



May 31, 1996

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 1st Quarter 1996 status report for the subject New Century Beverage Co. ground water investigation. This report addresses hydrocarbon 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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May 29, 1996

Mr. Jerry Tidwell
Pepsi-Cola Corporation
29000 Hesperian Blvd.
Hayward, California 94545

Re: **First Quarter 1996 Status Report**
1150 Park Avenue, Emeryville, CA
WA Project # 14-0307-19

Dear Mr. Tidwell:

This report documents the First Quarter 1996 (January 1996 - March 1996) ground water monitoring activities conducted by Weiss Associates (WA) for the New Century Beverage Company site located at 1150 Park Avenue, Emeryville, California (Figure 1). In March 1996, WA measured water levels in all site wells and collected ground water samples from selected site wells for hydrocarbon analysis. In May 1996, WA collected several additional ground water samples from selected site wells for confirmatory analyses of aromatic volatile organic compounds. These activities are described below and a schedule for Second Quarter 1996 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-7, -8, -10, and -11, to 7.5 parts per million (ppm) total extractable hydrocarbons (TEH) in MW-5, and 4.8 ppm total volatile hydrocarbons (TVH) in MW-13.

Because of inconsistent benzene detections reported by C&T Laboratory, WA resampled monitoring wells MW-5, -6, -12, -13, and -14 in May 1996 for BTEX and submitted the ground water samples to Superior Analytical Laboratory (SAL), of Martinez, California, and Sequoia Analytical (SA), of Walnut Creek, California (Table 2).

Water Level Measurements

On March 27, 1996, WA measured water levels in all onsite 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. The ground water elevation for monitoring well MW-6 was not calculated this quarter because the top of casing elevation has not been resurveyed since the casing was repaired on January 5, 1996.

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The MW-6 top of casing elevation was resurveyed on May 13, 1996.

Ground water level elevations increased between about 0.15 ft to 1.42 ft in wells MW-1, -2, -3, -4, -5, -7, -9, -11, and -13, and decreased between 0.03 and 0.47 ft in wells MW-8, -10, -12, and -14 as compared to Fourth Quarter 1995 ground water level elevations. First Quarter 1996 ground water elevation data indicate that shallow ground water flowed generally southwestward on March 27, 1996. This southwestward ground water flow direction is consistent with historical data for the site.

Ground Water Sampling and Analysis

On March 27, 1996, 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 (C&T), 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.

Analytic Results and Discussion

No hydrocarbons were detected in wells MW-8, downgradient of former Tank No. 1, or in well MW-10 downgradient of former Tank No. 2. TVH-G were detected in monitoring wells MW-5, -12, and -13. TEH were detected in monitoring wells MW-5, -6, -12, and -13.

BTEX compounds were detected in monitoring wells MW-5, -6, -12, -13, and -14 on March 27, 1996. Benzene concentrations exceeding the 0.001 ppm maximum contaminant level (MCL) were detected in wells MW-14, MW-5, -12 and -13.

Because of the inconsistent BTEX trends exhibited by MW-6 and MW-14, coupled with a series of coincident errors made by C&T, WA decided to resample MW-14 on May 3, 1996 and May 7, 1996. WA submitted the ground water samples to SAL and SA for analysis by EPA Method 8020.

No benzene above method detection limits were reported by both SAL and SA in monitoring well MW-14.

Because the benzene result reported for MW-14 by C&T was inconsistent with the SAL and SA reports, on May 14, 1996, WA resampled monitoring wells MW-5, MW-6, MW-12 and MW-13 for BTEX and submitted the ground water samples to SAL for analysis.

No BTEX was detected in the ground water sample collected from MW-6. Additionally, 0.31 ppm benzene was reported by SAL in MW-13, as compared to 0.98 ppm and 1.1 ppm reported by C&T on March 27, 1996. Benzene isoconcentration contours for select site wells are presented on Figure 3.

The quarterly ground water sampling protocol for the site calls for the analysis of the travel blank for BTEX only if BTEX is detected in monitoring wells MW-7, MW-8, or MW-14. Trace concentrations of benzene were detected in MW-14. Due to either a computer malfunction or human error on the part of Curtis and Tompkins Laboratory, the trip blank sample was analyzed on April 12, 1996, past the hold time for the sample (Table 2). Although the trip blank sample was analyzed outside the hold time, no BTEX compounds were reported by Curtis and Tompkins Laboratory in the travel blank. A case narrative describing the situation has been provided by Curtis and Tompkins and is presented in Attachment A.

No MTBE was reported in well MW-7.

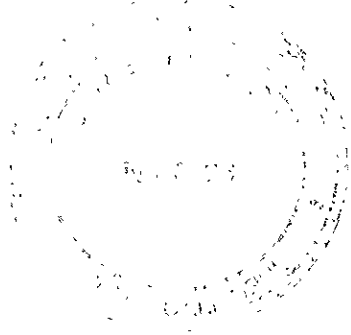
SCHEDULED SECOND QUARTER 1996 ACTIVITIES

WA will conduct the Second Quarter 1996 ground water sampling on or about June 21, 1996. Second Quarter 1996 activities will be reported by July 15, 1996.

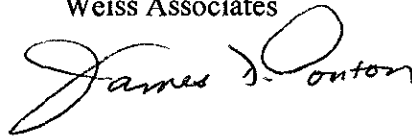
Mr. Jerry Tidwell
May 29, 1996

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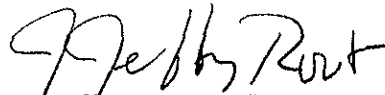
Weiss Associates appreciates the opportunity to provide environmental consulting services to the New Century Beverage Company. Please call James D. Ponton or Jeff Root at (510) 450-6000 if you have any questions or comments regarding this report.



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 - March 27, 1996
Figure 3. Benzene Isoconcentration Contour - March 27, 1996
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
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FIGURES

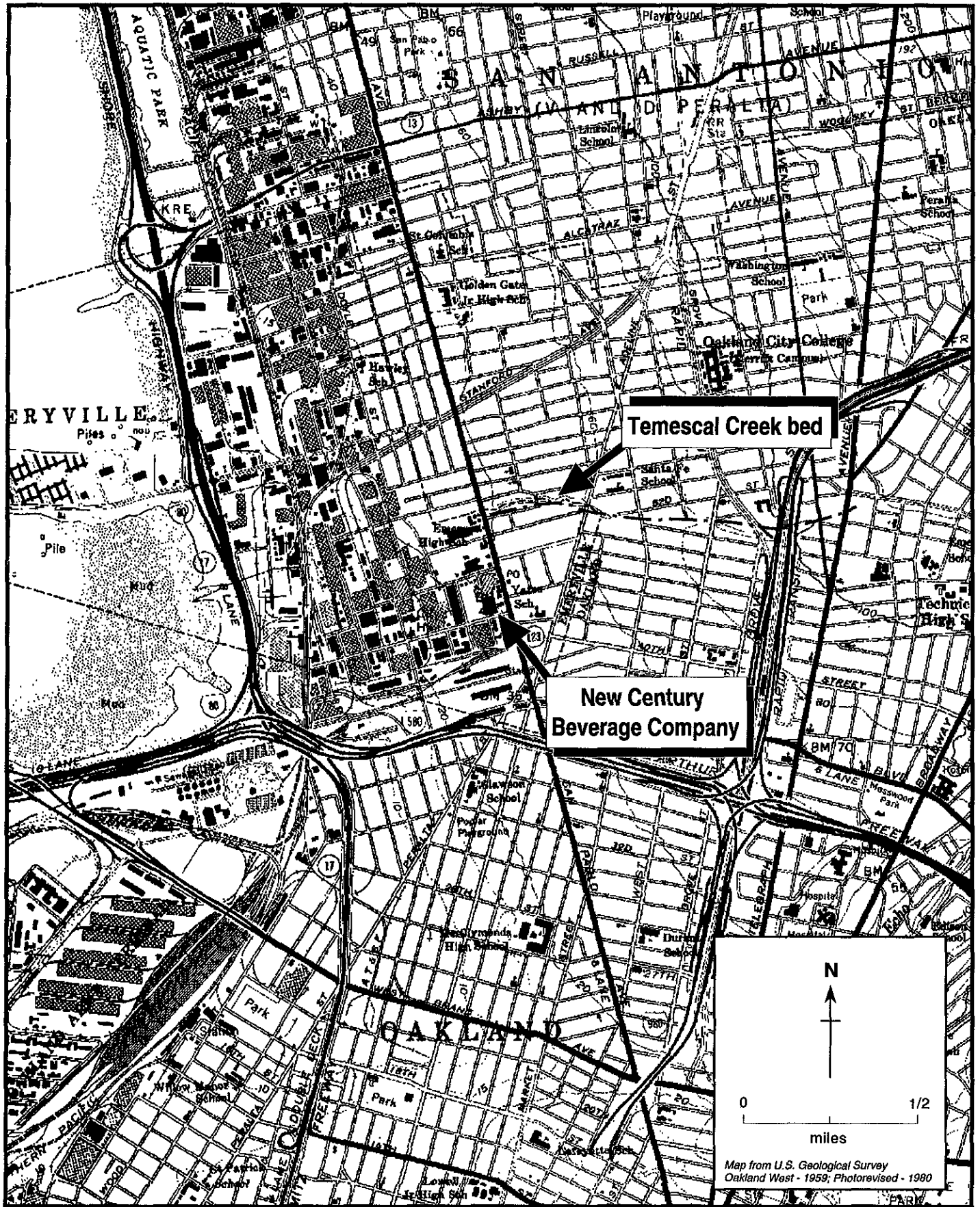


Figure 1. Site Vicinity Map - New Century Beverage Company, 1150 Park Avenue, Emeryville, California

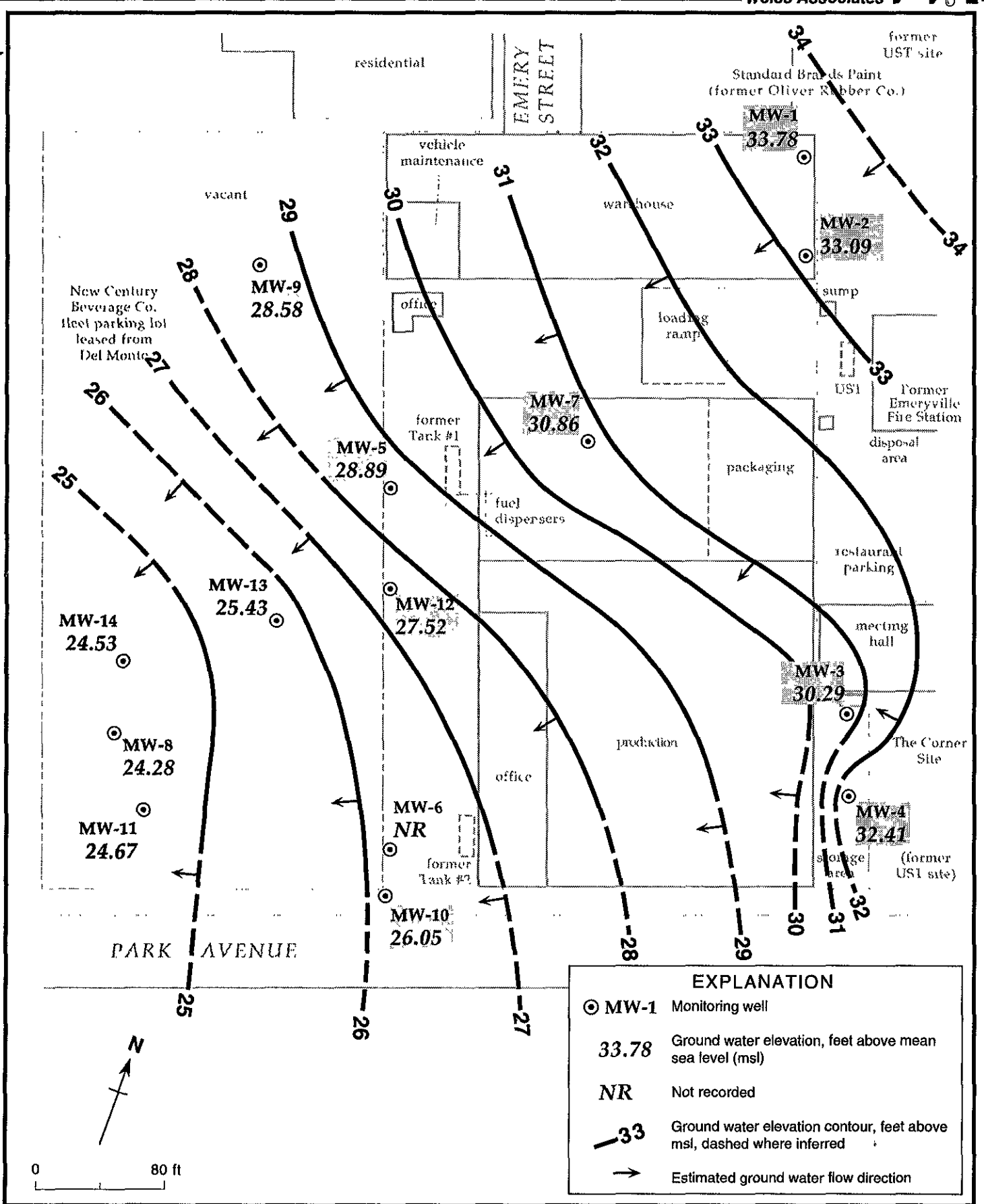


Figure 2. Ground Water Elevation Contours and Estimated Flow Direction - March 27, 1996 - New Century Beverage Company, 1150 Park Avenue, Emeryville, California

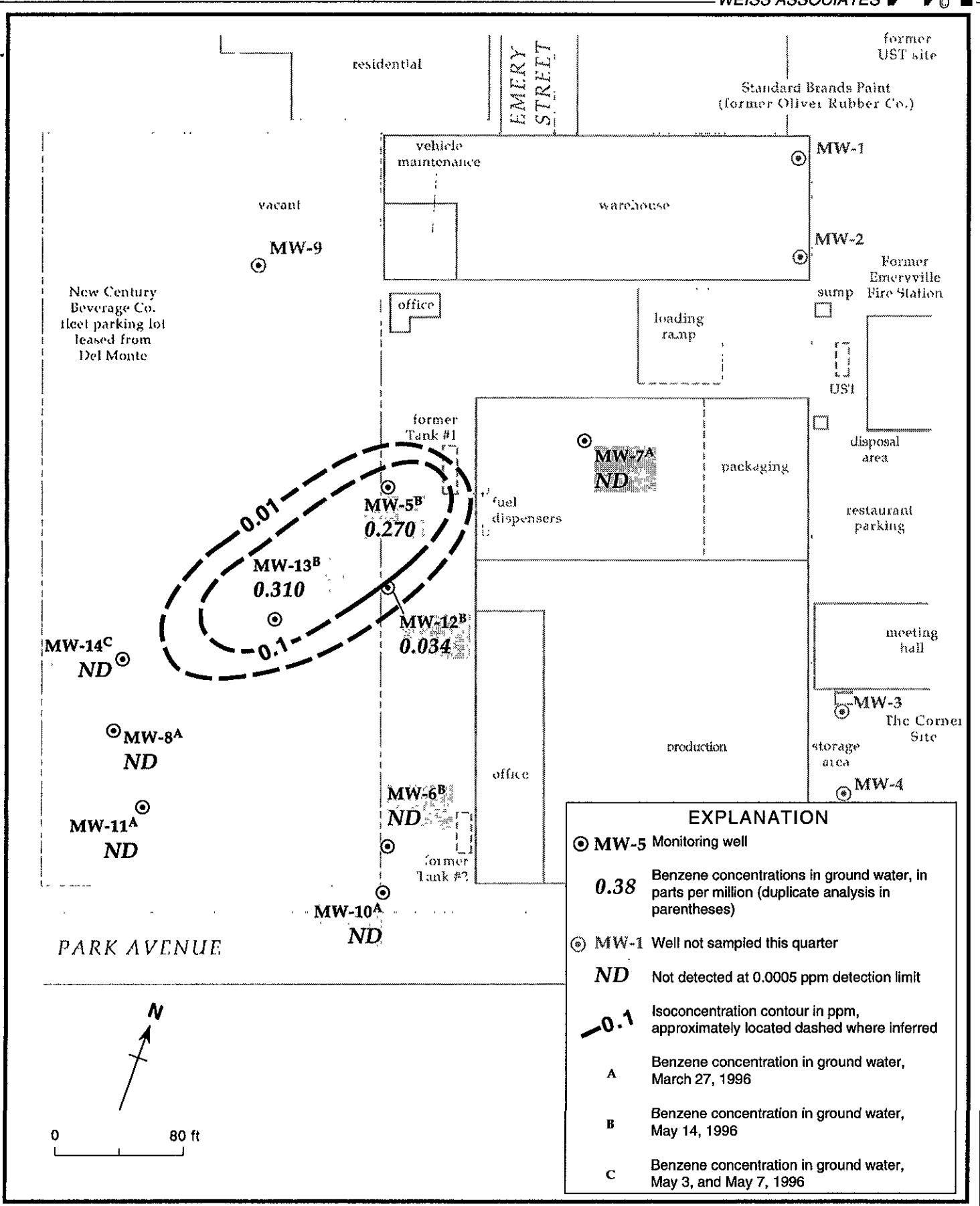


Figure 3. Benzene Isoconcentration Contours in Ground Water - March and May, 1996 - New Century Beverage Company, 1150 Park Avenue, Emeryville, California

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
	12/20/95		5.94	32.80
	03/27/96		4.96	33.78
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
	12/20/95		6.81	32.06
	03/27/96		5.78	33.09
MW-3	03/29/94	40.79	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
	12/20/95		10.65	30.14
	03/27/96		10.50	30.29
	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	
12/20/95		8.05	32.10	
03/27/96		7.74	32.41	

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-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
	12/20/95		9.02	27.47
	03/27/96		7.60	28.89
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
	12/20/95 ^a		---	---
	03/27/96 ^b		9.01	---
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
	12/20/95		7.10	30.43
	03/27/96		6.67	30.86
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

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-8 (cont.)	06/27/95		9.64	23.47
	09/21/95		9.83	23.28
	12/20/95		8.80	24.31
	03/27/96		8.83	24.28
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
	12/20/95		7.73	28.33
	03/27/96		7.48	28.58
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
	12/20/95		8.88	26.15
	03/27/96		8.98	26.05
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
	12/20/95		8.81	23.93
	03/27/96		8.07	24.67
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
	12/20/95		8.19	27.99
	03/27/96		8.66	27.52
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
	12/20/95		10.20	24.45
	03/27/96		9.22	25.43

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-14	06/27/95	33.68	9.88	23.80
	09/21/95		10.07	23.61
	12/20/95		9.02	24.66
	03/27/96		9.15	24.53

Notes:

¹ Resurveyed 3/13/95.

^a Well MW-6 damaged by excavation, therefore no water level was taken at MW-6 on 12/20/95.

^b Well MW-6 was repaired 1/5/96. Well MW-6 top-of-casing elevation will be resurveyed during 5/96. No ground water elevation calculated at well on 3/27/96.

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
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	---
	06/01/94	---	ND	---	---	---	---	---	---	0.005 1,2-DCB	---
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 ⁱ	ND	---	---	---	---
	12/20/95	0.86	6.10 ^e	0.28	0.003	0.039	0.0059	---	---	---	---
	03/27/96	1.6 ^e	7.5 ^e	0.38	0.0008	0.0017	0.031	---	---	---	---
	05/22/96 ^a	---	---	0.270	0.0045	0.0026	0.010	---	---	---	---
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 (---	---	---	---	---	---	---	---
	02/28/95	---	0.78 (	ND	ND	ND	ND	---	---	---	---
	06/27/95	ND	0.51 (	ND	ND	ND	ND	---	---	---	ND
	09/21/95	---	0.96 ^{g,h}	ND	ND	ND	ND	---	---	---	---
	12/20/95 ^k	---	---	---	---	---	---	---	---	---	---
	03/27/96	---	1.5 ^{g,h}	0.0009	ND	ND	ND	---	---	---	---
	05/22/96 ^a	---	---	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-7	03/29/94	0.16	ND (1)	ND	ND	ND	ND	ND	ND	ND	ND	---
dup	03/29/94	ND	ND (1)	ND	ND	ND	ND	ND	ND	ND	ND	---
	05/20/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
split ^a	05/20/94	ND	ND	ND	ND	ND	ND	ND (0.0005)	ND (0.0005)	ND	ND	---
dup	05/20/94	ND	^b	ND	ND	ND	ND	ND	ND	ND	ND	---
	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 ^d	ND	ND	ND	ND	---	---	---	---	ND
	12/20/95	ND	ND	ND	ND	ND	ND	---	---	---	---	---
	03/27/96	ND	ND	ND	ND	ND	ND	---	---	---	---	ND
MW-8	04/05/94	ND	ND (1)	ND	ND	ND	ND	ND	ND	ND	ND	---
split ^a	04/05/94	ND(0.01)	ND (1)	ND(0.0003)	0.0004	ND(0.0003)	ND(0.0003)	ND	ND	ND	ND	---
	05/20/94	ND	ND ^c	ND	ND	ND	ND	ND	ND	ND	ND	---
	10/20/94	ND	ND	ND	ND	ND	ND	---	---	---	---	---
split ^c	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	---	---	---	---	---
	12/20/95	ND	ND	ND	ND	ND	ND	---	---	---	---	---
	03/27/96	ND	ND	ND	ND	ND	ND	---	---	---	---	---
MW-9	04/05/94	ND	ND (1)	ND	ND	ND	ND	ND	ND	ND	ND	---
	05/20/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
MW-10	10/20/94	ND	ND	ND	ND	ND	ND	---	---	---	---	---
split ^c	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	---	---	---	---	---
	12/20/95	ND	ND	ND	ND	ND	ND	---	---	---	---	---
	03/27/96	---	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	parts per million (mg/L)								MTBE	
			TEH	Benzene	Toluene	Ethyl- benzene	Xylenes	1,2-DCA	PCE	Other HVOCs		
MW-11 split ^d	10/20/94	ND	ND	ND	ND	ND	ND	ND	---	---	---	---
	10/20/94	ND	ND	ND(0.0003)	ND(0.0003)	ND(0.0003)	ND	ND	---	---	---	---
	02/28/95	ND	ND	ND	ND	ND	ND	ND	---	---	---	---
	06/27/95	ND	ND	ND	ND	ND	ND	ND	---	---	---	ND
	09/21/95	ND	0.10 ^{g,i}	ND	ND	ND	ND	ND	---	---	---	---
	12/20/95	ND	ND	ND	ND	ND	ND	ND	---	---	---	---
	03/27/96	ND	ND	ND	ND	ND	ND	ND	---	---	---	---
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 (	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	0.14 ^{g,i}	0.0015	ND	ND	ND	---	---	---	---	---
	12/20/95	2.8	0.61 ^{g,i}	0.420	0.018	0.170	0.500	---	---	---	---	---
	03/27/96	0.5 ^g	0.38 ^g	0.05	0.0009	0.018	0.0051	---	---	---	---	---
	05/22/96 ^e	---	---	0.034	ND	0.013	0.0051	---	---	---	---	---
MW-13 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	0.01	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	0.34 ^{g,i}	1.1	0.0034	0.15	0.123	---	---	---	---	---
	09/21/95	3.7	0.40 ^{g,i}	1.1	0.008	0.13	0.158	---	---	---	---	---
	12/20/95	4.5	0.15 ^g	1.7	0.012	0.16	0.273	---	---	---	---	---
	12/20/95	3.5	0.59 ^{g,i}	1.2	0.013	0.086	0.258	---	---	---	---	---
	03/27/96	4.8 ^g	0.23 ^g	0.98	0.0041	0.12	0.16	---	---	---	---	---
	03/27/96	4.3 ^g	0.39 ^g	1.1	0.0031	0.13	0.13	---	---	---	---	---
05/22/96 ^e	---	---	0.310	0.0011	0.039	0.016	---	---	---	---	---	
MW-14	06/27/95	ND	ND	ND	ND	ND	ND	---	---	---	---	ND
	09/21/95	ND	ND	ND	ND	ND	ND	---	---	---	---	---
	12/20/95	ND	0.120 ^g	ND	ND	ND	ND	---	---	---	---	---
	03/27/96	ND	ND	0.0029	ND	ND	ND	---	---	---	---	---
	05/03/96 ^e	---	---	ND	ND	ND	ND	---	---	---	---	---
	05/07/96 ^e	---	---	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
Travel Blank	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	---	---	---	---
	split ^d 10/20/94	ND	---	ND(0.0003)	ND(0.0003)	ND(0.0003)	ND	---	---	---	---
	split ^e 10/20/94	ND	---	ND	ND	ND	ND	---	---	---	---
	03/27/96 ^m	---	---	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)	0.0005	0.0005	0.0005	0.0005	0.001	0.001	0.001-0.02	0.002
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
- k. Well MW-6 damaged by excavation. Not sampled 12/20/95. Repaired 1/5/96.
- l. Sample exhibits single unknown peak or peaks.
- m. Sample analyzed after expiration of holding time.
- n. Analyses performed by Superior Analytical Laboratory, Martinez, California
- o. Analyses performed by Sequoia Analytical, Walnut Creek, California

ATTACHMENT A

**LABORATORY ANALYTIC REPORTS AND CHAIN-OF-CUSTODY FORMS
MARCH 27, 1996, MAY 3, 1996 AND MAY 7, 1996**



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

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

A N A L Y T I C A L R E P O R T

Prepared for:

Weiss Associates
5500 Shellmound Street
Emeryville, CA 94608

Date: 11-APR-96
Lab Job Number: 124994
Project ID: 14-0307-19
Location: N/A

Reviewed by: Damara Moore

Reviewed by: 

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Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 125164
CLIENT: Weiss Associates
PROJECT ID: 14-0307-19

DATE SAMPLED: 03/27/96
DATE RECEIVED: 03/29/96

CASE NARRATIVE

This analytical set consisted of eleven water samples. The samples were received at Curtis & Tompkins Laboratory on 03/29/96 in good order. The following problem was encountered with this data set:

Sample 1Q307-16 (124994-011) was put on hold per the chain-of-custody request upon receipt at Curtis and Tompkins Laboratory. It was to be analyzed for BTXE if, and only if, any BTXE compounds were found in samples 1Q307-07 (124994-003) 1Q307-08 (124994-004) or 1Q307-14 (124994-010).

On 04/04/96, Curtis & Tompkins - Irvine faxed the results for the above-referenced data to Curtis & Tompkins - Berkeley. The results for this were faxed in a timely manner to Weiss Associates on the designated due-date of Friday afternoon, 04/05/96. On Monday morning, 04/08/96, the project manager for Curtis & Tompkins Laboratory - Berkeley handling the Weiss samples left a message with Jim Ponton confirming sample 124994-011 was to be analyzed for BTXE. That afternoon, Mr. Ponton verified his C-O-C request. The sample was taken off hold and logged into the computer system to be analyzed for BTXE by EPA 8020, and the appropriate paperwork was distributed to the analyst.

Per Jim Ponton's request, the sample was logged in for standard turnaround time, with the understanding that it would be analyzed within hold times. Apparently, either due to computer malfunction or due to human error in logging the sample in, the sample was not correctly in the computer system. The analyst had paperwork which correctly stated to analyze the sample and that there were hold time issues involved. However, without it also being in the computer system, the usual tracking mechanisms used in conjunction with paperwork by both project managers and analysts were not in place.

The login error was noticed by the project manager on the morning of 04/11/96. As Jim Ponton was not available, Joyce Adams of Weiss Associates was notified of the hold time issue. The sample was analyzed on 04/12/96,

Curtis & Tompkins deeply regrets the errors involved with this data set.



Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 124994
CLIENT: WEISS ASSOCIATES
PROJECT#: 14-0307-19

DATE SAMPLED: 03/27/96
DATE RECEIVED: 03/29/96
DATE ANALYZED: 04/08/96
DATE REPORTED: 04/10/96

=====
ANALYSIS: METHYL TERT-BUTYL ETHER (MTBE)
ANALYSIS METHOD: EPA 8020
=====

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
124994-003	1Q307-07 <i>MW-7</i>	ND	ug/L	0.5
METHOD BLANK		ND	ug/L	0.5

ND = Not detected at or above reporting limit.



LABORATORY NUMBER: 124994
CLIENT: WEISS ASSOCIATES
PROJECT ID: 14-0307-19

DATE SAMPLED: 03/27/96
DATE RECEIVED: 03/29/96
DATE ANALYZED: 04/02-03/96
DATE REPORTED: 04/08/96
BATCH NO:11152

Total Volatile Hydrocarbons as Gasoline in Aqueous Solutions
California DOHS Method

LAB ID	CLIENT ID	TVH AS GASOLINE (ug/L)	REPORTING LIMIT (ug/L)	SURROGATE RECOVERIES
124994-001	1Q307-05 MW-5	1,600 Y	50	98
124994-003	1Q307-07 MW-7	ND	50	108
124994-004	1Q307-08 MW-8	ND	50	102
124994-006	1Q307-11 MW-11	ND	50	121
124994-007	1Q307-12 MW-12	500 Y	50	112
124994-008	1Q307-13 MW-13	4,800 Y	50	91
124994-009	1Q307-15 MW-13 duplicate	4,300 Y	250	91
124994-010	1Q307-14 MW-14	ND	50	104
METHOD BLANK		ND	50	104

Y = Sample does not resemble the standard gas fuel pattern.

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: BS/BSD

RPD, %	6
RECOVERY, %	107



LABORATORY NUMBER: 124994
 CLIENT: WEISS ASSOCIATES
 PROJECT ID: 14-0307-19

DATE SAMPLED: 03/27/96
 DATE RECEIVED: 03/29/96
 DATE ANALYZED: 04/02-03/96
 DATE REPORTED: 04/08/96

Benzene, Toluene, Ethyl Benzene, Xylenes by EPA 8020
 Extraction by EPA 5030 Purge and Trap

LAB ID	CLIENT ID	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)	REPORTIN LIMIT (ug/L)	SURROGATE RECOVERIES
124994-001	1Q307-05	* 380	0.8	1.7	31	0.5	104
124994-002	1Q307-06	0.9	ND	ND	ND	0.5	111
124994-003	1Q307-07	ND	ND	ND	ND	0.5	113
124994-004	1Q307-08	ND	ND	ND	ND	0.5	117
124994-005	1Q307-10	ND	ND	ND	ND	0.5	116
124994-006	1Q307-11	ND	ND	ND	ND	0.5	118
124994-007	1Q307-12	50	0.9	18	5.1	0.5	110
124994-008	1Q307-13	** 980	4.1	120	160	0.5	105
124994-009	1Q307-15	** 1,100	3.1	130	130	0.5	105
124994-010	1Q307-14	2.9	ND	ND	ND	0.5	112
METHOD BLANK		ND	ND	ND	ND	0.5	114

ND = Not detected at or above reporting limit.

Reporting Limit applies to all analytes.

* = Analyzed at a 1:2 dilution on 04/03/96.

** = Analyzed at a 1:5 dilution on 04/03/96.

QA/QC SUMMARY: BS/BSD

=====
 RPD, % 2
 RECOVERY, % 97
 =====



TEH-Tot Ext Hydrocarbons

Client: Weiss Associates
Project#: 14-0307-19Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
124994-001	1Q307-05	26787	03/27/96	04/02/96	04/04/96	
124994-002	1Q307-06	26787	03/27/96	04/02/96	04/04/96	
124994-003	1Q307-07	26787	03/27/96	04/02/96	04/04/96	
124994-004	1Q307-08	26787	03/27/96	04/02/96	04/04/96	

Analyte	Units	124994-001	124994-002	124994-003	124994-004
Diln Fac:		1	1	1	1
Diesel Range	ug/L	7500 Y	1500 YH	<50	<50
Surrogate					
Hexacosane	%REC	100	98	102	100

Y: Sample exhibits fuel pattern which does not resemble standard

H: Heavier hydrocarbons than indicated standard



TEH-Tot Ext Hydrocarbons

Client: Weiss Associates
Project#: 14-0307-19

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
124994-005	1Q307-10	26787	03/27/96	04/02/96	04/04/96	
124994-006	1Q307-11	26787	03/27/96	04/02/96	04/04/96	
124994-007	1Q307-12	26787	03/27/96	04/02/96	04/04/96	
124994-008	1Q307-13	26787	03/27/96	04/02/96	04/04/96	

Analyte	Units	124994-005	124994-006	124994-007	124994-008
Diln Fac:		1	1	1	1
Diesel Range	ug/L	<50	<50	380 Y	230 Y
Surrogate					
Hexacosane	%REC	100	103	94	103

Y: Sample exhibits fuel pattern which does not resemble standard

H: Heavier hydrocarbons than indicated standard



TEH-Tot Ext Hydrocarbons

Client: Weiss Associates
Project#: 14-0307-19

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

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
124994-009	1Q307-15	26787	03/27/96	04/02/96	04/04/96	
124994-010	1Q307-14	26787	03/27/96	04/02/96	04/04/96	

Analyte	Units	124994-009	124994-010
Diln Fac:		1	1
Diesel Range	ug/L	390 Y	<50
Surrogate			
Hexacosane	%REC	98	94

Y: Sample exhibits fuel pattern which does not resemble standard

H: Heavier hydrocarbons than indicated standard



Lab #: 124994

BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Weiss Associates
Project#: 14-0307-19

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

METHOD BLANK

Matrix: Water
Batch#: 26787
Units: ug/L
Diln Fac: 1

Prep Date: 04/02/96
Analysis Date: 04/04/96

MB Lab ID: QC18479

Analyte	Result		
Diesel Range	<50		
Surrogate	%Rec	Recovery Limits	
Hexacosane	98	60-140	



Lab #: 124994

BATCH QC REPORT

Page 1 of 1

TEH-Tot Ext Hydrocarbons

Client: Weiss Associates
Project#: 14-0307-19Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 26787
Units: ug/L
Diln Fac: 1Prep Date: 04/02/96
Analysis Date: 04/04/96

BS Lab ID: QC18480

Analyte	Spike Added	BS	%Rec #	Limits
Diesel Range	2475	2663	108	60-140
Surrogate	%Rec	Limits		
Hexacosane	102	60-140		

BSD Lab ID: QC18481

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel Range	2475	2794	113	60-140	5	<35
Surrogate	%Rec	Limits				
Hexacosane	101	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

WA Weiss Associates
 Environmental and Geologic Services
 5500 Shellmound Street, Emeryville, CA 94608
 Phone: 510-450-6000 Fax: 510-547-5043
 AguaTierra Associates Incorporated, DBA

1249

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

Jim Ponton

Project ID: 14-0307-19

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: Shila Garrett/Paul Cardoza

Laboratory Name: Curtis Tompkins

No. of Containers	Sample ID	Container Type ¹	Sample Date	Vol ²	Fil ³	Ref ⁴	Preservative (specify)	Analyze for	Analytic Method	Turn ⁵	COMMENTS
1	3 1Q307-05	W/V	3/27/96	40ml	N	Y	HCL	TVH-G/BTEX	Luft/8020	N	
	1 1Q307-05	W/A		1l			NONE	TEH-D	Luft		
2	3 1Q307-06	W/V		40ml			HCL	BTEX	Luft/8020		
	1 ↓	W/A		1l			NONE	TEH-D	Luft		
3	3 1Q307-07	W/V		40ml			HCL	TVH-G/BTEX/MTBE	Luft/8020		
	1 ↓	W/A		1l			NONE	TEH-D	Luft		
4	3 1Q307-08	W/V		40ml			HCL	TVH-G/BTEX	Luft/8020		
	1 ↓	W/A		1l			NONE	TEH-D	Luft		
5	3 1Q307-10	W/V		40ml			HCL	BTEX	Luft/8020		
	1 ↓	W/A		1l			NONE	TEH-D	Luft		
6	3 1Q307-11	W/V		40ml			HCL	TVH-G/BTEX	Luft/8020		
	1 1Q307-11	W/A		1l			NONE	TEH-D	Luft		
7	3 1Q307-12	W/V	3/28/96	40ml	↓	↓	HCL	TVH-G/BTEX	Luft/8020	↓	

1 Paul Cardoza 3/28/96
 Released by (Signature), Date

1 Weiss Associates
 Affiliation

Shila Garrett 3/29/96
 Received by (Signature), Date

2 Weiss
 Affiliation

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; A = Amber
 Cap Codes: PT = Plastic, Teflon Lined 2 = Volume per container; 3 = Filtered YY(N); 4 = Refrigerated (Y/N)

5 Turnaround [N = Normal, W = 1 Week, R = 24 Hour, HOLD (write out)]
 OFFICE FOR MERCHANT.DOC

3 Shila Garrett 3/29/96
 Released by (Signature), Date

3 Weiss
 Affiliation

4 _____
 Shipping Carrier, Method, Date

4 _____
 Affiliation, Telephone

5 _____
 Released by (Signature), Date

5 _____
 Affiliation

6 Shila Garrett 3-29-96 11:35
 Received by Lab Personnel, Date Seal intact?

6 CAT
 Affiliation, Telephone

sealed overnight

WA Weiss Associates
 Environmental and Geologic Services
 5500 Shellmound Street, Emeryville, CA 94608
 Phone: 510-450-6000 Fax: 510-547-5043
 AguaTierra Associates Incorporated, DBA

(L44004)

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

Jim Ponton

Project ID: 14-0307-19

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: Sheila Garrett / Paul Cardoza

Laboratory Name: Cortis + Tompkins

No. of Containers	Sample ID	Container Type ¹	Sample Date	Vol ²	Fil ³	Ref ⁴	Preservative (specify)	Analyze for	Analytic Method	Turn ⁵	COMMENTS
1	1Q307-12	W/A	3/27/96	1L	N	Y	NONE	TEH-D	Luft	N	
3	1Q307-13	W/V		40ml			HCL	TVH-G/BTEX	Luft/8020		
1	↓	W/A		1L			NONE	TEH-D	Luft		
3	1Q307-15	W/V		40ml			HCL	TVH-G/BTEX	Luft/8020		
1	↓	W/A		1L			NONE	TEH-D	Luft		
3	1Q307-14	W/V		40ml			HCL	TVH-G/BTEX	Luft/8020		
1	↓	W/A		1L			NONE	TEH-D	Luft		
3	1Q307-16	W/V		40ml			HCL	BTEX	Luft/8020	HOLD	HOLD! Analyze for BTEX only if BTEX is detected in no. 307-07, 307-08 or 307-14

1 Paul Cardoza 3/24/96 11:55
 Released by (Signature), Date
 1 Weiss Associates
 Affiliation
 2 Jim Ponton 3/29/96 11:00
 Received by (Signature), Date
 2 Weiss
 Affiliation

3 Jim Ponton 3/29/96 11:35
 Released by (Signature), Date
 3 Weiss
 Affiliation
 4 _____
 Shipping Carrier, Method, Date
 4 _____
 Affiliation

5 _____
 Released by (Signature), Date
 5 _____
 Affiliation
 6 Jim Ponton 3-29-96 11:35
 Received by Lab Personnel, Date Seal intact?
 6 Cortis
 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; A = Amber
 Cap Codes: PT = Plastic, Teflon Lined 2 = Volume per container; 3 = Filtered YY/N; 4 = Refrigerated (Y/N)
 5 Turnaround [N = Normal, W = 1 Week, R = 24 Hour, HOLD (write out)]

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

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

A N A L Y T I C A L R E P O R T

Prepared for:

Weiss Associates
5500 Shellmound Street
Emeryville, CA 94608

Date: 15-APR-96
Lab Job Number: 125164
Project ID: 14-0307-19
Location: N/A


Reviewed by: _____

Reviewed by: _____

Damara Moore

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LABORATORY NUMBER: 125164
CLIENT: Weiss Associates
PROJECT ID: 14-0307-19

 Curtis & Tompkins, Ltd.
DATE SAMPLED: 03/27/96
DATE RECEIVED: 03/29/96

CASE NARRATIVE

This analytical set consisted of eleven water samples. The samples were received at Curtis & Tompkins Laboratory on 03/29/96 in good order. The following problem was encountered with this data set:

Sample 1Q307-16 (^{travel blank}124994-011) was put on hold per the chain-of-custody request upon receipt at Curtis and Tompkins Laboratory. It was to be analyzed for BTXE if, and only if, any BTXE compounds were found in samples 1Q307-07 (124994-003), 1Q307-08 (124994-004) or 1Q307-14 (124994-010).

On 04/04/96, Curtis & Tompkins - Irvine faxed the results for the above-referenced data to Curtis & Tompkins - Berkeley. The results for this were faxed in a timely manner to Weiss Associates on the designated due-date of Friday afternoon, 04/05/96. On Monday morning, 04/08/96, the project manager for Curtis & Tompkins Laboratory - Berkeley handling the Weiss samples left a message with Jim Ponton confirming sample 124994-011 was to be run for BTXE. That afternoon, Mr. Ponton verified his C-O-C request. The sample was taken off hold and logged into the computer system to be analyzed for BTXE by EPA 8020, and the appropriate paperwork was distributed to the analyst.

Per Jim Ponton's request, the sample was logged in for standard turnaround time, with the understanding that it would be analyzed within hold times. Apparently, either due to computer malfunction or due to human error in logging the sample in, the sample was not in the computer system. The analyst had paperwork which correctly stated to analyze the sample, and that there were hold-time issues involved. However, without it also being in the computer system, the usual tracking mechanisms used in conjunction with paperwork by both project managers and analysts were not in place.

The login error was noticed by the project manager on the morning of 04/11/96. As Jim Ponton was not available, Joyce Adams of Weiss Associates was notified of the hold time issue. The sample was analyzed on 04/12/96, past hold.

Curtis & Tompkins deeply regrets the errors involved with this data set.



BTXE

Client: Weiss Associates
Project#: 14-0307-19

Analysis Method: EPA 8020
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
125164-001	1Q307-16	<i>Travel Blank</i> 26964	03/27/96	04/12/96	04/12/96	

Analyte	Units	125164-001
Diln Fac:		1
Benzene	ug/L	<0.5
Toluene	ug/L	<0.5
Ethylbenzene	ug/L	<0.5
m,p-Xylenes	ug/L	<0.5
o-Xylene	ug/L	<0.5
Surrogate		
Trifluorotoluene	%REC	92
Bromobenzene	%REC	98



Lab #: 125164

BATCH QC REPORT

Page 1 of 1

BTXE			
Client: Weiss Associates	Analysis Method: EPA 8020		
Project#: 14-0307-19	Prep Method: EPA 5030		
METHOD BLANK			
Matrix: Water	Prep Date: 04/12/96		
Batch#: 26964	Analysis Date: 04/12/96		
Units: ug/L			
Diln Fac: 1			

MB Lab ID: QC19148

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	94	58-130	
Bromobenzene	91	62-131	



Lab #: 125164

BATCH QC REPORT

Page 1 of 1

BTXE			
Client: Weiss Associates	Analysis Method: EPA 8020		
Project#: 14-0307-19	Prep Method: EPA 5030		
LABORATORY CONTROL SAMPLE			
Matrix: Water	Prep Date:	04/12/96	
Batch#: 26964	Analysis Date:	04/12/96	
Units: ug/L			
Diln Fac: 1			

LCS Lab ID: QC19150

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	22.8	20	114	80-120
Toluene	22.2	20	111	80-120
Ethylbenzene	22.2	20	111	80-120
m,p-Xylenes	41.3	40	103	80-120
o-Xylene	22.7	20	114	80-120
Surrogate	%Rec	Limits		
Trifluorotoluene	94	58-130		
Bromobenzene	91	62-131		

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 #: 125164

BATCH QC REPORT

Page 1 of 1

BTXE			
Client: Weiss Associates	Analysis Method: EPA 8020		
Project#: 14-0307-19	Prep Method: EPA 5030		
MATRIX SPIKE/MATRIX SPIKE DUPLICATE			
Field ID: ZZZZZZ	Sample Date:	04/03/96	
Lab ID: 125064-001	Received Date:	04/03/96	
Matrix: Water	Prep Date:	04/12/96	
Batch#: 26964	Analysis Date:	04/12/96	
Units: ug/L			
Diln Fac: 1			

MS Lab ID: QC19151

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Benzene	20	<0.5000	19.7	105	75-125
Toluene	20	<0.5000	23.2	116	75-125
Ethylbenzene	20	<0.5000	20.9	105	75-125
m,p-Xylenes	40	<0.5000	42.2	106	75-125
o-Xylene	20	<0.5000	22.4	112	75-125
Surrogate	%Rec	Limits			
Trifluorotoluene	93	58-130			
Bromobenzene	91	62-131			

MSD Lab ID: QC19152

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Benzene	20	22.8	114	75-125	0	<20
Toluene	20	23.9	120	75-125	0	<20
Ethylbenzene	20	22.4	112	75-125	0	<20
m,p-Xylenes	40	44.9	112	75-125	0	<20
o-Xylene	20	23.6	118	75-125	0	<20
Surrogate	%Rec	Limits				
Trifluorotoluene	0	58-130				
Bromobenzene	0	62-131				

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

CURTIS & TOMPKINS, LTD. BERKELEY

LOGIN CHANGE FORM

Reason for change: Client Request: By: Jim Ponton Date/Time: 4-8-96 Initials: DLM
 Login Review Data Review

Current Lab ID	Previous Lab ID	Client ID	Matrix	Add/Cancel	Analysis	Due date
124994-011		10307-16	H ₂ O	+	BTXE	4-15-96
125164-1	124994-11					



Weiss Associates
Environmental and Geologic Services
5500 Shellmound Street, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

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

Jim Ponton
Project ID: 14-0307-19

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: Sheila Garrett/Paul Cardoza

Laboratory Name: Curtis + Tompkins

No. of Containers	Sample ID	Container Type ¹	Sample Date	Vol ²	Fil ³	Ref ⁴	Preservative (specify)	Analyze for	Analytic Method	Turn ⁵	COMMENTS
1	10307-12	W/A	3/27/96	1L	N	Y	NONE	TEH-D	Luft	N	
3	10307-13	W/V		40ml			HCL	TVH-G/BTEX	Luft/8020		
1	↓	W/A		1L			NONE	TEH-D	Luft		
3	10307-15	W/V		40ml			HCL	TVH-G/BTEX	Luft/8020		
1	↓	W/A		1L			NONE	TEH-D	Luft		
3	10307-14	W/V		40ml			HCL	TVH-G/BTEX	Luft/8020		
1	↓	W/A		1L			NONE	TEH-D	Luft		
3	10307-16	W/V		40ml			HCL	BTEX	Luft/8020	HOLD	HOLD! Analyze for BTEX only if BTEX is detected in no. 307-07, 307-08 or 307-14

1 <u>Paul Cardoza</u> 3/28/96 18155 Released by (Signature), Date	3 <u>Jim Ponton</u> 3/29/96 1135 Released by (Signature), Date	5 _____ Released by (Signature), Date
1 <u>Weiss Associates</u> Affiliation	3 <u>Weiss</u> Affiliation	5 _____ Affiliation
2 <u>Jim Ponton</u> 3/29/96 1100 Received by (Signature), Date	4 _____ Shipping Carrier, Method, Date	6 <u>3-29-96 11:35</u> Received by Lab Personnel, Date
2 <u>Weiss</u> Affiliation	4 _____ Affiliation	6 <u>CJT</u> 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; A = Amber
Cap Codes: PT = Plastic, Teflon Lined 2 = Volume per container; 3 = Filtered YY(N); 4 = Refrigerated (Y/N)
5 Turnaround [N = Normal, W = 1 Week, R = 24 Hour, HOLD (write out)]

K:\OFFICE\FORMS\CHAINOC.DOC



Superior

Analytical Laboratory

Weiss Associates
5500 Shellmound. Suite 100
Emeryville, CA 94608

Date: May 7, 1996

Attn: JIM PONTON

Laboratory Number : 21297

Project Number/Name : 14-0307-19

This report has been reviewed and
approved for release.


Project Manager

Customer Service: (800) 521-6109 • Laboratory: (510) 313-0850 • Facsimile: (510) 229-0916
Post Office Box 2648 • 835 Arnold Drive • Suite #106 • Martinez, California 94553
1555 Burke Street • Suite A • San Francisco, California 94124



Superior

Analytical Laboratory

Miss Associates
In: JIM PONTON

Project 14-0307-19
Reported on May 7, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Chronology

Laboratory Number 21297

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
1Q2307-14 <i>MW-14</i>	05/03/96	05/03/96	05/06/96	05/06/96	CE061.05	01

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CE061.05-02	Laboratory Spike	LS	Water	05/06/96	05/06/96
CE061.05-06	1Q2307-14	MS 21297-01	Water	05/06/96	05/06/96
CE061.05-07	1Q2307-14	MSD 21297-01	Water	05/06/96	05/06/96
CE061.05-01	Method Blank	MB	Water	05/06/96	05/06/96



Superior

Analytical Laboratory

Asst. ...
PONTON

Project 14-0307-19
Reported on May 7, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

LAB ID	Sample ID	Matrix	Dil. Factor	Moisture
21297-01	1Q2307-14 <i>MW-11</i>	Water	1.0	-

RESULTS OF ANALYSIS

Compound	21297-01 Conc. RL ug/L
----------	------------------------------

Benzene	ND 0.5
Toluene	ND 0.5
Ethyl Benzene	ND 0.5
Xylenes	ND 0.5

>> Surrogate Recoveries (%) <<
Trifluorotoluene (SS) 105



Superior

Analytical Laboratory

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 21297

Method Blank(s)

CE061.05-01

Conc. RL

ug/L

benzene	ND	0.5
toluene	ND	0.5
ethyl Benzene	ND	0.5
xlenes	ND	0.5

Surrogate Recoveries (%) <<
trifluorotoluene (SS) 105



Superior

Analytical Laboratory

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 21297

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
----------	--------------	-----------	------------	------------	----------	-------

For Water Matrix (ug/L)
 CE061.05 02 / - Laboratory Control Spikes

Benzene		20	20	100	65-125	
Toluene		20	20	100	65-125	
Ethyl Benzene		20	20	100	65-125	
Xylenes		60	58	97	65-125	

>> Surrogate Recoveries (%) <<

Trifluorotoluene (SS)				106	50-150	
-----------------------	--	--	--	-----	--------	--

For Water Matrix (ug/L)
 CE061.05 06 / 07 - Sample Spiked: 21297 - 01

Benzene	ND	20	22/22	110/110	65-125	0
Toluene	ND	20	22/21	110/105	65-125	5
Ethyl Benzene	ND	20	22/21	110/105	65-125	5
Xylenes	ND	60	64/63	107/105	65-125	2

>> Surrogate Recoveries (%) <<

Trifluorotoluene (SS)				104/104	50-150	
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Definitions:

ND = Not Detected
 RL = Reporting Limit
 NA = Not Analysed
 RPD = Relative Percent Difference
 ug/L = parts per billion (ppb)
 mg/L = parts per million (ppm)

ug/kg = parts per billion (ppb)
 mg/kg = parts per million (ppm)

WA Weiss Associates
 Environmental and Geologic Services
 5500 Shellmound Street, Emeryville, CA 94608
 Phone: 510-450-6000 Fax: 510-547-5043
 AguaTierra Associates Incorporated, DBA

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

Jim Ponton
 Project ID: 14-0307-19

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.

21297

CHAIN-OF-CUSTODY RECORD AND ANALYTIC INSTRUCTIONS

Sampled by: Sheila Garrett

Laboratory Name: Superior

No. of Containers	Sample ID	Container Type ¹	Sample Date	Vol ²	Fil ³	Ref ⁴	Preservative (specify)	Analyze for	Analytic Method	Turn ⁵	COMMENTS
3	1Q2307-14	w/v	5/3/96	40ml	N	Y	HCL	BTEX	8020	48hr.	
3	1Q2307-16	w/v	↓	↓	↓	↓	↓	↓	↓	↓	Analyze for BTEX only if BTEX is detected in 1Q2307-14

Please Initial: RF

Samples Stored in ice: yes

Appropriate containers: yes

Samples preserved: yes

VOA's without headspace: yes

Comments: T = 2.5°C

1 Sheila Garrett 5/3/96
 Released by (Signature), Date

1 Weiss Assoc. 1145
 Affiliation

2 Referrals 5/3/96
 Received by (Signature), Date

2 Superior 2:25
 Affiliation

3 Referrals 5/3/96
 Released by (Signature), Date

3 SAL 3:00
 Affiliation

4 _____
 Shipping Carrier, Method, Date

4 _____
 Affiliation

5 _____
 Released by (Signature), Date

5 _____
 Affiliation

6 Referrals 5/3/96
 Received by Lab Personnel, Date

6 SAL 3:00
 Affiliation, Telephone

Seal intact? X

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 YY/N; 4 = Refrigerated (Y/N)
 5 Turnaround [N = Normal, W = 1 Week, R = 24 Hour, HOLD (write out)]



Sequoia Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
 404 N Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
 819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Weiss Associates
 5500 Shellmound
 Emeryville, CA 94608
 Attention: Jim Ponton

Client Project ID: #14-0307-19
 Sample Matrix: Water
 Analysis Method: EPA 5030/8015 Mod./8020
 First Sample #: 605-0489

Sampled: May 7, 1996
 Received: May 8, 1996
 Reported: May 9, 1996

QC Batch Number: GC050896
 802009A

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 605-0489 1Q3307-14
Purgeable Hydrocarbons	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Total Xylenes	0.50	N.D.
Chromatogram Pattern:	--	

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Analyzed:	5/8/96
Instrument Identification:	HP-9
Surrogate Recovery, %: (QC Limits = 70-130%)	113

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
 Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Jim Bava
 Project Manager





Weiss Associates
5500 Shellmound
Emeryville, CA 94608
Attention: Jim Ponton

Client Project ID: #14-0307-19
Matrix: Liquid

QC Sample Group: 6050489

Reported: May 9, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC050896	GC050896	GC050896	GC050896
	802009A	802009A	802009A	802009A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	L. Huang	L. Huang	L. Huang	L. Huang
MS/MSD #:	6050257	6050257	6050257	6050257
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/8/96	5/8/96	5/8/96	5/8/96
Analyzed Date:	5/8/96	5/8/96	5/8/96	5/8/96
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Result:	23	25	25	74
MS % Recovery:	115	125	125	123
Dup. Result:	22	23	23	68
MSD % Recov.:	110	115	115	113
RPD:	4.4	8.3	8.3	8.5
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	9LCS050896	9LCS050896	9LCS050896	9LCS050896
Prepared Date:	5/8/96	5/8/96	5/8/96	5/8/96
Analyzed Date:	5/8/96	5/8/96	5/8/96	5/8/96
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	24	25	26	76
LCS % Recov.:	120	125	130	127

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130
---------------------------	--------	--------	--------	--------

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.
** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

SEQUOIA ANALYTICAL, #1271

Jim Bava
Jim Bava
Project Manager

WA Weiss Associates
 Environmental and Geologic Services
 5500 Shellmound Street, Emeryville, CA 94608
 Phone: 510-450-6000 Fax: 510-547-5043
 AguaTierra Associates Incorporated, DBA

Please send analytic results and a copy of the signed chain of custody form to:
Jim Ponton
 Project ID: 14-0307-19

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: Anni Krem Laboratory Name: Sequoia

No. of Containers	Sample ID	Container Type ¹	Sample Date	Voi ²	Fil ³	Ref ⁴	Preservative (specify)	Analyze for	Analytic Method	Turn ⁵	COMMENTS
3	1Q3307-14	W/V	5/7/96	40ml	N	Y	HCl	BTEX	EPA 8020	Rush	6050489
↓	1Q3307-16	↓	↓	↓	↓	↓	↓	Hold	Hold	Hold	Analyze for BTEX only if BTEX detected in 1Q3307-14.

1 [Signature] 5/8/96
 Released by (Signature), Date
 1 Weiss
 Affiliation
 2 _____
 Received by (Signature), Date
 2 _____
 Affiliation

3 Jim Ponton 5/8/96
 Released by (Signature), Date
 3 _____
 Affiliation
 4 Rec'd by John Walters 5/8/96
 Shipping Carrier, Method, Date
 4 _____
 Affiliation

5 [Signature] 9/95
 Released by (Signature), Date
 5 _____
 Affiliation
 6 [Signature] 5/8/96
 Received by Lab Personnel, Date Seal intact?
 6 _____
 Affiliation, Telephone

3 9 55

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 YY(N); 4 = Refrigerated (Y/N)
 5 Turnaround [N = Normal, W = 1 Week, R = 24 Hour, HOLD (write out)]



Superior

Analytical Laboratory

Weiss Associates
5500 Shellmound. Suite 100
Emeryville, CA 94608

Date: May 22, 1996

Attn: JIM PONTON

Laboratory Number : 21347

Project Number/Name : 14-0307-19

Dear JIM PONTON:

Attached is Superior Analytical Laboratory report for the samples received on May 15, 1996. This report has been reviewed and approved for release. Following the cover letter is the Case Narrative detailing sample receipt and analysis. Also enclosed is a copy of the original Chain-of-Custody record confirming receipt of samples.

Please note that any unused portion of the sample will be discarded after June 14, 1996, unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please contact our Laboratory at (510) 313-0850.

Sincerely,

Afsaneh Salimpour
Project Manager



Superior

Analytical Laboratory

CASE NARRATIVE

Weiss Associates
Project Number/Name: 14-0307-19
Laboratory Number: 21347

Sample Receipt

Five water samples were received by
Superior Analytical Laboratory on May 15, 1996.

Cooler temperature was 1.9°C

No abnormalities were noted with sample receiving.

Sample Analysis

The samples were analysed for methods 8020 .

I / I



Superior

Analytical Laboratory

Miss Associates
Attn: JIM PONTON

Project 14-0307-19
Reported on May 22, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Chronology

Laboratory Number 21347

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
IQ2307-05 MW-05	05/14/96	05/15/96	05/17/96	05/17/96	CE161.05	01
IQ2307-06 MW-06	05/14/96	05/15/96	05/17/96	05/17/96	CE161.05	02
IQ2307-12 MW-12	05/14/96	05/15/96	05/17/96	05/17/96	CE161.05	03
IQ2307-13 MW-13	05/14/96	05/15/96	05/17/96	05/17/96	CE161.05	04

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CE161.05-03	MW-B4	MS 21322-02	Water	05/17/96	05/17/96
CE161.05-08	MW-B4	MSD 21322-02	Water	05/17/96	05/17/96
CE161.05-02	Laboratory Spike	LS	Water	05/17/96	05/17/96
CE161.05-01	Method Blank	MB	Water	05/17/96	05/17/96



Superior

Analytical Laboratory

Seiss Associates
Attn: JIM PONTON

Project 14-0307-19
Reported on May 22, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21347-01	IQ2307-05	Water	1.0	-
21347-02	IQ2307-06	Water	1.0	-
21347-03	IQ2307-12	Water	1.0	-
21347-04	IQ2307-13	Water	1.0	-

RESULTS OF ANALYSIS

Compound	MW-5		MW-06		MW-12		MW-13	
	21347-01	21347-02	21347-03	21347-04	21347-01	21347-02	21347-03	21347-04
	Conc.	RL	Conc.	RL	Conc.	RL	Conc.	RL
	ug/L		ug/L		ug/L		ug/L	
Benzene	270	0.5	ND	0.5	34	0.5	310	0.5
Toluene	4.5	0.5	ND	0.5	ND	0.5	1.1	0.5
Ethyl Benzene	2.6	0.5	ND	0.5	13	0.5	39	0.5
Xylenes	10	0.5	ND	0.5	5.1	0.5	16	0.5

>> Surrogate Recoveries (%) <<

Trifluorotoluene (SS)	128	106	125	124
-----------------------	-----	-----	-----	-----



Superior

Analytical Laboratory

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 21347

Method Blank(s)

CE161.05-01

Conc. RL

ug/L

benzene	ND	0.5
toluene	ND	0.5
ethyl Benzene	ND	0.5
xylenes	ND	0.5

Surrogate Recoveries (%) <<
trifluorotoluene (SS) 106



Superior

Analytical Laboratory

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 21347

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
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For Water Matrix (ug/L)
 CE161.05 02 / - Laboratory Control Spikes

Benzene		20	23	115	65-135	
Toluene		20	23	115	65-135	
Ethyl Benzene		20	22	110	65-135	
Xylenes		60	66	110	65-135	

> Surrogate Recoveries (%) <<
 Trifluorotoluene (SS)

103 50-150

For Water Matrix (ug/L)
 CE161.05 03 / 08 - Sample Spiked: 21322 - 02

Benzene	ND	20	23/23	115/115	65-135	
Toluene	ND	20	23/23	115/115	65-135	
Ethyl Benzene	ND	20	21/21	105/105	65-135	
Xylenes	ND	60	64/63	107/105	65-135	

>> Surrogate Recoveries (%) <<
 Trifluorotoluene (SS)

100/105 50-150

Definitions:

ND = Not Detected

L = Reporting Limit

NA = Not Analysed

RPD = Relative Percent Difference

ug/L = parts per billion (ppb)

mg/L = parts per million (ppm)

ug/kg = parts per billion (ppb)

mg/kg = parts per million (ppm)

21341



Weiss Associates
Environmental and Geologic Services

5500 Shellmound Street, Emeryville, CA 94608
Phone: 510-450-6000 Fax: 510-547-5043
AguaTierra Associates Incorporated, DBA

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

JIM PONTON
Project ID: 14-0307-19

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.

Please Initial: JP
 Samples Stored in ice. yes
 Appropriate containers ↓
 Samples preserved ↓
 VOA's without headspace ↓
 Comments: TE 1.9

Analytic Method	Turn	COMMENTS
EPA 8020	N	

CHAIN-OF-CUSTODY RECORD AND ANALYTIC INSTRUCTIONS

Sampled by: ANNI KREML

Laboratory Name: SUPERIOR

No. of Containers	Sample ID	Container Type ¹	Sample Date	Vol ²	Fil ³	Ref ⁴	Preservative (specify)	Analyze for			
3	1Q2307-05	W/V	5/14/96	40ml	N	Y	HCL	BTEX			
↓	-06	↓	↓	↓	↓	↓	↓	↓			
↓	-12	↓	↓	↓	↓	↓	↓	↓			
↓	-13	↓	↓	↓	↓	↓	↓	↓			
↓	-16	↓	↓	↓	↓	↓	↓	HOLD	HOLD	HOLD	

Released by (Signature), Date: [Signature] 5/14/96
 1 Weiss
 Affiliation
 2 [Signature] 5/15
 Received by (Signature), Date
 2 Superior 9:20
 Affiliation

3 [Signature] 5/15/96
 Released by (Signature), Date
 3 SAC 12:00
 Affiliation
 4
 Shipping Carrier, Method, Date
 4
 Affiliation

5
 Released by (Signature), Date
 5
 Affiliation
 6 [Signature] 5/15/96
 Received by Lab Personnel, Date Seal intact? x
 6 SAC 12:00
 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)]

3:OFFICE\FORUS\CHAINCOC.DOC