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BASELINE
ENVIRONMENTAL CONSULTING

JUN 05 2001

TRANSMITTAL

TO: Ms. Ann E. Johnston
COBLENTZ, PATCH, DUFFEY & BASS, LLP
222 Kearny Street, 7th Floor
San Francisco, CA 94108-4510

Date: 01 June 2001

Project No: 98381-B0

SUBJECT: Quarterly Groundwater Monitoring Report, 6623 San Pablo Avenue, Oakland, CA April 2001

ENCLOSED:

No. of copies	Description:
1	Quarterly Report
1	Work Plan

COMMENTS:

cc: Helen Lorerto (McDonlads Corp.)
Barney Chan (Alameda County Env. Health Services)

Disposition:

X	As requested
	For signature
	For review and comment
	Returned after loan to us

Via:

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TRANSMITTED BY:
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BASELINE

ENVIRONMENTAL CONSULTING

29 May 2001
98381-B0

JUN 05 2001

Ms. Ann E. Johnston
COBLENTZ, PATCH, DUFFEY & BASS, LLP
222 Kearny Street, 7th Floor
San Francisco, California 94108-4510

Subject: Quarterly Groundwater Monitoring Report, 6623 San Pablo Avenue, Oakland, California - April 2001

Dear Ann:

This report documents the seventh quarterly groundwater sampling activities conducted by BASELINE in April 2001 at 6623 San Pablo Avenue in Oakland (Figure 1). Continued quarterly groundwater monitoring was requested by the Alameda County Environmental Health Services, in a letter dated 17 July 2000.

FIELD ACTIVITIES

On 16 April 2001, the five monitoring wells on-site were checked for the potential presence of free product and water levels measured using a dual-interface probe prior to purging the wells (Figure 2). Water levels were measured and recorded to the nearest one-hundredth of a foot. No free product was measured in any of the wells. The probe was decontaminated between wells by washing with a trisodium phosphate (TSP) solution and rinsing with deionized water. Groundwater was then slowly purged from each well using a peristaltic pump and clean disposable polyethylene tubing until each well was pumped dry or the temperature, pH, and electrical conductivity (EC) of the groundwater appeared to have stabilized. The purged groundwater and decontamination rinsate were stored on-site in sealed and labeled 55-gallon drums.

On 19 April 2001, groundwater samples were collected from each well using a peristaltic pump and clean polyethylene tubing. Sampling was conducted several days after purging to allow the extremely low-yield upper water-bearing zone to adequately recharge the wells. The samples were collected in VOA bottles directly from the tubing. The sample bottles were labeled, placed in a cooled container, and submitted under chain-of-custody procedures to Curtis and Tompkins, Ltd., of Berkeley, a California-certified laboratory, for analysis. As directed by the County in a letter dated 23 April 2001, analysis for TPH as diesel was discontinued. The groundwater samples were

submitted for TPH as gasoline (EPA Method 8015M), and BTEX and MTBE analyses (EPA Method 8021B). The groundwater sampling forms, which document the sampling activities, are included in Attachment A.

ANALYTICAL RESULTS

The analytical results for groundwater samples collected at the site are summarized in Table 1. The laboratory reports for the April 2001 groundwater samples are included in Attachment B. Groundwater from each of the three wells screened in the uppermost water-bearing zone (MW-1A, MW-2A, and MW-3A) was found to contain petroleum hydrocarbons above the laboratory reporting limits (up to 16 mg/L gasoline, 4.5 mg/L benzene, 1.4 mg/L toluene, 1.0 mg/L ethylbenzene, 4.5 mg/L xylenes, and 48 mg/L MTBE) during the April 2001 monitoring event.

The two wells screened in the lower water-bearing zone (MW-1B and MW-3B) did not contain any of the analyzed compounds above laboratory reporting limits, with the exception of 0.0039 mg/L (laboratory reporting limit is 0.002 mg/L) MTBE and 0.0005 mg/L xylenes (laboratory reporting limit is 0.0005 mg/L) in MW-1B.

GROUNDWATER FLOW DIRECTION

Groundwater elevation data are summarized in Table 2. The groundwater level data collected on 16 April 2001 from wells MW-1A, MW-2A, and MW-3A were used to calculate the groundwater flow direction and gradient magnitude using a three-point method. The calculated groundwater flow direction was S55°E with a gradient magnitude of 0.032.

CONCLUSIONS AND RECOMMENDATIONS

- Chemical quality of the uppermost water-bearing zone, characterized by samples collected from wells MW-1A, MW-2A, and MW-3A, has been impacted by a gasoline release. Based on monitoring data from November 1999 through January 2001 from MW-1B and MW-3B, no significant impact appears to have occurred within the lower water-bearing zone.

- The shallow groundwater flow direction calculated from the three shallow wells has been consistently to the southeast at magnitudes ranging from 0.004 to 0.03 since August 1999.

- Purge and decontamination water generated during field activities should be disposed of in accordance with applicable local, State, and Federal requirements.

If you have any questions or comments, please do not hesitate to contact us.

Sincerely,

Bruce Abelli-Amen
Project Manager

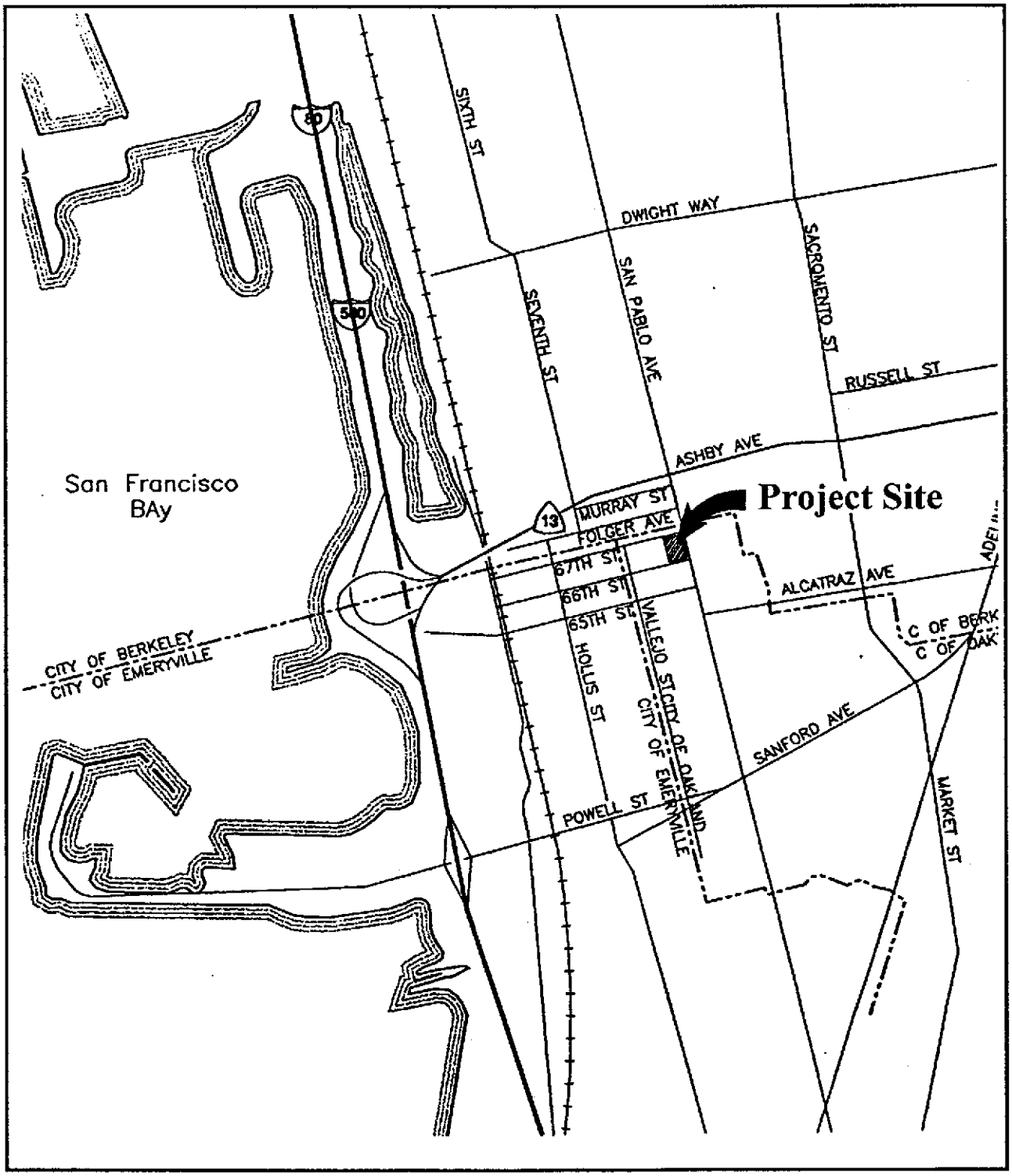
Yane Nordhav
Reg. Geologist No. 4009
Principal

BAA:YN:km
Enclosure

cc: Helen Loreto, McDonalds Corporation
Barney Chan, Alameda County Environmental Health Services

REGIONAL LOCATION

Figure 1



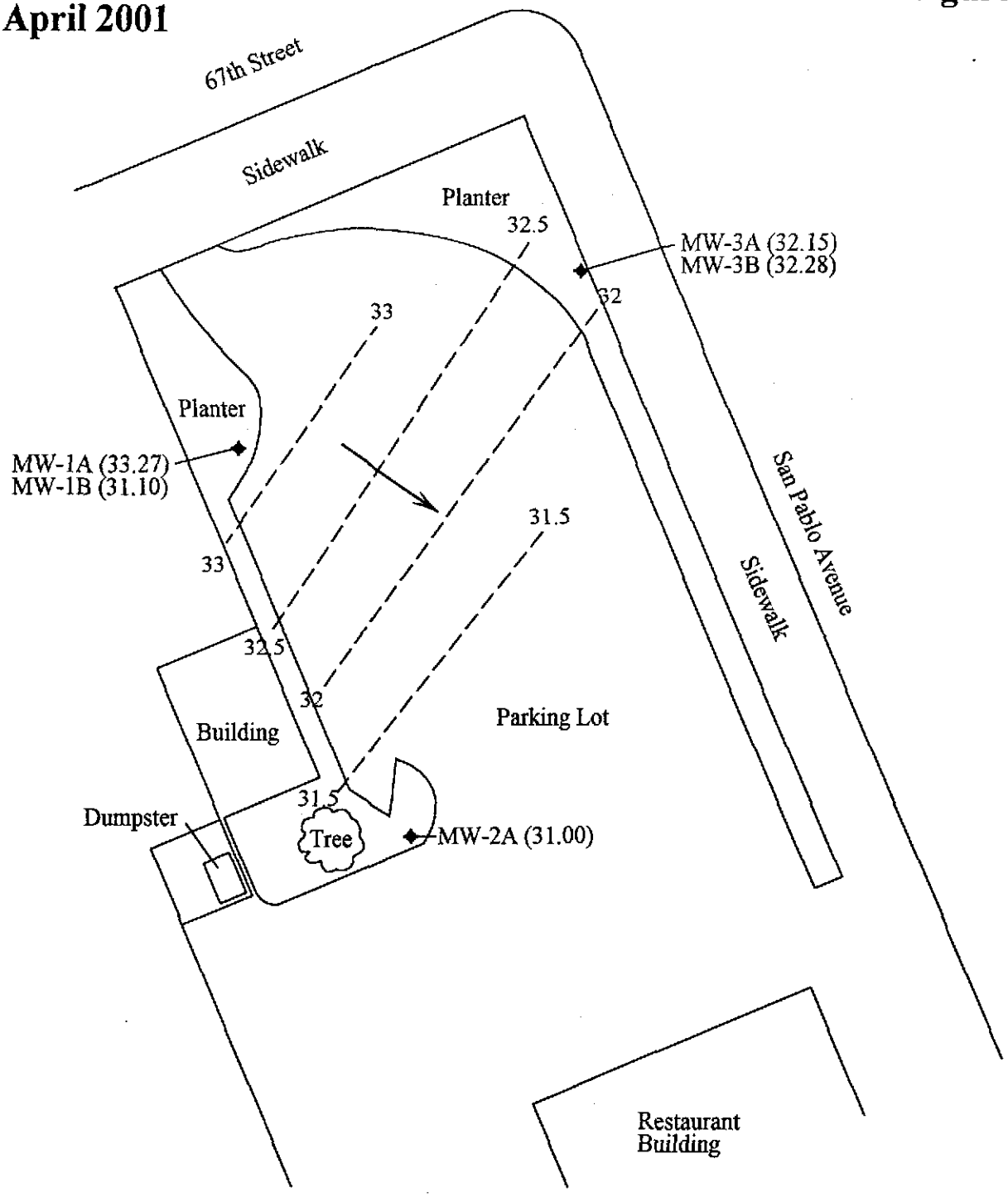
6623 San Pablo Avenue
Oakland, California

0 2000 Feet

BASELINE

GROUNDWATER CONTOUR MAP
16 April 2001

Figure 2



Legend

⟶	*Groundwater Flow Direction, April 2001*
- - - - -	Groundwater Elevation Contour (contour interval = 0.5 feet)
MW-2A ✦	Monitoring Well Location (BASELINE)
31.00	Groundwater Elevation on 16 April 2001 in feet above City of Oakland datum

6623 San Pablo Avenue
Oakland, California

0 30 Feet

BASELINE

D:\Graphics\98381\Fig-2 16 April 2001 vcd 5/17/01

TABLE 1
SUMMARY OF ANALYTICAL RESULTS, GROUNDWATER
6623 San Pablo Avenue, Oakland
(mg/L)

Sample ID	Date	Diesel[1]	Gasoline[1]	Total Lead[2]	Benzene[3]	Toluene[3]	Ethyl-benzene[3]	Xylenes[3]	MTBE[3]	MTBE Confirmation[4]
Grab Groundwater Samples from Borings:										
KB-8	2/5/97	0.86	0.12	<0.003	0.0013	<0.0005	0.0021	0.001	--	--
KB-9	2/5/97	<0.05	0.47	<0.003	0.0048	<0.0005	0.011	0.0183	--	--
KB-10	2/5/97	3.1	0.45	<0.003	0.03	0.0036	0.013	0.071	--	--
KB-11	2/5/97	0.97	0.82	<0.003	0.1	0.0022	0.028	0.129	--	--
KB-12	2/5/97	0.20	0.096	<0.003	0.02	<0.0005	0.005	0.0122	--	--
Groundwater Samples From Monitoring Wells										
MW-1A	2/8/99[5]	--	--	--	--	--	--	--	--	--
	5/21/99	0.56[6]	19	--	6.7	0.12	1.2	3.28	38	--
	8/11/99	0.63[6]	14	--	3.9	<0.1	0.68	1.65	40	--
	11/8/99	0.36[6]	15	--	4.3	<0.13	0.78	1.3	42	--
	9/20/00	--	14	--	4.0	0.063	0.45	0.66	47	48
	1/5/01	--[5]	20	--	4.0	0.054	0.66	1.1	36	--[8]
	4/19/01[9]	--	8	--	4.5	0.033	0.84	1.25	45	--[8]
MW-1B	2/8/99	<0.049	0.059	--	0.0013	<0.0005	0.0055	0.14	0.033	--
	5/21/99	<0.05	<0.05	--	0.00066	<0.0005	<0.0005	<0.0005	0.0041	--
	8/11/99	<0.05	<0.05	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	--
	11/8/99	<0.05	<0.05	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	--
	9/20/00	--	<0.05	--	<0.0005	<0.0005	<0.0005	<0.0005	0.0035	0.002
	1/5/01	--	<0.05	--	<0.0005	<0.0005	<0.0005	<0.0005	0.0039	--[8]
	4/19/01[9]	--	<0.05	--	<0.0005	<0.0005	<0.0005	0.0005	0.0039	0.0053
MW-2A	2/8/99	0.53[8]	3.6	--	0.87	0.079	0.14	0.58	5.1	--
	5/21/99	0.064[6]	0.91	--	0.62	0.018	0.038	0.078	4.0	--
	8/11/99	0.130[6]	1.4	--	0.96	0.032	0.065	0.093	4.0	--
	11/8/99	0.116	2.5	--	1.1	0.033	0.081	0.142	4.1	--
	9/20/00	--	2.5	--	0.98	0.033	0.073	0.178	6.6	4.6
	1/5/01	0.25[6]	3.5	--	0.56	0.022	0.090	0.390	4.1	--[8]
	4/19/01	--	1.7	--	0.91	0.036	0.071	0.153	6.8	7.2

Table 1 - *continued*

Sample ID	Date	Diesel[1]	Gasoline[1]	Total Lead[2]	Benzene[3]	Toluene[3]	Ethyl-benzene[3]	Xylenes[3]	MTBE[3]	MTBE Confirmation[4]
MW-3A	2/8/99	**0.21**[8]	**24**	--	**2.1**	**3.4**	**1.5**	**6.1**	<0.05	--
	5/21/99	**0.23**[6]	**17**	--	**3.5**	**3.1**	**0.85**	**3.6**	**0.077**	--
	8/11/99	**0.80**[6]	**68**	--	**7.4**	**6.8**	**2.9**	**11.6**	<0.2	--
	11/8/99	**0.47**[6]	**55**	--	**5.8**	**5.4**	**2.5**	**10.4**	<0.08	--
	9/20/00	--	**1.8**	--	**0.17**	**0.13**	**0.082**	**3.09**	<0.002	**0.0019**
	1/5/01	--[5]	**1.8**	--	**0.26**	**0.18**	**0.082**	**0.320**	<0.010	--
	4/19/01	--	**16**	--	**1.6**	**1.4**	**1.0**	**4.3**	<0.02	--
MW-3B	2/8/99	<0.047	**0.08**	--	**0.0015**	**0.0048**	**0.0025**	**0.0061**	**0.00455**	--
	5/21/99	<0.05	<0.05	--	<0.0005	<0.0005	<0.0005	**0.00057**	<0.002	--
	8/11/99	<0.05	<0.05	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	--
	11/8/99	<0.05	<0.05	--	<0.0005	<0.0005	**0.00059**	<0.0005	<0.002	--
	9/20/00	--	<0.05	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	<0.0005
	1/5/01	--	<0.05	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	--
	4/19/01	--	<0.05	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	--

Notes: <x.x = Compound not detected above laboratory reporting limit (e.g., <0.05 indicates that the constituent was not present in the sample above 0.05 mg/L).
x.x = Compound detected at indicated concentration.
-- = Not analyzed.
Groundwater sampling locations are shown on Figure 2.
Laboratory reports for January 2001 sampling event are included in Appendix B.

1 Analyzed using EPA Method 8015M with silica gel cleanup (EPA Method 3520) for diesel analyses.
2 Analyzed using EPA Method 6010A.
3 Analyzed using EPA Method 8020 or 8021B.
4 Analyzed using EPA Method 8260B.
5 Insufficient groundwater in well to allow sample collection.
6 Sample exhibits a fuel pattern which does not resemble standard; lighter hydrocarbons were exhibited than the indicated standard.
7 MTBE confirmation by EPA Method 8260B not performed because the September 2000 monitoring event indicated that Method 8021B provided representative results.
8 The chromatograms for these samples suggest that the concentrations quantified as diesel may be in the gasoline range of hydrocarbons; the laboratory also indicates that the samples exhibit patterns lighter than diesel.
9 Samples MW-1A and MW-1B were reversed in the field: sample MW-1A was labeled MW-1B and sample MW-1B was labeled MW-1A. The laboratory report reflects the reversed labeling.

TABLE 2

GROUNDWATER ELEVATIONS AND GRADIENT MAGNITUDES

6623 San Pablo Avenue, Oakland

	MW-1A[1]			MW-1B[2]			MW-2A[3]			MW-3A[4]			MW-3B[5]			Gradient[8]
Date	Time	Depth to Ground-water[6]	Ground-water Elevation[7]	Time	Depth to Ground-water[6]	Ground-water Elevation[7]	Time	Depth to Ground-water[6]	Ground-water Elevation[7]	Time	Depth to Ground-water[6]	Ground-water Elevation[7]	Time	Depth to Ground-water[6]	Ground-water Elevation[7]	feet/foot
1/15/99	12:44	Dry	--	12:44	21.60	18.35	12:52	7.15	31.77	12:50	7.0	32.76	12:50	22.50	17.29	--
1/19/99	8:11	Dry	--	8:11	9.10	30.85	8:17	7.32	31.60	8:13	7.27	32.49	8:14	8.77	31.02	--
1/19/99	16:58	Dry	--	16:55	26.81[9]	13.14	17:82	7.05[9]	31.87	17:08	7.79[9]	31.97	17:11	26.71[9]	13.08	--
1/20/99	8:46	Dry	--	8:43	16.76	23.19	8:50	6.94	31.98	8:55	7.18	32.58	8:58	15.40	24.39	--
1/20/99	17:48	Dry	--	17:44	13.48	26.47	17:51	6.89	32.03	17:56	7.04	32.72	17:58	12.50	27.29	--
2/8/99	7:45	Dry	--	7:42	10.74	29.21	7:50	6.80	32.12	6:48	5.45	34.31	6:45	6.82	32.97	--
2/12/99	6:54	9.10	30.86	--	--	--	6:58	6.90	32.02	7:04	5.94	33.82	--	--	--	--
5/18/99	12:05	8.42	31.54	12:24	9.09	30.86	12:25	7.77	31.15	12:02	6.78	32.98	12:03	8.65	31.14	S52°W@0.02
8/9/99	11:09	4.69	35.27	11:10	9.10	30.85	11:18	7.34	31.58	11:14	4.30	35.46	11:13	8.23	31.56	S23°E@0.0038
11/5/99	8:00	5.23	34.73	8:02	9.15	30.80	8:10	7.43	31.49	8:06	5.87	33.89	8:08	8.37	31.42	S40°E@0.042
9/19/00	10:30	5.53	34.43	10:33	9.36	30.59	9:55	8.13	30.79	10:50	7.10	32.66	10:49	9.71	30.08	S53°E@0.026
1/5/01	11:16	6.62	33.34	11:14	9.39	30.56	11:25	8.13	30.79	11:18	7.30	32.46	11:17	8.55	31.24	S43°E@0.03
4/16/01	11:29	6.99	33.27	11:25	8.85	31.10	11:40	7.82	31.00	11:35	7.81	32.15	11:32	7.51	32.28	S55°E@0.032

Notes: Monitoring well locations are shown on Figure 2.
-- = Not collected / Not determined.
The water level data collected on 20 January and 8 and 12 February 1999 indicate that the water levels had not stabilized in either the shallow or deeper wells on the site.

[1] Top of well casing elevation = 39.96 feet above City of Oakland datum.
[2] Top of well casing elevation = 39.95 feet above City of Oakland datum.
[3] Top of well casing elevation = 38.92 feet above City of Oakland datum.
[4] Top of well casing elevation = 39.76 feet above City of Oakland datum.
[5] Top of well casing elevation = 39.79 feet above City of Oakland datum.
[6] Depths are in feet below top of casing.
[7] Elevations are in feet above City of Oakland datum.
[8] Gradient direction and magnitude based on MW-1A, MW-2A, MW-3A
[9] Water level measurements were collected after removal of one well volume on 19 January 1999.

ATTACHMENT A

GROUNDWATER SAMPLING FORMS

GROUNDWATER SAMPLING

Project no.:	98381	Well no.:	MW-1A	Date:	4/16/01
Project name:	McDonald's	Depth of well from TOC (feet):	9.95		
Location:	6623 San Pablo Ave.	Well diameter (inch):	3/4		
	Oakland	Screened interval from TOC (feet):	5-10		
Recorded by:	WKS	TOC elevation (feet):	39.96		
Weather:	Cool, sunny	Water level from TOC (feet):	6.69	Time:	11:29
Precip in past 5 days (inch):	0.05	Product level from TOC (feet):	None	Time:	11:29
		Water level measurement device:	Dual-interface probe		

CALCULATION OF WELL VOLUME:

[(9.95 ft) -	(6.69 ft)] x	(0.03 ft)^2 x	3.14 x 7.48 =	0.07	gallons in one well volume
well depth	water level	well radius		0.46	total gallons removed

CALIBRATION

	Time	Temp (° C)	pH	EC (µmho/cm)	NTU
Calibration Standard:	--	--	7.00/10.01	1,000	0/5.0
Before Purging:	11:15	25.6	7.00/10.01	1,000	0/5.0
After Purging:	13:31	28.1	7.16/10.12	1,018	0/5.10

FIELD MEASUREMENTS:

Time	Temp (° C)	pH	EC (µmho/cm)	Cumulative Gallons Removed	Appearance	NTU
1217	17.8	7.17	1243	0.2	Clear	4.32
12:19	18.5	7.16	1276	0.3	Clear	4.21
12:21	Well pumped dry			--	--	--

Water level after purging prior to sampling (feet):	8.46	Time:	10:13 (4/19/01)
Appearance of sample:	Clear	Time:	10:30 (4/19/01)
Duplicate/blank number:	- -	Time:	--
Purge method:	Peristaltic pump and disposable polyethylene tubing		
Sampling equipment:	Peristaltic pump and disposable polyethylene tubing	VOC attachment:	None required
Sample containers:	Three 40 ml VOAs		
Sample analyses:	TPHg, BTEX, MTBE	Laboratory:	Curtis & Tompkins
Decontamination method:	TSP and water, DI water rinse	Rinsate disposal:	On-site drum

98381-gw-401.wpd-5/3/01

GROUNDWATER SAMPLING

Project no.:	98381	Well no.:	MW-2A	Date:	4/16/01
Project name:	McDonald's	Depth of well from TOC (feet):	14.72		
Location:	6623 San Pablo Ave.	Well diameter (inch):	1 inch		
	Oakland	Screened interval from TOC (feet):	5-10		
Recorded by:	WKS	TOC elevation (feet):	38.92		
Weather:	Cool, sunny	Water level from TOC (feet):	7.92	Time:	11:40
Precip in past 5 days (inch):	0.05	Product level from TOC (feet):	None	Time:	11:40
		Water level measurement device:	Dual-interface probe		

CALCULATION OF WELL VOLUME:

[(14.72 ft) -	(7.92 ft)] x	(0.042 ft)^2 x	3.14 x 7.48 =	0.28	gallons in one well volume
well depth	water level	well radius		1.5	total gallons removed

CALIBRATION

	Time	Temp (° C)	pH	EC (µmho/cm)	NTU
Calibration Standard:	--	--	7.00/10.01	1,000	0/5.0
Before Purging:	11:15	25.6	7.00/10.01	1,000	0/5.0
After Purging:	13:31	28.1	7.16/10.12	1,018	0/5.10

FIELD MEASUREMENTS:

Time	Temp (° C)	pH	EC (µmho/cm)	Cumulative Gallons Removed	Appearance	NTU
13:10	18.9	6.70	1153	0.5	Clear, petroleum odor	13.1
Slowed down pump rate						
13:20	18.9	6.68	1150	1.0	Clear, petroleum odor	2.08
13:30	18.9	6.67	1155	1.5	Clear, petroleum odor	1.39

Water level after purging prior to sampling (feet):	7.94	Time:	11:05 (4/19/01)
Appearance of sample:	Clear	Time:	11:10 (4/19/01)
Duplicate/blank number:	--	Time:	--
Purge method:	Peristaltic pump and disposable polyethylene tubing		
Sampling equipment:	Peristaltic pump and disposable polyethylene tubing	VOC attachment:	None required
Sample containers:	Three 40 ml VOAs		
Sample analyses:	TPHg, BTEX, MTBE	Laboratory:	Curtis & Tompkins
Decontamination method:	TSP and water, DI water rinse	Rinsate disposal:	On-site drum

98381-gw-401.wpd-5/3/01

GROUNDWATER SAMPLING

Project no.:	98381	Well no.:	MW-3A	Date:	4/16/01
Project name:	McDonald's	Depth of well from TOC (feet):	10.02		
Location:	6623 San Pablo Ave.	Well diameter (inch):	3/4		
	Oakland	Screened interval from TOC (feet):	7-10.02		
Recorded by:	WKS	TOC elevation (feet):	39.76		
Weather:	Cool, sunny	Water level from TOC (feet):	7.61	Time:	11:35
Precip in past 5 days (inch):	0.05	Product level from TOC (feet):	None	Time:	11:35
		Water level measurement device:	Dual-interface probe		

CALCULATION OF WELL VOLUME:

[(10.02 ft) -	(7.61 ft)] x	$(0.03 \text{ ft})^2$ x	3.14 x 7.48 =	0.05	gallons in one well volume
well depth	water level	well radius		0.25	total gallons removed

CALIBRATION

	Time	Temp (° C)	pH	EC (µmho/cm)	NTU
Calibration Standard:	--	--	7.00/10.01	1,000	0/5.0
Before Purging:	11:15	25.6	7.00/10.01	1,000	0/5.0
After Purging:	13:31	28.1	7.16/10.12	1,018	0/5.10

FIELD MEASUREMENTS:

Time	Temp (° C)	pH	EC (µmho/cm)	Cumulative Gallons Removed	Appearance	NTU

No field measurements collected due to presence of abundant white precipitate in purge water. This condition did not clear up before well was pumped dry at the removal of 0.25 liter. Well ran dry.

Water level after purging prior to sampling (feet):	9.35	Time:	10:42 (4/19/01)
Appearance of sample:	Clear - very slightly turbid	Time:	10:55 (4/19/01)
Duplicate/blank number:	--	Time:	--
Purge method:	Peristaltic pump and disposable polyethylene tubing		
Sampling equipment:	Peristaltic pump and disposable polyethylene tubing	VOC attachment:	None required
Sample containers:	One 40 ml VOAs		
Sample analyses:	TPHg, BTEX, MTBE	Laboratory:	Curtis & Tompkins
Decontamination method:	TSP and water, DI water rinse	Rinsate disposal:	On-site drum

98381-gw-401.wpd-5/3/01

GROUNDWATER SAMPLING

Project no.:	98381	Well no.:	MW-3B	Date:	4/16/01
Project name:	McDonald's	Depth of well from TOC (feet):	31.31		
Location:	6623 San Pablo Ave.	Well diameter (inch):	3/4		
	Oakland	Screened interval from TOC (feet):	26.3-31.3		
Recorded by:	WKS	TOC elevation (feet):	39.79		
Weather:	Cool, sunny	Water level from TOC (feet):	7.51	Time:	11:32
Precip in past 5 days (inch):	0.05	Product level from TOC (feet):	None	Time:	11:32
		Water level measurement device:	Dual-interface probe		

CALCULATION OF WELL VOLUME:

[(31.31 ft) -	(7.51 ft)] x	(0.03 ft)^2 x	3.14 x 7.48 =	0.5	gallons in one well volume
well depth	water level	well radius		1.05	total gallons removed

CALIBRATION

	Time	Temp (° C)	pH	EC (µmho/cm)	NTU
Calibration Standard:	--	--	7.00/10.01	1,000	0/5.0
Before Purging:	11:15	25.6	7.00/10.01	1,000	0/5.0
After Purging:	13:31	28.1	7.16/10.12	1,018	0/5.10

FIELD MEASUREMENTS:

Time	Temp (° C)	pH	EC (µmho/cm)	Cumulative Gallons Removed	Appearance	NTU
12:40	19.6	7.28	804	0.26	Clear	5.04
12:43	19.4	7.27	790	0.53	Clear	3.31
12:46	19.5	7.26	785	0.79	Clear	2.61
12:49	19.2	7.18	791	1.05	Clear	4.91

Well pumped dry

Water level after purging prior to sampling (feet):	9.65	Time:	10:40 (4/19/01)
Appearance of sample:	Clear	Time:	10:45 (4/19/01)
Duplicate/blank number:	- -	Time:	--
Purge method:	Peristaltic pump and disposable polyethylene tubing		
Sampling equipment:	Peristaltic pump and disposable polyethylene tubing	VOC attachment:	None required
Sample containers:	Three 40 ml VOAs		
Sample analyses:	TPHg, BTEX, MTBE	Laboratory:	Curtis & Tompkins
Decontamination method:	TSP and water, DI water rinse	Rinsate disposal:	On-site drum

98381-gw-401.wpd-5/3/01

ATTACHMENT B

LABORATORY REPORT AND CHAIN-OF-CUSTODY FORM

Quality Control Checklist
for Review of Laboratory Report

Job No.: 98381 Site: 6623 San Pablo Ave Oak.

Laboratory: Curtis + Tompkins Laboratory Report No: 151564

Report Date: 5-15-01 BASELINE Review By: WES

	Yes	No	NA
GENERAL QUESTIONS **(Describe "no" responses below in "comments" section. Contact the laboratory, as required, for further explanation or action on "no" responses; document discussion in comments section.)**			
1a. Does the report include a case narrative? *(A case narrative MUST be prepared by the lab for all analytical work requested by BASELINE)*	✓		
1b. Is the number of pages for the lab report as indicated on the case narrative/lab transmittal consistent with the number of pages that are included in report?	✓		
1c. Does the case narrative indicate which samples were analyzed by a subcontractor and the subcontractor's name?			✓
1d. Does the case narrative summarize subsequent requests not shown on the chain-of-custody (e.g., additional analyses requested, release of "hold" samples)?			✓
1e. Does the case narrative explain why requested analyses could not be performed by laboratory (e.g., insufficient sample)?			✓
1f. Does the case narrative explain all problems with the QA/QC data as identified in the checklist (as applicable) ?			✓
2a. Is the laboratory report format consistent and legible throughout the report?	✓		
2b. Are the sample and reported dates shown in the laboratory report correct?	✓		
3a. Does the lab report include the original chain-of-custody form?	✓		
3b. Were all samples appropriately analyzed as requested on the chain-of-custody form?	✓		
4. Was the lab report signed and dated as being reviewed by the laboratory director, QA manager, or other appropriate personnel? (Some lab reports have signature spaces for each page). (This requirement also applies to any analyses subcontracted out by the laboratory)	✓		
5a. Are preparation methods, cleanup methods (if applicable), and laboratory methods indicated for all analyses?	✓		
5b. If additional analytes were requested as part of the reporting of the data for an analytical method, were these included in the lab report?	✓		
6. Are the units in the lab report provided for each analysis consistent throughout the report?	✓		
7. Are the detection limits (DL) appropriate based on the intended use of the data? (e.g., DL below applicable MCLs for water quality issues?)	✓		
8a. Are detection limits appropriate based on the analysis performed? (i.e., not elevated due to dilution effects)	✓		
8b. If no, is an explanation provided by the laboratory?			✓
9a. Were the samples analyzed within the appropriate holding time? (generally 2 weeks for volatiles, and up to 6 months for total metals)	✓		

Laboratory Quality Control Checklist
Page 2

	Yes	No	NA
9b. If no, was it flagged in the report?			✓
10. If samples were composited prior to analysis, does the lab report indicate which samples were composited for each analysis?			✓
11a. Do the chromatograms confirm quantitative laboratory results? (petroleum hydrocarbons)	✓		
11b. Is a standard chromatogram(s) included in the laboratory report?	✓		
11c. Do the chromatograms confirm laboratory notes, if present (e.g., sample exhibits lighter hydrocarbon than standard)			✓
12. Are the results consistent with previous analytical results from the site? *(If no, contact the lab and request review/reanalysis of data, as appropriate)*	✓		
13a. REVISED LAB REPORTS ONLY. Is the revised lab report or revised pages to a lab report signed and dated as being reviewed by the laboratory director, QA manager, or other appropriate personnel?			✓
13b. REVISED LAB REPORTS ONLY. Does the case narrative indicate the date of revision and provide an explanation for the revision?			✓
13c. REVISED LAB REPORTS ONLY. Does the revised lab report adequately address the problem(s) which triggered the need for a revision?			✓
13d. REVISED LAB REPORTS ONLY. Are the data included in the revised report the same as data reported in the original report, except where the report was revised to correct incorrectly reported data?			✓
QA/QC Questions Field/Laboratory Quality Control - Groundwater Analyses			
14. Are field blanks reported as "ND"? (groundwater samples) *A field blank is a sample of DI water which is prepared in the field using the same collection and handling procedures as the other samples collected, and used to demonstrate that the sampling procedure has not contaminated the sample.*			✓
15. Are trip blanks reported as "ND"? (groundwater samples/volatile analyses) *A trip blank is a sample of contaminant-free matrix placed in an appropriate container by the lab and transported with the field samples collected. Provides information regarding positive interference introduced during sample transport, storage, preservation, and analysis. The sample is NOT opened in the field.*			✓
16. Are duplicate sample results consistent with the original sample? (groundwater samples) *Field duplicates consist of two independent samples collected at the same sampling location during a single sampling event. Used to evaluate precision of the analytical data and sampling technique. (Differences between the duplicate and sample results may also be attributed to environmental variability).*			✓

	Yes	No	NA
Batch Quality Control (Samples are batched together by matrix [soil, water] and analyses requested. A batch generally consists of 20 or fewer samples of the same matrix type, and is prepared using the same reagents, standards, procedures, and time frame as the samples. QC samples are run with each batch to assess performance of the entire measurement process.)			
17. Do the sample batch numbers and corresponding laboratory QA/QC batch numbers match?	✓		
18a. Are method blanks (MB) for the analytical method(s) below the laboratory reporting limits? *Used to assess lab contamination and prevent false positive results. MBs should be "ND."*	✓		
18b. If no, is an explanation provided in the case narrative to validate the data?			✓
18c. Are analytes which may be considered laboratory contaminants reported below the laboratory reporting limit? *Common lab contaminants include acetone, methylene chloride, diethylhexyl phthalate, and di-n-octyl phthalate.*			✓
18d. If no, was the laboratory contacted to determine whether reported analyte could be a potential laboratory contaminant and was an explanation included in the case narrative?			✓
19. Are laboratory control samples (LCS) and LCS duplicate (LCSD) [a.k.a., Blank Spike (BS) and BS duplicates (BSD)] within laboratory reporting limits? Limits should be provided on the report. *LCS is a reagent blank spike with a representative selection of target analyte(s) and prepared in the same manner as the samples analyzed. The LCS should be spiked with the same analytes as the matrix spike (below). The LCS is free from interferences from the sample matrix and demonstrates the ability of the lab instruments to recover the target analytes. Accuracy (recovery information) is generally reported as % spike recovery; precision (reproducibility of results) between the LCS and LCSD is generally reported as the relative percent difference (RPD). LCS/LCSD can be run in addition to or in lieu of, matrix QC data.*	✓		
20a. Are the Matrix QC data (i.e., MS/MSD) within laboratory limits? Limits should be provided on the lab report. *The lab selects a sample from the batch and analyzes a spike and a spike duplicate of that sample. Matrix QC data is used to obtain precision and accuracy information and is reported in the same manner as LCS/LCSD. If the MS/MSD fails, the results may still be considered valid if the MB and either the LCS/LCSD or BS/BSD is within the lab's limits (failure is probably due to matrix interference).*			✓
20b. If no, is the MB and either LCS/LCSD or BS/BSD within lab limits to validate the data?			✓

	Yes	No	NA
Sample Quality Control			
21a. Are the surrogate spikes reported within the lab's acceptable recovery limits? *A surrogate is a non-target analyte, which is similar in chemical structure to the analyte(s) being analyzed for, and which is not commonly found in environmental samples. A known concentration of the surrogate is spike into the sample or QA "sample" prior to extraction or sample preparation. Results are usually reported as % recovery of the spike. Failure to meet lab's limits for primary and secondary surrogates results in rebatching and reanalysis of the sample; failure of only the primary or the secondary surrogate may be acceptable under certain circumstances. Failure generally is due to coelution with the sample matrix.*	✓		
21b. If no, is an explanation given in the case narrative to validate the data?			✓

Comments:

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

ANALYTICAL REPORT

Prepared for:

Baseline Environmental
5900 Hollis Street
Suite D
Emeryville, CA 94608

Date: 15-MAY-01
Lab Job Number: 151564
Project ID: 98381
Location: McDonalds,6623 San Pablo

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: Paul Prendergast
Project Manager

Reviewed by:
Operations Manager

T51564

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
Tel: (510) 420-8686 Fax: (510) 420-1707

CHAIN OF CUSTODY RECORD

Turn-around Time: Normal
Lab: Curtis + Tompkins
BASELINE Contact Person: Bruce Abelli-Amen

Project No.: 98381

Project Name and Location: McDonald's 6623 San Pablo Ave, Oakland CA

Samplers: (Signature) William K Scott

Sample ID No. Station	Date:	Time:	Media	Containers No.	Containers Type	Preservative: None	HCl	NO_3	SO_4	Other:	TPH as Gasoline 8015M BTEX	MTBE 8021B							Remarks/ Composite
MW-1A	4/19/01	10:30	W	3	VOAS			X			X	X							
MW-1B	↓	10:20	↓	3	↓			X			X	X							
MW-2A	↓	10:10	↓	3	↓			X			X	X							
MW-3A	↓	10:55	↓	1	↓			X			X	X							
MW-3B	↓	10:45	↓	3	↓			X			X	X							

Received ☐ On Ice ☒ Cold ☐ Ambient ☒ Intact

Preservation Correct? ☒ Yes ☐ No ☐ N/A

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Conditions of Samples Upon Arrival at Laboratory:
William K Scott	4/19/01 11:30	[signature]	4/19 11:30	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Remarks:
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	

D:\Graphic\Chain of Custody Record\Master.cdr 4/12/00

Gasoline by GC/FID CA LUFT

Lab #:	151564	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8015M
Matrix:	Water	Sampled:	04/19/01
Units:	ug/L	Received:	04/19/01

Field ID:	MW-1A	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	63179
Lab ID:	151564-001	Analyzed:	04/23/01

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	59-135
Bromofluorobenzene (FID)	103	60-140

Field ID:	MW-1B	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	63287
Lab ID:	151564-002	Analyzed:	04/27/01

Analyte	Result	RL
Gasoline C7-C12	8,000	500

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	59-135
Bromofluorobenzene (FID)	97	60-140

Field ID:	MW-2A	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	63287
Lab ID:	151564-003	Analyzed:	04/27/01

Analyte	Result	RL
Gasoline C7-C12	1,700	500

Surrogate	%REC	Limits
Trifluorotoluene (FID)	96	59-135
Bromofluorobenzene (FID)	90	60-140

Field ID:	MW-3A	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	63287
Lab ID:	151564-004	Analyzed:	04/27/01

Analyte	Result	RL
Gasoline C7-C12	16,000	500

Surrogate	%REC	Limits
Trifluorotoluene (FID)	94	59-135
Bromofluorobenzene (FID)	96	60-140

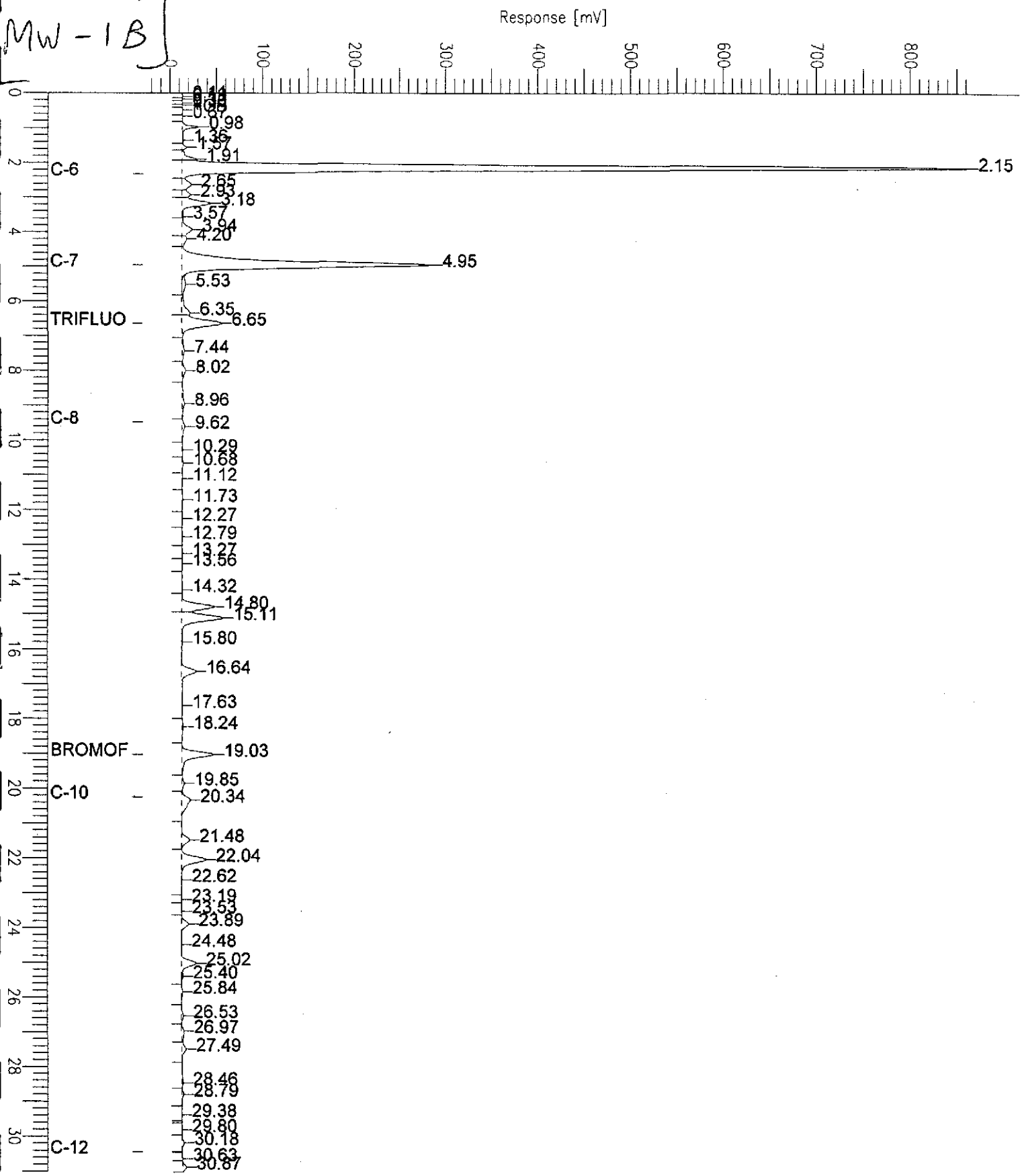
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : 151564-002,63287,+mtbe
leName : G:\GC05\DATA\116G016.raw
thod : TVHBTXE
Start Time : 0.00 min End Time : 31.00 min
Scale Factor: 1.0 Plot Offset: -29 mV

Sample #: a1 Page 1 of 1
Date : 4/27/01 05:52 AM
Time of Injection: 4/27/01 05:20 AM
Low Point : -29.15 mV High Point : 862.56 mV
Plot Scale: 891.7 mV

MW-1B

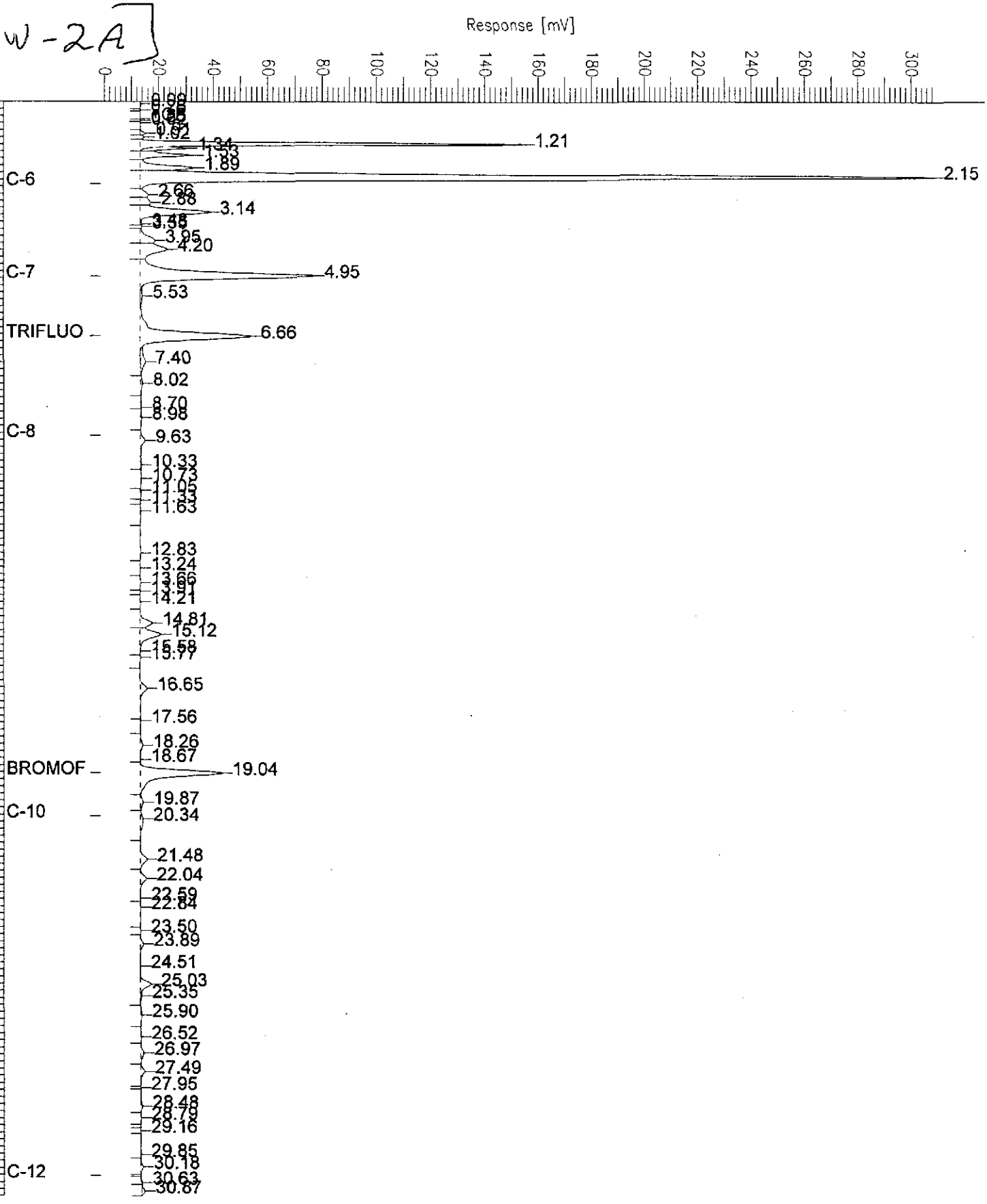


Chromatogram

Sample Name : 151564-003,63287,+mtbe
leName : G:\GC05\DATA\116G017.raw
thod : TVHBTXE
Start Time : 0.00 min End Time : 31.00 min
Scale Factor: 1.0 Plot Offset: -2 mV

Sample #: a1 Page 1 of 1
Date : 4/27/01 06:35 AM
Time of Injection: 4/27/01 06:03 AM
Low Point : -1.55 mV High Point : 308.78 mV
Plot Scale: 310.3 mV

MW-2A

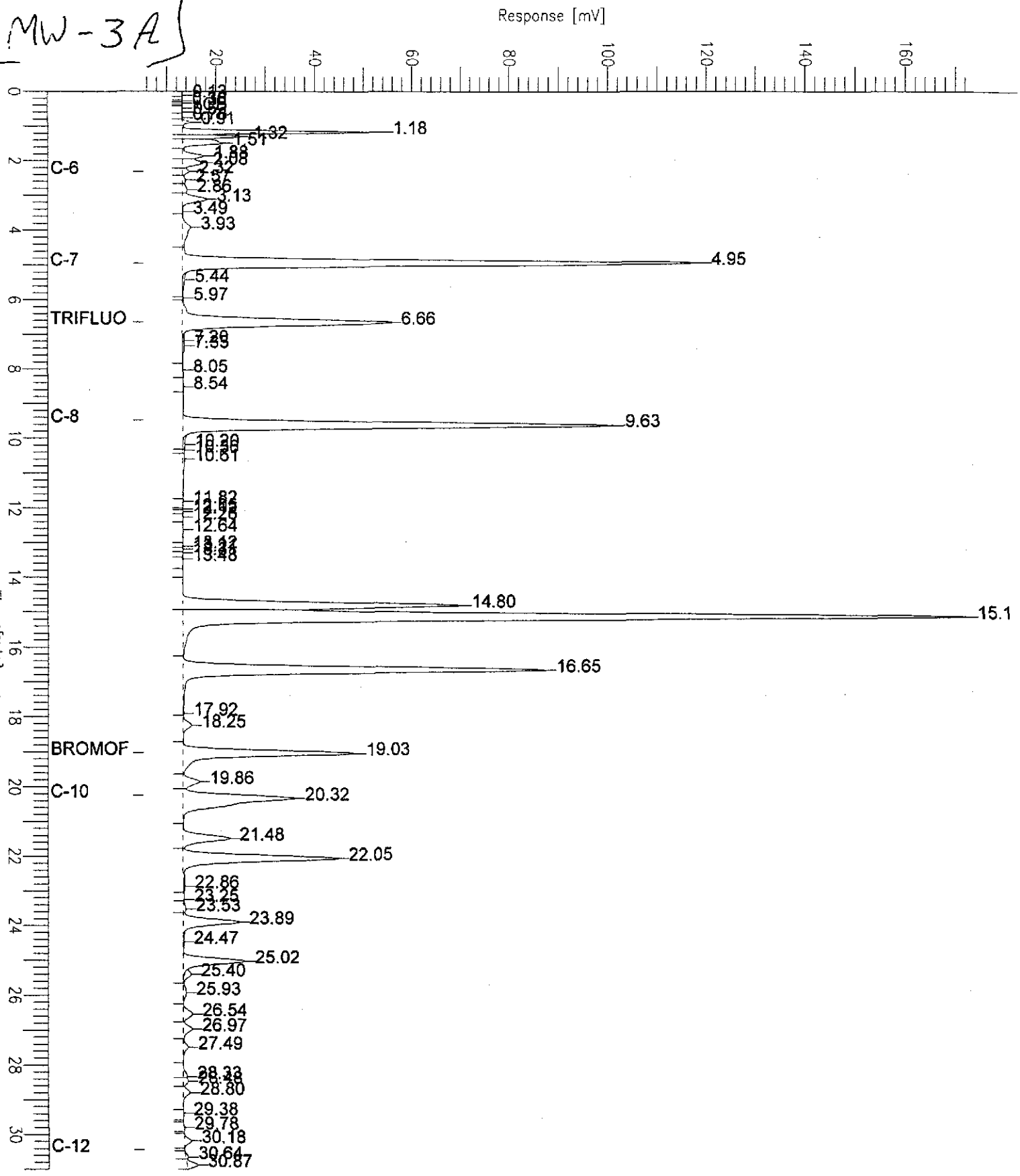


Chromatogram

Sample Name : 151564-004,63287,+mtbe
FileName : G:\GC05\DATA\116G018.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 31.00 min
Scale Factor: 1.0 Plot Offset: 5 mV

Sample #: a1 Page 1 of 1
Date : 4/27/01 · 07:19 AM
Time of Injection: 4/27/01 06:47 AM
Low Point : 5.19 mV High Point : 172.27 mV
Plot Scale: 167.1 mV

MW-3A



Gasoline by GC/FID CA LUFT

Lab #:	151564	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8015M
Matrix:	Water	Sampled:	04/19/01
Units:	ug/L	Received:	04/19/01

Field ID:	MW-3B	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	63179
Lab ID:	151564-005	Analyzed:	04/23/01

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	59-135
Bromofluorobenzene (FID)	100	60-140

Type:	BLANK	Batch#:	63179
Lab ID:	QC143751	Analyzed:	04/23/01
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	102	59-135
Bromofluorobenzene (FID)	100	60-140

Type:	BLANK	Batch#:	63287
Lab ID:	QC144158	Analyzed:	04/26/01
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	80	59-135
Bromofluorobenzene (FID)	78	60-140

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/FID CA LUFT

Lab #:	151564	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8015M
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC143749	Batch#:	63179
Matrix:	Water	Analyzed:	04/23/01
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,822	91	73-121

Surrogate	%REC	Limits
Trifluorotoluene (FID)	126	59-135
Bromofluorobenzene (FID)	103	60-140

Gasoline by GC/FID CA LUFT

Lab #:	151564	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8015M
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC144159	Batch#:	63287
Matrix:	Water	Analyzed:	04/26/01
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,977	99	73-121

Surrogate	%REC	Limits
Trifluorotoluene (FID)	101	59-135
Bromofluorobenzene (FID)	94	60-140

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	151564	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8021B
Matrix:	Water	Sampled:	04/19/01
Units:	ug/L	Received:	04/19/01

ield ID:	MW-1A	Diln Fac:	1.000
ype:	SAMPLE	Batch#:	63179
Lab ID:	151564-001	Analyzed:	04/23/01

Analyte	Result	RL
MTBE	3.9	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	0.50	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	101	56-142
Bromofluorobenzene (PID)	100	55-149

ield ID:	MW-1B	Diln Fac:	50.00
ype:	SAMPLE	Batch#:	63308
Lab ID:	151564-002	Analyzed:	04/28/01

Analyte	Result	RL
MTBE	45,000	100
Benzene	4,500	25
Toluene	33	25
Ethylbenzene	840	25
m,p-Xylenes	980	25
o-Xylene	270	25

Surrogate	%REC	Limits
Trifluorotoluene (PID)	76	56-142
Bromofluorobenzene (PID)	73	55-149

ield ID:	MW-2A	Diln Fac:	10.00
ype:	SAMPLE	Batch#:	63287
Lab ID:	151564-003	Analyzed:	04/27/01

Analyte	Result	RL
MTBE	6,800	20
Benzene	910	5.0
Toluene	36	5.0
Ethylbenzene	71	5.0
m,p-Xylenes	120	5.0
o-Xylene	33	5.0

Surrogate	%REC	Limits
Trifluorotoluene (PID)	82	56-142
Bromofluorobenzene (PID)	77	55-149

D= Not Detected
L= Reporting Limit

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	151564	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8021B
Matrix:	Water	Sampled:	04/19/01
Units:	ug/L	Received:	04/19/01

Field ID:	MW-3A	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	63287
Lab ID:	151564-004	Analyzed:	04/27/01

Analyte	Result	RL
MTBE	ND	20
Benzene	1,600	5.0
Toluene	1,400	5.0
Ethylbenzene	1,000	5.0
m,p-Xylenes	2,900	5.0
o-Xylene	1,400	5.0

Surrogate	%REC	Limits
Trifluorotoluene (PID)	85	56-142
Bromofluorobenzene (PID)	90	55-149

Field ID:	MW-3B	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	63179
Lab ID:	151564-005	Analyzed:	04/23/01

Analyte	Result	RL
MTBE	ND	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	102	56-142
Bromofluorobenzene (PID)	97	55-149

Type:	BLANK	Batch#:	63179
Lab ID:	QC143751	Analyzed:	04/23/01
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	102	56-142
Bromofluorobenzene (PID)	97	55-149

ND= Not Detected
RL= Reporting Limit

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	151564	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC143750	Batch#:	63179
Matrix:	Water	Analyzed:	04/23/01
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	19.21	96	51-125
Benzene	20.00	20.43	102	67-117
Toluene	20.00	20.88	104	69-117
Ethylbenzene	20.00	20.43	102	68-124
m,p-Xylenes	40.00	44.72	112	70-125
o-Xylene	20.00	21.37	107	65-129

Surrogate	%REC	Limits
Trifluorotoluene (PID)	105	56-142
Bromofluorobenzene (PID)	99	55-149

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	151564	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC144160	Batch#:	63287
Matrix:	Water	Analyzed:	04/26/01
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	19.41	97	51-125
Benzene	20.00	22.57	113	67-117
Toluene	20.00	21.86	109	69-117
Ethylbenzene	20.00	22.74	114	68-124
m,p-Xylenes	40.00	47.40	119	70-125
o-Xylene	20.00	23.63	118	65-129

Surrogate	%REC	Limits
Trifluorotoluene (PID)	84	56-142
Bromofluorobenzene (PID)	87	55-149

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	151564	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8021B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Batch#:	63308

Type: BS Analyzed: 04/27/01
Lab ID: QC144246

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	19.92	100	51-125
Benzene	20.00	21.81	109	67-117
Toluene	20.00	21.19	106	69-117
Ethylbenzene	20.00	22.36	112	68-124
m,p-Xylenes	40.00	45.93	115	70-125
o-Xylene	20.00	22.73	114	65-129

Surrogate	%REC	Limits
Trifluorotoluene (PID)	72	56-142
Bromofluorobenzene (PID)	74	55-149

Type: BSD Analyzed: 04/28/01
Lab ID: QC144247

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	19.89	99	51-125	0	20
Benzene	20.00	21.33	107	67-117	2	20
Toluene	20.00	20.85	104	69-117	2	20
Ethylbenzene	20.00	22.00	110	68-124	2	20
m,p-Xylenes	40.00	46.18	115	70-125	1	20
o-Xylene	20.00	23.24	116	65-129	2	20

Surrogate	%REC	Limits
Trifluorotoluene (PID)	73	56-142
Bromofluorobenzene (PID)	75	55-149

RPD= Relative Percent Difference

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	151564	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8021B
Field ID:	ZZZZZZZZZZ	Batch#:	63179
MSS Lab ID:	151523-009	Sampled:	04/17/01
Matrix:	Water	Received:	04/17/01
Units:	ug/L	Analyzed:	04/24/01
Diln Fac:	1.000		

Type: MS Lab ID: QC143752

Analyte	MSS Result	Spiked	Result	%REC	Limits
MTBE	9.989	20.00	29.76	99	33-131
Benzene	2.384	20.00	22.68	101	65-123
Toluene	1.644	20.00	22.85	106	73-122
Ethylbenzene	2.059	20.00	22.99	105	59-137
m,p-Xylenes	6.063	40.00	50.39	111	68-132
o-Xylene	2.014	20.00	23.96	110	61-140

Surrogate	%REC	Limits
Trifluorotoluene (PID)	101	56-142
Bromofluorobenzene (PID)	98	55-149

Type: MSD Lab ID: QC143753

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	30.13	101	33-131	1	20
Benzene	20.00	23.43	105	65-123	3	20
Toluene	20.00	22.05	102	73-122	4	20
Ethylbenzene	20.00	22.40	102	59-137	3	20
m,p-Xylenes	40.00	50.22	110	68-132	0	20
o-Xylene	20.00	23.80	109	61-140	1	20

Surrogate	%REC	Limits
Trifluorotoluene (PID)	101	56-142
Bromofluorobenzene (PID)	98	55-149

RPD= Relative Percent Difference

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	151564	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8021B
Field ID:	ZZZZZZZZZZ	Batch#:	63287
MSS Lab ID:	151519-006	Sampled:	04/18/01
Matrix:	Water	Received:	04/18/01
Units:	ug/L	Analyzed:	04/27/01
Diln Fac:	1.000		

Type: MS Lab ID: QC144161

Analyte	MSS Result	Spiked	Result	%REC	Limits
MTBE	1.783	20.00	22.95	106	33-131
Benzene	29.82	20.00	52.60	114	65-123
Toluene	<0.05100	20.00	23.92	120	73-122
Ethylbenzene	<0.07200	20.00	21.58	108	59-137
m,p-Xylenes	<0.1100	40.00	46.33	116	68-132
o-Xylene	<0.1300	20.00	23.07	115	61-140

Surrogate	%REC	Limits
Trifluorotoluene (PID)	82	56-142
Bromofluorobenzene (PID)	83	55-149

Type: MSD Lab ID: QC144162

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	22.45	103	33-131	2	20
Benzene	20.00	52.02	111	65-123	1	20
Toluene	20.00	25.29	126 *	73-122	6	20
Ethylbenzene	20.00	22.75	114	59-137	5	20
m,p-Xylenes	40.00	47.16	118	68-132	2	20
o-Xylene	20.00	23.61	118	61-140	2	20

Surrogate	%REC	Limits
Trifluorotoluene (PID)	81	56-142
Bromofluorobenzene (PID)	82	55-149

*= Value outside of QC limits; see narrative
PD= Relative Percent Difference

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	151564	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8021B
Matrix:	Water	Sampled:	04/19/01
Units:	ug/L	Received:	04/19/01

Type:	BLANK	Batch#:	63287
Lab ID:	QC144158	Analyzed:	04/26/01
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	74	56-142
Bromofluorobenzene (PID)	76	55-149

Type:	BLANK	Batch#:	63308
Lab ID:	QC144242	Analyzed:	04/27/01
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	65	56-142
Bromofluorobenzene (PID)	66	55-149

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	151564	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8260B
Field ID:	MW-1A	Batch#:	63372
Lab ID:	151564-001	Sampled:	04/19/01
Matrix:	Water	Received:	04/19/01
Units:	ug/L	Analyzed:	05/02/01
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	5.3	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	102	78-123
Toluene-d8	98	80-110
Bromofluorobenzene	101	80-115

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	151564	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8260B
Field ID:	MW-1B	Batch#:	63339
Lab ID:	151564-002	Sampled:	04/19/01
Matrix:	Water	Received:	04/19/01
Units:	ug/L	Analyzed:	05/02/01
Diln Fac:	333.3		

Analyte	Result	RL
MTBE	48,000	170

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	102	78-123
Toluene-d8	98	80-110
Bromofluorobenzene	98	80-115

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	151564	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8260B
Field ID:	MW-2A	Batch#:	63339
Lab ID:	151564-003	Sampled:	04/19/01
Matrix:	Water	Received:	04/19/01
Units:	ug/L	Analyzed:	05/02/01
Diln Fac:	50.00		

Analyte	Result	RL
MTBE	7,200	25

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	78-123
Toluene-d8	98	80-110
Bromofluorobenzene	96	80-115

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	151564	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC144355	Batch#:	63339
Matrix:	Water	Analyzed:	05/01/01
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	96	78-123
Toluene-d8	98	80-110
Bromofluorobenzene	102	80-115

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	151564	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC144478	Batch#:	63372
Matrix:	Water	Analyzed:	05/02/01
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	78-123
Toluene-d8	100	80-110
Bromofluorobenzene	99	80-115

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	151564	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	63339
Units:	ug/L	Analyzed:	05/01/01
Diln Fac:	1.000		

Type: BS Lab ID: QC144352

Analyte	Spiked	Result	%REC	Limits
MTBE	50.00	45.15	90	75-125

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	90	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	96	80-115

Type: BSD Lab ID: QC144353

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	50.00	47.08	94	75-125	4	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	94	78-123
Toluene-d8	101	80-110
Bromofluorobenzene	93	80-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	151564	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	63372
Units:	ug/L	Analyzed:	05/02/01
Diln Fac:	1.000		

Type: BS Lab ID: QC144476

Analyte	Spiked	Result	%REC	Limits
MTBE	50.00	45.71	91	75-125

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	94	78-123
Toluene-d8	95	80-110
Bromofluorobenzene	97	80-115

Type: BSD Lab ID: QC144477

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	50.00	47.83	96	75-125	5	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	78-123
Toluene-d8	101	80-110
Bromofluorobenzene	100	80-115

RPD= Relative Percent Difference