cg 1/8/95

Chevron

Chevron

November 19, 1995

Chevron U.S.A. Products Company
6001 Bollinger Canyon Rd., Bldg. L
P.O. Box 5004
San Ramon, CA 94583-0804

Mark A. Miller
SAR Engineer
Phone No. 510 842-8134
Fax No. 510 842-8252

Mr. Scott Seery
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Chevron Service Station #9-6991
2920 Castro Valley Boulevard, Castro Valley, CA

Dear Mr. Seery:

Enclosed is the Well Installation Report dated October 27, 1995, prepared by our consultant Gettler-Ryan, Inc. for the above referenced site. One on-site soil boring was advanced and completed as a ground water monitor wells (MW-7). This work was done to characterize dissolved ground water concentrations immediately down gradient of the underground storage tanks.

Soil samples collected were submitted to GTEL Environmental Laboratories for analysis. Laboratory results indicate that concentrations of TPH-G and BTEX were below method detection limits in all samples collected except the sample collected at 12 feet below grade. Trace hydrocarbon concentrations detected in this sample are likely a result of impacted ground water coming into contact with soil at this depth.

Ground water samples will be collected from the new wells in conjunction with the regularly scheduled quarterly event. This information will assist in determining if a monitoring management plan or closure is warranted.

If you have any questions or comments, please feel free to contact me at (510) 842-8134.

Sincerely,
CHEVRON U.S.A. PRODUCTS COMPANY

Mark A. Miller
Site Assessment and Remediation Engineer

cc: Mr. J.H. Ough

P:\FILES\SITES\5-7500\96991SA1.DOC

GETTLER-RYAN INC.

WELL INSTALLATION REPORT

for

Chevron Service Station #9-6991
2920 Castro Valley Boulevard
Castro Valley, California

Gettler-Ryan Inc. Job # 5296.01

Prepared for

Chevron USA Products Company
P.O. Box 5004
San Ramon, California 94583

Prepared by

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

Argy Leyton
Environmental Project Manager

Stephen J. Carter
Senior Geologist
RG #5577

REGISTERED GEOLOGIST
STEPHEN J. CARTER
No. 5577
STATE OF CALIFORNIA

October 27, 1995

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EXECUTIVE SUMMARY

Gettler-Ryan, Inc. presents this report for the installation of one on-site groundwater monitoring well at Chevron Service Station #9-6991 located at 2920 Castro Valley Boulevard in Castro Valley, California. The well was installed to assess the absence or presence of dissolved hydrocarbons in groundwater and to verify the groundwater flow direction and gradient beneath the site.

Two soil samples collected and analyzed from the well installation activities did not contain hydrocarbons as gasoline [TPPH(G)] or benzene, toluene, ethylbenzene and xylenes (BTEX) at laboratory method detection limits. The soil sample analyzed from 12 feet below ground surface contained TPPH(G) at 3.7 parts per million. Benzene was not detected in this sample. Groundwater sampling of the newly installed well is to be performed by Blaine Tech Services, Inc. during regularly scheduled groundwater monitoring and sampling events.

INTRODUCTION

Gettler-Ryan, Inc. (G-R) is pleased to present this report documenting the installation of one on-site groundwater monitoring well at the above-referenced location (Figure 1). The groundwater monitoring well was installed to assess subsurface conditions beneath the site. The scope of work included: installing one on-site groundwater monitoring well; collecting soil samples for chemical analysis; developing the newly installed well; arranging for disposal of the waste materials; and preparing a report documenting the work.

SITE HISTORY

The subject site is an operating Chevron service station. The following site history was obtained from Chevron project files supplied to G-R.

On September 11, 1990, Golden West Builders excavated and removed one 1,000-gallon waste oil tank and one 6,000-gallon unleaded fuel tank and associated product lines. Two remaining underground storage tanks (USTs) were left in place, and new product lines were installed. No indications of leaks, perforations, signs of structural failure, or corrosion were observed during tank removal activities.

Soil samples were collected during UST removal activities by Groundwater Technology, Inc. (GTI) of Concord, California. Soil samples collected and analyzed indicated that total oil and grease (TOG) were present in the soil beneath the former waste oil tank at concentrations up to 2,000 parts per million (ppm). In addition, total petroleum hydrocarbons as diesel [TPH(D)] were detected at 1,000 ppm in soil samples collected from the product line trench. Soil samples analyzed for total purgeable petroleum hydrocarbons as gasoline [TPPH(G)] contained less than 100 ppm hydrocarbons as gasoline or were not detected. Groundwater samples collected from the tank pit contained TPPH(G) and benzene at concentrations of 54,000 and 6,200 parts per billion (ppb), respectively.

Approximately 700 cubic yards (cy) of soil were excavated by GTI on September 18, 1990. Soil samples were collected from the furthest extent of the excavation and analyzed for TPH(D) and TOG. Low or non-detectable concentrations of TPH(D) and TOG were detected in these soil samples. Groundwater samples collected and analyzed from this excavated area contained 1,400 ppb TPPH(G).

On September 24 and 30, 1991, GTI installed three 3/4-inch monitoring wells (MW-1, MW-2 and MW-3) to approximately 21 feet below ground surface (bgs) using a 2-inch diameter hydraulically-driven coring system. TPPH(G) and benzene were not detected in soil samples collected and analyzed from these borings. Groundwater samples were collected from the newly installed wells on October 18, 1991. Hydrocarbons as gasoline were

detected in the water samples from all three wells at concentrations up to 230 ppb. Benzene was detected in MW-1 at 45 ppb. TOG was not detected in the groundwater samples collected from well MW-1.

On December 4, 1991, groundwater samples were collected from the three on-site monitoring wells. Hydrocarbons were detected in the samples collected and analyzed from wells MW-1 and MW-2. MW-1 contained TPH(D) and benzene at concentrations of 3.9 and 170 ppb, respectively. MW-2 contained TPPH(G), TPH(D) and benzene at concentrations of 440, 130 and 30 ppb, respectively. The sample from well MW-1 was also analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and metals (cadmium, chromium, lead, nickel and zinc). These analytes were not detected in this sample.

Three additional two-inch groundwater monitoring wells (MW-4, MW-5 and MW-6) were installed by GTI from September 25 through October 10, 1992. One well, MW-6, was installed, off-site, in the downgradient groundwater flow direction. Soil samples collected during well installation activities were analyzed for TPPH(G), TPH(D) and BTEX. TPH(D) were detected at 5 ppm in the sample collected from MW-6 at 5 ft bgs. Groundwater samples were collected from the six monitoring wells on October 27, 1992. Well MW-6 contained TPPH(G) and BTEX at concentrations of 600 and 22 ppb, respectively. Groundwater samples from wells MW-1, MW-2 and MW-3 contained TPH(D) at concentrations of 54, 100 and 120 ppb, respectively.

In March, 1993, GTI performed a site reconnaissance, reviewed the project files at the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) and Alameda County Department of Environmental Health (ACDEH), and Castro Valley Sanitary District maps to identify potential off-site sources of hydrocarbons detected in off-site well MW-6. Two of the three monitoring wells located at 2896 Castro Valley Boulevard, immediately west of the Chevron site, contained hydrocarbons, according to the groundwater monitoring report reviewed by GTI personnel. The westward to southward gradient direction fluctuations at the 2896 Castro Valley Boulevard site are similar to those observed at the Chevron site. A 21" diameter storm sewer is beneath the north side of Castro Valley Boulevard. A 36" diameter storm sewer line runs beneath the south side and is immediately adjacent to MW-6. Both sewer lines are between the Chevron site and monitoring well MW-6.

A quarterly groundwater monitoring program was initiated for wells MW-1, MW-2 and MW-3 in October 1991 and wells MW-4, MW-5 and MW-6 were added to the monitoring program in October 1992.

GEOLOGIC SETTING

The site is located in Alameda County, in the City of Castro Valley. The topography in the site vicinity is relatively flat. Regionally, the San Leandro Hills lie to the north and the Walpert Ridge lies to the east. The closest surface water is the San Francisco Bay, located approximately one mile west of the site.

The site is located within the California Coast Ranges. The Coast Ranges have a Franciscan basement composed of graywackes, limestone, shale and radiolarian chert[1]. The site is tectonically bounded by the Hayward Fault Zone.

Based on previous subsurface investigations, the site is underlain by clay and silty clay with lesser amounts of sand and gravel. Groundwater is approximately 12 feet below existing grade. Groundwater flow direction beneath the site is 0.01 ft/ft.

SOIL SAMPLING AND SUBSURFACE CONDITIONS

On August 30, 1995, G-R personnel observed and documented the drilling of one on-site soil boring (MW - 7) by Bay Area Exploration Services, Inc., of Cordelia, California (C57 #522125). The boring was drilled to 21.5 feet bgs using eight-inch hollow-stem augers driven by a truck-mounted CME-55 drill rig.

Soil samples were collected at a minimum of five-foot intervals. The soil samples were field screened during drilling for the presence of volatile organic compounds using an organic vapor meter (OVM). OVM readings are presented on the boring log (Appendix). Soil samples were collected in new brass sleeves, covered with teflon sheeting, capped with plastic end caps and sealed in plastic bags. The samples were placed in a cooler and maintained at 4°C prior to delivery to the analytical laboratory.

A groundwater monitoring well was constructed in the boring. The well was constructed using two-inch diameter, 0.010 machine-slotted Schedule 40 PVC screen. A sand pack of #2/12 graded sand was placed across the entire screen interval, extending approximately two feet above the top of the screen. The well was then sealed with one foot of hydrated bentonite chips followed by neat cement.

Drill cuttings were placed on and covered with visqueen sheeting, and remained on-site pending disposal by Integrated Waste Management of Milpitas, California.

Norris, Robert M. and Webb, Robert W., 1990, *Geology of California*, John Wiley and Sons, 537 pages.

Soils encountered in the boring consisted of silty clays, sandy clays, clayey sands and clayey gravels. Groundwater was encountered during drilling at approximately 12 feet bgs. Detailed descriptions of the subsurface materials encountered during drilling are presented on the boring log.

WELL DEVELOPMENT

On September 5, 1995, newly installed monitoring well MW-7 was developed by G-R personnel using a vented surge block and hand-bailing. The groundwater evacuated during well development activities was transported to the Chevron Refinery in Richmond, California.

SURVEYING AND MONITORING

On September 25, 1995, well MW-7 was surveyed relative to mean sea level by David Hop, Professional Engineer #27034, of Danville, California. The survey data is summarized in Table 2.

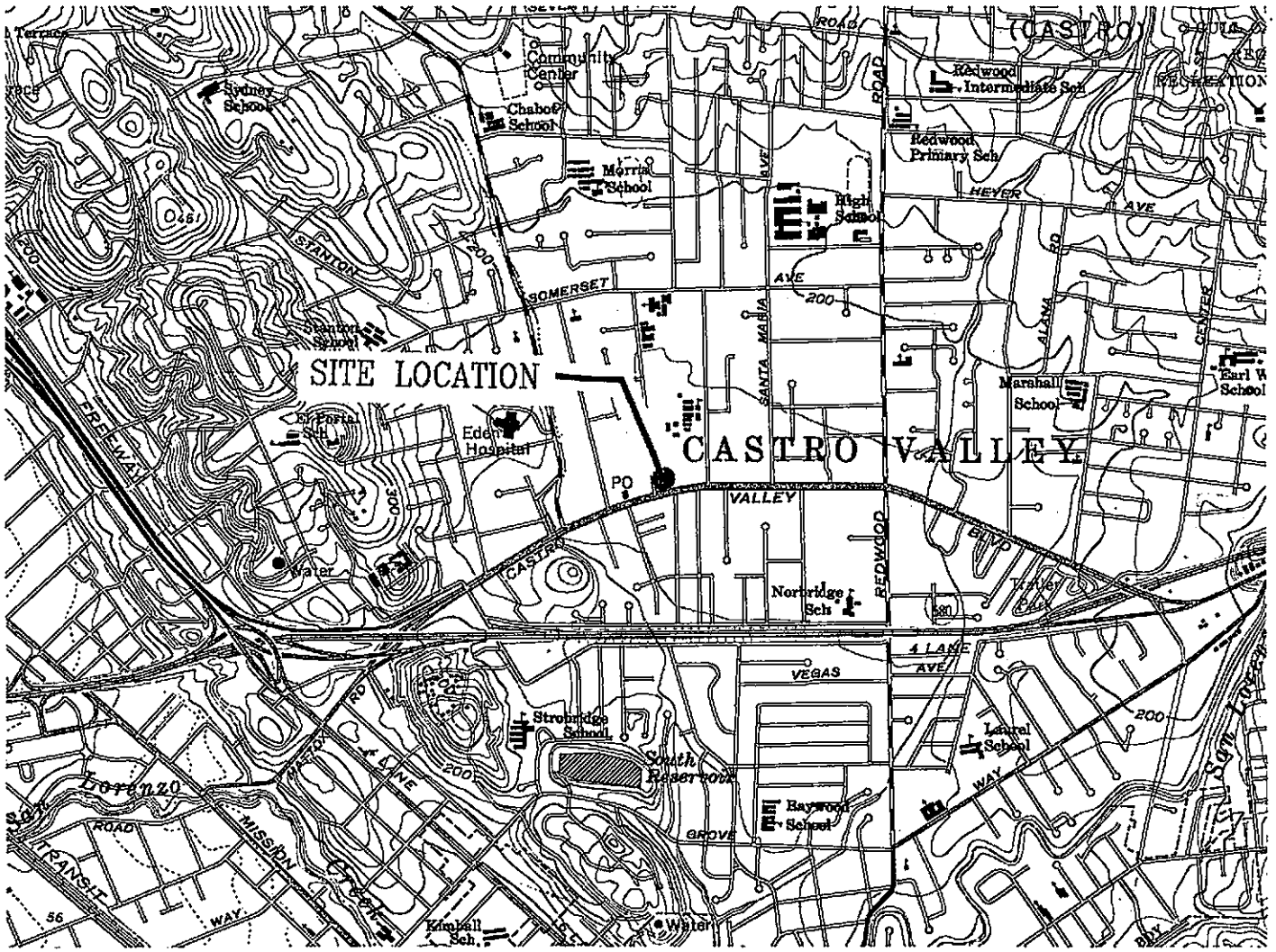
On October 25, 1995, G-R personnel gauged the seven groundwater monitoring wells at the site (MW-1 through MW-7). Using groundwater elevation data, G-R has prepared a potentiometric map for the site and is included as Figure 2. Groundwater elevation data is presented on Table 2. Based on these data, shallow groundwater beneath the site appears to flow southwesterly at a gradient of 0.01 ft/ft.

ANALYTIC RESULTS

Selected soil samples from the boring were analyzed for TPPH(G) by EPA Method 5030/8015 and BTEX by EPA Method 8020. Hydrocarbons as gasoline and BTEX compounds were not detected at laboratory method detection limits in the soil samples collected and analyzed from approximately 5.5 and 21 feet bgs. The soil sample collected from 12 feet bgs contained TPPH(G) at 3.7 ppm. However, benzene was not detected in this sample. Analytic results for soil samples collected and analyzed are presented in Table 1. G-R is not responsible for laboratory omissions or errors.

Analytic results for groundwater from the newly installed well will be submitted under separate cover by Blaine Tech Services, Inc.

FIGURES



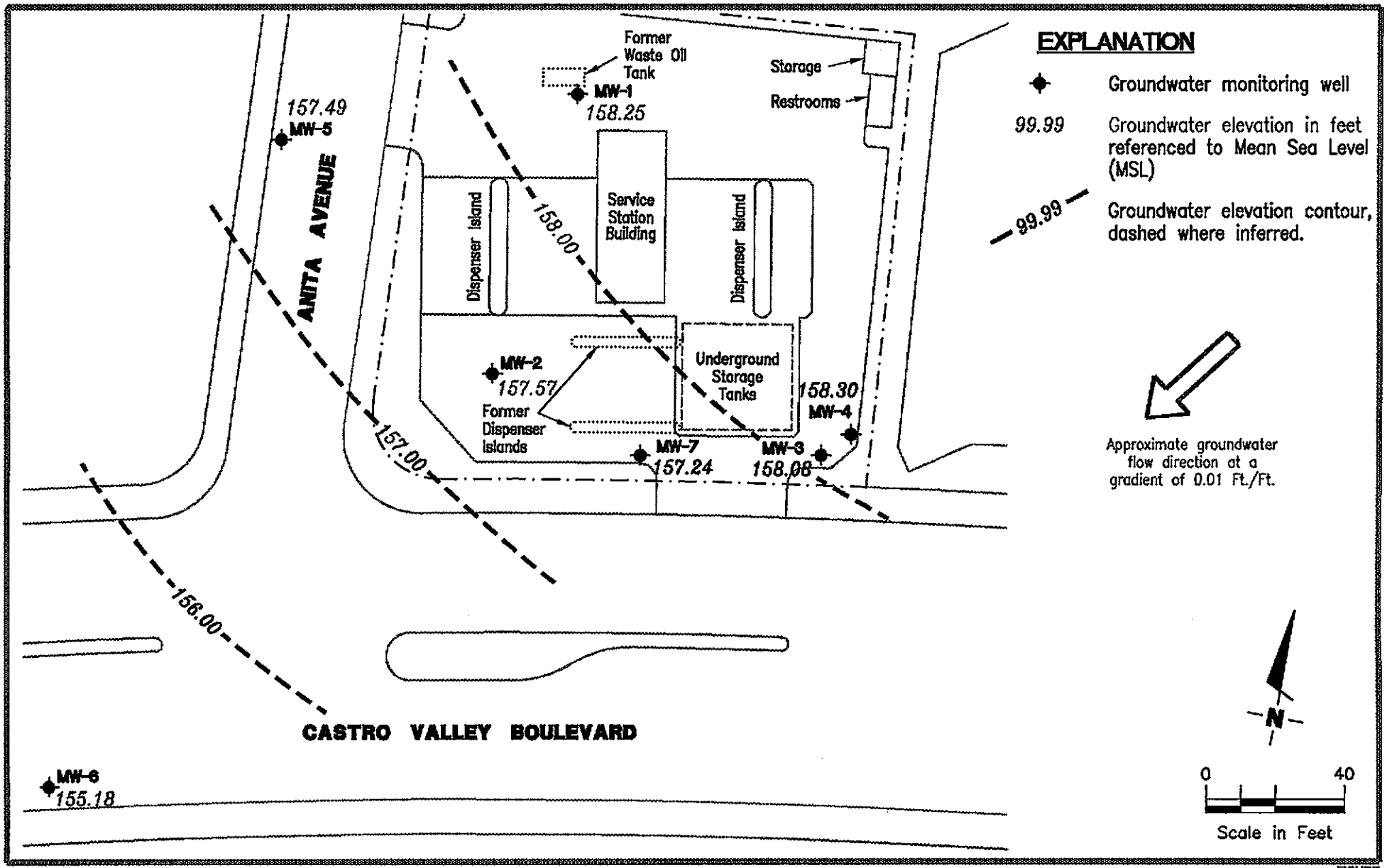
Base Map: USGS Topographic Map

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

VICINITY MAP
Chevron Service Station No. 9-6991
2920 Castro Valley Boulevard
Castro Valley, California

FIGURE
1

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
5296		July, 1995	



Gettler - Ryan Inc.

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

POTENTIOMETRIC MAP
Chevron Service Station No. 9-6991
2920 Castro Valley Boulevard
Castro Valley, California

FIGURE
2

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
5296.01		October 25, 1995	

TABLES

Table 1. Analytic Results for Soil - Chevron Service Station #9-6991, 2920 Castro Valley Boulevard, Castro Valley, California

Sample ID	Depth (ft)	Date	Analytic Laboratory	Analytic Method	TPPH(G)	B	T	E	X
					<------		ppm		------>
MW-7	5.5	8/30/95	GTEL	8015/8020	<1.0	<0.005	<0.005	<0.005	<0.015
	12.0	8/30/95	GTEL	8015/8020	3.7	<0.005	0.009	0.006	<0.015
	21.0	8/30/95	GTEL	8015/8020	<1.0	<0.005	<0.005	<0.005	<0.015

EXPLANATION:

TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
ppm = Parts per million
ft = feet below ground surface

ANALYTIC METHODS:

8015 = EPA Method 5030/8015 for TPPH(G)
8020 = EPA Method 8020 for BTEX

ANALYTIC LABORATORY:

GTEL = GTEL Environmental Laboratories, Inc., of Concord, California

Table 2. Water Level Data and Groundwater Analytic Results - Chevron Service Station #9-6991, 2920 Castro Valley Boulevard, Castro Valley, California

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)	B	T	E	X
						<———		ppb		———>
MW-1/ 169.30	10/25/95	11.05	158.25	0	—	—	—	—	—	—
MW-2/ 169.15	10/25/95	11.58	157.57	0	—	—	—	—	—	—
MW-3/ 169.11	10/25/95	11.03	158.08	0	—	—	—	—	—	—
MW-4/ 169.18	10/25/95	10.88	158.30	0	—	—	—	—	—	—
MW-5/ 167.41	10/25/95	9.92	157.49	0	—	—	—	—	—	—
MW-6/ 166.46	10/25/95	11.28	155.18	0	—	—	—	—	—	—
MW-7/ 168.80[1]	10/25/95	11.56	157.24	0	—	—	—	—	—	—

EXPLANATION:

DTW = Depth to water
TOC = Top of casing elevation
GWE = Groundwater elevation
ft = Feet below ground surface
msl = Measurements referenced relative to mean sea level
TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
ppb = Parts per billion

ANALYTIC METHODS:

8015 = EPA Method 8015/5030 for TPPH(G)
8020 = EPA Method 8020 for BTEX

NOTES:

Top of casing elevation for wells MW-1 through MW-6 compiled from the Quarterly Groundwater Monitoring Report prepared for Chevron by Blaine Tech Services, Inc.

[1] Well surveyed September 25, 1995 by David Hop of Danville, California, P.E. #27034.

BORING LOGS

Gettler-Ryan, Inc.

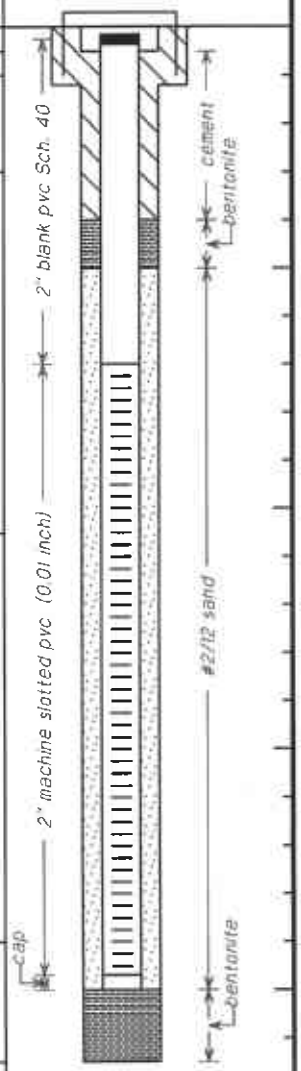
Log of Boring MW-7

PROJECT: *Chevron SS# 9-6991*	LOCATION: *2920 Castro Valley Blvd, Castro Valley, CA*
G-R PROJECT NO. : *5296.01*	SURFACE ELEVATION: *168.80 feet MSL*
DATE STARTED: *08/30/95*	WL (ft. bgs): *12.0* DATE: *08/30/95* TIME: *16:30*
DATE FINISHED: *08/30/95*	WL (ft. bgs): *12.0* DATE: *08/30/95* TIME: *17:40*
DRILLING METHOD: *8 in. Hollow Stem Auger*	TOTAL DEPTH: *21.5 Feet*
DRILLING COMPANY: *Bay Area Exploration, Inc.*	GEOLOGIST: *B. Sieminski*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SOIL CLASS	GEOLOGIC DESCRIPTION
				CL	PAVEMENT – 4 inches of asphalt over baserock.
				GC	SANDY CLAY WITH GRAVEL (CL) – black (10YR 1/2), damp, medium stiff, low plasticity; 50% fines, 30% fine to coarse sand, 20% gravel; fill.
				CL	CLAYEY GRAVEL (GC) – dark yellowish brown (10YR 4/3), damp, very dense; 70% gravel and cobbles, 20% fines, 10% fine to coarse sand; cobbles subangular up to 4 inches in diameter; fill.
5	10.4	13	MW7-5.5		SILTY CLAY WITH SAND (CL) – dark greenish gray (5GY 4/1), damp, stiff, low plasticity; 80% fines, 20% fine sand.
					Color change to black (7.5YR 2/0), decreasing sand, medium plasticity at 4 feet.
	18.6	13	MW7-9.5		Color change to grayish green (5G 5/2) mottled olive (5Y 5/4), 30% fine to coarse sand; noticeable hydrocarbon odor at 9 feet; increasing sand to 40%, becomes moist, trace fine gravel at 10 feet.
10				SC	
	199	22	MW7-12		CLAYEY SAND WITH GRAVEL (SC) – dark grayish green (5GY 4/1) mottled olive (5Y 4/4), moist, medium dense; 50% fine to coarse sand, 40% fines, 10% fine gravel; obvious hydrocarbon odor. Becomes saturated at 12 feet.
15	0	14	MW7-15.5		Color change to light olive brown (2.5Y 5/4) mottled dark yellowish brown (10YR 4/6) at 15 feet.
				CL	
20	0	15	MW7-21		SANDY CLAY (CL) – dark bluish gray (5B 4/1), moist, stiff, low plasticity; 75% clay, 25% fine sand.
					Becomes damp at 21 feet.
25					Bottom of boring at 21.5 feet, 08/30/95.

(* = converted to equivalent standard penetration blows/ft.)

WELL DIAGRAM



JOB NUMBER: *5296.01*

APPENDIX

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ 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 9-6991
Facility Address 2920 Castro Valley Blvd, Castro Valley
Consultant Project Number 5296.01
Consultant Name Gettler-Ryan Inc.
Address 6747 Sierra Ct, Suite J, Dublin, CA 94568
Project Contact (Name) Argy Leyton
(Phone) (510) 551-7555 (Fax Number) (510) 551-7888

Chevron Contact (Name) Mark Miller
(Phone) (510) 842-8134
Laboratory Name GTEL
Laboratory Release Number 3614190
Samples Collected by (Name) Barbara Sieminski
Collection Date 08/30/95
Signature B Sieminski

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: 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
MW7-5.5	01	1	S	G	15:55		Yes	X													ANALYZE
MW7-12	02	1	↓	↓	16:15		↓	X													↓
MW7-21	03	1	↓	↓	16:50		↓	X													
MW7-9.5	04	1	S	G			✓														HOLD
																	6°C				
															C5	C9	00	18			

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Barbara Sieminski	G-R	08/31/95 17:15		G/R	8/31/95
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	GR	9/1/95 15:15	John Weber	GTEL	9/1/95 5:15
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
John Weber	GTEL	9/1/95 16:45			9/1/95 16:45

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

-3.DWG/03 91/HCH

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080-C Pike Lane
Concord, CA 94520
(510) 685-7852
(800) 544-3422 *from inside California*
(800) 423-7143 *from outside California*
(510) 825-0720 (FAX)

September 15, 1995

Argy Leyton
Gettler-Ryan, Inc.
6747 Sierra Ct., Ste J
Dublin, CA 94568

RE: GTEL Client ID: GTR01CHV08
Login Number: C5090018
Project ID (number): 5296.01
Project ID (name): Chevron/#9-6991/2920 Castro Valley Blvd., Castro Valley, CA

Dear Argy Leyton:

Enclosed please find the analytical results for the samples received by GTEL Environmental Laboratories, Inc. on 09/01/95.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes.

GTEL is certified by the Department of Health Service under Certification Number E1075.

If you have any questions regarding this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

William Scholz
for

Chip Poalinelli
Laboratory Director

ANALYTICAL RESULTS
Volatile Organics

GTEL Client ID: GTR01CHV08
Login Number: C5090018
Project ID (number): 5296.01 Method: EPA8020/15
Project ID (name): Chevron/#9-6991/2920 Castro Valley Blvd., Castro Valley, CA Matrix: Solids

	GTEL Sample Number	C5090018-01	C5090018-02	C5090018-03	--
	Client ID	MW7-5.5	MW7-12	MW7-21	--
	Date Sampled	08/30/95	08/30/95	08/30/95	--
	Date Analyzed	09/08/95	09/10/95	09/10/95	--
	Dilution Factor	1.00	1.00	1.00	--

Analyte	Reporting Limit	Units	Concentration:Wet Weight			
Benzene	0.005	mg/kg	< 0.005	< 0.005	< 0.005	--
Toluene	0.005	mg/kg	< 0.005	0.009	< 0.005	--
Ethylbenzene	0.005	mg/kg	< 0.005	0.006	< 0.005	--
Xylenes (total)	0.015	mg/kg	< 0.015	< 0.015	< 0.015	--
TPH as GAS	1.0	mg/kg	< 1.0	3.7	< 1.0	--
BFB (Surrogate)	--	%	76.0	108.	101.	--

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA8020/15:

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update 1. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual protocols, May 1988 revision. Acceptability limits for recovery in the Bromofluorobenzene (BFB) surrogate is 60-119%.

GTEL ENVIRONMENTAL LABORATORIES, INC.

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: C5090018 Volatile Organics
Project ID (number): 5296.01 Method: EPA8020/15
Project ID (name): Chevron/#9-6991/2920 Castro Valley Blvd., Castro Valley, CA Matrix: Solids

Method Blank Results

QC Batch No: A091095-1
Date Analyzed: 09-SEP-95

Analyte	Method:EPA8020/15 Concentration: mg/kg
Benzene	< 0.00500
Toluene	< 0.00500
Ethylbenzene	< 0.00500
Xylenes (Total)	< 0.0150
TPH as Gasoline	< 1.00

Notes:

GTEL ENVIRONMENTAL LABORATORIES, INC.

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: C5090018 Volatile Organics
Project ID (number): 5296.01 Method: EPA8020/15
Project ID (name): Chevron/#9-6991/2920 Castro Valley Blvd., Castro Valley, CA Matrix: Solids

Matrix Spike(MS) and Matrix Spike Duplicate(MSD) Results

GTEL Sample ID:C5090011-12 MS ID:MS09001112 MSD ID:MD09001112
Analysis Date: 10-SEP-95 09-SEP-95 09-SEP-95

Units: mg/kg	Sample		Spikes Added		MS	MS	MSD	MSD		Acceptability Limits	
Analyte	Conc.		MS	MSD	Conc.	% Rec.	Conc.	% Rec.	RPD	RPD	%Rec.
Benzene	< 0.005	(0.000)	0.0500	0.0500	0.0554	111.	0.0555	111.	0.0	40	48.8-129
Toluene	< 0.005	(0.000700)	0.0500	0.0500	0.0508	100.	0.0507	100.	0.0	40	52-123
Ethylbenzene	< 0.005	(0.000600)	0.0500	0.0500	0.0500	98.8	0.0496	98.0	0.80	40	55.4-122
Xylenes (Total)	< 0.015	(0.00340)	0.150	0.150	0.167	109.	0.166	108.	0.90	40	55.1-130

Notes:

Values in parentheses in the sample concentration column are used for % recovery calculations.

Acceptability limits for recovery in the Bromofluorobenzene (BFB) surrogate is 60-119%.

Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual protocols, May 1988 revision.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Client Number: GTR01CHV08
Project ID: Chevron
2920 Castro Valley Blvd.
Casro Valley, CA
Facility Number: 0096991
Login Number: C5-09-0018

CONFORMANCE/NONCONFORMANCE SUMMARY

(X = Requirements Met * = See Comments NA = Not Applicable)

#	Conformance Item	VOA GC/MS	VOA GC	SV GC/MS	SV GC	Metals	Wet Chem
1	GC/MS Tune		NA		NA	NA	NA
2	Initial Calibration		X				
3	Continuing Calibration		X				
4	Surrogate Recovery		X			NA	NA
5	Holding Time		X				
6	Method Accuracy		X				
7	Method Precision		X				

8 Blank Contamination - List/ND (None Detected)/*(See Comments)

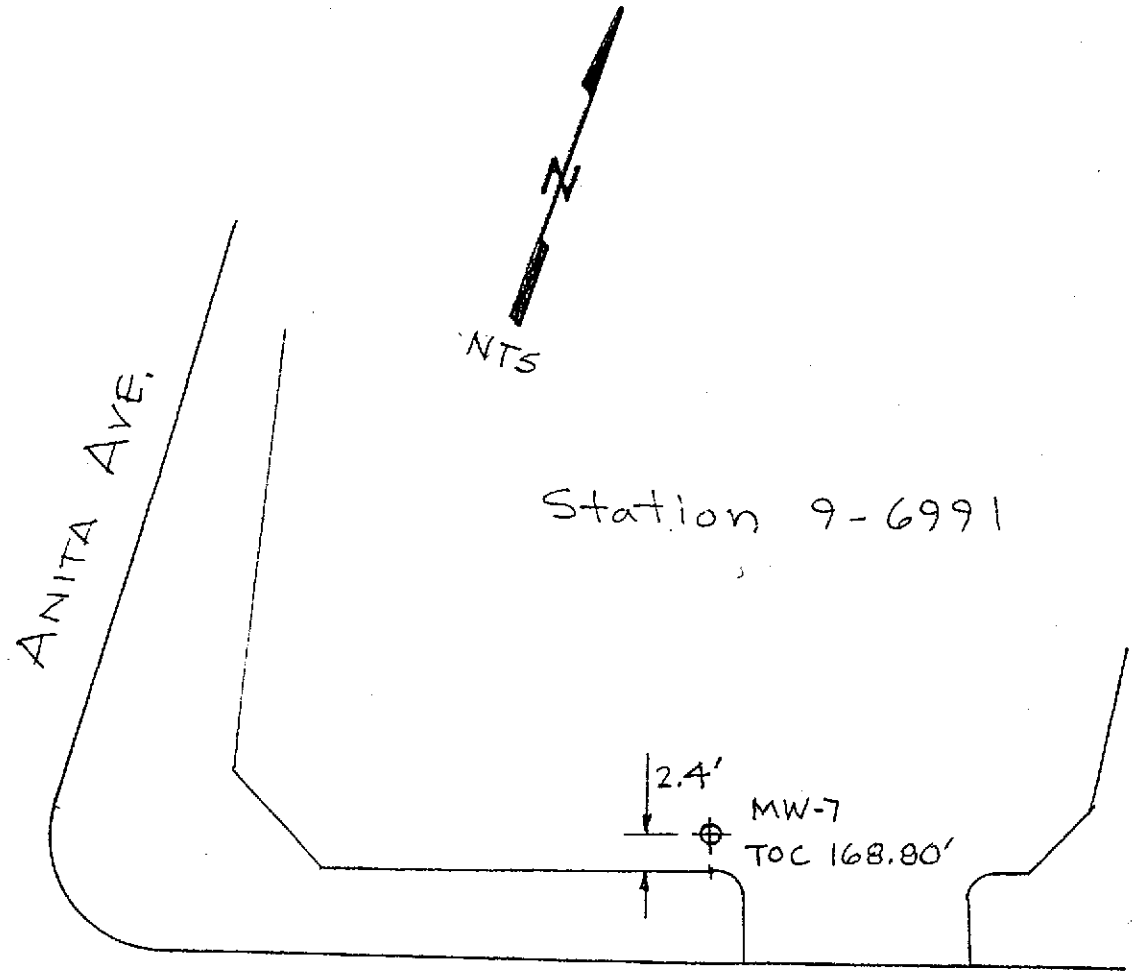
VOA: ND
SV:
Metals:
Wet Chem:

9 Comments:

GTEL ENVIRONMENTAL LABORATORIES, INC.

DAVID B. HOP
CIVIL ENGINEER

Surey Date:
9/25/95
Job 261-1



REGISTERED PROFESSIONAL ENGINEER
DAVID B. HOP
27034
EXP. 3/31/97
CIVIL
STATE OF CALIFORNIA

2920 Castro Valley Blvd.
Castro Valley CA

125 Railroad Avenue, Suite 203 • Danville, CA 94526 • (510) 837-7904

ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588 VOICE (510) 484-2600
FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT Chevron Station # 9-6991
2920 Castro Valley Blvd.
Castro Valley, CA

CLIENT
Name Chevron USA Product Company
Address P.O. Box 5004 Voice (510) 842-8134
City San Ramon, CA Zip 94583

APPLICANT
Name Gettler-Ryan Inc / Barbara Sieminski
Fax (510) 551-7888
Address 6747 Sierra Ct, Suite J Voice (510) 551-8777
City Dublin, CA Zip 94568

TYPE OF PROJECT

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

PROPOSED WATER SUPPLY WELL USE
Domestic ___ Industrial ___ Other ___
Municipal ___ Irrigation ___

DRILLING METHOD:
Mud Rotary ___ Air Rotary ___ Auger Hollow Stem
Cable ___ Other ___

DRILLER'S LICENSE NO. 522125

WELL PROJECTS
Drill Hole Diameter 8 in. Maximum
Casing Diameter 2 in. Depth 20 ft.
Surface Seal Depth 5 ft. Number 1

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

ESTIMATED STARTING DATE 08/28/95
ESTIMATED COMPLETION DATE 08/28/95

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

APPLICANT'S SIGNATURE Barbara Sieminski Date 08/01/95

FOR OFFICE USE

PERMIT NUMBER 95548
LOCATION NUMBER ___

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 WELLS, INCLUDING PIEZOMETERS
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. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

C. 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.

D. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

E. WELL DESTRUCTION. See attached.

Approved Wyman Hong Date 29 Aug 95
Wyman Hong

91992