Weiss Associates Environmental and Geologic Services

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

ALCO
HAZMAT
94 JAN 18 PM 2:41

STD 413

January 7, 1994

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 fourth quarter 1993 and proposed work for the first quarter 1994.

Fourth 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).

Anticipated First Quarter 1994 Activities:

- WA will submit a report presenting the results of the first quarter 1994 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.

Please call if you have any questions.

Sincerely,
Weiss Associates

John Wolf
Technical Assistant

(for NSM)

N. Scott MacLeod, R.G.
Project Geologist

JAW/NSM:jaw

J:\SHELL\700\700QMDE3.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

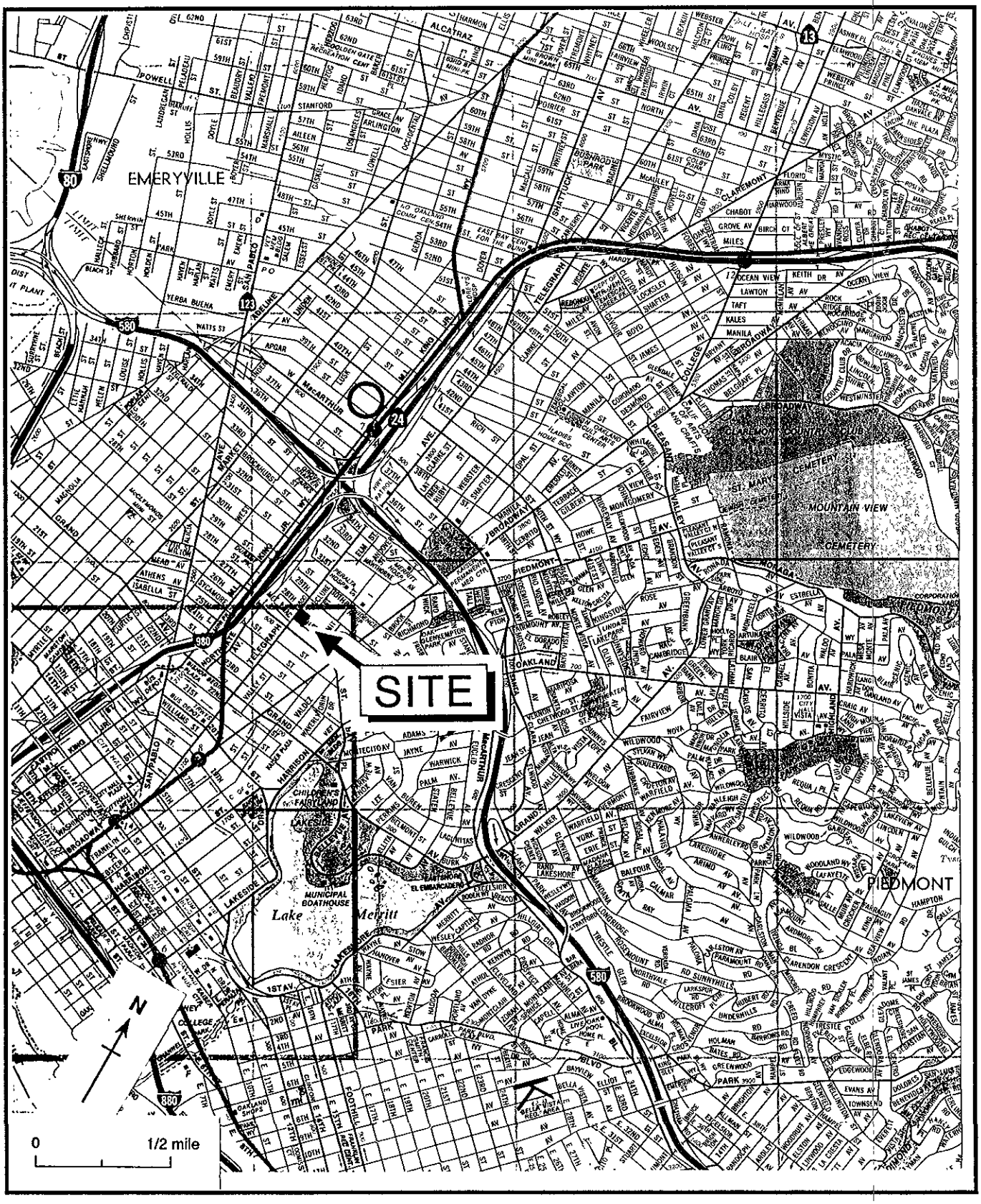

Figure 1. Site Location Map - Former Shell Service Station WIC #204-5508-2404, 2800 Telegraph Avenue, Oakland, California

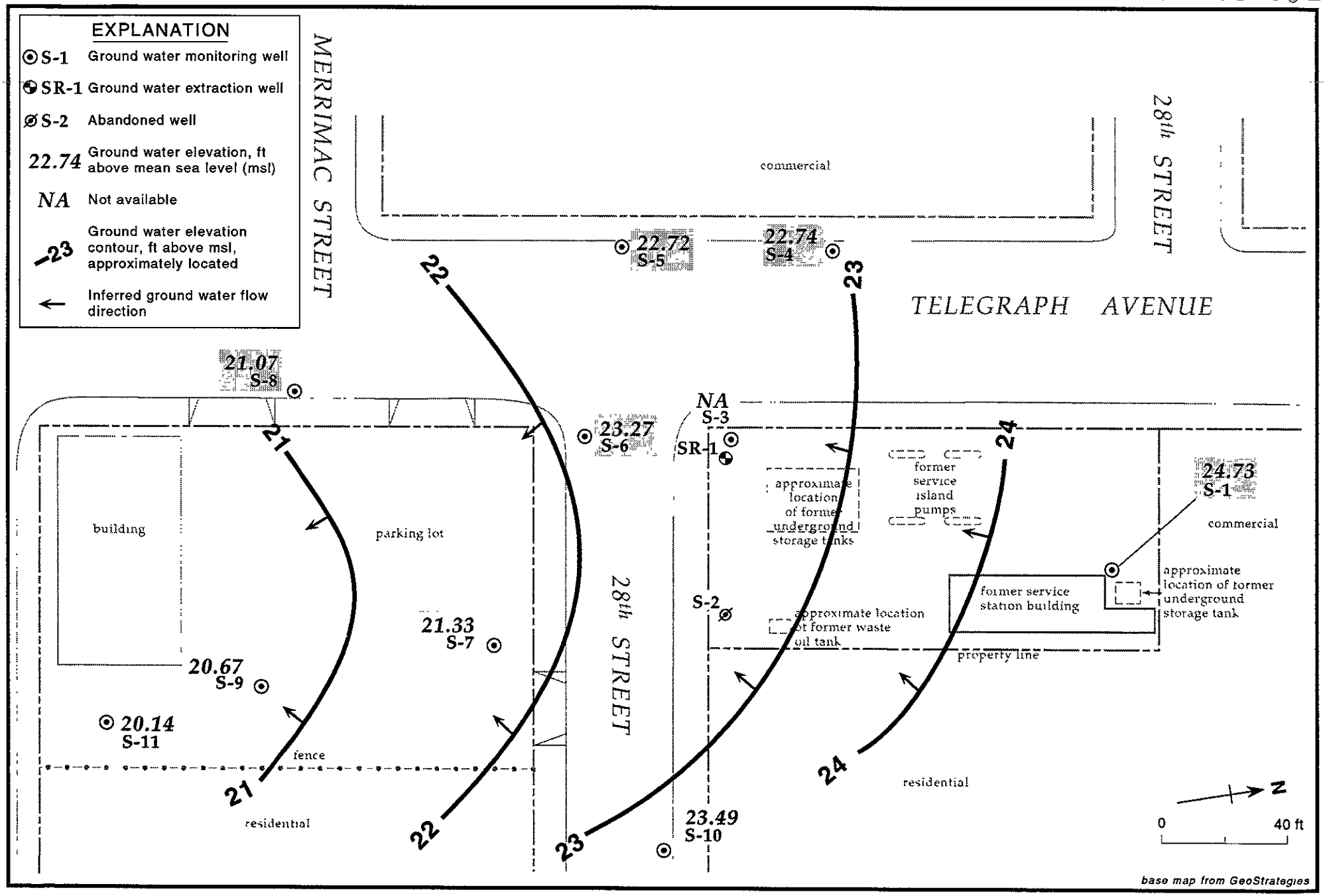

Figure 2. Monitoring Well Locations and Ground Water Elevations - November 18, 1993 - Former Shell Service Station WIC #204-5508-2404, 2800 Telegraph Avenue, Oakland, California

S700-006.ai

10/7/93

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
	08/13/93		9.20	26.11
	11/18/93		**10.58**	**24.73**
S-2	05/04/92	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[b]		---	---
	11/09/92[b]		---	---
	02/22/93[b]		---	---
	06/07/93[b]		---	---
	08/13/93[b]		---	---
	11/18/93[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
	08/13/93		11.05	23.03
	11/18/93		**11.34**	**22.74**
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
	08/13/93		10.58	22.84
	11/18/93		**10.70**	**22.72**
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
	08/13/93		9.39	23.20
	11/18/93		**10.32**	**22.27**

-- 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-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
	08/13/93		11.34	21.99
	11/18/93		**12.00**	**21.33**
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
	08/13/93		10.56	21.41
	11/18/93		**10.90**	**21.07**
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
	08/13/93		10.92	20.94
	11/18/93		**11.19**	**20.67**
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
	08/13/93		8.83	24.12
	11/18/93		**9.46**	**23.49**
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
	08/13/93		10.39	20.39
	11/18/93		**10.64**	**20.14**
SR-1	05/04/92[c]	---	9.02	---
	08/10/92		10.29	---
	11/09/92		10.92	---
	02/22/93		6.64	---

-- 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)
	06/07/93		7.36	---
	08/13/93		7.96	---
	11/18/93		10.02	---

Notes:

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

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
	08/13/93	9.20	<50	<0.5	<0.5	<0.5	<0.5
	11/18/93	**10.58**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
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	Well destroyed	---	---	---	---	---
S-3	05/04/92	9.22	---	---	---	---	---
	08/10/92	Well covered	---	---	---	---	---
	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
	08/13/93	11.05	<50	<0.5	<0.5	<0.5	<0.5
	11/18/93	**11.34**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
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
	08/13/93	10.58	<50	<0.5	<0.5	<0.5	<0.5
	11/18/93	**10.70**	**<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

-- 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)---------->				
	06/07/93	8.90	3,900	1,400	83	56	210
	08/13/93	9.39	4,000[a]	890	<0.5	16	41
	11/18/93	**10.32**	**80**	**5.0**	**<0.5**	**<0.5**	**<0.5**
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
	08/13/93	11.34	140	4.0	<0.5	0.8	0.5
	11/18/93	**12.00**	**440**	**43**	**0.9**	**4.9**	**4.2**
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
	08/13/93	10.56	1,300	21	49	23	250
	11/18/93	**10.90**	**870**	**16**	**59**	**5.3**	**230**
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
	08/13/93	10.92	140[b]	<0.5	<0.5	<0.5	<0.5
	11/18/93	**11.19**	**170**	**<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
	08/13/93	8.83	<50	<0.5	<0.5	<0.5	<0.5
	11/18/93	**9.46**	**<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[dup]	9.51	1,600	51	83	16	300
	08/13/93	10.39	60	0.9	0.8	<0.5	1.2
	08/13/93[dup]	10.39	70	2.1	0.9	<0.5	2.1
	11/18/93	**10.64**	**150**	**7.8**	**9.0**	**1.0**	**12**

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)---------->				
SR-1	11/18/93	10.02	<50	<0.5	<0.5	<0.5	<0.5
	11/18/93dup	10.02	<50	<0.5	<0.5	<0.5	<0.5
Trip Blank	06/04/93		<50	<0.5	<0.5	<0.5	<0.5
	08/13/93		<50	<0.5	<0.5	<0.5	<0.5
	11/18/93		<50	<0.5	<0.5	<0.5	<0.5
DTSC MCLs			NE	1.0	680	100[c]	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 = The concentration reported as gasoline is primarily due to the presence of a combination of gasoline and a discrete peak not indicative of gasoline.
b = The concentration reported as gasoline is primarily due to the presence of a discrete peak not indicative of gasoline.
c = DTSC recommended action level for drinking water; MCL not established

ATTACHMENT A

GROUND WATER MONITORING REPORT AND ANALYTIC REPORT

BLAINE
TECH SERVICES INC.

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

December 14, 1993

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

Attn: Lynn Walker

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

QUARTER:
4th quarter of 1993

QUARTERLY GROUNDWATER SAMPLING REPORT 931118-Y-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 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.

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 are removed in cases where more evacuation is needed to achieve stabilization of water parameters and when requested by the local implementing agency. Less water may be removed 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. Effluent water from purging and on-site equipment cleaning is collected and transported to Shell's Martinez Manufacturing Complex in Martinez, California.

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 sites 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.

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.

Richard C. Blaine

RCB/lp

attachments: table of well gauging data
chain of custody
certified analytical report

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

TABLE OF WELL GAUGING DATA

WELL I.D.	DATA COLLECTION DATE	MEASUREMENT REFERENCED TO	QUALITATIVE OBSERVATIONS (sheen)	DEPTH TO FIRST IMMISCIBLES LIQUID (FPZ) (feet)	THICKNESS OF IMMISCIBLES LIQUID ZONE (feet)	VOLUME OF IMMISCIBLES REMOVED (ml)	DEPTH TO WATER (feet)	DEPTH TO WELL BOTTOM (feet)
S-1	11/18/93	TOB	--	NONE	--	--	10.58	27.80
S-4	11/18/93	TOB	--	NONE	--	--	11.34	30.30
S-5	11/18/93	TOB	--	NONE	--	--	10.70	30.58
S-6	11/18/93	TOB	--	NONE	--	--	10.32	22.22
S-7	11/18/93	TOB	--	NONE	--	--	12.00	30.80
S-8	11/18/93	TOB	--	NONE	--	--	10.90	19.20
S-9	11/18/93	TOB	--	NONE	--	--	11.19	39.04
S-10	11/18/93	TOB	--	NONE	--	--	9.46	24.30
S-11	11/18/93	TOB	--	NONE	--	--	10.64	19.19
SR-1 *	11/18/93	TOB	--	NONE	--	--	10.02	34.10

* Sample DUP was a duplicate sample taken from well SR-1.

#281 9311281 (18)

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 931118-Y1

Date:
Page 1 of 2

Site Address: 2800 Telegraph Ave., Oakland

WIC#: 204-5508-2303

Shell Engineer: Lynn Walker
Phone No.: (510) 675-6169
Fax #: 675-6172

Consultant Name & Address:
Blaine Tech Services, Inc.
985 Timothy Drive San Jose, CA 95133

Consultant Contact: Jim Keller
Phone No.: (408) 995-5535
Fax #: 293-8773

Comments:

Sampled by: JOE CARRERA.

Printed Name: Joe Carrera

LAB: Anametrix

CHECK ONE (1) BOX ONLY	CT/DT	
Quarterly Monitoring	☒	5461
Site Investigation	☐	5441
Soil Classify/Disposal	☐	5442
Water Classify/Disposal	☐	5443
Soil/Air Rem. or Sys. O & M	☐	5462
Water Rem. or Sys. O & M	☐	5463
Other	☐	

TURN AROUND TIME
24 hours ☐
48 hours ☐
16 days ☒ (Normal)
Other ☐

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

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
(1)	S-1	11-18			X		3						X								
(2)	S-4												X								
(3)	S-5												X								
(4)	S-6												X								
(5)	S-7												X								
(6)	S-8												X								
(7)	S-9												X								
(8)	S-10												X								

Relinquished By (signature):	Printed Name:	Date/Time	Received (signature):	Printed Name:	Date/Time
Joe Carrera	JOE CARRERA.	Date: 11-19-93 Time: 1610	Benny S. Carrizosa	BENNY S. CARRIZOSA	Date: 11-19-93 Time: 1610
Benny S. Carrizosa	BENNY S. CARRIZOSA	Date: 11-19-93 Time: 1630	Brandy C. Falcon	Brandy C. Falcon	Date: 11/19/93 Time: 16:30
		Date: Time:			Date:

#281 9311281 (18)

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 931118-Y1

Date:
Page 2 of 2

Site Address: 2800 Telegraph Ave., Oakland
WIC#: 204-5508-2303

Shell Engineer: Lynn Walker — Phone No.: (510) 675-6169 Fax #: 675-6172

Consultant Name & Address: Blaine Tech Services, Inc. 985 Timothy Drive San Jose, CA 95133

Consultant Contact: Jim Keller — Phone No.: (408) 995-5535 Fax #: 293-8773

Comments:

Sampled by: Joe Carrera

Printed Name: JOE CARRERA

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			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
(9) S-11	11-18			X		3						X								
(10) SR-1												X								
(11) Dup.												X								
(12) EQuip Blank						1						X								
(13) Trip Blank.						2						X								

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

	CT/DT	TURN AROUND TIME
Quarterly Monitoring	☒ $441	24 hours ☐
Site Investigation	☐ $441	48 hours ☐
Soil Closure/Disposal	☐ $442	10 days ☒ (Normal)
Water Closure/Disposal	☐ $443	Other ☐
Soil/Air Rem. or Sys. O & M	☐ $452	
Water Rem. or Sys. O & M	☐ $453	
Other	☐	

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

	Printed Name:	Date:	Time:		Printed Name:	Date:	Time:
Relinquished By (Signature): Joe Carrera	JOE CARRERA	11-18-93	1610	Received (Signature): Danny S. Carrizosa	Danny S. Carrizosa	11-18-93	1610
Relinquished By (Signature): Danny S. Carrizosa	DANNY S. CARRIZOSA	11-19-93	1630	Received (Signature): Brandy Falcon	Brandy Falcon	11/19/93	1630
Relinquished By (Signature):		Date:	Time:	Received (Signature):		Date:	Time:

Inchcape Testing Services
Anametrix Laboratories

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

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

Workorder # : 9311281
Date Received : 11/19/93
Project ID : 204-5508-2303
Purchase Order: MOH-B813

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

ANAMETRIX ID	CLIENT SAMPLE ID
9311281- 1	S-1
9311281- 2	S-4
9311281- 3	S-5
9311281- 4	S-6
9311281- 5	S-7
9311281- 6	S-8
9311281- 7	S-9
9311281- 8	S-10
9311281- 9	S-11
9311281-10	SR-1
9311281-11	DUP
9311281-12	E. BLANK
9311281-13	T. BLANK

This report consists of 10 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

12-07-93
Date

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

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

Workorder # : 9311281
Date Received : 11/19/93
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
9311281- 1	S-1	WATER	11/18/93	TPHgBTEX
9311281- 2	S-4	WATER	11/18/93	TPHgBTEX
9311281- 3	S-5	WATER	11/18/93	TPHgBTEX
9311281- 4	S-6	WATER	11/18/93	TPHgBTEX
9311281- 5	S-7	WATER	11/18/93	TPHgBTEX
9311281- 6	S-8	WATER	11/18/93	TPHgBTEX
9311281- 7	S-9	WATER	11/18/93	TPHgBTEX
9311281- 8	S-10	WATER	11/18/93	TPHgBTEX
9311281- 9	S-11	WATER	11/18/93	TPHgBTEX
9311281-10	SR-1	WATER	11/18/93	TPHgBTEX
9311281-11	DUP	WATER	11/18/93	TPHgBTEX
9311281-12	E. BLANK	WATER	11/18/93	TPHgBTEX
9311281-13	T. BLANK	WATER	11/18/93	TPHgBTEX

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

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

Workorder # : 9311281
Date Received : 11/19/93
Project ID : 204-5508-2303
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- The concentration reported as gasoline for sample S-9 is primarily due to the presence of a discrete peak not indicative of gasoline.

Cheryl Balmer 12/7/93
Department Supervisor Date

Kamel G. Kamel 12/7/93
Chemist Date

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

Anametrix W.O.: 9311281
Matrix : WATER
Date Sampled : 11/18/93

Project Number : 204-5508-2303
Date Released : 12/03/93

	Reporting Limit	Sample I.D.# S-1	Sample I.D.# S-4	Sample I.D.# S-5	Sample I.D.# S-6	Sample I.D.# S-7
COMPOUNDS	(ug/L)	-01	-02	-03	-04	-05
Benzene	0.5	ND	ND	ND	5.0	43
Toluene	0.5	ND	ND	ND	ND	4.9
Ethylbenzene	0.5	ND	ND	ND	ND	0.9
Total Xylenes	0.5	ND	ND	ND	ND	4.2
TPH as Gasoline	50	ND	ND	ND	80	440
% Surrogate Recovery		120%	108%	116%	108%	102%
Instrument I.D.		HP12	HP12	HP12	HP4	HP12
Date Analyzed		11/24/93	11/24/93	11/24/93	12/01/93	11/24/93
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 (Dilution).

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 61-139%.

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

Kamel G. Kamel 12/7/93
Analyst Date

Cheryl Beelman 12/6/93
Supervisor Date

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

Anametrix W.O.: 9311281
Matrix : WATER
Date Sampled : 11/18/93

Project Number : 204-5508-2303
Date Released : 12/03/93

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# S-8 -06	Sample I.D.# S-9 -07	Sample I.D.# S-10 -08	Sample I.D.# S-11 -09	Sample I.D.# SR-1 -10
Benzene	0.5	16	ND	ND	7.8	ND
Toluene	0.5	5.3	ND	ND	1.0	ND
Ethylbenzene	0.5	59	ND	ND	9.0	ND
Total Xylenes	0.5	230	ND	ND	12	ND
TPH as Gasoline	50	870	170	ND	150	ND
% Surrogate Recovery		107%	122%	116%	132%	98%
Instrument I.D.		HP12	HP12	HP12	HP12	HP12
Date Analyzed		11/25/93	11/24/93	11/24/93	11/25/93	11/25/93
RLMF		10	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 (Dilution).

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Kamel G. Kamel 12/7/93
Analyst Date

Cheryl Beale 12/6/93
Supervisor Date

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

Anametrix W.O.: 9311281
Matrix : WATER
Date Sampled : 11/18/93

Project Number : 204-5508-2303
Date Released : 12/03/93

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# DUP -11	Sample I.D.# E. BLANK -12	Sample I.D.# T. BLANK -13	Sample I.D.# BN2401E2 BLANK	Sample I.D.# BN2901E2 BLANK
Benzene	0.5	ND	ND	ND	ND	ND
Toluene	0.5	ND	ND	ND	ND	ND
Ethylbenzene	0.5	ND	ND	ND	ND	ND
Total Xylenes	0.5	ND	ND	ND	ND	ND
TPH as Gasoline	50	ND	ND	ND	ND	ND
% Surrogate Recovery		103%	101%	99%	103%	99%
Instrument I.D.		HP12	HP12	HP12	HP4	HP12
Date Analyzed		11/25/93	11/29/93	11/25/93	11/24/93	11/29/93
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 (Dilution).

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 61-139%.

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

Kamel G. Kamel 12/7/93
Analyst Date

Cheryl Baeman 12/6/93
Supervisor Date

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

Anametrix W.O.: 9311281
Matrix : WATER
Date Sampled : 11/18/93

Project Number : 204-5508-2303
Date Released : 12/03/93

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# BD0101E2 BLANK
Benzene	0.5	ND
Toluene	0.5	ND
Ethylbenzene	0.5	ND
Total Xylenes	0.5	ND
TPH as Gasoline	50	ND
% Surrogate Recovery		98%
Instrument I.D.		HP4
Date Analyzed		12/01/93
RLMF		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 (Dilution).

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 61-139%.

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

Kamel G. Kamel 12/7/93
Analyst Date

Cheryl Balmer 12/6/93
Supervisor Date

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

Sample I.D.	: 204-5508-2303 DUP	Anametrix I.D.	: 11281-11
Matrix	: WATER	Analyst	: KK
Date Sampled	: 11/18/93	Supervisor	:
Date Analyzed	: 11/25/93	Date Released	: 12/03/93
		Instrument ID	: HP12

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	440	88%	400	80%	-10%	48-149
P-BFB				105%		98%		61-139

* Quality control 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
Matrix : WATER
Date Sampled : N/A
Date Analyzed : 11/25/93

Anametrix I.D. : MN2402E1
Analyst : KK
Supervisor : [illegible]
Date Released : 11/30/93
Instrument I.D.: HP12

COMPOUND	SPIKE AMT. (ug/L)	REC LCS (ug/L)	%REC LCS	% REC LIMITS *
GASOLINE	500	430	86%	67-127
p-BFB			76%	61-139

* Quality control limits established by Anametrix, Inc.

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

Sample I.D.	: LAB CONTROL SAMPLE	Anametrix I.D.	: MN2901E1
Matrix	: WATER	Analyst	: KK
Date Sampled	: N/A	Supervisor	:
Date Analyzed	: 11/29/93	Date Released	: 12/03/93
		Instrument I.D.	: HP12

COMPOUND	SPIKE AMT. (ug/L)	LCS (ug/L)	REC LCS	%REC LIMITS *
Benzene	20.0	19.3	97%	52-133
Toluene	20.0	20.7	103%	57-136
Ethylbenzene	20.0	22.3	112%	56-139
Total Xylenes	20.0	20.1	101%	56-141
P-BFB			114%	61-139

* Quality control limits established by Anametrix, Inc.

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

Sample I.D.	: LAB CONTROL SAMPLE	Anametrix I.D.	: MD0101E3
Matrix	: WATER	Analyst	: KK
Date Sampled	: N/A	Supervisor	:
Date Analyzed	: 12/01/93	Date Released	: 12/02/93
		Instrument I.D.	: HP4

COMPOUND	SPIKE AMT. (ug/L)	LCS (ug/L)	REC LCS	%REC LIMITS *
Benzene	20.0	17.6	88%	52-133
Toluene	20.0	18.6	93%	57-136
Ethylbenzene	20.0	19.9	99%	56-139
Total Xylenes	20.0	18.9	95%	56-141
P-BFB			111%	61-139

* Quality control limits established by Anametrix, Inc.