Conor Pacific

EFW

ENVIRONMENTAL PROTECTION

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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: March 31, 2000

Proj. No.: BNC 103

Copies	Description	Sent by:
1	Report: Fourth Quarter 1999 Groundwater Monitoring Results, B&C Gas Mini Mart, Livermore, California	☒ *Regular Mail* ☐ *FedEx* ☐ *Courier* ☐ *Other*

Comments:

cc:

Copies	Name & Address	Sent by:
1	Balaji Angle, B&C Gas Mini Mart	☒ *Regular Mail*
1	Fuel Leaks Section, San Francisco Bay RWQCB	☐ *FedEx*
1	Matt Katen, Alameda County Zone 7	☐ *Courier*
		☐ *Other*

Conor Pacific

EFW

March 31, 2000
Project No. BNC103

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

Re: Fourth Quarter 1999 Groundwater Monitoring Results, B&C Gas Mini Mart, 2008 First Street, Livermore, California (Station ID 1689)

Dear Mr. Angle:

Conor Pacific/EFW has compiled fourth quarter 1999 groundwater monitoring results for B&C Gas Mini Mart (B&C), 2008 First Street, Livermore, California (Figure 1). This report includes fourth quarter 1999 groundwater elevation data, groundwater sampling methods, and results of groundwater chemical analyses.

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-permeability clayey unit is found at depths of approximately 75 to 110 feet below ground

FOURTH QUARTER 1999
GROUNDWATER MONITORING RESULTS
B&C Gas Mini Mart
Livermore, California

Prepared by

Conor Pacific/EFW
2650 East Bayshore Road
Palo Alto, California 94303

March 2000

Project BNC 103

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).

Nine new 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 lateral extent of

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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."

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.

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 1). The well is screened from 15 feet to 40 feet, bgs, and the depth to groundwater has historically ranged from 18 to 33 feet, 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. However, in December 1999, 0.07 feet of free product was measured in well MW-5. The absorbent sock was replaced in the well.

GROUNDWATER SAMPLING AND ANALYSIS

Fourth 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 fourth quarter 1999 sampling event, Conor Pacific/EFW 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), only well MW-5 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 (MSP), was also checked for product (Figure 1). (MS)MW-1 did not contain a measurable thickness of product. A groundwater sample was collected from well (MS)MW-1 this quarter since no product was observed.

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

Groundwater Elevations

On December 20, 1999, Conor Pacific/EFW 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/EFW'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 1 summarizes available groundwater elevations from August 1990 to December 1999. A comparison of well screen elevations (Table 2) and fourth quarter measurements shows that the water levels were above the well screens only in wells MW-13, D-1, and D-2. The water levels in all other wells intercepted the well screen intervals at the time of groundwater sampling. A groundwater contour map, based on December 1999 measurements, is shown in Figure 2. Fourth quarter groundwater elevations are generally two feet lower than the third quarter 1999. Groundwater flow was generally due west during fourth quarter 1999. Based on fourth quarter measurements, the hydraulic gradient is approximately 0.014 foot per foot. The flow direction and gradient are in accordance with previous results.

Sampling Methods

Conor Pacific/EFW sampled ten monitoring wells (MW-2, MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, D-1, D-2, and (MS)MW-1) on December 21, 1999, following EFW's standard protocol. Well MW-5 was not sampled due to the presence of a measurable thickness of free product in the well. 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 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. Laboratory analyses occurred

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

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. Fourth quarter 1999 analytical results for benzene and MTBE are also presented on Figure 3.

Site Well

Well MW-2 is the only site well sampled quarterly. Hydrocarbon concentrations in well MW-2 were similar to the previous two quarter's. In well MW-2, TPH-G was detected at a concentration of 19,200 µg/l. Concentrations of BTEX compounds ranged from 818 to 2,130 µg/l. MTBE was detected at 579 µg/l.

Downgradient Wells

Well MW-5, located 75 feet downgradient of the site, was not sampled during the fourth quarter event, due to the presence of measurable free product in the well.

Well MW-7, located on the Mill Springs Park Apartments property approximately 550 feet downgradient from the site, had hydrocarbon concentrations similar to the previous quarter. Of the BTEX compounds, benzene and toluene were not detected, while ethylbenzene and xylenes were measured at 13.8 and 44.9 µg/L, respectively. The concentration of MTBE (26.3 µg/L) was almost twice that measured during the third quarter.

Well (MS)MW-1, located approximately 800 feet downgradient from the B&C site, was sampled during the fourth for the first time since November 1998. Total petroleum hydrocarbons as gasoline were detected at a concentration of 661 µg/L. Concentrations of BTEX compounds ranged from 3.5 to 31.1 µg/L. MTBE was detected at 7.2 µg/L. These concentrations were at least ten times lower than the previous sampling in November 1998.

Wells MW-8 and MW-10, located on Railroad Avenue at the Bank of America building and at the Granada Bowling Alley building, respectively, contained only MTBE. Both contained approximately 47 µg/L MTBE. The MTBE concentration in well MW-8 was similar to the previous sampling in September1999. No MTBE had been detected in well MW-10 previously.

No TPH-G, BTEX, or MTBE were detected in downgradient wells MW-11, MW-12, D-1, and D-2. These results are consistent with results from the third quarter sampling event for these wells (September 1999). Previously, low hydrocarbon concentrations in

well MW-11 was attributed to the Beacon Gasoline Station located at the intersection of P and First Streets (Conor Pacific/EFW, November 1999).

Well MW-13, located on Railroad Avenue at the southwest corner of the City's vacant property, contained TPH-G at a concentration of 71 µg/L. Benzene and ethylbenzene were detected at 6.7 and 1.4 µg/L, respectively. The concentration of MTBE was similar to the previous quarter, at 132 µg/L.

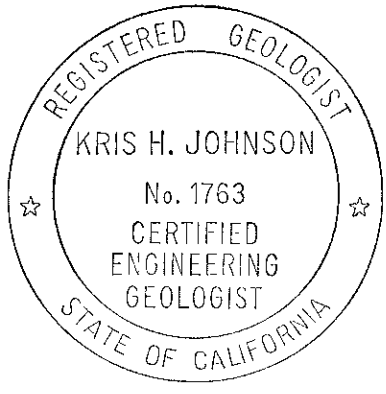
SUMMARY

The fourth quarter 1999 groundwater monitoring results are consistent with previous monitoring results. The most significant result being that MTBE was detected for the first time in well MW-10, the furthest detection of MTBE downgradient from the site. First quarter 2000 groundwater monitoring is currently scheduled for March 1999.

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

Sincerely,
Conor Pacific/EFW

Katrin Schliewen
Project Hydrogeologist



Kris H. Johnson
Senior Engineering Geologist
C.E.G. 1763

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 (December 1999)
Figure 3 - Groundwater Chemistry (December 1999)

Appendices

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

cc: Eva Chu, ACEHS
Mr. Matt Katen, Alameda Co. Flood Control and Water Cons. District Zone 7
Regional Water Quality Control Board, USTCF

Table 1
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		
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		
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		

Table 1
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		
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
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		
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		
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		
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		
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		
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		

Table 1
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-12	458.34	7/12/99	25.50	432.84		
		09/27/99	28.28	430.06		
		12/20/99	30.26	428.08		
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		
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		
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		
(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		

Notes
Data prior to 1998 from RSI quarterly reports. February 1997 date unknown
MSL = mean sea level
NM - not measured; NS - not surveyed; NA - well not accessible, blocked at 28.4 feet.
MSP - Mill Springs Park
(1) - free product visible in purge or sample water

Table 2
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 (in.)	Casing Material (PVC)	Casing Diameter (in.)	Screen Size (in.)	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	HAS	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 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
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
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

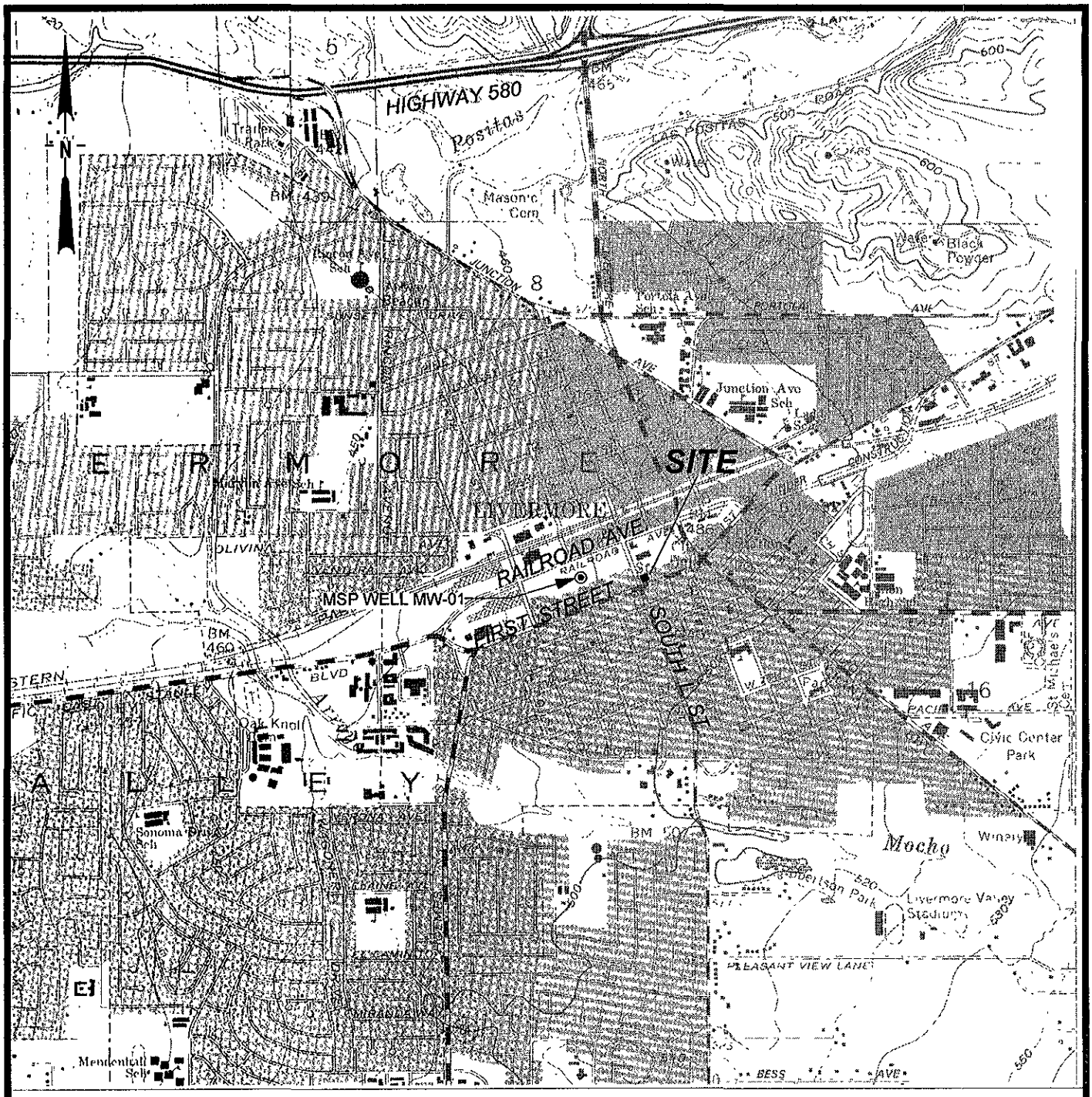
Table 3
Historical Groundwater Analytical Results
B&C Gas Mini Mart
Livermore, California

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
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
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
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
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
MW-9	Jun-99	<50	<0.5	<0.5	<0.5	<0.5	<2
	Dec-99	NS	NS	NS	NS	NS	NS
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
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
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

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-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
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
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
(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

ug/l = micrograms per liter
TPH-G = total petroleum hydrocarbons as gasoline
MTBE = methyl tertiary-butyl ether
MSP = Mill Springs Park
NA= not analyzed NS= not sampled
* = well inaccessible ** = floating hydrocarbon present
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	FIGURE 1
	SITE LOCATION MAP	PROJECT NO. BNC103

SPT/UNION PACIFIC RAILROAD

FORMER MILLER'S OUTPOST SHOPPING CENTER (Currently Livermore Valley Square)

PAUL'S CLEANERS

MIKE'S CLEANERS

FORMER LIVERMORE ARCADE SHOPPING CENTER (Currently Vintner's Square)

GRANADA BOWLING ALLEY

BANK OF AMERICA

VACANT PROPERTY

ARROW RENTALS

MILL SPRINGS PARK APARTMENTS

GROTH BROTHERS OLDSMOBILE

B & C GAS MINI MART

BEACON STATION

UNOCAL STATION

ABANDONED GAS STATION

RAILROAD AVENUE

FIRST STREET

SECOND STREET

NORTH P STREET

SOUTH P STREET

SOUTH O STREET

SOUTH N STREET

SOUTH M STREET

NORTH L STREET

SOUTH L STREET

DMW-01

CWS#3 (379.5)

CWS#3

(428.21) D-2

(428.08) MW-12

(428.38) D-1

(429.02) MW-11

MW-24

MW-10 (431.38)

MW-8 (433.44)

MW-13 (439.81)

(445.70)

(MS)MW-1 (440.43)

MW-9 (442.09)

MW-5 (449.67)

(GB)MW-1

(NM) MW-6

MW-2 (450.84)

MW-1 (451.08)

MW-4 (452.52)

MW-3 (452.39)

MW-6

MW-5

MW-2

MW-3

MW-4

MW-7

MW-1

B97-1

B97-2

B97-3

B97-4

B97-5

W-E

W-3

W-5

W-1

W-2

W-4

H-1 H-2 H-3 H-4 H-5 H-6 H-7 H-8 H-9 H-10 H-11

G-1 G-2 G-3 G-4

430 432 434 436 438 440 442 444 446 448 450 452

N

EXPLANATION

MW-1	Groundwater monitoring well
D-1	Deep groundwater monitoring well
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
(445.70)	Groundwater elevation (Feet-City of Livermore datum); measured December 20, 1999; NM = Not Measured
	Groundwater elevation measured December 31 1999 obtained from Alameda County Water Resources Management Zone 7
444	Groundwater elevation contour (Feet City of Livermore datum) measured December 20 1999

Date of photography 4/30/96

t:\bnc\103\figures\gw-aerial.ds* 3/28/00

SCALE 0 200 400 FEET

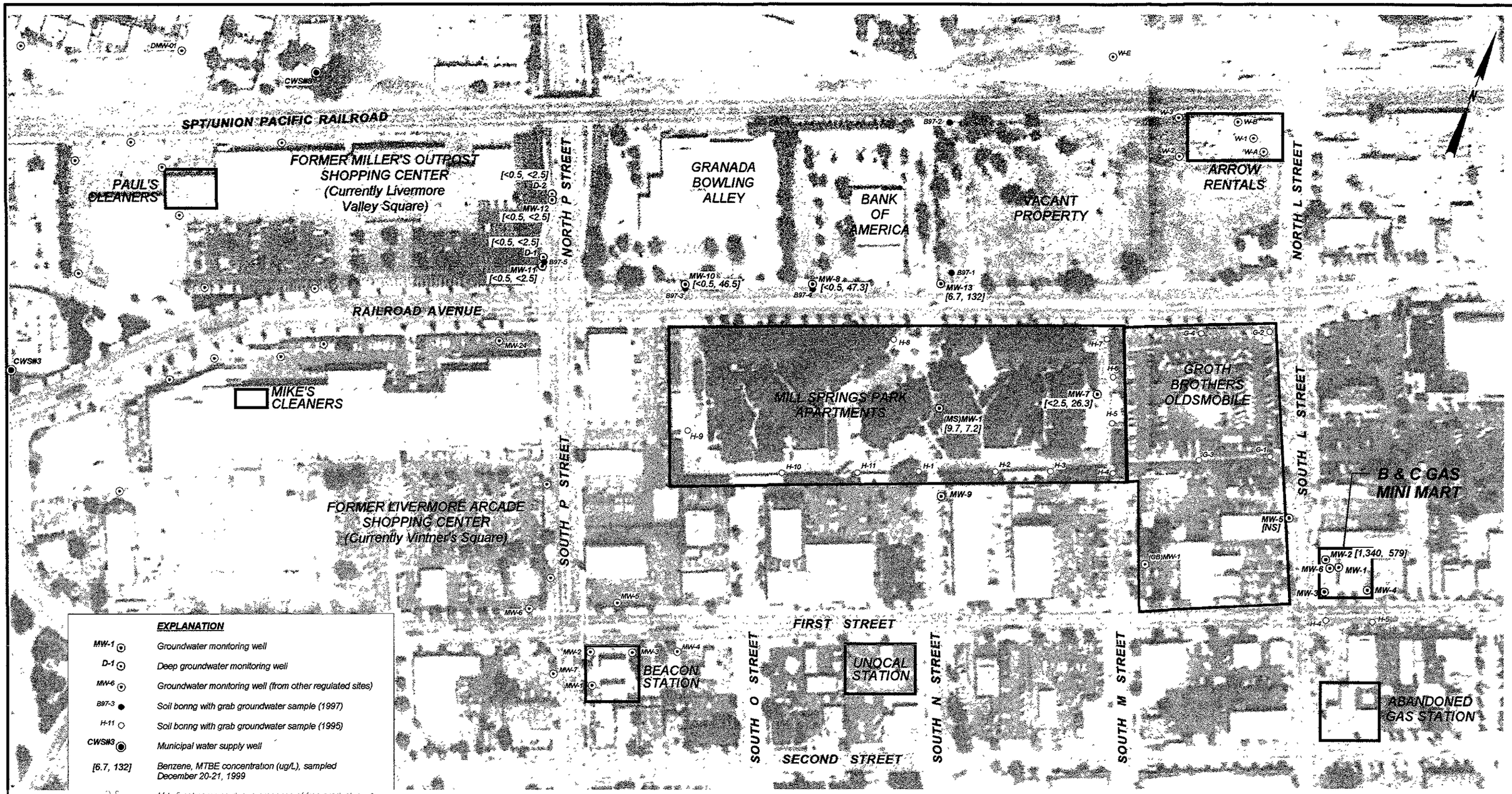
(APPROXIMATE)

GROUNDWATER MONITORING
B & C GAS MINI MART
LIVERMORE, CALIFORNIA

WELL LOCATIONS AND GROUNDWATER CONTOURS (DECEMBER 1999)

FIGURE 2

PROJECT NO BNC103



SCALE 0 200 400 FEET
(APPROXIMATE)

GROUNDWATER MONITORING
B & C GAS MINI MART
LIVERMORE, CALIFORNIA

GROUNDWATER CHEMISTRY (DECEMBER 1999)

FIGURE
3

PROJECT NO
BNC103

WATER LEVEL DATA SHEET
Conor Pacific/EFW

Project: B&C Gas Mini Mart
Project No.: BNC103
Date(s): 12/20/99
Name: R Paul
Weather: Sunny, breezy Sounder #: 1, KECK used in MW-2, 5, MS MW01

Well	Date	DTPP (TOC)	DTW (TOC)	Total Depth	Meas. By	Time	Comments
MW-1	12/20/99	ND	32.99	75.5	MD	1049	
MW-2			33.02	56.0	M	1043	
MW-3			31.85	57.3		1106	-9/16"
MW-4			32.52	59.9		1103	
MW-5		32.23	32.30	NM		1124	-15/16"
MW-6		NM	→	→		1046	-destructed at 20.7'
MW-7		ND	32.44	49.3		1233	-9/16"
MW-8			39.79	53.4		1151	-9/16"
MW-9			34.99	44.0		1139	-9/16"
MW-10			40.04	53.9		1150	-9/16"
MW-11			35.91	49.2		1210	-9/16"
MW-12			30.26	43.4		1209	-9/16"
MW-13			34.98	54.4		1146	-9/16"
D-1			36.32	124.2		1218	-9/16"
D-2			29.40	111.2		1205	-9/16"
MS MW01	↓	↓	37.36	NM	↓	1240	-9/16"

All locks: 0909, except for MS MW01.

EINARSON FOWLER & WATSON

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Minimart — SAMPLE ID: MW-2
PROJECT NO: BNC103 — SAMPLED BY: RPaine
CLIENT: B&C Gas Minimart — REGULATORY AGENCY:
SAMPLE TYPE: Groundwater 1 — Surface Water ____ — Leachate ____ — Treatment Effluent ____ — Other ____

CASING DIAMETER (OD-inches):	3/4	1	2	4	4.5	6	8
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): 15.2
Depth to Water (ft): 33.02 — Calculated Purge (volumes / gal.): 15.2
Height of Water Column (ft): 22.98 — Actual Pre-Sampling Purge (gal): 15.5

PURGE:
Device (Depth of Intake from TOC): Submersible Pump 2" (50') — Peristaltic Pump ____ — PVC Hand Pump ____
S.S. Bailer ____ — Teflon Bailer ____ — PVC Bailer ____ — Disposable Bailer ____ — 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)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Color (visual)	Turbidity (visual)	Observation
1002	5.5	19.9	1090		6.82	H.grey tint	low	
1006	10.5	20.4	1090		6.86	↓	↓	
1010	15.5	20.5	1080		6.89			

Purge Date: 12/21/99

SAMPLE:
Device (Depth of Intake from TOC): Submersible Pump ____ — Peristaltic Pump ____ — PVC Hand Pump ____
Teflon Bailer ____ — PVC Bailer ____ — Disposable Bailer (50') — Other ____

Time (2400 Hr)	Temp. (°C)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)
1616	19.9	1070		6.90	1.33	H.grey tint	77

Sheen: none — Odor: Strong — Sample Date: 12/21/99

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

REMARKS: 1 Casing Volume Purge.

SIGNATURE: ____ **DATE:** 12/21/99

EINARSON FOWLER & WATSON

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart
SAMPLE ID: MW-5
PROJECT NO: BNC103
SAMPLED BY: RPark
CLIENT: B&C Gas Mini Mart
REGULATORY AGENCY: _____
SAMPLE TYPE: Groundwater 1 Surface Water _____ Leachate _____ Treatment Effluent _____ Other _____

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

~~Well Total Depth~~ DTPP (ft): 32.23
Depth to Water (ft): 32.30
~~Height of Water Column~~ Product thickness (ft): 0.07
Volume in Casing (gal): _____
Calculated Purge (volumes / gal.): _____
Actual Pre-Sampling Purge (gal): _____

PURGE:
Device (Depth of Intake from TOC): Submersible Pump _____ Peristaltic Pump _____ PVC Hand Pump _____
S.S. Bailer _____ Teflon Bailer _____ PVC Bailer _____ Disposable Bailer _____ Other _____
Purge Water Containment: _____
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other _____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Color (visual)	Turbidity (visual)	Observation

Purge Date: _____

SAMPLE:
Device (Depth of Intake from TOC): Submersible Pump _____ Peristaltic Pump _____ PVC Hand Pump _____
Teflon Bailer _____ PVC Bailer _____ Disposable Bailer _____ Other _____

Time (2400 Hr)	Temp. (°C)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)

Sheen: _____ Odor: _____ Sample Date: _____

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

REMARKS: Floating Product present, no Samples collected.

SIGNATURE: _____ **DATE:** 12/20/99

EINARSON FOWLER & WATSON

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart
SAMPLE ID: MW-7
PROJECT NO: BNC103
SAMPLED BY: RPWK
CLIENT: B&C Gas Mini Mart
REGULATORY AGENCY:
SAMPLE TYPE: Groundwater 1 Surface Water ____ Leachate ____ Treatment Effluent ____ Other ____

CASING DIAMETER (OD-inches):	3/4	1	2	4	4.5	6	8
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): 2.9
Depth to Water (ft): 32.44
Calculated Purge (volumes / gal.): 8.0
Height of Water Column (ft): 16.86
Actual Pre-Sampling Purge (gal): 9.0

PURGE:
Device (Depth of Intake from TOC): Submersible Pump ____ Peristaltic Pump ____ PVC Hand Pump ____
S.S. Bailer ____ Teflon Bailer ____ PVC Bailer 1 Disposable Bailer ____ 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)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Color (visual)	Turbidity (visual)	Observation
1419	3.0	18.7	1030		7.08	lt. brown	high	
1423	6.0	18.8	1030		7.08	↓	↓	
1426	9.0	18.9	1030		7.09			

Purge Date: 12/21/99

SAMPLE:
Device (Depth of Intake from TOC): Submersible Pump ____ Peristaltic Pump ____ PVC Hand Pump ____
Teflon Bailer ____ PVC Bailer ____ Disposable Bailer (45) Other ____

Time (2400 Hr)	Temp. (°C)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)
1434	18.8	1020		7.06	3.11	lt. brown	>999

Sheen: none Odor: moderate Sample Date: 12/21/99

Field Measurement Devices: Horiba 1 Omega ____ QuickCheck ____ D.O. Test Kit ____

REMARKS:

SIGNATURE: _____ **DATE:** 12/21/99

EINARSON FOWLER & WATSON

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart — SAMPLE ID: MW-8
PROJECT NO: BNL103 — SAMPLED BY: RPAM
CLIENT: B&C Gas Mini Mart — REGULATORY AGENCY:
SAMPLE TYPE: Groundwater 1 Surface Water ____ Leachate ____ Treatment Effluent ____ Other ____

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

Well Total Depth (ft): 53.4 — Volume in Casing (gal): 2.4
Depth to Water (ft): 39.79 — Calculated Purge (volumes / gal.): 7.0
Height of Water Column (ft): 13.61 — Actual Pre-Sampling Purge (gal): 7.0

PURGE:
Device (Depth of Intake from TOC): Submersible Pump ____ Peristaltic Pump ____ PVC Hand Pump ____
S.S. Bailer ____ Teflon Bailer ____ PVC Bailer 1 Disposable Bailer ____ 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)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Color (visual)	Turbidity (visual)	Observation
1652	2.5	18.9	1000		7.06	lt.brown	high	
1656	5.0	19.0	1000		7.07	↓	↓	
1659	7.0	19.0	1000		7.09			

Purge Date: 12/20/99

SAMPLE:
Device (Depth of Intake from TOC): Submersible Pump ____ Peristaltic Pump ____ PVC Hand Pump ____
Teflon Bailer ____ PVC Bailer ____ Disposable Bailer 1 Other ____

Time (2400 Hr)	Temp. (°C)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS) (400)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)
1706	18.8	990		7.08	2.07	lt.brown	>999

Sheen: none — Odor: none — Sample Date: 12/20/99

Field Measurement Devices: Horiba 1 Omega ____ QuickCheck ____ D.O. Test Kit ____

REMARKS:

Barcoded

SIGNATURE: _____ **DATE:** 12/20/99

EINARSON FOWLER & WATSON

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart
SAMPLE ID: MW-10
PROJECT NO: BNC103
SAMPLED BY: R Park
CLIENT: B&C Gas Mini Mart
REGULATORY AGENCY:
SAMPLE TYPE: Groundwater 4 Surface Water ____ Leachate ____ Treatment Effluent ____ Other ____

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

Well Total Depth (ft): 53.9
Volume in Casing (gal): 2.4
Depth to Water (ft): 40.04
Calculated Purge (volumes / gal.): 7.1
Height of Water Column (ft): 13.86
Actual Pre-Sampling Purge (gal): 7.5

PURGE:
Device (Depth of Intake from TOC): Submersible Pump ____ Peristaltic Pump ____ PVC Hand Pump ____
S.S. Bailer ____ Teflon Bailer ____ PVC Bailer 4 Disposable Bailer ____ 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)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Color (visual)	Turbidity (visual)	Observation
1010	2.5	18.2	990		6.85	lt. brown	high	
1014	5.0	18.5	1000		6.83	↓	↓	
1018	7.5	18.7	1000		6.82	↓	↓	

Purge Date: 12/21/99

SAMPLE:
Device (Depth of Intake from TOC): Submersible Pump ____ Peristaltic Pump ____ PVC Hand Pump ____
Teflon Bailer ____ PVC Bailer ____ Disposable Bailer (50') Other ____

Time (2400 Hr)	Temp. (°C)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)
1025	18.7	1000		6.86	1.71	lt. brown	>999

Sheen: none Odor: none Sample Date: 12/21/99

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

REMARKS:

Calibrated meter 1000 12/21/99: pH: 7.04, 4.00; EC: 0, 2060; turb: 0; DO: auto; T: 10.2°C

SIGNATURE: _____ **DATE:** 12/21/99

EINARSON FOWLER & WATSON

WATER SAMPLE FIELD DATA

LOCATION: BiC Gas Mini Mart — SAMPLE ID: MW-11
PROJECT NO: BNC103 — SAMPLED BY: RPark
CLIENT: BiC Gas Mini Mart — REGULATORY AGENCY: _____
SAMPLE TYPE: Groundwater 1 Surface Water _____ Leachate _____ Treatment Effluent _____ Other _____

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

Well Total Depth (ft): 49.2 — Volume in Casing (gal): 2.3
Depth to Water (ft): 35.91 — Calculated Purge (volumes / gal.): 6.0
Height of Water Column (ft): 13.29 — Actual Pre-Sampling Purge (gal): 7.0

PURGE:
Device (Depth of Intake from TOC): Submersible Pump _____ Peristaltic Pump _____ PVC Hand Pump _____
S.S. Bailer _____ Teflon Bailer _____ PVC Bailer 1 Disposable Bailer _____ 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)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Color (visual)	Turbidity (visual)	Observation
1217	2.5	19.5	1020		6.98	lt. brown	high	
1220	5.0	19.8	1020		7.05	↓	↓	
1223	7.0	19.7	1020		7.07			

Purge Date: 12/21/99

SAMPLE:
Device (Depth of Intake from TOC): Submersible Pump _____ Peristaltic Pump _____ PVC Hand Pump _____
Teflon Bailer _____ PVC Bailer _____ Disposable Bailer (45') Other _____

Time (2400 Hr)	Temp. (°C)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)
1230	19.6	1020		7.05	2.10	lt. brown	>999

Sheen: none — Odor: none — Sample Date: 12/21/99

Field Measurement Devices: Horiba 1 Omega _____ QuickCheck _____ D.O. Test Kit _____

REMARKS: _____

SIGNATURE: _____ **DATE:** 12/21/99

EINARSON FOWLER & WATSON

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart — SAMPLE ID: MW-12
PROJECT NO: BNC103 — SAMPLED BY: RPunz
CLIENT: B&C Gas Mini Mart — REGULATORY AGENCY:
SAMPLE TYPE: Groundwater ✓ Surface Water ____ Leachate ____ Treatment Effluent ____ Other ____

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

Well Total Depth (ft): 43.4 — Volume in Casing (gal): 2.3
Depth to Water (ft): 30.26 — Calculated Purge (volumes / gal.): 6.0
Height of Water Column (ft): 13.14 — Actual Pre-Sampling Purge (gal): 7.0

PURGE:
Device (Depth of Intake from TOC): Submersible Pump ____ Peristaltic Pump ____ PVC Hand Pump ____
S.S. Bailer ____ Teflon Bailer ____ PVC Bailer ✓ Disposable Bailer ____ 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)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Color (visual)	Turbidity (visual)	Observation
1101	2.5	19.3	1010		6.84	lt. brown	high	
1104	5.0	19.5	1020		6.90	↓	↓	
1107	7.0	19.5	1020		6.92			

Purge Date: 12/21/99

SAMPLE:
Device (Depth of Intake from TOC): Submersible Pump ____ Peristaltic Pump ____ PVC Hand Pump ____
Teflon Bailer ____ PVC Bailer ____ Disposable Bailer (40') Other ____

Time (2400 Hr)	Temp. (°C)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)
1114	19.6	1020		6.89	2.91	lt. brown	>999

Sheen: none — Odor: none — Sample Date: 12/21/99

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

REMARKS: ____

SIGNATURE: ____ **DATE:** 12/21/99

EINARSON FOWLER & WATSON

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart — SAMPLE ID: MW-13
PROJECT NO: BNC103 — SAMPLED BY: RPAM
CLIENT: B&C Gas Mini Mart — REGULATORY AGENCY: _____
SAMPLE TYPE: Groundwater ✓ Surface Water _____ Leachate _____ Treatment Effluent _____ Other _____

CASING DIAMETER (OD-inches):	3/4	1	2	4	4.5	6	8
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): 3.4
Depth to Water (ft): 34.98 — Calculated Purge (volumes / gal.): 10.0
Height of Water Column (ft): 19.43 — Actual Pre-Sampling Purge (gal): 10.0

PURGE:
Device (Depth of Intake from TOC): Submersible Pump _____ Peristaltic Pump _____ PVC Hand Pump _____
S.S. Bailer _____ Teflon Bailer _____ PVC Bailer ✓ Disposable Bailer _____ 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)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Color (visual)	Turbidity (visual)	Observation
1626	3.5	19.2	931		7.06	lt. brown	high	
1630	7.0	19.1	947		7.07	↓	↓	
1633	10.0	19.2	990		7.12			

Purge Date: 12/20/99

SAMPLE:
Device (Depth of Intake from TOC): Submersible Pump _____ Peristaltic Pump _____ PVC Hand Pump _____
Teflon Bailer _____ PVC Bailer _____ Disposable Bailer ✓ Other _____

Time (2400 Hr)	Temp. (°C)	Specific Conductance (150') Horiba (µmhos/cm)	Specific Conductance (150') QuickCheck (µS)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)
1640	19.0	1000		7.15	1.60	lt. brown	>999

Sheen: none — Odor: none — Sample Date: 12/20/99

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

REMARKS: _____

Calibrated meter 1620, 12/20/99: pH: 7.02, 4.00; EC: 0, 2000, twb: 0; DO: auto; T: 20.8°C

SIGNATURE: _____ **DATE:** 12/20/99

EINARSON FOWLER & WATSON

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart SAMPLE ID: D-1
PROJECT NO: BNC103 SAMPLED BY: RPaul
CLIENT: B&C Gas Mini Mart REGULATORY AGENCY:
SAMPLE TYPE: Groundwater 1 Surface Water ____ Leachate ____ Treatment Effluent ____ Other ____

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

Well Total Depth (ft): 124.2 Volume in Casing (gal): 15.0
Depth to Water (ft): 36.32 Calculated Purge (volumes / gal.): 44.9
Height of Water Column (ft): 87.88 Actual Pre-Sampling Purge (gal): 45.0

PURGE:
Device (Depth of Intake from TOC): Submersible Pump (115') Peristaltic Pump ____ PVC Hand Pump ____
S.S. Bailer ____ Teflon Bailer ____ PVC Bailer ____ Disposable Bailer ____ 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)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Color (visual)	Turbidity (visual)	Observation
1245	15.0	19.4	1030		7.30	lt. brown	moderate	
1252	30.0	19.4	1030		7.29	↓	↓	
1259	45.0	19.4	1030		7.29	↓	↓	

Purge Date: 12/21/99

SAMPLE:
Device (Depth of Intake from TOC): Submersible Pump ____ Peristaltic Pump ____ PVC Hand Pump ____
Teflon Bailer ____ PVC Bailer ____ Disposable Bailer (115') Other ____

Time (2400 Hr)	Temp. (°C)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)
1307	18.9	1030		7.30	5.95	lt. brown	>999

Sheen: none Odor: none Sample Date: 12/21/99

Field Measurement Devices: Horiba 1 Omega ____ QuickCheck ____ D.O. Test Kit ____

REMARKS: ____

SIGNATURE: ____ **DATE:** 12/21/99

EINARSON FOWLER & WATSON

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart — SAMPLE ID: D-2
PROJECT NO: BNC103 — SAMPLED BY: RPMK
CLIENT: B&C Gas Mini Mart — REGULATORY AGENCY: _____
SAMPLE TYPE: Groundwater 1 Surface Water _____ Leachate _____ Treatment Effluent _____ Other _____

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

Well Total Depth (ft): 111.2 — Volume in Casing (gal): 14.0
Depth to Water (ft): 29.40 — Calculated Purge (volumes / gal.): 41.0
Height of Water Column (ft): 81.80 — Actual Pre-Sampling Purge (gal): 42.0

PURGE:
Device (Depth of Intake from TOC): Submersible Pump 2" (100') Peristaltic Pump _____ PVC Hand Pump _____
S.S. Bailer _____ Teflon Bailer _____ PVC Bailer _____ Disposable Bailer _____ 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)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Color (visual)	Turbidity (visual)	Observation
1127	14.0	19.2	1030		7.18	lt. brown	high	
1134	28.0	19.3	1030		7.20	↓	moderate	
1140	42.0	19.2	1030		7.20	↓	↓	

Purge Date: 12/21/99

SAMPLE:
Device (Depth of Intake from TOC): Submersible Pump _____ Peristaltic Pump _____ PVC Hand Pump _____
Teflon Bailer _____ PVC Bailer _____ Disposable Bailer (100') Other _____

Time (2400 Hr)	Temp. (°C)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)
1150	19.0	1030		7.20	6.73	lt. brown	>999

Sheen: none Odor: none Sample Date: 12/21/99

Field Measurement Devices: Horiba 1 Omega _____ QuickCheck _____ D.O. Test Kit _____

REMARKS: _____

SIGNATURE: _____ **DATE:** 12/21/99

EINARSON FOWLER & WATSON

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart
SAMPLE ID: MS MW01
PROJECT NO: BNC 103
SAMPLED BY: B Park
CLIENT: B&C Gas Mini Mart
REGULATORY AGENCY:
SAMPLE TYPE: Groundwater 1 Surface Water ____ Leachate ____ Treatment Effluent ____ Other ____

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

Well Total Depth (ft): 54.5
Volume in Casing (gal): 3.0
Depth to Water (ft): 37.36
Calculated Purge (volumes / gal.): 11.3
Height of Water Column (ft): 22.14
Actual Pre-Sampling Purge (gal): ~0.5

PURGE:
Device (Depth of Intake from TOC): Submersible Pump ____ Peristaltic Pump ____ PVC Hand Pump ____
S.S. Bailer ____ Teflon Bailer ____ PVC Bailer ____ Disposable Bailer 1 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)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Color (visual)	Turbidity (visual)	Observation

Purge Date: ____

SAMPLE:
Device (Depth of Intake from TOC): Submersible Pump ____ Peristaltic Pump ____ PVC Hand Pump ____
Teflon Bailer ____ PVC Bailer ____ Disposable Bailer (40') Other ____

Time (2400 Hr)	Temp. (°C)	Specific Conductance Horiba (µmhos/cm)	Specific Conductance QuickCheck (µS)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)
1359						H. grey	

Sheen: Present Odor: Strong Sample Date: 12/21/99

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

REMARKS: Well re-developed 12/20/99: ~50 gallons purged.
12/21/99: Product globules present in bailer in 2nd bailer full at start of purge. Then allowed globules to rise to top of bailer, collected grab sample from bottom of bailer.

SIGNATURE: _____ **DATE:** 12/21/99

Sequoia Analytical

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

January 3, 2000

Kris Johnson
Conor Pacific / EFW
2650 East Bayshore Rd.
Palo Alto, CA 94303

RE: B&C Gas Mini Mart/P912593

Dear Kris Johnson

Enclosed are the results of analyses for sample(s) received by the laboratory on December 22, 1999. 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

Sequoia Analytical

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Conor Pacific / EFW	Project:	B&C Gas Mini Mart	Sampled: 12/20/99 to 12/21/99
2650 East Bayshore Rd.	Project Number:	BNC103	Received: 12/22/99
Palo Alto, CA 94303	Project Manager:	Kris Johnson	Reported: 1/3/00

ANALYTICAL REPORT FOR P912593

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-2	P912593-01	Water	12/21/99
MW-7	P912593-02	Water	12/21/99
MW-8	P912593-03	Water	12/20/99
MW-10	P912593-04	Water	12/21/99
MW-11	P912593-05	Water	12/21/99
MW-12	P912593-06	Water	12/21/99
MW-13	P912593-07	Water	12/20/99
D-1	P912593-08	Water	12/21/99
D-2	P912593-09	Water	12/21/99
MSMW01	P912593-10	Water	12/21/99

Sequoia Analytical

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Conor Pacific / EFW	Project:	B&C Gas Mini Mart	Sampled: 12/20/99 to 12/21/99
2650 East Bayshore Rd.	Project Number:	BNC103	Received: 12/22/99
Palo Alto, CA 94303	Project Manager:	Kris Johnson	Reported: 1/3/00

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

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-2			**P912593-01**				**Water**	
Gasoline	9120679	12/29/99	12/29/99		2500	**19200**	ug/l	
Benzene	"	"	"		25.0	**1340**	"	
Toluene	"	"	"		25.0	**818**	"	
Ethylbenzene	"	"	"		25.0	**1050**	"	
Xylenes (total)	"	"	"		25.0	**2130**	"	
Methyl tert-butyl ether	"	"	"		125	**579**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*78.7*	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*88.7*	"	
MW-7			**P912593-02**				**Water**	
Gasoline	9120679	12/29/99	12/29/99		250	**2630**	ug/l	
Benzene	"	"	"		2.50	ND	"	
Toluene	"	"	"		2.50	ND	"	
Ethylbenzene	"	"	"		2.50	**13.8**	"	
Xylenes (total)	"	"	"		2.50	**44.9**	"	
Methyl tert-butyl ether	"	"	"		12.5	**26.3**	"	1
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*82.0*	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*94.0*	"	
MW-8			**P912593-03**				**Water**	
Gasoline	9120679	12/29/99	12/29/99		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	**47.3**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*96.7*	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*96.0*	"	
MW-10			**P912593-04**				**Water**	
Gasoline	9120679	12/29/99	12/29/99		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	**46.5**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*80.3*	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*96.3*	"	
MW-11			**P912593-05**				**Water**	
Gasoline	9120679	12/29/99	12/29/99		50.0	ND	ug/l	

Sequoia Analytical

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Conor Pacific / EFW	Project:	B&C Gas Mini Mart	Sampled: 12/20/99 to 12/21/99
2650 East Bayshore Rd.	Project Number:	BNC103	Received: 12/22/99
Palo Alto, CA 94303	Project Manager:	Kris Johnson	Reported: 1/3/00

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

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-11 (continued)			**P912593-05**				**Water**	
Benzene	9120679	12/29/99	12/29/99		0.500	ND	ug/l	
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*		*81.7*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*96.7*	"	
MW-12			**P912593-06**				**Water**	
Gasoline	9120679	12/29/99	12/29/99		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*		*81.3*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*97.0*	"	
MW-13			**P912593-07**				**Water**	
Gasoline	9120679	12/29/99	12/29/99		50.0	**71.0**	ug/l	2
Benzene	"	"	"		0.500	**6.69**	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	**1.38**	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.50	**132**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*97.0*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*97.7*	"	
D-1			**P912593-08**				**Water**	
Gasoline	9120679	12/29/99	12/29/99		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*		*82.0*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*96.0*	"	
D-2			**P912593-09**				**Water**	
Gasoline	9120679	12/29/99	12/29/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	

Sequoia Analytical

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Conor Pacific / EFW	Project:	B&C Gas Mini Mart	Sampled: 12/20/99 to 12/21/99
2650 East Bayshore Rd.	Project Number:	BNC103	Received: 12/22/99
Palo Alto, CA 94303	Project Manager:	Kris Johnson	Reported: 1/3/00

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

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
D-2 (continued)			**P912593-09**				**Water**	
Toluene	9120679	12/29/99	12/29/99		0.500	ND	ug/l	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.50	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*80.3*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*94.7*	"	
MSMW01			**P912593-10**				**Water**	
Gasoline	9120679	12/29/99	12/30/99		50.0	**661**	ug/l	
Benzene	"	"	"		0.500	**9.68**	"	
Toluene	"	"	"		0.500	**3.49**	"	
Ethylbenzene	"	"	"		0.500	**21.7**	"	
Xylenes (total)	"	"	"		0.500	**31.1**	"	
Methyl tert-butyl ether	"	"	"		2.50	**7.18**	"	1
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*81.0*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*91.7*	"	

Sequoia Analytical

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Conor Pacific / EFW	Project:	B&C Gas Mini Mart	Sampled: 12/20/99 to 12/21/99
2650 East Bayshore Rd.	Project Number:	BNC103	Received: 12/22/99
Palo Alto, CA 94303	Project Manager:	Kris Johnson	Reported: 1/3/00

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: 9120679	**Date Prepared: 12/29/99**					**Extraction Method: EPA 5030 waters**				
Blank	**9120679-BLK1**									
Gasoline	12/29/99			**ND**	ug/l	**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*		*287*	"	*65.0-135*	*95 7*			
Surrogate: 4-Bromofluorobenzene	"	*300*		*296*	"	*65.0-135*	*98.7*			
LCS	**9120679-BS1**									
Gasoline	12/29/99	1000		1020	ug/l	65.0-135	102			
Surrogate: 4-Bromofluorobenzene	"	*300*		*303*	"	*65.0-135*	*101*			
Matrix Spike	**9120679-MS1**		**P912519-01**							
Gasoline	12/29/99	1000	ND	1070	ug/l	65.0-135	**107**			
Surrogate 4-Bromofluorobenzene	"	*300*		*315*	"	*65.0-135*	*105*			
Matrix Spike Dup	**9120679-MSD1**		**P912519-01**							
Gasoline	12/29/99	1000	ND	1060	ug/l	65.0-135	**106**	20.0	**0.939**	
Surrogate: 4-Bromofluorobenzene	"	*300*		*287*	"	*65.0-135*	*95.7*			

Sequoia Analytical

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

Conor Pacific / EFW	Project:	B&C Gas Mini Mart	Sampled: 12/20/99 to 12/21/99
2650 East Bayshore Rd.	Project Number:	BNC103	Received: 12/22/99
Palo Alto, CA 94303	Project Manager:	Kris Johnson	Reported: 1/3/00

Notes and Definitions

#	Note
1	Results between the primary and confirmation columns varied by greater than 40% RPD.
2	Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.
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) RFrank (signature)

Sample I.D.	Lab I.D.	Collection Date	Collection Time	Matrix	Depth	Container Information Type/Volume	Qnty	Filt	Prsrv	Analyses TPH gas, BTEX, MTBE	Remarks
										VOA 40	P&T
										HCl	
mw-2		12/21/99	1616	water	✓	PQ125931	3	N		3	
mw-5		no sample				~~8~~	✓			✓	
mw-7		12/21/99	1434			~~2~~	3			3	
mw-9		12/20/99	1706			~~34~~	3			3	
mw-10		12/21/99	1025			~~4~~	3			3	
mw-11		↓	1230			~~5~~	3			3	
mw-12		↓	1114			~~6~~	3			3	
mw-13		12/20/99	1640			~~7~~	3			3	
D-1		12/21/99	1307			~~8~~	3			3	
D-2		↓	1150			~~9~~	3			3	
MSmw01		↓	1359	↓		10		↓			
									COOLER		

Relinquished by: (signature)	Received by: (signature)	Date/Time
RFrank	John Frick SC	12/22/99 1030
John Frick SC		
	Sharon	12/22/99 14:45

Send Results To:
Attn: Kris Johnson
EINARSON, FOWLER & WATSON
2650 East Bayshore Road
Palo Alto, CA 94303
Phone (650) 843-3828
Fax (650) 843-3815

White lab copy yellow project file