



Environmental, Inc.

October 17, 1990

Ms. Katherine Chesick
Senior Hazardous Materials Specialist
ALAMEDA COUNTY HEALTH DEPARTMENT
80 Swan Way, Room 200
Oakland, California 94621

**RE: CAVANAUGH MOTORS 1700 PARK STREET, ALAMEDA, CALIFORNIA---WASTE
OIL TANK REMOVAL**

Dear Ms. Chesick,

Enclosed please find the analytical results from the sample taken beneath the removed waste oil tank at the above referenced site.

As we discussed, TMC has done hand borings to the groundwater interface to determine the general extent of soil contamination. Samples were taken and are presently at Anametrix Inc. for analyses. We will continue to excavate the contaminated soil as you requested as it appears that the contamination does not extend beyond the bearing wall and the excavated contaminated soils should not exceed 100 cubic yards. We will submit a report of our progress upon completion of the dig and submit a work plan for groundwater investigation in this area.

If you should have any questions or comments, please don't hesitate to call me at (415) 232-8366.

Sincerely,

Tom Edwards
President

cc: Dave Cavanaugh, Cavanaugh Motors

90 OCT 30 PM 1:17

ANAMETRIX INC

Environmental & Analytical Chemistry
1964 Concourse Drive, Suite E, San Jose, CA 95131
(408) 432-8192 • Fax (408) 432-8198

**REPORT**

MR. TOM EDWARDS
TMC ENVIRONMENTAL
13908 SAN PABLO AVE
SAN PABLO, CA 94806

Workorder # : 9009006
Date Received : 09/04/90
Project ID : 109001
Purchase Order: N/A

The following samples were received at Anamatrix, Inc. for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9009006- 1	SS-1

This report is paginated for your convenience and ease of review. It contains 15 pages excluding the cover letter. The report is organized into sections. Each section contains all analytical results and quality assurance data related to a specific group or section within Anamatrix. The Report Summary that precedes each section will help you determine which group at Anamatrix generated the data. The Report Summary will contain the signatures of the department supervisor and a chemist, both of whom reviewed the analytical data. Please refer all questions to the department supervisor that signed the form.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anamatrix.



Burt Sutherland
Laboratory Director

09-24-90

Date

ANAMETRIX REPORT DESCRIPTION

GCMS

Organic Analysis Data Sheets (OADS)

OADS forms contain tabulated results for target compounds. The OADS are grouped by method and, within each method, organized sequentially in order of increasing Anamatrix ID number.

Tentatively Identified Compounds (TICs)

TIC forms contain tabulated results for non-target compounds detected in GC/MS analyses. TICs must be requested at the time samples are submitted at Anamatrix. TIC forms immediately follow the OADS form for each sample. If TICs are requested but not found, then TIC forms will not be included with the report.

Surrogate Recovery Summary (SRS)

SRS forms contain quality assurance data. An SRS form will be printed for each method, if the method requires surrogate compounds. They will list surrogate percent recoveries for all samples and any method blanks. Any surrogate recovery outside the established limits will be flagged with an "*", and the total number of surrogates outside the limits will be listed in the column labelled "Total Out".

Matrix Spike Recovery Form (MSR)

MSR forms contain quality assurance data. They summarize percent recovery and relative percent difference information for matrix spikes and matrix spike duplicates. This information is a statement of both accuracy and precision. Any percent recovery or relative percent difference outside established limits will be flagged with an "*", and the total number outside the limits will be listed at the bottom of the page. Not all reports will contain an MSR form.

Qualifiers

Anamatrix uses several data qualifiers (Q) in its report forms. These qualifiers give additional information on the compounds reported. They should help a data reviewer to verify the integrity of the analytical results. The following is a list of qualifiers and their meanings:

- U - Indicates that the compound was analyzed for, but was not detected at or above the specified reporting limit.
- B - Indicates that the compound was detected in the associated method blank.
- J - Indicates that the compound was detected at an amount below the specified reporting limit. Consequently, the amount should be considered an approximate value. Tentatively identified compounds will always have a "J" qualifier because they are not included in the instrument calibration.
- E - Indicates that the amount reported exceeded the linear range of the instrument calibration.
- D - Indicates that the compound was detected in an analysis performed at a secondary dilution.
- A - Indicates that the tentatively identified compound is a suspected aldol condensation product. This is common in EPA Method 8270 soil analyses.

Absence of a qualifier indicates that the compound was detected at a concentration at or above the specified reporting limit.

REPORTING CONVENTIONS

- ◆ Due to a size limitation in our data processing step, only the first eight (8) characters of your project ID and sample ID will be printed on the report forms. However, the report cover letter and report summary pages display up to twenty (20) characters of your project and sample IDs.
- ◆ Amounts reported are gross values, i.e., not corrected for method blank contamination.

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

MR. TOM EDWARDS
TMC ENVIRONMENTAL
13908 SAN PABLO AVE
SAN PABLO, CA 94806

Workorder # : 9009006
Date Received : 09/04/90
Project ID : 109001
Purchase Order: N/A
Department : GCMS
Sub-Department: GCMS

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9009006- 1	SS-1	SOIL	08/31/90	8270

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

MR. TOM EDWARDS
TMC ENVIRONMENTAL
13908 SAN PABLO AVE
SAN PABLO, CA 94806

Workorder # : 9009006
Date Received : 09/04/90
Project ID : 109001
Purchase Order: N/A
Department : GCMS
Sub-Department: GCMS

QA/QC SUMMARY :

- A surrogate recovery was outside established limits in the EPA method 8270 analysis of sample SS-1, probably due to a matrix interference from heavy hydrocarbons. A surrogate was also outside established limits in the method blank.
- PCBs and creosote were scanned for but were not detected in the EPA method 8270 analysis of sample SS-1. The approximate detection limit for these compounds is 1700 ppb.

Paul Gowan
Department Supervisor

9-24-90
Date

Janice Munn
Chemist

9-24-90
Date

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270
 ANAMETRIX, INC. (408)432-8192

Project ID : 109001
 Sample ID : SS-1
 Matrix : SOIL
 Date Sampled : 8/31/90
 Date Extracted : 9/ 7/90
 Amount Extracted : 30.0 g
 Date Analyzed : 9/19/90
 Instrument ID : F2

Anamatrix ID : 9009006-01
 Analyst : *W*
 Supervisor : *PG*

Dilution Factor : 1.00
 Conc. Units : ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
108-95-2	PHENOL	330.	ND	U
111-44-4	BIS(2-CHLOROETHYL) ETHER	330.	ND	U
95-57-8	2-CHLOROPHENOL	330.	ND	U
541-73-1	1,3-DICHLOROBENZENE	330.	ND	U
106-46-7	1,4-DICHLOROBENZENE	330.	ND	U
100-51-6	BENZYL ALCOHOL	330.	ND	U
95-50-1	1,2-DICHLOROBENZENE	330.	ND	U
95-48-7	2-METHYLPHENOL	330.	ND	U
108-60-1	BIS(2-CHLOROISOPROPYL) ETHER	330.	ND	U
106-44-5	4-METHYLPHENOL	330.	ND	U
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	330.	ND	U
67-72-1	HEXACHLOROETHANE	330.	ND	U
98-95-3	NITROBENZENE	330.	ND	U
78-59-1	ISOPHORONE	330.	ND	U
88-75-5	2-NITROPHENOL	330.	ND	U
105-67-9	2,4-DIMETHYLPHENOL	330.	ND	U
65-85-0	BENZOIC ACID	1700.	ND	U
111-91-1	BIS(2-CHLOROETHOXY)METHANE	330.	ND	U
120-83-2	2,4-DICHLOROPHENOL	330.	ND	U
120-82-1	1,2,4-TRICHLOROBENZENE	330.	ND	U
91-20-3	NAPHTHALENE	330.	1600.	U
106-47-8	4-CHLOROANILINE	330.	ND	U
87-68-3	HEXACHLOROBUTADIENE	330.	ND	U
59-50-7	4-CHLORO-3-METHYLPHENOL	330.	ND	U
91-57-6	2-METHYLNAPHTHALENE	330.	1500.	U
77-47-4	HEXACHLOROCYCLOPENTADIENE	330.	ND	U
88-06-2	2,4,6-TRICHLOROPHENOL	330.	ND	U
95-95-4	2,4,5-TRICHLOROPHENOL	1700.	ND	U
91-58-7	2-CHLORONAPHTHALENE	330.	ND	U
88-74-4	2-NITROANILINE	1700.	ND	U
131-11-3	DIMETHYLPHTHALATE	330.	ND	U
208-96-8	ACENAPHTHYLENE	330.	ND	U
606-20-2	2,6-DINITROTOLUENE	330.	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270
 ANAMETRIX, INC. (408)432-8192

Project ID : 109001
 Sample ID : SS-1
 Matrix : SOIL
 Date Sampled : 8/31/90
 Date Extracted : 9/ 7/90
 Amount Extracted : 30.0 g
 Date Analyzed : 9/19/90
 Instrument ID : F2

Anamatrix ID : 9009006-01
 Analyst : IM
 Supervisor : PG

Dilution Factor : 1.00
 Conc. Units : ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
99-09-2	3-NITROANILINE	1700.	ND	U
83-32-9	ACENAPHTHENE	330.	ND	U
51-28-5	2,4-DINITROPHENOL	1700.	ND	U
100-02-7	4-NITROPHENOL	1700.	ND	U
132-64-9	DIBENZOFURAN	330.	ND	U
121-14-2	2,4-DINITROTOLUENE	330.	ND	U
84-66-2	DIETHYLPHTHALATE	330.	ND	U
7005-72-3	4-CHLOROPHENYL-PHENYLEETHER	330.	ND	U
86-73-7	FLUORENE	330.	ND	U
100-01-6	4-NITROANILINE	1700.	ND	U
534-52-1	4,6-DINITRO-2-METHYLPHENOL	1700.	ND	U
86-30-6	N-NITROSODIPHENYLAMINE (1)	330.	ND	U
101-55-3	4-BROMOPHENYL-PHENYLEETHER	330.	ND	U
118-74-1	HEXACHLOROBENZENE	330.	ND	U
87-86-5	PENTACHLOROPHENOL	1700.	ND	U
85-01-8	PHENANTHRENE	330.	300.	J
120-12-7	ANTHRACENE	330.	ND	U
84-74-2	DI-N-BUTYLPHTHALATE	330.	ND	U
206-44-0	FLUORANTHENE	330.	ND	U
129-00-0	PYRENE	330.	ND	U
85-68-7	BUTYLBENZYLPHTHALATE	330.	ND	U
91-94-1	3,3'-DICHLOROBENZIDINE	670.	ND	U
56-55-3	BENZO(A)ANTHRACENE	330.	ND	U
218-01-9	CHRYSENE	330.	ND	U
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	330.	ND	U
117-84-0	DI-N-OCTYLPHTHALATE	330.	ND	U
205-99-2	BENZO(B)FLUOROANTHENE	330.	ND	U
207-08-9	BENZO(K)FLUOROANTHENE	330.	ND	U
50-32-8	BENZO(A)PYRENE	330.	ND	U
193-39-5	INDENO(1,2,3-CD)PYRENE	330.	ND	U
53-70-3	DIBENZ[A,H]ANTHRACENE	330.	ND	U
191-24-2	BENZO(G,H,I)PERYLENE	330.	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270
ANAMETRIX, INC. (408)432-8192

Project ID :
Sample ID : BLANK
Matrix : SOIL
Date Sampled : 0/ 0/ 0
Date Extracted : 9/ 7/90
Amount Extracted : 30.0 g
Date Analyzed : 9/19/90
Instrument ID : F2

Anamatrix ID : 2CB0907C03
Analyst : AM
Supervisor : PG

Dilution Factor : 1.00
Conc. Units : ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
108-95-2	PHENOL	330.	ND	U
111-44-4	BIS (2-CHLOROETHYL) ETHER	330.	ND	U
95-57-8	2-CHLOROPHENOL	330.	ND	U
541-73-1	1,3-DICHLOROBENZENE	330.	ND	U
106-46-7	1,4-DICHLOROBENZENE	330.	ND	U
100-51-6	BENZYL ALCOHOL	330.	ND	U
95-50-1	1,2-DICHLOROBENZENE	330.	ND	U
95-48-7	2-METHYLPHENOL	330.	ND	U
108-60-1	BIS (2-CHLOROISOPROPYL) ETHER	330.	ND	U
106-44-5	4-METHYLPHENOL	330.	ND	U
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	330.	ND	U
67-72-1	HEXACHLOROETHANE	330.	ND	U
98-95-3	NITROBENZENE	330.	ND	U
78-59-1	ISOPHORONE	330.	ND	U
88-75-5	2-NITROPHENOL	330.	ND	U
105-67-9	2,4-DIMETHYLPHENOL	330.	ND	U
65-85-0	BENZOIC ACID	1700.	ND	U
111-91-1	BIS (2-CHLOROETHOXY) METHANE	330.	ND	U
120-83-2	2,4-DICHLOROPHENOL	330.	ND	U
120-82-1	1,2,4-TRICHLOROBENZENE	330.	ND	U
91-20-3	NAPHTHALENE	330.	ND	U
106-47-8	4-CHLOROANILINE	330.	ND	U
87-68-3	HEXACHLOROBUTADIENE	330.	ND	U
59-50-7	4-CHLORO-3-METHYLPHENOL	330.	ND	U
91-57-6	2-METHYLNAPHTHALENE	330.	ND	U
77-47-4	HEXACHLOROCYCLOPENTADIENE	330.	ND	U
88-06-2	2,4,6-TRICHLOROPHENOL	330.	ND	U
95-95-4	2,4,5-TRICHLOROPHENOL	1700.	ND	U
91-58-7	2-CHLORONAPHTHALENE	330.	ND	U
88-74-4	2-NITROANILINE	1700.	ND	U
131-11-3	DIMETHYLPHTHALATE	330.	ND	U
208-96-8	ACENAPHTHYLENE	330.	ND	U
606-20-2	2,6-DINITROTOLUENE	330.	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270
 ANAMETRIX, INC. (408)432-8192

Project ID :
 Sample ID : BLANK
 Matrix : SOIL
 Date Sampled : 0/ 0/ 0
 Date Extracted : 9/ 7/90
 Amount Extracted : 30.0 g
 Date Analyzed : 9/19/90
 Instrument ID : F2

Anamatrix ID : 2CB0907C03
 Analyst : *UH*
 Supervisor : *PG*

Dilution Factor : 1.00
 Conc. Units : ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
99-09-2	3-NITROANILINE	1700.	ND	U
83-32-9	ACENAPHTHENE	330.	ND	U
51-28-5	2,4-DINITROPHENOL	1700.	ND	U
100-02-7	4-NITROPHENOL	1700.	ND	U
132-64-9	DIBENZOFURAN	330.	ND	U
121-14-2	2,4-DINITROTOLUENE	330.	ND	U
84-66-2	DIETHYLPHTHALATE	330.	ND	U
7005-72-3	4-CHLOROPHENYL-PHENYLEETHER	330.	ND	U
86-73-7	FLUORENE	330.	ND	U
100-01-6	4-NITROANILINE	1700.	ND	U
534-52-1	4,6-DINITRO-2-METHYLPHENOL	1700.	ND	U
86-30-6	N-NITROSODIPHENYLAMINE (1)	330.	ND	U
101-55-3	4-BROMOPHENYL-PHENYLEETHER	330.	ND	U
118-74-1	HEXACHLOROBENZENE	330.	ND	U
87-86-5	PENTACHLOROPHENOL	1700.	ND	U
85-01-8	PHENANTHRENE	330.	ND	U
120-12-7	ANTHRACENE	330.	ND	U
84-74-2	DI-N-BUTYLPHTHALATE	330.	ND	U
206-44-0	FLUORANTHENE	330.	ND	U
129-00-0	PYRENE	330.	ND	U
85-68-7	BUTYLBENZYLPHTHALATE	330.	ND	U
91-94-1	3,3'-DICHLOROBENZIDINE	670.	ND	U
56-55-3	BENZO(A) ANTHRACENE	330.	ND	U
218-01-9	CHRYSENE	330.	ND	U
117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE	330.	ND	U
117-84-0	DI-N-OCTYLPHTHALATE	330.	ND	U
205-99-2	BENZO(B) FLUOROANTHENE	330.	ND	U
207-08-9	BENZO(K) FLUOROANTHENE	330.	ND	U
50-32-8	BENZO(A) PYRENE	330.	ND	U
193-39-5	INDENO(1,2,3-CD) PYRENE	330.	ND	U
53-70-3	DIBENZ[A,H] ANTHRACENE	330.	ND	U
191-24-2	BENZO(G,H,I) PERYLENE	330.	ND	U

SURROGATE RECOVERY SUMMARY -- EPA METHOD 625/8270
ANAMETRIX, INC. (408)432-8192

Project ID : 109001
Matrix : SOIL

Anamatrix ID : 9009006
Analyst : *MM*
Supervisor : *PG*

	SAMPLE ID	SU1	SU2	SU3	SU4	SU5	SU6	TOTAL OUT
3	BLANK	89 *	83	52	52	44	21	1
4	SS-1	18	15 *	24	11 *	62	5 *	3
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

QC LIMITS

SU1 = 2-FLUOROPHENOL	(15- 83)
SU2 = PHENOL-D5	(18- 92)
SU3 = NITROBENZENE-D5	(12- 80)
SU4 = 2-FLUOROBIPHENYL	(16-100)
SU5 = 2,4,6-TRIBROMOPHENOL	(15-135)
SU6 = TERPHENYL-D14	(15-117)

* Values outside of Anamatrix QC limits

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

MR. TOM EDWARDS
TMC ENVIRONMENTAL
13908 SAN PABLO AVE
SAN PABLO, CA 94806

Workorder # : 9009006
Date Received : 09/04/90
Project ID : 109001
Purchase Order: N/A
Department : GC
Sub-Department: VOA

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9009006- 1	SS-1	SOIL	08/31/90	8010

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

MR. TOM EDWARDS
TMC ENVIRONMENTAL
13908 SAN PABLO AVE
SAN PABLO, CA 94806

Workorder # : 9009006
Date Received : 09/04/90
Project ID : 109001
Purchase Order: N/A
Department : GC
Sub-Department: VOA

QA/QC SUMMARY :

- No QA/QC problems encountered for samples.

Corinne Pham 09-19-90
Department Supervisor Date

M. Hesseini 09-19-90
Chemist Date

ORGANIC ANALYSIS DATA SHEET - EPA METHOD 601/8010
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 109001 SS-1
 Matrix : SOIL
 Date sampled : 08/31/90
 Date analyzed: 09/13/90
 Dilution : 2000

Anamatrix I.D. : 9009006-01
 Analyst : *mb*
 Supervisor : *CP*
 Date released : 09/18/90
 Instrument ID : HP15

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
74-87-3	* Chloromethane	2000	ND
74-83-9	* Bromomethane	1000	ND
75-71-8	* Dichlorodifluoromethane	2000	ND
75-01-4	* Vinyl Chloride	1000	ND
75-00-3	* Chloroethane	1000	ND
75-09-2	* Methylene Chloride	1000	22000
79-69-4	* Trichlorofluoromethane	1000	ND
75-35-4	* 1,1-Dichloroethene	1000	ND
75-34-3	* 1,1-Dichloroethane	1000	ND
156-59-2	# Cis-1,2-Dichloroethene	1000	ND
156-60-5	* Trans-1,2-Dichloroethene	1000	ND
67-66-3	* Chloroform	1000	ND
76-13-1	# Trichlorotrifluoroethane	1000	ND
107-06-2	* 1,2-Dichloroethane	1000	ND
71-55-6	* 1,1,1-Trichloroethane	1000	ND
56-23-5	* Carbon Tetrachloride	1000	ND
75-27-4	* Bromodichloromethane	1000	ND
78-87-5	* 1,2-Dichloropropane	1000	ND
10061-02-6	* Trans-1,3-Dichloropropene	1000	ND
79-01-6	* Trichloroethene	1000	ND
124-48-1	* Dibromochloromethane	1000	ND
79-00-5	* 1,1,2-Trichloroethane	1000	ND
10061-01-5	* cis-1,3-Dichloropropene	1000	ND
110-75-8	* 2-Chloroethylvinylether	2000	ND
75-25-2	* Bromoform	1000	ND
127-18-4	* Tetrachloroethene	1000	ND
79-34-5	* 1,1,2,2-Tetrachloroethane	1000	ND
108-90-7	* Chlorobenzene	1000	59000
541-73-1	* 1,3-Dichlorobenzene	2000	ND
95-50-1	* 1,2-Dichlorobenzene	2000	ND
106-46-7	* 1,4-Dichlorobenzene	2000	ND
% Surrogate Recovery		33-134%	121%

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

* A 601/8010 approved compound (Federal Register, 10/26/84).

A compound added by Anamatrix, Inc.

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

MR. TOM EDWARDS
TMC ENVIRONMENTAL
13908 SAN PABLO AVE
SAN PABLO, CA 94806

Workorder # : 9009006
Date Received : 09/04/90
Project ID : 109001
Purchase Order: N/A
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9009006- 1	SS-1	SOIL	08/31/90	TPHd
9009006- 1	SS-1	SOIL	08/31/90	TPHg/BTEX

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

MR. TOM EDWARDS
TMC ENVIRONMENTAL
13908 SAN PABLO AVE
SAN PABLO, CA 94806

Workorder # : 9009006
Date Received : 09/04/90
Project ID : 109001
Purchase Order: N/A
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for workorder.

Cheryl Palmer 9/18/90
Department Supervisor Date

Harold Vogt 9/18/90
Chemist Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS
(GASOLINE WITH BTEX)
ANAMETRIX, INC. - (408) 432-8192

Anamatrix W.O.#: 9009006
Matrix : SOIL
Date Sampled : 08/31/90

Project Number : 109001
Date Released : 09/18/90

COMPOUNDS	Reporting Limit (mg/Kg)	Sample I.D.# SS1	Sample I.D.# 04B0910A
Benzene	0.005	0.70	ND
Toluene	0.005	16	ND
Ethylbenzene	0.005	6.6	ND
Total Xylenes	0.005	39	ND
TPH as Gasoline	0.5	730	ND
% Surrogate Rec.		119%	89%
Instrument #		HP4	HP4
Date Analyzed		09/11/90	09/10/90
RLMF		100	1

- 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.
 BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.
 RLMF - Reporting Limit Multiplication Factor.

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

Heath Vogt 9/10/90
Analyst Date

Cheryl Baerman 9/18/90
Supervisor Date

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

Anamatrix W.O.#: 9009006
 Matrix : SOIL
 Date Sampled : 08/31/90
 Date Extracted : 09/07/90

Client Project# : 109001
 Date released : 09/18/90
 Instrument I.D. : HP19

Anamatrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9009006-01	SS-1	09/14/90	6400	ND
DSBL090790	METHOD BLANK	09/14/90	10	ND

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

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

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

Garth Wright 9/18/90
 Analyst Date

Charles Palmer 9/18/90
 Supervisor Date

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

MR. TOM EDWARDS
TMC ENVIRONMENTAL
13908 SAN PABLO AVE
SAN PABLO, CA 94806

Workorder # : 9009006
Date Received : 09/04/90
Project ID : 109001
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9009006- 1	SS-1	SOIL	08/31/90	503D
9009006- 1	SS-1	SOIL	08/31/90	503E

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

MR. TOM EDWARDS
TMC ENVIRONMENTAL
13908 SAN PABLO AVE
SAN PABLO, CA 94806

Workorder # : 9009006
Date Received : 09/04/90
Project ID : 109001
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

QA/QC SUMMARY :

- No QA/QC problems encountered for samples.



Department Supervisor

Sept, 18th 1990

Date

Maria E. Durera 9/18/90

Chemist

Date

ANALYSIS DATA SHEET - TOTAL OIL AND GREASE
ANAMETRIX, INC. (408) 432-8192

Project # : 109001
Matrix : SOIL
Date sampled : 08/31/90
Date ext. TOG: 09/10/90
Date anl. TOG: 09/10/90

Anamatrix I.D. : 9009006
Analyst : *MS*
Supervisor : *(MP)*
Date released : 09/18/90

Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9009006-01	SS-1	30	20000

- ND - Not detected at or above the practical quantitation limit for the method.
- TOG - Total Oil & Grease is determined by Standard Method 503D.

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

ANALYSIS DATA SHEET - TOTAL OIL AND GREASE
 ANAMETRIX, INC. (408) 432-8192

Project # : 109001
 Matrix : SOIL
 Date sampled : 08/31/90
 Date ext. TOG: 09/10/90
 Date anl. TOG: 09/10/90

Anamatrix I.D. : 9009006
 Analyst : *mg*
 Supervisor : *(signature)*
 Date released : 09/18/90

Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9009006-01	SS-1	30	17000

- ND - Not detected at or above the practical quantitation limit for the method.
- TOG - Total Oil & Grease is determined by Standard Method 503E.

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

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

MR. TOM EDWARDS
TMC ENVIRONMENTAL
13908 SAN PABLO AVE
SAN PABLO, CA 94806

Workorder # : 9009006
Date Received : 09/04/90
Project ID : 109001
Purchase Order: N/A
Department : METALS
Sub-Department: METALS

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9009006- 1	SS-1	SOIL	08/31/90	6010

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

MR. TOM EDWARDS
TMC ENVIRONMENTAL
13908 SAN PABLO AVE
SAN PABLO, CA 94806

Workorder # : 9009006
Date Received : 09/04/90
Project ID : 109001
Purchase Order: N/A
Department : METALS
Sub-Department: METALS

QA/QC SUMMARY :

- Spikes for chromium and zinc are outside of control limits due to variable contributions from the sample.

Sam Schoen 09-24-90
Department Supervisor Date

Manny Hojman 9/17/90
Chemist Date

ANALYSIS DATA SHEET - INDIVIDUAL METALS
 ANAMETRIX, INC. - (408) 432-8192

Anamatrix I.D.: 9009006
 Matrix : SOIL
 Date Sampled : 08/31/90
 Project Number: 109001

Date Prepared : 09/11/90
 Date Analyzed : 09/13/90
 Date Released : 09/17/90
 Instrument I.D.: ICP1

	EPA Method#	Reporting Limit	Sample I.D.# SS-1	Sample I.D.# BLANK
ELEMENTS		(mg/Kg)	-01	MB0911S
Cadmium (Cd)	6010	0.25	0.25	ND
Total Cr	6010	0.5	31.6	ND
Nickel (Ni)	6010	2.0	24.0	ND
Lead (Pb)	6010	2.0	1040	ND
Zinc (Zn)	6010	1.0	111	ND

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

All Metals by EPA Method 6010/7000, Test Methods for Evaluating Solid Waste, SW-846 3rd Edition November 1986.

Wanninger 9/17/90
 Chemist Date

Oleg Penchenok 09-17-90
 Chemist Date

ANAMETRIX, INC.
 1961 CONCOURSE DRIVE, SUITE E
 SAN JOSE, CA 95131, (408) 432-8192

 INDIVIDUAL METALS METHOD SPIKE REPORT

Spike I.D. : 9009006-01MS,MD
 Date Prepared: 09/11/90
 Date Analyzed: 09/13/90
 Assoc. WO # : 9009006

Inst. ID: ICP1
 Date : 09/17/90
 Matrix : SOIL
 Units : mg/Kg

ELEMENTS	METHOD	SPIKE AMOUNT	SAMPLE CONC.	M S CONC.	% REC	M S D CONC.	% REC	R P D
Cd	6010	2.5	0.27	2.7	98.6	2.8	101	2.4
Ttl Cr	6010	10.0	31.6	39.3	77.0	38.4	68.0	12.4
Ni	6010	25.0	24.0	48.7	98.8	50.9	108	8.5
Pb	6010	25.0	1040	1110	280	1420	1520	138
Zn	6010	25.0	111	143	128	157	184	35.9

=====

COMMENT: Quality control limits for percent recovery are 75-125%
 and 25% for RPD.

Manny Guyer 9/17/90
 Chemist Date

Oleg Nemchenok 09-17-90
 Chemist Date

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

MR. TOM EDWARDS
TMC ENVIRONMENTAL
13908 SAN PABLO AVE
SAN PABLO, CA 94806

Workorder # : 9009006
Date Received : 09/04/90
Project ID : 109001
Purchase Order: N/A
Department : GC
Sub-Department: VOA

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9009006- 1	SS-1	SOIL	08/31/90	8010

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

MR. TOM EDWARDS
TMC ENVIRONMENTAL
13908 SAN PABLO AVE
SAN PABLO, CA 94806

Workorder # : 9009006
Date Received : 09/04/90
Project ID : 109001
Purchase Order: N/A
Department : GC
Sub-Department: VOA

QA/QC SUMMARY :

- No QA/QC problems encountered for samples.

Corinne Khan 09-19-90
Department Supervisor Date

M. Harslein 09-19-90
Chemist Date

ORGANIC ANALYSIS DATA SHEET - EPA METHOD 601/8010
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 109001 SS-1
Matrix : SOIL
Date sampled : 08/31/90
Date analyzed: 09/13/90
Dilution : 2000

Anametrix I.D. : 9009006-01
Analyst : *mk*
Supervisor : *CP*
Date released : 09/18/90
Instrument ID : HP15

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
74-87-3	* Chloromethane	2000	ND
74-83-9	* Bromomethane	1000	ND
75-71-8	* Dichlorodifluoromethane	2000	ND
75-01-4	* Vinyl Chloride	1000	ND
75-00-3	* Chloroethane	1000	ND
75-09-2	* Methylene Chloride	1000	22000
79-69-4	* Trichlorofluoromethane	1000	ND
75-35-4	* 1,1-Dichloroethene	1000	ND
75-34-3	* 1,1-Dichloroethane	1000	ND
156-59-2	# Cis-1,2-Dichloroethene	1000	ND
156-60-5	* Trans-1,2-Dichloroethene	1000	ND
67-66-3	* Chloroform	1000	ND
76-13-1	# Trichlorotrifluoroethane	1000	ND
107-06-2	* 1,2-Dichloroethane	1000	ND
71-55-6	* 1,1,1-Trichloroethane	1000	ND
56-23-5	* Carbon Tetrachloride	1000	ND
75-27-4	* Bromodichloromethane	1000	ND
78-87-5	* 1,2-Dichloropropane	1000	ND
10061-02-6	* Trans-1,3-Dichloropropene	1000	ND
79-01-6	* Trichloroethene	1000	ND
124-48-1	* Dibromochloromethane	1000	ND
79-00-5	* 1,1,2-Trichloroethane	1000	ND
10061-01-5	* cis-1,3-Dichloropropene	1000	ND
110-75-8	* 2-Chloroethylvinylether	2000	ND
75-25-2	* Bromoform	1000	ND
127-18-4	* Tetrachloroethene	1000	ND
79-34-5	* 1,1,2,2-Tetrachloroethane	1000	ND
108-90-7	* Chlorobenzene	1000	59000
541-73-1	* 1,3-Dichlorobenzene	2000	ND
95-50-1	* 1,2-Dichlorobenzene	2000	ND
106-46-7	* 1,4-Dichlorobenzene	2000	ND
	% Surrogate Recovery	33-134%	121%

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

* A 601/8010 approved compound (Federal Register, 10/26/84).

A compound added by Anametrix, Inc.

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

MR. TOM EDWARDS
TMC ENVIRONMENTAL
13908 SAN PABLO AVE
SAN PABLO, CA 94806

Workorder # : 9009006
Date Received : 09/04/90
Project ID : 109001
Purchase Order: N/A
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9009006- 1	SS-1	SOIL	08/31/90	TPHd
9009006- 1	SS-1	SOIL	08/31/90	TPHg/BTEX

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

MR. TOM EDWARDS
TMC ENVIRONMENTAL
13908 SAN PABLO AVE
SAN PABLO, CA 94806

Workorder # : 9009006
Date Received : 09/04/90
Project ID : 109001
Purchase Order: N/A
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for workorder.

Cheryl Bilmer 9/18/90
Department Supervisor Date

Garth Vogt 9/18/90
Chemist Date