

Analysis: Volatile Organic Compounds by GC/MS
Method: SW8260B
Prep Meth: SW5030B

Field ID: MW-3
Descr/Location: MW-3
Sample Date: 04/20/2005
Sample Time: 1013
Matrix: Groundwater
Basis: Not Filtered

Lab Samp ID: 4549R-3
Rec'd Date: 04/20/2005
Prep Date: 04/28/2005
Analysis Date: 04/28/2005
QC Batch: 20050428B
Notes:

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Benzene	0.27	0.50	PQL		ND	UG/L	1
Bromochloromethane	0.43	0.50	PQL		ND	UG/L	1
Bromodichloromethane	0.31	0.50	PQL		ND	UG/L	1
Bromoform	0.40	0.50	PQL		ND	UG/L	1
Bromomethane	0.20	0.50	PQL		ND	UG/L	1
Carbon tetrachloride	0.40	0.50	PQL		ND	UG/L	1
Chlorobenzene	0.30	0.50	PQL		ND	UG/L	1
Dibromochloromethane	0.43	0.50	PQL		ND	UG/L	1
Chloroethane	0.35	0.50	PQL		ND	UG/L	1
Chloroform	0.33	0.50	PQL		ND	UG/L	1
Chloromethane	0.40	0.50	PQL		ND	UG/L	1
1,2-Dibromo-3-chloropropane	0.36	0.50	PQL		ND	UG/L	1
1,2-Dibromoethane	0.41	0.50	PQL		ND	UG/L	1
Dibromomethane	0.31	0.50	PQL		ND	UG/L	1
1,2-Dichlorobenzene	0.43	0.50	PQL		ND	UG/L	1
1,3-Dichlorobenzene	0.48	0.50	PQL		ND	UG/L	1
1,4-Dichlorobenzene	0.40	0.50	PQL		ND	UG/L	1
Dichlorodifluoromethane	0.36	0.50	PQL		ND	UG/L	1
1,1-Dichloroethane	0.27	0.50	PQL		ND	UG/L	1
1,2-Dichloroethane	0.35	0.50	PQL		ND	UG/L	1
1,1-Dichloroethene	0.36	0.50	PQL		ND	UG/L	1
trans-1,2-Dichloroethene	0.24	0.50	PQL		ND	UG/L	1
1,2-Dichloropropane	0.36	0.50	PQL		ND	UG/L	1
Ethylbenzene	0.24	0.50	PQL		ND	UG/L	1
Hexachlorobutadiene	0.57	1.00	PQL		ND	UG/L	1
Isopropylbenzene	0.43	0.50	PQL		ND	UG/L	1
Methylene chloride	0.22	0.50	PQL		ND	UG/L	1
Naphthalene	0.47	1.00	PQL		ND	UG/L	1
Styrene	0.41	0.50	PQL		ND	UG/L	1
1,1,1,2-Tetrachloroethane	0.38	0.50	PQL		ND	UG/L	1

Approved by: William H Poty Date: 7/5/05

Lab Report No.: 4549R Date: 07/02/2005

Project Name:	4180 MONTGOMERY	Analysis:	Volatile Organic Compounds by GC/MS
Project No:	421	Method:	SW8260B
		Prep Meth:	SW5030B

Field ID:	MW-3	Lab Samp ID:	4549R-3
Descr/Location:	MW-3	Rec'd Date:	04/20/2005
Sample Date:	04/20/2005	Prep Date:	04/28/2005
Sample Time:	1013	Analysis Date:	04/28/2005
Matrix:	Groundwater	QC Batch:	20050428B
Basis:	Not Filtered	Notes:	

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
1,1,2,2-Tetrachloroethane	0.25	0.50	PQL		ND	UG/L	1
Tetrachloroethene (PCE)	0.32	0.50	PQL		92.5	UG/L	1
Toluene	0.40	0.50	PQL		ND	UG/L	1
1,2,4-Trichlorobenzene	0.57	1.00	PQL		ND	UG/L	1
1,1,1-Trichloroethane	0.29	0.50	PQL		ND	UG/L	1
1,1,2-Trichloroethane	0.31	0.50	PQL		ND	UG/L	1
Trichloroethene (TCE)	0.40	0.50	PQL		ND	UG/L	1
1,2,3-Trichloropropane	0.35	0.50	PQL		ND	UG/L	1
Vinyl chloride	0.32	0.50	PQL		ND	UG/L	1
Bromobenzene	0.27	0.50	PQL		ND	UG/L	1
n-Butylbenzene	0.51	1.00	PQL		ND	UG/L	1
sec-Butylbenzene	0.49	1.00	PQL		ND	UG/L	1
tert-Butylbenzene	0.41	1.00	PQL		ND	UG/L	1
2-Chlorotoluene	0.40	0.50	PQL		ND	UG/L	1
4-Chlorotoluene	0.40	0.50	PQL		ND	UG/L	1
cis-1,2-Dichloroethene	0.34	0.50	PQL		ND	UG/L	1
1,3-Dichloropropane	0.34	0.50	PQL		ND	UG/L	1
Methyl-tert-butyl ether (MTBE)	0.38	1.00	PQL		ND	UG/L	1
n-Propylbenzene	0.37	0.50	PQL		ND	UG/L	1
1,2,3-Trichlorobenzene	0.57	1.00	PQL		ND	UG/L	1
1,3,5-Trimethylbenzene	0.42	1.00	PQL		ND	UG/L	1
Di-isopropyl ether (DIPE)	0.37	1.00	PQL		ND	UG/L	1
Ethyl tert-butyl ether (ETBE)	0.30	1.00	PQL		ND	UG/L	1
tert-Amyl methyl ether (TAME)	0.26	1.00	PQL		ND	UG/L	1
tert-Butyl alcohol (TBA)	2.4	10.	PQL		ND	UG/L	1
1,2,3-Trimethylbenzene	0.60	1.00	PQL		ND	UG/L	1
Xylenes	0.35	0.50	PQL		ND	UG/L	1

SURROGATE AND INTERNAL STANDARD RECOVERIES:

4-Bromofluorobenzene	86-115	SLSA	101%	1
Toluene-d8	88-110	SLSA	100%	1
Dibromofluoromethane	86-118	SLSA	99%	1

Approved by: William H. Potts Date: 7/5/05

Project Name: 4180 MONTGOMERY
Project No: 421

Analysis: Volatile Organic Compounds by GC/MS
Method: SW8260B
Prep Meth: SW5030B

Field ID: MW-4
Descr/Location: MW-4
Sample Date: 04/20/2005
Sample Time: 1052
Matrix: Groundwater
Basis: Not Filtered

Lab Samp ID: 4549R-4
Rec'd Date: 04/20/2005
Prep Date: 04/28/2005
Analysis Date: 04/28/2005
QC Batch: 20050428B
Notes:

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Benzene	0.27	0.50	PQL		ND	UG/L	1
Bromochloromethane	0.43	0.50	PQL		ND	UG/L	1
Bromodichloromethane	0.31	0.50	PQL		ND	UG/L	1
Bromoform	0.40	0.50	PQL		ND	UG/L	1
Bromomethane	0.20	0.50	PQL		ND	UG/L	1
Carbon tetrachloride	0.40	0.50	PQL		ND	UG/L	1
Chlorobenzene	0.30	0.50	PQL		ND	UG/L	1
Dibromochloromethane	0.43	0.50	PQL		ND	UG/L	1
Chloroethane	0.35	0.50	PQL		ND	UG/L	1
Chloroform	0.33	0.50	PQL		ND	UG/L	1
Chloromethane	0.40	0.50	PQL		ND	UG/L	1
1,2-Dibromo-3-chloropropane	0.36	0.50	PQL		ND	UG/L	1
1,2-Dibromoethane	0.41	0.50	PQL		ND	UG/L	1
Dibromomethane	0.31	0.50	PQL		ND	UG/L	1
1,2-Dichlorobenzene	0.43	0.50	PQL		ND	UG/L	1
1,3-Dichlorobenzene	0.48	0.50	PQL		ND	UG/L	1
1,4-Dichlorobenzene	0.40	0.50	PQL		ND	UG/L	1
Dichlorodifluoromethane	0.36	0.50	PQL		ND	UG/L	1
1,1-Dichloroethane	0.27	0.50	PQL		ND	UG/L	1
1,2-Dichloroethane	0.35	0.50	PQL		ND	UG/L	1
1,1-Dichloroethene	0.36	0.50	PQL		ND	UG/L	1
trans-1,2-Dichloroethene	0.24	0.50	PQL		ND	UG/L	1
1,2-Dichloropropane	0.36	0.50	PQL		ND	UG/L	1
Ethylbenzene	0.24	0.50	PQL		ND	UG/L	1
Hexachlorobutadiene	0.57	1.00	PQL		ND	UG/L	1
Isopropylbenzene	0.43	0.50	PQL		ND	UG/L	1
Methylene chloride	0.22	0.50	PQL		ND	UG/L	1
Naphthalene	0.47	1.00	PQL		ND	UG/L	1
Styrene	0.41	0.50	PQL		ND	UG/L	1
1,1,1,2-Tetrachloroethane	0.38	0.50	PQL		ND	UG/L	1

Approved by: William R Pottz Date: 7/5/05

Lab Report No.: 4549R Date: 07/02/2005

Project Name:	4180 MONTGOMERY	Analysis:	Volatile Organic Compounds by GC/MS
Project No:	421	Method:	SW8260B
		Prep Meth:	SW5030B

Field ID:	MW-4	Lab Samp ID:	4549R-4
Descr/Location:	MW-4	Rec'd Date:	04/20/2005
Sample Date:	04/20/2005	Prep Date:	04/28/2005
Sample Time:	1052	Analysis Date:	04/28/2005
Matrix:	Groundwater	QC Batch:	20050428B
Basis:	Not Filtered	Notes:	

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
1,1,2,2-Tetrachloroethane	0.25	0.50	PQL		ND	UG/L	1
Tetrachloroethene (PCE)	0.32	0.50	PQL		51.1	UG/L	1
Toluene	0.40	0.50	PQL		ND	UG/L	1
1,2,4-Trichlorobenzene	0.57	1.00	PQL		ND	UG/L	1
1,1,1-Trichloroethane	0.29	0.50	PQL		ND	UG/L	1
1,1,2-Trichloroethane	0.31	0.50	PQL		ND	UG/L	1
Trichloroethene (TCE)	0.40	0.50	PQL		ND	UG/L	1
1,2,3-Trichloropropane	0.35	0.50	PQL		ND	UG/L	1
Vinyl chloride	0.32	0.50	PQL		ND	UG/L	1
Bromobenzene	0.27	0.50	PQL		ND	UG/L	1
n-Butylbenzene	0.51	1.00	PQL		ND	UG/L	1
sec-Butylbenzene	0.49	1.00	PQL		ND	UG/L	1
tert-Butylbenzene	0.41	1.00	PQL		ND	UG/L	1
2-Chlorotoluene	0.40	0.50	PQL		ND	UG/L	1
4-Chlorotoluene	0.40	0.50	PQL		ND	UG/L	1
cis-1,2-Dichloroethene	0.34	0.50	PQL		ND	UG/L	1
1,3-Dichloropropane	0.34	0.50	PQL		ND	UG/L	1
Methyl-tert-butyl ether (MTBE)	0.38	1.00	PQL		ND	UG/L	1
n-Propylbenzene	0.37	0.50	PQL		ND	UG/L	1
1,2,3-Trichlorobenzene	0.57	1.00	PQL		ND	UG/L	1
1,3,5-Trimethylbenzene	0.42	1.00	PQL		ND	UG/L	1
Di-isopropyl ether (DIPE)	0.37	1.00	PQL		ND	UG/L	1
Ethyl tert-butyl ether (ETBE)	0.30	1.00	PQL		ND	UG/L	1
tert-Amyl methyl ether (TAME)	0.26	1.00	PQL		ND	UG/L	1
tert-Butyl alcohol (TBA)	2.4	10.	PQL		ND	UG/L	1
1,2,3-Trimethylbenzene	0.60	1.00	PQL		ND	UG/L	1
Xylenes	0.35	0.50	PQL		ND	UG/L	1

SURROGATE AND INTERNAL STANDARD RECOVERIES:

4-Bromofluorobenzene	86-115	SLSA	101%	1
Toluene-d8	88-110	SLSA	100%	1
Dibromofluoromethane	86-118	SLSA	97%	1

Approved by: William H Patty Date: 7/5/05

QA/QC Report
Method Blank Summary

Bace Analytical, Windsor, CA

Lab Report No.: 4549R Date: 07/02/2005

QC Batch:	20050428B	Analysis:	Total Petroleum Hydrocarbons (TPH) by
Matrix:	Groundwater	Method:	8260TPH
Lab Samp ID:	4549RMB	Prep Meth:	SW5030B
Analysis Date:	04/28/2005	Prep Date:	04/28/2005
Basis:	Not Filtered	Notes:	

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Gasoline Range Organics (C5-C12)	0.04	0.05	PQL		ND	MG/L	1
SURROGATE AND INTERNAL STANDARD RECOVERIES:							
4-Bromofluorobenzene		80-120	SLSA		101%		1

QA/QC Report
Method Blank Summary

Bace Analytical, Windsor, CA

Lab Report No.: 4549R Date: 07/02/2005

QC Batch: 20050428B
Matrix: Groundwater
Lab Samp ID: 4549RMB
Analysis Date: 04/28/2005
Basis: Not Filtered

Analysis: Volatile Organic Compounds by GC/MS
Method: SW8260B
Prep Meth: SW5030B
Prep Date: 04/28/2005
Notes:

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Benzene	0.27	0.50	PQL		ND	UG/L	1
Bromodichloromethane	0.31	0.50	PQL		ND	UG/L	1
Bromoform	0.40	0.50	PQL		ND	UG/L	1
Bromomethane	0.20	0.50	PQL		ND	UG/L	1
Carbon tetrachloride	0.40	0.50	PQL		ND	UG/L	1
Chlorobenzene	0.30	0.50	PQL		ND	UG/L	1
Dibromochloromethane	0.43	0.50	PQL		ND	UG/L	1
Chloroethane	0.35	0.50	PQL		ND	UG/L	1
Chloroform	0.33	0.50	PQL		ND	UG/L	1
Chloromethane	0.40	0.50	PQL		ND	UG/L	1
1,2-Dibromo-3-chloropropane	0.36	0.50	PQL		ND	UG/L	1
1,2-Dibromoethane	0.41	0.50	PQL		ND	UG/L	1
Dibromomethane	0.31	0.50	PQL		ND	UG/L	1
1,2-Dichlorobenzene	0.43	0.50	PQL		ND	UG/L	1
1,3-Dichlorobenzene	0.48	0.50	PQL		ND	UG/L	1
1,4-Dichlorobenzene	0.40	0.50	PQL		ND	UG/L	1
Dichlorodifluoromethane	0.36	0.50	PQL		ND	UG/L	1
1,1-Dichloroethane	0.27	0.50	PQL		ND	UG/L	1
1,2-Dichloroethane	0.35	0.50	PQL		ND	UG/L	1
1,1-Dichloroethene	0.36	0.50	PQL		ND	UG/L	1
trans-1,2-Dichloroethene	0.24	0.50	PQL		ND	UG/L	1
1,2-Dichloropropane	0.36	0.50	PQL		ND	UG/L	1
Ethylbenzene	0.24	0.50	PQL		ND	UG/L	1
Hexachlorobutadiene	0.57	1.00	PQL		ND	UG/L	1
Isopropylbenzene	0.43	0.50	PQL		ND	UG/L	1
Methylene chloride	0.22	0.50	PQL		ND	UG/L	1
Naphthalene	0.47	1.00	PQL		ND	UG/L	1
Styrene	0.41	0.50	PQL		ND	UG/L	1
1,1,1,2-Tetrachloroethane	0.38	0.50	PQL		ND	UG/L	1
1,1,2,2-Tetrachloroethane	0.25	0.50	PQL		ND	UG/L	1

QA/QC Report
Method Blank Summary

Bace Analytical, Windsor, CA

Lab Report No.: 4549R Date: 07/02/2005

QC Batch:	20050428B	Analysis:	Volatile Organic Compounds by GC/MS
Matrix:	Groundwater	Method:	SW8260B
Lab Samp ID:	4549RMB	Prep Meth:	SW5030B
Analysis Date:	04/28/2005	Prep Date:	04/28/2005
Basis:	Not Filtered	Notes:	

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Tetrachloroethene (PCE)	0.32	0.50	PQL		ND	UG/L	1
Toluene	0.40	0.50	PQL		ND	UG/L	1
1,2,4-Trichlorobenzene	0.57	1.00	PQL		ND	UG/L	1
1,1,1-Trichloroethane	0.29	0.50	PQL		ND	UG/L	1
1,1,2-Trichloroethane	0.31	0.50	PQL		ND	UG/L	1
Trichloroethene (TCE)	0.40	0.50	PQL		ND	UG/L	1
1,2,3-Trichloropropane	0.35	0.50	PQL		ND	UG/L	1
Vinyl chloride	0.32	0.50	PQL		ND	UG/L	1
Bromobenzene	0.27	0.50	PQL		ND	UG/L	1
n-Butylbenzene	0.51	1.00	PQL		ND	UG/L	1
sec-Butylbenzene	0.49	1.00	PQL		ND	UG/L	1
tert-Butylbenzene	0.41	1.00	PQL		ND	UG/L	1
2-Chlorotoluene	0.40	0.50	PQL		ND	UG/L	1
4-Chlorotoluene	0.40	0.50	PQL		ND	UG/L	1
cis-1,2-Dichloroethene	0.34	0.50	PQL		ND	UG/L	1
1,3-Dichloropropane	0.34	0.50	PQL		ND	UG/L	1
Methyl-tert-butyl ether (MTBE)	0.38	1.00	PQL		ND	UG/L	1
n-Propylbenzene	0.37	0.50	PQL		ND	UG/L	1
1,2,3-Trichlorobenzene	0.57	1.00	PQL		ND	UG/L	1
1,3,5-Trimethylbenzene	0.42	1.00	PQL		ND	UG/L	1
Di-isopropyl ether (DIPE)	0.37	1.00	PQL		ND	UG/L	1
Ethyl tert-butyl ether (ETBE)	0.30	1.00	PQL		ND	UG/L	1
tert-Amyl methyl ether (TAME)	0.26	1.00	PQL		ND	UG/L	1
tert-Butyl alcohol (TBA)	2.4	10.	PQL		ND	UG/L	1
1,2,3-Trimethylbenzene	0.60	1.00	PQL		ND	UG/L	1
Xylenes	0.35	0.50	PQL		ND	UG/L	1

SURROGATE AND INTERNAL STANDARD RECOVERIES:

4-Bromofluorobenzene	86-115	SLSA	101%	1
Toluene-d8	88-110	SLSA	105%	1
Dibromofluoromethane	86-118	SLSA	105%	1

QA/QC Report
Matrix Spike/Duplicate Matrix Spike Summary

Bace Analytical, Windsor, CA

Lab Report No.: 4549R Date: 07/02/2005

QC Batch: 20050428B
Matrix: Groundwater
Lab Samp ID: 4549RMS
Basis: Not Filtered

Project Name: Lab Generated or Non COE Sample
Project No.: Lab Generated or Non COE Sample
Field ID: Lab Generated or Non COE Sample
Lab Ref ID: 4554-1

Analyte	Analysis Method	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Units	% Recoveries MS	% Recoveries DMS	% Recoveries RPD	Acceptance Criteria % Rec		Acceptance Criteria RPD
1,1-Dichloroethene	SW8260B	10.0	10.0	ND	9.55	9.25	UG/L	95.5	92.5	3.2	145-61	MSA	14MSP
Benzene	SW8260B	10.	10.	0.59	10.7	10.2	UG/L	101	96.0	5.1	127-76	MSA	11MSP
Chlorobenzene	SW8260B	10.0	10.0	ND	9.65	9.37	UG/L	96.5	93.7	2.9	130-75	MSA	13MSP
Toluene	SW8260B	10.0	10.0	ND	9.80	9.46	UG/L	98.0	94.6	3.5	125-76	MSA	13MSP
Trichloroethene (TCE)	SW8260B	10.0	10.0	ND	9.93	9.53	UG/L	99.3	95.3	4.1	120-71	MSA	14MSP
4-Bromofluorobenzene	SW8260B	100.	100.	99.	100.	98.	PERCENT	100	98.0	2.0	115-86	SLSA	20SLSP
Dibromofluoromethane	SW8260B	100.	100.	97.	97.	98.	PERCENT	97.0	98.0	1.0	118-86	SLSA	20SLSP
Toluene-d8	SW8260B	100.	100.	99.	99.	100.	PERCENT	99.0	100	1.0	110-88	SLSA	20SLSP

QA/QC Report
Matrix Spike/Duplicate Matrix Spike Summary

Bace Analytical, Windsor, CA

Lab Report No.: 4549R Date: 07/02/2005

QC Batch: 20050428B
Matrix: Groundwater
Lab Samp ID: 4549RMS
Basis: Not Filtered

Project Name: Lab Generated or Non COE Sample
Project No.: Lab Generated or Non COE Sample
Field ID: Lab Generated or Non COE Sample
Lab Ref ID: 4554-2

Analyte	Analysis Method	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Units	% Recoveries MS	% Recoveries DMS	% Recoveries RPD	Acceptance Criteria % Rec		Acceptance Criteria RPD
Gasoline Range Organics (C5-C12)	8260TPH	0.50	0.50	ND	0.45	0.50	MG/L	90.0	100	11	130-70	MSA	25MSP
4-Bromofluorobenzene	8260TPH	100.	100.	101.	99.	99.	PERCENT	99.0	99.0	0.00	120-80	SLSA	20SLSP

Chain-of Custody Form

Project #	Project Name				Analysis												C.O.C. No. 11765
421	4180 Martinelli Montgomery Dr Santa Rosa																
L.P. No.	Sampler's Signature			No. of Con-tainers	TPH gas	8260 Full List											Remarks:
Date Sampled	Sample I.D.	Time (24 Hour)	Sample Type														
4/20/05	MW-1	1244	Water	4	X	X											4549A-1
	MW-2	1201	↓	↓	X	X											-2
	MW-3	1013	↓	↓	X	X											-3
	MW-4	1052	↓	↓	X	X											-4
																	Request for re-analysis of data for this lag received on 7/1/2005 WBP
																	TRANSFER FROM COC #11692

Laboratory:

Preservation: A - HCL: B - H2SO4: C - NaOH: D - HNO3: E - Ice: F - (specify)

Relinquished by: (signed)	Date/Time	Received by: (signed)	Remarks:
[signature]	4/20/05 1439	[signature]	This is a revision to reporting requirements previously requested DSL
Relinquished by: (signed)	Date/Time	Received by: (signed)	
Relinquished by: (signed)	Date/Time	Received for Laboratory by: (signed)	

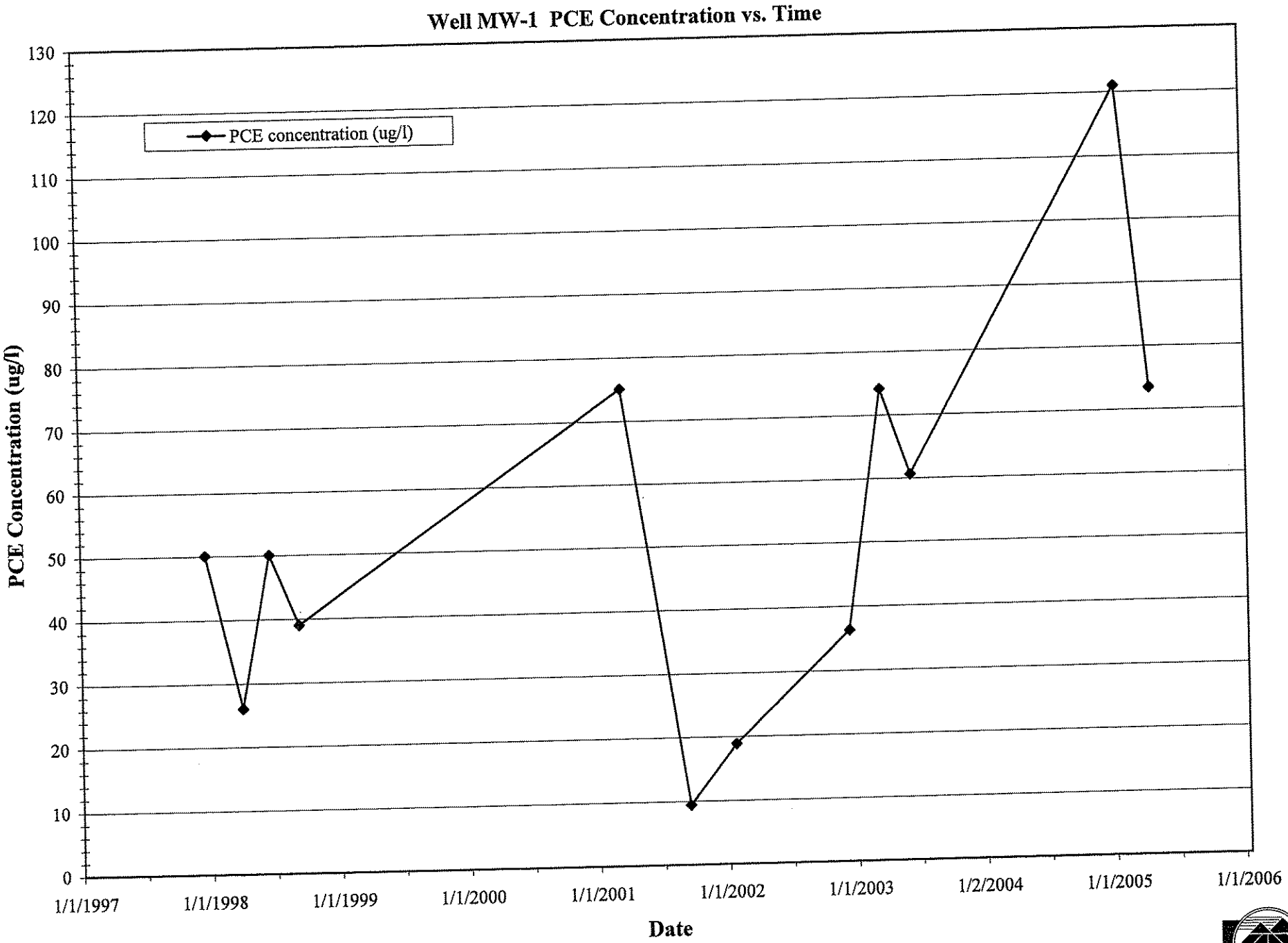
Brunsing Associates, Inc.
P.O. Box 588
5803 Skylane Blvd., Suite A
Windsor, CA 95492
(707) 838-3027
(707) 838-4420 fax

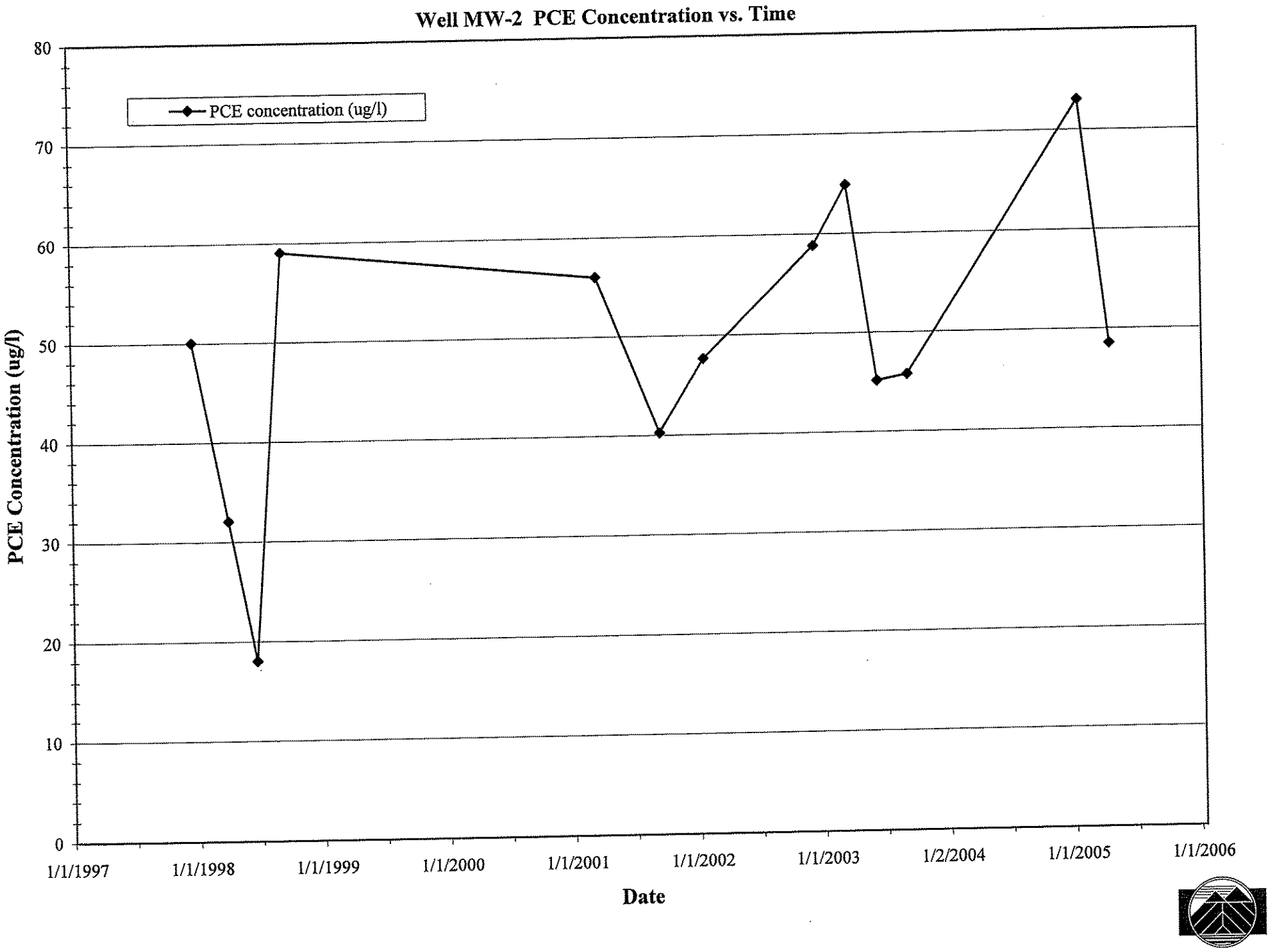
APPENDIX C
PCE Concentration vs. Time Graphs

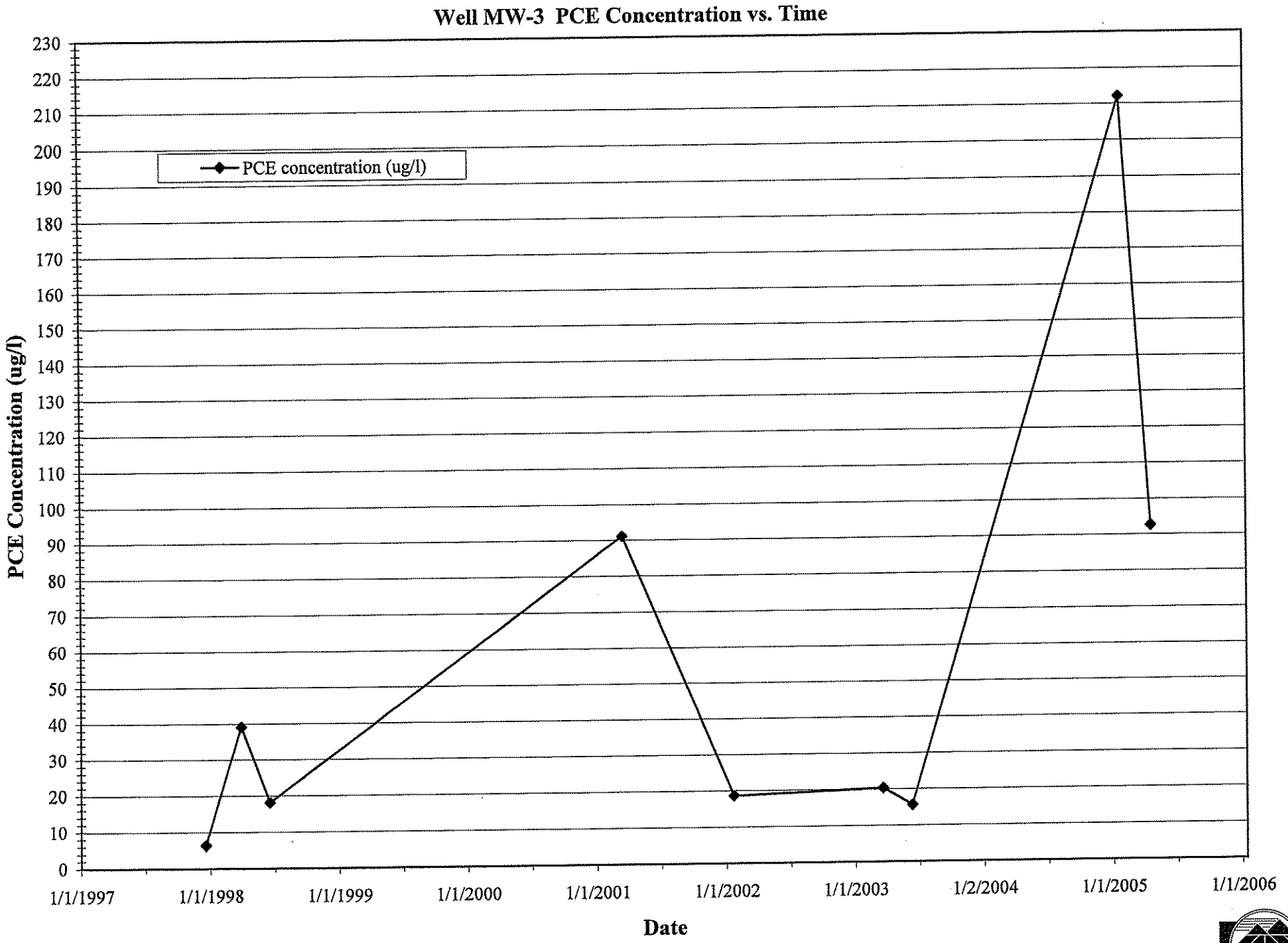
PCE vs. Time Data
4180 Montgomery Drive
Santa Rosa, California

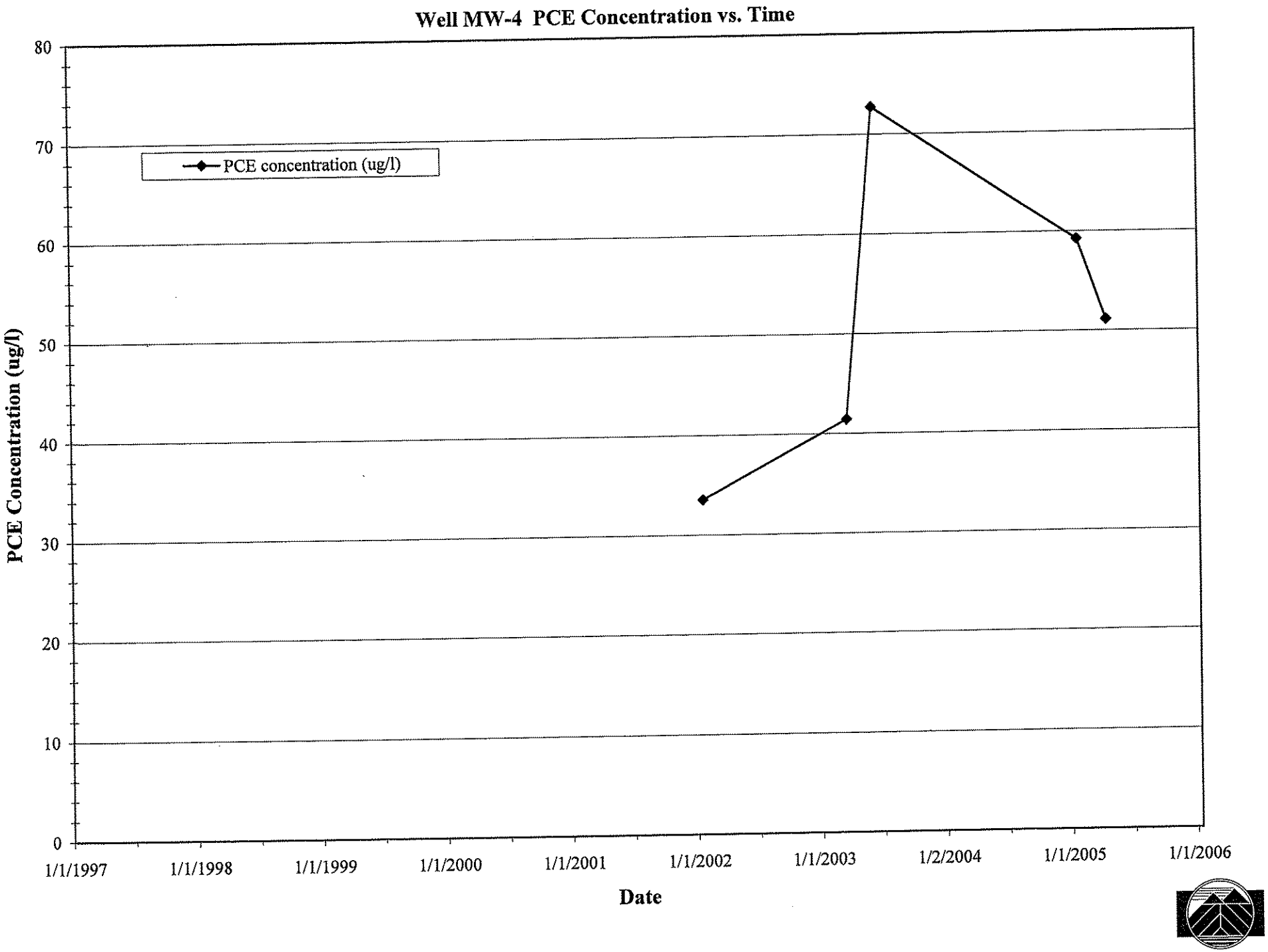
Monitoring Well Number	Sampling Date	Tetrachloroethene (µg/l)
MW-1	12/19/1997	50
MW-1	3/30/1998	26
MW-1	6/18/1998	50
MW-1	9/8/1998	39
MW-1	3/16/2001	75
MW-1	9/13/2001	9.32
MW-1	1/22/2002	18.8
MW-1	12/13/2002	36.3
MW-1	3/21/2003	74.1
MW-1	6/12/2003	60.6
MW-1	1/27/2005	121
MW-1	4/20/2005	73.4
MW-2	12/19/1997	50
MW-2	3/30/1998	32
MW-2	6/18/1998	18
MW-2	9/8/1998	59
MW-2	3/16/2001	56
MW-2	9/13/2001	40.2
MW-2	1/22/2002	47.6
MW-2	12/13/2002	58.8
MW-2	3/21/2003	64.8
MW-2	6/12/2003	45.1
MW-2	9/9/2003	45.7
MW-2	1/27/2005	73.0
MW-2	4/20/2005	48.5
MW-3	12/19/1997	6.3
MW-3	3/30/1998	39
MW-3	6/18/1998	18
MW-3	3/16/2001	91
MW-3	1/22/2002	18.5
MW-3	3/21/2003	20.2
MW-3	6/12/2003	15.5
MW-3	1/27/2005	212
MW-3	4/20/2005	92.5
MW-4	1/22/2002	33.5
MW-4	3/21/2003	41.4
MW-4	6/12/2003	72.7
MW-4	1/27/2005	59.2
MW-4	4/20/2005	51.1

µg/l = micrograms per liter.


Well MW-1 PCE Concentration vs. Time
PCE concentration (ug/l)
PCE Concentration (ug/l)
130
120
110
100
90
80
70
60
50
40
30
20
10
0
1/1/1997
1/1/1998
1/1/1999
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/2/2004
1/1/2005
1/1/2006
Date


Well MW-2 PCE Concentration vs. Time
PCE concentration (ug/l)
PCE Concentration (ug/l)
80
70
60
50
40
30
20
10
0
1/1/1997
1/1/1998
1/1/1999
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/2/2004
1/1/2005
1/1/2006
Date


Well MW-3 PCE Concentration vs. Time
PCE concentration (ug/l)
PCE Concentration (ug/l)
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
1/1/1997
1/1/1998
1/1/1999
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/2/2004
1/1/2005
1/1/2006
Date


Well MW-4 PCE Concentration vs. Time
PCE concentration (ug/l)
PCE Concentration (ug/l)
80
70
60
50
40
30
20
10
0
1/1/1997
1/1/1998
1/1/1999
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/2/2004
1/1/2005
1/1/2006
Date