



GETTLER-RYAN Inc.

MONITORING WELL INSTALLATION REPORT

for
Former Chevron Service Station #9-0517
3900 Piedmont Avenue
Oakland, California

Report No. 346420.02-2

Prepared for:

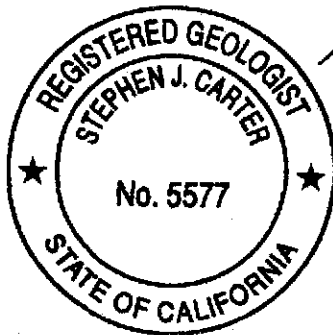
Mr. Phil Briggs
Chevron Products Company
P.O. Box 6004
San Ramon, California 94583

Prepared by:

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September 17, 1998

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1.0 INTRODUCTION

This report summarizes the results of a well installation performed at Former Chevron Station #9-0517, located at 3900 Piedmont Avenue in Oakland, California. The work was performed at the request of Chevron Products Company (Chevron) to evaluate the extent of petroleum hydrocarbon impact to soil and groundwater beneath the subject site. The scope of work included: obtaining the required encroachment, excavation and well installation permits; installing two off-site and two on-site groundwater monitoring wells (MW-1 through MW-4); surveying wellhead elevations; developing and sampling the wells; collecting and submitting soil and groundwater samples for chemical and physical analysis; arranging for Chevron's contractor to dispose of the waste materials; and preparing a report documenting the work. This work was proposed in Gettler-Ryan Inc. (GR) Report No. 6420.01-1, *Work Plan for Monitoring Well Installation*, dated December 17, 1997, and Addendum 1 to GR Report No. 6420.02-1 dated January 28, 1998, approved by the Alameda County Health Care Services Agency (ACHCSA).

2.0 SITE DESCRIPTION

2.1 General

The subject site is situated on the eastern corner of Piedmont Avenue and Montell Street in Oakland, California (Figure 1). The station facility have been removed, and a vacant bank building now occupies the site. Locations of the current site features are shown on Figure 2.

2.2 Geology and Hydrogeology

The subject site is located at the western edge of the Piedmont Hills, approximately 2 miles east of San Francisco Bay and 1 mile north of Lake Merritt. The site is a relatively flat, paved lot at an elevation of approximately 85 feet above mean sea level. As mapped by Helley and others (1979), soil in the site vicinity consists of Late Pleistocene alluvium consisting of weakly consolidated, slightly weathered, poorly sorted, irregularly interbedded clay, silt, sand and gravel. The nearest surface water is Glen Echo Creek located approximately 400 feet east of the site. Based on the site topography, groundwater in the vicinity of the site flows toward the southwest.

2.3 Previous Environmental Work

Chevron operated a service station at the subject site until 1978, when the station was demolished and underground storage tanks (USTs), dispenser islands, and associated product piping were removed. Data pertaining to the station demolition and UST removal were not available for inclusion in this report.

In October 1993, Environmental and Science Engineering, Inc (ESE) conducted a soil and groundwater investigation to evaluate petroleum hydrocarbon impact to the soil and groundwater beneath the site. Eight soil borings (FNBO-1 through FNBO-8) were drilled at the site. Eleven soil samples collected from depths between 6 and 11 feet below ground surface (bgs) were submitted for analyses. Soil samples were analyzed for total recoverable petroleum hydrocarbons (TRPH), total petroleum hydrocarbons as gasoline (TPHg), total petroleum hydrocarbons as diesel (TPHd), and the gasoline constituents benzene, toluene, ethylbenzene, and total xylenes (BTEX). Five of the eleven soil samples were analyzed for volatile organic compounds (VOCs).

TRPH were detected in five of the eleven soil samples analyzed at concentrations ranging from 10 parts per million (ppm) to 350 ppm. TPHg were detected in eight of the eleven soil samples analyzed at concentrations ranging from 1.4 ppm to 3,400 ppm. Benzene was detected in two samples at concentrations of 0.03 ppm and 1.0 ppm. VOCs were not detected in any of the analyzed soil samples.

One grab groundwater sample was collected from boring FNBO-6. TRPH (2,800 parts per billion [ppb]), TPHg (7,800 ppb) and benzene (7.7 ppb) were detected in this sample. VOCs were not detected in this sample except acetone (30 ppb) and carbon disulfide (33 ppb).

3.0 FIELD WORK

Field work was conducted in accordance with GR's Field Methods and Procedures (Appendix A) and the Site Safety Plan dated July 15, 1998. An encroachment permit was obtained from the City of Oakland Community and Economic Development Agency, an excavation permit (#X9800516) was obtained from the City of Oakland Office of Planning and Building, a well installation permit (#98WR288) was obtained from the Alameda County Public Works Agency, and Underground Service Alert was notified prior to drilling at the site. Copies of the permits and the State of California Well Completion Reports are included in Appendix B.

3.1 Drilling Activities

On July 21, 1998, a GR geologist observed Bay Area Exploration, Inc. (C57 #522125) install two on-site (MW-1 and MW-2) and two off-site (MW-3 and MW-4) groundwater monitoring wells at the locations shown on Figure 2. Well borings MW-1, MW-2 and MW-4 were drilled to 16.5 feet bgs and boring MW-3 was drilled to 20 feet bgs using 8-inch hollow-stem augers driven by a truck-mounted CME-55 drill rig. Soil samples were collected approximately every 5 feet. The GR geologist prepared logs of each boring and screened the soil samples in the field for the presence of volatile organic compounds. Screening data are presented on the boring logs (Appendix B).

A groundwater monitoring well was constructed in each boring using 13 feet of two-inch diameter, 0.020-inch machine-slotted Schedule 40 PVC screen. Lonestar #3 graded sand was placed in each well across the entire screen interval and extended approximately 0.5 to 1 foot above the top of the screen. Each well was then sealed with 0.5 feet of hydrated bentonite chips followed by neat cement. Well construction details are presented on the boring logs in Appendix B.

Drill cuttings were placed on and covered with plastic sheeting and stored on-site pending disposal. After completion of drilling, four samples for disposal characterization were collected from the drill cuttings and submitted to the laboratory for compositing and analysis as sample SP-(A-D)comp. On August 20, 1998, the drill cuttings were removed from the site and transported to the BFI Landfill in Livermore by Integrated Wastestream Management (IWM).

3.2 Well Development and Sampling

On August 3, 1998, groundwater monitoring wells MW-1 through MW-4 were developed by GR personnel using a vented surge block and hand-bailing. Depth to water was measured in the wells prior to development. Groundwater samples were collected from the wells upon completion of well development. Water purged during well development and sampling was transported to McKittrick Waste Management by IWM. Groundwater monitoring data are presented in Table 1, and copies of the GR Well Development and Sampling Field Data Sheets are included in Appendix C.

3.3 Wellhead Survey

On September 2, 1998, wells MW-1 through MW-4 were surveyed relative to mean sea level by Virgil Chavez, a California licensed land surveyor (#6323). A copy of the survey report is included in Appendix D, and the survey data is summarized in Table 1.

3.4 Laboratory Analysis

Soil and groundwater samples were analyzed by Sequoia Analytical in Redwood City, California (ELAP #1210). Twelve soil samples collected from the borings and groundwater samples were analyzed for TPHg, benzene, toluene, ethylbenzene and xylenes (BTEX), and MTBE by Environmental Protection Agency (EPA) Methods 8015/8020. In addition, soil samples collected from boring MW-1 at 6 and 11 feet bgs were analyzed for bulk density, porosity and fraction organic carbon. The unsaturated sample collected at 6 feet bgs was also analyzed for moisture content. The composite sample from the drill cuttings was analyzed for TPHg and BTEX. Copies of the laboratory analytical reports and chain-of-custody records are included in Appendix E.

4.0 RESULTS

4.1 Subsurface Conditions

Soil encountered in borings MW-1 through MW-4 consisted predominantly of interbedded clays, silts and clayey gravels to the total depth explored of 20 feet bgs. Groundwater was encountered within the sandy silt layer at depths of approximately 10.2 to 12.0 feet bgs and stabilized at depths of 7.4 to 9.1 feet bgs. The saturated sandy silt layer was underlain by a damp to moist clay layer which appears to be a perching layer. Groundwater recovery in the borings was very slow (approximately 1.5 foot/hour). Detailed descriptions of the subsurface materials encountered during drilling are presented on the boring logs in Appendix B. Based on the groundwater monitoring data collected on August 3, 1998, shallow groundwater beneath the site appears to flow to the northwest at an approximate gradient of 0.005 to 0.01 (Figure 2).

4.2 Soil Analytical Results

The soil sample collected from boring MW-4 at an approximate depth of 11 feet bgs contained TPHg (80 ppm) and benzene (2.0 ppm). A low concentration of benzene (0.0070 ppm) was also detected in the soil sample collected from boring MW-2 at an approximate depth of 6 feet bgs. TPHg or benzene were not detected in any other soil samples collected and analyzed from borings MW-1 through MW-4. MTBE was not detected in any of the soil samples collected and analyzed during this investigation.

Laboratory analytical results for the unsaturated sample collected from boring MW-1 at 6 feet bgs indicated 0.059% fraction organic carbon, 1.68 gram per cubic centimeter (gm/cc) dry density, 2.01 gm/cc natural density, 2.52 gm/cc matrix density, 33.1% porosity and 19% moisture content. The results for the saturated sample collected from boring MW-1 at 11 feet bgs indicated 0.15% fraction organic carbon, 1.60 gm/cc dry density, 1.99 gm/cc natural density, 2.62 gm/cc matrix density and 38.7% porosity.

The composite stockpile sample did not contain TPHg or BTEX. Soil chemical analytical data are summarized in Table 2.

4.3 Groundwater Analytical Results

Groundwater samples collected from wells MW-3 and MW-4 contained TPHg (4,000 ppb and 1,900 ppb, respectively), benzene (160 ppb and 110 ppb, respectively) and MTBE (180 ppb and 130 ppb, respectively). Groundwater samples collected from wells MW-1 and MW-2 did not contain petroleum hydrocarbons with the exception of low concentration of MTBE (3.4 ppb) detected in the sample collected from well MW-2. Groundwater analytical data are summarized in Table 1.

5.0 CONCLUSIONS

Based on analytical results from soil samples collected and analyzed during this investigation, it appears that soil in the vicinity of borings MW-1 through MW-3 is not impacted by petroleum hydrocarbons with the exception of a low concentration of benzene (0.0070 ppm) detected in boring MW-2 at 6 feet bgs. Soil within the capillary fringe zone in the vicinity of boring MW-4 is impacted by TPHg (80 ppm) and benzene (2.0 ppm). The vertical extent of hydrocarbon impacted soil in this location has been delineated to nondetectable hydrocarbon levels at a depth of 16 feet bgs.

Shallow groundwater in the vicinity of wells MW-1 and MW-2 is not impacted by TPHg or benzene, however, groundwater in the vicinity of well MW-2 is slightly impacted by MTBE (3.4 ppb). Shallow groundwater at the downgradient property boundary (vicinity of wells MW-3 and MW-4) is impacted by TPHg (up to 4,000 ppb), benzene (up to 160 ppb), and MTBE (up to 180 ppm). The extent of hydrocarbon impacted groundwater downgradient of the subject site has not been delineated. However, it is possible that the lateral migration of hydrocarbon impacted groundwater is restricted due to the lithology of the water bearing zone (silty and clayey material of low hydraulic conductivity).

6.0 REFERENCES

E. J. Helley and others, 1979, Flatland Deposits of the San Francisco Bay Region, California: U.S. Geological Survey Professional Paper 943.

Gettler-Ryan Inc., December 17, 1997, Work Plan for Monitoring Well Installation at Former Chevron Service Station #9-0517, 3900 Piedmont Avenue, Oakland, California, Report No. 6420.02-1.

Gettler-Ryan Inc., January 28, 1998, Addendum 1 to GR Report No. 6420.02-1, Work Plan for Monitoring Well Installation.

Gettler-Ryan Inc., July 21, 1998, Site Safety Plan for Former Chevron Service Station #9-0517, 3900 Piedmont Avenue, Oakland, California, Job No. 6420.02.

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-0517, 3900 Piedmont Avenue, Oakland, California.

Well ID/ TOC (feet)	Date	DTW (feet)	Product GWE (msl)	Thickness (feet)	←-----ppb-----→					
					TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MW-1/ 87.89	08/03/98	12.43	75.46	0	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5
MW-2/ 86.09	08/03/98	11.34	74.75	0	< 50	< 0.50	< 0.50	< 0.50	< 0.50	3.4
MW-3/ 86.28	08/03/98	12.08	74.20	0	4,000	160	< 5.0	< 5.0	73	180
MW-4/ 87.22	08/03/98	12.92	74.30	0	1,900	110	12	< 0.50	55	130
Trip Blank (TB-LB) —	08/03/98	—	—	—	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5

EXPLANATION:

DTW - Depth to water
 TOC - Top of casing elevation
 GWE - Groundwater elevation
 TPHg - Total Petroleum Hydrocarbons as gasoline
 MTBE - Methyl t-Butyl Ether
 msl - Measurements referenced relative to mean sea level
 ppb - Parts per billion
 — - Not analyzed/Not applicable

ANALYTICAL METHODS:

TPHg, benzene, toluene, ethylbenzene, xylenes, MTBE - EPA Methods 8015Mod/8020

ANALYTICAL LABORATORY:

Sequoia Analytical (ELAP #1210)

NOTES:

Wells MW-1 through MW-4 were surveyed on September 2, 1998, by Virgil Chavez of Vallejo, California (PLS 6323).

Table 2. Soil Analytical Results - Former Chevron Service Station #9-0517, 3900 Piedmont Avenue, Oakland, California.

Sample ID	Depth (ft)	Date	TPHg	B	T	E	X	MTBE	Fraction	Bulk Density			Porosity %	Moisture %
									Organic Carbon %	Dry gm/cc	Natural gm/cc	Matrix gm/cc		
MW1-6	6.0	07/21/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	0.059	1.68	2.01	2.52	33.1	19
MW1-11	11.0	07/21/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	0.15	1.60	1.99	2.62	38.7	---
MW1-16	16.0	07/21/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---	---	---	---	---	---
MW2-6	6.0	07/21/98	<1.0	0.0070	<0.0050	0.010	0.0090	<0.025	---	---	---	---	---	---
MW2-11	11.0	07/21/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---	---	---	---	---	---
MW2-16	16.0	07/21/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---	---	---	---	---	---
MW3-6	6.0	07/21/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---	---	---	---	---	---
MW3-10.5	10.5	07/21/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---	---	---	---	---	---
MW3-16	16.0	07/21/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---	---	---	---	---	---
MW4-6	6.0	07/21/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---	---	---	---	---	---
MW4-11	11.0	07/21/98	80	2.0	1.7	4.7	5.8	<0.25	---	---	---	---	---	---
MW4-16	16.0	07/21/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---	---	---	---	---	---
SP-(A-D)comp	---	07/21/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---

EXPLANATION:

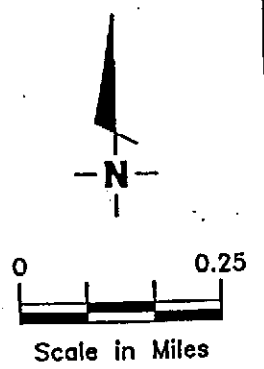
TPHg - Total Petroleum Hydrocarbons as gasoline
 MTBE - Methyl t-Butyl Ether
 ft - Feet
 ppm - Parts per million
 gm/cc - gram per cubic centimeter
 -- - Not analyzed/not applicable

ANALYTICAL METHODS:

TPHg, benzene, toluene, ethylbenzene, xylenes, MTBE - EPA Methods 8015Mod/8020
 Porosity, densities - Method API RP-40

ANALYTICAL LABORATORY:

Sequoia Analytical (ELAP #1210)



Source: Street Atlas USA, Delorme (1995).

FIGURE



Gettler - Ryan Inc.

6747 Sierra Ct., Suite J (510) 551-7555
Dublin, CA 94568

VICINITY MAP
First Nationwide Bank
3900 Piedmont Avenue
Oakland, California

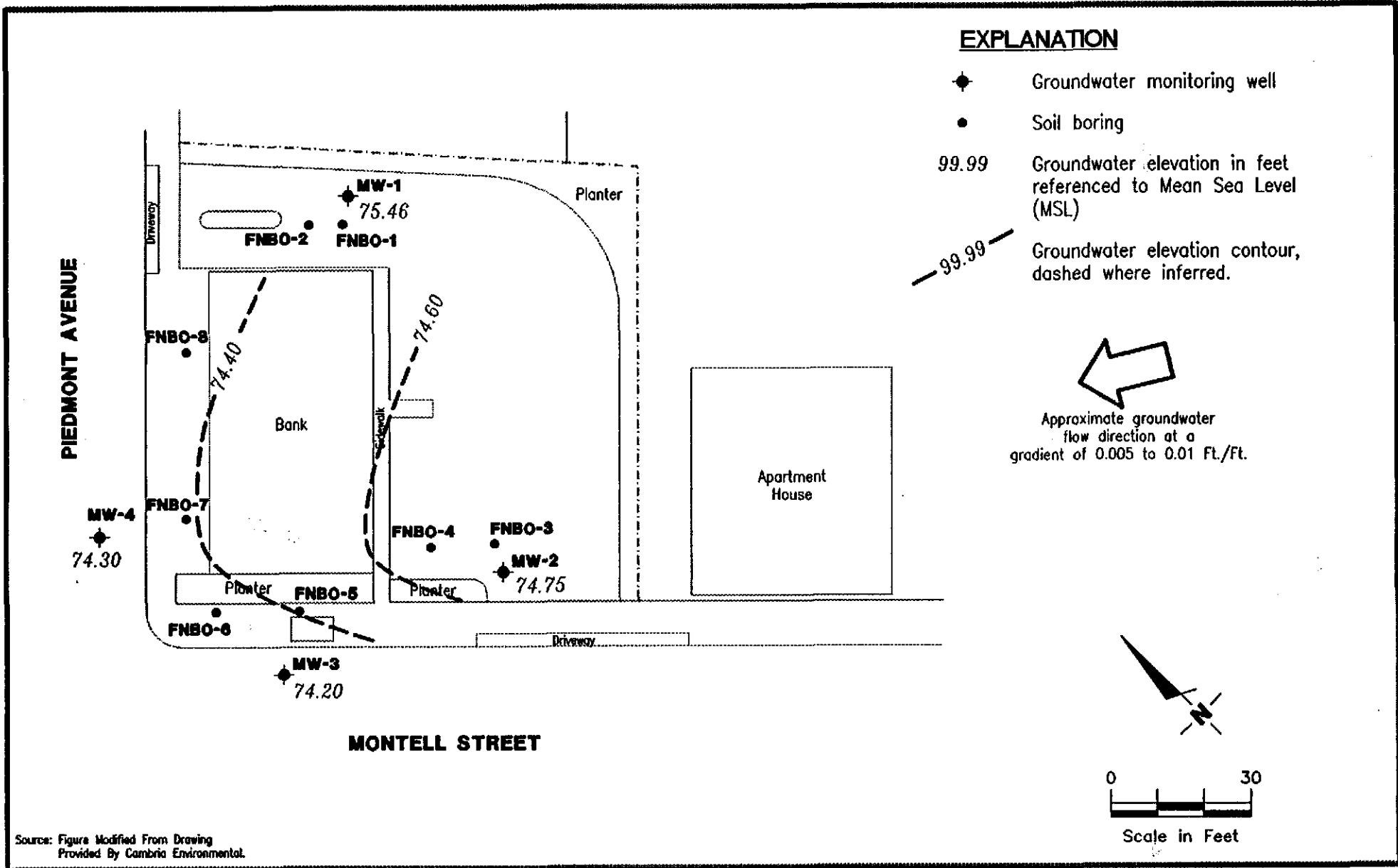
JOB NUMBER
6420

REVIEWED BY

DATE
12/97

REVISED DATE

1



Gertler - Ryan Inc.

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

POTENTIOMETRIC MAP
Former Chevron Service Station #0517
3900 Piedmont Avenue
Oakland, California

FIGURE
2

JOB NUMBER
6420.02

REVIEWED BY
[Signature]

DATE
August 3, 1998

REVISED DATE

GETTLER - RYAN FIELD METHODS AND PROCEDURES

Site Safety Plan

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

Collection of Soil Samples

Exploratory soil borings are drilled by a California-licensed well driller. A GR geologist is present to observe the drilling, collect soil samples for description, physical testing, and chemical analysis, and prepare a log of the exploratory soil boring. Soil samples are collected from the exploratory soil boring with a split-barrel sampler or other appropriate sampling device fitted with clean brass 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 soil is described using the Unified Soil Classification System (ASTM 2488-84) and the Munsell Soil Color Chart.

After removal from the sampling device, soil samples for chemical analysis are covered on both ends with teflon sheeting or aluminum foil, capped, labeled, and placed in a cooler with blue ice for preservation. A chain-of-custody form is initiated in the field and accompanies the selected soil samples to the analytical laboratory. Samples are selected for chemical analysis based on:

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

Field Screening of Soil Samples

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

Stockpile Sampling

Stockpile samples consist of four individual sample liners collected from each 100 cubic yards (yd³) of stockpiled soil material. Four arbitrary points on the stockpiled material are chosen, and discrete soil sample is collected at each of these points. Each discrete stockpile sample is collected by removing the upper 3 to 6 inches of soil, and then driving the stainless steel or brass tube into the stockpiled material with a wooden mallet or hand driven soil sampling device. The sample tubes are then covered on both ends with teflon sheeting or aluminum foil, capped,

labeled, placed in the cooler with blue ice for preservation. A chain-of-custody form is initiated in the field and accompanies the selected soil samples to the analytical laboratory. Stockpiled soils are covered with plastic sheeting after completion of sampling.

Construction of Monitoring Wells

Monitoring wells are constructed in the exploratory 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 cap. A lock is placed on the well cap to prevent vandalism and unintentional introduction of materials into the well.

Storing and Sampling of Drill Cuttings

Drill cuttings are stockpiled on plastic sheeting or stored in drums depending on site conditions and regulatory requirements. Stockpile samples are collected and analyzed on the basis of one composite sample per 50 cubic yards of soil. Stockpile samples are composed of four discrete soil samples, each collected from an arbitrary location on the stockpile. The four discrete samples are then composited in the laboratory prior to analysis.

Each discrete stockpile sample is collected by removing the upper 3 to 6 inches of soil, and then driving the stainless or brass sample tube into the stockpiled material with a hand, mallet, or drive sampler. The sample tubes are then covered on both ends with teflon sheeting or aluminum foil, capped, labeled, and placed in a cooler with blue ice for preservation. A chain-of-custody form is initiated in the field and accompanies the selected soil samples to the analytical laboratory. Stockpiled soils are covered with plastic sheeting after completion of sampling.

Wellhead Survey

The top of the newly-installed well casing is surveyed by a California-licensed Land Surveyor to mean sea level (MSL).

Well Development

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

Groundwater Monitoring and Sampling

Decontamination Procedures

All physical parameter measuring and sampling equipment are decontaminated prior to sample collection using Alconox or equivalent detergent followed by steam cleaning with deionized water. During field sampling, equipment placed in a well are decontaminated before purging or sampling the next well by cleaning with Alconox or equivalent detergent followed by steam cleaning with deionized water.

Water-Level Measurements

Prior to sampling each well, the static water level is measured using an electric sounder and/or calibrated portable oil-water interface probe. Both static water-level and separate-phase product thickness are measured to the nearest ± 0.01 foot. The presence of separate-phase product is confirmed using a clean, acrylic or polyvinylchloride (PVC) bailer, measured to the nearest ± 0.01 foot with a decimal scale tape. The monofilament line used to lower the bailer is replaced between borings with new line to preclude the possibility of cross-contamination. Field observations (e.g. product color, turbidity, water color, odors, etc.) are noted. Water-levels are measured in wells with known or suspected lowest dissolved chemical concentrations to the highest dissolved concentrations.

Sample Collection and Labeling

A temporary PVC screen is installed in the boring to facilitate a grab groundwater sample collection. Samples of groundwater are collected from the surface of the water in each well or boring using the teflon bailer or a pump. The water samples are then gently poured into laboratory-cleaned containers and sealed with teflon-lined caps, and inspected for air bubbles to check for headspace. The samples are then labeled by an adhesive label, noted in permanent ink, and promptly placed in an ice storage. A Chain-of-Custody Record is initiated and updated throughout handling of the samples, and accompanies the samples to the laboratory certified by the State of California for analyses requested.

RECEIVED

JUL 02 1998



Chevron

GETTLER-RYAN INC.
GENERAL CONTRACTORS

June 30, 1998

Chevron Products Company
6001 Bollinger Canyon Road
Building L
San Ramon, CA 94583
P.O. Box 6004
San Ramon, CA 94583-0904

Marketing - Sales West
Phone 510 842-9500

Mr. Roger Tam
City of Oakland-CEDA
250 Frank H. Ogawa Plaza
Oakland, CA 94612

Re: **MINOR ENCROACHMENT PERMIT FOR MONITORING WELLS IN
PIEDMONT AVENUE AND MONTELL SREET, OAKLAND**

**Former Chevron Service Station #9-0517
3900 Piedmont Avenue
Oakland, California**

Dear Mr. Tam:

Enclosed are the signed and notarized Minor Encroachment Permit and Agreement and the Conditions for Granting a Minor Encroachment Permit to install two monitoring wells within the public right-of-way of Piedmont Avenue and Montell Street.

It is Chevron's understanding that with the submittal of the signed Encroachment Permit that we can proceed with securing the street excavation permit prior to the start of the proposed work in the City right-of-way.

If you have any questions call me at (925) 842-9136.

Sincerely,
CHEVRON PRODUCTS COMPANY

A handwritten signature in black ink, appearing to read "Philip R. Briggs".

Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

June 30, 1998

Mr. Roger Tam

Minor Encroachment Permit-Piedmont & Montell

Former Chevron Service Station #9-0517

Page2

Cc. Mr. Bette Owen, Chevron

Ms. Madhulla Logan

Alameda County Health Care Services

Department of Environmental Health

1131 Harbor Bay Parkway, Suite 250

Alameda, CA 94502-6577

Mr. Neil B. Goodhue

300 Hillside Avenue

Piedmont, CA 94611

Ms. Barbara Sieminski

Gettler-Ryan, Inc.

6747 Sierra Court, Suite J

Dublin, CA 94568

Recording requested by:
City of Oakland

When Recorded Mail to:
City of Oakland
Community & Econ. Develop. Agency
Building Services, Eng. info.
1330 Broadway, 2nd Floor
Oakland, CA 94612

TAX ROLL PARCEL NUMBER
(ASSESSOR'S REFERENCE NUMBER)

---	---	---	---
MAP	BLOCK	PARCEL	SUB

SPACE ABOVE FOR RECORDER'S USE ONLY

Address: Piedmont Avenue, Oakland

MINOR ENCROACHMENT PERMIT AND AGREEMENT

Chevron Products Company, a corporation is hereby granted a Conditional Revocable Permit to encroach into the public right-of-way of Piedmont Avenue and Montell Street with two monitoring wells. The location of said encroachments shall be as delineated in Exhibit 'A' attached hereto and made a part hereof.

The permittee agrees to comply with and be bound by the conditions for granting an Encroachment Permit attached hereto and made a part hereof.

This agreement shall be binding upon the undersigned, the present owner of the property described above, and its successors in interest thereof.

In witness whereof, I have set my signature this 30th day of June, 1998.

CHEVRON PRODUCTS COMPANY

By: [Signature]
Name: John Randal
Title: SAR Manager / Attorney in Fact

BELOW FOR OFFICIAL USE ONLY

CITY OF OAKLAND

Dated _____

By: _____
CALVIN N. WONG
Chief of Building Services
For
WILLIAM E. CLAGGETT
Interim Director
Community & Economic
Development Agency

:rt

ACKNOWLEDGEMENT

State of California)
City of San Ramon)
County of Contra Costa)

On June 30, 1998, before me, Sallie A. Diamond, a Notary Public in and for the State of California, personally appeared John Randall, personally known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the within instrument in his authorized capacity as an attorney-in-fact for Chevron Products Company, and that by his signature on the within instrument, the person or the entity upon behalf of which the person acted executed the within instrument.

WITNESS my hand and official seal.

Signature Sallie A. Diamond

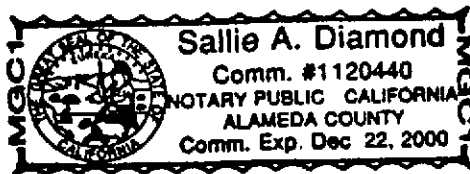
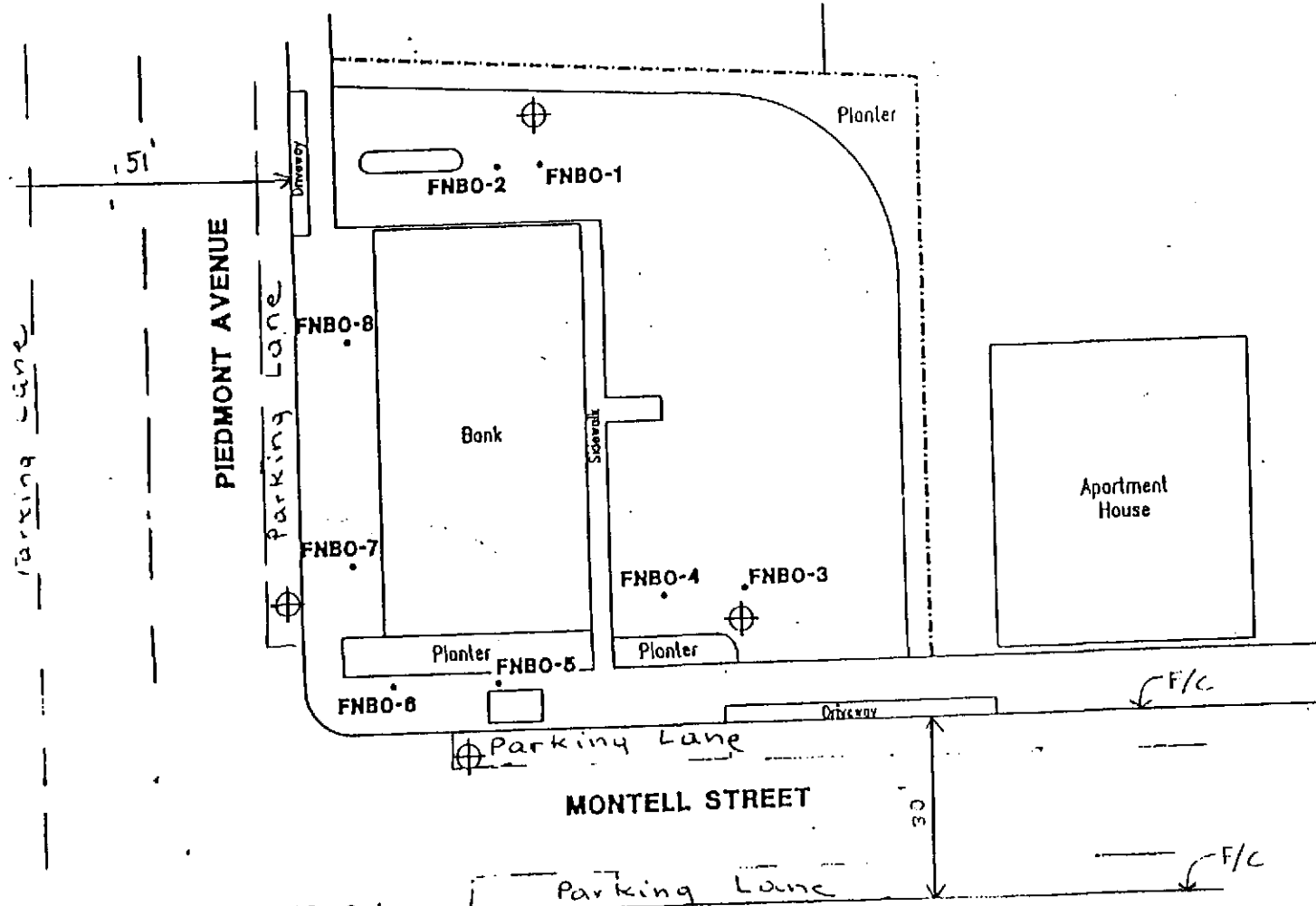


EXHIBIT "A" (no scale)



EXPLANATION:

FNBO-B • Soil Boring

⊕ Proposed Groundwater Monitoring Well

Source: Figure Modified From Drawing Provided By Cambria Environmental.



Gettler - Ryan Inc.

6747 Sierra Ct., Suite J (510) 551-7555
Dublin, CA 94568

SITE PLAN
First Nationwide Bank
3900 Piedmont Avenue
Oakland, California

JOB NUMBER
6420

REVIEWED BY

DATE
12/97

REVISED DATE
01/98

TO: Chervon Products Company
(APN: 012-0935-046-00)

Address: 6001 Bollinger Canyon Rd., Bldg. L, San Ramon, CA 94583

RE: Minor Encroachment Permit for Monitoring Wells in Piedmont Avenue
and Montell Street

CONDITIONS FOR GRANTING A MINOR ENCROACHMENT PERMIT

1. That this permit shall be revocable at the pleasure of the Chief of Building Services.
2. That the permittee, by the acceptance, either expressed or implied, of the minor encroachment permit hereby disclaims any right, title, or interest in or to any portion of the public sidewalk or street area, and agrees that said temporary use of said area does not constitute an abandonment on the part of the City of Oakland of any of its rights for street purposes and otherwise.
3. The permittee shall be considered self-insured. The permittee shall maintain in force and effect at all times that said encroachment occupies said public right-of-way, good and sufficient fund to cover public liability and property damage, both including contractual liability insuring the City of Oakland against any and all claims arising out of the existence of said encroachment in said public right-of-way area.
4. That the permittee, by the acceptance, either expressed or implied, of this revocable permit shall be solely and fully responsible for the repair or replacement of any portion or all of said improvements in the event that said improvements shall have failed or have been damaged to the extent of creating a menace or of becoming a hazard to the safety of the general public; and that the permittee shall be liable for the expenses connected therewith.
5. That the permittee is aware that the proposed work is out of the ordinary and does not comply with City standard installations. Permittee is also aware that the City has to conduct work in the public right-of-way which may include, but may not be limited to, excavation, trenching, and relocation of its facilities, all of which may damage encroachments. Permittee is further aware that the City takes no responsibility for repair or replacement of encroachments which are damaged by the City or its contractors. That the permittee, by the acceptance, either expressed or implied, of the encroachment permit hereby agrees that upon receipt of notification from the City, permittee shall immediately repair or replace within 30 days all

damages to permittee's encroachments within the public right-of-way which are damaged by the City or its contractors in carrying out the City's work. Permittee agrees to employ interim measures required and approved by the City until repair or replacement work is completed.

6. That upon the termination of the permission herein granted, permittee shall immediately remove said encroachment from the sidewalk and street area, and any damage resulting therefrom shall be repaired to the satisfaction of the Chief of Building Services.
7. That the permittee shall file with the City of Oakland for recordation a Minor Encroachment Permit and Agreement, and shall be bound by and comply with all the terms and conditions of said permit.
8. That said permittee shall obtain an excavation permit prior to the construction and a separate excavation permit prior to the removal of the ground water monitoring wells.
9. (a) That said permittee shall provide to the City of Oakland a performance bond for the amount of \$3,000 per each monitoring well encroaching within the public right-of-way prior to the issuance of the encroachment permit. Said performance bond shall be returned to the permittee after the monitoring is complete and the monitoring well is/are removed and the street area is restored.

(b) That said permittee shall provide to the City of Oakland an AS BUILT plan showing the actual location of the ground water monitoring wells and the results of all data collected from the monitoring wells.
10. That said permittee shall remove the monitoring wells and repair any damage to the sidewalk or street area in accordance with City standards two (2) years after construction or as soon as monitoring is complete.
11. That said permittee shall notify Building Services, Community and Economic Development Agency after the monitoring well(s) is/are removed and the sidewalk or street area restored to initiate the procedure to rescind the minor encroachment permit.
12. That monitoring well covers installed within the sidewalk area shall have a skidproof surface. A precast concrete utility box may be used in conjunction with the bolted cast iron cover with City approval.
13. That the ground water monitoring well casting and cover shall be cast iron and shall meet H-20 load rating. The cover shall be secured with a minimum of two stainless steel bolts. Bolts and cover shall be mounted flush with the

surrounding surface.

14. That the permittee acknowledges that the City makes no representations or warranties as to the conditions beneath said encroachment. By accepting this revocable permit, permittee agrees that it will use the encroachment area at its own risk, is responsible for the proper coordination of its activities with all other permittees, underground utilities, contractors, or workmen operating within the encroachment area and for the safety of itself and any of its personnel in connection with its entry under this revocable permit.
15. That the permittee acknowledges that the City is unaware of the existence of any hazardous substances beneath the encroachment area, and hereby waives and fully releases and forever discharges the City and its officers, directors, employees, agents, servants, representatives, assigns and successors from any and all claims, demands, liabilities, damages, actions, causes of action, penalties, fines, liens, judgments, costs, or expenses whatsoever (including, without limitation, attorneys' fees and costs), whether direct or indirect, known or unknown, foreseen or unforeseen, that may arise out of or in any way connected with the physical condition, or required remediation of the excavation area or any law or regulation applicable thereto, including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. Sections 9601 et seq.), the Resource Conservation and Recovery Act of 1976 (42 U.S.C. Section 6901 et seq.), the Clean Water Act (33 U.S.C. Section 466 et Seq.), the Safe Drinking Water Act (14 U.S.C. Sections 1401-1450), the Hazardous Materials Transportation Act (49 U.S.C. Section 1801 et seq.), the Toxic Substance Control Act (15 U.S.C. Sections 2601-2629), the California Hazardous Waste Control Law (California Health and Safety Code Sections 25100 et seq.), the Porter-Cologne Water Quality Control Act (California Health and Safety Code Section 13000 et seq.), the Hazardous Substance Account Act (California Health and Safety Code Section 25300 et seq.), and the Safe Drinking Water and Toxic Enforcement Act (California Health and Safety Code Section 25249.5 et seq.).
16. Permittee further acknowledges that it understands and agrees that it hereby expressly waives all rights and benefits which it now has or in the future may have, under and by virtue of the terms of California Civil Code Section 1542, which reads as follows: "A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM MUST HAVE MATERIALLY AFFECTED HIS SETTLEMENT WITH THE DEBTOR."
17. Permittee recognizes that by waiving the provisions of this section, permittee will not be able to make any claims for damages that may exist, and to which, if known, would materially affect his/her decision to execute this encroachment agreement, regardless of whether permittee's lack of

knowledge is the result of ignorance, oversight, error, negligence, or any other cause.

18. (a) That the permittee, by the acceptance of this revocable permit, agrees and promises to indemnify, defend, and hold harmless the City of Oakland, its officers, agents, and employees, to the maximum extent permitted by law, from any and all claims, demands, liabilities, damages, actions, causes of action, penalties, fines, liens, judgments, costs, or expenses whatsoever (including, without limitation, attorneys' fees and costs; collectively referred to as "claims"), whether direct or indirect, known or unknown, foreseen or unforeseen, to the extent that such claims were caused by the permittee, its agents, employees, contractors or representatives.
 - (b) That, if any contamination is discovered below or in the immediate vicinity of the encroachment, and the contaminants found are of the type used, housed, stored, processed or sold on or from the 3900 Piedmont Avenue, Oakland, California site, such shall amount to a rebuttable presumption that the contamination below, or in the immediate vicinity of, the encroachment was caused by the permittee, its agents, employees, contractors or representatives.
 - (c) That the permittee shall comply with all applicable federal, state, county and local laws, rules, and regulations governing the installation, maintenance, operation and abatement of the encroachment.
 - (d) That the permittee hereby does remise, release, and forever discharge, and agree to defend, indemnify and save harmless, the City, its officers, agents and employees and each of them, from any and all actions, claims, and demands of whatsoever kind or nature, and any damage, loss or injury which may be sustained directly or by the undersigned and any other person or persons, and arising out of, or by reason of, the occupation of said public property, and the future removal of the above-mentioned encroachment.
19. That the hereinabove conditions shall be binding upon the permittee and the successive owners and assigns thereof.
 20. That said Minor Encroachment Permit and Agreement shall take effect when all the conditions hereinabove set forth shall have been complied with to the satisfaction of the Chief of Building Services, and shall become null and void upon the failure of the permittee to comply with all conditions hereinabove set forth.

Descr install 2 monitoring wells. 1 on piedmont av & 1 on montel. Permit Issued 07/13/98
encroachment permit approved.

Work Type EXCAVATION-PRIVATE P

USA #

Util Co. Job #
Util Fund #:

Acctg#:

Applicant

Phone#

Lic# License Classes--

Owner GOODHUE NEIL B & DIANE C & PLA

Contractor GETTLER RYAN INC

Arch/Engr

Agent

Applic Addr 6747 SIERRA CT. DUBLIN CA, 94568

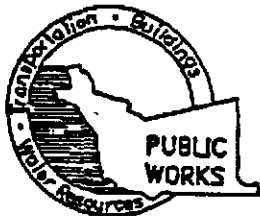
X

(510)551-7555 220703 B C61 A C57

\$246.00 TOTAL FEES PAID AT ISSUANCE

\$41.00	Applic	\$205.00	Permit
\$.00	Process	\$.00	Rec Mgmt
\$.00	Gen Plan	\$.00	Invstg
\$.00	Other		

APPROVED



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651
PHONE (510) 670-5575 ANDREAS GODFREY FAX (510) 670-5262
(510) 670-5248 ALVIN KAN

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 3900 Piedmont Avenue
Oakland, California

California Coordinates Source _____ ft. Accuracy = _____ ft.
CCN _____ ft. CCE _____ ft.
APN _____

CLIENT
Name Chemron Products Co
Address P.O. Box 6004 Phone (925) 842-9103
City San Ramon Zip _____

APPLICANT
Name Gettler-Ryan Inc
Address 6747 Sierra Ct. Ste J Fax (925) 551-7888
City Dublin Phone (925) 551-7555
Zip 94568

TYPE OF PROJECT

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

PROPOSED WATER SUPPLY WELL USE

New Domestic Replacement Domestic
Municipal Irrigation
Industrial Other _____

DRILLING METHOD:

Mud Rotary Air Rotary Auger Hollow Stem
Cable Other

DRILLER'S LICENSE NO C57 522 125

WELL PROJECTS

Drill Hole Diameter 3 in. Maximum _____
Casing Diameter 2 in. Depth 20 ft.
Surface Seal Depth 4 ft. Number 4

GEOTECHNICAL PROJECTS

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

ESTIMATED STARTING DATE 07/21/98
ESTIMATED COMPLETION DATE 07/21/98

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-65

APPLICANT'S SIGNATURE Barbara Aiemini DATE 07/13/98

FOR OFFICE USE

PERMIT NUMBER 98WR288
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 work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
- 3 Permit is void if project not begun within 90 days of approval date.

B. WATER 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 with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, wetted cement grout shall be used in place of compacted cuttings

E. CATHODIC

Fill hole above anode zone with concrete placed by tremie.

F. WELL DESTRUCTION

See attached.

G. SPECIAL CONDITIONS

APPROVED Andreas Godfrey DATE 7-14-98

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	

- LL - Liquid Limit (%)
- PI - Plastic Index (%)
- PID - Volatile Vapors in ppm
- MA - Particle Size Analysis
- 2.5 YR 6/2 - Soil Color according to Munsell Soil Color Charts (1975 Edition)
- 5 GY 5/2 - GSA Rock Color Chart

- No Soil Sample Recovered
- "Undisturbed" Sample
- Bulk or Classification Sample
- First Encountered Ground Water Level
- Piezometric Ground Water Level
- Penetration - Sample drive hammer weight - 140 pounds falling 30 inches. Blows required to drive sampler 1 foot are indicated on the logs

Unified Soil Classification - ASTM D 2488-85
and Key to Test Data

Gettler-Ryan, Inc.

Log of Boring MW-1

PROJECT: Former Chevron Service Station #9-0517
 G-R PROJECT NO.: 346420.02
 DATE STARTED: 07/21/98
 DATE FINISHED: 07/21/98
 DRILLING METHOD: 8 in. Hollow Stem Auger
 DRILLING COMPANY: Bay Area Exploration, Inc.

LOCATION: 3900 Piedmont Avenue, Oakland, CA
 SURFACE ELEVATION: 87.89 feet MSL
 WL (ft. bgs): 10.2 DATE: 07/21/98 TIME: 15:25
 WL (ft. bgs): 8.4 DATE: 07/22/98 TIME: 16:00
 TOTAL DEPTH: 16.5 Feet
 GEOLOGIST: Barbara Sieminski

DEPTH feet	PTD (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	WELL DIAGRAM
0						ML	PAVEMENT - asphalt.	
0-5		14	MWI-6			GC	GRAVELLY SILT (ML) - very dark grayish brown (2.5Y 3/2), damp, medium stiff, low plasticity; 50% silt, 30% fine gravel, 20% fine to coarse sand. CLAYEY GRAVEL (GC) - yellowish brown (10YR 5/4), damp, medium dense; 70% fine to coarse gravel, 15% fine to coarse sand, 15% clay.	
5-10	0	10	MWI-10 MWI-11			CL-ML GC ML	SILTY CLAY (CL-ML) - light yellowish brown (2.5Y 6/4), moist, stiff, low plasticity; 50% clay, 40% silt, 10% fine sand. CLAYEY GRAVEL (GC) - dark yellowish brown (10YR 4/4), moist, medium dense; 50% fine to coarse gravel, 30% clay, 20% fine to coarse sand. SANDY SILT WITH CLAYEY SILT LENSES (ML) - dark greenish gray (5GY 4/1), saturated, stiff, low plasticity; 45% silt, 30% fine sand, 25% clay; clayey silt lenses up to 2 inches thick. Color changes to light olive brown (2.5Y 5/6) at 11.5 feet.	
10-15	0	13	MWI-16			CL	CLAY (CL) - brown (10YR 5/3), damp to moist, stiff, low plasticity; 90% clay, 10% fine sand.	
15-20								
20-25								
(* = converted to equivalent standard penetration blows/ft.)								

Gettler-Ryan, Inc.

Log of Boring MW-2

PROJECT: Former Chevron Service Station #9-0517

LOCATION: 3900 Piedmont Avenue, Oakland, CA

G-R PROJECT NO.: 346420.02

SURFACE ELEVATION: 86.09 feet MSL

DATE STARTED: 07/21/98

WL (ft. bgs): 12.0 DATE: 07/21/98 TIME: 13:55

DATE FINISHED: 07/21/98

WL (ft. bgs): 7.4 DATE: 07/22/98 TIME: 16:00

DRILLING METHOD: 8 in. Hollow Stem Auger

TOTAL DEPTH: 16.5 Feet

DRILLING COMPANY: Bay Area Exploration, Inc.

GEOLOGIST: Barbara Sieminski

DEPTH feet	PTD (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	WELL DIAGRAM
0						CL	PAVEMENT - asphalt.	
5	0	14	MW2-8			GC	SANDY CLAY (CL) - dark brown (10YR 3/3), moist, stiff, low plasticity; 60% clay, 30% fine to coarse sand, 10% fine gravel. Color changes to yellowish brown (10YR 5/3) at 3 feet.	
10	0	10	MW2-11			ML	CLAYEY GRAVEL WITH SAND (GC) - olive (5Y 5/4) mottled light olive brown (2.5Y 5/4), moist, dense; 50% fine to coarse gravel, 30% fine to coarse sand, 20% clay.	
15	10	13	MW2-16			CL	SANDY SILT (ML) - light olive brown (2.5Y 5/6) mottled light gray (2.5 Y 7/2), moist to saturated, stiff, low plasticity; 45% silt, 30% fine sand, 25% clay.	
15						CL	CLAY (CL) - ligh olive brown (2.5Y 5/6), moist, stiff, low plasticity; 70% clay, 25% silt, 5% fine sand.	
20							(* = converted to equivalent standard penetration blows/ft.)	
25								

Gettler-Ryan, Inc.

Log of Boring MW-3

PROJECT: Former Chevron Service Station #9-0517

LOCATION: 3900 Piedmont Avenue, Oakland, CA

G-R PROJECT NO.: 346420.02

SURFACE ELEVATION: 86.28 feet MSL

DATE STARTED: 07/21/98

WL (ft. bgs): 11.0 DATE: 07/21/98 TIME: 10:55

DATE FINISHED: 07/21/98

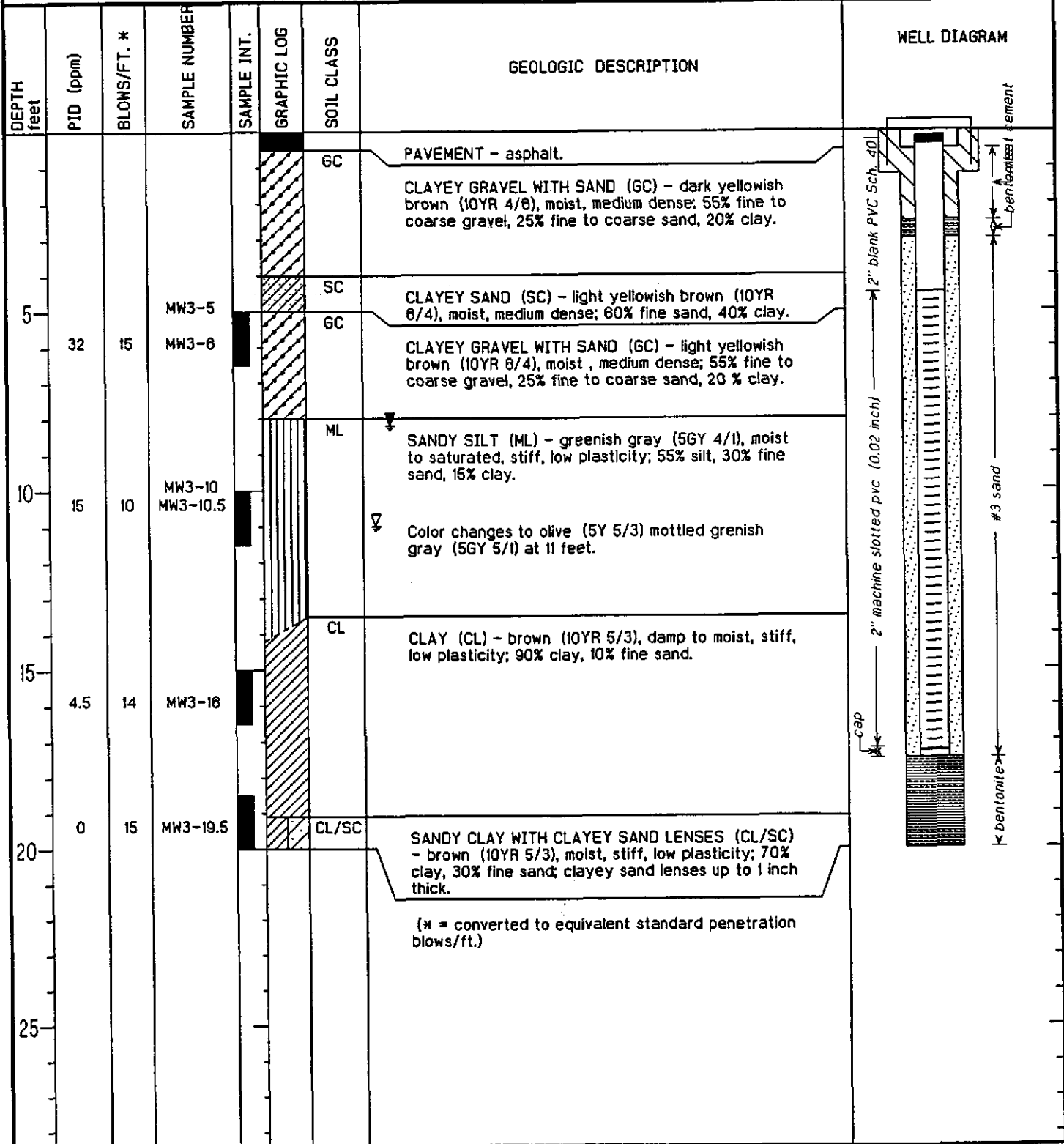
WL (ft. bgs): 8.2 DATE: 07/22/98 TIME: 16:00

DRILLING METHOD: 8 in. Hollow Stem Auger

TOTAL DEPTH: 20 Feet

DRILLING COMPANY: Bay Area Exploration, Inc.

GEOLOGIST: Barbara Sieminski



Gettler-Ryan, Inc.

Log of Boring MW-4

PROJECT: Former Chevron Service Station #9-0517

LOCATION: 3900 Piedmont Avenue, Oakland, CA

G-R PROJECT NO.: 346420.02

SURFACE ELEVATION: 87.22 feet MSL

DATE STARTED: 07/21/98

WL (ft. bgs): 12.0 DATE: 07/21/98 TIME: 12:20

DATE FINISHED: 07/21/98

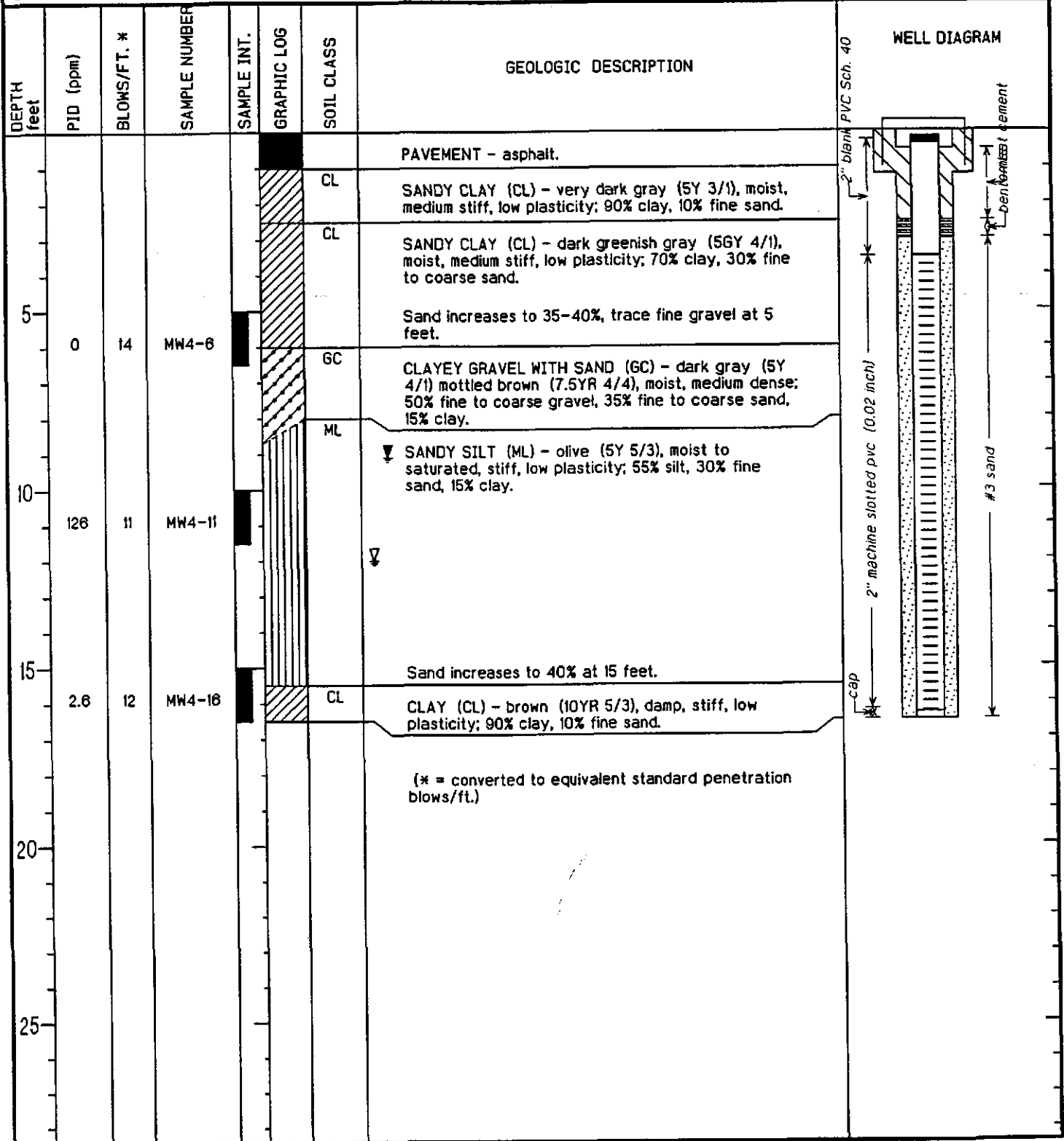
WL (ft. bgs): 9.1 DATE: 07/22/98 TIME: 16:00

DRILLING METHOD: 8 in. Hollow Stem Auger

TOTAL DEPTH: 18.5 Feet

DRILLING COMPANY: Bay Area Exploration, Inc.

GEOLOGIST: Barbara Sieminski



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

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

**WELL MONITORING/DEVELOPMENT
FIELD DATA SHEET**

Client/Facility: FNB / Chevron Job#: 6420.01
 Address: 3900 Piedmont Ave Date: 8-3-98
 City: Oakland CA Sampler: F. Clive

Well ID: MW-1 Well Condition: dry
 Well Diameter: 2" in. Hydrocarbon Thickness: 0 Ft. Amount Bailed: 0 (gal.)
 Total Depth: 16.5 ft. Volume Factor (VF): 2" = 0.17, 3" = 0.38, 4" = 0.66
 Depth to Water: 12.43 ft. 6" = 1.50, 12" = 5.80
4.07 X VF 0.17 = 0.7 X 10 (case volume) = Estimated Purge Volume: 7 (gal.)

Purge Equipment: Disposable Bailer
 Bailer
 Stack
 Suction
 Grundfos
 Other: _____

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

Starting Time: 12:45 Weather Conditions: clear HCT
 Sampling Time: 13:17 Water Color: Brown - clear Odor: None
 Purging Flow Rate: N/A gpm. Sediment Description: Muddy → None
 Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1245	0	7.35	1827	27.6	clear	cloudy	Initial
1301	1	6.90	1034	25.4	Brown	Muddy	Surge Bailer
1305	3	6.82	1753	24.2	↓	↓	Bail
1310	5	6.80	1699	23.7	↓	↓	Bail
1315	7	6.81	1700	23.5	Brown	cloudy	↓
1321	8	6.80	1699	23.5	Brown	cloudy	Sample

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	3x40ml VCA	✓	HA	SLG	Co-Bix MTL

COMMENTS: _____

**WELL MONITORING/DEVELOPMENT
FIELD DATA SHEET**

Client/Facility: FNB / Chevron
 Address: 3900 Piedmont Ave
 City: Oakland CA

Job#: 6420.01
 Date: 8-3-98
 Sampler: F. Cline

Well ID: MW-2
 Well Diameter: 2" in.
 Total Depth: 15.5 ft.
 Depth to Water: 11.34 ft.

Well Condition: dry
 Hydrocarbon Thickness: 0 ft. Amount Bailed 0 gal.
 Volume Factor (VF):
 2" = 0.17 3" = 0.38 4" = 0.66
 6" = 1.50 12" = 5.80

5.16 x VF 0.17 = 0.87 x (case volume) = Estimated Purge Volume: 8.7 (gal.)

Purge Equipment: Disposable Bailer
Bailer
 Stack
 Suction
 Grundfos
 Other: _____

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

Starting Time: 1318
 Sampling Time: 1348
 Purging Flow Rate: NA gpm.
 Did well de-water? N/C

Weather Conditions: clear HCT
 Water Color: Brown - clear Odor: None
 Sediment Description: Muddy → None
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1318	0	6.82	973	25.9			
1335	1	6.66	1029	25.3			
1338	3	6.68	1176	25.4			
1341	5	6.56	960	25.3			
1345	8	6.54	898	25.2			
1348	9	6.52	901	25.4			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	3x40ml VOA	✓	HA	SEGA	Co = BTEX NDBL

COMMENTS: _____

**WELL MONITORING/DEVELOPMENT
FIELD DATA SHEET**

Client/Facility: FNB / Chevron Job#: 6920.01
 Address: 3900 Piedmont Ave Date: 8-3-98
 City: Oakland CA Sampler: F. Cline

Well ID: MW-3 Well Condition: okay
 Well Diameter: 2" in. Hydrocarbon Thickness: 0 Ft. Amount Bailed: 0 (gal.)
 Total Depth: 17.5 ft.
 Depth to Water: 12.08 ft.

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

5.42 x VF 0.17 = 0.92 x 10 (case volume) = Estimated Purge Volume: 912 (gal.)

Purge Equipment: Disposable Bailer
 Bailer
 Stack
 Suction
 Grundfos
 Other: _____

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

Starting Time: 13:54 Weather Conditions: clear Hot
 Sampling Time: 14:25 Water Color: Brown - clear Odor: None
 Purging Flow Rate: NA gpm. Sediment Description: Muddy → None
 Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>13:54</u>	<u>0</u>	<u>6.58</u>	<u>1210</u>	<u>28.1</u>	<u>clear</u>	<u>cloudy</u>	<u>Initial</u>
<u>14:03</u>	<u>3</u>	<u>6.70</u>	<u>1557</u>	<u>27.0</u>	<u>Muddy</u>	<u>Brown</u>	<u>Bail/Surge</u>
<u>14:08</u>	<u>5</u>	<u>6.66</u>	<u>1555</u>	<u>27.3</u>	<u>cloudy</u>	<u>Brown</u>	<u>Bail</u>
<u>14:15</u>	<u>8</u>	<u>6.65</u>	<u>1566</u>	<u>27.5</u>	<u>↓</u>	<u>clear</u>	<u>↓</u>
<u>14:25</u>	<u>10</u>	<u>6.67</u>	<u>1565</u>	<u>27.3</u>	<u>↓</u>	<u>clear</u>	<u>↓</u>

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-</u>	<u>3x46mVCA</u>	<u>✓</u>	<u>Hot</u>	<u>SEGE</u>	<u>GeoBIX MTR</u>

COMMENTS: _____

**WELL MONITORING/DEVELOPMENT
FIELD DATA SHEET**

Client/Facility: FNB / Chevron
 Address: 3900 Piedmont Ave
 City: Oakland CA

Job#: 6420.01
 Date: 8-3-98
 Sampler: F. Clinic

Well ID: MW-4
 Well Diameter: 2' in.
 Total Depth: 16.5 ft.
 Depth to Water: 12.92 ft.

Well Condition: dry
 Hydrocarbon Thickness: 0 Ft. Amount Bailed: 0 (gal.)
 Volume Factor (VF):
 2" = 0.17 3" = 0.38 4" = 0.66
 6" = 1.50 12" = 5.80

3.58 x VF 0.17 = 0.6 x (Case volume) = Estimated Purge Volume: 0 (gal.)

Purge Equipment: Disposable Bailer
 Bailer
 Stack
 Suction
 Grundfos
 Other: _____

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

Starting Time: 1428
 Sampling Time: 1459
 Purging Flow Rate: NA gpm.
 Did well de-water? NU

Weather Conditions: clear HCT
 Water Color: Brown - clear Odor: None
 Sediment Description: Muddy → None
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1428	0	6.48	1147	23.8	clear	cloudy	Initial
1445	3	6.52	1249	22.8	Brown	Muddy	Back
1448	5	6.51	1245	22.9	Brown	cloudy	Surge
1451	7	6.50	1247	23.0	clear	↓	Back
1454	9	6.51	1250	23.1	clear	↓	↓

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	3x40ml VOA	Y	HA	SEGR	CO-BTEX METAL

COMMENTS: _____

Virgil Chavez Land Surveying

312 Georgia Street, Suite 200
Vallejo, California 94590
(707) 553-2476 • Fax (707) 553-8698

September 4, 1998
Project No. 1604-22

RECEIVED

SEP 07 1998

Barbara Sieminski
Gettler-Ryan, Inc.
6747 Sierra Ct., Suite J
Dublin, Ca. 94568

Subject: Monitoring Well Survey
First Nationwide Bank
3900 Piedmont Avenue
Oakland, Ca.

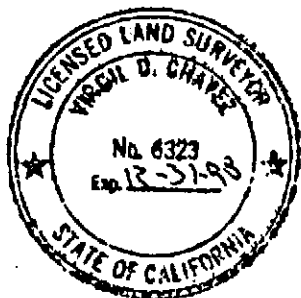
GETTLER-RYAN INC.
GENERAL CONTRACTORS

Dear Barbara:

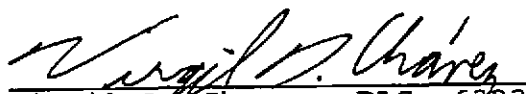
This is to confirm that we have proceeded at your request to survey the monitoring wells at the above referenced location. Our findings for the are shown in the tables below. The survey was performed September 2, 1998. Measurements were taken at notches on the top of casing. The benchmark for the survey was a City of Oakland survey monument at Piedmont & Monte Vista Avenues. The second table is for top of casing locations, using the back of sidewalk on Piedmont Avenue as reference line, beginning at intersection of the back of sidewalk with Montel Street.
Benchmark Elev. = 92.39 feet, MSL.

<u>Well No.</u>	<u>Rim Elevation</u>	<u>TOC Elevation</u>
MW -1	88.12	87.89
MW -2	86.26	86.09
MW -3	86.53	86.28
MW -4	87.56	87.22

<u>Well No.</u>	<u>Station</u>	<u>Offset</u>
MW -1	0+86.00	35.90 (Rt.)
MW -2	0+06.97	71.70 (Rt.)
MW -3	0-17.08	23.06 (Rt.)
MW -4	0+14.97	- 16.64 (Lt.)
BSW Piedmont Ave.	---	0.00
BSW Intx.	0+00	0.00



Sincerely,


Virgil D. Chavez, PLS 6323



Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: Chevron 9-0517, Oakland Lab Proj. ID: 9807F53	Sampled: 07/21/98 Received: 07/23/98 Analyzed: see below Reported: 08/04/98
Attention: Barbara Sieminski		

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
---------	-------	---------------	-----------------	----------------

Lab No: 9807F53-10
Sample Desc : SOLID,MW1-6

Bulk Density	-			Attached
Fraction Organic Carbon	%	07/30/98	0.020	0.059
Moisture, Percent	%	07/28/98	1.0	19
Porosity	-			Attached

Lab No: 9807F53-11
Sample Desc : SOLID,MW1-11

Bulk Density	-			Attached
Fraction Organic Carbon	%	07/30/98	0.020	0.15
Porosity	-			Attached

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager



Sequoia Analytical

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Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568

Attention: Barbara Sieminski

Client Proj. ID: Chevron 9-0517, Oakland
Sample Descript: MW3-6
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9807F53-01

Sampled: 07/21/98
Received: 07/23/98
Extracted: 07/29/98
Analyzed: 07/29/98
Reported: 08/04/98

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	83
4-Bromofluorobenzene	60 140	Q

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

SEQUOIA ANALYTICAL - ELAP #1849


Mike Gregory
Project Manager



Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568 Attention: Barbara Sieminski	Client Proj. ID: Chevron 9-0517, Oakland Sample Descript: MW3-10.5 Matrix: SOLID Analysis Method: 8015Mod/8020 Lab Number: 9807F53-02	Sampled: 07/21/98 Received: 07/23/98 Extracted: 07/29/98 Analyzed: 07/29/98 Reported: 08/04/98
---	---	--

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140
		97
		Q

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

SEQUOIA ANALYTICAL - ELAP #1849


Mike Gregory
Project Manager



Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568

Attention: Barbara Sieminski

Client Proj. ID: Chevron 9-0517, Oakland
Sample Descript: MW3-16
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9807F53-03

Sampled: 07/21/98
Received: 07/23/98
Extracted: 07/29/98
Analyzed: 07/29/98
Reported: 08/04/98

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140

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

SEQUOIA ANALYTICAL - ELAP #1849



Mike Gregory
Project Manager



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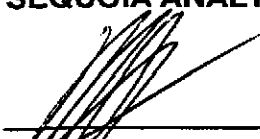
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FAX (707) 792-0342

Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: Chevron 9-0517, Oakland Sample Descript: MW4-6 Matrix: SOLID Analysis Method: 8015Mod/8020 Lab Number: 9807F53-04	Sampled: 07/21/98 Received: 07/23/98 Extracted: 07/29/98 Analyzed: 07/29/98 Reported: 08/04/98
Attention: Barbara Sieminski		

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140
		93
		Q

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

SEQUOIA ANALYTICAL - ELAP #1849



Mike Gregory
Project Manager



Sequoia Analytical

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Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568

Client Proj. ID: Chevron 9-0517, Oakland
Sample Descript: MW4-11
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9807F53-05

Sampled: 07/21/98
Received: 07/23/98
Extracted: 07/29/98
Analyzed: 07/29/98
Reported: 08/04/98

Attention: Barbara Sieminski

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	10	80
Methyl t-Butyl Ether	0.25	N.D.
Benzene	0.050	2.0
Toluene	0.050	1.7
Ethyl Benzene	0.050	4.7
Xylenes (Total)	0.050	5.8
Chromatogram Pattern:		GAS
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140

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

SEQUOIA ANALYTICAL - ELAP #1849


Mike Gregory
Project Manager



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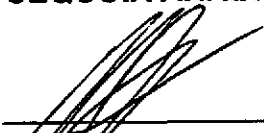
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Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: Chevron 9-0517, Oakland Sample Descript: MW4-16 Matrix: SOLID Analysis Method: 8015Mod/8020 Lab Number: 9807F53-06	Sampled: 07/21/98 Received: 07/23/98 Extracted: 07/29/98 Analyzed: 07/29/98 Reported: 08/04/98
Attention: Barbara Sieminski		

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	97
4-Bromofluorobenzene	60 140	Q

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

SEQUOIA ANALYTICAL - ELAP #1849


Mike Gregory
Project Manager



Sequoia Analytical

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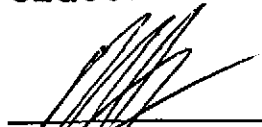
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Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568 Attention: Barbara Sieminski	Client Proj. ID: Chevron 9-0517, Oakland Sample Descript: MW2-6 Matrix: SOLID Analysis Method: 8015Mod/8020 Lab Number: 9807F53-07	Sampled: 07/21/98 Received: 07/23/98 Extracted: 07/29/98 Analyzed: 07/29/98 Reported: 08/04/98
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Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	0.0070
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	0.010
Xylenes (Total)	0.0050	0.0090
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140

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

SEQUOIA ANALYTICAL - ELAP #1849



Mike Gregory
Project Manager



**Sequoia
Analytical**

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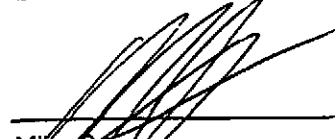
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Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568 Attention: Barbara Sieminski	Client Proj. ID: Chevron 9-0517, Oakland Sample Descript: MW2-11 Matrix: SOLID Analysis Method: 8015Mod/8020 Lab Number: 9807F53-08	Sampled: 07/21/98 Received: 07/23/98 Extracted: 07/29/98 Analyzed: 07/29/98 Reported: 08/04/98
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Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140

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

SEQUOIA ANALYTICAL - ELAP #1849



Mike Gregory
Project Manager



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Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: Chevron 9-0517, Oakland Sample Descript: MW2-16 Matrix: SOLID Analysis Method: 8015Mod/8020 Lab Number: 9807F53-09	Sampled: 07/21/98 Received: 07/23/98 Extracted: 07/29/98 Analyzed: 07/29/98 Reported: 08/04/98
Attention: Barbara Sieminski		

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140

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

SEQUOIA ANALYTICAL - ELAP #1849


Mike Gregory
Project Manager



Sequoia Analytical

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Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568

Attention: Barbara Sieminski

Client Proj. ID: Chevron 9-0517, Oakland
Sample Descript: MW1-6
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9807F53-10

Sampled: 07/21/98
Received: 07/23/98
Extracted: 07/29/98
Analyzed: 07/29/98
Reported: 08/04/98

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140

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

SEQUOIA ANALYTICAL - ELAP #1849



Mike Gregory
Project Manager





Sequoia Analytical

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Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: Chevron 9-0517, Oakland Sample Descript: MW1-11 Matrix: SOLID Analysis Method: 8015Mod/8020 Lab Number: 9807F53-11	Sampled: 07/21/98 Received: 07/23/98 Extracted: 07/29/98 Analyzed: 07/29/98 Reported: 08/04/98
Attention: Barbara Sieminski		

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	90
4-Bromofluorobenzene	60 140	Q

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

SEQUOIA ANALYTICAL - ELAP #1849



Mike Gregory
Project Manager





Sequoia Analytical

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Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568

Attention: Barbara Sieminski

Client Proj. ID: Chevron 9-0517, Oakland
Sample Descript: MW1-16
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9807F53-12

Sampled: 07/21/98
Received: 07/23/98
Extracted: 07/29/98
Analyzed: 07/29/98
Reported: 08/04/98

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	93
4-Bromofluorobenzene	60 140	Q

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

SEQUOIA ANALYTICAL - ELAP #1849



Mike Gregory
Project Manager





Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568 Attention: Barbara Sieminski	Client Proj. ID: Chevron 9-0517, Oakland Lab Proj. ID: 9807F53	Received: 07/23/98 Reported: 08/04/98
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LABORATORY NARRATIVE

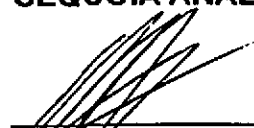
In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 26 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

Q - Only TFT surrogate reported.

TPH-GAS/BTEX:

Sample 9807F53-05 was diluted 10-fold.

SEQUOIA ANALYTICAL



Mike Gregory
Project Manager





Sequoia Analytical

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FAX (707) 792-0342

Gettler Ryan/Geostrategies
6747 Sierra Court, Ste J
Dublin, CA 94568
Attention: Barbara Sieminski

Client Project ID: Chevron 9-0517, Oakland
Matrix: Solid

Work Order #: 9807F53 -01-12

Reported: Aug 4, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	07V8438	07V8438	07V8438	07V8438
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 8015M	EPA 8015M	EPA 8015M	EPA 8015M
Analyst:	L. Hall	L. Hall	L. Hall	L. Hall
LCS/LCSD #:	LCS072998	LCS072998	LCS072998	LCS072998
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/29/98	7/29/98	7/29/98	7/29/98
Analyzed Date:	7/29/98	7/29/98	7/29/98	7/29/98
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	0.010 mg/Kg	0.010 mg/Kg	0.010 mg/Kg	0.010 mg/Kg
Result:	0.0098	0.0095	0.0098	0.010
LCS % Recovery:	98	95	98	100
Dup. Result:	0.0086	0.0083	0.0086	0.0089
LCSD % Recov.:	86	83	86	89
RPD:	13	13	13	12
RPD Limit:	0-30	0-30	0-30	0-30

MS/MSD	80-120	80-120	80-120	80-120
LCS				
Control Limits				

SEQUOIA ANALYTICAL
Elap #1849

Mike Gregory
Project Manager

Please Note:

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

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9807F53.GET <1>





Gettler Ryan/Geostrategies
6747 Sierra Court, Ste J
Dublin, CA 94568
Attention: Barbara Sieminski

Client Project ID: Chevron 9-0517, Oakland
Matrix: Solid

Work Order #: 9807F53-10

Reported: Aug 4, 1998

QUALITY CONTROL DATA REPORT

Analyte: % Moisture

QC Batch: IN072898160300A
Analy. Method: EPA 160.3
Prep Method: N.A.

Analyst: R. Dave

Duplicate
Sample #: 9807D3402

Prepared Date: 7/28/98
Analyzed Date: 7/29/98
Instrument I.D.#: MANUAL

Sample
Concentration: 61

Dup. Sample
Concentration: 60

RPD: 1.7
RPD Limit: 0-20

SEQUOIA ANALYTICAL


Mike Gregory
Project Manager

** RPD = Relative % Difference

9807F53.GET <2>





Gettler Ryan/Geostrategies
6747 Sierra Court, Ste J
Dublin, CA 94568
Attention: Barbara Sieminski

Client Project ID: Chevron 9-0517, Oakland
Matrix: Solid

Work Order #: 9807F53-10, 11

Reported: Aug 4, 1998

QUALITY CONTROL DATA REPORT

Analyte: Fractional Organic
Carbon

QC Batch: IN073098WALK00A

Analy. Method: WALKLEY-BLACK

Prep Method: N.A.

Analyst: K. Cesar

**Duplicate
Sample #:** 9807F5311

Prepared Date: 7/30/98
Analyzed Date: 7/30/98
Instrument I.D.#: MANUAL

**Sample
Concentration:** 0.15

**Dup. Sample
Concentration:** 0.15

RPD: 0.0
RPD Limit: 0-20

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

** RPD = Relative % Difference

9807F53.GET <3>





CORE LABORATORIES

July 30, 1998

Mr. Mike Gregory
Sequoia Analytical
680 Chesapeake Dr.
Redwood City, CA 94063

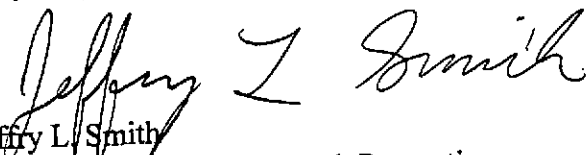
Subject : Transmittal of Geotechnical Analysis Data
SA Work order # 9807F53
Core Lab File No. 57111-98204

Dear Mr. Gregory:

Soil samples were submitted to our Bakersfield laboratory for geotechnical analysis. Determinations of bulk density and total porosity were requested. Grain and pore volumes were determined by Boyles Law double-cell methods utilizing an extended range helium porosimeter. The bulk densities and total porosity measurements and calculations were performed as described in API RP-40, API Recommended Practice for Core-Analysis Procedure, 1960. Accompanying this letter please find the results of this study.

We appreciate this opportunity to be of service to you and to Sequoia Analytical. Should you have any questions, or if we may be of further help in the future, please do not hesitate to contact us.

Very truly yours,


Jeffrey L. Smith
Laboratory Supervisor - Rock Properties

JLS:nw
1 original report, 1 cc report: Addressee



Sequoia Analytical
(Redwood City)
9807F53

C.L. File: 57111-98204

Sample Fraction	Sample Desc.	Sample Date	Sample Density			Total Porosity %	Description	Method
			Dry Bulk g/cc	Natural Bulk g/cc	Matrix g/cc			
10	MW1-6	21-Jul-98	1.68	2.01	2.52	33.1	Gray v clayey silt	API RP-40
11	MW1-11	21-Jul-98	1.60	1.99	2.62	38.7	Gray vfgr v slty clayey sand	API RP-40



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RECEIVED
JUL 30 1998
GETTLER-RYAN INC.
GENERAL CONTRACTORS

Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: Chevron 9-0517, Oakland Sample Descript: SP-(A-D)comp Matrix: SOLID Analysis Method: 8015Mod/8020 Lab Number: 9807D72-01	Sampled: 07/21/98 Received: 07/23/98 Extracted: 07/24/98 Analyzed: 07/26/98 Reported: 07/27/98
---	---	--

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	100

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager



Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568
Attention: Barbara Sieminski

Client Proj. ID: Chevron 9-0517, Oakland

Received: 07/23/98

Lab Proj. ID: 9807D72

Reported: 07/27/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 4 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager





Gettler Ryan/Geostrategies
6747 Sierra Court, Ste J
Dublin, CA 94568
Attention: Barbara Sieminski

Client Project ID: Chevron 9-0517, Oakland
Matrix: Solid
Work Order #: 9807D72 -01

Reported: Jul 28, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	07V8389	07V8389	07V8389	07V8389
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 8015M	EPA 8015M	EPA 8015M	EPA 8015M
Analyst:	L. Hall	L. Hall	L. Hall	L. Hall
LCS/LCSD #:	LCS072498	LCS072498	LCS072498	LCS072498
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/24/98	7/24/98	7/24/98	7/24/98
Analyzed Date:	7/26/98	7/26/98	7/26/98	7/26/98
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	0.010 mg/Kg	0.010 mg/Kg	0.010 mg/Kg	0.010 mg/Kg
Result:	0.0099	0.0096	0.010	0.010
LCS % Recovery:	99	96	100	100
Dup. Result:	0.0090	0.0087	0.0090	0.0096
LCSD % Recov.:	90	87	90	96
RPD:	9.5	9.8	11	4.1
RPD Limit:	0-30	0-30	0-30	0-30

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130
Control Limits				

SEQUOIA ANALYTICAL
Elap #1849

Mike Gregory
Project Manager

Please Note:

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

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9807D72.GET <1>





**Sequoia
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FAX (707) 792-0342

RECEIVED

Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568

Attention: Deanna Harding

Client Proj. ID: Chevron First Nationwide Bank
Sample Descript: TB-LB
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9808058-01

Sampled: 08/03/98
Received: 08/04/98
Analyzed: 08/17/98
Reported: 08/24/98


QC Batch Number: GC081798802005A
Instrument ID: HP-5

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	78

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

SEQUOIA ANALYTICAL - ELAP #1271


Mike Gregory
Project Manager



Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: Chevron First Nationwide Bank Sample Descript: MW-1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9808058-02	Sampled: 08/03/98 Received: 08/04/98 Analyzed: 08/17/98 Reported: 08/24/98
---	--	---

QC Batch Number: GC081798802005A
Instrument ID: HP-5

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	82

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

SEQUOIA ANALYTICAL - ELAP #1271



Mike Gregory
Project Manager





Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: Chevron First Nationwide Bank Sample Descript: MW-2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9808058-03	Sampled: 08/03/98 Received: 08/04/98 Analyzed: 08/17/98 Reported: 08/24/98
Attention: Deanna Harding		

QC Batch Number: GC081798802005A
Instrument ID: HP-5

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	3.4
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	89

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

SEQUOIA ANALYTICAL - ELAP #1271


Mike Gregory
Project Manager



Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: Chevron First Nationwide Bank Sample Descript: MW-3 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9808058-04	Sampled: 08/03/98 Received: 08/04/98 Analyzed: 08/19/98 Reported: 08/24/98
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QC Batch Number: GC081998802009A
Instrument ID: HP-9

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	4000
Methyl t-Butyl Ether	25	180
Benzene	5.0	160
Toluene	5.0	N.D.
Ethyl Benzene	5.0	N.D.
Xylenes (Total)	5.0	73
Chromatogram Pattern:		Gas
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	89

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

SEQUOIA ANALYTICAL - ELAP #1271


Mike Gregory
Project Manager





Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: Chevron First Nationwide Bank Sample Descript: MW-4 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9808058-05	Sampled: 08/03/98 Received: 08/04/98 Analyzed: 08/19/98 Reported: 08/24/98
Attention: Deanna Harding		

QC Batch Number: GC081998802009A
Instrument ID: HP-9

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	1900
Methyl t-Butyl Ether	2.5	130
Benzene	0.50	110
Toluene	0.50	12
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	55
Chromatogram Pattern:		Gas
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	80

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

SEQUOIA ANALYTICAL - ELAP #1271



Mike Gregory
Project Manager





Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568
Attention: Deanna Harding

Client Proj. ID: Chevron First Nationwide Bank

Received: 08/04/98

Lab Proj. ID: 9808058

Reported: 08/24/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 9 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

TPH-GAS/BTEX:

Sample 9808058-04 was diluted 10-fold.

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager





Gettler Ryan/Geostrategies
6747 Sierra Court, Ste J
Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Chevron First Nationwide Bank
Matrix: Liquid

Work Order #: 9808058 -01-03

Reported: Aug 24, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	BTEX as TPH
QC Batch#:	GC081798802005A	GC081798802005A	GC081798802005A	GC081798802005A	GC081798802005A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Kemp	A. Kemp	A. Kemp	A. Kemp	A. Kemp
MS/MSD #:	8080347	8080347	8080347	8080347	8080347
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/17/98	8/17/98	8/17/98	8/17/98	8/17/98
Analyzed Date:	8/17/98	8/17/98	8/17/98	8/17/98	8/17/98
Instrument I.D.#:	HP5	HP5	HP5	HP5	HP5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	220 µg/L
Result:	21	22	22	66	200
MS % Recovery:	105	110	110	110	91
Dup. Result:	20	20	21	64	230
MSD % Recov.:	100	100	105	107	105
RPD:	4.9	9.5	4.7	3.1	14
RPD Limit:	0-20	0-20	0-20	0-20	0-50

LCS #:	LCS081798	LCS081798	LCS081798	LCS081798	LCS081798
Prepared Date:	8/17/98	8/17/98	8/17/98	8/17/98	8/17/98
Analyzed Date:	8/17/98	8/17/98	8/17/98	8/17/98	8/17/98
Instrument I.D.#:	HP5	HP5	HP5	HP5	HP5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	220 µg/L
LCS Result:	19	20	20	61	210
LCS % Recov.:	95	100	100	102	95

MS/MSD	60-140	60-140	60-140	60-140	
LCS	70-130	70-130	70-130	70-130	60-140
Control Limits					

SEQUOIA ANALYTICAL
Elap #1271

Mike Gregory
Project Manager

Please Note:

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

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9808058.GET <1>





Gettler Ryan/Geostrategies
6747 Sierra Court, Ste J
Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Chevron First Nationwide Bank
Matrix: Liquid

Work Order #: 9808058-04, 05

Reported: Aug 24, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	BTEX as TPH
QC Batch#:	GC081998802009A	GC081998802009A	GC081998802009A	GC081998802009A	GC081998802009A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	C. Westwater	C. Westwater	C. Westwater	C. Westwater	C. Westwater
MS/MSD #:	8080600	8080600	8080600	8080600	8080600
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/19/98	8/19/98	8/19/98	8/19/98	8/19/98
Analyzed Date:	8/19/98	8/19/98	8/19/98	8/19/98	8/19/98
Instrument I.D.#:	HP9	HP9	HP9	HP9	HP9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	240 µg/L
Result:	9.3	10	10	32	160
MS % Recovery:	47	50	50	53	67
Dup. Result:	19	21	21	65	230
MSD % Recov.:	95	105	105	108	96
RPD:	68.6	71	71	68	35.9
RPD Limit:	0-20	0-20	0-20	0-20	0-50

LCS #:	LCS081998	LCS081998	LCS081998	LCS081998	LCS081998
Prepared Date:	8/19/98	8/19/98	8/19/98	8/19/98	8/19/98
Analyzed Date:	8/19/98	8/19/98	8/19/98	8/19/98	8/19/98
Instrument I.D.#:	HP9	HP9	HP9	HP9	HP9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	240 µg/L
LCS Result:	20	21	23	68	260
LCS % Recov.:	100	105	115	113	108

MS/MSD	60-140	60-140	60-140	60-140	
LCS	70-130	70-130	70-130	70-130	60-140
Control Limits					

SEQUOIA ANALYTICAL
Elap #1271

Mike Gregory
Project Manager

Please Note:

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

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9808058.GET <2>



