



Chevron U.S.A. Products Company

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Mail Address: P.O. Box 5004, San Ramon, CA 94583-0804

9207010 011150

December 1, 1992

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

1110

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

Dear Ms. Eberle:

Enclosed we are forwarding the **Groundwater Monitoring and Sampling Activities** report dated October 26, 1992, prepared by our consultant Groundwater Technology, Inc. for the above referenced site. As indicated in the report, groundwater samples collected were analyzed for total petroleum hydrocarbons as gasoline (TPH-G), and BTEX. **Benzene** was detected in monitor wells MW-4, MW-5, and MW-6 only, at concentrations of 1.1 ppb, **14,000 ppb**, and 0.5 ppb, respectively. A negligible concentration of **1,2 DCA** was reported in monitor well MW-5 only at a level of **4.4 ppb**. Depth to ground water was encountered at approximately 3.7 feet to 7.2 feet below grade, and the direction of flow is to the west-northwest.

Per approval from Susan Hugo of Alameda County Health Care Services in her letter dated July 15, 1992, sampling for purgeable halocarbons (EPA Method 8010) will be discontinued for monitor wells MW-1, MW-4, MW-6, MW-7, MW-8, and MW-9. Monitor wells MW-3 and MW-5 will continue to be sampled quarterly for these constituents. All wells will continue to be sampled and analyzed for TPH-G and BTEX on a quarterly basis.

OK-JE

Chevron will continue to monitor and this site and report findings on a quarterly basis. The ground water extraction system has been installed and we are currently awaiting approval from the East Bay Municipal Utility District for the sewer discharge permit to start the system. Monitor well MW-8 has recently been paved over and could not be sampled this quarter. This well will be potholed out to enable continued monitoring and sampling.

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

Very truly yours,
CHEVRON U.S.A. PRODUCTS COMPANY

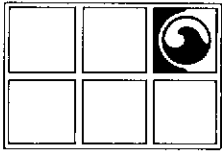
Mark A. Miller
Site Assessment and Remediation Engineer

Enclosure



Page 2
December 1, 1992
Former SS#9-0019

cc: Mr. Rich Hiatt, RWQCB - Bay Area
Mr. Kent O'Brien - Geraghty & Miller
Ms. B.C. Owen
File (9-0019 QM1)



GROUNDWATER TECHNOLOGY, INC.

NOV 10 '92 JST

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

FAX: (415) 685-9148

October 26, 1992

Project No. 020302500

Mr. Mark Miller
Chevron U.S.A. Products Company
P. O. Box 5004
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 September 29, 1992. Seven of the eight groundwater monitoring wells at this site were gauged to determine depth to groundwater (DTW) and to check for the presence of separate-phase hydrocarbons. Monitoring well MW-8 could not be monitored or sampled because it was covered by street repaving. A potentiometric surface map (Figure 1) and a summary of groundwater monitoring data (Table 1) are presented in Attachments A and B, respectively. After measuring the DTW, each monitoring well was purged and sampled. The groundwater samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), total petroleum hydrocarbons (TPH)-as-gasoline and Purgeable Halocarbons. Results of the chemical analyses are summarized in Table 2 (Attachment C). Laboratory report and chain-of-custody record are included in Attachment D. Monitoring well purge water was transported by Groundwater Technology, Inc. to the Chevron terminal in Richmond, California for recycling.

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

Sincerely,
GROUNDWATER TECHNOLOGY, INC.

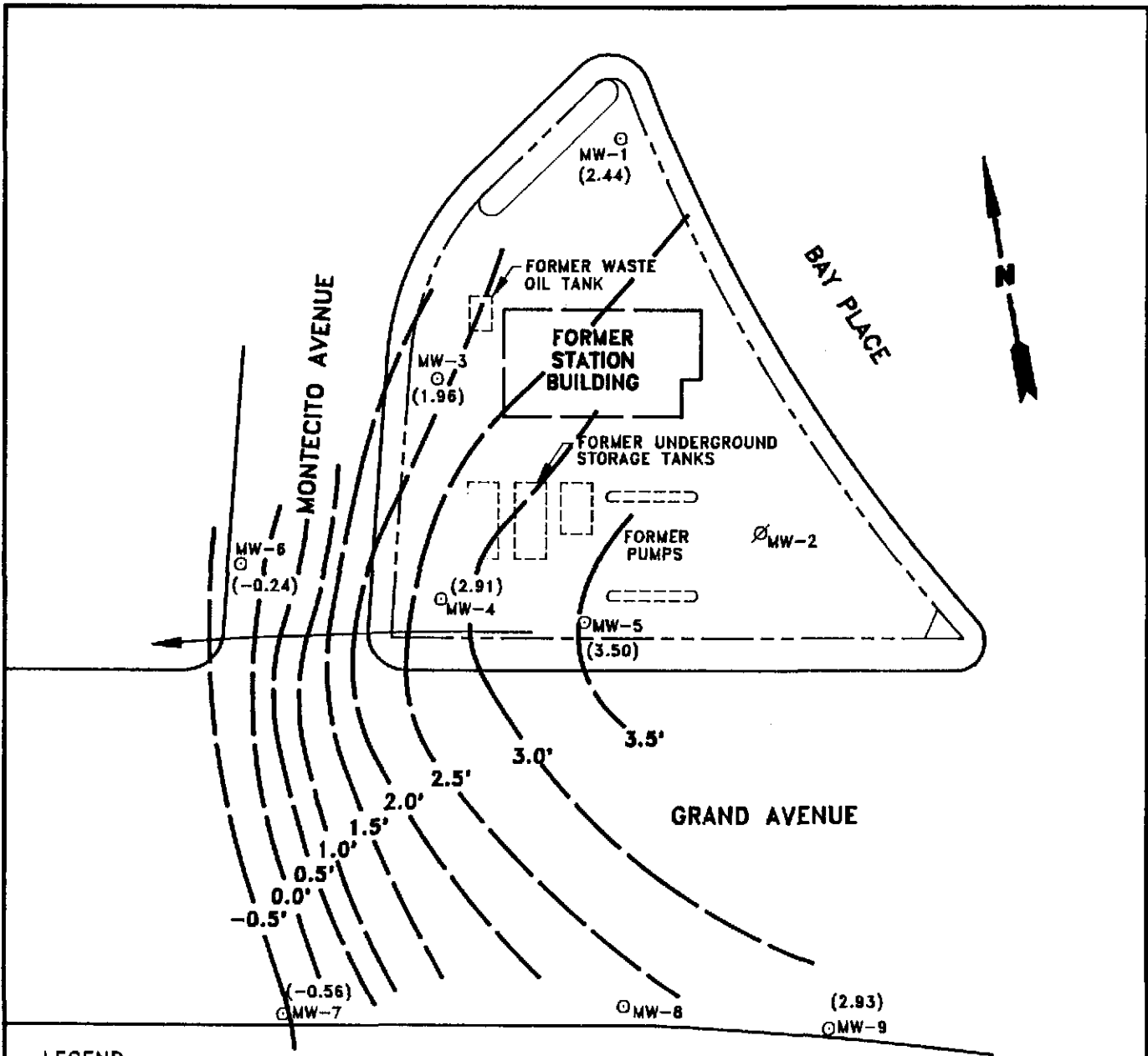
Sandra L. Lindsey
Project Manager

Attachments: Attachment A - Figure 1
Attachment B - Table 1
Attachment C - Laboratory Report
Attachment D - Table 2

LR2500A1.NM
(061022)

David R. Kleesattel
Registered Geologist
No. 5136

For:
John Gaines, V.P.
General Manager,
West Region



- LEGEND**
- MONITORING WELL
 - ∅ ABANDONED MONITORING WELL
 - () POTENTIOMETRIC SURFACE ELEVATION
 - - - POTENTIOMETRIC SURFACE CONTOUR
 - GROUNDWATER FLOW DIRECTION



GROUNDWATER TECHNOLOGY		4057 PORT CHICAGO HWY. CONCORD, CA 94520 (510) 671-2387		POTENTIOMETRIC SURFACE MAP (9/29/92)		
		CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-0019		LOCATION: 210 GRAND AVENUE OAKLAND, CALIFORNIA		REV. NO.: 0
PM <i>JRW</i>	PE/RG <i>DRK</i>	DESIGNED TW	DETAILED ML	ACAD FILE: PSM92992/SP692	PROJECT NO.: 020302500	FIGURE: 1

TABLE 1
GROUNDWATER MONITORING DATA
CHEVRON SERVICE STATION NO. 9-0019
210 GRAND AVENUE, OAKLAND, CALIFORNIA

WELL ID/ ELEV	DATE	DTW	SPT	WTE
MW-1 9.63	03/14/89	6.74	0.0	2.89
	06/08/89	7.14	0.0	2.49
	09/14/89	7.21	0.0	2.42
	12/08/89	7.29	0.0	2.34
	03/19/90	7.00	0.0	2.63
	07/06/90	7.13	0.0	2.50
	10/03/90	7.53	0.0	2.10
	08/23/91	7.06	0.0	2.57
	11/22/91	7.47	0.0	2.16
	02/26/92	6.69	0.0	2.94
	05/22/92	6.96	0.0	2.67
	09/29/92	7.19	0.0	2.44
MW-2 8.99 9.01	03/14/89	6.08	0.0	2.91
	06/08/89	5.22	0.0	3.77
	09/14/89	5.95	0.0	3.04
	12/08/89	9.25	0.0	-0.26
	03/19/90	5.92	0.0	3.07
	07/06/90	6.79	0.0	2.22
	10/03/90	---	---	---
	08/23/91	---	---	---
	09/29/92	---	---	---
	11/22/91	WELL DESTROYED (11/15/91)		
MW-3 8.19 8.19	03/14/89	6.02	0.0	2.16
	06/08/89	5.88	0.0	2.30
	09/14/89	6.30	0.0	1.88
	12/08/89	9.52	0.0	-1.34
	03/19/90	6.17	0.0	2.01
	07/06/90	7.52	0.0	0.67
	10/03/90	7.31	0.0	0.88
	08/23/91	5.65	0.0	2.53
	11/22/91	6.78	0.0	1.41
	02/26/92	4.65	0.0	3.54
	05/22/92	5.56	0.0	2.63
	09/29/92	6.23	0.0	1.96

TABLE 1
GROUNDWATER MONITORING DATA
CHEVRON SERVICE STATION NO. 9-0019
210 GRAND AVENUE, OAKLAND, CALIFORNIA

WELL ID/ ELEV	DATE	DTW	SPT	WTE	
MW-4 7.60	03/14/89	5.52	0.0	2.08	
	06/08/89	4.19	0.0	3.41	
	09/14/89	4.80	0.0	2.80	
	12/08/89	4.86	0.0	2.74	
	03/19/90	4.65	0.0	2.95	
	7.59	07/06/90	6.42	0.0	1.17
		10/03/90	6.39	0.0	1.20
		08/23/91	4.42	0.0	3.17
		11/22/91	5.38	0.0	2.21
		02/26/92	2.65	0.0	4.94
05/22/92		3.96	0.0	3.63	
	09/29/92	4.68	0.0	2.91	
MW-5 8.35	03/14/89	6.98	0.0	1.37	
	06/08/89	4.73	0.0	3.62	
	09/14/89	5.37	0.0	2.98	
	12/08/89	9.13	0.0	-0.78	
	03/19/90	5.12	0.0	3.23	
	07/06/90	5.81	0.0	2.54	
	10/03/90	6.90	0.0	1.45	
	08/23/91	5.05	0.0	3.30	
	11/22/91	6.25	0.0	2.10	
	02/26/92	3.00	0.0	5.35	
05/22/92	4.49	0.0	3.86		
	09/29/92	4.85	0.0	3.50	
MW-6 6.56	07/06/90	9.09	0.0	-2.53	
	10/03/90	5.78	0.0	0.78	
	08/23/91	7.49	0.0	-0.93	
	11/22/91	7.63	0.0	-1.07	
	02/26/92	5.55	0.0	1.01	
	05/22/92	6.94	0.0	-0.38	
	09/29/92	6.80	0.0	-0.24	
MW-7 4.99	07/06/90	5.85	0.0	-0.86	
	10/03/90	6.25	0.0	-1.26	
	08/23/91	5.50	0.0	-0.51	
	11/22/91	5.73	0.0	-0.74	
	02/26/92	4.84	0.0	0.15	
	05/22/92	4.89	0.0	0.10	
	09/29/92	5.55	0.0	-0.56	

**TABLE 1
GROUNDWATER MONITORING DATA
CHEVRON SERVICE STATION NO. 9-0019
210 GRAND AVENUE, OAKLAND, CALIFORNIA**

WELL ID/ ELEV	DATE	DTW	SPT	WTE
MW-8 6.77	07/06/90	3.98	0.0	2.79
	10/03/90	4.73	0.0	2.04
	08/23/91	4.76	0.0	2.01
	11/22/91	5.73	0.0	1.04
	02/26/92	4.30	0.0	2.47
	05/22/92	3.66	0.0	3.11
	09/29/92	---	---	---
MW-9 7.63	07/06/90	4.61	0.0	3.02
	10/03/90	5.14	0.0	2.49
	08/23/91	5.45	0.0	2.18
	11/22/91	5.48	0.0	2.15
	02/26/92	2.63	0.0	5.00
	05/22/92	4.00	0.0	3.63
	09/29/92	4.70	0.0	2.93

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

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-AS-GASOLINE (ppb)	BENZENE (ppb)	TOLUENE (ppb)	ETHYL-BENZENE (ppb)	XYLENES (ppb)	O & G (ppb)	CHLORO-FORM (ppb)	1,2-DCA (ppb)	F113 (ppb)	TCA (ppb)
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
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 ^a	—	—	—	—	—	—	—	—	—	—
	08/23/91 ^a	—	—	—	—	—	—	—	—	—	—
	11/22/91 ^f	—	—	—	—	—	—	—	—	—	—
	09/29/92	—	—	—	—	—	—	—	—	—	—

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-0019
210 GRAND AVENUE, OAKLAND, CALIFORNIA

WELL	DATE	TPH-AS-GASOLINE (ppb)	BENZENE (ppb)	TOLUENE (ppb)	ETHYL-BENZENE (ppb)	XYLENES (ppb)	O & G (ppb)	CHLORO-FORM (ppb)	1,2-DCA (ppb)	F113 (ppb)	TCA (ppb)
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
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

**TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-0019
210 GRAND AVENUE, OAKLAND, CALIFORNIA**

WELL	DATE	TPH-AS-GASOLINE (ppb)	BENZENE (ppb)	TOLUENE (ppb)	ETHYL-BENZENE (ppb)	XYLENES (ppb)	O & G (ppb)	CHLORO-FORM (ppb)	1,2-DCA (ppb)	F113 (ppb)	TCA (ppb)
(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	
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
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

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-0019
210 GRAND AVENUE, OAKLAND, CALIFORNIA

WELL	DATE	TPH-AS GASOLINE (ppb)	BENZENE (ppb)	TOLUENE (ppb)	ETHYL- BENZENE (ppb)	XYLENES (ppb)	O & G (ppb)	CHLORO- FORM (ppb)	1,2- DCA (ppb)	F113 (ppb)	TCA (ppb)
MW-8	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	--	--	--	--	--	--	--	--	--	--
	09/29/92	--	--	--	--	--	--	--	--	--	--
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
	09/29/92	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	<0.5
TRIP BLANK	12/08/89	<100	<0.1	<0.2	<0.1	<0.2	--	<0.5	<0.1	--	<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	--	--	--	--	--
	09/29/92	<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-AS-GASOLINE (ppb)	BENZENE (ppb)	TOLUENE (ppb)	ETHYL-BENZENE (ppb)	XYLENES (ppb)	O & G (ppb)	CHLORO-FORM (ppb)	1,2-DCA (ppb)	F113 (ppb)	TCA (ppb)
BAILER	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, k
BLANK	02/26/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	05/22/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---

EXPLANATION:

TPH(G) = Total Petroleum Hydrocarbons
O&G = Oil and Grease
1,2-DCA = 1,2-Dichloroethane
F113 = Trichlorotrifluoroethane (Freon 113)
TCA = 1,1,1-Trichloroethane
TCE = Trichloroethene
ppb = Parts per billion
--- = Not analyzed/not applicable
(D) = Duplicate sample
(T) = Triplicate sample

NOTES:

Data prior to 5/22/92 was taken from a report prepared by Sierra Environmental Services dated March 13, 1992.

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.



Superior Precision Analytical, Inc.

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GROUNDWATER TECHNOLOGY, INC.
Attn: Sandra Lindsey

Project 020302500
Reported 10/17/92

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
86852- 1	TB-LB	09/29/92	10/12/92 Water
86852- 2	RBMW-7	09/29/92	10/12/92 Water
86852- 3	MW-7	09/29/92	10/13/92 Water
86852- 5	MW9	09/29/92	10/12/92 Water
86852- 7	MW3	09/29/92	10/13/92 Water
86852- 9	MW1	09/29/92	10/13/92 Water
86852-11	MW6	09/29/92	10/13/92 Water
86852-13	MW4	09/29/92	10/12/92 Water
86852-15	MW5	09/29/92	10/12/92 Water

RESULTS OF ANALYSIS

Laboratory Number:	86852- 1	86852- 2	86852- 3	86852- 5	86852- 7
--------------------	----------	----------	----------	----------	----------

Gasoline:	ND<50	ND<50	ND<50	ND<50	ND<50
Benzene:	ND<0.5	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	ND<0.5
Ethyl Benzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Xylenes:	ND<0.5	ND<0.5	0.6	ND<0.5	ND<0.5

Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L
----------------	------	------	------	------	------

Laboratory Number:	86852- 9	86852-11	86852-13	86852-15
--------------------	----------	----------	----------	----------

Gasoline:	ND<50	65	160	54000
Benzene:	ND<0.5	0.5	1.1	14000
Toluene:	ND<0.5	1.4	1.7	1400
Ethyl Benzene:	ND<0.5	0.5	0.8	740
Xylenes:	ND<0.5	0.64	2.8	8100

Concentration:	ug/L	ug/L	ug/L	ug/L
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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: 86852

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	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	200 ng	86/89	3%	70-130
Benzene:	200 ng	86/98	13%	70-130
Toluene:	200 ng	90/103	13%	70-130
Ethyl Benzene:	200 ng	92/104	12%	70-130
Xylenes:	200 ng	92/104	12%	70-130

Richard Sina, Ph.D.

(Signature)
Laboratory Director



Superior Precision Analytical, Inc.

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GROUNDWATER TECHNOLOGY, INC.
Attn: Sandra Lindsey

Project 020302500
Reported 18-October-1992

EPA METHOD 8010

Sample preparation by Purge and Trap (EPA SW-846 Method 5030) and Chromatographic analysis using an electrolytic conductivity detector (EPA SW-846 Method 8010).

Chronology

Laboratory Number 86852

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
MW-7	09/29/92	09/29/92	/ /	10/12/92		3
MW9	09/29/92	09/29/92	/ /	10/09/92		5
MW3	09/29/92	09/29/92	/ /	10/09/92		7
MW1	09/29/92	09/29/92	/ /	10/09/92		9
MW6	09/29/92	09/29/92	/ /	10/09/92		11
MW4	09/29/92	09/29/92	/ /	10/10/92		13
MW5	09/29/92	09/29/92	/ /	10/10/92		15



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GROUNDWATER TECHNOLOGY, INC.
Attn: Sandra Lindsey

Project 020302500
Reported 18-October-1992

EPA METHOD 8010

Laboratory Number	Sample Identification	Matrix
86852- 3	MW-7	Water
86852- 5	MW9	Water
86852- 7	MW3	Water
86852- 9	MW1	Water
86852-11	MW6	Water

RESULTS OF ANALYSIS

Laboratory Number: 86852- 3 86852- 5 86852- 7 86852- 9 86852-11

Chloromethane:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Vinyl Chloride:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Bromomethane:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Chloroethane:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Trichlorofluoromethane:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
1,1-Dichloroethene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Dichloromethane:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
c-1,2-Dichloroethene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
1,1-Dichloroethane:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
t-1,2-Dichloroethene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Chloroform:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
1,1,1-Trichloroethane:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Carbon tetrachloride:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
1,2-Dichloroethane:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Trichloroethene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
1,2-Dichloropropane:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Bromodichloromethane:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
c-1,3-Dichloropropene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
t-1,3-Dichloropropene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
1,1,2-Trichloroethane:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Tetrachloroethene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Dibromochloromethane:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Chlorobenzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Bromoform:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
1,1,2,2-Tetracl-ethane:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
1,3-Dichlorobenzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
1,4-Dichlorobenzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
1,2-Dichlorobenzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
4-Chlorotoluene:	94%	91%	88%	83%	88%
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L



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~~GROUNDWATER TECHNOLOGY, INC.~~

Project 020302500

Attn: Sandra Lindsey

Reported 18-October-1992

EPA METHOD 8010

Laboratory Number	Sample Identification	Matrix
86852-13	MW4	Water
86852-15	MW5	Water

RESULTS OF ANALYSIS

Laboratory Number: 86852-13 86852-15

Chloromethane:	ND<0.5	ND<0.5
Vinyl Chloride:	ND<0.5	ND<0.5
Bromomethane:	ND<0.5	ND<0.5
Chloroethane:	ND<0.5	ND<0.5
Trichlorofluoromethane:	ND<0.5	ND<0.5
1,1-Dichloroethene:	ND<0.5	ND<0.5
Dichloromethane:	ND<0.5	ND<0.5
c-1,2-Dichloroethene:	ND<0.5	ND<0.5
1,1-Dichloroethane:	ND<0.5	ND<0.5
t-1,2-Dichloroethene:	ND<0.5	ND<0.5
Chloroform:	ND<0.5	ND<0.5
1,1,1-Trichloroethane:	ND<0.5	ND<0.5
Carbon tetrachloride:	ND<0.5	ND<0.5
1,2-Dichloroethane:	ND<0.5	4.4
Trichloroethene:	ND<0.5	ND<0.5
1,2-Dichloropropane:	ND<0.5	ND<0.5
Bromodichloromethane:	ND<0.5	ND<0.5
c-1,3-Dichloropropene:	ND<0.5	ND<0.5
t-1,3-Dichloropropene:	ND<0.5	ND<0.5
1,1,2-Trichloroethane:	ND<0.5	ND<0.5
Tetrachloroethene:	ND<0.5	ND<0.5
Dibromochloromethane:	ND<0.5	ND<0.5
Chlorobenzene:	ND<0.5	ND<0.5
Bromoform:	ND<0.5	ND<0.5
1,1,2,2-Tetracl-ethane:	ND<0.5	ND<0.5
1,3-Dichlorobenzene:	ND<0.5	ND<0.5
1,4-Dichlorobenzene:	ND<0.5	ND<0.5
1,2-Dichlorobenzene:	ND<0.5	ND<0.5
4-Chlorotoluene:	80%	82%
Concentration:	ug/L	ug/L



Superior Precision Analytical, Inc.

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EPA METHOD 8010

Quality Assurance and Control Data - Water
Laboratory Number 86852

Compound	Method		Average Spike Recovery (%)	Limits (%)	RPD (%)	Spike Level (ng)
	Blank (ug/L)	PQL (ug/L)				
Chloromethane:	ND<0.5	0.5				
Vinyl Chloride:	ND<0.5	0.5				
Bromomethane:	ND<0.5	0.5				
Chloroethane:	ND<0.5	0.5				
Trichlorofluoromethane:	ND<0.5	0.5				
1,1-Dichloroethene:	ND<0.5	0.5	120		16	20
Dichloromethane:	ND<0.5	0.5				
c-1,2-Dichloroethene:	ND<0.5	0.5				
1,1-Dichloroethane:	ND<0.5	0.5				
t-1,2-Dichloroethene:	ND<0.5	0.5				
Chloroform:	ND<0.5	0.5				
1,1,1-Trichloroethane:	ND<0.5	0.5				
Carbon tetrachloride:	ND<0.5	0.5				
1,2-Dichloroethane:	ND<0.5	0.5				
Trichloroethene:	ND<0.5	0.5	95		10	20
1,2-Dichloropropane:	ND<0.5	0.5				
Bromodichloromethane:	ND<0.5	0.5				
c-1,3-Dichloropropene:	ND<0.5	0.5				
t-1,3-Dichloropropene:	ND<0.5	0.5				
1,1,2-Trichloroethane:	ND<0.5	0.5				
Tetrachloroethene:	ND<0.5	0.5				
Dibromochloromethane:	ND<0.5	0.5				
Chlorobenzene:	ND<0.5	0.5	96		4	20
Bromoform:	ND<0.5	0.5				
1,1,2,2-Tetracl-ethane:	ND<0.5	0.5				
1,3-Dichlorobenzene:	ND<0.5	0.5				
1,4-Dichlorobenzene:	ND<0.5	0.5				
1,2-Dichlorobenzene:	ND<0.5	0.5				
Aevrage Spike Recovery:			104	80-120	10	

ND = Not Detected
PQL = Practical Quantitation Limit

RPD = Relative Percent Difference

QC File No. 86852

[Signature]
Senior Analyst

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

86852

Chain-of-Custody-Record

Chevron Facility Number 9-0019
 Facility Address 210 Grand avenue, Oakland
 Consultant Project Number 020302500
 Consultant Name Groundwater Technology, Inc.
 Address 4057 Port Chicago Hwy, Concord, CA
 Project Contact (Name) MS. Sandra L. Lindsey
 (Phone) 671-2387 (Fax Number) 685-9148

Chevron Contact (Name) Mr. Mark Miller
 (Phone) 510-842-8134
 Laboratory Name Superior Analytical
 Laboratory Release Number 448-2030
 Samples Collected by (Name) Hector Merino
 Collection Date 9/29/92
 Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iod (Yes or No)	Analytes To Be Performed										Remarks		
								BTEX + 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)					
TB-LB	1	1	W	G		HCl	Y	X												
PBMW7	2	1				HCl		X												
MW7	3	3				HCl		X												
MW7	4	3				NONE					X									
PBMW9	5	1				HCl														
MW9	6	3				HCl		X												
MW9	7	3				NONE					X									
PBMW3	8	1				HCl														
MW3	9	3				HCl		X												
MW3	10	3				NONE					X									
PBMW1	11	1				HCl														
MW1	12	3				HCl		X												
MW1	13	3		X		NONE	X				X									

Please Initial:
 Samples Stored in ice: _____
 Appropriate containers: _____
 Samples preserved: _____
 VOA's without headspace: _____
 Comments: _____

Relinquished By (Signature) <u>[Signature]</u>	Organization GTI	Date/Time 9/29/92	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days 10 Days As Contracted
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 9-29-92	

