

Rec'd 2/27/01



# GETTLER-RYAN INC.

## TRANSMITTAL

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

DATE: February 22, 2001  
PROJ #: 20-9339  
SUBJECT: Well Installation Report  
Former Chevron Service Station #20-9339  
5940 College Avenue  
Oakland, California

FROM:

Stephen J Carter  
Senior Geologist  
Gettler-Ryan Inc.  
3140 Gold Camp Drive  
Suite 170  
Rancho Cordova, CA 95670

WE ARE SENDING YOU:

COPIES	DATED	DESCRIPTION
1	February 20, 2001	Well Installation Report

THESE ARE TRANSMITTED as checked below:

- For review and comment
- As requested
- For approval
- For Your Files
- Approved as submitted
- Approved as noted
- Return for corrections
- Resubmit \_ copies for approval
- Submit \_ copies for distribution
- Return \_ corrected prints

COMMENTS:

Enclosed is a copy of the referenced Report. If you have any questions, please call me at (916) 631-1314.

Cc: Eva Chu, Alameda County Environmental Health Services; Donald Sweet, Property owner; Jim Brownell, Delta Environmental Inc..



3164 Gold Camp Drive  
Suite 200  
Rancho Cordova, California 95670-6021  
916/638-2085  
FAX: 916/638-8385

## WELL INSTALLATION REPORT

at

Former Chevron Service Station #20-9339  
5940 College Avenue  
Oakland, California

GR Report No. 346521.02  
Delta Project No. DG29/339

### Prepared for:

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

### Prepared by:

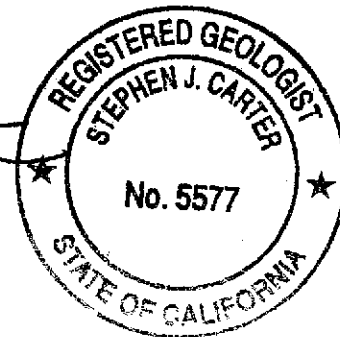
**DELTA ENVIRONMENTAL CONSULTANTS INC.**  
Network Associate **GETTLER - RYAN INC.**  
6747 Sierra Court, Suite J  
Dublin, California 94568

A handwritten signature in black ink that reads "Andrew Smith".

Andrew Smith  
Staff Geologist

A handwritten signature in black ink that reads "Stephen J. Carter".

Stephen J. Carter  
Senior Geologist  
R.G. 5577



February 20, 2001

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## WELL INSTALLATION REPORT

at

Former Chevron Service Station #20-9339  
5940 College Avenue  
Oakland, California

GR Report No. 346521.02  
Delta Project No. DG29/339

### INTRODUCTION

This report summarizes the results of a soil and groundwater investigation performed at former Chevron Station #20-9339, located at 5940 College Avenue in Oakland, California. The work was performed by Delta Environmental Consultants Inc. Network Associate Gettler-Ryan Inc. (GR) at the request of Chevron Products Company (Chevron) to evaluate if soil and groundwater downgradient of the subject site have been impacted by petroleum hydrocarbons. The scope of work included: obtaining the required monitoring well and encroachment permits; preparing a site safety plan; installing two monitoring wells; surveying the newly installed wells; developing and sampling the new wells; analyzing groundwater and selected soil samples; arranging for disposal of waste material; and preparing a report documenting the work. This work was proposed in GR Report No. 346521.01-1, *Work Plan For Well Installation*, dated March 1, 2000 and approved by the Alameda County Environmental Protection Division (ACEPD) in a letter dated March 6, 2000.

### SITE DESCRIPTION

The subject site is located on the southeast corner of the intersection of College Avenue and Harwood Street in Oakland, California (Figure 1). Currently, the site is occupied by an office building where several businesses operate. Based on information supplied by Chevron, it appears a Chevron service station occupied the site from 1938 until 1968. Former site facilities consisted of four underground storage tanks (USTs), one dispenser island, an office building and a separate auto service building. Locations of pertinent site features are shown on Figure 2.

### PREVIOUS ENVIRONMENTAL WORK

On August 3 and September 1, 1999, Piers Environmental Services (PES) advanced four soil borings (SB-1 through SB-4) in the vicinity of the suspected former UST pit. Groundwater was encountered at approximately 5 feet below ground surface (bgs). The boring locations are shown on Figure 2. A grab groundwater sample was collected from each boring. Total Petroleum Hydrocarbons as gasoline, or TPHg (up to 190,00 parts per billion, or ppb) and benzene (up to 890 ppb) were detected in borings SB-1, SB-3 and SB-4. Methyl tertiary-butyl-ether, or MtBE (up to 650 ppb) was detected in SB-1 and SB-3 by EPA Method 8020. The sample from SB-4 was analyzed for fuel oxygenates (MtBE, tertiary-butyl alcohol, di-isopropyl ether, tertiary-amyl methyl ether and ethyl-tert-butyl ether) by EPA Method 8240. None of these compounds were detected. Petroleum hydrocarbons were not detected in boring SB-2.

## **WELL INSTALLATION REPORT**

Former Chevron Service Station #20-9339  
5940 College Avenue  
Oakland, California  
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### **FIELD ACTIVITIES**

Field work was conducted in accordance with GR's Field Methods and Procedures (Appendix A) and the Site Safety Plan dated December 5, 2000. Drilling permit #WOO-868 was obtained from the Alameda Public Works Agency and a Excavation Permit #X000214 was obtained for the City of Oakland. Underground Service Alert (USA) was notified prior to drilling at the site. Copies of the permits are included in Appendix B.

#### **Well Installation**

On December 6, 2000 a GR geologist observed Cascade Drilling Inc. (C57 #717510) installing two monitoring wells (MW-1 and MW-2) in the locations shown on Figure 2. A hand auger was used for the first five feet of each borehole in order to clear the locations of any underground utilities. A truck-mounted rig using 8-inch-diameter hollow stem augers advanced the boreholes to 21 feet bgs. A GR geologist prepared a log of each boring and screened soil samples in the field for the presence of volatile organic compounds. The screening data are presented on the boring logs (Appendix B).

The wells were constructed of 2-inch-diameter polyvinyl chloride (PVC) to a depth of 20 feet bgs. The bottom 15 feet of each well was screened with 0.02-inch machine-slotted casing. Lonestar #3 sand was placed in the annular space from the bottom of the boring to approximately 1 foot above the well screen. The wells were then sealed with hydrated bentonite followed by neat cement. Water resistant boxes installed in concrete were placed over the wells. Expandable well caps secured with locks were placed in the tops of the well casings. Well construction details are shown on the boring logs in Appendix B.

Drill cuttings were placed in 55-gallon drums and removed at the end of the day by Integrated Wastestream Management (IWM). Soil was transported to the Republic Landfill Services in Livermore California for disposal.

#### **Well Monitoring, Development and Sampling**

The wells were developed and sampled on January 3, 2001. Depth-to-water was measured and each well was checked for the presence of separate phase hydrocarbons (SPH). SPH were not found in the wells. Neither of the newly installed wells dewatered during development, and each well yielded a minimum of 10 casing volumes. Following development, groundwater samples were collected from each of the wells. Purge water generated during development and sampling procedures was transported by IWM to McKittrick for disposal. Well development procedures are included in Appendix A. Copies of the well development forms are included in Appendix C. Monitoring data are summarized in Table 2.

## **WELL INSTALLATION REPORT**

Former Chevron Service Station #20-9339  
5940 College Avenue  
Oakland, California  
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### **Wellhead Survey**

Following installation of the wells, the elevations were surveyed by Virgil Chavez Land Surveying of Vallejo, CA (license #6323). Top of casing and vault box elevations were measured relative to Mean Sea Level (MSL), and the horizontal locations of the wells were measured. The surveyor's report is included in Appendix D. Well elevations are summarized in Table 2.

### **RESULTS OF THE SUBSURFACE INVESTIGATION**

Soil encountered during this investigation consisted of clay and silty sand to approximately 15 to 19 feet bgs. This material contained brick fragments and appeared to be fill material. A silty sand stratum was encountered at the bottom of each boring. Groundwater was encountered at 10 feet bgs at MW-2, but at MW-1 groundwater was not encountered. Based on the groundwater monitoring data collected on January 3, 2001, the water table beneath the site is at approximately 12.5 feet bgs. Detailed descriptions of the soil encountered during drilling are presented on the boring logs in Appendix B.

### **CHEMICAL ANALYTICAL RESULTS**

All samples were analyzed by Sequoia Analytical in Walnut Creek, California (ELAP #1271). Soil samples from the well borings were analyzed for TPHg, benzene, toluene, ethylbenzene and xylenes (BTEX) and MtBE by DHS LUFT. Stockpile samples were analyzed for TPHg, BTEX and total lead by EPA Method 6010. Groundwater samples were analyzed for TPHg, BTEX, MtBE and Ethanol, TBA, DIPE, ETBE, TAME and 1,2-DCA by EPA Method 8260. Copies of the laboratory analytical reports and chains-of-custody are included in Appendix E.

#### **Soil Analytical Results**

Petroleum Hydrocarbons were not detected in either of the soil samples collected from well borings MW-1. The sample from well boring MW-2 at 4.5 feet bgs did not contain detectable concentrations of TPHg, benzene or MtBE, but did contain toluene (0.0062 parts per million or ppm), ethylbenzene (0.0054 ppm), and xylenes (0.021 ppm). The disposal characterization samples from the drill cuttings contained TPHg, BTEX and lead. Concentrations were acceptable to the disposal facility. These data are summarized in Table 1.

#### **Groundwater Analytical Results**

Petroleum hydrocarbons were detected in both wells. The samples from well MW-1 contained 930 ppb of an unidentified hydrocarbon in the C6-C12 range, 2.9 ppb of benzene and 14 ppb of MtBE by EPA Method 8020. The laboratory did not confirm the presence of MtBE or any of the other fuel additives by EPA Method 8260. Well MW-2 contained 2,100 ppb of TPHg, 110 ppb of benzene and 83 ppb of MtBE by EPA Method 8020. MTBE was confirmed in well MW-2 by EPA Method 8260 at a concentration of 2.2 ppb, but none of the other fuel additive compounds were detected. These data are summarized in Tables 2 and 3.

## WELL INSTALLATION REPORT

Former Chevron Service Station #20-9339

5940 College Avenue

Oakland, California

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### **Waste Disposal**

Drill cuttings were removed from the site on December 6, 2000, by IWM. The drill cuttings were transported to the Republic landfill in Livermore California for disposal. Waste water generated during drilling and well development was transported by IWM to Mckittrick.

### **CONCLUSIONS**

The purpose of this investigation was to evaluate if soil and groundwater downgradient of the subject site have been impacted by petroleum hydrocarbons. Hydrocarbon impact to soil in the vicinity of the well MW-2, adjacent to the western property boundary is negligible. Hydrocarbon impact was not identified across College Avenue in the vicinity of well MW-1. Additional assessment of soil conditions is not warranted.

Dissolved gasoline hydrocarbons were detected in both wells. A very low concentration of MtBE (2.2 ppb) was detected in well MW-2, adjacent to the former UST complex. This station closed in the late 1960s, prior to introduction of MtBE into gasoline in California. It is unlikely that the MtBE came from the former Chevron facility.

The dissolved hydrocarbon plume remains undefined. Additional monitoring and sampling is required to further assess both groundwater flow direction and plume configuration. GR recommends that the quarterly monitoring and sampling be implemented at this site, and that joint monitoring be implemented with the adjacent Sheaff's Garage. Groundwater samples from the Chevron wells should continue to be analyzed for TPHg, BTEX and MtBE (hits confirmed by EPA Method 8260). In addition, samples should also be analyzed for sulfate (SO<sub>4</sub><sup>-</sup>), ferrous iron (Fe<sup>2+</sup>) alkalinity, dissolved oxygen (DO) and oxidation-reduction potential (ORP) to evaluate if natural biodegradation is occurring.

**Table 1. Soil Chemical Analytical Data –Former Chevron Service Station #20-9339, 5940 College Ave. Oakland CA**

Sample ID	Depth (Feet)	Date (Sampled)	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Xylenes (ppm)	MtBE (ppm)	Total Lead (ppm)
<b>Well Boring MW-1</b>									
MW-1-4.5	4.5	12-06-00	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.05	NA
MW-1-9.5	9.5	12-06-00	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.05	NA
<b>Well Boring MW-2</b>									
MW-2-4.5	4.5	12-06-00	<1.0	< 0.0050	0.0062	0.0054	0.021	<0.050	NA
<b>Drill Cuttings</b>									
Comp-1-(A+B)	NA	12-06-00	72	< 0.25	< 0.25	0.31	0.77	NA	6.4
Comp-2-(A+B)	NA	12-06-00	9.1	0.0061	0.022	0.044	0.10	NA	5.0

**EXPLANATION:**

TPHg = Total Petroleum Hydrocarbons as Gas  
 MtBE = Methyl tert-Butyl Ether  
 BTEX = Benzene, toluene, ethylbenzene, xylenes  
 ppm = parts per million  
 NA = Not Analyzed

**ANALYTICAL METHODS:**

TPHg, BTEX MtBE by DHS LUFT  
 Total Lead = EPA Method 6010

**ANALYTICAL LABORATORY:**

Sequoia Analytical (ELAP #1271)



**Table 2. Groundwater Chemical Analytical Data - Former Chevron Service Station #20-9339, 5940 College Ave. Oakland CA**

Well ID	Date	Total Well Depth (ft.)	Well <sup>1</sup> Elev. (ft. MSL)	Depth to Water (ft.)	Floating Product (ft.)	Ground Water Elevation (ft. MSL)	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)
MW-1	01/03/01	20.10	196.91	12.75	0.0	184.16	930 <sup>2</sup>	2.9	6.9	2.7	7.6	14
MW-2	01/03/01	20.06	197.35	12.48	0.0	184.87	2100 <sup>3</sup>	110	11	63	25	83
Trip Blank	01/03/01	NA	NA	NA	NA	NA	<50	<0.50	<0.50	<0.50	<0.50	<2.5

**Explanation**

TPHg = Total Petroleum Hydrocarbons as gasoline

MTBE = Methyl tertiary butyl ether

ppb = Parts per billion

NA = Not applicable

ft. = feet

ft. MSL = feet relative to Mean Sea Level.

**Analytical Methods**

TPHg , BTEX , MtBE by 8020

**Analytical Laboratory**

Sequoia Analytical (ELAP #1271)

<sup>1</sup> Well elevations reported as top of casing (TOC) surveyed by Virgil Chavez, Licensed California Land Surveyor No. 6323.

<sup>2</sup> Chromatogram pattern indicates unidentified hydrocarbons C6-C12

<sup>3</sup> Chromatogram pattern indicates gasoline C6-C12

**Table 3. Groundwater Monitoring Data and Chemical Analytical Data - Former Chevron Service Station #20-9339, 5940 College Ave. Oakland CA**

Sample No.	Sample Date	Ethanol (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2 DCA (ppb)
MW-1	01/03/01	<500	<50	<2.0	<2.0	<2.0	<2.0	<2.0
MW-2	01/03/01	<500	<50	2.2	<2.0	<2.0	<2.0	<2.0

**Explanation**

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  
ppb = Parts per billion

**Analytical Methods**

Fuel oxygenates by EPA Method 8260

**Analytical Laboratory**

Sequoia Analytical (ELAP #1271)



**Gettler - Ryan Inc.**

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

**VICINITY MAP**

Former Chevron Service Station No. 3-0021  
5940 College Avenue  
Oakland, California

FIGURE

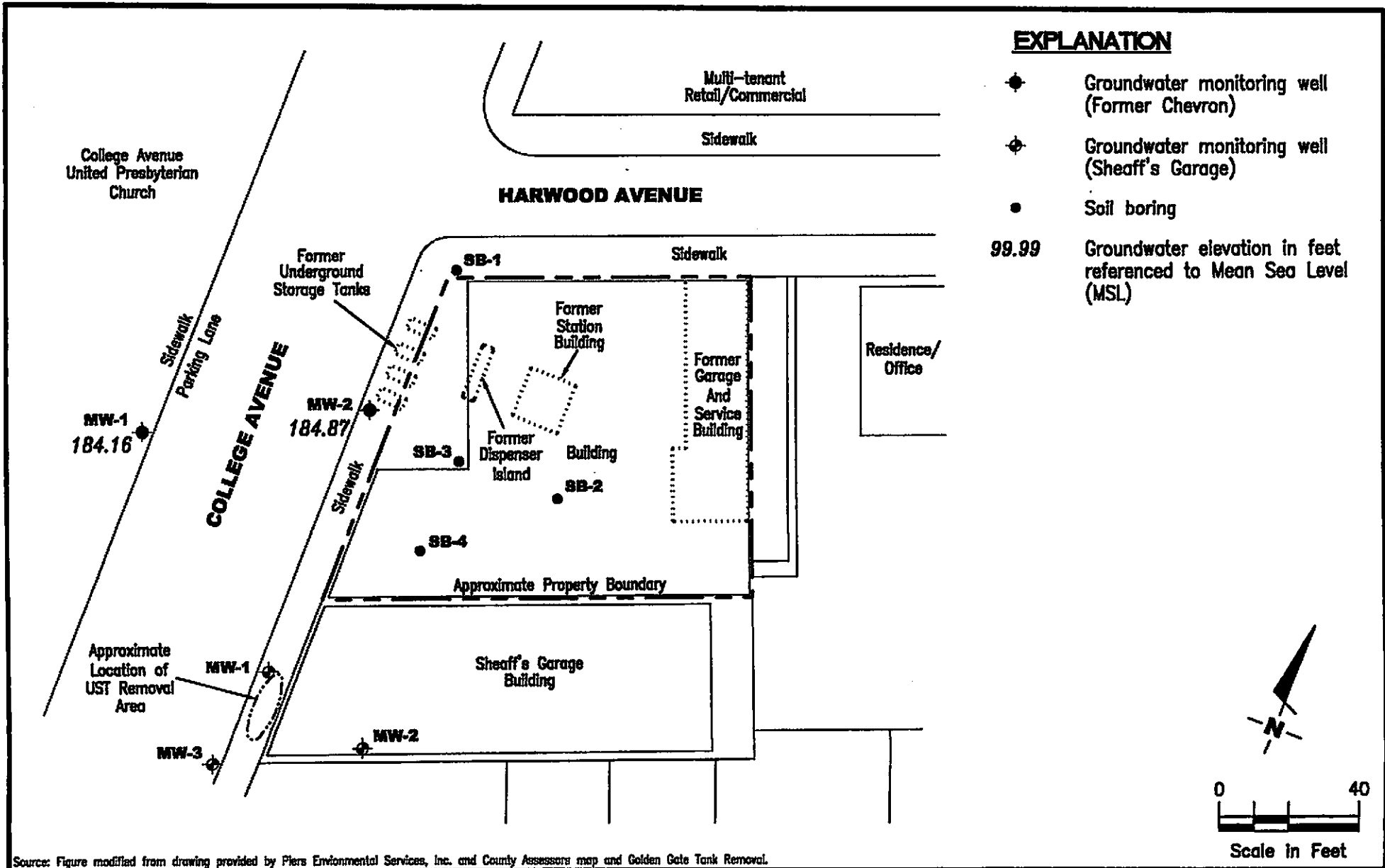
**1**

JOB NUMBER  
346521.01

REVIEWED BY

DATE  
02/00

REVISED DATE



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

**GROUNDWATER ELEVATION MAP**  
 Former Chevron Service Station No. 20-9339  
 5940 College Avenue  
 Oakland, California

FIGURE  
**2**

PROJECT NUMBER  
**346521**

REVIEWED BY

DATE  
**January 3, 2001**

REVISED DATE

## **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**

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. Soil samples are collected from the soil boring with a split-barrel sampling device fitted with 2-inch-diameter, clean brass tube or stainless steel liners. The sampling device is driven approximately 18 inches with a 140-pound hammer falling 30 inches. The number of blows required to advance the sampler each successive 6 inches is recorded on the boring log. The encountered soils are described using the Unified Soil Classification System (ASTM 2488-84) and the Munsell Soil Color Chart.

After removal from the sampling device, soil samples for chemical analysis are covered on both ends with teflon sheeting or aluminum foil, capped, labeled, and placed 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. Samples are selected for chemical analysis based in part on:

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

#### **Field Screening of Soil Samples**

A PID is used to perform head-space analysis in the field for the presence of organic vapors from the soil sample. This test procedure involves removing some soil from one of the sample tubes not retained for chemical analysis and immediately covering the end of the tube with a plastic cap. The PID probe is inserted into the headspace inside the tube through a hole in the plastic cap. Head-space screening results are recorded on the boring log. Head-space screening procedures are performed and results recorded as reconnaissance data. GR does not consider field screening techniques to be verification of the presence or absence of hydrocarbons.

#### **Construction of Monitoring Wells**

Monitoring wells are constructed in the exploratory soil borings with Schedule 40 polyvinyl chloride (PVC) casing. All joints are thread-joined; no glues, cements, or solvents are used in well construction. The screened interval is constructed of machine-slotted PVC well screen which generally extends from the total well depth to a point above the groundwater. An appropriately-sized sorted sand is placed in the annular space adjacent to the entire screened interval. A bentonite transition seal is placed in the annular space above the sand, and the remaining annular space is sealed with neat cement or cement grout.

Wellheads are protected with water-resistant traffic-rated vault boxes placed flush with the ground surface. The top of the well casing is sealed with a locking waterproof cap. A lock is placed on the well cap to prevent vandalism and unintentional introduction of materials into the well.

#### **Measurement of Water Levels**

The top of the newly-installed well casing is surveyed by a California-licensed Land Surveyor to mean sea level (MSL). Depth-to-groundwater in the well is measured from the top of the well casing with an electronic water-level indicator. Depth-to-groundwater is measured to the nearest 0.01-foot, and referenced to MSL.

#### **Well Development and Sampling**

The purpose of well development is to improve hydraulic communication between the well and the surrounding aquifer. Prior to development, each well is monitored for the presence of floating product and the depth-to-water is recorded. Wells are then developed by alternately surging the well with a vented surge block, then purging the well with a pump or bailer to remove accumulated sediments and draw groundwater into the well. Development continues until the groundwater parameters (temperature, pH, and conductivity) have stabilized.

#### **Storing and Sampling of Drill Cuttings**

Drill cuttings are stockpiled on and covered with plastic sheeting and samples are collected and analyzed for disposal classification on the basis of one composite sample per 100 cubic yards of soil. Stockpile samples are composed of four discrete soil samples, each collected from an arbitrary location on the stockpile. The four discrete samples are then composited in the laboratory prior to analysis.

Each discrete stockpile sample is collected by removing the upper 3 to 6 inches of soil, and then driving the stainless steel or brass sample tube into the stockpiled material with a hand, mallet, or drive sampler. The sample tubes are then covered on both ends with teflon sheeting or aluminum foil, capped, labeled, and placed 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. Stockpiled soils are covered with plastic sheeting after completion of sampling.

**APPENDIX B**

**MONITORING WELL PERMIT, BORING LOGS  
AND WELL COMPLETION REPORT**



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. MAYWARD CA. 94544-1395
PHONE (510) 678-4454 MARLON MAGALIANES/FRANK CODD (510) 679-5783
FAX (510)782-1339

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 5940 College Ave
Oakland CA

PERMIT NUMBER WCO-868
WELL NUMBER
APN

CLIENT Name Chevron Products Co.
Address PO Box 6007 Phone (916) 892-8898
City San Ramon CA Zip 94583

APPLICANT Name Andrew Smith, Gettler Ryan
INC Phone (916) 541-7888
Address 6747 Sierra Ct Phone (916) 541-7444 EXT 127
City Suite J Dublin CA Zip

TYPE OF PROJECT
W Well 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:
Med Rotary Air Rotary Auger
Cable Other

DRILLER'S NAME Cascade Drilling

DRILLER'S LICENSE NO. C57717510
exp. 1-31-02

WELL PROJECTS
Drill Hole Diameter 8" in. Maximum Depth 20 ft. MW-1
Casing Diameter 2" in.
Surface Seal Depth 5 ft. Owner's Well Number

GEOTECHNICAL PROJECTS
Number of Borings Maximum Depth
Hole Diameter in.

ESTIMATED STARTING DATE 12/6/00
ESTIMATED COMPLETION DATE 12/16/00

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

APPLICANT'S SIGNATURE Andrew Smith DATE 11/28/00

PLEASE PRINT NAME Andrew Smith Rev. 5-13-00

PERMIT CONDITIONS
Cited 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 work the 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 and mixture. Upper two-thirds feet replaced in kind or with compacted cuttings.

- E. CATHODIC
Fill hole around zone with concrete placed by tremie.

- F. WELL DESTRUCTION
Send a map of work site. A separate permit is required for wells deeper than 43 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.

Surface Seal depth min @ 5 ft. well cap shall be a locking type. 11/28/00

APPROVED [Signature] DATE 11-28-00



# EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL  
ENGINEERING

PAGE 2 of 2

PERMIT NUMBER <b>X000 2214</b>		SITE ADDRESS/LOCATION <b>5940 COLLEGE AV</b>
APPROX. START DATE	APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number)
CONTRACTOR'S LICENSE # AND CLASS		CITY BUSINESS TAX #

ATTENTION:

1) State law requires that the contractor/owner call *Underground Service Alert (USA)* two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1 (800) 642-2444. UNDERGROUND SERVICE ALERT (USA) #: 360021

2) **48 hours prior to starting work, YOU MUST CALL (510) 238-3651 TO SCHEDULE AN INSPECTION.**

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than \$500):

I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).

I am exempt under Sec. \_\_\_\_\_, B&PC for this reason \_\_\_\_\_

WORKER'S COMPENSATION

I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).

Policy # \_\_\_\_\_ Company Name \_\_\_\_\_

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars (\$100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

*Barbara A. [Signature]* 11-01-80

Signature of Permittee  Agent for  Contractor  Owner Date

DATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
ISSUED BY <i>[Signature]</i>		DATE ISSUED <b>11-01-80</b>	

lic # 220793

# Gettler-Ryan, Inc.

# Log of Boring MW-1

PROJECT: Former Chevron Service Station No. 20-9339	LOCATION: 5940 College Avenue, Oakland, California
GR PROJECT NO.: 346521.02	CASING ELEVATION: 196.51
DATE STARTED: 12/06/00	WL (ft. bgs):      DATE:      TIME:
DATE FINISHED: 12/06/00	WL (ft. bgs):      DATE:      TIME:
DRILLING METHOD: 8 in. Hollow Stem Auger	TOTAL DEPTH: 21 feet
DRILLING COMPANY: Cascade Drilling	GEOLOGIST: Andrew Smith

DEPTH (feet)	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	WELL DIAGRAM
0					Concrete	CL	Concrete. CLAY (CL) - reddish brown (5YR 4/4), dry, very stiff; 85% clay, 10% silt, 5% angular fine gravel.	
4	6.1	17	MW-1-4.5			CL	At 5 feet color changes to very dark gray (7.5YR 3/1), becomes moist; 60% clay, 10% silt.	
8	5.5	34	MW-1-9.5			CL	At 10 feet becomes hard; includes some brick fragments.	
12	10.6	32	MW-1-14.5			CL		
16						SM	SILTY SAND (SM) - brown (10YR 5/3), moist, dense; 75% fine sand, 25% silt.	
20	24.0	>100	MW-1-19.5				At 20 feet color changes to light yellowish brown (10YR 6/4), becomes wet, very dense. Bottom of boring at 21 feet bgs. (* = converted to equivalent standard penetration blows/foot.)	
24								
28								

# Gettler-Ryan, Inc.

# Log of Boring MW-2

PROJECT: <i>Former Chevron Service Station No. 20-9339</i>	LOCATION: <i>5940 College Avenue, Oakland, California</i>
GR PROJECT NO.: <i>346521.02</i>	CASING ELEVATION: <i>197.35</i>
DATE STARTED: <i>12/06/00</i>	WL (ft. bgs): <i>10</i> DATE: <i>12/06/00</i> TIME: <i>14:26</i>
DATE FINISHED: <i>12/06/00</i>	WL (ft. bgs):    DATE:    TIME:
DRILLING METHOD: <i>8 in. Hollow Stem Auger</i>	TOTAL DEPTH: <i>21 feet</i>
DRILLING COMPANY: <i>Cascade Drilling</i>	GEOLOGIST: <i>Andrew Smith</i>

DEPTH (feet)	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	WELL DIAGRAM
4	1.4	42	MW-2-4.5			SM	Concrete. SILTY SAND WITH GRAVEL (SM) - brown (7.5YR 4/3), dry, soft; 65% fine sand, 20% angular gravel, 15% silt.  At 5 feet includes brick fragments.  At 8 feet becomes wet, dense.	<p>2" blank schedule 40 PVC</p> <p>2" machine slotted PVC (0.010 inch)</p> <p>neat cement</p> <p>bentonite</p> <p>#3 Lanester sand</p> <p>CBP</p>
8	3.6	37	MW-2-8.5			CL	CLAY (CL) - dark olive green (5Y 3/2), moist, hard; 90% clay, 10% silt.	
12	4.2	42	MW-2-14.5			SM	At 5 feet color changes to dark grayish brown (2.5Y 4/2).	
16								
20	8.9	42	MW-2-19.5			SM	SILTY SAND (SM) - yellowish brown (10YR 5/6), moist, dense; 85% fine sand, 15% silt.	
24							Bottom of boring at 21 feet bgs.  (* = converted to equivalent standard penetration blows/foot.)	
28								

**CONFIDENTIAL**

STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**

**APPENDIX C**  
**WELL DEVELOPMENT FORMS**



# GETTLER-RYAN INC.

## DAILY SAMPLING REPORT

Site Location: Former CHEVRON # 209339

Job # 346521.02

5940 COLLEGE AVE.

OAKLAND, CA

Date: 1/3/01

### DESCRIPTION OF WORK PERFORMED:

Monitor	<u>2</u>
Purge	<u>2</u>
Sample	<u>2</u>
Develop	<u>2</u>

Total # of Wells @ site: 2

Water levels only: \_\_\_\_\_

Monitored/Sampled: 2/2

Bailed Product: 0

### PURGING EQUIPMENT:

Disposal bailer	_____
Teflon bailer	_____
3/8" stack pumps	<u>✓</u>
1" double diaphragm	_____
Grundfo's	_____

### OTHER EQUIPMENT:

Gloves	<u>4</u>
Bailer cord	<u>~40'</u>
Well plug size	_____ #

### CHECK LIST:

Transfer Purge Water To: \_\_\_\_\_

Drums on site: \_\_\_\_\_

Holding tank: ✓

Total Purge Water (gals): 25

Sampling Truck: MP4

Purge water trailer: \_\_\_\_\_

Traffic Control: \_\_\_\_\_

Arrow board/road signs/cones ○

### SAMPLING EQUIPMENT:

Teflon bailer \_\_\_\_\_

Disposable bailer 2

Grab sample \_\_\_\_\_

Pressure bailer \_\_\_\_\_

### SPECIAL EQUIPMENT:

Turbidity Meter \_\_\_\_\_

D O Meter \_\_\_\_\_

Re-Dox Meter \_\_\_\_\_

Alkalinity test \_\_\_\_\_

COMMENTS: 2 NEW CHEVRON LOCKS INSTALLED.

Sampled by: HAIG KEVORK

Assistant: N/A

Time Billed: 3.75 Hrs



MONITORING WELL  
OBSERVATION SUMMARY SHEET

CLIENT FACILITY #: FORMER CHEVRON # 209339 G-R JOB #: 346521.02  
LOCATION: 5940 COLLEGE AVE. DATE: 1/3/01  
CITY: OAKLAND, CA TIME: \_\_\_\_\_

Well ID	Total Depth	Depth to Water	Product Thickness	TOB or TOC	Comments VOLUME PURGED
<u>MW-1</u>	<u>20.10</u>	<u>12.75</u>	<u>Ø</u>	<u>TOC</u>	<u>12 gal.</u>
<u>MW-2</u>	<u>20.06</u>	<u>12.48</u>	<u>Ø</u>	<u>TOC</u>	<u>13</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Comments: \_\_\_\_\_  
\_\_\_\_\_

Sampler: HAIG KIEWORK Assistant: N/A

**WELL MONITORING/DEVELOPMENT  
FIELD DATA SHEET**

Client/ Facility: FOAMER CHEVRON #209339  
 Address: 5940 COLLEGE AVE  
 City: OAKLAND, CA

Job#: 346521.02  
 Date: 1/3/01  
 Sampler: HAIG K.

Well ID: MW-1 Well Condition: GOOD  
 Well Diameter: 2 in. Hydrocarbon Thickness: Ø Ft. Amount Bailed (product/water): Ø (gal.)  
 Total Depth: 20.10 ft. Volume 2" = 0.17 3" = 0.38 4" = 0.66  
 Depth to Water: 12.75 ft. Factor (VF) 6" = 1.50 12" = 5.80

$1.35 \times VF_{0.17} = 1.2 \times 10$  (case volume) = Estimated Purge Volume: 12 (gal.)

Purge Equipment: Disposable Bailer  
 Stack  
 Suction  
 Grundfos  
 Other: \_\_\_\_\_

Sampling Equipment: Disposable Bailer  
 Bailer  
 Pressure Bailer  
 Grab Sample  
 Other: \_\_\_\_\_

Starting Time: 12:58 Weather Conditions: SUNNY  
 Sampling Time: 13:40 Water Color: CLEAR Odor: \_\_\_\_\_  
 Purging Flow Rate: ~314 gpm. Sediment Description: SOME SILT  
 Did well de-water? NO If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu$ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
13:00	1.5	7.52	1369	70.6			
13:05	5	7.43	1328	70.2			
13:09	8	7.38	1275	69.5			
13:12	10	7.31	1263	69.3			
13:16	12	7.35	1281	68.8			

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	5 VOA	YES	HCL	SEQUOIA	G/BTEX/MTBE 8020 60XYS 1/2 DCA BY 8260

COMMENTS: \_\_\_\_\_



**WELL MONITORING/DEVELOPMENT  
FIELD DATA SHEET**

Client/ Facility: FORMER CHEVRON # 209339 Job#: 346521.02  
 Address: 5940 COLLEGE AVE. Date: 1/3/01  
 City: OAKLAND, CA Sampler: HAIG K.

Well ID: MW-2 Well Condition: GOOD  
 Well Diameter: 2 in. Hydrocarbon Thickness: Ø Ft. Amount Bailed (product/water): Ø (gal.)  
 Total Depth: 20.06 ft. Volume 2" = 0.17 3" = 0.38 4" = 0.66  
 Depth to Water: 12.48 ft. Factor (VF) 6" = 1.50 12" = 5.80

1.58 x VF 0.17 = 1.29 x 2 (case volume) = Estimated Purge Volume: 13 (gal.)

Purge Equipment: Disposable Bailer  
 Stack  
 Suction  
 Grundfos  
 Other: \_\_\_\_\_

Sampling Equipment:  Disposable Bailer  
 Bailer  
 Pressure Bailer  
 Grab Sample  
 Other: \_\_\_\_\_

Starting Time: 13:56 Weather Conditions: SUNNY  
 Sampling Time: 14:30 Water Color: CLEAR Odor: \_\_\_\_\_  
 Purging Flow Rate: ~314 gpm. Sediment Description: SOME SILT  
 Did well de-water? NO If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu$ mhos/cm	Temperature	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>13:58</u>	<u>1.5</u>	<u>7.38</u>	<u>1714</u>	<u>72.8</u>	_____	_____	_____
<u>14:04</u>	<u>5</u>	<u>7.29</u>	<u>1651</u>	<u>72.0</u>	_____	_____	_____
<u>14:08</u>	<u>8</u>	<u>7.27</u>	<u>1623</u>	<u>71.8</u>	_____	_____	_____
<u>14:11</u>	<u>10</u>	<u>7.26</u>	<u>1610</u>	<u>71.3</u>	_____	_____	_____
<u>14:15</u>	<u>13</u>	<u>7.23</u>	<u>1568</u>	<u>71.5</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-2</u>	<u>5 VOA'S</u>	<u>YES</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>SIBTEX/MTBE 8020</u>
_____	_____	_____	_____	_____	<u>6 OXY'S + 1ADCA BY</u>
_____	_____	_____	_____	_____	<u>8260</u>

COMMENTS: \_\_\_\_\_

Chevron Products Co.  
 P.O. BOX 6004  
 San Ramon, CA 94583  
 FAX (925)842-8370

Chevron Facility Number 209339 - OAKLAND, CA  
 Facility Address 5940 COLLEGE AVE.  
 Consultant Project Number 346521-02  
 Consultant Name GETTLER-RYAN INC.  
 Address 6747 SIERRA COURT, SUITE J, DUBLIN, CA 94568  
 Project Contact (Name) Barbara Sieminski  
 (Phone) 925-551-7555 (Fax Number) 925-551-7899

Chevron Contact (Name) MR. TOM BAUHS  
 (Phone) (925) 842-8898  
 Laboratory Name SEQUOIA  
 Laboratory Service Order \_\_\_\_\_  
 Laboratory Service Code \_\_\_\_\_  
 Samples Collected by (Name) HAIG KEVORK  
 Signature [Signature]

State Method:  CA  OR  WA  NW Series  CO  UT **IDAHO**

Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Sample Preservation	Date/Time	State Method: <input checked="" type="checkbox"/> CA <input type="checkbox"/> OR <input type="checkbox"/> WA <input type="checkbox"/> NW Series <input type="checkbox"/> CO <input type="checkbox"/> UT <b>IDAHO</b>											Lab Sample No.	Remarks	
					BTX/NTBE+TPH GAS (8020 + 8015)	BTX + TPH GAS (8020 + 8015)	TPH Dist (8015)	Organics (8260) + 1,2-DOP	Permissible Halocarbons (8010)	Purgeable Organics (8240)	Extractable Organics (8270)	Oil and Grease (8320)	Metals (DAP or AA) CALIFORNIA	BTX (8020)	BTX/NTBE/Noaph. (8020)			TPH - HCD
TB-LB	1	W	HCL	1/3/01	X													
MW-1	5	W	HCL	1/3/01	X													
MW-2	5	W	HCL	1/4/01	X													

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>G-R INC.</u>	Date/Time <u>1/3/01</u>	Received By (Signature) <u>[Signature]</u>	Organization _____	Date/Time _____	iced Y/N _____
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received By (Signature) _____	Organization _____	Date/Time _____	iced Y/N _____
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received For Laboratory By (Signature) <u>Mike Golin</u>	Organization _____	Date/Time <u>1/3/01</u>	iced Y/N <u>1830</u>

Turn Around Time (Circle Choice)

24 Hrs.  
 48 Hrs.  
 5 Days  
 10 Days  
 As Contracted

**APPENDIX D**  
**SURVEYOR'S REPORT**

**Virgil Chavez Land Surveying**

312 Georgia Street, Suite 225  
Vallejo, California 94590-5907  
(707) 553-2476 • Fax (707) 553-8698

December 28, 2000  
Project No. 1904-12

Andrew Smith  
Gettler-Ryan Inc.  
6747 Sierra Court, Suite J  
Dublin, CA 94568-2611

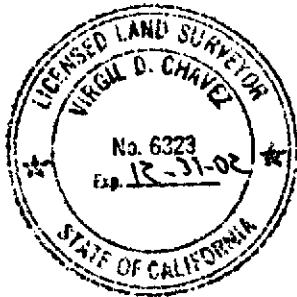
Subject: Monitoring Well Survey  
Former Chevron Station No. 3-0021  
5940 College Avenue  
Oakland, CA

Dear Andrew:

This is to confirm that we have proceeded at your request to survey the new wells located at the above referenced location. The survey was completed on December 27, 2000. The benchmark used for the survey was a City of Oakland benchmark being a cut square in the top of curb, at the curb return at the northeast corner of College Avenue and Miles Avenue. The station and offset data are relative to the west face of building, beginning at the southwest building corner. Measurements taken at approximate north side of top of box and top of casings were marked at location of measurements. Benchmark Elev. = 179.075 feet, MSL.

<u>Well No.</u>	<u>Rim Elevation</u>	<u>TOC Elevation</u>	<u>Station</u>	<u>Offset</u>
MW - 1	197.43'	196.91'	0+26.47	-66.83 (LT)
MW - 2	197.58'	197.35'	0+56.75	-7.96 (LT)
SW Bldg. Cor.			0+00	0.00
Westerly Bldg. Face			---	0.00

Sincerely,



*Virgil D. Chavez*  
Virgil D. Chavez, PLS 6323

**APPENDIX E**

**CHEMICAL ANALYTICAL REPORTS  
AND CHAIN-OF-CUSTODY FORMS**



# Sequoia Analytical

404 N. Wiget Lane  
Walnut Creek, CA 94598  
(925) 988-9600  
FAX (925) 988-9673  
www.sequoialabs.com

15 December, 2000

Barbara Sieminski  
Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin, CA 94568

RE: Chevron  
Sequoia Report W012202

Enclosed are the results of analyses for samples received by the laboratory on 07-Dec-00 17:18. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Charlie Westwater  
Project Manager

CA ELAP Certificate #1271





Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 30021  
Project Manager: Barbara Sieminski

Reported:  
15-Dec-00 07:30

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Comp 1(A)+(B)	W012202-01	Soil	06-Dec-00 15:10	07-Dec-00 17:18
Comp 2(A)+(B)	W012202-02	Soil	06-Dec-00 17:05	07-Dec-00 17:18

Sequoia Analytical - Walnut Creek

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Charlie Westwater, Project Manager





Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 30021  
Project Manager: Barbara Sieminski

Reported:  
15-Dec-00 07:30

**Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT**  
**Sequoia Analytical - Walnut Creek**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Comp 1(A)+(B) (W012202-01) Soil</b>									<b>P-04</b>
Sampled: 06-Dec-00 15:10 Received: 07-Dec-00 17:18									
<b>Purgeable Hydrocarbons</b>	72	50	mg/kg	1000	0L11003	11-Dec-00	11-Dec-00	DHS LUFT	S-01
Benzene	ND	0.25	"	"	"	"	"	"	
Toluene	ND	0.25	"	"	"	"	"	"	
Ethylbenzene	0.31	0.25	"	"	"	"	"	"	
Xylenes (total)	0.77	0.25	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		%	40-140	"	"	"	"	"	S-01
<b>Comp 2(A)+(B) (W012202-02) Soil</b>									<b>P-04</b>
Sampled: 06-Dec-00 17:05 Received: 07-Dec-00 17:18									
<b>Purgeable Hydrocarbons</b>	9.1	1.0	mg/kg	20	0L11003	11-Dec-00	11-Dec-00	DHS LUFT	
Benzene	0.0061	0.0050	"	"	"	"	"	"	
Toluene	0.022	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.044	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.10	0.0050	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		75.7 %	40-140	"	"	"	"	"	







Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 30021  
Project Manager: Barbara Sieminski

**Reported:**  
15-Dec-00 07:30

**Total Metals by EPA 6000/7000 Series Methods  
Sequoia Analytical - Walnut Creek**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Comp 1(A)+(B) (W012202-01) Soil</b> <b>Sampled: 06-Dec-00 15:10</b> <b>Received: 07-Dec-00 17:18</b>									
Lead	6.4	1.0	mg/kg	1	0L08022	08-Dec-00	11-Dec-00	EPA 6010A	
<b>Comp 2(A)+(B) (W012202-02) Soil</b> <b>Sampled: 06-Dec-00 17:05</b> <b>Received: 07-Dec-00 17:18</b>									
Lead	5.0	1.0	mg/kg	1	0L08022	08-Dec-00	11-Dec-00	EPA 6010A	





Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 30021  
Project Manager: Barbara Sieminski

Reported:  
15-Dec-00 07:30

**Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT - Quality Control  
Sequoia Analytical - Walnut Creek**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	-----------	-------------	-----	-----------	-------

**Batch 0L11003 - EPA 5030B [MeOH]**

**Blank (0L11003-BLK1)**

Prepared & Analyzed: 11-Dec-00

Purgeable Hydrocarbons	ND	1.0	mg/kg							
Benzene	ND	0.0050	"							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
<i>Surrogate: a, a, a-Trifluorotoluene</i>	0.660		"	0.600		110	40-140			

**LCS (0L11003-BS1)**

Prepared & Analyzed: 11-Dec-00

Benzene	0.626	0.0050	mg/kg	0.800		78.2	50-150			
Toluene	0.656	0.0050	"	0.800		82.0	50-150			
Ethylbenzene	0.738	0.0050	"	0.800		92.2	50-150			
Xylenes (total)	2.22	0.0050	"	2.40		92.5	50-150			
<i>Surrogate: a, a, a-Trifluorotoluene</i>	0.656		"	0.600		109	40-140			

**Matrix Spike (0L11003-MS1)**

Source: W012121-01

Prepared & Analyzed: 11-Dec-00

Benzene	0.604	0.0050	mg/kg	0.800	ND	75.5	50-150			
Toluene	0.638	0.0050	"	0.800	ND	79.8	50-150			
Ethylbenzene	0.712	0.0050	"	0.800	ND	89.0	50-150			
Xylenes (total)	2.16	0.0050	"	2.40	ND	90.0	50-150			
<i>Surrogate: a, a, a-Trifluorotoluene</i>	0.510		"	0.600		85.0	40-140			

**Matrix Spike Dup (0L11003-MSD1)**

Source: W012121-01

Prepared & Analyzed: 11-Dec-00

Benzene	0.592	0.0050	mg/kg	0.800	ND	74.0	50-150	2.01	20	
Toluene	0.634	0.0050	"	0.800	ND	79.2	50-150	0.629	20	
Ethylbenzene	0.716	0.0050	"	0.800	ND	89.5	50-150	0.560	20	
Xylenes (total)	2.17	0.0050	"	2.40	ND	90.4	50-150	0.462	20	
<i>Surrogate: a, a, a-Trifluorotoluene</i>	0.492		"	0.600		82.0	40-140			





Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 30021  
Project Manager: Barbara Sieminski

**Reported:**  
15-Dec-00 07:30

**Total Metals by EPA 6000/7000 Series Methods - Quality Control  
Sequoia Analytical - Walnut Creek**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 0L08022 - EPA 3050B**

Blank (0L08022-BLK1)

Prepared: 08-Dec-00 Analyzed: 11-Dec-00

Lead	ND	1.0	mg/kg							
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LCS (0L08022-BS1)

Prepared: 08-Dec-00 Analyzed: 11-Dec-00

Lead	53.9	1.0	mg/kg	50.0		108	80-120			
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LCS Dup (0L08022-BSD1)

Prepared: 08-Dec-00 Analyzed: 11-Dec-00

Lead	54.2	1.0	mg/kg	50.0		108	80-120	0.555	20	
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Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 30021  
Project Manager: Barbara Sieminski

**Reported:**  
15-Dec-00 07:30

### Notes and Definitions

- P-04 Chromatogram Pattern: Gasoline C6-C12 + Unidentified Hydrocarbons C6-C12
- S-01 The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interferences.
- 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







# Sequoia Analytical

404 N. Wiget Lane  
Walnut Creek, CA 94598  
(925) 988-9600  
FAX (925) 988-9673  
[www.sequoialabs.com](http://www.sequoialabs.com)

27 December, 2000

Barbara Sieminski  
Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin, CA 94568

RE: Chevron  
Sequoia Report W012203

Enclosed are the results of analyses for samples received by the laboratory on 07-Dec-00 17:18. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Charlie Westwater  
Project Manager

CA ELAP Certificate #1271





Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 3-0021  
Project Manager: Barbara Sieminski

Reported:  
27-Dec-00 08:01

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1-4.5	W012203-01	Soil	06-Dec-00 16:20	07-Dec-00 17:18
MW-1-9.5	W012203-02	Soil	06-Dec-00 16:25	07-Dec-00 17:18
MW-2-4.5	W012203-03	Soil	06-Dec-00 14:20	07-Dec-00 17:18

Sequoia Analytical - Walnut Creek

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Charlie Westwater, Project Manager





Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 3-0021  
Project Manager: Barbara Sieminski

Reported:  
27-Dec-00 08:01

**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT**  
**Sequoia Analytical - Walnut Creek**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1-4.5 (W012203-01) Soil</b> Sampled: 06-Dec-00 16:20    Received: 07-Dec-00 17:18									
Purgeable Hydrocarbons	ND	1.0	mg/kg	20	0L11003	11-Dec-00	15-Dec-00	EPA 8015/8020	
Benzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.050	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		98.7 %	40-140		"	"	"	"	
<b>MW-1-9.5 (W012203-02) Soil</b> Sampled: 06-Dec-00 16:25    Received: 07-Dec-00 17:18									
Purgeable Hydrocarbons	ND	1.0	mg/kg	20	0L11003	11-Dec-00	15-Dec-00	EPA 8015/8020	
Benzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.050	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		90.7 %	40-140		"	"	"	"	
<b>MW-2-4.5 (W012203-03) Soil</b> Sampled: 06-Dec-00 14:20    Received: 07-Dec-00 17:18									
Purgeable Hydrocarbons	ND	1.0	mg/kg	20	0L11003	11-Dec-00	15-Dec-00	EPA 8015/8020	
Benzene	ND	0.0050	"	"	"	"	"	"	
Toluene	0.0062	0.0050	"	"	"	"	"	"	A-01
Ethylbenzene	0.0054	0.0050	"	"	"	"	"	"	A-01
Xylenes (total)	0.021	0.0050	"	"	"	"	"	"	A-01
Methyl tert-butyl ether	ND	0.050	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		86.0 %	40-140		"	"	"	"	







Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 3-0021  
Project Manager: Barbara Sieminski

Reported:  
27-Dec-00 08:01

**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control  
Sequoia Analytical - Walnut Creek**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 0L11003 - EPA 5030B [MeOH]</b>										
<b>Blank (0L11003-BLK1)</b> Prepared & Analyzed: 11-Dec-00										
Purgeable Hydrocarbons	ND	1.0	mg/kg							
Benzene	ND	0.0050	"							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Methyl tert-butyl ether	ND	0.050	"							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	0.660		"	0.600		110	40-140			
<b>LCS (0L11003-BS1)</b> Prepared & Analyzed: 11-Dec-00										
Benzene	0.626	0.0050	mg/kg	0.800		78.2	50-150			
Toluene	0.656	0.0050	"	0.800		82.0	50-150			
Ethylbenzene	0.738	0.0050	"	0.800		92.2	50-150			
Xylenes (total)	2.22	0.0050	"	2.40		92.5	50-150			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	0.656		"	0.600		109	40-140			
<b>Matrix Spike (0L11003-MS1)</b> Source: W012121-01 Prepared & Analyzed: 11-Dec-00										
Benzene	0.604	0.0050	mg/kg	0.800	ND	75.5	50-150			
Toluene	0.638	0.0050	"	0.800	ND	79.8	50-150			
Ethylbenzene	0.712	0.0050	"	0.800	ND	89.0	50-150			
Xylenes (total)	2.16	0.0050	"	2.40	ND	90.0	50-150			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	0.510		"	0.600		85.0	40-140			
<b>Matrix Spike Dup (0L11003-MSD1)</b> Source: W012121-01 Prepared & Analyzed: 11-Dec-00										
Benzene	0.592	0.0050	mg/kg	0.800	ND	74.0	50-150	2.01	20	
Toluene	0.634	0.0050	"	0.800	ND	79.2	50-150	0.629	20	
Ethylbenzene	0.716	0.0050	"	0.800	ND	89.5	50-150	0.560	20	
Xylenes (total)	2.17	0.0050	"	2.40	ND	90.4	50-150	0.462	20	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	0.492		"	0.600		82.0	40-140			





Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 3-0021  
Project Manager: Barbara Sieminski

**Reported:**  
27-Dec-00 08:01

### Notes and Definitions

- A-01 Results as reported were not confirmed by an alternate column or method.
- 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



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

Chevron Facility Number # 3 0021  
Facility Address 5940 Coltrage Ave Oakland  
Consultant Project Number 346521.02  
Consultant Name Getler Ryan Inc.  
Address 6747 Sierra Ct.  
Project Contact (Name) Barbara Sieminski  
(Phone) (925) 551-7444 (Fax Number) (925) 551-7888

Chevron Contact (Name) Thomas Kachis  
(Phone) \_\_\_\_\_  
Laboratory Name Sequoia  
Laboratory Release Number \_\_\_\_\_  
Samples Collected by (Name) Andrew Smith  
Collection Date 12/16/00  
Signature Andrew Smith

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water C = Charcoal	Type G = Grab U = Composite D = Diurnal	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed										Remarks					
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Hydrocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICP or AA)	M T 13E, 13Y DHS LUFT Method							
MW-1-4.5		1	S	D	1620	none	Y	✓															
MW-1-9.5		1	S	D	1625	none	Y	✓															
MW-1-14.5	Hold	1	S	D	1630	none	Y																} Hold
MW-1-19.5	Hold	1	S	D	1640	none	Y																
MW-2-4.5		1	S	D	1420	none	Y	✓															
MW-2-9.5	Hold	1	S	D	1425	none	Y																} do not test, Hold
MW-2-14.5	Hold	1	S	D	1430	none	Y																
MW-2-19.5	Hold	1	S	D	1436	none	Y																

Relinquished By (Signature) <u>Andrew Smith</u>	Organization <u>GRI</u>	Date/Time <u>12/7/00 1000</u>	Received By (Signature) <u>Thomas Kachis</u>	Organization <u>Sequoia</u>	Date/Time <u>12/7/00 1530</u>	Turn Around Time (Circle Choice) <del>AS</del> 48 Hrs. 5 Days <u>10 Days</u> TAT As Contracted
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time	

COC-3.0/6/03 91/1/01



Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 209339  
Project Manager: Deanna L. Harding

Reported:  
26-Jan-01 12:18

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	W101077-01	Water	03-Jan-01 00:00	03-Jan-01 18:30
MW-1	W101077-02	Water	03-Jan-01 13:40	03-Jan-01 18:30
MW-2	W101077-03	Water	03-Jan-01 14:30	03-Jan-01 18:30

Sequoia Analytical - Walnut Creek

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

  
Charlie Westwater, Project Manager





Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 209339  
Project Manager: Deanna L. Harding

Reported:  
26-Jan-01 12:18

**Volatile Organic Compounds by EPA Method 8260B  
Sequoia Analytical - Walnut Creek**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (W101077-02) Water</b> Sampled: 03-Jan-01 13:40 Received: 03-Jan-01 18:30									
Ethanol	ND	500	ug/l	1	1A05009	05-Jan-01	08-Jan-01	EPA 8260B	
tert-Butyl alcohol	ND	50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		100 %	50-150		"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		104 %	50-150		"	"	"	"	
<b>MW-2 (W101077-03) Water</b> Sampled: 03-Jan-01 14:30 Received: 03-Jan-01 18:30									
Ethanol	ND	500	ug/l	1	1A05009	05-Jan-01	06-Jan-01	EPA 8260B	
tert-Butyl alcohol	ND	50	"	"	"	"	"	"	
Methyl tert-butyl ether	2.2	2.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		98.0 %	50-150		"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %	50-150		"	"	"	"	





Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 209339  
Project Manager: Deanna L. Harding

Reported:  
26-Jan-01 12:18

**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT  
Sequoia Analytical - Walnut Creek**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>TB-LB (W101077-01) Water</b> Sampled: 03-Jan-01 00:00 Received: 03-Jan-01 18:30									
Purgeable Hydrocarbons	ND	50	ug/l	1	1A12002	12-Jan-01	12-Jan-01	EPA 8015M/8020	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		135 %	70-130		"	"	"	"	
<b>MW-1 (W101077-02) Water</b> Sampled: 03-Jan-01 13:40 Received: 03-Jan-01 18:30 <span style="float: right;">P-03</span>									
Purgeable Hydrocarbons	930	50	ug/l	1	1A12002	12-Jan-01	12-Jan-01	EPA 8015M/8020	
Benzene	2.9	0.50	"	"	"	"	"	"	
Toluene	6.9	0.50	"	"	"	"	"	"	
Ethylbenzene	2.7	0.50	"	"	"	"	"	"	
Xylenes (total)	7.6	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	14	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		78.0 %	70-130		"	"	"	"	
<b>MW-2 (W101077-03) Water</b> Sampled: 03-Jan-01 14:30 Received: 03-Jan-01 18:30 <span style="float: right;">P-01</span>									
Purgeable Hydrocarbons	2100	1000	ug/l	20	1A12002	12-Jan-01	12-Jan-01	EPA 8015M/8020	
Benzene	110	10	"	"	"	"	"	"	
Toluene	11	10	"	"	"	"	"	"	
Ethylbenzene	63	10	"	"	"	"	"	"	
Xylenes (total)	25	10	"	"	"	"	"	"	
Methyl tert-butyl ether	83	50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		105 %	70-130		"	"	"	"	





Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 209339  
Project Manager: Deanna L. Harding

Reported:  
26-Jan-01 12:18

**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control  
Sequoia Analytical - Walnut Creek**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1A12002 - EPA 5030B [P/T]</b>										
<b>Blank (1A12002-BLK1)</b> Prepared & Analyzed: 12-Jan-01										
Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.5	"							
<i>Surrogate: a, a, a-Trifluorotoluene</i>	38.2		"	30.0		127	70-130			
<b>LCS (1A12002-BS1)</b> Prepared & Analyzed: 12-Jan-01										
Benzene	18.0	0.50	ug/l	20.0		90.0	70-130			
Toluene	18.1	0.50	"	20.0		90.5	70-130			
Ethylbenzene	18.0	0.50	"	20.0		90.0	70-130			
Xylenes (total)	53.6	0.50	"	60.0		89.3	70-130			
<i>Surrogate: a, a, a-Trifluorotoluene</i>	28.9		"	30.0		96.3	70-130			
<b>Matrix Spike (1A12002-MS1)</b> Source: W101032-04 Prepared & Analyzed: 12-Jan-01										
Benzene	17.4	0.50	ug/l	20.0	ND	87.0	70-130			
Toluene	17.8	0.50	"	20.0	ND	89.0	70-130			
Ethylbenzene	17.6	0.50	"	20.0	ND	88.0	70-130			
Xylenes (total)	52.7	0.50	"	60.0	ND	87.8	70-130			
<i>Surrogate: a, a, a-Trifluorotoluene</i>	28.3		"	30.0		94.3	70-130			
<b>Matrix Spike Dup (1A12002-MSD1)</b> Source: W101032-04 Prepared & Analyzed: 12-Jan-01										
Benzene	19.4	0.50	ug/l	20.0	ND	97.0	70-130	10.9	20	
Toluene	19.6	0.50	"	20.0	ND	98.0	70-130	9.63	20	
Ethylbenzene	19.3	0.50	"	20.0	ND	96.5	70-130	9.21	20	
Xylenes (total)	56.7	0.50	"	60.0	ND	94.5	70-130	7.31	20	
<i>Surrogate: a, a, a-Trifluorotoluene</i>	31.9		"	30.0		106	70-130			





Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 209339  
Project Manager: Deanna L. Harding

Reported:  
26-Jan-01 12:18

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - Walnut Creek**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1A05009 - EPA 5030B [P/T]**

Prepared & Analyzed: 05-Jan-01

**Blank (1A05009-BLK1)**

Ethanol	ND	500	ug/l							
tert-Butyl alcohol	ND	50	"							
Methyl tert-butyl ether	ND	2.0	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
tert-Amyl methyl ether	ND	2.0	"							
1,2-Dichloroethane	ND	2.0	"							
Ethylene dibromide	ND	2.0	"							
<i>Surrogate: Dibromofluoromethane</i>	48.0		"	50.0		96.0	50-150			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	46.0		"	50.0		92.0	50-150			

**Blank (1A05009-BLK2)**

Prepared & Analyzed: 08-Jan-01

Ethanol	ND	500	ug/l							
tert-Butyl alcohol	ND	50	"							
Methyl tert-butyl ether	ND	2.0	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
tert-Amyl methyl ether	ND	2.0	"							
1,2-Dichloroethane	ND	2.0	"							
Ethylene dibromide	ND	2.0	"							
<i>Surrogate: Dibromofluoromethane</i>	49.0		"	50.0		98.0	50-150			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	52.0		"	50.0		104	50-150			

**LCS (1A05009-BS1)**

Prepared & Analyzed: 05-Jan-01

Methyl tert-butyl ether	54.3	2.0	ug/l	50.0		109	70-130			
<i>Surrogate: Dibromofluoromethane</i>	49.0		"	50.0		98.0	50-150			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	48.0		"	50.0		96.0	50-150			







Gettler Ryan, Inc. - Dublin  
6747 Sierra Court Suite J  
Dublin CA, 94568

Project: Chevron  
Project Number: Chevron # 209339  
Project Manager: Deanna L. Harding

Reported:  
26-Jan-01 12:18

**Volatile Organic Compounds by EPA Method 8260B - Quality Control  
Sequoia Analytical - Walnut Creek**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1A05009 - EPA 5030B [P/T]</b>										
<b>LCS (1A05009-BS2)</b>				Prepared & Analyzed: 08-Jan-01						
Methyl tert-butyl ether	44.9	2.0	ug/l	50.0		89.8	70-130			
Surrogate: Dibromofluoromethane	49.0		"	50.0		98.0	50-150			
Surrogate: 1,2-Dichloroethane-d4	53.0		"	50.0		106	50-150			
<b>Matrix Spike (1A05009-MS1)</b>		Source: W101053-03		Prepared & Analyzed: 05-Jan-01						
Methyl tert-butyl ether	51.9	2.0	ug/l	50.0	ND	104	60-150			
Surrogate: Dibromofluoromethane	48.0		"	50.0		96.0	50-150			
Surrogate: 1,2-Dichloroethane-d4	50.0		"	50.0		100	50-150			
<b>Matrix Spike Dup (1A05009-MSD1)</b>		Source: W101053-03		Prepared & Analyzed: 05-Jan-01						
Methyl tert-butyl ether	51.1	2.0	ug/l	50.0	ND	102	60-150	1.55	25	
Surrogate: Dibromofluoromethane	45.0		"	50.0		90.0	50-150			
Surrogate: 1,2-Dichloroethane-d4	49.0		"	50.0		98.0	50-150			



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26-Jan-01 12:18

### Notes and Definitions

P-01 Chromatogram Pattern: Gasoline C6-C12  
P-03 Chromatogram Pattern: Unidentified Hydrocarbons C6-C12  
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



**Chevron Products Co.**  
 P.O. BOX 6004  
 San Ramon, CA 94583  
 FAX (925)842-8370

**Chevron Facility Number** 209339 - OAKLAND, CA  
**Facility Address** 5940 COLLEGE AVE.  
**Consultant Project Number** 346521.02  
**Consultant Name** GETTLER-RYAN INC.  
**Address** 6747 SIERRA COURT, SUITE J, DUBLIN, CA 94568  
**Project Contact (Name)** Barbara Sieminski  
**(Phone)** 925-551-7555 **(Fax Number)** 925-551-7899

**Chevron Contact (Name)** MR. TOM BAUHS  
**(Phone)** (925) 842-8898  
**Laboratory Name** SEQUOIA W101077  
**Laboratory Service Order**  
**Laboratory Service Code**  
**Samples Collected by (Name)** HAIG KEVORK  
**Signature** [Signature]

**State Method:**  CA  OR  WA  NW Series  CO  UT **IDAHO**

Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Sample Preservation	Date/Time	State Method: <input checked="" type="checkbox"/> CA <input type="checkbox"/> OR <input type="checkbox"/> WA <input type="checkbox"/> NW Series <input type="checkbox"/> CO <input type="checkbox"/> UT <b>IDAHO</b>												Remarks	
					ETEX/MTBE+TPH GAS (8020 + 8015)	ETEX + TPH GAS (8020 + 8015)	TPH Dosed (8015)	Organics (8260) + 1,2-DCP	Purgeable Hydrocarbons (8010)	Purgeable Organics (8260)	Extractable Organics (8270)	Oil and Grease (8820)	Metals (Cd, Cr, Pb, Zn, Ni)	ETEX (8020)	ETEX/MTBE/Naph. (8020)	TPH - HCD		TPH-O Extended
TB-LB	1	W	HCL	1/3/01	X							01						
MW-1	5	W	HCL	1/3/01 13:40	X				X			02	A-E					
MW-2	5	W	HCL	1/3/01 14:30	X				X			03	↓					

Relinquished By (Signature) <u>[Signature]</u>	Organization G-R INC.	Date/Time 1/3/01	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time	Iced Y/N
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Iced Y/N
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>[Signature]</u>	Organization	Date/Time	Iced Y/N

**Turn Around Time (Circle Choice)**

24 Hrs.  
 48 Hrs.  
 5 Days  
 10 Days  
 **As Contracted**