Weiss Associates Environmental and Geologic Services

5500 Shellmound Street, Emeryville, CA 94608-2411 Fax: 510-547-5043 Phone: 510-450-6000

93 AUG 20 PM 1:16

STID 413

August 12, 1993

Brian Oliva
Alameda County Department
of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Re: Shell Service Station
WIC #204-5508-2404
2800 Telegraph Avenue
Oakland, California
WA Job #81-700-203

Dear Mr. Oliva:

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 1993 and proposed work for the third quarter 1993.

Second Quarter 1993 Activities:

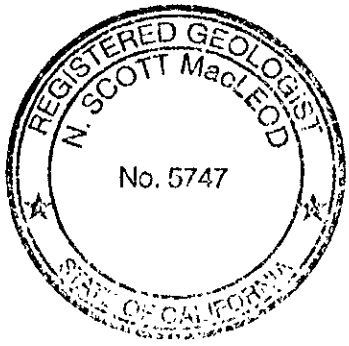
- Blaine Tech Services, Inc. (BTS) of San Jose, California measured ground water depths in ten of the eleven site wells and collected ground water samples from nine of the eleven site wells. Well S-3 is paved over and could not be located or sampled. Well SR-1 is a ground water extraction well and is not sampled. BTS' report describing these activities and the analytic report for the ground water samples are included as Attachment A.
- Weiss Associates (WA) calculated ground water elevations and compiled the analytic data (Tables 1 and 2) and prepared a ground water elevation contour map (Figure 2).
- On April 8, 1993 WA destroyed monitoring well S-2 to allow PG&E to install an electrical transformer at the site.

Anticipated Third Quarter 1993 Activities:

- WA will submit a report presenting the results of the third quarter 1993 ground water sampling and ground water depth measurements. The report will include tabulated chemical analytic results, ground water elevations and a ground water elevation contour map.

- WA will locate and reset the monitoring well S-3 well vault.

Please call if you have any questions.



Sincerely,
Weiss Associates

J. Michael Asport
Technical Assistant

N. Scott MacLeod, R.G.
Project Geologist

JMA/NSM:jma

J:\SHELL\700\700QMJY3.WP

Attachments: A - Blaine Tech's Ground Water Monitoring Report

cc: Lynn Walker, Shell Oil Company, P.O. Box 5278, Concord, California 94520-9998
Richard Hiett, Regional Water Quality Control Board - San Francisco Bay Region, 2101 Webster Street, Suite 500, Oakland, California 94612

Table 1. Ground Water Elevations - Shell Service Station WIC #204-5508-2303, 2800 Telegraph Avenue, Oakland, California

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
S-1	05/04/92	35.31	9.50	25.81
	08/10/92		10.85	24.46
	11/09/92		10.34	24.97
	02/22/93		7.60	27.71
	06/07/93		**8.63**	**26.68**
S-2	05/04/92[c]	33.91	9.44	24.47
	08/10/92		10.73	23.18
	11/09/92		10.29	23.62
	02/22/93[a]		9.04	24.87
S-3	05/04/92	33.56	9.22	24.34
	08/10/92		---	---
	11/09/92		---	---
	02/22/93[b]		---	---
	06/07/93[b]		**---**	**---**
S-4	05/04/92	34.08	9.96	24.12
	08/10/92		11.32	22.76
	11/09/92		11.29	22.79
	02/22/93		9.82	24.26
	06/07/93		**10.51**	**23.57**
S-5	05/04/92	33.42	10.27	23.15
	08/10/92		10.68	22.74
	11/09/92		10.69	22.73
	02/22/93		9.45	23.97
	06/07/93		**10.23**	**23.19**
S-6	05/04/92	32.59	9.42	23.17
	08/10/92		10.40	22.19
	11/09/92		10.16	22.43
	02/22/93		7.60	24.99
	06/07/93		**8.90**	**23.69**
S-7	05/04/92	33.33	11.21	22.12
	08/10/92		12.28	21.05
	11/09/92		11.77	21.56
	02/22/93		8.86	24.47
	06/07/93		**10.58**	**22.75**

-- Table 1 continues on next page --

Table 1. Ground Water Elevations - Shell Service Station WIC #204-5508-2303, 2800 Telegraph Avenue, Oakland, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
S-8	05/04/92	31.97	10.29	21.68
	08/10/92		11.12	20.85
	11/09/92		10.71	21.26
	02/22/93		6.04	25.93
	06/07/93		**10.06**	**21.91**
S-9	05/04/92	31.86	10.45	21.41
	08/10/92		11.52	20.34
	11/09/92		11.02	20.84
	02/22/93		8.00	23.86
	06/07/93		**10.07**	**21.79**
S-10	05/04/92	32.95	8.54	24.41
	08/10/92		10.43	22.52
	11/09/92		9.14	23.81
	02/22/93		6.72	26.23
	06/07/93		**8.08**	**24.87**
S-11	05/04/92	30.78	9.99	20.79
	08/10/92		10.92	19.86
	11/09/92		10.44	20.34
	02/22/93		7.30	23.48
	06/07/93		**9.51**	**21.27**
SR-1	05/04/92[c]	---	9.02	---
	08/10/92		10.29	---
	11/09/92		10.92	---
	02/22/93		6.64	---
	06/07/93		**7.36**	**---**

Notes:

a = Destroyed on April 8, 1993 for onsite construction
b = Well inaccessible
c = Top-of-Casing not surveyed

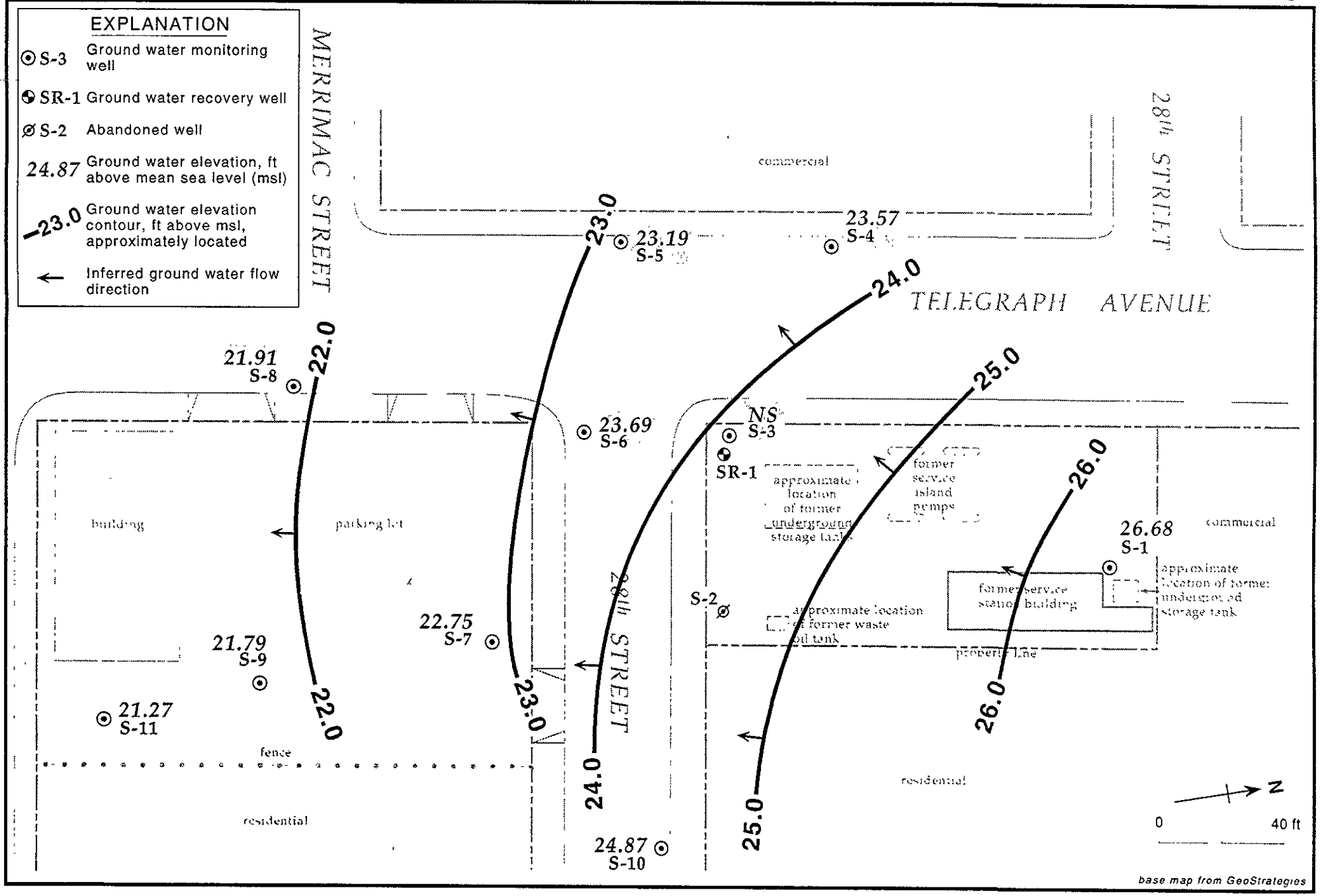


Figure 2. Monitoring Well Locations and Ground Water Elevations - June 7, 1993 - Former Shell Service Station WIC #204-5508-2404, 2800 Telegraph Avenue, Oakland, California

ATTACHMENT A

GROUND WATER MONITORING REPORT AND ANALYTIC REPORT

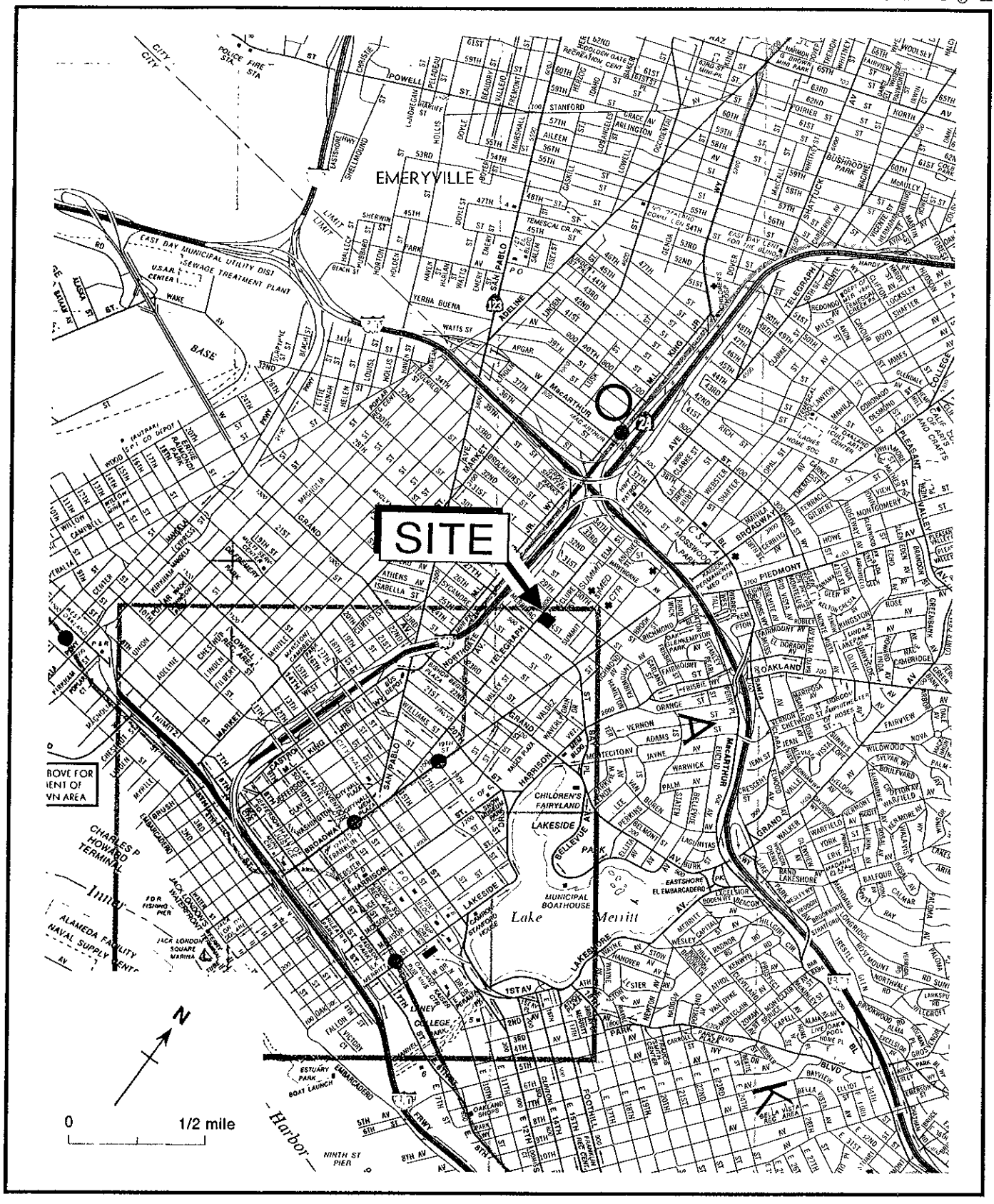


Figure 1. Site Location Map - Former Shell Service Station WIC #204-5508-2303, 2800 Telegraph Avenue, Oakland, California

Table 2. Analytic Results for Ground Water, Former Shell Service Station, WIC #204-5508-2404, 2800 Telegraph Avenue, Oakland, California

Sample ID	Date	Depth to Water (ft)	TPH-G	B	E	T	X
			<----------parts per billion (µg/L)---------->				
WELLS							
S-1	05/04/92	9.50	<50	<0.5	<0.5	<0.5	<0.5
	08/10/92	10.85	<50	<0.5	<0.5	<0.5	<0.5
	11/09/92	10.34	<50	<0.5	<0.5	<0.5	<0.5
	02/23/93	7.60	<50	<0.5	<0.5	<0.5	<0.5
	06/07/93	8.63	<50	2.8	0.7	1.3	3.0
S-2	05/04/92	9.44	1,600	190	240	6	54
	08/10/92	10.73	<50	4.1	<0.5	<0.5	<0.5
	09/11/92	10.29	84	19	2.2	0.7	4.3
	02/23/93	9.04	16,000	1,600	850	480	1,800
	06/07/93	---	---	---	---	---	---
S-3	05/04/92	9.22	---	---	---	---	---
	08/10/92	---	---	---	---	---	---
	11/09/92	---	---	---	---	---	---
	02/23/93	---	---	---	---	---	---
	06/07/93	---	---	---	---	---	---
S-4	05/04/92	9.96	<50	<0.5	<0.5	<0.5	<0.5
	08/10/92	11.32	<50	<0.5	<0.5	<0.5	<0.5
	11/09/92	11.29	<50	<0.5	<0.5	<0.5	<0.5
	02/23/93	9.82	<50	<0.5	<0.5	<0.5	<0.5
	06/07/93	10.51	50	9.2	3.3	5.5	14
S-5	05/04/92	10.27	<50	<0.5	<0.5	<0.5	<0.5
	08/10/92	10.68	<50	<0.5	<0.5	<0.5	<0.5
	11/09/92	10.69	<50	<0.5	<0.5	<0.5	<0.5
	02/23/93	9.45	<50	<0.5	<0.5	<0.5	<0.5
	06/07/93	10.23	<50	<0.5	<0.5	<0.5	<0.5
S-6	05/04/92	9.42	3,100	640	23	22	97
	08/10/92	10.40	3,400	430	26	27	120
	11/09/92	10.16	2,000	320	15	15	100
	02/23/93	7.60	14,000	780	380	180	1,300
	06/07/93	8.90	3,900	1,400	83	56	210
S-7	05/04/92	11.21	180	1.6	1.5	<0.5	3
	08/10/92	12.28	190	8	4.7	1.4	8.5
	11/09/92	11.77	280	16	7.8	4	21
	02/23/93	8.86	210	13	5.4	2.2	12
	06/07/93	10.58	90	1.2	1.0	2.5	<0.5

-- Table 2 continues on next page --

Table 2. Analytic Results for Ground Water, Former Shell Service Station, WIC #204-5510-0303, 5755 Broadway, Oakland, California (continued)

Sample ID	Date	Depth to Water (ft)	TPH-G	B	E	T	X
			<----------parts per billion (µg/L)---------->				
S-8	05/05/92	10.29	1,600	20	96	420	330
	08/10/92	11.12	1,500	19	60	37	250
	11/09/92	10.71	710	5.7	28	24	120
	02/23/93	6.04	3,800	40	68	54	260
	06/07/93	**10.06**	**1,200**	**13**	**65**	**19**	**150**
S-9	05/05/92	10.45	<50	<0.5	<0.5	<0.5	<0.5
	08/10/92	11.52	<50	<0.5	<0.5	<0.5	<0.5
	11/09/92	11.02	<50	<0.5	<0.5	<0.5	0.7
	02/23/92	8.00	<50	<0.5	<0.5	<0.5	<0.5
	06/07/93	**10.07**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
S-10	05/05/92	8.54	<50	<0.5	<0.5	<0.5	<0.5
	08/10/92	10.43	<50	<0.5	<0.5	<0.5	<0.5
	11/09/92	9.14	<50	<0.5	<0.5	<0.5	<0.5
	02/22/93	6.72	<50	<0.5	<0.5	<0.5	<0.5
	06/07/93	**8.08**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
S-11	05/04/92	9.99	1,500	55	57	32	190
	08/10/92	10.92	750	29	43	13	120
	11/09/92	10.44	4,100	32	120	62	1,100
	02/23/93	7.30	760	15	37	13	140
	06/07/93	**9.51**	**1,700**	**40**	**100**	**16**	**360**
	06/07/93**	**9.51**	**1,600**	**51**	**83**	**16**	**300**
DTSC MCLs			NE	1.0	680	100[a]	1,750

Abbreviations:

TPH-G = Total petroleum hydrocarbons as gasoline by Modified EPA Method 8015
B = Benzene by EPA Method 8020
E = Ethylbenzene by EPA Method 8020
T = Toluene by EPA Method 8020
X = Xylenes by EPA Method 8020
--- = Not analyzed
DTSC MCLs = California Department of Toxic Substances Control maximum contaminant levels for drinking water
NE = Not established
<n = Not detected at detection limits of n ppb
dup = Duplicate sample

Notes:

a = DTSC recommended action level for drinking water; MCL not established

BLAINE
TECH SERVICES INC.

985 TIMOTHY DRIVE
SAN JOSE, CA 95133
(408) 995-5535
FAX (408) 293-8773

June 28, 1993

Shell Oil Company
P.O. Box 5278
Concord, CA 94520-9998

Attn: Daniel T. Kirk

SITE:
Shell WIC # 204-5508-2303
2800 Telegraph Ave.
Oakland, California

QUARTER:
2nd quarter of 1993

QUARTERLY GROUNDWATER SAMPLING REPORT 930607-W-1

This report contains data collected during routine inspection, gauging and sampling of groundwater monitoring wells performed by Blaine Tech Services, Inc. in response to the request of the consultant who is overseeing work at this site on behalf of our mutual client, Shell Oil Company. Data collected in the course of our field work is presented in a TABLE OF WELL GAUGING DATA. The field information was collected during our preliminary gauging and inspection of the wells, the subsequent evacuation of each well prior to sampling, and at the time of sampling.

Measurements taken include the total depth of the well and the depth to water. The surface of the water was further inspected for the presence of immiscibles which may be present as a thin film (a sheen on the surface of the water) or as a measurable free product zone (FPZ). At intervals during the evacuation phase, the purge water was monitored with instruments that measure electrical conductivity (EC), potential hydrogen (pH), temperature (degrees Fahrenheit), and turbidity (NTU). In the interest of simplicity, fundamental information is tabulated here, while the bulk of the information is turned over directly to the consultant who is making professional interpretations and evaluations of the conditions at the site.

TABLE OF WELL GAUGING DATA

WELL I.D.	WELL DIAMETER (inches)	DATA COLLECTION DATE	MEASUREMENTS REFERENCED TO	QUALITATIVE OBSERVATIONS (sheen)	DEPTH TO FIRST IMMISCIBLE LIQUID (FPZ) (feet)	THICKNESS OF IMMISCIBLE LIQUID ZONE (feet)	VOLUME OF IMMISCIBLES REMOVED (ml)	DEPTH TO WATER (feet)	DEPTH TO WELL BOTTOM (feet)
S-1	3	06-07-93	TOB	--	NONE	--	--	8.63	27.81
S-2	--	06-07-93	WELL WAS DESTROYED.						--
S-3	--	06-07-93	UNABLE TO LOCATE.						--
S-4	3	06-07-93	TOB	--	NONE	--	--	10.51	30.42
S-5	3	06-07-93	TOB	--	NONE	--	--	10.23	30.58
S-6	3	06-07-93	TOB	ODOR	NONE	--	--	8.90	22.16
S-7	3	06-07-93	TOB	--	NONE	--	--	10.58	30.74
S-8	3	06-07-93	TOB	ODOR	NONE	--	--	10.06	19.18
S-9	3	06-07-93	TOB	--	NONE	--	--	10.07	30.02
S-10	3	06-07-93	TOB	--	NONE	--	--	8.08	24.24

TABLE OF WELL GAUGING DATA

WELL I.D.	WELL DIAMETER (inches)	DATA COLLECTION DATE	MEASUREMENTS REFERENCED TO	QUALITATIVE OBSERVATIONS (sheen)	DEPTH TO FIRST IMMISCIBLE LIQUID (FPZ) (feet)	THICKNESS OF IMMISCIBLE LIQUID ZONE (feet)	VOLUME OF IMMISCIBLES REMOVED (ml)	DEPTH TO WATER (feet)	DEPTH TO WELL BOTTOM (feet)
S-11 *	3	06-07-93	TOB	ODOR	NONE	--	--	9.51	19.17
SR-1	6	06-07-93	TOB	--	NONE	--	--	7.36	34.70

* Sample DUP is a duplicate sample taken from well S-11.

STANDARD PROCEDURES

Evacuation

Groundwater wells are thoroughly purged before sampling to insure that the sample is collected from water that has been newly drawn into the well from the surrounding geologic formation. The selection of equipment to evacuate each well is based on the physical characteristics of the well and what is known about the performance of the formation in which the well has been installed. There are several suitable devices which can be used for evacuation. The most commonly employed devices are air or gas actuated pumps, electric submersible pumps, and hand or mechanically actuated bailers. Our personnel frequently employ USGS/Middleburg positive displacement pumps or similar air actuated pumps which do not agitate the water standing in the well.

Normal evacuation removes three case volumes of water from the well. More than three case volumes of water may be removed in cases where more evacuation is needed to achieve stabilization of water parameters. Less than three case volumes of water may be obtained in cases where the well dewaters and does not recharge to 80% of its original volume within two hours and any additional time our personnel have reason to remain at the site. In such cases, our personnel return to the site within twenty four hours and collect sample material from the water which has recharged into the well case.

Decontamination

All apparatus is brought to the site in clean and serviceable condition. The equipment is decontaminated after each use and before leaving the site.

Free Product Skimmer

The column headed, VOLUME OF IMMISCIBLES REMOVED (ml) is included in the TABLE OF WELL GAUGING DATA to cover situations where a free product skimming device must be removed from the well prior to gauging. Skimmers are installed in wells with a free product zone on the surface of the water. The skimmer is a free product recovery device which often prevents normal well gauging and free product zone measurements. The 2.0" and 3.0" PetroTraps fall into the category of devices that obstruct normal gauging. In cases where the consultant elects to have our personnel pull the skimmers out of the well and gauge the well, our personnel perform the additional task of draining the accumulated free product out of the PetroTrap before putting it back in the well. This recovered free product is measured and logged in the VOLUME OF IMMISCIBLES REMOVED column. Gauging at such site is performed in accordance with specific directions from the professional consulting firm overseeing work at the site on Shell's behalf.

Sample Containers

Sample material is collected in specially prepared containers which are provided by the laboratory that performs the analyses.

Sampling

Sample material is collected in stainless steel bailer type devices normally fitted with both a top and a bottom check valve. Water is promptly decanted into new sample containers in a manner which reduces the loss of volatile constituents and follows the applicable EPA standard for handling volatile organic and semi-volatile compounds.

Following collection, samples are promptly placed in an ice chest containing prefrozen blocks of an inert ice substitute such as Blue Ice or Super Ice. The samples are maintained in either an ice chest or a refrigerator until delivered into the custody of the laboratory.

Sample Designations

All sample containers are identified with a site designation and a discrete sample identification number specific to that particular groundwater well. Additional standard notations (e.g. time, date, sampler) are also made on the label. Either the requested analyses or the specific analytes are written on the sample label (e.g. TPH-G, BTEX).

Chain of Custody

Samples are continuously maintained in an appropriate cooled container while in our custody and until delivered to the laboratory under a standard Shell Oil Company chain of custody. If the samples are taken charge of by a different party (such as another person from our office, a courier, etc.) prior to being delivered to the laboratory, appropriate release and acceptance records are made on the chain of custody (time, date, and signature of the person releasing the samples followed by the time, date and signature of the person accepting custody of the samples).

Hazardous Materials Testing Laboratory

The samples obtained at this site were delivered to Anametrix, Inc. in San Jose, California. Anametrix, Inc. is a California Department of Health Services certified Hazardous Materials Testing Laboratory and is listed as DOHS HMTL #1234.

Objective Information Collection

Blaine Tech Services, Inc. performs specialized environmental sampling and documentation as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc.

performs no consulting and does not become involved in the marketing or installation of remedial systems of any kind. Blaine Tech Services, Inc. is concerned only with the generation of objective information, not with the use of that information to support evaluations and recommendations concerning the environmental condition of the site. Even the straightforward interpretation of objective analytical data is better performed by interested regulatory agencies, and those engineers and geologists who are engaged in the work of providing professional opinions about the site and proposals to perform additional investigation or design remedial systems.

Reportage

Submission of this report and the attached laboratory report to interested regulatory agencies is handled by the consultant in charge of the project. Any professional evaluations or recommendations will be made by the consultant under separate cover.

Please call if we can be of any further assistance.

Sincerely,

Sigrid Blaine
for Richard C. Blaine

RCB/cdk

attachments: chain of custody
certified analytical report

cc: Weiss Associates
5500 Shellmound Street
Emeryville, CA 94608-2411
ATTN: Michael Asport

15:15 MW

9306112 (18)

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No:

Date: 6/7/93
Page 1 of 2

Site Address: ~~ARCO~~ 2500 Telegraph Oakland

Analysis Required

LAB: Kramer Lx

WIC#: 204-5528-2303

Shell Engineer: Dan Kirk — Phone No.: 510 675-6168 — Fax #:

Consultant Name & Address: Blaine Tech Serv. 985 Timothy Dr

Consultant Contact: Jim Keller — Phone No.: — Fax #: 995-551

Comments:

Sampled by: Don Wells

Printed Name: DON WELTZ

CHECK ONE (1) BOX ONLY — CT/DT

- Quarterly Monitoring ☐ 6441
- Site Investigation ☐ 6441
- Soil Closure/Disposal ☐ 6442
- Water Closure/Disposal ☐ 6443
- Soil/Air Rem. or Sys. O & M ☐ 6452
- Water Rem. or Sys. O & M ☐ 6453
- Other ☐

TURN AROUND TIME

- 24 hours ☐
- 48 hours ☐
- 15 days ☒ ~~(normal)~~
- Other ☐ ____

NOTE: Notify Lab as soon as Possible of 24/48 hr. TAT.

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			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
(1) S-1	6/7			X		3						X							Grab water	
(2) S-4				X		3						X								
(3) S-5				X		3						X								
(4) S-9				X		3						X								
(5) S-11				X		3						X								
(6) S-8				X		3						X								
(7) S-10				X		3						X								
(8) S-7				X		3						X								

Relinquished By (signature):	Printed Name: DON WELTZ	Date: 6-8-93 Time: 1305	Received (signature):	Printed Name: BENNY S. CARRIZOSA	Date: 6-8-93 Time: 1305
Relinquished By (signature):	Printed Name: BENNY S. CARRIZOSA	Date: 6-8-93 Time: 1335	Received (signature):	Printed Name: Maria Barajas	Date: 6/8/93 Time: 13:35
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

9306112 (18)

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No:

Date: 6/7/93
Page 2 of 2

Site Address: 2500 Telegraph Oakland

WIC#: 204-5508-2303

Shell Engineer: Dan Kirk — Phone No.: 510 675-6168 Fax #:

Consultant Name & Address: BTS

Consultant Contact: Jim Keller — Phone No.: 408 995-5535 Fax #:

Comments:

Sampled by: Don Wertz

Printed Name: DON WERTZ

LAB: Chromalab

Analysis Required

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			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
(9) S-6	6/7			X		3						X				40 VOA	HCl	N	Groundwater	
(10) DUP	"			X		3						X				"	"	"	"	
(11) EB	↓			X		3						X				"	"	"	Equip blank	
(12) TB	6/4			X		2						X				↓	↓	↓	Trip blank	

CHECK ONE (1) BOX ONLY — CT/DT — TURN AROUND TIME

Quarterly Monitoring	☑ 5441	24 hours	☐
Site Investigation	☐ 5441	48 hours	☐
Soil Closure/Disposal	☐ 5442	15 days	☑ (Normal)
Water Closure/Disposal	☐ 5443	Other	☐ ____
Soil/Air Rem. or Sys. O & M	☐ 5452	NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.	
Water Rem. or Sys. O & M	☐ 5453		
Other	☐		

Relinquished By (signature):	Printed Name: DON WERTZ	Date: 6-8-93 Time: 1305	Received (signature): Benny S. Carrizosa	Printed Name: BENNY S. CARRIZOSA	Date: 6-8-93 Time: 1305
Relinquished By (signature): Benny S. Carrizosa	Printed Name: BENNY S. CARRIZOSA	Date: 6-8-93 Time: 1335	Received (signature):	Printed Name: Maria Barajas	Date: 6/8/93 Time: 13:35
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

Inchcape Testing Services
Anametrix Laboratories

1961 Concourse Drive #E
San Jose, CA 95131
Tel: 408-432-8192
Fax: 408-432-8198

MR. JIM KELLER
BLAINE TECH
985 TIMOTHY STREET
SAN JOSE, CA 95133

Workorder # : 9306112
Date Received : 06/08/93
Project ID : 204-5508-2303
Purchase Order: MOH-B813

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

ANAMETRIX ID	CLIENT SAMPLE ID
9306112- 1	S-1
9306112- 2	S-4
9306112- 3	S-5
9306112- 4	S-9
9306112- 5	S-11
9306112- 6	S-8
9306112- 7	S-10
9306112- 8	S-7
9306112- 9	S-6
9306112-10	DUP
9306112-11	EB
9306112-12	TB

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 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.

Corinne Pham for

Sarah Schoen, Ph.D.
Laboratory Director

06/22/93
Date

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

MR. JIM KELLER
BLAINE TECH
985 TIMOTHY STREET
SAN JOSE, CA 95133

Workorder # : 9306112
Date Received : 06/08/93
Project ID : 204-5508-2303
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9306112- 1	S-1	WATER	06/07/93	TPHgBTEX
9306112- 2	S-4	WATER	06/07/93	TPHgBTEX
9306112- 3	S-5	WATER	06/07/93	TPHgBTEX
9306112- 4	S-9	WATER	06/07/93	TPHgBTEX
9306112- 5	S-11	WATER	06/07/93	TPHgBTEX
9306112- 6	S-8	WATER	06/07/93	TPHgBTEX
9306112- 7	S-10	WATER	06/07/93	TPHgBTEX
9306112- 8	S-7	WATER	06/07/93	TPHgBTEX
9306112- 9	S-6	WATER	06/07/93	TPHgBTEX
9306112-10	DUP	WATER	06/07/93	TPHgBTEX
9306112-11	EB	WATER	06/07/93	TPHgBTEX
9306112-12	TB	WATER	06/04/93	TPHgBTEX

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

MR. JIM KELLER
BLAINE TECH
985 TIMOTHY STREET
SAN JOSE, CA 95133

Workorder # : 9306112
Date Received : 06/08/93
Project ID : 204-5508-2303
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Cheryl Brinkman 6/22/93
Department Supervisor Date

Reggie Dawson 6/22/93
Chemist Date

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

Anametrix W.O.: 9306112
Matrix : WATER
Date Sampled : 06/07/93

Project Number : 204-5508-2303
Date Released : 06/22/93

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# S-1 -01	Sample I.D.# S-4 -02	Sample I.D.# S-5 -03	Sample I.D.# S-9 -04	Sample I.D.# S-11 -05
Benzene	0.5	2.8	9.2	ND	ND	40
Toluene	0.5	1.3	5.5	ND	ND	16
Ethylbenzene	0.5	0.7	3.3	ND	ND	100
Total Xylenes	0.5	3.0	14	ND	ND	360
TPH as Gasoline	50	ND	50	ND	ND	1700
% Surrogate Recovery		114%	116%	113%	109%	110%
Instrument I.D.		HP21	HP21	HP21	HP21	HP21
Date Analyzed		06/12/93	06/12/93	06/12/93	06/12/93	06/13/93
RLMF		1	1	1	1	5

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 61-139%

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

Peggie Davison 6/22/93
Analyst / Date

Cheryl Balmer 6/22/93
Supervisor / Date

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

Anametrix W.O.: 9306112
Matrix : WATER
Date Sampled : 06/07/93

Project Number : 204-5508-2303
Date Released : 06/22/93

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# S-8 -06	Sample I.D.# S-10 -07	Sample I.D.# S-7 -08	Sample I.D.# S-6 -09	Sample I.D.# DUP -10
Benzene	0.5	13	ND	1.2	1400	51
Toluene	0.5	19	ND	2.5	56	16
Ethylbenzene	0.5	65	ND	1.0	83	83
Total Xylenes	0.5	150	ND	ND	210	300
TPH as Gasoline	50	1200	ND	90	3900	1600
% Surrogate Recovery		119%	111%	105%	125%	123%
Instrument I.D.		HP21	HP21	HP21	HP21	HP21
Date Analyzed		06/13/93	06/12/93	06/12/93	06/14/93	06/14/93
RLMF		10	1	1	25	10

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 61-139%

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

Peggie Dawson 6/22/93
Analyst Date

Supervisor Date

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

Anametrix W.O.: 9306112 Project Number : 204-5508-2303
Matrix : WATER Date Released : 06/22/93
Date Sampled : 06/04 & 07/93

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# EB -11	Sample I.D.# TB -12	Sample I.D.# BU1201E2 BLANK	Sample I.D.# BU1401E2 BLANK
Benzene	0.5	ND	ND	ND	ND
Toluene	0.5	ND	ND	ND	ND
Ethylbenzene	0.5	ND	ND	ND	ND
Total Xylenes	0.5	ND	ND	ND	ND
TPH as Gasoline	50	ND	ND	ND	ND
% Surrogate Recovery		115%	112%	113%	116%
Instrument I.D.		HP21	HP21	HP21	HP21
Date Analyzed		06/12/93	06/12/93	06/12/93	06/14/93
RLMF		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 61-139%

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

Reggie Denson 6/22/93
Analyst Date

Supervisor Date

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

Sample I.D.	: 204-5508-23-3 S-10	Anametrix I.D.	: 06112-7
Matrix	: WATER	Analyst	:
Date Sampled	: 06/07/93	Supervisor	:
Date Analyzed	: 06/12/93	Date Released	: 06/22/93
		Instrument ID	: HP21

COMPOUND	SPIKE AMT (ug/L)	SAMPLE AMT (ug/L)	REC MS (ug/L)	% REC MS	REC MD (ug/L)	% REC MD	RPD	% REC LIMITS
GASOLINE	500	0	530	106%	510	102%	-4%	48-149
P-BFB				102%		104%		61-139

* Limits established by Anametrix, Inc.

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

Sample I.D.	: LAB CONTROL SAMPLE	Anametrix I.D.	: LCSW0612
Matrix	: WATER	Analyst	: RD
Date Sampled	: N/A	Supervisor	:
Date Analyzed	: 06/12/93	Date Released	: 06/22/93
		Instrument I.D.	: HP21

COMPOUND	SPIKE AMT. (ug/L)	REC LCS (ug/L)	%REC LCS	% REC LIMITS
GASOLINE	500	540	108%	67-127
SURROGATE			106%	61-139

* Quality control established by Anametrix, Inc.