Conor Pacific

EFW

Transmittal

To: Ms. Eva Chu
Hazardous Materials Specialist
Alameda County Environmental
Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

From: Katrin Schliewen

Date: August 25, 2000

Proj. No.: BNC 103

Copies	Description	Sent by:
1	Second Quarter 2000 Groundwater Monitoring Results, B&C Gas Mini Mart, Livermore, California	☒ *Regular Mail* ☐ *FedEx* ☐ *Courier* ☐ *Other*

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Copies	Name & Address	Sent by:
2	Mr. Balaji Angle, Angle's AM-PM Mini Mart	☒ *Regular Mail*
1	Ms. Eva Chu, Alameda County Env. Health Services	☐ *FedEx*
1	Mr. Matt Katen, Alameda County Zone 7	☐ *Courier*
1	Regional Water Quality Control Board, LUFT	☐ *Other*

SECOND QUARTER 2000
GROUNDWATER MONITORING RESULTS
B&C Gas Mini Mart
Livermore, California

Prepared by

Conor Pacific
2650 East Bayshore Road
Palo Alto, California 94303

August 2000

Project BNC 103

Conor Pacific

August 25, 2000
Project No. BNC103

Mr. Balaji Angle
Angle Enterprises
5131 Shattuck Avenue
Oakland, California 94609

Re: Second Quarter 2000 Groundwater Monitoring Results, B&C Gas Mini Mart, 2008 First Street, Livermore, California (Station ID 1689)

Dear Mr. Angle:

Conor Pacific has compiled second quarter 2000 groundwater monitoring results for B&C Gas Mini Mart (B&C), 2008 First Street, Livermore, California (Figure 1). This report includes second quarter 2000 groundwater elevation data, groundwater sampling methods, and results of groundwater chemical analyses. Eight out of the nine wells to be sampled on a quarterly basis were sampled during the second quarter 2000 monitoring.

SITE INFORMATION

Site Name & Contact

Mr. Balaji Angle
B&C Gas Mini Mart
2008 First Street
Livermore, California 94550
(510) 654-3461

Site Description

The B&C property is located on the northeast corner of First and South L Streets in Livermore, California, and currently serves as a gasoline station and mini market and is called Valley Gas. From at least 1988 until 1994, Desert Petroleum (DP) owned and operated the site. In January 1994, DP sold the site to the current owner, Mr. Balaji Angle. The following site description has been compiled from reports on file with Alameda County Environmental Health Services (ACEHS) and information provided by the site owner.

The site is located in the Livermore Valley groundwater basin, an area of sedimentary deposition containing braided channel systems with complex interfingering. Subsurface investigations conducted to the west of the B&C site have found an upper unconfined water-bearing zone consisting primarily of gravels with sand and clay. A low-

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permeability clayey unit is found at depths of approximately 75 to 110 feet below ground surface (bgs). Below the clayey unit, the top of a lower, semi-confined aquifer is found at depths ranging from 110 to 145 feet bgs.[1]

Subsurface work conducted in the B&C area has found predominantly sandy clay, silty sand, silty gravel, and sandy gravel. Over the last eleven years, static water levels have ranged from 68.7 feet bgs (January 1992) to 17.0 feet bgs (February 1997). The groundwater flow generally ranges from west of north during the summer and fall months, to north of west during the winter and spring months. Table 1 presents historical site groundwater elevations.[2] Table 2 summarizes all B&C monitoring well constructions.

Previous Work Performed at Site

A preliminary site assessment was conducted in September 1988. Three soil borings were completed; one of which was converted to a monitoring well (MW-1). In March 1994, a 280-gallon waste oil underground storage tank (UST) and 25 cubic yards of soil were removed as part of closing the auto repair shop at the station. Three months later in June, wells MW-2, MW-3, and MW-4 were installed (Figure 2).[3]

In August 1994, free product was encountered in well MW-2, and product removal commenced twice a month. By the end of January 1995, no measurable thickness of product remained, only sheen could be detected.[4] In March 1995, a release was reported to have occurred from the union between a tank subpump and product line. The quantity of the release is unknown.

One gasoline UST at the B&C site failed an integrity test in September 1995. The tank was immediately taken out of commission and ACEHS was notified. In July 1996, further source removal was conducted. Two more gasoline USTs were removed, and new double-walled fiberglass USTs and fiberglass piping with automated leak detection were installed. Other remedial activities included the removal of two hydraulic lifts and approximately 700 cubic yards of impacted soil. Also, one 1,000-gallon UST discovered during excavation activities was closed in place with approval from ACEHS and the Livermore Fire Department by grouting with a cement sand slurry. In October 1995, two additional monitoring wells (off-site well MW-5 and well MW-6) were installed for the B&C site (Figure 2).

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[1] H⁺GCL, Inc. Deep Groundwater Conduit Study, Livermore Arcade Shopping Center, First Street and South P Street, Livermore, California. December 6, 1993.

[2] Groundwater elevation and flow direction data from Remediation Service Int'l quarterly reports.

[3] Remediation Service Int'l. Soil & Groundwater Investigation Report for 2008 First Street, Livermore, California. July 22, 1994.

[4] Product thickness information from Remediation Service, Int'l field records, "Free Product Removal Logs."

Nine downgradient wells (MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, D-1, and D-2) were installed during June and July 1999 to define the downgradient and lateral extent of the plume and provide long-term monitoring locations (Figure 2).[5] Two of the wells, D-1 and D-2, are installed in the semi-confined aquifer below the aquitard. The other wells are installed in the upper water-bearing zone. Table 1 summarizes the well construction details for all on-site and off-site wells installed to date.

The primary constituents of concern are total petroleum hydrocarbons as gasoline (TPH-G); the aromatic compounds benzene, toluene, ethylbenzene, and xylenes (collectively referred to as BTEX); and methyl tertiary-butyl ether (MTBE). Since 1994, concentrations of TPH-G in groundwater have generally decreased.

Interim Remedial Action at Well MW-5

Floating product was first observed in well MW-5 on July 30, 1998 (Table 2). The well is screened from 15 feet to 40 feet bgs, and the depth to groundwater has historically ranged from 18 to 33 feet bgs, well within the screened interval of the well. Due to the presence of floating free product in well MW-5, interim remedial actions were taken to remove the floating product from the well. A passive bailer or absorbent sock was selected to remove product from well MW-5 based on well access, the thickness of the product, and the rate at which the product enters the well as it is removed.

Over the time period monitored, the absorbent socks have removed sufficient product to reduce the free product thickness to a sheen or less. In April 1999, the absorbent sock was raised above the water table. In December 1999, 0.07 feet of free product was measured in well MW-5 and the absorbent sock was replaced in the well. In March and June 2000, no free product was measured or visible in MW-5 and groundwater samples were collected.

GROUNDWATER SAMPLING AND ANALYSIS

Second quarter activities are reviewed below. Groundwater sampling methods and results are presented and a discussion of historical analytical trends for site monitoring wells is included.

Free Product

During the second quarter 2000 sampling event, Conor Pacific checked for free product in all site wells. Of the wells which previously have been reported to contain free product (Wells MW-2, MW-5, and MW-6), none contained a measurable thickness of product this quarter. Off-site well (MS)MW-1, located approximately 800 feet downgradient from the B&C site on the Mill Springs Park property, was also checked for product (Figure 1). (MS)MW-1 did not contain a measurable thickness of product although

[5] Einarson, Fowler & Watson, November 5, 1999, Report of Downgradient Investigation, B&C Gas Mini Mart, 2008 First Street, Livermore, California.

globules of product were observed in the bailer during purging. No sample was collected from (MS)MW-1 during this quarter.

Groundwater Elevations

On June 21, 2000, Conor Pacific measured the depth to water in all groundwater monitoring wells. Water levels were measured to the nearest 0.01 foot using a float-activated product probe, according to Conor Pacific's standard measuring protocol,[6] and were recorded on a water level data sheet (Appendix A). Groundwater elevations are calculated by subtracting depth-to-water measurements from the top of well casing elevations, surveyed to Livermore City datum, mean sea level (MSL).

Table 2 summarizes available groundwater elevations from August 1990 to June 2000. A comparison of well screen elevations (Table 1) and second quarter measurements shows that the water levels were above the well screens in all wells except MW-5, MW-6, MW-9, and (MS)MW-1. The water level in these four wells intercepted the well screen interval at the time of groundwater sampling. A groundwater contour map, based on June 2000 measurements, is shown in Figure 2. Second quarter groundwater elevations are generally two to almost three feet lower than the first quarter 2000. Groundwater flow was generally due west during second quarter 2000. Based on second quarter measurements, the hydraulic gradient is approximately 0.013 foot per foot. The flow direction and gradient are in accordance with previous results.

A vertically downward gradient was observed between the upper water-bearing zone (MW-11 and MW-12) and the semi-confined aquifer (D-1 and D-2), similar to, although less significant, than in previous quarters. This may be the result of the effects of slower recharge to the deeper, semi-confined aquifer compared with more rapid recharge to the upper water-bearing zone.

Sampling Methods

Conor Pacific sampled 8 monitoring wells on June 21-22, 2000, following Conor Pacific's standard protocol. The remaining wells will be sampled during the regular annual sampling event in the third quarter. Off-site well (MS)MW-1 was not sampled this quarter due to the presence of free product globules observed during well purging. Wells were purged using either a submersible pump or a polyvinyl chloride (PVC) bailer. Samples were collected from each well using a disposable PVC bailer. Field measurements of temperature, pH, dissolved oxygen, turbidity, and electrical conductivity were taken and recorded on water sample field data sheets (Appendix A). All purge water was contained in 55-gallon drums and stored on-site pending proper disposal. Purge water with low hydrocarbon concentrations is pumped to the sanitary sewer under City of Livermore Groundwater Discharge Permit # 1514. All samples were

[6] Einarson, Fowler & Watson. Third Quarter 1998 Groundwater Monitoring Results, B&C Gas Mini Mart, Livermore, California, Appendix A. September 10, 1998.

properly stored on the day of sampling. Chain-of-custody documentation accompanied the samples through collection and delivery to the analytical laboratory.

Analytical Program

All groundwater analyses were performed by Sequoia Analytical of Petaluma, California, a state-certified laboratory. All groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) by U.S. Environmental Protection Agency (EPA) Method 8015M and benzene, toluene, ethylbenzene, and xylenes (BTEX) and methyl tertiary-butyl ether (MTBE) by EPA Method 8020M. At the request of the ACEHS, the groundwater sample collected from MW-5 was also analyzed by EPA Method 8260B for seven oxygenates including MTBE. Laboratory analyses occurred within specified holding times and within laboratory quality control standards. The certified analytical report is located in Appendix A.

Analytical Results

Over the last five years of monitoring at the site, concentrations of benzene have steadily decreased in all site wells. Analysis of site groundwater samples for MTBE began in June 1995. Since then, concentrations of MTBE have decreased significantly. Table 3 presents a historical summary of groundwater analytical results from the B&C site. Second quarter 2000 analytical results for benzene and MTBE are also presented on Figure 3.

Site Wells

Only one of the five wells located on the B&C Gas Mini Mart property was sampled during the second quarter 2000, namely MW-2. Hydrocarbon concentrations in the groundwater sample collected from MW-2 were lower during this quarter than during all previous sampling events. During this quarter, TPH-G was detected at 5,820 micrograms per liter (µg/L), the concentrations of BTEX compounds were respectively 128 µg/L, 94.4 µg/L, 155 µg/L, and 161 µg/L, and the concentration of MTBE was measured at 67.8 µg/L.

Downgradient Wells

Seven of the eight downgradient wells were sampled during second quarter. In general, hydrocarbon concentrations in groundwater samples collected from these wells during the second quarter 2000 were similar to the previous sampling event, with the notable exception of MW-5 where certain hydrocarbon concentrations were significantly higher this quarter.

Well MW-5, located 75 feet downgradient of the site, was sampled this quarter since no free product was measured in the well. Hydrocarbon concentrations for TPH-G and all BTEX compounds were almost twice as high this quarter as they were during first quarter 2000. However, concentrations generally are significantly below hydrocarbon levels reported in samples collected up to and including September 1999. The

concentration of MTBE in the groundwater sample collected during second quarter 2000 is the lowest reported to date. The MTBE result reported in Table 3 (131 µg/L) was obtained using EPA Method 8260B for oxygenates and differed by more than 40% from the MTBE concentration obtained from EPA Method 8020 (244 µg/L), as noted in the certified analytical report. No other oxygenates analyzed were detected in the groundwater sample collected from well MW-5.

Well MW-7, located on the Mill Springs Park Apartments property approximately 550 feet downgradient from the site, had lower concentrations for TPH-G and xylenes during this quarter. Ethylbenzene was detected at a low concentration (0.875 µg/L) after being not detected during last quarter. The concentration of MTBE was slightly higher this quarter at 4.87 µg/L.

Well MW-8, located on Railroad Avenue at the Bank of America building contained only a low concentration of MTBE (5.56 µg/L) during this quarter, slightly higher than last quarter (4.65 µg/L).

Well MW-10 is located on Railroad Avenue at the Granada Bowling Alley building. No hydrocarbons were detected this quarter, including TPH-G which was detected for the first time last quarter.

Well MW-13, located on Railroad Avenue east of the Bank of America, contained low concentrations of benzene (7.83 µg/L), ethylbenzene (0.732 µg/L), and MTBE (38.8 µg/L). The concentration of benzene this quarter was the highest measured since the first sample was collected in July 1999.

Well (MS)MW-1, located approximately 800 feet downgradient from the B&C site, was not sampled during second quarter 2000 since globules of free product were observed in the PVC bailer during well purging.

No TPH-G, BTEX compounds, or MTBE were detected in downgradient wells MW-12 and D-2. These results are consistent with historical results from these wells.

RECOMMENDATIONS

It is recommended that additional monitoring wells be installed in the upper water-bearing zone north of existing wells MW-5, MW-7, MW-8, and MW-13. These would help define the lateral extent of MTBE, benzene, and TPH-G and be used to monitor possible plume migration towards the north-northwest. Currently, the extent of the plume to the north is poorly defined as seen in Figure 3.

The installation of two monitoring wells (referred to at the time as MW-11, MW-12, and MW-13) to the north of the present plume was proposed originally in a September 1998

Einarson, Fowler and Watson workplan.[7] As discussed in the November 1999 report summarizing the June-July 1999 drilling, these wells were not installed due to access constraints of properties between Railroad Avenue, the railroad track, North P Street, and North L Street. Negotiations with the City of Livermore and surrounding private property owners will need to be made prior to proposing well locations.

SUMMARY

The second quarter 2000 groundwater monitoring results are consistent with previous monitoring results. Hydrocarbon concentrations were generally lower or similar to previous sampling events, with the exception of the groundwater sample collected from well MW-5. During the previous quarter, the furthest downgradient hydrocarbon concentration was reported from a sample collected from well MW-10. This quarter no hydrocarbons were detected in MW-10. Third quarter 2000 groundwater monitoring, scheduled for September 2000, is an annual sampling event where all wells, both on-site and off-site will be sampled.

[7] Einarson, Fowler & Watson. Workplan for Additional Downgradient Investigation, B&C Gas Mini Mart, 2008 First Street, Livermore, California. September 8, 1998.

If you have any questions regarding this report, please call us at (650) 843-3828.

Sincerely,
Conor Pacific

ORIGINAL SIGNED BY

Katrin Schliewen
Project Hydrogeologist

ORIGINAL SIGNED BY

Kris H. Johnson, CEG 1763
Senior Engineering Geologist

Attachments:

Tables

Table 1 - Summary of Groundwater Elevations
Table 2 - Monitoring Well Constructions
Table 3 - Historical Groundwater Analytical Results

Figures

Figure 1 - Site Location
Figure 2 - Well Locations and Groundwater Contours (June 2000)
Figure 3 - Groundwater Chemistry (June 2000)

Appendices

Appendix A - Water Sample Field Data Sheets and Certified Analytical Reports

cc: Eva Chu, Alameda County Environmental Health Services
Mr. Matt Katen, Alameda Co. Flood Control and Water Cons. District Zone 7
Regional Water Quality Control Board, San Francisco Bay Region LUFT
State Water Resources Control Board, UST Fund

Table 1
Monitoring Well Constructions
B&C Gas Mini Mart
Livermore, California

Well No.	Drilling Method	Date Installed	T.D. Boring (ft.-bgs)	T.D. Well (ft.-bgs)	Borehole Diameter (inches)	Casing Material (PVC)	Casing Diameter (inches)	Screen Size (inches)	Sand Pack Material	Screened Interval (ft.-bgs)	Sand Pack Interval (ft.-bgs)
MW-1	HSA	Sep-88	77	77	8	PVC	2	0.020	#3 sand	27 - 77	25 - 77
MW-2	HSA	Jun-94	60	60	10	PVC	4	0.020	#2/20 sand	30 - 60	27 - 60
MW-3	HSA	Jun-94	60	60	10	PVC	4	0.020	#2/20 sand	30 - 60	27 - 60
MW-4	HSA	Jun-94	60	60	10	PVC	4	0.020	#2/20 sand	30 - 60	27 - 60
MW-5	HSA	Oct-95	42	40	10	PVC	4	0.020	#2 sand	15 - 40	12 - 40
MW-6	HSA	Oct-95	42	40	10	PVC	4	0.020	#2 sand	15 - 40	12 - 40
MW-7	HSA	Jun-99	62	49	8	PVC	2	0.020	#3 sand	29-49	27-51
MW-8	HSA	Jun-99	62	54	8	PVC	2	0.020	#3 sand	34-54	32-54
MW-9	HSA	Jun-99	45	45	8	PVC	2	0.020	#3 sand	25-45	23-45
MW-10	HSA	Jun-99	55	53.5	8	PVC	2	0.020	#3 sand	33.5-53.5	23-55
MW-11	HSA	Jun-99	50	49	8	PVC	2	0.020	#3 sand	29-49	27-49
MW-12	HSA	Jun-99	45	43.5	8	PVC	2	0.020	#3 sand	23.5-43.5	21-45
MW-13	HSA	Jul-99	55	55	8	PVC	2	0.020	#3 sand	35-55	32-55
D-1	HSA	Jun-99	125	125	8	PVC	2	0.020	#3 sand	110-125	104-125
D-2	HSA	Jun-99	115	114	8	PVC	2	0.020	#3 sand	99-114	94-114
(MS)MW-1	HSA	Apr-89	62	60	NA	PVC	2	NA	NA	30-60	NA

HSA Hollow-Stem Auger
T.D. Total Depth
ft.-bgs feet below ground surface
NA Not available
Well construction information for wells MW-2 through MW-6 collected from Remediation Service Int'l boring logs.

Table 2
Summary of Groundwater Elevations
B & C Gas Mini Mart
Livermore, California

Well Number	Top-of-Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet)	Groundwater Elevation (feet, MSL)	Depth to Free product (feet)	Product Thickness (feet)
MW-1	487.00	09/22/88	60.50	426.50		
		08/02/90	43.10	443.90		
		10/10/91	66.39	420.61		
		01/08/92	68.72	418.28		
		05/11/93	34.76	452.24		
		09/21/93	38.70	448.30		
		05/22/94	33.57	453.43		
	484.07	06/19/94	37.51	446.56		
		08/25/94	43.27	440.80		
		11/22/94	40.58	443.49		
		03/13/95	28.06	456.01		
		06/01/95	21.76	462.31		
		02/29/96	18.86	465.21		
		Feb-97	NM	NM		
		07/30/98	25.90	458.17		
		11/05/98	33.23	450.84		
		03/23/99	25.49	458.58		
		06/08/99	27.78	456.29		
		09/27/99	30.65	453.42		
		12/20/99	32.99	451.08		
		03/21/00	23.95	460.12		
		06/21/00	26.55	457.52		
MW-2	483.86	06/19/94	38.15	445.71		
		08/25/94	44.13	-	43.47	0.66
		11/22/94	40.96	-	40.92	0.04
		03/09/95	29.28	-	28.47	0.81
		03/13/95	28.71	-	28.29	0.42
		06/01/95	22.61	461.25		
		02/29/96	20.05	463.81		
		Feb-97	18.30	465.56		
		07/30/98	25.75	-	25.74	0.01
		11/05/98	33.31	450.55		
		03/23/99	25.51	458.35		
		06/08/99	27.54	456.32		
		09/27/99	30.73	453.13		
		12/20/99	33.02	450.84		
		03/21/00	24.13	459.73		
		06/21/00	26.26	457.60		
MW-3	484.24	06/19/94	37.15	447.09		
		08/25/94	42.31	441.93		
		11/22/94	40.07	444.17		
		03/13/95	27.94	456.30		
		06/01/95	21.31	462.93		
		02/29/96	18.78	465.46		
		Feb-97	16.97	467 27		
		07/30/98	24.88	459.36		
		11/05/98	32.09	452.15		
		03/23/99	24.49	459.75		
		06/08/99	26.77	457.47		
		09/27/99	29.52	454.72		
		12/20/99	31.85	452.39		
		03/21/00	22.95	461.29		
		06/21/00	25.60	458.64		

Table 2
Summary of Groundwater Elevations
B & C Gas Mini Mart
Livermore, California

Well Number	Top-of-Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet)	Groundwater Elevation (feet, MSL)	Depth to Free product (feet)	Product Thickness (feet)
MW-4	485.04	06/19/94	37.49	447.55		
		08/25/94	42.25	442.79		
		11/22/94	40.59	444.45		
		03/13/95	28.00	457.04		
		06/01/95	21.51	463.53		
		02/29/96	18.42	466.62		
		Feb-97	17.47	467.57		
		07/30/98	25.47	459.57		
		11/05/98	32.67	452.37		
		03/23/99	25.09	459.95		
		06/08/99	27.43	457.61		
		09/27/99	30.16	454.88		
		12/20/99	32.52	452.52		
		03/21/00	23.43	461.61		
		06/21/00	26.14	458.90		
MW-5	481.97	02/29/96	19.35	462.62		
		Feb-97	18.19	463.78		
		07/30/98	25.25	456.72	25.24	0.01
		11/05/98	32.70	449.27	32.48	0.22
		03/23/99	25.15	456.82		
		06/08/99	27.27	454.70		
		09/27/99	30.00	451.97		
		12/20/99	32.30	449.67	32.23	0.07
		03/21/00	23.55	458.42		
		06/21/00	26.04	455.93		
MW-6	483.93	02/29/96	20.32	463.61		
		Feb-97	18.92	465.01		
		07/30/98	25.59	458.34	25.58	0.01
		11/05/98	NA	NA		
		03/23/99	25.43	458.50		
		06/08/99	27.43	456.50		
		09/27/99	NM >28.6	NM		
		12/20/99	NM >28.7	NM		
		03/21/00	24.02 *	459.91		
		06/21/00	26.04 *	457.89		
MW-7	478.14	7/12/99	28.37	449.77		
		09/27/99	30.20	447.94		
		12/20/99	32.44	445.70		
		03/21/00	24.18	453.96		
		06/21/00	26.70	451.44		
MW-8	473.23	7/12/99	34.29	438.94		
		09/27/99	37.11	436.12		
		12/20/99	39.79	433.44		
		03/21/00	29.10	444.13		
		06/21/00	31.90	441.33		
MW-9	477.08	7/12/99	30.71	446.37		
		09/27/99	32.61	444.47		
		12/20/99	34.99	442.09		
		03/21/00	26.75	450.33		
		06/21/00	29.28	447.80		

Table 2
Summary of Groundwater Elevations
B & C Gas Mini Mart
Livermore, California

Well Number	Top-of-Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet)	Groundwater Elevation (feet, MSL)	Depth to Free product (feet)	Product Thickness (feet)
MW-10	471.42	7/12/99	34.60	436.82		
		09/27/99	37.62	433.80		
		12/20/99	40.04	431.38		
		03/21/00	29.50	441.92		
		06/21/00	32.19	439.23		
MW-11	464.93	7/12/99	31.00	433.93		
		09/27/99	33.83	431.10		
		12/20/99	35.91	429.02		
		03/21/00	26.41	438.52		
		06/21/00	28.79	436.14		
MW-12	458.34	7/12/99	25.50	432.84		
		09/27/99	28.28	430.06		
		12/20/99	30.26	428.08		
		03/21/00	20.70	437.64		
		06/21/00	23.11	435.23		
MW-13	474.79	7/12/99	30.65	444.14		
		09/27/99	32.74	442.05		
		12/20/99	34.98	439.81		
		03/21/00	26.03	448.76		
		06/21/00	28.74	446.05		
D-1	464.70	7/12/99	30.67	434.03		
		09/27/99	35.32	429.38		
		12/20/99	36.32	428.38		
		03/21/00	27.84	436.86		
		06/21/00	30.40	434.30		
D-2	457.61	7/12/99	25.72	431.89		
		09/27/99	28.44	429.17		
		12/20/99	29.40	428.21		
		03/21/00	20.91	436.70		
		06/21/00	23.56	434.05		
(MS)MW-1	477.79	07/30/98	30.37	447.42	30.35	0.02
		11/05/98	38.01	439.78	(1)	
		03/23/99	29.44	448.35	(1)	
		06/08/99	31.70	446.09	(1)	
		09/27/99	34.38	443.41		
		12/20/99	37.36	440 43		
		03/21/00	28.22	449.57		
		06/21/00	30.95	446.84		

Notes.
Data prior to 1998 from RSI quarterly reports February 1997 date unknown.
MSL = mean sea level
NM = not measured; NA = not accessible, blocket at 28.4 feet.
MS = Mill Springs Park
(1) - free product visible in purge or sample water
* Obstruction in well at 28.6 feet below top of casing

Table 3
Historical Groundwater Analytical Results
B&C Gas Mini Mart
Livermore, California

Well No.	Sample Date	TPH-G (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)
MW-1	Aug-90	24,000	1,300	1,300	400	2,700	NA
	Oct-91	2,000	430	170	100	290	NA
	Jan-92	1,000	200	120	30	150	NA
	May-93	960	66	8	41	90	NA
	Sep-93	1,900	311	118	34	112	NA
	May-94	10,000	690	1,100	340	1,200	NA
	Aug-94	13,000	290	690	120	670	NA
	Nov-94	19,000	400	770	230	130	NA
	Mar-95	6,000	900	100	980	740	NA
	Jun-95	2,400	210	380	53	280	13,000
	Sep-95	7,800	69	1,300	220	1,200	2,000
	Feb-96	120	4.2	1.4	4.7	5.6	14
	Feb-97	NS*	NS*	NS*	NS*	NS*	NS*
	Jul-98	1,400	26	110	57	243	5
	Nov-98	6,000	230	330	240	1,060	<100
	Mar-99	6,600	280	420	240	990	60
	Jun-99	1,630	70	52	55	138	67
	Dec-99	NS	NS	NS	NS	NS	NS
	Mar-00	300	17.6	14.2	9.89	40.7	7.84
	Jun-00	NS	NS	NS	NS	NS	NS
MW-2	Jun-94	290,000	18,000	36,000	4,600	26,000	NA
	Aug-94	NS**	NS**	NS**	NS**	NS**	NA
	Nov-94	NS**	NS**	NS**	NS**	NS**	NA
	Mar-95	NS**	NS**	NS**	NS**	NS**	NA
	Jun-95	25,000	2,300	3,400	720	3,100	16,000
	Sep-95	NS**	NS**	NS**	NS**	NS**	NS**
	Feb-96	57,000	2,500	650	3,700	3,100	6,500
	Feb-97	20,000	860	1,500	480	1,000	1,300
	Jul-98	NS**	NS**	NS**	NS**	NS**	NS**
	Nov-98	40,000	2,400	2,500	2,100	7,200	1,200
	Mar-99	22,000	780	880	780	1,730	300
	Jun-99	11,200	352	454	540	639	343
	Sep-99	18,000	992	331	901	2,140	225
	Dec-99	19,200	1,340	818	1,050	2,130	579
	Mar-00	6,340	281	184	233	348	90.2
	Jun-00	5,820	128	94.4	155	161	67.8
MW-3	Jun-94	11,000	640	580	270	790	NA
	Aug-94	41,000	1,600	2,300	330	1,800	NA
	Nov-94	18,000	8,000	10,000	900	5,000	NA
	Mar-95	44,000	1,600	1,300	5,000	6,600	NA
	Jun-95	15,000	600	1,900	490	2,600	4,200
	Sep-95	8,000	710	1,100	180	870	2,700
	Feb-96	13,000	260	200	200	1,100	1,500
	Feb-97	11,000	260	550	170	600	900
	Jul-98	25,000	330	1,200	490	1,860	300
	Nov-98	26,000	400	2,100	820	3,600	300
	Mar-99	6,900	100	160	110	265	220
	Jun-99	1,210	5.4	9.0	6.9	4.3	53.3
	Dec-99	NS	NS	NS	NS	NS	NS
	Mar-00	465	4.56	1.87	6.20	7.45	15.5
	Jun-00	NS	NS	NS	NS	NS	NS

Table 3
Historical Groundwater Analytical Results
B&C Gas Mini Mart
Livermore, California

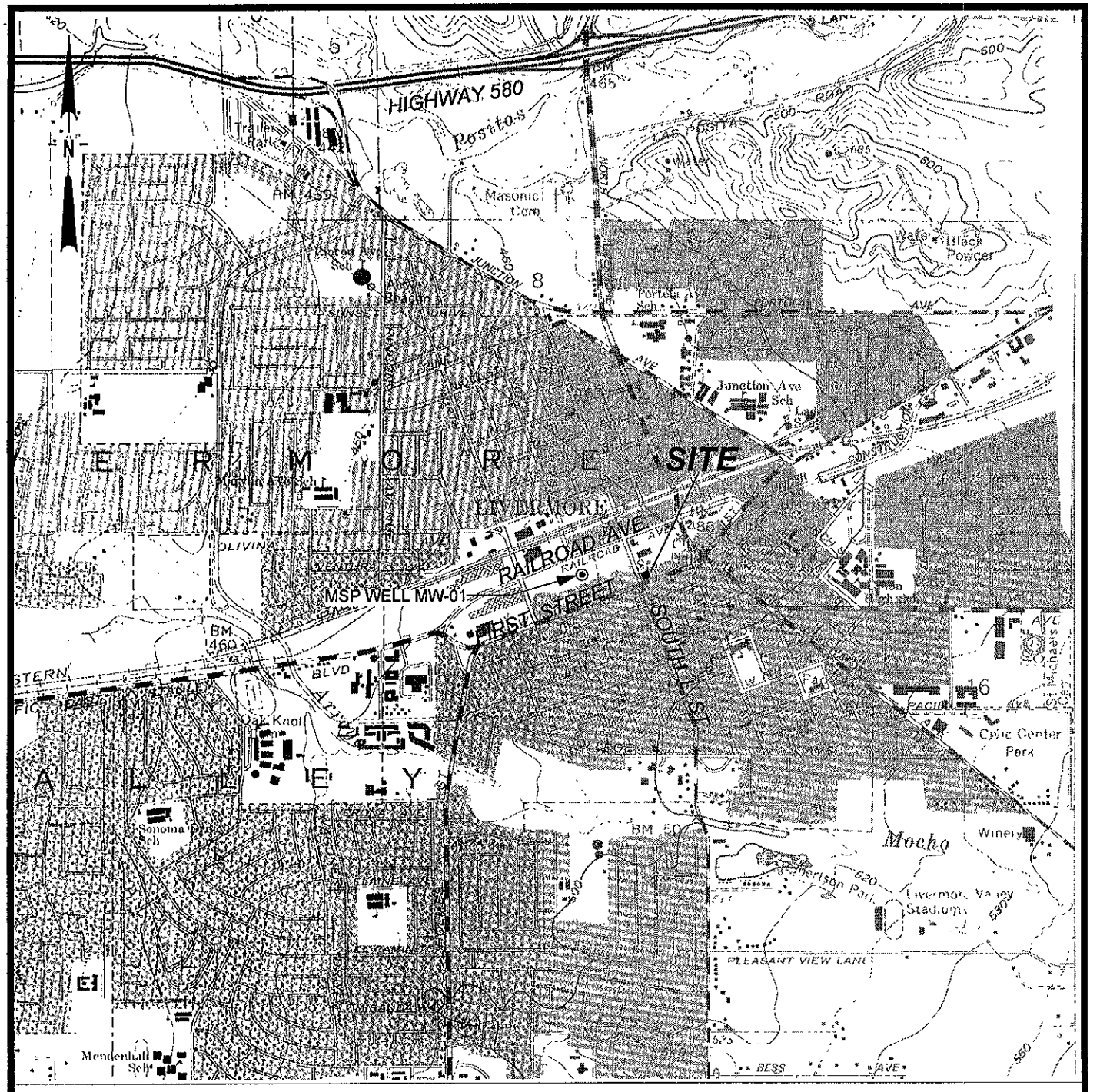
Well No.	Sample Date	TPH-G (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)
MW-4	Jun-94	810	12	25	<0.5	22	NA
	Aug-94	850	37	51	9.5	35	NA
	Nov-94	1,700	110	110	5.8	58	NA
	Mar-95	1,300	180	8	52	77	NA
	Jun-95	ND	3	1	ND	1	ND
	Sep-95	<50	0.7	<0.5	<0.5	<0.5	<2.5
	Feb-96	87	<0.5	<0.5	<0.5	<0.5	<0.5
	Feb-97	<50	<0.5	<0.5	<0.5	<0.5	2.9
	Jul-98	<50	<0.4	0.6	<0.3	0.8	<5
	Nov-98	<50	0.7	<0.3	<0.3	<0.8	27
	Mar-99	<50	<0.4	<0.3	<0.3	<0.8	<5
	Jun-99	<50	<0.5	<0.5	<0.5	<0.5	<2
	Dec-99	NS	NS	NS	NS	NS	NS
	Mar-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Jun-00	NS	NS	NS	NS	NS	NS
MW-5	Oct-95	120,000	16,000	26,000	3,100	15,000	39,000
	Feb-96	47,000	3,400	4,200	860	4,100	20,000
	Feb-97	28,000	1,300	1,500	480	1,000	2,200
	Jul-98	47,000	1,400	4,000	2,000	8,500	600
	Nov-98	NS**	NS**	NS**	NS**	NS**	NS**
	Mar-99	36,000	1,500	2,400	1,500	5,500	900
	Jun-99	34,500	722	1,980	1,720	7,170	765
	Sep-99	49,100	540	2,500	1,730	8,040	255
	Dec-99	NS**	NS**	NS**	NS**	NS**	NS**
	Mar-00	10,700	217	300	332	1,480	160
	Jun-00	23,000	537	533	1,040	2,590	131***
MW-6	Oct-95	110,000	9,900	22,000	3,200	17,000	47,000
	Feb-96	23,000	2,000	460	2,900	2,600	6,300
	Feb-97	12,000	450	780	200	590	790
	Jul-98	NS**	NS**	NS**	NS**	NS**	NS**
	Nov-98	NS*	NS*	NS*	NS*	NS*	NS*
	Mar-99	5,700	240	260	120	440	150
	Jun-99	7,610	259	334	283	567	275
	Dec-99	NS	NS	NS	NS	NS	NS
	Mar-00	10,100	276	170	200	673	159
	Jun-00	NS	NS	NS	NS	NS	NS
MW-7	Jul-99	5,090	31.9	4.8	60	219	43.6
	Sep-99	2,160	2.8	8.2	5.9	27.3	14.0
	Dec-99	2,630	<2.5	<2.5	13.8	44.9	26.3
	Mar-00	624	<0.5	<0.5	<0.5	1.61	3.87
	Jun-00	435	<0.5	<0.5	0.875	1.28	4.87
MW-8	Jun-99	<50	<0.5	<0.5	<0.5	<0.5	88.5
	Sep-99	<50	<0.5	<0.5	<0.5	<0.5	52
	Dec-99	<50	<0.5	<0.5	<0.5	<0.5	47.3
	Mar-00	<50	<0.5	<0.5	<0.5	<0.5	4.65
	Jun-00	<50	<0.5	<0.5	<0.5	<0.5	5.56
MW-9	Jun-99	<50	<0.5	<0.5	<0.5	<0.5	<2
	Dec-99	NS	NS	NS	NS	NS	NS
	Mar-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Jun-00	NS	NS	NS	NS	NS	NS

Table 3
Historical Groundwater Analytical Results
B&C Gas Mini Mart
Livermore, California

Well No.	Sample Date	TPH-G (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)
MW-10	Jun-99	<50	<0.5	<0.5	<0.5	<0.5	<2
	Sep-99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Dec-99	<50	<0.5	<0.5	<0.5	<0.5	46.5
	Mar-00	52.7	<0.5	<0.5	<0.5	<0.5	<2.5
	Jun-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-11	Jun-99	91	0.7	2.0	1.1	2.6	<2
	Sep-99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Dec-99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Mar-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Jun-00	NS	NS	NS	NS	NS	NS
MW-12	Jun-99	<50	<0.5	<0.5	<0.5	<0.5	<2
	Sep-99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Dec-99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Mar-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Jun-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-13	Jul-99	214	42.8	<0.5	4.5	<0.5	332
	Sep-99	<100	5.8	<1	<1	<1	160
	Dec-99	71	6.7	<0.5	1.4	<0.5	132
	Mar-00	<50	2.32	<0.5	<0.5	<0.5	53.5
	Jun-00	<50	7.83	<0.5	0.732	<0.5	38.8
D-1	Jun-99	<50	<0.5	<0.5	<0.5	<0.5	<2
	Sep-99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Dec-99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Mar-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Jun-00	NS	NS	NS	NS	NS	NS
D-2	Jun-99	<50	<0.5	<0.5	<0.5	<0.5	<2
	Sep-99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Dec-99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Mar-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Jun-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
(MS)MW-1	Aug-95	11,000	190	260	110	900	210
	Jul-98	NS**	NS**	NS**	NS**	NS**	NS**
	Nov-98	10,000	260	120	500	1,100	200
	Mar-99	NS**	NS**	NS**	NS**	NS**	NS**
	Jun-99	NS**	NS**	NS**	NS**	NS**	NS**
	Dec-99	661	9.7	3.5	21.7	31.1	7.2
	Mar-00	NS**	NS**	NS**	NS**	NS**	NS**
	Jun-00	NS**	NS**	NS**	NS**	NS**	NS**

ug/l = micrograms per liter
TPH-G = total petroleum hydrocarbons as gasoline
MTBE = methyl tertiary-butyl ether
MS = Mill Springs Park

NA= not analyzed NS= not sampled
* = well inaccessible ** = free product hydrocarbon present
*** = analytical result from EPA method 8260B
ND = not detected above reporting limit, limit not available
< = less than method reporting limit

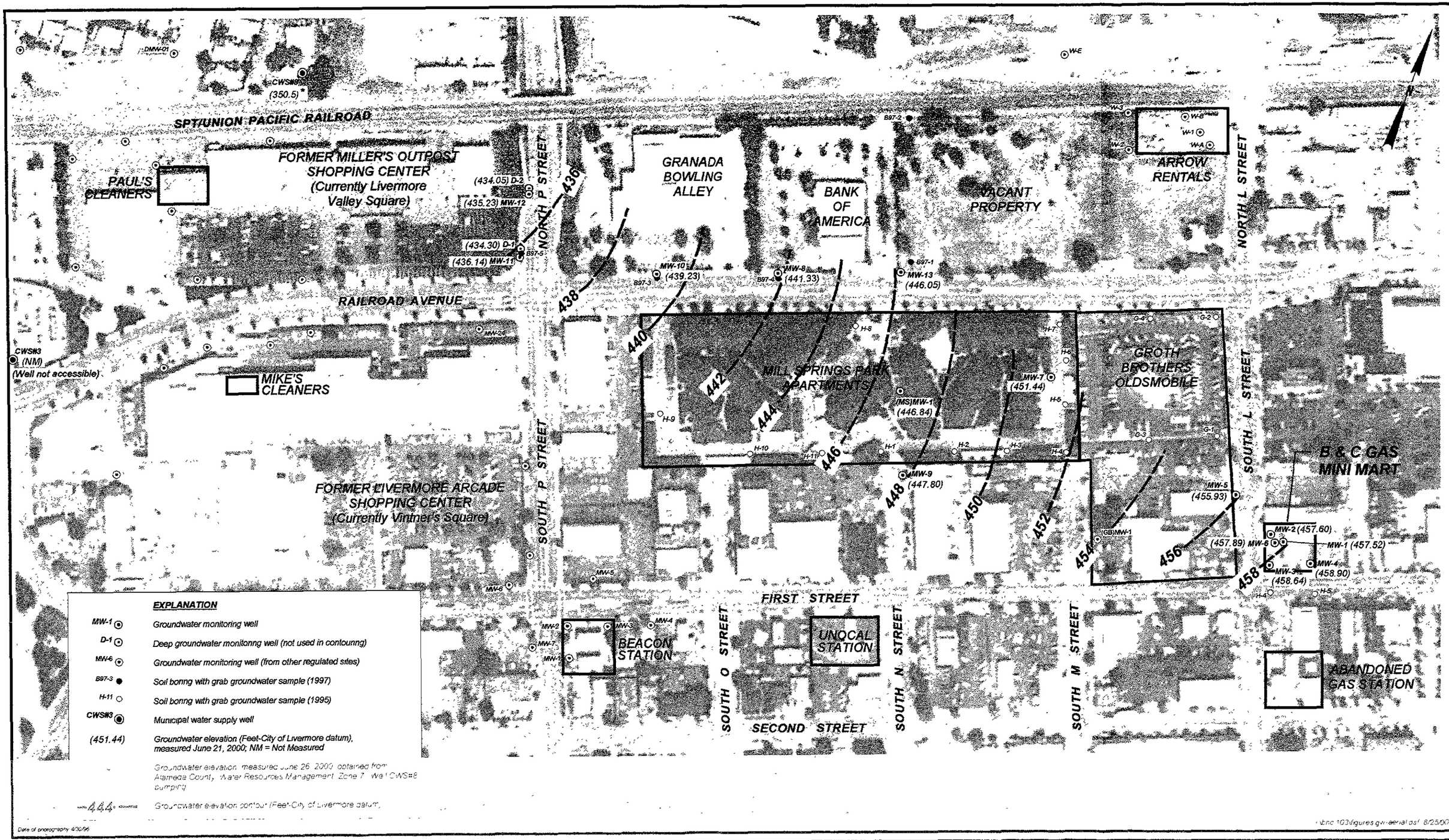


Base map: USGS 7.5' topography, Livermore, California (1961; photorevised 1980)

SCALE: 0 2,000 4,000 FEET

I/BNC/103/FIGURES/SITELOC.DSF 4/22/99

Conor Pacific EFW	GROUNDWATER MONITORING B & C GAS MINI MART LIVERMORE, CALIFORINA SITE LOCATION MAP	FIGURE 1 PROJECT NO. BNC103



EXPLANATION

MW-1 ⊙	Groundwater monitoring well
D-1 ⊙	Deep groundwater monitoring well (not used in contouring)
MW-6 ⊙	Groundwater monitoring well (from other regulated sites)
B97-3 ●	Soil boring with grab groundwater sample (1997)
H-11 ○	Soil boring with grab groundwater sample (1995)
CWS#3 ◉	Municipal water supply well
(451.44)	Groundwater elevation (Feet-City of Livermore datum), measured June 21, 2000; NM = Not Measured
	Groundwater elevation measured June 26, 2000 obtained from Alameda County, Water Resources Management Zone 7 Well CWS#8 pumping
444	Groundwater elevation contour (Feet-City of Livermore datum),

Date of photography 4/30/96

I:\bnc103\figures\gw-aerial.as1 6/25/00

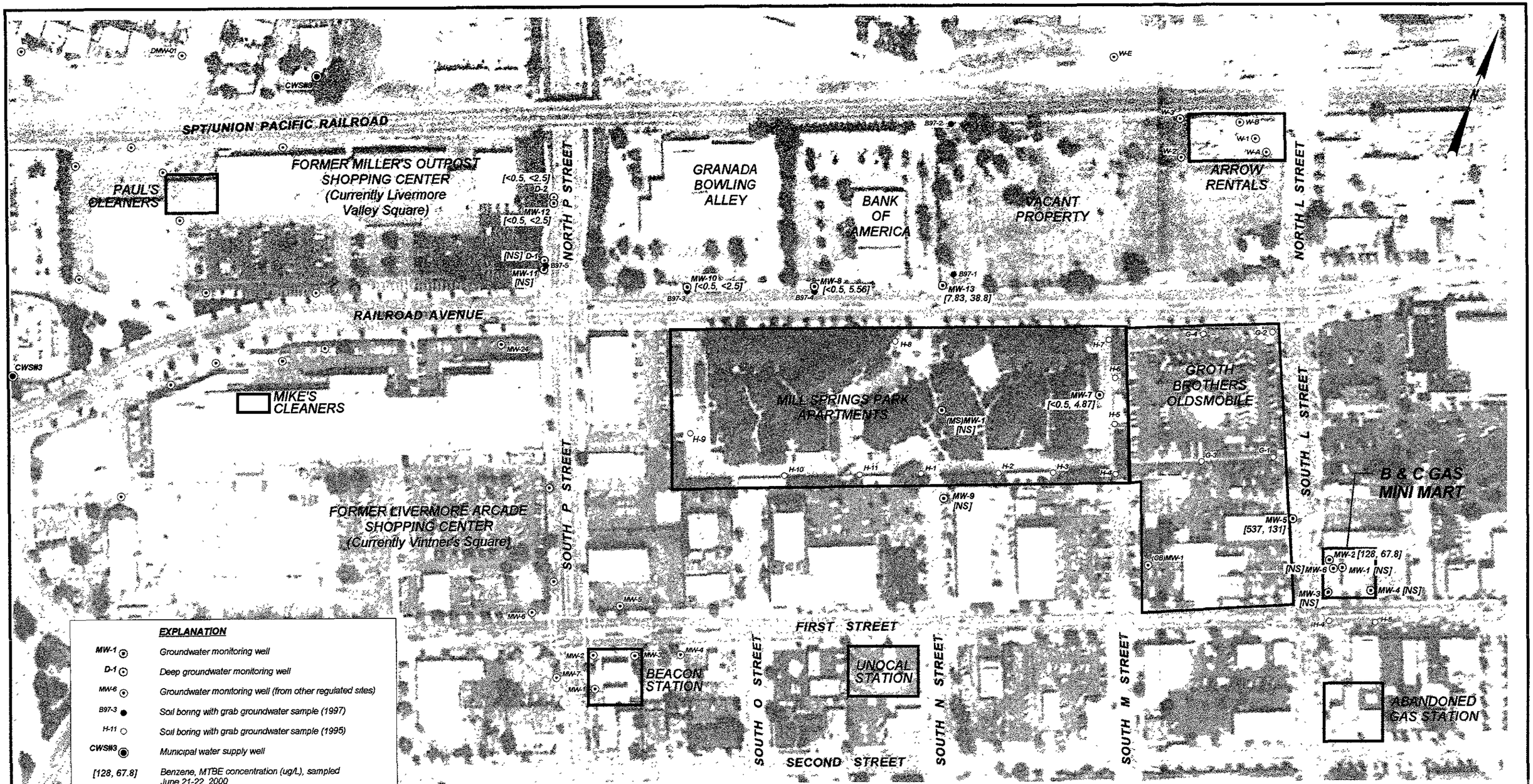
SCALE 0 200 400 FEET
(APPROXIMATE)

GROUNDWATER MONITORING
B & C GAS MINI MART
LIVERMORE CALIFORNIA

WELL LOCATIONS AND GROUNDWATER CONTOURS (JUNE 2000)

FIGURE 2

PROJECT NO BNC103



SCALE 0 200 400 FEET
(APPROXIMATE)

GROUNDWATER MONITORING
B & C GAS MINI MART
LIVERMORE, CALIFORNIA

GROUNDWATER CHEMISTRY (JUNE 2000)

FIGURE
3

PROJECT NO
BNC103

WATER LEVEL DATA SHEET
Conor Pacific/EFW

Project: B&C Gas Mini Mart
Project No.: BNC103
Date(s): 6/21/00
Name: R Plunk
Weather: Sunny, Hot Sounder #: 350', KECK

Well	Date / Time	DTFP (TOC)	DTW (TOC)	Total Depth	Meas By	Comments
MW-1	1120	ND	26.55	75.3	RP	
MW-2	1134		26.26	56.0		
MW-3	1123		25.40	57.5		9/16"
MW-4	1120		26.14	59.9		
MW-5	1003		26.04	39.7		1 3/16"
MW-6	1131		26.04	(28.6)		obstructed.
MW-7	1219		26.70	49.3		9/16", 0909
MW-8	1230		31.90	53.1		
MW-9	1147		29.20	44.0		
MW-10	1246		32.19	53.9		
MW-11	1322		28.79	49.2		
MW-12	1331		23.11	43.3		
MW-13	1220		28.74	54.4		
D-1	1326		30.40	124.3		
D-2	1335		23.54	111.8		
MS MW01	1156		30.95	NM		9/16"

Conor Pacific

EFW

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart SAMPLE ID: MW-2
PROJECT NO: BNC103 SAMPLED BY: R Park
CLIENT: B&C Gas Mini Mart REGULATORY AGENCY:
SAMPLE TYPE: Groundwater ✓ Surface Water ____ Leachate ____ Treatment System ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ____ 4 ✓ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 56.0 Volume in Casing (gal): ~~0.66~~ 19.7
Depth to Water (ft): 26.29 Calculated Purge (volumes / gal.): 19.7
Height of Water Column (ft): 29.71 Actual Pre-Sampling Purge (gal): 20.0

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ____ PVC Bailer ✓ Disp. Bailer ____
PVC Hand Pump ~~(45')~~ in Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: drummed
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1427	7.0	21.6	980	6.66	lt.grey tint	low		
1433	13.5	21.2	1000	6.64	↓	↓		
1437	20.0	20.9	1000	6.70	↓	↓		

Purge Date: 6/22/00

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ____ PVC Bailer ____ Disp. Bailer (50')
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1443	20.8	1020	6.76	1.14	lt.grey tint	~~107~~ 57	

Sheen: none Odor: strong Sample Date: 6/22/00

Field Measurement Devices: Horiba ✓ Omega ____ QuickCheck ____ D.O. Test Kit ____
REMARKS: 1 casing volume purge.

SIGNATURE: [signature] **DATE:** 6/22/00

Conor Pacific

EFW

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart
SAMPLE ID: MW-5
PROJECT NO: B&C103
SAMPLED BY: R Park
CLIENT: B&C Gas Mini Mart
REGULATORY AGENCY:
SAMPLE TYPE: Groundwater ✓ Surface Water ____ Leachate ____ Treatment System ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ____ 4 ✓ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 39.7
Volume in Casing (gal): 3 * 9.1
Depth to Water (ft): 26.04
Calculated Purge (volumes / gal.): 9.1
Height of Water Column (ft): 13.66
Actual Pre-Sampling Purge (gal): 9.5

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer____ Teflon Bailer____ PVC Bailer ✓ Disp. Bailer____
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump____ Electric Submersible Pump____ Dedicated____ Other____
Purge Water Containment: drummed
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1306	3.5	21.5	1030	6.86	lt.grey tint	low		
1308	6.5	20.8	1040	6.85	↓	|		
1311	9.5	20.7	1040	6.85				

Purge Date: 4/22/00

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer____ Teflon Bailer____ PVC Bailer____ Disp. Bailer (35')
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump____ Electric Submersible Pump____ Dedicated____ Other____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1317	21.1	1050	6.90	1.48	lt.grey	406	

Sheen: none Odor: moderate/strong Sample Date: 4/22/00

Field Measurement Devices: Horiba ✓ Omega ____ QuickCheck ____ D.O. Test Kit ____
REMARKS: 1 Casing volume purge.

SIGNATURE: [signature] **DATE:** 4/22/00

Conor Pacific

EFW

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart — SAMPLE ID: MW-7
PROJECT NO: BNC 103 — SAMPLED BY: RPark
CLIENT: B&C Gas Mini Mart — REGULATORY AGENCY:
SAMPLE TYPE: Groundwater ✓ Surface Water ____ Leachate ____ Treatment System ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ✓ 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 49.3	Volume in Casing (gal): 3.9
Depth to Water (ft): 20.71	Calculated Purge (volumes / gal.): 11.0
Height of Water Column (ft): 22.59	Actual Pre-Sampling Purge (gal): 12.0

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer____ Teflon Bailer____ PVC Bailer ✓ Disp. Bailer____
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump____ Electric Submersible Pump____ Dedicated____ Other____
Purge Water Containment: drummed
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1208	4.0	20.7	1020	6.97	H.brown	high		
1213	8.0	20.5	1040	6.97	↓	↓		
1220	12.0	20.3	1030	7.05	↓	↓		

Purge Date: 4/22/00

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer____ Teflon Bailer____ PVC Bailer____ Disp. Bailer (45')
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump____ Electric Submersible Pump____ Dedicated____ Other____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1234	20.7	1040	7.01	3.33	H.brown	>999	

Sheen: none Odor: light Sample Date: 4/22/00

Field Measurement Devices: Horiba ✓ Omega ____ QuickCheck ____ D.O. Test Kit ____

REMARKS: ____

SIGNATURE: ____ **DATE:** 4/22/00

Conor Pacific

EFW

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart — SAMPLE ID: MW-8
PROJECT NO: BNC103 — SAMPLED BY: R Pace
CLIENT: B&C Gas Mini Mart — REGULATORY AGENCY:
SAMPLE TYPE: Groundwater ✓ Surface Water ____ Leachate ____ Treatment System ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ✓ 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 53.1 — Volume in Casing (gal): 3.7
Depth to Water (ft): 31.91 — Calculated Purge (volumes / gal.): 10.9
Height of Water Column (ft): 21.19 — Actual Pre-Sampling Purge (gal): 11.0

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer____ Teflon Bailer____ PVC Bailer ✓ Disp. Bailer____
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump____ Electric Submersible Pump____ Dedicated____ Other____
Purge Water Containment: drummed
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1129	4.0	20.0	1030	6.96	lt brown	high		
1133	7.5	20.5	1040	6.84	↓	↓		
1136	11.0	20.1	1040	6.89	↓	↓		

Purge Date: 6/22/00

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer____ Teflon Bailer____ PVC Bailer____ Disp. Bailer (40')
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump____ Electric Submersible Pump____ Dedicated____ Other____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1142	20.6	1050	6.88	1.12	lt brown	865	

Sheen: none — Odor: none — Sample Date: 6/22/00

Field Measurement Devices: Horiba ✓ Omega ____ QuickCheck ____ D.O. Test Kit ____

REMARKS: ____

SIGNATURE: ____ **DATE:** 6/22/00

Conor Pacific

EFW

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart
SAMPLE ID: MW-10
PROJECT NO: BNC103
SAMPLED BY: RPMC
CLIENT: B&C Gas Mini Mart
REGULATORY AGENCY: _____
SAMPLE TYPE: Groundwater 4 Surface Water _____ Leachate _____ Treatment System _____ Other _____
CASING DIAMETER (OD-inches): 3/4 ___ 1 ___ 2 4 4 ___ 4.5 ___ 6 ___ 8 ___ Other ___
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 53.9	Volume in Casing (gal): 8.7
Depth to Water (ft): 32.19	Calculated Purge (volumes / gal.): 11.1
Height of Water Column (ft): 21.71	Actual Pre-Sampling Purge (gal): 11.5

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer _____ Teflon Bailer _____ PVC Bailer 4 Disp. Bailer _____
PVC Hand Pump _____ Peristaltic Pump _____ Centrifugal Pump _____ Bladder Pump _____
Pneumatic Displacement Pump _____ Electric Submersible Pump _____ Dedicated _____ Other _____
Purge Water Containment: drummed
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other _____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1519	4.0	21.4	920	6.76	lt. brown	high		
1524	8.0	20.3	940	6.79	↓	moderate		
1529	11.5	19.9	930	6.83	↓	↓		

Purge Date: 6/21/00

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer _____ Teflon Bailer _____ PVC Bailer _____ Disp. Bailer (49')
PVC Hand Pump _____ Peristaltic Pump _____ Centrifugal Pump _____ Bladder Pump _____
Pneumatic Displacement Pump _____ Electric Submersible Pump _____ Dedicated _____ Other _____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1534	20.4	940	4.71	2.34	lt. brown	743	

Sheen: none Odor: none Sample Date: 6/21/00

Field Measurement Devices: Horiba 4 Omega ___ QuickCheck ___ D.O. Test Kit ___

REMARKS: _____

SIGNATURE: _____ **DATE:** 6/21/00

Conor Pacific

EFW

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart
SAMPLE ID: MW-12
PROJECT NO: BNC103
SAMPLED BY: R Park
CLIENT: B&C Gas Mini Mart
REGULATORY AGENCY:
SAMPLE TYPE: Groundwater 1 Surface Water ____ Leachate ____ Treatment System ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 1 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 43.3
Volume in Casing (gal): 3.5
Depth to Water (ft): 23.11
Calculated Purge (volumes / gal.): 10.3
Height of Water Column (ft): 20.19
Actual Pre-Sampling Purge (gal): 10.5

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ____ PVC Bailer 1 Disp. Bailer ____
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: drummed
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1349	3.5	21.3	930	6.74	lt. brown	high		
1353	7.0	20.7	940	6.76	↓	↓		
1357	10.5	20.2	940	6.85				

Purge Date: 6/21/00

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ____ PVC Bailer ____ Disp. Bailer (38')
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1403	20.8	950	6.80	5.34	lt. brown	7999	

Sheen: none Odor: none Sample Date: 6/21/00

Field Measurement Devices: Horiba X Omega ____ QuickCheck ____ D.O. Test Kit ____

REMARKS:

Calibrated meter 1045, 6/21/00: pH: 7.00, 10.00; EC: 0, 2000; turb: 0; 00: auto; T: 25.2°C

SIGNATURE: [signature] **DATE:** 6/21/00

Conor Pacific

EFW

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart
SAMPLE ID: MW-13
PROJECT NO: BNC 103
SAMPLED BY: R Park
CLIENT: B&C Gas Mini Mart
REGULATORY AGENCY:

SAMPLE TYPE: Groundwater 1 Surface Water ____ Leachate ____ Treatment System ____ Other ____

CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 1 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 54.4	Volume in Casing (gal): 4.4
Depth to Water (ft): 28.74	Calculated Purge (volumes / gal.): 13.1
Height of Water Column (ft): 25.66	Actual Pre-Sampling Purge (gal): 13.5

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ____ PVC Bailer X Disp. Bailer ____
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: drummed
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1050	4.5	20.1	1030	6.94	lt.brown	high		
1055	9.0	19.8	1040	6.94	↓	↓		
1059	13.5	19.6	1050	6.96				

Purge Date: 6/22/00

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ____ PVC Bailer ____ Disp. Bailer (49')
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1105	19.9	1060	6.95	1.74	lt.brown	>999	

Sheen: none Odor: none Sample Date: 6/22/00

Field Measurement Devices: Horiba Y Omega ____ QuickCheck ____ D.O. Test Kit ____

REMARKS:

Calibrated meter 1030, 6/22/00: pH: 7.00, 4.00, EC: 0, 2060; turb: 0; DO: auto; T: 24.9°C

SIGNATURE: ____ **DATE:** 6/22/00

Conor Pacific

EFW

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart
SAMPLE ID: D-2
PROJECT NO: BNC103
SAMPLED BY: R Pauk
CLIENT: B&C Gas Mini Mart
REGULATORY AGENCY:
SAMPLE TYPE: Groundwater ✓ Surface Water ____ Leachate ____ Treatment System ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ✓ 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 111.8	Volume in Casing (gal): 15.0
Depth to Water (ft): 23.56	Calculated Purge (volumes / gal.): 45.0
Height of Water Column (ft): 88.24	Actual Pre-Sampling Purge (gal): 45.0

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer____ Teflon Bailer____ PVC Bailer____ Disp. Bailer____
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump____ Electric Submersible Pump (95') Dedicated____ Other____
Purge Water Containment: drummed
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1419	15.0	21.1	990	7.26	H.brown	low		
1425	30.0	20.7	990	7.26	H.brown/fine	↓		
1431	45.0	20.6	990	7.28	↓	↓		

Purge Date: 6/21/00

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer____ Teflon Bailer____ PVC Bailer____ Disp. Bailer (100')
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump____ Electric Submersible Pump____ Dedicated____ Other____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1440	20.8	990	7.33	5.86	H.brown	>999	

Sheen: none Odor: none Sample Date: 6/21/00

Field Measurement Devices: Horiba ✓ Omega ____ QuickCheck ____ D.O. Test Kit ____

REMARKS: ____

SIGNATURE: ____ **DATE:** 6/21/00

Conor Pacific

EFW

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart
SAMPLE ID: MSMW01
PROJECT NO: BNC103
SAMPLED BY: R Punk
CLIENT: B&C Gas Mini Mart
REGULATORY AGENCY: _____
SAMPLE TYPE: Groundwater ✓ Surface Water _____ Leachate _____ Treatment System _____ Other _____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ✓ 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 59.5	Volume in Casing (gal): 4.9
Depth to Water (ft): 30.95	Calculated Purge (volumes / gal.): 14.6
Height of Water Column (ft): 28.55	Actual Pre-Sampling Purge (gal): 0.75

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer _____ Teflon Bailer _____ PVC Bailer _____ Disp. Bailer ✓
PVC Hand Pump _____ Peristaltic Pump _____ Centrifugal Pump _____ Bladder Pump _____
Pneumatic Displacement Pump _____ Electric Submersible Pump _____ Dedicated _____ Other _____
Purge Water Containment: Drummed
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other _____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation

Purge Date: 6/21/00

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer _____ Teflon Bailer _____ PVC Bailer _____ Disp. Bailer _____
PVC Hand Pump _____ Peristaltic Pump _____ Centrifugal Pump _____ Bladder Pump _____
Pneumatic Displacement Pump _____ Electric Submersible Pump _____ Dedicated _____ Other _____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other

Sheen: _____ Odor: _____ Sample Date: _____

Field Measurement Devices: Horiba ____ Omega ____ QuickCheck ____ D.O. Test Kit ____

REMARKS: Brown product globules in bailer from 2nd and 3rd bail. End purge. No samples collected.

SIGNATURE: _____ **DATE:** 6/21/00

Sequoia Analytical

1455 McDowell Blvd. North, Ste. D
Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342
www.sequoialabs.com

July 7, 2000

Katrin Schliewen
Conor Pacific / EFW
2650 East Bayshore Rd.
Palo Alto, CA 94303

RE: B&C Gas Mini Mart/P006648

Dear Katrin Schliewen:

Enclosed are the results of analyses for sample(s) received by the laboratory on June 23, 2000. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Michelle M. Portis
Project Manager

CA ELAP Certificate Number 2374

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1455 McDowell Blvd. North, Ste. D
Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342
www.sequoialabs.com

Conor Pacific / EFW	Project:	B&C Gas Mini Mart	Sampled:	6/21/00 to 6/22/00
2650 East Bayshore Rd.	Project Number:	BNC103	Received:	6/23/00
Palo Alto, CA 94303	Project Manager:	Katrin Schliewen	Reported:	7/7/00

ANALYTICAL REPORT FOR P006648

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-2	P006648-01	Water	6/22/00
MW-5	P006648-02	Water	6/22/00
MW-7	P006648-03	Water	6/22/00
MW-8	P006648-04	Water	6/22/00
MW-10	P006648-05	Water	6/21/00
MW-12	P006648-06	Water	6/21/00
MW-13	P006648-07	Water	6/22/00
D-2	P006648-08	Water	6/21/00

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1455 McDowell Blvd. North, Ste. D
Petaluma, CA 94954
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FAX (707) 792-0342
www.sequoialabs.com

Conor Pacific / EFW	Project:	B&C Gas Mini Mart	Sampled: 6/21/00 to 6/22/00
2650 East Bayshore Rd.	Project Number:	BNC103	Received: 6/23/00
Palo Alto, CA 94303	Project Manager:	Katrin Schliewen	Reported: 7/7/00

Sample Description: **MW-2**
Laboratory Sample Number: **P006648-01**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
			Sequoia Analytical - Petaluma					
Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M								1
Gasoline	0070019	7/5/00	7/5/00		500	**5820**	ug/l	
Benzene	"	"	"		5.00	**128**	"	
Toluene	"	"	"		5.00	**94.4**	"	
Ethylbenzene	"	"	"		5.00	**155**	"	
Xylenes (total)	"	"	"		5.00	**161**	"	
Methyl tert-butyl ether	"	"	"		25.0	**67.8**	"	2
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*101*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*100*	"	

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Petaluma, CA 94954
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www.sequoialabs.com

Conor Pacific / EFW	Project:	B&C Gas Mini Mart	Sampled: 6/21/00 to 6/22/00
2650 East Bayshore Rd.	Project Number:	BNC103	Received: 6/23/00
Palo Alto, CA 94303	Project Manager:	Katrin Schliewen	Reported: 7/7/00

Sample Description: **MW-5**
Laboratory Sample Number: **P006648-02**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
			Sequoia Analytical - Petaluma					
Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M								1
Gasoline	0070019	7/5/00	7/5/00		1000	**23000**	ug/l	
Benzene	"	"	"		10.0	**537**	"	
Toluene	"	"	"		10.0	**533**	"	
Ethylbenzene	"	"	"		10.0	**1040**	"	
Xylenes (total)	"	"	"		10.0	**2590**	"	
Methyl tert-butyl ether	"	"	"		50.0	**244**	"	2
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*100*	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*96.0*	"	
Volatile Organic Compounds by EPA Method 8260B								1,3
Tert-amyl methyl ether	0060749	7/2/00	7/2/00		200	ND	ug/l	
Tert-butyl alcohol	"	"	"		4000	ND	"	
Di-isopropyl ether	"	"	"		200	ND	"	
1,2-Dibromoethane (EDB)	"	"	"		100	ND	"	
1,2-Dichloroethane	"	"	"		100	ND	"	
Ethanol	"	"	"		20000	ND	"	
Ethyl tert-butyl ether	"	"	"		200	ND	"	
Methyl tert-butyl ether	"	"	"		100	**131**	"	
Surrogate: Dibromofluoromethane	"	"	"	*86.0-118*		*96.2*	%	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*80.0-120*		*111*	"	
Surrogate: Toluene-d8	"	"	"	*88.0-110*		*94.6*	"	

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Petaluma, CA 94954
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www.sequoialabs.com

Conor Pacific / EFW	Project:	B&C Gas Mini Mart	Sampled: 6/21/00 to 6/22/00
2650 East Bayshore Rd.	Project Number:	BNC103	Received: 6/23/00
Palo Alto, CA 94303	Project Manager:	Katrin Schliewen	Reported: 7/7/00

Sample Description: **MW-7**
Laboratory Sample Number: **P006648-03**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
			Sequoia Analytical - Petaluma					
Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M								1
Gasoline	0070019	7/5/00	7/5/00		50.0	**435**	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	**0.875**	"	
Xylenes (total)	"	"	"		0.500	**1.28**	"	
Methyl tert-butyl ether	"	"	"		2.50	**4.87**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*101*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*97.0*	"	

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FAX (707) 792-0342
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Conor Pacific / EFW	Project:	B&C Gas Mini Mart	Sampled: 6/21/00 to 6/22/00
2650 East Bayshore Rd.	Project Number:	BNC103	Received: 6/23/00
Palo Alto, CA 94303	Project Manager:	Katrin Schliewen	Reported: 7/7/00

Sample Description: **MW-8**
Laboratory Sample Number: **P006648-04**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
			Sequoia Analytical - Petaluma					
Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M								1
Gasoline	0070019	7/5/00	7/5/00		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.50	**5.56**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*101*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*96.0*	"	

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Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342
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Conor Pacific / EFW	Project:	B&C Gas Mini Mart	Sampled: 6/21/00 to 6/22/00
2650 East Bayshore Rd.	Project Number:	BNC103	Received: 6/23/00
Palo Alto, CA 94303	Project Manager:	Katrin Schliewen	Reported: 7/7/00

Sample Description: **MW-10**
Laboratory Sample Number: **P006648-05**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
Sequoia Analytical - Petaluma								
Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M								1
Gasoline	0070051	7/5/00	7/5/00		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.50	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*101*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*89.0*	"	

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Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342
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Conor Pacific / EFW	Project:	B&C Gas Mini Mart	Sampled: 6/21/00 to 6/22/00
2650 East Bayshore Rd.	Project Number:	BNC103	Received: 6/23/00
Palo Alto, CA 94303	Project Manager:	Katrin Schliewen	Reported: 7/7/00

Sample Description: **MW-12**
Laboratory Sample Number: **P006648-06**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
			Sequoia Analytical - Petaluma					
Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M								1
Gasoline	0070051	7/5/00	7/5/00		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.50	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*103*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*92.3*	"	

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Conor Pacific / EFW	Project:	B&C Gas Mini Mart	Sampled: 6/21/00 to 6/22/00
2650 East Bayshore Rd.	Project Number:	BNC103	Received: 6/23/00
Palo Alto, CA 94303	Project Manager:	Katrin Schliewen	Reported: 7/7/00

Sample Description: **MW-13**
Laboratory Sample Number: **P006648-07**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
			Sequoia Analytical - Petaluma					
Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M								1
Gasoline	0070019	7/5/00	7/5/00		50.0	ND	ug/l	
Benzene	"	"	"		0.500	**7.83**	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	**0.732**	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.50	**38.8**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*73.3*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*97.0*	"	

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Conor Pacific / EFW	Project:	B&C Gas Mini Mart	Sampled: 6/21/00 to 6/22/00
2650 East Bayshore Rd.	Project Number:	BNC103	Received: 6/23/00
Palo Alto, CA 94303	Project Manager:	Katrin Schliewen	Reported: 7/7/00

Sample Description: **D-2**
Laboratory Sample Number: **P006648-08**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
Sequoia Analytical - Petaluma								
Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M								1
Gasoline	0070051	7/5/00	7/5/00		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.50	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*103*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*91.3*	"	

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2650 East Bayshore Rd.	Project Number:	BNC103	Received: 6/23/00
Palo Alto, CA 94303	Project Manager:	Katrin Schliewen	Reported: 7/7/00

Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 0070019	**Date Prepared: 7/5/00**					**Extraction Method: EPA 5030 waters**				
Blank	**0070019-BLK1**									
Gasoline Range Organics	7/5/00			**ND**	ug/l	**50.0**				
Gasoline	"			**ND**	"	**50.0**				
Benzene	"			**ND**	"	**0.500**				
Toluene	"			**ND**	"	**0.500**				
Ethylbenzene	"			**ND**	"	**0.500**				
Xylenes (total)	"			**ND**	"	**0.500**				
Methyl tert-butyl ether	"			**ND**	"	**2.50**				
Surrogate: a,a,a-Trifluorotoluene	"	*300*		*305*	"	*65.0-135*	*102*			
Surrogate: 4-Bromofluorobenzene	"	*300*		*297*	"	*65.0-135*	*99.0*			
LCS	**0070019-BS1**									
Benzene	7/5/00	100		90.7	ug/l	65.0-135	90.7			
Toluene	"	100		92.2	"	65.0-135	92.2			
Ethylbenzene	"	100		92.2	"	65.0-135	92.2			
Xylenes (total)	"	300		273	"	65.0-135	91.0			
Methyl tert-butyl ether	"	100		91.7	"	65.0-135	91.7			
Surrogate: a,a,a-Trifluorotoluene	"	*300*		*291*	"	*65.0-135*	*97.0*			
Matrix Spike	**0070019-MS1**		**P006681-01**							
Benzene	7/5/00	100	ND	90.4	ug/l	65.0-135	**90.4**			
Toluene	"	100	ND	92.0	"	65.0-135	**92.0**			
Ethylbenzene	"	100	ND	91.8	"	65.0-135	**91.8**			
Xylenes (total)	"	300	ND	273	"	65.0-135	**91.0**			
Methyl tert-butyl ether	"	100	7.21	97.3	"	65.0-135	**90.1**			
Surrogate: a,a,a-Trifluorotoluene	"	*300*		*289*	"	*65.0-135*	*96.3*			
Matrix Spike Dup	**0070019-MSD1**		**P006681-01**							
Benzene	7/5/00	100	ND	89.9	ug/l	65.0-135	**89.9**	20.0	**0.555**	
Toluene	"	100	ND	91.5	"	65.0-135	**91.5**	20.0	**0.545**	
Ethylbenzene	"	100	ND	91.4	"	65.0-135	**91.4**	20.0	**0.437**	
Xylenes (total)	"	300	ND	271	"	65.0-135	**90.3**	20.0	**0.772**	
Methyl tert-butyl ether	"	100	7.21	98.3	"	65.0-135	**91.1**	20.0	**1.10**	
Surrogate: a,a,a-Trifluorotoluene	"	*300*		*287*	"	*65.0-135*	*95.7*			
Batch: 0070051	**Date Prepared: 7/5/00**					**Extraction Method: EPA 5030 waters**				
Blank	**0070051-BLK1**									
Gasoline Range Organics	7/5/00			**ND**	ug/l	**50.0**				
Gasoline	"			**ND**	"	**50.0**				
Benzene	"			**ND**	"	**0.500**				
Toluene	"			**ND**	"	**0.500**				

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FAX (707) 792-0342
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Conor Pacific / EFW	Project:	B&C Gas Mini Mart	Sampled: 6/21/00 to 6/22/00
2650 East Bayshore Rd.	Project Number:	BNC103	Received: 6/23/00
Palo Alto, CA 94303	Project Manager:	Katrin Schliewen	Reported: 7/7/00

Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Blank (continued)	**0070051-BLK1**									
Ethylbenzene	7/5/00			**ND**	ug/l	**0.500**				
Xylenes (total)	"			**ND**	"	**0.500**				
Methyl tert-butyl ether	"			**ND**	"	**2.50**				
Surrogate: a,a,a-Trifluorotoluene	"	*300*		*300*	"	*65.0-135*	*100*			
Surrogate: 4-Bromofluorobenzene	"	*300*		*280*	"	*65.0-135*	*93.3*			
LCS	**0070051-BS1**									
Benzene	7/5/00	100		98.2	ug/l	65.0-135	98.2			
Xylenes (total)	"	300		293	"	65.0-135	97.7			
Methyl tert-butyl ether	"	100		86.7	"	65.0-135	86.7			
Surrogate: a,a,a-Trifluorotoluene	"	*300*		*305*	"	*65.0-135*	*102*			
Matrix Spike	**0070051-MS1**		**P006627-04**							
Benzene	7/5/00	100	ND	104	ug/l	65.0-135	**104**			
Toluene	"	100	ND	105	"	65.0-135	**105**			
Ethylbenzene	"	100	ND	96.7	"	65.0-135	**96.7**			
Xylenes (total)	"	300	ND	310	"	65.0-135	**103**			
Methyl tert-butyl ether	"	100	ND	92.2	"	65.0-135	**92.2**			
Surrogate: a,a,a-Trifluorotoluene	"	*300*		*303*	"	*65.0-135*	*101*			
Matrix Spike Dup	**0070051-MSD1**		**P006627-04**							
Benzene	7/5/00	100	ND	100	ug/l	65.0-135	**100**	20.0	**3.92**	
Toluene	"	100	ND	101	"	65.0-135	**101**	20.0	**3.88**	
Ethylbenzene	"	100	ND	93.6	"	65.0-135	**93.6**	20.0	**3.26**	
Xylenes (total)	"	300	ND	299	"	65.0-135	**99.7**	20.0	**3.26**	
Methyl tert-butyl ether	"	100	ND	88.8	"	65.0-135	**88.8**	20.0	**3.76**	
Surrogate: a,a,a-Trifluorotoluene	"	*300*		*302*	"	*65.0-135*	*101*			

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Conor Pacific / EFW	Project:	B&C Gas Mini Mart	Sampled: 6/21/00 to 6/22/00
2650 East Bayshore Rd.	Project Number:	BNC103	Received: 6/23/00
Palo Alto, CA 94303	Project Manager:	Katrin Schliewen	Reported: 7/7/00

Volatile Organic Compounds by EPA Method 8260B/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 0060749	**Date Prepared: 7/1/00**					**Extraction Method: EPA 5030 waters**				
Blank	**0060749-BLK1**									
Tert-amyl methyl ether	7/1/00			**ND**	ug/l	**1.00**				
Tert-butyl alcohol	"			**ND**	"	**20.0**				
Di-isopropyl ether	"			**ND**	"	**1.00**				
1,2-Dibromoethane (EDB)	"			**ND**	"	**0.500**				
1,2-Dichloroethane	"			**ND**	"	**0.500**				
Ethanol	"			**ND**	"	**100**				
Ethyl tert-butyl ether	"			**ND**	"	**1.00**				
Methyl tert-butyl ether	"			**ND**	"	**0.500**				
Surrogate: Dibromofluoromethane	"	*5.00*		*4.54*	"	*86.0-118*	*90.8*			
Surrogate: 1,2-Dichloroethane-d4	"	*5.00*		*5.18*	"	*80.0-120*	*104*			
Surrogate: Toluene-d8	"	*5.00*		*4.75*	"	*88.0-110*	*95.0*			
Blank	**0060749-BLK2**									
Tert-amyl methyl ether	7/2/00			**ND**	ug/l	**1.00**				
Tert-butyl alcohol	"			**ND**	"	**20.0**				
Di-isopropyl ether	"			**ND**	"	**1.00**				
1,2-Dibromoethane (EDB)	"			**ND**	"	**0.500**				
1,2-Dichloroethane	"			**ND**	"	**0.500**				
Ethanol	"			**ND**	"	**100**				
Ethyl tert-butyl ether	"			**ND**	"	**1.00**				
Methyl tert-butyl ether	"			**ND**	"	**0.500**				
Surrogate: Dibromofluoromethane	"	*5.00*		*4.61*	"	*86.0-118*	*92.2*			
Surrogate: 1,2-Dichloroethane-d4	"	*5.00*		*5.12*	"	*80.0-120*	*102*			
Surrogate: Toluene-d8	"	*5.00*		*4.91*	"	*88.0-110*	*98.2*			
LCS	**0060749-BS1**									
Methyl tert-butyl ether	7/1/00	5.00		4.86	ug/l	72.7-119	97.2			
Surrogate: Dibromofluoromethane	"	*5.00*		*4.69*	"	*86.0-118*	*93.8*			
Surrogate: 1,2-Dichloroethane-d4	"	*5.00*		*5.40*	"	*80.0-120*	*108*			
Surrogate: Toluene-d8	"	*5.00*		*4.84*	"	*88.0-110*	*96.8*			
LCS	**0060749-BS2**									
Methyl tert-butyl ether	7/2/00	5.00		4.91	ug/l	72.7-119	98.2			
Surrogate: Dibromofluoromethane	"	*5.00*		*4.70*	"	*86.0-118*	*94.0*			
Surrogate: 1,2-Dichloroethane-d4	"	*5.00*		*5.19*	"	*80.0-120*	*104*			
Surrogate: Toluene-d8	"	*5.00*		*4.86*	"	*88.0-110*	*97.2*			
Matrix Spike	**0060749-MS1**		**P006681-04**							
Methyl tert-butyl ether	7/2/00	5.00	ND	5.15	ug/l	72.7-119	**103**			
Surrogate: Dibromofluoromethane	"	*5.00*		*5.03*	"	*86.0-118*	*101*			

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Conor Pacific / EFW	Project:	B&C Gas Mini Mart	Sampled: 6/21/00 to 6/22/00
2650 East Bayshore Rd.	Project Number:	BNC103	Received: 6/23/00
Palo Alto, CA 94303	Project Manager:	Katrin Schliewen	Reported: 7/7/00

Volatile Organic Compounds by EPA Method 8260B/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Matrix Spike (continued)	**0060749-MS1**		**P006681-04**							
Surrogate: 1,2-Dichloroethane-d4	*7/2/00*	*5.00*		*6.01*	*ug/l*	*80.0-120*	*120*			
Surrogate: Toluene-d8	*"*	*5.00*		*4.76*	*"*	*88.0-110*	*95.2*			
Matrix Spike Dup	**0060749-MSD1**		**P006681-04**							
Methyl tert-butyl ether	7/2/00	5.00	ND	4.99	ug/l	72.7-119	**99.8**	20.0	**3.16**	
Surrogate: Dibromofluoromethane	*"*	*5.00*		*4.94*	*"*	*86.0-118*	*98.8*			
Surrogate: 1,2-Dichloroethane-d4	*"*	*5.00*		*5.78*	*"*	*80.0-120*	*116*			
Surrogate: Toluene-d8	*"*	*5.00*		*4.93*	*"*	*88.0-110*	*98.6*			

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Conor Pacific / EFW	Project:	B&C Gas Mini Mart	Sampled:	6/21/00 to 6/22/00
2650 East Bayshore Rd.	Project Number:	BNC103	Received:	6/23/00
Palo Alto, CA 94303	Project Manager:	Katrin Schliewen	Reported:	7/7/00

Notes and Definitions

#	Note
1	The EPA recommended storage temperature of 4 degrees C was exceeded prior to analysis.
2	Results between the primary and confirmation columns varied by greater than 40% RPD.
3	The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Recov.	Recovery
RPD	Relative Percent Difference

EINARSON FOWLER & WATSON

CHAIN OF CUSTODY

Page 1 of 1

PO # ~

CONTRACT LABORATORY: Sequoia-Petaluma TURN-AROUND TIME: Standard

Project No.	Site Name
BNC103	B&C Gas Mini Mart

Sampler(s): (printed) R Park (signature)

Sample I.D.	Lab I.D.	Collection Date	Collection Time	Matrix	Depth	Container Information Type/Volume	Qnty	Filt	Prsrv.	Analyses: MTBE, BTEX, MTBE	Analyses: EDB/DBCP, LL, App IX VOCs	Remarks
						VOA 40						
						HCl						
mw-2		6/22/00	1443	water	~	P006648-01	3	N		3		
mw-5		↓	1317	↓		2	3	↓		3	3	
mw-7			1234			3	3			3		
mw-8		↓	1142			4	3			3		
mw-10		6/21/00	1534			5	3			3		
mw-12		↓	1403			6	3			3		
mw-13		6/22/00	1105			7	3			3		
D-2		6/21/00	1440			8	3			3		
MSMW01		no sample		↓			/	↓		/		

Relinquished by: (signature)	Received by: (signature)	Date/Time:	Send Results To:
	C Buckley	6-23 1205	Attn: Katrin Schliewen
Relinquished by: (signature)	Received by: (signature)	Date/Time:	EINARSON, FOWLER & WATSON
	Moreno	6-23 1430	2650 East Bayshore Road
Relinquished by: (signature)	Received by: (signature)	Date/Time:	Palo Alto, CA 94303
			Phone (650) 843-3828
			Fax (650) 843-3815

white: lab copy yellow: project file