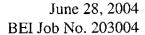
LETTER OF TRANSMITTAL BEI Job No. 203004 DATE July 14, 2004 ATTENTION: Mr. Amir Gholsmi 1829 Clement Avenue SUBJECT: Alameda, California 94501-1396 Former Fiesta Beverage Facility 966 89th Avenue (510) 521-3773 FAX: (510) 865-2594 Oakland, California Alameda County Health Care Services Agency ACHCSA Site # RO0000314 **Environmental Protection Division** 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 □ Specifications We are sending you ☐ Report ☐ Invoice ☐ Prints ☐ Change Order ☐ Copy of letter ☐ Plans Copies Date Number Description Spring 2004 Semiannual Groundwater Monitoring Event; Blymyer Engineers, Inc. 6/28/04 These are transmitted as checked below: ☐ Resubmit\_\_\_copies for approval ☐ For signature ☐ Approved as submitted ☐ Submit\_\_\_copies for distribution ☐ For payment ☐ Approved as noted ☐ As requested ☐ Returned for Corrections ☐ Return\_\_\_corrected prints ☐ For approval ☐ For review and comment ☐ FOR BIDS DUE ☐ For your use REMARKS: For your files.

COPY TO:

Mr. Ted Walbey, Fiesta Beverage

SIGNED: Mark Detterman





Mr. Ted Walbey Fiesta Beverage 2871 Friar Rock Ct. Sparks, NV 89436

Subject:

Spring 2004 Semi-Annual Groundwater Monitoring Event

Former Fiesta Beverage Facility

966 89th Avenue

Oakland, California

ACHCSA Site # RO0000314

Alameda County

JUL 1 3 2004

Environmental Health

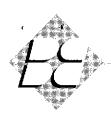
Dear Mr. Walbey:

This letter documents the Spring 2004 semi-annual groundwater monitoring event at the subject site (Figure 1). This is the fifth groundwater monitoring event and the first 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.



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 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. Due to interior accessibility issues, the investigation activities are currently pending a previously planned termination of a lease.

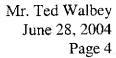


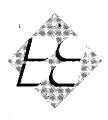
The Fourth Quarter 2003 Groundwater Monitoring Event report, dated January 6, 2004, recommended that analysis for fuel oxygenates by EPA Method 8260B be eliminated from the analytical program. It was reasoned that the data generated to date had been very consistent, and further quantification would not 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 recomendation.

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 first semi-annual groundwater monitoring event since the recomendation.

#### 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

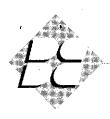
Groundwater samples were collected from monitoring wells MW-1, MW-2, and MW-3 on June 15, 2004. The groundwater samples were collected by Blaine in accordance with Blaine Standard Operating Procedures for groundwater gauging and sampling. A copy is included as Appendix A. Depth to groundwater was measured 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. In addition, Dissolved Oxygen (DO) was measured prior to purging groundwater. The measurement of DO can be useful in determining if an adequate supply of oxygen is present in groundwater to allow microbial growth. 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 some 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 significantly above the previous period's results, which were atypically low. TPH as gasoline and BTEX were present in well MW-2 this period, all at concentrations slightly higher than the previous period's results. Only benzene was present in well MW-3 during this sampling event. These fluctuating results may be indicative of the mobilization of residual contamination from soil to groundwater at the site.

The concentration of TPH as gasoline ranged from non-detect (well MW-3) to 5,200 micrograms per liter ( $\mu$ g/L) in well MW-1. Benzene ranged between a concentration of 1.1  $\mu$ g/L (well MW-3) and 520  $\mu$ g/L (well MW-1). Toluene was present up to a concentration of 13  $\mu$ g/L, ethylbenzene up to 38  $\mu$ g/L, and total xylenes to up 39  $\mu$ g/L (all in well MW-1).

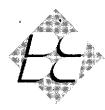


The concentration of benzene in groundwater exceeded the drinking water Maximum Contaminant Level (MCL) in all wells this quarter; however, Blymyer Engineers does not believe that groundwater at this location should be considered as drinking water. Consequently, Blymyer Engineers also includes several other "Look-up" Tier 1 Risk-Based Screening Level (RBSL) values promulgated by the City of Oakland and the Environmental Screening Levels (ESL) promulgated by the San Francisco Bay Regional Water Quality Control Board (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 first groundwater event since that recommendation. Using EPA Method 8021B, MTBE was detected in well MW-3, at a concentration of 6.2 µg/L. Elevated detection limits for MTBE were encountered for groundwater samples obtained from wells MW-1 and MW-2. However, this result is reasonably similar to previous results for well MW-3 using EPA Method 8260B. It is likely that MTBE is present in wells MW-1 and MW-2 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 was present at the site in pre-purge groundwater at very low concentrations, ranging from 0.04 to 0.05 milligrams per liter (mg/L). During previous quarters it has ranged from 0.4 to 1.3 mg/L. Currently there does not appear to be 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 8.42 to 8.85 feet below the top of the casings. Depth to groundwater increased an average of 0.60 feet. The direction of groundwater flow appears to be towards the northwest. 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. The average groundwater gradient was calculated to be 0.011 feet/foot for the current monitoring event.



#### 5.0 Recommendations

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

- The next groundwater sampling event should occur in December 2004.
- 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.

Mark Detterman, C.R.(

Senior Geologist

And:

Michael S. Lewis

Vice President, Technical Services

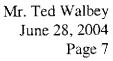




Table I:

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, June 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., June 15, 2004

Appendix C:

Analytical Laboratory Report, McCampbell Analytical, Inc., dated

June 23, 2004

H ALARKINGSPRINGERS FB/2000045pringSA04.wp

### Table I, Summary of Groundwater Elevation Measurements BEI Job No. 203004, Fiesta Beverage 966 89<sup>th</sup> Avenue, Oakland, California

Well ID	Date	TOC Elevation (feet)	Depth to Water (feet)	Groundwater 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
MW-2	8/6/93	18.44	8.68	9.76
	1/12/96		8.24	10.20
	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

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

Well ID	Date	TOC Elevation (feet)	Depth to Water (feet)	Groundwater 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

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 II, Summary of Groundwater Sample Hydrocarbon Analytical Results BEI Job No. 203004, Fiesta Beverage 966 89<sup>th</sup> Avenue, Oakland, California

Sample ID	Date	Modified EPA Method 8015 (µg/L)		EPA Method 8020 or 8021B (μg/L)						
		TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes	МТВЕ	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	450	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 s, c	270	46	59	130	<5.0	NA		
	3/17/03*	2,200 a	260	19	36	54	NA <sup>d</sup>	NA		
	6/23/03	6,100 a	930	53	99	200	NA	0.4		
	9/18/03	3,800 °	660	13	24	34	NA	0.4		
	12/15/03	260 °	19	1.1	<0.5	1.5	NA	1.1		
	6/15/04	5,200 °	520	13	38	39	<50	0.05		
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 <sup>a</sup>	74	26	7.3	21	7.3	NA		
	4/25/01	<50°	4.5	2.2	0.57	1.9	<5.0	NA		
	3/17/03*	78 °	26	3.3	1.5	3.5	NA d	NA		
	6/23/03	160 °	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		

		The state of the s
The state of the s	The state of the s	The state of the s
The state of the s	A SAME AND	
The state of the s	ary of Groundwater Sample Hydrocarl	
The state of the s		
	A	
	#1:V::DE::YT11DE::HE::W::HEEE::W::HEEE::D:::HEEE::C:::HE::HEEE::D:::::HEE	
	AL   OL OF CHARLES OF COURSE OF THE CASE O	
The state of the s	and the second s	The state of the s
The same and the s	· · · · · · · · · · · · · · · · · · ·	The state of the s
	BEI Job No. 203004, Fiesta Bevera	
A CONTRACTOR OF THE PROPERTY O		C The second of
The state of the s	The state of the s	The state of the s
	966 89th Avenue, Oakland, Californ	A CONTRACTOR OF THE PROPERTY O
and the state of t	OCCOMBALL BUILDING BUILDING BUILDING	
Was a various of the contract	STORY AND OF WORLD IN PRINCIPLE AND SELECTION OF	4. 34 (7.7)
	TUU OF THE CHILD OF CHERCHEN CONTRACTOR	
\$2500 Mark Mark Mark Mark Mark Mark Mark Mark	The state of the s	The same of the sa

And African African Communication Communicat		AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	OO OF AVE	iue, Oakia	nd, California			- Add a constitution of the constitution of th
Sample ID	Date	Modified EPA Method 8015 (μg/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	37 <u>0</u>	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 s	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
transport	**************************************		The state of the s			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	To Program and a second	
N	ACL .	N/A	1.0	150	700	1,750	13	N/A
Commerci Land Use Default; C Potentia Drinki	kland RBSL; ial / Industrial c; Clayey Silt Groundwater a al Source of ing Water; ater Ingestion)	N/A	1.0	150	700	1,000	20	N/A
Commerc Land Use: Not a Pote	CB RBSL ial / Industrial Groundwater ntial Source of ing Water	500	46	130	290	13	1,800	N/A

Table II, Summary of Groundwater Sample Analytical Results; continued

Notes:	μ <b>g/L</b>	=	Micrograms per liter
	mg/L	=	Milligrams per liter
	TPH	=	Total Petroleum Hydrocarbons
	MTBE	=	Methyl tert-butyl ether
	DO	=	Dissolved oxygen
	NA	=	Not analyzed
	<x< td=""><td>=</td><td>Less than the analytical detection limit (x)</td></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 89 <sup>th</sup> Avenue, Oakland, California									
Sample	Date		EPA Method 8260B						
ID	:	DIPE	ETBE	МТВЕ	TAME	TBA			
		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)			
MW-1	3/17/03	<0.50	<0.50	10	8.3	<5.0			
	6/23/03	<2.5	<2. <u>5</u>	8.0	6.4	<25			
	9/18/03	<2.5	<2.5	8.5	5.3	<25			
	12/15/03 <sup>1</sup>	<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			
ļ	9/18/03	<2.5	<2.5	5.0	0.74	<25			
	12/15/03 <sup>1</sup>	<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 <sup>1</sup>	<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

A for this data, fuel axis

= 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.





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



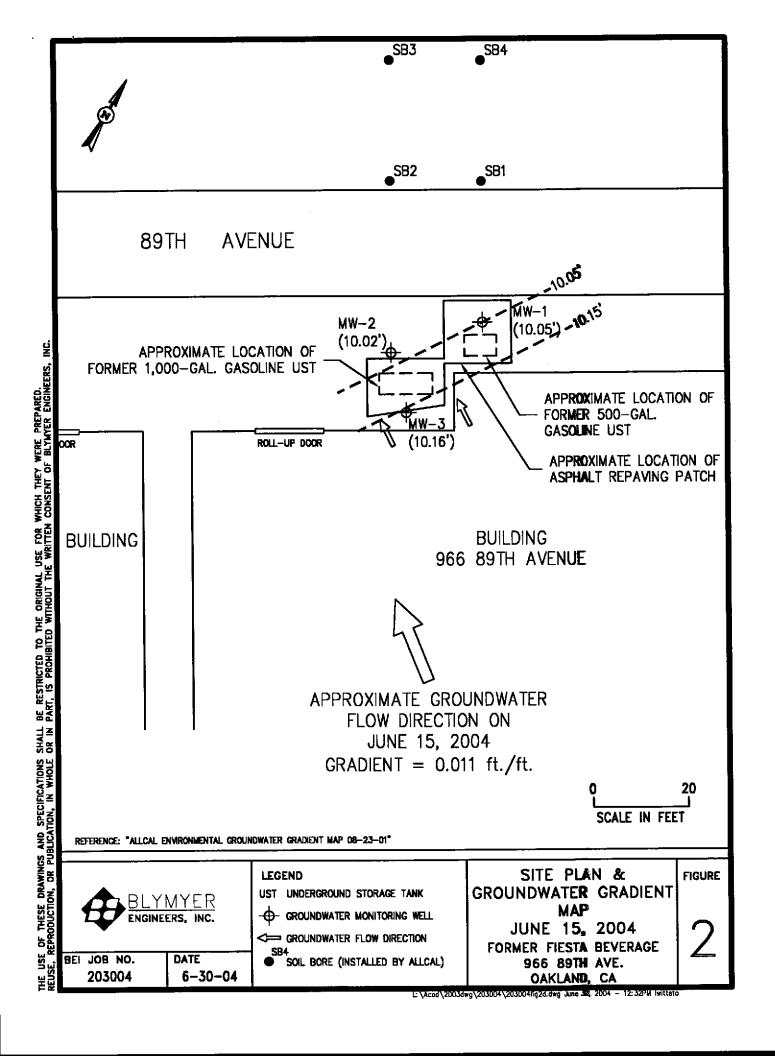
8EI JOB NO. 203004 DATE 3-19-03



# SITE LOCATION MAP

FORMER FIESTA BEVERAGE 966 89TH AVE. OAKLAND, CA **FIGURE** 

1



Appendix A
Standard Operating Procedures
Blaine Tech Services, Inc.

P. 03

Gauging SOP

Page 1 of 2

# Blaine Tech Services, Inc. Standard Operating Procedure

# WATER 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 out 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 ilsted 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)

#### 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 weil bottom.

Gauging SOP

Page 2 of 2

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.

4. Recover probe, replace and tighten well cap, replace lock (if applicable), replace well

box cover and tighten hardware (if applicable).

Purging - 1.75" Middleburg Pump SOP

Page 1 of 2

Mar 27 2003 13:34

#### Blaine Tech Services, Inc. Standard Operating Procedure

## **WELL WATER EVACUATION (PURGING) WITH BTS 1.75" BLADDERLESS STAINLESS STEEL** POSITIVE DISPLACEMENT PUMP

The BTS 1.75" Bladderless Stainless Steel Positive Displacement Purge Pump is modeled after the EPA approved USGS/Middleburg Positive Displacement Sampling Pump. It is suitable for purging wells with diameters greater than 2" at depths up to several hundred feet.

The pump is accusted with compressed air from an electric, oil-less air compressor mounted on the Sampling Vehicle. The air travels to the pump via a single hose. Water is pushed out of the pump and up a second hose to the surface. The rate of water removal is relatively slow and loss of volatiles is almost non-existent. There is only positive pressure on the water being purged. There is no impeller cavitation or suction acting on the water. The pump can be placed at any location in the well and can draw water from the very bottom of the well. The pump is virtually immune to the erosive effects of silt or lack of water that can destroy other types of pumps.

## Purging with the BTS 1.75" Stainless Steel Positive Displacement Pump

- 1. Position pump hose real over the top of the well.
- 2. Start the air compressor so that it can build pressure.
- 3. Connect the influent air hose and effluent water hose of the reel to the pump.
- 4. Gently unreel and lower the pump into the well to the desired depth, typically several feet off the well bottom. Use caution when contacting the well bottom.
- 5. Secure the hose reel.
- 6. Connect the effluent water line extension to the hose reel. Attach the extension to a graduated 5-gallon bucket or other receptacle.
- 7. Connect the control box air-line to the hose reel.
- 8. Turn the switch on the control box to the "on" position to commence purging.
- 9. Adjust water recharge duration and air pulse duration for maximum efficiency. Expect not more than 1.0 GPM when pumping from 0 - 100 feet below grade and not more than 0.5 GPM when pumping from depths greater than 100 feet below
- 10. Upon removal of first casing volume, fill clean perameter cup with water.
- 11. Use the water in the cup to collect and record the required parameter measurements.
- 12. Continue purging until second casing volume is removed.
- 13. Collect parameter measurements.
- 14. Continue purging until third casing volume is removed.

Purging - 1.76" Middleburg Pump SOP

Page 2 of 2

15. 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.

16. Upon completion of purging, disconnect the control box air-line and effluent water line extension from the hose real, gently recover the pump and secure the real.

Sample the well as required.

Sampling SOP

Page 1 of 1

#### Blaine Tech Services, Inc. Standard Operating Procedure

# SAMPLE COLLECTION FROM GROUNDWATER WELLS USING BAILERS

# Sampling with a Bailer (Stainless Steel, Teffon 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 apool.
- 6. Gently lower empty baller into well until water is reached.
- 7. As baller fills, cut cord from spool and tie end of cord to hand.
- 8. Gently raise full belier out of well and clear of well head. Do not let the belier 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 semivolatile, then inorganic. Return to the well as needed for additional sample material.

Fill 40-milliliter visis for volatile compounds as follows: Slowly pour water down the inside on the vial. Carefully pour the last drops creating a convex or positive meniecus on the surface. Gently sorew the cap on eliminating any air space in the visi. Turn the visi 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.

Fleid filtering of inorganic samples using a stainless steel baller 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 batter 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

Page \_\_\_\_\_\_of \_\_\_\_

Date6   1.5 Site Address Job Number6	109	_ Client	Blyn	yen E	Engine	<i>rs</i> :		
Site Address	966 80	1th 8h						
Job Numberc	040615-	m0>		Tec	hnician	M		
Well ID	Welf Inspected - No Corrective Action Required	Water Bailed From Wellbox	,	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
Mus-1		V						
Mw-2 Mw-3							0	
MW-3								
						ļ <u>-</u>		
			ļ				-	
	_						-	
					-	<u>                                     </u>	+	
			<u> </u>					
						<del>                                     </del>		
			<del>                                     </del>					
			<del>                                     </del>					
			<u> </u>					
NOTES	Orepail		Coh	ins H	0			
NOTES.	Wiepair	Mer	)-0			:		
					<del></del>		<del></del>	
					<u> </u>			
		<del>_</del>						

# SPH or Purge Water Drum Log

Client: BLYMPER ENGINEERS, INC.

Site Address: FRANK FIRSTS BEVERINE 966 8915 CAKLAND CA

STANTE STOTE TO THE STANTAGE OF			era v rise		
Date	3/17/03	6/23/00	9-18-03	12.15.03	6/15/04
Number of drum(s) empty:					
Number of drum(s) 1/4 full:		1			
Number of drum(s) 1/2 full:					
Number of drum(s) 3/4 full:				<u>l</u>	
Number of drum(s) full:		1		1	2
Total drum(s) on site:	(	7		2	2
Are the drum(s) properly labeled?	No	yes	445	yes	Y
Drum ID & Contents:	Non-Haz	<b>&gt;</b>	<del>-</del>	•	<b>*</b>
If any drum(s) are partially or totally filled, what is the first use date:		Parge Wester	- purge	ter.	> 11

- If you add any SPH to an empty or partially filled drum, drum must have at least 20 gals. of Purgewater or DI Water.
- -If drum contains SPH, the drum MUST be steel AND labeled with the appropriate label.

-All BTS drums MUST be labeled appropriately.

STATES OF DEUTS AND						
Date	3/17/03	6/23/03	4-18-07	12-15-03	6/15/4	
Number of drums empty:						
Number of drum(s) 1/4 full:	l				1 1	
Number of drum(s) 1/2 full:		i				
Number of drum(s) 3/4 full:			1			
Number of drum(s) full:	1	1	1	2	2	
Total drum(s) on site:	2	2	2	2	3	
Are the drum(s) properly labeled?	Yes	yes	465	405	1	
Drum ID & Contents:	Puraewast	>	, -	7	7911	

#### MORY THO MEET BRUDIE

Describe location of drum(s):

Near MW-3 next to wall

Number of new drum(s) left on site		X	0	70	1	1
this event  Date of inspection:	3/17/03	62303	9 18 03	12-15.03	6/15/cc	
Drum(s) labelled properly:	Yes	Hes Vecas	465	Spes	Į V	
Logged by BTS Field Tech:	BA	RH	bw_	Re	m	
Office reviewed by:	n		R		ik	

#### WELL GAUGING DATA

Project # OYCE 15 - MD Date _	6/15/04	Client Bly myer	141.
Site 966 89th 51			<u>.</u>

<del></del>		·		Thickness	Volume of	r <del></del> -	<del></del>	<u> </u>	
	Well		Depth to	of	Immiscibles			Survey	
	Size	Sheen /		Immiscible	Removed	Depth to water	Depth to well		
Well ID	(in.)	Odor		Liquid (ft.)	(ml)	(ft.)	bottom (ft.)	ocTOC>	
Musel	2					8.6+	14,48		1
1110									4
MW-3	2					B.42 B.85	23.95		
	0							<b>V</b>	1
Mw-3	U					6.53	24.91	W	
•									
						1		1	
						-			
		· · · · · · · · · · · · · · · · · · ·							i
				1	<u> </u>	ļ			
								-	
							amenter (17)		
			<u> </u>	<u> </u>	1		<u> </u>		
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \					:				
		<u> </u>					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
						Į.			
-									
								-	
									maast vacorbild ?
	1			1			1		
						-			
		<u> </u>	<u> </u>						
1									
	<u> </u>	<u> </u>	1		1	1	<u> </u>		_
		***************************************		1	W. Carried P.		i    -		
	A. Barber					<del>                                     </del>			<u> </u>
w	Ì	# L							
		1		<u> </u>		. †	1	Ŧ	<u> </u>

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

# WELL MONITORING DATA SHEET

				<del></del>								
Project #: _	240615	-MD2		Client: Blymy or Engrs.								
Sampler:	m	, ·		Start Date: 6	15/04	· · · · · · · · · · · · · · · · · · ·						
Well I.D.:	W	1.60	_	Well Diameter: 2 3 4 6 8								
Total Well I	Depth:	· · · · · ·		Depth to Water: 8,67								
Before: /4	<i>,</i> i(&)	After: K	1,48	Before: 867 After: 10.41								
Depth to Fre		t:		Thickness of Free Product (feet):								
Referenced		(FVc)	Grade	D.O. Meter (if	req'd):	YSD HACH						
Dis Pos	iler <b>sp</b> osable Bail sitive Air Dis ectric Submer	placement	Waterra Peristaltic Extraction Pump Other	Sampling Method:  Bailer  Disposable Bailer  Extraction Port  Dedicated Tubing  Other:								
Gz 1 Case Volume	als.) X	= =	2.7 Gals.	Well Diamet	o.04 4" 0.16 6" 0.37 Other	meter <u>Multiplier</u> 0.65 1.47 radius <sup>2</sup> * 0.163						
Time (053	Temp. (F) or (S) (9,1)	рН С. 9	Conductivity (mS orus) 826	Turbidity (NTU)  660 71000	Gals. Removed	Observations  Grey coor						
1057	63:4	7,8	849	71000	2.7	greredoo						
Did well de		Yes	No	Gallons actual Sampling Date	ly evacuated: 2							
Sampling T		1105		<u> </u>	<u> </u>							
Sample I.D.		my		Laboratory:	W.F.	<u></u>						
Analyzed for		H-G BTEX	MTBE TPH-D  @	Other:								
Equipment			Time	Duplicate I.D.								
Analyzed for	or: Ti	PH-G BTEX		Other:		mg/L						
D.O. (if req	ı'd):		Pre-purge:		Post-purge:							
ORP (if req	ı'd):		Pre-purge:	mV	Post-purge:	mV						

#### WELL MONITORING DATA SHEET

WELL MONITOR									
Project #: 040615-MI) 2	Client: Blymyer Engrs.								
Sampler: MD	Start Date: 6/15/04								
Well I.D.: MW-V	Well Diameter: 2 3 4 6 8								
Total Well Depth:	Depth to Water:								
Before: 23,95 After: 23,95	Before: 8,42 After: /8,7								
Depth to Free Product:	Thickness of Free Product (feet):								
Referenced to: Grade	D.O. Meter (if req'd):								
Purge Method:  Bailer Waterra  Disposable Bailer Peristaltic  Positive Air Displacement Extraction Pum  Electric Submersible Other	Other:								
	1" 0.04 4" 0.65								
$\frac{2.5 \text{ (Gals.) X}}{1 \text{ Case Volume}} = \frac{7.5 \text{ Gals.}}{\text{Specified Volumes}} = \frac{7.5 \text{ Gals.}}{\text{Calculated Volume}}$	2" 0.16 6" 1.47 3" 0.37 Other radius <sup>2</sup> * 0.163								
Time For °C) pH Conductivity (mS)	Turbidity (NTU) Gals. Removed Observations								
1006 6415 613 737	319 2.5 Cary								
1010 63,4 6,9 657	7/000 5								
1013 650 7,1 675	>1000 7.5 c/owy								
Did well dewater? Yes No	Gallons actually evacuated: 7,5								
Sampling Time: 1020	Sampling Date: 6/15-64								
Sample I.D.: MW-Z	Laboratory: STE								
Analyzed for: TPH-G BYEX MTBE TPH-D	Other:								
Equipment Blank I.D.: @	Duplicate I.D.:								
Analyzed for: TPH-G BTEX MTBE TPH-D	Other:								
D.O. (if req'd): Pre-purg									
ORP (if req'd): Pre-purg	e: mV Post-purge: mV								

#### WELL MONITORING DATA SHEET

		LL MONTON	KING DATA SHEET										
Project #: Oyo	615-MDZ	>(	Client: Bly	myer Eng	V5.								
Sampler:	am	i	Start Date:	115/41									
Well I.D.:	NW - 3		Well Diameter: 2 3 4 6 8										
Total Well Depti			Depth to Water	•									
Before: > 4,9	After: 20	1.91	Before: 8,85 After: /4,81										
Depth to Free Pr		1	Thickness of F	ree Product (feet)	:								
Referenced to:	PVC	Grade	D.O. Meter (if	req'd):	YSI HACH								
	le Bailer Air Displacement Submersible	Waterra Peristaltic Extraction Pump Other	Sampling Method: Bailer  Disposable Bailer  Extraction Port  Dedicated Tubing  Other:  Well Diameter Multiplier Well Diameter Multiplier										
2,6 (Gals.) X 1 Case Volume	= Specified Volumes	7,8 Gals. Calculated Volume	Well Diamet 1" 2" 3"	0.04 4" 0.16 6" 0.37 Other	0.65 1.47 radius <sup>2</sup> * 0.163								
Tem Time (P) or	~ I	Conductivity (mS or	Turbidity (NTU)	Gals. Removed	Observations								
1032 63	1 7.5	611	O 0015	2.6	clocal odar								
1035 62	4	616	71000	5.2	11								
1039 62.		619	7/000	78	Clouds								
					/								
	:												
Did well dewate	r? Yes	No	Gallons actual	ly evacuated:	1,8								
Sampling Time:	1042		Sampling Date	: 6 (4/04)									
Sample I.D.:	MW;	3	Laboratory:	STL									
Analyzed for:	TPH-G BTEX	MTBE TPH-D	Other:										
Equipment Blan	ık I.D.:	@ Time	Duplicate I.D.	:									
Analyzed for:	трн-с втех	MTBE TPH-D	Other:		T								
D.O. (if req'd):		Pre-purge:	0,04 <sup>mg</sup> /L	Post-purge:	mg/ <sub>L</sub>								
ORP (if req'd):		Pre-purge:	mV	Post-purge:	mV								

Appendix C

Analytical Laboratory Report dated June 23, 2004 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: 06/15/04
1829 Clement Avenue		Date Received: 06/16/04
1 04 04501 1205	Client Contact: Mark Detterman	Date Reported: 06/23/04
Alameda, CA 94501-1395	Client P.O.:	Date Completed: 06/23/04

WorkOrder: 0406277

June 23, 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



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, In	c.	Client P	roject ID: F	ormer Fiesta I	Date Sampled: 06/15/04								
1829 Cle	ement Avenue						Date Received:	06/16/04						
Alamada	ı, CA 94501-1	205	Client C	Contact: Mark	Detterman		Date Extracted:	06/18/04-0	6/21/0	4				
Alameda	i, CA 94301-1	393	Client F	P.O.:			Date Analyzed:	06/18/04-0	6/21/0	4				
Extraction n	Gasoli method: SW5030B	ine Range	e (C6-C12)	-	rocarbons as		with BTEX and		Order: 0	406277				
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS				
001A	MW-1	W	5200,a	ND<50	520	13	38	39	10	115				
002A	MW-2	W	95,a,i	ND<30	15	1.3	1.8	1.2	1	117				
003A	MW-3	W	ND	6.2	. 1.1	ND	ND	ND	1	108				
				:		Production of the form of the second								
··································	.,								<del></del>					
:				:	**************************************									
·······							<u> </u>		;	:				
		:		:	· · · · · · · · · · · · · · · · · · ·	:				:				
<del>-</del>				: :						1				
						<u> </u>			i					
		: :								:				
		· <del></del>						<u> </u>						
i					: :					-				
Reporting	Limit for DF =1;	w	50	5.0	0.5	. 0,5	0.5	0.5	1	μg/L				
ND means	not detected at or e reporting limit	S	NA NA	NA	NA NA	NA NA	NA	NA	1	mg/K				

<sup>\*</sup> 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.

<sup>#</sup> cluttered chromatogram; sample peak coelutes with surrogate peak.

<sup>+</sup>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.

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

Matrix: W

WorkOrder: 0406277

EPA Method: SW8	021B/8015Cm E	Extraction:	SW5030	В	BatchID:	BatchID: 11980 Spiked Sample ID: 0406264-019A								
	Sample	Spiked	MS*	: MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance	e Criteria (%)				
	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High				
TPH(btex) <sup>£</sup>	ND	60	99.3	98.8	0.502	98.3	97.9	0.414	70	130				
МТВЕ	ND	10	107	115	7.09	114	107	5.73	70	130				
Benzene	ND	10	107	116	8.11	108	107	0.636	70	; 130				
Toluene	ND	10	105	113	7.36	103	104	0.417	70	130				
Ethylbenzene	ND	10	107	115	7.81	108	107	0.172	70	130				
Xylenes	ND	30	95.3	100	4.78	95	95.3	0.350	70	130				
%SS:	118	10	101	105	3.55	104	103	0.640	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.

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

<sup>\*</sup> MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

<sup>£</sup> TPH(btex) = sum of BTEX areas from the FID.

<sup>#</sup> 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.

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

# **CHAIN-OF-CUSTODY RECORD**

Page I of I

WorkOrder: 0406277

ClientID: BEIA

Report to:

Mark Detterman

Blymyer Engineers, Inc.

1829 Clement Avenue Alameda, CA 94501-1395 TEL: FAX:

(510) 521-3773

(510) 865-2594

ProjectNo: Former Fiesta Beverage

PO:

Bill to:

Requested TAT:

5 days

Blymyer Engineers, Inc.

Blymyer Engineers, Inc.

1829 Clement Avenue

Date Received:

6/16/04

Alameda, CA 94501-1395 Date Printed:

6/16/04

Requested Tests (See legend below)										<del></del>	· · · · · · · · · · · · · · · · · · ·															
Sample ID	ClientSamplD	Matrix	Collection Date	Hold	1	2	2	3		4	ĺ	5	6	Ī	7	8		9	1	0 [	11		12	13	14	1 15
0406277-001	MW-1	Water	6/15/04 11:05:00		Α	P	\					-		i		İ	ĺ		í			İ	į		1	:
0406277-002	MW-2	Water	6/15/04 10:20:00		Α							ŀ													:	
0406277-003	MW-3	Water	6/15/04 10:45:00		Α						ļ								!	ŀ					į .	:

#### Test Legend:

1 G-MBTEX_W	:	2	PREDF REPORT	!	3	i	4	ļ	5	1
6	;	7			8		9		10	
11	ł	12			13		14 }		15	

Prepared by: Melissa Valles

#### 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.

**1680 ROGERS AVENUE** CONDUCT ANALYSIS TO DETECT DHS# **BLAINE** SAN JOSE, CALIFORNIA 95112-1105 ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION FAX (408) 573-7771 LIMITS SET BY CALIFORNIA DHS AND TECH SERVICES, INC. PHONE (408) 573-0555 ☐ EPA RWQCB REGION LIA CHAIN OF CUSTODY ☐ OTHER BTS# (40615-M)2 CONTAINERS CLIENT SPECIAL INSTRUCTIONS (8021B) Blymyer Engineers, Inc. SITE Former Fiesta Beverage Invoice and Report to: Blymyer Engineers, Inc. MTBE ( ALL 966 89th Avenue Attn: Mark Detterman TPH-G (8015) C = COMPOSITE EDF Format Required. Oakland, CA CONTAINERS MATRIX BTEX S= SOIL W=H<sub>2</sub>0 DATE TIME TOTAL ADD'L INFORMATION **STATUS** CONDITION LAB SAMPLE# SAMPLE I.D. 62 APPROPRIATE CONTAINERS HEAD SPACE ABSENT. DECHLORINATED IN LAB METALS PRESERVATION RESULTS NEEDED SAMPLING TIME SAMPLING PERFORMED BY NO LATER THAN COMPLETED 1120 As contracted TIME RECEIVED BY TIME RELEASED B RECEIVED BY RELEASED BY TIME 1500 1500 RELEASED BY TIME RECEIVED BY 6/16 TIME SENT SHIPPED VIA DATE SENT COOLER#