



November 30, 1995

Ms. Susan Hugo
Alameda County Health Care
Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Re: 1150 Park Avenue, Emeryville, CA
STID #1777


Dear Ms. Hugo:

Enclosed is the 3rd Quarter 1995 status report for the subject New Century Beverage Co. ground water investigation. This report addresses occurrences beneath the subject property in the vicinity of two former fuel tanks operated by the New Century Beverage Co., as discussed in Weiss Associates' January 27, 1995 Remedial Action Plan. Two other hydrocarbon occurrences in ground water beneath the facility have been shown to be the responsibility of other parties. Pursuant to your August 7, 1995 letter, we will submit quarterly status reports on site activities for these two occurrences in the future.

I certify under penalty of perjury that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true and accurate, and I am in agreement with the conclusions and/or recommendations in the report. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Please call Jim Ponton or Jeff Root of Weiss Associates at (510) 450-6000 if you have any questions or comments on the enclosed technical work plan.

Sincerely,
New Century Beverage Co.



Jerry Tidwell

Enc.
JT/jdp

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cc: Mr. Paul Morici, Pepsi-Cola Corp.
Paul Milmed, Esq., White & Case
Mr. Ray Plock, Raymond Plock & Associates

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Raymond Plock and Associates
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Mr. Steve P. Ronzone
Del Monte Foods
One Market Street
PO Box 193575
San Francisco, CA 94119-3575

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November 28, 1995

Mr. Jerry Tidwell
New Century Beverage Company
1150 Park Avenue
Emeryville, California 94608

Re: Third Quarter 1995 Status Report
1150 Park Avenue, Emeryville, CA
WA Project # 14-0307-09

Dear Mr. Tidwell:

This report documents the Third Quarter 1995 (July 1995 - September 1995) ground water monitoring activities conducted by Weiss Associates (WA) for the New Century Beverage Company, 1150 Park Avenue, Emeryville, California (Figure 1). In September 1995, WA measured water levels in all site wells and collected ground water samples from selected site wells for hydrocarbon analysis. These activities are described below and a schedule for Fourth Quarter 1995 activities is also provided.

During the reporting period, ground water elevations and flow direction were generally consistent with historical data. Hydrocarbon concentrations in shallow ground water samples for this period are generally consistent with historical trends, and ranged from not detected (ND) in monitoring wells MW-8, -10, and -14, to 3.5 parts per million (ppm) total extractable hydrocarbons (TEH) in MW-5, and 4.1 ppm total volatile hydrocarbons (TVH) in MW-12.

Benzene was detected in ground water samples collected from monitoring wells MW-5, MW-12, and MW-13 and appears to remain isolated to the small area around these three wells.

Water Level Measurements

On September 21, 1995, WA measured water levels in 14 site monitoring wells. Historical water level measurements and calculated ground water elevations are shown on Table 1, and ground water elevation contours and estimated flow direction are shown on Figure 2. Ground water level elevations decreased between about 0.19 ft to 1.46 ft in all site monitoring wells as compared to Second Quarter 1995 ground water level elevations reported on June 27, 1995. Third Quarter 1995 ground water elevation data indicate that shallow ground water flowed generally southwestward on September 21, 1995. This southwestward ground water flow direction is consistent with historical data for the site.

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Ground Water Sampling and Analysis

On September 21, 1995, WA collected ground water samples for chemical analysis from monitoring wells MW-5, -6, -7, -8, -10, -11, -12, -13, and -14. At least three well volumes of ground water were purged from each well that did not purge dry, using dedicated PVC bailers. In these wells, the ground water pH, temperature and electrical conductivity were monitored until stabilization to ensure that a representative sample was collected. The samples were decanted from the dedicated PVC bailers into appropriate containers, and immediately refrigerated for shipment to Curtis and Tompkins, Ltd., a State-certified laboratory located in Berkeley, California. A blind duplicate sample from monitoring well MW-13 was submitted for analysis as a quality control measure.

Ground water samples were analyzed for:

- Total volatile hydrocarbons as gasoline (TVH-G) for wells MW-5, -7, -8, -11, -12, -13, and -14 using the California Department of Health Services (DHS) Leaking Underground Fuel Tank (LUFT) Method (modified EPA Method 8015);
- Total extractable hydrocarbons (TEH) for wells MW-5, -6, -7, -8, -10, -11, -12, -13, and -14 using the DHS LUFT Method (modified EPA Method 8015);
- Benzene, toluene, ethyl benzene, and total xylenes (BTEX) for wells MW-5, -6, -7, -8, -10, -11, -12, -13, and -14 using EPA Method 8020 (Purgeable Aromatic Compounds), and
- Methyl Tertiary Butyl Ether (MTBE) for well MW-7 using EPA Method 8020.

Analytic results are presented in Table 2 along with historical results for the monitoring wells. Figure 3 shows benzene isoconcentration contours for September 21, 1995.

Analytic Results and Discussion

No hydrocarbons were detected in wells MW-8 and -14, downgradient of former Tank No. 1, or in well MW-10 downgradient of former Tank No. 2. Low concentrations of TEH were detected in monitoring wells MW-7 and MW-11 at 0.11 ppm and 0.10 ppm, respectively. BTEX compounds were detected in monitoring wells MW-5, -12, and -13 and the BTEX concentrations are consistent with historical data. Benzene concentrations exceeding the 0.001 ppm maximum contaminant level (MCL) remain isolated to a small area encompassing monitoring wells MW-5, -12 and -13 (Figure 3). No MTBE was reported in well MW-7.

Mr. Jerry Tidwell
November 28, 1995

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Scheduled Fourth Quarter 1995 Activities

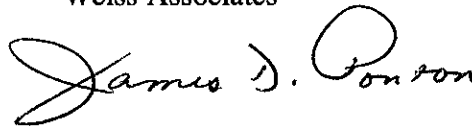
WA will conduct the Fourth Quarter 1995 ground water sampling on or about December 20, 1995. Fourth Quarter 1995 activities will be reported by February 15, 1996. We expect that the remedial soil excavation described in our Remedial Action Plan and which began on October 20, 1995, will be completed during the Fourth Quarter 1995, and the results of the excavation will be reported to the Alameda County Health Care Services Agency (ACHCSA).

The field work presented in this report was conducted under the supervision of Jim D. Ponton, the Weiss Associates project manager for the New Century Beverage Company Emeryville, California, site.

Weiss Associates appreciates the opportunity to provide environmental consulting services to the New Century Beverage Company. Please call Jim D. Ponton or Jeff Root at (510) 450-6000 if you have any questions or comments regarding this report.



Sincerely,
Weiss Associates



James D. Ponton, R.G.
Project Geologist



J. Jeffrey Root, R.E.A.
Senior Project Manager

Attachments: Figure 1. Site Location Map
Figure 2. Ground Water Elevation Contours and Estimated Flow Direction - September 21, 1995
Figure 3. Benzene Isoconcentration Contour - September 21, 1995
Table 1: Historical Ground Water Elevations
Table 2: Ground Water Analytical Results
Attachment A - Analytical Reports and Chain-of-Custody

cc: Paul Morici, Pepsi-Cola Corporation, 1 Pepsi Way, MD 850, Somers, NY 10589
Raymond Plock, Raymond Plock & Associates, 28 Craig Avenue, Piedmont, CA 94611
Indrajit Obeysekere, Esq., Kaiser Foundation Hospitals, Inc., 1950 Franklin Street, 17th Floor,
Oakland, CA 94612
David Harnish, Environ, 5820 Shellmound Street, Suite 700, Emeryville, CA 94608

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FIGURES

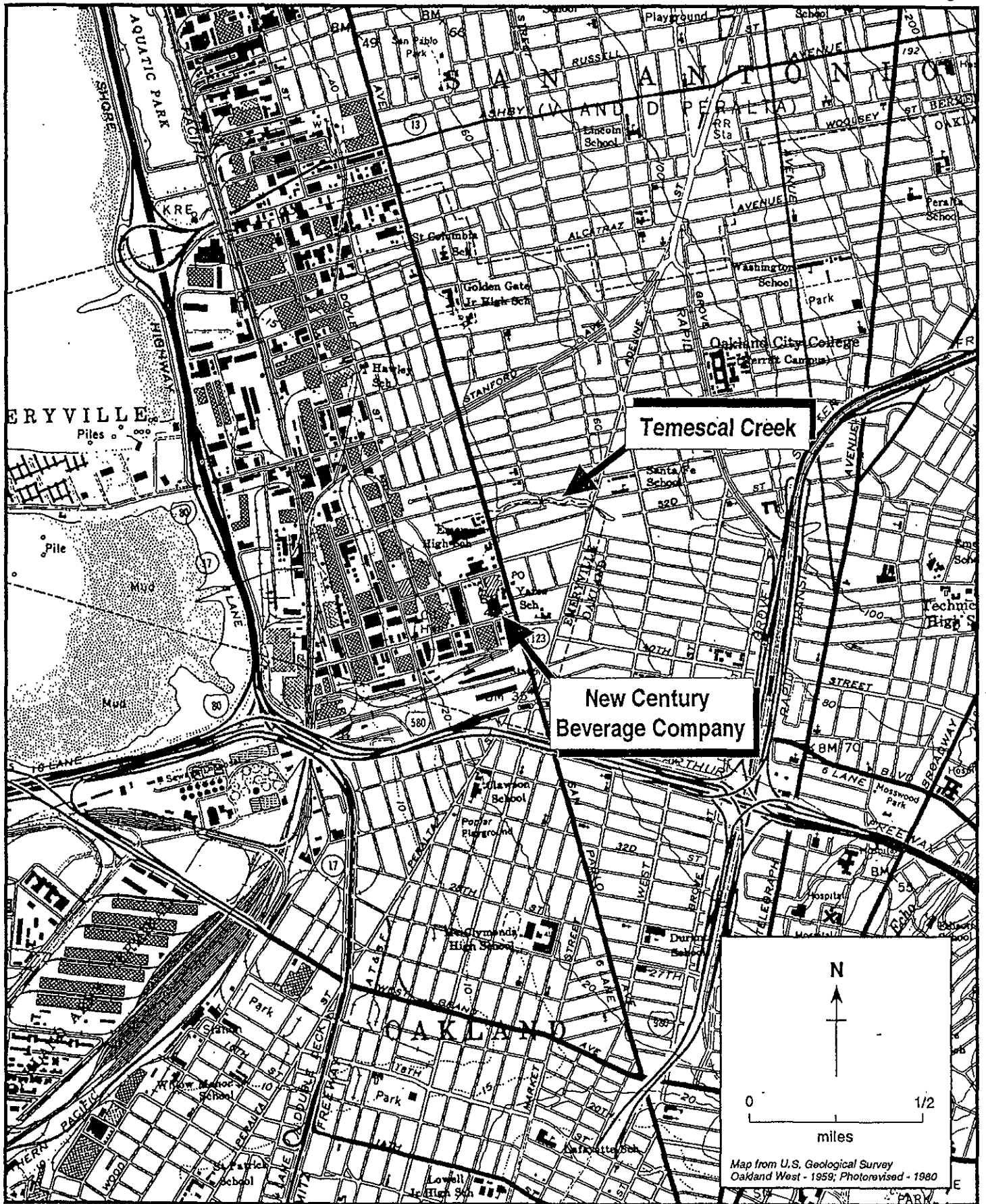


Figure 1. Site Vicinity Map - New Century Beverage Company, 1150 Park Avenue, Emeryville, California

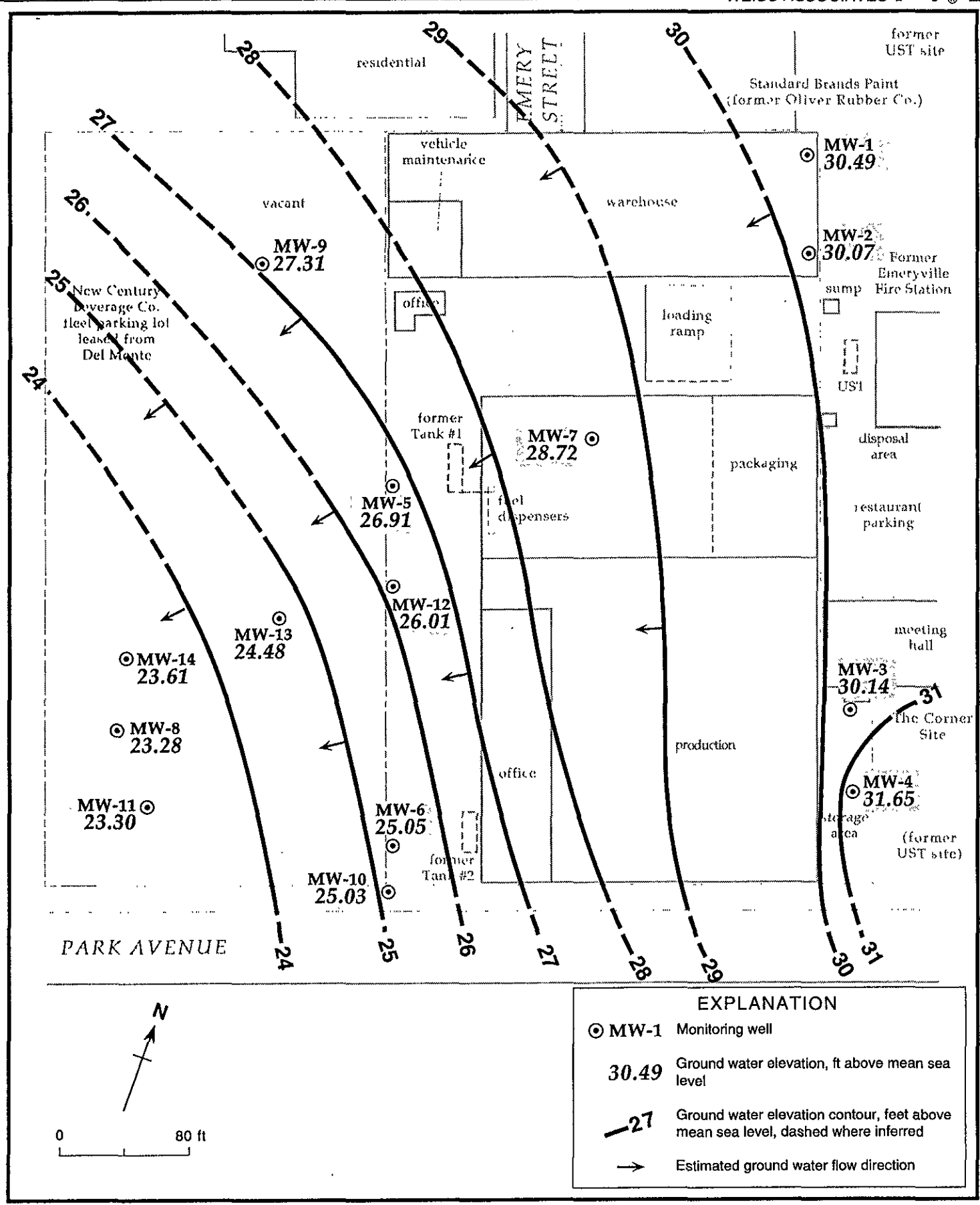


Figure 2. Ground Water Elevation Contours and Estimated Flow Direction - September 21, 1995 - New Century Beverage Company, 1150 Park Avenue, Emeryville, California

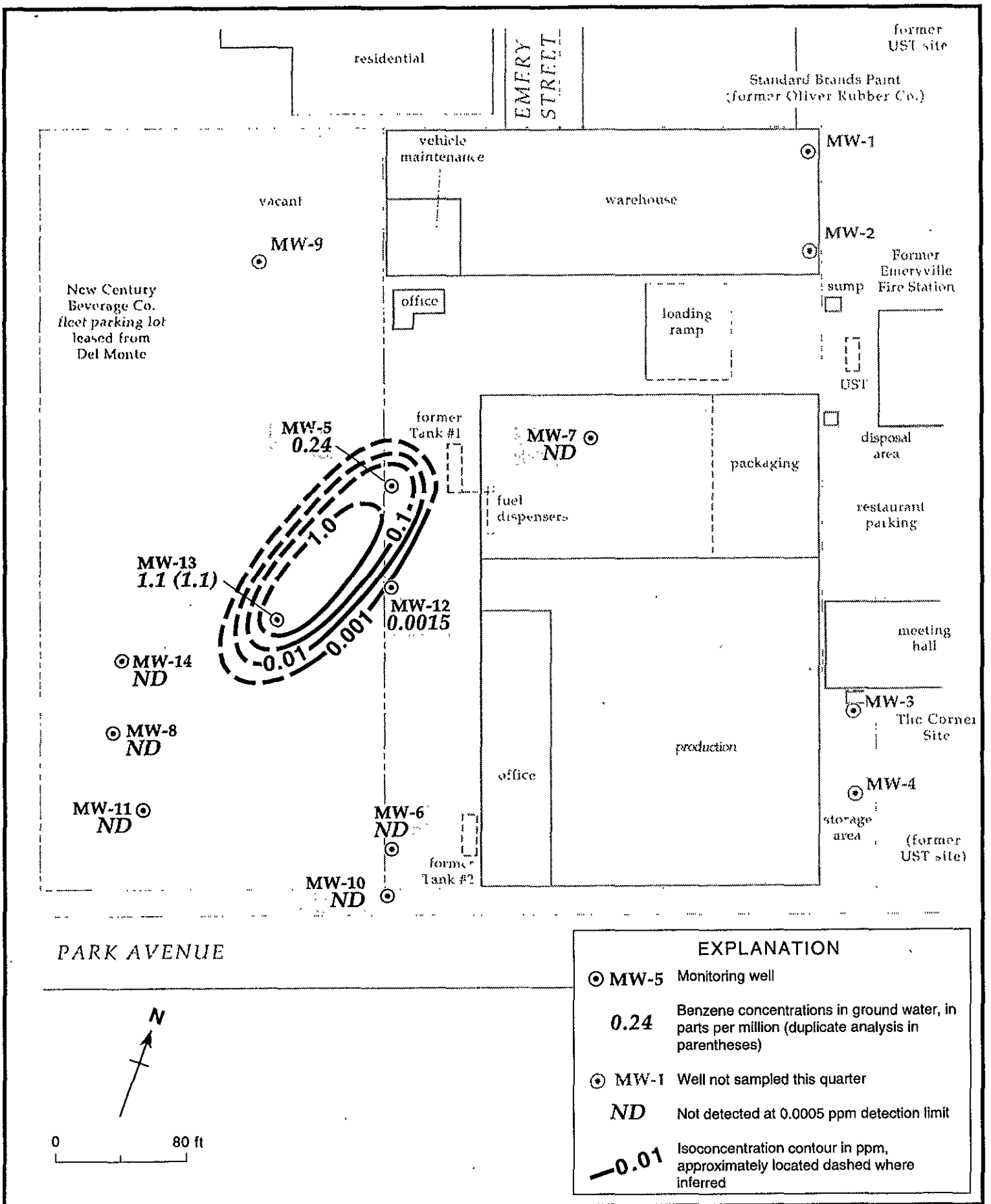


Figure 3. Benzene Isoconcentration Contours in Ground Water - September 21, 1995 - New Century Beverage Company, 1150 Park Avenue, Emeryville, California

TABLES

Table 1. Historical Ground Water Elevations - New Century Beverage Co., 1150 Park Avenue, Emeryville, California

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
MW-1	03/27/94	38.74	5.90	32.84
	03/29/94		5.89	32.85
	04/15/94		6.24	32.50
	05/20/94		5.79	32.95
	02/28/95		5.13	33.61
	06/27/95		7.69	31.05
	09/21/95		8.25	30.19
MW-2	03/27/94	38.87	6.57	32.30
	03/29/94		6.58	32.29
	04/15/94		6.86	32.01
	05/20/94		6.45	32.42
	02/28/95		5.64	33.23
	06/27/95		7.34	31.53
	09/21/95		8.80	30.07
MW-3	03/27/94	40.79	10.75	30.04
	03/29/94		10.69	30.10
	04/15/94		10.90	29.89
	05/20/94		10.81	29.98
	02/28/95		10.35	30.44
	06/27/95		10.43	30.36
	09/21/95		10.65	30.14
MW-4	03/27/94	40.15	8.23	31.92
	03/29/94		8.21	31.94
	04/15/94		8.78	31.37
	05/20/94		8.54	31.61
	02/28/95		7.71	32.44
	06/27/95		7.90	32.25
	09/21/95		8.50	31.65
MW-5	03/27/94	36.49	8.02	28.47
	03/29/94		7.93	28.56
	04/15/94		8.10	28.39
	05/20/94		7.88	28.61
	10/20/94		9.45	27.04
	02/28/95		7.57	28.92
	06/27/95		8.99	27.50
	09/21/95		9.56	26.91
MW-6	03/27/94	35.52	9.60	25.92
	03/29/94		9.59	25.93
	04/15/94		9.64	25.88
	05/20/94		9.47	26.05
	10/20/94	10.51	25.01	
	02/28/95	35.53 ¹	8.54	26.99
	06/27/95	10.02	25.51	
	09/21/95	10.47	25.05	

Table 1. Historical Ground Water Elevations - New Century Beverage Co., 1150 Park Avenue, Emeryville, California

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
MW-7	03/27/94	37.53	7.25	30.28
	03/29/94		7.27	30.26
	04/15/94		7.47	30.06
	05/20/94		7.25	30.28
	10/20/94		8.87	28.66
	02/28/95		6.89	30.64
	06/27/95		7.90	29.63
	09/21/95		8.81	28.72
MW-8	04/05/94	33.11	9.03	24.08
	04/15/94		8.94	24.17
	05/20/94		8.70	24.41
	10/20/94		10.00	23.11
	02/28/95		8.48	24.63
	06/27/95		9.64	23.47
	09/21/95		9.83	23.28
MW-9	04/05/94	36.06	7.60	28.46
	04/15/94		7.60	28.46
	05/20/94		7.39	28.67
	02/28/95		6.85	29.21
	06/27/95		8.31	27.75
	09/21/95		8.75	27.31
MW-10	10/20/94	35.03	10.14	24.89
	02/28/95		8.98	26.05
	06/27/95		9.59	25.44
	09/21/95		10.00	25.03
MW-11	10/20/94	32.74	9.71	23.03
	02/28/95		7.66	25.08
	06/27/95		8.86	23.88
	09/21/95		9.44	23.30
MW-12	10/20/94	36.18	12.66	23.52
	02/28/95		7.60	28.58
	06/27/95		9.56	26.62
	09/21/95		10.17	26.01
MW-13	02/28/95	34.65	8.72	25.93
	06/27/95		8.99	25.66
	09/21/95		10.37	24.28
MW-14	06/27/95	33.68	9.88	23.80
	09/21/95		10.07	23.61

Notes:

¹Resurveyed 3/13/95

Table 2. Ground Water Analytical Results - New Century Beverage Co., 1150 Park Avenue, Emeryville, California

Well/ Boring ID	Date Sampled	TVH-G	TEH	Benzene	Toluene	Ethyl- benzene	Xylenes	1,2- DCA	PCE	Other HVOCs	MTBE
←————— parts per million (mg/L) —————→											
MW-1	03/29/94	ND	ND (1)	ND	ND	ND	ND	ND	ND	ND	---
	05/20/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
MW-2	03/29/94	2.4	37 (D)	0.017	ND (0.001)	0.005	0.015	ND	ND	ND	---
	05/20/94	1.9	6.7	0.021	0.0086	0.0061	0.0059	ND	ND	ND	---
MW-3	03/29/94	ND	ND (1)	ND	ND	ND	ND	ND	ND	ND	---
	05/20/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
MW-4	03/29/94	0.13	ND (1)	ND	ND	ND	ND	ND	ND	0.017 CB	---
	05/20/94	0.22	^b	0.0006	0.0015	0.0011	0.0035	ND	ND	0.004 1,2- DCB 0.017 CB 0.005 1,2- DCB	---
	06/01/94	---	ND	---	---	---	---	---	---	---	---
MW-5	03/29/94	2.1	30 (K)	0.39	ND (0.003)	ND (0.003)	0.18	ND	ND	ND	---
	05/20/94	2.3	2.7 (D)	0.49	0.005	0.033	0.23	ND	ND	ND	---
	10/20/94	0.77	9(K)	0.23	ND(0.001)	0.019	0.077	---	---	---	---
	split ^d 10/20/94	---	ND	---	---	---	---	---	---	---	---
	02/28/95	1.2	3.6 (D)	0.33	0.0016	0.041	0.013	---	---	---	---
	06/27/95	0.72	2.1 (D)	0.28	ND	ND	ND	---	---	---	ND
09/21/95	0.71	3.5 ^e	0.24	0.0021	0.045 ^f	ND	---	---	---	---	
MW-6	03/29/94	ND	5 (D)	ND	ND	ND	ND	ND	ND	ND	---
	05/20/94	ND	2.4 (D)	ND	ND	ND	ND	ND	ND	ND	---
	10/20/94	0.055	ND	ND	ND	0.0021	0.0024	---	---	---	---
	split ^c 10/20/94	---	0.27 (D)	---	---	---	---	---	---	---	---
	02/28/95	---	0.78 (D)	ND	ND	ND	ND	---	---	---	---
	06/27/95	ND	0.51 (D)	ND	ND	ND	ND	---	---	---	ND
09/21/95	---	0.96 ^{g,h}	ND	ND	ND	ND	---	---	---	---	
MW-7 dup	03/29/94	0.16	ND (1)	ND	ND	ND	ND	ND	ND	ND	---
	03/29/94	ND	ND (1)	ND	ND	ND	ND	ND	ND	ND	---



Table 2. Ground Water Analytical Results - New Century Beverage Co., 1150 Park Avenue, Emeryville, California
(continued)

Well/ Boring ID	Date Sampled	TVH-G	TEH	Benzene	Toluene	Ethyl- benzene	Xylenes	1,2- DCA	PCE	Other HVOCs	MTBE
←————— parts per million (mg/L) —————→											
split ^a	05/20/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
	05/20/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
dup	05/20/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
dup	06/01/94	---	ND	---	---	---	---	---	---	---	---
	10/20/94	ND	ND	ND	ND	ND	ND	---	---	---	---
	02/28/95	ND	ND	ND	ND	ND	ND	---	---	---	---
	06/27/95	ND	ND	ND	ND	ND	ND	---	---	---	ND
	09/21/95	ND	0.110 ^e	ND	ND	ND	ND	---	---	---	ND
MW-8 split ^a	04/05/94	ND	ND (1)	ND	ND	ND	ND	ND	ND	ND	---
	04/05/94	ND(0.01)	ND (1)	ND(0.0003)	0.0004	ND(0.0003)	ND(0.0003)	ND	ND	ND	---
	05/20/94	ND	ND ^f	ND	ND	ND	ND	ND	ND	ND	---
split ^c	10/20/94	ND	ND	ND	ND	ND	ND	---	---	---	---
	10/20/94	---	ND	---	---	---	---	---	---	---	---
	02/28/95	ND	ND	ND	ND	ND	ND	---	---	---	---
	06/27/95	ND	ND	ND	ND	ND	ND	---	---	---	ND
	09/21/95	ND	ND	ND	ND	ND	ND	---	---	---	---
MW-9	04/05/94	ND	ND (1)	ND	ND	ND	ND	ND	ND	ND	---
	05/20/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
MW-10 split ^c	10/20/94	ND	ND	ND	ND	ND	ND	---	---	---	---
	10/20/94	---	ND	---	---	---	---	---	---	---	---
	02/28/95	---	ND	ND	ND	ND	ND	---	---	---	---
	06/27/95	ND	ND	ND	ND	ND	ND	---	---	---	ND
	09/21/95	---	ND	ND	ND	ND	ND	---	---	---	---
MW-11 split ^d	10/20/94	ND	ND	ND	ND	ND	ND	---	---	---	---
	10/20/94	ND	ND	ND(0.0003)	ND(0.0003)	ND(0.0003)	ND	---	---	---	---
	02/28/95	ND	ND	ND	ND	ND	ND	---	---	---	---
	06/27/95	ND	ND	ND	ND	ND	ND	---	---	---	ND
	09/21/95	ND	0.10 ^g	ND	ND	ND	ND	---	---	---	---

Table 2. Ground Water Analytical Results - New Century Beverage Co., 1150 Park Avenue, Emeryville, California
(continued)

Well/ Boring ID	Date Sampled	TVH-G	TEH	Benzene	Toluene	Ethyl- benzene	Xylenes	1,2- DCA	PCE	Other HVOCs	MTBE
<----- parts per million (mg/L) ----->											
MW-12 split ^d	10/20/94	0.087	0.13(K)	0.0063	ND	0.0014	0.0027	---	---	---	---
	10/20/94	0.057	ND	0.0073	ND(0.0003)	0.0016	0.0029	---	---	---	---
	02/28/95	0.16	0.077 (K)	0.018	ND	0.0028	0.0027	---	---	---	---
	06/27/95	ND	0.16 (K)	0.011	ND	ND	0.0009	---	---	---	ND
	09/21/95	ND	0.140 ^{a,1}	0.0015	ND	ND	ND	---	---	---	---
MW-13 dup dup dup	02/28/95	5.8	1.0 (K)	0.76	0.021	0.049	0.58	---	---	---	---
	02/28/95	6.3	0.74 (K)	0.77	0.013	0.058	0.58	---	---	---	---
	06/27/95	4.7	0.35 (K)	1.6	0.010	0.26	0.40	---	---	---	ND (0.036)
	06/27/95	3.8	0.32 (K)	2.0	ND (0.018)	0.27	0.39	---	---	---	ND (0.072)
	09/21/95	4.1	0.340 ^{a,1}	1.1	0.0034	0.15	0.123	---	---	---	---
09/21/95	3.7	0.400 ^{a,1}	1.1	0.008	0.130	0.158	---	---	---	---	
MW-14	06/27/95	ND	ND	ND	ND	ND	ND	---	---	---	ND
	09/21/95	ND	ND	ND	ND	ND	ND	---	---	---	---
Travel Blank split ^d split ^c	03/29/94	ND	---	ND	ND	ND	ND	ND	ND	ND	---
	04/05/94	ND	---	ND	ND	ND	ND	ND	ND	ND	---
	05/20/94	ND	---	ND	ND	ND	ND	ND	ND	ND	---
	10/20/94	ND	---	ND	ND	ND	ND	---	---	---	---
	10/20/94	ND	---	ND(0.0003)	ND(0.0003)	ND(0.0003)	ND	---	---	---	---
	10/20/94	ND	---	ND	ND	ND	ND	---	---	---	---
Bailer Blank	03/29/94	ND	ND (1)	ND	ND	ND	ND	ND	ND	ND	---
	04/05/94	ND	ND (1)	ND	ND	ND	ND	ND	ND	ND	---
	05/20/94	ND	0.42 ^b	ND	ND	ND	ND	ND	ND	ND	---
	02/28/95	ND	ND	ND	ND	ND	ND	---	---	---	---
	06/27/95	ND	ND	ND	ND	ND	ND	---	---	---	ND
		0.05	0.05 (K,D)	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.001	0.001-0.02
MCL		NE	NE	0.001	0.1 ^f	0.68	1.75	0.0005	0.005	0.13 1,2-DCB ^f 0.03 CB	NE



Table 2. Ground Water Analytical Results - New Century Beverage Co., 1150 Park Avenue, Emeryville, California
(continued)

Abbreviations:

TVH-G = Total volatile hydrocarbons as gasoline detected by EPA Method 8015, modified by DHS note: Mineral spirits were also screened with this method for analyses prior to 10/20/94, however, all detectable TVH was characterized as gasoline.

TEH = Total extractable hydrocarbons [kerosene (K) and diesel (D)] detected by EPA Method 8015, modified per DHS notes: Hydraulic oil and motor oil were also screened with this method for analyses prior to 10/20/94, however, all detected TEH was characterized as kerosene or diesel. All reported kerosene-range TEH was characterized as a fraction of gasoline compounds by the analytical laboratory.

BTEX = Benzene, toluene, ethylbenzene, and xylenes.

HVOCs = Halogenated volatile organic compounds detected by EPA Method 8010

MTBE = Methyl-tert-butyl ether by EPA Method 8020

ND = Not detected at standard detection limit specified on the last row of the table

ND(n) = Not detected at detection limit of n ppm, due to dilution of sample prior to analysis

--- = Not analyzed

MCL = Maximum Contaminant Level for Drinking Water established by the California Department of Toxic Substances Control

NE = Not established

Notes:

Benzene, toluene, ethylbenzene, xylenes and MTBE were analyzed by EPA Method 8020.

Analyses performed by Curtis & Tompkins, Ltd. of Berkeley, CA except as noted (CA DHS certification # 1459)

- a. Split duplicate analysis performed by GTEL Environmental Laboratories, Inc. of Concord, CA (CA DHS certification # E1075)
- b. TEH as diesel was detected at 0.42 ppm in the bailer blank collected on 5/20/94, and similar concentrations were reported in well MW-4 (0.31 ppm) and MW-7 (0.45 ppm) samples. Since no TEH was detected in earlier MW-4 and MW-7 samples, this indicated the samples were contaminated with the sampling equipment. Samples were collected in wells MW-4 and MW-7 again on 6/01/94, and no TEH was detected in either sample, consistent with the 3/94 results.
- c. Although no TEH as diesel, kerosene or motor oil was reported, the laboratory reported a single peak on the gas chromatogram that was identified as pentatriacontane (a nonhazardous alkane or paraffin organic compound C36H74) using EPA Method 8270 (Gas chromatography with Mass spectrometry)
- d. Split duplicate analysis performed by WEST Laboratory of Sacramento, CA (CA DHS certification #1346)
- e. Split duplicate analysis performed by Superior Precision Analytical Laboratories, Inc. of Martinez, CA (CA DHS certification #1542)
- f. DTSC Recommended Action Level - no MCL established
- g. Sample exhibits fuel pattern that does not resemble standard
- h. Heavier hydrocarbons than indicated standard
- i. Lighter hydrocarbons than indicated standard
- j. Presence of this compound confirmed by second column; however, the confirmation concentration differed from the reported result by more than a factor of two

ATTACHMENT A

**LABORATORY ANALYTIC REPORTS AND CHAIN-OF-CUSTODY FORMS
SEPTEMBER 1995**



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

ANALYTICAL REPORT

Prepared for:

Weiss Associates
5500 Shellmound Street
Emeryville, CA 94608

Date: 09-OCT-95
Lab Job Number: 122747
Project ID: 14-0307-09
Location: N/A

Reviewed by:

Reviewed by:

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LABORATORY NUMBER: 122747
CLIENT: WEISS ASSOCIATES
PROJECT ID: 14-0307-09

DATE SAMPLED: 09/21/95
DATE RECEIVED: 09/22/95
DATE ANALYZED: 09/26/95
DATE REPORTED: 10/09/95

=====
ANALYSIS: MTBE
ANALYSIS METHOD: EPA 8020
=====

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
122747-003	307-07 <i>MW-7</i>	ND	ug/L	2.0
METHOD BLANK	N/A	ND	ug/L	2.0

ND = Not detected at or above reporting limit.



TVH-Total Volatile Hydrocarbons

Client: Weiss Associates
Project#: 14-0307-09

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID		Batch #	Sampled	Extracted	Analyzed	Moisture
122747-001	307-05	MW-5	23548	09/21/95	09/27/95	09/27/95	
122747-003	307-07	MW-7	23519	09/21/95	09/26/95	09/26/95	
122747-004	307-08	MW-8	23519	09/21/95	09/26/95	09/26/95	
122747-006	307-11	MW-11	23519	09/21/95	09/26/95	09/26/95	

Analyte	Units	MW-5	MW-7	MW-8	MW-11
Diln Fac:		1	1	1	1
Gasoline	ug/L	710	<50	<50	<50
Surrogate					
Trifluorotoluene	%REC	96	98	103	101
Bromobenzene	%REC	140 *	89	92	85

* Values outside of QC limits



TVH-Total Volatile Hydrocarbons

Client: Weiss Associates
Project#: 14-0307-09

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

Sample #	Client ID		Batch #	Sampled	Extracted	Analyzed	Moisture
122747-007	307-12	MW-12	23519	09/21/95	09/26/95	09/26/95	
122747-008	307-13	MW-13	23519	09/21/95	09/27/95	09/27/95	
122747-009	307-15	MW-15	23519	09/21/95	09/27/95	09/27/95	
122747-010	307-14	MW-14	23548	09/21/95	09/27/95	09/27/95	

Analyte	Units	MW-12	MW-13	MW-13 dup	MW-14
Diln Fac:		1	1	1	1
Gasoline	ug/L	<50	4100	3700	<50
Surrogate					
Trifluorotoluene	%REC	102	103	104	102
Bromobenzene	%REC	89	122	120	105



BTXE

Client: Weiss Associates
Project#: 14-0307-09

Analysis Method: BTXE
Prep Method: EPA 5030

Sample #	Client ID		Batch #	Sampled	Extracted	Analyzed	Moisture
122747-001	307-05	MW-5	23548	09/21/95	09/27/95	09/27/95	
122747-002	307-06	MW-6	23519	09/21/95	09/26/95	09/26/95	
122747-003	307-07	MW-7	23519	09/21/95	09/26/95	09/26/95	
122747-004	307-08	MW-8	23519	09/21/95	09/26/95	09/26/95	

Analyte	Units	MW-5	MW-6	MW-7	MW-8
		122747-001	122747-002	122747-003	122747-004
Diln Fac:		1	1	1	1
Benzene	ug/L	240	<0.5	<0.5	<0.5
Toluene	ug/L	2.1	<0.5	<0.5	<0.5
Ethylbenzene	ug/L	45 C	<0.5	<0.5	<0.5
m,p-Xylenes	ug/L	<0.5	<0.5	<0.5	<0.5
o-Xylene	ug/L	<0.5	<0.5	<0.5	<0.5
Surrogate					
Trifluorotoluene	%REC	94	96	93	99
Bromobenzene	%REC	108	93	94	97

C: Presence of this compound confirmed by second column,
however, the confirmation concentration differed from the reported
result by more than a factor of two



BTXE

Client: Weiss Associates
Project#: 14-0307-09

Analysis Method: BTXE
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
122747-005	307-10 MW-10	23519	09/21/95	09/26/95	09/26/95	
122747-006	307-11 MW-11	23519	09/21/95	09/26/95	09/26/95	
122747-007	307-12 MW-12	23519	09/21/95	09/26/95	09/26/95	
122747-008	307-13 MW-13	23548	09/21/95	09/27/95	09/27/95	

MW-10

MW-11

MW-12

MW-13

Analyte	Units	122747-005	122747-006	122747-007	122747-008
Diln Fac:		1	1	1	1
Benzene	ug/L	<0.5	<0.5	1.5	1100
Toluene	ug/L	<0.5	<0.5	<0.5	3.4
Ethylbenzene	ug/L	<0.5	<0.5	<0.5	150
m,p-Xylenes	ug/L	<0.5	<0.5	<0.5	120
o-Xylene	ug/L	<0.5	<0.5	<0.5	3.6
Surrogate					
Trifluorotoluene	%REC	95	95	96	98
Bromobenzene	%REC	96	91	96	95



BTXE

Client: Weiss Associates
Project#: 14-0307-09

Analysis Method: BTXE
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
122747-009	307-15 <i>MW-15</i>	23548	09/21/95	09/27/95	09/27/95	
122747-010	307-14 <i>MW-14</i>	23548	09/21/95	09/27/95	09/27/95	

Analyte	Units	<i>MW-13 dup</i>		<i>MW-14</i>	
		122747-009	122747-010	122747-009	122747-010
Diln Fac:		1	1	1	1
Benzene	ug/L	1100	<0.5		
Toluene	ug/L	8 C	<0.5		
Ethylbenzene	ug/L	130	<0.5		
m,p-Xylenes	ug/L	150	<0.5		
o-Xylene	ug/L	8	<0.5		
Surrogate					
Trifluorotoluene	%REC	95	104		
Bromobenzene	%REC	96	101		

C: Presence of this compound confirmed by second column,
however, the confirmation concentration differed from the reported
result by more than a factor of two



Lab #: 122747

BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Weiss Associates
Project#: 14-0307-09Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 23519
Units: ug/L
Diln Fac: 1Prep Date: 09/26/95
Analysis Date: 09/26/95

MB Lab ID: QC05255

Analyte	Result	
Gasoline	<50	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	99	65-135
Bromobenzene	90	65-135



Lab #: 122747

BATCH QC REPORT

BTXE

Client: Weiss Associates
Project#: 14-0307-09Analysis Method: BTXE
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 23519
Units: ug/L
Diln Fac: 1Prep Date: 09/26/95
Analysis Date: 09/26/95

MB Lab ID: QC05255

Analyte	Result		
Benzene	<0.5		
Toluene	<0.5		
Ethylbenzene	<0.5		
m,p-Xylenes	<0.5		
o-Xylene	<0.5		
Surrogate	%Rec		Recovery Limits
Trifluorotoluene	100		75-125
Bromobenzene	103		75-125



Lab #: 122747

BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Weiss Associates
Project#: 14-0307-09

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

METHOD: BLANK

Matrix: Water
Batch#: 23548
Units: ug/L
Diln Fac: 1

Prep Date: 09/27/95
Analysis Date: 09/27/95

MB Lab ID: QC05400

Analyte	Result	
Gasoline	<50	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	111	65-135
Bromobenzene	102	65-135



Lab #: 122747

BATCH QC REPORT

BTXE

Client: Weiss Associates
Project#: 14-0307-09

Analysis Method: BTXE
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 23519
Units: ug/L
Diln Fac: 1

Prep Date: 09/26/95
Analysis Date: 09/26/95

LCS Lab ID: QC05254

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	19.4	20	97	85-115
Toluene	19.4	20	97	85-115
Ethylbenzene	19.4	20	97	85-115
m,p-Xylenes	20.8	20	104	85-115
o-Xylene	19.2	20	96	85-115
Surrogate	%Rec	Limits		
Trifluorotoluene	99	75-125		
Bromobenzene	102	75-125		

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 5 outside limits



Lab #: 122747

BATCH QC REPORT

BTXE

Client: Weiss Associates
Project#: 14-0307-09Analysis Method: BTXE
Prep Method: EPA 5030

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 23519
Units: ug/L
Diln Fac: 1Prep Date: 09/26/95
Analysis Date: 09/26/95

BS Lab ID: QC05256

Analyte	Spike Added	BS	%Rec #	Limits
Benzene	20	20.1	101	85-115
Toluene	20	19.6	98	85-115
Ethylbenzene	20	19.5	98	85-115
m,p-Xylenes	20	20.5	103	85-115
o-Xylene	20	19.1	96	85-115
Surrogate	%Rec	Limits		
Trifluorotoluene	96	75-125		
Bromobenzene	94	75-125		

BSD Lab ID: QC05257

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Benzene	20	19.3	97	85-115	4	<11
Toluene	20	19.1	96	85-115	3	<13
Ethylbenzene	20	19	95	85-115	3	<25
m,p-Xylenes	20	20.1	101	85-115	2	<25
o-Xylene	20	18.8	94	85-115	2	<25
Surrogate	%Rec	Limits				
Trifluorotoluene	94	75-125				
Bromobenzene	94	75-125				

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits



Lab #: 122747

BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Weiss Associates
Project#: 14-0307-09Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 23548
Units: ug/L
Diln Fac: 1Prep Date: 09/27/95
Analysis Date: 09/27/95

LCS Lab ID: QC05399

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline	2165	2006	108	75-125
Surrogate	%Rec	Limits		
Trifluorotoluene	104	65-135		
Bromobenzene	100	65-135		

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 1 outside limits



Lab #: 122747

BATCH QC REPORT

Page 1 of 1

BTXE

Client: Weiss Associates
Project#: 14-0307-09Analysis Method: BTXE
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 23548
Units: ug/L
Diln Fac: 1Prep Date: 09/27/95
Analysis Date: 09/27/95

LCS Lab ID: QC05399

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	19.6	20	98	85-115
Toluene	20.8	20	104	85-115
Ethylbenzene	21.1	20	106	85-115
m,p-Xylenes	38.4	40	96	85-115
o-Xylene	21.3	20	107	85-115
Surrogate	%Rec	Limits		
Trifluorotoluene	98	75-125		
Bromobenzene	94	75-125		

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits



Lab #: 122747

BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: Weiss Associates
Project#: 14-0307-09Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: 307-14
Lab ID: 122747-010
Matrix: Water
Batch#: 23548
Units: ug/L
Diln Fac: 1Sample Date: 09/21/95
Received Date: 09/22/95
Prep Date: 09/27/95
Analysis Date: 09/27/95

MS Lab ID: QC05401

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline	2006	<50.00	2025	101	75-125
Surrogate	%Rec	Limits			
Trifluorotoluene	103	65-135			
Bromobenzene	107	65-135			

MSD Lab ID: QC05402

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline	2006	2067	103	75-125	2	<35
Surrogate	%Rec	Limits				
Trifluorotoluene	108	65-135				
Bromobenzene	116	65-135				

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits



TEH-Tot. Ext. Hydrocarbons

Client: Weiss Associates
Project#: 14-0307-09

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: LUFT

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
122747-001	307-05	23504	09/21/95	09/25/95	09/28/95	
122747-002	307-06	23504	09/21/95	09/25/95	09/28/95	
122747-003	307-07	23504	09/21/95	09/25/95	09/28/95	
122747-004	307-08	23504	09/21/95	09/25/95	09/29/95	

Analyte	Units	<i>MW-5</i> <i>MW-6</i> <i>MW-7</i> <i>MW-8</i>			
		122747-001	122747-002	122747-003	122747-004
Diln Fac:		1	1	1	1
Diesel Range	ug/L	3500 Y	960 YH	110 Y	<50
Motor Oil Range	ug/L	<1300	<1300	<1300	<1300
Surrogate					
Hexacosane	%REC	105	129	111	112

Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard



TEH-Tot Ext Hydrocarbons

Client: Weiss Associates
Project#: 14-0307-09

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: LUFT

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
122747-005	307-10	23504	09/21/95	09/25/95	09/28/95	
122747-006	307-11	23504	09/21/95	09/25/95	09/28/95	
122747-007	307-12	23504	09/21/95	09/25/95	09/28/95	
122747-008	307-13	23504	09/21/95	09/25/95	09/28/95	

Analyte	Units	<i>NW-10</i> 122747-005	<i>NW-11</i> 122747-006	<i>NW-12</i> 122747-007	<i>NW-13</i> 122747-008
Diln Fac:		1	1	1	1
Diesel Range	ug/L	<50	100 YL	140 YL	340 YL
Motor Oil Range	ug/L	<1300	<1300	<1300	<1300
Surrogate					
Hexacosane	%REC	118	126	116	108

Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard
L: Lighter hydrocarbons than indicated standard



TEH-Tot Ext Hydrocarbons

Client: Weiss Associates
Project#: 14-0307-09

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: LUFT

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
122747-009	307-15	23504	09/21/95	09/25/95	09/28/95	
122747-010	307-14	23504	09/21/95	09/25/95	09/28/95	

Analyte	Units	122747-009	122747-010
Diln Fac:		1	1
Diesel Range	ug/L	400 YL	<50
Motor Oil Range	ug/L	<1300	<1300
Surrogate			
Hexacosane	%REC	109	124

*MW - 13 dms**MW - 14*

Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard
L: Lighter hydrocarbons than indicated standard



Lab #: 122747

BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Weiss Associates
Project#: 14-0307-09

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: 3520

METHOD: BLANK

Matrix: Water
Batch#: 23504
Units: ug/L
Diln Fac: 1

Prep Date: 09/25/95
Analysis Date: 09/27/95

MB Lab ID: QC05174

Analyte	Result		
Diesel Range	<50		
Motor Oil Range	<1300		
Surrogate	%Rec	Recovery Limits	
Hexacosane	131	60-140	



Lab #: 122747

BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Weiss Associates
Project#: 14-0307-09

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 23504
Units: ug/L
Diln Fac: 1

Prep Date: 09/25/95
Analysis Date: 09/25/95

BS Lab ID: QC05175

Analyte	Spike Added	BS	%Rec #	Limits
Diesel Range	2565	2413	94	60-140
Surrogate	%Rec	Limits		
Hexacosane	143	60-140		

BSD Lab ID: QC05176

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel Range	2565	2084	80	60-140	16	<35
Surrogate	%Rec	Limits				
Hexacosane	143	60-140				

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

Please send analytic results and a copy of the signed chain of custody form to:

Jim Ponton
 Project ID: 14-0307-09

Lab Personnel:

- PLEASE INCLUDE QA/QC DATA IF BOX IS CHECKED.
- Specify analytic method and detection limit in report.
 - Notify us if there are any anomalous peaks in GC or other scans.
 - ANY QUESTIONS/CLARIFICATIONS: CALL US.

CHAIN-OF-CUSTODY RECORD AND ANALYTIC INSTRUCTIONS

Sampled by: AKK / HT Laboratory Name: C+T

No. of Containers	Sample ID	Container Type	Sample Date	Vol ²	Fil ³	Ref ⁴	Preservative (specify)	Analyze for	Analytic Method	Turn ⁵	COMMENTS
-1	3 307 -05	W/V	9/21/95	40ml	N	Y	HCL	TVH-G / BTEX	LUFT/8020	N	
-2	-06							BTEX			
-3	-07							TVH-G / BTEX / MTBE			
-4	-08							TVH-G / BTEX			
-5	-10							BTEX			
-6	-11							TVH-G / BTEX			
-7	-12										
-8	-13										
-9	-15										
-10	-14										
-11	-17							HOLD	HOLD		

1 [Signature] 9/21/95 1700
 Released by (Signature), Date

1 Weiss
 Affiliation

2 Brian Bush 9/24/95 1700
 Received by (Signature), Date

2 WEISS
 Affiliation

3 Brian Bush 9/22/95 0950
 Released by (Signature), Date

3 WEISS
 Affiliation

4 _____
 Shipping Carrier, Method, Date

4 _____
 Affiliation

5 _____
 Released by (Signature), Date

5 _____
 Affiliation

6 D. Moore 9-22-95 9:50 AM
 Received by Lab Personnel, Date Seal intact?

6 C+T
 Affiliation, Telephone

1 Sample Type Codes: W = Water, S = Soil, Describe Other; Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B - Clear/Brown Glass, Describe Other; Cap Codes: PT = Plastic, Teflon Lined 2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)
 5 Turnaround [N = Normal, W = 1 Week, R = 24 Hour, HOLD (write out)]

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:
Secured overnight

Please send analytic results and a copy of the signed chain of custody form to:

Jim Ponton

Project ID: 14-0307-09

Lab Personnel:

PLEASE INCLUDE QA/QC DATA IF BOX IS CHECKED.

- 1) Specify analytic method and detection limit in report.
- 2) Notify us if there are any anomalous peaks in GC or other scans.
- 3) ANY QUESTIONS/CLARIFICATIONS: CALL US.

CHAIN-OF-CUSTODY RECORD AND ANALYTIC INSTRUCTIONS

Sampled by: AK / HT Laboratory Name: C&T

No. of Containers	Sample ID	Container Type	Sample Date	Vol ²	Fil ³	Ref ⁴	Preservative (specify)	Analyze for	Analytic Method	Turn ⁵	COMMENTS
1	307-05	w/c	9/21/95	12	N	Y	None	TEH-D	LUFT	N	
2	-06										
3	-07										
4	-08										
5	-10										
6	-11										
7	-12										
8	-13										
9	-15										
10	-14										

1 [Signature] 9/21/95 1700
 Released by (Signature), Date

1 Weiss
 Affiliation

2 Brian Bush 9/21/95 1700
 Received by (Signature), Date

2 WEISS ASSOC.
 Affiliation

3 Brian Bush 9/22/95 0950
 Released by (Signature), Date

3 WEISS ASSOC.
 Affiliation

4 _____
 Shipping Carrier, Method, Date

4 _____
 Affiliation

5 _____
 Released by (Signature), Date

5 _____
 Affiliation

6 D. Moore 9-22-95 9:50AM x
 Received by Lab Personnel, Date Seal intact?

6 C&T
 Affiliation, Telephone

1 Sample Type Codes: W = Water, S = Soil, Describe Other; Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B - Clear/Brown Glass, Describe Other; Cap Codes: PT = Plastic, Teflon Lined 2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)
 5 Turnaround [N = Normal, W = 1 Week, R = 24 Hour, HOLD (write out)]
 ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Secured overnight