



TRANSMITTAL LETTER

82 JUL 22 7 10 53
5510 3719

FROM: J. Michael Asport

DATE: July 27, 1992

TO: Tom Peacock
Alameda County Department of
Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

VIA: X First Class Mail
_____ Fax _____ pages
_____ UPS (Surface)
_____ Federal Express
_____ Courier

SUBJECT: Shell Service Station
WIC #204-5508-3301
6039 College Avenue
Oakland, California

JOB: 81-618-201

AS: _____ We discussed on the telephone on _____
_____ You requested _____
_____ We believe you may be interested
 X _____ Is required

WE ARE SENDING: X Enclosed
_____ Under Separate Cover Via _____

Quarterly Status Report

FOR: _____ Your information
 X _____ Your use
_____ Your review & comments
_____ Return to you

PLEASE: X Keep this material
_____ Return within 2 weeks
_____ Acknowledge receipt

MESSAGE: Please call if you have any questions.

cc: Dan Kirk, Shell Oil Company, P.O. Box 5278, Concord, California 94520-9998
Tom Callaghan, Water Quality Control Board, San Francisco Bay Region, 2101
Webster Street, Suite 500, Oakland, CA 94612



7/20/92

DATE?

Mr. Tom Peacock
Alameda County Department of
Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Re: Shell Service Station
WIC #204-5508-3301
6039 College Avenue
Oakland, California
WA Job #81-618-201

Dear Mr. Peacock

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 second quarter 1992 and proposed work for the third quarter 1992.

Second Quarter 1992 Activities:

- EMCON Associates (EMCON) of San Jose, California measured depths to ground water in four of the five site wells and collected ground water samples from three of the five wells. Well MW-5 was inaccessible and well MW-4 contained floating hydrocarbons and was not sampled. EMCON's report describing these activities and 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).

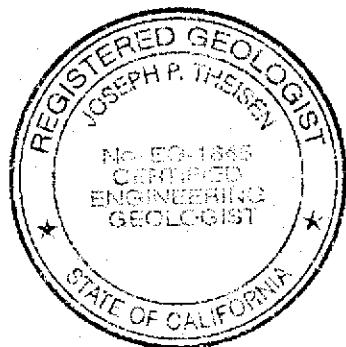
Anticipated Third Quarter 1992 Activities:

WA will submit a report presenting the results of third quarter 1992 ground water sampling and ground water depth measurements. The report will include tabulated chemical analytic results and a ground water elevation contour map.

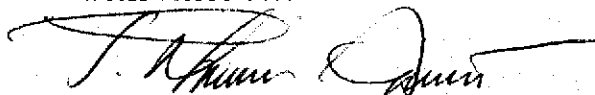
Mr. Tom Peacock
July 20, 1992

2

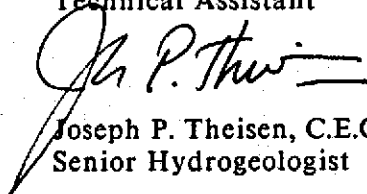
Please call if you have any questions.



Sincerely,
Weiss Associates



J. Michael Asport
Technical Assistant



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

JMA/JPT:jma

E:\ALL\SHELL\600\618QMJU2.WP

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

cc: Dan Kirk, Shell Oil Company, P.O. Box 5278, Concord, CA 94520
 Tom Callaghan, San Francisco Bay Regional Water Quality Control Board, 2101 Webster
 Street, Oakland, CA 94612

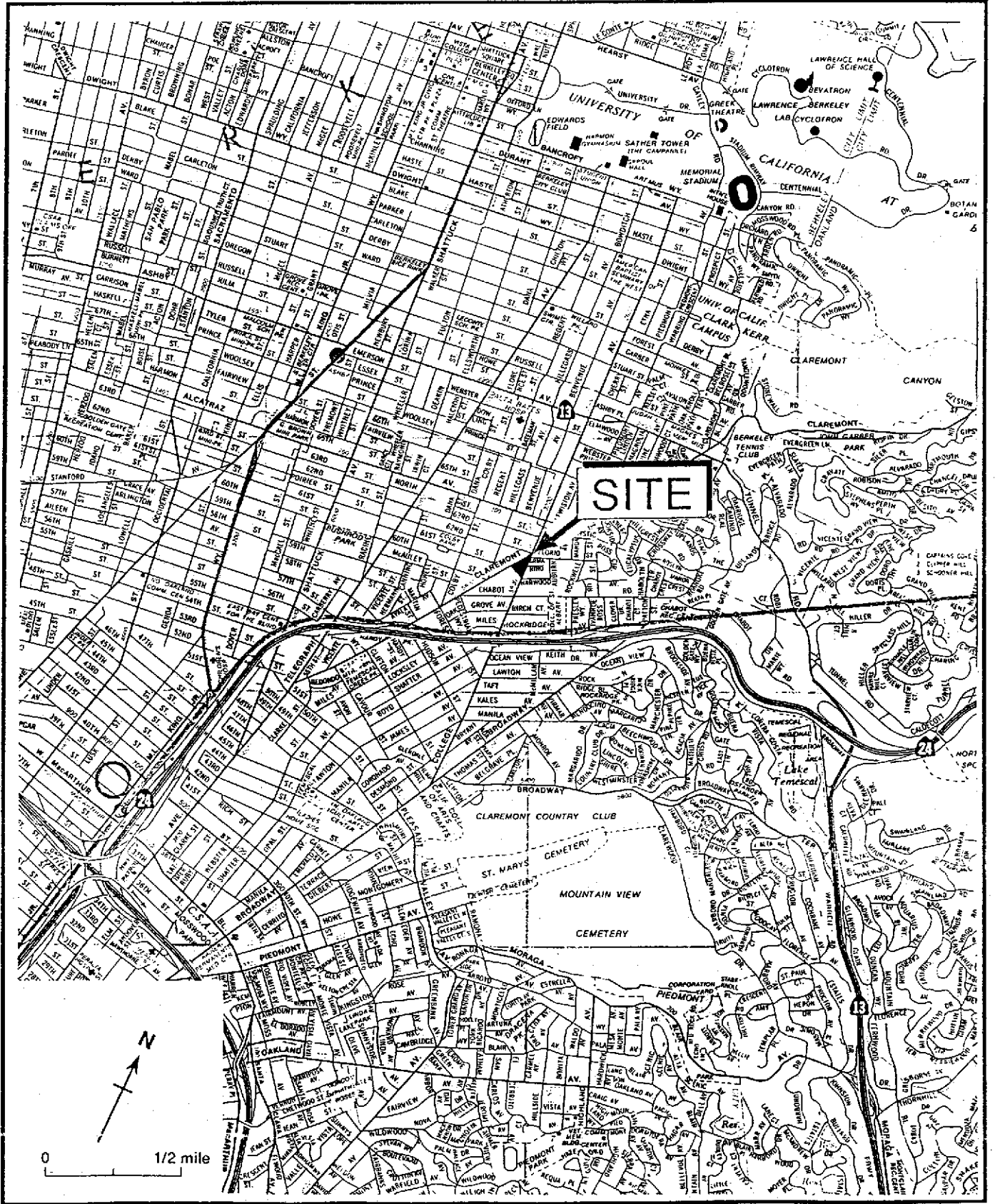


Figure 1. Site Location Map - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California

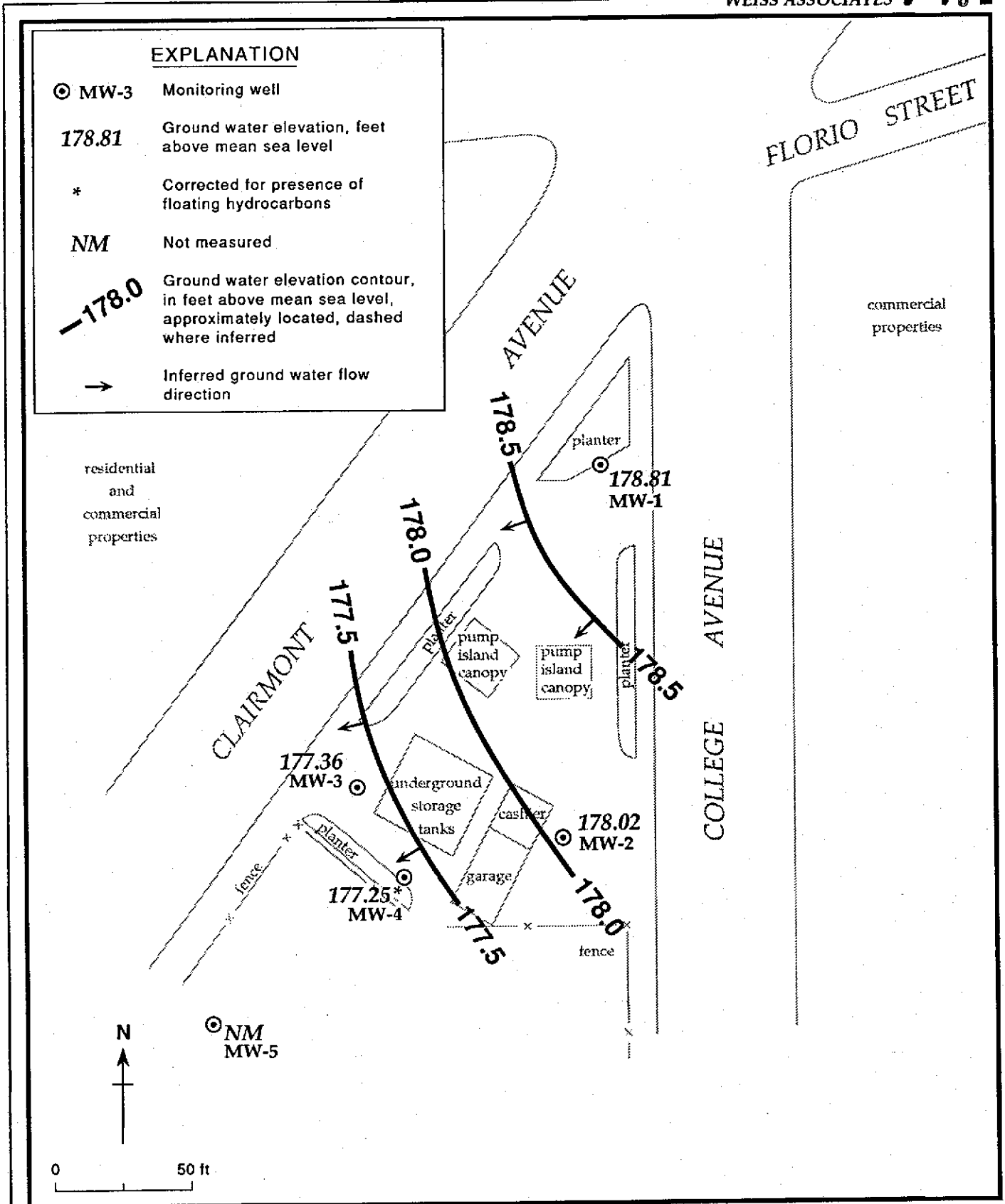


Figure 2. Monitoring Well Locations and Ground Water Elevation Contours - May 28, 1992 - Shell Service Station WIC #204-5510-0303, 6039 College Avenue, Oakland, California

Table 1. Floating Hydrocarbon Removal - Shell Service Staiton WIC #204-5508-3301, 6039 College Avenue, Oakland, California

Well	Date	Floating Hydrocarbon Thickness (ft)	Vol. of Floating Hydrocarbon Removed (gal)	Cumulative Volume of Hydrocarbons Removed (gal)
MW-4 ^a	01/15/92 ^b	---	0.52	0.52
	02/15/92 ^b	---	0.52	1.04
	03/18/92	0.24	---	1.04
	04/29/92	---	0.25	1.29
	05/28/92	0.12	0.031	1.321

a = Petrotrap passive floating hydrocarbon skimmer installed in well
 b = Date approximate. Actual date of floating hydrocarbon removal unavailable.

ATTACHMENT A
GROUND WATER MONITORING REPORT AND ANALYTIC REPORT



EMCON
ASSOCIATES

Consultants in Wastes
Management and
Environmental Control

June 17, 1992
Project: G67-39.01
WIC#: 204-5508-3301

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

Re: Second quarter 1992 ground-water monitoring report, Shell Oil
Company, 6039 College Avenue, Oakland, California

Dear Mr. Elias:

This letter presents the results of the second quarter 1992 ground-water monitoring event for the Shell Oil Company (Shell) site located at 6039 College Avenue, Oakland, California (figure 1). Second quarter monitoring was conducted on May 28, 1992. The site is monitored quarterly. Well MW-5 could not be located during second quarter monitoring. The parking lot near well MW-5 had fresh-looking pavement; the well may have been paved over.

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 through MW-4 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. Floating product, 0.12 foot thick, was observed in well MW-4. The skimmer in well MW-4 contained 120 milliliters of product. Total depth was measured to the nearest 0.1 foot. Results of the second 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 through MW-3 on May 28, 1992. Well MW-4 contained floating product and was not sampled during second quarter monitoring. 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. Well MW-1 was evacuated to

G673901B.DOC



dryness before three casings were removed. The well was allowed to recharge for up to 24 hours. Samples were collected after the well had recharged to a level sufficient for sample collection. Field measurements from second quarter monitoring, and available measurements from four previous monitoring events, are summarized in table 1. Purge water from the monitoring wells was contained in a 55-gallon drum. The drum was identified with a Shell-approved label and secured for on-site storage.

Ground-water samples were collected with a Teflon® bailer, labeled, placed on ice, and transported to a Shell-approved and state-certified analytical laboratory 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 second quarter monitoring included a trip blank. All water samples collected during second quarter monitoring were analyzed for total petroleum hydrocarbons as gasoline (TPH-g), and benzene, toluene, ethylbenzene, and total xylenes (BTEX). Additional ground-water samples collected from well MW-1 were analyzed for total petroleum hydrocarbons as diesel (TPH-d). Additional ground-water samples collected from well MW-3 were analyzed for TPH-d and total petroleum hydrocarbons as motor oil (TPH-mo).


ANALYTICAL RESULTS

Analytical results for the second quarter 1992 monitoring event, and available results from four previous monitoring events, are summarized in table 2. The original certified analytical report and 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

G673901B.DOC

Mr. David Elias
June 17, 1992
Page 3

Project G67-39.01
WIC# 204-5508-3301

Attachments: Table 1 - Monitoring well field measurement data
Table 2 - Summary of analytical results
Figure 1 - Site location map
Figure 2 - Monitoring well locations
Certified analytical report
Chain-of-custody document

Table 1
Monitoring Well Field Measurement Data
Second Quarter 1992

Shell Station: 6039 College Avenue
Oakland, California
WIC #: 204-5508-3301

Date: 06/29/92
Project Number: G67-39.01

Well Designation	Water Level Field Date	TOC Elevation (ft-PSD)	Depth to Water (feet)	Ground-water Elevation (ft-PSD)	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	03/08/91	195.89	16.85	179.04	NR	NR	03/08/91	NR	NR	NR	NR
MW-1	06/03/91	195.89	17.82	178.07	NR	NR	06/03/91	NR	NR	NR	NR
MW-1	08/30/91	195.89	19.87	176.02	NR	NR	08/30/91	NR	NR	NR	NR
MW-1	03/18/92	195.89	13.55	182.34	24.5	ND	03/18/92	6.79	795	65.2	>200
MW-1	05/28/92	195.89	17.08	178.81	24.5	ND	05/28/92	6.60	555	67.9	>200
MW-2	03/08/91	194.27	15.96	178.31	NR	NR	03/08/91	NR	NR	NR	NR
MW-2	06/03/91	194.27	17.00	177.27	NR	NR	06/03/91	NR	NR	NR	NR
MW-2	08/30/91	194.27	18.95	175.32	NR	NR	08/30/91	NR	NR	NR	NR
MW-2	03/18/92	194.27	12.91	181.36	24.4	ND	03/18/92	6.39	554	65.5	184.2
MW-2	05/28/92	194.27	16.25	178.02	24.5	ND	05/28/92	6.35	556	64.0	>200
MW-3	03/08/91	192.52	14.86	177.66	NR	NR	03/08/91	NR	NR	NR	NR
MW-3	06/03/91	192.52	15.84	176.68	NR	NR	06/03/91	NR	NR	NR	NR
MW-3	08/30/91	192.52	17.79	174.73	NR	NR	08/30/91	NR	NR	NR	NR
MW-3	03/18/92	192.52	12.03	180.49	23.8	ND	03/18/92	6.54	712	64.1	>200
MW-3	05/28/92	192.52	15.16	177.36	24.8	ND	05/28/92	6.42	667	68.5	>200
MW-4	03/08/91	193.37	15.77	177.60	NR	NR	03/08/91	NR	NR	NR	NR
MW-4	06/03/91	193.37	16.77	176.60	NR	NR	06/03/91	NR	NR	NR	NR
MW-4	08/30/91	193.37	18.71	174.66	NR	NR	08/30/91	NR	NR	NR	NR
MW-4	03/18/92	193.37	13.15	180.41**	NR	0.24	03/18/92	FP	FP	FP	FP
MW-4	05/28/92	193.37	16.22	177.25**	24.5	0.12	05/28/92	FP	FP	FP	FP

TOC = top of casing

ft-PSD = elevation in feet, relative to project site datum

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

** = groundwater elevation corrected to include 80 percent of the floating product thickness measured in the well

FP = Floating product; well contained floating product and was not sampled

Table 1
Monitoring Well Field Measurement Data
Second Quarter 1992

Shell Station: 6039 College Avenue
Oakland, California
WIC #: 204-5508-3301

Date: 06/29/92
Project Number: G67-39.01

Well Designation	Water Level Field Date	TOC Elevation (ft-PSD)	Depth to Water (feet)	Ground-water Elevation (ft-PSD)	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-5	08/30/91	190.35	16.74	173.61	NR	NR	08/30/91	NR	NR	NR	NR
MW-5	03/18/92	190.35	11.28	179.07	28.5	ND	03/18/92	6.45	535	66.0	>200
MW-5	05/28/92	190.35	IW	IW	IW	IW	05/28/92	IW	IW	IW	IW

TOC = top of casing
 ft-PSD = elevation in feet, relative to project site datum
 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
 IW = Inaccessible well; well was inaccessible and was not sampled

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

Shell Station: 6039 College Avenue
 Oakland, California
 WIC #: 204-5508-3301

Date: 06/29/92
 Project Number: G67-39.01

Sample Designation	Water Sample Field Date	TPH-g	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-d	TPH-mo
		(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
MW-1	03/08/91	ND	ND	ND	ND	ND	0.05	ND
MW-1	06/03/91	ND	ND	ND	ND	ND	ND	ND
MW-1	08/30/91	ND	ND	ND	ND	ND	0.52	ND
MW-1	03/18/92	<0.03	<0.0003	<0.0003	<0.0003	<0.0003	<0.05	NA
MW-1	05/28/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05	NA
MW-2	03/08/91	ND	ND	ND	ND	ND	ND	ND
MW-2	06/03/91	ND	ND	ND	ND	ND	ND	ND
MW-2	08/30/91	ND	ND	ND	ND	ND	ND	ND
MW-2	03/18/92	<0.03	<0.0003	<0.0003	<0.0003	<0.0003	NA	NA
MW-2	05/28/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
MW-3	03/08/91	3.4	0.63	0.033	0.27	0.018	2.1	ND
MW-3	06/03/91	1.7	0.26	0.013	0.098	0.024	0.69#	ND
MW-3	08/30/91	0.87	0.044	0.0061	0.01	0.0029	0.37+	0.5
MW-3	03/18/92	6.1	0.62	0.028	0.22	0.038	1.9	20.
MW-3	05/28/92	2.3	0.20	0.009	0.071	0.017	1.1*	4.6

TPH-g = total petroleum hydrocarbons as gasoline

TPH-d = total petroleum hydrocarbons as diesel

TPH-mo = total petroleum hydrocarbons as motor oil

ND = None detected

NA = Not analyzed

= Compounds appear to be the less volatile constituents of gasoline

+ = Results include compounds apparently due to gasoline as well as those due to diesel

* = Concentration reported as diesel is primarily due to the presence of a lighter petroleum product, possibly gasoline

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

Shell Station: 6039 College Avenue
 Oakland, California
 WIC #: 204-5508-3301

Date: 06/29/92
 Project Number: G67-39.01

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)	TPH-mo (mg/l)
MW-4	03/08/91	1.1	0.33	0.0035	0.088	0.0058	2.6	15.
MW-4	06/03/91	0.67&	0.24	0.0023	0.0016	0.0023	1.1+	ND
MW-4	08/30/91	0.57	0.064	0.0018	0.0009	0.0009	0.28+	2.0
MW-4	03/18/92	FP	FP	FP	FP	FP	FP	FP
MW-4	05/28/92	FP	FP	FP	FP	FP	FP	FP
MW-5	08/30/91	ND	ND	ND	ND	ND	0.08+	ND
MW-5	03/18/92	<0.03	<0.0003	<0.0003	<0.0003	<0.0003	<0.05	NA
MW-5	05/28/92	IW	IW	IW	IW	IW	IW	IW
TB	03/08/91	ND	ND	ND	ND	ND	NA	NA
TB	06/03/91	ND	ND	ND	ND	ND	NA	NA
TB	08/30/91	ND	ND	ND	ND	ND	NA	NA
TB	03/18/92	<0.03	<0.0003	<0.0003	<0.0003	<0.0003	<0.05	NA
TB	05/28/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA

TPH-g = total petroleum hydrocarbons as gasoline

TPH-d = total petroleum hydrocarbons as diesel

TPH-mo = total petroleum hydrocarbons as motor oil

& = Compounds detected within the gasoline range are not characteristic of the standard gasoline chromatographic pattern

+ = Results include compounds apparently due to gasoline as well as those due to diesel

ND = None detected

FP = Floating product; well contained floating product and was not sampled

NA = Not analyzed

IW = Inaccessible well; well was inaccessible and was not sampled

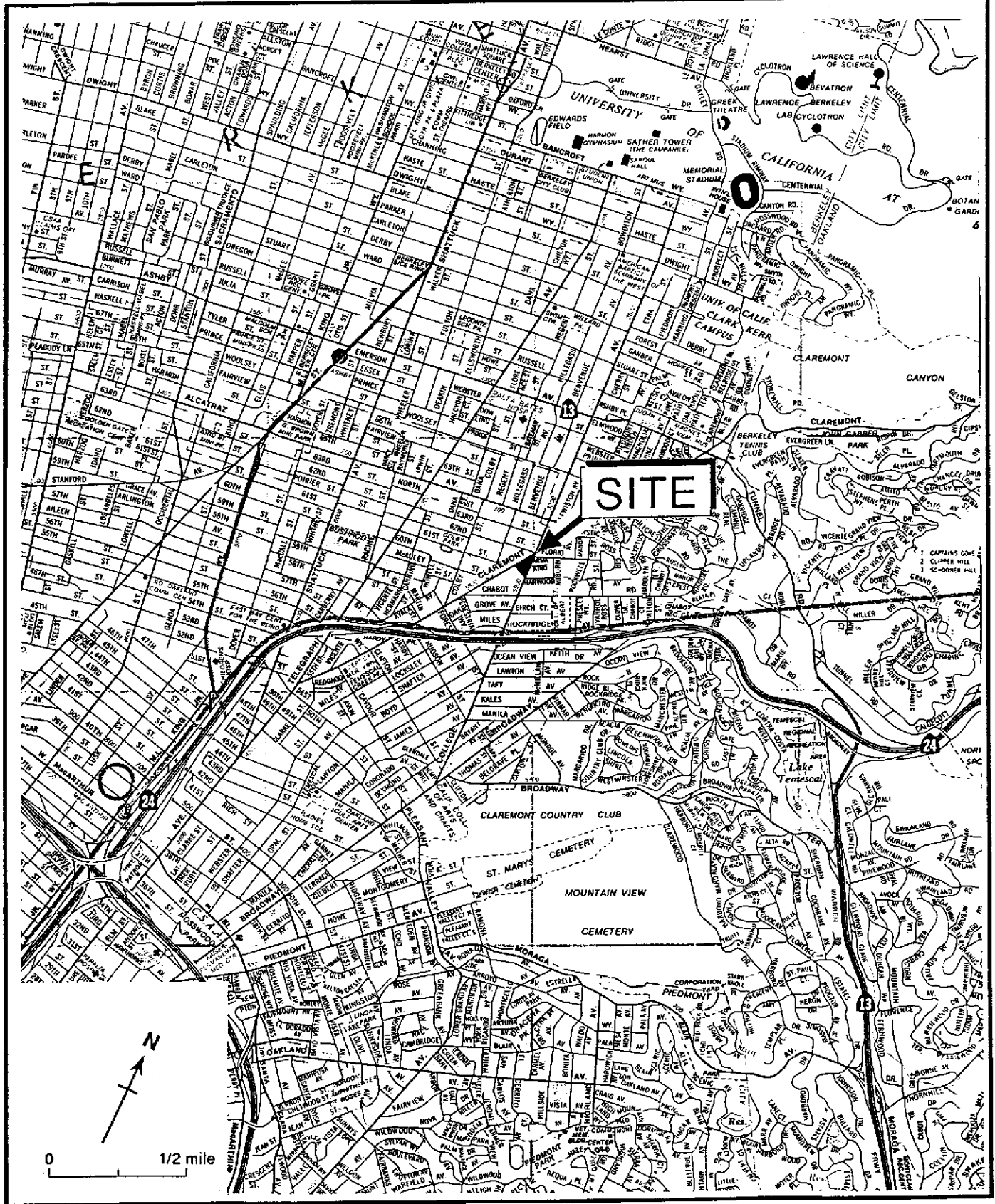


Figure 1. Site Location Map - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California

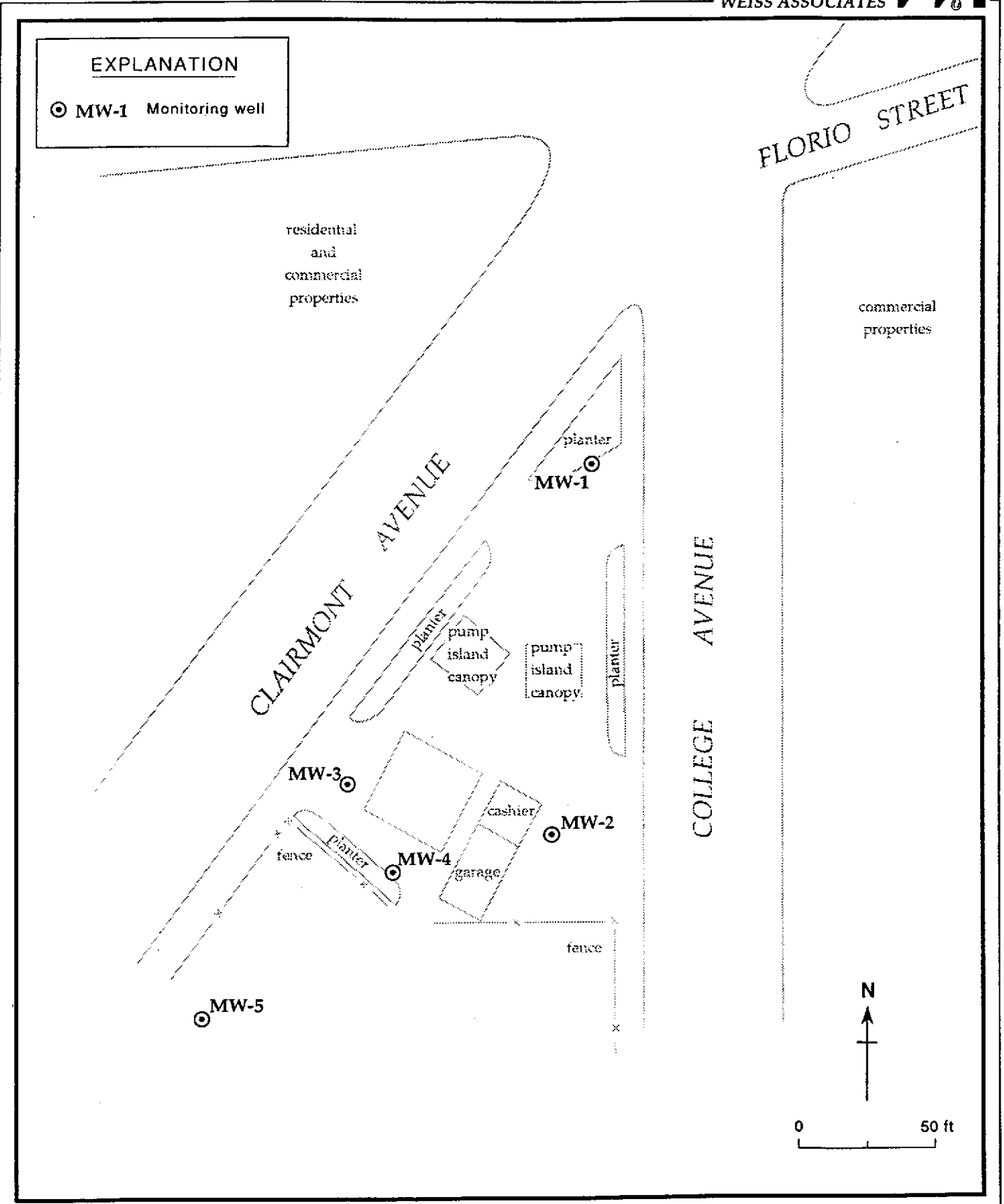


Figure 2. Monitoring Well Locations - Shell Service Station WIC #204-5510-0303, 6039 College Avenue, Oakland, California

ANAMETRIX INC

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

**REPORT**

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

Workorder # : 9205395
 Date Received : 05/28/92
 Project ID : G67-39.01
 Purchase Order: MOH-B813

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

ANAMETRIX ID	CLIENT SAMPLE ID
9205395- 1	MW-2
9205395- 2	MW-1
9205395- 3	MW-3
9205395- 4	TB

This report consists of 7 pages not including the cover letter, and is organized in sections according to the specific Anamatrix 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 Anamatrix 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.

Anamatrix 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 Anamatrix.

Sarah Schoen, Ph.D.
 Laboratory Director

6-11-92
 Date

EMCON ASSOCIATES

JUN 12 1992

RECEIVED

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

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

Workorder # : 9205395
Date Received : 05/28/92
Project ID : G67-39.01
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9205395- 2	MW-1	WATER	05/28/92	TPHd
9205395- 3	MW-3	WATER	05/28/92	TPHd
9205395- 1	MW-2	WATER	05/28/92	TPHg/BTEX
9205395- 2	MW-1	WATER	05/28/92	TPHg/BTEX
9205395- 3	MW-3	WATER	05/28/92	TPHg/BTEX
9205395- 4	TB	WATER	05/28/92	TPHg/BTEX

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

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

Workorder # : 9205395
Date Received : 05/28/92
Project ID : G67-39.01
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- The concentration reported as diesel for sample MW-3 is primarily due to the presence of a lighter petroleum product, possibly gasoline.

Cheryl Balmer 6/10/92
Department Supervisor Date

Luna Sher 6/10/92
Chemist Date

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

Anamatrix W.O.: 9205395
Matrix : WATER
Date Sampled : 05/28/92

Project Number : G67-39.01
Date Released : 06/10/92

Reporting Limit	Sample I.D.# MW-2	Sample I.D.# MW-1	Sample I.D.# MW-3	Sample I.D.# TB	Sample I.D.# BU0501E2
COMPOUNDS (mg/L)	-01	-02	-03	-04	BLANK
Benzene	0.0005	ND	ND	0.20	ND
Toluene	0.0005	ND	ND	0.009	ND
Ethylbenzene	0.0005	ND	ND	0.071	ND
Total Xylenes	0.0005	ND	ND	0.017	ND
TPH as Gasoline	0.050	ND	ND	2.3	ND
% Surrogate Recovery	106%	108%	96%	102%	110%
Instrument I.D.	HP4	HP4	HP4	HP4	HP4
Date Analyzed	06/05/92	06/05/92	06/05/92	06/05/92	06/05/92
RLMF	1	1	2	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.

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

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

Lucia Sher 6/10/92
Analyst Date

Cheryl Balmer 6/10/92
Supervisor Date

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

Anametrix W.O.: 9205395
 Matrix : WATER
 Date Sampled : 05/28/92
 Date Extracted: 06/02/92

Project Number : G67-39.01
 Date Released : 06/10/92
 Instrument I.D.: HP9

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/L)	Amount Found (mg/L)
9205395-02	MW-1	06/05/92	0.050	ND
9205395-03	MW-3	06/05/92	0.050	1.1
DWBL060292	METHOD BLANK	06/05/92	0.050	ND

Note : Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

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

TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following sample extraction by EPA Method 3510.

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

Lucas Star 6/10/92
 Analyst Date

Cheryl Bulmer 6/10/92
 Supervisor Date

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

Anametrix W.O.: 9205395
 Matrix : WATER
 Date Sampled : 05/28/92
 Date Extracted: 06/02/92

Project Number : G67-39.01
 Date Released : 06/10/92
 Instrument I.D.: HP9

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/L)	Amount Found (mg/L)
9205395-03	MW-3	06/05/92	0.050	4.6
DWBL060292	METHOD BLANK	06/05/92	0.050	ND

Note : Reporting limit is obtained by multiplying the dilution factor times 10 mg/Kg.

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

TPHd - Total Petroleum Hydrocarbons as motor oil is determined by GCFID following sample extraction by EPA Method 3510.

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

Reggie Dawson 6/11/92
 Analyst Date

Cheryl Palmer 6/11/92
 Supervisor Date

BTEX MATRIX SPIKE REPORT
 EPA METHOD 5030 WITH GC/PID
 ANAMETRIX, INC. (408) 432-8192

SAMPLE I.D. : G67-39.01 MW-1
 Matrix : WATER
 Date Sampled : 05/28/92
 Date Analyzed : 06/05/92

Anamatrix I.D.: 9205395-02
 Analyst : IS
 Supervisor : CS
 Date Released : 06/10/92
 Instrument ID : HP 4

COMPOUND	SPIKE AMT. (mg/L)	MS (mg/L)	REC MS	MSD (mg/L)	REC MSD	RPD	%REC LIMITS
Benzene	0.020	0.020	100%	0.024	120%	18%	49-159
Toluene	0.020	0.019	95%	0.022	110%	15%	53-156
Etylbenzene	0.020	0.018	90%	0.022	110%	20%	54-151
M+P-Xylenes	0.0133	0.0123	92%	0.0139	105%	12%	56-157
O-Xylene	0.0067	0.0059	88%	0.0067	100%	13%	58-154
P-BFB			90%		88%		53-147

* Limits established by Anamatrix, Inc.

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

Sample I.D. : METHOD SPIKE	Anamatrix I.D. : SPK0602A
Matrix : REAGENT WATER	Analyst :
Date Sampled : N/A	Supervisor : <i>df</i>
Date Extracted: 06/02/92	Date Released : 06/10/92
Date Analyzed : 06/02/92	Instrument I.D.: HP23

COMPOUND	SPIKE AMT. (mg/Kg)	MS (mg/Kg)	%REC MS	MSD (mg/Kg)	%REC MSD	RPD	%REC LIMITS
Diesel	1.25	0.79	63%	0.51	41%	-43%	36-150

* Limits established by Anamatrix, Inc.

Site Address: 6034 College Avenue
Oakland CA

Serial No.: 295

Page 1 of 1

WIC#: 204-5508-3301

Analysis Required

LAB: Anamatrix

Shell Engineer: Kurt Miller
Phone No. (510) 685-3853
Fax #: 685-3853

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

Consultant Contact: David Larsen
Phone No. (408) 453-2269
Fax #: 453-2269

Comments: 3-VOLTS (HCL) for GIBTEX
2-Liter Glass (SR) for diesel and motor oil

Sampled By: LISLERATH
Printed Name: Lisa RATH

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND T
Quarterly Monitoring <input checked="" type="checkbox"/>	5461	24 hours <input type="checkbox"/>
Site Investigation <input type="checkbox"/>	5441	48 hours <input type="checkbox"/>
Soil for disposal <input type="checkbox"/>	5442	15 days <input checked="" type="checkbox"/> (Non)
Water for disposal <input type="checkbox"/>	5443	Other <input type="checkbox"/>
Air Sample- Sys O&M <input type="checkbox"/>	5452	NOTE: Notify Lab soon as possible of 24/48 hrs. TAT.
Water Sample - Sys O&M <input type="checkbox"/>	5453	
Other <input type="checkbox"/>		

TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	TPH as Motor Oil
X	X	X			
X	X	X			
X	X	X			X
X	X	X			X
X	X	X			

Sample ID	Date	Soil	Water	Air	No. of conts.	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITIO COMMENT
1 MW-2	5-28-92		X		3	40 ml	HCL	No		
MW-5					5					
2 MW-1	5-28-92				5				NO SAMPLE TAKEN	
3 MW-3	5-28-92				5					
MW-4					5					
4 TB	5-28-92		X		3				NO SAMPLE TAKEN	

Relinquished By (signature): Lisa RATH
Relinquished By (signature): Simon Hague
Relinquished By (signature): Aaron Ble

Printed name: LISLERATH
Printed name: Simon Hague
Printed name:

Date: 5-28-92
Time: 15:30
Date: 5-28-92
Time: 4:20 PM
Date:
Time:

Received (signature): Simon Hague
Received (signature): Aaron Ble
Received (signature):

Printed name: Simon Hague
Printed name: Aaron Ble
Printed name:

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

Last Revision Date: 10/15/91