



Chevron

HAZARD

91 OCT 12 AM 11:51

October 5, 1994

Chevron U.S.A. Products Company
6001 Bollinger Canyon Road
Building L
San Ramon, CA 94583
P.O. Box 5004
San Ramon, CA 94583-0804

Marketing - Northwest Region
Phone 510 842 9500

Mr. Scott Seery
Alameda County Environmental Health Department
80 Swan Way, Room 200
Oakland, CA 94621

Re: Former Chevron Service Station No. 9-4930
3369 Castro Valley Blvd., Castro Valley, CA 94546

Dear Mr. Seery :

Monitoring well MW-3 was non-detect for total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethylbenzene, and xylene (BTEX). The remaining wells contained petroleum hydrocarbons having TPH-G concentrations ranging from 800-190 ppb and BTEX concentrations ranging from 1.2-43 ppb.

* Chevron has contacted Jeff Scharff of Scharff & Greben and Sal's Auto Repair's consultant. Both parties have expressed interest in working together on the off-site investigation, but neither of them have contacted me. If they do not respond within 45 days from the date of this letter (November 18), Chevron will proceed with its investigation.

For additional information on the groundwater conditions, please refer to the enclosed report from Groundwater Technology dated September 27, 1994. If you have any questions or comments, please feel free to call me at (510) 842-8752.

Sincerely,

Chevron U.S.A. Products Co.

Kenneth Kan
Engineer

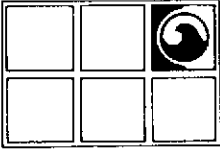
LKAN/MacFile 9-4930R9

Enclosure

cc: Mr. Richard Hiatt, RWQCB-S.F.Bay Region
2101 Webster Street, Suite 500, Oakland, CA 94612

Anna Counelis & Tula Gallanes
109 Casa Vieja Place, Orinda, CA 94563

Ms. Bette Owen, Chevron U.S.A. Products Co.



GROUNDWATER TECHNOLOGY, INC.

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

FAX: (415) 685-9148

September 27, 1994

Project No. 020105001

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

SUBJECT: *Groundwater Monitoring and Sampling Activities*
Chevron Service Station No. 9-4930
3369 Castro Valley Blvd., Castro Valley, California

Dear Mr. Kan:

Groundwater Technology, Inc. presents the groundwater monitoring and sampling data collected for the third quarter 1994. Groundwater monitoring data was collected on July 28, 1994. Groundwater monitoring and sampling data was collected on August 31, 1994. Four 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 and a summary of groundwater monitoring data are presented in attachments 1 and 2, respectively. After the DTW was measured, the monitoring wells were purged and sampled. Groundwater monitoring and sample collection protocol and field data sheets are presented in attachment 3. The groundwater samples were analyzed for benzene, toluene, ethylbenzene, xylenes, total petroleum hydrocarbons-as-gasoline and purgeable halocarbons. Results of the chemical analyses are summarized in attachment 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.

The next quarterly groundwater monitoring and sampling round is scheduled for November 1994. ~~The frequency of monitoring groundwater has been reduced from monthly to quarterly. Monitoring well MW-3 will be sampled semi-annually in February and August.~~

Page 2

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.

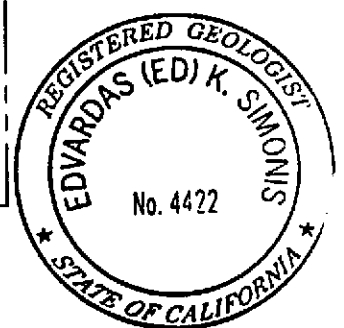
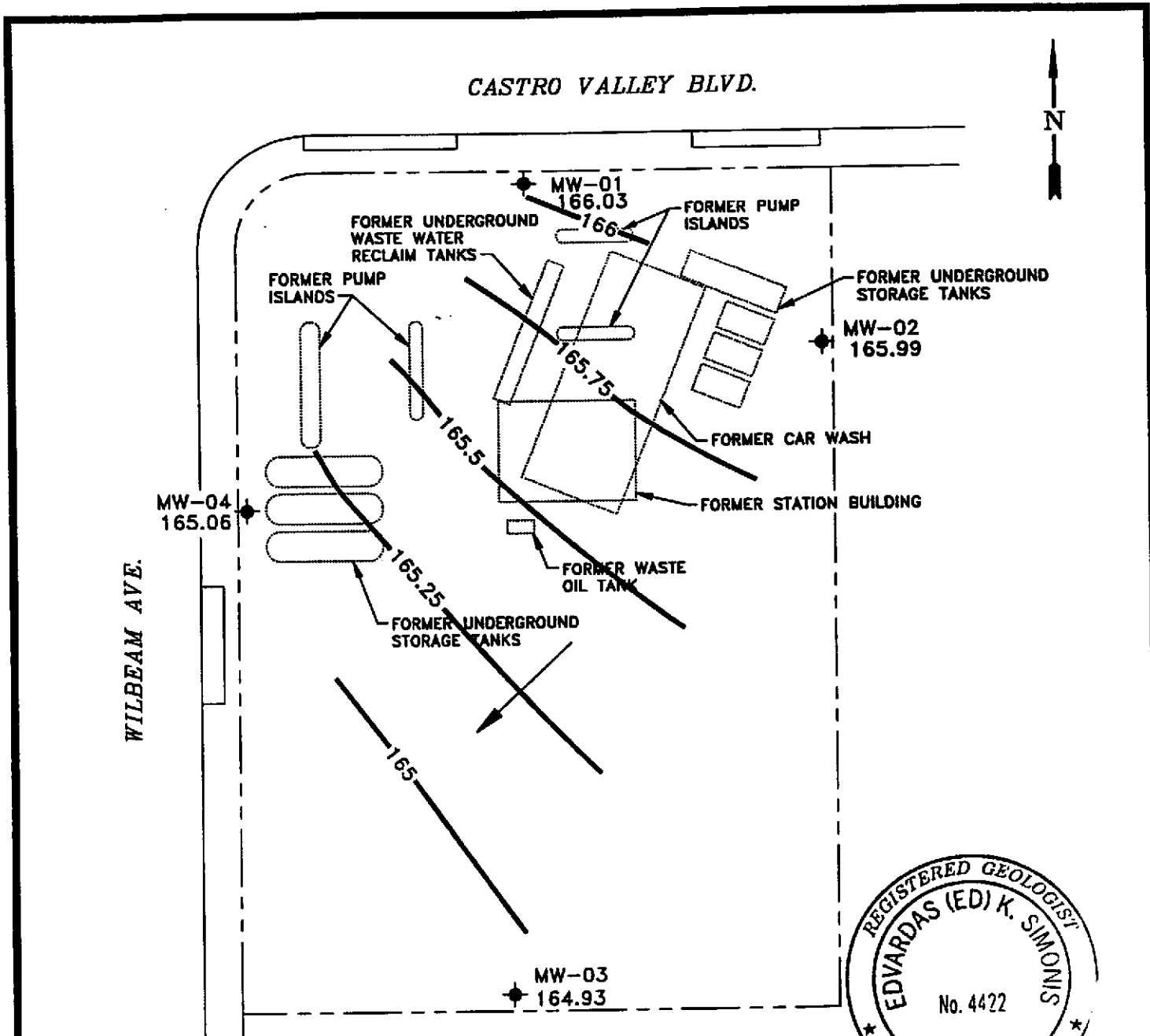
Sincerely,
Groundwater Technology, Inc.
Written/Submitted by


Kenneth P. Johnson
Project Manager

PR 

Attachment 1 Figure
Attachment 2 Table
Attachment 3 Protocol and Field Data Sheets
Attachment 4 Laboratory Report

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

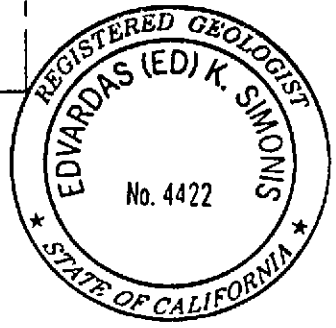
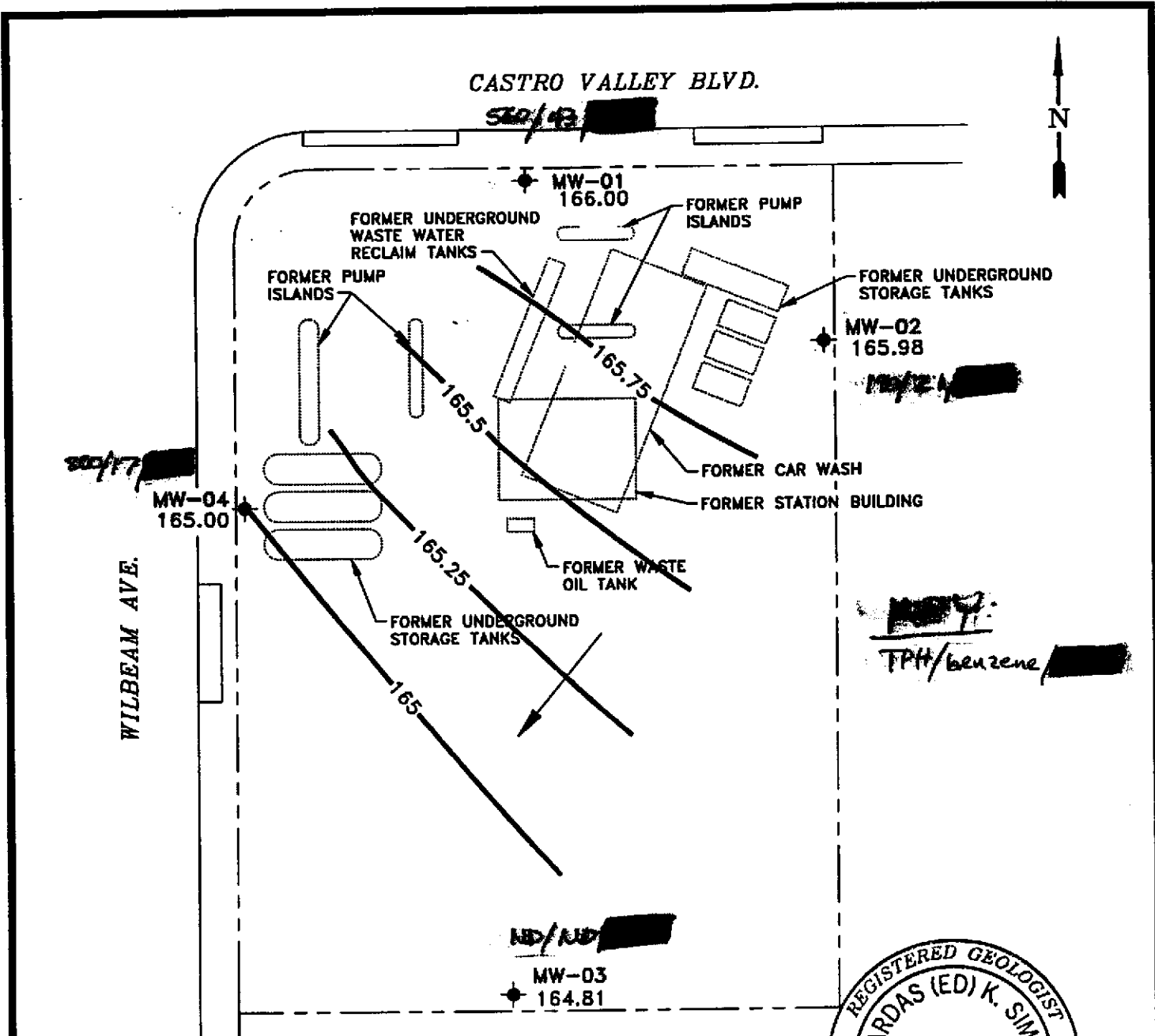


LEGEND

- PROPERTY LINE
- MONITORING WELL
- POTENTIOMETRIC SURFACE ELEVATION (FT)
- POTENTIOMETRIC SURFACE CONTOUR
- GROUNDWATER FLOW DIRECTION

NOTE:
 1. CONTOURS REPRESENT APPROXIMATE ELEVATIONS ABOVE MEAN SEA LEVEL.

		POTENTIOMETRIC SURFACE MAP (7/28/94)		
CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION NO. 9-1723		FILE: 5001PSM, (1:40)	PROJECT NO.: 02010-5001	PM
LOCATION: 3369 CASTRO VALLEY BLVD. CASTRO VALLEY, CALIFORNIA		REV.		FIGURE: 1
		DES. SS	DET. SS	DATE: 8/2/94



LEGEND

- PROPERTY LINE
- MONITORING WELL
- POTENTIOMETRIC SURFACE ELEVATION (FT)
- POTENTIOMETRIC SURFACE CONTOUR
- GROUNDWATER FLOW DIRECTION

NOTE:
1. CONTOURS REPRESENT APPROXIMATE ELEVATIONS ABOVE MEAN SEA LEVEL.

				POTENTIOMETRIC SURFACE MAP (8/31/94)	
CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION NO. 9-1723		FILE: 5001PSM, (1:40)		PROJECT NO.: 02010-5001	
LOCATION: 3369 CASTRO VALLEY BLVD. CASTRO VALLEY, CALIFORNIA		REV.		PM 	
		DES. SS		DATE: 9/14/94	
		OET. SS		PE/RC, 	
				FIGURE: 1	

ATTACHMENT 1

Figures

ATTACHMENT 2

Table

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
Chevron Service Station No. 9-4930
3369 Castro Valley Blvd., Castro Valley, California

Well ID/ Elev	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	1,2 DCE	TCE	DCFM	PCE	DTW (ft)	SPT (ft)	WTE (ft)
MW-1 172.90	10/29/93	1,000	11	17	32	110	---	---	---	---	6.75	0.00	166.15
	02/25/94	250	6	1	5	3	---	---	---	---	6.10	0.00	166.80
	04/04/94	---	---	---	---	---	---	---	---	---	6.76	---	166.14
	04/29/94	---	---	---	---	---	---	---	---	---	6.55	---	166.35
	06/13/94	670	35	3.5	43	3.9	0.8	16	14	47	6.78	0.00	166.12
	06/30/94	---	---	---	---	---	---	---	---	---	6.84	0.00	166.06
	07/28/94	---	---	---	---	---	---	---	---	---	6.87	0.00	166.03
	08/31/94	560	48	9.5	25	5.0	1.3	19	13	65	6.90	0.00	166.00
MW-2 173.91	10/29/93	5,600	140	3.2	17	330	---	---	---	---	7.86	0.00	166.05
	02/25/94	820	41	<0.5	17	5	---	---	---	---	6.95	0.00	166.96
	04/04/94	---	---	---	---	---	---	---	---	---	7.73	---	166.18
	04/29/94	---	---	---	---	---	---	---	---	---	7.68	---	166.23
	06/13/94	1,100	160	0.8	64	2.0	<0.5	0.9	<0.5	2	7.71	0.00	166.20
	06/30/94	---	---	---	---	---	---	---	---	---	8.04	0.00	165.87
	07/28/94	---	---	---	---	---	---	---	---	---	7.92	0.00	165.99
	08/31/94	190	7.1	4.1	3.1	1.2	<0.5	1.1	<0.5	4.5	7.93	0.00	165.98
MW-3 172.60	10/29/94	110*	<0.5	<0.5	<0.5	<0.5	---	---	---	---	7.64	0.00	164.96
	02/25/94	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	6.38	0.00	166.22
	04/04/94	---	---	---	---	---	---	---	---	---	7.39	---	165.21
	Semi Annual Feb./Aug.	---	---	---	---	---	---	---	---	---	6.98	---	165.62
	04/29/94	---	---	---	---	---	---	---	---	---	7.45	0.00	165.15
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5	<0.5	2	<0.5	220	7.55	0.00	165.05
	06/30/94	---	---	---	---	---	---	---	---	---	7.67	0.00	164.93
	07/28/94	---	---	---	---	---	---	---	---	---	7.79	0.00	164.81
08/31/94	<50	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	320	7.79	0.00	164.81	

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
Chevron Service Station No. 9-4930
3369 Castro Valley Blvd., Castro Valley, California

Well ID/ Elev	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	1,2 DCE	TCE	DCFM	PCE	DTW (ft)	SPT (ft)	WTE (ft)
MW-4 170.68	10/29/93	640	6.7	3.3	0.6	6.7	---	---	---	---	5.50	0.00	165.18
	02/25/94	450	20	0.8	12	6	---	---	---	---	4.82	0.00	165.86
	04/04/94	---	---	---	---	---	---	---	---	---	5.45	---	165.23
	04/29/94	---	---	---	---	---	---	---	---	---	5.23	---	165.45
	06/13/94	1,700	130	1.4	100	11	22	59	13	180	5.54	0.00	165.14
	06/30/94	---	---	---	---	---	---	---	---	---	5.55	0.00	165.13
	07/28/94	---	---	---	---	---	---	---	---	---	5.62	0.00	165.06
	08/31/94	800	17	3.5	9.3	4.4	25	53	22	510	5.68	0.00	165.00

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
Chevron Service Station No. 9-4930
3369 Castro Valley Blvd., Castro Valley, California

Well ID/ Elev	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	1,2 DCE	TCE	DCFM	PCE	DTW (ft)	SPT (ft)	WTE (ft)
Rinsate	02/25/94	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	---
TBLB	02/25/94	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	---
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	---
	08/31/94	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	---

TPH-G = Total petroleum hydrocarbons-as-gasoline
DTW = Depth to water
SPT = Separate-phase hydrocarbon thickness
WTE = Water-table elevation
* = Compound does not match typical gasoline pattern
1,2 DCE = 1,2 Dichloroethene
TCE = Trichloroethene
DCFM = Dichlorodifluoromethane
PCE = Tetrachloroethene

C-Form = Chloroform

Concentrations are in parts per billion.

Data from 10/29/93 is from RESNA.

ATTACHMENT 3

**Groundwater Monitoring and Sample Collection Protocol
and
Field Data Sheets**

GROUNDWATER TECHNOLOGY GROUNDWATER MONITORING AND SAMPLE COLLECTION PROTOCOL

Groundwater Monitoring

Groundwater monitoring is accomplished using an INTERFACE PROBE™ Well Monitoring System. The INTERFACE PROBE™ Well Monitoring System is a hand held, battery operated device for measuring the depth to separate-phase hydrocarbons and depth to water. The INTERFACE PROBE™ Well Monitoring System consists of a dual-sensing probe which utilizes an optical liquid sensor and electrical conductivity to distinguish between water and petroleum products.

Monitoring is accomplished by measuring from the surveyed top of well casing or grade to groundwater and separate-phase hydrocarbons if present. The static water elevation is then calculated for each well and a potentiometric surface map is constructed. If separate-phase hydrocarbons are detected the water elevation is adjusted by the following calculation:

$$(\text{Product thickness}) \times (0.8) + (\text{Water elevation}) = \text{Corrected water elevation}$$

Groundwater monitoring wells are monitored in order of wells with lowest concentrations of volatile organic compounds to wells with the highest concentrations, based upon historical concentrations. If separate-phase hydrocarbons are encountered in a well, the product is visually inspected to confirm and note color, amount, and viscosity. Monitoring equipment is washed with laboratory grade detergent and rinsed with distilled or deionized water before monitoring each well.

Groundwater Sampling

Before groundwater samples are collected, sufficient water is purged from each well to ensure representative formation water is entering the well. Wells are purged and sampled in the same order as monitoring, from wells with the lowest concentrations of volatile organic compounds to wells with the highest concentrations. Wells are purged using either a polyvinyl chloride (PVC) bailer fitted with a check valve or with a stainless steel submersible Grundfos pump. The purge equipment is decontaminated before use in each well by washing with laboratory grade detergent and triple rinsing with deionized or distilled water. A minimum of 3 well-casing volumes of water are removed from each well while pH, electrical conductivity, and temperature are recorded to verify that "fresh" formation water is being sampled and the parameters have stabilized. If the well is low yielding, it may be purged dry and sampled before 3 casing volumes are purged. The wells are then allowed to recharge to approximately 80 percent of the initial water level before a sample is collected.

Groundwater samples are collected from each well using a new, prepackaged disposable bailer and string. The water sample is decanted from the bailer into laboratory-provided containers (appropriate for the analyses required) so that there is no headspace in the containers. Samples collected for benzene, toluene, ethylbenzene, xylene, and total petroleum hydrocarbons (TPH)-as-gasoline analyses are collected in 40-milliliter vials fitted with Teflon® septum lids. Samples are preserved with hydrochloric acid (HCL) to a pH of less than 2. Dissolved metals samples are filtered through a 0.45-micron paper filter in the field and preserved as required before submitting to the laboratory for analyses. All samples are labeled immediately upon collection and logged on the chain-of-custody record. Sample label and chain-of-custody recorded information includes the project name and number, sample identification, date and time of collection, analyses requested, and the sampler's name. Sample bottles are placed in plastic bags (to protect the bottles and labels) and on ice (frozen water) in an insulated cooler and are shipped under chain-of-custody protocol to the laboratory.

The chain-of-custody record documents who has possession of the samples until the analyses is performed. Other pertinent information is also noted for the laboratory use on the chain-of-custody record.

Trip blanks (TBLBs) are used for each project as a quality assurance/quality control measure. The TBLBs are prepared by the laboratory and are placed in the insulated cooler and accompany the field samples throughout the sampling event.

Project Name: Chevron - Castro Valley

Date: 8-31-94

Site Address: 3369 Castro Valley Blvd.

Page 2 of 4

Project Number: 020105001.0610

Project Manager: Ken Johnson

Well ID: mw-2

DTW Measurements:

Initial: 7.93 Calc Well Volume: _____ gal

Well Diameter: 2

Recharge: _____ Well Volume: 5 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
	<u>X</u> C F					
		MS/cm				
12:30	23.4	1.95	6.74	0		dark murky brown
12:31	23.7	1.08	6.74	1		
12:32	23.5	1.12	6.74	3		
12:33	23.5	1.14	6.74	5		

ATTACHMENT 4

Laboratory Report



ENVIRONMENTAL
LABORATORIES, INC.

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

September 27, 1994

Ken Johnson
Groundwater Technology, Inc.
4057 Port Chicago Highway
Concord, CA 94520

RE: GTEL Client ID: 020105001
Login Number: C4090007
Project ID (number): 020105001
Project ID (name): Chevron/#9-4930/3369 Casto Valley Blvd.

Dear Ken Johnson:

Enclosed please find the analytical results for the samples received by GTEL Environmental Laboratories, Inc. on 09/01/94.

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 Department of Health Service under Certification Number E1075.

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

Sincerely,
GTEL Environmental Laboratories, Inc.

Rashmi Shah
Laboratory Director

GTEL Client ID: 020105001
 Login Number: C4090007
 Project ID (number): 020105001
 Project ID (name): Chevron/#9-4930/3369 Casto Valley Blvd.

ANALYTICAL RESULTS

Volatile Organics
 Method: EPA 8020
 Matrix: Aqueous

GTEL Sample Number	C4090007-01	C4090007-02	C4090007-03	C4090007-04
Client ID	TB-LB	M4-1	M4-2	M4-3
Date Sampled	08/31/94	08/31/94	08/31/94	08/31/94
Date Analyzed	09/07/94	09/08/94	09/08/94	09/08/94
Dilution Factor	1.00	1.00	1.00	1.00

Analyte	Reporting		Concentration:			
	Limit	Units				
Benzene	0.5	ug/L	< 0.5	43.	7.1	< 0.5
Toluene	0.5	ug/L	< 0.5	9.5	4.1	< 0.5
Ethylbenzene	0.5	ug/L	< 0.5	25.	3.1	< 0.5
Xylenes (total)	0.5	ug/L	< 0.5	5.0	1.2	< 0.5
TPH as GAS	50.	ug/L	< 50.	560.	190.	< 50.
BFB (Surrogate)	--	%	101.	108.	107.	100.

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020:

"Test Methods for Evaluating Solid Waste, Physical and Chemical Methods, SW-846", Third Edition, Revision 1, US EPA November 1986. Bromofluorobenzene surrogate recovery acceptability limits are 62-129%. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual protocols, May 1988 revision.

C4090007-04:

Uncategorized compound is not included in gasoline concentration.

GTEL Concord, CA
 C4090007:1



GTEL Client ID: 020105001
Login Number: C4090007
Project ID (number): 020105001
Project ID (name): Chevron/#9-4930/3369 Casto Valley Blvd.

ANALYTICAL RESULTS

Volatile Organics
Method: EPA 8020
Matrix: Aqueous

GTEL Sample Number: C4090007-05
Client ID: MW-4
Date Sampled: 08/31/94
Date Analyzed: 09/08/94
Dilution Factor: 1.00

Analyte	Reporting Limit	Units	Concentration:			
Benzene	0.5	ug/L	17	--	--	--
Toluene	0.5	ug/L	3.5	--	--	--
Ethylbenzene	0.5	ug/L	9.3	--	--	--
Xylenes (total)	0.5	ug/L	4.4	--	--	--
TPH as GAS	50	ug/L	800	--	--	--
BFB (Surrogate)	--	%	99.2	--	--	--

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020:

"Test Methods for Evaluating Solid Waste, Physical and Chemical Methods, SW-846", Third Edition, Revision 1, US EPA November 1986. Bromofluorobenzene surrogate recovery acceptability limits are 62-129%. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual protocols, May 1988 revision.

GTEL Concord, CA
C4090007:2

