



Chevron

93 AUG 25 PM 2: 31

August 20, 1993

Chevron U.S.A. Products Company
2410 Camino Ramon
San Ramon, CA 94583

Marketing Department
Phone 510 842 9500

Site Assessment & Remediation

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

Re: Chevron Service Station #9-0338
5500 Telegraph Avenue, Oakland, CA

Dear Ms. Hugo:

Enclosed is the quarterly Groundwater Monitoring and Sampling Activities report dated August 18, 1993, prepared by our consultant Groundwater Technology, Inc. for the above referenced site. As indicated in the report, ground water samples collected were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) and BTEX. Laboratory analyses reported these constituents below the method detection limits for all monitor wells with the exception of TPH-G in C-3 at a concentration of 280 ppb. Depth to ground water was measured at approximately 9.8 to 10.6 feet below grade and the direction of flow is to the southwest.

The laboratory report indicates that a single peak was observed in the chromatogram for the sample collected from monitor well C-3. Chevron will instruct its consultant to collect an additional sample from this well during the next monitoring event. If the single peak appears again, the additional sample will be analyzed for EPA Method 601 constituents. This will assist in determining whether the single peak was a reflection of weathered petroleum products or other compounds.

Chevron will continue to monitor and sample all wells at this site for one additional quarter. We will then evaluate the site for possible case closure.

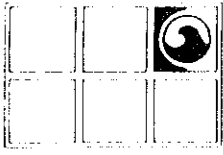
If you have any questions or comments, please do not hesitate to call me at (510) 842-8134.

Sincerely,
CHEVRON U.S.A. PRODUCTS COMPANY

Mark A. Miller
Site Assessment and Remediation Engineer

Enclosure

cc: Mr. Eddy So, RWQCB - Bay Area
Mr. M.R. Purcell
File (9-0338 QM2)



GROUNDWATER TECHNOLOGY, INC.

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

FAX: (415) 685-9148

August 18, 1993

Project No. 020204116

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

SUBJECT: Groundwater Monitoring and Sampling Activities
Former Chevron Service Station No. 9-0338
5500 Telegraph Avenue, Oakland, California

Dear Mr. Miller:

Groundwater Technology, Inc. presents the attached quarterly groundwater monitoring and sampling data collected on July 27, 1993. The three 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 measuring the DTW, each monitoring well was purged and sampled. The groundwater samples were analyzed for benzene, toluene, ethylbenzene, and xylenes and for total petroleum hydrocarbons-as-gasoline. Results of the chemical analyses are summarized in Table 1. The laboratory report and chain-of-custody record are included in Attachment 3. Monitoring-well purge water was transported by Groundwater Technology to the Chevron Terminal in Richmond, California, for recycling.

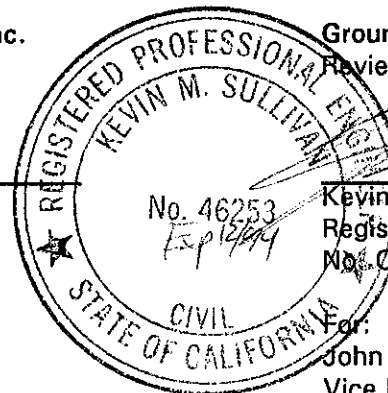
Groundwater Technology is pleased to assist Chevron on this project. If you have any questions or comments, please contact our Concord office at (510) 671-2387.

Sincerely,
Groundwater Technology, Inc.
Written/Submitted by

Tim Watchers
Tim Watchers
Project Geologist

PR *SA*

Attachment 1 - Figure
Attachment 2 - Table
Attachment 3 - Laboratory Report



Groundwater Technology, Inc.
Reviewed/Approved by

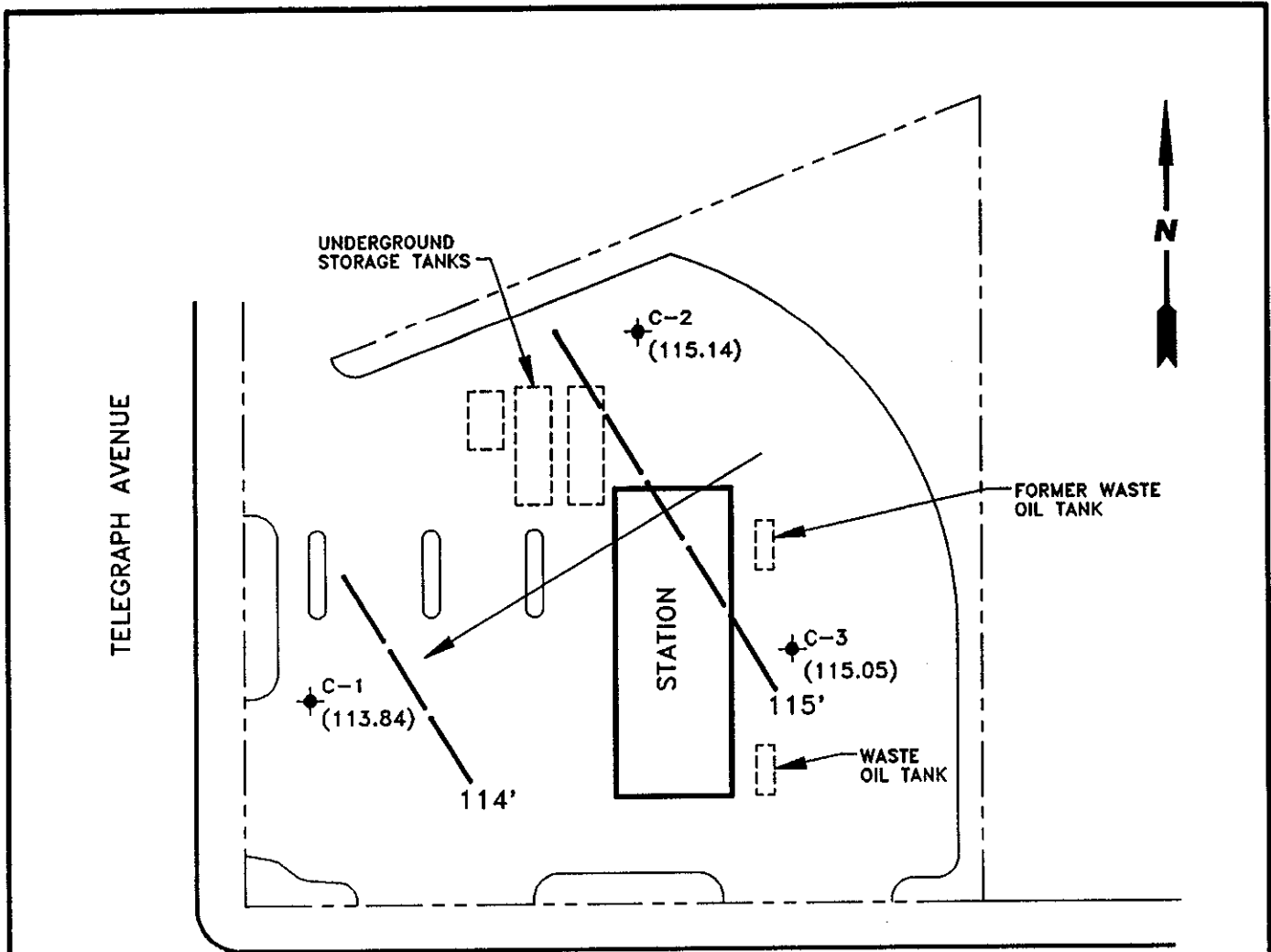
Kevin M. Sullivan
Kevin M. Sullivan
Registered Professional Engineer
No. C46253

John S. Gaines
John S. Gaines
Vice President, General Manager
West Region

ATTACHMENT 1

Figure





55th STREET

LEGEND

- ◆ MONITORING WELL
- () POTENTIOMETRIC SURFACE ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- POTENTIOMETRIC SURFACE CONTOUR
- ← GROUNDWATER FLOW DIRECTION



GROUNDWATER TECHNOLOGY

4057 PORT CHICAGO HWY.
CONCORD, CA 94520
(510) 671-2387

**POTENTIOMETRIC SURFACE MAP
(7/27/93)**

CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-0338			LOCATION: 5500 TELEGRAPH AVENUE OAKLAND, CALIFORNIA		REV. NO.: 0	DATE: 8/13/93
PM <i>Law</i>	PE/RG <i>ORK</i>	DESIGNED TW	DETAILED ML	ACAD FILE: PSM72793/SP893	PROJECT NO.: 020204116	FIGURE: 1

ATTACHMENT 2

Table

TABLE 1
GROUNDWATER MONITORING DATA
Chevron Service Station No. 9-0338
5500 Telegraph Avenue, Oakland, California

Well ID/ Elevation	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	TPH-D	TOG	TTL	DTW (ft)	SPT (ft)	WTE (ft)
C-1 123.88	11/21/89	<500	<0.5	<0.5	<0.5	<0.5	---	---	---	10.75	0.00	113.13
	03/20/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	9.93	0.00	113.95
	06/27/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	<0.5	9.64	0.00	114.24
	D06/27/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	<0.5	9.64	0.00	114.24
	*10/12/90	---	---	---	---	---	---	---	---	10.91	0.00	112.97
	D10/12/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	10.91	0.00	112.97
	12/20/90	75	<0.5	0.9	0.8	3	---	---	---	9.76	0.00	114.12
	D12/20/90	73	<0.5	0.6	0.7	2	---	---	---	9.76	0.00	114.12
	04/10/91	<50	0.7	1.2	<0.5	1.0	---	---	---	8.76	0.00	115.12
	D04/10/91	<50	0.9	1.5	<0.5	1.5	---	---	---	8.76	0.00	115.12
	02/26/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	8.08	0.00	115.80
	02/04/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	8.26	0.00	115.62
07/27/93	<50	<0.5	<0.5	<0.5	<0.5	<1.5	---	---	10.04	0.00	113.84	
C-2 124.92	11/21/89	<500	<0.5	<0.5	<0.5	<0.5	---	---	---	10.75	0.00	114.17
	03/20/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	9.44	0.00	115.48
	06/27/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	<0.5	9.55	0.00	115.37
	10/12/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	10.89	0.00	114.03
	12/20/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	9.65	0.00	115.27
	04/10/91	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	8.04	0.00	116.88
	02/26/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	7.03	0.00	117.89
	02/04/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	7.06	0.00	117.86
	07/27/93	<50	<0.5	<0.5	<0.5	<0.5	<1.5	---	---	9.78	0.00	115.14
C-3 125.64	11/21/89	<500	<0.5	<0.5	<0.5	<0.5	---	---	---	11.28	0.00	114.36
	01/12/90	---	---	---	---	---	<1000	<5000	---	---	0.00	---
	03/20/90	<50	<0.5	<0.5	<0.5	<0.5	<50	<5000	---	10.39	0.00	115.25
	06/27/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	<0.5	10.32	0.00	115.32
	10/12/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	11.28	0.00	114.36
	12/20/90	54	<0.5	<0.5	<0.5	0.7	---	---	---	10.25	0.00	115.39
	04/10/91	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	8.79	0.00	116.85
	02/26/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	7.83	0.00	117.81
	02/04/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	7.94	0.00	117.70
07/27/93	**280	<0.5	<0.5	<0.5	<0.5	<1.5	---	---	10.59	0.00	115.05	

TABLE 1
GROUNDWATER MONITORING DATA
 Chevron Service Station No. 9-0338
 5500 Telegraph Avenue, Oakland, California

Well ID/ Elevation	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	TPH-D	TOG	TTL	DTW (ft)	SPT (ft)	WTE (ft)
TRIP BLANK	03/20/90	<50	<0.5	<0.5	<0.5	<0.5	<50	---	---	---	---	---
	06/27/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	*10/12/90	---	---	---	---	---	---	---	---	---	---	---
	12/20/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	04/10/91	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	02/26/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	07/27/93	<50	<0.5	<0.5	<0.5	<1.5	---	---	---	---	---	---
RINSATE	06/27/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	*10/12/90	---	---	---	---	---	---	---	---	---	---	---
	12/20/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	04/10/91	<50	<0.5	0.6	<0.5	<0.5	---	---	---	---	---	---
	02/26/92	<50	<0.5	<0.5	<0.5	3.3	---	---	---	---	---	---

- TPH-G = Total petroleum hydrocarbons-as-gasoline
 TPH-D = Total petroleum hydrocarbons-as-diesel fuel
 TTL = Lead
 TOG = Total oil and grease
 DTW = Depth to water
 SPT = Separate-phase hydrocarbon thickness
 WTE = Water table elevations measured to mean sea level
 --- = Not applicable/not measured/not sampled
 D = Duplicate
 * = Samples broken by laboratory.
 ** = Gasoline range concentrations reported. The pattern of peaks observed in the chromatogram shows only single peak in the gasoline range.

ATTACHMENT 3

Laboratory Report



Superior Precision Analytical, Inc.

825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

GROUNDWATER TECHNOLOGY, INC.
Attn: Nicole Merchant

Project 020204109.0610
Reported 08/03/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
89389- 1	TB-LB	07/27/93	07/29/93 Water
89389- 3	C-3	07/27/93	07/29/93 Water
89389- 5	C2	07/27/93	07/29/93 Water
89389- 7	C-1	07/27/93	07/29/93 Water

RESULTS OF ANALYSIS

Laboratory Number: 89389- 1 89389- 3 89389- 5 89389- 7

Gasoline:	ND<50	280*	ND<50	ND<50
Benzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Toluene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Ethyl Benzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Xylenes:	ND<1.5	ND<1.5	ND<1.5	ND<1.5
Concentration:	ug/L	ug/L	ug/L	ug/L

* Gasoline range concentration reported. The pattern of peaks observed in the chromatogram shows only single peak in the gasoline range.



Superior Precision Analytical, Inc.

825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 89389

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
ug/L = parts per billion (ppb)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Water: 5000ug/L

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 50ug/L

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 50ug/L

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/L

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	85/77	10%	70-130
Benzene:	106/118	11%	70-130
Toluene:	97/109	12%	70-130
Ethyl Benzene:	97/109	12%	70-130
Xylenes:	98/110	12%	70-130

[Handwritten Signature] 8/4/93

Senior Chemist

START PENDING

RUN # 5169 JUL 29, 1993 21:12:50

START

IF

STOP

*ok 1 confirmed for gas
ok accord'g to Rich*

RUNNUM: 5169

ALS POSITION: 9

SAMPLE: 89389-3 ✓

SAMPLE AMOUNT: 5 ml UR a

AREA: 2793176.

MS TOTAL: 1.40443 ✓

CONCENTRATION: 0.280886 mg/L OR mg/kg

GC-5 SERIAL # 2950A27656

280 ppb

START PENDING
RUN # 5155 JUL 29, 1993 12:29:38
START

IF

APPROVED

DATE: 7-30-93

ANALYST: MM

COMMENTS: _____

STOP

RUNNUM: 5155 ALS POSITION: 2

SAMPLE: GAS STD
SAMPLE AMOUNT: 5 ML OR 3

AREA: 21714328.
UM TOTAL: 11.331
CONCENTRATION: 2.26621 ug/L OR ug/kg
GC-5 SERIAL # 2959A27656

START PENDING
RUN # 5158 JUL 29, 1993 14:13:19
START

1.793
2.203
2.927
3.678

4.546

7.163

9.779

10.829

11.216

12.415

14.598

15.173

16.143
16.818
17.203

18.529

TIMETABLE STOP

APPROVED

DATE: 7-30-93

ANALYST: MM

COMMENTS: _____

ALS POSITION: 4
SAMPLE: 8820 STD
GC-5 SERIAL # 2959A27656

SAMPLE AMOUNT: 5 ML OR G

COMPOUND	RT	RT DIFF	HEIGHT	AMOUNT ng	CONCENTRATION (ug/L or ug/kg)
BENZENE	4.546	.003	139777	108.4	21.7
TOLUENE	7.163	.012	143215	97.7	19.5
CL-BENZENE	9.779	.021	156034	97.7	19.5
ET-BENZENE	10.898	.016	133664	97.9	19.6
M,P-XYLENES	10.364	-.02	321840	203.4	40.7
O-XYLENE	11.216	.016	137582	99.3	19.9
4-BFB	12.415	.033	169573	125.0	
M-DCB	14.548	-.01	231532	193.5	20.7
O-DCB	14.690	-.09	254198	100.8	20.2
P-DCB	15.173	-.06	219669	108.4	21.7

TOTAL XYLENES

60.5

SURROGATE COMPOUND RECOVERY: 99.7 PERCENT

START PENDING
RUN # 5157 JUL 29, 1993 13:43:45
START

IF



STOP

APPROVED

DATE: 7-30-93
ANALYST: gmm
COMMENTS: _____

RUNNUM: 5157

ALS POSITION: 3

SAMPLE: BLANK

SAMPLE AMOUNT: 5 ml OR g

AREA: 498398.

us TOTAL: 0.245441

CONCENTRATION: 0.0490881 ug/L OR ug/kg

GC-5 SERIAL # 2950A27656

START PENDING
RUN # 5157 JUL 29, 1993 13:41:45
START

1.818
2.361
2.905
3.671
4.532
5.372
6.224
8.215
8.648
9.761
10.745
10.958
11.228
11.582

13.646
14.183
14.589
15.173
15.822.142
16.808
17.198
18.727

TIMETABLE STOP

12.419

APPROVED

DATE: 7-30-93
ANALYST: gmm
COMMENTS: _____

ALS POSITION: 3
SAMPLE: BLANK
GC-5 SERIAL # 2950A27656

SAMPLE AMOUNT: 5 ml OR g

COMPOUND	RT	RT diff	HEIGHT	AMOUNT ug	CONCENTRATION (ug/L or ug/kg)
BENZENE					ND < 0.3
TOLUENE					ND < 0.3
CL-BENZENE					ND < 0.3
ET-BENZENE					ND < 0.3
M-P-XYLENES					ND < 0.3
O-XYLENE					ND < 0.3
4-BFB	12.419	.048	139908	125.0	ND < 0.3
M-DCB					ND < 0.3
O-DCB					ND < 0.3
P-DCB					ND < 0.3
TOTAL XYLENES					ND < 0.3

SURROGATE COMPOUND RECOVERY: 82.3 PERCENT

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

89387 Chain-of-Custody-Record

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

Chevron Facility Number 9-0338
Facility Address Chv-5500 Telegraph Ave, Oakland
Consultant Project Number 020204109.0610
Consultant Name Groundwater Technology, Inc.
Address 4057 Port Chicago Hwy, Concord, CA 94520
Project Contact (Name) Ms. Nicole Merchant
(Phone) 671-2387 (Fax Number) 685-9148

Chevron Contact (Name) Mr. Mark Miller
(Phone) 842-8134
Laboratory Name Superior Analytical
Laboratory Release Number 264-6690
Samples Collected by (Name) Grey Mason
Collection Date 7/27-93
Signature [Signature]

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	Iced (Yes or No)	Analyses To Be Performed											Remarks					
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Greases (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)	Hold								
TB-LB		2	W	D		HCl	Y																TB-LB Do NOT Bill	
RB-C-3		1																						
C-3		3			2:45			X																
RB-C2		1																						
C2		3			2:55			X																
RB-C1		1																						
C-1		3	✓	✓	3:10	✓	✓	X																

Please Initial: VM
 Samples Stored in ice: 10°C
 Appropriate containers: yes
 Samples preserved: yes
 VOA's without headspace: yes
 Comments: Trip Blanks.

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>GTI</u>	Date/Time <u>7/27</u>	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days 10 Days <u>As Contracted</u>
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>[Signature]</u>	Date/Time <u>7/27/93 1631</u>		

COC-3.DWG/03 91/HCH



Superior Precision Analytical, Inc.

825 Arnold Drive, Suite 114 ▪ Martinez, California 94553 ▪ (510) 229-1512 / fax (510) 229-1526

MOCK INVOICE

Chevron USA
P.O. Box 5004
San Ramon, CA 94583

Date: 08/03/93
Date Rcvd: 07/27/93
Date Rptd: 08/03/93
Our Job #: 89389
Invoice #: 89389

GROUNDWATER TECHNOLOGY, INC. Job # 020204109.0610
Chevron USA Release # 264-6690 Facility #: 9-0338

QTY/MATRIX	ANALYSIS	EXT. PRICE
3	Water sample(s) for VPHBTXE @	\$0.00 (NORMAL) 0.00
3	Water sample(s) for HOLD @	\$0.00 (NORMAL) 0.00
TOTAL INVOICE		0.00

Please Send Payment To:
Superior Precision Analytical
P.O. Box 1545
Martinez, CA 94553

TERMS: NET 30
A charge of 1.5% per month may be applied to unpaid balances.