COPY

ENVIRONMENTAL CONSULTING

6 November 2000 98381-B0

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, Oakfand, California - September 2000

Dear Ann:

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

FIELD ACTIVITIES

On 20 September 2000, groundwater samples were collected from the five monitoring wells on-site (Figure 2). The potential presence of free product was checked and water levels measured in the wells using a dual-interface probe prior to sampling activities. 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.

Due to slow groundwater recovery, the purging of the wells was completed on 19 September 2000, and the samples collected on 20 September 2000. The purged groundwater and decontamination rinsate were stored on-site in sealed and labeled 55-gallon drums.

A peristaltic pump and clean polyethylene tubing was used to collect groundwater samples from each well. 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, California, a California-certified laboratory for analysis. The groundwater samples were submitted for TPH as gasoline (EPA Method 8015M), and BTEX

Ms. Ann E. Johnston 6 November 2000 Page 2

and MTBE analyses (EPA Method 8021B). The presence of MTBE was confirmed using EPA Method 8260B. 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 report for the September 2000 groundwater samples is included in Attachment B. The groundwater samples collected on 20 September 2000 were not analyzed for TPH as diesel. TPH as diesel, which was analyzed as part of the previous four monitoring events, does not appear to be a contaminant of concern for the project site. During the previous monitoring events, TPH as diesel was quantified by the laboratory (at less than 1.0 mg/L) in wells MW-1A, MW-2A, and MW-3A. However, review of the chromatograms for these analyses indicates that diesel is not present, and that the "diesel" quantified by the laboratory is associated with late-eluting gasoline.

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 14 mg/L gasoline, 4.0 mg/L benzene, 0.13 mg/L toluene, 0.45 mg/L ethylbenzene, 3.09 mg/L xylenes, and 48 mg/L MTBE) during the September 2000 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 0.002 mg/L (laboratory reporting limit is 0.0005 mg/L) methyl-tert-butyl ether (MTBE) in MW-1B.

GROUNDWATER FLOW DIRECTION

Groundwater elevation data are summarized in Table 2. The groundwater data collected on 19 September 2000 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 S53°E with a gradient magnitude of 0.026.

CONCLUSIONS AND RECOMMENDATIONS

- Chemical quality of the uppermost water-bearing zone, characterized by samples collected from MW-1A, MW-2A, and MW-3A, has been impacted by a gasoline release. Based on November 1999 and September 2000 analytical data for samples collected from MW-1B and MW-3B, no significant impact appears to have occurred within the lower water-bearing zone.
- The shallow groundwater flow direction was S53°E with a gradient magnitude of 0.026, as calculated from the three shallow wells.

Ms. Ann E. Johnston 6 November 2000 Page 3

- Purge and decontamination water generated during field activities should be disposed of in accordance with applicable local, State, and Federal requirements.
- The next quarterly groundwater monitoring event should be conducted in December 2000.
 Groundwater samples should be analyzed for TPH as gasoline (EPA 8015M), BTEX, and MTBE (EPA 8021B). MTBE confirmation by EPA 8260B is not recommended because confirmation during the September 2000 monitoring event indicated that test Method 8021B provided representative results.

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

Sincerely,

Bruce Abelli-Amen

Project Manager

Mane Nordhav

Reg. Geologist #4009

Principal

BAA:YN:cr Enclosure

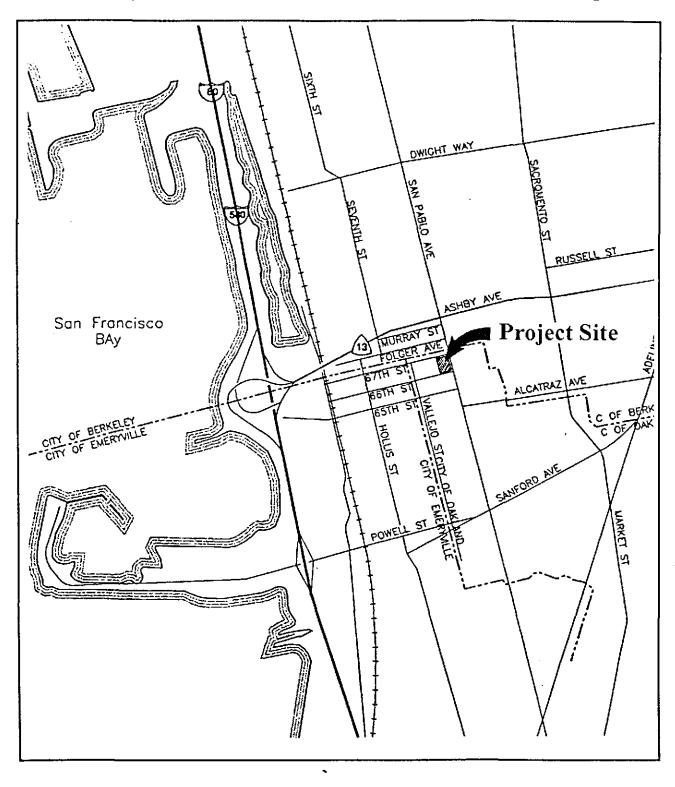
cc: Helen Loreto, McDonalds Corporation

bell anergo

Larry Seto, Alameda County Environmental Health Services

REGIONAL LOCATION

Figure 1



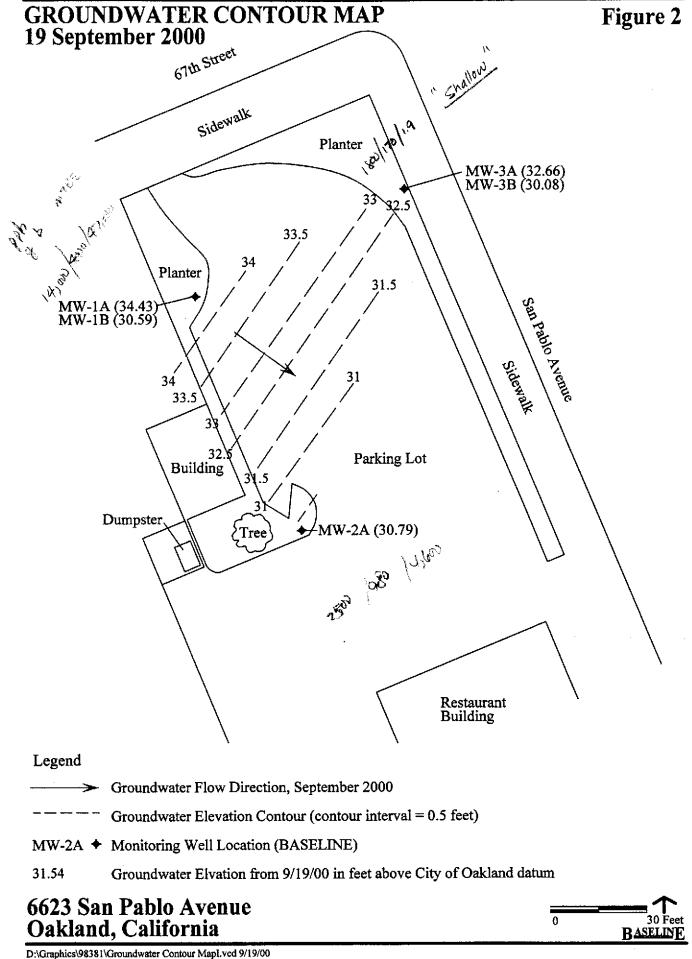


TABLE 1
SUMMARY OF ANALYTICAL RESULTS, GROUNDWATER
6623 San Pablo Avenue, Oakland
(mg/L)

Sample ID	Date	Diesel ¹	Gasoline ¹	Total Lead ²	Benzene ³	Toluene ³	Ethyl- benzene ³	Xylenes³	MTBE ³	MTBE Confirmation
	dwater Sample	s 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		
Groundwate	r Samples Fro	m Monitoring V	<u>Vells</u>							
MW-1A	2/8/99⁵									
	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
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
MW-2A	2/8/99	0.53^{7}	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

Table 1 - continued

Sample ID	Date	Diesel ¹	Gasoline ^l	Total Lead ²	⇒ Benzene³	Toluene³	Ethyl- benzene ³	Xylenes ³	MTBE ³	MTBE Confirmation ⁴
MW-3A	2/8/99	0.217	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
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

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 November 1999 sampling event are included in Appendix B.

- ¹ Analyzed using EPA Method 8015M.
- ² Analyzed using EPA Method 6010A.
- Analyzed using EPA Method 8020 or 8021B.
- ⁴ Analyzed using EPA Method 8260B.
- Insufficient groundwater in well to allow sample collection.
- Sample exhibits a fuel pattern which does not resemble standard; lighter hydrocarbons were exhibited than the indicated standard.//
- 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 lighter than diesel patterns.

TABLE 2
GROUNDWATER ELEVATIONS AND GRADIENT MAGNITUDES
6623 San Pablo Avenue, Oakland

		MW-1	Λ^1 , \mathbb{R}^2	, 13 S. j. F	MW-1B	² , Aprile view	M	W-2A ³			MW-3/	(4 1) (14 in 19		MW-31	B ⁵	Gradient ⁸
Date	Time	Depth to Ground- water	Ground- water Elevation ⁷	Time	Depth to Ground- water	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	ft/ft
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

Notes: Monitoring well locations are shown on Figure 2.

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.

^{-- =} Not collected / Not determined.

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

Project no.:	98381			Well no.:	MW-1A		Date:	9/19/00
Project name:	McDonald	's		Depth of well from	TOC (feet):	9.95		
Location:	6623 San I	Pablo Ave.		Well diameter (inch):	3/4		
	Oakland			Screened interval fr	om TOC (feet):	5-10		
Recorded by:	WKS			TOC elevation (feet):	39.96		
						5.62	æ;	10:30
Weather:	Sunny, wa	rm		Water level from TO	OC (feet):	5.53	Time:	(9/19/00) 10:30
Precip in past 5	days (inch):	0		Product level from	ΓΟC (feet):	None	Time:	(9/19/00)
				Water level measure	ement device:	Dual-interface	probe	
CALCULATIO	N OF WEI	L VOLUME:						
GALOGEATIC	((9.95 ft) -	(5.53 ft)] x	$(0.03 \text{ ft})^2 \text{ x}$	3.14 x 7.48 =	0.0	8 gallons in	one well volu	ıme
	well depth	water level	well radius		0.2		ns removed	
	_					· 		
CALIBRATIO	N							
			<u>Time</u>	Temp (° C)	<u>pH</u>	EC (umh	io/cm)	<u>NTU</u>
	Calibration	Standard:			7.00/10.01	1,0	000	0/5.0
	Before	e Purging:	9:50	24.5	7.00/10.01	1,0	000	0/5.0
	Afte	r Purging:	12:00	24.0	7.09/10.05	5 1,0	028	0/4.97
FIELD MEAS	UREMENTS	3 :						
	<u>Ten</u>	מו	<u>EC</u>	Cumulative Galle	ons .			
<u>Time</u>		_	(µmho/em)			<u>Appearance</u>	<u>e</u>	<u>NTU</u>
11:09			1231	0.06		Clear		3.93
11:12			1270	0.13		Clear		3.32
11:17	7 23	5 7.08	1306	0.20		Clear		3.23
				•				
Water level after	r purging pri	or to sampling (fe	eet): 6.76				Time:	13:20 (9/20/00)
Appearance of s	ample:	Clear/3.23 NTU	J				Time:	13:20 (9/20/00)
Duplicate/blank	number:						Time:	
Purge method:		Peristaltic pump	and disposable	polyethylene tubing	7		··	
Sampling equip	ment:	Peristaltic pum	o and disposable	polyethylene tubing	g V	OC attachment:	None requir	ed
Sample containe		Three 40 ml VC)As		<u>-</u>			
Sample analyses		TPHg, BTEX, I	МТВЕ			Laboratory:	Curtis & To	mpkins
	n method:		DI water rinse			Rinsate disposal:		

					_			
Project no.:	98381			Well no.:	MW-2A		Date:	9/19/00
Project name:	МcDonald	s		Depth of well from TO	OC (feet):	14.72		
Location:	6623 San F	ablo Ave.		Well diameter (inch):		1 inch		
	Oakland			Screened interval from	TOC (feet):	5-10		
Recorded by:	WKS			TOC elevation (feet):		38.92		
Weather:	Sunny, war	m	·	Water level from TOC	(feet):	8.13	Time:	9:55 (9/18/00)
								9:55
Precip in past 5	days (inch):			Product level from TO		None		(9/18/00)
				Water level measurem	ent device:	Dual-interface prob	e	
CALCULATIO	ON OF WEL	L VOLUME:						
	[(14.72 ft) -	(5.53 ft)] x	$(0.042 \text{ ft})^2 \text{ x}$	3.14 x 7.48 =	0.20	gallons in one v	veli volu	ıme
	well depth	water level	well radius		1.5	total gallons ren	noved	
CALIBRATIO	N.							
ONLIBITATIO	41		<u>Time</u>	<u>Temp (° C)</u>	рH	EC (µmho/em)	<u>NTU</u>
	Calibration	Standard:	<u> </u>	Temp (C)	7.00/10.01		<u> </u>	0/5.0
		Purging:	9:50	24.5	7.00/10.01			0/5.0
		Purging:	12:00	24.0	7.09/10.05	•		0/4.97
		•	12.00	2.110		-,		
FIELD MEAS	UREMENTS	:						
<u>Tim</u>	<u>Tem</u> <u>e (° C</u>	_	EC (µmho/cm)	Cumulative Gallons Removed	i	Appearance		<u>NTU</u>
10:24			1226	0.2		Clear, petroleum odo	or .	2.60
10:29			1144	1.0		Clear, petroleum odo		2.21
10:30			1150	1,5		Clear, petroleum odo		1.46
10.5	. 22	0.57	1150	1.5		Crouc, pourous		
				•				
Water level afte	er purging pric	or to sampling (fe	et): 8.14				Time: _	13:15 (9/20/00)
Appearance of s	sample:	Clear					Time: _	13:15 (9/20/00)
Duplicate/blank	number:						Time:	
Purge method:	•	Peristaltic pump	and disposable	polyethylene tubing				
Sampling equip	ment:	Peristaltic pump	and disposable	e polyethylene tubing	v	OC attachment: Nor	e requir	ed
Sample contain	ers:	Three 40 ml VO	As					
Sample analyse	s:	TPHg, BTEX, N	TBE			Laboratory: Cur	tis & To	mpkins
Decontamination	•	TSP and water,	DI water rinse			Rinsate disposal: On-	site drui	m
1								

Project no.:	98381			Well no.:	MW-3A		Date:	9/19/00
	McDonald'			•		10.02		3/13/00
Project name:				Depth of well from T	• •	· · · · · · · · · · · · · · · · · · ·		
Location:	6623 San P	ablo Ave.		Well diameter (inch)		3/4		
	Oakland			Screened interval fro		7-10.02		-
Recorded by:	WKS			TOC elevation (feet):	:	39.76		
Weather:	Sunny, war	m		Water level from TO	C (feet):	7.10	Time:	10:50 (9/19/00)
Precip in past 5	days (inch):	0		Product level from T	OC (feet):	None	Time:	10:50 (9/19/00)
				Water level measurer	ment device:	Dual-interface	probe	
CALCULATIO	N OF WELL	VOLUME.	<u> </u>					
CALCULATIO			(0.00.00.0)			. 11 '	11 .1.	
	[(10.02 ft) -	(7.10 ft)] x	$(0.0.03 \text{ ft})^2 \text{ x}$	$3.14 \times 7.48 =$	0.00		one well volu	ime
	well depth	water level	well radius		1.13	total gallor	ns removed	
CALIDDATION	. I							
CALIBRATION	N			- 00	**	no cont	- />	NUTE I
			<u>Time</u>	Temp (° C)	<u>pH</u>	EC (µmh		NTU
	Calibration S				7.00/10.01		000	0/5.0
	Before	Purging:	9:50	24.5	7,00/10.01	•	000	0/5.0
	After	Purging:	12:00	24.0	7.09/10.05	1,0	028	0/4.97
FIELD MEASU	JREMENTS	;						
<u>Time</u>	Tem (° C		<u>EC</u> (μmho/cm)	Cumulative Gallor Removed	<u>ns</u>	Appearanc	<u>e</u>	<u>NTU</u>
				presence of abundant vas pumped dry at the			er. This	
Water level after	purging prio	r to sampling (fee	et): 7.66		<u>.</u>		-	13:50 (9/20/00)
Appearance of sa	ample:	Clear - very sligh	ntly turbid				Time:	13:50 (9/20/00)
Duplicate/blank	number:						Time:	
Purge method:	_	Peristaltic pump	and disposable	polyethylene tubing				
Sampling equipm	nent:	Peristaltic pump	and disposable	polyethylene tubing	v	OC attachment:	None requir	ed
Sample containe	rs:	Two 40 ml VOA	ıs					<u>,,</u>
Sample analyses	: _	ТРНg, ВТЕХ, М	ITBE			Laboratory:	Curtis & To	mpkins
Decontamination	n method:	TSP and water, l	DI water rinse			Rinsate disposal:	On-site dru	m

Project no.:	98381			Well no.:	MW-3B		Date:	9/19/00
Project name:	McDonald's		<u></u>	Depth of well from T		31.31	Date.	7/17/00
Location:	6623 San Pa		·	Well diameter (inch):	• •	3/4		
Location.	Oakland	olo Avc.		Screened interval from		26.3-31.3		···
Recorded by:	WKS			TOC elevation (feet):	` '	39.79		
Recorded by.	WKS			TOC elevation (teet).		39.79		10:49
Weather:	Sunny, warn	n		Water level from TO	C (feet):	9.71	Time:	(9/19/00)
Precip in past 5 o	days (inch):	0		Product level from To	OC (feet):	None	Time:	12:03 (9/19/00)
				Water level measuren	nent device:	Dual-interface p	robe	
CALCULATIO	N OF WELL	VOLUME:						
	[(31.31 ft) -	(9.71 ft)] x	(0.0.03 ft) ² x	3.14 x 7.48 =	0.43	gallons in or	ne well volu	ıme
	well depth	water level	well radius	•	1.1	total gallons		
CALIBRATION	ų							
			<u>Time</u>	Temp (° C)	pН	EC (umho	/cm)	<u>NTU</u>
	Calibration Si	tandard:			7.00/10.01	1,00	00	0/5.0
	Before I	ourging:	9:50	24.5	7.00/10.01	1,00	00	0/5.0
	After I	Purging:	12:00	24.0	7.09/10.05	1,02	28	0/4.97
FIELD MEASU	IREMENTS:							
	Temp		<u>EC</u>	Cumulative Gallor	ıs			
<u>Time</u>		-	(µmho/cm)			<u>Appearance</u>		<u>NTU</u>
11:44	21.5	7.22	872	0.1		Clear, petroleum	odor	3.02
11:52	21.7	7.06	911	0.75		Clear, petroleum	odor	7.83
11:59	21.9	7.07	918	1.1		Clear, petroleum	odor	8.23
		We	ll ran dry					
			-					
Water level after	nurging nrior	to sampling (fee	et): 12.71				Time:	14:05 (9/20/00)
Appearance of sa		Clear	12.71				_	14:05 (9/20/00)
Duplicate/blank r	_	-					Time:	
Purge method:	_	Peristaltic pump	and disposable	polyethylene tubing			_	
Sampling equipm	•••		•	polyethylene tubing	v	OC attachment:	None requir	red
Sample container	_	Three 40 ml VO						
Sample analyses:		ГРНg, ВТЕХ, М				Laboratory:	Curtis & To	ompkins
Decontamination	method:	ΓSP and water, I	DI water rinse		F	Rinsate disposal:	On-site drui	m

.	00201						Δ-4	0/10/00
Project no.:	98381			Well no.:	MW-1B	20.22	Date:	9/19/00
Project name:	McDonald's		· · · · · · · · · · · · · · · · · · ·	Depth of well from		30.32		
Location:	6623 San Pa	ablo Ave.		Well diameter (inch		3/4		
	Oakland			Screened interval fr		25-30		
Recorded by:	WKS			TOC elevation (feet	·	39.95		
Weather:	Sunny, warr		····	Water level from To	•	9.36	_	10:33
Precip in past 5 o	days (inch):	0		Product level from	, .	None		10:33
				Water level measure	ement device:	Dual-interface p	robe	
CALCULATIO	N OF WELL	VOLUME:						
	[(30.32 ft) -	(9.36 ft)] x	$(0.0.03 \text{ ft})^2 \text{ x}$	$3.14 \times 7.48 =$	0.4	gallons in o	ne well vol	ште
	well depth	water level	well radius		1.0	total gallons	s removed	
	•							
CALIBRATION	J							
			<u>Time</u>	Temp (° C)	Щ	EC (umbo	o/cm)	<u>NTU</u>
	Calibration S	standard:			7.00/10.01			0/5.0
		Purging:	9:50	24.5	7.00/10.01			0/5.0
		Purging:	12:00	24.0	7.09/10.05	•		0/4.97
FIELD MEASU								
<u>Time</u>	<u>Temr</u> (° C)	-	EC (umho/cm)	Cumulative Galle Removed	<u>ons</u>	Appearance		<u>NTU</u>
10:54	21.6	6.97	892	0.4		Clear	i	6.0
10.54	21.4	7.02	913	1.0		Clear		3.11
. (1.02	21.4	7.02	713	1.0		Cica		3.11
				•	•			
Water level after	purging prior	to sampling (fee	et): 12.74		ж:.		Time:	13:35 (9/20/00)
Appearance of sa	mple:	Clear - very sligh	ntly turbid				Time:	13:35 (9/20/00)
Duplicate/blank r	number:						Time:	
Purge method:		Peristaltic pump	and disposable	polyethylene tubing	3			
Sampling equipm	nent:	Peristaltic pump	and disposable	polyethylene tubing	<u>v</u> V	OC attachment:	None requi	red
Sample container	rs:	Three 40 ml VO	As					
Sample analyses:	- :	TPHg, BTEX, M	TBE			Laboratory:	Curtis & To	ompkins
Decontamination	method:	TSP and water, I	I water rinse		F	tinsate disposal:	On-site dru	m

ATTACHMENT B

LABORATORY REPORT AND CHAIN-OF-CUSTODY FORM

Quality Control Checklist for Review of Laboratory Report

Job P	No.: 9838/-ω Site:	Mr Donalds	, 66	<u> 23 S</u>	in 1941
Labo	ratory: Curtis & Tompiens Labor	ratory Report No: _	1476	23	
Repo	rt Date; 9-28-00 BASE	ELINE Review By: _	Wbs	-	
6 to			Yes	⊗No	NA -
(De	NERAL QUESTIONS scribe "no" responses below in "comments" section. Contact lanation or action on "no" responses; document discussion in			for fur	ther
la.	Does the report include a case narrative? (A case narrative MC the lab for all analytical work requested by BASELINE)	JST be prepared by	X		\bigotimes
1b.	Is the number of pages for the lab report as indicated on the ca transmittal consistent with the number of pages that are include		X		\bigotimes
1c.	Does the case narrative indicate which samples were analyzed and the subcontractor's name?	by a subcontractor			X
ld.	Does the case narrative summarize subsequent requests not sho custody (e.g., additional analyses requested, release of "hold"		X		M.
le.	Does the case narrative explain why requested analyses could laboratory (e.g., insufficient sample)?	not be performed by			X
lf.	Does the case narrative explain all problems with the QA/QC of the checklist (as applicable)?	data as identified in			X
2a.	Is the laboratory report format consistent and legible throughout	ut the report?	X		$\Diamond \Diamond$
2b.	Are the sample and reported dates shown in the laboratory repo	ort correct?	X		XX
3a.	Does the lab report include the original chain-of-custody form	?		COPY	\otimes
3b.	Were all samples appropriately analyzed as requested on the cl form?	hain-of-custody	X		\bigotimes
4.	Was the lab report signed and dated as being reviewed by the l QA manager, or other appropriate personnel? (Some lab report spaces for each page). (This requirement also applies to any a subcontracted out by the laboratory)	ts have signature	X		$\overset{\otimes}{\otimes}$
5a.	Are preparation methods, cleanup methods (if applicable), and indicated for all analyses?	l laboratory methods	X		\bigotimes
5b.	If additional analytes were requested as part of the reporting o analytical method, were these included in the lab report?	f the data for an	X		
6.	Are the units in the lab report provided for each analysis consireport?	istent throughout the	X		\bigotimes
7.	Are the detection limits (DL) appropriate based on the intende (e.g., DL below applicable MCLs for water quality issues?)	ed use of the data?	X		\otimes
8a.	Are detection limits appropriate based on the analysis perform due to dilution effects)	ned? (i.e., not elevated	X		\bigotimes
8b.	If no, is an explanation provided by the laboratory?				X
9a.	Were the samples analyzed within the appropriate holding time for volatiles, and up to 6 months for total metals)	ne? (generally 2 weeks	Χ		\bigotimes

Laboratory Quality Control Checklist Page 2

		Yes	No	NA 1
9b.	If no, was it flagged in the report?			X
10.	If samples were composited prior to analysis, does the lab report indicate which samples were composited for each analysis?			X
lla.	Do the chromatograms confirm quantitative laboratory results? (petroleum hydrocarbons)	X		
llb.	Is a standard chromatogram(s) included in the laboratory report?	X		
11c.	Do the chromatograms confirm laboratory notes, if present (e.g., sample exhibits lighter hydrocarbon than standard)			X
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)	X	:	
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?		:	\times
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?			X
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?	_		Χ
	QC Questions I/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.		,	X
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.			X
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).			X

	Yes	No NA
Batch Quality Control (Samples are batched together by matrix [soil, water] and analyses requested. A batch gene fewer samples of the same matrix type, and is prepared using the same reagents, standards, frame as the samples. QC samples are run with each batch to assess performance of the ent process.)	procedure	s, and time
17. Do the sample batch numbers and corresponding laboratory QA/QC batch numbers match?		\otimes
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."	X	$\overset{\sim}{\sim}$
18b. If no, is an explanation provided in the case narrative to validate the data?		メ
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.	X	
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?		X
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.	X	
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).	X	
20b. If no, is the MB and either LCS/LCSD or BS/BSD within lab limits to validate the data?		X

Laboratory Quality Control Checklist Page 4

	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?			X

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: 28-SEP-00 Lab Job Number: 147623 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:

Project Manager

Reviewed by:

Opera**k**ibn**s** Manage:

This package may be reproduced only in its entirety.

CA ELAP # 1459

Page 1 of



Laboratory Number: 147623
Client: Baseline Environmental

Project ID: 98381-BO

Location: McDonalds, San Pablo Ave, Berkeley

CASE NARRATIVE

Receipt Date: 09/20/00

This hardcopy data package contains sample and QC results for five soil samples, which were received from the site referenced above on September 20, 2000.

TVH/BTXE: No analytical problems were encountered.

MTBE: All samples were analyzed by EPA Method 8260 to confirm the MTBE concentrations observed by EPA Method 8020. The MTBE concentrations were confirmed. No analytical problems were encountered.

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

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

CHAIN OF CUSTODY RECORD

Lab

BASELINE Contact Person

aroma ime

Curlis +TOMOKINS

Project Name and Location: Project No. 98381-80 McDonalds, San Pablo Aux, Berkeley
Containers Sampiers: (Signature) Preservative Media Sample ID Date: Time: Other: Remarks/ No. Station HC Composite SO, No.1 Type MW-1H I VOA 13:20 DONG 9-20-00 MW-1A W has a bubble 13:35 3 W MW-1 B W 3 13115 MW-2A a MW-3A 15:50 W 14:05 W MW-315 Conditions of Samples Upon Date/Time Received by: (Signature) Date/Time Relinquished by: (\$)gnature) Arrival at Laboratory: TF MTBE Present in COCH LANGE Confirm W/8260 TYTICS Date/Time Date/Time Received by: (Signature) Relinquished by: (Signature) Received by (Signature) Date/Time Relinguished by: (Signature) Date/Time 9-20-af 15:21

Baseline Environmental

COLLIO & LOUIS INTO ELDI DMINICEEL ECCHI CIDRICE I CIN	CURTIS & TOMPKINS	6. LTD. BERKELEY	LOGIN CHANGE FORM
--	-------------------	------------------	-------------------

Reason for change: _____ Client Request: By: _____ Buce A. Date/Time: _____ Date/Time: _____ Initials: ______

Current Lab ID	Previous Lab ID	Client ID	Matrix	Add/Cancel	Analysis	Duedate
147623-001	Lao ID	MW-IA	Water	Confirm	MTBE by 8260	91
1 -002			1	1)	
-003		MW-1B MW-2A				1010
- 004		MW-3A MW-3B			(120
	(MW-3B	4		<u> </u>	
					· · · · · · · · · · · · · · · · · · ·	
				ļ		
				ļ		
<u> </u>						



	Gasoline l	oy GC/FID CA LU	FT
Lab #:	147623	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
<u> </u> Project#:	98381	Analysis:	EPA 8015M
Matrix:	Water	Sampled:	09/20/00
■Inits:	11α/Γ.	Peceived:	09/20/00

ield ID:

pe: Lab ID: MW-1A SAMPLE

147623-001

Diln Fac:

Batch#: Analyzed: 20.00 58459 09/23/00

Result RI, 14,000 1,000

Surrogate %REC Limits Trifluorotoluene (FID) Bromofluorobenzene (FID) 72 67 59-135 60-140

ield ID:

MW-1B

Analyte
Gasoline C7-C12

ype: Lab ID:

SAMPLE 147623-002 Diln Fac:

Batch#: Analyzed: 1.000

58422 09/21/00

Analyte Gasoline C7-C12 Result RL 50 ND Surrogate Trifluorotoluene (FID) %REC Limits 89 59-135 Bromofluorobenzene (FID) 92 60-140

ield ID:

MW-2A SAMPLE

147623-003

Diln Fac:

Batch#:

Analyzed:

5.000

58459 09/23/00

Analyte		Result	RL	
Gasoline C7-C12		2,500	250	
Surrogate	%REC	Limits		
Trifluorotoluene (FID)	70	59-135		
Bromofluorobenzene (FID)	67	60-140		
·				

<u>F</u>ield ID:

ype: ab ID:

AE-WM SAMPLE

147623-004

Diln Fac:

Batch#:

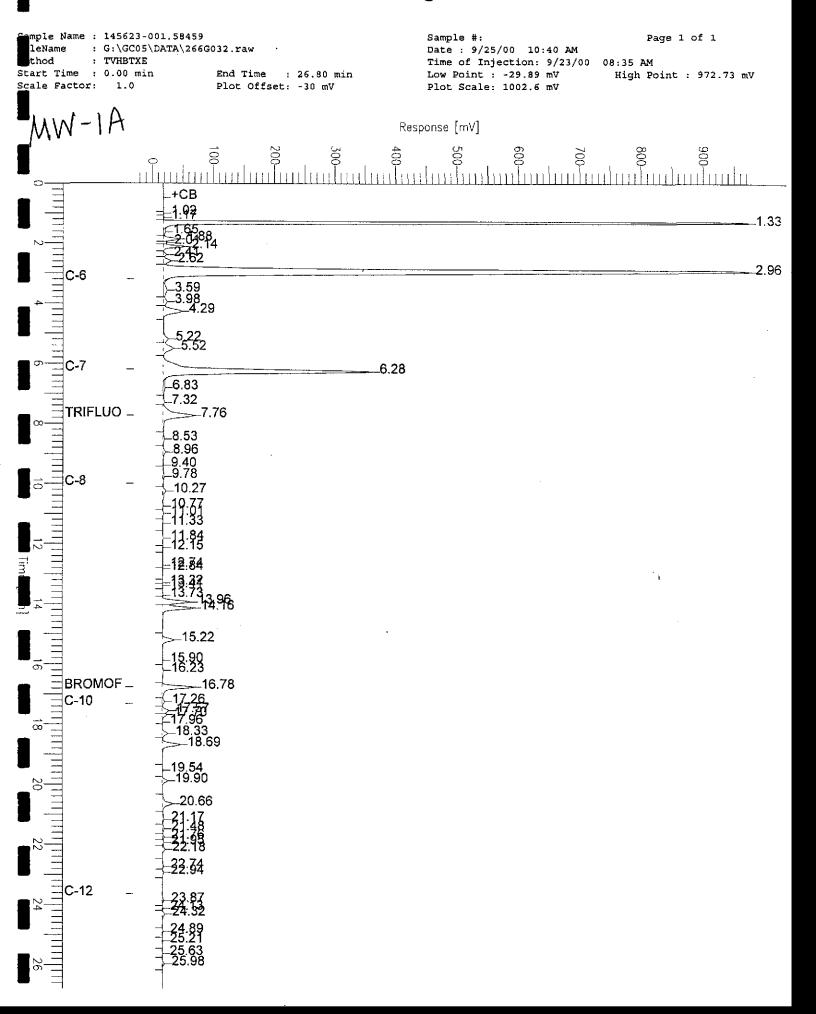
1.000 58422

Analyzed:

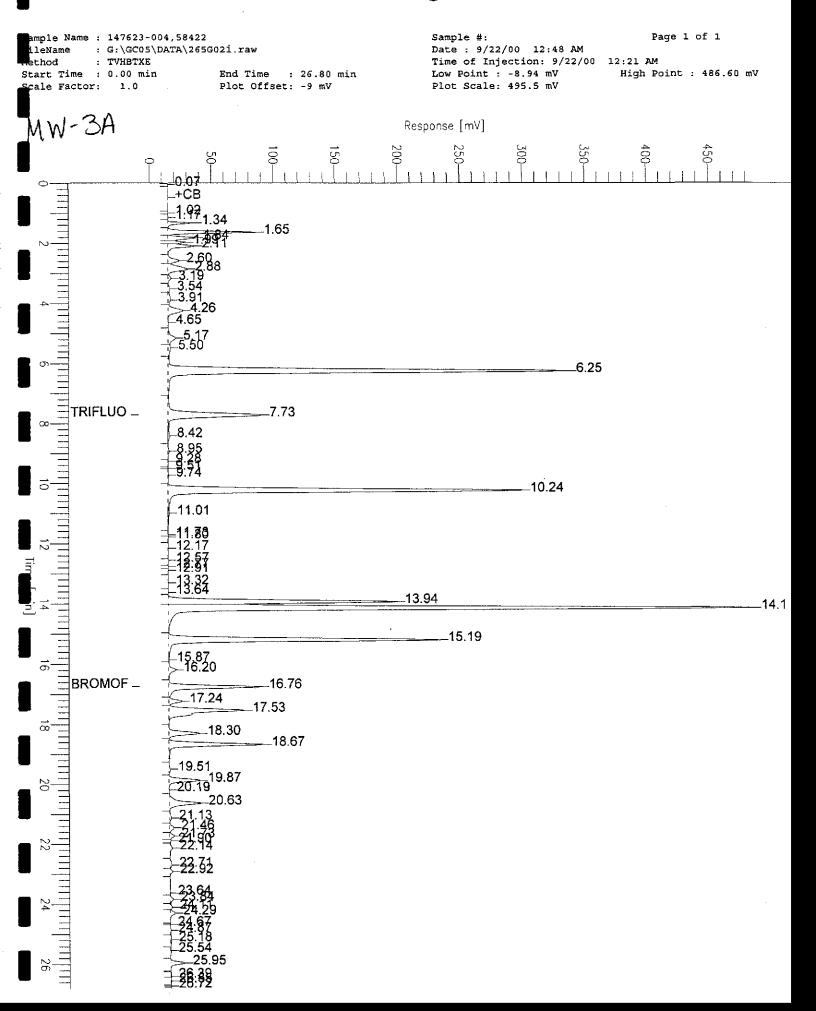
09/22/00

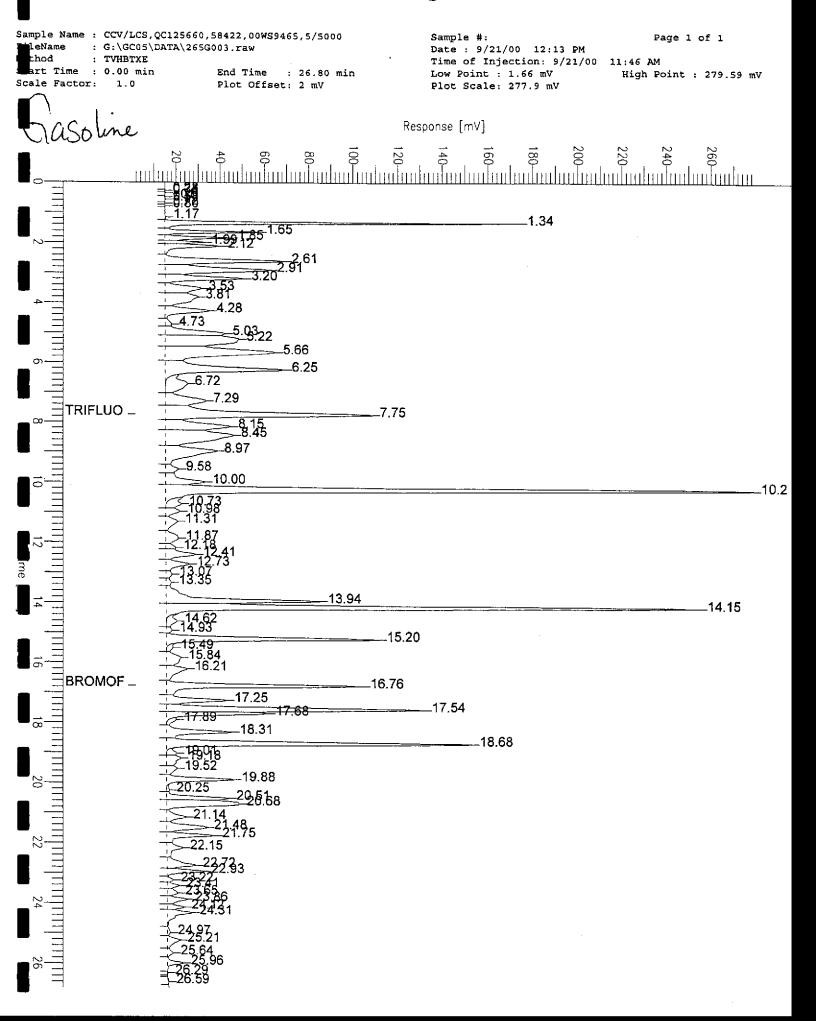
Analyte	000000000000000000000000000000000000000	Result	RL	
Gasoline C7-C12		1,800	50	
Surrogate	%REC	Limits		
Trifluorotoluene (FID)	92	59-135		
Bromofluorobenzene (FID)	93	60-140		

D = Not Detected L = Reporting Limit Page 1 of 2



Sample Name : 145623-003,58459 Sample #: Page 1 of 1 leName : G:\GC05\DATA\266G031.raw Date : 9/25/00 10:39 AM : TVHBTXE Time of Injection: 9/23/00 07:59 AM Start Time : 0.00 min End Time : 26.80 min Low Point : -30.02 mV High Point : 972.74 mV Scale Factor: Plot Offset: -30 mV Plot Scale: 1002.8 mV MW-2A Response [mV] _+CB -1.32 1.68 2.00.86 2.40 2.61 2.96 C-6 3.61 3.96 C-7 _ 4.28 4.76 5.20 5.52 6.27 6.84 7.32 7.75 8.15 8.48 8.96 _9.38 _9.77 -10.26 -11.01 -11.77 -13.15 -12.62 -13.03 -13.42 =13₄95₅ 14.69 _15.21 BROMOF _ _16.77 17 25 17 69 C-10 _20.65 C-12 26.52







Gasoline by GC/FID CA LUFT Lab #: 147623 Location: McDonalds, 6623 San Pablo Client: Baseline Environmental Prep: Analysis: EPA 5030 EPA 8015M 09/20/00 Project#: 98381 Sampled: Matrix: Water <u> Units:</u> 09/20/00 <u>uq/L</u> Received

ield ID: pe:

Lab ID:

MW-3B

SAMPLE 147623-005 Diln Fac:

Batch#: Analyzed: 1.000 58422

09/22/00

Analyte C7-C12 Result Jasoline ND 50 Surrogate Trifluorotoluene (FID) **%REC Limits** 69 59-135 69 Bromofluorobenzene (FID) 77 60-140

āb ID:

Jiln Fac:

BLANK

QC125663 Ĩ.000

Batch#:

Analyzed:

58422 09/21/00

Analyte Result RL Gasoline C7-C12 Surrogate Trifluorotoluene (FID) %REC Limits 99 59-135 <u>Bromofluorobenzene (FID)</u> 104 60-140

ab ID: iln Fac:

BLANK

QC125793

1.000

Batch#:

58459

Analyzed:

09/22/00

Analyte		Result	RL		
Gasoline C7-C12	1	ND	50		
Surrogate	%REC	C Limits			
Trifluorotoluene (FID)	63	59-135		 	
Bromofluorobenzene (FID)	72	60-140 ·			

D = Not Detected L = Reporting Limit age 2 of 2



	Benzene, Toluene,	Ethylbenzene,	Xylenes
Lab #:	147623	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
\perp Project#:	98381	Analysis:	EPA 8021B
Matrix:	Water	Sampled:	09/20/00
Units:	ug/L	Received:	09/20/00
TBatch#:	58484	Analyzed:	09/25/00

ield ID: Type:

MW-1A SAMPLE Lab ID:

147623-001

Diln Fac:

50.00

Analyte	Result	RL
MTBE	47,000	100
Benzene	4,000	25
Toluene	63	25
_ Ethylbenzene	450	25
m,p-Xylenes	490	25
So-Xylene	170	25

Surroga	te	%REC	Limits
Trifluorotoluene	(PID)	89	56-142
Bromofluorobenzen	e (PID)	93	55-149

ield ID: ype:

MW-1B SAMPLE

Lab ID: 147623-002 Diln Fac: 1.000

MTBE	Result 3.5	RL 2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ИD	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50
Surrogate	%REC Limits	
Trifluorotoluene (PID)	86 56-142	
Bromofluorobenzene (PID)	92 55-149	

ield ID: ype:

MW-2A SAMPLE

Lab ID: 147623-003 Diln Fac: 10.00

Analyte	Result	RL	
MTBE	6,600	20	
Benzene	980	5.0	
Toluene	33	5.0	
Ethylbenzene	73	5.0	
m,p-Xylenes	120	5.0	
o-Xylene	58	5.0	
Surrogate	%REC Limits		
Trifluorotoluene (PID)	92 56-142		
Bromofluorobenzene (PID)	93 55-149		

D = Not Detected L = Reporting Limit Page 1 of 2



	Benzene, Toluene,	Eurymenzene,	waremes
Lab #:	147623	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#: Matrix:	98381	Analysis:	EPA 8021B
Matrix:	Water	Sampled:	09/20/00
Units:	ug/L	Received:	09/20/00
Batch#:	58484	Analyzed:	09/25/00

ield ID: Type:

MW-3A SAMPLE

Lab ID: Diln Fac:

147623-004

1.000

Analyte	Result	RL
MTBE	ND	2.0
Benzene	170	0.50
Toluene	130	0.50
E thylbenzene	82	0.50
m,p-Xylenes	210	0.50
o-Xylene	99	0.50

Surroga	ite	*REC	Limits
Trifluorotoluene		87	56-142
<u>Bromofluorobenzer</u>	ne (PID)	92	55-149

ield ID: ype:

MW-3B

SAMPLE

Lab ID: 147623-005 Diln Fac: 1.000

MTBE	ND	RL 2.0	
Benzene	ND	0.50	
Toluene	ND	0.50	
Ethylbenzene	ИD	0.50	
m,p-Xylenes	ND	0.50	
<u>o-X</u> ylene	ND	0.50	

ype: ab ID:

BLANK QC125895

· Diln Fac: 1.000

MTBE	ND	Result RL 2.0
Benzene	ND	0.50
Toluene Ethylbenzene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xvlene	ND	0.50
Surrogate	*REC	Limits
Trifluorotoluene (PID)	88	56-142
Bromofluorobenzene (PID)	93	55-149

D = Not Detected L = Reporting Limit rage 2 of 2



Gasoline by GC/FID CA LUFT

Lab #: 147623 Location: McDonalds,6623 San Pablo

Client: Baseline Environmental Prep: EPA 5030
Project#: 98381 Analysis: EPA 8015M

Type: LCS Diln Fac: 1.000
Lab ID: QC125660 Batch#: 58422
Matrix: Water Analyzed: 09/21/00

Units: ug/L

Analyte	Spiked	Result	%RE	C Limits	
Gasoline C7-C12	2,000	1,883	94	73-121	

Surrogate	%REC	Limits
Trifluorotoluene (FID)		59-135
Bromofluorobenzene (FID)	115	60-140



Gasoline by GC/F	ID CA LUFT		
Loca	tion: McDo	nalds,6623 San	Pablo
Environmental Prep	EPA	5030	
Anal	ysis: EPA	8015M	
Dilr	Fac: 1.00	0	
) Bato	h#: 5845	9	
Anal	yzed: 09/2	2/00	
	Loca Environmental Prep Anal Diln Batc	E Environmental Prep: EPA Analysis: EPA Diln Fac: 1.00 Batch#: 5845	Location: McDonalds,6623 San e Environmental Prep: EPA 5030 Analysis: EPA 8015M Diln Fac: 1.000

Analyte	Spiked	Result		C Limits
Gasoline C7-C12	2,000	1,878	94	73-121

1	Surrogate	%RE	C Limits
	Trifluorotoluene (FID)	92	59-135
ł	Bromofluorobenzene (FID)	81	60-140

Units:

ug/L



l	Benzene, Toluene,	Pthyllhongono	Virlanas
l	belizene, Tordelle,	schyibenzene,	vArenes
Lab #:	147623	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC125894	Batch#:	58484
Matrix:	Water	Analyzed:	09/25/00
Units:	ug/L	-	

Analyte	Spiked	Result	%REC	C Limits
MTBE	20.00	16.55	83	51-125
Benzene	20.00	17.88	89	67-117
Toluene	20.00	18.25	91	69-117
Ethylbenzene	20.00	18.00	90	68-124
m,p-Xylenes	40.00	36.36	91	70-125
o-Xylene	20.00	17.70	88	65-129
,				

Surrogate	%REC	Limits
Trifluorotoluene (PID)	87	56-142
Bromofluorobenzene (PID)	92	55-149



	Gasoline 1	oy GC/FID CA LU	IFT
Lab #:	147623	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8015M
Field ID:	MW-3B	Batch#:	58422
MSS Lab ID:	147623-005	Sampled:	09/20/00
Matrix:	Water	Received:	09/20/00
Units:	ug/L	Analyzed:	09/22/00
Diln Fac:	1.000	•	

ype:

MS

Lab ID: QC125664

Analyte	MSS I	Result	Spiked	Result	%RE	C Limits
Gasoline C7-C12		24.12	2,000	1,889	93	65-131
Surrogate	%RE	C Limits				
Trifluorotoluene (FID)	91	59-135				
Bromofluorobenzene (FID)	77	60-140				

MSD

Lab ID:

QC125665

Gasoline C7-C12		2,000	1,641	81	65-131	14	20
Surrogate	%RE(Limits					
	200000000000000000000000000000000000000						
Trifluorotoluene (FID) Bromofluorobenzene (FID)	87	59-135					



ļ.		oy GC/FID CA LU	
Lab #:	147623	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8015M
Field ID:	ZZZZZZZZZZ	Batch#:	58459
MSS Lab ID:	147619-004	Sampled:	09/18/00
Matrix:	Water	Received:	09/19/00
Units:	ug/L	Analyzed:	09/23/00
Diln Fac:	1.000	-	

ype:

MS

Lab ID:

QC125794

Analyte	MSS F	Result	Spiked	Result	%RE	C Limits
Gasoline C7-C12		30.70	2,000	1,731	85	65-131
Surroqate	\$ P P/					
Trifluorotoluene (FID)	97	59-135				
Bromofluorobenzene (FID)	83	60-140				

vpe:

MSD

Analyte

Lab ID:

QC125795

Spiked Result %REC Limits RPD Lim

Gasoline C7-C12		2,000	1,729	85	65-131	0	20
•					···		
Surrogate	%RE(C Limits					
Trifluorotoluene (FID)	94	59-135					
Bromofluorobenzene (FID)	80	60-140					



	Benzene, Toluene,	. Ethylbenzene,	Xylenes
Lab #:	147623	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8021B
Field ID:	MW-3B	Batch#:	58484
MSS Lab ID:	147623-005	Sampled:	09/20/00
Matrix:	Water	Received:	09/20/00
Units:	ug/L	Analyzed:	09/25/00
Diln Fac:	1.000	-	

MS

Lab ID: QC125896

		-,			
Analyte	MSS Result	Spiked	Result	%REC	2 Limits
MTBE	1.888	20.00	23.09	106	33-131
Benzene	<0.06300	20.00	17.15	86	65-123
Toluene	<0.05100	20.00	17.79	89	73-122
Ethylbenzene	<0.07200	20.00	16.67	83	59-137
m,p-Xylenes o-Xylene	<0.1100	40.00	35.67	89	68-132
o-Xylene	<0.1300	20.00	17.13	86	61-140

Surrogate	%REC	Limits
Trifluorotoluene (PID)	88	56-142
Bromofluorobenzene (PID)	96	55-149

Type:

MSD

Lab ID: QC125897

Analyte	Spiked	Result	%REC	: Limits	RPD	Lim
MTBE	20.00	24.44	113	33-131	6	20
Benzene	20.00	18.65	93	65-123	8	20
Toluene	20.00	19.24	96	73-122	8	20
Ethylbenzene	20.00	18.35	92	59-137	10	20
m,p-Xylenes o-Xylene	40.00	38.91	97	68-132	9	20
o-Xylene	20.00	18.82	94	61-140	9	20

Surrogate	~ %R	EC Limits
Trifluorotoluene (PID)	88	56-142
Bromofluorobenzene (PID)	95	55-149



	1	urge	able Arc	omatics by G	C/MS	
Lab #:	147623			Location:	McDonalds,6623 S	an Pablo
Client:	Baseline Envir	onmen	tal	Prep:	EPA 5030	
Project#:	98381			Analysis:	EPA 8260B	
Field ID:	MW-1A			Batch#:	58508	
Lab ID:	147623-001			Sampled:	09/20/00	
Matrix:	Water			Received:	09/20/00	
Units:	ug/L			Analyzed:	09/26/00	
Diln Fac:	500.0				,,	-
An	alyte		Result		RL	
MTBE			48,000		250	
Sur	rogate	*REC	Limits			
1,2-Dichloroe	thane-d4	93	78-123			
Toluene-d8		100	80-110			
Bromofluorobe	enzene	105	80-115			



Lab #:	147623	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8260B
Field ID:	MW-1B	Batch#:	58508
Lab ID:	147623-002	Sampled:	09/20/00
Matrix:	Water	Received:	09/20/00
Units:	ug/L	Analyzed:	09/26/00
Diln Fac:	1.000	· · · · · · · · · · · · · · · · · · ·	
An	alyte Result	Ţ	L.
MTBE	2.	0	0.5

101

104

80-110 80-115

Toluene-d8

Bromofluorobenzene



	Purgeable 1	Aromatics by GC	3/M8
Lab #:	147623	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8260B
Field ID:	MW-2A	Batch#:	58508
Lab ID:	147623-003	Sampled:	09/20/00
Matrix:	Water	Received:	09/20/00
Units:	ug/L	Analyzed:	09/26/00
Diln Fac:	200.0	-	

7.154.3 6.45		RESULL	NU .	
MTBE		4,600	100	
Surrogate	BREC	Limits		
1,2-Dichloroethane-d4	94	78-123		
Toluene-d8	99	80-110		
Bromofluorobenzene	105	80~115		



Lab #:	147623	Location:	McDonalds,6623	San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030	
Project#:	98381	Analysis:	EPA 8260B	<u> </u>
Field ID:	MW-3A	Batch#:	58508	
Lab ID:	147623-004	Sampled:	09/20/00	
Matrix:	Water	Received:	09/20/00	
Units:	ug/L	Analyzed:	09/26/00	
Diln Fac:	1.000	-	• •	

78-123

80-110

80-115

96

99

102

1,2-Dichloroethane-d4

Bromofluorobenzene

Toluene-d8



Lab #:	147623	Location:	McDonalds, 6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8260B
rield ID:	MW-3B	Batch#:	58476
ab ID:	147623-005	Sampled:	09/20/00
fatrix:	Water	Received:	09/20/00
Inits:	ug/L	Analyzed:	09/23/00
iln Fac:	1.000		

78-123

80-110

80-115

97

100

104

1,2-Dichloroethane-d4

Bromofluorobenzene

Toluene-d8



98381	Analysis:	EPA 8260B	
Baseline Environmental	Prep:	EPA 5030	
147623	Location:	McDonalds,6623 San Pablo	
Purgeable 7	romatics by GC	:/ив	

Project#: 98381 Type: BLANK Diln Fac: 1.000 Lab ID: QC125863 Batch#: 58476 Matrix: Water Analyzed: 09/23/00 Units: ug/L

	Analyt	e Result	RL	
٦	MTBE	ND	0.5	
	•			

	Surrogate	1REC	Limits	
	1,2-Dichloroethane-d4	103	78-123	
١	Toluene-d8	98	80-110	
	Bromofluorobenzene	101	80-115	

ND = Not Detected RL = Reporting Limit

Page 1 of 1

Lab #:

Client:



*																																									

Lab #:	147623	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC125981	Batch#:	58508
Matrix:	Water	Analyzed:	09/26/00
Units:	ug/L		

Analyte	Result	RL	
MTBE	ND	0.5	
	- · · · · · · · · · · · · · · · · · · ·		

Surrogate	% REC	Limits	
1,2-Dichloroethane-d4	95	78-123	
Toluene-d8	100	80-110	
Bromofluorobenzene	103	80-115	

ND = Not Detected RL = Reporting Limit Page 1 of 1



	Purgeable 1	Aromatics by GO	с/мв
Lab #:	147623	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	58476
Units:	ug/L	Analyzed:	09/23/00
Diln Fac:	1.000	-	

Type:

BS

Lab ID:

QC125861

Analyte		Spiked	Result	%REC	Limits	
MTBE		50.00	51.01	102	50-150	
				~~~		
Surrogate	1REC	Limits				
1,2-Dichloroethane-d4	104	78-123				
Toluene-d8	95	80-110				
Bromofluorobenzene	91	80-115				

Type:

BSD

Lab ID:

QC125862

Analyte		Spiked	Result	*REC	Limits	RPD	Lin
MTBE		50.00	50.93	102	50-150	0	20
Surrogate	*REC	Limits					
1,2-Dichloroethane-d4	103	78-123		•			
Toluene-d8	97	80-110					
Bromofluorobenzene	97	80-115					



	Purgeable 7	Aromatics by GO	:/ив
Lab #:	147623	Location:	McDonalds,6623 San Pablo
Client:	Baseline Environmental	Prep:	EPA 5030
Project#:	98381	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	58508
Units:	ug/L	Analyzed:	09/26/00
Diln Fac:	1.000		

Type:

BS

Lab ID:

QC125979

		optked	VESUTE		C LIET CB	
MTBE		50.00	48.00	96	50-150	
Surrogate	1REC	Limits				
1,2-Dichloroethane-d4	93	78-123				
Toluene-d8	101	80-110				

80-115

98

Type:

Bromofluorobenzene

BSD

Lab ID:

QC125980

Analyte		Spiked	Result	% REC	Limits	RPD	Lin
MTBE		50.00	49.79	100	50-150	4	20
Surrogate	1 REC	Limits					
1,2-Dichloroethane-d4	94	78-123	 				
Toluene-d8	101	80-110					
Bromofluorobenzene	98	80-115	 				