Fax: 510-547-5043 Phone: 510-547-5420



Scott Seery 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 #81-618-203

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 depths to ground water in the five site wells and collected ground water samples from four of the five site wells. Well MW-4 contained floating hydrocarbons and was not sampled. However, 610 milliliters of floating hydrocarbons were removed from well MW-4 by a floating hydrocarbon skimmer that is installed in the well (Table 1). EMCON's report describing these activities and analytic results for ground water is included as Attachment A. Hydrocarbons were only detected in two of the five ground water monitoring wells.
- Weiss Associates (WA) used EMCON's ground water elevation calculations to prepare a ground water elevation contour map (Figure 2).
- WA submitted a City of Oakland encroachment permit application to install an additional well on Clairmont Avenue and pursued a right-of-entry agreement with the downgradient property owner to drill additional borings and possibly install an additional ground water monitoring well on the downgradient property.

Scott Seery February 2, 1993



Anticipated First Quarter 1993 Activities:

- WA will submit a report presenting the results of 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.
- Pending receipt of an encroachment permit and a completed right-of-entry agreement, WA will drill the additional borings/wells to define the extent of hydrocarbon-bearing soil and ground water between source area well MW-4 and clean downgradient well MW-5 as required by the ACDEH.

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

J:\SHELL\600\618QMJA3.WP

Attachments: Figures

Table

A - EMCON's Ground Water Monitoring Report

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

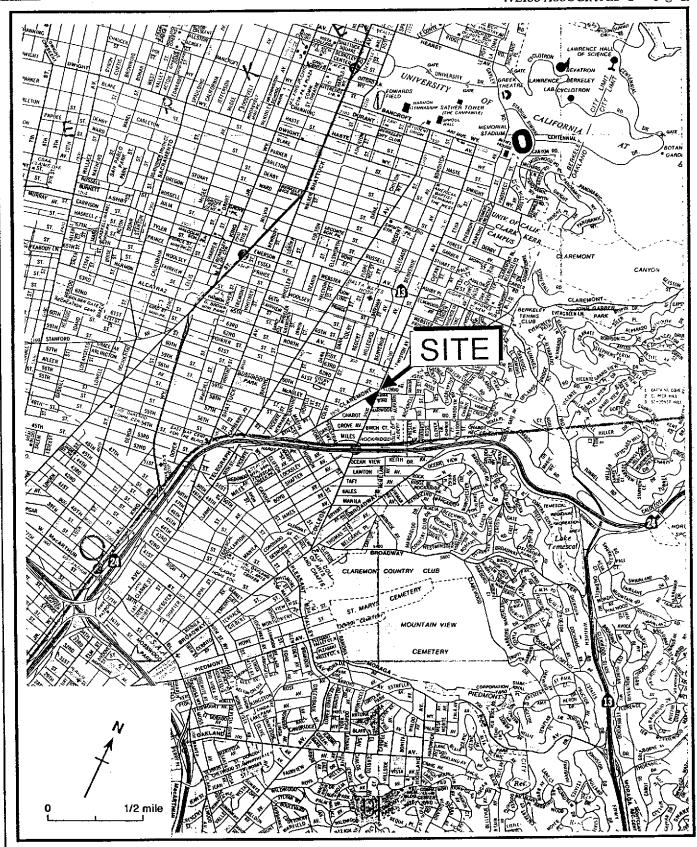


Figure 1. Site Location Map - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California

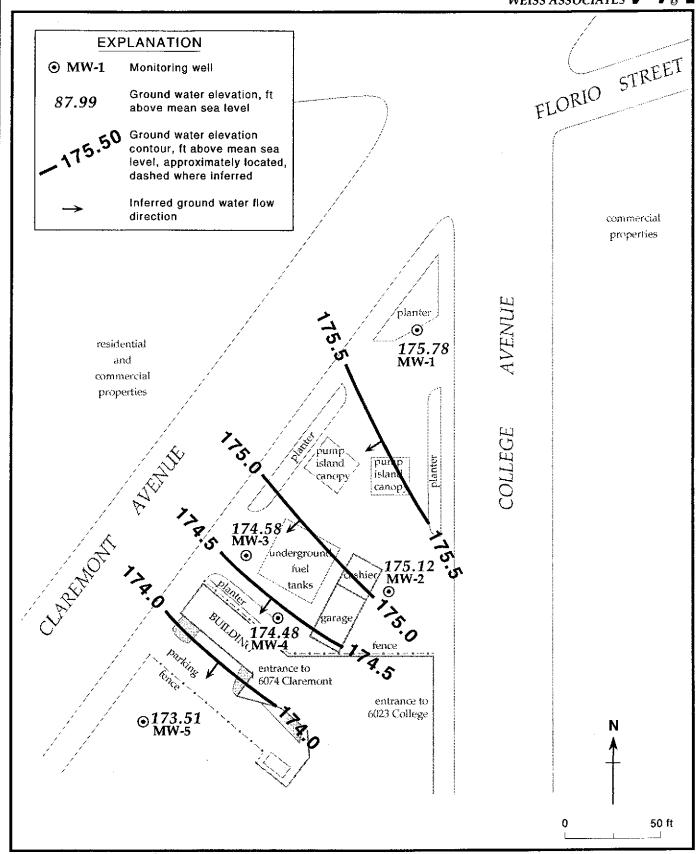


Figure 2. Monitoring Well Locations and Ground Water Elevation Contours - November 17,1993 - Shell Service Station WIC #204-5510-0303, 6039 College Avenue, Oakland, California

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

Well ID	Date	Floating Hydrocarbon Thickness (ft)	Vol. of Floating Hydrocarbon Removed (gal).	Cumulative Volume of Hydrocarbons Removed (gal)
MW-4ª	01/15/92 ^b		0.52	0.52
•	02/15/92	•••	0.52	1.04
	03/18/92	0.24		1.04
	04/29/92		0.25	1.29
	05/28/92	0.12	0.03	1.32
	08/19/92	0.09	0.16	1.48
	11/17/92		0.16	1.64

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



December 9, 1992 Project: 0G67-039.01 WIC#: 204-5508-3301

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

Re: Fourth quarter 1992 ground-water monitoring report, Shell Oil Company, 6039 College Avenue, Oakland, 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 6039 College Avenue, Oakland, California (figure 1). Fourth quarter monitoring was conducted on November 17, 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 through MW-5 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. The skimmer in well MW-4 contained 610 milliliters (mls) of product and 1460 mls of a water/product mixture. 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, MW-3, and MW-5 on November 17, 1992. The skimmer in well MW-4 contained product and the well was not sampled during fourth 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. Field measurements from fourth quarter monitoring, and available measurements from four previous monitoring events, are summarized in table

0G6703901D.DOC



Mr. David Elias December 9, 1992 Page 2

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.

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-3D) collected from well MW-3. All water samples collected during fourth 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 wells MW-1, MW-3, and MW-5 were analyzed for total petroleum hydrocarbons as diesel (TPH-d). Additional ground-water samples collected from well MW-3 were analyzed for total petroleum hydrocarbons as motor oil (TPH-mo).

ANALYTICAL RESULTS

Analytical results for the fourth quarter 1992 monitoring event, and available results from four previous monitoring events, are summarized in table 2. 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

Mr. David Elias December 9, 1992 Page 3

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 Fourth Quarter 1992

Shell Station: 6039 College Avenue

Oakland, California

WIC #: 204-5508-3301

Date: 12/08/92 Project Number: G67-39.01

Well Desig- nation	Water Level Field Date	TOC Elevation	Depth to Water	Ground- water Elevation	Total Well Depth	Floating Product Thickness	Water Sample Field Date	рН	Electrical Conductivity	Temperature	Turbidity
		(ft-PSD)	(feet)	(ft-PSD)	(feet)	(feet)		(std. units)	(micromhos/cm)	(degrees F)	(NTU)
MW-1	11/22/91	195.89	20.58	175.31	NR	NR	11/22/91	NR	NR NR	NR	NR
MW - 1	03/18/92	195.89	13,55	182.34	24.5	ΝΩ	03/18/92	6.79	795	65.2	>200
MW - 1	05/28/92	195.89	17.08	178.81	24.5	ΩM	05/28/92	6.60	555	67.9	>200
MW - 1	08/19/92	195.89	19.07	176.82	24.4	ON	08/19/92	6.93	542	58.1	>200
MW - 1	11/17/92	195.89	20.11	175.78	24.5	ND	11/17/92	6.74	463	60.6	>1000
MW - 2	11/22/91	194.27	19.55	174.72	NR	NR	11/22/91	NR	NR	NR	NR
MW-2	03/18/92	194.27	12.91	181.36	24.4	ND	03/18/92	6.39	554	85.5	184.2
MW-2	05/28/92	194.27	16.25	178.02	24.5	ND	05/28/92	€.35	556	64.0	>200
MW - 2	08/19/92	194.27	18.21	176.06	24.3	ND	08/19/92	6.22	504	65.9	>200
MW - 2	11/17/92	194.27	19.15	175.12	24.3	ND	11/17/92	6.47	480	60.4	>1000
MW-3	11/22/91	192.52	18.40	174.12	NR	NR	11/22/91	NR	NR	NR	NR
MW-3	03/18/92	192.52	12.03	180.49	23.8	НD	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-3	08/19/92	192.52	17.03	175.49	24.8	ND	08/19/92	7.20	531	67.2	>200
MW-3	11/17/92	192.52	17.94	174.58	24.8	ND	11/17/92	6.59	525	60.6	171
MW - 4	11/22/91	193.37	NR	NR	NR	NR	11/22/91	FP	FP	FP	FP
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
MW - 4	08/19/92	193.37	18.05	175.39**	28.5	0.09	08/19/92	FP	FP	FP	FP
MW - 4	11/17/92	193.37	18.89	174.48	24.4	ND*	11/17/92	FP	FP	FP	FP

TOC = top of casing

ft-PSO = 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

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

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

^{* =} Well skimmer contained 610 milliliters of product and 1460 milliliters of a water/product mixture

Table 1 Monitoring Well Field Measurement Data Fourth Quarter 1992

Shell Station: 6039 College Avenue

Oakland, California

WIC #: 204-5508-3301

Date: 12/08/92 Project Number: G67-39.01

Well Desig- nation	Water Level Field Date	TOC Elevation	Depth to Water	Ground- water Elevation	Total Well Depth	Floating Product Thickness	Water Sample Field Date	рН	Electrical Conductivity	Temperature	Turbidity
		(ft-PSD)	(feet)	(ft-PSD)	(feet)	(feet)		(std. units)	(micromhos/cm)	(degrees F)	(NTU)
MW-5	11/22/91	190.35	17.27	173.08	NR	NR	11/22/91	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 MW - 5	05/28/92 08/19/92	190.35 190.35	IW 15.99	IW 174.36	IW 28.4	IW ND	05/28/92 08/19/92	IW 6.57	I₩ 5 9 1	IW 66.4	IW >200
MW - 5	11/17/92	190.35	16.84	173.51	28.5	ND	11/17/92	6.56	500	60.3	>1000

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 Fourth Quarter 1992 milligrams per liter (mg/l) or parts per million (ppm)

Shell Station: 6039 College Avenue

Oakland, California

WIC #: 204-5508-3301

Date: 12/08/92 Project Number: G67-39.01

Sample	Water Sample								
Desig-	Field		_		Ethyl-	Total	TOU 1	**************************************	
nation	Date	TPH-g	Benzene	Toluene	benzene	Xylenes	TPH-d	TPH-mo	
		(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	
MW - 1	11/22/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05	<0.5	
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 - 1	08/19/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05	NA	
MW - 1	11/17/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05	NA	
MW - 2	11/22/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05	<0.5	
MW - 2	03/18/92	<0.03	<0.0003	<0.0003	<0.0003	<0.0003	NA	NA.	
M₩-2	05/28/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	
MW - 2	08/19/92	<0.05	<0.0005	0.0020	0.0012	0.0019	NA	NA	
MW - 2	11/17/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	
MW-3	11/22/91	0.31	0.018	0.0012	0.0033	0.0029	0.14	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	
MW-3	08/19/92	5.7a	0.071	0.077	0.052	0.13	1.0^	1.8	
MW-3	11/17/92	3.6	0.016	0.0086	0.024	0.050	0.16^	1.2	
MW-3D	08/19/92	2.1	0.091	0.052	0.053	0.084	0.9\$	1.8	
MW-3D	11/17/92	4.1	0.016	0.0058	0.025	0.054	NA	NA	

TPH-g = total petroleum hydrocarbons as gasoline TPH-d = total petroleum hydrocarbons as diesel

TPH-mo = total petroleum hydrocarbons as motor oil

NA = Not analyzed

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

a = Concentration reported as gasoline is primarily due to the presence of a heavier petroleum product, possibly kerosene

^{\$ =} Concentration reported as diesel is due to the presence of heavier and lighter petroleum products, possibly motor oil and kerosene

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

Shell Station: 6039 College Avenue

Oakland, California

WIC #: 204-5508-3301

Date: 12/08/92 Project Number: G67-39.01

Sample Desig-	Water Sample Field				Ethyl-	Total			
nation	Date	TPH-g	Benzene	Toluene	benzene	Xy lenes	TPH-d	TPH-mo	
		(mg/t)	(mg/l)	(mg/l)	(mg/l)	(mg/t)	(mg/l)	(mg/l)	
MW - 4	11/22/91	FP	FP	FP	FP	FP	FP	FP	
MW - 4	03/18/92	FP	FP	FP	FP	FP	FP	FΡ	
MW - 4	05/28/92	FP	FP	FP	FP	FP	FP	FP	
MW - 4	08/19/92	FP	FP	FP	FP	FP	FP	FP	
MW - 4	11/17/92	FP	FP	FP	FP	FP	FP	FP	
MW - 5	11/22/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	0.05	<0.5	
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	
MW-5	08/19/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05	NA	
MW - 5	11/17/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05	NA	
FB	08/19/92	<0.05#	<0.0005#	<0.0005#	<0.0005#	<0.0005#	NA	NA	
FB	11/17/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	
ТВ	11/22/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	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	
TB	08/19/92	<0.05#	<0.0005#	<0.0005#	<0.0005#	<0.0005#	NA	NA	
TB	11/17/92	<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

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

NA = Not analyzed

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

= Samples TB and FB are called TB-1 and FB-1 on the chain-of-custody form and certified analytical report



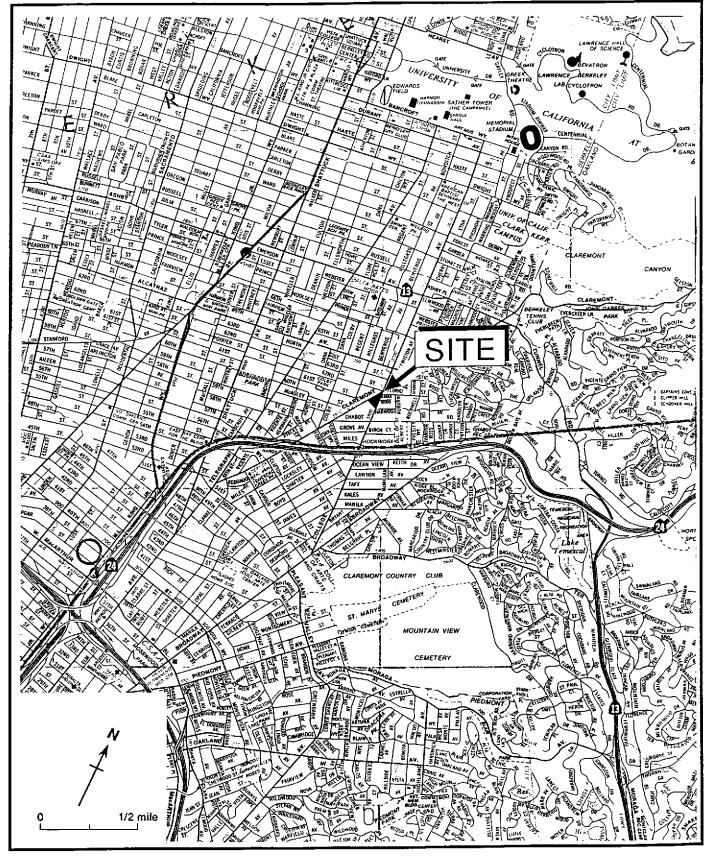


Figure 1. Site Location Map - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California

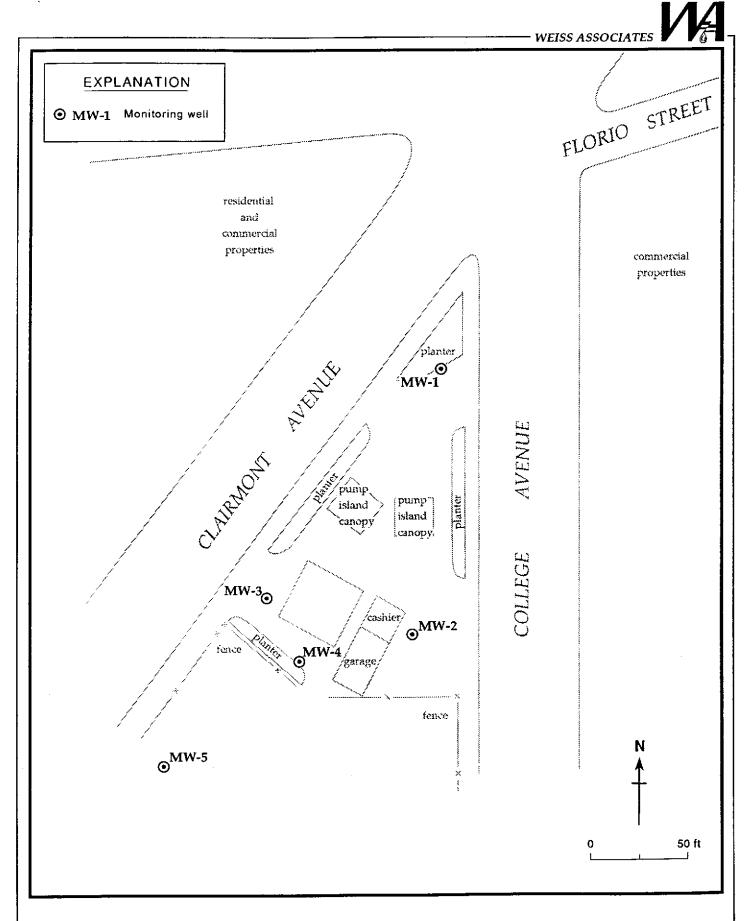


Figure 2. Monitoring Well Locations - Shell Service Station WIC #204-5510-0303, 6039 College Avenue, Oakland, California

ANAMETRIX INC **Environmental & Analytical Chemistry**

Part of Inchcape Environmental



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

Workorder # : 9211263 Date Received: 11/18/92 Project ID: 204-5508-3301

Purchase Order: MOH-B813

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

ANAMETRIX ID CLI	ENT SAMPLE ID
9211263- 1 MW- 9211263- 2 MW- 9211263- 3 MW- 9211263- 4 MW- 9211263- 5 MW- 9211263- 6 TB 9211263- 7 FB	-5 -1 -3

This report consists of 8 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 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

EMCON ASSOCIATES

DEC 0 3 1992 RECEIVED

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

MR. DAVID LARSEN EMCON ASSOCIATES 1938 JUNCTION AVE. SAN JOSE, CA 95131 Workorder # : 9211263
Date Received : 11/18/92
Project ID : 204-5508-3301
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9211263- 2	MW-5	WATER	11/17/92	TPHd
9211263- 3	MW-1	WATER	11/17/92	TPHd
9211263- 4	MW-3	WATER	11/17/92	TPHd
9211263- 1	MW-2	WATER	11/17/92	TPHg/BTEX
9211263- 2	MW-5	WATER	11/17/92	TPHg/BTEX
9211263- 3	MW-1	WATER	11/17/92	TPHg/BTEX
9211263- 4	MW-3	WATER	11/17/92	TPHg/BTEX
9211263- 5	MW-3D	WATER	11/17/92	TPHg/BTEX
9211263- 6	ТВ	WATER	11/17/92	TPHg/BTEX
9211263- 7	FB	WATER	11/17/92	TPHg/BTEX

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

MR. DAVID LARSEN EMCON ASSOCIATES 1938 JUNCTION AVE. SAN JOSE, CA 95131 Workorder # : 9211263
Date Received : 11/18/92
Project ID : 204-5508-3301
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 a lighter petroleum product, possibly gasoline.

Chaul Balmon 13/2/12
Department Supervisor Date

Steve Some Chemist 12/03/92

Date

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

Project Number: 204-5508-3301 Date Released: 11/30/92

Anametrix W.O.: 9211263
Matrix : WATER
Date Sampled : 11/17/92

	Reporting Limit	Sample I.D.# MW-2	Sample I.D.# MW-5	Sample I.D.# MW-1	Sample I.D.# MW-3	Sample I.D.# MW-3D
COMPOUNDS	(mg/L)	-01	-02	-03	-04	-05
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	0.0005 0.0005 0.0005 0.0005 0.050	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	0.016 0.0086 0.024 0.050 3.6	0.016 0.0058 0.025 0.054 4.1
<pre>% Surrogate Rec Instrument I.I Date Analyzed RLMF</pre>	D	119% HP4 11/20/92	128% HP4 11/20/92 1	107% HP4 11/20/92 1	143% HP4 11/20/92 5	133% HP4 11/20/92 5

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

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

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

visor Balma 12/3/5,

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.

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

Anametrix W.O.: 9211263 Project Number: 204-5508-3301

Matrix : WATER Date Released : 11/30/92

Date Sampled : 11/17/92

	Reporting Limit	Sample I.D.# TB	Sample I.D.# FB	Sample I.D.# BN2001E2	
COMPOUNDS	(mg/L)	-06	-07	BLANK	
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline % Surrogate Rec Instrument I.1 Date Analyzed RLMF		ND ND ND ND ND 113% HP4 11/20/92	ND ND ND ND ND 125% HP4 11/20/92	ND ND ND ND ND 113% HP4 11/20/92	

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

(iheigh Balman 12/1/9) Supervisor Date

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

Anametrix W.O.: 9211263

Project Number: 204-5508-3301 Date Released: 11/30/92

Instrument I.D.: HP23

Matrix : WATER
Date Sampled : 11/17/92
Date Extracted: 11/19/92

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/L)	Amount Found (mg/L)
9211263-02	MW-5	11/19/92	0.050	ND
9211263-03	MW-1	11/19/92	0.050	ND
9211263-04	MW-3	11/21/92	0.050	0.16
DWBL111992	METHOD BLANK	11/19/92	0.050	ND

Note: Reporting limit is obtained by multiplying the dilution factor times $0.\bar{0}50$ mg/L.

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.

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

Anametrix W.O.: 9211263

Project Number: 204-5508-3301 Date Released: 11/30/92 Instrument I.D.: HP23

Matrix : WATER
Date Sampled : 11/17/92
Date Extracted: 11/19/92

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/L)	Amount Found (mg/L)
9211263-04	MW-3	11/21/92	0.050	1.2
DWBL111992	METHOD BLANK	11/21/92	0.050	ND

Note: Reporting limit is obtained by multiplying the dilution factor times 0.050 mg/L.

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.

BTEX LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE Matrix : WATER

Anametrix I.D.: LCSW1120

Matrix : WATER
Date Sampled : N/A
Date Analyzed : 11/20/92

Analyst : M Supervisor : M Date Released : 12/01/92 Instrument ID : HP4

COMPOUND	SPIKE AMT. (mg/L)	LCS (mg/L)	REC LCS	%REC LIMITS
Benzene Toluene Ethylbenzene TOTAL-Xylenes	0.020 0.020 0.020 0.020	0.017 0.019 0.019 0.020	85% 95% 95% 100%	49-159 53-156 54-151 56-157
P-BFB			66%	53-147

^{*} Limits established by Anametrix, Inc.

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

Anametrix I.D. : LCSW1119

Sample I.D. : LAB CONTROL SAMPLE
Matrix : WATER
Date Sampled : N/A
Date Extracted: 11/19/92
Date Analyzed : 11/19/92 Analyst : M Supervisor : M Date Released : 11/30/92 Instrument I.D.: HP23

COMPOUND	SPIKE AMT (mg/L)	REC LCS (mg/L)	% REC LCS	% REC LIMITS
Diesel	1.25	1.18	94%	72-143

^{*}Limits established by Anametrix, Inc.

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SHELL OIL COMPANY RETAIL ENVIRONMENTAL ENGINEERING - WEST								ST			CH		V O rial N				REC	CORD	: • / of /		
Sile Address: 6039 College Avenue Oakland, CVP							Analysis Required LAB: Anametrix													×	
WIC#:							CHECK ONE (1) BOX ONLY												1 -	TURN AROUND TIME	
Shell Engineer: Dan Kiv K				Phone No.: (510) 675-6168											: 			1	Quarterly Monitoring Site Investigation] 6441]	24 hours
Consultant Name & Address: 1938 Junction Av										8	10						Soll Classify/Disposal] 6442	16 days (Norma		
EMCON Associates San Jose, CA 95131 Consultant Contact: Phone No.:					}			6		ğ	7						Water Classify/Disposal] eus [Olher		
					8	Diesel)		8240)		45	4					1	Soll/Air Rem, or Sys.	6462	NOTE: Notity Lab as		
David Largen (408) 453-2269 Comments: 3-VOAs (HCI) for gas, BTEX 2-Lifer Glass (SR) for TPH-dandor TPH-mo							ล	(EPA		<u>8</u>	200						Woler Rem. or Sys.] 6463	eaan as Possible of 24/48 hm, TAT.		
2-Liter Glass (SR) for TPH Jan Vor TPH-mo					¥ 80 Po	Š	8020/602)		75	표					g	z	Olher	ם			
Sampled by: Printed Name: Sample ID	Date	Sludge	Soli	Water	Alr	No. of conts.	TPH (EPA 8015	TPH (EPA 8015 Mod.	BTEX (EPA 802)	Volatile Organics	Test for Disposal	Combination TPH 8015 & BTEX 8020	TPH as		Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION		SAMPLE CONDITION/ COMMENTS
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MW-1				X		5	ļ	X		ļ <u>.</u>		X	-								-
MW-3				X		5		X				X	X								
MW-9	No	5amp	ع	X		6		X				X	X						Product in Si	kimme .	٧.
MW-3D	11-17-9	•		X		3	<u> </u>	ļ		_	ļ	X			 						
TB				X		3						X							2 YOA (but	se los	£(E
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		T)	E LABO	ORATOR)	MUST	PROVIDI			OF THI	S CH	NN-O	F-CU:	TODY	WITH	INV	DICE	AND	RESUL	15		

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