

SCS ENGINEERS

January 9, 1988
File No. 388038.00

Mr. Verl Rothlisberger
Verl's Construction
20914 Redwood Road
Castro Valley, CA 94565

Subject: Underground Tank Removal - Soil Sampling
Verl's Construction - Rudy's Donut Shoppe
Castro Valley, California

Dear Mr. Rothlisberger:

This letter report contains the results of services performed at Rudy's Donut Shoppe in Castro Valley, California which consisted of the following:

1. Sample collection from under two (2) 10,000 gallon underground storage tanks after removal.
 2. Sample submittal and analysis by a state certified analytical laboratory.
- I. Scope of Work - Phase I

Two 10,000 gallon gasoline storage tanks were present at the above mentioned site. Verl's Construction, under direct contract with Rudy's Donut Shoppe, removed the tanks on November 28, 1988 (See Plate 1). The tanks were transported from site by H&H Shipyards for disposal. Both gas tanks had no visible holes.

The contamination appeared to originate from tank piping. All excavated material was covered with 6 mil poly-cover plastic pending analysis and disposal.

Six samples were collected from the tank pit excavation at locations noted on Plate 1.

All soil samples, when collected, were retained in brass sleeves, examined, sealed with teflon tape, capped with plastic end caps, tightly wrapped with tape, labeled, and kept in cold storage for transport to the chemical laboratory.

Mr. Verl Rothlisberger
December 16, 1988
Page Two

II. Chemical Analyses - Phase I

Anametrix Laboratory Services of San Jose, California tested 6 (six) soil samples for:

- o Total hydrocarbons as gasoline (EPA 8015 with BTEX)

Samples removed from native soil below fill material in the tank pit indicated the presence of contamination below action limits. However, the sample retrieved from the northern wall contained contamination at an excessive level (7,300 parts per million, ppm).

Table 1 contains a summary of laboratory results.

III. Phase II

Since Phase I revealed contamination present in the fuel tank pit, a second phase of sampling was completed to determine the extent of the contamination. Additionally, the excavated soil piles were sampled to determine their contamination levels and therefore the proper disposal methods.

Five samples were collected from the tank pit at locations noted on Plate 1. A trench was cut into the north wall of the excavation (where S-3 in Phase I was collected, 7,300 ppm). Two samples were retrieved from the south wall, and one composite sample was collected from all excavated soil piles.

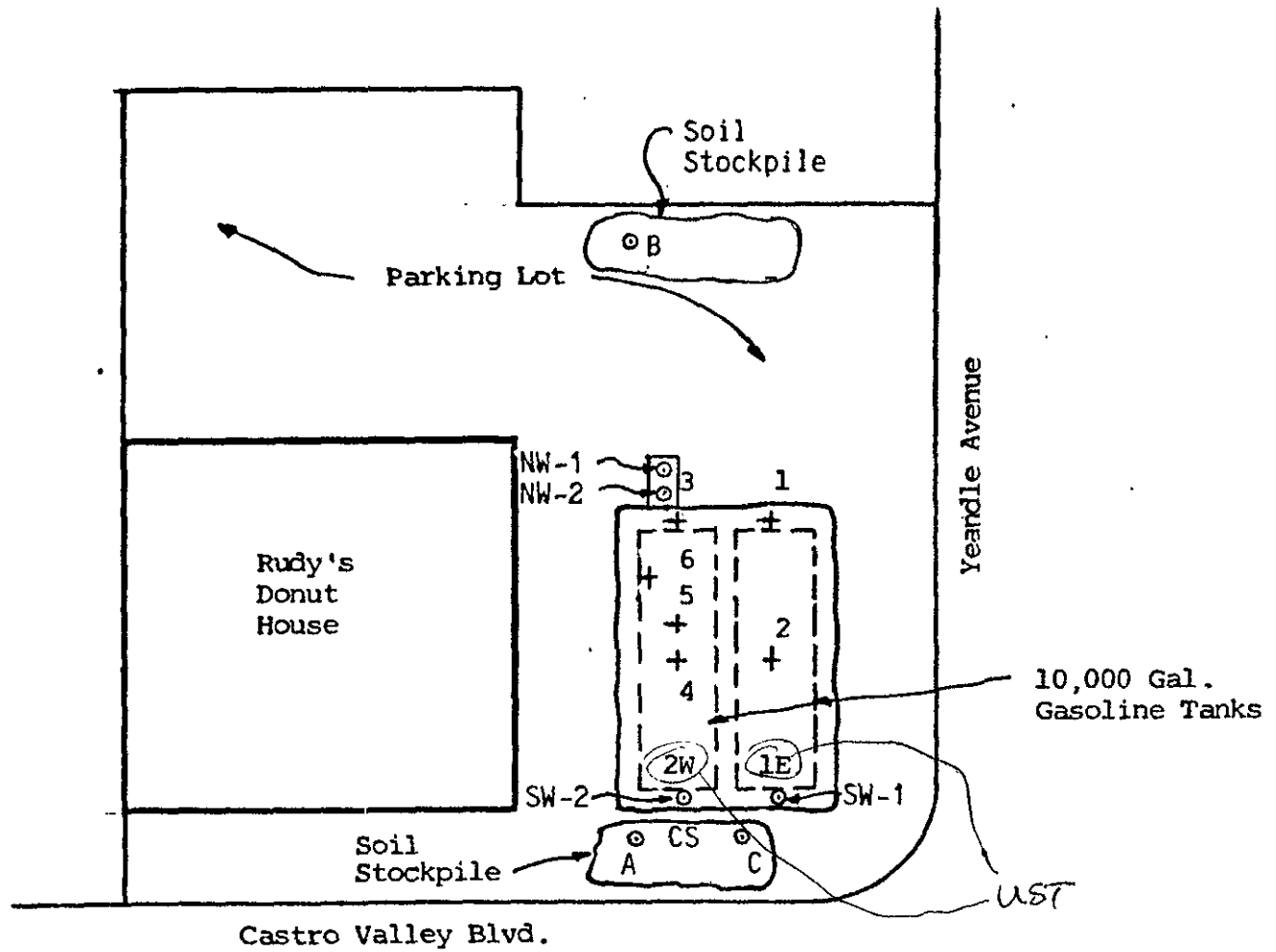
IV. Chemical Analyses - Phase II

Once again, Anametrix Laboratory Services tested 5 (five) soil samples for:

- o Total hydrocarbons as gasoline (EPA 8015)

All samples collected in Phase II indicated contamination was not present.

Table 1 contains a summary of laboratory results.



⊙ - Secondary Sample Location
 + - Sample Location

Not to Scale



SCS ENGINEERS

STEVENSON, CONRAD AND BOHMERT
 CONSULTING ENGINEERS INC.

8781-D BAY PARK COURT
 DUBLIN, CA 94568

RUDY'S DONUT SHOPPE
 CASTRO VALLEY, CALIFORNIA

SITE PLAN

Project No: 388038.00

Date: 1-11-89

Page
1

Mr. Verl Rothlisberger
January 9, 1989
Page Three

V. Conclusion and Recommendations

Sample analyses results indicate that the site contains no significant contamination. The one sample, S-3 in Phase I, which contained a high level of contamination was anomalous and is considered a result of an extremely localized fuel spillage, possibly during tank removal.

The excavation may be backfilled with the excavated soil as well as other material which will be brought on site.

This report has been specifically prepared for Rudy's Donut Shoppe with specific application to hazardous waste site investigations. The report has been prepared in accordance with the care and the skill generally exercised with reputable professionals, under similar circumstances, in this or similar localities. No other warranty, either expressed or implied, is made as to the professional advice presented herein.

Within 30 days either Verl's Construction or Rudy's Donut Shoppe should forward a copy of this report to:

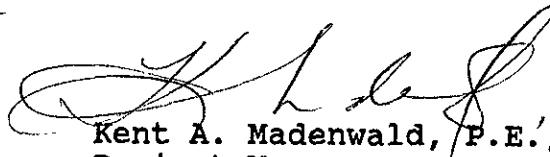
Lawrence Seto, Hazardous Materials Specialist
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94621

If you have any question, please contact either of the undersigned at (415) 829-0661.

Sincerely,



Matthew J. Hopwood
Staff Geologist
SCS Engineers



Kent A. Madenwald, P.E., R.E.A.
Project Manager
SCS Engineers

MJH/KAM/egh

TABLE 1

Summary of Results - Soil Sampling (ppm)

Phase I

<u>Sample ID</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylene</u>	<u>Gasoline</u>
S-1	ND	ND	ND	0.2	1.0
S-2	ND	0.1	ND	0.4	13.0
S-3	1.1	79.0	240.0	960.0	7,300.0
S-4	ND	ND	ND	ND	ND
S-5	ND	ND	ND	0.2	2.3
S-6	0.1	1.2	0.6	5.9	32.0

Phase II

NW 1	NA	NA	NA	NA	ND
NW 2	NA	NA	NA	NA	ND
SW 3	NA	NA	NA	NA	ND
SW 4	NA	NA	NA	NA	ND
CS 5 (composite)	NA	NA	NA	NA	ND

ppm = parts per million
 ND = none detected (<10 ppm)
 NA = not analyzed

APPENDIX I
LABORATORY REPORT

CHAIN-OF-CUSTODY RECORD

000225

Page 1 of 1

AMPLER (Signature) Michael J. Griffin Date Shipped _____ Carrier _____
 Phone (415) 829-117587 Airbill No. _____ Cooler No. _____

SHIP TO: Anametrix Laboratories SEND RESULTS TO:
San Jose, CA Client Name SCS Engineers
(408) 432-8192 Company MICHAEL J. GRIFFIN
 Address 6761 - 0 SIERRA CT
DUBLIN, CA. 94568
 Phone (415) 829-0661

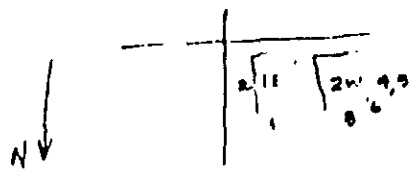
ATTENTION: _____
 PROJECT NAME VERL CONSTR - Rudy's Donut Shop PROJECT NO. 388038.00 P.O. NO. _____

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
<u>Michael J. Griffin</u>	<u>[Signature]</u>	<u>29 Nov 88</u>	<u>0830</u>
<u>[Signature]</u>	<u>[Signature]</u>	<u>11-29-88</u>	<u>8:30</u>
<u>[Signature]</u>	<u>Narim S.</u>	<u>11-29-88</u>	<u>9:20</u>
Relinquished from lab by: (Signature)	Received by: (Signature)	Date	Time

ANALYSIS REQUEST

Sample ID Number	Sample Description	Date/Time Sampled	Analysis Requested	Sample Condition Upon Receipt
# 1	1E - Backfill	28 Nov 88	8015	
# 2	1E - Center	28 Nov 88		
# 3	2W - Backfill	28 Nov 88		
# 4	2W - Center	28 Nov 88		
# 5	2W - Center - 2'	28 Nov 88		
# 6	2W - Wall - 3'	28 Nov 88		

Special Instructions/Comments: Anametrix 881189
 # 5 - 2W - Center - 2 feet below tank bottom
 # 6 - 2W - Northwest Wall - 3 feet below asphalt surface





4961 Concourse Drive Suite E
San Jose, CA 95131
(408) 432-8192 • Fax (408) 432-8198

Michael J. Griffin
SCS Engineering
6761 Sierra Ct., Ste. D
Dublin, CA 94568

December 13, 1988
Work Order Number 8811189
Date Received 11/29/88
Project No. 388038.00

Dear Mr. Griffin:

Six soil samples were received for analysis of BTEX plus total volatile hydrocarbons as gasoline by gas chromatography, using the following method(s):

ANAMETRIX I.D.	SAMPLE I.D.	METHOD(S)
8811189-01	388038.00 #1	TVH/BTEX
-02	" #2	"
-03	" #3	"
-04	" #4	"
-05	" #5	"
-06	" #6	"

RESULTS

See enclosed data sheets, Pages 2-7.

NOTE: Amounts reported are net values, i.e. corrected for method blank contamination.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX, INC.

Sincerely,

Burt Sutherland for

Burt Sutherland
Laboratory Director

BWS/dm

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 388038.00 #1
 Matrix : SOIL
 Date sampled : 11-28-88
 Date anl. TVH: 12-05-88
 Date ext. TEH: NA
 Date anl. TEH: NA

Anamatrix I.D. : 8811189-01
 Analyst : *W*
 Supervisor : *SW*
 Date released : 12-13-88
 Date ext. TOG : NA
 Date anl. TOG : NA

CAS #	Compound Name	Reporting Limit (ug/kg)	Amount Found (ug/kg)
71-43-2	Benzene	50	BRL
108-88-3	Toluene	100	BRL
100-41-4	Ethylbenzene	100	BRL
1330-20-7	Total Xylenes	100	200
	TVH as Gasoline	1000	1000

- BRL - Below reporting limit.
- TVH/TPHG - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using EPA Method 5030.
- TEH/TPHD - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.
- TOG - Total Oil & Grease is determined by Standard Method 503E.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.

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

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 988038.00 #2
 Matrix : SOIL
 Date sampled : 11-28-88
 Date anl. TVH: 12-05-88
 Date ext. TEH: NA
 Date anl. TEH: NA

Anamatrix I.D. : 8811189-02
 Analyst : *h*
 Supervisor : *TL*
 Date released : 12-13-88
 Date ext. TOG : NA
 Date anl. TOG : NA

CAS #	Compound Name	Reporting Limit (ug/kg)	Amount Found (ug/kg)
71-43-2	Benzene	50	BRL
108-88-3	Toluene	100	100
100-41-4	Ethylbenzene	100	BRL
1330-20-7	Total Xylenes	100	400
	TVH as Gasoline	1000	13000

- BRL - Below reporting limit.
- TVH/TPHG - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using EPA Method 5030.
- TEH/TPHD - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.
- TOG - Total Oil & Grease is determined by Standard Method 503E.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.

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

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 388038.00 #3
 Matrix : SOIL
 Date sampled : 11-28-88
 Date anl. TVH: 12-08-88
 Date ext. TEH: NA
 Date anl. TEH: NA

Anamatrix I.D. : 8811189-03
 Analyst : *[Signature]*
 Supervisor : *[Signature]*
 Date released : 12-13-88
 Date ext. TOG : NA
 Date anl. TOG : NA

CAS #	Compound Name	Reporting Limit (ug/kg)	Amount Found (ug/kg)
71-43-2	Benzene	50	1100
108-88-3	Toluene	100	79000
100-41-4	Ethylbenzene	100	240000
1330-20-7	Total Xylenes	100	900000
	TVH as Gasoline	1000	7300000

- BRL - Below reporting limit.
- TVH/TPHG - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using EPA Method 5030.
- TEH/TPHD - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.
- TOG - Total Oil & Grease is determined by Standard Method 503E.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.

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

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 388038.00 #4	Anametrix I.D. : 8811189-04
Matrix : SOIL	Analyst : <i>aw</i>
Date sampled : 11-28-88	Supervisor : <i>Fr</i>
Date anl. TVH: 12-07-88	Date released : 12-13-88
Date ext. TEH: NA	Date ext. TOG : NA
Date anl. TEH: NA	Date anl. TOG : NA

CAS #	Compound Name	Reporting Limit (ug/kg)	Amount Found (ug/kg)
71-43-2	Benzene	50	BRL
108-88-3	Toluene	100	BRL
100-41-4	Ethylbenzene	100	BRL
1330-20-7	Total Xylenes	100	BRL
	TVH as Gasoline	1000	BRL

- BRL - Below reporting limit.
- TVH/TPHG - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using EPA Method 5030.
- TEH/TPHD - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.
- TOG - Total Oil & Grease is determined by Standard Method 503E.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.

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

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 388038.00 #5
 Matrix : SOIL
 Date sampled : 11-28-88
 Date anl. TVH: 12-08-88
 Date ext. TEH: NA
 Date anl. TEH: NA

Anamatrix I.D. : 8811189-05
 Analyst : *aw*
 Supervisor : *fw*
 Date released : 12-13-88
 Date ext. TOG : NA
 Date anl. TOG : NA

CAS #	Compound Name	Reporting Limit (ug/kg)	Amount Found (ug/kg)
71-43-2	Benzene	50	BRL
108-88-3	Toluene	100	BRL
100-41-4	Ethylbenzene	100	BRL
1330-20-7	Total Xylenes	100	200
	TVH as Gasoline	1000	2300

- BRL - Below reporting limit.
- TVH/TPHG - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using EPA Method 5030.
- TEH/TPHD - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.
- TOG - Total Oil & Grease is determined by Standard Method 503E.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.

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

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 988038.00 #6
 Matrix : SOIL
 Date sampled : 11-28-88
 Date anl. TVH: 12-08-88
 Date ext. TEH: NA
 Date anl. TEH: NA

Anamatrix I.D. : 8811189-06
 Analyst : *aw*
 Supervisor : *Fir*
 Date released : 12-13-88
 Date ext. TOG : NA
 Date anl. TOG : NA

CAS #	Compound Name	Reporting Limit (ug/kg)	Amount Found (ug/kg)
71-43-2	Benzene	100	100
108-88-3	Toluene	200	1200
100-41-4	Ethylbenzene	200	600
1330-20-7	Total Xylenes	200	5900
	TVH as Gasoline	2000	32000

- BRL - Below reporting limit.
- TVH/TPHG - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using EPA Method 5030.
- TEH/TPHD - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.
- TOG - Total Oil & Grease is determined by Standard Method 503E.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.

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



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

Matt Hopwood
SCS Engineering
6761 Sierra Ct., Ste. D
Dublin, CA 94568

January 10, 1989
Work Order Number 8812173
Date Received 12/28/88
Project No. 388040.02

Dear Mr. Hopwood:

Five soil samples were received for analysis of total petroleum hydrocarbons as gasoline by gas chromatography, using the following EPA method(s):

ANAMETRIX I.D.	SAMPLE I.D.	METHOD(S)
8812173-01	388040.02 NW-1	TPHG
-02	" NW-2	"
-03	" SW-1	"
-04	" SW-2	"
-05	" CS1(A,B,C)COMP.	"

RESULTS

See enclosed data sheets, Pages 2 thru 6.

NOTE: Amounts reported are net values, i.e. corrected for method blank contamination.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX, INC.

Sincerely,

ANAMETRIX, INC.

Sarah Schoen, Ph.D.
GC Manager

SRS/dg

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 388040.02 NW-1
 Matrix : SOIL
 Date sampled : 12-23-88
 Date anl.TPHg: 12-29-88
 Date ext.TPHd: NA
 Date anl.TPHd: NA

Anamatrix I.D. : 8812173-01
 Analyst : *mf*
 Supervisor : *DW*
 Date released : 01-10-89
 Date ext. TOG : NA
 Date anl. TOG : NA

CAS #	Compound Name	Detection Limit (ug/kg)	Amount Found (ug/kg)
	TPH as Gasoline	1000	ND

- ND - Not detected at or above the practical quantitation limit for the method.
- TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using EPA Method 5030.
- TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.
- TOG - Total Oil & Grease is determined by Standard Method 503E.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.

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

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 388040.02 NW-2
 Matrix : SOIL
 Date sampled : 12-23-88
 Date anl.TPHg: 12-29-88
 Date ext.TPHd: NA
 Date anl.TPHd: NA

Anamatrix I.D. : 8812173-02
 Analyst : ml
 Supervisor : *dy*
 Date released : 01-10-89
 Date ext. TOG : NA
 Date anl. TOG : NA

CAS #	Compound Name	Detection Limit (ug/kg)	Amount Found (ug/kg)
	TPH as Gasoline	1000	ND

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using EPA Method 5030.

TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.

TOG - Total Oil & Grease is determined by Standard Method 503E.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.

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

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 388040.02 SW-1
 Matrix : SOIL
 Date sampled : 12-23-88
 Date anl.TPHg: 12-29-88
 Date ext.TPHd: NA
 Date anl.TPHd: NA

Anamatrix I.D. : 8812173-03
 Analyst : ml
 Supervisor : JNS
 Date released : 01-10-89
 Date ext. TOG : NA
 Date anl. TOG : NA

CAS #	Compound Name	Detection Limit (ug/kg)	Amount Found (ug/kg)
	TPH as Gasoline	1000	ND

- ND - Not detected at or above the practical quantitation limit for the method.
- TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using EPA Method 5030.
- TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.
- TOG - Total Oil & Grease is determined by Standard Method 503E.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.

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

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 388040.02 SW-2
 Matrix : SOIL
 Date sampled : 12-23-88
 Date anl.TPHg: 12-29-88
 Date ext.TPHd: NA
 Date anl.TPHd: NA

Anamatrix I.D. : 8812173-04
 Analyst : *mh*
 Supervisor : *dir*
 Date released : 01-10-89
 Date ext. TOG : NA
 Date anl. TOG : NA

CAS #	Compound Name	Detection Limit (ug/kg)	Amount Found (ug/kg)
	TPH as Gasoline	1000	ND

ND - Not detected at or above the practical quantitation limit for the method.

TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using EPA Method 5030.

TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.

TOG - Total Oil & Grease is determined by Standard Method 503E.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.

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

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 388040.02 CS1(A,B,C)COMP. Anamatrix I.D. : 8812173-05
 Matrix : SOIL Analyst : *mb*
 Date sampled : 12-23-88 Supervisor : *SW*
 Date anl.TPHg: 12-29-88 Date released : 01-10-89
 Date ext.TPHd: NA Date ext. TOG : NA
 Date anl.TPHd: NA Date anl. TOG : NA

CAS #	Compound Name	Detection Limit (ug/kg)	Amount Found (ug/kg)
	TPH as Gasoline	1000	ND

- ND - Not detected at or above the practical quantitation limit for the method.
- TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using EPA Method 5030.
- TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.
- TOG - Total Oil & Grease is determined by Standard Method 503E.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.

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