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Chevron

March 28, 1994

Ms. Jennifer Eberle
Alameda County Health Care Services
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Chevron U.S.A. Products Company
2410 Camino Ramon
San Ramon, CA 94583
P.O. Box 5004
San Ramon, CA 94583-0804

Marketing Department
Phone 510 842 9500

**Re: Former Chevron Service Station #9-0019
210 Grand Avenue, Oakland, CA**

Dear Ms. Eberle:

Enclosed is the Groundwater Monitoring and Sampling Activities report dated January 28, 1994, prepared by our consultant Groundwater Technology, Inc. for the above referenced site. As indicated in the report, ground water samples collected from all wells were analyzed for total petroleum hydrocarbons as gasoline (TPH-G), and BTEX. Concentrations of dissolved hydrocarbon constituents in the ground water samples collected were consistent with previous observations at the site. Ground water samples collected from monitor wells MW-3 and MW-5 were also analyzed for purgeable halocarbons (EPA Method 601). Laboratory reports indicate concentrations of these constituents were below method detection limits.

Depth to ground water was measured at approximately 4.1 to 6.9 feet below grade, and the direction of flow is to the west. *or W-SW.*

As agreed to in your letter of January 13, 1994, we have temporarily discontinued operating the ground water extraction system for six months. If natural attenuation mechanisms are shown to be in effect at the conclusion of six months, we will permanently shut down the system. At that time an alternative points of compliance approach will be proposed for conditional closure of the site. If a review of the site data at that time indicates that hydraulic control is not naturally maintained, we will evaluate and propose appropriate alternatives.

Chevron will continue to monitor and sample this site on a quarterly basis.

If you have any questions or comments, please do not hesitate to contact me at (510) 842-8134.

Sincerely,
CHEVRON U.S.A. PRODUCTS COMPANY


Mark A. Miller
Site Assessment and Remediation Engineer

Enclosure

cc: Mr. Rich Hiatt, RWQCB - Bay Area
Mr. Kent O'Brien, Geraghty & Miller - Richmond
Ms. B.C. Owen

Mr. Frank Fanelli
City of Oakland
Real Estate Department
1330 Broadway, Suite #101
Oakland, CA 94612

Mr. Ron Basarich
City of Oakland
Real Estate Department
1330 Broadway, Suite #101
Oakland, CA 94612

File: 9-0019 QM6

Fax copy of Lab Report and COC to Chevron Contact: Yes No

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number 9-0019
Facility Address 210 Grand Ave. Oakland
Consultant Project Number 020204096.0610
Consultant Name Groundwater Technology, Inc.
Address 4057 Port Chicago Hwy, Concord, CA. 94520
Project Contact (Name) Tim Watchers
(Phone) 510-671-2387 (Fax Number)

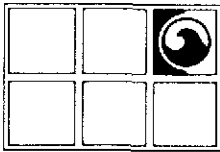
Chevron Contact (Name) M. Muller
(PHONE) 842-8134
Laboratory Name GTEI
Laboratory Release Number 876-6990
Samples Collected by (Name) Mark Garcia
Collection Date 12/20/93
Signature Mark Garcia

Sample Number	Lab Sample Number	Number of Containers	Media: S = Soil W = Water A = Air C = Charcoal	Type C = Grab = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed													
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (8520)	Purgeable Hydrocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)	PH					
MW-4	14	3	W		4:10	HCL	Y	X	N												
RBMW-5	15	1			4:20	HCL											X				
MW-5	16	3			4:20	HCL		X	X10												
MW-3	17	3			3:20	NONE					X										
MW-5	18	3		V	4:20	NONE	V				X										

NOTE:
Do NOT BILL
TB-LB SAMPLES
SEAL IN SACS
AS
30L
Remarks

CBI20450

Relinquished By (Signature) <u>Mark Garcia</u>	Organization <u>GTEI</u>	Date/Time <u>12/20/93</u>	Received By (Signature) <u>R. M. Suenna</u>	Organization <u>GTT</u>	Date/Time <u>12/20/93</u>	Turn Around Time (Circle One)
Relinquished By (Signature) <u>R. M. Suenna</u>	Organization <u>GTT</u>	Date/Time <u>12/22/93</u>	Received By (Signature) <u>Joan Weber</u>	Organization <u>GTEI</u>	Date/Time <u>12-22-93</u>	24 Hrs. 48 Hrs. 5 Days 10 Days
Relinquished By (Signature) <u>Joan Weber</u>	Organization <u>GTEI</u>	Date/Time <u>12/22/93</u>	Received For Laboratory By (Signature) <u>R. P. C. P.</u>		Date/Time <u>12/22/93</u>	As Contracted



GROUNDWATER TECHNOLOGY, INC.

4057 Port Chicago Highway, Concord, CA 94520 (415) 671-2387

FAX: (415) 685-9148

January 28, 1994

Project No. 020104096

Mr. Mark Miller
Chevron U.S.A. Products Company
2410 Camino Ramon
San Ramon, CA 94583-0804

SUBJECT: *Groundwater Monitoring and Sampling Activities*
Chevron Service Station No. 9-0019
210 Grand Avenue, Oakland, California


Dear Mr. Miller:

Groundwater Technology, Inc. presents the attached quarterly groundwater monitoring and sampling data collected on December 20, 1993. The eight groundwater monitoring wells at this site were gauged to measure depth to groundwater (DTW) and to check for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not detected in the monitoring wells. A potentiometric surface map (Figure 1) and a summary of groundwater monitoring data (Table 1) are presented in Attachments 1 and 2, respectively. After the DTW was measured, each monitoring well was purged and sampled. The field data sheets are presented in Attachment 3. The groundwater samples were analyzed for benzene, toluene, ethylbenzene, and xylenes and for total petroleum hydrocarbons-as-gasoline. The sample from monitoring wells MW-3 and MW-5 were analyzed for purgeable halocarbons. Results of the chemical analyses are summarized in Table 2. The laboratory report and chain-of-custody record are included in Attachment 4. Monitoring-well purge water was transported by Groundwater Technology to the Chevron Terminal in Richmond, California, for recycling.

Groundwater Technology is pleased to assist Chevron on this project. If you have any questions or comments, please contact our Concord office at (510) 671-2387.

Sincerely,
Groundwater Technology, Inc.
Written/Submitted by

Attachment 1 Figures
Attachment 2 Tables
Attachment 3 Field Data Sheets
Attachment 4 Laboratory Report

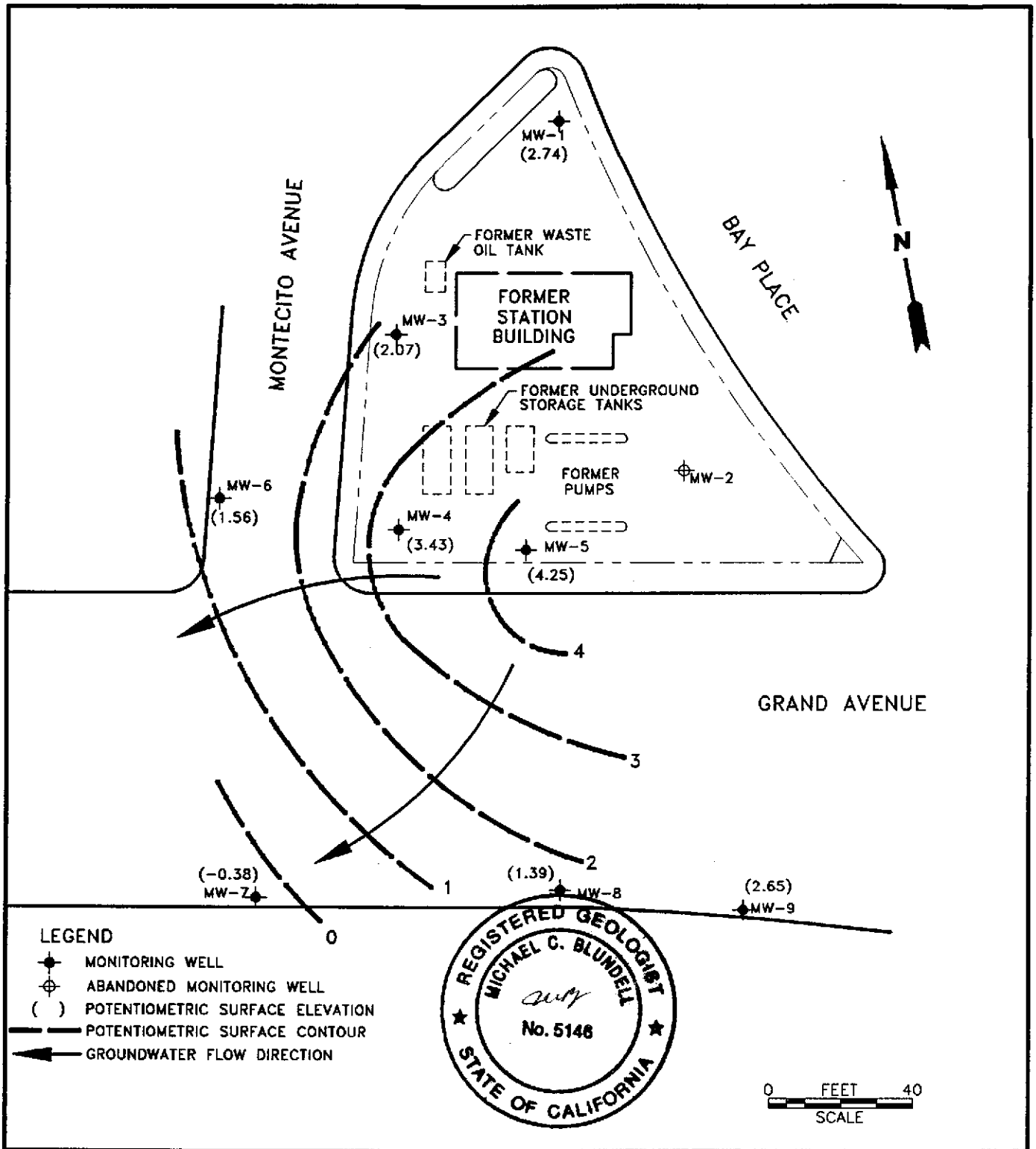


Tim Watchers
Project Manager

For:
Wendell W. Lattz
Vice President, General Manager
West Region

PR MAC

4096R014.010



		4057 PORT CHICAGO HWY. CONCORD, CA 94520 (510) 671-2387		POTENTIOMETRIC SURFACE MAP (12/20/93)	
CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-0019			LOCATION: 210 GRAND AVENUE OAKLAND, CALIFORNIA		REV. NO.: 0
					DATE: 1/20/93
PM <i>JAW</i>	PE/RG <i>MB</i>	DESIGNED TW	DETAILED CY	ACAD FILE: PSM194	PROJECT NO.: 020204084
					FIGURE: 1

TABLE 1
GROUNDWATER MONITORING DATA
Chevron Service Station No. 9-0019
210 Grand Avenue, Oakland, California

Well ID/ Elevation	Date	DTW (ft)	SPT (ft)	WTE (ft)
MW-1 9.63	03/14/89	6.74	0.00	2.89
	06/08/89	7.14	0.00	2.49
	09/14/89	7.21	0.00	2.42
	12/08/89	7.29	0.00	2.34
	03/19/90	7.00	0.00	2.63
	07/06/90	7.13	0.00	2.50
	10/03/90	7.53	0.00	2.10
	08/23/91	7.06	0.00	2.57
	11/22/91	7.47	0.00	2.16
	02/26/92	6.69	0.00	2.94
	05/22/92	6.96	0.00	2.67
	09/29/92	7.19	0.00	2.44
	12/23/92	7.03	0.00	2.60
	03/22/93	6.60	0.00	3.03
	06/07/93	6.97	0.00	2.66
09/10/93	7.08	0.00	2.55	
12/20/93	6.89	0.00	2.74	
MW-2 8.99 9.01	03/14/89	6.08	0.00	2.91
	06/08/89	5.22	0.00	3.77
	09/14/89	5.95	0.00	3.04
	12/08/89	9.25	0.00	-0.26
	03/19/90	5.92	0.00	3.07
	07/06/90	6.79	0.00	2.22
	10/03/90	---	---	---
	08/23/91	---	---	---
	03/22/93	---	---	---
	11/22/91	Well destroyed (11/15/91)		

TABLE 1
GROUNDWATER MONITORING DATA
Chevron Service Station No. 9-0019
210 Grand Avenue, Oakland, California

Well ID/ Elevation	Date	DTW (ft)	SPT (ft)	WTE (ft)
MW-3 8.19 8.19	03/14/89	6.02	0.00	2.16
	06/08/89	5.88	0.00	2.30
	09/14/89	6.30	0.00	1.88
	12/08/89	9.52	0.00	-1.34
	03/19/90	6.17	0.00	2.01
	07/06/90	7.52	0.00	0.67
	10/03/90	7.31	0.00	0.88
	08/23/91	5.65	0.00	2.53
	11/22/91	6.78	0.00	1.41
	02/26/92	4.65	0.00	3.54
	05/22/92	5.56	0.00	2.63
	09/29/92	6.23	0.00	1.96
	12/23/92	5.82	0.00	2.37
	03/22/93	4.92	0.00	3.27
	06/07/93	5.69	0.00	2.50
	09/10/93	6.04	0.00	2.15
	12/20/93	6.12	0.00	2.07
MW-4 7.60 7.59	03/14/89	5.52	0.00	2.08
	06/08/89	4.19	0.00	3.41
	09/14/89	4.80	0.00	2.80
	12/08/89	4.86	0.00	2.74
	03/19/90	4.65	0.00	2.95
	07/06/90	6.42	0.00	1.17
	10/03/90	6.39	0.00	1.20
	08/23/91	4.42	0.00	3.17
	11/22/91	5.38	0.00	2.21
	02/26/92	2.65	0.00	4.94
	05/22/92	3.96	0.00	3.63
	09/29/92	4.68	0.00	2.91
	12/23/92	3.63	0.00	3.96
	03/22/93	2.90	0.00	4.69
	06/07/93	3.89	0.00	3.70
	09/10/93	4.52	0.00	3.07
	12/20/93	4.16	0.00	3.43

TABLE 1
GROUNDWATER MONITORING DATA
Chevron Service Station No. 9-0019
210 Grand Avenue, Oakland, California

Well ID/ Elevation	Date	DTW (ft)	SPT (ft)	WTE (ft)
MW-5 8.35	03/14/89	6.98	0.00	1.37
	06/08/89	4.73	0.00	3.62
	09/14/89	5.37	0.00	2.98
	12/08/89	9.13	0.00	-0.78
	03/19/90	5.12	0.00	3.23
	07/06/90	5.81	0.00	2.54
	10/03/90	6.90	0.00	1.45
	08/23/91	5.05	0.00	3.30
	11/22/91	6.25	0.00	2.10
	02/26/92	3.00	0.00	5.35
	05/22/92	4.49	0.00	3.86
	09/29/92	4.85	0.00	3.50
	12/23/92	3.58	0.00	4.77
	03/22/93	---	---	---
	06/07/93	12.17	0.00	-3.82
09/10/93	8.50	0.00	-0.15	
12/20/93	4.10	0.00	4.25	
MW-6 6.56	07/06/90	9.09	0.00	-2.53
	10/03/90	5.78	0.00	0.78
	08/23/91	7.49	0.00	-0.93
	11/22/91	7.63	0.00	-1.07
	02/26/92	5.55	0.00	1.01
	05/22/92	6.94	0.00	-0.38
	09/29/92	6.80	0.00	-0.24
	12/23/92	5.99	0.00	0.57
	03/22/93	7.07	0.00	-0.51
	06/07/93	7.61	0.00	-1.05
	09/10/93	4.68	0.00	1.88
12/20/93	5.00	0.00	1.56	
MW-7 4.99	07/06/90	5.85	0.00	-0.86
	10/03/90	6.25	0.00	-1.26
	08/23/91	5.50	0.00	-0.51
	11/22/91	5.73	0.00	-0.74
	02/26/92	4.84	0.00	0.15
	05/22/92	4.89	0.00	0.10
	09/29/92	5.55	0.00	-0.56
	12/23/92	4.87	0.00	0.12
	03/22/93	4.05	0.00	0.94
	06/07/93	4.63	0.00	0.36
	09/10/93	5.56	0.00	-0.57
	12/20/93	5.37	0.00	-0.38

TABLE 1
GROUNDWATER MONITORING DATA
Chevron Service Station No. 9-0019
210 Grand Avenue, Oakland, California

Well ID/ Elevation	Date	DTW (ft)	SPT (ft)	WTE (ft)
MW-8 6.77	07/06/90	3.98	0.00	2.79
	10/03/90	4.73	0.00	2.04
	08/23/91	4.76	0.00	2.01
	11/22/91	5.73	0.00	1.04
	02/26/92	4.30	0.00	2.47
	05/22/92	3.66	0.00	3.11
	09/29/92	---	---	---
	12/23/92	2.83	0.00	3.94
	03/22/93	4.38	0.00	2.39
	06/07/93	5.17	0.00	1.60
	09/10/93	5.16	0.00	1.61
	12/20/93	5.38	0.00	1.39
	MW-9 7.63	07/06/90	4.61	0.00
10/03/90		5.14	0.00	2.49
08/23/91		5.45	0.00	2.18
11/22/91		5.48	0.00	2.15
02/26/92		2.63	0.00	5.00
05/22/92		4.00	0.00	3.63
09/29/92		4.70	0.00	2.93
12/23/92		3.76	0.00	3.87
03/22/93		2.11	0.00	5.52
06/07/93		3.28	0.00	4.35
09/10/93		5.18	0.00	2.45
12/20/93		4.98	0.00	2.65

DTW = Depth to water
SPT = Separate-phase hydrocarbon thickness
WTE = Water-table elevation
-- = Not applicable, not sampled, not measured

Measurements referenced relative to mean sea level

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
Chevron Service Station No. 9-0019
210 Grand Avenue, Oakland, California

Well	Date	TPH-G	Benzene	Toluene	Ethyl-benzene	Xylenes	TOG	Chloroform	1,2-DCA	F113	TCA
MW-1	03/14/89	600	<0.2	<0.2	3.2	1.7	<3,000	1.0	<0.2	<20.0	<0.2
	06/08/89	<50	<0.1	<0.5	<0.1	<0.2	---	<0.5	<0.1	<20.0	<0.1
	09/14/89	<50	<0.2	<1.0	<0.2	<0.4	---	<1.0	<0.2	<1.0	0.7
	12/08/89	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	<0.5	---	<0.5
	03/19/90	190	0.8	<0.3	7	3	---	<0.5	<0.5	---	<0.5
	07/06/90	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	<0.5	---	<0.5
	10/03/90	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	<0.5	---	<0.5
	08/23/91	150	5.0	11	3.5	10	---	<0.5	<0.5	---	<0.5
	11/22/91	86	7.2	11	2.9	13	---	<0.5	<0.5	<0.5	<0.5
	02/26/92	<50	<0.5	<0.5	<0.5	1.4	---	<0.5	<0.5	<0.5	<0.5
	05/22/92	<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5
	09/29/92	<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	---	<0.5
	12/23/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	03/22/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	06/07/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	09/10/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
12/20/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	
MW-2	03/14/89	<100	6.7	7.1	0.5	4.6	<3,000	<1.0	0.7	<20.0	<0.2
	06/09/89	<100	<0.2	<1.0	<0.2	<0.4	---	<1.0	<0.2	<20.0	<0.2
	09/14/89	<50	<0.2	<1.0	<0.2	<0.4	---	<1.0	<0.2	<1.0	<0.2
	12/08/89	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	<0.5	---	<0.5
	03/19/90	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	<0.5	---	<0.5
	07/06/90	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	<0.5	---	<0.5
	10/03/90 ^b	---	---	---	---	---	---	---	---	---	---
	08/23/91 ^a	---	---	---	---	---	---	---	---	---	---
	11/22/91 ^f	---	---	---	---	---	---	---	---	---	---

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
Chevron Service Station No. 9-0019
210 Grand Avenue, Oakland, California

Well	Date	TPH-G	Benzene	Toluene	Ethyl-benzene	Xylenes	TOG	Chloroform	1,2-DCA	F113	TCA
MW-3	03/14/89	<100	2.1	0.8	<0.2	2	<3,000	<1	3	<20	<0.2
	06/09/89	<100	<0.5	<1.0	<0.2	<0.4	---	<1	3.3	<20	<0.2
	09/14/89	<50	<0.2	<1.0	<0.2	<0.4	---	<1.0	2.2	<1	<0.2
	12/08/89	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	1.3	---	<0.5
	03/19/90	<50	<0.3	<0.3	<0.3	<0.6	---	0.5	1.3	---	<0.5
	07/06/90	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	<0.5	---	<0.5
	10/03/90	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	0.83	---	<0.5
	08/23/91	220	16	22	5.5	16	---	<0.5	0.6	---	<0.5
	11/22/91	<50	<0.5	<0.5	<0.5	0.6	---	0.6	1.0	<0.5	<0.5
	02/26/92	<50	4.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5
	05/22/92	<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5
	09/29/92	<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	---	<0.5
	12/23/92	<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	---	<0.5
	03/22/93	<50	7	<0.5	<0.5	<0.5	---	<0.5	<0.5	---	<0.5
	06/07/93	<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	---	<0.5
	09/10/93	<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	---	<0.5
	12/20/93	<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	---	<0.5
MW-4	03/14/89	3,000	810	200	30	130	<3,000	<20.0	<5.0	<20	<5
	06/09/89	900	440	13	22	40	---	<20.0	<5.0	60	<5
	09/14/89	540	220	2	6.1	9.3	---	<1.0	2.3	<1	<0.2
	12/08/89	150	18	<0.3	1	<0.6	---	<0.5	1.9	---	<0.5
	03/19/90	270	50	<0.3	0.7	<0.6	---	<0.5	0.8	---	<0.5
	07/06/90	140	0.7	<0.3	0.5	<0.6	---	<0.5	0.79	---	<0.5
	10/03/90	180	<0.3	<0.3	2	<0.6	---	<0.5	0.5	---	<0.5
	08/23/91	400	9.9	6.8	3.1	7.1	---	<0.5	<0.5	---	<0.5
	11/22/91	130	3.4	1.3	3.5	6	---	<0.5	<0.5	<0.5	<0.5
	02/26/92	520	15	2.7	6.1	8.6	---	<0.5	<0.5	<0.5	<0.5
	05/22/92	460	20	2.8	5	6.9	---	<0.5	<0.5	<0.5	<0.5
	09/29/92	160	1.1	1.7	0.8	2.8	---	<0.5	<0.5	---	<0.5
	12/23/92	110	0.7	0.5	0.9	1.7	---	---	---	---	---
	03/22/93	930	9	3	7	8	---	---	---	---	---
	06/07/93	240	2	0.9	3	3	---	---	---	---	---
	09/10/93	<50	<0.5	<0.5	0.8	<0.5	---	---	---	---	---
	12/20/93	67	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
Chevron Service Station No. 9-0019
210 Grand Avenue, Oakland, California

Well	Date	TPH-G	Benzene	Toluene	Ethyl-benzene	Xylenes	TOG	Chloro-form	1,2-DCA	F113	TCA
MW-5 (D) (D) (T)	03/14/89	20,000	6,600	1,600	270	1,100	<3,000	<100	<20	<20	<20
	06/09/89	15,000	>2,800	270	240	640	---	<20	28	<20	<5
	06/09/89	12,000	5,100	300	240	700	---	<200	<50	<20	<50
	09/14/89	15,000	>730	>320 ^b	>290 ^b	440	---	<10	<2	<20	<2
	09/14/89	15,000	3,300	450	490	730	---	<100	<20	100	<20
	09/14/89	16,000	3,100	550	400	690	---	<50	<10	<50	<10
	12/08/89	20,000	4,600	640	390	1,300	---	<0.5	27	---	<0.5
	03/19/90	25,000	6,500	1,200	450	2,200	---	<0.5	10	---	0.7
	06/06/90	30,000	5,600	890	210	1,400	---	<0.5	<0.5	---	<0.5 ^c
	10/03/90	29,000	6,000	790	270	1,500	---	<0.5	<0.5	---	<0.5 ^d
	08/23/91	36,000	6,100	1,200	460	2,600	---	<0.5	3.9	---	<0.5 ^e
	11/22/91	21,000	8,000	1,500	530	2,600	---	<0.5	3.9	<0.5	<0.5 ^m
	02/26/92	43,000	14,000	1,600	640	4,700	---	<0.5	2.0	<0.5	<0.5
	05/22/92	72,000	18,000	8,100	920	10,000	---	<0.5	6.8	<0.5	<0.5
	09/29/92	54,000	14,000	1,400	740	8,100	---	<0.5	4.4	---	<0.5
	12/23/92	38,000	8,400	910	530	5,300	---	<0.5	2.9	---	<0.5
	03/22/93	---	---	---	---	---	---	---	---	---	---
	06/07/93	24,000	3,000	280	360	1,200	---	<0.5	<0.5	---	<0.5
	09/10/93 ¹²	8,900	860	160	100	320	---	<5	<5	---	<5
	12/20/93	5,900	1,300	330	79	230	---	<0.5	<0.5	---	<0.5
MW-6	07/06/90	210	<0.3	<0.3	3	7	---	<0.5	<0.5	---	<0.5
	10/03/90	320	<0.3	0.3	1	<0.6	---	<0.5	<0.5	---	<0.5
	08/23/91	320	1.7	<0.5	2.1	<0.5	---	<0.5	<0.5	---	<0.5
	11/22/91	190	1.9	2.2	5.4	7.7	---	<0.5	<0.5	<0.5	<0.5
	02/26/92	120	2.0	1.5	3.5	5.1	---	<0.5	<0.5	<0.5	<0.5
	05/22/92	160	1.1	0.6	0.9	1	---	<0.5	<0.5	<0.5	<0.5
	09/29/92	65	0.5	1.4	0.5	0.64	---	<0.5	<0.5	---	<0.5
	12/23/92	140	0.7	0.7	0.9	2.1	---	---	---	---	---
	03/22/93	71	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	06/07/93	85	<0.5	<0.5	2	1	---	---	---	---	---
	09/10/93	<50	<0.5	<0.5	1	<0.5	---	---	---	---	---
	12/20/93	130	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
Chevron Service Station No. 9-0019
210 Grand Avenue, Oakland, California

Well	Date	TPH-G	Benzene	Toluene	Ethyl-benzene	Xylenes	TOG	Chloroform	1,2-DCA	F113	TCA
MW-7	07/06/90	<50	<0.3	<0.3	<0.3	<0.6	<1,000	<0.5	<0.5	---	<0.5
	10/03/90	<50	<1.5	<1.5	<1.5	<3	---	<0.5	<0.5	---	<0.5
	08/23/91	<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	---	<0.5
	11/22/91	<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5
	02/26/92	<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5
	05/22/92	<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5
	09/29/92	<50	<0.5	<0.5	<0.5	0.6	---	<0.5	<0.5	---	<0.5
	12/23/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	03/22/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	06/07/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	09/10/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	12/20/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	MW-8	07/06/90	<50	<0.3	<0.3	<0.3	<0.6	<1,000	<0.5	<0.5	---
10/03/90		<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	<0.5	---	<0.5
08/23/91		<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	---	<0.5
11/22/91		<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5
02/26/92		<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5
05/22/92		<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5
09/29/92		---	---	---	---	---	---	---	---	---	---
12/23/92		<50	<0.5	7.2	0.6	2.5	---	---	---	---	---
03/22/93		<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
06/07/93		<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
09/10/93		<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
12/20/93		<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
Chevron Service Station No. 9-0019
210 Grand Avenue, Oakland, California

Well	Date	TPH-G	Benzene	Toluene	Ethyl-benzene	Xylenes	TOG	Chloroform	1,2-DCA	F113	TCA
MW-9	07/06/90	<50	<0.3	<0.3	<0.3	<0.6	<1,000	<0.5	<0.5	—	<0.5
	10/03/90	<50	<0.3	<0.3	<0.3	<0.6	—	<0.5	<0.5	—	<0.5
	08/23/91	<50	<0.5	<0.5	<0.5	<0.5	—	<0.5	<0.5	—	<0.5
	11/22/91	<50	<0.5	<0.5	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5
	02/26/92	<50	<0.5	<0.5	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5
	05/22/92	<50	<0.5	<0.5	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5
	09/29/92	<50	<0.5	<0.5	<0.5	<0.5	—	<0.5	<0.5	—	<0.5
	12/23/92	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—
	03/22/93	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—
	06/07/93	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—
	09/10/93	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—
	12/23/93	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—
	TB-LB	12/08/89	<100	<0.1	<0.2	<0.1	<0.2	—	<0.5	<0.1	—
06/09/89		<50	<0.5	<0.5	<0.1	<0.2	—	<0.5	<0.1	<20.0	<0.1
09/14/89		<50	<0.1	<0.5	<0.1	<0.2	—	<0.5	<0.1	<0.5	<0.1
12/08/89		<50	<0.3	<0.3	<0.3	<0.6	—	4.4	<0.5	—	1.9
03/19/90		<50	<0.3	<0.3	<0.3	<0.6	—	<0.5	<0.5	—	<0.5
07/06/90		<50	<0.3	<0.3	<0.3	<0.6	—	<0.5	<0.5	—	<0.5
10/03/90		<50	<0.3	<0.3	<0.3	1	—	<0.5	<0.5	—	<0.5
08/23/91		<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—
11/22/91		<50	<0.5	<0.5	<0.5	<0.5	—	—	—	<0.5	g,h,i
02/26/92		<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—
05/22/92		<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—
09/29/92		<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—
12/23/92		<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—
03/22/93		<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—
06/07/93		<50	<0.5	<0.5	<0.5	<0.5	1	—	—	—	—
09/10/93		<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
Chevron Service Station No. 9-0019
210 Grand Avenue, Oakland, California

Well	Date	TPH-G	Benzene	Toluene	Ethyl-benzene	Xylenes	TOG	Chloroform	1,2-DCA	F113	TCA
RB	08/23/91	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	11/22/91	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	<0.5	g,j,k
	02/26/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	05/22/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	12/20/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---

TPH-G = Total petroleum hydrocarbons-as-gasoline
 TOG = Total oil and grease
 1,2-DCA = 1,2-Dichloroethane
 F113 = Trichlorotrifluoroethane (Freon 113)
 TCA = 1,1,1-Trichloroethane
 TB-LB = Trip blank/Laboratory blank
 --- = Not analyzed, not applicable
 (D) = Duplicate sample
 (T) = Triplicate sample

Data before May 22, 1992, were taken from a report prepared by Sierra Environmental Services, March 13, 1992. Results in parts per billion.

a = Well obstructed during site demolition.
 b = Saturated column.
 c = 1,2-Dichloropropane was detected at 1.2 ppb.
 d = 1,2-Dichloropropane and trichloroethane were detected at 2 ppb and 0.74 ppb, respectively.
 e = 1,2-Dichloropropane was detected at 0.9 ppb.
 f = Well destroyed November 15, 1991.
 g = Bromodichloromethane was detected at 2.4 ppb.
 h = Dibromochloromethane was detected at 2.4 ppb.
 i = Bromoform was detected at 4.8 ppb.
 j = Dibromochloromethane was detected at 2.2 ppb.
 k = Bromoform was detected at 4.8 ppb.
 l = TCE was detected at 1.0 ppb.
 m = 1,2-Dichloropropane was detected at 0.8 ppb.

Project Name: Chevron - Grand

Date: 12-10-73

Site Address: 210 Grand Ave., Oakland

Page 5 of _____

Project Number: 020204084.0610

Project Manager: Tim Watchers

Well ID: MW-1

DTW Measurements:

Well Diameter: 4u

Initial: /

Calc Well Volume: 350 gal

Recharge: /

Well Volume: 3 ~~11~~ gal

Purge Method _____ Pump Depth _____ ft.
 Peristaltic _____ Hand Bailed X
 Gear Drive _____ Air Lift _____
 Submersible _____ Other _____

Instruments Used
 YSI: X _____ Other: _____
 Hydac: _____
 Omega: _____

Time	Temp		Conductivity	pH	Purge Volume Gallons	Turbidity	Comments
	C	F					
2:30	13.9	57	1.98	6.78	0		
2:30	13.9	57	1.99	6.78	5		
2:40	Temp		1.05	6.50	0		
2:43	Hand Bailed		1.18	6.24	4		
2:44	↓		1.18	6.23	8		
2:50	↓		1.18	6.24	11		

ATTACHMENT 4
Laboratory Report



4080 Pike Lane
Concord, CA 94520
(510) 685-7852
(800) 544-3422 Inside CA
(800) 423-7143 Outside CA
(510) 825-0720 FAX

Client Number: 020204096
Consultant Project Number: 020204096.0610
Facility Number: 9-0019
Project ID: 210 Grand Ave.
Oakland, CA
Work Order Number: C3-12-0450

January 6, 1994

Tim Watchers
Groundwater Technology, Inc.
4057 Port Chicago Hwy.
Concord, CA 94520

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories, Inc. on 12/22/93.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria, unless otherwise stated in the footnotes.

GTEL is certified by the California State Department of Health Services, Laboratory certification number E1075, to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Bill Snoboda
for
Rashmi Shah
Laboratory Director

Client Number: 020204096
 Consultant Project Number: 020204096.0610
 Facility Number: 9-0019
 Project ID: 210 Grand Ave.
 Oakland, CA
 Work Order Number: C3-12-0450

Table 1

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Methods 5030, 8020, and Modified 8015a

GTEL Sample Number		01	02	04	06
Client Identification		RBMW-7	MW-7	MW-9	MW-3
Date Sampled		12/20/93	12/20/93	12/20/93	12/20/93
Date Analyzed		12/31/93	01/01/94	12/31/93	12/31/93
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	<0.5	<0.5	<0.5	<0.5
Toluene	0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	0.5	<0.5	<0.5	<0.5	<0.5
Xylene, total	0.5	<0.5	<0.5	<0.5	<0.5
TPH as Gasoline	50	<50	<50	<50	<50
Detection Limit Multiplier		1	1	1	1
BFB surrogate, % recovery		93.9	91.7	92.0	94.8

- a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual procedures. Bromofluorobenzene surrogate recovery acceptability limits are 70-130%.

Client Number: 020204096
 Consultant Project Number: 020204096.0610
 Facility Number: 9-0019
 Project ID: 210 Grand Ave.
 Oakland, CA
 Work Order Number: C3-12-0450

Table 1 (continued)

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Methods 5030, 8020, and Modified 8015a

GTEL Sample Number		08	10	12	14
Client Identification		MW-8	MW-1	MW-6	MW-4
Date Sampled		12/20/93	12/20/93	12/20/93	12/20/93
Date Analyzed		12/31/93	12/31/93	12/31/93	01/01/94
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	<0.5	<0.5	<0.5	<0.5
Toluene	0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	0.5	<0.5	<0.5	<0.5	<0.5
Xylene, total	0.5	<0.5	<0.5	<0.5	<0.5
TPH as Gasoline	50	<50	<50	130	67
Detection Limit Multiplier		1	1	1	1
BFB surrogate, % recovery		92.1	94.4	94.5	92.6

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual procedures. Bromofluorobenzene surrogate recovery acceptability limits are 70-130%.

Client Number: 020204096
 Consultant Project Number: 020204096.0610
 Facility Number: 9-0019
 Project ID: 210 Grand Ave.
 Oakland, CA
 Work Order Number: C3-12-0450

Table 1 (continued)

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Methods 5030, 8020, and Modified 8015^a

GTEL Sample Number		16	123193M		
Client Identification		MW-5	METHOD BLANK		
Date Sampled		12/20/93	--		
Date Analyzed		12/31/93	12/31/93		
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	1300	<0.5		
Toluene	0.5	330	<0.5		
Ethylbenzene	0.5	79	<0.5		
Xylene, total	0.5	230	<0.5		
TPH as Gasoline	50	5900	<50		
Detection Limit Multiplier		10	1		
BFB surrogate, % recovery		92.8	90.9		

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual procedures. Bromofluorobenzene surrogate recovery acceptability limits are 70-130%.

Client Number: 020204096
 Consultant Project Number: 020204096.0610
 Facility Number: 9-0019
 Project ID: 210 Grand Ave.
 Oakland, CA
 Work Order Number: C3-12-0450

Table 1

ANALYTICAL RESULTS

Purgeable Halocarbons in Water

EPA Method 601^a

GTEL Sample Number		17	18	C010294	
Client Identification		MW-3	MW-5	METHOD BLANK	
Date Sampled		12/20/93	12/20/93	--	
Date Analyzed		01/02/94	01/03/94	01/02/94	
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Chloromethane	0.5	<0.5	<0.5	<0.5	
Bromomethane	0.5	<0.5	<0.5	<0.5	
Vinyl chloride	1	<1	<1	<1	
Chloroethane	0.5	<0.5	<0.5	<0.5	
Methylene chloride	0.5	<0.5	<0.5	<0.5	
1,1-Dichloroethane	0.5	<0.5	<0.5	<0.5	
1,1-Dichloroethane	0.5	<0.5	<0.5	<0.5	
1,2-Dichloroethane	0.5	<0.5	<0.5	<0.5	
Chloroform	0.5	<0.5	<0.5	<0.5	
1,2-Dichloroethane	0.5	<0.5	<0.5	<0.5	
1,1,1-Trichloroethane	0.5	<0.5	<0.5	<0.5	
Carbon tetrachloride	0.5	<0.5	<0.5	<0.5	
Bromodichloromethane	0.5	<0.5	<0.5	<0.5	
1,2-Dichloropropane	0.5	<0.5	<0.5	<0.5	
cis-1,3-Dichloropropene	0.5	<0.5	<0.5	<0.5	
Trichloroethene	0.5	<0.5	<0.5	<0.5	
Dichlorodifluoromethane	0.5	<0.5	<0.5	<0.5	
Dibromochloromethane	0.5	<0.5	<0.5	<0.5	
1,1,2-Trichloroethane	0.5	<0.5	<0.5	<0.5	
trans-1,3-Dichloropropene	0.5	<0.5	<0.5	<0.5	
2-Chloroethylvinyl ether	1	<1	<1	<1	
Bromoform	0.5	<0.5	<0.5	<0.5	
Tetrachloroethene	0.5	<0.5	<0.5	<0.5	
1,1,2,2-Tetrachloroethane	0.5	<0.5	<0.5	<0.5	
Chlorobenzene	0.5	<0.5	<0.5	<0.5	
1,2-Dichlorobenzene	0.5	<0.5	<0.5	<0.5	
1,3-Dichlorobenzene	0.5	<0.5	<0.5	<0.5	
1,4-Dichlorobenzene	0.5	<0.5	<0.5	<0.5	
Trichlorofluoromethane	0.5	<0.5	<0.5	<0.5	
Detection Limit Multiplier		1	1	1	
BFB surrogate, % recovery		81.9	90.6	89.2	

a. Federal Register, Vol. 49, October 26, 1984. BFB surrogate recovery acceptability limits are 65-135%.

Client Number: 020204096
 Consultant Project Number: 020204096.0610
 Facility Number: 9-0019
 Project ID: 210 Grand Ave.
 Oakland, CA
 Work Order Number: C3-12-0450

QC Matrix Spike and Duplicate Spike Results

Matrix: Water

Analyte	Sample ID	Spike Amount	Units	Recovery, %	Duplicate Recovery, %	RPD, %	Control Limits
Modified EPA 8020:							
Benzene	C3120467-03	20.0	ug/L	85.0	84.5	0.6	55 - 129
Toluene	C3120467-03	20.0	ug/L	103	103	0	72 - 149
Ethylbenzene	C3120467-03	20.0	ug/L	104	104	0	75 - 138
Xylene, total	C3120467-03	60.0	ug/L	107	106	0.9	74 - 147
EPA 8010:							
Chlorobenzene	C3120457-09	20.0	ug/L	80.0	84.0	4.9	34 - 134
Benzene	C3120457-09	20.0	ug/L	64.5	74.5	14.4	66 - 118
Toluene	C3120457-09	20.0	ug/L	71.6	81.1	12.4	53 - 115
Ethylbenzene	C3120457-09	20.0	ug/L	41.0	62.0	40.8	43 - 131
Xylene, total	C3120457-09	60.0	ug/L	87.7	93.8	6.7	55 - 115
1,1-Dichloroethene	C3120457-09	20.0	ug/L	74.0	78.0	5.3	30 - 160
Trichloroethene	C3120457-09	20.0	ug/L	83.5	93.5	7.8	78 - 184

Fax copy of Lab Report and COC to Chevron Contact: Yes No

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number 9-0019
Facility Address 210 Grand Ave Oakland
Consultant Project Number 020204096.0610
Consultant Name Groundwater Technology, Inc.
Address 4057 Port Chicago Hwy, Concord, CA. 94520
Project Contact (Name) Tim Watchers
(Phone) 510-671-2387 (Fax Number) -

Chevron Contact (Name) M. Miller
(Phone) 842-8134
Laboratory Name GTI
Laboratory Release Number (000) (0990) 876-1990
Samples Collected by (Name) Mark Garcia
Collection Date 12/20/93
Signature Mark Garcia

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Lead (Yes or No)	Analytes To Be Performed										NOTE: Do NOT BILL TB-LB SAMPLES SEALS IN THOS, OR ICE AT 3°C Remarks			
								BTX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (8020)	Purgeable Hydrocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)	HIQH					
TBLB	-	1	W		2:55	HCl	Y	X													
RBMW-7	01	1			3:00			X													
MW-7	02	3			3:00			X	N												
RBMW-9	03	1			3:10			X													
MW-9	04	3			3:10			X	N												
RBMW-3	05	1			3:20			X													
MW-3	06	3			3:30			X	N												
RBMW-8	07	1			3:30			X													
MW-8	08	3			3:30			X	N												
RBMW-1	09	1			3:40			X													
MW-1	10	3			3:50			X	N												
RBMW-6	11	1			4:00			X													
MW-6	12	3			4:00			X	N												
RBMW-4	13	1			4:10			X													

Requested By (Signature) <u>Mark Garcia</u>	Organization <u>GTI</u>	Date/Time <u>12/20/93</u>	Received By (Signature) <u>R. M. Shuman</u>	Organization <u>GTI</u>	Date/Time <u>12/20/93 17:00</u>	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days 10 Days <u>No Contracted</u>
Requested By (Signature) <u>R. M. Shuman</u>	Organization <u>GTI</u>	Date/Time <u>12/22/93</u>	Received By (Signature) <u>Joan Weber</u>	Organization <u>GTI</u>	Date/Time <u>12/22/93</u>	
Requested By (Signature) <u>Joan Weber</u>	Organization <u>GTI</u>	Date/Time <u>12/22/93</u>	Received For Laboratory By (Signature) <u>B. S. CR</u>	Organization <u>GTI</u>	Date/Time <u>12/22/93 5:00</u>	