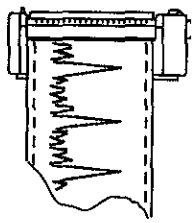
Received on 2/22/95 Creek

PRELIMINARY SITE ASSESSMENT REPORT

GALLO SALAME
2411 BAUMANN AVENUE, SAN LORENZO, CALIFORNIA

Prepared by:



Chemist Enterprises
333-B Camino Verde
Boulder Creek, California 95006

(408) 338-0198

Prepared For:

Daryl Melville
Director of Engineering
Gallo Salame
2411 Baumann Avenue
San Lorenzo, California 94580

Prepared by:

Tom Price
Project Manager

Robert E. Baker
Project Engineering Geologist

Report completed February 9, 1995

I. INTRODUCTION

A. SCOPE OF WORK

The objective of the activities described in this report was to evaluate the nature and distribution of impacts to soils and ground water which resulted from a hydrocarbon release at the location of previous Underground Storage Tanks (USTs) at the Gallo Salame property. The scope of these activities included the following tasks.

- Preliminary activities including preparation of a workplan, securing the necessary drilling permit (see **Appendix A**) from Zone 7 Water Agency, and preparation of a Health and Safety Plan,
- Field sampling on December 21-22, 1994,
- Analyses of soil and water samples at a Department of Health Services certified laboratory,
- Preparation of this Preliminary Site Assessment report for submittal to the Alameda County Department of Environmental Health (ACDEH).

B. SITE LOCATION

The Gallo Salame property is the location of a major salame plant located at 2411 Baumann Avenue in western San Lorenzo, approximately 1/2-mile east of San Francisco Bay within the boundaries of the Zone 7 Water Agency. **Figure 1** shows the general location of the site.

C. BACKGROUND/SITE HISTORY

The Gallo Salame plant was built in 1970-71. Prior to that time the property was undeveloped. Two USTs were removed from the site on December 11, 1987. These included one 10,000-gallon gasoline and one 10,000-gallon diesel USTs. **Figure 2** shows the previous locations of these USTs on a site map. Currently there are no operating USTs at the subject site. When the USTs were removed, neither of the tanks were observed to have holes and the tar wrappings were intact. However, soil and water samples collected at the time the tanks were removed indicated the presence of gasoline and diesel. The hydrocarbon release may have resulted from

over filling the tanks or a product line leak. The tank pit was filled with imported material and covered with asphalt and concrete to match the existing lot.

II. SITE DESCRIPTION

A. HYDROGEOLOGIC SETTING

Nilsen's map (1973) shows the property is immediately underlain by artificial fill. He describes this material as highway, railroad, and canal fills composed of rock and surficial deposits derived from nearby cuts or quarries. This material covers a large part of the bay margin from the vicinity of the Gallo Salame property northwest to Bay Farm Island. Nilsen's map (1973) shows marshland deposits of the Quaternary Age to the south and to the northwest of the property. Helley's map (1972) shows the older mud deposits of Pleistocene Age to the east and north of the property. The marshland deposits and older mud deposits may be the same and they probably underlie the artificial fill. Nilsen (1973) describes the marshland deposits as primarily soft mud and silt with some shell, peat, sand, and gravel layers. Helley (1972) describes the older mud deposits as dark, plastic, semiconsolidated, organic-rich clay and silty clay. He says the older mud deposits are greater than 50-feet thick near the bay margin.

According to Webster's map (1973), the water table at the property is from 0 to 5 feet below the land surface. His map also indicates the property is near the boundary of a deeper aquifer that is confined and is under artesian head.

Ground water was encountered in the excavation that was made when the two USTs were removed. We suspect the first aquifer is perched on the underlying marshland or older mud deposits. We suspect there is a second confined aquifer at some depth below the marshland and older mud deposits. There may be intermediate perched aquifers in sand and gravel lenses within the older mud deposits.

B. PREVIOUS ENVIRONMENTAL SAMPLING RESULTS

A total of four soil samples were collected from the bottom of the tank pit at a depth of about 10-feet and one ground water sample was collected from the tank pit at the time the USTs were removed. Two of the soil samples were collected from below the gasoline UST and two soil samples were collected from below the diesel UST. The ground water sample was collected from the center of the tank pit at the time the USTs were removed. The tank pit was left open and allowed to aerate for at least one month after the USTs were removed and ground water samples were taken at approximately two-week intervals during that time.

Following are tables showing the laboratory results from the five samples collected at the time the USTs were removed:

Laboratory: Sequoia Analytical Units: µg/L[1] Date Sampled: 12/11/87
Date Reported 12/21/87

Sample	Depth	TPHg[2]	TPHd[3]	Benzene	Toluene	Ethyl-Benzene	Xylenes
1 (Water)	-	910	600	<0.5	4.9	NA[4]	70

Laboratory: Sequoia Analytical Units: mg/Kg[5] Date Sampled: 12/11/87
Date Reported 12/21/87

Sample	Depth	TPHg	TPHd	Benzene	Toluene	Ethyl-Benzene	Xylenes
2 (Soil)	10'	1.8	NA	<0.1	<0.1	NA	<0.1
3 (Soil)	10'	NA	7.5	NA	NA	NA	NA
4 (Soil)	10'	<1.0	NA	<0.1	<0.1	NA	<0.1
5 (Soil)	10'	NA	6.1	NA	NA	NA	NA

[1] µg/L = Micrograms/Liter
[2] TPHg = Total Petroleum Hydrocarbons as Gasoline
[3] TPHd = Total Petroleum Hydrocarbons as Diesel
[4] NA = Not Analyzed
[5] mg/Kg = Milligrams/Kilogram

After removal of the USTs, the tank pit was left open and allowed to aerate for approximately two weeks and then a single ground water sample was collected from the tank pit:

Laboratory: Sequoia Analytical Units: µg/L Date Sampled: 12/28/87
Date Reported 1/13/88

Sample	Depth	TPHg	TPHd	Benzene	Toluene	Ethyl-Benzene	Xylenes
1 (Water)	-	<50	NA	<0.5	0.58	<0.5	3.8

Subsequently, the tank pit was left open and allowed aerate for ten more days and another ground water sample was collected from the tank pit:

Laboratory: Sequoia Analytical Units: µg/L Date Sampled: 1/7/88
Date Reported 1/14/88

Sample	Depth	TPHg	TPHd	Benzene	Toluene	Ethyl-Benzene	Xylenes
1 (Water)	-	<50	160	<0.5	<0.5	<0.5	<0.5

III. FIELD WORK

A. PRELIMINARY ACTIVITIES

Underground Service Alert was notified of augering operations 48-hours prior to commencement of field work and the drilling permit was secured from Zone 7 Water Agency.

Prior to beginning field work, all workers were briefed on a Health and Safety plan. This plan was site specific and addressed hazardous waste operations and emergency response as required by 29 CFR 1910.120.

B. SOIL AND GROUND WATER SAMPLING

The work performed for this project was performed under the supervision or review of a California Registered Geologist. The scope of work included the collection of one soil sample and four ground water samples. The locations of the sampling locations into and around the previous tank pit area locations are shown on **Figure 3**.

One soil sample and one ground water sample was collected at SB-1 on December 21, 1994. We attempted to collect ground water samples with a bailer at locations SB-2 through SB-5 but were unable to due to caving of loose backfill material. On December 22, we collected ground water samples from SB-3, SB-7, and SB-8 with an alternate sampling method described below.

At sampling point SB-1, the boring was advanced with a 2-3/4" diameter hand auger. to a depth of 6'. The auger spoils were visually inspected for lithology, moisture content, and any obvious hydrocarbon impacts. Soil was screened with a hand held photo-ionization detector (PID) analyzer. A soil sample was collected using a 2-inch diameter stainless steel core sampler and a brass sleeve and advanced with a slide hammer. Once the core sampler was retrieved, the brass sleeve containing soil was sealed with aluminum foil, plastic end caps, and tape. Subsequently, a groundwater sample was collected with a new disposable polyethylene bailer by gently pouring from the bailer into 1-liter amber glass sample containers and 40-milliliter glass vials. The 40-milliliter vials were sealed with caps containing teflon septa with no air bubbles in the vials. These and subsequent samples were labeled for sampling location reference and placed in iced storage.

No soil samples were collected at SB-2 through SB-5 because we planned to initiate soil sampling at the 5' depth however, groundwater was encountered at a depth of 4'. In addition, soils encountered in SB-2 through SB-5 appeared to be imported backfill.

At boring locations SB-2, SB-3, SB-4, and SB-5, engineered baserock fill was encountered and attempts to auger below the depth of the surface of ground water resulted in sloughing. At boring SB-4, a synthetic fabric liner was encountered below the baserock at a depth of 3.5', and below the fabric, clean rock was encountered. Due to the highly permeable nature of the engineered backfill, it was concluded that concentrations of hydrocarbons in the ground water at locations

SB-2, SB-3, SB-4, and SB-5 would be similar, and SB-3 was chosen as the representative sampling location.

We returned to the site on December 22, 1994, to collect ground water samples and backfill borings left open. Ground water was collected from locations SB-3, SB-7, and SB-8 using a 1-1/4 inch diameter temporary casing driven through the caving material below the ground water surface. Boreholes SB-6, SB-7, and SB-8 were placed 5-10' laterally outside the presumed tank pit area in an attempt to collect samples from the ground water in undisturbed soil. SB-6 was terminated at 6" due to a strong sewage-like odor encountered possibly related to the drainage system on the concrete ramp (see **Figure 3**). At SB-7, engineered fill was encountered only to a depth of 2.5 feet indicating that the selected location was outside the engineered fill of the former tank pit. At SB-8, a baserock material dissimilar to the engineered fill area related to the previous USTs was encountered to a depth of 1.5' also indicating that the selected location was outside the engineered fill area related to the previous USTs.

Ground water samples were collected at locations SB-3, SB-7, and SB-8 as follows: a 5 foot length of 1-1/4 inch diameter steel pipe with forged tip and 1/8" perforations the lower two feet was driven into the water table with a sledge hammer. A 1/8" diameter teflon tube was run down the inside of the pipe. The top of the teflon tube was run through a rubber stopper and fitted into the opening of a 1-liter amber glass sample container. A second length of tubing was run through a second hole in the rubber stopper and connected to a vacuum pump. The vacuum pump was turned on and the vacuum created in the jar caused the ground water to rise into the teflon tube and fill the sample container. This method of sampling was employed for collecting the 1 liter samples which were submitted for TPHd analyses. Samples submitted for TPHg and BTEX analyses were collected by bailing with a micro-bailer. The micro-bailer was constructed of a 10-milliliter glass pipet with a 5 millimeter-diameter glass sphere as a check valve.

C. SAMPLING EQUIPMENT DECONTAMINATION PROCEDURES

All soil and ground water sampling equipment was decontaminated between sampling locations by washing with a solution of tap water and laboratory grade detergent, a tap water rinse, and with a final rinse with distilled water. The perforated pipe with forged tip and perforations was decontaminated between sampling locations by heating with a propane torch.

D. BORING ABANDONMENT PROCEDURES

The soil borings were abandoned by placing an initial seal of bentonite pellets up to a depth of 3.5' and placing grout into the boreholes to the surface. Due to the shallowness of the boreholes, a tremie pipe was unnecessary.

E. SOIL CUTTINGS AND RINSATE CONTAINMENT

Soils generated during augering and decontamination derived liquid wastes were stored in a labeled, DOT-rated 55-gallon drum on-site.

F. SAMPLE STORAGE AND TRANSPORTATION

All samples were transported in iced storage directly to Anametrix Laboratories in San Jose under chain of custody documentation. All samples were submitted for analyses for TPHd by EPA Method 3510, TPHg and BTEX by EPA Methods 8020 and 5030. In addition the soil and ground water samples collected from location SB-1 were submitted for total lead analyses by EPA Method 6010. Also, the water sample collected from location SB-1 was submitted for total dissolved solids analysis by EPA Method 160.1.

IV. QUALITY ASSURANCE/QUALITY CONTROL MEASURES

The quality assurance/quality control measures related to the grab groundwater sampling included the following:

- Samples were collected in triplicate.
- One trip blank was submitted for TPHg and BTEX analyses.
- One duplicate ground water sample at SB-1 was submitted for TPHg and BTEX analyses.
- One blind duplicate ground water sample at SB-7 (labeled SB-19) was submitted for TPHg and BTEX analyses.

V. ANALYTICAL RESULTS

The laboratory reports for all samples are included in **Appendix B** and summarized as follows:

A. SOIL SAMPLE

Laboratory: Anametrix Units: mg/Kg Date Sampled: 12/21/94
Date Reported: 1/4/95

Sample	Depth	TPHg	TPHd	Benzene	Toluene	Ethyl-Benzene	Xylenes
SB-1-S1	6.0'	<0.5	<10	<0.005	<0.005	<0.005	<0.005

Laboratory: Anametrix Units: mg/K Date Sampled: 12/21/94
Date Reported: 1/4/95

Sample	Depth	Total Lead
SB-1-S1	6.0'	7.2

B. GROUNDWATER SAMPLES

Laboratory: Anametrix Units: µg/L Date Sampled: 12/21-22/94
Date Reported: 1/4-9/95

Sample	Depth	TPHg	TPHd	Benzene	Toluene	Ethyl-Benzene	Xylenes
SB-1-W1	4.0'	<50	230	<0.5	<0.5	<0.5	1.6
SB-1-W1[6]	4.0'	<50	NA	<0.5	<0.5	<0.5	0.67
SB-3-W1	4.0'	<50	190	<0.5	<0.5	<0.5	<0.5
SB-7-W1	4.0'	<50	190	<0.5	8.5	<0.5	1.8
SB-19-W1[7]	4.0'	<50	NA	<0.5	4.8	<0.5	1.3

[6]Duplicate sample.
[7]SB-19-W1 was the blind duplicate sample of SB-7-W1

SB-8-W1	4.0'	<50	200	<0.5	<0.5	<0.5	<0.5

Laboratory: Anametrix Units: µg/L Date Sampled: 12/21/94
Date Reported: 1/4/95

Sample	Depth	Total Lead
SB-1-W1	4.0'	72.4

Laboratory: Anametrix Units: mg/L Date Sampled: 12/21/94
Date Reported: 1/4/95

Sample	Depth	Total Dissolved Solids
SB-1-W1	4.0'	1400

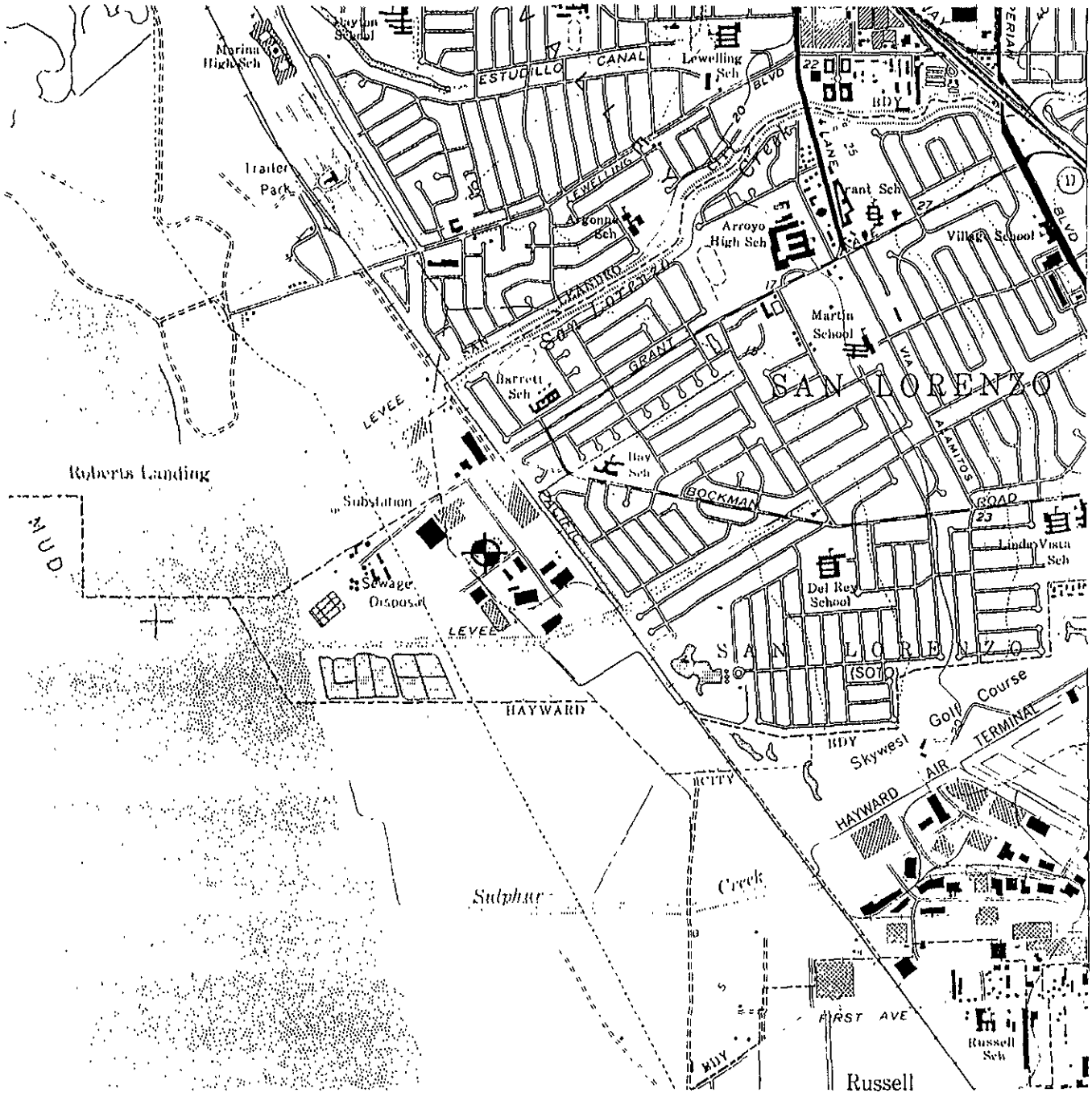
VI. CONCLUSIONS AND DISCUSSION

The results of this investigation are both consistent and remarkably attenuated in comparison to previous environmental sampling at the subject site. In December 1987, immediately following removal of the USTs the TPHg concentration in ground water in the UST pit was reported to be 910 µg/L then later <50 µg/L after the UST pit was left open and allowed to aerate for one month. This is consistent with the results for the ground water samples we collected in December 1994 which also had non-detectable or <50 µg/L TPHg. It indicates that the release of gasoline was minor and that a major source of gasoline leaching into the groundwater is not present.

At the time the USTs were removed from the subject site in December 1987, in ground water samples collected from the UST pit, benzene and ethyl-benzene were not detected while toluene and xylenes were detected at 4.9 and 70 µg/L respectively. In the ground water samples collected in December 1994, benzene and ethyl-benzene were also not detected while toluene and xylenes were also detected in the ranges of 4.8-8.5 and 0.67-1.8 µg/L respectively.

In December 1987 the UST pit ground water concentration of TPHd was 600 µg/L then later 160 µg/L after aerating for one month. In December 1994 the average concentration of TPHd in

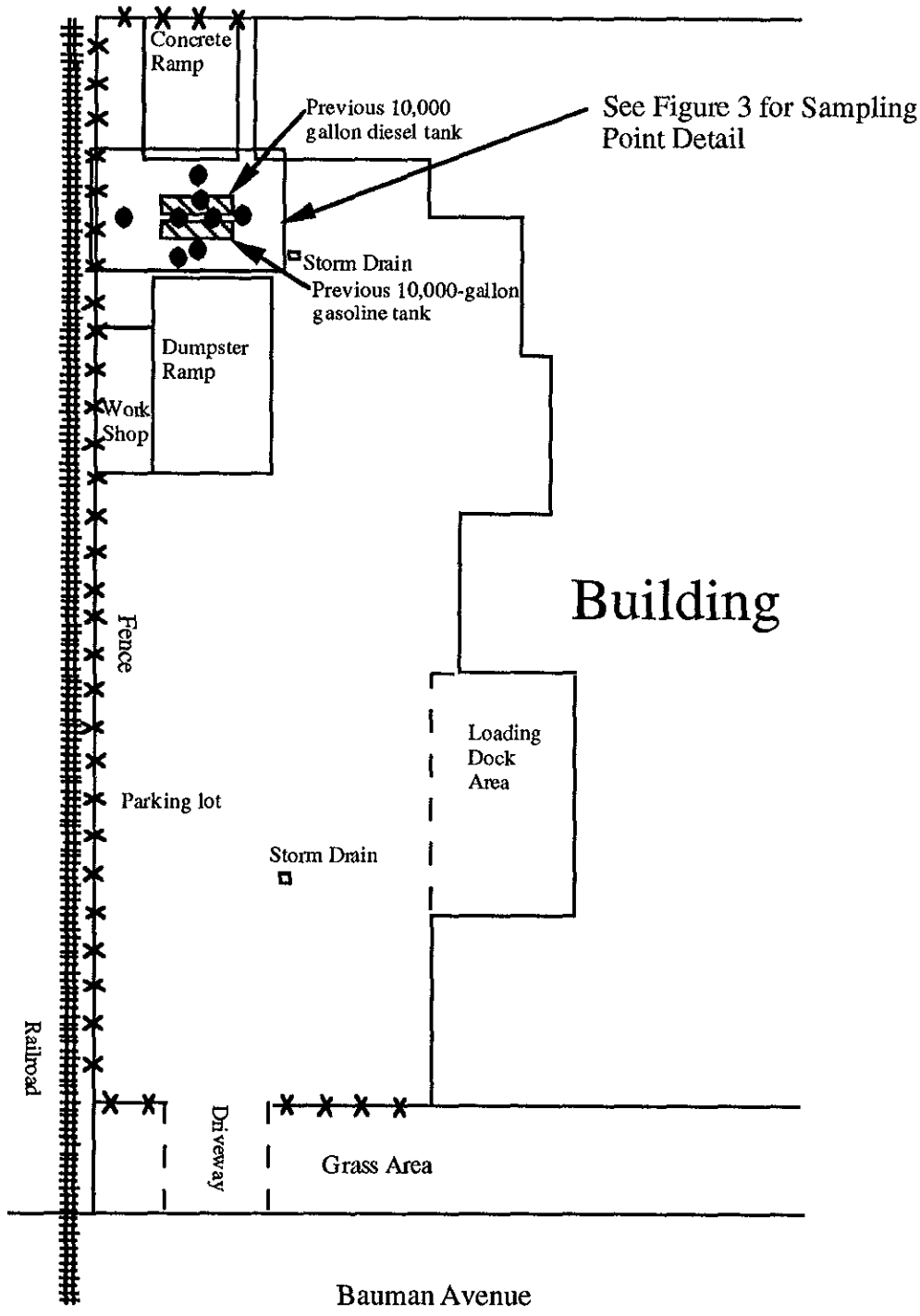
ground water around the previous USTs was 200 µg/L. We feel the TPHd concentration in ground water has not risen significantly since the USTs were removed and the open pit was aerated in 1987. This indicates that a major source of diesel fuel leaching into the groundwater is not present.



Chemist Enterprises
Boulder Creek, California

LOCATION MAP
Gallo Salame
2411 Baumann Avenue
San Lorenzo, California

Figure 1
Project No. 94-54
Date: 10/94



EXPLANATION

- Soil Boring Location
- Previous Tank Location

Scale: 1"=50"

0 25 50

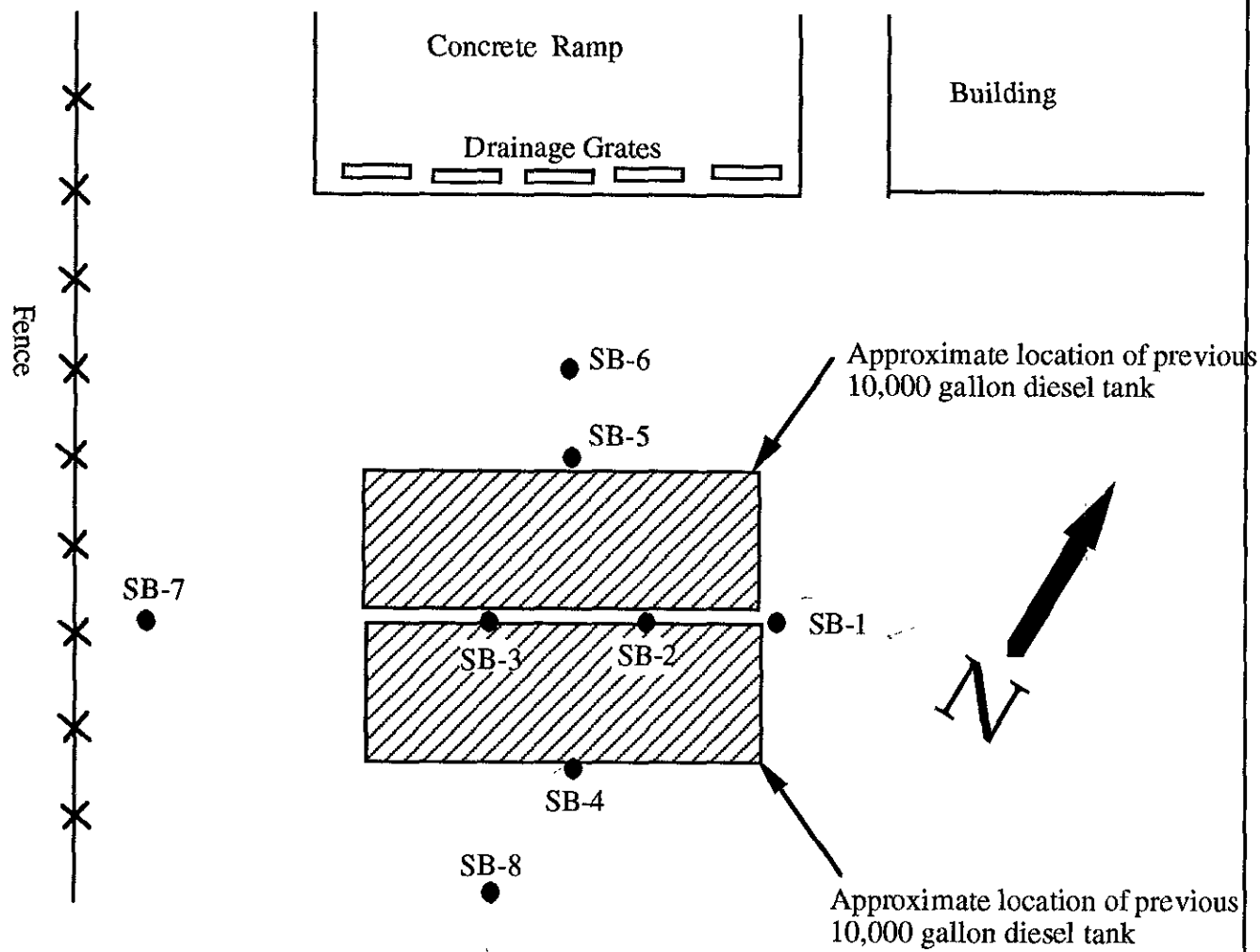
N

Chemist Enterprises
Boulder Creek, California

SITE MAP
Gallo Salame
2411 Baumann Avenue
San Lorenzo, California

Figure 2

Project No. 94-54
Date: 1/95



EXPLANATION

Scale: 1"=10"

0 5 10

● Soil Boring Location

▨ Previous Tank Location

Analytical Results for Ground water Samples Units: Micrograms/Liter

Date Collected	Location	TPHd	TPHg	Benzene	Toluene	Ethyl -Benzene	Xylenes
12/21/94	SB-1	230	<50	<0.5	<0.5	<0.5	1.6
12/21/94	SB-1(Duplicate)	-	<50	<0.5	<0.5	<0.5	0.67
	SB-2	-	-	-	-	-	-
12/22/94	SB-3	190	<50	<0.5	<0.5	<0.5	<0.5
	SB-4	-	-	-	-	-	-
	SB5	-	-	-	-	-	-
	SB-6	-	-	-	-	-	-
12/22/94	SB-7	190	<50	<0.5	8.5	<0.5	1.8
12/22/94	SB-7(Duplicate)	-	<50	<0.5	4.8	<0.5	1.3
12/22/94	SB-8	200	<50	<0.5	<0.5	<0.5	<0.5

Chemist Enterprises
Boulder Creek, California

SAMPLING LOCATION DETAIL
Gallo Salame
2411 Baumann Avenue
San Lorenzo, California

Figure 3

Project No. 94-54
Date: 1/95

APPENDIX A: DRILLING PERMIT

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

CATION OF PROJECT Gallo Salame
2411 Baumann Ave.
San Lorenzo, CA

IENT
me Gallo Salame
dress 2411 Baumann Ave Voice (510) 276-1300
y San Lorenzo Zip 94580

PLICANT
me Tom Price
Chemist Ent. Fax (408) 338-0198
dress 333-B Camino Verde Voice (408) 338-0198
y Boulder Creek CA Zip 95006

PE OF PROJECT
ell Construction
Cathodic Protection ___
Water Supply ___
Monitoring ___
Geotechnical Investigation
General ___
Contamination ✓
Well Destruction ___

ROPOSED WATER SUPPLY WELL USE
omestic ___ Industrial ___ Other ___
unicipal ___ Irrigation ___

RILLING METHOD:
d Rotary ___ Air Rotary ___ Auger Hand ✓
able ___ Other ___

RILLER'S LICENSE NO. Licensed Geologist: Bob Baker R.G.#5087 C.E.G.#1587

ELL PROJECTS
Drill Hole Diameter ___ in. Maximum
Casing Diameter ___ in. Depth ___ ft.
Surface Seal Depth ___ ft. Number ___

EOTECHNICAL PROJECTS
Number of Borings 6
Hole Diameter 2 3/4 in. Maximum Depth 15 ft. (Expect <10 ft.)

ESTIMATED STARTING DATE 12/21 or 12/22, 1994
ESTIMATED COMPLETION DATE same (1 day project)

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

APPLICANT'S SIGNATURE Tom Price Date 12/15/94

FOR OFFICE USE

PERMIT NUMBER 94783
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 15 Dec 94
Wyman Hong

91992

APPENDIX B: LABORATORY REPORTS

Inchcape Testing Services
Anametrix Laboratories

1961 Concourse Drive
Suite E
San Jose, CA 95131
Tel: 408-432-8192
Fax: 408-432-8198

MR. TOM PRICE
CHEMIST ENTERPRISES
333-B CAMINO VERDE
BOULDER CREEK, CA 95006

Workorder # : 9412225
Date Received : 12/21/94
Project ID : 94-56
Purchase Order: N/A

The following samples were received at Anametrix for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9412225- 1	SB-1-S1
9412225- 2	SB-1-W1
9412225- 3	T. BLANK

This report is organized in sections according to the specific Anametrix laboratory group which performed the analysis(es) and generated the data.

The results contained within this report relate to only the sample(s) tested. Additionally, these data should be considered in their entirety and Anametrix cannot be responsible for the detachment, separation, or otherwise partial use of this report.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234.

If you have any further questions or comments on this report, please call your project manager as soon as possible. Thank you for using Inchcape Testing Services.

Todd Seeinger for
Susan Kraska Yeager
Laboratory Director

1-4-95
Date

Project Manager

This report consists of 25 pages.

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. TOM PRICE
CHEMIST ENTERPRISES
333-B CAMINO VERDE
BOULDER CREEK, CA 95006

Workorder # : 9412225
Date Received : 12/21/94
Project ID : 94-56
Purchase Order: N/A
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9412225- 1	SB-1-S1	SOIL	12/21/94	TPHd
9412225- 2	SB-1-W1	WATER	12/21/94	TPHd
9412225- 1	SB-1-S1	SOIL	12/21/94	TPHgBTEX
9412225- 2	SB-1-W1	WATER	12/21/94	TPHgBTEX
9412225- 3	T. BLANK	WATER	12/21/94	TPHgBTEX

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. TOM PRICE
CHEMIST ENTERPRISES
333-B CAMINO VERDE
BOULDER CREEK, CA 95006

Workorder # : 9412225
Date Received : 12/21/94
Project ID : 94-56
Purchase Order: N/A
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- All holding times have been met for the analyses reported in this section.
- The concentration reported as diesel for sample SB-1-W1 is primarily due to the presence of a heavier petroleum product of hydrocarbon range C18-C36, possibly motor oil.

Cheryl Baerman 1/3/95
Department Supervisor Date

Reggie Dawson 1/3/95
Chemist Date

Organic Analysis Data Sheet
Total Petroleum Hydrocarbons as Gasoline with BTEX
ITS - Anametrix Laboratories - (408)432-8192

Lab Workorder : 9412225 | Client Project ID : 94-56

Matrix : SOIL | Units : mg/Kg

Compound Name	Method Reporting Limit*	Client ID SB-1-S1 Lab ID 9412225-01	Client ID Lab ID METHOD BLANK	Client ID Lab ID 	Client ID Lab ID 	Client ID Lab ID
Benzene	0.0050	ND	ND			
Toluene	0.0050	ND	ND			
Ethylbenzene	0.0050	ND	ND			
Total Xylenes	0.0050	ND	ND			
TPH as Gasoline	0.50	ND	ND			
Surrogate Recovery		84%	97%			
Instrument ID		HP12	HP12			
Date Sampled		12/21/94	N/A			
Date Analyzed		12/28/94	12/28/94			
RLMF		1	1			
Filename Reference		FPD22501.D	BD2801E1.D			

* The Method Reporting Limit must be multiplied by the Reporting Limit Multiplication Factor (RLMF) to achieve the compound's reporting limit in the analysis.

ND : Not detected at or above the reporting limit for the analysis as performed.
TPHg : Determined by GC/FID following sample purge & trap by EPA Method 5030.
BTEX : Determined by modified EPA Method 8020 following sample purge & trap by EPA Method 5030.

Lab Control Limits for surrogate compound p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggie Dawson 1/3/95
Analyst Date

Cheryl Balmer 1/3/95
Supervisor Date

Issued on 1/3/95 @ 11:31 am

Organic Analysis Data Sheet
Total Petroleum Hydrocarbons as Gasoline with BTEX
ITS - Anametrix Laboratories - (408)432-8192

Lab Workorder : 9412225 | Client Project ID : 94-56

Matrix : WATER | Units : ug/L

Compound Name	Method Reporting Limit*	Client ID SB-1-W1 Lab ID 9412225-02	Client ID SB-1-W1 DUP Lab ID 9412225-02	Client ID T. BLANK Lab ID 9412225-03	Client ID Lab ID METHOD BLANK	Client ID Lab ID METHOD BLANK
Benzene	0.50	ND	ND	ND	ND	ND
Toluene	0.50	ND	ND	ND	ND	ND
Ethylbenzene	0.50	ND	ND	ND	ND	ND
Total Xylenes	0.50	1.6	0.67	ND	ND	ND
TPH as Gasoline	50	ND	ND	ND	ND	ND
Surrogate Recovery		99%	99%	93%	97%	99%
Instrument ID		HP12	HP12	HP12	HP12	HP12
Date Sampled		12/21/94	12/21/94	12/21/94	N/A	N/A
Date Analyzed		12/28/94	12/29/94	12/28/94	12/28/94	12/29/94
RLMF		1	1	1	1	1
Filename Reference		FPD22502.D	FAD22502.D	FPD22503.D	BD2801E1.D	BD2901E1.D

* The Method Reporting Limit must be multiplied by the Reporting Limit Multiplication Factor (RLMF) to achieve the compound's reporting limit in the analysis.

ND : Not detected at or above the reporting limit for the analysis as performed.
TPHg : Determined by GC/FID following sample purge & trap by EPA Method 5030.
BTEX : Determined by modified EPA Method 8020 following sample purge & trap by EPA Method 5030.

Lab Control Limits for surrogate compound p-Bromofluorobenzene are 61-139%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggie Dawson 1/3/95
Analyst Date

Cheryl Balmer 1/3/95
Supervisor Date

Matrix Spike Report

Total Petroleum Hydrocarbons as BTEX

ITS - Anametrix Laboratories - (408)432-8192

Project ID : 94-56
Sample ID : SB-1-W1
Matrix : WATER
Date Sampled : 12/21/94

Laboratory ID : 9412225-02
Analyst : RY
Supervisor : [illegible]
Instrument ID : HP12
Units : ug/L

COMPOUND NAME	SPIKE AMOUNT	SAMPLE RESULTS	MS RECOVERY	MSD RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS
Benzene	10	ND	110%	100%	45-139	10%	30
Toluene	10	ND	104%	104%	51-138	0%	30
Ethylbenzene	10	ND	110%	110%	48-146	0%	30
Total Xylenes	10	1.6	104%	104%	50-139	0%	30
Surrogate Recovery		99%	100%	99%			
Date Analyzed		12/28/94	12/28/94	12/28/94			
Multiplier		1	1	1			
Filename Reference		FPD22502.D	FMD22502.D	FDD22502.D			

* Limits established by Inchcape Testing Services, Anametrix Laboratories.

Laboratory Control Spike Report
Total Petroleum Hydrocarbons as BTEX
ITS - Anametrix Laboratories - (408)432-8192

Instrument ID : HP12
Matrix : LIQUID

Analyst : RD
Supervisor : ac
Units : ug/L

COMPOUND NAME	SPIKE AMOUNT	LCS RECOVERY	RECOVERY LIMITS
Benzene	10	110%	52-133
Toluene	10	100%	57-136
Ethylbenzene	10	110%	56-139
Total Xylenes	10	110%	56-141
Surrogate Recovery		102%	61-139
Date Analyzed		12/28/94	
Multiplier		1	
Filename Reference		MD2801E1.D	

* Limits established by Inchcape Testing Services, Anametrix Laboratories.

Laboratory Control Spike Report
Total Petroleum Hydrocarbons as BTEX
ITS - Anametrix Laboratories - (408)432-8192

Instrument ID : HP12
Matrix : SOLID

Analyst : RD
Supervisor : [illegible]
Units : mg/Kg

COMPOUND NAME	SPIKE AMOUNT	LCS RECOVERY	RECOVERY LIMITS
Benzene	0.010	98%	52-133
Toluene	0.010	100%	57-136
Ethylbenzene	0.010	100%	56-139
Total Xylenes	0.010	110%	56-141
Surrogate Recovery		100%	53-147
Date Analyzed		12/28/94	
Multiplier		1	
Filename Reference		MD2802E1.D	

* Limits established by Inchcape Testing Services, Anametrix Laboratories.

Laboratory Control Spike Report
Total Petroleum Hydrocarbons as BTEX
ITS - Anametrix Laboratories - (408)432-8192

Instrument ID : HP12
Matrix : LIQUID

Analyst : [illegible]
Supervisor : [illegible]
Units : ug/L

COMPOUND NAME	SPIKE AMOUNT	LCS RECOVERY	RECOVERY LIMITS
Benzene	10	100%	52-133
Toluene	10	110%	57-136
Ethylbenzene	10	110%	56-139
Total Xylenes	10	120%	56-141
Surrogate Recovery		99%	61-139
Date Analyzed		12/29/94	
Multiplier		1	
Filename Reference		MD2901E1.D	

* Limits established by Inchcape Testing Services, Anametrix Laboratories.

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL
ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9412225
Matrix : WATER
Date Sampled : 12/21/94
Date Extracted: 12/23/94

Project Number : 94-56
Date Released : 12/29/94
Instrument I.D.: HP19

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (ug/L)	Amount Found (ug/L)	Surrogate %Rec
9412225-02	SB-1-W1	12/27/94	50	230	53%
BD2311F9	METHOD BLANK	12/24/94	50	ND	83%

Note : Reporting limit is obtained by multiplying the dilution factor times 50 ug/L.
The surrogate recovery limits for o-terphenyl are 67-103%.

ND - Not detected at or above the practical quantitation limit for the method.
TPHd - Total Petroleum Hydrocarbons as C10-C28 is determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst 1/3/95 Date

Supervisor 1/3/95 Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL
ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9412225
Matrix : SOIL
Date Sampled : 12/21/94
Date Extracted: 12/23/94

Project Number : 94-56
Date Released : 12/29/94
Instrument I.D.: HP23

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)	Surrogate %Rec
9412225-01	SB-1-S1	12/29/94	10	ND	90%
BD23H1F1	METHOD BLANK	12/27/94	10	ND	89%

Note : Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.
The surrogate recovery limits for o-terphenyl are 64-109%.

ND - Not detected at or above the practical quantitation limit for the method.
TPHd - Total Petroleum Hydrocarbons as C10-C28 is determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst 1/8/95 Date

Supervisor 1/3/95 Date

TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT
EPA METHOD 3510 WITH GC/FID
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : WATER
Date Sampled : N/A
Date Extracted: 12/23/94
Date Analyzed : 12/24/94

Anametrix I.D. : MD2311F9
Analyst : [illegible]
Supervisor : [illegible]
Date Released : 12/29/94
Instrument I.D.: HP19

COMPOUND	SPIKE AMT (ug/L)	LCS REC (ug/L)	% REC LCS	LCSD REC (ug/L)	% REC LCSD	RPD	% REC LIMITS
DIESEL	1250	1180	94%	1150	92%	-3%	38-96
SURROGATE			86%		84%		67-103

* Quality control limits established by Anametrix, Inc.

TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT
EPA METHOD 3550 WITH GC/FID
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date Sampled : N/A
Date Extracted: 12/23/94
Date Analyzed : 12/27/94

Anametrix I.D. : MD23H1F1
Analyst : FO
Supervisor : cs
Date Released : 12/29/94
Instrument I.D.: HP23

COMPOUND	SPIKE AMT (mg/Kg)	REC LCS (mg/Kg)	% REC LCS	% REC LIMITS *
DIESEL	62.5	63.2	101%	48-113
SURROGATE			85%	64-109

* Quality control limits established by Anametrix, Inc.

ANAMETRIX REPORT DESCRIPTION
INORGANICS

Analytical Data Report (ADR)

The ADR contains tabulated results for inorganic analytes. All field samples, QC samples and blanks were prepared and analyzed according to procedures in the following references:

- "Test Methods for Evaluating Solid Waste," SW-846, EPA, 3rd Edition, November 1986.
- "Methods for Chemical Analysis of Water and Wastes," EPA, 3rd Edition, 1983.
- CCR Title 22, Section 66261, Appendix II, California Waste Extraction Test.
- CCR Title 22, Section 66261, Appendix XI, Organic Lead.
- "Standard Methods for the Examination of Water and Wastewater," APHA, AWWA, WEF, 18th Edition, 1992.
- USEPA Contract Laboratory Program Statement of Work for Inorganic Analyses, ILM02.1, 1991.

Matrix Spike Report (MSR)

The MSR summarizes percent recovery and relative percent difference information for matrix spikes and matrix spike duplicates. This information is a statement of both accuracy and precision. MSRs may not be provided with all analytical reports. Anametrix control limit for MSR is 75-125% with 25% for RPD limits, except for Method 6010A, which is 80-120% with 25% RPD limits.

Laboratory Control Sample Report (LCSR)

The LCSR summarizes percent recovery information for laboratory control spikes on reagent water or soil. This information is a statement of performance for the method, i.e., the samples are properly prepared and analyzed according to the applicable methods. Anametrix control limit for LCSR is 80-120%.

Method Blank Report (MBR)

The MBR summarizes quality control information for reagents used in preparing samples. The absolute value of each analyte measured in the method blank should be below the method reporting limit for that analyte.

Post Digestion Spike Report (PDSR)

The PDSR summarizes percent recovery information for post digestion spikes. A post digestion spike is performed for a particular analyte if the matrix spike recovery is outside of established control limits. Any percent recovery for a post digestion spike outside of established limits for an analyte indicates probable matrix effects and interferences for that analyte. Anametrix control limit for PDSR is 75-125%.

Qualifiers (Q)

Anametrix uses several data qualifiers in inorganic reports. These qualifiers give additional information on the analytes reported. The following is a list of qualifiers and their meanings:

- I - Sample was analyzed at the stated dilution due to spectral interferences.
- U - Analyte concentration was below the method reporting limit. For matrix and post digestion spike reports, a value of "0.0" is entered for calculation of the percent recovery.
- B - Sample concentration was below the reporting limit but above the instrument detection limit. Result is entered for calculation of the percent recovery only.
- H - Spike percent recovery was outside of Anametrix control limits due to interferences from relatively high concentration level of the analyte in the unspiked sample.
- L - Reporting limit was increased to compensate for background absorbances or matrix interferences.

Comment Codes

In addition to qualifiers, the following codes are used in the comment section of all reports to give additional information about sample preparation methods:

- A - Sample was prepared for silver based on the silver digestion method developed by the Southern California Laboratory, Department of Health Services, "Acid Digestion for Sediments, Sludges, Soils and Solid Wastes. A Proposed Alternative to EPA SW846, Method 3050 " Environmental Science and Technology, 1989, 23, 898-900.
- T - Spikes were prepared after extraction by the Toxicity Characteristic Leaching Procedure (TCLP).
- C - Spikes were prepared after extraction by the California Waste Extraction Test (CWET) method.
- D - Reported results are dissolved, not total, metals.

Reporting Conventions

Analytical values reported are gross values, i.e., not corrected for method blank contamination. Solid matrices are reported on a wet weight basis, unless specifically requested otherwise.

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. TOM PRICE
CHEMIST ENTERPRISES
333-B CAMINO VERDE
BOULDER CREEK, CA 95006

Workorder # : 9412225
Date Received : 12/21/94
Project ID : 94-56
Purchase Order: N/A
Department : METALS
Sub-Department: METALS

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9412225- 2	SB-1-W1	WATER	12/21/94	160.1
9412225- 1	SB-1-S1	SOIL	12/21/94	6010
9412225- 2	SB-1-W1	WATER	12/21/94	6010

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. TOM PRICE
CHEMIST ENTERPRISES
333-B CAMINO VERDE
BOULDER CREEK, CA 95006

Workorder # : 9412225
Date Received : 12/21/94
Project ID : 94-56
Purchase Order: N/A
Department : METALS
Sub-Department: METALS

QA/QC SUMMARY :

- All holding times have been met for the analyses reported in this section.

Department Supervisor 12/30/94 Date

Chemist 12/30/94 Date

INCHCAPE TESTING SERVICES
ANAMETRIX LABORATORIES
(408) 432-8192
DATA REPORT

Analyte-Method: **Lead-6010A**
Client Project Number: **94-56**
Matrix - Units: **SOIL - mg/Kg**

Analyst: NV
Supervisor: MW

Anametrix Sample ID	Client Sample ID	Prep. Method	Instr. ID	Date Sampled	Date Prepared	Date Analyzed	D.F.	Reporting Limit	Results	Q
9412225-01	SB-1-S1	3050A	ICP1	12/21/94	12/27/94	12/27/94	1	4.0	**7.2**	
BD274SA	METHOD BLANK	3050A	ICP1	N/A	12/27/94	12/27/94	1	4.0	**ND**	

COMMENTS:

INCHCAPE TESTING SERVICES
ANAMETRIX LABORATORIES
(408) 432-8192
DATA REPORT

Analyte-Method: **Lead-6010A**
Client Project Number: **94-56**
Matrix - Units: **WATER - ug/L**

Analyst: L·P
Supervisor: MN

Anametrix Sample ID	Client Sample ID	Prep. Method	Instr. ID	Date Sampled	Date Prepared	Date Analyzed	D.F.	Reporting Limit	Results	Q
9412225-02	SB-1-W1	3010A	ICP2	12/21/94	12/23/94	12/23/94	1	3.0	72.4	
BD234WC	METHOD BLANK	3010A	ICP2	N/A	12/23/94	12/23/94	1	3.0	ND	

COMMENTS:

INCHCAPE TESTING SERVICES
ANAMETRIX LABORATORIES
(408) 432-8192
DATA REPORT

Analyte-Method: **Total Dissolved Solids-160.1**
Client Project Number: **94-56**
Matrix - Units: **WATER - mg/L**

Analyst: NP
Supervisor: MW

Anametrix Sample ID	Client Sample ID	Prep. Method	Instr. ID	Date Sampled	Date Prepared	Date Analyzed	D.F.	Reporting Limit	Results	Q
9412225-02	SB-1-W1	160.1	N/A	12/21/94	12/22/94	12/23/94	1	10.0	1400	
BD224WA	METHOD BLANK	160.1	N/A	N/A	12/22/94	12/23/94	1	10.0	ND	

COMMENTS:

INCHCAPE TESTING SERVICES
ANAMETRIX LABORATORIES
(408) 432-8192

SAMPLE DUPLICATE REPORT

Anametrix Sample ID: **9412225-02D**
Client Sample ID: **SB-1-W1**
Client Project Number: **94-56**
Matrix: **WATER**

Analyst: PS
Supervisor: MW

Analyte	Prep. Method	Analyt. Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Sample Conc.	Sample Duplicate Conc.	RPD	Q
Total Dissolved Solids	160.1	160.1	N/A	12/22/94	12/23/94	1	mg/L	1400	1400	0.0	

COMMENTS:

INCHCAPE TESTING SERVICES
ANAMETRIX LABORATORIES
(408) 432-8192
MATRIX SPIKE REPORT

Anametrix. Sample ID: **9412225-02MS,MD**
Client Sample ID: **SB-1-W1**
Client Proj. Number: **94-56**
Matrix: **WATER**

Analyst: NP
Supervisor: MN

Analyte	Analyt. Method	Instr. I.D.	Date Prepared	Date Analyzed	Units	Spike Amount	Sample Conc.	Matrix Spike Conc.	% Rec.	Matrix Sp. Dup. Conc.	% Rec.	RPD	Q
Total Dissolved Solids	160.1	N/A	12/22/94	12/23/94	mg/L	1500	1400	2910	**101**	2890	**99.3**	**0.7**	

COMMENTS:

INCHCAPE TESTING SERVICES
ANAMETRIX LABORATORIES
(408) 432-8192

LABORATORY CONTROL SAMPLE REPORT

Lab. Control Sample ID: **LD274SA**
Anametrix WO #: **9412225**
Client Project Number: **94-56**
Matrix: **SOIL**

Analyst: VP
Supervisor: MN

Analyte	Prep. Method	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Spike Amount	LCS Results	% Recovery	Q
Lead	3050A	6010A	ICP1	12/27/94	12/27/94	1	mg/Kg	50.0	43.4	86.8	

COMMENTS:

INCHCAPE TESTING SERVICES
ANAMETRIX LABORATORIES
(408) 432-8192

LABORATORY CONTROL SAMPLE REPORT

Lab. Control Sample ID: **LD234WA, LD224WA**
Anametrix WO #: **9412225**
Client Project Number: **94-56**
Matrix: **WATER**

Analyst: NP
Supervisor: MN

Analyte	Prep. Method	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Spike Amount	LCS Results	% Recovery	Q
Lead	3010A	6010A	ICP2	12/23/94	12/23/94	1	ug/L	500	516	103	
Total Dissolved Solids	160.1	160.1	N/A	12/22/94	12/23/94	1	mg/L	1500	1470	98.0	

COMMENTS:

Inchcape Testing Services
Anametrix Laboratories

SAMPLE RECEIVING CHECKLIST

WORKORDER NUMBER: 9412225 CLIENT PROJECT ID: 94-56

COOLER

Shipping slip (airbill, etc.) present?	YES	NO	(N/A)
If YES, enter carrier name and airbill # : ____			
Custody Seal on the outside of cooler?	YES	NO	(N/A)
Condition: INTACT ____ BROKEN ____			
Temperature of sample (s) within range?	YES	(NO)	N/A
List temperature of cooler (s): 7°C			

SAMPLES

Chain of custody seal present for each container?	YES	NO	(N/A)
Condition: INTACT ____ BROKEN ____			
Samples arrived within holding time?	(YES)	NO	N/A
Samples in proper containers for methods requested?	(YES)	NO	
Condition of containers: INTACT ____ BROKEN ____			
If NO, were samples transferred to proper container? ____			
Were VOA containers received with zero headspace?	(YES)	NO	N/A
If NO, was it noted on the chain of custody? ____			
Were container labels complete? (ID, date, time preservative, etc.)	(YES)	NO	
Were samples preserved with the proper preservative?	(YES)	NO	N/A
If NO, was the proper preservative added at time of receipt? ____			
pH check of samples required at time of receipt?	(YES)	NO	
If YES, pH checked and recorded by: JP			
Sufficient amount of sample received for methods requested?	(YES)	NO	
If NO, has the client or lab project manager been notified? ____			
Field blanks received with sample batch? # of Sets: ____	YES	NO	(N/A)
Trip blanks received with sample batch? # of Sets: 1	(YES)	NO	N/A

CHAIN OF CUSTODY

Chain of custody received with samples?	(YES)	NO
Has it been filled out completely and in ink?	(YES)	NO
Sample ID's on chain of custody agree with container labels?	(YES)	NO
Number of containers indicated on chain of custody agree with number received?	(YES)	NO
Analysis methods clearly specified?	(YES)	NO
Sampling date and time indicated?	(YES)	NO
Proper signatures of sampler, courier, sample custodian in appropriate place? with time and date?	(YES)	NO
Turnaround time? REGULAR ✓ RUSH ____		

Any NO response and/or any "BROKEN" that was checked must be detailed in the Corrective Action Form.

Sample Custodian: JP Date: 12-21-94 Project Manager: W Date: 12/22/94

4817

Inchcape Testing Services
Anametrix Laboratories

1961 Concourse Drive, Suite E
San Jose, CA 95131
(408) 432-8192 • Fax (408) 432-8198

9412225

(27) (18) (6) (8) (10) (1)

CHAIN-OF-CUSTODY RECORD

PROJECT NUMBER	PROJECT NAME
94-56	Gallo Salame

Send Report Attention of:	Report Due	Verbal Due
Tom Price	/ /	/ /

	Sample Number	Date	Time	Comp	Matrix	Station Location	Number of Cntnrs	Type of Containers	Type of Analysis: TPH g/BTEX	TPH d	TPH mo	TDS	Condition of Samples	Initial
1	SB-1-S1	12/21/94	0930		S		1	Brass Sleeve	✓	✓	✓			
2	SB-1-W1	12/21/94	0940		W		6	40 ml VOA	✓	DUPLICATE SAMPLES				
	SB-1-W1	12/21/94	0940		W		3	1 liter Amber		✓				
	SB-1-W1	12/21/94	0940		W		1	500 ml Poly No Pres.				✓		
	SB-1-W1	12/21/94	0940		W		1	500 ml Poly Acid			✓			
3	TRIP BLANK	12/21/94	0940		W		3	40 ml VOAs	✓					

Sampled by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Tom Price	12/21/94 0940		
Relinquished by: (Signature)	**Date/Time**	**Received by: (Signature)**	**Date/Time**
Relinquished by: (Signature)	**Date/Time**	**Received by Lab:**	**Date/Time**
		[signature]	12/21/94 0940

Remarks: Cooler temp: 7°C

COMPANY: Chemist Enterprises
ADDRESS: 333-B Camino Verde Boulder Creek CA 95006
PHONE: (408) 335-3198 FAX: Same

Inchcape Testing Services
Anametrix Laboratories

1961 Concourse Drive
Suite E
San Jose, CA 95131
Tel: 408-432-8192
Fax: 408-432-8198

MR. TOM PRICE
CHEMIST ENTERPRISES
333-B CAMINO VERDE
BOULDER CREEK, CA 95006

Workorder # : 9412242
Date Received : 12/22/94
Project ID : GALLO SALAME
Purchase Order: N/A

The following samples were received at Anametrix for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9412242- 1	SB3-W1
9412242- 2	SB7-W1
9412242- 3	SB8-W1
9412242- 4	SB19-W1

This report is organized in sections according to the specific Anametrix laboratory group which performed the analysis(es) and generated the data.

The results contained within this report relate to only the sample(s) tested. Additionally, these data should be considered in their entirety and Anametrix cannot be responsible for the detachment, separation, or otherwise partial use of this report.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234.

If you have any further questions or comments on this report, please call your project manager as soon as possible. Thank you for using Inchcape Testing Services.

Todd Seringer for
Susan Kraska Yeager
Laboratory Director

1-9-95
Date

Cristina V. Kayoun
Project Manager

This report consists of 10 pages.

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. TOM PRICE
CHEMIST ENTERPRISES
333-B CAMINO VERDE
BOULDER CREEK, CA 95006

Workorder # : 9412242
Date Received : 12/22/94
Project ID : GALLO SALAME
Purchase Order: N/A
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9412242- 1	SB3-W1	WATER	12/22/94	TPHd
9412242- 2	SB7-W1	WATER	12/22/94	TPHd
9412242- 3	SB8-W1	WATER	12/22/94	TPHd
9412242- 1	SB3-W1	WATER	12/22/94	TPHgBTEX
9412242- 2	SB7-W1	WATER	12/22/94	TPHgBTEX
9412242- 3	SB8-W1	WATER	12/22/94	TPHgBTEX
9412242- 4	SB19-W1	WATER	12/22/94	TPHgBTEX

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. TOM PRICE
CHEMIST ENTERPRISES
333-B CAMINO VERDE
BOULDER CREEK, CA 95006

Workorder # : 9412242
Date Received : 12/22/94
Project ID : GALLO SALAME
Purchase Order: N/A
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- All holding times have been met for the analyses reported in this section.
- The concentrations reported as diesel for samples SB3-W1, SB7-W1, and SB8-W1 are primarily due to the presence of a heavier petroleum product of hydrocarbon range C18-C36, possibly motor oil.

Cheryl Balman 1/4/95
Department Supervisor Date

Irina Shor 1/5/95
Chemist Date

Organic Analysis Data Sheet
Total Petroleum Hydrocarbons as Gasoline with BTEX
ITS - Anametrix Laboratories - (408)432-8192

Lab Workorder : 9412242 | Client Project ID : GALLO SALAME

Matrix : WATER | Units : ug/L

Compound Name	Method Reporting Limit*	Client ID SB3-W1 Lab ID 9412242-01	Client ID SB7-W1 Lab ID 9412242-02	Client ID SB8-W1 Lab ID 9412242-03	Client ID SB19-W1 Lab ID 9412242-04	Client ID Lab ID METHOD BLANK
Benzene	0.50	ND	ND	ND	ND	ND
Toluene	0.50	ND	8.5	ND	4.8	ND
Ethylbenzene	0.50	ND	ND	ND	ND	ND
Total Xylenes	0.50	ND	1.8	ND	1.3	ND
TPH as Gasoline	50	ND	ND	ND	ND	ND
Surrogate Recovery		130%	122%	123%	126%	124%
Instrument ID		HP21	HP21	HP21	HP21	HP21
Date Sampled		12/22/94	12/22/94	12/22/94	12/22/94	N/A
Date Analyzed		12/30/94	12/30/94	12/30/94	12/30/94	12/30/94
RLMF		1	1	1	1	1
Filename Reference		FPD24201.D	FPD24202.D	FPD24203.D	FPD24204.D	BD3001E1.D

* The Method Reporting Limit must be multiplied by the Reporting Limit Multiplication Factor (RLMF) to achieve the compound's reporting limit in the analysis.

ND : Not detected at or above the reporting limit for the analysis as performed.
TPHg : Determined by GC/FID following sample purge & trap by EPA Method 5030.
BTEX : Determined by modified EPA Method 8020 following sample purge & trap by EPA Method 5030.

Lab Control Limits for surrogate compound p-Bromofluorobenzene are 61-139%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Irma Shor 1/5/95
Analyst Date

Cheryl Balmer 1/4/95
Supervisor Date

Issued on 1/4/95 @ 10:46 am

Matrix Spike Report
Total Petroleum Hydrocarbons as Gasoline
ITS - Anametrix Laboratories - (408)432-8192

Project ID : GALLO SALAME
Sample ID : SB19-W1
Matrix : WATER
Date Sampled : 12/22/94

Laboratory ID : 9412242-04
Analyst : IS
Supervisor : OY
Instrument ID : HP21
Units : ug/L

COMPOUND NAME	SPIKE AMOUNT	SAMPLE RESULTS	MS RECOVERY	MSD RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS
Gasoline	500	ND	96%	100%	50-139	-4%	30
Surrogate Recovery		126%	115%	123%			
Date Analyzed		12/30/94	12/30/94	12/30/94			
Multiplier		1	1	1			
Filename Reference		FPD24204.D	FMD24204.D	FDD24204.D			

* Limits established by Inchcape Testing Services, Anametrix Laboratories.

Laboratory Control Spike Report
Total Petroleum Hydrocarbons as Gasoline
ITS - Anametrix Laboratories - (408)432-8192

Instrument ID : HP21
Matrix : LIQUID

Analyst : IS
Supervisor : CF
Units : ug/L

COMPOUND NAME	SPIKE AMOUNT	LCS RECOVERY	RECOVERY LIMITS
Gasoline	500	96%	56-141
Surrogate Recovery		123%	61-139
Date Analyzed		12/30/94	
Multiplier		1	
Filename Reference		MD3001E1.D	

* Limits established by Inchcape Testing Services, Anametrix Laboratories.

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL
ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9412242
Matrix : WATER
Date Sampled : 12/22/94
Date Extracted: 12/28/94

Project Number : GALLO SALAME
Date Released : 01/03/95
Instrument I.D.: HP23

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (ug/L)	Amount Found (ug/L)	Surrogate %Rec
9412242-01	SB3-W1	12/29/94	50	190	86%
9412242-02	SB7-W1	12/29/94	50	190	92%
9412242-03	SB8-W1	12/29/94	50	200	89%
BD2811F1	METHOD BLANK	12/29/94	50	ND	94%

Note : Reporting limit is obtained by multiplying the dilution factor times 50 ug/L.
The surrogate recovery limits for o-terphenyl are 67-103%.

ND - Not detected at or above the practical quantitation limit for the method.
TPHd - Total Petroleum Hydrocarbons as C10-C28 is determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

C.R.Patel 01106195
Analyst Date

Cheryl Brenner 1/6/95
Supervisor Date

TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT
EPA METHOD 3510 WITH GC/FID
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : WATER
Date Sampled : N/A
Date Extracted: 12/28/94
Date Analyzed : 12/29/94

Anametrix I.D. : MD2811F1
Analyst :
Supervisor :
Date Released : 01/03/95
Instrument I.D.: HP23

COMPOUND	SPIKE AMT (ug/L)	LCS REC (ug/L)	% REC LCS	LCSD REC (ug/L)	% REC LCSD	RPD	% REC LIMITS
DIESEL	1250	850	68%	880	70%	3%	38-96
SURROGATE			78%		76%		67-103

* Quality control limits established by Anametrix, Inc.

Inchcape Testing Services
Anametrix Laboratories

SAMPLE RECEIVING CHECKLIST

WORKORDER NUMBER: 9412242 CLIENT PROJECT ID: GALLOSALAME

COOLER

Shipping slip (airbill, etc.) present?	YES	NO	(N/A)
If YES, enter carrier name and airbill # : _____			
Custody Seal on the outside of cooler?	YES	NO	(N/A)
Condition: INTACT ____ BROKEN ____			
Temperature of sample (s) within range?	YES	(NO)	N/A
List temperature of cooler (s): 10°C			

SAMPLES

Chain of custody seal present for each container?	YES	NO	(N/A)
Condition: INTACT ____ BROKEN ____			
Samples arrived within holding time?	(YES)	NO	N/A
Samples in proper containers for methods requested?	(YES)	NO	
Condition of containers: INTACT ✓ BROKEN ____			
If NO, were samples transferred to proper container? ____			
Were VOA containers received with zero headspace?	(YES)	NO	N/A
If NO, was it noted on the chain of custody? ____			
Were container labels complete? (ID, date, time preservative, etc.)	(YES)	NO	
Were samples preserved with the proper preservative?	(YES)	NO	N/A
If NO, was the proper preservative added at time of receipt? ____			
pH check of samples required at time of receipt?	YES	(NO)	
If YES, pH checked and recorded by: ____			
Sufficient amount of sample received for methods requested?	(YES)	NO	
If NO, has the client or lab project manager been notified? ____			
Field blanks received with sample batch? # of Sets: ____	YES	NO	(N/A)
Trip blanks received with sample batch? # of Sets: ____	YES	NO	(N/A)

CHAIN OF CUSTODY

Chain of custody received with samples?	(YES)	NO
Has it been filled out completely and in ink?	(YES)	NO
Sample ID's on chain of custody agree with container labels?	(YES)	NO
Number of containers indicated on chain of custody agree with number received?	(YES)	NO
Analysis methods clearly specified?	(YES)	NO
Sampling date and time indicated?	(YES)	NO
Proper signatures of sampler, courier, sample custodian in appropriate place? with time and date?	(YES)	NO
Turnaround time? REGULAR ✓ RUSH ____		

Any NO response and/or any "BROKEN" that was checked must be detailed in the Corrective Action Form.

Date: 12-23-94 Project Manager: dlw Date: 12/23/94

#4840

Inchcape Testing Services
Anametrix Laboratories

1961 Concourse Drive, Suite E
San Jose, CA 95131
(408) 432-8192 • Fax (408) 432-8198

9412242 (18) (10/2) 9:30 Cn

CHAIN-OF-CUSTODY RECORD

PROJECT NUMBER:
PROJECT NAME: Gallo Salame

Send Report Attention of: Tom Price
Report Due: / /
Verbal Due: / /

	Sample Number	Date	Time	Comp	Matrix	Station Location	Number of Cntnrs	Type of Containers	TPHg/BTEX	TPHd	Condition of Samples	Initial
1	SB3-W1	12/22/94	1150		W		5	Ambers VOAS	✓	✓	OK	Cn
2	SB7-W1	12/22/94	1415		W		5	Ambers VOAS	✓	✓	↓	↓
3	SB8-W1	12/22/94	1552		W		6	Ambers VOAS	✓	✓	↓	↓
4	SB19-W1	12/22/94	1430		W		3	VOAS	✓	✓	↓	↓

Sampled by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Tom Price	12/22/94 1838		
Relinquished by: (Signature)	**Date/Time**	**Received by: (Signature)**	**Date/Time**
Relinquished by: (Signature)	**Date/Time**	**Received by Lab:**	**Date/Time**
		[signature]	12/22/94 1838

Remarks:

COMPANY: Chemist Enterprises
ADDRESS: 333-B Camino Verde, Boulder Crk, CA 95006
PHONE: (408) 338-0195
FAX: SAME

APPENDIX C: REFERENCES

California Regional Water Quality Control Board, Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites, 1990.

Helley, E.J., Lajoie, K.R., and Burke, D.B., 1972, Geologic map of late Cenozoic deposits, Alameda County, California: U.S. Geological Survey, miscellaneous field studies map, MF-429, 1 sheet, scale: 1:62,500.

Nilsen, T.H., 1973, Preliminary small photointerpretation map of landslide and other surficial deposits of the Livermore and part of the Hayward 15 minute quadrangles, Alameda and Contra Costa Countys, California: U.S. Geological Survey, miscellaneous field studies map MF-519, 1 sheet, 1 plate, scale: 1:62,500.

Webster, D.A., 1973, Map showing areas bordering the southern part of San Francisco Bay, where a high water table may adversely affect land use: U.S. Geological Survey, miscellaneous field studies map, MF-530, 1 sheet, scale: 1:62,500.

APPENDIX D: STATEMENT OF QUALIFICATIONS OF PROJECT PERSONNEL

Robert E. Baker - Project Engineering Geologist

Experience Summary:

Mr. Baker has 20 years experience as a professional geologist working on a variety of projects including environmental, landslide and slope investigations, fault investigations, geophysical investigations and construction inspections.

Education:

B.S., Geology, San Jose State University

Registration:

State of California: Registered Geologist, RG 5087; Certified Engineering Geologist, CEG 1575, State of Oregon: Registered Engineering Geologist, E1419.

Certification:

40 hours Safety Training and 8 hours Supervisory Training per OSHA Hazardous Waste Operations and Emergency Response.

Environmental Project Experience:

Project Engineering Geologist: Managed and conducted a groundwater quality investigation at an underground storage tank removal site for the Santa Cruz County Corporation Yard in Felton. The project involved siting, installation, development and sampling of groundwater monitoring wells to investigate possible groundwater contamination.

Project Engineering Geologist: Installed, developed and sampled a groundwater monitoring well at an underground storage tank removal site for Mattos Auto, San Jose.

Project Engineering Geologist: Conducted quarterly groundwater sampling from monitoring wells and an extraction holding tank for Pilot Petroleum Plant in Redwood City.

Project Engineering Geologist: Conducted a quarterly groundwater monitoring program for Clark's Building Materials in San Leandro.

Project Engineering Geologist: Conducted a soil sampling program with a hollow-stem drill rig and grouted the holes per Alameda County Water District Requirements at IBG Central and Atlantic in Hayward.

Project Engineering Geologist: Conducted a soil sampling program with a hollow-stem drill rig at a level B hazardous wasted site at the Palo Alto Landfill in Palo Alto.

Project Engineering Geologist: Conducted a liquefaction study including the installation and monitoring of several groundwater monitoring wells at Las Palmas Ranch in Salinas.

Project Engineering Geologist: Performed soil and groundwater sampling. Logged soil borings and collected samples with hollow-stem auger rigs at the Fort Ord Base Closure Project in Marina.

Project Engineering Geologist: Logged soil borings and collected soil samples and groundwater samples with percussion hammer, air return and hollow-stem auger rigs at Hunter's Point Naval Shipyard Closure Project at Hunter's Point.

Tom Price, Project Manager

Experience Summary:

Mr. Price has 5 years experience working as an environmental scientist and manager on a variety of environmental projects including soil and water investigations, soil and water remediation, and air pollution studies.

Education:

B.S., Chemistry, University of Arizona, 1988.

Certification:

40 hours Safety Training and 8 hour refresher courses per OSHA Hazardous Waste Operations and Emergency Response.

Visible Emissions Readings, California Air Resources Board

Environmental Project Experience:

Project Manager: Managed a soils excavation project for a leaking underground storage tank (UST) site at Swim Pool Supply Company in San Jose. Activities included field work, writing investigative and corrective action work plans and reports.

Project Manager: Managed the installation of a groundwater monitoring well, development, and sampling of groundwater at a UST site, A. Dariano & Son, Inc. in San Jose. Activities included field work and writing a work plan and report.

Project Manager: Managed a groundwater monitoring program at an UST site, Advance Interiors in Fremont. Activities included field work, writing a work plan and report.

Project Manager: Managed a soil and water investigation at a UST site, Honda Suzuki of San Mateo. Activities included writing a work plan, report, and conducting hand augering, soil sampling, and groundwater sampling.

Field Chemist: On-site analyses of soil gases at approximately 10 leaking UST sites involving chlorinated solvents and fuels around Silicon Valley, California. Analyses were performed using gas chromatographs equipped with flame ionization, photo ionization, and electron capture detectors.

Field Chemist: On-site analyses of soil gases at approximately 20 leaking UST sites including Beacon Oil Stations throughout northern California. Analyses were performed with a simple flame ionization detector.

Sampling Technician: Collection of soil and water samples for UST leak sites. Activities include directing the collection of soil and water samples using percussion sampling and augering. Experience includes water sampling using micro-bailers for plume definition mapping.

Air Quality Technician: Air Quality Compliance testing for UST remediation sites. Ativities include air flow rate measurements, collection of samples, analyses, calculation of emission rates and reporting to the Bay Area Air Quality Management District.

Air Quality Technician: Stack sampling technician at major industrial plants from San Diego to Portland, Oregon. Activities include flow rate measurements, sampling train management, wet chemistry analyses, and report writing.