MAY 1 0 2001

Delta
Environmental
Consultants, Inc.

3164 Gold Camp Drive
Suite 200
Rancho Cordova, CA 95670-6021
U.S.A.
916/638-2085
FAX: 916/638-8385

TRANSMITTAL

TO: Mr. Thomas Bauhs
Chevron Products Company
P.O. Box 6004
San Ramon, California 94583

DATE: **May 8, 2001**
PROJ. #: DG90329C.4C01
SUBJECT: Soil Boring Report
Former Chevron Station #9-0329
340 Highland Avenue
Piedmont, California

FROM:
David Herzog
Project Geologist
Gettler-Ryan Inc.
3140 Gold Camp Drive, Suite 170
Rancho Cordova, California 95670

WE ARE SENDING YOU:

COPIES	DATED	DESCRIPTION
1	May 3, 2001	**Soil Boring Report**

THESE ARE TRANSMITTED as checked below:

[ ] For review and comment
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[ ] As requested
[ ] For approval
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[ ] Approved as submitted
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[ ] Approved as noted
[ ] Return _ corrected prints
[ ] Return for corrections

COMMENTS:

If you have any questions, please call our Sacramento office at (916) 631-1300.

Cc: Mr. Scott Seery, Alameda County Health Care Services, Dept. of Environmental Health, 1153 Harbor Bay Parkway, Suite 250, Alameda, CA 94502
Mr. Chuck Headlee, RWQCB-S.F. Bay Region, 1515 Clay Street, Suite 1400, Oakland, CA 94612
Mr. Frank Hoffman, Hoffman Investment Co., 1760 Willow Road, Hillsborough, CA 94010
Mir Ghafari & Fred Manoucheri, Texaco Service Station, 340 Highland Ave., Piedmont, CA 94611
Mr. Jeff Orwig, Texaco Service Station, 340 Highland Ave., Piedmont, CA 94611
Mr. James Brownell, Delta Environmental Consultants, Inc., 3164 Gold Camp Drive, Suite 200, Rancho Cordova, CA 95670

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SOIL BORING REPORT

at
Former Chevron Station No. 9-0329
340 Highland Avenue
Piedmont, California

Report No. DG90329C.4C01

Prepared for:

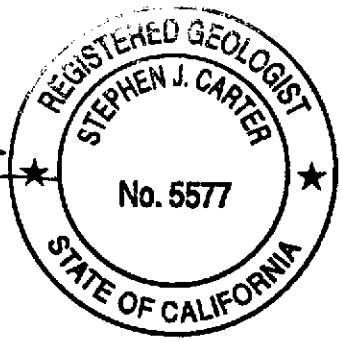
Mr. Thomas Bauhs
Chevron Products Company
P. O. Box 6004
San Ramon, California 94583

Prepared by:

Delta Environmental Consultants, Inc.
Network Associate
Gettler-Ryan Inc.
3164 Gold Camp Drive, Suite 240
Rancho Cordova, California 95670

David W. Herzog
Project Geologist

Stephen J. Carter
Senior Geologist
R.G. 5577



May 3, 2001

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SOIL BORING REPORT

at
Former Chevron Station No. 9-0329
340 Highland Avenue
Piedmont, California

Report No. DG90329C.4C01

INTRODUCTION

This report presents the results of a subsurface investigation performed by Delta Environmental Consultants, Inc. network associate Gettler-Ryan Inc. (GR) at the above referenced site. The work was performed at the request of Chevron Products Company (Chevron) to further evaluate whether utility line trenches in the vicinity of the subject site are acting as preferential pathways for the migration of methyl tert-butyl ether (MtBE). The scope of work performed included: preparing a site safety plan; obtaining the required soil boring and street use permits; advancing five soil borings up to 6.5 feet below ground surface (bgs); collecting soil samples for chemical analysis; analyzing the soil samples; and preparing a report documenting the work. This work was originally proposed in Pacific Environmental Group, Inc. (PEG) report #320-160.1C, *Addendum Work Plan for Groundwater Investigation*, dated November 30, 1998. The Addendum Work Plan was approved by Alameda County Health Care Services Agency (ACHCSA) in a letter dated December 16, 1998 (Appendix A). In March 2000, Cambria Environmental Technology, Inc. (Cambria) attempted to complete the work proposed in PEG's Addendum Work Plan, but the work was not completed to ACHCSA's satisfaction. ACHCSA issued a letter dated September 14, 2000 requesting that the work proposed in PEG's Addendum Work Plan must be completed as originally proposed.

SITE DESCRIPTION

The subject site is an operating service station located at the intersection of Highland Avenue and Highland Way in Piedmont, California (Figure 1). Site facilities include a station building, gasoline underground storage tanks (USTs) in a common excavation, a waste oil UST, and one dispenser island (Figure 2). The site is on a hillside which slopes to the west. Site elevation is approximately 345 feet above mean sea level (MSL). Land use in the site vicinity is residential and commercial. The nearest surface water to the site is a small ephemeral creek located in Piedmont Park approximately 500 feet south of the site.

PREVIOUS ENVIRONMENTAL ACTIVITIES

In 1983, GR installed four groundwater monitoring wells (C-1 through C-4) at the site. Well C-1 was a dry well. Information supplied by Chevron indicates that well C-1 was abandoned in 1991. Total

petroleum hydrocarbons as gasoline (TPHg) and benzene have been detected in well C-2 at concentrations up to 56,000 and 2,500 parts per billion (ppb), respectively, and in well C-4 at concentrations up to 1,300 and 5.9 ppb, respectively. In groundwater monitoring well C-3, TPHg have not been detected and benzene has sporadically been detected at a concentration up to 4 ppb.

In 1993, Resna Industries installed four shallow off-site borings (B-1 through B-4), installed temporary monitoring wells in the borings, and preformed a 1-mile radius off-site source search. Petroleum hydrocarbons were not detected in soil samples collected from the off-site borings. Groundwater was not encountered in borings B-1 and B-3. Petroleum hydrocarbons were not detected in groundwater collected from borings B-2 and B-4. Piedmont City Hall located northwest of the subject site was identified as an off-site source of diesel.

In May 1995, Canonie Environmental drilled off-site boring B-6 and installed well MW-6. No petroleum hydrocarbons were detected in soil samples collected from boring B-6. The day after well MW-6 was installed, the well began to flow under artesian conditions. The well was not suitable for groundwater sampling and was subsequently destroyed.

In November 1996, PEG drilled two soil borings and completed them as monitoring wells C-5 and C-6.

In May 1998, PEG performed a water well and surface water survey of the site vicinity. The City of Piedmont Well #4 located 0.11 miles south, and the intermittent creek in Piedmont Park, located approximately 360 feet southeast of the site are the nearest sensitive receptors.

On March 21, 2000, Cambria advanced five hand augered soil borings (U-1 through U-5) adjacent to subsurface utility trenches in the vicinity of the site. A soil sample collected from boring U-1, which is located near the southern boundary of the site had TPHg concentrations of 1,900 parts per million (ppm). No oxygenates were detected in soil samples from the borings. Groundwater was only encountered in borings U-1 and U-4. TPHg and MtBE were only detected in a groundwater sample from boring U-1 at concentrations of 1,000 and 39,000 ppb, respectively.

Groundwater Monitoring and Sampling

Monitoring wells C-2 through C-4 have been monitored and sampled quarterly since August 1989, and wells C-5 and C-6 since November 1996. During the most recent event on January 5, 2001, TPHg and benzene were detected only in well C-2 at concentrations of 14,000 and 2,000 ppb, respectively. MtBE was only detected in wells C-2 and C-4 at concentrations of 17,000 and 27 ppb, respectively. Depth to water ranged from 0.87 to 4.22 feet below top of casing (btoc), which is within the range of historic depth to groundwater data of 0.20 and 9.31 feet btoc. Groundwater flow was to the south-southwest at a gradient of 0.05 to 0.1, which is consistent with historical data.

FIELD ACTIVITIES

To further evaluate whether utility line trenches in the vicinity of site are acting as preferential pathways for the migration of MtBE, GR advanced five hand augered soil borings to depths up to 6.5 feet bgs. Field work was performed in accordance with GR's Site Safety Plan #DG90329C.4C01, dated March 19, 2001. GR Field Methods and Procedures are included in Appendix B. Underground Service Alert was notified prior to beginning site activities, and a private subsurface utility locating service (Subtronics, Inc., or Subtronics) was contracted to locate subsurface utilities in the vicinity of the subject site. Soil boring activities were performed by GR (C57 #220793). The work was done under Alameda County Public Works Agency permit #W01-121 and a City of Piedmont Special Use of Street permit (Appendix A).

Five hand augered soil borings (U-6 through U-10) were advanced on March 21, 2001. The borings were advanced to depths between 3 and 6.5 feet bgs. A GR geologist observed the boring activities. Since the borings were to be advanced in trench backfill material, the borings were not logged. All boring were advanced within 1 foot of the surface trace of the buried utility lines as determined by Subtronics. All soil borings were advanced to the point of refusal. Borings U-8 and U-10 were advanced to 6.5 feet bgs, which corresponds to the base of the adjacent sanitary sewer lines. Boring U-6 was advanced to 6 feet bgs, which is approximately 1.5 feet below the base of the adjacent sanitary sewer line.

Boring U-7 was attempted at three different locations, and refusal at approximately 3.5 feet bgs was encountered at each location. Boring U-9 was attempted on the north side of the adjacent storm drain conduit and refusal was encountered at approximately 3 feet bgs, but because of the location of telecommunication lines along the south side of the storm drain conduit, no additional attempts at U-9 were made. Although borings U-7 and U-9 were advanced within 6 inches of the marked surface trace of the adjacent utility lines as located by Subtronics, the borings appeared to be in native soil.

Groundwater was not encountered in any of the borings, and only boring U-8 had soil that was moist. Boring U-8 was temporarily cased with 2-inch diameter Schedule 40 PVC slotted casing and was allowed to stand open for 2.5 hours. At the end of that time, no water had collected in the boring. Soil samples were collected from soil cuttings obtained from the base of borings U-6, U-8, and U-10, and the soil samples were submitted for chemical analysis. Because borings U-7 and U-9 appeared to be in native soil, no soil samples were collected for analysis. Upon completion, soil cuttings from each boring were placed back in the borings and compacted, then each boring was filled to ground surface with concrete. Locations of the borings are shown on Figure 2.

RESULTS OF THE SUBSURFACE INVESTIGATION

Soil encountered during this investigation in borings U-6 and U-10 consisted of dry, yellowish brown fine sand, and soil in boring U-8 consisted of moist, brown sandy gravel. The soil in borings U-6, U-8, and U-10 appeared to be non-native trench backfill material. Soil encountered in borings U-7 and U-9 consisted of dry, well indurated, olive gray silt and sand with some gravel, with a few cobbles in boring U-7. The soil in borings U-7 and U-9 appeared to be native.

CHEMICAL ANALYTICAL RESULTS

A total of three soil samples from well borings U-6, U-8, and U-10 were submitted under chain-of-custody for chemical analysis. Analyses were performed by Sequoia Analytical of Sacramento, California (ELAP #1624). Copies of the laboratory reports and chain-of-custody forms are included in Appendix C. Soil chemical analytical data are summarized in Table 1.

Chemical Analytical Procedures

Soil samples were analyzed for TPHg, benzene, toluene, ethylbenzene, and xylenes (BTEX), and MtBE by DHS LUFT Method, and tert-butyl alcohol (TBA), MtBE, di-isopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), tert-amyl methyl ether (TAME), ethanol, 1,2-dichloroethane (1,2-DCA), and ethylene dibromide (EDB) by EPA Method 8260A.

Soil Analytical Results

TPHg, BTEX, oxygenates, 1,2-DCA, or EDB were not detected in any of the soil samples.

DISCUSSION

TPHg, BTEX, oxygenates, 1,2-DCA, or EDB were not detected in soil samples collected during this investigation and groundwater was not observed in the soil borings. Even though groundwater in monitoring wells at the site during the most recent quarterly monitoring and sampling event was as high as 0.87 feet btoc, the lack of groundwater in the utility trenches is not unexpected given artesian conditions encountered in previous investigations at the site.

A review of Cambria's August 7, 2000 *Subsurface Investigation Report* that documents the initial attempt to complete the work proposed in PEG's Addendum Work Plan, shows that MtBE was only detected in boring U-1 at a concentration of 39,000 ppb in a grab groundwater sample. Boring U-1 was located on the subject site near its southern boundary.

Based on the lack of groundwater in off-site utility trenches and the absence of MtBE in soil samples collected during the investigation, the results of this and Cambria's investigations indicate that the utility trenches are not acting as preferential pathways for the migration of MtBE.

Table 1 - Soil Chemical Analytical Data

Former Chevron Service Station #9-0329
340 Highland Avenue
Piedmont, California

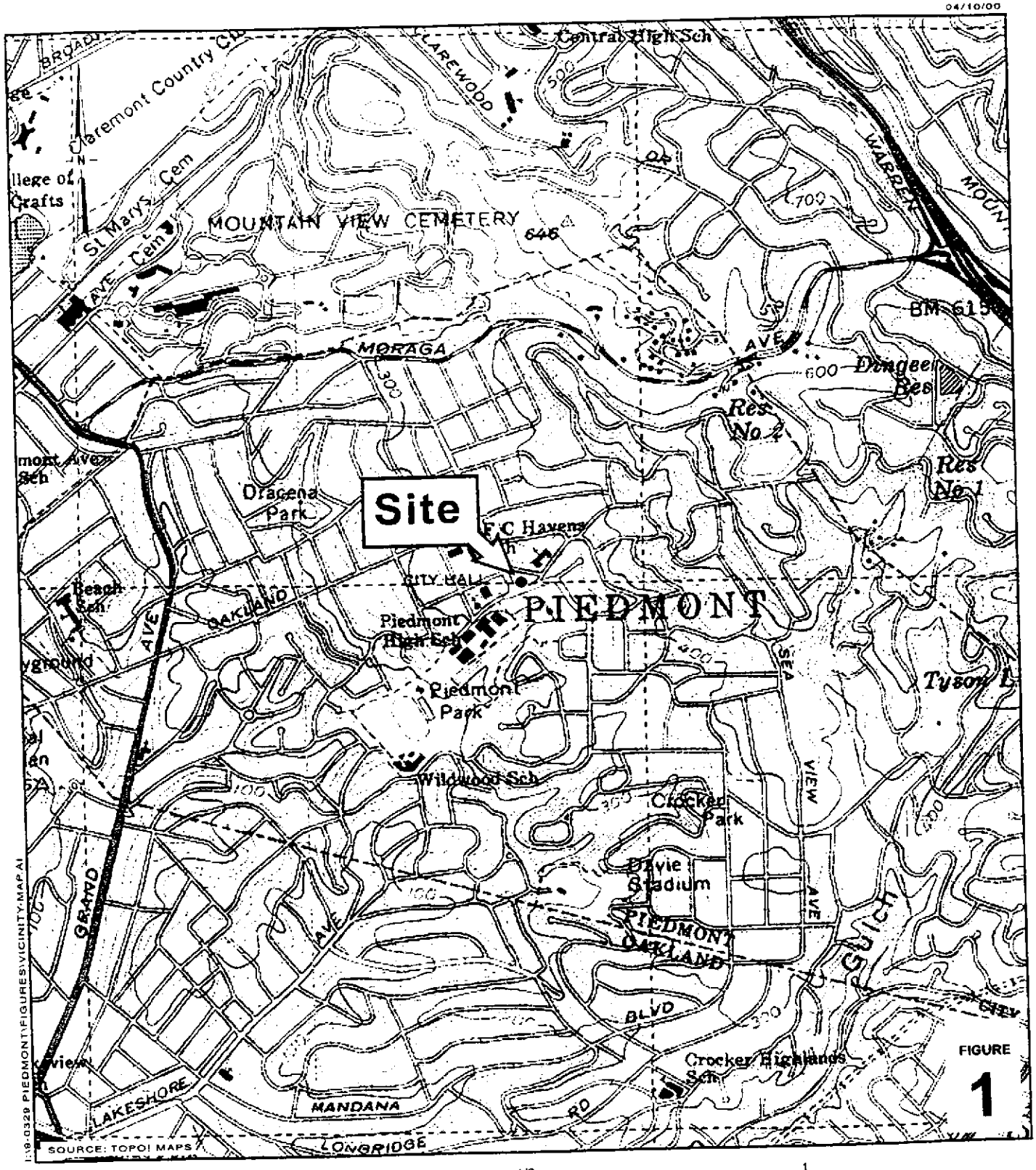
Sample No.	Sample Date	Sample Depth (feet)	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Xylenes (ppm)	MtBE[1] (ppm)	TBA (ppm)	DIPE (ppm)	ETBE (ppm)	TAME (ppm)	Ethanol (ppm)	1,2-DCA (ppm)	EDB (ppm)
U-6	3/21/01	5.5	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500/<0.00200	<0.200	<0.00200	<0.00200	<0.00200	<3.000	<0.00200	<0.00200
U-8	3/21/01	6	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500/<0.00200	<0.200	<0.00200	<0.00200	<0.00200	<3.000	<0.00200	<0.00200
U-10	3/21/01	6	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500/<0.00200	<0.200	<0.00200	<0.00200	<0.00200	<3.000	<0.00200	<0.00200

Explanation:
TPHg = Total Petroleum Hydrocarbons as gasoline
BTEX = Benzene, toluene, ethylbenzene, xylenes
MtBE = Methyl tert-butyl ether
TBA = Tert-butyl alcohol
DIPE = Di-isopropyl ether
ETBE = Ethyl tert-butyl ether
TAME = Tert-amyl methyl ether
1,2-DCA = 1,2-Dichloroethane
EDB = Ethylene dibromide
ppm = parts per million

Analytical Methods
TPHg, BTEX, and MtBE by DHS LUFT Method
1,2-DCA and EDB by EPA Method 8260A
Oxygenates by EPA Method 8260A

Analytical Laboratories
Sequoia Analytical (ELAP #1624)

Notes:
[1]MtBE by DHS LUFT Method/MtBE by EPA Method 8260A



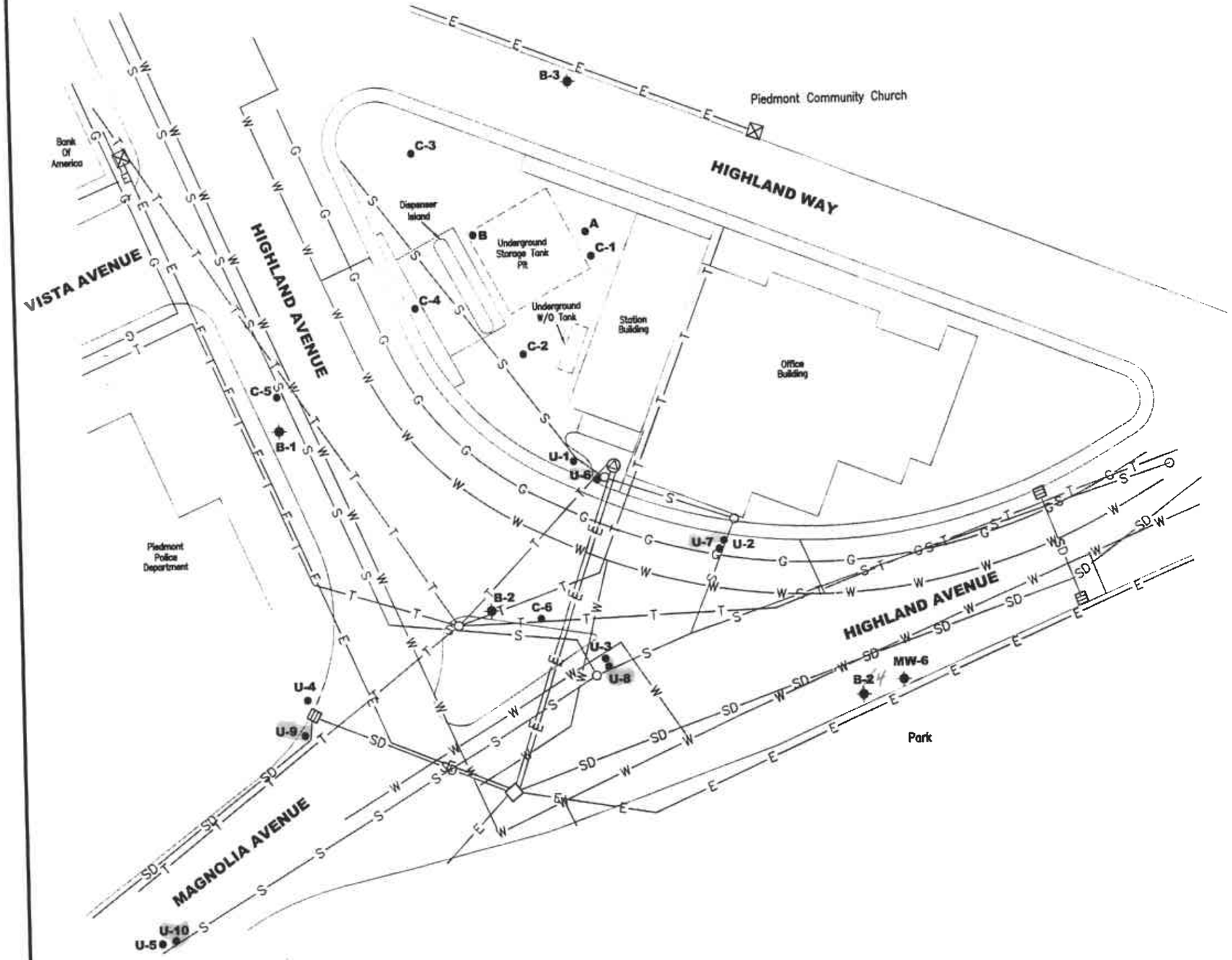
Former Chevron Station 9-0329

340 Highland Avenue

Piedmont, California

CAMBRIA

Vicinity Map



EXPLANATION

- Groundwater monitoring well
- Soil boring
- Storm drain
- Electrical transformer
- Manhole

UNDERGROUND UTILITIES

- S — Sanitary sewer
- SD — Storm drain
- W — Water
- G — Natural gas
- E — Electric
- T — Telephone

N

0 40

Scale in Feet

Source: Figure modified from drawing provided by Cambria.

FIGURE 2

UTILITY MAP
Chevron Service Station No. 9-0329
340 Highland Avenue
Piedmont, California

REVISED DATE

GETTLER - RYAN INC.
6747 Sierra Ct., Suite J
Dublin, CA 94568
(925) 551-7555

PROJECT NUMBER
DG90329C.4C01

REVIEWED BY

DATE
4/01

FILE NAME: P:\ENVRO\CHEVRON\9-0329\A01-9-0329.DWG | Layout Tab: Boring Plot 4-01

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

December 16, 1998

STID 1143

Mr. Philip Briggs
Chevron Products Company
P.O. Box 5004
San Ramon, CA 94583

RE: 340 Highland Avenue, Piedmont – Utility Conduit Investigation

Dear Mr. Briggs:

I have reviewed the November 30, 1998 Pacific Environmental Group, Inc. (PEG) *Addendum Work Plan for Groundwater Investigation* for the utility conduit investigation planned for the next phase of the assessment of the release at the subject site. The *revised* plan, submitted under Chevron cover dated December 11, 1998, amends the original PEG work plan dated September 9, 1998.

The *revised* PEG work plan has been accepted with the following change:

- Groundwater samples are to be collected from the completed boreholes using a device that will minimize the potential for the agitation of formation water and loss of volatile constituents in collected samples. For example, a "mini" bailer is such a device, while a peristaltic pump is not.

Please call me at (510) 567-6783 when fieldwork has been scheduled.

Sincerely,

Scott O. Seery, CHMM
Hazardous Materials Specialist

cc: Mee Ling Tung, Director, Environmental Health
Chuck Headlee, RWQCB
Robert Weston, ACDEH
Frank Hoffman, Hoffman Investment Co.
1760 Willow Rd., Hillsborough, CA 94010
Messrs. Manoucheri and Ghafari, 340 Highland Ave., Piedmont, CA 94611
James Perkins, Pacific Environmental Group, Inc.
2025 Gateway Pl., Ste. 440, San Jose, CA 95110-1006

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

September 14, 2000

STID 1143

Mr. Tom Bauhs
Chevron Products Company
P.O. Box 5004
San Ramon, CA 94583

Post-it™ brand fax transmittal memo 7671	# of pages ▸ 3
To Greg Gurss	From S. Seary
Co. GRI	Co. ACDEH
Dept.	Phone # 510/567-6783
Fax # 916/631-1317	Fax #

RE: 340 Highland Avenue, Piedmont – Preferential Pathway Investigation

Dear Mr. Bauhs:

This letter follows my attempts to contact you by telephone over the last week. As I mentioned in my messages to you, we are in receipt of the August 7, 2000 *Subsurface Investigation Report* submitted by Cambria Environmental Technology, Inc. (Cambria). This report documents work performed by Cambria in March 2000, the scope of which was to adhere to the specific tasks and objectives outlined in the *revised* Pacific Environmental Group, Inc. (PEG) workplan dated November 30, 1998, as submitted under Chevron cover dated December 11, 1998.

The revised PEG workplan, replacing an earlier PEG workplan dated September 9, 1998, was produced as a direct consequence of an October 1998 meeting between Chevron, PEG, and this agency during which the final scope of work was fine-tuned. As you may be aware, our attention was focused specifically on the shallow sanitary and storm sewer trenches located adjacent to the site, as they were long suspected as potential preferential pathways for the migration and dispersal of MtBE-impacted groundwater away from the site.

In order to determine if the sewer trenches did act as preferential pathways, the sole goal of the subject investigation was to advance sampling probes *into the sewer trenches* and collect groundwater samples if encountered there. In order to eliminate risks to the investigated utilities and field personnel both, each probe would be advanced by hand, a reasonable approach considering the very shallow depths the sample probes were expected to be pushed.

In practice, unfortunately, this workplan was not adhered to. Sample probes were not advanced into the sewer trenches as required, but, rather, beside them. Shallow bedrock and refusal were encountered in 3 of 5 sample locations at reported depths of between 2.5 and 3.0' below grade. Only two water samples were collected and neither came from the sewer trenches. Consequently, the issue of preferential migration via sewer trenches has still not been resolved, now nearly 2 years after workplan approval.

At this time, the responsible parties are directed to fully implement the scope of the cited PEG workplan within 60 days of the date of this letter.

Please call me at (510) 567-6783 should you have any questions or care to discuss this issue in more detail.

Sincerely,

Scott O. Seery, CHMM
Hazardous Materials Specialist

cc: Mike O'Connor, Alameda County District Attorney's Office
Chuck Headlee, RWQCB
Robert Weston, ACDEH
Jeff Orwig and Mir Ghafari, Piedmont Texaco, 340 Highland Ave.
Piedmont, CA 94611
Frank Hoffman, Hoffman Investment Co., 1760 Willow Rd.
Hillsborough, CA 94010
Fred Manchouri, 1065 Shuey Dr., Moraga, CA 94556
Jim Perkins, Cambria Env. Technology, Inc., 2694 Bishop Dr., Ste. 105
San Ramon, CA 94583

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-5554
FAX (510)782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT Former Chevron Service Station #9-0329, 340 Highland Ave. at Vista Ave., Piedmont, CA

CLIENT
Name Chevron Products Company
Address PO Box 6004 Phone (925) 842-8898
City San Ramon Zip 94583

APPLICANT
Name Gettler-Ryan Inc.
Address 3140 Gold Camp Dr. Suite 170 Fax (916) 631-1317
Phone (916) 631-1300
City Rancho Cordova Zip 95670

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	☐	General	☐
Water Supply	☐	Contamination	☒
Monitoring	☐	Well Destruction	☐

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other	☐

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Auger	☐
Cable	☐	Other	☒ - Hand Auger		

DRILLER'S NAME Gettler-Ryan Inc.
DRILLER'S LICENSE NO 220793
Exp 5-31-01

ALL PROJECTS
Drill Hole Diameter ____ in. Maximum
Casing Diameter ____ in. Depth ____ ft.
Surface Seal Depth ____ ft. Owner's Well Number ____

GEOTECHNICAL PROJECTS
Number of Borings 5 Maximum
Hole Diameter 2 in. Depth 5 ft.

ESTIMATED STARTING DATE March 5, 2001
ESTIMATED COMPLETION DATE March 5, 2001

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

APPLICANT'S SIGNATURE [signature] DATE 2/16/01
PLEASE PRINT NAME David Herzog

Rev.6-5-00

FOR OFFICE USE

PERMIT NUMBER W01-121
WELL NUMBER
APN

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL
1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date

B. WATER SUPPLY WELLS
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.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

(D.) GEOTECHNICAL
Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC
Fill hole above zone with concrete placed by tremie.

F. WELL DESTRUCTION
See attached requirements for destruction of shallow wells. Send a map of work site. A different permit application is required for wells deeper than 45 feet

(G.) SPECIAL CONDITIONS
NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.
→ Contact the City of Piedmont (Public Works) for an encroachment permit.

APPROVED [signature] DATE 2-21-01

APPLICATION FOR SPECIAL USE OF STREET/SIDEWALK OR PUBLIC FACILITY

CHECK APPROPRIATE BOX

☑ SPECIAL USE OF CITY STREET ☐ CLOSURE OF CITY STREET/SIDEWALK

☐ OTHER _____

STREETS OR SIDEWALKS

NAME & ADDRESS OF STREET: Intersection of Magnolia and Highland Avenues

DATE(S) OF USE OR CLOSURE: One day during week of 3/19-23/2001

HOURS OF USE OR CLOSURE: 8:45 - 2:30

REASON/EXPLANATION: Installation of 5 hand augered soil borings to collect groundwater samples from utility trenches as described in Pacific Environmental Group's Addendum Work Plan for Groundwater Investigation.

APPROXIMATE NUMBER OF PARTICIPANTS: 5 ASSEMBLY AREA: 340 Highland Avenue

PERSONAL DATA

NAME OF APPLICANT: Gettler-Ryan Inc.

ADDRESS: 3140 Gold Camp Dr. Suite 170, Rancho Cordova, CA 95670

INDIVIDUAL RESPONSIBLE: David Herzog

HOME PHONE _____ BUSINESS PHONE: (916) 631-1300

PAGER _____ CELL PHONE _____

IT IS UNDERSTOOD AND AGREED THAT CITY COUNCIL POLICY NO. 1 AND ANY SPECIAL CONDITIONS MUST BE COMPLIED WITH.

SIGNATURE

3/2/01

DATE

FOR OFFICE USE ONLY *$25.00 FEE PAID* MB

DEPARTMENT COMMENTS / RECOMMENDATIONS

FIRE: ______________________________

☐ RECOMMEND ☑ APPROVAL ☐ DENIAL

H. M. Eisner [signature]
FIRE CHIEF

POLICE: After review of plan, it is evident there would be a significant impact on local existing parking & disruption to business. A review with Public Works Director Eisenberg concurs with request that the job be performed on a different date (Saturday/Sun.)

☐ RECOMMEND ☐ APPROVAL ☑ DENIAL

Capt. [signature]
POLICE CHIEF

PUBLIC WORKS: Refer to Police Dept. comments.

☐ RECOMMEND ☐ APPROVAL ☑ DENIAL

[signature]
DIRECTOR OF PUBLIC WORKS

Police: Based on revised plan described in letter of 3-8-01, apparently all requests have been addressed. Citizens/employees should not be significantly impacted. Recommend.

Capt. [signature] 3/9/01

[signature] 3/9/01

[illegible]

GETTLER-RYAN INC.

FIELD METHODS AND PROCEDURES

Site Safety Plan

Field work performed by Gettler-Ryan Inc. (GR) is conducted in accordance with GR's Health and Safety Plan and the Site Safety Plan. GR personnel and subcontractors who perform work at the site are briefed on the contents of these plans prior to initiating site work. The GR geologist or engineer at the site when the work is performed acts as the Site Safety Officer. GR utilizes a photoionization detector (PID) to monitor ambient conditions as part of the Health and Safety Plan.

Collection of Soil Samples

Hand augered soil borings are drilled by a California-licensed well driller. A GR geologist is present to observe the drilling, collect soil samples for description, physical testing, and chemical analysis, and prepare a log of the exploratory soil boring. Samples of soil cuttings obtained with a hand auger for analysis are immediately placed in clean brass tubes. The brass sample tubes are then covered on both ends with teflon sheeting, capped, labeled, and place in a cooler with blue ice for preservation. A chain-of-custody form is initiated in the field and accompanies the selected soil samples to the analytical laboratory. The encountered soils are described using the Unified Soil Classification System (ASTM 2488-84) and the Munsell Soil Color Chart or GSA Rock Color Chart.

Samples are selected for chemical analysis based on:

a. depth relative to underground storage tanks and existing ground surface
b. depth relative to known or suspected groundwater
c. presence or absence of contaminant migration pathways
d. presence or absence of discoloration or staining
e. presence or absence of obvious gasoline hydrocarbon odors
f. presence or absence of organic vapors detected by headspace analysis

Sequoia Analytical

819 Striker Avenue, Su
Sacramento, CA 95
(916) 921-9
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April 05 , 2001

David Herzog
Gettler-Ryan - Rancho Cordova
3140 Gold Camp Dr., Ste. 170
Rancho Cordova, CA 95670
RE: Chevron 9-0329, Piedmont, CA / S103448

Enclosed are the results of analyses for samples received by the laboratory on 03/23/01. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ron Chew
Client Services Representative

CA ELAP Certificate Number 1624

Sequoia Analytical

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Gettler-Ryan - Rancho Cordova 3140 Gold Camp Dr., Ste. 170 Rancho Cordova CA, 95670	Project: Chevron 9-0329, Piedmont, CA Project Number: DG90329C.4C01 Project Manager: David Herzog	**Reported:** 04/05/01 13:02

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
U-6	S103448-01	Soil	03/21/01 14:30	03/23/01 16:26
U-8	S103448-02	Soil	03/21/01 10:55	03/23/01 16:26
U-10	S103448-03	Soil	03/21/01 12:34	03/23/01 16:26

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Gettler-Ryan - Rancho Cordova	Project: Chevron 9-0329, Piedmont, CA	
3140 Gold Camp Dr., Ste. 170	Project Number: DG90329C.4C01	**Reported:**
Rancho Cordova CA. 95670	Project Manager: David Herzog	04/05/01 13:02

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-6 (S103448-01) Soil Sampled: 03/21/01 14:30 Received: 03/23/01 16:26									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	1030374	03/26/01	03/26/01	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*101 %*	*60-140*		"	"	"	"	
U-8 (S103448-02) Soil Sampled: 03/21/01 10:55 Received: 03/23/01 16:26									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	1030374	03/26/01	03/26/01	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*104 %*	*60-140*		"	"	"	"	
U-10 (S103448-03) Soil Sampled: 03/21/01 12:34 Received: 03/23/01 16:26									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	1030374	03/26/01	03/26/01	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*103 %*	*60-140*		"	"	"	"	

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Gettler-Ryan - Rancho Cordova	Project: Chevron 9-0329, Piedmont, CA	
3140 Gold Camp Dr., Ste. 170	Project Number: DG90329C.4C01	**Reported:**
Rancho Cordova CA, 95670	Project Manager: David Herzog	04/05/01 13:02

Volatile Oxygenate Compounds by EPA Method 8260A

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-6 (S103448-01) Soil Sampled: 03/21/01 14:30 Received: 03/23/01 16:26									
Tert-butyl alcohol	ND	200	ug/l	1	1040047	04/03/01	04/04/01	EPA 8260A	
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.00	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.00	"	"	"	"	"	"	
Ethanol	ND	3000	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.00	"	"	"	"	"	"	
Ethylene dibromide	ND	2.00	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		*102 %*	*60-140*		"	"	"	"	
U-8 (S103448-02) Soil Sampled: 03/21/01 10:55 Received: 03/23/01 16:26									
Tert-butyl alcohol	ND	200	ug/l	1	1040047	04/03/01	04/04/01	EPA 8260A	
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.00	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.00	"	"	"	"	"	"	
Ethanol	ND	3000	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.00	"	"	"	"	"	"	
Ethylene dibromide	ND	2.00	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		*100 %*	*60-140*		"	"	"	"	
U-10 (S103448-03) Soil Sampled: 03/21/01 12:34 Received: 03/23/01 16:26									
Tert-butyl alcohol	ND	200	ug/l	1	1040047	04/03/01	04/04/01	EPA 8260A	
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.00	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.00	"	"	"	"	"	"	
Ethanol	ND	3000	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.00	"	"	"	"	"	"	
Ethylene dibromide	ND	2.00	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		*107 %*	*60-140*		"	"	"	"	

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Gettler-Ryan - Rancho Cordova	Project: Chevron 9-0329, Piedmont, CA	
3140 Gold Camp Dr., Ste. 170	Project Number: DG90329C.4C01	**Reported:**
Rancho Cordova CA, 95670	Project Manager: David Herzog	04/05/01 13:02

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1030374 - EPA 5030B (MeOH)										
Blank (1030374-BLK1)				Prepared & Analyzed: 03/26/01						
Purgeable Hydrocarbons	ND	1.00	mg/kg							
Benzene	ND	0.00500	"							
Toluene	ND	0.00500	"							
Ethylbenzene	ND	0.00500	"							
Xylenes (total)	ND	0.00500	"							
Methyl tert-butyl ether	ND	0.0500	"							
Surrogate: a,a,a-Trifluorotoluene	*0.189*		"	*0.200*		*94.5*	*60-140*			
LCS (1030374-BS1)				Prepared & Analyzed: 03/26/01						
Benzene	0.206	0.00500	mg/kg	0.200		103	70-130			
Toluene	0.217	0.00500	"	0.200		108	70-130			
Ethylbenzene	0.229	0.00500	"	0.200		114	70-130			
Xylenes (total)	0.600	0.00500	"	0.600		100	70-130			
Methyl tert-butyl ether	0.185	0.0500	"	0.200		92.5	70-130			
Surrogate: a,a,a-Trifluorotoluene	*0.216*		"	*0.200*		*108*	*60-140*			
Matrix Spike (1030374-MS1)		**Source: S103312-02**		Prepared & Analyzed: 03/26/01						
Benzene	0.170	0.00500	mg/kg	0.200	ND	85.0	60-140			
Toluene	0.181	0.00500	"	0.200	ND	90.5	60-140			
Ethylbenzene	0.192	0.00500	"	0.200	ND	96.0	60-140			
Xylenes (total)	0.495	0.00500	"	0.600	ND	82.5	60-140			
Methyl tert-butyl ether	0.147	0.0500	"	0.200	ND	73.5	60-140			
Surrogate: a,a,a-Trifluorotoluene	*0.198*		"	*0.200*		*99.0*	*60-140*			
Matrix Spike Dup (1030374-MSD1)		**Source: S103312-02**		Prepared & Analyzed: 03/26/01						
Benzene	0.173	0.00500	mg/kg	0.200	ND	86.5	60-140	1.75	25	
Toluene	0.185	0.00500	"	0.200	ND	92.5	60-140	2.19	25	
Ethylbenzene	0.196	0.00500	"	0.200	ND	98.0	60-140	2.06	25	
Xylenes (total)	0.504	0.00500	"	0.600	ND	84.0	60-140	1.80	25	
Methyl tert-butyl ether	0.152	0.0500	"	0.200	ND	76.0	60-140	3.34	25	
Surrogate: a,a,a-Trifluorotoluene	*0.213*		"	*0.200*		*106*	*60-140*			

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3140 Gold Camp Dr., Ste. 170	Project Number: DG90329C.4C01	**Reported:**
Rancho Cordova CA, 95670	Project Manager: David Herzog	04/05/01 13:02

Volatile Oxygenate Compounds by EPA Method 8260A - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1040047 - EPA 5030B [MeOH]										
Blank (1040047-BLK1)				Prepared: 04/03/01 Analyzed: 04/04/01						
Tert-butyl alcohol	ND	200	ug/l							
Methyl tert-butyl ether	ND	2.00	"							
Di-isopropyl ether	ND	2.00	"							
Ethyl tert-butyl ether	ND	2.00	"							
Tert-amyl methyl ether	ND	2.00	"							
Ethanol	ND	3000	"							
1,2-Dichloroethane	ND	2.00	"							
Ethylene dibromide	ND	2.00	"							
Surrogate: 1,2-DCA-d4	*56.8*		"	*50.0*		*114*	*60-140*			
LCS (1040047-BS1)				Prepared: 04/03/01 Analyzed: 04/04/01						
Methyl tert-butyl ether	46.0	2.00	ug/l	50.0		92.0	60-140			
Surrogate: 1,2-DCA-d4	*55.3*		"	*50.0*		*111*	*60-140*			
Matrix Spike (1040047-MS1)		**Source: S103419-02**		Prepared: 04/03/01 Analyzed: 04/04/01						
Methyl tert-butyl ether	48.4	2.00	ug/l	50.0	ND	96.8	60-140			
Surrogate: 1,2-DCA-d4	*50.6*		"	*50.0*		*101*	*60-140*			
Matrix Spike Dup (1040047-MSD1)		**Source: S103419-02**		Prepared: 04/03/01 Analyzed: 04/04/01						
Methyl tert-butyl ether	50.8	2.00	ug/l	50.0	ND	102	60-140	4.84	25	
Surrogate: 1,2-DCA-d4	*50.2*		"	*50.0*		*100*	*60-140*			

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3140 Gold Camp Dr., Ste. 170	Project Number: DG90329C.4C01	**Reported:**
Rancho Cordova CA, 95670	Project Manager: David Herzog	04/05/01 13:02

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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

Chain-of-Custody-Record

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

Chevron Facility Number 9-0329
Facility Address 340 Highland Ave, Piedmont, CA
Consultant Project Number DG90329C.4C01
Consultant Name Gettler-Ryan Inc.
Address 3140 Gold Camp Drive, Suite 170, Rancho Cordova
Project Contact (Name) David Herzog
(Phone) (916) 631-1300 (Fax Number) (916) 631-1317

Chevron Contact (Name) Tom Bauhs
(Phone) (925) 842-8898
Laboratory Name Sequoia Analytical
Laboratory Release Number
Samples Collected by (Name) David Herzog
Collection Date March 21, 2001
Signature [signature]

Analyses To Be Performed

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) MtBE	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)	Ethanol, TBA, MtBE DIPE, ETBE, TAME (8260)	1,2-DCA, EDB (8260)				Remarks
U-6		1	S	G	1430	None	Y	X								X	X		S	10	3148-01
U-8		1	S	G	1055	None	Y	X								X	X				-02
U-10		1	S	G	1234	None	Y	X								X	X				-03

[illegible]

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
[signature]	GR	3-23-01/1435	[signature]	Sequoia	3/23 1437	24 Hrs.
Relinquished By (Signature) [signature]	Organization Sequoia	Date/Time 3/23 1626	Received By (Signature) Monica Bregman	Organization Sequoia	Date/Time 3/23/01 1626	48 Hrs.
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time	5 Days
						(10 Days) (circled)
						As Contracted