LR0314

LETTER OF TRANSMITTAL

BLYMYER ENGINEERS, INC.

1829 Clement Avenue

Alameda, California 94501-1396

(510) 521-3773 FAX: (510) 865-2594

DATE February 22, 2005	BEI Job No. 203004
ATTENTION:	Mr. Amir Gholami
SUBJECT:	Former Fiesta Beverage Facility
	966 89th Avenue
	Oakland, California
	ACHCSA Site # RO0000314

Alameda County Health Care Services Agency

Environmental Protection Division

1131 Harbor Bay Parkway, Suite 250

Alameda, CA 94502-6577

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Mr. Ted Walbey, Fiesta Beverage

SIGNED: Mark Detterman

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BLYMYER
ENGINEERS, INC.

January 6, 2005
BEI Job No. 203004

Mr. Ted Walbey
Fiesta Beverage
7150 Island Queen Dr.
Sparks, NV 89436

Subject: **Fall 2004 Semi-Annual Groundwater Monitoring Event**
Former Fiesta Beverage Facility
966 89th Avenue
Oakland, California
ACHCSA Site # RO0000314

Dear Mr. Walbey:

This letter documents the Fall 2004 semi-annual groundwater monitoring event at the subject site (Figure 1). This is the sixth groundwater monitoring event and the second semi-annual event conducted by Blymyer Engineers, Inc. at the former Fiesta Beverage site in Oakland, California.

1.0 Background

In August 1990, one 500-gallon and one 1,000-gallon gasoline underground storage tanks (USTs) were removed from the subject site (Figure 2). Soil and groundwater were reported to be impacted from releases from one or both USTs. Overexcavation of the former UST basins occurred in January 1991. The excavations were reported to have reached approximately 15 feet by 8 feet by 14 feet deep and 12 feet by 7 feet by 14 feet deep, respectively, on January 14, 1991. Beginning in April 1991, aeration of the soil occurred onsite. In April 1993, 74.28 tons of soil were transported to the Remco recycling facility.

In June 1993, groundwater monitoring wells MW-1, MW-2, and MW-3 were installed. In general, the wells encountered black to grey to light brown clay to a depth of approximately 15 below grade surface (bgs). At 15 feet bgs, the three bores encountered a 0.5- to 2.0-foot-thick clayey sand. Below this unit a light brown to grey clay was present to a depth of 18 to 21 feet bgs. Underneath this unit, a 1- to 3-foot-thick sand was encountered in bores MW-1 and MW-2, while a clayey silt was encountered in bore MW-3. Below approximately 21 feet bgs, a green-grey or black clay was encountered to the full explored depth of 26.5 feet bgs in bore MW-1 and to 25 feet bgs in bores MW-2 and MW-3. Saturated soil was encountered below a depth of approximately 13 feet bgs (in clay overlaying the uppermost sand unit). The wells were installed with a screened interval between 10 and 25 feet bgs. Groundwater from the three wells was sampled six times between August 1993 and December 1998.

1829 CLEMENT AVENUE ALAMEDA CA 94501-1395 PHONE 510-521-3773 FAX 510-865-2594

In November 1999, after obtaining appropriate permits, AllCal Property Services, Inc. (AllCal) installed four Geoprobe® soil bores downgradient from the former location of the two USTs. The bores were installed in the public right-of-way across 89th Avenue from the subject site, in an unpaved portion of the roadway. Soil bores SB-1 and SB-2 were logged to a depth of 16 feet bgs. Silty clay was encountered to a depth of approximately 13 to 14 feet bgs. Below that depth, soil consisted of clayey silt that alternated between moist and saturated for several vertical feet. Bore SB-1 also encountered a poorly graded sand at 16 feet bgs. Hydrocarbon odors were present in both bores at a depth of approximately 6 feet bgs and green discolored soil was present at 10 feet bgs in bore SB-1. Discolored soil and gasoline odors were noted in both bores throughout the clayey silt, while brownish colored clay was present in both bores just above the silt. The groundwater interface appears to have been encountered at an approximate depth of 16 feet bgs in the sand. A sheen was noted at that depth in SB-1. Groundwater samples were obtained from bores SB-1 and SB-2 after pushing the Geoprobe® system to a total depth of 18 feet bgs. Soil bores SB-3 and SB-4 were directly pushed to a total depth of 18 feet bgs in order to obtain grab groundwater samples. Groundwater samples from bores SB-1 and SB-2 contained elevated concentrations of Total Petroleum Hydrocarbons (TPH) as gasoline, and benzene, toluene, ethylbenzene, and total xylenes (BTEX). Significantly lower concentrations of TPH as gasoline and total xylenes were encountered in the groundwater sample from soil bore SB-3, while all analytes were nondetectable in groundwater collected from soil bore SB-4. No soil samples were submitted for laboratory analysis from the four Geoprobe® bores.

After the review of the January 2001 groundwater monitoring report, the Alameda County Health Care Services Agency (ACHCSA) approved the application of a 7% solution of hydrogen peroxide to the wells in an attempt to remediate dissolved constituents. On March 7, 2001, the solution was applied by AllCal and on April 25, 2001, a groundwater monitoring event was conducted to determine if a reduction in dissolved constituents had occurred. Based on the analytical data, a reduction was seen in wells MW-1 and MW-2, with some reductions also seen in well MW-3. This sampling event and subsequent interpretation was complicated by the presumed mis-marking of samples from wells MW-1 and MW-3. No further work at the site is known to have occurred between April 2001 and the March 2003 groundwater monitoring event.

On January 16, 2003, a new case manager for the project was appointed by the ACHCSA. Mr. Amir Gholami is the current case manger for the ACHCSA. On September 17, 2003, a workplan for a Geoprobe® investigation of the site was submitted to the ACHCSA. The intent is to attempt to determine the lateral and vertical extent of impacted soil and groundwater in order to better target the residual contamination in future remedial actions to be determined. Due to the lack of a response from the ACHCSA, on February 17, 2004, Blymyer Engineers issued a *Letter of Intent to Proceed: Geoprobe® Investigation*.

The *Fourth Quarter 2003 Groundwater Monitoring Event* report, dated January 6, 2004, recommended that analysis for fuel oxygenates by EPA Method 8260B be eliminated from the analytical program. It was reasoned that the data generated to date had been very consistent, and further quantification would not significantly add to the level of understanding at the site. Additionally, the concentration of methyl *tert*-butyl ether (MTBE) can be monitored using EPA Method 8021B for no additional cost, and the resultant concentration of MTBE can be used as a proxy for the approximate concentration of the remaining fuel oxygenates. Based on the lack of response from the ACHCSA, it has been presumed that this was found reasonable and acceptable. This is the first groundwater monitoring event since the recommendation.

On March 15, 2004, Blymyer Engineers issued a letter entitled *Recommendation for Reduction of Groundwater Monitoring* that provided additional rationale for decreasing the groundwater sampling interval from quarterly to semi-annually. It argued that generation of quarterly analytical data would not significantly improve the level of understanding of impacts to the subsurface at the site, and recommended a reduction of the sampling interval to semi-annual. Based on the lack of response from the ACHCSA, it has been presumed that this was found reasonable and acceptable. This is the second semi-annual groundwater monitoring event since the recommendation.

On December 14, 2004, Blymyer Engineers issued to the ACHCSA the *Report on a Geoprobe® Subsurface Investigation* which documented the installation of nine Geoprobe® soil bores at the site. The work further refined the known lateral and vertical extent of soil impacted by the petroleum release at the site. Grab groundwater samples in the upgradient and the eastern cross-gradient directions defined all petroleum compounds in groundwater to concentrations below the San Francisco Bay Regional Water Quality Control Board (RWQCB) ESLs. Grab groundwater samples in the downgradient and western cross-gradient directions were unable to define most petroleum compounds to concentrations below the RWQCB ESLs. The installation of additional permanent groundwater monitoring wells was recommended as appropriate at the site in order to allow for groundwater sampling from a "repeatably accessed location". It was reasoned that data generated from these locations will assist in determining appropriate remedial actions, and in monitoring remedial progress. To date a response has not been received from the ACHCSA.

2.0 Redevelopment of Well MW-1 and Well Maintenance

At the request of the ACHCSA, an attempt to redevelop well MW-1 was undertaken by Blaine Tech Services, Inc. (Blaine), on March 17, 2003. The wells are approximately 25 feet in total depth; however, over 7 feet of sediment had apparently accumulated in well MW-1. During the previous groundwater monitoring event in April 2001, the total depth measured in well MW-1 was recorded at 17.85 feet, in contrast to wells MW-2 and MW-3 which were measured at approximately 25 feet. Prior to redevelopment, Blaine measured the total depth of well MW-1 at 17.63 feet. After redeveloping the well with a surge block, the total depth of well MW-1 was measured at 14.43 feet. Blaine also attempted to remove the accumulated sediment with a Middleburg sampling pump. The

first pump became clogged and a second pump was then put into service, but a significant amount of sediment could not be removed. Field notes completed by the Blaine field technician afterward contain references to "large sand particles" and "coarse sand and gravel" in the water column. Additional notes indicate that these particles were too large to be removed by the sampling pump, but that samples of the material were obtained with a Teflon® bailer. Well casing breaks or offsets were not noted by the technician (personal communication, March 17, 2003). However, because well MW-1 is located within the asphalt repair installed after soil overexcavation, it is likely that a shift in the backfill material may have decoupled the casing at the joint between the screen and blank portions of the casing. The log for well MW-1 notes only native soil. The well is thus assumed to have been installed immediately outside of the UST excavation.

Because it had been a period of time since the wells were installed or sampled, several well maintenance issues were also encountered at the time of groundwater sampling in March 2003. In particular the well expansion caps were found to be aged with poor sealing capabilities and broken bolts which can interfere with well security (locking). Because these conditions compromise the security of the wells, the caps and locks were replaced on wells MW-2 and MW-3. The well cap and lock for well MW-1 were replaced in September 2003.

3.0 Groundwater Sample Collection and Analytical Methods

Groundwater samples were collected from monitoring wells MW-1, MW-2, and MW-3 on December 15, 2004. The groundwater samples were collected by Blaine in accordance with Blaine *Standard Operating Procedures* for groundwater gauging and sampling. A copy is included as Appendix A. Depth to groundwater was measured in all wells at the site. Temperature, pH, conductivity, and turbidity were measured initially, and then after removal of each of three well casing volumes for each well. The groundwater depth measurements and details of the monitoring well purging and sampling are presented on the *Well Monitoring Data Sheets* and *Well Gauging Data Sheets* generated by Blaine and included as Appendix B. Depth-to-groundwater measurements are presented in Table I. All purge and decontamination water was temporarily stored in a Department of Transportation-approved 55-gallon drum for future disposal by the owner.

The groundwater samples were analyzed by McCampbell Analytical, Inc., a California-certified laboratory, on a 5-day turnaround time. The samples were analyzed for TPH as gasoline by Modified EPA Method 8015 and BTEX and MTBE by EPA Method 8021B. Tables II and III summarize current and previous analytical results for groundwater samples. The laboratory analytical report for the current sampling event is included as Appendix C.

4.0 Groundwater Sample Analytical Results and Groundwater Flow Data

Concentrations of most or all of the chemical compounds related to gasoline were present in each well this quarter. Well MW-1 contained TPH as gasoline and BTEX, all at concentrations below the previous period's results. BTEX were present in well MW-2 this period, all at concentrations slightly lower than the previous period's results. Well MW-3 contained concentrations of TPH as gasoline and BTEX, all at concentrations significantly above the previous period's results. The continued fluctuation in results amongst all wells suggests a mobilization of residual contamination from soil to groundwater at the site.

The concentration of TPH as gasoline ranged from non-detect (well MW-2) to 2,400 micrograms per liter (μg/L) in well MW-1. Benzene ranged between a concentration of 11 μg/L (well MW-2) and 370 μg/L (well MW-1). Toluene was present up to a concentration of 83 μg/L, ethylbenzene up to 83 μg/L, and total xylenes to up 230 μg/L (all in well MW-3).

As is typical, the concentration of benzene in groundwater exceeded the drinking water Maximum Contaminant Level (MCL) in all wells this monitoring and sampling event; however, Blymyer Engineers does not believe that groundwater at this location should be considered as drinking water. Consequently, Blymyer Engineers also includes the Environmental Screening Levels (ESL) promulgated by the RWQCB. Only the RWQCB provides a look-up value for TPH, and for a non-drinking water designation of groundwater.

At the request of the ACHCSA, four quarters of groundwater samples have previously been analyzed for the fuel oxygenates di-isopropyl ether (DIPE), ethyl *tert*-butyl ether (ETBE), methyl *tert*-butyl ether (MTBE), *tert*-amyl methyl ether (TAME), and *tert*-butyl alcohol (TBA), by EPA Method 8260B. Due to the consistency of the data, analysis by this EPA method was eliminated as an unnecessary expense. This is the second groundwater event since that recommendation. Using EPA Method 8021B, MTBE was detected in well MW-2, at a concentration of 7.8 μg/L. Slightly elevated detection limits for MTBE were encountered for groundwater samples obtained from wells MW-1 and MW-3. Although not detected, it is likely that MTBE is present in wells MW-1 and MW-3 at similar concentrations, and that TAME is also present, at slightly lower concentrations, such as was documented in the June 2003 sampling event (Table III). Of the fuel oxygenates, only MTBE has an MCL, listed at 13 μg/L.

Microbial use of petroleum hydrocarbons as a food source is principally affected by the concentration of dissolved oxygen (DO) in the groundwater present at a site; it is the preferable electron acceptor for the biodegradation of hydrocarbons. DO has been present at the site in pre-purge groundwater at very low concentrations, ranging from 0.04 to1.3 milligrams per liter (mg/L). To date, there has not been a good correlation between the concentration of DO and the concentration of contaminants (lower concentrations of DO would be expected with higher contaminant concentrations as the DO is utilized by existing microbes, and visa versa).

Previously surveyed top-of-casing (TOC) elevations were used to construct a groundwater gradient map (Figure 2). Groundwater depths during this monitoring event ranged between 7.99 to 8.84 feet below the top of the casings. Depth to groundwater decreased an average of 0.37 feet. However, the depth to groundwater in well MW-3 remained essentially unchanged. As a consequence, the direction of groundwater flow appears to be towards the south. Except for the First Quarter of 2003, previous sampling reports available for review indicate that the historic groundwater flow direction has been to the northwest to north-northwest. During the First Quarter of 2003 an unusual eastward directed gradient was documented. Blaine noted that rainwater was present during that event, and was bailed only from the well box for MW-3 and that the well apron was cracked. Infiltration of rainwater to the subsurface was thus a possibility. Surficial infiltration does not appear to have been a factor during the present sampling event, thus the change of flow direction is not currently understood. The average groundwater gradient was calculated to be a rather steep 0.022 feet/foot for the current monitoring event.

5.0 Recommendations

The following recommendations were generated from the available data discussed above:

- Semi-annual groundwater monitoring should be continued. The next semiannual groundwater sampling event is scheduled to occur in June 2005.

- A copy of this letter report should be forwarded to:

  Mr. Amir Gholami
  Alameda County Health Care Services Agency
  Environmental Protection Division
  1131 Harbor Bay Parkway, Suite 250
  Alameda, CA 94502-6577

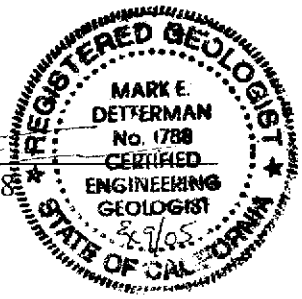
6.0 Limitations

Services performed by Blymyer Engineers have been provided in accordance with generally accepted professional practices for the nature and conditions of the work completed in the same or similar localities, at the time the work was performed. The scope of work for the project was conducted within the limitations prescribed by the client. This report is not meant to represent a legal opinion. No other warranty, expressed or implied, is made. This report was prepared for the sole use of our client.

Please call Mark Detterman at (510) 521-3773 with any questions or comments.

Sincerely,

Blymyer Engineers, Inc.



By: _____
Mark Detterman, C.E.G. 1788
Senior Geologist

And: _____
Michael S. Lewis
Vice President, Technical Services

Enclosures:

Table I:	Summary of Groundwater Elevation Measurements
Table II:	Summary of Groundwater Sample Hydrocarbon Analytical Results
Table III:	Summary of Groundwater Sample Fuel Oxygenate Analytical Results
Figure 1:	Site Location Map
Figure 2:	Site Plan and Groundwater Gradient, December 15, 2004
Appendix A:	*Standard Operating Procedures*, Blaine Tech Services, Inc.
Appendix B:	*Well Monitoring Data Sheets* and *Well Gauging Data,* Blaine Tech Services, Inc., December 15, 2004
Appendix C:	Analytical Laboratory Report, McCampbell Analytical, Inc., dated December 22, 2004

Tables

Table 1 Summary of Groundwater Elevation Measurements
BEI Job No. 203004 Fiesta Beverage
966 89th Avenue, Oakland, California

Well Identification	Sampling Date	TOC Elevation (feet)	Depth to Water (feet)	Water Surface Elevation (feet)
MW-1	8/6/93	18.72	8.96	9.76
	1/12/96		8.55	10.17
	4/16/96		7.65	11.07
	7/15/96		8.76	9.96
	10/16/96		9.04	9.68
	12/15/98		8.38	10.34
	1/18/01		8.49	10.23
	4/25/01		8.24	10.48
	3/17/03*		8.08	10.64
	6/23/03		8.63	10.09
	9/18/03		8.90	9.82
	12/15/03		8.15	10.57
	6/15/04		8.67	10.05
	12/15/04		7.99	10.73

Table 1: Summary of Groundwater Elevation Measurements
BEI Job No: 203004 Fiesta Beverages
966 89th Avenue, Oakland, California

Well Identification	Sampling Date	TOC Elevation (feet)	Depth to Water (feet)	Water Surface Elevation (feet)
MW-2	8/6/93	18.44	8.68	9.76
	1/12/96		8.24	10.2
	4/16/96		7.41	11.03
	7/15/96		8.45	9.99
	10/16/96		8.73	9.71
	12/15/98		8.05	10.39
	1/18/01		8.24	10.20
	4/25/01		7.88	10.56
	3/17/03*		7.08	11.36
	6/23/03		8.90	9.54
	9/18/03		8.61	9.83
	12/15/03		7.97	10.47
	6/15/04		8.42	10.02
	12/15/04		8.00	10.44

Table 1. Summary of Groundwater Elevation Measurements
BEI Job No: 203004, Fiesta Beverages
966 89th Avenue, Oakland, California

Well Identification	Sampling Date	TOC Elevation (feet)	Depth to Water (feet)	Water Surface Elevation (feet)
MW-3	8/6/93	19.01	9.07	9.94
	1/12/96		8.65	10.36
	4/16/96		7.82	11.19
	7/15/96		8.88	10.13
	10/16/96		9.16	9.85
	12/15/98		8.45	10.56
	1/18/01		8.57	10.44
	4/25/01		8.29	10.72
	3/17/03*		8.50	10.51
	6/23/03		9.05	9.96
	9/18/03		9.11	9.90
	12/15/03		8.03	10.98
	6/15/04		8.85	10.16
	12/15/04		8.84	10.17

Notes: TOC = Top of casing
* = Initial data set collected under direction of Blymyer Engineers, Inc.
NM = Not measured

Elevations in feet above mean sea level

Table 1: Summary of Groundwater Sample Hydrocarbon Analytical Results
BET Job No. 203004, Fiesta Beverage
966 89th Avenue, Oakland, California

Sample ID	Date	Modified EPA Method 8015 (µg/L)	EPA Method 8020 or 8021B (µg/L)					Field Measurement (mg/L)
		TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	DO
MW-1	8/6/93	17,000	7.1	8.4	9.2	53	NA	NA
	1/12/96	12,000	1,900	840	370	1,100	NA	NA
	4/16/96	3,500	700	55	100	180	NA	NA
	7/15/96	11,000	2,300	460	350	910	NA	NA
	10/16/96	21,000	4,200	2,200	650	2,600	NA	NA
	12/15/98	10,000	1,800	520	270	1,100	<350	NA
	1/18/01	11,000 [a]	2,000	320	320	1,100	<120	NA
	4/25/01	2,100 [a, c]	270	46	59	130	<5.0	NA
	3/17/03*	2,200 [a]	260	19	36	54	NA [d]	NA
	6/23/03	6,100 [a]	930	53	99	200	NA	0.4
	9/18/03	3,800 [a]	660	13	24	34	NA	0.4
	12/15/03	260 [a]	19	1.1	<0.5	1.5	NA	1.1
	6/15/04	5,200 [a]	520	13	38	39	<50	0.05
	12/15/04	2,400 [a]	370	8.2	13	14	<15	NA

Table II: Summary of Groundwater Sample Hydrocarbon Analytical Results
BBI Job No: 2030019; Fiesta Beverage
9668 9th Avenue, Oakland, California

Sample ID	Date	Modified EPA Method 8015 (µg/L)	EPA Method 8020 or 8021B (µg/L)					Field Measurement (mg/L)
		TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	DO
MW-2	8/6/93	2,700	1.3	1.7	2.0	8.1	NA	NA
	1/12/96	2,700	600	310	94	220	NA	NA
	4/16/96	190	39	11	10	14	NA	NA
	7/15/96	700	160	33	34	48	NA	NA
	10/16/96	190	48	8.2	10	13	NA	NA
	12/15/98	200	62	17	4.9	14	4.4 [b]	NA
	1/18/01	300 [a]	74	26	7.3	21	7.3	NA
	4/25/01	<50 [c]	4.5	2.2	0.57	1.9	<5.0	NA
	3/17/03*	78 [a]	26	3.3	1.5	3.5	NA [d]	NA
	6/23/03	160 [a]	51	1.6	1.2	1.8	NA	0.6
	9/18/03	<50	2.1	<0.5	<0.5	<0.5	NA	1.3
	12/15/03	<50	12	<0.5	<0.5	<0.5	NA	1.6
	6/15/04	95 [a]	15	1.3	1.8	1.2	<30	0.05
	12/15/04	<50	11	0.97	0.57	0.91	7.8	NA

Table 1: Summary of Groundwater Sample Hydrocarbon Analytical Results
BEP Job No. 203004, Fiesta Beverage
966 89th Avenue, Oakland, California

Sample ID	Date	Modified EPA Method 8015 (µg/L)	EPA Method 8020 or 8021B (µg/L)					Field Measurement (mg/L)
		TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	DO
MW-3	8/6/93	**5,200**	**2.1**	**2.9**	**3.6**	**17**	NA	NA
	1/12/96	**4,500**	**280**	**180**	**120**	**470**	NA	NA
	4/16/96	**5,400**	**370**	**340**	**160**	**580**	NA	NA
	7/15/96	**1,800**	**200**	**220**	**66**	**250**	NA	NA
	10/16/96	**2,000**	**340**	**140**	**100**	**300**	NA	NA
	12/15/98	**1,400**	**200**	**39**	**72**	**150**	<22	NA
	1/18/01	**1,800** [a]	**240**	**41**	**86**	**120**	<10	NA
	4/25/01	**8,300** [a, c]	**300**	**330**	**200**	**1,100**	<20	NA
	3/17/03*	**2,100** [a]	**240**	**78**	**10**	**280**	NA [d]	NA
	6/23/03	<50	**2.5**	**0.60**	**0.69**	**1.4**	NA	0.7
	9/18/03	<50	<0.5	<0.5	<0.5	<0.5	NA	0.4
	12/15/03	**2,400**	**300**	**120**	**140**	**260**	NA	1.6
	6/15/04	<50	**1.1**	<0.5	<0.5	<0.5	6.2	0.04
	12/15/04	**1,600** [a]	**140**	**83**	**83**	**230**	<15	NA
MCL		N/A	1.0	150	700	1,750	13	N/A
RWQCB RBSL Commercial / Industrial Land Use; Groundwater Not a Potential Source of Drinking Water		500	46	130	290	13	1,800	N/A

Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results; continued

Notes:	µg/L	=	Micrograms per liter
	mg/L	=	Milligrams per liter
	TPH	=	Total Petroleum Hydrocarbons
	MTBE	=	Methyl *tert*-butyl ether
	DO	=	Dissolved oxygen
	NA	=	Not analyzed
	<x	=	Less than the analytical detection limit (x)
	EPA	=	Environmental Protection Agency
	N/A	=	Not applicable
	MCL	=	Maximum Contaminant Level
	>Sol.	=	Greater than the solubility of pure product in water
	RWQCB	=	Regional Water Quality Control Board
	RBSL	=	Risk Based Screening Level
	[a]	=	Laboratory note indicates the unmodified or weakly modified gasoline is significant.
	[b]	=	Confirmed with EPA Method 8260.
	[c]	=	Groundwater samples for MW-1 and MW-3 suspected to have been switched (mismarked) in field. First collection of groundwater samples after application of Hydrogen Peroxide on March 7, 2001.
	[d]	=	Analysis conducted by EPA Method 8260. See Table III.
	*	=	Initial data set collected under direction of Blymyer Engineers, Inc.

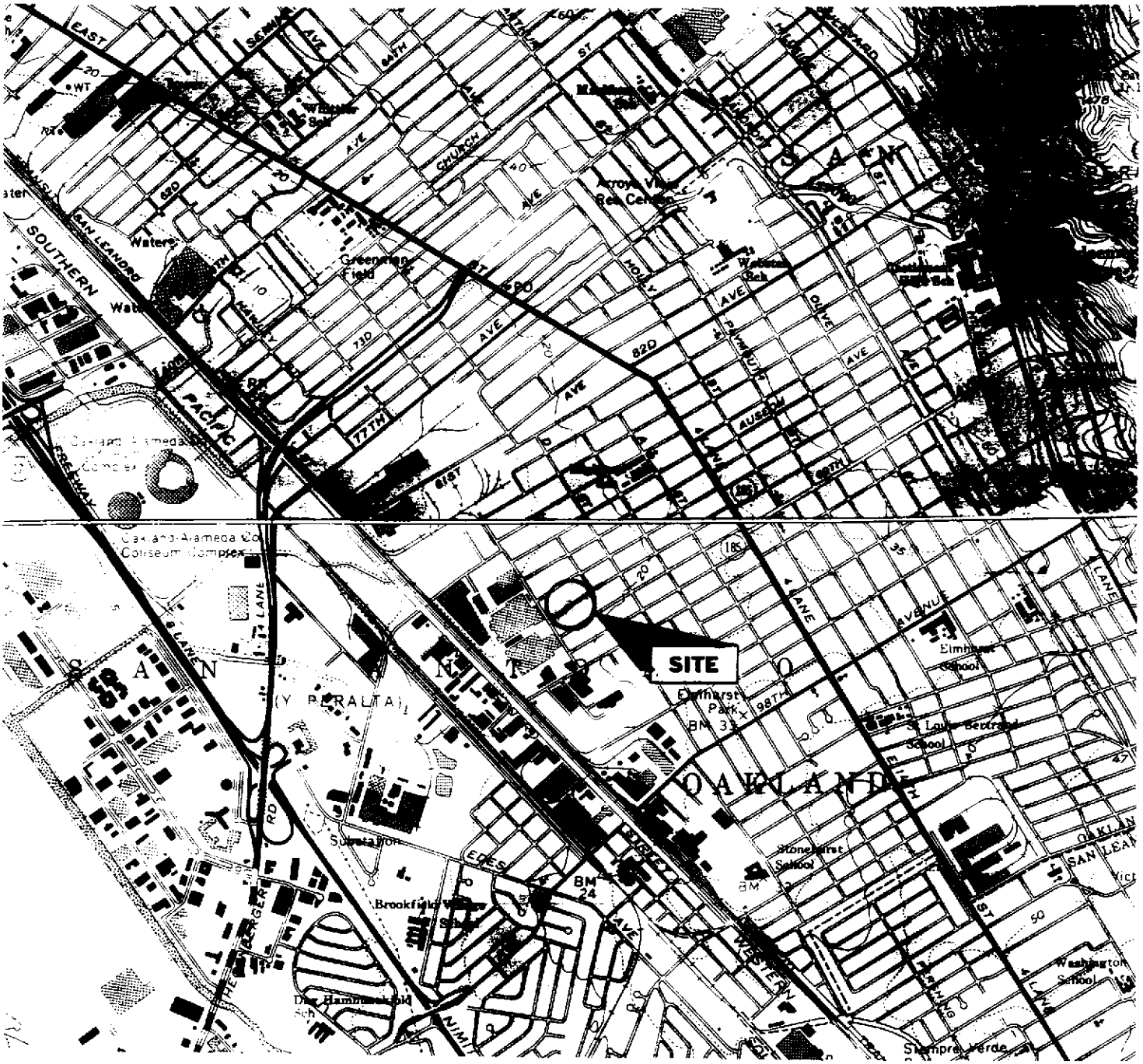
Bold results indicate detectable analyte concentrations.
Shaded results indicate analyte concentrations above the MCL.

Table III: Summary of Groundwater Sample Fuel Oxygenate Analytical Results
BEI Job No. 203004, Fiesta Beverage
966 89th Avenue, Oakland, California

Sample ID	Date	EPA Method 8260B				
		DIPE (μg/L)	ETBE (μg/L)	MTBE (μg/L)	TAME (μg/L)	TBA (μg/L)
MW-1	3/17/03	<0.50	<0.50	**10**	**8.3**	<5.0
	6/23/03	<2.5	<2.5	**8.0**	**6.4**	<25
	9/18/03	<2.5	<2.5	**8.5**	**5.3**	<25
	12/15/03[1]	<0.5	<0.5	**12**	**9.0**	<5.0
MW-2	3/17/03	<0.50	<0.50	**13**	**2.1**	**6.0**
	6/23/03	<0.50	<0.50	**11**	**4.5**	<5.0
	9/18/03	<2.5	<2.5	**5.0**	**0.74**	<25
	12/15/03[1]	<0.5	<0.5	**13**	**3.2**	**5.2**
MW-3	3/17/03	<0.50	<0.50	**10**	**4.3**	**8.6**
	6/23/03	<0.50	<0.50	**5.6**	**2.6**	<5.0
	9/18/03	<2.5	<2.5	**10**	**3.6**	<25
	12/15/03[1]	<0.5	<0.5	**13**	**2.7**	<5.0

Notes: DIPE = Di-isopropyl ether
ETBE = Ethyl *tert*-Butyl ether
MTBE = Methyl *tert*-butyl ether
TAME = *tert*-Amyl methyl ether
TBA = *tert*-Butyl alcohol
μg/L = Micrograms per liter
[1] = After this date, fuel oxygenates were monitored using MTBE detected by EPA Method 8020B, as a proxy for the approximate concentration of the remaining fuel oxygenates.

Figures



QUADRANGLE LOCATION

UNITED STATES GEOLOGICAL SURVEY 7.5' QUADS. "OAKLAND EAST, CA & SAN LEANDRO, CA". BOTH PHOTOREVISED 1981.

BLYMYER ENGINEERS, INC.

BEI JOB NO. 203004

DATE 3-19-03

0 1000 2000

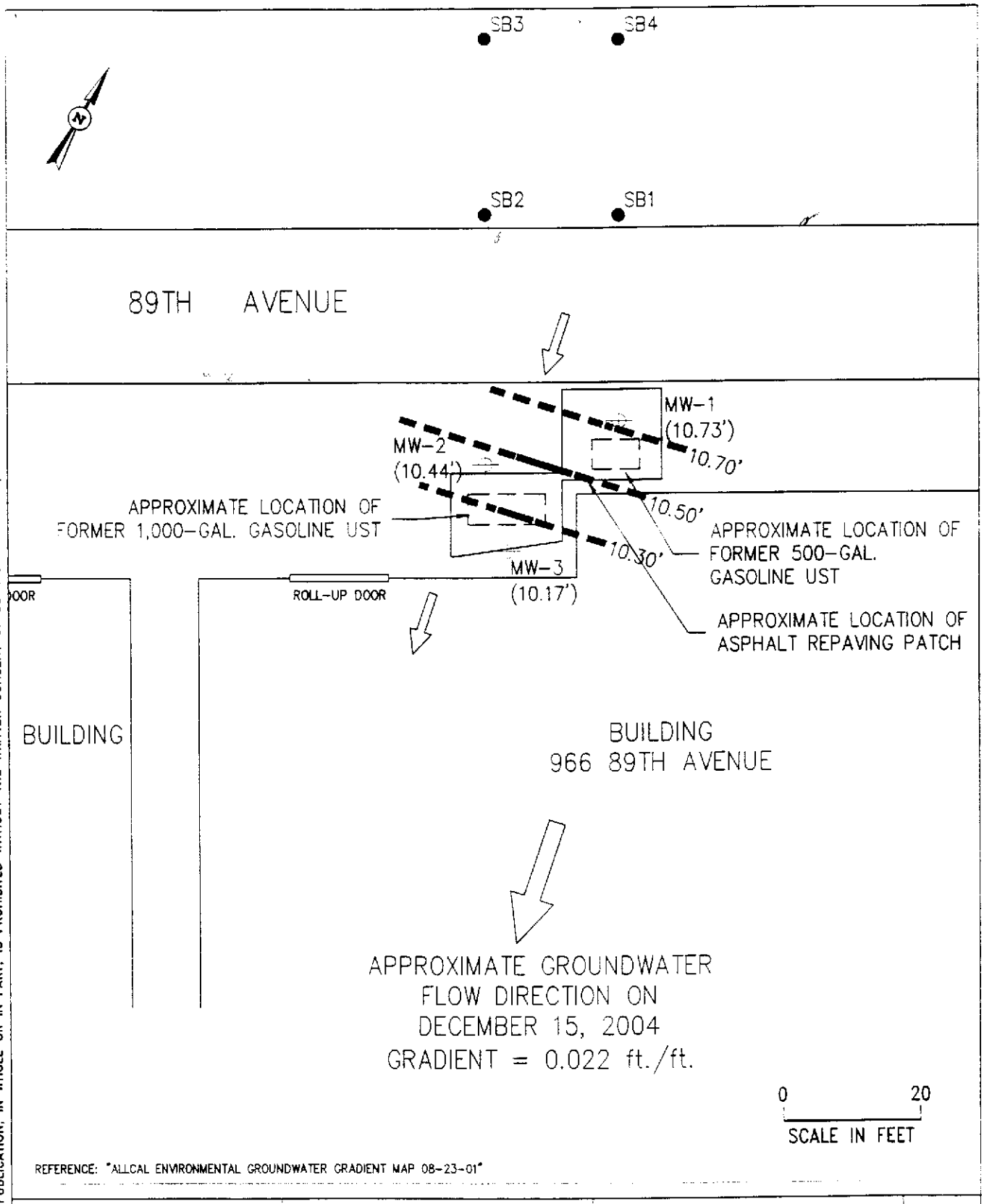
SCALE IN FEET

N

SITE LOCATION MAP

FORMER FIESTA BEVERAGE
966 89TH AVE.
OAKLAND, CA

FIGURE 1



REFERENCE: "ALLCAL ENVIRONMENTAL GROUNDWATER GRADIENT MAP 08-23-01"

BLYMYER ENGINEERS, INC.

LEGEND

UST UNDERGROUND STORAGE TANK

GROUNDWATER MONITORING WELL

GROUNDWATER FLOW DIRECTION

SITE PLAN & GROUNDWATER GRADIENT MAP
DECEMBER 15, 2004
FORMER FIESTA BEVERAGE
966 89TH AVE.
OAKLAND, CA

FIGURE 2

BEI JOB NO.	DATE
203004	1-7-05

L:\Acad\2003dwg\203004\203004fig2f.dwg February 01, 2005 - 6:13PM LWITTSTOCK

Appendix A

Standard Operating Procedures

Blaine Tech Services, Inc.

Blaine Tech Services, Inc.
Standard Operating Procedure

WATER LEVEL, SEPARATE PHASE LEVEL AND TOTAL WELL DEPTH MEASUREMENTS (GAUGING)

Routine Water Level Measurements

1. Establish that water or debris will not enter the well box upon removal of the cover.
2. Remove the cover using the appropriate tools.
3. Inspect the wellhead (see Wellhead Inspections).
4. Establish that water or debris will not enter the well upon removal of the well cap.
5. Unlock and remove the well cap lock (if applicable). If lock is not functional cut it off.
6. Loosen and remove the well cap. CAUTION: DO NOT PLACE YOUR FACE OR HEAD DIRECTLY OVER WELLHEAD WHEN REMOVING THE WELL CAP. WELL CAP MAY BE UNDER PRESSURE AND/OR MAY RELEASE ACCUMULATED AND POTENTIALLY HARMFULL VAPORS.
7. Verify and identify survey point as written on S.O.W.
   TOC: If survey point is listed as Top of Casing (TOC), look for the exact survey point in the form of a notch or mark on the top of the casing. If no mark is present, use the north side of the casing as the measuring point.
   TOB: If survey point is listed as Top of Box (TOB), the measuring point will be established manually. Place the inverted wellbox lid halfway across the wellbox opening and directly over the casing. The lower edge of the inverted cover directly over the casing will be the measuring point.
8. Put new Latex or Nitrile gloves on your hands.
9. Slowly lower the Water Level Meter probe into the well until it signals contact with water with a tone and/or flashing a light.
10. Gently raise the probe tip slightly above the water and hold it there. Wait momentarily to see if the meter emits a tone, signaling rising water in the casing. Gently lower the probe tip slightly below the water. Wait momentarily to see if the meter stops emitting a tone, signaling dropping water in the casing. Continue process until water level stabilizes indicating that the well has equilibrated.
11. While holding the probe at first contact with water and the tape against the measuring point, note depth. Repeat twice to verify accuracy. Write down measurement on Well Gauging Sheet under Depth to Water column.
12. Recover probe, replace and tighten well cap, replace lock (if applicable), replace well box cover and tighten hardware (if applicable)

Water Level and Separate Phase Thickness Measurements in Wells Suspected of Containing Separate Phase

1. Establish that water or debris will not enter the well box upon removal of the cover.
2. Remove the cover using the appropriate tools.
3. Inspect the wellhead (see Wellhead Inspections).
4. Establish that water or debris will not enter the well upon removal of the well cap.

5. Unlock and remove the well cap lock (if applicable). If lock is not functional cut it off.
6. Loosen and remove the well cap. CAUTION: DO NOT PLACE YOUR FACE OR HEAD DIRECTLY OVER WELLHEAD WHEN REMOVING THE WELL CAP. WELL CAP MAY BE UNDER PRESSURE AND/OR MAY RELEASE ACCUMULATED AND POTENTIALLY HARMFULL VAPORS.
7. Verify and identify survey point as written on S.O.W.
   TOC: If survey point is listed as Top of Casing (TOC), look for the exact survey point in the form of a notch or mark on the top of the casing. If no mark is present, use the north side of the casing as the measuring point.
   TOB: If survey point is listed as Top of Box (TOB), the measuring point will be established manually. Place the inverted well box lid halfway across the well box opening and directly over the casing. The lower edge of the inverted cover directly over the casing will be the measuring point.
8. Put new Nitrile gloves on your hands.
9. Slowly lower the tip of the Interface Probe into the well until it emits either a solid or broken tone.
   BROKEN TONE: Separate phase layer is not present. Go to Step 8 of Routine Water Level Measurements shown above to complete gauging process using the interface probe as you would a Water Level Meter.
   SOLID TONE: Separate phase layer is present. Go to the next step.
10. Gently raise the probe tip slightly above the separate phase layer and hold it there. Wait momentarily to see if the meter emits a tone, signaling rising water in the casing. Gently lower the probe tip slightly below the separate phase layer. Wait momentarily to see if the meter stops emitting a tone, signaling dropping water in the casing. Continue process until water level stabilizes indicating that the well has equilibrated.
11. While holding the probe at first contact with the separate phase layer and the tape against the measuring point, note depth. Repeat twice to verify accuracy. Write down measurement on Well Gauging Sheet under Depth to Product column.
12. Gently lower the probe tip until it emits a broken tone signifying contact with water. While holding the probe at first contact with water and the tape against the measuring point, note depth. Repeat twice to verify accuracy. Write down measurement on Well Gauging Sheet under Depth to Water column.
13. Recover probe, replace and tighten well cap, replace lock (if applicable), replace well box cover and tighten hardware (if applicable).

Routine Total Well Depth Measurements

1. Lower the Water Level Meter probe into the well until it lightens in your hands, indicating that the probe is resting at the bottom of well.
2. Gently raise the tape until the weight of the probe increases, indicating that the probe has lifted off the well bottom.
3. While holding the probe at first contact with the well bottom and the tape against the well measuring point, note depth. Repeat twice to verify accuracy. Write down measurement on Well Gauging Sheet under Total Well Depth column.

- Recover probe, replace and tighten well cap, replace lock (if applicable), replace well box cover and tighten hardware (if applicable).

Blaine Tech Services, Inc.
Standard Operating Procedure

WELL WATER EVACUATION (PURGING)

Purpose
Evacuation of a predetermined minimum volume of water from a well (purging) while *simultaneously* measuring water quality parameters is typically required prior to sampling. Purging a minimum volume guarantees that actual formation water is drawn into the well. Measuring water quality parameters either verifies that the water is stable and suitable for sampling or shows that the water remains unstable, indicating the need for continued purging. Both the minimum volume and the stable parameter qualifications need to be met prior to sampling. This assures that the subsequent sample will be representative of the formation water surrounding the well screen and not of the water standing in the well.

Defining Casing Volumes
The predetermined minimum quantity of water to be purged is based on the wells' casing volume. A casing volume is the volume of water presently standing within the casing of the well. This is calculated as follows:

Casing Volume = (TD – DTW) VCF

1. Subtract the wells' depth to water (DTW) measurement from its total depth (TD) measurement. This is the height of the water column in feet.
2. Determine the well casings' volume conversion factor (VCF). The VCF is based on the diameter of the well casing and represents the volume, in gallons, that is contained in one (1) foot of a particular diameter of well casing. The common VCF's are listed on our Well Purge Data Sheets.
3. Multiply the VCF by the calculated height of the water column. This is the casing volume, the amount of water in gallons standing in the well.

Remove Three to Five Casing Volumes
Prior to sampling, an attempt will be made to purge all wells of a minimum of three casing volumes and a maximum of five casing volumes except where regulations mandate the minimum removal of four casing volumes.

Choose the Appropriate Evacuation Device Based on Efficiency
In the absence of instructions on the SOW to the contrary, selection of evacuation device will be based on efficiency.

Measure Water Quality Parameters at Each Casing Volume

At a minimum, water quality measurements include pH, temperature and electrical conductivity (EC). Measurements are made and recorded at least once every casing volume. They are considered stable when all parameters are within 10% of their previous measurement.

Note: The following instructions assume that well has already been properly located, accessed, inspected and gauged.

Prior to Purging a Well

1. Confirm that the well is to be purged and sampled per the SOW.
2. Confirm that the well is suitable based on the conditions set by the client relative to separate phase.
3. Calculate the wells' casing volume.
4. Put new Latex or Nitrile gloves on your hands.

Purging With a Bailer (Stainless Steel, Teflon or Disposable)

1. Attach bailer cord or string to bailer. Leave other end attached to spool.
2. Gently lower empty bailer into well until well bottom is reached.
3. Cut cord from spool. Tie end of cord to hand.
4. Gently raise full bailer out of well and clear of well head. Do not let the bailer or cord touch the ground.
5. Pour contents into graduated 5-gallon bucket or other graduated receptacle.
6. Repeat purging process.
7. Upon removal of first casing volume, fill clean parameter cup with purgewater, empty the remainder of the purgewater into the bucket, lower the bailer back into the well and secure the cord on the Sampling Vehicle.
8. Use the water in the cup to collect and record parameter measurements.
9. Continue purging until second casing volume is removed.
10. Collect parameter measurements.
11. Continue purging until third casing volume is removed.
12. Collect parameter measurements. If parameters are stable, stop purging. If parameters remain unstable, continue purging until stabilization occurs or the fifth casing volume is removed.

Purging With a Pneumatic Pump

1. Position Pneumatic pump hose reel over the top of the well.
2. Gently unreel and lower the pump into the well. Do not contact the well bottom.
3. Secure the hose reel.
4. Begin purging into graduated 5-gallon bucket or other graduated receptacle.
5. Adjust water recharge duration and air pulse duration for maximum efficiency.
6. Upon removal of first casing volume, fill clean parameter cup with water.
7. Use the water in the cup to collect and record parameter measurements.
8. Continue purging until second casing volume is removed.

9. Collect parameter measurements.
10. Continue purging until third casing volume is removed.
11. Collect parameter measurements. If parameters are stable, stop purging. If parameters remain unstable, continue purging until stabilization occurs or the fifth casing volume is removed.
12. Upon completion of purging, gently recover the pump and secure the reel.

Purging With a Fixed Speed Electric Submersible Pump

1. Position Electric Submersible hose reel over the top of the well.
2. Gently unreel and lower the pump to the well bottom.
3. Raise the pump 5 feet off the bottom.
4. Secure the hose reel.
5. Begin purging.
6. Verify pump rate with flow meter or graduated 5-gallon bucket
7. Upon removal of first casing volume, fill clean parameter cup with water.
8. Use the water in the cup to collect and record parameter measurements.
9. Continue purging until second casing volume is removed.
10. Collect parameter measurements.
11. Continue purging until third casing volume is removed.
12. Collect parameter measurements. If parameters are stable, stop purging. If parameters remain unstable, continue purging until stabilization occurs or the fifth casing volume is removed.
13. Upon completion of purging, gently recover the pump and secure the reel.

Sampling SOP

Blaine Tecn Services, Inc.
Standard Operating Procedure

SAMPLE COLLECTION FROM GROUNDWATER WELLS USING BAILERS

Sampling with a Bailer (Stainless Steel, Teflon or Disposable)

1. Put new Latex or Nitrile gloves on your hands.
2. Determine required bottle set.
3. Fill out sample labels completely and attach to bottles.
4. Arrange bottles in filling order and loosen caps (see Determine Collection Order below).
5. Attach bailer cord or string to bailer. Leave other end attached to spool.
6. Gently lower empty bailer into well until water is reached.
7. As bailer fills, cut cord from spool and tie end of cord to hand.
8. Gently raise full bailer out of well and clear of well head. Do not let the bailer or cord touch the ground. If a set of parameter measurements is required, go to step 9. If no additional measurements are required, go to step 11.
9. Fill a clean parameter cup, empty the remainder contained in the bailer into the sink, lower the bailer back into the well and secure the cord on the Sampling Vehicle. Use the water in the cup to collect and record parameter measurements.
10. Fill bailer again and carefully remove it from the well.
11. Slowly fill and cap sample bottles. Fill and cap volatile compounds first, then semi-volatile, then inorganic. Return to the well as needed for additional sample material.

Fill 40-milliliter vials for volatile compounds as follows: Slowly pour water down the inside on the vial. Carefully pour the last drops creating a convex or positive meniscus on the surface. Gently screw the cap on eliminating any air space in the vial. Turn the vial over, tap several times and check for trapped bubbles. If bubbles are present, repeat process.

Fill 1 liter amber bottles for semi-volatile compounds as follows: Slowly pour water into the bottle. Leave approximately 1 inch of headspace in the bottle. Cap bottle.

Field filtering of inorganic samples using a stainless steel bailer is performed as follows: Attach filter connector to top of full stainless steel bailer. Attach 0.45 micron filter to connector. Flip bailer over and let water gravity feed through the filter and into the sample bottle. If high turbidity level of water clogs filter, repeat process with new filter until bottle is filled. Leave headspace in the bottle. Cap bottle.

Field filtering of inorganic samples using a disposable bailer is performed as follows: Attach 0.45 micron filter to connector plug. Attach connector plug to bottom of full disposable bailer. Water will gravity feed through the filter and into the sample bottle. If high turbidity level of water clogs filter, repeat process with new filter until bottle is filled. Leave headspace in the bottle. Cap bottle.

12. Bag samples and place in ice chest.
13. Note sample collection details on well data sheet and Chain of Custody.

Appendix B

Well Monitoring Data Sheets* and *Well Gauging Data,
dated June 15, 2004
Blaine Tech Services, Inc.

WELLHEAD INSPECTION CHECKLIST

Date 12/15/04 Client Blymyer Eng

Site Address 966 59th Ave, Oakland

Job Number 041215-MW1 Technician MW

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-1	✓							
MW-2	✓	✓						
MW-3	✓							

NOTES:

WELL GAUGING DATA

Project # 041215-MM2 Date 12/15/04 Client Blymyer Eng.

Site ~~966 8th~~ 966 89th Ave, Oakland

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
MW-1	2					7.99	14.41		
MW-2	2					8.00	23.94		
MW-3	2					8.84	24.91		

WELL MONITORING DATA SHEET

Project #: 041215-MD2	Client: Blymyer Eng. @ 966 89th Ave, Oakland
Sampler: MD	Date: 12/15/04
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 14.41	Depth to Water (DTW): 7.99
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.27	

Purge Method: Bailer; (Disposable Bailer); Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; (Disposable Bailer); Extraction Port; Dedicated Tubing; Other:_____

1 Case Volume	Specified Volumes	Calculated Volume
1.0 (Gals.) X	3	= 3.0 Gals.

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or (uS))	Turbidity (NTUs)	Gals. Removed	Observations
0938	15.9	7.0	762	554	1	Cloudy
0940	17.0	6.9	837	1000	2	"
0943	17.5	6.9	851	1000	3	Cloudy

Did well dewater? Yes (No) Gallons actually evacuated: 3

Sampling Date: 12/15/04 Sampling Time: 0955 Depth to Water: 8.51

Sample I.D.: MW-1 Laboratory: Kiff CalScience Other McCampbell

Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 041215-MW2	Client: Blymyer Eng. @ 966 89th Ave, Oakland
Sampler: MD	Date: 12/15/04
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 23.14	Depth to Water (DTW): 8.05
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.19	

Purge Method: Bailer; (Disposable Bailer); Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; (Disposable Bailer); Extraction Port; Dedicated Tubing; Other: _____

2.6 (Gals.) X 3 = 7.8 Gals.
1 Case Volume; Specified Volumes; Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
0906	16.9	7.1	681	461	2.6	Cloudy
0911	17.3	7.0	717	604	5.2	ll
0916	17.0	7.1	749	71000	7.8	cloudy

Did well dewater? Yes (No) Gallons actually evacuated: 7.8

Sampling Date: 12/15/04 Sampling Time: 1000 Depth to Water: 13.57

Sample I.D.: MW-2 Laboratory: Kiff CalScience Other McCampbell

Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 041215-MW2	Client: Blymyer Eng. 966 8th Ave, Oakland
Sampler: MD	Date: 12/15/04
Well I.D.: MW-3	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 24.91	Depth to Water (DTW): 8.84
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.05	

Purge Method: (Bailer) / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other_____

Sampling Method: Bailer / (Disposable Bailer) / Extraction Port / Dedicated Tubing / Other: _____

2.6 (Gals.) X 3 = 7.8 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
0836	~~15.4 60.7~~ MD	7.2	704	348	2.6	cloudy, odor
0840	16.3	7.0	690	884	5.2	"
0844	16.7	7.0	681	642	7.8	cloudy, odor

Did well dewater? Yes (No) Gallons actually evacuated: 7.8

Sampling Date: 12/15/04 Sampling Time: 0855 Depth to Water: 12.05

Sample I.D.: MW-3 Laboratory: Kiff CalScience Other McCampbell

Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

Appendix C

Analytical Laboratory Report
dated December 22, 2004
McCampbell Analytical, Inc.

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

Blymyer Engineers, Inc.	Client Project ID: Former Fiesta Beverage	Date Sampled: 12/15/04
1829 Clement Avenue		Date Received: 12/16/04
Alameda, CA 94501-1395	Client Contact: Mark Detterman	Date Reported: 12/22/04
	Client P.O.:	Date Completed: 12/22/04

WorkOrder: 0412365

December 22, 2004

Dear Mark:

Enclosed are:

1). the results of 3 analyzed samples from your **Former Fiesta Beverage project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

Blymyer Engineers, Inc.	Client Project ID: Former Fiesta Beverage	Date Sampled: 12/15/04
1829 Clement Avenue		Date Received: 12/16/04
Alameda, CA 94501-1395	Client Contact: Mark Detterman	Date Extracted: 12/21/04
	Client P.O.:	Date Analyzed: 12/21/04

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B | Analytical methods: SW8021B/8015Cm | Work Order: 0412365

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	W	2400,a	ND<15	370	8.2	13	14	2	---#
002A	MW-2	W	ND	7.8	11	0.97	0.57	0.91	1	104
003A	MW-3	W	1600,a	ND<15	140	83	83	230	1	108
Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical. Inc.
110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0412365

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 14381 Spiked Sample ID: 0412369-002A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex)£	ND	60	97	98.4	1.50	83.4	85.4	2.36	70 - 130	70 - 130
MTBE	ND	10	113	116	2.27	97	96.7	0.292	70 - 130	70 - 130
Benzene	ND	10	105	107	2.28	98.8	96.1	2.82	70 - 130	70 - 130
Toluene	ND	10	104	105	1.00	101	98.2	2.72	70 - 130	70 - 130
Ethylbenzene	ND	10	109	109	0	103	101	2.23	70 - 130	70 - 130
Xylenes	ND	30	96	96.3	0.347	100	100	0	70 - 130	70 - 130
%SS:	107	10	105	105	0	101	98	2.38	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is innomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not applicable or not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0412365 **ClientID: BEIA**

Report to:
Mark Detterman
Blymyer Engineers, Inc.
1829 Clement Avenue
Alameda, CA 94501-1395

TEL: (510) 521-3773
FAX: (510) 865-2594
ProjectNo: Former Fiesta Beverage
PO:

Bill to:
Blymyer Engineers, Inc.
Blymyer Engineers, Inc.
1829 Clement Avenue
Alameda, CA 94501-1395

Requested TAT: 5 days
Date Received: **12/16/2004**
Date Printed: **12/16/2004**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0412365-001	MW-1	Water	12/15/04 9:55:00	☐	A	A													
0412365-002	MW-2	Water	12/15/04 10:00:00	☐	A														
0412365-003	MW-3	Water	12/15/04 8:55:00	☐	A														

Test Legend:

1	G-MBTEX_W	2	PREDF REPORT	3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Elisa Venegas

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

DEH 0412365

BLAINE
TECH SERVICES, INC.

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
FAX (408) 573-7771
PHONE (408) 573-0555

CHAIN OF BTS # 041215-MW2

CLIENT: Blymyer Engineers, Inc.

SITE: Former Fiesta Beverage
966 89th Avenue
Oakland, CA

C = COMPOSITE ALL CONTAINERS

CONDUCT ANALYSIS TO DETECT

LAB: McCampbell | DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND
☐ EPA ☐ RWQCB REGION
☐ LIA
☐ OTHER

SPECIAL INSTRUCTIONS

Invoice and Report to : Blymyer Engineers, Inc.
Attn: Mark Detterman
EDF Format Required.

SAMPLE I.D.	DATE	TIME	MATRIX S= SOIL W=H_2O	CONTAINERS TOTAL	TPH-G (8015)	BTEX & MTBE (8021B)	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-1	12/15/04	0955	W	6	X	X				
MW-2		1000		6	X	X				
MW-3		0855		6	X	X				

EDF ✓
GOOD CONDITION ✓ APPROPRIATE
HEAD SPACE ABSENT ___ CONTAINERS ✓
DECHLORINATED IN LAB ___ PRESERVED IN LAB ___
PRESERVATION: VOAs | O&G | METALS | OTHER

SAMPLING COMPLETED	DATE	TIME
	12/15/04	1030

SAMPLING PERFORMED BY: John DeJong

RESULTS NEEDED NO LATER THAN: As contracted

	DATE	TIME		DATE	TIME
RELEASED BY: John DeJong	12/16/04	356	RECEIVED BY	12/16/04	3:56
RELEASED BY:	12/16/04	7:30	RECEIVED BY	12/16	7:36
RELEASED BY:	DATE	TIME	RECEIVED BY	DATE	TIME

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #	