1/16/96

SIERRA
Environmental Services

July 25, 1995

Mr. Mike Golden
Division of the State Architect
400 P Street, 5th Floor
Sacramento,CA 95814

Re: Quarterly Monitoring Report
CALTRANS Hayward Maintenance Yard
21195 Center Street
~~Hayward~~, CA
C.V.
SES Project #MR-904-06

Dear Mr. Golden:

This report presents the results of the quarterly ground water sampling at Service Station #801-952739, located at 21195 Center Street in Castro Valley, California (Figure 1, Appendix A). Three wells, VW-1, VW-2 and VW-3, were sampled (Figure 2, Appendix A).

On June 7, 1995, SES personnel visited the site. Water level measurements were collected in all site wells and all wells were checked for the presence of free-phase hydrocarbons. Free-phase hydrocarbons were not present in any of the site wells. Due to bottle breakage during shipment to the laboratory, VW-2 needed to be resampled June 28, 1995. Water level data are shown in Table 1 (Appendix B).

The ground water samples were collected on June 7, 1995 and June 28, 1995 in accordance with SES Standard Operating Procedure - Ground Water Sampling (Appendix C). The field water sampling forms for this event are included. All analyses were performed by Applied P & CH Laboratory, Inc. of Chino, California. Analytic results for ground water are presented in Table 2 (Appendix B). The chain of custody document and laboratory analytic reports are included in Appendix D. SES is not responsible for laboratory omissions or errors.

95 JUL 20 PM 1:27

P.O. Box 2546 • Martinez, California 94553 • (510) 370-1280

Survey data is not readily available at this time. Once SES has obtained this information an additional report will be submitted.

Thank you for allowing us to provide services to DSA. Please call if you have any questions.

Sincerely,
Sierra Environmental Services

David M. Beardsley
Senior Environmental Technician

Wayne S. Akiyama
Senior Hydrogeologist #6009

DMB/WSA
90406QM.JL5

Appendices:
A - Figures
B - Tables
C - SES Standard Operating Procedure
D - Chain of Custody Document and Laboratory Analytic Reports
E - Field Water Sampling Forms

cc: Scott O. Seery - Alameda County Health Care Services Agency

APPENDIX A
FIGURES

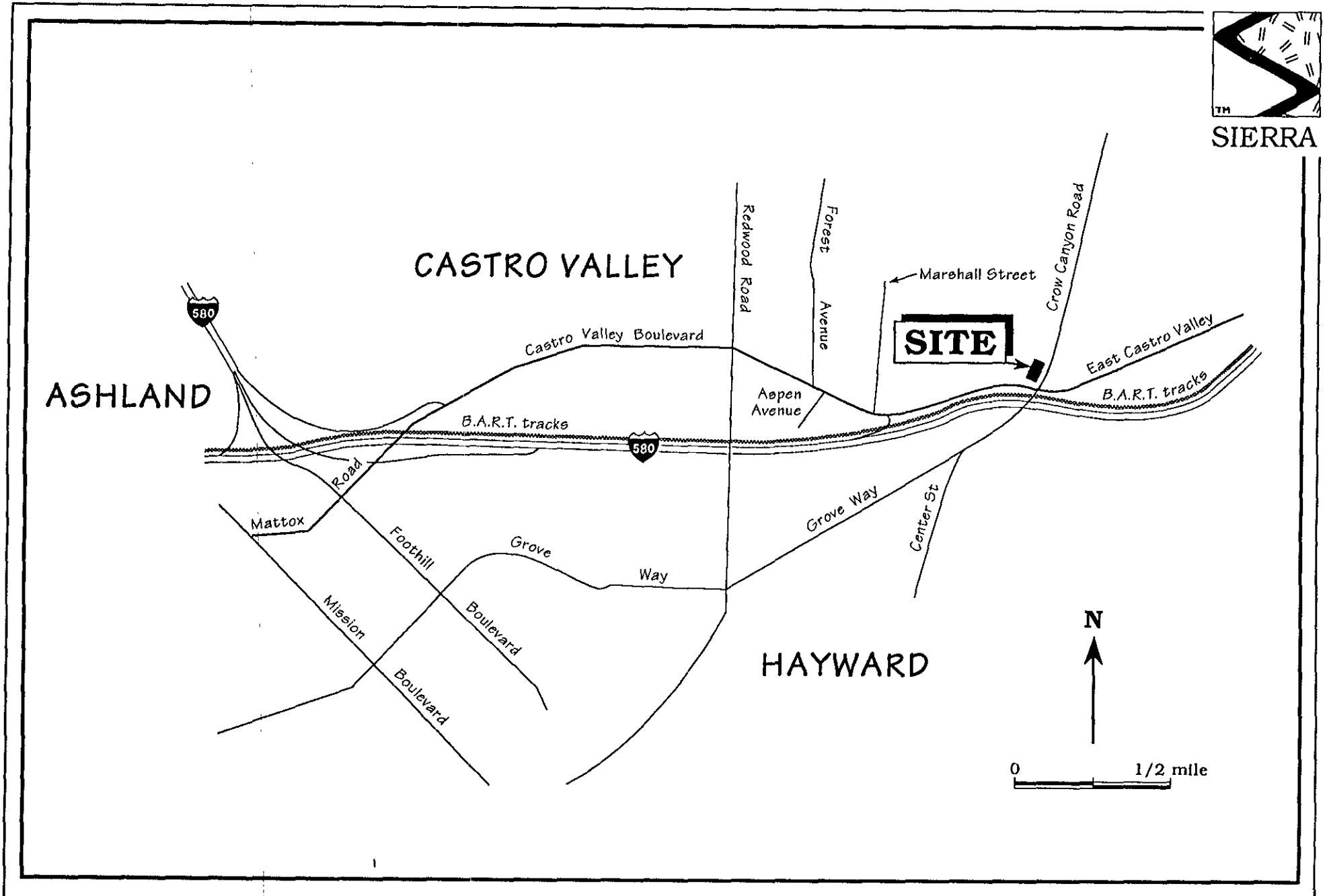

Figure 1. Site Location Map – CALTRANS Hayward Maintenance Facility, 21195 Center Street, Castro Valley, California

MR-903-04 6/19/95

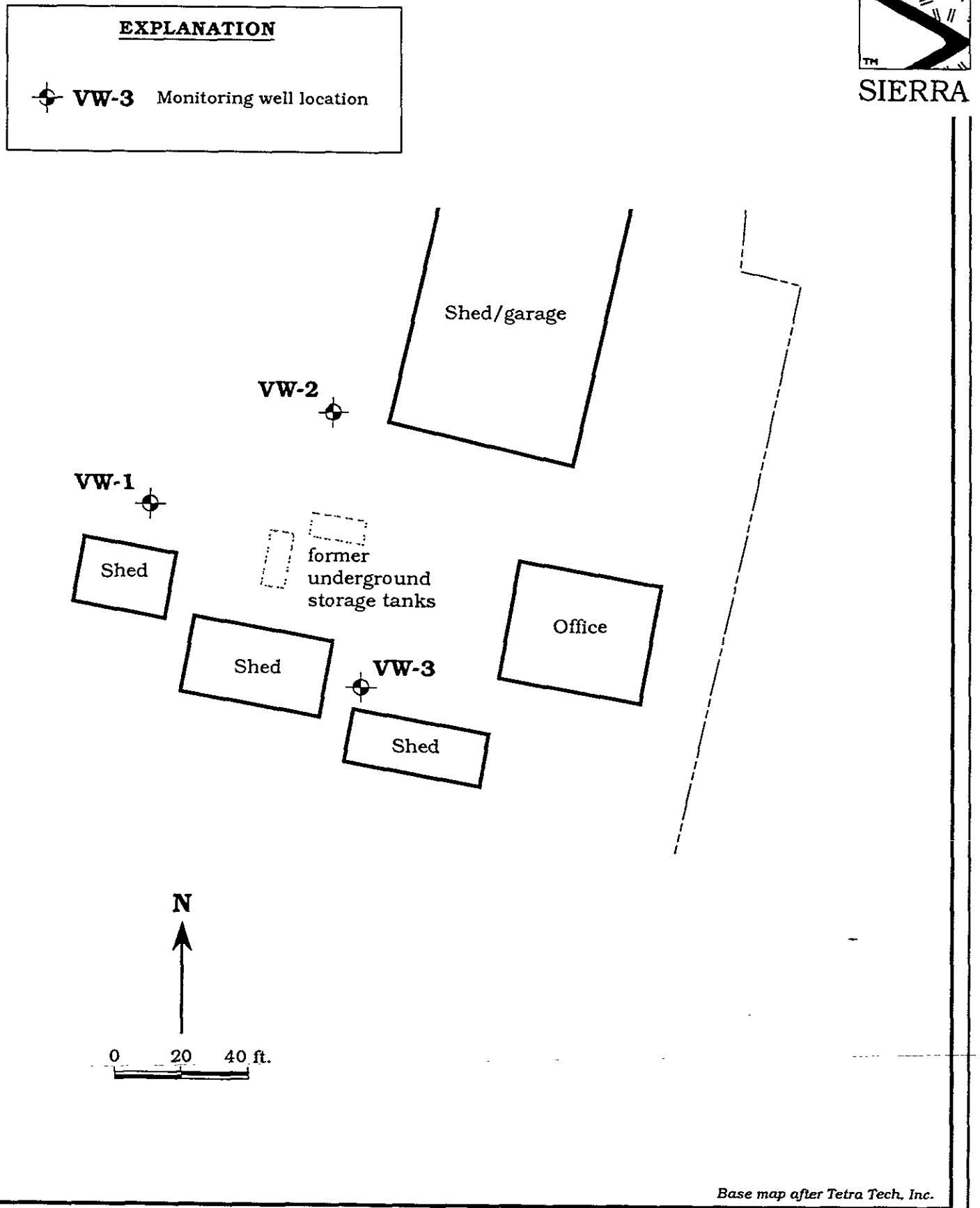

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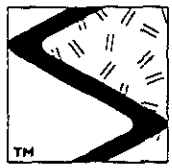
Figure 2. Monitoring Well and Former Underground Storage Tank Locations – CALTRANS Hayward Maintenance Facility, Castro Valley, California

MR-904-06 11/15/94



APPENDIX B
TABLES

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Table 2. Analytic Results for Ground Water - Caltrans Maintenance Station, 21195 Center Street, Castro Valley, California

Well ID	Date Sampled	Analytic Method	TPPH(G)	TPH(D)	B	T	E	X
			<--------			ppb		-------->
VW-1	10/28/94	8015/8020	<50	<500	<0.5	<0.5	<0.5	<0.5
	6/7/95	**8015/8020**	**<50**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
VW-2	10/28/94	8015/8020	<50	<500	<0.5	<0.5	<0.5	<0.5
	6\7\95	8015/8020	<50	---*	<0.5	<0.5	<0.5	<0.5
	6/28/95	**8015/8020**	---	**1.4****	---	---	---	---
VW-3	10/28/94	8015/8020	<50	<500	<0.5	<0.5	<0.5	<0.5
	6/7/95	**8015/8020**	**<50**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
TB	**6/7/95**	**8015/8020**	**<50**	---	**<0.5**	**<0.5**	**<0.5**	**<0.5**

EXPLANATION:

TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline
TPH(D) = Total Petroleum Hydrocarbons as Diesel
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
ppb = Parts per billion
--- = Not analyzed/not applicable

ANALYTIC METHODS:

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

ANALYTIC LABORATORY:

All samples were analyzed by Applied P & CH Laboratory of Chino, California.

NOTE:

* Sample Bottle was broken upon receipt.
** Motor oil with a small amount of diesel.

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APPENDIX C
SIERRA ENVIRONMENTAL SERVICES
STANDARD OPERATING PROCEDURES

SES STANDARD OPERATING PROCEDURE
GROUND WATER SAMPLING

SIERRA

The following describes sampling procedures used by SES field personnel to collect and handle ground water samples. Before samples are collected, careful consideration is given to the type of analysis to be performed so that precautions are taken to prevent loss of volatile components or contamination of the sample, and to preserve the sample for subsequent analysis. Wells will be sampled no less than 24 hours after well development. Collection methods specific to ground water sampling are presented below.

Prior to sampling, each well is checked for the presence of free-phase hydrocarbons using an MMC flexi-dip interface probe. Product thickness (measured to the nearest 0.01 foot) is noted on the sampling form. Water level measurements are also made using either a water level meter or the interface probe. The water level measurements are also noted on the sampling form.

Prior to sampling, each well is purged of a minimum of four well casing volumes of water using a steam-cleaned PVC bailer, or a pre-cleaned pump. Temperature, pH and electrical conductivity are measured at least three times during purging. Purging is continued until these parameters have stabilized (i.e., changes in temperature, pH or conductivity do not exceed ±0.5°F, 0.1 or 5%, respectively).

The purge water is stored temporarily on-site in 55-gallon Department of Transportation-approved drums pending analytic results. The drums are labeled with the date, contents, the SES field personnel initials and SES phone number.

Ground water samples are collected from the wells with steam-cleaned Teflon bailers. The water samples are decanted into the appropriate container for the analysis to be performed. Pre-preserved sample containers may be used or the analytic laboratory may add preservative to the sample upon arrival. Duplicate samples are collected from each well as a back-up sample and/or to provide quality control. The samples are labeled to include the project number, sample ID, date, preservative, and the field person's initials. The samples are placed in polyethylene bags and in an ice chest (maintained at 4°C with blue ice or ice) for transport under chain-of-custody to the laboratory.

The chain-of-custody form includes the project number, analysis requested, sample ID, date analysis and the SES field person's name. The form is signed and dated (with the transfer time) by each person who yields or receives the samples beginning with the field personnel and ending with the laboratory personnel.

A trip blank and bailer blank accompanies each sampling set, or 5% trip blanks and 5% bailer blanks are included for sets of greater than 20 samples. The bailer blank is prepared by pouring previously boiled water into a steam-cleaned Teflon bailer prior to sampling a well. The trip and bailer blanks are analyzed for some or all of the same compounds as the ground water samples.

SIERRA

APPENDIX D
CHAIN OF CUSTODY DOCUMENTS AND
LABORATORY ANALYTIC REPORTS

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
Facility Address 21195 CENTER ST. CASTRO VALLEY
Consultant Project Number MR-964-06
Consultant Name SIERRA ENVIRONMENTAL SERVICES
Address PO BOX 2546 MARTINEZ, CA. 94553
Project Contact (Name) ED MORALES
(Phone) 370-1280 (Fax Number) 370-7959

CLIENT
Chevron Contact (Name) MIKE COLDEN
(Phone)
Laboratory Name APPLIED P&CH LABORTORY
Laboratory Release Number
Samples Collected by (Name) RICHARD BRUSH
Collection Date 6/7/95
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
VW-1		4	W	G	14:30	40ml ONLY HCL	Yes	X	X											
VW-2		4	↓	↓	14:00	↓	↓	X	X											
VW-3		4	↓	↓	13:20	↓	↓	X	X											
TB		1	↓	↓	—	↓	↓	X												

Note:
Do Not Bill
TB-LB Samples

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	SES	6/7/95			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time 6/14/95 17:00

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

2739

COC-3.DWG/03 91/MCH

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:
Sierra Environmental Services
Attention: Ed. Morales
P.O. Box 2546
Martinez, CA 94553
Tel: (510)370-1280 Fax: (510)370-7959

Service ID #: 801-952739 Received : 06/14/95
Collected by: Richard Brush Tested : 6/15-16/95
Collected on: 06/07/95 Reported : 06/19/95
Sample description:
Water from 21195 Center St. in Castro Valley
Project: MR-904-06

Anlaysis of Water

801-952739 Page 1 of 1

Component Analyzed	Method	Unit	PQL	Concentration VW-1 95-2739-1	VW-3 95-2739-4	VW-2 95-2739-3	TB 95-2739-2
TPH: Diesel	LUFT/M8015	mg/L	0.05	N.D.	N.D.	*	–
TPH: Gasoline + BTXE Distinction							
TPH (Gasoline)	M8015	mg/L	0.05	N.D.	N.D.	N.D.	N.D.
Benzene	8020	µg/L	0 5	N.D.	N.D.	N.D.	N.D.
Ethylbenzene	8020	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
Toluene	8020	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
o-Xylene	8020	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
m-Xylene/p-xylene	8020	µg/L	0.5	N.D.	N.D.	N.D.	N.D.
BTXE, Total	8020	µg/L	0.5	N.D.	N.D.	N.D.	N.D.

PQL : Practical Quantitation Limit
– : Analysis not requested.
N.D. : Not Detected or less than the quantitation limit.
* : Sample bottle was broken upon receipt.

Respectfully submitted,

Dominic Lau
Laboratory Manager
Applied P & Ch Laboratory

Chain-of-Custody Record

Facility No. _____
Facility Address 21195 Center St. Castro Valley
Consultant Project Number MR-904-06
Consultant Name SIERRA ENVIRONMENTAL SERVICES
Address P.O. Box 2546, Martinez, CA 94553
Project Contact (Name) Ed Morales
(Phone) (510) 370-1280
(FAX Number) (510) 370-7959

Client Contact (Name) Mike Golden
(Company) CADSA
(Phone) ——
Laboratory Name Applied P&CH Laboratory
Samples Collected by (Name) David Burberry
Collection Date 6/28/95
Signature _____

Laboratory Number	Sample Identification	# - size of Container(s)	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (yes or no)	ANALYSIS TO BE PERFORMED: BTEX + TPH Gas (602/8020 + 8015/5030)	TPH Diesel (8015/3550/3510)	Oil and Grease (Non-polar) (5520 B/E/F)	Halogenated Hydrocarbons (601/8010)	Volatile Organic Compounds (624/8240)	Total Lead (AA)	Metals: Cd, Cr, Ni, Pb, Zn (ICAP or AA)	Organic lead (DHS LUFT)			Remarks
	VW-2	2 Liter amber	W	D	1200	—	Y		✓									Analyse

2900

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle One)
[signature]	SES	6/30/95 1230				24 hours
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	48 hours
						5 days
Relinquished By (Signature)	Organization	Date/Time	Received for Laboratory by (Signature)		Date/Time	10 days
			[signature]		7/3/95 09:44	As Contracted

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:
Sierra Environmental Services
Attention: Ed. Morales
1320 Arnold Drive, Ste 170
Martinez, CA 94553
Tel: (510)370-1280 Fax: (510)370-7959

Service ID #: 801-952900 Received : 07/03/95
Collected by: David Beardsley Tested : 7/3-5/95
Collected on: 06/28/95 Reported : 07/07/95
Sample description:
Water from 21195 Center St. in Castro Valley
Project: MR-904-06

Analysis of Water

801-952900 Page 1 of 1

Component Analyzed	Method	Unit	PQL	Concentration VW-2 95-2900-1
TPH: Diesel	LUFT/M8015	mg/L	0.05	1.4*

PQL : Practical Quantitation Limit
* Motor oil with a small amount of diesel.

Respectfully submitted,

Dominic Lau
Laboratory Manager
Applied P & Ch Laboratory

SIERRA

APPENDIX E
WATER SAMPLING FORMS

WATER LEVEL & PRODUCT MEASUREMENTS

SIERRA

PROJECT NAME & NUMBER: MR-904-06 Date: 6/7/95
CAL TRANS HAYWARD By: RCB

Well ID	Time Measured	Depth to Product (ft)	Depth to Water (ft)	Total Depth	Comments: (well condition, odor, etc.)
VW-1	14:10	N/A	26.07	34.20	OIL OVER AND AROUND WELL BOX ON SURFACE 4" WELL
VW-2	13:35	N/A	25.78	34.35	4" WELL
VW-3	12:55	N/A	26.76	34.53	4" WELL

SIERR

WATER SAMPLING DATA

Job Name CAL TRANS HAYWARD Job Number MR-904-06 Sampler RGZ

Well Number VW-1 Date 6/7/95 Well Diameter 4"

Sample Point Location/Description WEST WELL Well Depth (spec.) _____

Depth to Water (static) 26.07 Well Depth (sounded) 34.20

Initial height of water in casing 8.13 Volume 4.5 gallons

Volume to be purged 13.7 gallons

Purged With ELEC PUMP Sampled With DISP. BAILER

Pumped or Bailed Dry? ___ Yes ✓ No Time ____ After ____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°F) (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
14:15			1	6.73	66°	2910	
			5	6.74	65°	2990	
			10	6.74	65°	2970	
	14:25		15	6.74	65°	2980	

SAMPLES COLLECTED Time 14:30 Total volume purged (gal.) 15

Water color CLEAR Odor NONE

Description of sediments or material in sample: LIGHT TO NONE

Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Ipit)	Analysis Requested
VW-1	4	1 & 2 LT	N/A	HCL	YES	ARL	TPH-G BTEX TPH-G

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

SIERR

WATER SAMPLING DATA

Job Name CAL TRANS HAYWARD Job Number MR-904-06 Sampler RCM

Well Number VW-2 Date 6/7/95 Well Diameter 4"

Sample Point Location/Description NORTH WELL Well Depth (spec.) _____

Depth to Water (static) 25.78 Well Depth (sounded) 34.35

Initial height of water in casing 8.57 Volume 5.5 gallons

Volume to be purged 16.7 gallons

Purged With ELEC. PUMP Sampled With DISP. BAILER

Pumped or Bailed Dry? ___ Yes ✓ No Time _____ After _____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°F)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
13:40			2	6.82	66°	3520	
			6	6.96	65°	2720	
			12	7.10	65°	1550	
	13:50		17	6.99	65°	1350	

SAMPLES COLLECTED Time 14:00 Total volume purged (gal.) 17

Water color LIGHT BROWN TO CLEAR Odor NONE

Description of sediments or material in sample: LIGHT FINE SAND

Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
VW-2	4	1+2 1L	N/A	HCL 40 mL VOA	Y	APCL	TPH-G BTEX TPH-D

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
5 = Other _____; 6 = Other _____

SIER

WATER SAMPLING DATA

Job Name CALTRANS HAYWARD Job Number MR-904-06 Sampler RCB

Well Number VW-3 Date 6/8/95 Well Diameter 4"

Sample Point Location/Description SOUTH WELL Well Depth (spec.) _____

Depth to Water (static) 26.76 Well Depth (sounded) 34.53

Initial height of water in casing 7.77 Volume 5.0 gallons

Volume to be purged 15.2 gallons

Purged With ELEC PUMP Sampled With DISP BAILER

Pumped or Bailed Dry? ___ Yes ✓ No Time _____ After _____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°F)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
13:00			1	6.83	67°	1620	
			5	6.94	65°	1350	
			10	6.86	65°	0990	
	13:15		15	6.76		1000	

SAMPLES COLLECTED Time 13:20 Total volume purged (gal.) 15

Water color RUSTY TO CLEAR Odor NONE

Description of sediments or material in sample: MOD. TO LIGHT

Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
VW-3	4	1&2 1LT	—	HCL	Y	APCL	TPH-G BTEX TPH-D

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

WATER LEVEL & PRODUCT MEASUREMENTS

SIERRA

PROJECT NAME & NUMBER: MR 904 06 Date: 6/28/95
CALTRANS - MAINT. STATION By: JOHN HARMON

Well ID	Time Measured	Depth to Product (ft)	Depth to Water (ft)	Total Depth	Comments: (well condition, odor, etc.)
VW-1	11:26	~	26.72	-	WELL GOOD COND.
VW-2	11:28	-	26.31	34.65	
VW-3	11:23	-	27.16	-	
VW-?	11:20	-	27.20	-	

SIERRA

WATER SAMPLING DATA

Job Name CALTRANS   Job Number ME-904.06   Sampler JH / DMB
Well Number VW-2   Date 6/28/95   Well Diameter 4"
Sample Point Location/Description ______   Well Depth (spec.) ______
Depth to Water (static) 26.31   Well Depth (sounded) 34.65
Initial height of water in casing 8.34   Volume 5.44 gallons
Volume to be purged = 4 x initial volume 21.78 gallons
Purged With PVC BAILER   Sampled With DISP BAILER
Pumped or Bailed Dry? ✓ Yes ___ No   Time ___ After 14 gallons
Water level at sampling ______   Percent Recovery ______

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
11:38							
	11:42	7	1	6.75	67°	3220	
	11:47	~~14~~ 10	~~2~~ 3	6.70	67°	3090	
	11:55	~~22~~ 14	~~3~~ 4	6.98	65°	2810	

SAMPLES COLLECTED Time 12:00   Total volume purged (gal.) 14
Water color TAN BROWN   Odor NO
Description of sediments or material in sample: MED - HIGH TURBIDITY
Additional Comments: ______

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
VW-2	2	2	—	—	Y		

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other ______; 6 = Other ______