



# GROUNDWATER TECHNOLOGY, INC.

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

FAX: (415) 685-9148

## FAX TRANSMITTAL

210 Grand

DATE: 13 Jan 94 TIME: \_\_\_\_\_

TO: Jennifer Eberle

FROM: Tim Watchers / Mark Miller

FAX NUMBER: 569-4757

NO. OF PAGES (including cover page): 9

If you do not receive any of the pages, please call (510) 671-2387, Concord Regional/District Office.

To fax a reply, please send to (510) 685-9148.

### MESSAGE

Chevron site # 9-0019. This information is faxed to you at the request of Mark Miller of Chevron

MW	ND	MW 6:
2	Ø	130 TPH <sub>5</sub>
3	ND	ND benz
4	67 TPH <sub>5</sub> <sup>?</sup> ND benz	
5	5900 TPH <sub>5</sub>	1300 benz <sup>↑</sup>
7	ND	
8	ND	
9	ND	

Offices throughout the U.S., Canada and Overseas



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: 020204096.0810  
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 Snodgrass*  
for  
Rashmi Shah  
Laboratory Director

Client Number: 020204096  
 Consultant Project Number: 020204096.0810  
 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 8015<sup>a</sup>**

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: CS-12-0450

**Table 1 (continued)**  
**ANALYTICAL RESULTS**  
**Volatile Organics in Water**

EPA Methods 5030, 8020, and Modified 8015<sup>a</sup>

GTEL Sample Number		08	10	12	14
Client Identification		MW-9	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	87
Detection Limit Multiplier		1	1	1	1
BFB surrogate, % recovery		92.1	94.4	94.5	92.6

- <sup>a</sup> Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1985. 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  
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 Oakland, CA  
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**Table 1 (continued)**

**ANALYTICAL RESULTS**

**Volatile Organics in Water**

**EPA Methods 5030, 8020, and Modified 8015<sup>a</sup>**

GTEL Sample Number		16	123193M		
Client Identification		<del>16-5</del>	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	<del>1300</del>	<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	<del>1000</del>	<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 1996. 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  
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 Facility Number: 9-0019  
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 Oakland, CA  
 Work Order Number: C3-12-0450

**Table 1**  
**ANALYTICAL RESULTS**  
**Purgeable Halocarbons in Water**  
**EPA Method 601<sup>a</sup>**

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-Dichloroethene	0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	0.5	<0.5	<0.5	<0.5
1,2-Dichloroethene	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 28, 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: CS-12-0450

### QC Matrix Spike and Duplicate Spike Results

Matrix: Water

Analyte	Sample ID	Spike Amount	Units	Recovery, %	Duplicate Recovery, %	RPD, %	Control Limits
<b>Modified EPA 8020:</b>							
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
<b>EPA 8010:</b>							
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

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

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: 020204096.06101  
 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: ETTEL  
 Laboratory Release Number: 020204096 876-1A90  
 Samples Collected by (Name): Nick Garcia  
 Collection Date: 12/20/93  
 Signature: Nick Garcia

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Chemical	Type C = Comb Components D = Discrete	Time	Sample Preservation	Leak (Yes or No)	Analytes To Be Performed												Remarks		
								CEC + TPH CAS (0220 + 0615)	TPH Diesel (0215)	Oil and Grease (0200)	Polycyclic Aromatics (0310)	Flammable Aromatics (0220)	Purgeable Organics (0260)	Extractable Organics (0270)	Metals Cd,Cu,Pb,Zn,Hg (02AF or 04)	HOLD						
TBLB	-	1	W		8:55	HCL	Y	X														NOTE: DO NOT BILL TB-LB SAMPLES SEALS IN THEO, 02 ICE AT 3°C
RBNW-7	01 ✓	1			8:00			X														
MW-7	02 ✓	3			8:00			X	N													
RBNW-9	03	1			8:10			X														
MW-9	04 ✓	3			8:10			X	N													
RBNW-3	05	1			8:20			X														
MW-3	06 ✓	3			8:20			X	N													
RBNW-8	07	1			8:30			X														
MW-8	08 ✓	3			8:30			X	N													
RBNW-1	09	1			8:40			X														
MW-1	10 ✓	3			8:50			X	N													
RBNW-6	11	1			4:00			X														
MW-6	12 ✓	3			4:00			X	N													
RBNW-4	13	1			4:10			X														

Released By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)	
<u>Nick Garcia</u>	GTI	12/20/93	<u>R. M. Sharma</u>	GTI	12/20/93 17:00		24 Hrs. 48 Hrs. 6 Days 10 Days <u>As Contracted</u>
<u>R. M. Sharma</u>	GTI	12/22/93	<u>Ben Weber</u>	BTEL	12/22/93		
<u>Ben Weber</u>	BTEL	12/22/93	<u>Ben Garcia</u>	BTEL	12/22/93 9:00		



**Chevron U.S.A. Inc.**  
P.O. BOX 5004  
Son 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: 876-6990  
Samples Collected by (Name): Mark Garcia  
Collection Date: 12-20-93  
Signature: Mark Garcia

Sample Number	Lab Sample Number	Number of Containers	Mats: A - Air, B - Soil, C - Water, D - Charcoal	Type: C - Grab, C - Composite, D - Diurnal	Time	Sample Preservation	Leak (Yes or No)	Analysis To Be Performed													
								SEIX + TPH GAS (8220 + 8015)	TPH (8015)	Oil and Grease (8020)	Petroleum Hydrocarbons (8010)	Pesticides (8025)	Phenolics (8040)	Estrogens (8270)	Metals: Cd, Cr, Pb, Zn, Ni (8040 or 8050)	PH	Temperature	Other	Other		
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	Y												
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  
BRK INACS  
P/W AT 30C

Requested By (Signature) <u>Mark Garcia</u>	Organization <u>GTI</u>	Date/Time <u>12/20/93</u>	Received By (Signature) <u>R.M. Juerna</u>	Organization <u>GTI</u>	Date/Time <u>12/20/93 17:00</u>
Requested By (Signature) <u>R.M. Juerna</u>	Organization <u>GTI</u>	Date/Time <u>12/22/93</u>	Received By (Signature) <u>Juan Weber</u>	Organization <u>GTI</u>	Date/Time <u>12-22-93</u>
Requested By (Signature) <u>Juan Weber</u>	Organization <u>GTI</u>	Date/Time <u>12/22/93</u>	Requested for Laboratory By (Signature) <u>R.M. Juerna</u>	Organization <u>GTI</u>	Date/Time <u>12/22/93</u>

- Turn Around Time (Circle One)
- 24 Hrs.
  - 48 Hrs.
  - 5 Days
  - 10 Days
  - As Contracted

C3120453

009/008  
GROUNDWATER TECH  
01/13/94 08:52 510 695 9146