Chevron U.S.A. Products Company
2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address: P.O. Box 5004, San Ramon, CA 94583-0804

Marketing Department

August 4, 1992

STID 3812

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

Re: Former Chevron Service Station #9-0020
1633 Harrison, Oakland 94612

Dear Ms. Eberle:

Enclosed we are forwarding the Quarterly Ground Water Monitoring Report dated July 27, 1992, 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, BTEX and volatile organic compounds. Monitor wells MW-11 and MW-14 were obstructed by automobiles and were not sampled during this event. Benzene was detected in monitor wells MW-7, MW-9 and MW-13 at concentrations of 760, 19 and 35 ppb, respectively. Negligible to moderate concentrations of VOC's were detected in all the monitor wells with the exception of monitor wells MW-9 and MW-13 which reported non-detectable concentrations of all VOC's. Based on the uneven distribution of solvents and the higher concentrations being detected in the up-gradient and cross-gradient off-site wells, it is surmised that the solvents are emanating from an off-site source. Further assessment of the solvent distribution pattern will be performed to support this theory. Depth to ground water was measured at approximately 20.5-feet below grade, and the direction of flow fluctuates from the northeast to east. TPHg are detected in MW-7, MW-9, + MW-13 at 19,000, 4,500, + 3,200 ppb.

→ nice excuse

Chevron typically samples ground water on a quarterly basis at their operating or former service stations. However, a review of data for this site indicates that some of the monitor wells warrant sampling frequency modification for ground water monitoring. The California Water Quality Control Board (CWQCB) ground water monitoring guidelines also support frequency changes for ground water monitoring. CWQCB guidelines state that "Quarterly (ground water) monitoring is the maximum sampling interval typically allowed when ground water contamination is present unless other arrangements are made with the Regional Water Quality Control Board (RWQCB) staff." RWQCB-San Francisco Bay Region personnel have indicated that the Board will allow reduction of the sampling frequency on a site-specific basis, if the frequency modification is justified by site conditions.

Thus, Chevron evaluates and recommends sampling frequency modifications by utilizing the following factors:

* reliability of the ground water quality analytic data,
* historical ground water analytic data,
* information obtained during the subsurface investigation of the site,
* trend of the dissolved hydrocarbon concentrations in the wells, and
* the location of the wells in relation to the hydrocarbon source areas.

A review of the referenced site data indicates the following:

* **1972** - Site abandoned prior to 1972. Site has since been used as a parking lot.

* **10/88** - Investigation was initiated in preparation for future sale of property. Three (3) ground water monitor wells were installed designated MW-1 through MW-3. Soil samples collected from the drill cuttings reported non-detectable concentrations of TPH-G and BTEX. Ground water samples collected were analyzed for TPH-G, BTEX, and volatile organic compounds. All samples reported ND concentrations of TPH-G and BTEX. However, various halocarbons TCE, chloroform, 1,2 DCE were reported at concentrations up to 84 ppb.

* **11/89** - Nine (9) borings were advanced with five (5) being completed into ground water monitor wells designated MW-4 through MW-8. Analytical testing of the soils detected TPH-G at a concentration of 50,000 ppm from MW-7 (B-11) at 23.5' and a concentration of 600 ppm from MW-4 at sample depths of 4.5 and 9.6 feet below grade.

* **6/90** - Four (4) borings were advanced and completed into ground water monitor wells designated MW-9 through MW-12 in an attempt to delineate the extent of the plume. All soil samples collected reported ND concentrations of hydrocarbon contaminants. Halocarbons were detected in all the newly installed wells with the exception of MW-9 (down-gradient).

* **11/91** - Two (2) additional off-site wells designated MW-13 and MW-14 were installed to delineate the extent of the plume and to investigate the possibility of an off-site up-gradient source for the halocarbons. Also, four (4) borings were installed to delineate the extent of the subsurface contamination in the vicinity of MW-7. All soil samples reported non-detectable hydrocarbon concentrations. An off-site investigation was performed to assess if the Hallmark Cleaners, located directly up-gradient, performed on-site cleaning. The search indicated that the Hallmark Cleaners does not perform any cleaning on the premisesand that clothes are sent to another location for dry cleaning. However, other businesses in the immediate vicinity which may use or store halocarbons (industrial inks, solvents and degreasers commonly contain halocarbons) include printers, dry-cleaners, machine shops and manufacturers. A large number of printers are found in the immediate vicinity of the site, a knitwear manufacturer is located up-gradient a short distance, and various automobile repair facilities are located nearby. The number of business in the immediate vicinity up-gradient of the site which may be potential sources of halogenated volatile organics appears to be extensive.

* **1/92** - A soils excavation program was implemented to excavate and aerate the soils in the vicinity of MW-4. Approximately 150 cubic yards of soils were excavated and disposed of off-site an an approved landfill. Final excavation samples collected were analyzed for TPH-Gasoline, TPH-Diesel, and BTEX. In addition, per the request of Mr. Smith, three (3) excavation samples were analyzed for halogenated volatile organics. All the samples reported non-detectable concentrations of these constituents with the exception of a sample collected from the southern sidewall at a depth of 8-feet below grade. This sample reported concentrations of TPH-Gasoline and TPH-Diesel of 310 and 270 ppm, respectively. Benzene was not detected in this sample. Laboratory analysis reported that the TPH-Diesel chromatogram was of a non-standard diesel pattern. They highly suspect this to be a result of weathered gasoline as diesel was never marketed at this site. Further excavation laterally to the south was precluded due to the presence of an adjacent building foundation wall. However, no hydrocarbon contaminants were detected in the adjacent 10-foot and 5-foot depth samples collected from the southern sidewall. The excavation extended to a depth of approximately 14-feet below grade.

Based on a review of the analytical data that has been collected through quarterly monitoring at this site since November, 1988, we recommend adjusting the frequency of monitoring as described below:

Well ID	Current Sampling Frequency	Recommended Sampling Frequency	Rationale for Recommended Sampling Frequency
MW-1	Quarterly	**Annual** 110 ppb TPH-g 8-27-91	Historical hydrocarbon concentrations at or below the method detection limits; cross-gradient source area well
MW-2	Quarterly	Quarterly	Historical non-detectable to negligible hydrocarbon concentrations ; up-gradient on-site well
MW-3	Quarterly	**Annual** 91 ppb TPH-g 8-27-91	Historical non-detectable to negligible hydrocarbon concentrations; cross-gradient on-site well
MW-4	Quarterly	**Annual** 92 ppb TPH-g 11-15-91	Historical hydrocarbon concentrations at or below the method detection limits; on-site up-gradient well
MW-5	Quarterly	**Annual** 94 ppb TPH-g 8-27-91	Historical non-detectable to negligible hydrocarbon concentrations; on-site source well down-gradient from former waste oil tank
MW-6	Quarterly	**Annual** 180 ppb TPH-g 8-27-91	Historical non-detectable to negligible hydrocarbon concentrations; on-site down-gradient well
MW-7	Quarterly	Quarterly	Consistent hydrocarbon concentrations; cross-gradient on-site well
MW-8	Quarterly	**Annual** 73 ppb TPH-g 8-27-91	Historical non-detectable to negligible hydrocarbon concentrations; on-site cross-gradient well
MW-9	Quarterly	Quarterly	Consistent hydrocarbon concentrations; off-site down-gradient well
MW-10	Quarterly	Quarterly	Historical non-detectable to negligible hydrocarbon concentrations; off-site down-gradient well

Well ID	Current Sampling Frequency	Recommended Sampling Frequency	Rationale for Recommended Sampling Frequency
MW-11	Quarterly	**Annual** 110 ppb TPH-g 8-27-91 NA	Historical negligible to non-detectable hydrocarbon concentrations; farthest off-site cross-gradient well. Suspect off-site source for hydrocarbon contamination
MW-12	Quarterly	Quarterly Y	Historical non-detectable to negligible hydrocarbon concentrations; off-site cross-gradient well
MW-13	Quarterly	Quarterly N	Consistent hydrocarbon concentrations; off-site down-gradient well
MW-14	Quarterly	**Annual** only have 2 Qs ND this Q it was NA. NA	Non-detectable to negligible hydrocarbon concentrations; off-site cross-gradient well. Suspect off-site source for hydrocarbon contamination.

Based on this justification, Chevron feels that a sampling frequency reduction is warranted. Chevron will implement this sampling frequency modification at the time of the next sampling event unless we hear from you to the contrary. We would appreciate your concurrence with this modification. However, we will continue to measure the ground water levels on a quarterly basis so that knowledge of the ground water gradient can be maintained throughout the site.

A corrective action work plan is currently underway and will be submitted to your office no later than August 20, 1992. Attached to this work plan will be the results of the soil vapor extraction pilot test. We are pending encroachment permit approval from the City of Oakland for installation of the additional off-site wells. Upon receipt the work will be scheduled.

Chevron will continue to monitor this site and report findings on a quarterly basis. If you have any questions or comments, please do not hesitate to contact me at (510) 842-9581.

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

Nancy Vukelich
Site Assessment and Remediation Engineer

Enclosure

cc: Mr. Rich Hiett, RWQCB-Bay Area
Mr. B.C. Owen
Mr. L.E. Jones, 225/1510
File (9-0020Q4)

JUL 30 '92 PWM

GROUNDWATER TECHNOLOGY, INC.

4057 Port Chicago Highway, Concord, CA 94520 (415) 671-2387
FAX: (415) 685-9148

July 27, 1992

Project No. 020302499

Ms. Nancy Vukelich
Chevron U.S.A. Products Company, Inc.
2410 Camino Ramon
San Ramon, CA 94583-0804

4 mos. since last Qtly.

SUBJECT: GROUNDWATER MONITORING AND SAMPLING ACTIVITIES
CHEVRON SERVICE STATION NO. 9-0020
1633 HARRISON STREET, OAKLAND, CALIFORNIA 94612

Dear Ms. Vukelich:

Groundwater Technology, Inc. presents the attached quarterly monitoring and sampling data collected on June 15, 1992. Thirteen of the fourteen groundwater monitoring wells at this site were gauged to determine depth to groundwater (DTW) and to check for the presence of separate-phase hydrocarbons. 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 halogenated volatile organics. Results of the chemical analyses are summarized in Table 1 and Table 2. Laboratory reports and chain-of-custody records are included in Attachment C. Monitoring well purge water was removed by Groundwater Technology and transported 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

David R. Kleesattel
Registered Geologist
No. 5136

REGISTERED GEOLOGIST
DAVID R. KLEESATTEL
NO. 5136
STATE OF CALIFORNIA

Attachments:
Attachment A - Figure 1
Attachment B - Tables
Attachment C - Laboratory Reports

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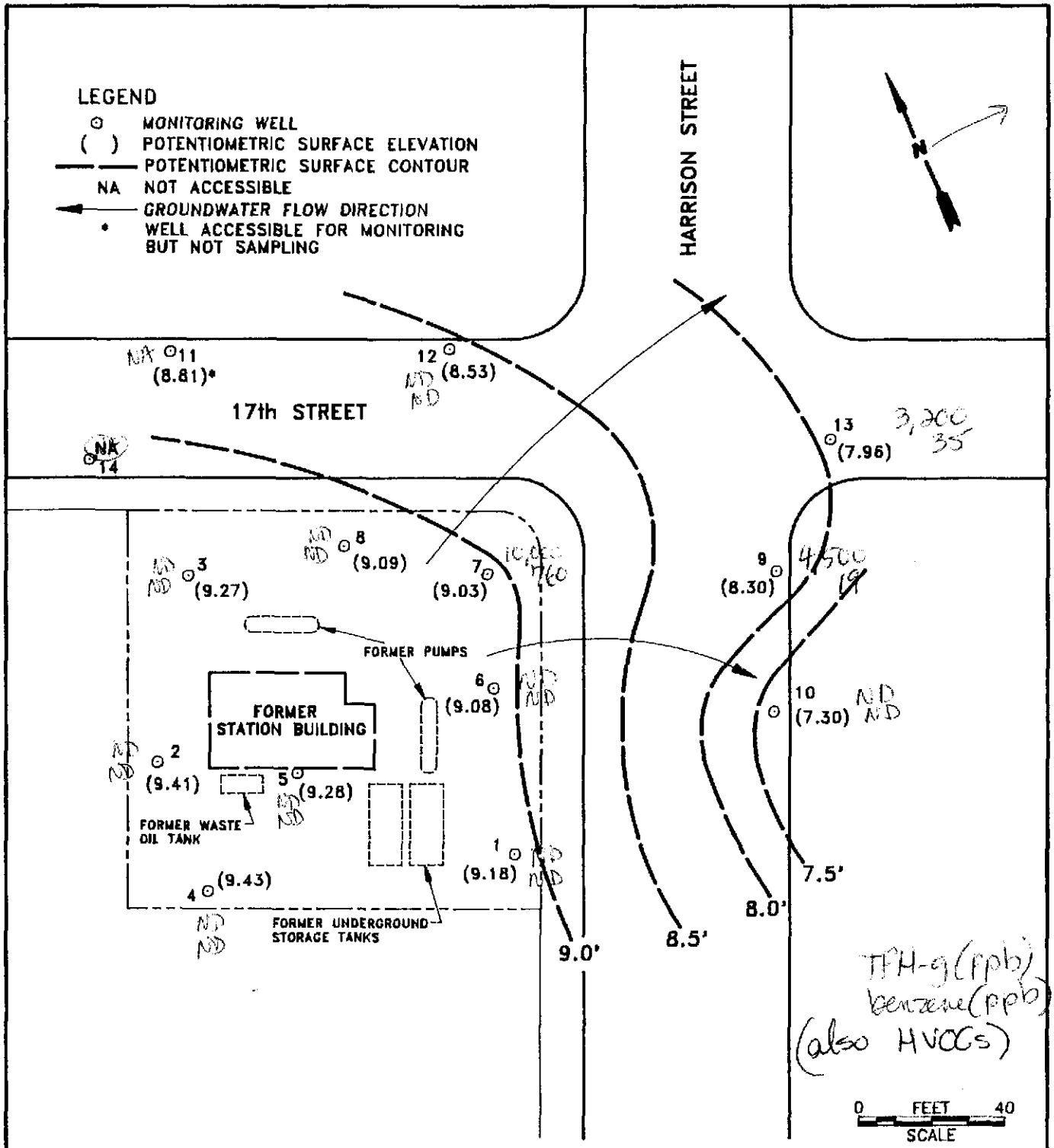
ATTACHMENT A

FIGURE



GROUNDWATER TECHNOLOGY 4057 PORT CHICAGO HWY. CONCORD, CA 94520 (510) 671-2387				POTENTIOMETRIC SURFACE MAP (6/15/92)			
CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-0020				LOCATION: 1633 HARRISON STREET OAKLAND, CALIFORNIA		REV. NO.: 0	DATE: 7/22/92
PM: SAM	PE/RG: DKK	DESIGNED: GM	DETAILED: ML	ACAD FILE: PSM61592/SP592	PROJECT NO.: 020302499		FIGURE: 1

ATTACHMENT B

TABLES

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-0020
1633 HARRISON STREET, OAKLAND, CALIFORNIA
CONCENTRATIONS SHOWN IN PART PER BILLION (ppb), µg/L

WELL ID/ ELEVATION	DATE	TPH-AS-GASOLINE	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	TOG	DTW (ft.)	SPT (ft.)	GWE (ft.)
MW-1	11/03/88	<1,000[1]	<1.0	<1.0	<1.0	<1.0	---	20.40	0.0	9.42
	02/02/89	---	---	---	---	---	---	20.71	0.0	9.11
29.82	02/10/89	<100	<0.2	<0.2	<0.2	<0.4	---	---	---	---
	04/23/89	---	---	---	---	---	---	20.34	0.0	9.48
	04/24/89	<50	<0.5	<1.0	<1.0	<1.0	<3,000	---	---	---
	07/28/89	<50	<0.1	<0.5	<0.2	<0.5	<3,000	20.58	0.0	9.24
	10/30/89	<500	<0.3	<0.3	<0.3	<0.6	---	20.52	0.0	9.30
	01/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	20.77	0.0	9.05
	04/18/90	<50	<0.3	<0.3	<0.3	<0.6	---	20.95	0.0	8.87
	06/22/90	---	---	---	---	---	---	21.00	0.0	8.82
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	20.94	0.0	8.88
	11/13/90	<50	<0.5	<0.5	<0.5	<0.5	---	20.98	0.0	8.84
	05/15/91	<50	<0.5	<0.5	<0.5	<0.5	---	20.64	0.0	9.18
	08/27/91	110[2]	<0.5	<0.5	<0.5	<0.5	---	20.79	0.0	9.03
	11/15/91	<50	<0.5	<0.5	<0.5	<0.5	---	20.75	0.0	9.07
	02/20/92	<50	0.5	0.6	<0.5	0.9	---	20.90	0.0	8.92
	06/15/92	<50	<0.5	<0.5	<0.5	<0.5	---	20.64	0.0	9.18

TABLE 1
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WELL ID/ ELEVATION	DATE	TPH-AS-GASOLINE	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	TOG	DTW (ft.)	SPT (ft.)	GWE (ft.)
MW-2	11/03/88	<1,000[1]	<1.0	<1.0	<1.0	<1.0	—	20.89	0.0	9.70
	02/02/89	---	---	—	—	—	—	21.21	0.0	9.38
30.59	02/10/89	<100	<0.2	<0.2	<0.2	<0.4	---	---	—	—
	04/23/89	---	---	—	—	—	---	20.82	0.0	9.77
	04/24/89	<50	<0.5	<1.0	<1.0	<1.0	<3,000	—	—	—
	07/28/89	<100	<0.2	<1.0	<0.2	<0.4	<3,000	21.02	0.0	9.57
	10/30/89	<500	<0.3	<0.3	<0.3	<0.6	—	20.96	0.0	9.63
	01/09/90	<50	<0.3	<0.3	<0.3	<0.6	—	21.25	0.0	9.34
	04/18/90	<50	<0.3	<0.3	<0.3	<0.6	—	21.53	0.0	9.06
	06/22/92	---	---	—	—	—	—	21.57	0.0	9.02
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	21.55	0.0	9.04
	11/13/90	<50	<0.5	0.8	<0.5	0.9	---	21.54	0.0	9.05
	05/15/91	83[2]	<0.5	<0.5	<0.5	<0.5	—	21.15	0.0	9.44
	08/27/91	97[2]	<0.5	<0.5	<0.5	<0.5	—	21.27	0.0	9.32
	11/15/91	<50	0.5	1.5	0.8	3.6	—	21.30	0.0	9.29
	02/20/92	<50	<0.5	<0.5	<0.5	<0.5	—	21.43	0.0	9.13
	06/15/92	<50	<0.5	<0.5	<0.5	<0.5	---	21.18	0.0	9.41

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TABLE 1
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1633 HARRISON STREET, OAKLAND, CALIFORNIA
CONCENTRATIONS SHOWN IN PART PER BILLION (ppb), µg/L

WELL ID/ ELEVATION	DATE	TPH-AS-GASOLINE	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	TOG	DTW (ft.)	SPT (ft.)	GWE (ft.)
MW-3	11/03/88	<1,000[1]	<1.0	<1.0	<1.0	<1.0	---	20.54	0.0	9.55
	02/02/89	---	---	---	---	---	---	20.85	0.0	9.24
30.09	02/10/89	<100	<0.2	<0.2	<0.2	<0.4	---	---	---	---
	04/23/89	---	---	---	---	---	---	20.43	0.0	9.66
	04/24/92	<50	<0.5	<1.0	<1.0	<1.0	<3,000	---	---	---
	07/28/89	<100	<0.2	<1.0	<0.2	<0.4	<3,000	20.64	0.0	9.45
	10/30/89	<500	<0.3	<0.3	<0.3	<0.6	---	20.61	0.0	9.48
	01/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	20.88	0.0	9.21
	04/18/90	<50	<0.3	<0.3	<0.3	<0.6	---	21.15	0.0	8.94
	06/22/90	---	---	---	---	---	---	21.20	0.0	8.89
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	21.18	0.0	8.91
	11/13/90	51[2]	<0.5	<0.5	<0.5	<0.5	---	21.15	0.0	8.94
	05/15/91	85[2]	<0.5	<0.5	<0.5	<0.5	---	20.91	0.0	9.18
	08/27/91	91[2]	<0.5	<0.5	<0.5	<0.5	---	20.89	0.0	9.20
	11/15/91	<50	<0.5	0.7	<0.5	1.3	---	21.02	0.0	9.07
	02/02/92	<50	<0.5	<0.5	<0.5	0.9	---	21.07	0.0	9.02
	06/15/92	50[2]	<0.5	<0.5	<0.5	<0.5	---	20.82	0.0	9.27

TABLE 1
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1633 HARRISON STREET, OAKLAND, CALIFORNIA
CONCENTRATIONS SHOWN IN PART PER BILLION (ppb), µg/L

WELL ID/ ELEVATION	DATE	TPH-AS-GASOLINE	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	TOG	DTW (ft.)	SPT (ft.)	GWE (ft.)
MW-4	04/23/89	—	—	—	—	—	—	21.33	0.0	9.84
	04/24/89	<50	<0.5	<1.0	<1.0	<1.0	<3,000	—	—	—
31.17	07/28/89	<50	<0.1	<0.5	<0.1	<0.2	<3,000	21.58	0.0	9.59
	10/30/89	<500	<0.3	<0.3	<0.3	<0.6	—	21.54	0.0	9.63
	01/09/90	<50	<0.3	<0.3	<0.3	<0.6	—	21.82	0.0	9.35
	04/18/90	<50	<0.3	<0.3	<0.3	<0.6	—	22.09	0.0	9.08
	06/22/90	—	—	—	—	—	—	22.12	0.0	9.05
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	—	22.11	0.0	9.06
	11/13/90	<50	<0.5	1	0.5	1	—	22.10	0.0	9.07
	05/15/91	<50	<0.5	<0.5	<0.5	<0.5	—	21.71	0.0	9.46
	08/27/91	<50	<0.5	<0.5	<0.5	<0.5	—	21.87	0.0	9.30
	11/15/91	97	<0.5	0.9	<0.5	1.9	—	21.80	0.0	9.37
	02/20/92	<50	<0.5	<0.5	<0.5	<0.5	—	21.99	0.0	9.18
	06/15/92	<50	<0.5	<0.5	<0.5	<0.5	—	21.74	0.0	9.43
MW-5	04/23/89	—	—	—	—	—	—	20.62	0.0	9.66
	04/24/89	<50	<0.5	<1.0	<1.0	<1.0	<3,000	—	0.0	—
	07/28/89	<100	<0.2	<1.0	<0.2	<0.4	<3,000	20.86	0.0	9.42
30.28	10/30/89	<500	<0.3	<0.3	<0.3	<0.6	—	20.82	0.0	9.46
	01/09/90	<50	<0.3	<0.3	<0.3	<0.6	—	21.07	0.0	9.21
	04/18/90	<50	<0.3	<0.3	<0.3	<0.6	—	21.35	0.0	8.93
	06/22/90	—	—	—	—	—	—	21.38	0.0	8.90
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	—	21.36	0.0	8.92
	11/13/90	<50	<0.5	1	<0.5	1	—	21.35	0.0	8.93
	05/15/91	<50	<0.5	<0.5	<0.5	<0.5	—	21.29	0.0	8.99
	08/27/91	94	3.0	5.0	1.5	5.5	—	21.11	0.0	9.17
	11/15/91	<50	0.9	1.7	<0.5	2.2	—	21.18	0.0	9.10
	02/20/92	<50	<0.5	<0.5	<0.5	<0.5	—	21.25	0.0	9.03
	06/15/92	<50	<0.5	<0.5	<0.5	<0.5	—	21.00	0.0	9.28

TABLE 1
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CHEVRON SERVICE STATION NO. 9-0020
1633 HARRISON STREET, OAKLAND, CALIFORNIA
CONCENTRATIONS SHOWN IN PART PER BILLION (ppb), µg/L

WELL ID/ ELEVATION	DATE	TPH-AS-GASOLINE	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	TOG	DTW (ft.)	SPT (ft.)	GWE (ft.)
MW-6	04/23/89	—	—	—	—	—	—	20.05	0.0	9.41
	04/24/89	<50	<0.5	<1.0	<1.0	<1.0	<3	—	—	—
	07/28/89	<100	<0.2	<1.0	<0.2	<0.4	<3	20.30	0.0	9.16
29.46	10/30/89	<500	<0.3	<0.3	<0.3	<0.6	—	20.32	0.0	9.14
	01/09/90	<50	<0.3	<0.3	<0.3	<0.6	—	20.51	0.0	8.95
	04/18/90	<50	<0.3	<0.3	<0.3	<0.6	—	20.72	0.0	8.74
	06/22/90	—	—	—	—	—	—	20.77	0.0	8.69
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	—	20.74	0.0	8.72
	11/13/90	<50	3	5	0.5	2	—	20.75	0.0	8.71
	05/15/91	<50	<0.5	<0.5	<0.5	<0.5	—	20.61	0.0	8.85
	08/27/91	180	6.1	12	3.8	14	—	20.53	0.0	8.93
	11/15/91	<50	<0.5	0.6	<0.5	<0.5	—	20.53	0.0	8.93
	02/20/92	<50	0.9	1.1	<0.5	1.4	—	20.69	0.0	8.77
	06/15/92	<50	<0.5	<0.5	<0.5	<0.5	—	20.38	0.0	9.08

TABLE 1
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1633 HARRISON STREET, OAKLAND, CALIFORNIA
CONCENTRATIONS SHOWN IN PART PER BILLION (ppb), µg/L

WELL ID/ ELEVATION	DATE	TPH-AS-GASOLINE	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	TOG	DTW (ft.)	SPT (ft.)	GWE (ft.)
MW-7	04/23/89	—	—	—	—	—	—	18.99	0.0	10.02
	04/24/89	8,400[3]	100	260	160	1,300	3[4]	—	—	—
29.01	07/28/89	7,000[3]	230	90	70	440	<3,000	19.94	0.0	9.07
(D)	07/28/89	6,000[3]	280	180	58	430	—	—	—	—
	10/30/89	10,000[3]	570	55	160	400	—	19.97	0.0	9.04
(D)	10/30/89	9,900[3]	520	82	180	410	—	—	—	—
	01/09/90	3,400[3]	290	72	9	200	—	20.15	0.0	8.86
	04/18/90	6,800[3]	350	140	110	400	—	20.37	0.0	8.64
	06/22/90	—	—	—	—	—	—	20.40	0.0	8.61
	08/09/90	11,000[3]	360	130	14	660	—	20.38	0.0	8.63
	11/13/90	6,500	230	110	97	460	—	20.41	0.0	8.60
	05/15/91	4,600	180	55	46	300	—	20.47	0.0	8.54
	08/27/91	7,000	220	53	63	340	—	20.14	0.0	8.87
	11/15/91	3,300	150	19	4.9	200	—	20.22	0.0	8.79
	02/20/92	5,200	520	150	100	380	—	20.32	0.0	8.69
	06/15/92	10,000	760	430	320	1,100	—	19.98	0.0	9.03

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-0020
1633 HARRISON STREET, OAKLAND, CALIFORNIA
CONCENTRATIONS SHOWN IN PART PER BILLION (ppb), µg/L

WELL ID/ ELEVATION	DATE	TPH-AS-GASOLINE	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	TOG	DTW (ft.)	SPT (ft.)	GWE (ft.)
MW-8	04/23/89	—	—	—	—	—	—	20.14	0.0	9.43
	04/24/89	<50	<0.5	<1.0	<1.0	<1.0	3,000	—	—	—
29.57	04/24/89	<50	<0.5	<1.0	<1.0	<1.0	—	—	—	—
	07/28/89	<100	<0.2	<1.0	<0.2	<0.4	<3,000	20.37	0.0	9.20
	10/30/89	<500	<0.3	<0.3	<0.3	<0.6	—	20.32	0.0	9.25
	01/09/90	<50	<0.3	<0.3	<0.3	<0.6	—	20.60	0.0	8.97
	04/18/90	<50	<0.3	<0.3	<0.3	<0.6	—	20.87	0.0	8.70
	06/22/90	—	—	—	—	—	—	20.34	0.0	9.23
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	—	20.89	0.0	8.68
	11/13/90	<50	<0.5	0.8	<0.5	2	—	20.86	0.0	8.71
	05/15/91	<50	<0.5	<0.5	<0.5	<0.5	—	20.49	0.0	9.08
	08/27/91	73[2]	<0.5	<0.5	<0.5	<0.5	—	20.60	0.0	8.97
	11/15/91	<50	<0.5	0.7	<0.5	2.1	—	20.62	0.0	8.95
	02/20/92	<50	<0.5	<0.5	<0.5	<0.5	—	20.80	0.0	8.77
	06/15/92	<50	<0.5	<0.5	<0.5	<0.5	—	20.48	0.0	9.09
MW-9	06/22/90	5,700[3]	47	31	280	530	<1,000	20.80	0.0	7.87
	08/09/90	8,000[3]	<0.3	17	210	480	—	20.74	0.0	7.93
	11/13/90	6,400	<3	20	240	450	—	20.78	0.0	7.89
28.67	05/15/91	5,700	2	16	190	390	—	20.48	0.0	8.19
	08/27/91	6,700	<3	31	180	350	—	20.55	0.0	8.12
	11/15/91	4,000	8.8	26	150	280	—	20.57	0.0	8.10
	02/20/92	3,400	13	30	230	460	—	21.77	0.0	6.90
	06/15/92	4,500	19	72	280	560	—	20.37	0.0	8.30

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GROUNDWATER TECHNOLOGY

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-0020
1633 HARRISON STREET, OAKLAND, CALIFORNIA
CONCENTRATIONS SHOWN IN PART PER BILLION (ppb), µg/L

WELL ID/ ELEVATION	DATE	TPH-AS-GASOLINE	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	TOG	DTW (ft.)	SPT (ft.)	GWE (ft.)
MW-10	06/22/90	<50[3]	<0.5	<0.5	<0.5	<0.5	<1,000	20.48	0.0	8.12
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	—	20.45	0.0	8.15
	11/13/90	<50	<0.5	2	0.5	2	—	20.47	0.0	8.13
28.60	05/15/91	<50	<0.5	<0.5	<0.5	<0.5	—	20.15	0.0	8.45
	08/27/91	<50	<0.5	<0.5	<0.5	<0.5	—	20.27	0.0	8.33
	11/15/91	<50	<0.5	<0.5	<0.5	<0.5	—	20.33	0.0	8.27
	02/20/92	<50	2.0	2.2	<0.5	2.1	—	21.45	0.0	7.15
	06/15/92	<50	<0.5	<0.5	<0.5	<0.5	—	21.30	0.0	7.30
MW-11	06/22/90	<50[3]	<0.5	<0.5	<0.5	<0.5	<1,000	21.03	0.0	8.34
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	—	21.02	0.0	8.35
29.37	11/13/90	76	0.6	1	0.9	4	—	20.93	0.0	8.44
	05/15/91	78[2]	<0.5	<0.5	<0.5	<0.5	—	20.61	0.0	8.76
	08/27/91	110[2]	<0.5	<0.5	<0.5	<0.5	—	20.70	0.0	8.67
	11/15/91	<50	<0.5	<0.5	<0.5	<0.5	—	20.68	0.0	8.69
	02/20/92	<50	1.9	2.1	1.0	4.4	—	21.91	0.0	7.46
	06/15/92	—	—	—	—	—	—	20.56	0.0	8.81
MW-12	06/22/90	<50[3]	<0.5	<0.5	<0.5	<0.5	<1,000	20.45	0.0	7.98
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	—	20.43	0.0	8.00
28.43	11/13/90	<50	<0.5	<0.5	<0.5	<0.5	—	20.45	0.0	7.98
	05/15/91	<50	<0.5	<0.5	<0.5	<0.5	—	20.07	0.0	8.36
	08/27/91	56[2]	<0.5	<0.5	<0.5	<0.5	—	20.15	0.0	8.28
	11/15/91	<50	<0.5	<0.5	<0.5	<0.5	—	20.25	0.0	8.18
	02/20/92	<50	2.5	3.1	0.7	3.0	—	21.37	0.0	7.06
	06/15/92	<50	<0.5	<0.5	<0.5	<0.5	—	19.90	0.0	8.53

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-0020
1633 HARRISON STREET, OAKLAND, CALIFORNIA
CONCENTRATIONS SHOWN IN PART PER BILLION (ppb), µg/L

WELL ID/ ELEVATION	DATE	TPH-AS-GASOLINE	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	TOG	DTW (ft.)	SPT (ft.)	GWE (ft.)
MW-13	11/15/91	3,100	68	40	110	270	—	21.07	0.0	7.56
	02/20/92	3,100	120	50	240	400	—	22.17	0.0	6.46
28.63	06/15/92	3,200	35	33	210	300	—	20.67	0.0	7.96
MW-14	11/15/91	<50	<0.5	<0.5	<0.5	<0.5	—	20.33	0.0	9.13
	02/20/92	<50	1.3	1.8	1.1	5.2	—	21.41	0.0	8.05
29.46	06/15/92	—	—	—	—	—	—	—	—	—

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-0020
1633 HARRISON STREET, OAKLAND, CALIFORNIA
CONCENTRATIONS SHOWN IN PART PER BILLION (ppb), µg/L

WELL ID/ ELEVATION	DATE	TPH-AS-GASOLINE	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	TOG	DTW (ft.)	SPT (ft.)	GWE (ft.)
TRIP BLANK	11/03/88	---	<1.0	<1.0	<1.0	<1.0	---	---	---	---
	02/10/89	<50	<0.1	<0.1	<0.1	<0.2	---	---	---	---
	04/24/89	<50	<0.5	<0.5	<1.0	<1.0	---	---	---	---
	07/28/89	<50	<0.1	<0.1	<0.1	<0.2	---	---	---	---
	10/30/89	<500	<0.3	<0.3	<0.3	<0.6	---	---	---	---
	01/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	---	---	---
	04/18/90	<50	<0.3	<0.3	<0.3	<0.6	---	---	---	---
	06/22/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	---	---	---
	11/13/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	05/15/91	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	08/27/91	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	11/15/91	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	02/20/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	06/15/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---

All elevation are given as feet above mean sea level.
Concentrations shown in parts per billion.

DTW = Depth to water
SPT = Separate-phase hydrocarbon thickness
GWE = Groundwater elevation in feet above mean sea level
TOG = Total oil and grease
--- = Not applicable/not sampled/not measured
(D) = Duplicate analysis
[1] = Analyzed for total fuel hydrocarbons
[2] = Laboratory reported that peaks did not match typical gasoline pattern
[3] = Fuel characterized as gasoline
[4] = Acetone and 2-butanone were detected at 5 ppb and 160 ppb, respectively

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TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS FOR HALOGENATED VOLATILE ORGANICS
CHEVRON SERVICE STATION NO. 9-0020
1633 HARRISON STREET, OAKLAND, CALIFORNIA

WELL ID	DATE	CARBON TET.	CHLORO FORM	PCE	TCE	1,2,- DCE	t-1,2- DCE	c-1,2- DCE	TCA	1,2 - DCA	1,2 - DCP	MC	OTHER[a] HVOC'S
MW-1	11/03/88	18.0	7.0	<1.0	<1.0	—	<1.0	—	<1.0	<1.0	—	—	—
	02/10/89	17.0	6.0	<0.2	<0.2	—	<0.2	<0.2	<0.2	<0.2	—	—	—
	04/24/89	16.0	6.0	<1.0	<1.0	<1.0	—	—	<1.0	<1.0	—	—	—
	07/28/89	20.0	6.4	<0.1	<0.1	—	<0.1	<0.1	0.3	<0.1	—	—	—
	10/30/89	11.0	4.9	<0.5	<0.5	<0.5	—	—	<0.5	<0.5	—	—	—
	01/09/90	24.0	7.2	<0.5	<0.5	<0.5	—	—	<0.5	<0.5	—	—	—
	04/18/90	23.0	5.5	<0.5	<0.5	<0.5	—	—	1.4	<0.5	<0.5	<0.5	—
	08/09/90	32.0	11.0	0.76	<0.5	<0.5	—	—	<0.5	<0.5	<0.5	<0.5	—
	11/13/90	24	7	0.7	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	—
	05/15/91	15	5	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	18	4.2	<0.5	<0.5	—	—	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	21	7.9	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	02/20/92	24	7.5	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	06/15/92	10	3.2	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
MW-2	11/03/88	3.0	2.0	34.0	3.0	—	10.0	—	<1.0	<1.0	—	—	—
	02/10/89	1.4	1.0	17.2	<0.2	—	<0.2	6.3	<0.2	<0.2	—	—	—
	04/24/89	2.0	2.0	38.0	3.0	9.0	—	—	<1.0	<1.0	—	—	—
	07/28/89	3.7	2.0	46.0	2.6	—	<0.2	<0.2	<0.2	<0.2	—	—	—
	10/30/89	1.4	2.6	53.0	1.1	14.0	—	—	<0.5	<0.5	—	—	—
	01/09/90	3.6	3.9	78.0	5.3	16.0	—	—	<0.5	<0.5	—	—	—
	04/18/90	1.5	2.7	130.0	3.9	19.0	—	—	<0.5	<0.5	<0.5	<0.5	—
	08/09/90	2.1	2.1	74.0	6.1	15.0	—	—	<0.5	<0.5	<0.5	<0.5	—
	11/13/90	<0.5	2	40	4	—	<0.5	10	<0.5	<0.5	<0.5	<0.5	—
	05/15/91	2	2	56	6	—	<0.5	15	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	1.1	0.9	46	3.9	—	—	8.0	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	0.6	1.1	58	3.1	—	<0.5	6.3	<0.5	<0.5	<0.5	<0.5	ND
	02/20/92	11	<2.5	62	3.1	—	<2.5	4.3	<2.5	<2.5	<2.5	<2.5	ND
	06/15/92	<0.5	1.2	45	3.1	—	<0.5	4.8	<0.5	<0.5	<0.5	<0.5	ND

GROUNDWATER TECHNOLOGY

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS FOR HALOGENATED VOLATILE ORGANICS
CHEVRON SERVICE STATION NO. 9-0020
1633 HARRISON STREET, OAKLAND, CALIFORNIA

WELL ID	DATE	CARBON TET.	CHLORO FORM	PCE	TCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	TCA	1,2-DCA	1,2-DCP	MC	OTHER[a] HVOC'S
MW-3	11/03/88	8.0	6.0	84.0	3.0	—	5.0	—	<1.0	<1.0	—	—	—
	02/10/89	5.8	4.0	53.0	1.9	—	<0.2	9.0	<0.2	<0.2	—	—	—
	04/24/89	7.0	6.0	110.0	3.0	11.0	—	—	<1.0	<1.0	—	—	—
	07/28/89	8.6	5.0	49.0	2.1	—	<0.2	11.0	<0.2	<0.1	—	—	—
	10/30/89	5.6	5.3	62.0	0.77	8.2	—	—	<0.5	<0.5	—	—	—
	01/09/90	8.6	6.1	81.0	3.8	8.7	—	—	<0.5	<0.5	—	—	—
	04/18/90	7.6	5.8	120.0	2.4	11.0	—	—	<0.5	<0.5	<0.5	<0.5	—
	08/09/90	11.0	6.7	81.0	5.1	11.0	—	—	<0.5	<0.5	<0.5	<0.5	—
	11/13/90	7	5	43	4	—	<0.5	9	<0.5	<0.5	<0.5	<0.5	—
	05/15/91	6	4	46	3	—	<0.5	8	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	5.5	3.8	43	2.6	—	—	8.1	<0.5	<0.5	<0.5	<0.5	c,d,e,f
	11/15/91	6.3	5.0	67	3.4	—	0.8	7.4	0.9	<0.5	<0.5	<0.5	ND
	02/20/92	2.8	4.0	96	3.0	—	<2.5	6.1	<2.5	<2.5	<2.5	<0.5	ND
	06/15/92	5.0	3.9	86	2.9	—	<0.5	7.5	<0.5	<0.5	<0.5	<0.5	ND
MW-4	04/24/89	35.0	11.0	<1.0	<1.0	<1.0	—	—	<1.0	<1.0	—	—	—
	07/28/89	32.0	9.3	<0.1	<0.1	—	<0.1	<0.1	<0.1	<0.1	—	—	—
	10/30/89	32.0	8.5	<0.5	<0.5	<0.5	—	—	<0.5	<0.5	—	—	—
	01/09/90	36.0	9.8	<0.5	<0.5	<0.5	—	—	<0.5	<0.5	—	—	—
	04/18/90	41.0	9.5	<0.5	<0.5	<0.5	—	—	<0.5	<0.5	<0.5	<0.5	—
	08/09/90	38.0	11.0	<0.5	<0.5	<0.5	—	—	<0.5	<0.5	<0.5	<0.5	—
	11/13/90	40	11	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	—
	05/15/91	35	10	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	28	6.1	<0.5	<0.5	—	—	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	23	9.1	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	02/20/92	400	140	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	06/15/92	38	11	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND

GROUNDWATER TECHNOLOGY

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS FOR HALOGENATED VOLATILE ORGANICS
CHEVRON SERVICE STATION NO. 9-0020
1633 HARRISON STREET, OAKLAND, CALIFORNIA

WELL ID	DATE	CARBON TET.	CHLORO FORM	PCE	TCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	TCA	1,2-DCA	1,2-DCP	MC	OTHER[2] HVOC'S
MW-5	04/24/89	4.0	5.0	4.0	<1.0	2.0	---	---	<1.0	<1.0	---	---	---
	07/28/89	5.6	4.0	5.3	0.3	---	0.2	2.3	0.5	<0.2	---	---	---
	10/30/89	2.9	2.0	2.7	<0.5	0.86	---	---	<0.5	<0.5	---	---	---
	01/09/90	8.2	4.6	7.8	0.6	3.1	---	---	<0.5	<0.5	---	---	---
	04/18/90	6.3	2.8	2.6	<0.5	1.7	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/09/90	<11.0	4.8	6.0	<0.5	2.3	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	7	3	5	<0.5	---	<0.5	1	<0.5	<0.5	<0.5	<0.5	---
	05/15/91	4	2	3	<0.5	---	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	3.3	1.1	2.3	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	11/15/91	5.7	2.8	5.5	<0.5	---	<0.5	1.7	<0.5	<0.5	<0.5	<0.5	ND
	02/20/92	4.0	2.0	3.9	<0.5	---	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	ND
	06/15/92	4.0	2.0	5.0	<0.5	---	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	ND
MW-6	04/24/89	13.0	7.0	<1.0	<1.0	<1.0	---	---	<1.0	<1.0	---	---	---
	07/28/89	9.6	4.0	<0.2	<0.2	---	<0.2	<0.2	0.5	0.6	---	---	---
	10/30/89	8.2	3.6	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	---	---	---
	01/09/90	10.0	4.2	<0.5	<0.5	<0.5	---	---	<0.5	1.8	---	---	---
	04/18/90	11.0	3.8	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/09/90	<20.0	6.6	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	15	5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---
	05/15/91	11	4	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	8.0	2.2	2.4	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	13	5.4	<0.5	<0.5	---	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	ND
	02/20/92	11	4.0	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	06/15/92	9.6	4.2	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND

GROUNDWATER TECHNOLOGY

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS FOR HALOGENATED VOLATILE ORGANICS
CHEVRON SERVICE STATION NO. 9-0020
1633 HARRISON STREET, OAKLAND, CALIFORNIA

WELL ID	DATE	CARBON TET.	CHLORO FORM	PCE	TCE	1,2,- DCE	t-1,2- DCE	c-1,2- DCE	TCA	1,2 - DCA	1,2 - DCP	MC	OTHER[a] HVOC'S
MW-7	04/24/89	3.0	9.0	<1.0	<1.0	<1.0	—	—	<1.0	<1.0	—	—	—
	07/28/89	<2.0	<10.0	<2.0	<2.0	—	<2.0	<2.0	<10.0	6.0	—	—	—
	07/28/89[b]	<5.0	<20.0	<5.0	<5.0	—	<5.0	<0.5	<5.0	<5.0	—	—	—
	10/30/89	<1.0	3.9	<1.0	<1.0	<1.0	—	—	<1.0	6.4	—	—	—
	10/30/89[b]	<1.0	3.1	<1.0	<1.0	<1.0	—	—	<1.0	6.2	—	—	—
	01/09/90	<0.5	3.0	<0.5	<0.5	<0.5	—	—	<0.5	8.4	—	—	—
	04/18/90	<0.5	3.2	<0.5	<0.5	<0.5	—	—	<0.5	7.7	0.6	0.6	—
	08/09/90	3.3	7.7	<0.5	<0.5	<0.5	—	—	<0.5	8.4	<0.5	1.8	—
	11/13/90	0.6	3	<0.5	<0.5	—	<0.5	<0.5	<0.5	4	<0.5	<0.5	—
	05/15/91	2	2	<0.5	<0.5	—	<0.5	<0.5	<0.5	3	<0.5	<0.5	ND
	08/27/91	0.7	2.8	<0.5	<0.5	—	—	<0.5	<0.5	2.7	<0.5	<0.5	ND
	11/15/91	0.8	2.7	<0.5	<0.5	—	<0.5	<0.5	<0.5	3.1	<0.5	0.8	ND
	02/20/92	2.2	1.9	<0.5	<0.5	—	<0.5	<0.5	<0.5	3.3	<0.5	<0.5	ND
	06/15/92	1.1	1.8	<0.5	<0.5	—	<0.5	<0.5	<0.5	4.5	<0.5	<0.5	ND
MW-8	04/24/89	2.0	3.0	6.0	<1.0	4.0	—	—	<1.0	<1.0	—	—	—
	04/24/89[b]	2.0	2.0	6.0	<1.0	3.0	—	—	<1.0	<1.0	—	—	—
	07/28/89	2.3	2.0	5.6	<0.2	—	<0.2	3.8	<0.2	<0.2	—	—	—
	10/30/89	2.5	2.6	8.0	<0.5	5.5	—	—	<0.5	<0.5	—	—	—
	01/09/90	4.9	3.9	19.0	0.9	6.6	—	—	<0.5	<0.5	—	—	—
	04/18/90	3.8	2.8	17.0	0.6	5.7	—	—	<0.5	<0.5	<0.5	<0.5	—
	08/09/90	5.3	4.4	27.0	1.2	9.2	—	—	<0.5	<0.5	<0.5	<0.5	—
	11/13/90	3	2	21	0.7	—	<0.5	6	<0.5	<0.5	<0.5	<0.5	—
	05/15/91	2	2	30	0.9	—	<0.5	6	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	1.4	1.1	32	1.0	—	—	4.7	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	1.5	1.9	50	<0.5	—	<0.5	5.8	<0.5	<0.5	2.0	<0.5	ND
	02/20/92	1.3	2.3	68	2.4	—	<0.5	7.6	<0.5	<0.5	<0.5	<0.5	ND
	06/15/92	0.7	1.9	46	1.6	—	<0.5	5.6	<0.5	—	<0.5	<0.5	ND

GROUNDWATER TECHNOLOGY

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS FOR HALOGENATED VOLATILE ORGANICS
CHEVRON SERVICE STATION NO. 9-0020
1633 HARRISON STREET, OAKLAND, CALIFORNIA

WELL ID	DATE	CARBON TET.	CHLORO FORM	PCE	TCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	TCA	1,2-DCA	1,2-DCP	MC	OTHER HVOC'S
MW-9	06/22/90	<0.5	<0.5	<0.5	<0.5	—	<0.5	—	<0.5	<0.5	<0.5	<0.5	—
	08/09/90	<0.5	<0.5	<0.5	<0.5	<0.5	—	—	<0.5	0.71	<0.5	<0.5	—
	11/13/90	<0.5	<0.5	<0.5	<0.5	—	<0.5	<0.5	<0.5	1	<0.5	<0.5	—
	05/15/91	<0.5	<0.5	<0.5	<0.5	—	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	ND
	08/27/91	<0.5	<0.5	<0.5	<0.5	—	—	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	<0.5	<0.5	<0.5	<0.5	—	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	ND
	02/20/92	<0.5	<0.5	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	06/15/92	<0.5	<0.5	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
MW-10	06/22/90	9.6	8.9	<0.5	<0.5	—	<0.5	—	<0.5	<0.5	<0.5	<0.5	—
	08/09/90	11.0	7.8	<0.5	<0.5	<0.5	—	—	<0.5	<0.5	<0.5	<0.5	—
	11/13/90	5	4	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	—
	05/15/91	5	4	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	6.9	3.4	<0.5	<0.5	—	—	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	2.7	3.3	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	02/20/92	3.3	3.4	3.0	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	06/15/92	4.5	2.9	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
MW-11	06/22/90	4.6	6.5	73	1.3	—	<0.5	8.9	<0.5	<0.5	<0.5	<0.5	—
	08/09/90	8.1	6.8	84	2.0	4.6	—	—	<0.5	<0.5	<0.5	<0.5	—
	11/13/90	<0.5	<0.5	39	<0.5	—	<0.5	2	5	<0.5	<0.5	<0.5	—
	05/15/91	1	3	7	0.5	—	<0.5	2	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	4.1	3.3	73	1.0	—	—	2.4	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	3.3	3.6	64	0.9	—	<0.5	2.3	<0.5	<0.5	<0.5	<0.5	ND
	02/20/92	<2.5	<2.5	62	<2.5	—	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	ND
	06/15/92	—	—	—	—	—	—	—	—	—	—	—	—

GROUNDWATER TECHNOLOGY

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS FOR HALOGENATED VOLATILE ORGANICS
CHEVRON SERVICE STATION NO. 9-0020
1633 HARRISON STREET, OAKLAND, CALIFORNIA

WELL ID	DATE	CARBON TET.	CHLORO FORM	PCE	TCE	1,2- DCE	t-1,2- DCE	c-1,2- DCE	TCA	1,2 - DCA	1,2 - DCP	MC	OTHER[a] HVOC'S
MW-12	06/22/90	6.0	7.3	7.4	<0.5	—	<0.5	13	<0.5	<0.5	<0.5	<0.5	—
	08/09/90	8.0	7.0	6.7	<0.5	5.8	—	—	<0.5	<0.5	<0.5	<0.5	—
	11/13/90	<0.5	<0.5	9	<0.5	—	<0.5	3	3	<0.5	<0.5	<0.5	—
	05/15/91	4	4	10	<0.5	—	<0.5	3	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	3.1	2.6	10	<0.5	—	—	2.3	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	1.9	3.5	8.9	<0.5	—	<0.5	5.9	<0.5	<0.5	<0.5	<0.5	ND
	02/20/92	3.3	3.4	3.7	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	06/15/92	2.2	3.7	13	<0.5	—	<0.5	4.5	<0.5	<0.5	<0.5	<0.5	ND
MW-13	11/15/91	<0.5	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	[g]
	02/20/92	<0.5	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	06/15/92	<0.5	<0.5	<0.5	—	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
MW-14	11/15/91	<0.5	5.5	33	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	02/20/92	<0.5	4.3	38	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	06/15/92	—	—	—	—	—	—	—	—	—	—	—	—

GROUNDWATER TECHNOLOGY

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS FOR HALOGENATED VOLATILE ORGANICS
CHEVRON SERVICE STATION NO. 9-0020
1633 HARRISON STREET, OAKLAND, CALIFORNIA

WELL ID	DATE	CARBON TET.	CHLORO FORM	PCE	TCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	TCA	1,2-DCA	1,2-DCP	MC	OTHER[a] HVOC'S
TRIP BLANK	11/03/88	<1.0	<1.0	<1.0	<1.0	—	<1.0	—	<1.0	<1.0	—	—	—
	02/10/89	<0.1	<0.5	<0.1	<0.1	—	<0.1	<0.1	<0.1	<0.1	—	—	—
	04/24/89	<1.0	<1.0	<1.0	<1.0	<1.0	—	—	<1.0	<1.0	—	—	—
	07/28/89	<0.1	<0.5	<0.1	<0.5	<0.1	—	<0.1	<0.1	<0.1	—	—	—
	10/30/89	<0.5	<0.5	<0.5	<0.5	<0.5	—	—	<0.5	<0.5	—	—	—
	01/09/90	<0.5	<0.5	<0.5	<0.5	<0.5	—	—	<0.5	<0.5	—	—	—
	04/18/90	<0.5	<0.5	<0.5	<0.5	<0.5	—	—	<0.5	<0.5	<0.5	<0.5	—
	06/22/90	<0.5	<0.5	<0.5	<0.5	—	<0.5	—	<0.5	<0.5	<0.5	<0.5	—
	08/09/90	<0.5	<0.5	<0.5	<0.5	<0.5	—	—	<0.5	<0.5	<0.5	<0.5	—
	11/13/90	<0.5	<0.5	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	—
	05/15/91	—	—	—	—	—	—	—	—	—	—	—	—
	08/27/91	—	—	—	—	—	—	—	—	—	—	—	—
	11/15/91	<0.5	<0.5	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	—	ND
	02/20/92	<0.5	<0.5	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	—	ND
	06/15/92	<0.5	<0.5	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND

CARBON TET = Carbon Tetrachloride
PCE = Tetrachloroethene
TCE = Trichloroethene
1,2-DCE = 1,2-Dichloroethene
t-1,2-DCE = trans - 1,2-Dichloroethene
c-1,2-DCE = cis-1,2-Dichloroethene
TCA = 1,1,1-Trichloroethane
1,2-DCA = 1,2-Dichloroethane
1,2-DCP = 1,2-Dichloropropane
MC = Methylene chloride (dichloromethane)

Other HVOC's = Other Halogenated Volatile Organic Compounds
— = Not applicable/Not analyzed/Not Sampled
ND = Not detected above method detection limit
a = The tabulated analytical results for ground water prior to May 15, 1991 do not specify whether other HVOC's were detected
b = Duplicate analyses
c = Trichlorofluoromethane was detected at 1.4 ppb
d = 1,1-Dichloroethene was detected at 1.3 ppb
e = 1,1-Dichloroethane was detected at 0.5 ppb
f = Chlorobenzene was detected at 0.7 ppb
g = 1,1-Dichloroethane was detected at 0.6 ppb

GROUNDWATER TECHNOLOGY

ATTACHMENT C

LABORATORY REPORTS

Superior Precision Analytical, Inc.
835 Arnold Drive, Suite 106 • Martinez, California 94553 • (510) 229-0166 / fax (510) 229-0916

GROUNDWATER TECHNOLOGIES INC. Project 020302499.061004
Attn: Sandra Lindsey Reported 07/01/92

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed	Matrix
86005- 1	TB-LB	06/15/92	06/23/92	Water
86005- 2	MW-1	06/15/92	06/23/92	Water
86005- 3	MW-2	06/15/92	06/23/92	Water
86005- 4	MW-3	06/15/92	06/23/92	Water
86005- 5	MW-4	06/15/92	06/23/92	Water
86005- 6	MW-5	06/15/92	06/23/92	Water
86005- 7	MW-6	06/15/92	06/22/92	Water
86005-21	MW-8	06/15/92	06/23/92	Water
86005-22	MW-10	06/15/92	06/23/92	Water
86005-23	MW-12	06/15/92	06/23/92	Water

RESULTS OF ANALYSIS

Laboratory Number:	86005- 1	86005- 2	86005- 3	86005- 4	86005- 5
		MW-1	MW-2	MW-3	MW-4
Gasoline:	ND<50	ND<50	ND<50	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	ND<0.5	ND<0.5	ND<0.5
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

Laboratory Number:	86005- 6	86005- 7	86005-21	86005-22	86005-23
	MW-5	MW-6	MW-8	MW-10	MW-12
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	ND<0.5	ND<0.5	ND<0.5
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

* Gasoline range concentration. A single peak was observed in the chromatogram.

Superior Precision Analytical, Inc.
835 Arnold Drive, Suite 106 • Martinez, California 94553 • (510) 229-0166 / fax (510) 229-0916

GROUNDWATER TECHNOLOGIES INC.
Attn: Sandra Lindsey

Project 020302499.061004
Reported 07/01/92

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed	Matrix
86005-24	MW-13	06/15/92	06/23/92	Water
86005-25	MW-9	06/15/92	06/23/92	Water
86005-26	MW-7	06/15/92	06/23/92	Water

RESULTS OF ANALYSIS

Laboratory Number:	86005-24	86005-25	86005-26
	MW 13	MW 9	MW 7
Gasoline:	3200	4500	10000
Benzene:	35	19	760
Toluene:	33	72	430
Ethyl Benzene:	210	280	320
Xylenes:	300	560	1100
Concentration:	ug/L	ug/L	ug/L

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

QA/QC INFORMATION
SET: 86005

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	92/86	7%	70-130
Benzene:	200 ng	87/86	1%	70-130
Toluene:	200 ng	89/89	0%	70-130
Ethyl Benzene:	200 ng	94/94	0%	70-130
Xylenes:	200 ng	82/83	1%	70-130

Richard Srna, Ph.D.
Laboratory Director

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

GROUNDWATER TECHNOLOGIES INC.
Attn: Sandra Lindsey

Project 020302499.061004
Reported 01-July-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 86005

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
TB-LB	06/15/92	06/16/92	/ /	06/25/92	1	1
MW-1	06/15/92	06/16/92	/ /	06/25/92	2	2
MW-2	06/15/92	06/16/92	/ /	06/26/92	2	3
MW-3	06/15/92	06/16/92	/ /	06/26/92	2	4
MW-4	06/15/92	06/16/92	/ /	06/26/92	2	5
MW-5	06/15/92	06/16/92	/ /	06/29/92	1	6
MW-6	06/15/92	06/16/92	/ /	06/29/92	1	7
MW-8	06/15/92	06/16/92	/ /	06/29/92	1	21
MW-10	06/15/92	06/16/92	/ /	06/29/92	1	22
MW-12	06/15/92	06/16/92	/ /	06/29/92	1	23
MW-13	06/15/92	06/16/92	/ /	06/25/92	1	24
MW-9	06/15/92	06/16/92	/ /	06/25/92	1	25
MW-7	06/15/92	06/16/92	/ /	06/29/92	1	26

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

GROUNDWATER TECHNOLOGIES INC.
Attn: Sandra Lindsey

Project 020302499.061004
Reported 01-July-1992

EPA METHOD 8010

Laboratory Number	Sample Identification	Matrix
86005- 1	TB-LB	Water
86005- 2	MW-1	Water
86005- 3	MW-2	Water
86005- 4	MW-3	Water
86005- 5	MW-4	Water

RESULTS OF ANALYSIS

Laboratory Number:	86005- 1	86005- 2	86005- 3	86005- 4	86005- 5
		MW1	MW2	MW3	MW4
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	**4.8**	**7.5**	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	**3.2**	**1.2**	**3.9**	**11**
1,1,1-Trichloroethane:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Carbon tetrachloride:	ND<0.5	**10**	ND<0.5	**5.0**	**38**
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	**3.1**	**2.9**	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	**45**	**86**	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
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

highest [ ]

Superior Precision Analytical, Inc.
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GROUNDWATER TECHNOLOGIES INC.
Attn: Sandra Lindsey

Project 020302499.061004
Reported 01-July-1992

EPA METHOD 8010

Laboratory Number	Sample Identification	Matrix
86005- 1	TB-LB	Water
86005- 2	MW-1	Water
86005- 3	MW-2	Water
86005- 4	MW-3	Water
86005- 5	MW-4	Water

RESULTS OF ANALYSIS

Laboratory Number:	86005- 1	86005- 2	86005- 3	86005- 4	86005- 5
4-Chlorotoluene:	87%	87%	80%	74%	83%

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GROUNDWATER TECHNOLOGIES INC.
Attn: Sandra Lindsey

Project 020302499.061004
Reported 01-July-1992

EPA METHOD 8010

Laboratory Number	Sample Identification	Matrix
86005- 6	MW-5	Water
86005- 7	MW-6	Water
86005-21	MW-8	Water
86005-22	MW-10	Water
86005-23	MW-12	Water

RESULTS OF ANALYSIS

Laboratory Number:	86005- 6	86005- 7	86005-21	86005-22	86005-23
	MW5	MW6	MW8	MW10	MW12
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:	**1.4**	ND<0.5	**5.6**	ND<0.5	**4.5**
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:	**2.0**	**4.2**	**1.9**	**2.9**	**3.7**
1,1,1-Trichloroethane:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Carbon tetrachloride:	**4.0**	**9.6**	**0.7**	**4.5**	**2.2**
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	**1.6**	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:	**5.0**	ND<0.5	**46**	ND<0.5	**13**
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
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

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GROUNDWATER TECHNOLOGIES INC.
Attn: Sandra Lindsey

Project 020302499.061004
Reported 01-July-1992

EPA METHOD 8010

Laboratory Number	Sample Identification	Matrix
86005- 6	MW-5	Water
86005- 7	MW-6	Water
86005-21	MW-8	Water
86005-22	MW-10	Water
86005-23	MW-12	Water

RESULTS OF ANALYSIS

Laboratory Number:	86005- 6	86005- 7	86005-21	86005-22	86005-23
4-Chlorotoluene:	95%	86%	91%	94%	84%

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GROUNDWATER TECHNOLOGIES INC.
Attn: Sandra Lindsey

Project 020302499.061004
Reported 01-July-1992

EPA METHOD 8010

Laboratory Number	Sample Identification	Matrix
86005-24	MW-13	Water
86005-25	MW-9	Water
86005-26	MW-7	Water

RESULTS OF ANALYSIS

Laboratory Number:	86005-24	86005-25	86005-26
	MW13	MW9	MW7
Chloromethane:	ND<0.5	ND<0.5	ND<0.5
Vinyl Chloride:	ND<0.5	ND<0.5	ND<0.5
Bromomethane:	ND<0.5	ND<0.5	ND<0.5
Chloroethane:	ND<0.5	ND<0.5	ND<0.5
Trichlorofluoromethane:	ND<0.5	ND<0.5	ND<0.5
1,1-Dichloroethene:	ND<0.5	ND<0.5	ND<0.5
Dichloromethane:	ND<0.5	ND<0.5	ND<0.5
c-1,2-Dichloroethene:	ND<0.5	ND<0.5	ND<0.5
1,1-Dichloroethane:	ND<0.5	ND<0.5	ND<0.5
t-1,2-Dichloroethene:	ND<0.5	ND<0.5	ND<0.5
Chloroform:	ND<0.5	ND<0.5	1.8
1,1,1-Trichloroethane:	ND<0.5	ND<0.5	ND<0.5
Carbon tetrachloride:	ND<0.5	ND<0.5	1.1
1,2-Dichloroethane:	ND<0.5	ND<0.5	4.5
Trichloroethene:	ND<0.5	ND<0.5	ND<0.5
1,2-Dichloropropane:	ND<0.5	ND<0.5	ND<0.5
Bromodichloromethane:	ND<0.5	ND<0.5	ND<0.5
c-1,3-Dichloropropene:	ND<0.5	ND<0.5	ND<0.5
t-1,3-Dichloropropene:	ND<0.5	ND<0.5	ND<0.5
1,1,2-Trichloroethane:	ND<0.5	ND<0.5	ND<0.5
Tetrachloroethene:	ND<0.5	ND<0.5	ND<0.5
Dibromochloromethane:	ND<0.5	ND<0.5	ND<0.5
Chlorobenzene:	ND<0.5	ND<0.5	ND<0.5
Bromoform:	ND<0.5	ND<0.5	ND<0.5
1,1,2,2-Tetracl-ethane:	ND<0.5	ND<0.5	ND<0.5
1,3-Dichlorobenzene:	ND<0.5	ND<0.5	ND<0.5
1,4-Dichlorobenzene:	ND<0.5	ND<0.5	ND<0.5
1,2-Dichlorobenzene:	ND<0.5	ND<0.5	ND<0.5
Concentration:	ug/L	ug/L	ug/L

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GROUNDWATER TECHNOLOGIES INC.
Attn: Sandra Lindsey

Project 020302499.061004
Reported 01-July-1992

EPA METHOD 8010

Laboratory Number	Sample Identification	Matrix
86005-24	MW-13	Water
86005-25	MW-9	Water
86005-26	MW-7	Water

RESULTS OF ANALYSIS

Laboratory Number:	86005-24	86005-25	86005-26
4-Chlorotoluene:	76%	74%	89%

Superior Precision Analytical, Inc.
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EPA METHOD 8010
Quality Assurance and Control Data - Water
Laboratory Number 86005

Compound	Method Blank (ug/L)	PQL (ug/L)	Average Spike Recovery (%)	Limits (%)	RPD (%)	Spike Level (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	82%	80-120	1%	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	92%	80-120	1%	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	101%	80-120	1%	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				
4-Chlorotoluene:	92%					

Definitions:

ND = Not Detected
PQL = Practical Quantitation Limit

RPD = Relative Percent Difference

QC File No. 86005

Charles Green
Senior Analyst

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No 8660

Chain-of-Custody-Record

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

Chevron Facility Number 9-0020
Facility Address 1633 Harrison Street, Oakland
Consultant Project Number 020302499.061004
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) Ms. Nancy Vukelich
(Phone) 510-842-9581
Laboratory Name Superior Analytical
Laboratory Release Number 436-8660
Samples Collected by (Name) HECTOR NIFRINO
Collection Date 6-15-92
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	Iced (Yes or No)	BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)					Remarks
TB-GB	1	1	W	G		HCL	Y	X			X									8010
RB-MW1	2	1														X				ARENOT
MW-1	3	5						X			X									MODIFIED
RB-MW-2	4	1														X				
MW-2	5	5						X			X									
RB-MW3	6	1														X				
MW3	7	5						X			X									
RB-MW4	8	1														X				
MW4	9	5						X			X									
RB-MW5	10	1														X				
MW5	11	5						X			X									
RB-MW-6	12	1														X				
MW6	13	5	X	X		X	X	X			X									

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

Page 1 of 1

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	GTI	6/16/92			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
					6/16/92 / 0247

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

COC-3.DWG/03 91/HCH

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

Chain-of-Custody-Recor

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

Chevron Facility Number 9-0020
Facility Address 1633 Harrison Street, Oakland
Consultant Project Number 020302499.061004
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) Ms. Nancy Vukelich
(Phone) 510-842-9581
Laboratory Name Superior Analytical
Laboratory Release Number 436-8660
Samples Collected by (Name) HECTOR MERINO
Collection Date 6-15-92
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	Iced (Yes or No)	BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)	TPH-D			Remarks
RB-MW8	14	1	W	G		HCl										X			
MW-8	15	5						X			X								
RB-MW10	16	1														X			
MW-10	17	5						X			X								
~~RB-MW11~~																			
~~MW-11~~																			
RB-MW12	18	1														X			
MW-12	19	5						X			X								
~~RB-MW14~~																			
~~MW14~~																			
RB-MW-13	20	1														X			
MW-13	21	5						X			X								
RB-MW9	22	1														X			
MW-9	23	5	X	X				X			X								

Page 2 of 3

Remarks

~~SEE ABOVE~~
NOT ACIDIFIED

Please initial:
Samples stored in ice.
Appropriate containers.
Samples preserved.
VOAs without headspace.
Comments:

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	G71	6/16/92			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
					6/16/92

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

SCC-3.DWG/03.21/ACH

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No 86001

Chain-of-Custody-Record

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

Chevron Facility Number 9-0020
Facility Address 1633 Harrison Street, Oakland
Consultant Project Number 020302499.061004
Consultant Name Groundwater Technology, Inc.
Address 4057 Port Chicago Hwy, Concord, CA
Project Contact (Name) Sandra L. Lindsey
(Phone) 671-2387 (Fax Number) 685-9148

Chevron Contact (Name) Ms. Nancy Vukelich
(Phone) 510-842-9581
Laboratory Name Superior Analytical
Laboratory Release Number 436-8660
Samples Collected by (Name) [illegible]
Collection Date 1-15-92
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: BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)	TRLD				
RB-MW7	24	1	W	G		HCl										X				
MW7	25	5	W	G		HCl		X			X									

Page 3 of 3

Remarks: SOILS ARE NOT ACIDIFIED.

Please Initial:
Samples Stored in Ice: RG
Appropriate containers
Samples preserved
VOA's without headspace
Comments:

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
[signature]	GTI	1/16/92			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time 1-16-92 1600

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

COC-3.DWG/03 91 MCH