Chevron U.S.A. Inc.
2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address: P.O. Box 5004, San Ramon, CA 94583-0804

Marketing Department

February 13, 1992

Mr. Ravi Arulananthum
Alameda County Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Re: Chevron Station #9-5542
7007 San Ramon Valley Blvd., Dublin, CA 94568

Dear Mr. Arulananthum:

Enclosed is a report dated January 16, 1992, which was prepared by Chevron's consultant, GeoStrategies Inc. (GSI), to describe the installation and sampling of one offsite groundwater monitoring well at the site captioned above. The well, named MW-8, was installed to help evaluate and define the extent of dissolved hydrocarbons in the groundwater downgradient of the site. Soil and groundwater samples from MW-8 did not contain detectable levels of TPH-Gas or BTEX.

If you have any questions or comments, I can be reached at (415) 842-8658.

Sincerely,

Clint B. Rogers

Clint B. Rogers
Engineer, Site Assessment and Remediation

Attachment

cc: San Francisco Bay RWQCB, Oakland, CA

Sharon Halper, Sierra, Martinez, CA

GeoStrategies Inc.

WELL INSTALLATION REPORT

Chevron Service Station No. 5542
7007 San Ramon Road
Dublin, California

729001-1

January 16, 1992

GeoStrategies Inc.
2140 WEST WINTON AVENUE
HAYWARD, CALIFORNIA 94545

January 16, 1992

Gettler-Ryan Inc.
2150 West Winton Avenue
Hayward, California 94545

Attn: Mr. Jeff Monroe

Re: WELL INSTALLATION REPORT
Chevron Service Station No. 5542
7007 San Ramon Road
Dublin, California

Gentlemen:

This well installation report by GeoStrategies Inc. (GSI) summarizes the ground-water monitoring well installation and soil sampling performed at the above referenced location (Plate 1), as directed by Chevron U.S.A. One exploratory soil boring was drilled on December 6, 1991 and completed as a ground-water monitoring well designated MW-8. Field work and laboratory analysis were performed to comply with current State of California Water Resources Control Board guidelines.

FIELD PROCEDURES

The exploratory soil boring was drilled using a truck-mounted hollow-stem auger drill rig. A GSI geologist observed the drilling, described soil samples using the Unified Soil Classification System (ASTM D-2488) and Munsell Soil Color Charts, and prepared a lithologic log for the borehole. The exploratory boring log is presented in Appendix A.

Soil samples were collected at five-foot depth intervals, using a modified California split-spoon sampler fitted with clean stainless steel liners. Soil samples were screened for organic vapor using an Organic Vapor Monitor (OVM) photoionization detector. Selected soil samples retained for chemical analysis were covered on both ends with aluminum foil and sealed with plastic end caps. The samples were labeled, entered on a Chain-of-Custody form and transported in a cooler with blue ice to Superior Analytical Laboratory (Superior), a State-certified laboratory located in San Francisco, California.

Monitoring Well Construction

Boring MW-8 was drilled to a total depth of 35.5 feet. The well was constructed using 2-inch diameter Schedule 40 PVC well casing and 0.020-inch factory-slotted well screen. The monitoring well construction detail is presented with the boring log in Appendix A.

CHEMICAL ANALYSIS

Soil and groundwater samples were analyzed for Total Petroleum Hydrocarbons calculated as Gasoline (TPH - Gasoline) according to EPA Method 8015 (Modified) and Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) according to EPA Method 8020. Analysis were performed by Superior.

Soil Analytical Results

The soil sample from the 20 foot sample interval was retained for chemical analysis. TPH-Gasoline and BTEX were reported as not detected (ND). A summary of the soil analytical data is presented in Table 1, and a copy of the Superior analytical report and Chain-of-Custody form is presented in Appendix B.

Groundwater Analytical Results

Groundwater samples were collected by Gettler-Ryan Inc. on December 12, 1991. Prior to sampling, the well was inspected for separate-phase hydrocarbons using an oil-water interface probe. Separate-phase hydrocarbons were not observed in the well during this sampling. A clear acrylic bailer was used to confirm interface probe results. TPH-Gasoline and Benzene were reported as ND. A summary of the groundwater chemical analytical results is presented in Table 2, and a copy of the Superior analytical report and Chain-of-Custody form is presented in Appendix C.

If you have any questions, please call.

GeoStrategies Inc. by,

Randall S. Young
Project Geologist

Michael C. Carey
Engineering Geologist
C.E.G. 1351

CERTIFIED ENGINEERING GEOLOGIST
MICHAEL C. CAREY
C.E.G. 1351
Exp: 6-30-92
STATE OF CALIFORNIA

Plate 1. Site Plan

Appendix A: Exploratory Boring Log
Appendix B: Soil Analytical Report and Chain-of-Custody Form
Appendix C: Groundwater Analytical Report and Chain-of-Custody Form

TABLE 1

SOIL ANALYSES DATA

SAMPLE NO	SAMPLE DATE	ANALYSIS DATE	TPH-G (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBENZENE (PPM)	XYLENES (PPM)
MW-8-20	06-Dec-91	18-Dec-91	<1	<.005	<.005	<.005	<.005

TPH-G = Total Petroleum Hydrocarbons calculated as Gasoline
PPM = Parts Per Million

Note: 1. All data shown as <x are reported as ND (not detected).

729001-1

TABLE 2

FIELD MONITORING AND GROUND-WATER ANALYSIS DATABASE

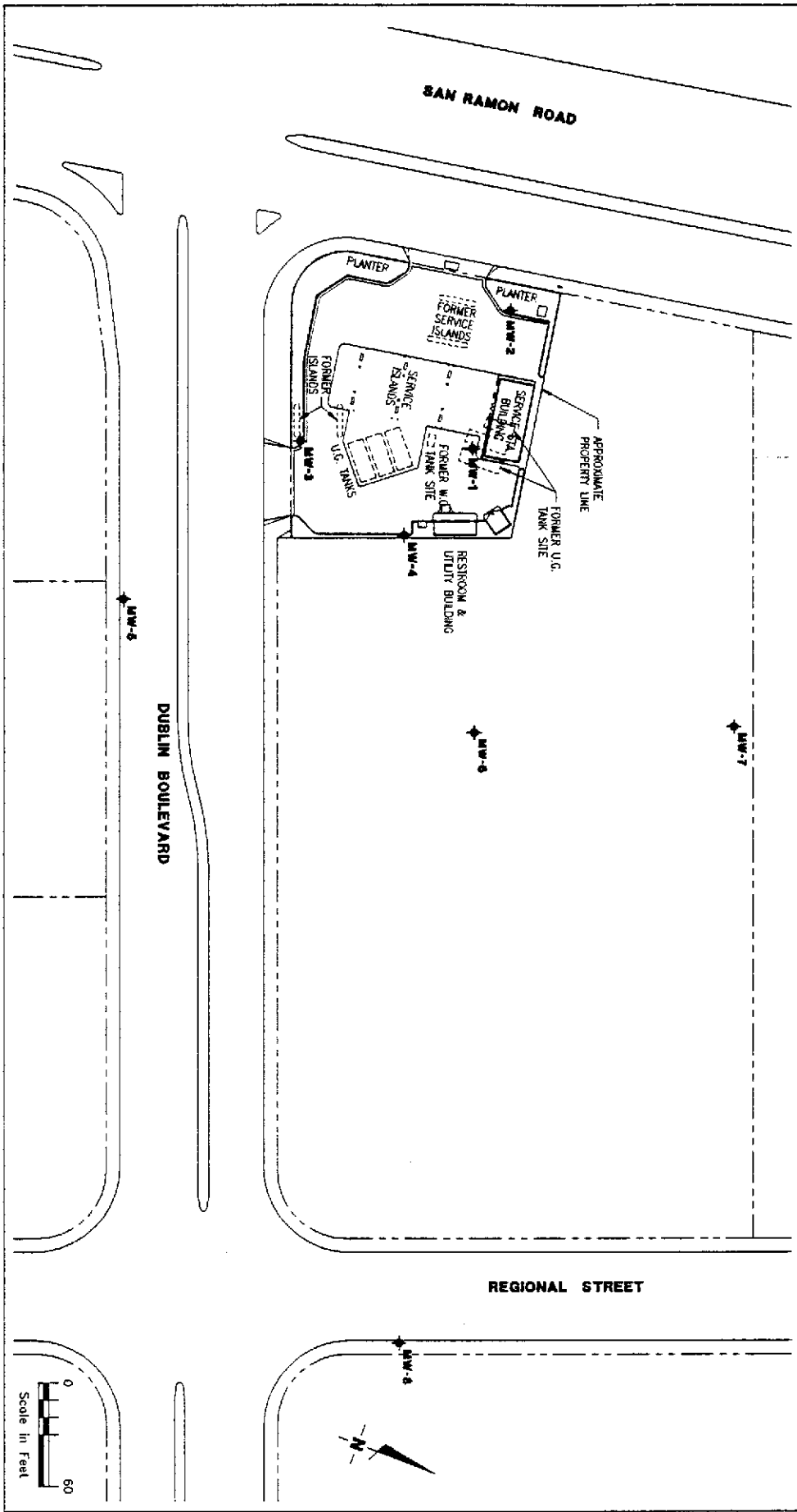
WELL NO.	SAMPLE DATE	TPH-G (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENES (PPB)	WELL ELEV. (FT)	STATIC WATER ELEV. (FT)	PRODUCT THICKNESS (FT)	DEPTH TO WATER (FT)
MW-8	12-Dec-91	<50	<0.5	<0.5	<0.5	0.5	355.54	333.00	----	22.54
TB	12-Dec-91	<50	<0.5	<0.5	<0.5	<0.5	----	----	----	----

Current Regional Water Quality Control Board Maximum Contaminant Levels
Benzene 1. ppb Xylenes 1750. ppb Ethylbenzene 680. ppb

Current DHS Action Levels Toluene 100.0 ppb

TPH-G = Total Petroleum Hydrocarbons calculated as Gasoline
PPB = Parts Per Billion TB = Trip Blank

Notes: 1. DHS Action levels and MCL's are subject to change pending State of California review.
2. All data shown as x are reported as ND (none detected).



Base Map: Compiled from Chevron Yard Piping Plan, former Chevron Station Site Plan, Survey data and public records

EXPLANATION

✦ Ground-water monitoring well

GeoStrategies Inc.

SITE PLAN
Chevron Service Station #5542
7007 San Ramon Road
Dublin, California

PLATE 1

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
729001-1		1/92	

APPENDIX A
EXPLORATORY BORING LOG
WELL CONSTRUCTION DETAIL

Field location of boring:

(See Plate 2)

Project No.:	729001	Date: 12/6/91	Boring No: MW-8
Client:	Chevron Service Station No. 5542		
Location:	7007 San Ramon Road		
City:	Dublin, California		Sheet 1 of 2
Logged by:	R.S.Y.	Driller: Hazmat	
Casing installation data:			
Drilling method:	Hollow Stem Auger		
Hole diameter:	8-inches	Top of Box Elevation: 355.54	Datum: MSL

Water Level	23'								
Time	11:30								
Date	12/6/91								

PID (ppm)	Blows/ft.* or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
								Concrete Sidewalk - 6 inches
				1				SILTY CLAY (CL) - very dark gray (10YR 2/1), medium stiff, moist; low plasticity; trace fine sand; roots, voids.
				2				
				3				
				4				
				5				
			MW-8-	6				SANDY SILT (ML) - dark yellow brown (10YR 4/4), stiff, moist; low plasticity; 30% fine sand; roots.
0	19	S&H	6.5	7				
				8				
				9				
			MW-8-	10				COLOR CHANGE to dark gray (7.5YR 4/0), sand from fine to 30% coarse; trace fine subround gravel.
0	15	S&H	10.5	11				
				12				
				13				
				14				CLAY (CL) - olive gray (5Y 4/2), hard, moist; medium plasticity; minor silt; calcareous stringers.
			MW-8-	15				
0	51	S&H	15.5	16				
				17				
				18				
				19				SILTY CLAY (CL) - olive gray (5Y 4/2), very stiff, moist; low to medium plasticity; trace fine sand.
			MW-8-	20				
0	27	S&H	20					

Remarks:

* Converted to equivalent Standard Penetration blows/ft.

Log of Boring

BORING NO. MW-8

GeoStrategies Inc.

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
729001	MCC	12/91		

Field location of boring: (See Plate 2)	Project No.: 729001	Date: 12/6/91	Boring No.: MW-8
	Client: Chevron Service Station No. 5542		
	Location: 7007 San Ramon Road		
	City: Dublin, California		Sheet 2 of 2
	Logged by: R.S.Y.	Driller: Hazmat	
Drilling method: Hollow Stem Auger	Casing installation data:		
Hole diameter: 8-inches	Top of Box Elevation:	Datum:	

PID (ppm)	Blows/ft.* or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
				21				
				22				
				23		▽		10% medium sand, saturated at 23 ft.
				24				
			MW-8-	25				
0	53	S&H	25.5					
				26				
				27				
				28				
				29				
			MW-8-	30				
0	23	S&H	30.5					
				31				
				32				
				33				
				34				
			MW-8-	35				lenses of sand 1-2 inches thick interfingered with clay and clayey sand.
0	15	S&H	35.5					
				36				Bottom of Boring at 35.5 ft.
				37				12/6/91
				38				
				39				
				40				

Remarks:

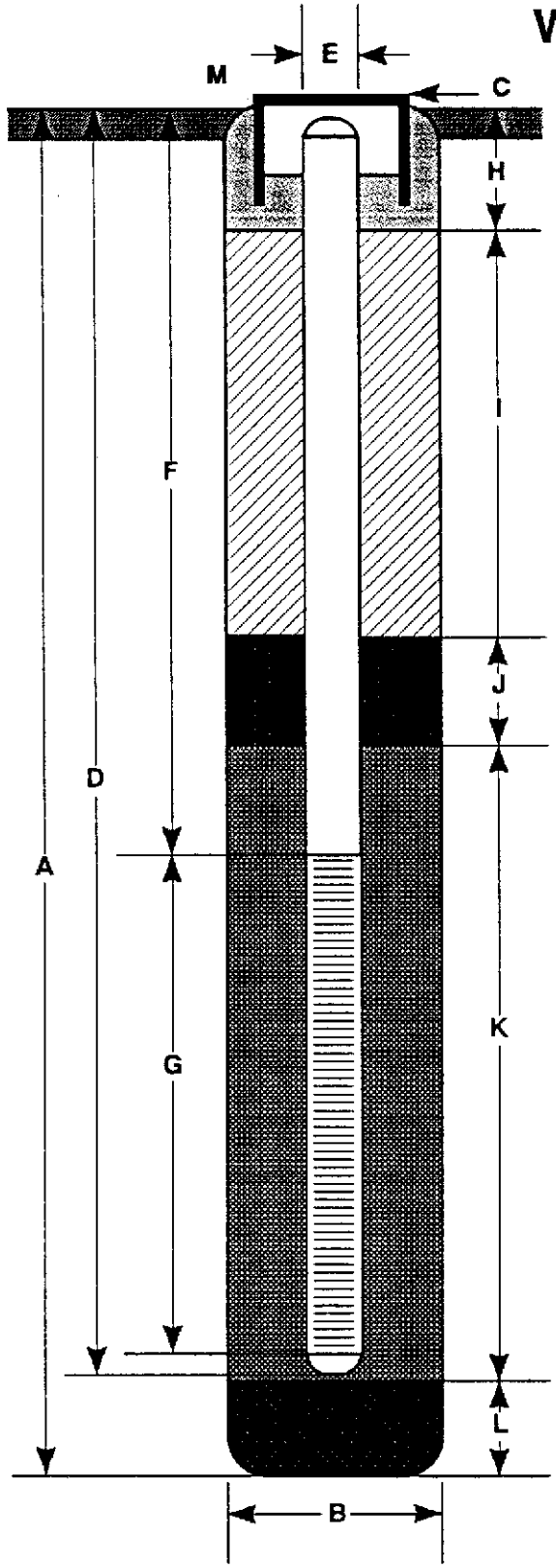
GeoStrategies Inc.

Log of Boring

BORING NO. MW-8

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
729001	MCC	12/91		

WELL CONSTRUCTION DETAIL



A Total Depth of Boring: 35.5 ft.

B Diameter of Boring: 8 in.
Drilling Method: Hollow Stem Auger

C Top of Box Elevation: 355.54 ft.
[X] Referenced to Mean Sea Level
[ ] Referenced to Project Datum

D Casing Length: 35 ft.
Material: Schedule 40 PVC

E Casing Diameter: 2 in.

F Depth to Top Perforations: 15 ft.

G Perforated Length: 20 ft.
Perforated Interval from 15 to 35 ft.
Perforation Type: Factory slot
Perforation Size: 0.020 in.

H Surface Seal from 0.0 to 1.5 ft.
Seal Material: Concrete grout

I Backfill from 1.5 to 11 ft.
Backfill Material: Cement grout

J Seal from 11 to 13 ft.
Seal Material: Bentonite pellets

K Gravel Pack from 13 to 35 ft.
Pack Material: Lonestar #2/12 sand

L Bottom Seal: 0.5 ft.
Seal Material: Native material

M Traffic-rated box with locking well cap and lock.

Note: Depths measured from initial ground surface.

GeoStrategies Inc.

Well Construction Detail

WELL NO.
MW-8

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
729001	MCC	12/91		

APPENDIX B
SOIL CHEMICAL ANALYTICAL REPORT AND CHAIN-OF-CUSTODY FORM

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 84631
CLIENT: Gettler Ryan Co.
CLIENT JOB NO.: 7290.01

DATE RECEIVED: 12/12/91
DATE REPORTED: 12/18/91

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
84631- 1	MW-8-20	12/06/91	12/18/91
84631- 2	CP-1,2	12/06/91	12/18/91

Laboratory Number:	84631 1	84631 2
ANALYTE LIST	Amounts/Quantitation Limits (ug/kg)	
OIL AND GREASE:	NA	NA
TPH/GASOLINE RANGE:	ND<1	ND<1
TPH/DIESEL RANGE:	NA	NA
BENZENE:	ND<.005	ND<.005
TOLUENE:	ND<.005	ND<.005
ETHYL BENZENE:	ND<.005	ND<.005
XYLENES:	ND<.005	ND<.005

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

QA/QC INFORMATION
SET: 84631

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = part per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA-SW846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg
Standard Reference: NA

EPA-SW846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg
Standard Reference: 10/04/91

SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg
Standard Reference: 10/11/91

ANALYTE	REFERENCE	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Oil & Grease	NA	NA	NA	NA	NA
Diesel	NA	NA	NA	NA	NA
Gasoline	10/04/91	200 ng	102/98	4	70-130
Benzene	12/02/91	200 ng	83/100	19	70-130
Toluene	12/02/91	200 ng	85/98	14	70-130
Ethyl Benzene	12/02/91	200 ng	93/102	9	70-130
Total Xylenes	12/02/91	200 ng	101/111	9	70-130

Richard Srna, Ph.D.
Laboratory Director

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 84631
CLIENT: Gettler Ryan Co.
CLIENT JOB NO.: 7290.01

DATE RECEIVED: 12/12/91
DATE REPORTED: 12/18/91
DATE SAMPLED : 12/06/91

ANALYSIS FOR TOTAL ORGANIC LEAD
by DHS METHOD (LUFT MANUAL)

LAB #	Sample Identification	Concentration (mg/kg)
2	CP-1,2	ND<2

mg/kg - parts per million (ppm)

Method Detection Limit for Organic Lead in Soil: 2 mg/kg

QAQC Summary: MS/MSD Recovery : 100/101%
Duplicate RPD : 1

Richard Srna, Ph.D.

Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: ☑ Yes ☐ No 84631

Chain-of-Custody-Record

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

Chevron Facility Number 9-5542
Facility Address 7007 SAN RAMON Rd, Dublin, Ca
Consultant Project Number 7280.01
Consultant Name GeHler-Ryan Inc.
Address 2150 West Winton Ave, Hayward
Project Contact (Name) Jeff Monroe
(Phone) 352-4800 (Fax Number) 783-1089

Chevron Contact (Name) Clint Rogers
(Phone)
Laboratory Name Superior Laboratory
Laboratory Release Number 5464460
Samples Collected by (Name) RANDALL YOUNG
Collection Date 12/6/91
Signature Randall Young

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	BTEX + TPH GAS (8020 + 8015)	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)	Organic Lead				Remarks
MW-8-20	1	1	S	D	11:20		Y	✓												
CP-1	2	1	S	C	15:00		Y	✓								✓				composite and run as 1 sample
CP-2		1	S	C	15:00		Y	✓								✓				

CLS Ice VW NA

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
Randall Young	GSI	12-9-91	[signature]	GR	12-10-91 08:00	24 Hrs.
Relinquished By (Signature) [signature]	Organization G/R	Date/Time 12-11-91 12:20	Received By (Signature)	Organization	Date/Time	48 Hrs. 5 Days (10 Days) As Contracted
Relinquished By (Signature)	Organization	Date/Time	Recieved For Laboratory By (Signature) Cecilia [signature]		Date/Time 12/12/91 12:[illegible]	

COC-3.DWG/03 91/HCH

APPENDIX C
GROUND-WATER CHEMICAL ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY FORM

Superior Precision Analytical, Inc.
1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 12612
CLIENT: Chevron, USA
CLIENT JOB NO.: 9290.01

DATE RECEIVED: 12/12/91
DATE REPORTED: 12/13/91

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
12612- 1	MW-8	12/12/91	12/12/91
12612- 2	TRIP	12/12/91	12/12/91

Laboratory Number:	12612 1	12612 2
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)	
OIL AND GREASE:	NA	NA
TPH/GASOLINE RANGE:	ND<50	ND<50
TPH/DIESEL RANGE:	NA	NA
BENZENE:	ND<0.5	ND<0.5
TOLUENE:	ND<0.5	ND<0.5
ETHYL BENZENE:	ND<0.5	ND<0.5
XYLENES:	0.5	ND<0.5

Superior Precision Analytical, Inc.
1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

QA/QC INFORMATION
SET: 12612

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
ug/l = part per billion (ppb)

OIL AND GREASE ANALYSIS By Standard Methods Method 503E:
Minimum Detection Limit in Water: 5000ug/L

Modified EPA-SW846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 50ug/l
Standard Reference: NA

EPA-SW846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 50ug/l
Standard Reference: 07/23/91

SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/l
Standard Reference: 06/13/91

ANALYTE	REFERENCE	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Oil & Grease	NA	NA	NA	NA	NA
Diesel	NA	NA	NA	NA	NA
Gasoline	07/23/91	200ng	90/88	2.2	59-121
Benzene	06/13/91	200ng	88/89	1.7	70-125
Toluene	06/13/91	200ng	90/90	0.0	74-116
Ethyl Benzene	06/13/91	200ng	93/93	0.5	75-120
Total Xylene	06/13/91	600ng	93/92	0.9	75-119

Richard Srna, Ph.D.
Cecilia P. Joaquin (for)
Laboratory Director

12/6/12 ☐ Yes
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: 9-5542
Facility Address: 7007 San Ramon Rd Dublin
Consultant Project Number: 9290.01
Consultant Name: Gettler Ryan Inc
Address: 2150 W. Winton Ave Hayward CA
Project Contact (Name): Jeff Monroe
(Phone): 783-7500 (Fax Number): 783-1089

Chevron Contact (Name): Clint Rodgers
(Phone):
Laboratory Name: Superior
Laboratory Release Number: 54644060
Samples Collected by (Name): Frank Cline
Collection Date: 12-12-91
Signature: [signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	BTEX + TPH GAS (8020 + 8015)	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
MW-8		2	W	G	1002	HCL	Y	✓												
Trip		1	"	"	—	—	"	✓												

Please initial: [initials]
Samples stored in ice. — yes
Appropriate containers — yes
Samples preserved — yes
VOA's without headspace — yes
Comments:

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
[signature]	G/R	12-12-91/12:20			

Relinquished By (Signature)	Organization	Date/Time	Recieved For Laboratory By (Signature)	Date/Time
			[signature]	12/12/91 12:20

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

COC-3.DWG/03 91/HCH