Chevron

July 20, 1995

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

Site Assessment & Remediation Group
Phone (510) 842-9500

Ms. Madhulla Logan
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Chevron Service Station #9-3415
4500 Park Boulevard, Oakland, CA

Dear Ms. Logan:

Enclosed is the Environmental Assessment Report dated May 30, 1995, prepared by our consultant Groundwater Technology, Inc. for the above referenced site. Three soil borings were installed to further characterize the extent of petroleum hydrocarbon impact to soil following the recent tank removal and excavation activities.

The original scope of work was to install four soil borings and to complete the borings as ground water monitor wells. Soil boring MW-3 was abandoned at two feet below grade because pea gravel back fill material was encountered indicating that the boring was located too close to the underground storage tanks. No other suitable on-site locations were available for this boring. Soil borings MW-1, MW-2, and MW-4 were drilled to approximately 25 to 30 feet below grade before drill rig refusal when hard bedrock was encountered. Ground water was not encountered at this depth. The borings were secured and remained open overnight to allow for the accumulation of ground water, if present. Ground water was not observed in any of the borings the following day and all borings were abandoned by backfilling with a grout mixture.

Soil samples collected from the drill cuttings were submitted to Sequoia Analytical for analysis. Laboratory results indicate concentrations of TPH-G and BTEX were below method detection limits in all samples analyzed. Low concentrations of TPH-D and TPH as motor oil were detected in samples collected from MW-2, the boring located nearest to the waste oil tank.

Based upon the data collected during this investigation and the recent waste oil and product line removal, we believe that no further action is required at this site.. The very low concentrations of hydrocarbons detected in soil, subsurface geology (sandstone and bedrock) and depth to water greater than 25 feet below grade indicate the possibility of hydrocarbon impact to ground water is quite small. If you have any questions or comments, please feel free to contact me at (510) 842-8134.

Sincerely,
CHEVRON U.S.A. PRODUCTS COMPANY

Mark A. Miller
Site Assessment and Remediation Engineer

Enclosure

cc: Mr. S.A. Willer

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GROUNDWATER TECHNOLOGY ®

Groundwater Technology, Inc.
4057 Port Chicago Highway, Concord, CA 94520 USA
Tel: (510) 671-2387 Fax: (510) 685-9148

ENVIRONMENTAL ASSESSMENT REPORT
CHEVRON SERVICE STATION NO. 9-3415
4500 PARK BOULEVARD
OAKLAND, CALIFORNIA

GTI Project 020200048

May 30, 1995

Prepared for:
Mr. Mark Miller
Chevron U.S.A. Products Company
6001 Bollinger Canyon Road, Building L
San Ramon, California 94583-0804

Groundwater Technology, Inc.
Submitted by:

Michael A. Chamberlain
Project Manager

Groundwater Technology, Inc.
Approved by:

E.K. Simonis, R.G.
Senior Geologist

REGISTERED GEOLOGIST
EDVARDAS (ED) K. SIMONIS
No. 4422
STATE OF CALIFORNIA

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

0048R015.020

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1.0 INTRODUCTION

This report summarizes the environmental assessment work conducted by Groundwater Technology, Inc. at Chevron U.S.A. Products Company (Chevron) Service Station No. 9-3415 located at 4500 Park Boulevard, Oakland, California (figure 1). A *Work Plan for Site Assessment* (Groundwater Technology, January 24, 1995) presented the scope of the work performed. The objective of the work was to evaluate the lateral and vertical extent of petroleum hydrocarbons in the soil and groundwater beneath the site. The assessment was performed during May 1995 and included drilling four soil borings (MW-1 through MW-4), collecting soil samples, abandoning the soil borings, analyzing the collected samples, evaluating the data, and preparing this report.

2.0 BACKGROUND

The site is located on Park Boulevard in the City of Oakland in eastern Alameda County, California (figure 2). The site is in a residential area. The site is currently a Chevron service station operating with three 10,000-gallon single-wall fiberglass underground product storage tanks (USTs). During August and September 1994, the product lines and a 1,000 gallon, single-walled waste-oil tank were removed. Approximately 275 cubic yards of soil were over-excavated during the removal of the waste-oil tank. Analytical results of soil samples collected from the waste-oil tank excavation at 8.5 feet below surface grade (BSG) indicated total petroleum hydrocarbon-as-gasoline (TPH-g) and total petroleum hydrocarbon-as-diesel (TPH-d) concentrations ranging to 440 parts per million (ppm) and 1,500 ppm, respectively. Soil samples collected from the vicinity of the northern pump islands during the product line removal reported benzene and TPH-g concentrations ranging to 0.58 ppm and 8,200 ppm (Touchstone Developments, November 3, 1994).

The surface elevation at the site is approximately 300 feet above mean sea level. The nearest surface fresh water is Sausal Creek which flows from northeast to southwest through Dimond Canyon and is located approximately 0.15 miles east of the site. Lake Merritt is located approximately 1.7 miles west of the site. The site is located in the East Bay hills approximately one mile southwest of the Hayward fault zone. Weathered Mesozoic Franciscan sandstone occurs at the surface or is covered by a thin veneer of unconsolidated sediments in vicinity of the site. The major groundwater producing area in the East Bay region of Alameda County is the Bay Plain west of the site. Regional groundwater flow is generally west toward San Francisco Bay (Alameda County Flood Control and Water Conservation District, June 1988).

3.0 WORK SCOPE

3.1 Site-Specific *Health and Safety Plan* and Permits

Groundwater Technology prepared a site-specific *Health and Safety Plan* required by the Occupational Health and Safety Administration Standard Hazardous Waste Operations and Emergency Response guidelines (29 CFR 1910.120). The site-specific *Health and Safety Plan* was prepared after a review of site conditions and existing available site-specific health and safety plans. The *Health and Safety Plan* was reviewed and signed by Groundwater Technology personnel and subcontractors before beginning work at the site.

Groundwater Technology personnel reviewed site history and information with Chevron representatives before beginning work at the site. A drilling permit to install four monitoring wells was approved by Mr. Wyman Hong of the Alameda County Zone 7 Water Agency on March 20, 1995. A copy of the permit is included in appendix A.

3.2 Soil Borings

On May 3, 1995, Groundwater Technology supervised the drilling of four soil borings for the construction of four monitoring wells, MW-1 through MW-4 (figure 2). A Groundwater Technology field geologist, under the supervision of a California registered geologist, logged the materials encountered during drilling of the soil borings using the Unified Soil Classification System. Drilling was completed on May 3, 1995. Soil borings MW-1, MW-2, and MW-4 were drilled to total depths of 25 feet bsg, 25 feet bsg, and 30 feet bsg respectively. Drilling at soil borings MW-1, MW-2, and MW-4 was terminated following drilling refusal because of increased hardness of encountered bedrock with depth. Soil boring MW-3 was abandoned at approximately 2 feet bsg because backfill material from the underground storage tank pit was encountered. The groundwater monitoring wells were not installed because groundwater was not encountered. Drilling logs are presented in appendix B.

The boreholes were secured on May 3, 1995, but left open overnight for the accumulation of groundwater, if present. On May 4, 1995, the boreholes were monitored for the presence of groundwater. Groundwater was not observed in the soil borings on May 4, 1995. The boreholes were backfilled on May 4, 1995, with a bentonite/concrete grout mixture.

The soil cuttings generated during the drilling activities were placed onto and covered with plastic at the site. Soil cuttings were then characterized, profiled, and removed.

3.3 Soil Sampling

During drilling, soil samples were collected from the soil borings at 5-foot intervals from approximately 5 to 25 feet BSG. Soil samples were collected using a 2-inch-diameter split-spoon sampler lined with three 2-inch-diameter by 6-inch-long brass sample tubes. At each sample point, the sampler was advanced 18 inches ahead of the hollow-stem augers into undisturbed soil. One soil sample from each 5-foot interval was collected, sealed with aluminum foil, capped, taped, labeled, placed on ice in an insulated container, and delivered to a California-certified laboratory. Soil sampling was performed according to Groundwater Technology Standard Operating Procedures (SOPs), which are included in appendix C.

Soil samples collected at approximately 10 and 20 feet bsg in soil boring MW-1 and 25 feet bsg in soil borings MW-2 and MW-4 were submitted to a California-certified laboratory for analyses of benzene, toluene, ethylbenzene, xylene (BTEX) and TPH-g using Environmental Protection Agency (EPA) Methods 5030/8020/modified 8015. Soil samples collected from soil boring MW-2 were also analyzed for concentrations of TPH-d, total petroleum hydrocarbons-as-motor oil (TPH-mo) and halogenated volatile organic (HVO) using EPA methods 3550/8015, and EPA method 5030/8010, respectively.

4.0 SITE CONDITIONS

4.1 Analytical Results of Soil Samples

Laboratory analytical reports of soil samples collected from soil borings MW-1, MW-2, and MW-4 on May 3, 1995, indicated BTEX and TPH-g concentrations below method detection limits (MDLs). The results of additional soil samples collected from MW-2 indicated concentrations of HVO below the MDLs. Analytical results of soil samples collected from soil boring MW-2 at 10 feet bsg and 25 feet bsg indicated TPH-d at 1.8 milligrams per kilogram and 2.3 mg/kg, respectively. The results of the soil analyses are summarized in table 1 and laboratory reports are included in appendix D. Results indicate concentrations for TPH-mo at 20 mg/kg from the soil sample collected at 25 feet bsg from soil boring MW-2.

4.2 Subsurface

The materials encountered during drilling consisted of surface clays and sandstone bedrock. Groundwater was not encountered at the soil boring locations to a maximum explored depth of 30 feet bsg.

5.0 SUMMARY

- On May 3 and 4, 1995, Groundwater Technology supervised the drilling and abandonment of four (4) soil borings. Drilling of soil borings MW-1, MW-2, and MW-4 was terminated at a maximum explored depth of 30 feet bsg because of drilling refusal. Drilling of soil boring MW-3 was terminated at a depth of approximately 2 feet bsg following encountering UST backfill material. Groundwater was not encountered during drilling on May 3, 1995. The soil borings (MW-1, MW-2, and MW-4) were allowed to remain open for approximately 24 hours. Groundwater was not detected in the boreholes on May 4, 1995, and the soil borings were subsequently abandoned.

- Analytical results of the soil samples collected during drilling activities of soil boring MW-1, MW-2, and MW-4 indicated BTEX and TPH-g concentrations below the MDLs.

- Additional soil samples collected from soil boring MW-2 for analyses of HVO indicated concentrations below the MDLs. Analytical results of soil samples collected from soil boring MW-2 at 10 feet and 25 feet bsg indicated TPH-d at 1.8 mg/kg and 2.3 mg/kg, respectively. Concentrations for TPH-mo were detected at 20 mg/kg for the soil sample collected at 25 feet bsg from soil boring MW-2.

6.0 REFERENCES

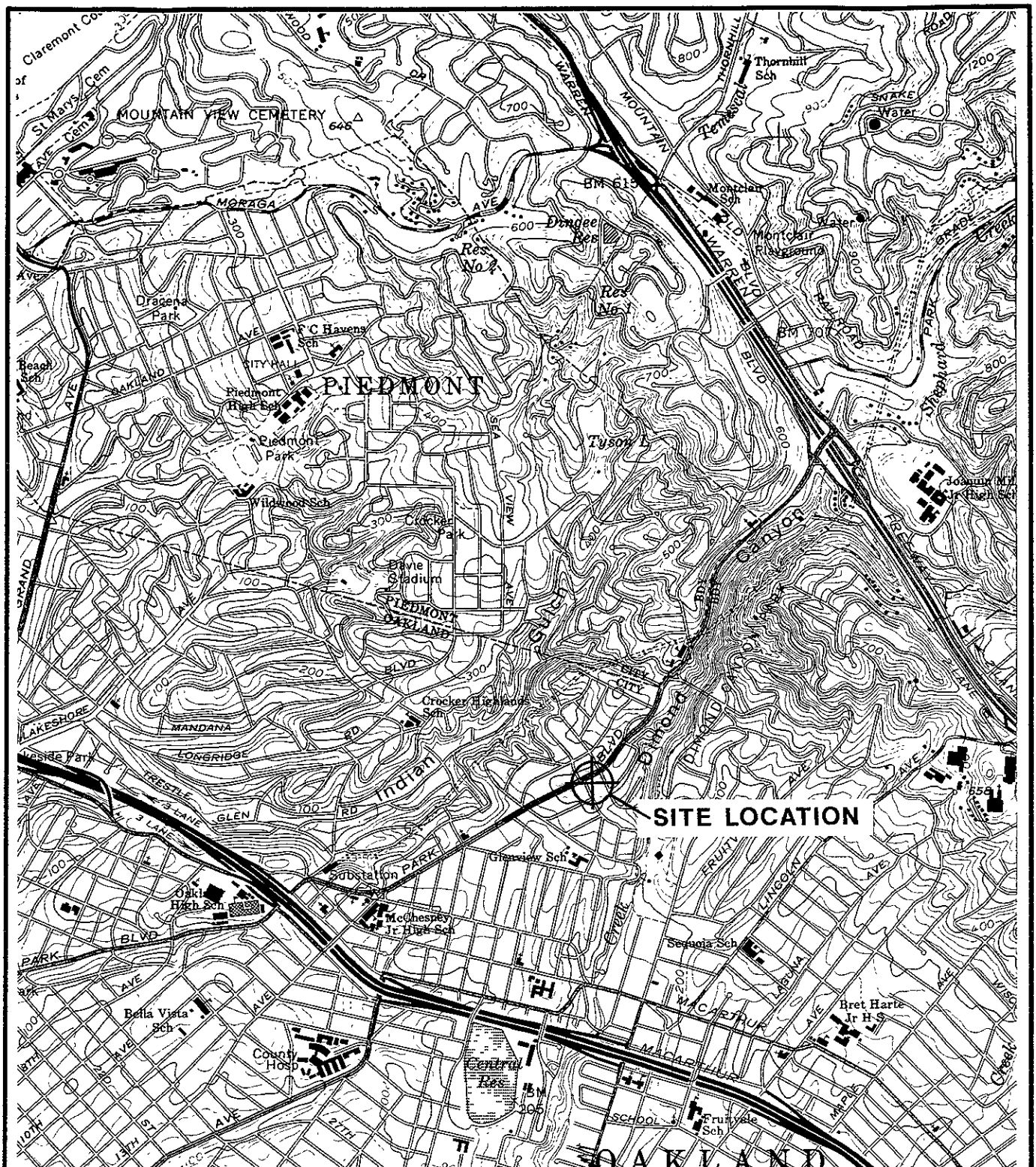
Alameda County Flood Control and Water Conservation District. June 1988. Geohydrogeology and Groundwater-Quality Overview, East Bay Plain Area, Alameda County, California, 205(J) Report.

Groundwater Technology, Inc. January 24, 1995. *Work Plan for Site Assessment.* Chevron Service Station No. 9-3415, 4500 Park Boulevard, Oakland, California.

Touchstone Developments Environmental Managements. November 3, 1994. Product Line Removal, Waste Oil Tank Removal, and Soil Sampling Report, Chevron Service Station Number 9-3415, 4500 Park Boulevard, Oakland, California.

FIGURES

1. Site Location Map
2. Site Plan



GROUNDWATER TECHNOLOGY

SOURCE: U.S.G.S. 7.5' QUAD SHEET
OAKLAND EAST, CALIFORNIA
PHOTOREVISED 1980

N

SCALE: 0 FEET 2000

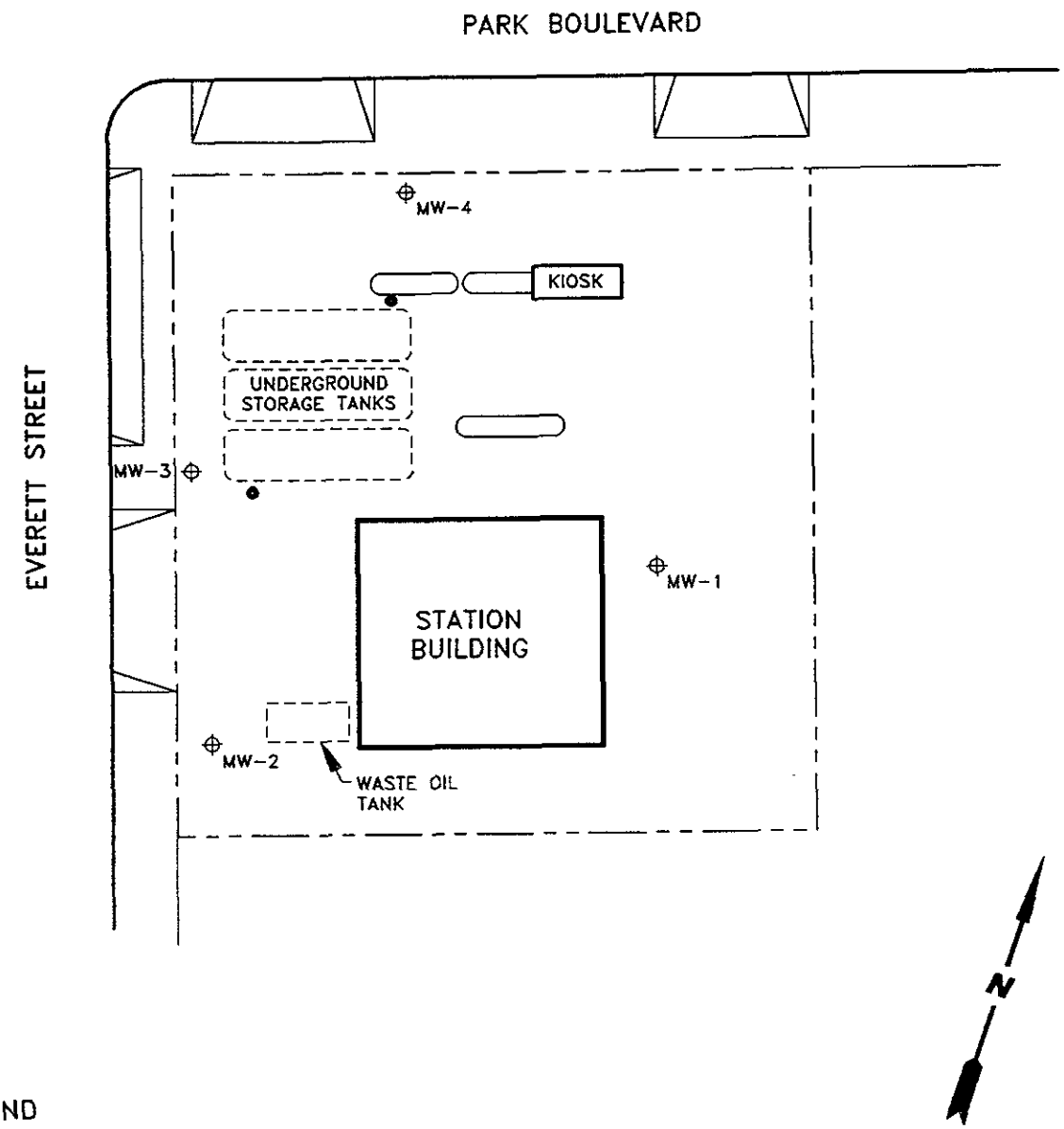
SITE LOCATION MAP

CLIENT: CHEVRON U.S.A. PRODUCTS CO.
SERVICE STATION No. 9-3415

DATE: 12/6/94

LOCATION: 4500 PARK BOULEVARD
OAKLAND, CALIFORNIA

FIGURE: 1



LEGEND

- ⊕ SOIL BORING
- ● TANK PIT MONITORING WELL

GROUNDWATER TECHNOLOGY	0 FEET 30 SCALE	SITE PLAN				
CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-3415		FILE: SP595	PROJECT NO: 020200048	PM: AMC	RG/PE	
LOCATION: 4500 PARK BLVD. OAKLAND, CALIFORNIA		REV: 1			FIGURE: 2	
		DES: TW	DET: ML	DATE: 5/25/95		

TABLES

TABLE 1
Analytical Results of Soil Samples

(Results expressed as milligrams per kilogram)

Chevron Service Station No. 9-3415
4500 Park Boulevard
Oakland, California

Date	Sample ID	Sample Depth (ft)[a]	Benzene	Toluene	Ethyl-benzene	Xylenes	TPH-g	TPH-d	TPH-mo	HVO
5-3-95	MW 1-10	10	<0.0050	<0.0050	<0.0050	<0.0050	<1	-	-	-
	MW 1-20	20	<0.0050	<0.0050	<0.0050	<0.0050	<1	-	-	-
	MW 2-10	10	<0.0050	<0.0050	<0.0050	<0.0050	<1	1.8	<1	ND
	MW 2-25	25	<0.0050	<0.0050	<0.0050	<0.0050	<1	2.3	20	ND
	MW 4-10	10	<0.0050	<0.0050	<0.0050	<0.0050	<1	-	-	-
	MW 4-25	25	<0.0050	<0.0050	<0.0050	<0.0050	<1	-	-	-

TPH-g = total petroleum hydrocarbons-as-gasoline
TPH-d = total petroleum hydrocarbons-as-diesel
TPH-mo = total petroleum hydrocarbons-as-motor oil
HVO = halogenated volatile organics (EPA 8010)
ND = Not detectable at detection limits. Detection limits are noted in laboratory analytical reports.

[a]Feet below surface grade

APPENDIX A

WELL INSTALLATION PERMIT

ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE · PLEASANTON, CALIFORNIA 94588 VOICE (510) 484-2600
FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 4500 Park Boulevard
Oakland, CA

CLIENT
Name Chevron U.S.A. Products Co.
Address 2410 Camino Ramon Voice (510) 842-8134
City San Ramon, CA Zip 94583-0804

APPLICANT
Name Groundwater Technology Inc. Fax (510) 685-9148
Address 4057 Port Chicago Voice (510) 671-2387
City Concord, CA Zip 94520

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	–	General	–
Water Supply	–	Contamination	X
Monitoring	X	Well Destruction	–

PROPOSED WATER SUPPLY WELL USE
Domestic – Industrial – Other –
Municipal – Irrigation –

DRILLING METHOD:
Mud Rotary – Air Rotary – Auger X
Cable – Other –

DRILLER'S LICENSE NO. C-57 582696

WELL PROJECTS
Drill Hole Diameter 8 in. Maximum
Casing Diameter 2 in. Depth 20 ft.
Surface Seal Depth 5 ft. Number 4

GEOTECHNICAL PROJECTS
Number of Borings – Maximum
Hole Diameter – in. Depth – ft.

ESTIMATED STARTING DATE MARCH 27, 1995
ESTIMATED COMPLETION DATE APRIL 27, 1995

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE J. Walker Date 3-20-95

FOR OFFICE USE

PERMIT NUMBER 95154
LOCATION NUMBER

PERMIT CONDITIONS

Circled Permit Requirements Apply

(A.) GENERAL
1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well Projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

(B.) WATER WELLS, INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

C. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

D. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

E. WELL DESTRUCTION. See attached.

Approved Wyman Hong Date 20 Mar 95
Wyman Hong

91992

APPENDIX B

DRILL LOGS

Drilling Log

GROUNDWATER TECHNOLOGY

Soil Boring **MW-1**

Project Chv/9-2315 Owner Chevron USA
Location 4500 Park Blvd., Oakland CA Proj. No. 020200048
Surface Elev. NA ft. Total Hole Depth 25 ft. Diameter 8 in.
Top of Casing NA ft. Water Level Initial NA ft. Static NA ft.
Screen: Dia NA in. Length NA ft. Type/Size NA in.
Casing: Dia NA in. Length NA ft. Type NA
Fill Material Neat cement Rig/Core CME-55/Split Spoon
Drill Co. Soil Exploration Services Method Hollow Stem Auger
Driller Tyke Van Zandt Log By Terry James Date 5/3/95 Permit # 95154
Checked By Ed Simonis License No. RG 4422

See Site Map For Boring Location

COMMENTS:

PID readings at 15 ft. were taken from drill cuttings. Very poor to no recovery at sampling intervals.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
0				Conc	Concrete.
2				ML	Clayey SILT (40,60): red-brown, slightly plastic, very stiff, dry, lenses up to 1/4 in thick of plastic Clay, no hydrocarbon odor.
4					
6	0	MW-1-5 50/4in.			Fine grained SANDSTONE: tan, poorly indurated, weathered, no hydrocarbon odor.
8					
10	0	MW-1-10 50/2in.			
12				SS	
14					
16	0	MW-1-15 50/0in.			(Grades moderately indurated, little weathering, no hydrocarbon odor.)
18					
20	0	MW-1-20 50/3in.			(Grades hard, well indurated, fresh, no hydrocarbon odor.)
22					
24				QZT	METAQUARTZITE: hard, thin bedded, intensely fractured, weathered along fractures, dry, no hydrocarbon odor.
26	0	MW-1-25 50/0in.			End of boring.
28					
30					
32					
34					
36					
38					
40					
42					

Drilling Log

GROUNDWATER TECHNOLOGY

Soil Boring MW-2

Project Chv/9-2315 Owner Chevron USA
Location 4500 Park Blvd., Oakland CA Proj. No. 020200048
Surface Elev. NA ft. Total Hole Depth 27 ft. Diameter 8 in.
Top of Casing NA ft. Water Level Initial NA ft. Static NA ft.
Screen: Dia NA in. Length NA ft. Type/Size NA in.
Casing: Dia NA in. Length NA ft. Type NA
Fill Material Neat cement Rig/Core CME-55/Split Spoon
Drill Co. Soil Exploration Services Method Hollow Stem Auger
Driller Tyke Van Zandt Log By Terry James Date 5/3/95 Permit # 95154
Checked By Ed Simonis License No. RG 4422

See Site Map For Boring Location

COMMENTS:

Depth (ft.)	PID (ppm)	Sample ID	Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2 to 0					Conc	Concrete.
2 to 4					CL	Silty CLAY (30,70):gray-green, very plastic, dense, slightly moist, no hydrocarbon odor.
6	0	MW-2-5	50/6in.			Fine grained SANDSTONE: tan, poorly indurated, weathered, no hydrocarbon odor.
10	0	MW-2-10	28 50/5in.			(Grades 20% blue-green mottling, no hydrocarbon odor.)
16	0	MW-2-15	50/5in.		SS	(Grades moderately indurated, little weathering, no) hydrocarbon odor.)
20	0	MW-2-20	50/6in.			(Grades well indurated, no hydrocarbon odor.)
26	0	MW-2-25	50/5in.			(Grades red mottling, hard, no hydrocarbon odor.)
28						End of boring.
30 to 42						

Drilling Log

GROUNDWATER TECHNOLOGY

Soil Boring MW-4

Project Chv/9-2315 Owner Chevron USA
Location 4500 Park Blvd., Oakland CA Proj. No. 020200048
Surface Elev. NA ft. Total Hole Depth 25 ft. Diameter 8 in.
Top of Casing NA ft. Water Level Initial NA ft. Static NA ft.
Screen: Dia NA in. Length NA ft. Type/Size NA in.
Casing: Dia NA in. Length NA ft. Type NA
Fill Material Neat cement Rig/Core CME-55/Split Spoon
Drill Co. Soil Exploration Services Method Hollow Stem Auger
Driller Tyke Van Zandt Log By Terry James Date 5/3/95 Permit # 95154
Checked By Ed Simonis License No. RG 4422

See Site Map For Boring Location

COMMENTS:

Very poor recovery, used 1 in. sampler for the 15ft, and 20 ft. samples, used a 2 oz. jar for the 25 ft. sample.

Depth (ft.)	PID (ppm)	Sample ID	Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
0				Conc		Concrete.
2					CL	Silty CLAY (40,60):gray-green, very plastic, dense, slightly moist, no hydrocarbon odor.
4						
6	0	MW-4-5	28 50/4in.			Fine grained SANDSTONE: tan, poorly indurated, weathered, no hydrocarbon odor.
8						
10	0	MW-4-10	55/5in.			(Grades 20% black and white mottling)
12						
14						
16	0	MW-4-15	60/5in.		SS	(Grades moderately indurated, little weathering, no hydrocarbon odor.)
18						
20	0	MW-4-20	60/5in.			
22						(Grades well indurated, no hydrocarbon odor.)
24						
26	0	MW-4-25	60/5in.			(Grades hard non hydrocarbon odor.) End of boring.
28						
30						
32						
34						
36						
38						
40						
42						

APPENDIX C

GROUNDWATER TECHNOLOGY'S STANDARD OPERATING PROCEDURES (SOPS)

GROUNDWATER TECHNOLOGY, INC.
STANDARD OPERATING PROCEDURE NO. 11
CHAIN-OF-CUSTODY PROTOCOL

1. Samples must be maintained under custody until shipped or delivered to the laboratory. The laboratory will then maintain custody. A sample is under custody if:

    a) It is in your possession
    b) It is in your view after being in your possession
    c) You locked it up after it was in your possession
    d) It is in a designated secure area

2. Custody of samples may be transferred from one person to another. Each transferrer and recipient must date, sign and note the time on the chain-of-custody form.

3. In shipping, the container must be sealed with tape, and bear the sender's signature across the area of bonding at the ends of the tape to prevent undetected tampering. Each sampling jar should be taped and signed as well. Scotch tape works well.

4. Write "sealed by" and sign in the "Remarks" box at the bottom of the form before sealing the box. Place form in a plastic bag and seal it inside the box.

5. The "REMARKS" section of the form is for documenting details such as:

    a) Correlation of sample numbers if samples are split between labs.
    b) QC numbers when lab is logging in the samples.
    c) Sample temperature and condition when received by lab.
    d) Preservation notation.
    e) pH of samples when opened for analysis (if acidified).
    f) Sampling observation or sampling problem.

6. The chain-of-custody form should be included inside the shipping container. A copy should be sent to the project manager.

7. When the samples are received by the lab, the chain-of-custody form will be dated, signed, and the time noted by a laboratory representative. The form will be retained in the laboratory files along with shipping bills and receipts .

8. At the time of receipt of samples by the laboratory, the shipping container will be inspected and the sealing signature will be checked. The samples will be inspected for condition and bubbles, and the temperature of a representative sample container will be measured

externally by a thermocouple probe (held tightly between two samples) and recorded. The laboratory QC numbers will be placed on the labels, in the accession log, and on the chain-of-custody form. If samples are acidified, their pH will be measured by narrow range pH paper at the time of opening for analysis. All comments concerning procedures requiring handling of the samples will be dated and initialed on the form by the laboratory person performing the procedure. A copy of the completed chain-of-custody form with the comments on sample integrity will be returned to the sampler.

GROUNDWATER TECHNOLOGY, INC.
STANDARD OPERATING PROCEDURE NO. 14
SOIL SAMPLING METHODOLOGY

1. Soil samples should be collected and preserved in accordance with Groundwater Technology Standard Operating Procedure (SOP 15) concerning Soil Sample Collection and Handling when Sampling for Volatile Organics. A hollow stem soil auger should be used to drill to the desired sampling depth. A standard 2 inch diameter split spoon sampler 18 inches in length shall be used to collect the samples. The samples are contained in 2 inch diameter by 6 inch long thin walled brass tube liners fitted into the split spoon sampler (three per sampler).

2. The split spoon sampler should be driven the full depth of the spoon into the soil by a 140 pound hammer. The spoon shall then be extracted from the borehole and the brass tube liners containing the soil sample removed from the sampler. The ends of the liner tubes should be immediately covered with aluminum foil, sealed with a teflon or plastic cap, and taped with duct tape. After being properly identified with sample data entered on a standard chain of custody form the samples shall be placed on dry ice (maintained below 4~C) and transported to the laboratory within 24 hours.

3. One of the three soil samples retrieved at each sample depth shall be analyzed in the field using a photoionization detector and/or explosimeter. The purpose of the field analysis is to provide a means to choose samples to be laboratory analyzed for hydrocarbon concentrations and to enable comparisons between the field and laboratory analyses. The soil sample shall be sealed in a plastic bag and allowed to equilibrate with the air surrounding the soil for approximately 10 minutes. One of the two field vapor instruments shall be used to quantify the amount of hydrocarbon released to the air from the soils. The data shall be recorded on the drill logs at the depth corresponding to the sample point.

GROUNDWATER TECHNOLOGY, INC.
STANDARD OPERATING PROCEDURE NO. 15
SOIL SAMPLE COLLECTION AND HANDLING WHEN SAMPLING FOR VOLATILE ORGANICS

1. Use a sampling means which maintains the physical integrity of the samples. The project sampling protocol will designate a preferred sampling tool. A split spoon sampler with liners, or similar tube sampler which can be sealed, is best.

2. The samples should be sealed in the liner, with teflon plugs (The "California Sampler") or plastic caps.

3. For sending whole-core samples (above):

   A. Seal ends of liner with teflon plugs or plastic caps, leaving no free air space inside.

   B. Tape with duct tape.

   C. Label the sample with the following information: sample identification, depth, date and time, project number and required analyses.

   D. Place in plastic bag labeled with indelible marker. Use Well #, depth, date, and job #.

   E. Place inside a second bag and place a labelling tag inside outer bag.

   F. Enclose samples in a cooler with sufficient ice or dry ice to maintain samples at 4 degrees C during shipment.

   G. Seal cooler with a lock, or tape with samplers signature so tampering can be detected.

   H. Package cooler in a box with insulating material. Chain of custody forms can be placed in a plastic bag in this outer box.

   I. If dry ice is used, a maximum of 5 pounds is allowed by Federal Express without special documents(documents are easy to obtain but are not necessary for under 5 pounds). Write "ORM-A dry ice", "____ pounds, for research" on outside packaging and on regular airbill under classification. UPS does not accept dry ice.

J. Soil cores kept a 4 degrees C are only viable for up to 7 days when aromatic hydrocarbons are involved. The lab should prepare the samples in methanol once in the lab.

4. *Good sampling practice would include preparing 1 out of 5 samples to be prepared in* duplicates for analysis. These 4 out of 20 samples will be used for the following purposes:

   A. One in every 20 samples should be analyzed as a field replicate to evaluate the precision of the sampling technique. A minimum of 1 sample per data set is suggested.

   B. An additional 1 in 20 samples should be selected by sampler to be prepared in duplicate as alternative to Step (A). Choose a different soil type if available.

   C. The remaining 2 in 20 samples should be used by lab for spiking with reference materials for internal QC.

   Other QC procedures can be specified at the project manager's discretion. See Table 3-2 (reference 2) attached.

5. Decontamination of equipment in the field requires a detergent wash, with a distilled water rinse.

REFERENCES

1. Soil Sampling Quality Assurance Users Guide, U.S. EPA Environmental Monitoring Systems Laboratory, Las Vegas, NV, EPA 600/4-84-043, May 1984.

2. Preparation of Soil Sampling Protocol. Techniques and Strategies, U.S. EPA, Environmental Monitoring Systems Laboratory, Las Vegas, NV, EPA 600/4-83-020, August 1983 (PB83-206979).

3. Test Methods for Evaluating Solid Waste, U.S. EPA, Office of Solid Waste and Emergency Response, Washington, D.C., SW 846, July 1982.

GROUNDWATER TECHNOLOGY, INC.
STANDARD OPERATING PROCEDURE NO. 19
OPERATION/CALIBRATION OF PHOTOIONIZATION ANALYZER

1. The Thermo Environmental Instruments Inc. Model 580B OVM Photoionization Analyzer shall be used, using photoionization, to measure the concentration of trace gases over a range of less than 1 ppm to 2,000 ppm. The specific instrument used for investigations related to hydrocarbon contamination should be calibrated for direct readings in parts per million (ppm) volume/volume of isobutylene. Specifics of the detection principle/theory and functions of various components can be found in the manufactures instruction manual.

2. To assure optimum performance, the photoionization analyzer should be calibrated with a standard gas mixture of known concentration from a pressurized container. A daily procedure for calibration involves bringing the probe and readout close to the calibration gas, cracking the valve on the tank and checking the instrument reading. This provides a useful spot check for the instrument.

3. A procedure conducted weekly for more accurate calibration of the instrument from a pressurized container is to connect one side of a "T" to the pressurized container of calibration gas, another side of the "T" to a rotameter and the third side of the "T" directly to the 8" extension to the photoionization probe (see Figure 2). Crack the valve of the pressurized container until a slight flow is indicated on the rotameter. The instrument draws in the volume of sample required for detection, and the flow in the rotameter indicates an excess of sample. Now adjust the span pot so that the instrument reads the exact value of the calibration gas. (If the instrument span setting is changed, the instrument should be turned back to the standby position and the electronic zero should be readjusted, if necessary).

APPENDIX D

LABORATORY REPORTS
AND
CHAIN-OF-CUSTODY RECORDS

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Groundwater Technology	Client Project ID:	Chevron #9-3415	Sampled: May 3, 1995
4057 Port Chicago Hwy	Sample Matrix:	Soil	Received: May 5, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported: May 15, 1995
Attention: Mike Chamberlain	First Sample #:	505-0363	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 505-0363 MW 2-10	Sample I.D. 505-0364 MW 2-25	Sample I.D. 505-0365 MW 4-10	Sample I.D. 505-0366 MW 4-25	Sample I.D. 505-0367 MW 1-10	Sample I.D. 505-0368 MW 1-20
Purgeable Hydrocarbons	1.0	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Benzene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		--	--	--	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	5/12/95	5/12/95	5/12/95	5/12/95	5/12/95	5/12/95
Instrument Identification:	HP-2	HP-4	HP-4	HP-2	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	109	104	104	109	107	104

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kenneth L. Wimer
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Groundwater Technology	Client Project ID:	Chevron #9-3415	Sampled: May 3, 1995
4057 Port Chicago Hwy	Sample Matrix:	Soil	Received: May 5, 1995
Concord, CA 94520	Analysis Method:	EPA 3550/8015	Reported: May 15, 1995
Attention: Mike Chamberlain	First Sample #:	505-0363	

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 505-0363 MW 2-10	Sample I.D. 505-0364 MW 2-25
Extractable Hydrocarbons	1.0	1.8	2.3
Chromatogram Pattern:		Diesel	Diesel

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Extracted:	5/8/95	5/8/95
Date Analyzed:	5/10/95	5/10/95
Instrument Identification:	HP-3A	HP-3A

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kenneth L. Wimer
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Groundwater Technology	Client Project ID:	Chevron #9-3415	Sampled: May 3, 1995
4057 Port Chicago Hwy	Sample Matrix:	Soil	Received: May 5, 1995
Concord, CA 94520	Analysis Method:	EPA 3550/8015	Reported: May 15, 1995
Attention: Mike Chamberlain	First Sample #:	505-0363	

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS AS MOTOR OIL

Analyte	Reporting Limit mg/kg	Sample I.D. 505-0363 MW 2-10	Sample I.D. 505-0364 MW 2-25
Extractable Hydrocarbons	1.0	N.D.	20
Chromatogram Pattern:		--	Motor Oil

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Extracted:	5/8/95	5/8/95
Date Analyzed:	5/8/95	5/8/95
Instrument Identification:	HP-3A	HP-3B

Extractable Hydrocarbons are quantitated against a fresh motor oil standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kenneth L. Wimer
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Groundwater Technology	Client Project ID:	Chevron #9-3415	Sampled:	May 3, 1995
4057 Port Chicago Hwy	Sample Descript:	Soil, MW 2-10	Received:	May 5, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8010	Analyzed:	May 9, 1995
Attention: Mike Chamberlain	Lab Number:	505-0363	Reported:	May 15, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kenneth L. Wimer
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Groundwater Technology	Client Project ID:	Chevron #9-3415	Sampled:	May 3, 1995
4057 Port Chicago Hwy	Sample Descript:	Soil, MW 2-25	Received:	May 5, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8010	Analyzed:	May 9, 1995
Attention: Mike Chamberlain	Lab Number:	505-0364	Reported:	May 15, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kenneth L. Wimer
Project Manager

Sequoia Analytical

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Groundwater Technology
4057 Port Chicago Hwy
Concord, CA 94520
Attention: Mike Chamberlain

Client Project ID: Chevron #9-3415
Matrix: Solid
QC Sample Group: 5050363-68

Reported: May 15, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel	Diesel	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015 M	EPA 8015 M	EPA 8015 M
Analyst:	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha	J. Dinsay	J. Dinsay	J. Dinsay
MS/MSD Batch#:	5050363	5050363	5050363	5050363	5050344	5050344	5050344
Date Prepared:	5/12/95	5/12/95	5/12/95	5/12/95	5/8/95	5/8/95	5/8/95
Date Analyzed:	5/12/95	5/12/95	5/12/95	5/12/95	5/8/95	5/8/95	5/10/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	HP-3B	HP-3A	HP-3A
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg	10 mg/kg	10 mg/kg	10 mg/kg
Matrix Spike % Recovery:	73	100	113	113	92	60	34
Matrix Spike Duplicate % Recovery:	75	103	118	118	78	45	78
Relative % Difference:	2.7	3.0	4.3	4.3	16	29	79
LCS Batch#:	1LCS051295	1LCS051295	1LCS051295	1LCS051295	BLK050895	BLK050895	BLK050895
Date Prepared:	5/12/95	5/12/95	5/12/95	5/12/95	5/8/95	5/8/95	5/8/95
Date Analyzed:	5/12/95	5/12/95	5/12/95	5/12/95	5/8/95	5/8/95	5/10/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	HP-3B	HP-3A	HP-3A
LCS % Recovery:	101	106	111	112	79	83	89
% Recovery Control Limits:	55-145	47-149	47-155	56-140	38-122	38-122	38-122

SEQUOIA ANALYTICAL, #1271

Kenneth L. Wimer
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Groundwater Technology
4057 Port Chicago Hwy
Concord, CA 94520
Attention: Mike Chamberlain

Client Project ID: Chevron #9-3415
Matrix: Solid
QC Sample Group: 5050363-68

Reported: May 15, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha
MS/MSD Batch#:	5050364	5050364	5050364	5050364
Date Prepared:	5/12/95	5/12/95	5/12/95	5/12/95
Date Analyzed:	5/12/95	5/12/95	5/12/95	5/12/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Matrix Spike % Recovery:	88	100	103	104
Matrix Spike Duplicate % Recovery:	88	100	103	104
Relative % Difference:	0.0	0.0	0.0	0.0
LCS Batch#:	2LCS051295	2LCS051295	2LCS051295	2LCS051295
Date Prepared:	5/12/95	5/12/95	5/12/95	5/12/95
Date Analyzed:	5/12/95	5/12/95	5/12/95	5/12/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
LCS % Recovery:	75	103	112	113
% Recovery Control Limits:	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kenneth L. Wimer
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

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Groundwater Technology
4057 Port Chicago Hwy
Concord, CA 94520
Attention: Mike Chamberlain

Client Project ID: Chevron #9-3415
Matrix: Liquid
QC Sample Group: 5050363-68

Reported: May 15, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
Method:	EPA 8010	EPA 8010	EPA 8010
Analyst:	K. Nill	K. Nill	K. Nill
MS/MSD Batch#:	5050363	5050363	5050363
Date Prepared:	5/9/95	5/9/95	5/9/95
Date Analyzed:	5/9/95	5/9/95	5/9/95
Instrument I.D.#:	HP5890/7	HP5890/7	HP5890/7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L
Matrix Spike % Recovery:	90	72	124
Matrix Spike Duplicate % Recovery:	97	59	121
Relative % Difference:	7.5	20	2.4
LCS Batch#:	LCS050995	LCS050995	LCS050995
Date Prepared:	5/9/95	5/9/95	5/9/95
Date Analyzed:	5/9/95	5/9/95	5/9/95
Instrument I.D.#:	HP5890/7	HP5890/7	HP5890/7
LCS % Recovery:	74	90	97
% Recovery Control Limits:	28-167	35-146	38-150

SEQUOIA ANALYTICAL, #1271

Kenneth L. Wimer
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

Fax Copy of Lab Report and COC to Chevron Contact: [redacted] No [redacted] Chain-of-Custody Record

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

Chevron Facility Number 9-3415
Facility Address 4500 PARK Blvd, OAKLAND
Consultant Project Number 020200092
Consultant Name Groundwater Technology, Inc.
Address 4057 Port Chicago Hwy, Concord
Project Contact (Name) Mike Chamberlin
(Phone) 671-2387 (Fax Number) 685-9148

Chevron Contact (Name) MARK MILLER
(Phone) 510 842 8134
Laboratory Name SEQUOIA
Laboratory Release Number 26136 00
Samples Collected by (Name) TERRY JAMES
Collection Date 5/3/95
Signature Terry James

NOTE:
DO NOT BILL
TB-LB SAMPLE

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)	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)	TPH LUFT			Remarks
MW2-5		1	S	G	850		Yes	X	X		X					X		Hold	
MW2-10					900			X	X		X					X			5050363
MW2-15					920			X	X		X					X		Hold	
MW2-20					925			X	X		X					X		Hold	
MW2-25					940			X	X		X					X			5050364
MW4-5					1030			X										Hold	
MW4-10					1040			X											5050365
MW4-15					1050			X										Hold	
MW4-20					1100			X										Hold	
MW4-25					1110			X											5050366
MW1-5					1150			X											
MW1-10					1200			X											5050367
MW1-20		V	V	V	230		Y	X											5050368

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Terry James	GTI	5/3/95 1600	Terry James	Sequoia	5/5 10:15
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Terry James	Sequoia	5/5 11:24			
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
			Chris Aug		5/5 11 24

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