GETTLER-RYAN INC.

JUN 04 2002

TRANSMITTAL

TO: Ms. Karen Streich
Chevron Products Company
P.O. Box 6004
San Ramon, California 94583

DATE: May 30, 2002
PROJ. #: DG93600G.4CT1-1
SUBJECT: Chevron Station #9-3600
2200 Telegraph Ave.
Oakland, California

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

WE ARE SENDING YOU:

COPIES	DATED	DESCRIPTION
1	May 30, 2002	*Monitoring Well Installation Report,* dated May 30, 2002.

THESE ARE TRANSMITTED as checked below:

[ ] For review and comment [ ] Approved as submitted [ ] Resubmit _ copies for approval

[ ] As requested [ ] Approved as noted [ ] Submit _ copies for distribution

[ ] For approval [ ] Return for corrections [ ] Return __ corrected prints

[X] For your files

COMMENTS:

At the request of Chevron, GR will send copies to the following:

cc: Mr. Don Hwang, Alameda County Health Care Services Agency, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502-6577
Mr. Chuck Headlee, RWQCB-San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, CA 94612
Mr. James Brownell, Delta Environmental Consultants, Inc., 3164 Gold Camp Dr., Suite 200, Rancho Cordova, CA 95670-6021
Mr. Tom Welch, First Union, 425 Market Street, Suite 2200, San Francisco, CA 94105

Delta
Environmental
Consultants, Inc.

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

MONITORING WELL INSTALLATION REPORT

at
Chevron Service Station #9-3600
2200 Telegraph Avenue
Oakland, California

Report No. DG93600G.4CT1-1
Delta Project No. DG93-600-G

Prepared for:

Ms. Karen Streich
Chevron Products Company
P.O. Box 6004
San Ramon, California 94583

Prepared by:

DELTA ENVIRONMENTAL CONSULTANTS INC.
Network Associate **GETTLER - RYAN INC.**
3140 Gold Camp Drive, Suite 170
Rancho Cordova, California 95670

Tony P. Mikacich
Project Geologist

David W. Herzog
Senior Geologist
R.G. 7211

May 30, 2002

TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

MONITORING WELL INSTALLATION REPORT

at
Chevron Service Station #9-3600
2200 Telegraph Avenue
Oakland, California

Report No. DG93600G.4CT1-1
Delta Project No. DG93-600-G

INTRODUCTION

At the request of Chevron Products Company (Chevron), Delta Environmental Consultants, Inc. (Delta) network associate Gettler-Ryan Inc. (GR) has prepared this report for the installation of three groundwater monitoring wells at the subject site. The purpose of this investigation was to evaluate dissolved hydrocarbons in the area of the UST complex. The proposed scope of work included: obtaining the required well installation permits from the Alameda County Public Works Agency (ACPWA); updating the site safety plan; installing three groundwater monitoring wells; collecting soil samples from the well borings for description and possible analysis; developing and sampling the newly installed groundwater monitoring wells; analyzing selected soil and groundwater samples; surveying the new wellhead elevations; and preparing a report that presents the findings of the investigation. This work was originally proposed in Delta's, *Work Plan for Monitoring Well Installation*, dated January 24, 2002, and approved by Alameda County Health Cares Services Agency (ACHCSA) in letter dated January 30, 2002.

SITE DESCRIPTION

The subject site is an active Chevron service station located on the southeast corner of the intersection of Telegraph Avenue and West Grand Avenue in Oakland, California (Figure 1). Site facilities consist of a kiosk, three underground storage tanks (USTs), five fueling dispenser islands with canopy, and a bathroom and storage room. Bay Area Regional Transit (BART) tracks run beneath the center of the site in an underground tunnel at a depth of approximately 30 feet below surface grade (bsg). The approximate location of the BART right-of-way is presented on Figure 2. The monitoring well locations were placed outside the BART right-of-way. Locations of pertinent site features are shown on Figure 2.

PREVIOUS ENVIRONMENTAL WORK

1986: In October, Blaine Tech Services Inc. of San Jose, California, collected and analyzed soil and groundwater samples from a re-excavated, backfilled tank pit, from which a tank had been previously removed. Total Petroleum Hydrocarbons as gasoline (TPHg) were detected at concentrations as high as 44 parts per million (ppm) in a soil sample from a depth between 2 and 3 feet bsg. TPHg were detected at concentrations of 4.5 ppm from an additional soil sample collected from a depth of approximately 13 feet bsg in the former tank pit area. On October 24, 1986, one water sample was collected from the re-excavated tank pit. TPHg and benzene were detected in groundwater.

1986-87:During station reconstruction, sixteen vapor wells equipped with vapor sensors were installed because of the BART tracks that run beneath the center of the site. It is GR's understanding that the vapor

wells and sensors were abandoned and removed from the site.

1992: In October, Groundwater Technology, Inc. collected and analyzed one groundwater sample from former vadose zone well (VW-2-1). TPHg and benzene were detected at concentrations of 42,000 and 3,300 ppb, respectively. Depth to groundwater was 4.43 feet bsg during the October 13, 1992 sampling event. Groundwater samples were not analyzed for fuel oxygenating compounds.

1994: In July, gasoline product lines were removed in order to upgrade the system. Touchstone Developments of Santa Rosa, California, were onsite to observe the removal of product piping and collect soil samples for analysis from product line trenches at depths between 4.5 and 5.5 feet bsg. TPHg were detected at concentrations as high as 3.6 ppm in a soil sample collected at a depth of 5.5 feet bsg. Samples were not analyzed for fuel oxygenating compounds.

2000: In March, GR advanced eight hand-augered borings up to 16 feet bsg. TPHg or BTEX were not detected in soil samples collected from the borings.

Based on the available analytical soil data, trace concentrations of residual petroleum hydrocarbons are present beneath the site, mainly in the vicinity of the former USTs. Historical soil analytical data are presented in Table 1.

FIELD ACTIVITIES

To further evaluate the dissolved petroleum hydrocarbon plume in the vicinity of the UST complex, GR install three groundwater monitoring wells at the locations shown on Figure 2. Field work was conducted in accordance with GR's Field Methods and Procedures (Appendix A) and Site Safety Plan dated March 12, 2002. The wells were installed under drilling permits #WO2-0055, -0056, and –0057, which were obtained from the ACPWA. Copies of the permit are included in Appendix B. Underground Service Alert (USA) was notified prior to drilling at the site.

On March 12, 2002, a GR geologist observed Gregg Drilling Inc. (C57#485165) drill and install three monitoring wells (MW-1, MW-2, and MW-3) at the locations shown on Figure 2. A hand auger was used to clear the first five feet of each borehole of underground utilities. A limited access rig using 8-inch diameter hollow-stem augers drilled the well borings to approximately 20 feet bsg. Soil samples were collected from the well borings at 5-foot intervals for description and preparation of a log, and for possible chemical analysis. The boring logs are presented in Appendix B.

Well Installation

The wells were constructed of 2-inch diameter polyvinyl chloride (PVC) well casing and 0.020-inch machine slotted screen material to a depth of 20 feet bsg. The wells are screened from 5-20 feet bsg. Lonestar #3 sand was placed in the annular space from the bottom of the borings to approximately 2 feet above the well screen. The wells were then sealed with hydrated bentonite followed by neat cement. A water-resistant well box installed in concrete was placed over each well. An expandable waterproof well cap with lock was placed on the top of the well casings. Well construction details are shown on the boring logs in Appendix B. The well borings were drilled and soil samples were collected as described in GR's Field Methods and Procedures (Appendix A).

Drill cuttings were placed on-site in properly labeled 55-gallon drums pending disposal. One 4-point composite sample (SP1-4) was collected from the drummed soil for disposal characterization.

Well Development, Monitoring, and Sampling

Wells MW-1, MW-2, and MW-3 were developed and sampled on April 5, 2002. Depth-to-water was measured and the wells were checked for the presence of separate phase hydrocarbons (SPH). SPH were not found in the wells. The newly installed wells had abundant silt and required additional purging prior to becoming clear. Wells MW-1 and MW-3 did not de-water during development, but well MW-2 did de-water and was allowed to recover for 10 minutes prior to sampling. Following development, groundwater samples were collected from the wells. Purge water generated during development and sampling procedures were transported by Chevron's contractor Integrated Wastestream Management (IWM) for disposal at McKittrick. Well development procedures are included in Appendix A. A copy of the well development/monitoring and sampling field data sheets are included in Appendix C.

Wellhead Survey

Following installation of the wells, the elevations were surveyed by Morrow Surveying of West Sacramento, CA (California license #5161). Top of casings and vault box elevations were measured relative to Mean Sea Level (MSL) utilizing City of Oakland Benchmark (BM#37JC). GPS measurements, horizontal coordinates of the wells, and other site-specific details were also established. A copy of the surveyor's report is included in Appendix D.

RESULTS OF THE SUBSURFACE INVESTIGATION

Soil encountered during this investigation generally consisted of clay with sand and clay to approximately 10 to 15 feet bsg. Poorly graded sand and silty and clayey sand were generally encountered from approximately 15 feet bsg to the total explored depth of 20 feet bsg. Groundwater was first encountered at approximately 11 feet bsg as indicated by wet soil samples, and the static water level remained consistent with these levels. Based on groundwater monitoring data collected on April 5, 2002, shallow groundwater beneath the site is flowing to the southeast at a gradient of 0.005 (Figure 2). Detailed descriptions of the soil encountered during drilling are presented on the boring logs in Appendix B.

CHEMICAL ANALYTICAL RESULTS

A total of 12 soil samples from the well borings, one composite soil sample from the drummed cuttings, and three groundwater samples were submitted for chemical analysis. Analyses were performed by Lancaster Laboratories (ELAP No. 2116). Copies of the laboratory analytical reports and chains-of-custody are included in Appendix E.

Chemical Analytical Procedures

Soil samples from the well borings and drummed drill cuttings were analyzed for TPHg and benzene, toluene, ethylbenzene, and xylenes (BTEX), and methyl tertiary-butyl ether (MtBE) by EPA Methods 8015M/8021B.

The drill cuttings soil sample was also analyzed for total lead by EPA Method 6010B. Groundwater samples were analyzed for TPHg, BTEX and MtBE by EPA Methods 8015M/8021B, and for MtBE, tertiary butyl alcohol (TBA), di-isopropyl ether (DIPE), ethyl tertiary butyl ether (EtBE), and tertiary amyl methyl ether (TAME) by EPA Method 8260B.

Soil Analytical Results

TPHg, BTEX, or MtBE were not detected in soil samples from well boring MW-2 or MW-3, and benzene or MtBE were not detected in soil samples from MW-1. TPHg were reported in soil samples collected at 11.5 feet bsg in well boring MW-1 at concentrations of 3.2 ppm. Soil chemical analytical data are summarized in Table 1.

Groundwater Analytical Results

TPHg, BTEX, or oxygenates were not detected in groundwater samples from wells MW-2 or MW-3. TPHg and benzene were reported in the groundwater sample collected from monitoring well MW-1 at concentrations of 2,000 and 5.0 ppb, respectively. MtBE, TBA, and TAME were reported in groundwater from well MW-1 at concentrations of 370 ppb, 200 ppb, and 10 ppb, respectively, by EPA Method 8260B. These data are summarized in Tables 2 and 3.

WASTE DISPOSAL

Drill cuttings were removed from the site on April 12, 2002, by IWM for disposal at Republic Services Vasco Road Landfill of Livermore, California. A copy of the disposal confirmation form is included in Appendix B.

CONCLUSIONS

The purpose of this investigation was to evaluate soil and groundwater near the UST complex to determine the extent of petroleum hydrocarbons and MtBE.

Based on the soil chemical analytical data collected during this and previous site investigations, no significant hydrocarbon impact to soil is present, and additional assessment of soil conditions is not warranted at this time. Groundwater impact onsite appears limited to the immediate vicinity of the USTs.

The dissolved hydrocarbon plume is not delineated downgradient of the USTs, but assessment of the groundwater downgradient is restricted due to the location of the BART tunnel.

GR recommends that quarterly monitoring and sampling be initiated for wells MW-1, MW-2, and MW-3. Groundwater samples from all three wells should be analyzed for TPHg, BTEX, and MtBE by EPA Methods 8015M and 8021B, and for MtBE, TBA, DIPE, EtBE, and TAME by EPA Method 8260B.

Additional assessment work may be necessary, but GR recommends that at least four quarters of groundwater data be collected and reviewed prior to determining if additional work is warranted.

Table 1 - Soil Chemical Analytical Results

Chevron Service Station #9-3600
2200 Telegraph Avenue
Oakland, California

Sample ID	Sample Depth (ft)	Sample Date	TPHg (ppm)	Lead (ppm)	B (ppm)	T (ppm)	E (ppm)	X (ppm)	MtBE (ppm)
Historic									
F4-1	2 to 3	10/31/1986	**15**	---	---	---	---	---	---
F4-2	2	10/31/1986	**44**	---	---	---	---	---	---
F4-3	2	10/31/1986	**1.4**	---	---	---	---	---	---
F4-4	2	10/31/1986	<1.0	---	---	---	---	---	---
P-1	4.5	7/25/1994	ND	---	ND	ND	ND	ND	---
P-2	4.5	7/25/1994	ND	---	ND	ND	ND	ND	---
P-3	5	7/25/1994	ND	---	ND	**0.012**	**0.008**	**0.045**	---
P-4	5	7/25/1994	ND	---	ND	ND	ND	ND	---
P-5	5	7/25/1994	ND	---	ND	ND	ND	ND	---
P-6	5.5	7/25/1994	**3.6**	---	ND	**0.03**	**0.012**	**1.3**	---
P-7	5.5	7/25/1994	ND	---	ND	**0.005**	ND	**0.007**	---
P-8	5	7/25/1994	ND	---	ND	ND	ND	ND	---
B-1-6	6	11/8/2000	<1.0	**32**	<0.005	<0.005	<0.005	<0.005	---
B-1-10	10	11/8/2000	<1.0	**10**	<0.005	<0.005	<0.005	<0.005	---
B-2-6	6	11/8/2000	<1.0	**9.6**	<0.005	<0.005	<0.005	<0.005	---
B-2-10	10	11/8/2000	<1.0	**6.2**	<0.005	<0.005	<0.005	<0.005	---
B-3-5	5	11/8/2000	<1.0	**27**	<0.005	<0.005	<0.005	<0.005	---
B-4-5	5	11/8/2000	<1.0	**26**	<0.005	<0.005	<0.005	<0.005	---
B-4-10	10	11/8/2000	<1.0	**27**	<0.005	<0.005	<0.005	<0.005	---
B-5-5	5	11/8/2000	<1.0	**17**	<0.005	<0.005	<0.005	<0.005	---
B-5-10	10	11/8/2000	<1.0	**8.9**	<0.005	<0.005	<0.005	<0.005	---
B-6-5	5	11/8/2000	<1.0	**27**	<0.005	<0.005	<0.005	<0.005	---
B-6-10	10	11/8/2000	<1.0	**3.6**	<0.005	<0.005	<0.005	<0.005	---
B-7-5	5	11/8/2000	<1.0	**6.5**	<0.005	<0.005	<0.005	<0.005	---
B-7-10	10	11/8/2000	<1.0	**6.8**	<0.005	<0.005	<0.005	<0.005	---
Recent									
MW-1-S-6.5	6.5	3/12/2002	<1.0	---	<0.0050	<0.0050	<0.0050	<0.015	<0.050
MW-1-S-11.5	11.5	3/12/2002	**3.2**	---	<0.0050	<0.0050	**0.015**	<0.015	<0.050
MW-1-S-16.5	16.5	3/12/2002	<1.0	---	<0.0050	<0.0050	<0.0050	<0.015	<0.050
MW-1-S-20	20	3/12/2002	<1.0	---	<0.0050	<0.0050	<0.0050	<0.015	<0.050
MW-2-S-6.5	6.5	3/12/2002	<1.0	---	<0.0050	<0.0050	<0.0050	<0.015	<0.050
MW-2-S-11.5	11.5	3/12/2002	<1.0	---	<0.0050	<0.0050	<0.0050	<0.015	<0.050
MW-2-S-16.5	16.5	3/12/2002	<1.0	---	<0.0050	<0.0050	<0.0050	<0.015	<0.050
MW-2-S-20	20	3/12/2002	<1.0	---	<0.0050	<0.0050	<0.0050	<0.015	<0.050
MW-3-S-6.5	6.5	3/12/2002	<1.0	---	<0.0050	<0.0050	<0.0050	<0.015	<0.050
MW-3-S-11.5	11.5	3/12/2002	<1.0	---	<0.0050	<0.0050	<0.0050	<0.015	<0.050
MW-3-S-16.5	16.5	3/12/2002	<1.0	---	<0.0050	<0.0050	<0.0050	<0.015	<0.050
MW-3-S-20	20	3/12/2002	<1.0	---	<0.0050	<0.0050	<0.0050	<0.015	<0.050
SP-1-4-S	---	3/12/2002	<1.0	**110**	<0.0050	<0.0050	<0.0050	<0.015	<0.050
SP-1-4-S	---	3/12/2002	---	**74.5**	---	---	---	---	---
SP-1-4-S	---	3/12/2002	---	***3.340**	---	---	---	---	---

Explanation:
TPHg = Total Petroleum Hydrocarbons as gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Total xylenes
MtBE = Methyl tert-butyl ether
ppm = Parts per million

Analytical Methods for Samples Collected 3/12/2002
TPHg by EPA Method 8015M
BTEX/MtBE by EPA Method 8021B
Lead by EPA Method 6010B

Analytical Laboratory for Samples collected 03/12/2002
Lancaster Laboratories (ELAP # 2116)

Notes:
* = Waste Extraction Test (WET) Method

Table 2

Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-3600

2200 Telegraph Avenue

Oakland, California

WELL ID/ TOC* *(ft.)*	DATE	DTW *(ft.)*	GWE *(ft.)*	TPH-G *(ppb)*	B *(ppb)*	T *(ppb)*	E *(ppb)*	X *(ppb)*	MTBE *(ppb)*
MW-1 17.07	04/05/02[1]	11.68	5.39	2,000	5.0	<1.0	14	8.4	310/370[1]
MW-2 16.82	04/05/02[1]	11.17	5.65	<50	<0.50	<0.50	<0.50	<1.5	<2.5/<2[1]
MW-3 16.52	04/05/02[1]	11.29	5.23	<50	<0.50	0.59	<0.50	<1.5	<2.5/<2[1]
QA	04/05/02	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5

Table 2

Groundwater Monitoring Data and Analytical Results
Chevron Service Station #9-3600
2200 Telegraph Avenue
Oakland, California

EXPLANATIONS:

TOC = Top of Casing
(ft.) = Feet
DTW = Depth to Water
GWE = Groundwater Elevation
TPH-G = Total Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl tertiary butyl ether
(ppb) = Parts per billion
-- = Not Measured/Not Analyzed
QA = Quality Assurance

* TOC elevations were surveyed on April 17, 2002, by Morrow Surveying. The elevations are based on a City of Oakland Benchmark No. 37JC, (Benchmark Elevation = 17.68 Feet).

[1] Well development performed.
[1] MTBE by EPA Method 8260.

Table 3

Groundwater Analytical Results - Oxygenate Compounds
Chevron Service Station #9-3600
2200 Telegraph Avenue
Oakland, California

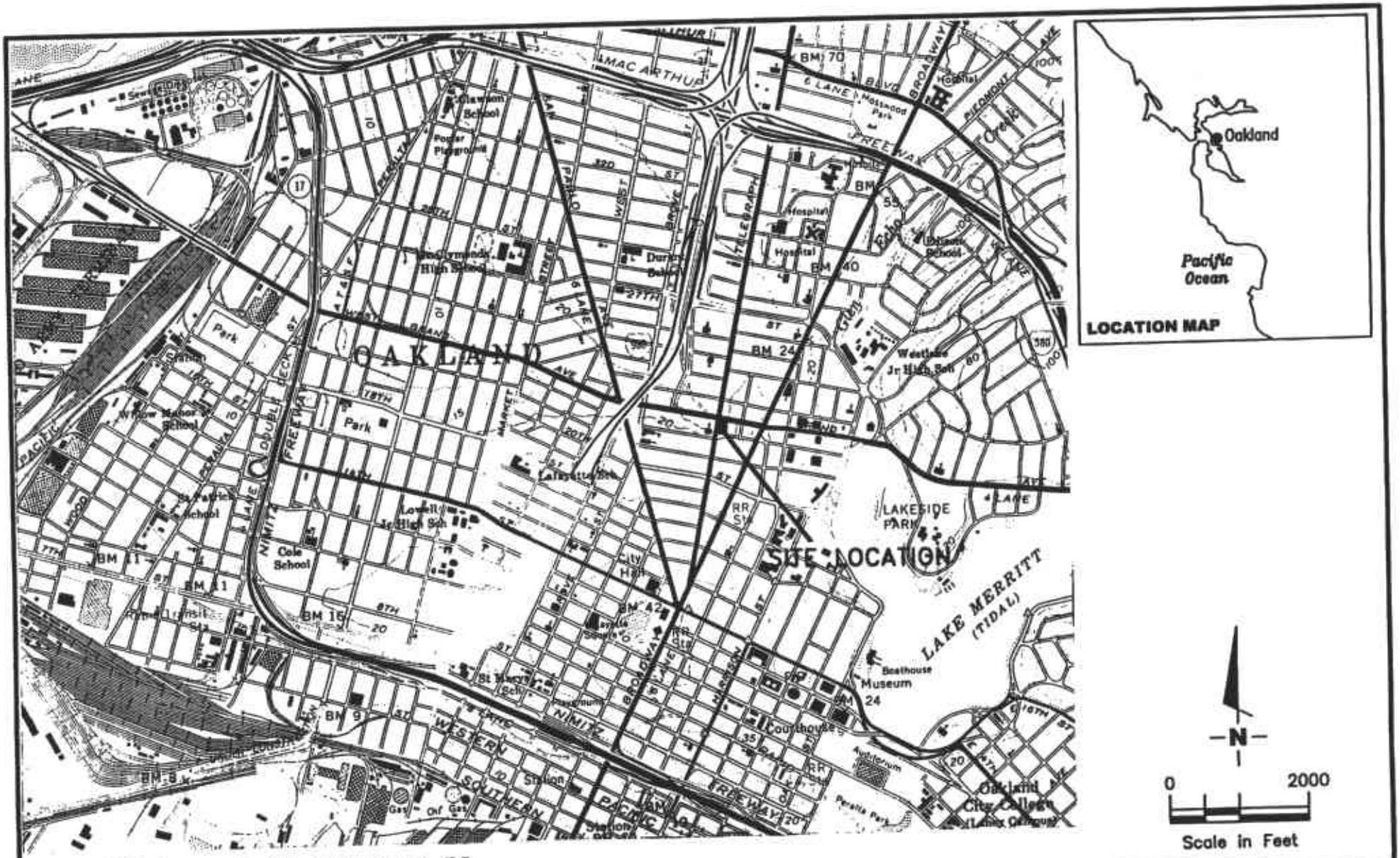
WELL ID	DATE	TBA *(ppb)*	MTBE *(ppb)*	DIPE *(ppb)*	ETBE *(ppb)*	TAME *(ppb)*
MW-1	04/05/02	200	370	<2	<2	10
MW-2	04/05/02	<100	<2	<2	<2	<2
MW-3	04/05/02	<100	<2	<2	<2	<2

EXPLANATIONS:

TBA = Tertiary butyl alcohol
MTBE = Methyl tertiary butyl ether
DIPE = Di-isopropyl ether
ETBE = Ethyl tertiary butyl ether
TAME = Tertiary amyl methyl ether
(ppb) = Parts per billion

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds



Source: USGS Topographic Map, Oakland West, 7.5

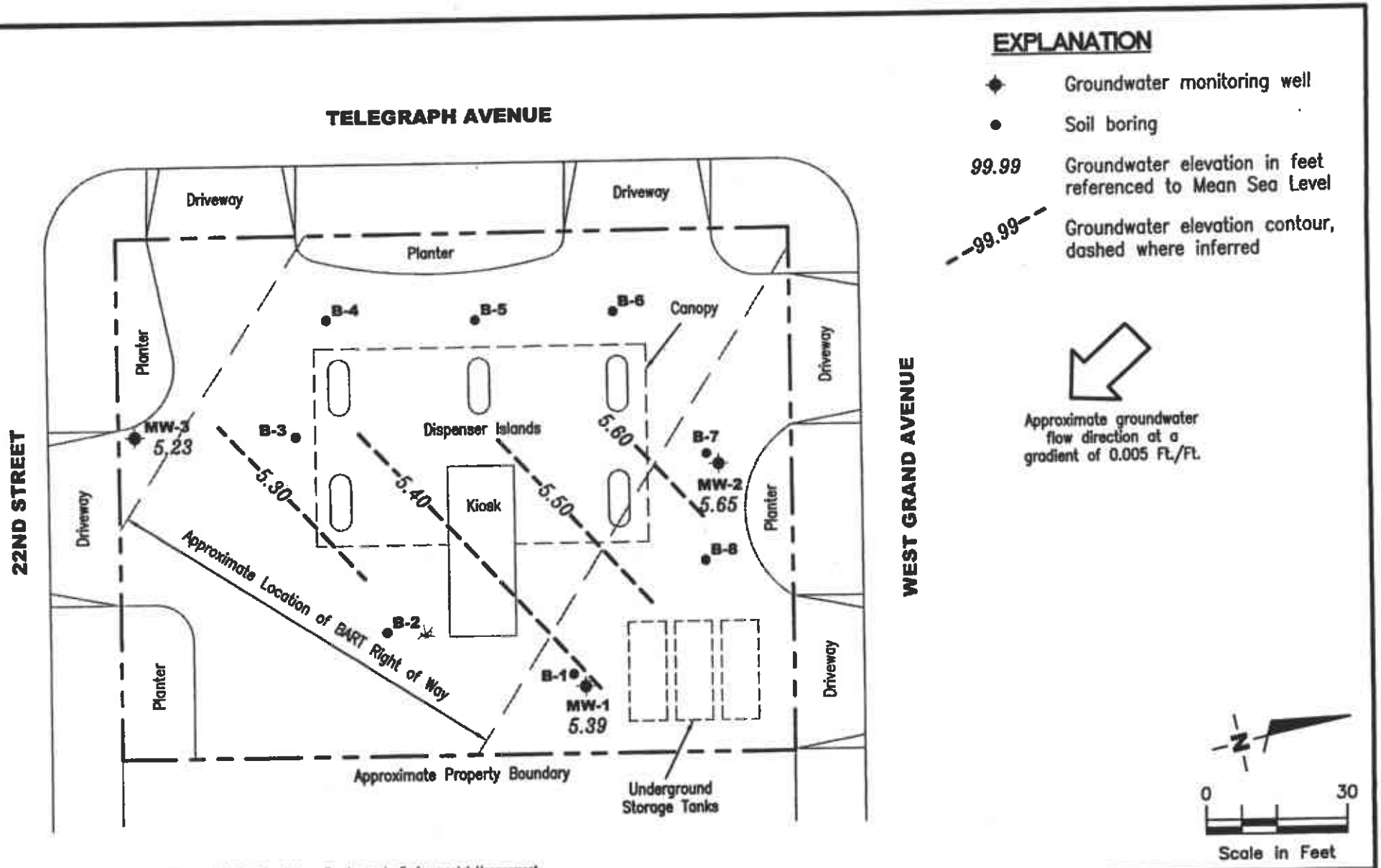
FIGURE 1

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

VICINITY MAP
Chevron Service Station No. 9-3600
2200 Telegraph Avenue
Oakland, California

JOB NUMBER 346895
REVIEWED BY
DATE 11/00
REVISED DATE

FILE NAME: P:\ENVRO\CHEVRON\9-3600\VIC-9-3600.DWG | Layout Tab: CA



Source: Figure modified from drawing provided by Touchstone Developments Environmental Management.

FIGURE 2

POTENTIOMETRIC MAP
Chevron Service Station No. 9-3600
2200 Telegraph Avenue
Oakland, California

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

PROJECT NUMBER
DG93600G.4CT1

REVIEWED BY

DATE
April 5, 2002

REVISED DATE

FILE NAME: P:\ENVIRD\CHEVRON\9-3600\A00-9-3600.DWG | Layout Tab: Well Install 5-02

GETTLER-RYAN INC.

FIELD METHODS AND PROCEDURES
WELL INSTALLATION

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

Collection, preservation, and analysis of samples is performed in accordance with the California Code of Regulations Title 23, Division 3, Chapter 16, *Underground Tank Regulations* (June 2001), the Central Valley Regional Water Quality Control Board's *Tri-Regional Board Staff Recommendations for Preliminary Investigation And Evaluation Of Underground Tank Sites* (August 1990), Environmental Protection Agency *SW-846 Methods* (November 2000), and local agency guidelines.

Well 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 under the supervision of a California Registered Geologist. Soil samples are collected from the soil boring with a split-barrel sampling device fitted with 2-inch-diameter, clean brass tubes 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 2488-93) and the Munsell Soil Color Chart or GSA Rock Color Chart.

After removal from the sampling device, soil samples for chemical analysis are covered on both ends with teflon sheeting, capped, labeled, and placed in a cooler with blue ice for preservation to 48C628C. A chain-of-custody form is initiated in the field and accompanies the selected soil samples to a California state-certified hazardous material testing 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 headspace 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, or by placing a small amount of the soil to be screened in a sealable plastic bag. The soil is warmed in the sun to allow organic compounds in the sample to volatilize. The PID probe is inserted into the headspace inside the tube

through a hole in the plastic cap or through the wall of the plastic bag. Headspace screening results are recorded on the boring log. Headspace 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 well 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). The surveyor also obtains the horizontal coordinates of the well location including GPS longitude and latitude. 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 either drummed, or 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. Drill cuttings samples are composed of four discrete soil samples, each collected from an arbitrary location. The four discrete samples are then composited at the laboratory prior to analysis.

Each discrete drill cuttings 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 by hand, mallet, or drive sampler. The sample tubes are then covered on both ends with Teflon sheeting, 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.

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 2200 Telegraph AVE., OAKland, CA. (CHEVRON #9-3600)

CLIENT
Name CHEVRON U.S.A. Products Company
Address P.O. Box 6004 Phone N/A
City San Ramon, CA Zip 94583-0904

APPLICANT
Name Tony Mikacich / Gettler-Ryan Inc. Fax (916) 631-1317
Address 3140 Gold Camp Dr., Suite 170, Rancho Cordova, CA Phone (916) 631-1300 x14 Zip 95670

TYPE OF PROJECT

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

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other N/A	☐

DRILLING METHOD:

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

DRILLER'S NAME Woodward Drilling Inc. Gregg Drilling

DRILLER'S LICENSE NO. C-57 # 710079

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

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

ESTIMATED STARTING DATE 02/08/02 ~ 03/12/02 ✓ Called in 02/05/02
ESTIMATED COMPLETION DATE 02/08/02 ~ 03/12/02

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

APPLICANT'S SIGNATURE Tony Mikacich (G/R) DATE 01/18/02

PLEASE PRINT NAME Tony Mikacich (for Gettler-Ryan Inc.)

Rev.5-13-00

FOR OFFICE USE

PERMIT NUMBER WO2-0055
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 anode zone with concrete placed by tremie.

F. WELL DESTRUCTION
Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS
Attached #1

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED _____ DATE 1-24-02

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 2200 Telegraph AVE., OAKLAND, CA. (CHEVRON #9-3600)

CLIENT
Name CHEVRON U.S.A. Products Company
Address P.O. BOX 6004 Phone N/A
City SAN RAMON, CA Zip 94583-0904

APPLICANT
Name Tony MIKACICH / Gettler-RYAN INC. Fax (916) 631-1317
Address 3140 Gold CAMP DR., Phone (916) 681-1300 x19
City Suite 170, Rancho Cordova, CA Zip 95670

TYPE OF PROJECT

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

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other N/A	☐

DRILLING METHOD:

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

DRILLER'S NAME Woodward Drilling Inc. Gregg

DRILLER'S LICENSE NO. C-57 # 710079

WELL PROJECTS
Drill Hole Diameter 8 in. Maximum Depth 20 ft.
Casing Diameter 2 in. Owner's Well Number MW-2
Surface Seal Depth 2 ft. MW 5&4

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

ESTIMATED STARTING DATE 03/08/02 03/12/02
ESTIMATED COMPLETION DATE 03/08/02

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

APPLICANT'S SIGNATURE Tony Mikacich (G/R) DATE 01/18/02

PLEASE PRINT NAME Tony MIKACICH (for Gettler-Ryan Inc.)

Rev.5-13-00

FOR OFFICE USE

PERMIT NUMBER WO2-0056
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 inside zone with concrete placed by tremie.

F. WELL DESTRUCTION
Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS Attached #1

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

Approved

APPROVED _____ DATE 1-24-02

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 2200 Telegraph AVE, OAKland, CA. (CHEVRON #9-3600)

CLIENT
Name CHEVRON U.S.A. Products Company
Address P.O. BOX 6004 Phone N/A
City SAN RAMON, CA Zip 94583-0904

APPLICANT
Name Tony Mikacich/Gettler-Ryan INC. Fax (916) 631-1317
Address 3140 Gold Camp Dr. #1 Phone (916) 631-1300 x19
City Suite 170, Rancho Cordova, CA Zip 95670

TYPE OF PROJECT

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

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other N/A	☐

DRILLING METHOD:

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

DRILLER'S NAME Woodward Drilling Inc. Gregg

DRILLER'S LICENSE NO. C-57 # 710079

WELL PROJECTS
Drill Hole Diameter 8 in. Maximum Depth 20 ft.
Casing Diameter 2 in. Owner's Well Number MW-3.
Surface Seal Depth 2 ft. (minimum)

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

ESTIMATED STARTING DATE 02/08/02 03/12/02
ESTIMATED COMPLETION DATE 02/08/02

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

APPLICANT'S SIGNATURE Tony Mikacich (G/R) DATE 01/18/02

PLEASE PRINT NAME Tony Mikacich (for Gettler-Ryan Inc.)

FOR OFFICE USE
PERMIT NUMBER W02-0057
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 anode zone with concrete placed by tremie.

F. WELL DESTRUCTION
Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS
Attached #1

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

Approved 1-24-02

APPROVED ____ DATE ____

Rev.5-13-00

MAJOR DIVISIONS				TYPICAL NAMES
COARSE-GRAINED SOILS (MORE THAN HALF IS COARSER THAN NO. 200 SIEVE)	GRAVELS (MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE SIZE)	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW	Well graded gravels with or without sand, little or no fines
			GP	Poorly graded gravels with or without sand, little or no fines
		GRAVELS WITH OVER 15% FINES	GM	Silty gravels, silty gravels with sand
			GC	Clayey gravels, clayey gravels with sand
	SANDS (MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE SIZE)	CLEAN SANDS WITH LITTLE OR NO FINES	SW	Well graded sands with or without gravel, little or no fines
			SP	Poorly graded sands with or without gravel, little or no fines
		SANDS WITH OVER 15% FINES	SM	Silty sands with or without gravel
			SC	Clayey sands with or without gravel
FINE-GRAINED SOILS (MORE THAN HALF IS FINER THAN NO. 200 SIEVE)	SILTS AND CLAYS (LIQUID LIMIT 50% OR LESS)		ML	Inorganic silts and very fine sands, rock flour, silts with sands and gravels
			CL	Inorganic clays of low to medium plasticity, clays with sands and gravels, lean clays
			OL	Organic silts or clays of low plasticity
	SILTS AND CLAYS (LIQUID LIMIT GREATER THAN 50%)		MH	Inorganic silts, micaceous or diatomaceous, fine sandy or silty soils, elastic silts
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic silts or clays of medium to high plasticity
HIGHLY ORGANIC SOILS			PT	Peat and other highly organic soils

PID	Volatile vapors in ppm
(2.5YR 6/2)	Soil color according to Munsell Soil Color Charts (1993 Edition)
BLOWS/FT.	Sample drive hammer weight – 140 pounds falling 30 inches. Blows required to drive sampler 1 foot are indicated on the logs.

———	Observed contact
– – – –	Inferred contact
▨	No soil sample recovered
■	"Undisturbed" sample
▽	First encountered groundwater level
▼	Static groundwater level

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

UNIFIED SOIL CLASSIFICATION
ASTM D 2488-85
AND
KEY TO SAMPLING DATA

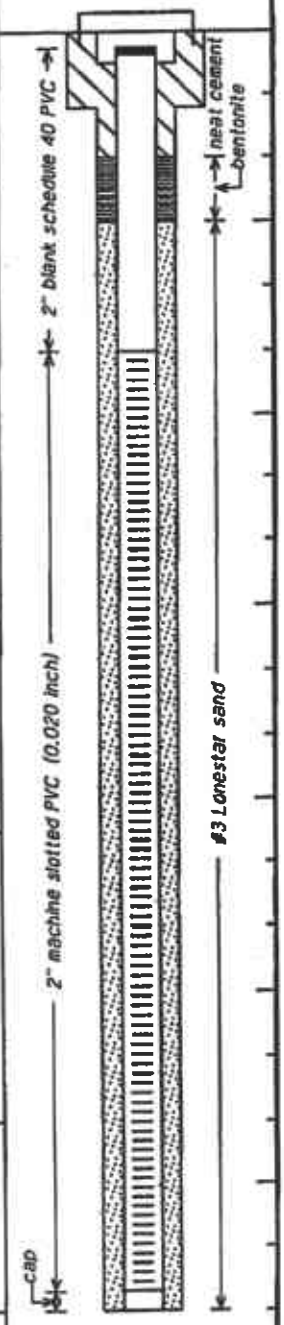
Gettler-Ryan, Inc.

Log of Boring MW-1

PROJECT: *Chevron Service Station No. 9-3600*	LOCATION: *2200 Telegraph Avenue, Oakland, California*
GR PROJECT NO.: *DG93600G.4CTI*	CASING ELEVATION:
DATE STARTED: *03/12/02*	WL (ft. bgs): DATE: TIME:
DATE FINISHED: *03/12/02*	WL (ft. bgs): *11.20* DATE: *03/12/02* TIME: *13:00*
DRILLING METHOD: *8 in. HSA – Limited Access Rig*	TOTAL DEPTH: *20 feet*
DRILLING COMPANY: *Gregg Drilling, Inc.*	GEOLOGIST: *Tony Mikacich*

DEPTH (feet)	SAMPLE NUMBER	SOIL CLASS	GEOLOGIC DESCRIPTION
			Asphalt – 6 inches thick.
		SC	CLAYEY SAND (SC)
3		CL	CLAY WITH SAND (CL) – brown to dark brown (7.5YR 3/3), moist; 80% clay, 20% fine to medium sand, trace fine gravel.
6	MW-1-6.5		
9			CLAY (CL) – black (N2 5Y), moist; 90% clay, 10% fine sand, faint organic odor.
12	MW-1-11.5	SC	CLAYEY SAND (SC) – brown (7.5YR 3/3), wet, medium dense; 60% fine sand, 40% clay, abundant iron oxidation.
15	MW-1-16.5		
18		CL	SANDY CLAY (CL) – brown to green (2.5Y 5/3), trace gray mottling, wet; 70% clay, 30% fine sand, abundant iron oxidation.
	MW-1-20		
21			Bottom of boring at 20 feet bgs.

WELL DIAGRAM



JOB NUMBER: *DG93600G.4CTI*

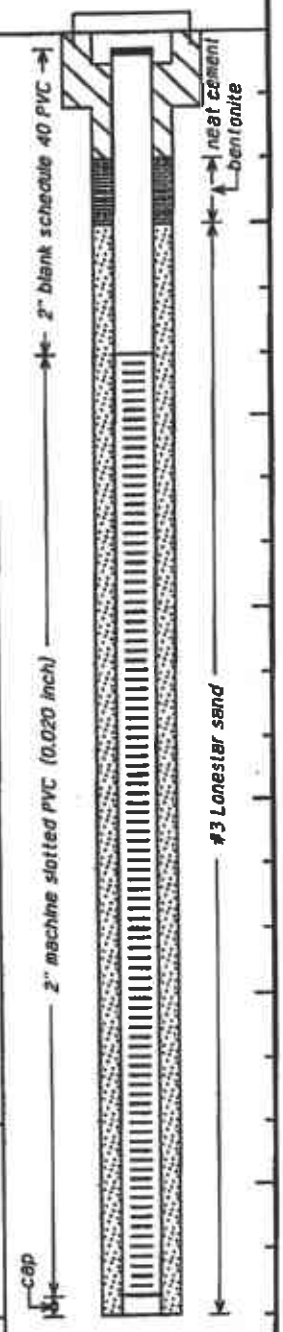
Gettler-Ryan, Inc.

Log of Boring MW-2

PROJECT: *Chevron Service Station No. 9-3600*	LOCATION: *2200 Telegraph Avenue, Oakland, California*
GR PROJECT NO.: *DG93600G.4CTI*	CASING ELEVATION:
DATE STARTED: *03/12/02*	WL (ft. bgs): DATE: TIME:
DATE FINISHED: *03/12/02*	WL (ft. bgs): *11.65* DATE: *03/12/02* TIME: *13:16*
DRILLING METHOD: *8 in. HSA – Limited Access Rig*	TOTAL DEPTH: *20 feet*
DRILLING COMPANY: *Gregg Drilling, Inc.*	GEOLOGIST: *Tony Mikacich*

DEPTH (feet)	SAMPLE NUMBER	SOIL CLASS	GEOLOGIC DESCRIPTION
			Asphalt – 6 inches thick.
		SM	SILTY SAND (SM)
3		CL	CLAY (CL) – black (N.2.5), moist; 80% clay, 20% silt, trace shell fragments.
6	MW-2-6.5		
9			Color changes to dark brown (2.5Y 4/3), moist, very plastic; 70% clay, 20% silt, 10% fine sand, abundant iron oxidation, abundant black organic matter.
12	MW-2-11.5		
15			Becomes wet.
18	MW-2-18.5	SP	POORLY GRADED SAND (SP) – light olive brown (2.5Y 5/3), wet; 100% very fine sand, trace iron oxidation.
21	MW-2-20		Bottom of boring at 20 feet bgs.

WELL DIAGRAM



JOB NUMBER: *DG93600G.4CTI*

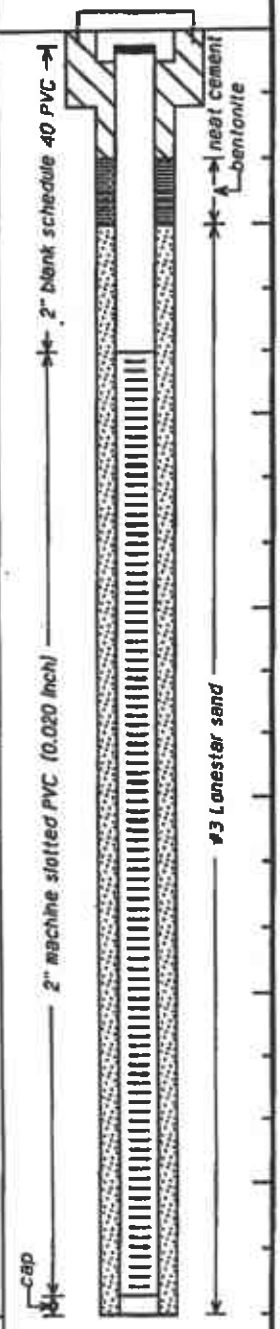
Gettler-Ryan, Inc.

Log of Boring MW-3

PROJECT: *Chevron Service Station No. 9-3600*	LOCATION: *2200 Telegraph Avenue, Oakland, California*
GR PROJECT NO.: *DG936006.4CTI*	CASING ELEVATION:
DATE STARTED: *03/12/02*	WL (ft. bgs): DATE: TIME:
DATE FINISHED: *03/12/02*	WL (ft. bgs): *10.60* DATE: *03/12/02* TIME: *13:05*
DRILLING METHOD: *8 in. HSA – Limited Access Rig*	TOTAL DEPTH: *20 feet*
DRILLING COMPANY: *Gregg Drilling, Inc.*	GEOLOGIST: *Tony Mikacich*

DEPTH (feet)	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
					Asphalt – 6 inches thick.
				CL	SANDY CLAY (CL) – brown (7.5YR 4/3), moist.
3					
6	MW-3-6.5				
9					
	MW-3-11.5			SP	POORLY GRADED SAND (SP) – brown (7.5YR 4/3), wet; 95% fine sand, 5% silt, abundant iron oxidation, abundant black organic matter.
12				SM	SILTY SAND (SM) – brown (7.5YR 4/3), wet; 80% fine sand, 20% silt, abundant iron oxidation, trace gravel.
15					
	MW-3-16.5				
18					Color changes to light olive brown (2.5Y 5/3); trace white mineralization.
	MW-3-20				Bottom of boring at 20 feet bgs.
21					

WELL DIAGRAM



JOB NUMBER: *DG936006.4CTI*

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

IWM, Inc.

INTEGRATED WASTESTREAM MANAGEMENT, INC.
950 AMES AVENUE, MILPITAS, CA 95035
PHONE: 408.942.8955 FAX: 408.942.1499

CERTIFICATE OF DISPOSAL

Generator Name:	Chevron Products Company	Facility Name:	Chevron #9-3600
Address:	6001 Bollinger Canyon Road San Ramon, CA 94583	Address:	2200 Telegraph Avenue Oakland, CA
Contact:	Bob Cochran	Facility Contact:	Tony Mikacich, Gettler-Ryan
Phone:	925-842-9500	Phone:	916-631-1300

IWM Job #:	92134-DS
Description of Waste:	5 Drum(s) of Non-Hazardous Soil
Removal Date:	April 12, 2002
Ticket #:	RSVRL120402

Transporter Information

Name:	IWM, Inc.
Address:	950 Ames Avenue Milpitas, CA 95035
Phone:	(408) 942-8955

Disposal Facility Information

Name:	Republic Services Vasco Road Landfill
Address:	4001 N. Vasco Road Livermore, CA 94550
Phone:	(925) 447-0491

IWM, INC. CERTIFIES THAT THE ABOVE LISTED NON-HAZARDOUS WASTE WILL BE TREATED AND DISPOSED AT THE DESIGNATED FACILITY IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

William T. DeLon William T. DeLon
Authorized Representative (Print Name and Signature)

4/12/02
Date

Client/ Chevron

Facility 9-3600 Job#: 386895

Address: 2200 Telegraph Avenue Date: 4/05/02

City: Oakland, CA Sampler: TC

Well ID MW-1 Well Condition: O.K

Well Diameter 2" in. Hydrocarbon Thickness: 0 Ft. Amount Bailed (product/water): 0 (gal.)

PRE-DEVELOPMENT →

Total Depth 20.00 ft.

Depth to Water 11.68 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.50	12" = 5.80

8.32 x VF .17 = 1.4 x3 (case volume) = Estimated Purge Volume: 14.0 (gal.)

Purge Equipment: Disposable Bailer, Bailer, Stack, Suction, Grundfos, Other: 2" STEEL BAILER

Sampling Equipment: Disposable Bailer, Bailer, Pressure Bailer, Grab Sample, Other:

Starting Time: 1258 Weather Conditions: Cloudy / Sprinkles

Sampling Time: 1430 Water Color: Brown Odor: YES

Purging Flow Rate: 2½ gpm. Sediment Description: VERY SILTY / FINE SAND

Did well de-water? NO If yes: Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
STEEL BAILER 1303	1.5	8.28	1118	65.8			
1308	3.0	8.18	1121	66.1			
1311	4.5	8.16	1136	66.2			
1316	6.0	8.20	1121	66.4			
1319	7.5	8.07	1116	66.8			
1323	9.0	8.10	1133	66.5			
1327	10.5	8.00	1140	66.6			
TEFLON 1332	12.0	7.67	1262	66.9			
1334	13.5	7.41	1281	66.7			
1336	14.0	7.22	1302	66.6			
1406	40½	7.10	1364	66.8			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	6 VOAs VIAL	Y	HCL	LANCASTER	TPH-D; TPH-G/BTEX
					(5) OXYS 8260

COMMENTS: WATER WAS VERY SILTY / PURGED AN EXTRA 26½ GAL. TO CLEAN UP WATER / AFTER PURGING 40½ GAL. WATER WAS CLEAR WELL DEPTH AFTER DEVELOPMENT = 20.00

9/97-Fieldat.frm

FIELD DATA SHEET

Client/ Chevron
Facility 9-3600 Job#: 386895
Address: 2200 Telegraph Avenue Date: 4/05/02
City: Oakland, CA Sampler: TL

Well ID MW-2 Well Condition: o.k

Well Diameter 2" in. Hydrocarbon Thickness: 0 ft. Amount Bailed (product/water): 0 (gal.)

PRE-DEVELOPMENT → Total Depth 19.98 ft.

Depth to Water 11.17 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

8.81 x VF .17 = 1.4 X3 (case volume) = Estimated Purge Volume: 15.9 (gal.)

Purge Equipment: Disposable Bailer, Bailer, Stack, ~~Submersible~~, Grundfos, (Other) 2" STEEL BAILER

Sampling Equipment: ~~Disposable Bailer~~, Bailer, Pressure Bailer, Grab Sample, Other:

Starting Time: 1137 Weather Conditions: Dry. Cloudy
Sampling Time: 1413 Water Color: BROWN Odor: NO
Purging Flow Rate: ~~gpm.~~ Sediment Description: Silty/FINE SAND
Did well de-water? yes If yes; Time: 1200 Volume: 7½ (gal.)
LET RECOVER FOR 10 MIN

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
STEEL BAILER 1140	1.5	7.16	1321	67.9			
1145	3.0	7.28	1221	67.1			
1150	4.5	7.38	1226	67.0			
1155	6.0	7.48	1232	66.9			
1159	7.5	7.41	1230	67.2			
1213	9.0	7.38	1240	67.0			
1218	10.5	7.26	1296	66.4			
1227	12.0	7.16	1320	66.5			
1235	13.5	7.11*	1318	66.9			
1243	15.0	7.10	1326	66.7			

* LET WELL RECOVER, THEN RETURNED TO SAMPLE

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	6 VOA + 1 AG	Y	HCl	LANCASTER	TPH-G/BTEX/MTBE
					(5) OXYS 8260

COMMENTS: *WELL HAS SLOW RECOVERY / WATER STARTED CLEARING-UP AT 10½ GAL. NO NEED PURGE EXTRA WATER / AFTER 15 GAL WATER WAS CLOUDY- AFTER DEVELOPMENT WELL DEPTH @ 20.00 ft

9/97-fieldat.frm

FIELD DATA SHEET

Client/ Chevron
Facility 9-3600 Job#: 386895
Address: 2200 Telegraph Avenue Date: 4/05/02
City: Oakland, CA Sampler: TC

Well ID MW-3 Well Condition: O.k
Well Diameter 2" in. Hydrocarbon Thickness: 0 Ft. Amount Bailed (product/water): 0 (gal.)
PRE-DEVELOPMENT → Total Depth 20.00 ft.
Depth to Water 11.29 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.50	12" = 5.80

8.71 X VF .17 = 1.4 X10 (case volume) = Estimated Purge Volume: 15.0 (gal.)

Purge Equipment: Disposable Bailer, Bailer, Stack, (Suction), Grundfos, (Other:) 2" STEEL BAILER
Sampling Equipment: Disposable Bailer, Bailer, Pressure Bailer, Grab Sample, Other:

Starting Time: 1000 Weather Conditions: cloudy
Sampling Time: 1111 Water Color: BROWN Odor: NO
Purging Flow Rate: 2.0 gpm. Sediment Description: SILTY
Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1006	1.5	8.19	986	67.9			
1011	3.0	8.00	1026	67.3			
1016	4.5	7.91	1121	67.0			
1024	6.0	7.62	1118	66.8			
1029	7.5	7.56	1134	66.9			
1038	9.0	7.74	1216	67.4			
1040	10.5	7.64	1248	67.1			
1042	12.0	7.51	1256	66.8			
1046	13.5	7.32	1288	67.0			
1048	15.0	7.48	1273	67.4			
1101	37.5	7.12	1222	67.2			

LABORATORY INFORMATION

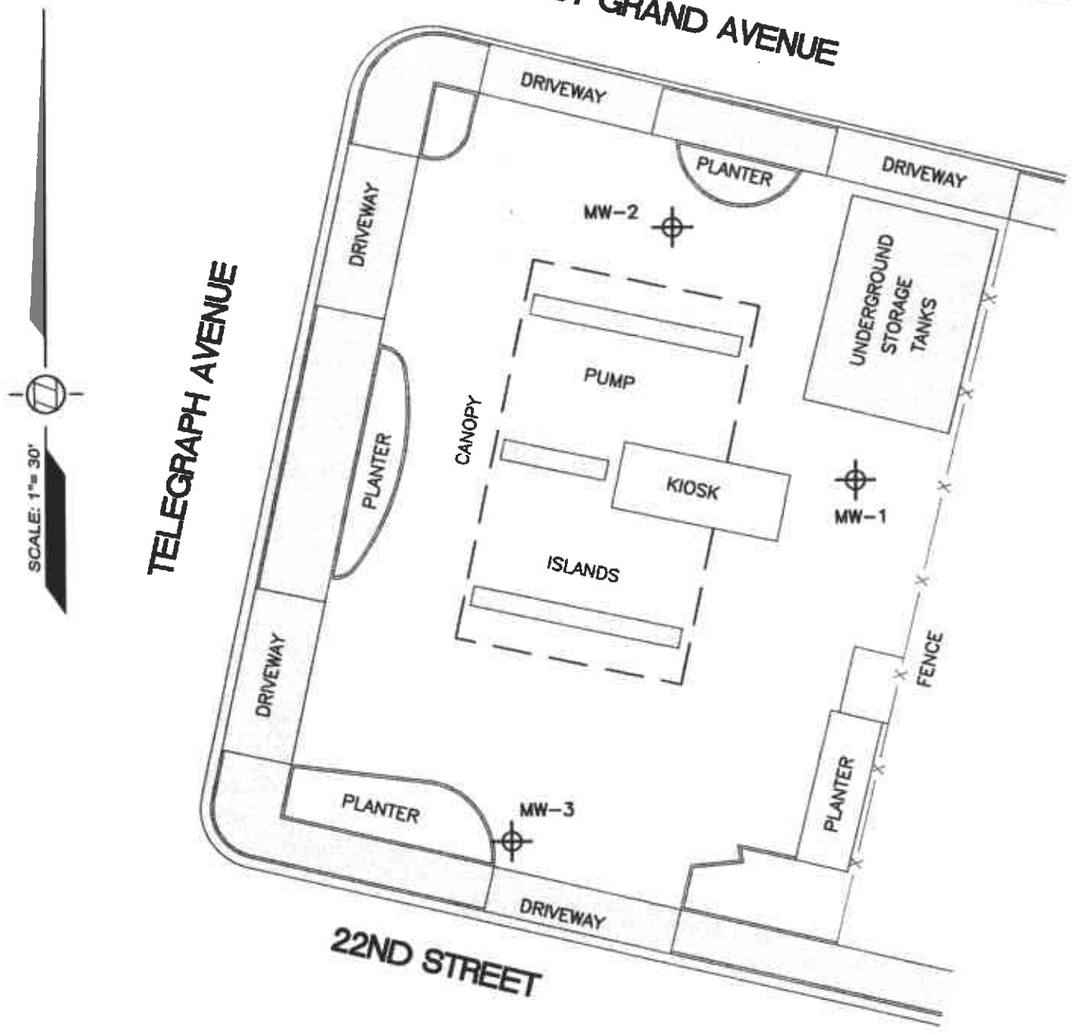
SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	6 X VOA VIAL	Y	HCL	LANCASTER	TPH-G/ BTEX/MTBE
					(5) OXYS 8260

COMMENTS: WATER WAS VERY SILTY PURGED AN EXTRA 22½ GAL. AFTER 37½ GAL WATER WAS CLEAR. REPLACED LOCK W/ 3910
WELL DEPTH AFTER DEVELOPMENT = 20.00'

Monitoring Well Exhibit

Prepared for:

Gettler-Ryan



DESCRIPTION	NORTHING	EASTING	LATITUDE	LONGITUDE	ELEV (PVC)	ELEV (BOX)
MW-1	2122776.7	6050793.6	37.8115054	-122.2685703	17.07	17.40
MW-2	2122827.1	6050757.7	37.8116417	-122.2686978	16.82	17.22
MW-3	2122705.4	6050725.3	37.8113059	-122.2688019	16.52	16.83

BASIS OF COORDINATES AND ELEVATIONS:

COORDINATES ARE CALIFORNIA STATE PLANE ZONE 3 COORDINATES FROM GPS OBSERVATIONS USING UNIVERSITY OF CALIFORNIA BAY AREA DEFORMATION CORS STATION OBSERVATION FILES AND BASED ON THE CALIFORNIA SPATIAL REFERENCE CENTER DATUM, REFERENCE EPOCH 2000.35.

COORDINATE DATUM IS NAD 83(1986).

DATUM ELLIPSOID IS GRS80.

REFERENCE GEOID IS NGS96.

CORS STATIONS USED WERE DIAB AND POTB.

ELEVATIONS ARE BASED ON CITY OF OAKLAND BENCHMARK NO. 37JC. ELEVATION = 17.68 FEET.

Chevron Station No. 9-3600
2200 Telegraph Avenue
Oakland
Alameda County
California

Morrow Surveying
1450 Harbor Blvd. Ste. D
West Sacramento
California 95691
(916) 372-8124
tom@morrowsurveying.com

Date: 4/17/02
Scale: 1" = 30'
Sheet 1 of 1
Revised:
Field Book: MW-6
Dwg. No. 2480-022 AZ

Lancaster Laboratories
Where quality is a science.

ANALYTICAL RESULTS

Prepared for:

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904
925-842-8582

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 800445. Samples arrived at the laboratory on Friday, March 15, 2002. The PO# for this group is 99011184 and the release number is BAUHS.

Client Description			Lancaster Labs Number
MW-1-S-6.5-020312	Grab	Soil	3788880
MW-1-S-11.5-020312	Grab	Soil	3788881
MW-1-S-16.5-020312	Grab	Soil	3788882
MW-1-S-20-020312	Grab	Soil	3788883
MW-2-S-6.5-020312	Grab	Soil	3788884
MW-2-S-11.5-020312	Grab	Soil	3788885
MW-2-S-16.5-020312	Grab	Soil	3788886
MW-2-S-20-020312	Grab	Soil	3788887
MW-3-S-6.5-020312	Grab	Soil	3788888
MW-3-S-11.5-020312	Grab	Soil	3788889
MW-3-S-16.5-020312	Grab	Soil	3788890
MW-3-S-20-020312	Grab	Soil	3788891

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO Gettler-Ryan, Inc Attn: Tony Mikacich

Lancaster Laboratories
Where quality is a science.

Questions? Contact your Client Services Representative
Teresa M Lis at (717) 656-2300.

Respectfully Submitted,

Steven A Skiles
Steven A. Skiles
Sr. Chemist

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3788880

Collected:03/12/2002 10:21 by TM

Account Number: 10992

Submitted: 03/15/2002 09:40
Reported: 03/22/2002 at 00:15
Discard: 03/30/2002
MW-1-S-6.5-020312 Grab Soil

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 GRRC
2200 Telegraph Av-Oakland NA MW-1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					
02160	BTEX/MTBE					
02174	Benzene	71-43-2	N.D.	0.0050	mg/kg	25
02177	Toluene	108-88-3	N.D.	0.0050	mg/kg	25
02178	Ethylbenzene	100-41-4	N.D.	0.0050	mg/kg	25
02182	Total Xylenes	1330-20-7	N.D.	0.015	mg/kg	25
02199	MTBE	1634-04-4	N.D.	0.050	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	03/18/2002 22:54	Stephanie A Selis	25
02160	BTEX/MTBE	SW-846 8021B	1	03/18/2002 22:54	Stephanie A Selis	25
01150	GC VOA Soil Prep	SW-846 5035	1	03/18/2002 06:00	Stephanie A Selis	n.a.

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3788881

Collected:03/12/2002 10:27 by TM

Account Number: 10992

Submitted: 03/15/2002 09:40
Reported: 03/22/2002 at 00:15
Discard: 03/30/2002
MW-1-S-11.5-020312 Grab Soil

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 GRRC
2200 Telegraph Av-Oakland NA MW-1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils	n.a.	3.2	1.0	mg/kg	25
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					
02160	BTEX/MTBE					
02174	Benzene	71-43-2	N.D.	0.0050	mg/kg	25
02177	Toluene	108-88-3	N.D.	0.0050	mg/kg	25
02178	Ethylbenzene	100-41-4	0.015	0.0050	mg/kg	25
02182	Total Xylenes	1330-20-7	N.D.	0.015	mg/kg	25
02199	MTBE	1634-04-4	N.D.	0.050	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	03/18/2002 23:31	Stephanie A Selis	25
02160	BTEX/MTBE	SW-846 8021B	1	03/18/2002 23:31	Stephanie A Selis	25
01150	GC VOA Soil Prep	SW-846 5035	1	03/18/2002 06:01	Stephanie A Selis	n.a.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3788882

Collected:03/12/2002 10:31 by TM

Account Number: 10992

Submitted: 03/15/2002 09:40
Reported: 03/22/2002 at 00:15
Discard: 03/30/2002
MW-1-S-16.5-020312 Grab Soil

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 GRRC
2200 Telegraph Av-Oakland NA MW-1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					
02160	BTEX/MTBE					
02174	Benzene	71-43-2	N.D.	0.0050	mg/kg	25
02177	Toluene	108-88-3	N.D.	0.0050	mg/kg	25
02178	Ethylbenzene	100-41-4	N.D.	0.0050	mg/kg	25
02182	Total Xylenes	1330-20-7	N.D.	0.015	mg/kg	25
02199	MTBE	1634-04-4	N.D.	0.050	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	03/19/2002 00:08	Stephanie A Selis	25
02160	BTEX/MTBE	SW-846 8021B	1	03/19/2002 00:08	Stephanie A Selis	25
01150	GC VOA Soil Prep	SW-846 5035	1	03/18/2002 06:02	Stephanie A Selis	n.a.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3788883

Collected:03/12/2002 10:35 by TM

Account Number: 10992

Submitted: 03/15/2002 09:40
Reported: 03/22/2002 at 00:16
Discard: 03/30/2002
MW-1-S-20-020312 Grab Soil

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 GRRC
2200 Telegraph Av-Oakland NA MW-1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					
02160	BTEX/MTBE					
02174	Benzene	71-43-2	N.D.	0.0050	mg/kg	25
02177	Toluene	108-88-3	N.D.	0.0050	mg/kg	25
02178	Ethylbenzene	100-41-4	N.D.	0.0050	mg/kg	25
02182	Total Xylenes	1330-20-7	N.D.	0.015	mg/kg	25
02199	MTBE	1634-04-4	N.D.	0.050	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	03/19/2002 00:45	Stephanie A Selis	25
02160	BTEX/MTBE	SW-846 8021B	1	03/19/2002 00:45	Stephanie A Selis	25
01150	GC VOA Soil Prep	SW-846 5035	1	03/18/2002 06:03	Stephanie A Selis	n.a.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3788884

Collected:03/12/2002 09:03 by TM

Account Number: 10992

Submitted: 03/15/2002 09:40
Reported: 03/22/2002 at 00:16
Discard: 03/30/2002
MW-2-S-6.5-020312 Grab Soil

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 GRRC
2200 Telegraph Av-Oakland NA MW-2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					
02160	BTEX/MTBE					
02174	Benzene	71-43-2	N.D.	0.0050	mg/kg	25
02177	Toluene	108-88-3	N.D.	0.0050	mg/kg	25
02178	Ethylbenzene	100-41-4	N.D.	0.0050	mg/kg	25
02182	Total Xylenes	1330-20-7	N.D.	0.015	mg/kg	25
02199	MTBE	1634-04-4	N.D.	0.050	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	03/19/2002 01:22	Stephanie A Selis	25
02160	BTEX/MTBE	SW-846 8021B	1	03/19/2002 01:22	Stephanie A Selis	25
01150	GC VOA Soil Prep	SW-846 5035	1	03/18/2002 06:04	Stephanie A Selis	n.a.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3788885

Collected:03/12/2002 09:07 by TM

Account Number: 10992

Submitted: 03/15/2002 09:40
Reported: 03/22/2002 at 00:16
Discard: 03/30/2002
MW-2-S-11.5-020312 Grab Soil

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 GRRC
2200 Telegraph Av-Oakland NA MW-2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					
02160	BTEX/MTBE					
02174	Benzene	71-43-2	N.D.	0.0050	mg/kg	25
02177	Toluene	108-88-3	N.D.	0.0050	mg/kg	25
02178	Ethylbenzene	100-41-4	N.D.	0.0050	mg/kg	25
02182	Total Xylenes	1330-20-7	N.D.	0.015	mg/kg	25
02199	MTBE	1634-04-4	N.D.	0.050	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	03/19/2002 00:22	Martha L Seidel	25
02160	BTEX/MTBE	SW-846 8021B	1	03/19/2002 00:22	Martha L Seidel	25
01150	GC VOA Soil Prep	SW-846 5035	1	03/18/2002 06:05	Stephanie A Selis	n.a.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3788886

Collected:03/12/2002 09:14 by TM

Account Number: 10992

Submitted: 03/15/2002 09:40
Reported: 03/22/2002 at 00:16
Discard: 03/30/2002
MW-2-S-16.5-020312 Grab Soil

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 GRRC
2200 Telegraph Av-Oakland NA MW-2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					
02160	BTEX/MTBE					
02174	Benzene	71-43-2	N.D.	0.0050	mg/kg	25
02177	Toluene	108-88-3	N.D.	0.0050	mg/kg	25
02178	Ethylbenzene	100-41-4	N.D.	0.0050	mg/kg	25
02182	Total Xylenes	1330-20-7	N.D.	0.015	mg/kg	25
02199	MTBE	1634-04-4	N.D.	0.050	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	03/19/2002 01:00	Martha L Seidel	25
02160	BTEX/MTBE	SW-846 8021B	1	03/19/2002 01:00	Martha L Seidel	25
01150	GC VOA Soil Prep	SW-846 5035	1	03/18/2002 06:06	Stephanie A Selis	n.a.

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3788887

Collected:03/12/2002 09:20 by TM

Account Number: 10992

Submitted: 03/15/2002 09:40
Reported: 03/22/2002 at 00:16
Discard: 03/30/2002
MW-2-S-20-020312 Grab Soil

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 GRRC
2200 Telegraph Av-Oakland NA MW-2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					
02160	BTEX/MTBE					
02174	Benzene	71-43-2	N.D.	0.0050	mg/kg	25
02177	Toluene	108-88-3	N.D.	0.0050	mg/kg	25
02178	Ethylbenzene	100-41-4	N.D.	0.0050	mg/kg	25
02182	Total Xylenes	1330-20-7	N.D.	0.015	mg/kg	25
02199	MTBE	1634-04-4	N.D.	0.050	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	03/19/2002 01:37	Martha L Seidel	25
02160	BTEX/MTBE	SW-846 8021B	1	03/19/2002 01:37	Martha L Seidel	25
01150	GC VOA Soil Prep	SW-846 5035	1	03/18/2002 06:07	Stephanie A Selis	n.a.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3788888

Collected:03/12/2002 11:45 by TM

Account Number: 10992

Submitted: 03/15/2002 09:40
Reported: 03/22/2002 at 00:16
Discard: 03/30/2002
MW-3-S-6.5-020312 Grab Soil

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 GRRC
2200 Telegraph Av-Oakland NA MW-3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					
02160	BTEX/MTBE					
02174	Benzene	71-43-2	N.D.	0.0050	mg/kg	25
02177	Toluene	108-88-3	N.D.	0.0050	mg/kg	25
02178	Ethylbenzene	100-41-4	N.D.	0.0050	mg/kg	25
02182	Total Xylenes	1330-20-7	N.D.	0.015	mg/kg	25
02199	MTBE	1634-04-4	N.D.	0.050	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	03/19/2002 02:15	Martha L Seidel	25
02160	BTEX/MTBE	SW-846 8021B	1	03/19/2002 02:15	Martha L Seidel	25
01150	GC VOA Soil Prep	SW-846 5035	1	03/18/2002 06:08	Stephanie A Selis	n.a.

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3788889

Collected:03/12/2002 11:49 by TM

Account Number: 10992

Submitted: 03/15/2002 09:40
Reported: 03/22/2002 at 00:16
Discard: 03/30/2002
MW-3-S-11.5-020312 Grab Soil

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 GRRC
2200 Telegraph Av-Oakland NA MW-3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					
02160	BTEX/MTBE					
02174	Benzene	71-43-2	N.D.	0.0050	mg/kg	25
02177	Toluene	108-88-3	N.D.	0.0050	mg/kg	25
02178	Ethylbenzene	100-41-4	N.D.	0.0050	mg/kg	25
02182	Total Xylenes	1330-20-7	N.D.	0.015	mg/kg	25
02199	MTBE	1634-04-4	N.D.	0.050	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	03/19/2002 02:52	Martha L Seidel	25
02160	BTEX/MTBE	SW-846 8021B	1	03/19/2002 02:52	Martha L Seidel	25
01150	GC VOA Soil Prep	SW-846 5035	1	03/18/2002 06:09	Stephanie A Selis	n.a.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3788890

Collected:03/12/2002 11:54 by TM

Account Number: 10992

Submitted: 03/15/2002 09:40
Reported: 03/22/2002 at 00:16
Discard: 03/30/2002
MW-3-S-16.5-020312 Grab Soil

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 GRRC
2200 Telegraph Av-Oakland NA MW-3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					
02160	BTEX/MTBE					
02174	Benzene	71-43-2	N.D.	0.0050	mg/kg	25
02177	Toluene	108-88-3	N.D.	0.0050	mg/kg	25
02178	Ethylbenzene	100-41-4	N.D.	0.0050	mg/kg	25
02182	Total Xylenes	1330-20-7	N.D.	0.015	mg/kg	25
02199	MTBE	1634-04-4	N.D.	0.050	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	03/19/2002 03:30	Martha L Seidel	25
02160	BTEX/MTBE	SW-846 8021B	1	03/19/2002 03:30	Martha L Seidel	25
01150	GC VOA Soil Prep	SW-846 5035	1	03/18/2002 06:10	Stephanie A Selis	n.a.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3788891

Collected:03/12/2002 11:58 by TM

Account Number: 10992

Submitted: 03/15/2002 09:40
Reported: 03/22/2002 at 00:16
Discard: 03/30/2002
MW-3-S-20-020312 Grab Soil

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 GRRC
2200 Telegraph Av-Oakland NA MW-3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					
02160	BTEX/MTBE					
02174	Benzene	71-43-2	N.D.	0.0050	mg/kg	25
02177	Toluene	108-88-3	N.D.	0.0050	mg/kg	25
02178	Ethylbenzene	100-41-4	N.D.	0.0050	mg/kg	25
02182	Total Xylenes	1330-20-7	N.D.	0.015	mg/kg	25
02199	MTBE	1634-04-4	N.D.	0.050	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	03/19/2002 04:07	Martha L Seidel	25
02160	BTEX/MTBE	SW-846 8021B	1	03/19/2002 04:07	Martha L Seidel	25
01150	GC VOA Soil Prep	SW-846 5035	1	03/18/2002 06:11	Stephanie A Selis	n.a.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Quality Control Summary

Client Name: Chevron Products Company
Reported: 03/22/02 at 12:16 AM

Group Number: 800445

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 02077A31A	Sample number(s): 3788885-3788891							
TPH-GRO - Soils	N.D.	1.	mg/kg	78		75-117		
Benzene	N.D.	.005	mg/kg	104		84-132		
Toluene	N.D.	.005	mg/kg	104		88-116		
Ethylbenzene	N.D.	.005	mg/kg	103		87-127		
Total Xylenes	N.D.	.015	mg/kg	104		88-120		
MTBE	N.D.	.05	mg/kg	100		64-158		
Batch number: 02077A33C	Sample number(s): 3788880-3788884							
TPH-GRO - Soils	N.D.	1.	mg/kg	80		75-117		
Benzene	N.D.	.005	mg/kg	101		84-132		
Toluene	N.D.	.005	mg/kg	100		88-116		
Ethylbenzene	N.D.	.005	mg/kg	102		87-127		
Total Xylenes	N.D.	.015	mg/kg	102		88-120		
MTBE	N.D.	.05	mg/kg	95		64-158		

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 02077A31A	Sample number(s): 3788885-3788891								
TPH-GRO - Soils	60	63	44-116	6	30				
Benzene	107	113	56-142	5	30				
Toluene	83	87	66-120	4	30				
Ethylbenzene	89	93	66-131	4	30				
Total Xylenes	83	87	67-122	4	30				
MTBE	90	91	42-163	2	30				
Batch number: 02077A33C	Sample number(s): 3788880-3788884								
TPH-GRO - Soils	72	79	44-116	9	30				
Benzene	111	119	56-142	7	30				
Toluene	86	91	66-120	6	30				
Ethylbenzene	97	102	66-131	6	30				
Total Xylenes	89	94	67-122	5	30				
MTBE	132	144	42-163	8	30				

Surrogate Quality Control

Analysis Name: TPH-GRO - Soils
Batch number: 02077A31A

	Trifluorotoluene-F	Trifluorotoluene-P
3788885	78	99
3788886	74	93

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science

Quality Control Summary

Client Name: Chevron Products Company
Group Number: 800445
Reported: 03/22/02 at 12:16 AM

Surrogate Quality Control

3788887	80	99
3788888	81	97
3788889	77	92
3788890	80	97
3788891	76	96
Blank	81	104
LCS	88	104
MS	77	90
MSD	79	93
Limits:	61-127	68-122

Analysis Name: TPH-GRO - Soils
Batch number: 02077A33C

	Trifluorotoluene-F	Trifluorotoluene-P
3788880	97	100
3788881	96	98
3788882	92	96
3788883	93	96
3788884	97	98
Blank	108	105
LCS	97	105
MS	95	96
MSD	100	103
Limits:	61-127	68-122

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Chevron California Region Analysis Request/Chain of Custody

1 of 2

Lancaster Laboratories
Where quality is a science.

Acct. #: ~~10905~~ 10992 — For Lancaster Laboratories use only — Sample #: 3788880-91 / 3788871 — SCR#:

Facility #: 9-3600
Site Address: 2200 Telegraph AVE., OAKLAND
Chevron PM: Tom Bauhs — Lead Consultant: Delta/GR
Consultant/Office: Gettler-Ryan Inc. / Rancho Cordova
Consultant Prj. Mgr.: Tony Mikacich
Consultant Phone #: (916) 631-1300 — Fax #: (916) 631-1317
Sampler: Tony Mikacich
Service Order #: DG936006.4CT1 — ☐ Non SAR:

Analyses Requested / Preservation Codes

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water (☐ Potable ☐ NPDES)	Oil ☐ Air ☐	Total Number of Containers	BTEX + MTBE 8260 ☐ 8021 ☒	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	~~Oxygenates~~ TOTAL Lead	Lead 7420 ☐ 7421 ☐ 6010B						
MW-1-6.5	03/12/02	10:21	X		X			1	✓	✓										
MW-1-11.5	↓	10:27	↓		↓			1	↓	↓										
MW-1-16.5	↓	10:31	↓		↓			1	↓	↓										
MW-1-20	↓	10:35	↓		↓			1	↓	↓										
MW-2-6.5	↓	9:03	↓		↓			1	↓	↓										
MW-2-11.5	↓	9:07	↓		↓			1	↓	↓										
MW-2-16.5	↓	9:14	↓		↓			1	↓	↓										
MW-2-20	↓	9:20	↓		↓			1	↓	↓										
MW-3-6.5	↓	11:45	↓		↓			1	↓	↓										
MW-3-11.5	↓	11:49	↓		↓			1	↓	↓										
MW-3-16.5	↓	11:54	↓		↓			1	↓	↓										
MW-3-20	↓	11:58	↓		↓			1	↓	↓										
SP-1-4		12:08		X	↓			4						X						

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

☐ J value reporting needed
☐ Must meet lowest detection limits possible for 8260 compounds

8021 MTBE Confirmation
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run ____ oxy's on highest hit
☐ Run ____ oxy's on all hits

Comments / Remarks
(4:1 Composite) (48hr. TAT)

Turnaround Time Requested (TAT) (please circle)
(STD. TAT) 72 hour 24 hour 4 day (48 hour) (ON composite) 5 day

Data Package Options (please circle if required)
QC Summary Type I – Full
Type VI (Raw Data) ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk

Relinquished by:	Date	Time	Received by:	Date	Time
Tony Mikacich	03/14/02	4:30			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by Commercial Carrier: UPS (FedEx) Other ______			Received by: [signature]	3/15/02	0940
Temperature Upon Receipt 3 C°			Custody Seals Intact? (Yes) No		

3460 Rev. 7/30/01

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

Chevron California Region Analysis Request/Chain of Custody

2052

Lancaster Laboratories
Where quality is a science.

Acct. #: 10992 (10905) For Lancaster Laboratories use only Sample #: 378880-91 378881 SCR#:

Facility #: 9-3600
Site Address: 2200 Telegraph AVE., OAKLAND
Chevron PM: Tom Bauhs Lead Consultant: Delta/GR
Consultant/Office: Getler-Ryan Inc./Rancho Cordova
Consultant Prj. Mgr.: Tony Mikacich
Consultant Phone #: (916) 631-1300 Fax #: (916) 631-1317
Sampler: Tony Mikacich
Service Order #: DG93600G.4CT1 ☐ Non SAR:

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Water	Oil	Air	Potable	NPDES	Total Number of Containers	BTEX + MTBE 8260	8021	TPH 8015 MOD GRO	TPH 8015 MOD DRO	Silica Gel Cleanup	8260 full scan	Oxygenates	Total Lead 6010B	Lead 7420	7421
MW-1-6.5	03/12/02	10:21	X		X						1	X									
MW-1-11.5		10:27									1										
MW-1-16.5		10:31									1										
MW-1-20		10:35									1										
MW-2-6.5		9:03									1										
MW-2-11.5		9:07									1										
MW-2-16.5		9:14									1										
MW-2-20		9:20									1										
MW-3-6.5		11:45									1										
MW-3-11.5		11:49									1										
MW-3-16.5		11:54									1										
MW-3-20		11:58									1										
SP-1-4		12:08		X							4								X		4

Analyses Requested / Preservation Codes

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

☐ J value reporting needed
☐ Must meet lowest detection limits possible for 8260 compounds

8021 MTBE Confirmation
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run ____ oxy's on highest hit
☐ Run ____ oxy's on all hits

Comments / Remarks
(4:1 Composite)
(48hr. TAT)

Turnaround Time Requested (TAT) (please circle)
STD. TAT 24 hour 48 hour (on composite)
72 hour 4 day 5 day

Data Package Options (please circle if required)
QC Summary Type I – Full
Type VI (Raw Data) ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk

Relinquished by:	Date	Time	Received by:	Date	Time
Tony Mikacich	03/14/02	4:30			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by Commercial Carrier: UPS FedEx Other			Received by: Unknown	3/15/02	0940
Temperature Upon Receipt 3 C°			Custody Seals Intact? Yes No		

3460 Rev. 7/30/01

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

Lancaster Laboratories
Where quality is a science.

ANALYTICAL RESULTS

Prepared for:

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904
925-842-8582

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 800440. Samples arrived at the laboratory on Friday, March 15, 2002. The PO# for this group is 99011184 and the release number is BAUHS.

Client Description		Lancaster Labs Number
SP-1-4-S-020312	Composite Soil	3788871

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO Gettler-Ryan, Inc Attn: Tony Mikacich

Questions? Contact your Client Services Representative
Teresa M Lis at (717) 656-2300.

Respectfully Submitted,

Steven A. Skiles
Sr. Chemist

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3788871

Collected:03/12/2002 12:08 by TM

Account Number: 10992

Submitted: 03/15/2002 09:40
Reported: 03/20/2002 at 13:13
Discard: 03/28/2002
SP-1-4-S-020312 Composite Soil

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 GRRC
2200 Telegraph Av-Oakland NA SP1-4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01655	Lead	7439-92-1	110.	0.80	mg/kg	1
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					
02160	BTEX/MTBE					
02174	Benzene	71-43-2	N.D.	0.0050	mg/kg	25
02177	Toluene	108-88-3	N.D.	0.0050	mg/kg	25
02178	Ethylbenzene	100-41-4	N.D.	0.0050	mg/kg	25
02182	Total Xylenes	1330-20-7	N.D.	0.015	mg/kg	25
02199	MTBE	1634-04-4	N.D.	0.050	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01655	Lead	SW-846 6010B	1	03/19/2002 15:53	David K Beck	1
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	03/18/2002 07:27	Stephanie A Selis	25
02160	BTEX/MTBE	SW-846 8021B	1	03/18/2002 07:27	Stephanie A Selis	25
01150	GC VOA Soil Prep	SW-846 5035	1	03/18/2002 01:15	Stephanie A Selis	n.a.
05708	SW SW846 ICP Digest	SW-846 3050B	1	03/18/2002 06:40	Liana C Jones	1

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3788871

Collected:03/12/2002 12:08 by TM

Account Number: 10992

Submitted: 03/15/2002 09:40
Reported: 03/20/2002 at 13:13
Discard: 03/28/2002
SP-1-4-S-020312 Composite Soil

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 GRRC
2200 Telegraph Av-Oakland NA SP1-4

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Quality Control Summary

Client Name: Chevron Products Company
Reported: 03/20/02 at 01:13 PM

Group Number: 800440

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 020775708001	Sample number(s): 3788871							
Lead	N.D.	.82	mg/kg	100		86-109		
Batch number: 02077A33A	Sample number(s): 3788871							
TPH-GRO - Soils	N.D.	1.	mg/kg	80		75-117		
Benzene	N.D.	.005	mg/kg	101		84-132		
Toluene	N.D.	.005	mg/kg	100		88-116		
Ethylbenzene	N.D.	.005	mg/kg	102		87-127		
Total Xylenes	N.D.	.015	mg/kg	102		88-120		
MTBE	N.D.	.05	mg/kg	95		64-158		

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 020775708001	Sample number(s): 3788871								
Lead	139*	80	75-125	18	20	110.	175.	46*	20
Batch number: 02077A33A	Sample number(s): 3788871								
TPH-GRO - Soils	72	79	44-116	9	30				
Benzene	111	119	56-142	7	30				
Toluene	86	91	66-120	6	30				
Ethylbenzene	97	102	66-131	6	30				
Total Xylenes	89	94	67-122	5	30				
MTBE	132	144	42-163	8	30				

Surrogate Quality Control

Analysis Name: TPH-GRO - Soils
Batch number: 02077A33A

	Trifluorotoluene-F	Trifluorotoluene-P
3788871	96	96
Blank	101	108
LCS	97	105
MS	95	96
MSD	100	103
Limits:	61-127	68-122

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Chevron California Region Analysis Request/Chain of Custody

1 of 2

Lancaster Laboratories
Where quality is a science.

Acct. #: 10992 ~~10905~~ For Lancaster Laboratories use only Sample #: 3788880-91 3788871 SCR#:

Facility #: 9-3600
Site Address: 2200 Telegraph AVE., OAKLAND
Chevron PM: Tom Bauhs Lead Consultant: Delta/GR
Consultant/Office: Getler-Ryan Inc./Rancho Cordova
Consultant Prj. Mgr.: Tony Mikacich
Consultant Phone #: (916) 631-1300 Fax #: (916) 631-1317
Sampler: Tony Mikacich
Service Order #: DG936006.4CT1 ☐ Non SAR:

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water	Matrix: Oil ☐ Air ☐ Potable ☐ NPDES	Total Number of Containers	Analyses Requested / Preservation Codes: BTEX + MTBE 8260 ☐ 8021	TPH 8015 MOD GRO	TPH 8015 MOD DRO	Silica Gel Cleanup ☐	8260 full scan	Oxygenates	Lead 7420 ☐ 7421 ☐ TOTAL Lead GOLDB
MW-1-6.5	03/12/02	10:21	X		X			1							
MW-1-11.5		10:27						1							
MW-1-16.5		10:31						1							
MW-1-20		10:35						1							
MW-2-6.5		9:03						1							
MW-2-11.5		9:07						1							
MW-2-16.5		9:14						1							
MW-2-20		9:20						1							
MW-3-6.5		11:45						1							
MW-3-11.5		11:49						1							
MW-3-16.5		11:54						1							
MW-3-20		11:58						1							
SP-1-4		12:08		X				4							X

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

☐ J value reporting needed
☐ Must meet lowest detection limits possible for 8260 compounds

8021 MTBE Confirmation
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run ____ oxy's on highest hit
☐ Run ____ oxy's on all hits

Comments / Remarks
(4:1 Composite)
(48hr. TAT)

Turnaround Time Requested (TAT) (please circle)
STD. TAT 24 hour 48 hour (on composite)
72 hour 4 day 5 day

Data Package Options (please circle if required)
QC Summary Type I – Full
Type VI (Raw Data) ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk

	Date	Time		Date	Time
Relinquished by: Tony Mikacich	03/14/02	4:30	Received by:		
Relinquished by:			Received by:		
Relinquished by:			Received by:		
Relinquished by Commercial Carrier: UPS FedEx Other			Received by: UNOCAL	3/15/02	0940
Temperature Upon Receipt 3 C°			Custody Seals Intact? Yes No		

3460 Rev. 7/30/01

Chevron California Region Analysis Request/Chain of Custody

2 of 2

Lancaster Laboratories
Where quality is a science.

Acct. #: ~~10905~~ 10992 For Lancaster Laboratories use only Sample #: 378888-91 378887 SCR#:

Facility #: 9-3600
Site Address: 2200 Telegraph AVE, OAKLAND
Chevron PM: Tom Bauhs Lead Consultant: Delta/GR
Consultant/Office: Getler-Ryan Inc./Rancho Cordova
Consultant Prj. Mgr.: Tony Mikacich
Consultant Phone #: (916) 631-1300 Fax #: (916) 631-1317
Sampler: Tony Mikacich
Service Order #: DG936006.4CT1 ☐ Non SAR:

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Oil	Air	Total Number of Containers	BTEX + MTBE 8260 ☐ 8021	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	~~Oxygenates~~ TOTAL Lead	Lead 7420 ☐ 7421 ☐ 6010B
MW-1-6.5	03/12/02	10:21	X		X				1						
MW-1-11.5		10:27							1						
MW-1-16.5		10:31							1						
MW-1-20		10:35							1						
MW-2-6.5		9:03							1						
MW-2-11.5		9:07							1						
MW-2-16.5		9:14							1						
MW-2-20		9:20							1						
MW-3-6.5		11:45							1						
MW-3-11.5		11:49							1						
MW-3-16.5		11:54							1						
MW-3-20		11:58							1						
SP-1-4		12:08		X					4						X

Analyses Requested / Preservation Codes

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

☐ J value reporting needed
☐ Must meet lowest detection limits possible for 8260 compounds
8021 MTBE Confirmation
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run ____ oxy's on highest hit
☐ Run ____ oxy's on all hits

Comments / Remarks
(4:1 Composite)
(48hr. TAT)

Turnaround Time Requested (TAT) (please circle)
STD. TAT 24 hour 48 hour (on composite)
72 hour 4 day 5 day

Data Package Options (please circle if required)
QC Summary Type I – Full
Type VI (Raw Data) ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk

Relinquished by:	Date	Time	Received by:	Date	Time
Tony Mikacich	03/14/02	4:30			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by Commercial Carrier: UPS FedEx Other			Received by: UNOCAL	Date 3/15/02	Time 0940
Temperature Upon Receipt 3 C°			Custody Seals Intact? Yes No		

3460 Rev. 7/30/01

Lancaster Laboratories
Where quality is a science.

ANALYTICAL RESULTS

Prepared for:

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904
925-842-8582

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 800970. Samples arrived at the laboratory on Wednesday, March 20, 2002. The PO# for this group is 99011184 and the release number is BAUHS.

Client Description		Lancaster Labs Number
SP-1-4-S-020312	Composite Soil	3791586
SP-1-4-S-020312	Composite Soil	3791587

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO Gettler Ryan Attn: Tony Mikacich

Questions? Contact your Client Services Representative
Teresa M Lis at (717) 656-2300.

Respectfully Submitted,

Erik J. Frederiksen
Group Leader

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3791586

Collected:03/12/2002 12:08 by TM

Account Number: 10992

Submitted: 03/20/2002 15:43
Reported: 04/01/2002 at 21:05
Discard: 04/16/2002
SP-1-4-S-020312 Composite Soil

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 GRRC
2200 Telegraph Av Oakland NA SP1-4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01655	Lead	7439-92-1	74.5	0.80	mg/kg	1

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01655	Lead	SW-846 6010B	1	03/22/2002 10:55	Joanne M Gates	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	03/21/2002 21:15	Annamaria Stipkovits	1

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. TL 3791587

Collected:03/12/2002 12:08 by TM

Account Number: 10992

Submitted: 03/20/2002 15:43
Reported: 04/01/2002 at 21:05
Discard: 04/16/2002
SP-1-4-S-020312 Composite Soil

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 STLC NON-VOA LEACH EXT GRRC
2200 Telegraph Av Oakland NA SP1-4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01755	Lead	7439-92-1	3,340.	8.8	ug/l	1

state of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01755	Lead	SW-846 6010B	1	04/01/2002 03:22	Donna R Sackett	1
01435	Non-volatile WET	CCR Sec. 66700 WET, Title 22	1	03/23/2002 11:30	Kenneth A Yingst	n.a.
05705	WW/TL SW 846 ICP Digest (tot)	SW-846 3010A	1	03/28/2002 16:30	Irimar Leon	1

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Quality Control Summary

Client Name: Chevron Products Company
Group Number: 800970
Reported: 04/01/02 at 09:05 PM

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 020805708003	Sample number(s): 3791586							
Lead	N.D.	.82	mg/kg	97		86-109		
Batch number: 020875705005	Sample number(s): 3791587							
Lead	N.D.	.0088	mg/l	98		94-110		

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 020805708003	Sample number(s): 3791586								
Lead	99	141*	75-125	19	20	48.6	36.2	29* (1)	20
Batch number: 020875705005	Sample number(s): 3791587								
Lead	84	88	75-125	4	20	0.0761	0.0766	1 (1)	20

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Chevron California Region Analysis Request/Chain of

Lancaster Laboratories
Where quality is a science.

Acct. #: ~~10105~~ 10992 For Lancaster Laboratories use only Sample #: 3788886-91 3788887 SCR#:

Facility #: 9-3600
Site Address: 2200 Telegraph AVE., OAKLAND
Chevron PM: Tom Bauhs Lead Consultant: Delta/GR
Consultant/Office: Gettler-Ryan Inc./Rancho Cordova
Consultant Prj. Mgr.: Tony Mikacich
Consultant Phone #: (916) 631-1300 Fax #: (916) 631-1317
Sampler: Tony Mikacich
Service Order #: DG936006.4CT1 ☐ Non SAR:

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water	Matrix: Oil ☐ Air ☐	Total Number of Containers	BTEX + MTBE 8260 ☐ 8021	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	Total Lead — Oxygenates —	Lead 7420 ☐ 7421 ☐ 6010B
MW-1-6.5	03/12/02	10:21	X		X			1						
MW-1-11.5		10:27						1						
MW-1-16.5		10:31						1						
MW-1-20		10:35						1						
MW-2-6.5		9:03						1						
MW-2-11.5		9:07						1						
MW-2-16.5		9:14						1						
MW-2-20		9:20						1						
MW-3-6.5		11:45						1						
MW-3-11.5		11:49						1						
MW-3-16.5		11:54						1						
MW-3-20		11:58						1						
SP-1-4		12:08		X				4						X

Analyses Requested / Preservation Codes

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

☐ J value reporting needed
☐ Must meet lowest detection limits possible for 8260 compounds
8021 MTBE Confirmation
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run ____ oxy's on highest hit
☐ Run ____ oxy's on all hits

Comments / Remarks
(4:1 Composite)
(48hr. TAT)

Turnaround Time Requested (TAT) (please circle)
STD. TAT | 24 hour | 48 hour (on composite) | 72 hour | 4 day | 5 day

Data Package Options (please circle if required)
QC Summary | Type I – Full | Type VI (Raw Data) | ☐ Coelt Deliverable not needed | WIP (RWQCB) | Disk

Relinquished by:	Date	Time	Received by:	Date	Time
Tony Mikacich	03/14/02	4:30			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by Commercial Carrier: UPS FedEx Other			Received by: UNOCAL	Date 3/15/02	Time 0940
Temperature Upon Receipt 3 C°			Custody Seals Intact? Yes No		

3460 Rev. 7/30/01

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

Analysis Report

Lancaster Laboratories
Where quality is a science.

ANALYTICAL RESULTS

Prepared for:

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904
925-842-8582

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 803200. Samples arrived at the laboratory on Tuesday, April 09, 2002. The PO# for this group is 99011184 and the release number is BAUHS.

Client Description			Lancaster Labs Number
QA-T-020405	NA	Water	3801807
MW-1-W-020405	Grab	Water	3801808
MW-2-W-020405	Grab	Water	3801809
MW-3-W-020405	Grab	Water	3801810

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO Delta C/O Gettler-Ryan Attn: Deanna L. Harding

Lancaster Laboratories
Where quality is a science.

Questions? Contact your Client Services Representative
Teresa M Lis at (717) 656-2300.

Respectfully Submitted,

Steven A. Skiles
Sr. Chemist

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3801807

Collected:04/05/2002 00:00

Account Number: 10905

Submitted: 04/09/2002 09:10
Reported: 04/19/2002 at 21:02
Discard: 05/20/2002
QA-T-020405 NA Water

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 Job# 386895 GRD
2200 TELEGRAPH AV-OAKLAND NA QA

Q3600

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1
00777	Toluene	108-88-3	N.D.	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
00780	Methyl tert-Butyl Ether	1634-04-4	N.D.	2.5	ug/l	1
	A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	04/11/2002 01:17	Melissa D Mann	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	04/11/2002 01:17	Melissa D Mann	1
01146	GC VOA Water Prep	SW-846 5030B	1	04/11/2002 01:17	Melissa D Mann	n.a.

#=Laboratory Method Detection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

ACIL
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3801808

Collected:04/05/2002 14:30 by TC

Account Number: 10905

Submitted: 04/09/2002 09:10
Reported: 04/19/2002 at 21:02
Discard: 05/20/2002
MW-1-W-020405 Grab Water

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 Job# 386895 GRD
3600 TELEGRAPH AV-OAKLAND NA NA

13600

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	2,000.	50.	ug/l	1
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	5.0	0.50	ug/l	1
00777	Toluene	108-88-3	N.D. #	1.0	ug/l	1
00778	Ethylbenzene	100-41-4	14.	0.50	ug/l	1
00779	Total Xylenes	1330-20-7	8.4	1.5	ug/l	1
00780	Methyl tert-Butyl Ether	1634-04-4	310.	2.5	ug/l	1
	A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level. Due to the presence of an interferent near its retention time, the normal reporting limit was not attained for toluene. The presence or concentration of this compound cannot be determined due to the presence of this interferent.					
01595	Oxygenates by 8260B					
02010	Methyl t-butyl ether	1634-04-4	370.	2.	ug/l	2
02011	di-Isopropyl ether	108-20-3	N.D.	2.	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	2.	ug/l	1
02014	t-Amyl methyl ether	994-05-8	10.	2.	ug/l	1
02015	t-Butyl alcohol	75-65-0	200.	100.	ug/l	1

State of California Lab Certification No. 2116

#=Laboratory Method Detection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

ACIL
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3801808

Collected:04/05/2002 14:30 by TC

Account Number: 10905

Submitted: 04/09/2002 09:10
Reported: 04/19/2002 at 21:02
Discard: 05/20/2002
MW-1-W-020405 Grab Water

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 Job# 386895 GRD
3600 TELEGRAPH AV-OAKLAND NA NA

13600

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	04/11/2002 05:57	Melissa D Mann	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	04/11/2002 05:57	Melissa D Mann	1
01595	Oxygenates by 8260B	SW-846 8260B	1	04/10/2002 20:22	Patricia L Nolt	1
01595	Oxygenates by 8260B	SW-846 8260B	1	04/11/2002 01:01	Patricia L Nolt	2
01146	GC VOA Water Prep	SW-846 5030B	1	04/11/2002 05:57	Melissa D Mann	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	04/10/2002 20:22	Patricia L Nolt	n.a.

#=Laboratory Method Detection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3801809

Collected:04/05/2002 14:13 by TC

Account Number: 10905

Submitted: 04/09/2002 09:10
Reported: 04/19/2002 at 21:02
Discard: 05/20/2002
MW-2-W-020405 Grab Water

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 Job# 386895 GRD
3600 TELEGRAPH AV-OAKLAND NA NA

23600

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1
00777	Toluene	108-88-3	N.D.	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
00780	Methyl tert-Butyl Ether	1634-04-4	N.D.	2.5	ug/l	1
	A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
01595	Oxygenates by 8260B					
02010	Methyl t-butyl ether	1634-04-4	N.D.	2.	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	2.	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	2.	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	2.	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	100.	ug/l	1

State of California Lab Certification No. 2116

Laboratory Chronicle

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

Lancaster Laboratories
2425 New Holland Pike.
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3801809

Collected:04/05/2002 14:13 by TC

Account Number: 10905

Submitted: 04/09/2002 09:10
Reported: 04/19/2002 at 21:02
Discard: 05/20/2002
MW-2-W-020405 Grab Water

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 Job# 386895 GRD
3600 TELEGRAPH AV-OAKLAND NA NA

23600

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	04/11/2002 05:22	Melissa D Mann	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	04/11/2002 05:22	Melissa D Mann	1
01595	Oxygenates by 8260B	SW-846 8260B	1	04/10/2002 20:47	Patricia L Nolt	1
01146	GC VOA Water Prep	SW-846 5030B	1	04/11/2002 05:22	Melissa D Mann	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	04/10/2002 20:47	Patricia L Nolt	n.a.

#=Laboratory Method Detection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3801810

Collected:04/05/2002 11:11 by TC

Account Number: 10905

Submitted: 04/09/2002 09:10
Reported: 04/19/2002 at 21:02
Discard: 05/20/2002
MW-3-W-020405 Grab Water

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 Job# 386895 GRD
3600 TELEGRAPH AV-OAKLAND NA NA

33600

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1
00777	Toluene	108-88-3	0.59	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
00780	Methyl tert-Butyl Ether	1634-04-4	N.D.	2.5	ug/l	1
	A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
01595	Oxygenates by 8260B					
02010	Methyl t-butyl ether	1634-04-4	N.D.	2.	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	2.	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	2.	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	2.	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	100.	ug/l	1

State of California Lab Certification No. 2116

Laboratory Chronicle

#=Laboratory MethodDetection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3801810

Collected:04/05/2002 11:11 by TC

Account Number: 10905

Submitted: 04/09/2002 09:10
Reported: 04/19/2002 at 21:02
Discard: 05/20/2002
MW-3-W-020405 Grab Water

Chevron Products Company
6001 Bollinger Canyon Road
Building L PO Box 6004
San Ramon CA 94583-0904

Facility# 93600 Job# 386895 GRD
3600 TELEGRAPH AV-OAKLAND NA NA

33600

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	04/11/2002 10:02	Melissa D Mann	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	04/11/2002 10:02	Melissa D Mann	1
01595	Oxygenates by 8260B	SW-846 8260B	1	04/10/2002 21:13	Patricia L Nolt	1
01146	GC VOA Water Prep	SW-846 5030B	1	04/11/2002 10:02	Melissa D Mann	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	04/10/2002 21:13	Patricia L Nolt	n.a.

#=Laboratory Method Detection Limit exceeded target detection limit
N.D.=Not detected at or above the Reporting Limit

MEMBER
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Quality Control Summary

Client Name: Chevron Products Company
Reported: 04/19/02 at 09:03 PM

Group Number: 803200

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 02100A56A	Sample number(s): 3801807-3801809							
Benzene	N.D.	0.5	ug/l	100	101	80-118	1	30
Toluene	N.D.	0.5	ug/l	100	102	82-119	3	30
Ethylbenzene	N.D.	0.5	ug/l	97	101	81-119	3	30
Total Xylenes	N.D.	1.5	ug/l	99	102	82-120	3	30
Methyl tert-Butyl Ether	N.D.	2.5	ug/l	103	103	79-127	0	30
TPH-GRO - Waters	N.D.	50.	ug/l	93	95	76-126	2	30
Batch number: 02100A56B	Sample number(s): 3801810							
Benzene	N.D.	0.5	ug/l	100	101	80-118	1	30
Toluene	N.D.	0.5	ug/l	100	102	82-119	3	30
Ethylbenzene	N.D.	0.5	ug/l	97	101	81-119	3	30
Total Xylenes	N.D.	1.5	ug/l	99	102	82-120	3	30
Methyl tert-Butyl Ether	N.D.	2.5	ug/l	103	103	79-127	0	30
TPH-GRO - Waters	N.D.	50.	ug/l	93	95	76-126	2	30
Batch number: U021001AB	Sample number(s): 3801808-3801810							
Methyl t-butyl ether	N.D.	2.	ug/l	97		77-127		
di-Isopropyl ether	N.D.	2.	ug/l	98		74-125		
Ethyl t-butyl ether	N.D.	2.	ug/l	100		74-120		
t-Amyl methyl ether	N.D.	2.	ug/l	97		71-114		
t-Butyl alcohol	N.D.	100.	ug/l	86		59-139		

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 02100A56A	Sample number(s): 3801807-3801809								
Benzene	111		77-131						
Toluene	112		80-128						
Ethylbenzene	112		76-132						
Total Xylenes	112		76-132						
Methyl tert-Butyl Ether	103		61-144						
TPH-GRO - Waters	92		74-132						
Batch number: 02100A56B	Sample number(s): 3801810								
Benzene	111		77-131						
Toluene	112		80-128						
Ethylbenzene	112		76-132						
Total Xylenes	112		76-132						
Methyl tert-Butyl Ether	103		61-144						
TPH-GRO - Waters	92		74-132						
Batch number: U021001AB	Sample number(s): 3801808-3801810								
Methyl t-butyl ether	101	94	69-134	7	30				
di-Isopropyl ether	104	102	68-133	2	30				
Ethyl t-butyl ether	103	100	73-123	3	30				

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Quality Control Summary

Client Name: Chevron Products Company
Group Number: 803200
Reported: 04/19/02 at 09:03 PM

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
t-Amyl methyl ether	102	99	69-118	3	30				
t-Butyl alcohol	84	81	51-148	3	30				

Surrogate Quality Control

Analysis Name: TPH-GRO - Waters
Batch number: 02100A56A

	Trifluorotoluene-F	Trifluorotoluene-P
3801807	92	99
3801808	113	96
3801809	86	99
Blank	89	99
LCS	101	99
LCSD	100	99
MS	103	99
Limits:	67-135	71-130

Analysis Name: TPH-GRO - Waters
Batch number: 02100A56B

	Trifluorotoluene-F	Trifluorotoluene-P
3801810	90	99
Blank	90	99
LCS	101	99
LCSD	100	99
MS	103	99
Limits:	67-135	71-130

Analysis Name: Oxygenates by 8260B
Batch number: U021001AB

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
3801808	91	89	97	96
3801809	93	94	94	93
3801810	94	95	96	93
Blank	93	93	94	91
LCS	94	95	94	92
MS	94	92	95	95
MSD	94	94	95	95
Limits:	86-118	80-120	88-110	86-115

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Quality Control Summary

Client Name: Chevron Products Company
Reported: 04/19/02 at 09:03 PM

Group Number: 803200

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories *Where quality is a science.*

041802-005

For Lancaster Laboratories use only
Acct. #: 10905 Sample #: 3801802-10 SCR#:

Facility #: 9-3600 Job #386895 Globel ID#NA
Site Address: 2200 TELEGRAPH AVE., OAKLAND, CA
Chevron PM: Tom Bauhs Lead Consultant: Delta/G-R
Consultant/Office: G-R, Inc., 6747 Sierra Court, Dublin, Ca 94568
Consultant Prj. Mgr.: Deanna L. Harding (Deanna@grinc.com)
Consultant Phone #: 925-551-7555 Fax #: 925-551-7899
Sampler: Tony CAMARDA
Service Order #: ☐ Non SAR:

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water (Potable ☐ NPDES ☐)	Matrix: Oil ☐ Air ☐	Total Number of Containers	Preservation Codes	Analyses Requested: BTEX + MTBE 8260 ☒ 8021 ☐	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	5 Oxygenates 8260	Lead 7420 ☐ 7421 ☐
QA	4/05/02	—	X			X		2	H	X	X				
MW-1		1430	X			X		6	H	X	X			X	
MW-2		1413	X			X		6	H	X	X			X	
MW-3	↓	1111	X			X		6	H	X	X			X	

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

☐ J value reporting needed
☐ Must meet lowest detection limits possible for 8260 compounds
8021 MTBE Confirmation
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run ____ oxy s on highest hit
☐ Run ____ oxy s on all hits

Comments / Remarks

Turnaround Time Requested (TAT) (please circle)
STD. TAT 72 hour 48 hour
24 hour 4 day 5 day

Data Package Options (please circle if required)
QC Summary Type I — Full
Type VI (Raw Data) ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk

	Date	Time		Date	Time
Relinquished by:	4/05/02	1945	Received by: Dennis Vance	4/8/02	1245
Relinquished by: Dennis Vance	4/8/02	1245	Received by:	4/8/02	1245
Relinquished by:	4/8/02	1345	Received by:	4/8/02	
Relinquished by Commercial Carrier: UPS FedEx Other Air Borne			Received by:	04/9/02	0910
Temperature Upon Receipt 5.5 C°			Custody Seals Intact? Yes No		

3460 Rev. 7/30/01