Weiss Associates Environmental and Geologic Services

5500 Shellmound Street, Emeryville, CA 94608-2411 Fax: 510-547-5043 Phone: **510-547-5420**

February 16, 1993

Scott Seery
Alameda County Department
of Environmental Health
80 Swan Way, Room 200
Oakland, California 94621-1426

Re: Shell Service Station
WIC #204-6852-0703
[redacted]
San Leandro, California 94577
WA Job #81-423-203

Dear Mr. Seery:

This letter describes recently completed and anticipated activities at the Shell service station referenced above (Figure 1). This status report satisfies the quarterly reporting requirements prescribed by California Administrative Code Title 23 Waters, Chapter 3, Subchapter 16, Article 5, Section 265.d. Included below are descriptions and results of activities performed in the fourth quarter 1992 and proposed work for the first quarter 1993.

Fourth Quarter 1992 Activities:

- EMCON Associates (EMCON) of San Jose, California measured ground water depths and collected ground water samples from the three site wells. EMCON's report describing these activities and presenting analytic results for ground water is included as Attachment A.

- Weiss Associates (WA) used EMCON's ground water elevation calculations to prepare a ground water elevation contour map (Figure 2).

Anticipated First Quarter 1993 Activities:

- WA will continue to analyze water samples from all three wells for volatile organic compounds (VOCs) by EPA Method 601. A January 27, 1993 letter from the Alameda County Department of Environmental Health (ACDEH) requested that Shell sample one site well for VOCs as part of a regional hydrogeological study.[1]

- WA will submit a report presenting the results of the first quarter 1993 ground water sampling and ground water depth measurements. The report will include tabulated chemical analytic results and a ground water elevation contour map. We will submit a copy of the report to the California Department of Toxic Substances Control.

Please call if you have any questions.

Sincerely,
Weiss Associates

J. Michael Asport
Technical Assistant

Joseph P. Theisen, C.E.G.
Senior Hydrogeologist

REGISTERED GEOLOGIST
JOSEPH P. THEISEN
No. EG-1245
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

JMA/JPT:jma

J:\SHELL\400\423QMFE3.WP

Attachments: Figures
A - EMCON's Ground Water Monitoring Report

cc: Dan Kirk, Shell Oil Company, P.O. Box 5278, Concord, California 94520-9998
Lester Feldman, California Regional Water Quality Control Board - San Francisco Bay Region, 2101 Webster Street, Oakland, California 94612

1 ACEDEH, January 27, 1993, Letter from ACDEH Chief Edgar B. Howell to Shell Environmental Engineer Kurt Miller regarding a regional hydrogeological study in San Leandro, California, 4 pages.

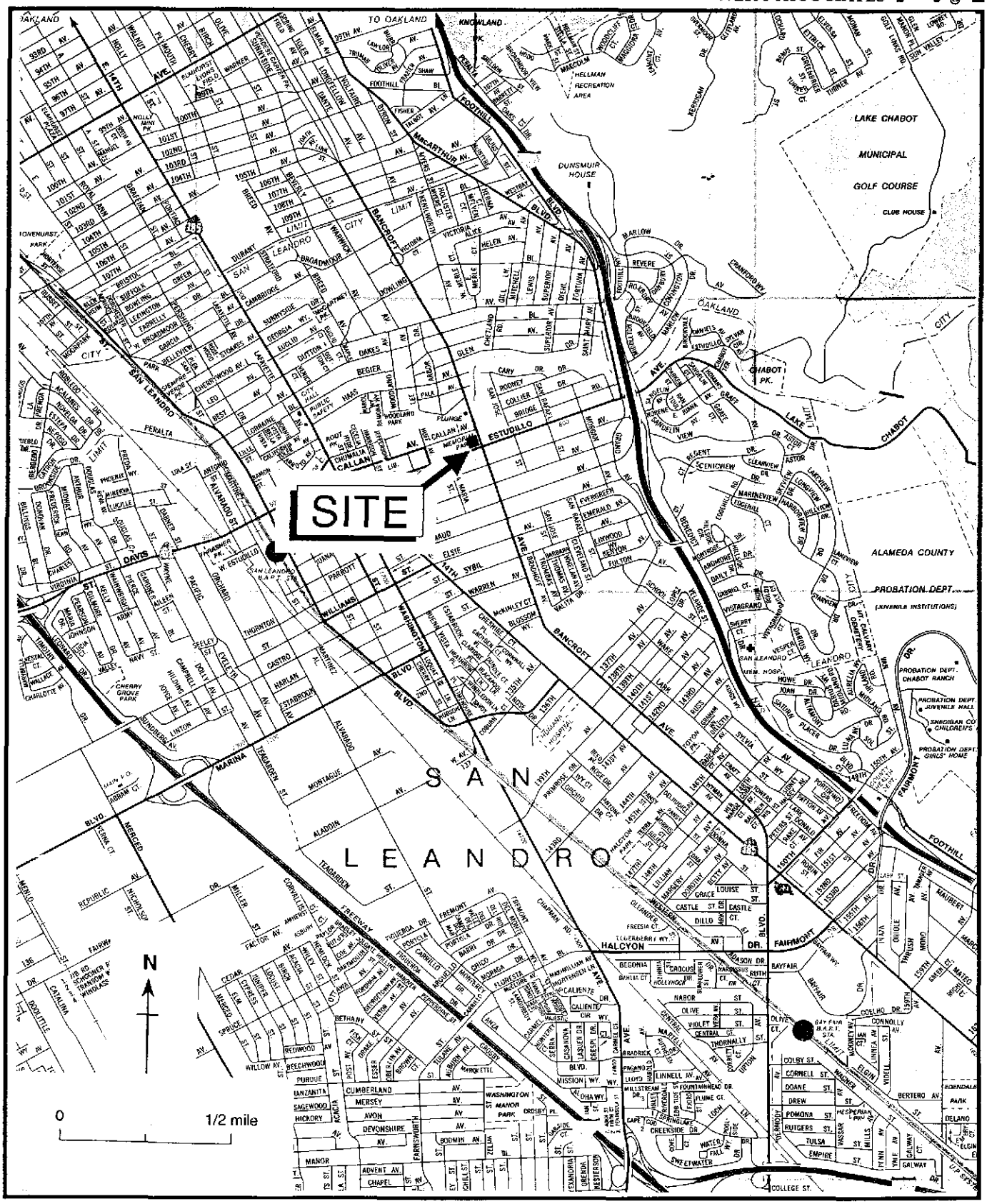


Figure 1. Site Location Map - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California

3/16/90

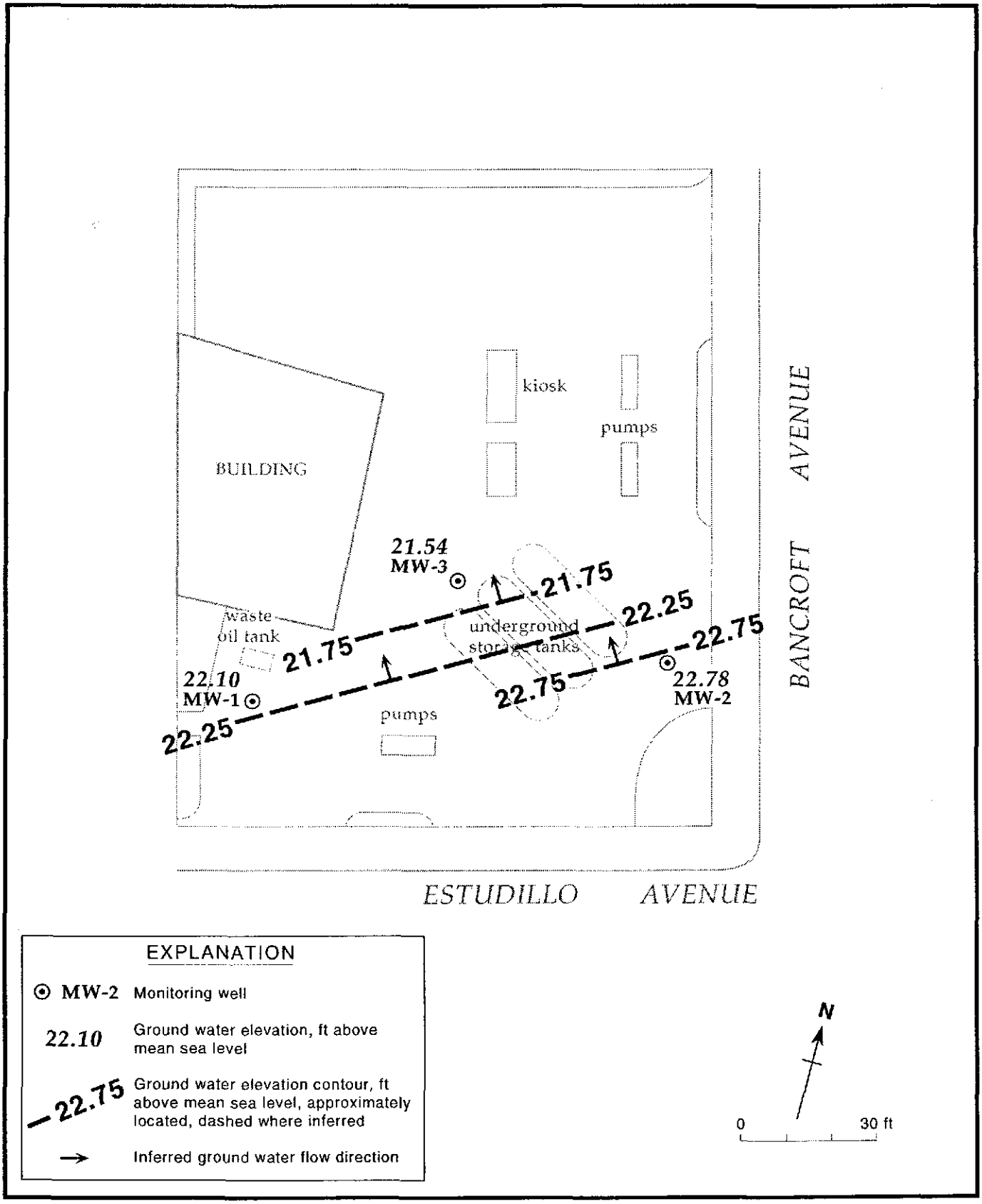


Figure 2. Monitoring Well Locations and Ground Water Elevation Contours - December 7, 1992 - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California

2/9/93

ATTACHMENT A

GROUND WATER MONITORING REPORT AND ANALYTIC REPORT

EMCON
ASSOCIATES
Consultants in Wastes
Management and
Environmental Control

January 6, 1993
Project: 0G67-035.01
WIC#: 204-6852-0703

Mr. David Elias
Weiss Associates
5500 Shellmound Street
Emeryville, California 94608-2411

Re: Fourth quarter 1992 ground-water monitoring report, Shell Oil Company, 1285 Bancroft Avenue, San Leandro, California

Dear Mr. Elias:

This letter presents the results of the fourth quarter 1992 ground-water monitoring event for the Shell Oil Company (Shell) site located at 1285 Bancroft Avenue, San Leandro, California (figure 1). Fourth quarter monitoring was conducted on December 7, 1992. The site is monitored quarterly.

GROUND-WATER LEVEL SURVEY

A water-level survey preceded the purging and sampling of the monitoring wells. The wells included in the survey are identified in figure 2 (supplied by Weiss Associates). During the survey, wells MW-1, MW-2, and MW-3 were measured for depth to water, floating product thickness, and total depth. Depth to water and floating product thickness were measured to the nearest 0.01 foot with an oil/water interface probe. No floating product was observed in any wells. Total depth was measured to the nearest 0.1 foot. Results of the fourth quarter water-level survey, and available data from four previous surveys, are summarized in table 1.

SAMPLING AND ANALYSIS

Ground-water samples were collected from wells MW-1, MW-2, and MW-3 on December 7, 1992. Prior to sample collection, the wells were purged with polyvinyl chloride bailers. During the purging operation, ground water was monitored for pH, electrical conductivity, and temperature as a function of volume of water removed. Purging continued until these parameters were stable and a minimum of three casing volumes of ground water were removed. Field measurements from fourth quarter monitoring, and available measurements from four previous monitoring events, are summarized in table 1. Purge water from the monitoring wells was contained in 55-gallon drums. The drums were identified with Shell-approved labels and secured for on-site storage.

1938 Junction Avenue, San Jose, California 95131-2102, (408) 453-0719, Fax (408) 453-0452

Ground-water samples were collected with a Teflon® bailer, labeled, placed on ice, and transported to Anametrix Inc. for analysis. Shell chain-of-custody documents accompanied all samples to the laboratory.

All equipment that was placed down a well or that came in contact with ground water was steam cleaned with deionized water prior to use at each well.

Quality control samples for fourth quarter monitoring included a trip blank (TB), a field blank (FB), and a duplicate well sample (MW-2D) collected from well MW-2D. All water samples collected during fourth quarter monitoring were analyzed for total petroleum hydrocarbons as gasoline (TPH-g); benzene, toluene, ethylbenzene, and total xylenes (BTEX); and halogenated volatile organic compounds (VOCs) by U.S. Environmental Protection Agency method 601.

ANALYTICAL RESULTS

Analytical results for the fourth quarter 1992 monitoring event, and available results from four previous monitoring events, are summarized in table 2 (TPH-G and BTEX) and table 3 (VOCs). The original certified analytical report and final chain-of-custody document are attached.

If you have any questions, please call.

Very truly yours,

EMCON Associates

David Larsen
Environmental Sampling Coordinator

Orrin Childs
Environmental Sampling Supervisor

DL/OC:dl

Attachments: Table 1 - Monitoring well field measurement data
Table 2 - Summary of analytical results (TPH-g, BTEX)
Table 3 - Summary of analytical results (VOCs)
Figure 1 - Site location map
Figure 2 - Monitoring well locations
Certified analytical report
Chain-of-custody document

Table 1
Monitoring Well Field Measurement Data
Fourth Quarter 1992

Shell Station: 1285 Bancroft Avenue
San Leandro, California
WIC #: 204-6852-0703

Date: 01/06/93
Project Number: G67-35.01

Well Designation	Water Level Field Date	TOC Elevation (ft-MSL)	Depth to Water (feet)	Groundwater Elevation (ft-MSL)	Total Well Depth (feet)	Floating Product Thickness (feet)	Water Sample Field Date	pH (std. units)	Electrical Conductivity (micromhos/cm)	Temperature (degrees F)	Turbidity (NTU)
MW-1	09/17/91	66.29	44.85	21.44	NR	NR	09/17/91	NR	NR	NR	NR
MW-1	03/01/92	66.29	41.56	24.73	59.1	ND	03/01/92	6.84	497	64.7	20
MW-1	06/03/92	66.29	40.74	25.55	59.2	ND	06/03/92	6.72	516	68.8	2.85
MW-1	09/01/92	66.29	43.05	23.24	59.0	ND	09/01/92	6.69	459	67.2	>200
MW-1	12/07/92	66.29	44.19	22.10	59.2	ND	12/07/92	6.81	483	59.3	>200
MW-2	03/01/92	66.91	41.57	25.34	59.1	ND	03/01/92	6.85	468	64.9	50
MW-2	06/03/92	66.91	40.56	26.35	59.1	ND	06/03/92	6.70	471	72.6	10.7
MW-2	09/01/92	66.91	42.94	23.97	59.2	ND	09/01/92	6.77	432	66.9	>200
MW-2	12/07/92	66.91	44.13	22.78	59.1	ND	12/07/92	6.71	465	58.7	>200
MW-3	03/01/92	66.31	42.00	24.31	57.9	ND	03/01/92	6.74	679	65.2	70
MW-3	06/03/92	66.31	44.30	22.01	57.9	ND	06/03/92	6.60	648	68.6	9.61
MW-3	09/01/92	66.31	43.62	22.69	58.0	ND	09/01/92	6.59	649	67.2	>200
MW-3	12/07/92	66.31	44.77	21.54	58.0	ND	12/07/92	6.58	726	57.6	>200

TOC = top of casing
ft-MSL = elevation in feet, relative to mean sea level
std. units = standard pH units
micromhos/cm = micromhos per centimeter
degrees F = degrees Fahrenheit
NTU = nephelometric turbidity units
NR = Not reported; data not available
ND = None detected

Table 2
Summary of Analytical Results
Fourth Quarter 1992
milligrams per liter (mg/l) or parts per million (ppm)

Shell Station: 1285 Bancroft Avenue
San Leandro, California
WIC #: 204-6852-0703

Date: 01/06/93
Project Number: G67-35.01

Sample Designation	Water Sample Field Date	TPH-g (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethyl-benzene (mg/l)	Total Xylenes (mg/l)	TPH-d (mg/l)
MW-1	09/17/91	0.05^	<0.0005	<0.0005	<0.0005	<0.0005	0.16&
MW-1	03/01/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
MW-1	06/03/92	<0.05	0.0008	<0.0005	0.0009	<0.0005	NA
MW-1	09/01/92	<0.05	<0.0005	0.0058	0.0053	0.0072	NA
MW-1	12/07/92	[illegible]	<0.0005	[illegible]	<0.0005	[illegible]	NA
MW-2	03/01/92	0.91	0.011	0.0052	0.050	0.140	<0.05
MW-2	06/03/92	1.4	0.033	0.016	0.15	0.24	NA
MW-2	09/01/92	0.23	0.0052	0.0041	0.015	0.019	NA
MW-2	12/07/92	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	NA
MW-2D	09/01/92	0.23	0.0056	0.0050	0.018	0.022	NA
MW-2D	12/07/92	0.32	0.0017	0.0010	0.013	0.012	NA
MW-3	03/01/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
MW-3	06/03/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	NA
MW-3	09/01/92	<0.05	<0.0005	<0.0005	[illegible]	[illegible]	NA
MW-3	12/07/92	[illegible]	<0.0005	<0.0005	<0.0005	[illegible]	NA
FB	09/01/92	<0.05	<0.0005	<0.0005	<0.0005	0.0010	NA
FB	12/07/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	NA

TPH-g = total petroleum hydrocarbons as gasoline
TPH-d = total petroleum hydrocarbons as diesel
^ = Result due to a non-gasoline hydrocarbon compound
& = Result due to a non-diesel hydrocarbon compound
NA = Not analyzed

Table 2
Summary of Analytical Results
Fourth Quarter 1992
milligrams per liter (mg/l) or parts per million (ppm)

Shell Station: 1285 Bancroft Avenue
San Leandro, California
WIC #: 204-6852-0703

Date: 01/06/93
Project Number: G67-35.01

Sample Designation	Water Sample Field Date	TPH-g (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethyl-benzene (mg/l)	Total Xylenes (mg/l)	TPH-d (mg/l)
TB	09/17/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	NA
TB	03/01/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	NA
TB	06/03/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	NA
TB	09/01/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	NA
TB	12/07/92	0.059	<0.0005	<0.0005	<0.0005	<0.0005	NA

TPH-g = total petroleum hydrocarbons as gasoline
TPH-d = total petroleum hydrocarbons as diesel
NA = Not analyzed

Table 3
Summary of Analytical Results
Volatile Organic Compounds by EPA Method 601
Fourth Quarter 1992
milligrams per liter (mg/l) or parts per million (ppm)

Shell Station: 1285 Bancroft Avenue
San Leandro, California
WIC #: 204-6852-0703

Date: 01/06/93
Project Number: G67-35.01

Sample Designation	Water Sample Field Date	TCE (mg/l)	PCE (mg/l)	Chloroform (mg/l)	cis-1,2-DCE (mg/l)	trans-1,2-DCE (mg/l)
MW-1	09/17/91	NA	0.023	0.0074	NA	NA
MW-1	03/01/92	<0.0004	0.021	0.0063	NA	<0.0004
MW-1	06/03/92	0.017	<0.0005	0.0067	<0.0005	<0.0005
MW-1	09/01/92	0.012	<0.0005	0.0058	<0.0005	<0.0005
MW-1	12/07/92	<0.0005	[illegible]	[illegible]	<0.0005	<0.0005
MW-2	03/01/92	<0.0004	0.011	0.0089	NA	<0.0004
MW-2	06/03/92	0.0074	<0.0005	<0.0005	0.00078	0.0063
MW-2	09/01/92	0.0084	<0.0005	0.0091	<0.0005	<0.0005
MW-2	12/07/92	<0.0005	[illegible]	[illegible]	<0.0005	<0.0005
MW-2D	09/01/92	0.0084	<0.0005	0.0081	<0.0005	<0.0005
MW-2D	12/07/92	<0.0005	[illegible]	[illegible]	<0.0005	<0.0005
MW-3	03/01/92	<0.0004	0.0088	0.0024	NA	<0.0004
MW-3	06/03/92	0.0030	<0.0005	0.0015	<0.0005	<0.0005
MW-3	09/01/92	0.0088	<0.0005	0.0023	<0.0005	<0.0005
MW-3	12/07/92	<0.0005	[illegible]	[illegible]	<0.0005	<0.0005
FB	09/01/92	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
FB	12/07/92	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
TB	09/01/92	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
TB	12/07/92	<0.0005*	<0.0005*	<0.0005*	<0.0005*	<0.0005*

TCE = Trichloroethene
PCE = Tetrachloroethene
cis-1,2-DCE = cis-1,2-Dichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
NA = Not analyzed
* = Trip blank sample from 12/07/92 contained 0.014 mg/l of 1,3-Dichlorobenzene

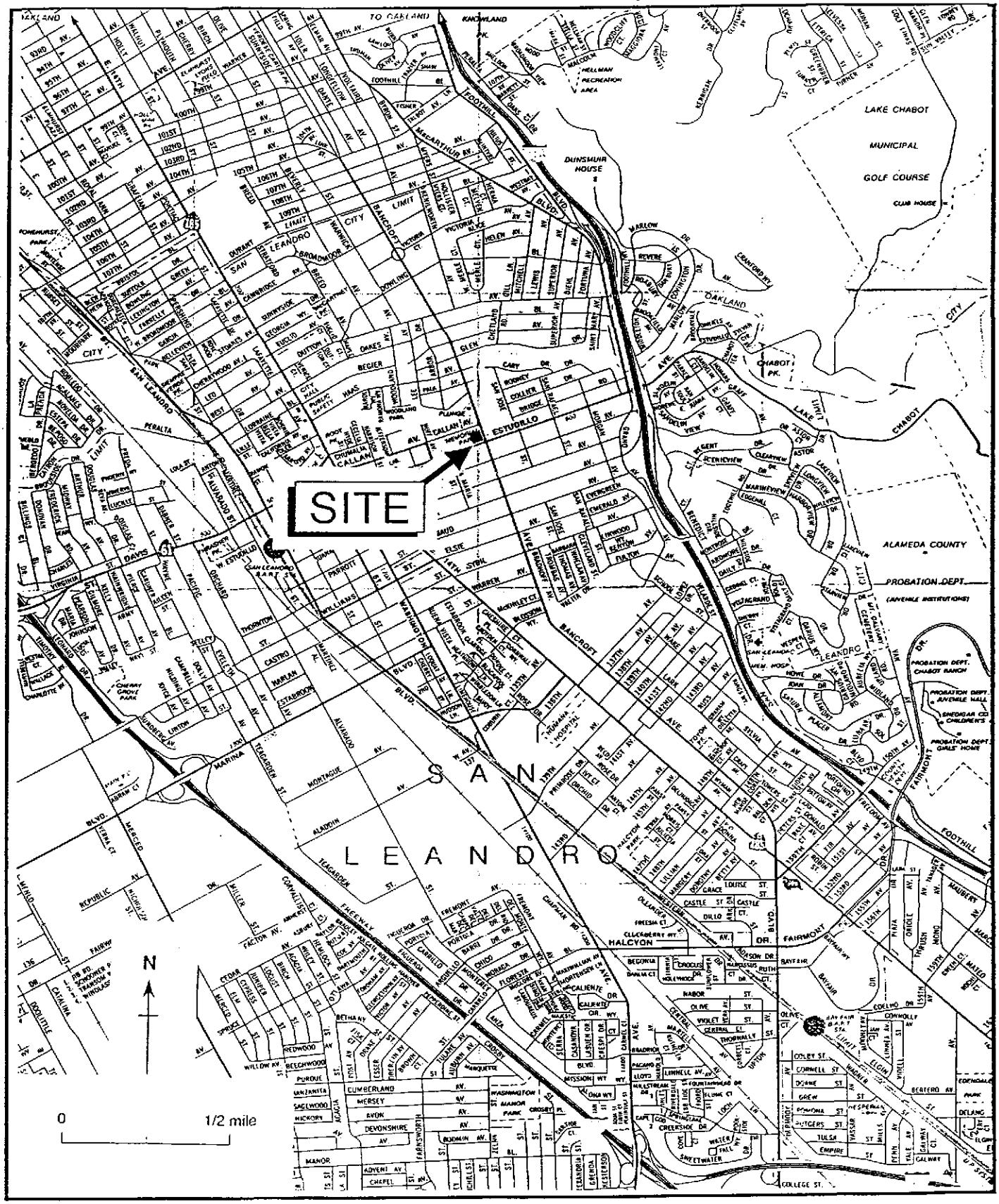
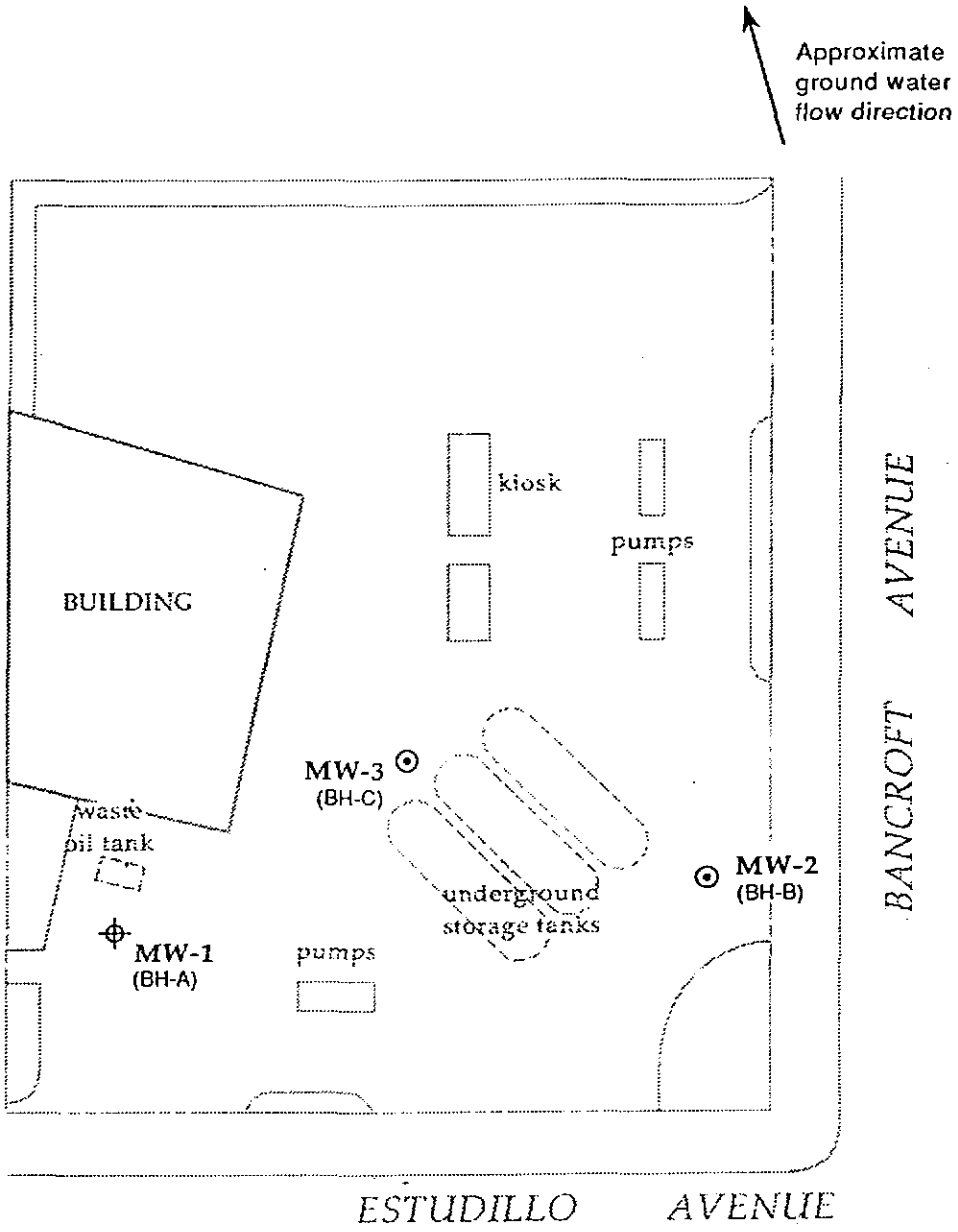


Figure 1. Site Location Map - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California

3/16/90



EXPLANATION

- MW-2 (BH-B) — Monitoring well installed for this investigation; boring ID in parenthesis
- MW-1 (BH-A) — Pre-existing monitoring well; boring ID in parenthesis

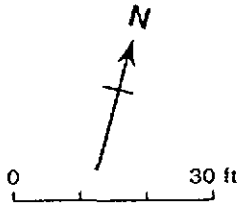


Figure 2. Monitoring Well Locations - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California

ANAMETRIX INC
Environmental & Analytical Chemistry

Part of INCHCAPE ENVIRONMENTAL

REPORT

MR. DAVID LARSEN
EMCON ASSOCIATES
1938 JUNCTION AVE.
SAN JOSE, CA 95131

Workorder # : 9212132
Date Received : 12/08/92
Project ID : 204-6852-0703
Purchase Order: MOH-B813

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

ANAMETRIX ID	CLIENT SAMPLE ID
9212132- 1	MW-1
9212132- 2	MW-2
9212132- 3	MW-3
9212132- 4	MW-2D
9212132- 5	TB
9212132- 6	FB

This report consists of 20 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

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

Sarah Schoen, Ph.D.
Laboratory Director

12-22-92
Date

EMCON ASSOCIATES

DEC 2 2 1992

RECEIVED

ANAMETRIX REPORT DESCRIPTION
GC

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 Anametrix ID number.

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

Anametrix uses several data qualifiers (Q) in it's 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.

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. DAVID LARSEN
EMCON ASSOCIATES
1938 JUNCTION AVE.
SAN JOSE, CA 95131

Workorder # : 9212132
Date Received : 12/08/92
Project ID : 204-6852-0703
Purchase Order: MOH-B813
Department : GC
Sub-Department: VOA

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9212132- 1	MW-1	WATER	12/07/92	8010
9212132- 2	MW-2	WATER	12/07/92	8010
9212132- 3	MW-3	WATER	12/07/92	8010
9212132- 4	MW-2D	WATER	12/07/92	8010
9212132- 5	TB	WATER	12/07/92	8010
9212132- 6	FB	WATER	12/07/92	8010

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

MR. DAVID LARSEN
EMCON ASSOCIATES
1938 JUNCTION AVE.
SAN JOSE, CA 95131

Workorder # : 9212132
Date Received : 12/08/92
Project ID : 204-6852-0703
Purchase Order: MOH-B813
Department : GC
Sub-Department: VOA

QA/QC SUMMARY :

- No QA/QC problems encountered for samples.

C. Grimenstram 12/21/92
Department Supervisor Date

M. Hassanian 12/21/92
Chemist Date

DESCRIPTIONS FOR SPECIFIC COMPOUNDS ANALYZED
EPA METHOD 601/8010

CAS #	COMPOUND NAME	ABBREVIATED NAME
74-87-3	Chloromethane	Chloromethane
74-83-9	Bromomethane	Bromoethane
75-71-8	Dichlorodifluoromethane	Freon 12
75-01-4	Vinyl Chloride	Vinyl Chloride
75-00-3	Chloroethane	Chloroethane
75-09-2	Methylene Chloride	Methylene Chlor
75-69-4	Trichlrofluoromethane	Freon 11
75-35-4	1,1-Dichloroethene	1,1-DCE
75-34-3	1,1-Dichloroethane	1,1-DCA
156-59-2	Cis-1,2-Dichloroethene	Cis-1,2-DCE
156-60-5	Trans-1,2-Dichloroethene	Trans-1,2-DCE
67-66-3	Chloroform	Chloroform
76-13-1	Trichlorotrifluoroethane	Freon 113
107-06-2	1,2-Dichloroethane	1,2-DCA
71-55-6	1,1,1-Trichloroethane	1,1,1-TCA
56-23-5	Carbon Tetrachloride	Carbon Tet
75-27-4	Bromodichloromethane	BromodichloroMe
78-87-5	1,2-Dichloropropane	1,2-DCPA
10061-02-6	Trans-1,3-Dichloropropene	Trans-1,3-DCPE
79-01-6	Trichloroethene	TCE
124-48-1	Dibromochloromethane	DibromochloroMe
79-00-5	1,1,2-Trichloroethane	1,1,2-TCA
10061-01-5	Cis-1,3-Dichloropropene	Cis-1,3-DCPE
110-75-8	2-Chloroethylvinylether	Chloroethylvinl
75-25-2	Bromoform	Bromoform
127-18-4	Tetrachloroethene	PCE
79-34-5	1,1,2,2-Tetrachloroethane	PCA
108-90-7	Chlorobenzene	Chlorobenzene
95-50-1	1,2-Dichlorobenzene	1,2-DCB
541-73-1	1,3-Dichlorobenzene	1,3-DCB
106-46-7	1,4-Dichlorobenzene	1,4-DCB
352-33-0	p-Chlorofluorobenzene	Chlorofluoroben

mh/3426 - 10MH

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

Sample I.D. : 204-6852-0703 MW-1
Matrix : WATER
Date sampled : 12/07/92
Date analyzed: 12/17/92
Dilution : NONE

Anametrix I.D. : 9212132-01
Analyst :
Supervisor :
Date released : 12/21/92
Instrument ID : HP14

CAS #	Compound Name	Reporting Limit (mg/L)	Amount Found (mg/L)
74-87-3	* Chloromethane	0.001	ND
74-83-9	* Bromomethane	0.0005	ND
75-71-8	* Dichlorodifluoromethane	0.001	ND
75-01-4	* Vinyl Chloride	0.0005	ND
75-00-3	* Chloroethane	0.0005	ND
75-09-2	* Methylene Chloride	0.0005	ND
75-69-4	* Trichlorofluoromethane	0.0005	ND
75-35-4	* 1,1-Dichloroethene	0.0005	ND
75-34-3	* 1,1-Dichloroethane	0.0005	ND
156-59-2	# Cis-1,2-Dichloroethene	0.0005	ND
156-60-5	* Trans-1,2-Dichloroethene	0.0005	ND
67-66-3	* Chloroform	0.0005	0.009
76-13-1	# Trichlorotrifluoroethane	0.0005	ND
107-06-2	* 1,2-Dichloroethane	0.0005	ND
71-55-6	* 1,1,1-Trichloroethane	0.0005	ND
56-23-5	* Carbon Tetrachloride	0.0005	ND
75-27-4	* Bromodichloromethane	0.0005	ND
78-87-5	* 1,2-Dichloropropane	0.0005	ND
10061-02-6	* Trans-1,3-Dichloropropene	0.0005	ND
79-01-6	* Trichloroethene	0.0005	ND
124-48-1	* Dibromochloromethane	0.0005	ND
79-00-5	* 1,1,2-Trichloroethane	0.0005	ND
10061-01-5	* cis-1,3-Dichloropropene	0.0005	ND
110-75-8	* 2-Chloroethylvinylether	0.001	ND
75-25-2	* Bromoform	0.0005	ND
127-18-4	* Tetrachloroethene	0.0005	0.017
79-34-5	* 1,1,2,2-Tetrachloroethane	0.0005	ND
108-90-7	* Chlorobenzene	0.0005	ND
95-50-1	* 1,2-Dichlorobenzene	0.001	ND
541-73-1	* 1,3-Dichlorobenzene	0.001	ND
106-46-7	* 1,4-Dichlorobenzene	0.001	ND
	% Surrogate Recovery	51-136%	105%

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.

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

Sample I.D.	: 204-6852-0703 MW-2	Anametrix I.D.	: 9212132-02
Matrix	: WATER	Analyst	:
Date sampled	: 12/07/92	Supervisor	: CP
Date analyzed	: 12/18/92	Date released	: 12/21/92
Dilution	: NONE	Instrument ID	: HP10

CAS #	Compound Name	Reporting Limit (mg/L)	Amount Found (mg/L)
74-87-3	* Chloromethane	0.001	ND
74-83-9	* Bromomethane	0.0005	ND
75-71-8	* Dichlorodifluoromethane	0.001	ND
75-01-4	* Vinyl Chloride	0.0005	ND
75-00-3	* Chloroethane	0.0005	ND
75-09-2	* Methylene Chloride	0.0005	ND
75-69-4	* Trichlorofluoromethane	0.0005	ND
75-35-4	* 1,1-Dichloroethene	0.0005	ND
75-34-3	* 1,1-Dichloroethane	0.0005	ND
156-59-2	# Cis-1,2-Dichloroethene	0.0005	ND
156-60-5	* Trans-1,2-Dichloroethene	0.0005	ND
67-66-3	* Chloroform	0.0005	0.010
76-13-1	# Trichlorotrifluoroethane	0.0005	ND
107-06-2	* 1,2-Dichloroethane	0.0005	ND
71-55-6	* 1,1,1-Trichloroethane	0.0005	ND
56-23-5	* Carbon Tetrachloride	0.0005	ND
75-27-4	* Bromodichloromethane	0.0005	ND
78-87-5	* 1,2-Dichloropropane	0.0005	ND
10061-02-6	* Trans-1,3-Dichloropropene	0.0005	ND
79-01-6	* Trichloroethene	0.0005	ND
124-48-1	* Dibromochloromethane	0.0005	ND
79-00-5	* 1,1,2-Trichloroethane	0.0005	ND
10061-01-5	* cis-1,3-Dichloropropene	0.0005	ND
110-75-8	* 2-Chloroethylvinylether	0.001	ND
75-25-2	* Bromoform	0.0005	ND
127-18-4	* Tetrachloroethene	0.0005	0.010
79-34-5	* 1,1,2,2-Tetrachloroethane	0.0005	ND
108-90-7	* Chlorobenzene	0.0005	ND
95-50-1	* 1,2-Dichlorobenzene	0.001	ND
541-73-1	* 1,3-Dichlorobenzene	0.001	ND
106-46-7	* 1,4-Dichlorobenzene	0.001	ND
	% Surrogate Recovery	51-136%	102%

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.

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

Sample I.D. : 204-6852-0703 MW-3
Matrix : WATER
Date sampled : 12/07/92
Date analyzed: 12/17/92
Dilution : NONE

Anametrix I.D. : 9212132-03
Analyst :
Supervisor : CP
Date released : 12/21/92
Instrument ID : HP14

CAS #	Compound Name	Reporting Limit (mg/L)	Amount Found (mg/L)
74-87-3	* Chloromethane	0.001	ND
74-83-9	* Bromomethane	0.0005	ND
75-71-8	* Dichlorodifluoromethane	0.001	ND
75-01-4	* Vinyl Chloride	0.0005	ND
75-00-3	* Chloroethane	0.0005	ND
75-09-2	* Methylene Chloride	0.0005	ND
75-69-4	* Trichlorofluoromethane	0.0005	ND
75-35-4	* 1,1-Dichloroethene	0.0005	ND
75-34-3	* 1,1-Dichloroethane	0.0005	ND
156-59-2	# Cis-1,2-Dichloroethene	0.0005	ND
156-60-5	* Trans-1,2-Dichloroethene	0.0005	ND
67-66-3	* Chloroform	0.0005	0.003
76-13-1	# Trichlorotrifluoroethane	0.0005	ND
107-06-2	* 1,2-Dichloroethane	0.0005	ND
71-55-6	* 1,1,1-Trichloroethane	0.0005	ND
56-23-5	* Carbon Tetrachloride	0.0005	ND
75-27-4	* Bromodichloromethane	0.0005	ND
78-87-5	* 1,2-Dichloropropane	0.0005	ND
10061-02-6	* Trans-1,3-Dichloropropene	0.0005	ND
79-01-6	* Trichloroethene	0.0005	ND
124-48-1	* Dibromochloromethane	0.0005	ND
79-00-5	* 1,1,2-Trichloroethane	0.0005	ND
10061-01-5	* cis-1,3-Dichloropropene	0.0005	ND
110-75-8	* 2-Chloroethylvinylether	0.001	ND
75-25-2	* Bromoform	0.0005	ND
127-18-4	* Tetrachloroethene	0.0005	0.010
79-34-5	* 1,1,2,2-Tetrachloroethane	0.0005	ND
108-90-7	* Chlorobenzene	0.0005	ND
95-50-1	* 1,2-Dichlorobenzene	0.001	ND
541-73-1	* 1,3-Dichlorobenzene	0.001	ND
106-46-7	* 1,4-Dichlorobenzene	0.001	ND
	% Surrogate Recovery	51-136%	105%

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.

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

Sample I.D.	: 204-6852-0703 MW-2D	Anametrix I.D.	: 9212132-04
Matrix	: WATER	Analyst	:
Date sampled	: 12/07/92	Supervisor	: CP
Date analyzed	: 12/18/92	Date released	: 12/21/92
Dilution	: NONE	Instrument ID	: HP10

CAS #	Compound Name	Reporting Limit (mg/L)	Amount Found (mg/L)
74-87-3	* Chloromethane	0.001	ND
74-83-9	* Bromomethane	0.0005	ND
75-71-8	* Dichlorodifluoromethane	0.001	ND
75-01-4	* Vinyl Chloride	0.0005	ND
75-00-3	* Chloroethane	0.0005	ND
75-09-2	* Methylene Chloride	0.0005	ND
75-69-4	* Trichlorofluoromethane	0.0005	ND
75-35-4	* 1,1-Dichloroethene	0.0005	ND
75-34-3	* 1,1-Dichloroethane	0.0005	ND
156-59-2	# Cis-1,2-Dichloroethene	0.0005	ND
156-60-5	* Trans-1,2-Dichloroethene	0.0005	ND
67-66-3	* Chloroform	0.0005	0.009
76-13-1	# Trichlorotrifluoroethane	0.0005	ND
107-06-2	* 1,2-Dichloroethane	0.0005	ND
71-55-6	* 1,1,1-Trichloroethane	0.0005	ND
56-23-5	* Carbon Tetrachloride	0.0005	ND
75-27-4	* Bromodichloromethane	0.0005	ND
78-87-5	* 1,2-Dichloropropane	0.0005	ND
10061-02-6	* Trans-1,3-Dichloropropene	0.0005	ND
79-01-6	* Trichloroethene	0.0005	ND
124-48-1	* Dibromochloromethane	0.0005	ND
79-00-5	* 1,1,2-Trichloroethane	0.0005	ND
10061-01-5	* cis-1,3-Dichloropropene	0.0005	ND
110-75-8	* 2-Chloroethylvinylether	0.001	ND
75-25-2	* Bromoform	0.0005	ND
127-18-4	* Tetrachloroethene	0.0005	0.010
79-34-5	* 1,1,2,2-Tetrachloroethane	0.0005	ND
108-90-7	* Chlorobenzene	0.0005	ND
95-50-1	* 1,2-Dichlorobenzene	0.001	ND
541-73-1	* 1,3-Dichlorobenzene	0.001	ND
106-46-7	* 1,4-Dichlorobenzene	0.001	ND
	% Surrogate Recovery	51-136%	101%

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.

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

Sample I.D.	: 204-6852-0703 TB	Anametrix I.D.	: 9212132-05
Matrix	: WATER	Analyst	:
Date sampled	: 12/07/92	Supervisor	: CP
Date analyzed	: 12/17/92	Date released	: 12/21/92
Dilution	: NONE	Instrument ID	: HP14

CAS #	Compound Name	Reporting Limit (mg/L)	Amount Found (mg/L)
74-87-3	* Chloromethane	0.001	ND
74-83-9	* Bromomethane	0.0005	ND
75-71-8	* Dichlorodifluoromethane	0.001	ND
75-01-4	* Vinyl Chloride	0.0005	ND
75-00-3	* Chloroethane	0.0005	ND
75-09-2	* Methylene Chloride	0.0005	ND
75-69-4	* Trichlorofluoromethane	0.0005	ND
75-35-4	* 1,1-Dichloroethene	0.0005	ND
75-34-3	* 1,1-Dichloroethane	0.0005	ND
156-59-2	# Cis-1,2-Dichloroethene	0.0005	ND
156-60-5	* Trans-1,2-Dichloroethene	0.0005	ND
67-66-3	* Chloroform	0.0005	ND
76-13-1	# Trichlorotrifluoroethane	0.0005	ND
107-06-2	* 1,2-Dichloroethane	0.0005	ND
71-55-6	* 1,1,1-Trichloroethane	0.0005	ND
56-23-5	* Carbon Tetrachloride	0.0005	ND
75-27-4	* Bromodichloromethane	0.0005	ND
78-87-5	* 1,2-Dichloropropane	0.0005	ND
10061-02-6	* Trans-1,3-Dichloropropene	0.0005	ND
79-01-6	* Trichloroethene	0.0005	ND
124-48-1	* Dibromochloromethane	0.0005	ND
79-00-5	* 1,1,2-Trichloroethane	0.0005	ND
10061-01-5	* cis-1,3-Dichloropropene	0.0005	ND
110-75-8	* 2-Chloroethylvinylether	0.001	ND
75-25-2	* Bromoform	0.0005	ND
127-18-4	* Tetrachloroethene	0.0005	ND
79-34-5	* 1,1,2,2-Tetrachloroethane	0.0005	ND
108-90-7	* Chlorobenzene	0.0005	ND
95-50-1	* 1,2-Dichlorobenzene	0.001	ND
541-73-1	* 1,3-Dichlorobenzene	0.001	0.014
106-46-7	* 1,4-Dichlorobenzene	0.001	ND
	% Surrogate Recovery	51-136%	98%

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.

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

Sample I.D. : 204-6852-0703 FB
Matrix : WATER
Date sampled : 12/07/92
Date analyzed: 12/17/92
Dilution : NONE

Anametrix I.D. : 9212132-06
Analyst : [illegible]
Supervisor : LP
Date released : 12/21/92
Instrument ID : HP14

CAS #	Compound Name	Reporting Limit (mg/L)	Amount Found (mg/L)
74-87-3	* Chloromethane	0.001	ND
74-83-9	* Bromomethane	0.0005	ND
75-71-8	* Dichlorodifluoromethane	0.001	ND
75-01-4	* Vinyl Chloride	0.0005	ND
75-00-3	* Chloroethane	0.0005	ND
75-09-2	* Methylene Chloride	0.0005	ND
75-69-4	* Trichlorofluoromethane	0.0005	ND
75-35-4	* 1,1-Dichloroethene	0.0005	ND
75-34-3	* 1,1-Dichloroethane	0.0005	ND
156-59-2	# Cis-1,2-Dichloroethene	0.0005	ND
156-60-5	* Trans-1,2-Dichloroethene	0.0005	ND
67-66-3	* Chloroform	0.0005	ND
76-13-1	# Trichlorotrifluoroethane	0.0005	ND
107-06-2	* 1,2-Dichloroethane	0.0005	ND
71-55-6	* 1,1,1-Trichloroethane	0.0005	ND
56-23-5	* Carbon Tetrachloride	0.0005	ND
75-27-4	* Bromodichloromethane	0.0005	ND
78-87-5	* 1,2-Dichloropropane	0.0005	ND
10061-02-6	* Trans-1,3-Dichloropropene	0.0005	ND
79-01-6	* Trichloroethene	0.0005	ND
124-48-1	* Dibromochloromethane	0.0005	ND
79-00-5	* 1,1,2-Trichloroethane	0.0005	ND
10061-01-5	* cis-1,3-Dichloropropene	0.0005	ND
110-75-8	* 2-Chloroethylvinylether	0.001	ND
75-25-2	* Bromoform	0.0005	ND
127-18-4	* Tetrachloroethene	0.0005	ND
79-34-5	* 1,1,2,2-Tetrachloroethane	0.0005	ND
108-90-7	* Chlorobenzene	0.0005	ND
95-50-1	* 1,2-Dichlorobenzene	0.001	ND
541-73-1	* 1,3-Dichlorobenzene	0.001	ND
106-46-7	* 1,4-Dichlorobenzene	0.001	ND
	% Surrogate Recovery	51-136%	96%

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.

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

Sample I.D.	: VBLANK	Anametrix I.D.	: 10B1217H01
Matrix	: WATER	Analyst	:
Date sampled	: N/A	Supervisor	:
Date analyzed	: 12/17/92	Date released	: 12/21/92
Dilution	: NONE	Instrument ID	: HP14

CAS #	Compound Name	Reporting Limit (mg/L)	Amount Found (mg/L)
74-87-3	* Chloromethane	0.001	ND
74-83-9	* Bromomethane	0.0005	ND
75-71-8	* Dichlorodifluoromethane	0.001	ND
75-01-4	* Vinyl Chloride	0.0005	ND
75-00-3	* Chloroethane	0.0005	ND
75-09-2	* Methylene Chloride	0.0005	ND
75-69-4	* Trichlorofluoromethane	0.0005	ND
75-35-4	* 1,1-Dichloroethene	0.0005	ND
75-34-3	* 1,1-Dichloroethane	0.0005	ND
156-59-2	# Cis-1,2-Dichloroethene	0.0005	ND
156-60-5	* Trans-1,2-Dichloroethene	0.0005	ND
67-66-3	* Chloroform	0.0005	ND
76-13-1	# Trichlorotrifluoroethane	0.0005	ND
107-06-2	* 1,2-Dichloroethane	0.0005	ND
71-55-6	* 1,1,1-Trichloroethane	0.0005	ND
56-23-5	* Carbon Tetrachloride	0.0005	ND
75-27-4	* Bromodichloromethane	0.0005	ND
78-87-5	* 1,2-Dichloropropane	0.0005	ND
10061-02-6	* Trans-1,3-Dichloropropene	0.0005	ND
79-01-6	* Trichloroethene	0.0005	ND
124-48-1	* Dibromochloromethane	0.0005	ND
79-00-5	* 1,1,2-Trichloroethane	0.0005	ND
10061-01-5	* cis-1,3-Dichloropropene	0.0005	ND
110-75-8	* 2-Chloroethylvinylether	0.001	ND
75-25-2	* Bromoform	0.0005	ND
127-18-4	* Tetrachloroethene	0.0005	ND
79-34-5	* 1,1,2,2-Tetrachloroethane	0.0005	ND
108-90-7	* Chlorobenzene	0.0005	ND
95-50-1	* 1,2-Dichlorobenzene	0.001	ND
541-73-1	* 1,3-Dichlorobenzene	0.001	ND
106-46-7	* 1,4-Dichlorobenzene	0.001	ND
	% Surrogate Recovery	51-136%	98%

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.

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

Sample I.D. : VBLANK
Matrix : WATER
Date sampled : N/A
Date analyzed: 12/18/92
Dilution : NONE

Anametrix I.D. : 10B1218H01
Analyst : SL
Supervisor : CP
Date released : 12/21/92
Instrument ID : HP10

CAS #	Compound Name	Reporting Limit (mg/L)	Amount Found (mg/L)
74-87-3	* Chloromethane	0.001	ND
74-83-9	* Bromomethane	0.0005	ND
75-71-8	* Dichlorodifluoromethane	0.001	ND
75-01-4	* Vinyl Chloride	0.0005	ND
75-00-3	* Chloroethane	0.0005	ND
75-09-2	* Methylene Chloride	0.0005	ND
75-69-4	* Trichlorofluoromethane	0.0005	ND
75-35-4	* 1,1-Dichloroethene	0.0005	ND
75-34-3	* 1,1-Dichloroethane	0.0005	ND
156-59-2	# Cis-1,2-Dichloroethene	0.0005	ND
156-60-5	* Trans-1,2-Dichloroethene	0.0005	ND
67-66-3	* Chloroform	0.0005	ND
76-13-1	# Trichlorotrifluoroethane	0.0005	ND
107-06-2	* 1,2-Dichloroethane	0.0005	ND
71-55-6	* 1,1,1-Trichloroethane	0.0005	ND
56-23-5	* Carbon Tetrachloride	0.0005	ND
75-27-4	* Bromodichloromethane	0.0005	ND
78-87-5	* 1,2-Dichloropropane	0.0005	ND
10061-02-6	* Trans-1,3-Dichloropropene	0.0005	ND
79-01-6	* Trichloroethene	0.0005	ND
124-48-1	* Dibromochloromethane	0.0005	ND
79-00-5	* 1,1,2-Trichloroethane	0.0005	ND
10061-01-5	* cis-1,3-Dichloropropene	0.0005	ND
110-75-8	* 2-Chloroethylvinylether	0.001	ND
75-25-2	* Bromoform	0.0005	ND
127-18-4	* Tetrachloroethene	0.0005	ND
79-34-5	* 1,1,2,2-Tetrachloroethane	0.0005	ND
108-90-7	* Chlorobenzene	0.0005	ND
95-50-1	* 1,2-Dichlorobenzene	0.001	ND
541-73-1	* 1,3-Dichlorobenzene	0.001	ND
106-46-7	* 1,4-Dichlorobenzene	0.001	ND
	% Surrogate Recovery	51-136%	98%

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.

HALOGENATED VOLATILE RECOVERY REPORT
EPA METHOD 601/8010
ANAMETRIX, INC. (408)432-8192

Sample I.D. : 204-6852-0703 MW-2
Matrix : WATER
Date sampled : 12/07/92
Date analyzed : 12/18/92

Anametrix I.D. : 9212132-02
Analyst :
Supervisor : CP
Date released : 12/21/92
Instrument I.D.: HP10

	SPIKE AMT. (ug/L)	MS (ug/L)	REC MS	MSD (ug/L)	REC MSD	RPD	%REC LIMITS
FREON 113	10	8.6	86%	8.5	85%	1%	28 - 127
1,1-DICHLOROETHENE	10	10.6	106%	10.4	104%	1%	47 - 119
trans-1,2-DICHLOROETHENE	10	9.6	96%	9.2	92%	4%	46 - 112
1,1-DICHLOROETHANE	10	10.3	103%	10.8	108%	-5%	57 - 124
Cis-1,2-DICHLOROETHENE	10	11.9	119%	12.8	128%	-7%	70 - 139
1,1,1-TRICHLOROETHANE	10	11.8	118%	10.8	108%	8%	57 - 125
TRICHLOROETHENE	10	9.2	92%	9.0	90%	2%	61 - 133
TETRACHLOROETHENE	10	7.4	74%	8.3	83%	-12%	61 - 132
CHLOROBENZENE	10	8.4	84%	10.2	102%	-20%	81 - 120
1,3-DICHLOROBENZENE	10	8.1	81%	7.9	79%	2%	56 - 113
1,4-DICHLOROBENZENE	10	9.2	92%	9.8	98%	-6%	62 - 119
1,2-DICHLOROBENZENE	10	8.9	89%	9.1	91%	-1%	69 - 116

* Limits based on data generated by Anametrix, Inc., September 1992.

LABORATORY CONTROL SAMPLE
EPA METHOD 601/8010
ANAMETRIX, INC. (408)432-8192

Project/Case : LABORATORY CONTROL SAMPLE
Matrix : WATER
SDG/Batch : N/A
Date analyzed : 12/17/92

Anametrix I.D. : WO121792
Analyst : JL
Supervisor : CP
Instrument I.D.: HP14

COMPOUND	SPIKE AMOUNT (ug/L)	AMOUNT RECOVERED (ug/L)	PERCENT RECOVERY	%RECOVERY LIMITS
FREON 113	10	9.8	98%	34 - 128
1,1-DICHLOROETHENE	10	9.5	95%	63 - 133
trans-1,2-DICHLOROETHENE	10	9.4	94%	55 - 145
1,1-DICHLOROETHANE	10	10.0	100%	49 - 121
cis-1,2-DICHLOROETHENE	10	8.6	86%	66 - 168
1,1,1-TRICHLOROETHANE	10	10.4	104%	72 - 143
TRICHLOROETHENE	10	8.8	88%	63 - 147
TETRACHLOROETHENE	10	8.4	84%	60 - 133
CHLOROBENZENE	10	9.7	97%	70 - 148
1,3-DICHLOROBENZENE	10	7.6	76%	49 - 139
1,4-DICHLOROBENZENE	10	8.3	83%	70 - 133
1,2-DICHLOROBENZENE	10	8.4	84%	69 - 140

* Limits based on data generated by Anametrix, Inc., August, 1992.

LABORATORY CONTROL SAMPLE
EPA METHOD 601/8010
ANAMETRIX, INC. (408)432-8192

Project/Case : LABORATORY CONTROL SAMPLE
Matrix : WATER
SDG/Batch : N/A
Date analyzed : 12/18/92

Anametrix I.D. : WQ121892
Analyst :
Supervisor :
Instrument I.D.: HP10

COMPOUND	SPIKE AMOUNT (ug/L)	AMOUNT RECOVERED (ug/L)	PERCENT RECOVERY	%RECOVERY LIMITS
FREON 113	10	8.5	85%	34 - 128
1,1-DICHLOROETHENE	10	10.4	104%	63 - 133
trans-1,2-DICHLOROETHENE	10	9.2	92%	55 - 145
1,1-DICHLOROETHANE	10	10.8	108%	49 - 121
cis-1,2-DICHLOROETHENE	10	12.8	128%	66 - 168
1,1,1-TRICHLOROETHANE	10	10.8	108%	72 - 143
TRICHLOROETHENE	10	9.0	90%	63 - 147
TETRACHLOROETHENE	10	8.3	83%	60 - 133
CHLOROBENZENE	10	10.2	102%	70 - 148
1,3-DICHLOROBENZENE	10	7.9	79%	49 - 139
1,4-DICHLOROBENZENE	10	9.8	98%	70 - 133
1,2-DICHLOROBENZENE	10	9.1	91%	69 - 140

* Limits based on data generated by Anametrix, Inc., August, 1992.

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

MR. DAVID LARSEN
EMCON ASSOCIATES
1938 JUNCTION AVE.
SAN JOSE, CA 95131

Workorder # : 9212132
Date Received : 12/08/92
Project ID : 204-6852-0703
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9212132- 1	MW-1	WATER	12/07/92	TPHg/BTEX
9212132- 2	MW-2	WATER	12/07/92	TPHg/BTEX
9212132- 3	MW-3	WATER	12/07/92	TPHg/BTEX
9212132- 4	MW-2D	WATER	12/07/92	TPHg/BTEX
9212132- 5	TB	WATER	12/07/92	TPHg/BTEX
9212132- 6	FB	WATER	12/07/92	TPHg/BTEX

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

MR. DAVID LARSEN
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1938 JUNCTION AVE.
SAN JOSE, CA 95131

Workorder # : 9212132
Date Received : 12/08/92
Project ID : 204-6852-0703
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Cheryl Brewer 12/14/92
Department Supervisor Date

Laura Starr 12/16/92
Chemist Date

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

Anametrix W.O.: 9212132
Matrix : WATER
Date Sampled : 12/07/92

Project Number : 204-6852-0703
Date Released : 12/15/92

COMPOUNDS	Reporting Limit (mg/L)	Sample I.D.# MW-1 -01	Sample I.D.# MW-2 -02	Sample I.D.# MW-3 -03	Sample I.D.# MW-2D -04	Sample I.D.# TB -05
Benzene	0.0005	ND	0.0015	ND	0.0017	ND
Toluene	0.0005	0.0008	0.0013	ND	0.0010	ND
Ethylbenzene	0.0005	ND	0.0095	ND	0.013	ND
Total Xylenes	0.0005	0.0012	0.0099	0.0005	0.012	ND
TPH as Gasoline	0.050	0.068	0.24	0.052	0.32	0.059
% Surrogate Recovery		113%	101%	108%	101%	125%
Instrument I.D.		HP4	HP4	HP4	HP4	HP4
Date Analyzed		12/10/92	12/10/92	12/10/92	12/10/92	12/10/92
RLMF		1	1	1	1	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 modified EPA Method 8015 following sample purge and trap by EPA Method 5030.
BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.
RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

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

Analyst 12/22/92 Date

Supervisor 12/22/92 Date

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

Anametrix W.O.: 9212132
Matrix : WATER
Date Sampled : 12/07/92

Project Number : 204-6852-0703
Date Released : 12/15/92

COMPOUNDS	Reporting Limit (mg/L)	Sample I.D.# FB -06	Sample I.D.# BD1001E3 BLANK
Benzene	0.0005	ND	ND
Toluene	0.0005	ND	ND
Ethylbenzene	0.0005	ND	ND
Total Xylenes	0.0005	ND	ND
TPH as Gasoline	0.050	ND	ND
% Surrogate Recovery		110%	115%
Instrument I.D.		HP4	HP4
Date Analyzed		12/10/92	12/10/92
RLMF		1	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 modified EPA Method 8015 following sample purge and trap by EPA Method 5030.
BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.
RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

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

Analyst Date 12/16/92

Supervisor Date 12/16/92

TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT
EPA METHOD 5030 WITH GC/FID
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : WATER
Date Sampled : N/A
Date Analyzed : 12/10/92

Anametrix I.D. : LCSW1210
Analyst : IS
Supervisor : CB
Date Released : 12/16/92
Instrument I.D.: HP4

COMPOUND	SPIKE AMT. (mg/L)	REC LCS (mg/L)	%REC LCS	% REC LIMITS
GASOLINE	0.50	0.50	100%	56-116
SURROGATE		93%		53-147

* Quality control established by Anametrix, Inc.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 12-8-92
Page / of /

Site Address: 1285 Bancroft Ave. San Leandro CA

WIC#: 204-6852-0703

Shell Engineer: Dan Kirk — Phone No.: (510) 675-6168

Consultant Name & Address: 1938 Junction Ave. San Jose, CA 95131 — EMCON Associates

Consultant Contact: David Larsen — Phone No.: (408) 453-7269

Comments: 3-VOAs (HCl) for gas, BTEX
3-VOAs (HCl) for 601

Sampled by: Bard Stafford

Printed Name: Bard Stafford

LAB: Anametrix

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	EPA 601 (VOCs)		Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
(1) MW-1	12-7-92			X		6 3						X	X			40 ml	NP HCl	No		
(2) MW-2				X		6						X	X							
(3) MW-3				X		6						X	X							
(4) MW-2D				X		6						X	X							
(5) TB				X		6						X	X							
(6) FB	"			X		6						X	X							

Relinquished By (signature)	Printed Name	Date / Time	Received (signature)	Printed Name	Date / Time
Bard Stafford		Date: 12-8-92 Time: 08:30	Chris Chaco	Chris Chaco	Date: 12-8-92 Time: 08:30
Chris Chaco	Chris Chaco	Date: 12-8 Time: 12:02	Michele D Aguilar	Michele D Aguilar	Date: 12-8-92 Time: 12:03
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):	Printed Name:	Date: Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev 07/91

Shell Oil Chain of Custody