GETTLER-RYAN INC.

February 21, 1997

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

Subject: **Limited Subsurface Environmental Investigation Near the Former Product Piping and Dispenser Islands at Former Chevron Service Station #9-2960, 2416 Grove Way, Castro Valley, California.**

Mr. Briggs:

At the request of Chevron Products Company (Chevron), Gettler-Ryan Inc. (G-R) performed a limited subsurface environmental investigation near the former product piping and dispenser islands at the subject site (Figure 1). The purpose of this investigation was to evaluate soil condition beneath the former product lines and dispenser islands. The scope of work included: updating the site safety plan and obtaining the drilling permit; drilling six soil borings to groundwater; collecting soil samples from borings; submitting selected soil samples for analysis; and preparing a report documenting the work.

FIELD ACTIVITIES

Field work was conducted in accordance with the G-R *Letter Work Plan for Subsurface Environmental Investigation Near the Former Product Piping and Dispenser Islands* dated January 14, 1997, and approved by the Alameda County Health Care Services Agency (ACHCSA), and the G-R Site Safety Plan dated January 30, 1997. Drilling was performed under Zone 7 Water Agency permit number 97065, dated January 29, 1997 (attached).

On January 30, 1997, an underground utility survey was conducted at the site by Cruz Brothers Subsurface Locators. The survey indicated that no lines were present in the location of the former product line trenches. On February 5, 1997, a G-R geologist observed Bay Area Exploration Services, Inc. (C57 #522125) drill six on-site soil borings (B-1 through B-6) at the locations shown on Figure 2. Borings B-1 through B-4 were drilled to 16.5 feet below ground surface (bgs) and borings B-4 and B-5 were drilled to 19.5 feet bgs using 6-inch hollow-stem augers driven by a truck-mounted CME-55 drill rig. Soil samples were collected every 5 feet at a minimum. The G-R 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). Upon collection of soil samples the borings were backfilled with neat cement from the total depth to the ground surface. Mr. Scott Seery of the ACHCSA and Mr. Phil Briggs of Chevron were present at the site during drilling activities.

Drill cuttings were placed on and covered with plastic sheeting and stored onsite 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 February 13, 1997, the drill cuttings were removed from the site and transported to the BFI Landfill in Livermore by Integrated Wastestream Management (IWM).

6747 Sierra Court, Suite J • Dublin, California 94568 • (510) 551-7555

SAMPLE ANALYSIS

The samples were delivered under chain-of-custody to Sequoia Analytical (ELAP #1210) for analysis. All selected samples were analyzed for Total Petroleum Hydrocarbons as gasoline (TPHg) and gasoline constituents benzene, toluene, ethylbenzene and xylenes (BTEX) by Environmental Protection Agency (EPA) Method 8015Mod/8020. Samples collected from boring B-1 at 5.5, 11 and 16 feet bgs were also analyzed for fraction organic carbon, porosity and bulk density.

RESULTS

Subsurface Conditions

Fill material was encountered in all borings from the ground surface to depths of approximately 2 to 6 feet bgs. Native soil encountered in borings B-1 through B-6 consisted predominantly of sandy clay, clayey gravel, and gravel with sand to the total depth explored of 19.5 feet bgs. Groundwater was encountered in these borings at a depth of approximately 16 to 19 feet bgs. Detailed description of the subsurface materials encountered during drilling are presented on the attached boring logs.

Analytical Results

TPHg (up to 2,300 parts per million [ppm]) and benzene (up to 13 ppm) were detected in all soil samples collected from the capillary fringe zone (at depths of 15.5 to 18.5 feet bgs) except in the soil sample from boring B-4. The sample collected at 3 feet bgs from beneath the northwestern dispenser island (boring B-1) contained 1,200 ppm TPHg and 1.5 ppm benzene. The sample collected at 2.5 feet bgs from beneath the southeastern dispenser island (boring B-6) contained 560 ppm TPHg and less than 0.5 ppm benzene. Samples collected at 11 feet bgs from borings B-2 and B-6 contained low concentrations of TPHg (2.0 ppm and 3.3 ppm, respectively).

Fraction organic carbon concentrations ranged from 0.051% to 0.078% in soil samples analyzed. Total porosity of these samples ranged from 24.9% to 27.5%. Bulk density of dry samples ranged from 1.95 grams per cubic centimeter (gm/cc) to 2.02 gm/cc, and bulk density of wet samples ranged from 2.22 gm/cc to 2.27 gm/cc.

The composite stockpile sample contained 13 ppm TPHg, 0.014 ppm benzene, 0.012 toluene, 0.090 ppm ethylbenzene and 0.24 xylenes. Soil analytical results are summarized in Table 1. Copies of the laboratory analytical reports and chain-of-custody records are attached.

CONCLUSIONS

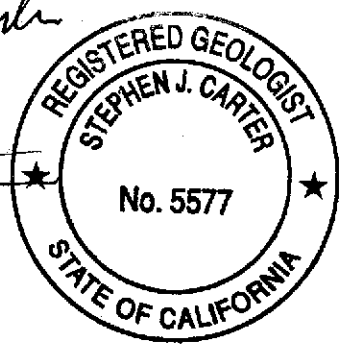
Analytical results from soil samples collected and analyzed during this investigation indicate that soil beneath dispenser islands has been impacted by gasoline hydrocarbons. The majority of hydrocarbon-impacted soil at these locations appears to be present at depths between 2.5 and 5.5 feet bgs. The soil immediately beneath the former product lines does not appear to be impacted by petroleum hydrocarbons. The soil within the capillary fringe zone (16 to 19 feet bgs) is impacted by gasoline hydrocarbons.

If you have questions, please call us at (510) 551-7555.

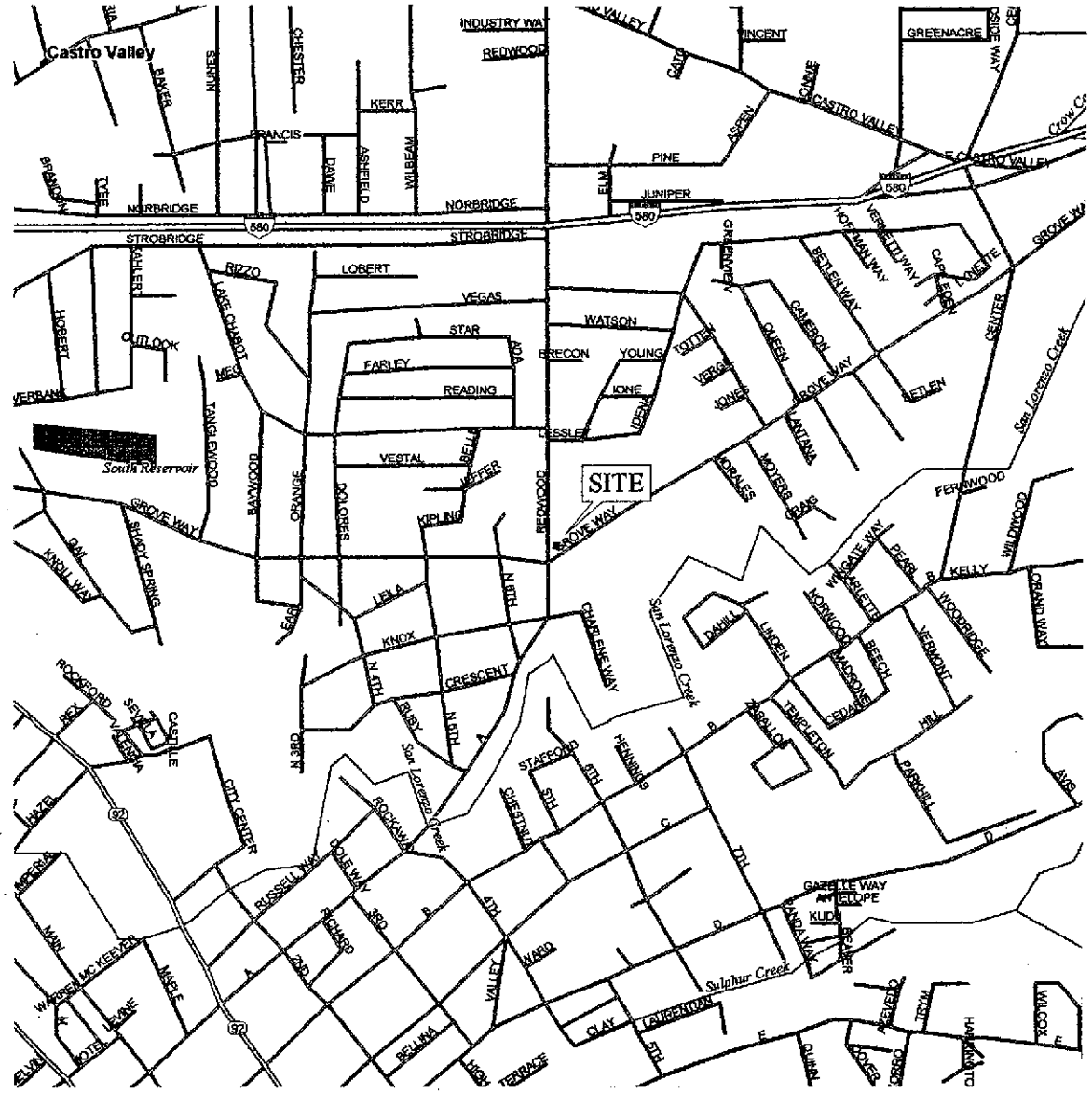
Sincerely
Gettler-Ryan Inc.

Barbara Sieminski
Project Geologist

Stephen J. Carter
Senior Geologist
R.G. 5577



Attachments:
Figure 1. Vicinity Map
Figure 2. Soil Concentration Map
Table 1. Analytical Results
Field Methods and Procedures
Drilling Permit
Boring Logs
Laboratory Analytical Report and Chain-of-Custody Record



Source: Street Atlas USA, Delorme (1995).

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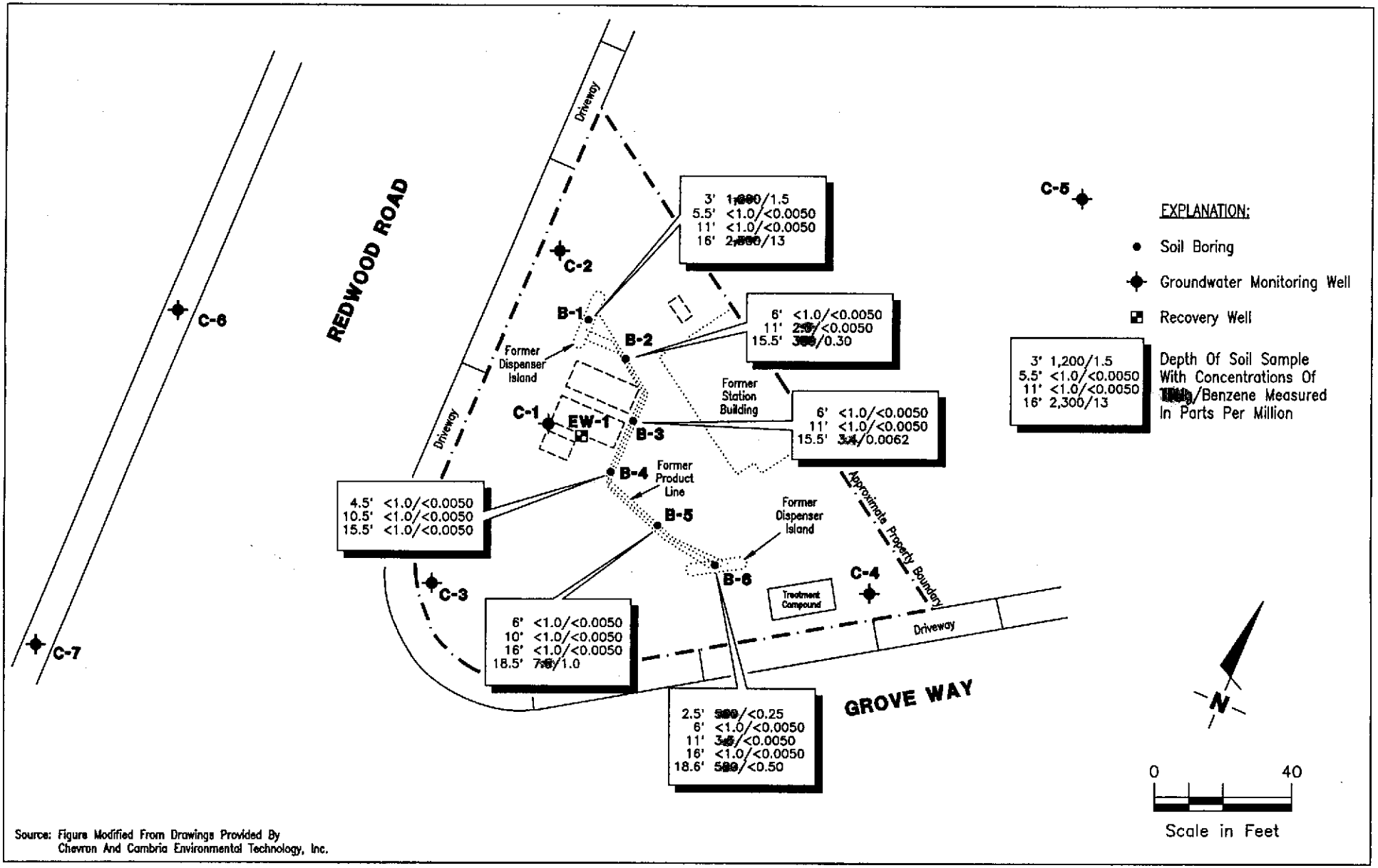
Dublin, CA 94568

VICINITY MAP
Former Chevron Service Station No. 9-2960
2416 Grove Way
Castro Valley, California

FIGURE
1

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
6365		1/97	



Source: Figure Modified From Drawings Provided By Chevron And Cambria Environmental Technology, Inc.

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SOIL CONCENTRATION MAP
Former Chevron Service Station No. 9-2960
2416 Grove Way
Castro Valley, California

FIGURE
2

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
6365		February 5, 1997	

Table 1. Analytical Results - Former Chevron Service Station #9-2960, 2416 Grove Way, Castro Valley, California.

Sample ID	Depth (ft)	Date	Analytic Method	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	Organic Carbon %	Bulk Density Dry gm/cc	Bulk Density Wet gm/cc	Grain Density gm/cc	Porosity %
				<----------ppm---------->									
B1-3	3	02/05/97	8015/8020	1,200	1.5	<0.50	4.1	18	---	---	---	---	---
B1-5.5	5.5	02/05/97	8015/8020/API RP-40	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	0.070	1.95	2.23	2.69	27.5
B1-11	11	02/05/97	8015/8020/API RP-40	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	0.078	1.95	2.22	2.68	27.4
B1-16	16	02/05/97	8015/8020/API RP-40	2,300	13	64	32	160	0.051	2.02	2.27	2.69	24.9
B2-6	6	02/05/97	8015/8020	<1.0	<0.0050	0.011	<0.0050	0.015	---	---	---	---	---
B2-11	11	02/05/97	8015/8020	2.0	<0.0050	<0.0050	0.0055	0.018	---	---	---	---	---
B2-15.5	15.5	02/05/97	8015/8020	330	0.30	0.63	0.81	1.6	---	---	---	---	---
B3-6	6	02/05/97	8015/8020	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---
B3-11	11	02/05/97	8015/8020	<1.0	<0.0050	<0.0050	<0.0050	0.010	---	---	---	---	---
B3-15.5	15.5	02/05/97	8015/8020	3.4	0.0062	0.0078	<0.0050	0.075[1]	---	---	---	---	---
B4-4.5	4.5	02/05/97	8015/8020	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---
B4-10.5	10.5	02/05/97	8015/8020	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---
B4-15.5	15.5	02/05/97	8015/8020	<1.0	<0.0050	<0.0050	<0.0050	0.0052	---	---	---	---	---
B5-6	6	02/05/97	8015/8020	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---
B5-10	10	02/05/97	8015/8020	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---
B5-16	16	02/05/97	8015/8020	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---
B5-18.5	18.5	02/05/97	8015/8020	7.5	1.0	0.87	0.20	0.63	---	---	---	---	---
B6-2.5	2.5	02/05/97	8015/8020	560	<0.25	0.47	2.7	8.3	---	---	---	---	---
B6-6	6	02/05/97	8015/8020	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---
B6-11	11	02/05/97	8015/8020	3.3	<0.0050	<0.0050	0.0082	0.060	---	---	---	---	---
B6-16	16	02/05/97	8015/8020	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---
B6-18.5	18.6	02/05/97	8015/8020	580	<0.50	0.83	5.1	32	---	---	---	---	---
SP-(A-D) Comp	---	02/05/96	8015/8020	13	0.014	0.012	0.090	0.24	---	---	---	---	---

EXPLANATION:

TPHg = Total Petroleum Hydrocarbons as gasoline
ft = Feet
ppm = Parts per million
gm/cc = Grams per cubic centimeter
--- = Not analyzed/not applicable
[1] = Weathered gasoline (C8-C12)

ANALYTICAL METHODS:

8015 = EPA Method for TPHg
8020 = EPA Method for benzene, toluene, ethylbenzene and xylenes
API RP-40 = API Recommended Practice for Core-Analysis Procedure, 1960.

ANALYTICAL LABORATORY:

Sequoia Analytical (ELAP #1210).

G-R FIELD METHODS AND PROCEDURES

Site Safety Plan

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

Collection of Soil Samples from Borings

Exploratory soil borings are drilled by a California-licensed well driller. A G-R 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 or pushed approximately 24 inches using a Geoprobe® rig. 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. GSI does not consider field screening techniques to be verification of the presence or absence of hydrocarbons.

ZONE 7 WATER AGENCY

6997 PARKSIDE DRIVE, PLEASANTON, CALIFORNIA 94588-5127 PHONE (510) 484-2600 X235
FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT Former Chevron #9-2960, 2416 Grove Way, Castro Valley

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

CLIENT
Name Chevron Products Co.
Address P.O. Box 6004 Phone (510) 842-9136
City San Ramon, CA 94583 Zip 94583

APPLICANT
Name Gettler-Ryan Inc. Fax (916) 631-7317
Address 3140 Gold Camp Dr. #240 Phone (916) 631-1310
City Rancho Cordova, CA Zip 95670

TYPE OF PROJECT
Well Construction
- Cathodic Protection ☐
- Water Supply ☐
- Monitoring ☐

Geotechnical Investigation (Soil borings)
- General ☒
- Contamination ☐
- Well Destruction ☐

PROPOSED WATER SUPPLY WELL USE N/A
- New Domestic ☐ Replacement Domestic ☐
- Municipal ☐ Irrigation ☐
- Industrial ☐ Other _____ ☐

DRILLING METHOD:
- Mud Rotary ☐ Air Rotary ☐ Auger ☒
- Cable ☐ Other ☐

DRILLER'S LICENSE NO. C57 - 522125 (Bay Area Explor.)

WELL PROJECTS N/A
- Drill Hole Diameter _____ in. Maximum
- Casing Diameter _____ in. Depth _____ ft.
- Surface Seal Depth _____ ft. Number _____

GEOTECHNICAL PROJECTS
- Number of Borings 5 Maximum
- Hole Diameter 8 in. Depth 20 ft.

ESTIMATED STARTING DATE 2-5-97
ESTIMATED COMPLETION DATE 2-5-97

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

APPLICANT'S SIGNATURE Stephen J. Carter, R.G. Date 1-22-97
For Gettler-Ryan Inc

FOR OFFICE USE

PERMIT NUMBER 97065
WELL NUMBER _____
APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

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

B. WATER 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 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, tremied 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 Wyman Hong Date 29 Jan 97
Wyman Hong

1019

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 DIATOMACIOUS, 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 B-1

PROJECT: *Chevron SS# 9-2960*	LOCATION: *2416 Grove Way, Castro Valley, CA*
G-R PROJECT NO. : *6365.01*	SURFACE ELEVATION: *MSL*
DATE STARTED: *02/05/97*	WL (ft. bgs): *16.3* DATE: *02/05/96* TIME: *10:15*
DATE FINISHED: *02/05/97*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *6 in. Hollow Stem Auger*	TOTAL DEPTH: *16.5 Feet*
DRILLING COMPANY: *Bay Area Exploration, Inc.*	GEOLOGIST: *Barbara Sieminski*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
0						GW	GRAVEL WITH SAND (GW) – dark grayish brown (2.5Y 4/2), dry, dense; 60% fine to coarse gravel, 40% fine to coarse sand; pieces of concrete and asphalt; fill.	Boring was backfilled to ground surface with neat cement.
	242	N/A	B1-3			GC	CLAYEY GRAVEL (GC) – black (N 2/0), damp, dense; 70% subrounded to well rounded fine to coarse gravel; 25% clay, 5% fine to coarse sand.	
5	32	31	B1-5.5				Color changes to olive (5Y 5/4) at 5 feet.	
						GW	GRAVEL WITH SAND AND CLAY (GW) – olive (5Y 5/3), damp, very dense; 50% subrounded to well rounded fine to coarse gravel, 40% fine to coarse sand, 10% clay.	
10	0	72	B1-11					
15	671	29	B1-16				Color changes to dark greenish gray (5GY 4/1); 50% gravel, 45% sand, 5% clay at 15 feet. ▽ Becomes saturated at 16.3 feet.	
20							(* = converted to equivalent standard penetration blows/ft.)	
25								
30								
35								

JOB NUMBER: *6365.01*

Gettler-Ryan, Inc.

Log of Boring B-2

PROJECT: *Chevron SS# 9-2960*	LOCATION: *2416 Grove Way, Castro Valley, CA*
G-R PROJECT NO. : *6365.01*	SURFACE ELEVATION: *MSL*
DATE STARTED: *02/05/97*	WL (ft. bgs): *16.0* DATE: *02/05/96* TIME: *11:15*
DATE FINISHED: *02/05/97*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *6 in. Hollow Stem Auger*	TOTAL DEPTH: *16.5 Feet*
DRILLING COMPANY: *Bay Area Exploration, Inc.*	GEOLOGIST: *Barbara Sieminski*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
5	0	8	B2-6			GW	GRAVEL WITH SAND (GW) - dark grayish brown (2.5Y 4/2), dry, dense; 60% fine to coarse gravel, 40% fine to coarse sand; fill.	Boring was backfilled to ground surface with neat cement.
							Becomes saturated at 5 feet.	
						CL	GRAVELLY CLAY (CL) - dark grayish brown (10YR 4/2), moist, stiff, low plasticity; 70% clay, 30% fine to coarse gravel.	
10	0	6	B2-11			GW	GRAVEL WITH SAND AND CLAY (GW) - dark grayish brown (10YR 4/2), moist, loose; 60% subrounded to well rounded fine to coarse gravel, 30% fine to coarse sand, 10% clay.	
15	159	12	B2-15.5				▽ Color changes to very dark gray (2.5Y 3/0); 50% gravel, 45% sand, 5% clay at 15 feet.	
							Becomes saturated at 16 feet.	
20							(* = converted to equivalent standard penetration blows/ft.)	
25								
30								
35								

JOB NUMBER: *6365.01*

Gettler-Ryan, Inc.

Log of Boring B-3

PROJECT: *Chevron SS# 9-2960*	LOCATION: *2416 Grove Way, Castro Valley, CA*
G-R PROJECT NO. : *6365.01*	SURFACE ELEVATION: *MSL*
DATE STARTED: *02/05/97*	WL (ft. bgs): *16.4* DATE: *02/05/96* TIME: *12:10*
DATE FINISHED: *02/05/97*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *6 in. Hollow Stem Auger*	TOTAL DEPTH: *16.5 Feet*
DRILLING COMPANY: *Bay Area Exploration, Inc.*	GEOLOGIST: *Barbara Sieminski*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
						GW	GRAVEL WITH SAND (GW) - dark grayish brown (2.5Y 4/2), dry, dense; 60% fine to coarse gravel, 40% fine to coarse sand; pieces of tile ; fill.	Boring was backfilled to ground surface with neat cement.
5	0	11	B3-6			CL	CLAY WITH SAND (CL) - grayish brown (10YR 5/2), moist, stiff, low plasticity; 80% clay, 20% fine to coarse sand, trace fine gravel.	
10	0	12	B3-11			GC	CLAYEY GRAVEL WITH SAND (GC) - grayish brown (10YR 5/2), moist, medium dense; 50% subrounded to well rounded fine to coarse gravel; 30% clay, 20% fine to coarse sand.	
15	101	23	B3-15.5			GW	GRAVEL WITH SAND (GW) - dark greenish gray (5GY 4/1), moist, medium dense; 60% subrounded to well rounded fine to coarse gravel, 35% fine to coarse sand, 5% clay.	
							▽ Becomes saturated at 16.4 feet.	
20							(* = converted to equivalent standard penetration blows/ft.)	
25								
30								
35								

JOB NUMBER: *6365.01*

Gettler-Ryan, Inc.

Log of Boring B-4

PROJECT: *Chevron SS# 9-2960*	LOCATION: *2416 Grove Way, Castro Valley, CA*
G-R PROJECT NO. : *6365.01*	SURFACE ELEVATION: *MSL*
DATE STARTED: *02/05/97*	WL (ft. bgs): *16.4* DATE: *02/05/96* TIME: *13:55*
DATE FINISHED: *02/05/97*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *6 in. Hollow Stem Auger*	TOTAL DEPTH: *16.5 Feet*
DRILLING COMPANY: *Bay Area Exploration, Inc.*	GEOLOGIST: *Barbara Sieminski*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
				GW	GRAVEL WITH SAND (GW) - dark grayish brown (2.5Y 4/2), dry, dense; 60% fine to coarse gravel, 40% fine to coarse sand; fill.	Boring was backfilled to ground surface with neat cement.
	0	N/A	B4-4.5			
5			B4-5.5	CL		
	0	40	B4-6.0	GC	SANDY CLAY (CL) - very dark gray (10YR 3/1), damp, very stiff, low plasticity; 70% clay, 30% fine to coarse sand.	
					CLAYEY GRAVEL (GC) - light olive brown (2.5Y 5/6), damp, dense; 60% subrounded to well rounded fine to coarse gravel; 30% clay, 10% fine to coarse sand.	
10					60% gravel, 20% clay, 20% fine to coarse sand.	
	0	41	B4-10.5 B4-11			
				GW	GRAVEL WITH SAND (GW) - light olive brown (2.5Y 5/6), moist, dense; 60% subrounded to well rounded fine to coarse gravel, 30% fine to coarse sand, 10% clay.	
15					Becomes saturated at 16.4 feet.	
	0	29	B4-15.5 B4-16			
20					(* = converted to equivalent standard penetration blows/ft.)	
25						
30						
35						

JOB NUMBER: *6365.01*

Gettler-Ryan, Inc.

Log of Boring B-5

PROJECT: *Chevron SS# 9-2960*	LOCATION: *2416 Grove Way, Castro Valley, CA*
G-R PROJECT NO. : *6365.01*	SURFACE ELEVATION: *MSL*
DATE STARTED: *02/05/97*	WL (ft. bgs): *18.1* DATE: *02/05/96* TIME: *15:30*
DATE FINISHED: *02/05/97*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *6 in. Hollow Stem Auger*	TOTAL DEPTH: *19.5 Feet*
DRILLING COMPANY: *Bay Area Exploration, Inc.*	GEOLOGIST: *Barbara Sieminski*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
				GW	GRAVEL WITH SAND (GW) – dark grayish brown (2.5Y 4/2), dry, dense; 60% fine to coarse gravel, 40% fine to coarse sand; fill.	Boring was backfilled to ground surface with neat cement.
				CL	CLAY WITH GRAVEL AND SAND (CL) – light olive brown (2.5Y 5/4), damp, very stiff, low plasticity; 70% clay, 15% well rounded fine to coarse gravel, 15% fine to coarse sand.	
5	0	21	B5-6		60% clay, 25% sand, 15% gravel at 6 feet.	
10	0	37	B5-10		Color changes to dark brown (10YR 3/3) at 10 feet.	
				GC	CLAYEY GRAVEL WITH SAND (GC) – yellowish brown (10YR 5/3), moist, dense; 40% subrounded to well rounded fine to coarse gravel; 30% clay, 30% fine to coarse sand.	
15	0	29	B5-16			
	159	26	B5-18.5 B5-19		▽ Becomes saturated at 18.1 feet.	
				SM	SILTY SAND (SM) – gray (10YR 5/1), saturated, dense; 70% fine sand, 30% silt.	
20						
					(* = converted to equivalent standard penetration blows/ft.)	
25						
30						
35						

JOB NUMBER: *6365.01*

Gettler-Ryan, Inc.

Log of Boring B-6

PROJECT: *Chevron SS# 9-2960*	LOCATION: *2416 Grove Way, Castro Valley, CA*
G-R PROJECT NO. : *6365.01*	SURFACE ELEVATION: *MSL*
DATE STARTED: *02/05/97*	WL (ft. bgs): *19.0* DATE: *02/05/96* TIME: *16:30*
DATE FINISHED: *02/05/97*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *6 in. Hollow Stem Auger*	TOTAL DEPTH: *19.5 Feet*
DRILLING COMPANY: *Bay Area Exploration, Inc.*	GEOLOGIST: *Barbara Sieminski*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
	250	N/A	B6-2.5	GW	GRAVEL WITH SAND (GW) – dark grayish brown (2.5Y 4/2), dry, dense; 60% fine to coarse gravel, 40% fine to coarse sand; fill.	Boring was backfilled to ground surface with neat cement.
				CL	SANDY CLAY (CL) – black (N 2/0), damp, stiff, low plasticity; 70% clay, 30% fine to coarse sand, trace fine gravel.
5	0	18	B6-6		Color changes to grayish brown (10YR 5/2) mottled black (N 2/0); 90% clay, 10% sand at 5 feet.
10	0	19	B6-11		Color changes to grayish brown (2.5YR 5/2) mottled strong brown (7.5YR 5/8); 85% clay, 10% sand, 5% fine gravel.
				GC	CLAYEY GRAVEL (GC) – yellowish brown (10YR 5/3), moist, dense; 70% subrounded to well rounded fine to coarse gravel; 20% clay, 10% fine to coarse sand.
15	0	33	B6-16		
	874	31	B5-18.5		▽ Becomes saturated at 19 feet.
20					(* = converted to equivalent standard penetration blows/ft.)
25					
30					
35					

JOB NUMBER: *6365.01*

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B1-3	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-01	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**100**	**1200**
Benzene	**0.50**	**1.5**
Toluene	0.50	N.D.
Ethyl Benzene	**0.50**	**4.1**
Xylenes (Total)	**0.50**	**18**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	123
4-Bromofluorobenzene	60	140	188 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B1-5.5	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-02	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP22

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	91
4-Bromofluorobenzene	60	140	76

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B1-11	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-03	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP22

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	89
4-Bromofluorobenzene	60	140	68

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B1-16	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/10/97
Attention: Deanna Harding	Lab Number: 9702259-04	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**200**	**2300**
Benzene	**1.0**	**13**
Toluene	**1.0**	**64**
Ethyl Benzene	**1.0**	**32**
Xylenes (Total)	**1.0**	**160**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	134 Q
4-Bromofluorobenzene	60	140	8 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B2-6	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-05	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP22

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**	**0.011**
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	**0.0050**	**0.015**
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	91
4-Bromofluorobenzene	60	140	83

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B2-11	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-06	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**1.0**	**2.0**
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	**0.0050**	**0.0055**
Xylenes (Total)	**0.0050**	**0.018**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	96
4-Bromofluorobenzene	60	140	80

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B2-15.5	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-07	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**50**	**330**
Benzene	**0.25**	**0.30**
Toluene	**0.25**	**0.63**
Ethyl Benzene	**0.25**	**0.81**
Xylenes (Total)	**0.25**	**1.6**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	105
4-Bromofluorobenzene	60	140	52 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B3-6	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-08	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP22

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	89
4-Bromofluorobenzene	60	140	75

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B3-11	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-09	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP22

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**	**0.010**
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	91
4-Bromofluorobenzene	60	140	77

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B3-15.5	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-10	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**1.0**	**3.4**
Benzene	**0.0050**	**0.0062**
Toluene	**0.0050**	**00078**
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	**0.0050**	**0.075**
Chromatogram Pattern:		
Weathered Gas		**C8-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	99
4-Bromofluorobenzene	60	140	78

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B4-4.5	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-11	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP07

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.
Ethyi Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	88
4-Bromofluorobenzene	60	140	93

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B4-10.5	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-12	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP22

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	89
4-Bromofluorobenzene	60	140	72

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B4-15.5	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-13	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP22

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**	**0.0052**
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	86
4-Bromofluorobenzene	60	140	61

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B5-6	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-14	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP22

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	89
4-Bromofluorobenzene	60	140	68

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B5-10	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-15	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP22

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	88
4-Bromofluorobenzene	60	140	77

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B5-16	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-16	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP22

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	89
4-Bromofluorobenzene	60	140	66

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B5-18.5	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-17	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**2.5**	**7.5**
Benzene	**0.012**	**1.0**
Toluene	**0.012**	**0.87**
Ethyl Benzene	**0.012**	**0.20**
Xylenes (Total)	**0.012**	**0.63**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	91
4-Bromofluorobenzene	60	140	81

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
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Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B6-2.5	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-18	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**50**	**560**
Benzene	0.25	N.D.
Toluene	**0.25**	**0.47**
Ethyl Benzene	**0.25**	**2.7**
Xylenes (Total)	**0.25**	**8.3**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	111
4-Bromofluorobenzene	60	140	237 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B6-6	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-19	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP22

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	90
4-Bromofluorobenzene	60	140	63

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
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Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B6-11	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/10/97
Attention: Deanna Harding	Lab Number: 9702259-20	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXA
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**1.0**	**3.3**
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	**0.0050**	**0.0082**
Xylenes (Total)	**0.0050**	**0.060**
Chromatogram Pattern:		
Weathered Gas		**C8-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	119
4-Bromofluorobenzene	60	140	75

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B6-16	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-21	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXB
Instrument ID: GCHP07

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	104
4-Bromofluorobenzene	60	140	90

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
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Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: B6-18.5	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702259-22	Reported: 02/11/97

QC Batch Number: GC020797BTEXEXB
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**100**	**580**
Benzene	0.50	N.D.
Toluene	**0.50**	**0.83**
Ethyl Benzene	**0.50**	**5.1**
Xylenes (Total)	**0.50**	**32**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	98
4-Bromofluorobenzene	60	140	6 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Received: 02/06/97
6747 Sierra Court Suite G		
Dublin, CA 94568	Lab Proj. ID: 9702259	Reported: 02/11/97
Attention: Deanna Harding		

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 27 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

TPHGBS: Sample 9702259-01 was diluted 100-fold.
Sample 9702259-04 was diluted 200-fold.
Sample 9702259-07 was diluted 50-fold.
Sample 9702259-17 was diluted 2.5-fold.
Sample 9702259-18 was diluted 50-fold.
Sample 9702259-22 was diluted 100-fold.

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Project ID:	Chevron 9-2960, Castro Valley	
6747 Sierra Court, Ste G	Matrix:	Solid	
Dublin, CA 94568			
Attention: Deanna Harding	Work Order #:	9702259 -01-20	Reported: Feb 12, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC020797BTEXEXA	GC020797BTEXEXA	GC020797BTEXEXA	GC020797BTEXEXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Porter	A. Porter	A. Porter	A. Porter
MS/MSD #:	9701F7306	9701F7306	9701F7306	9701F7306
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	2/7/97	2/7/97	2/7/97	2/7/97
Analyzed Date:	2/7/97	2/7/97	2/7/97	2/7/97
Instrument I.D.#:	GCHP07	GCHP07	GCHP07	GCHP07
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg
Result:	0.17	0.18	0.18	0.55
MS % Recovery:	85	90	90	92
Dup. Result:	0.17	0.17	0.18	0.55
MSD % Recov.:	85	85	90	92
RPD:	0.0	5.7	0.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25
LCS #:	BLK020797	BLK020797	BLK020797	BLK020797
Prepared Date:	2/7/97	2/7/97	2/7/97	2/7/97
Analyzed Date:	2/7/97	2/7/97	2/7/97	2/7/97
Instrument I.D.#:	GCHP07	GCHP07	GCHP07	GCHP07
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg
LCS Result:	0.19	0.19	0.19	0.58
LCS % Recov.:	95	95	95	97
MS/MSD Control Limits	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

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

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Project ID:	Chevron 9-2960, Castro Valley	
6747 Sierra Court, Ste G	Matrix:	Solid	
Dublin, CA 94568			
Attention: Deanna Harding	Work Order #:	9702259-21-22	Reported: Feb 12, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC020797BTEXEXB	GC020797BTEXEXB	GC020797BTEXEXB	GC020797BTEXEXB
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Porter	A. Porter	A. Porter	A. Porter
MS/MSD #:	9701F7307	9701F7307	9701F7307	9701F7307
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	2/7/97	2/7/97	2/7/97	2/7/97
Analyzed Date:	2/7/97	2/7/97	2/7/97	2/7/97
Instrument I.D.#:	GCHP07	GCHP07	GCHP07	GCHP07
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg
Result:	0.17	0.17	0.18	0.52
MS % Recovery:	85	85	90	87
Dup. Result:	0.17	0.17	0.18	0.53
MSD % Recov.:	85	85	90	88
RPD:	0.0	0.0	0.0	1.9
RPD Limit:	0-25	0-25	0-25	0-25
LCS #:	BLK020797	BLK020797	BLK020797	BLK020797
Prepared Date:	2/7/97	2/7/97	2/7/97	2/7/97
Analyzed Date:	2/7/97	2/7/97	2/7/97	2/7/97
Instrument I.D.#:	GCHP07	GCHP07	GCHP07	GCHP07
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg
LCS Result:	0.19	0.19	0.19	0.57
LCS % Recov.:	95	95	95	95
MS/MSD Control Limits	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

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

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

Chain-of-Custody-Record

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

Chevron Facility Number: 9-2960
Facility Address: 2416 Grove Way, Castro Valley
Consultant Project Number: 6365.01
Consultant Name: Gettler-Ryan
Address: 6747 Sierra Ct, Ste J, Dublin 94568
Project Contact (Name): Barbara Sieminski
(Phone): 510 551-7555 (Fax Number): 510 551-7888

Chevron Contact (Name): Phil Briggs
(Phone):
Laboratory Name: Sequoia
Laboratory Release Number:
Samples Collected by (Name): Barbara Sieminski
Collection Date: 02/05/97
Signature: B Sieminski

SAME DAY CHARGE

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed: TPH Gas + BTEX (8015) (8020)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)					DO NOT BILL TPH LB ANALYSIS	Remarks
B1-3	1	1	S	G	17:30		Yes	X													970225
B1-5.5	2	1		D	10:00			X													
B1-11	3	1			10:10			X													
B1-16	4	1			10:15			X													
B2-6	5	1			11:00			X													
B2-11	6	1			11:05			X													
B2-15.5	7	1			11:15			X													
B3-6	8	1			11:55			X													
B3-11	9	1			12:00			X													
B3-15.5	10	1		↓	12:10			X													
B4-4.5	11	1		G	13:25			X													
B4-5.5	~~12~~	1		D	13:30																hold
B4-6.0	~~13~~	1			13:30																
B4-10.5	~~12~~	1	↓	↓	13:45		↓	X													

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Barbara Sieminski	G-R	02/06/97 2:40	S Wright	SEQ	2/6/97 2:40
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
S Wright	SEQ	2/6/97		SEQ	2/6/97 8:54
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
5 Days
10 Days (3 days)
As Contracted

COC-3.DWG/03-91/rev.3

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

Chain-of-Custody-Record

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

Chevron Facility Number: 9-2960
Facility Address: 2416 Grove Way, Castro Valley
Consultant Project Number: 6365.01
Consultant Name: Gettler-Ryan
Address: 6747 Sierra Ct, Ste J, Dublin 94568
Project Contact (Name): Barbara Sieminski
(Phone): 510 551-7555 (Fax Number): 510 551-7888

Chevron Contact (Name): Phil Briggs
(Phone):
Laboratory Name: Sequoia
Laboratory Release Number:
Samples Collected by (Name): Barbara Sieminski
Collection Date: 02/05/97
Signature: B Sieminski

SAME DAY CHARGE

DO NOT BILL TB-LB ANALYSI

9702259

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	TPH Gas + BTEX (8015) (8020)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)	Remarks
B4-11	12	1	S	D	13:45		Yes									hold
B4-15.5	13	1			13:55			X								
B4-16	14	1			13:55											hold
B5-6	14	1			14:55			X								
B5-10	15	1			15:05			X								
B5-16	16	1			15:20			X								
B5-18.5	17	1			15:35			X								
B5-19	18	1			15:35											hold
B6-2.5	18	1		G	15:50			X								
B6-6	19	1		D	16:05			X								
B6-11	01	1			16:10			X								
B6-16	11	1			16:20			X								
B6-18.5	24	↓	↓	↓	16:30		↓	X								

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Barbara Sieminski	G-R	02/06/97 1240			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	SEQ	2/6/97 515		SEQ	2/6/97 1754
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time

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

COC-3.DWG/03 01/MCH

Sequoia Analytical

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

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

Attention: Deanna Harding

Client Proj. ID: Chevron 9-2960, Castro Valley

Lab Proj. ID: 9702412

Sampled: 02/05/97
Received: 02/06/97
Analyzed: see below

Reported: 02/18/97

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9702412-01				
Sample Desc : **SOLID,B1-5.5**				
Bulk Density	**mg/L**			**attached**
Fraction Organic Carbon	**%**	**02/13/97**	**0.020**	**0.070**
Porosity	**-**			**attached**
Lab No: 9702412-02				
Sample Desc : **SOLID,B1-11**				
Bulk Density	**mg/L**			**attached**
Fraction Organic Carbon	**%**	**02/13/97**	**0.020**	**0.078**
Porosity	**-**			**attached**
Lab No: 9702412-03				
Sample Desc : **SOLID,B1-16**				
Bulk Density	**mg/L**			**attached**
Fraction Organic Carbon	**%**	**02/13/97**	**0.020**	**0.051**
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

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
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Gettler Ryan/Geostrategies
6747 Sierra Court Suite G
Dublin, CA 94568
Attention: Deanna Harding

Client Proj. ID: Chevron 9-2960, Castro Valley

Lab Proj. ID: 9702412

Received: 02/06/97

Reported: 02/18/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 1 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

Sequoia Analytical

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Gettler Ryan/Geostrategies	Client Project ID:	Chevron 9-2960, Castro Valley	
6747 Sierra Court, Ste J	Matrix:	Solid	
Dublin, CA 94568			
Attention: Deanna Harding	Work Order #:	9702412 01, 02, 03	Reported: Feb 20, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Fractional Organic Carbon
QC Batch:	IN021397WALK00A
Analy. Method:	Walkley-Black
Prep Method:	N.A.

Analyst:	T. McMahon
Duplicate Sample #:	970241202
Prepared Date:	2/13/97
Analyzed Date:	2/13/97
Instrument I.D.#:	MANUAL
Sample Concentration:	0.078
Dup. Sample Concentration:	0.070
RPD:	11
RPD Limit:	0-20

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

** RPD = Relative % Difference

CORE LAB

Sequia Analytical

Proj. # 9702412

File: 57111-97079

Date: 14-Feb-97

Sample ID	Porosity (Total) %	Grain Density gm/cc	Bulk Density gm /cc Dry	Bulk Density gm /cc Nat.	Description	Methods Porosity, Densities
B-1 5.5	27.5	2.69	1.95	2.23	Slt tn vf-gran sdy v slty v cly/frac	API RP-40
B-1 11	27.4	2.68	1.95	2.22	Sd brn vf-gran v slty v cly/frac	API RP-40
B-1 16	24.9	2.69	2.02	2.27	Sd brn vf-gran slty	API RP-40

Fax copy of Lab Report and COC to Chevron Contact: ... Chain of Custody Record

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Chevron Facility Number 9-2960 Facility Address 2416 Grove Way, Castro Valley Consultant Project Number 6365.01 Consultant Name Gettler-Ryan Address 6747 Sierra Ct, Ste J, Dublin 94568 Project Contact (Name) Barbara Sieminski (Phone) 510 551-7555 (Fax Number) 510 551-7888	Chevron Contact (Name) Phil Briggs (Phone) Laboratory Name Sequoia Laboratory Release Number Samples Collected by (Name) Barbara Sieminski Collection Date 02/05/97 Signature [signature]

Analyses To Be Performed

SAME DAY CHARGE

DO NOT BILL TB-LB ANALYSIS

9702259

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	TPH Gas + BTEX (8015) (8020)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)						Remarks
B1-3	1	1	S	G	17:30		Yes	X													
B1-5.5	2	1		D	10:00			X													
B1-11	3	1			10:10			X													
B1-16	4	1			10:15			X													
B2-6	5	1			11:00			X													
B2-11	6	1			11:05			X													
B2-15.5	7	1			11:15			X													
B3-6	8	1			11:55			X													
B3-11	9	1			12:00			X													
B3-15.5	10	1			12:10			X													
B4-4.5	11	1		G	13:25			X													
B4-5.5	~~12~~	1		D	13:30																hold
B4-6.0	~~13~~	1			13:30																hold
B4-10.5	12 ~~14~~	1			13:45			X													

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Barbara Sieminski	G-R	02/06/97 2:40	S Wright	SEQ	2/6/97 2:40
S Wright	SEQ	2/6/97	[signature]	SEQ	2/6/97 1754
			Received For Laboratory By (Signature)		

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

COC-3.D-G/03 91

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-2960, Castro Valley	Sampled: 02/05/97
6747 Sierra Court Suite G	Sample Descript: SP-A,B,C,D Comp	Received: 02/06/97
Dublin, CA 94568	Matrix: SOLID	Extracted: 02/07/97
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Deanna Harding	Lab Number: 9702260-01	Reported: 02/10/97

QC Batch Number: GC020797BTEXEXB
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**1.0**	**13**
Benzene	**0.0050**	**0.014**
Toluene	**0.0050**	**0.012**
Ethyl Benzene	**0.0050**	**0.090**
Xylenes (Total)	**0.0050**	**0.24**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	106
4-Bromofluorobenzene	60	140	90

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Gettler Ryan/Geostrategies	Client Project ID:	Chevron 9-2960, Castro Valley	
6747 Sierra Court, Ste G	Matrix:	Solid	
Dublin, CA 94568			
Attention: Deanna Harding	Work Order #:	9702260 -01	Reported: Feb 12, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC020797BTEXEXB	GC020797BTEXEXB	GC020797BTEXEXB	GC020797BTEXEXB
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Porter	A. Porter	A. Porter	A. Porter
MS/MSD #:	9701F7307	9701F7307	9701F7307	9701F7307
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	2/7/97	2/7/97	2/7/97	2/7/97
Analyzed Date:	2/7/97	2/7/97	2/7/97	2/7/97
Instrument I.D.#:	GCHP07	GCHP07	GCHP07	GCHP07
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg
Result:	0.17	0.17	0.18	0.52
MS % Recovery:	85	85	90	87
Dup. Result:	0.17	0.17	0.18	0.53
MSD % Recov.:	85	85	90	88
RPD:	0.0	0.0	0.0	1.9
RPD Limit:	0-25	0-25	0-25	0-25
LCS #:	BLK020797	BLK020797	BLK020797	BLK020797
Prepared Date:	2/7/97	2/7/97	2/7/97	2/7/97
Analyzed Date:	2/7/97	2/7/97	2/7/97	2/7/97
Instrument I.D.#:	GCHP07	GCHP07	GCHP07	GCHP07
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg
LCS Result:	0.19	0.19	0.19	0.57
LCS % Recov.:	95	95	95	95
MS/MSD Control Limits	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

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

Sequoia Analytical

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

Client Proj. ID: Chevron 9-2960, Castro Valley

Lab Proj. ID: 9702260

Received: 02/06/97

Reported: 02/10/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 7 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

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

Chain-of-Custody-Re

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

Chevron Facility Number: 9-2960
Facility Address: 2416 Grove Way, Castro Valley
Consultant Project Number: 6365.01
Consultant Name: Gettler-Ryan
Address: 6747 Sierra Ct, Ste J, Dublin 94568
Project Contact (Name): Barbara Sieminski
(Phone): 510 551-7555 (Fax Number): 510 551-7888

Chevron Contact (Name): Phil Briggs
(Phone):
Laboratory Name: Sequoia
Laboratory Release Number:
Samples Collected by (Name): Barbara Sieminski
Collection Date: 02/05/97
Signature: B Sieminski

SAME DAY CHARGE

DO NOT BILL
TB-LB ANALYSI
970226

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	TPH Gas + BTEX (8020)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)	Remarks
SP-A	1	1	S	G	18:00		Yes	X								
SP-B	2	1			18:02			X								Fax results
SP-C	3	1			18:04			X								to IWM
SP-D	4	1	↓	↓	18:06		↓	X								(Att. Steve Shimon
																(408)942-1499

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

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Deanna Harding	GR	2/6/97 2:40	L Wright	SEQ	2/6/97 2:40
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
L Wright	SEQ	2/6/97 5:05		SEQ	2/6/97 1753
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time

COC-3.DWG/03191/HCH