Weiss Associates
Environmental and Geologic Services
5500 Shellmound Street, Emeryville, CA 94608-2411
Fax: 510-547-5043 Phone: 510-450-6000

January 26, 1994

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 1993 and proposed work for the first quarter 1994.

Fourth Quarter 1993 Activities:

- Blaine Tech Services, Inc. (BTS) of San Jose, California measured depths to ground water in five of the six site wells and collected ground water samples from four of the five site wells. Well MW-4 contained floating hydrocarbons and was not sampled. Well MW-6 was inadvertently not sampled, but will be sampled first quarter 1994. BTS' report describing these activities and analytic results for ground water is included as Attachment A.

- Weiss Associates (WA) compiled the ground water elevation and analytic data (Tables 1 and 2) and prepared a ground water elevation contour map (Figure 2). WA also tabulated floating hydrocarbon removal data (Table 3). To date, about 1.65 gallons of floating hydrocarbons have been purged from the subsurface.

- WA submitted a report summarizing the third quarter 1993 subsurface investigation.

Anticipated First Quarter 1994 Activities:

- WA will submit a report presenting the results of first quarter 1994 ground water sampling and ground water depth measurements. The report will include tabulated chemical analytic results and a ground water elevation contour map.

Conclusions and Recommendations:

WA recommends continued monitoring of dissolved hydrocarbon concentrations in ground water. Despite the fact that indications of hydrocarbons were observed in soil borings between wells MW-4 and MW-5, no petroleum hydrocarbons as gasoline or benzene, ethylbenzene, toluene and xylenes have ever been detected in ground water samples from well MW-5 since it was installed in 1991. In addition, no petroleum hydrocarbons were detected in the September 1993 ground water sample collected from recently installed monitoring well MW-6.

Please call if you have any questions.

Sincerely,
Weiss Associates

John Wolf
Technical Assistant

N. Scott MacLeod, R.G.
Project Geologist

JW/NSM:jw

J:\SHELL\600\QMRPTS\618QMJA4.WP

Attachments: A - Blaine Tech Services' 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

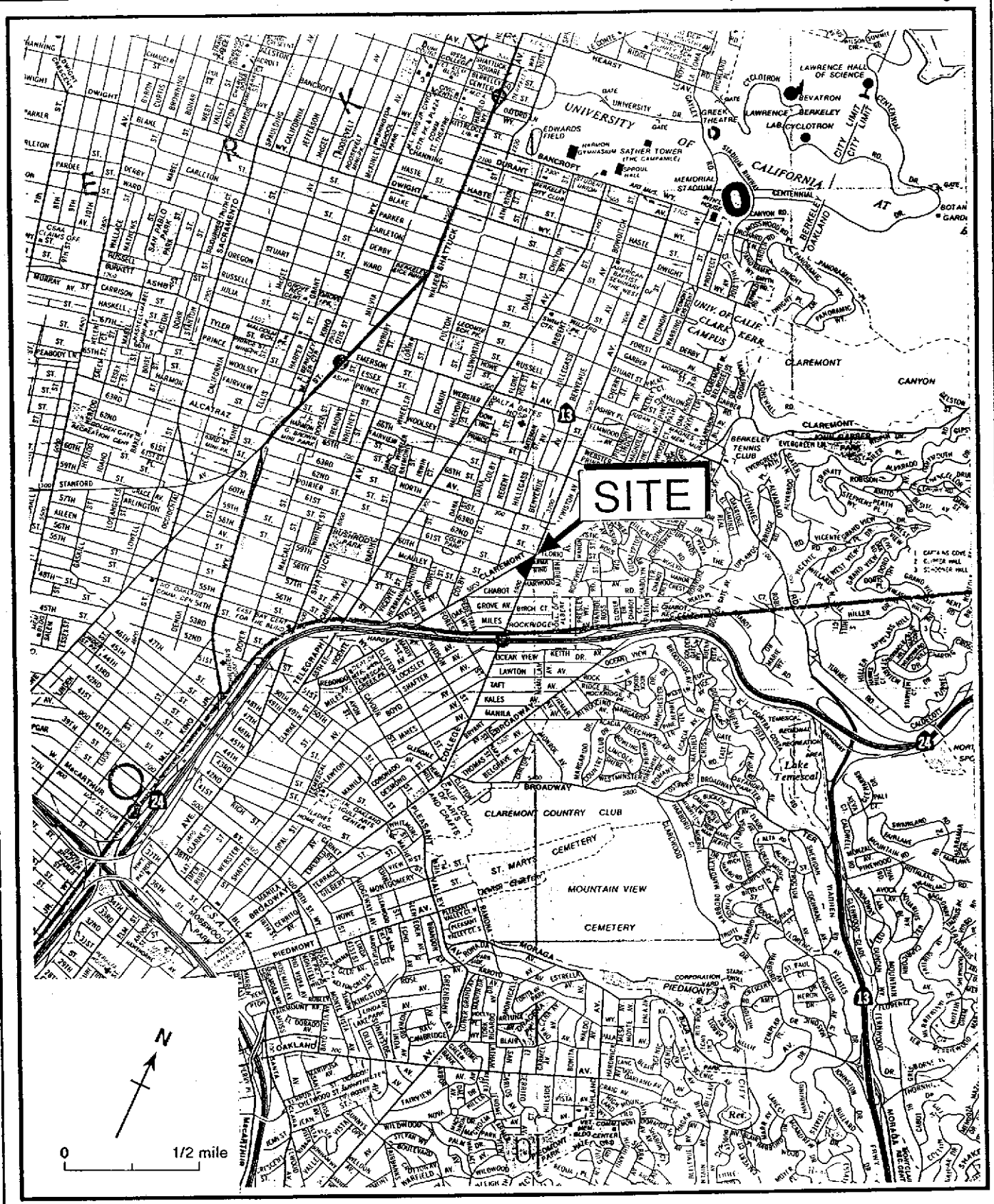

Figure 1. Site Location Map - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California

4/3/92

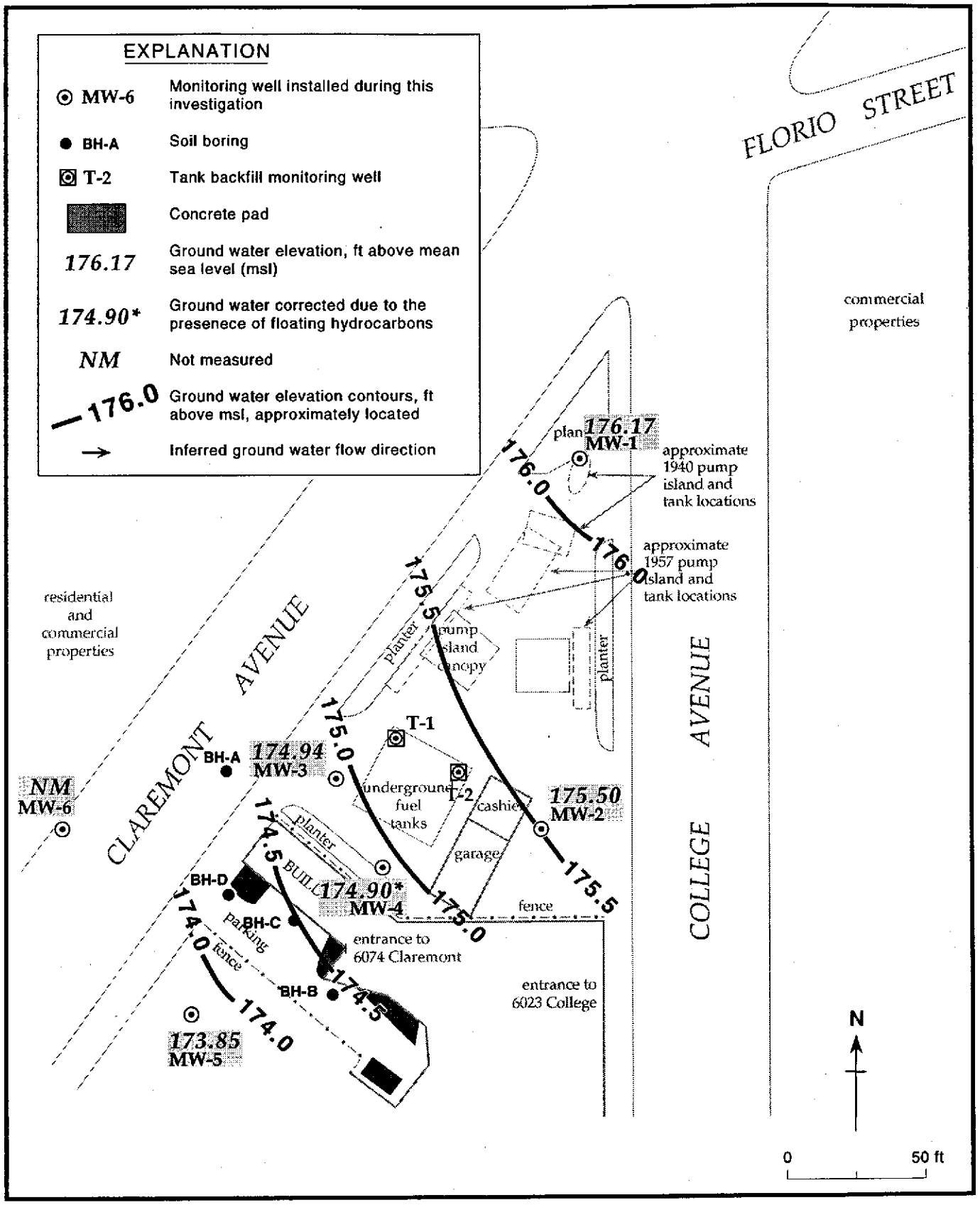

Figure 2. Monitoring Well Locations and Ground Water Elevation Contours - November 19, 1993
Shell Service Station WIC #204-5510-0303, 6039 College Avenue, Oakland, California

Table 1. Ground Water Elevations - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Floating Hydrocarbon Thickness (ft)	Ground Water Elevation (ft above msl)[a]
MW-1	06/03/91	195.89	17.82		178.07
	08/30/91		19.87		176.02
	11/22/91		20.58		175.31
	03/18/92		13.55		182.34
	05/28/92		17.08		178.81
	08/19/92		19.07		176.82
	11/17/92		20.11		175.78
	02/12/93		12.10		183.79
	06/10/93		14.87		181.02
	08/18/93		16.90		178.99
	11/19/93		**19.72**		**176.17**
MW-2	06/03/91	194.27	17.00		177.27
	08/30/91		18.95		175.32
	11/22/91		19.55		174.72
	03/18/92		12.91		181.36
	05/28/92		16.25		178.02
	08/19/92		18.21		176.06
	11/17/92		19.15		175.12
	02/12/93		11.60		182.67
	06/10/93		14.14		180.13
	08/18/93		16.10		178.17
	11/19/93		**18.77**		**175.50**
MW-3	06/03/91	192.52	15.84		176.68
	08/30/91		17.79		174.73
	11/22/91		18.40		174.12
	03/18/92		12.03		180.49
	05/28/92		15.16		177.36
	08/19/92		17.03		175.49
	11/17/92		17.94		174.58
	02/12/93		9.16		183.36
	06/10/93		13.20		179.32
	08/18/93		14.93		177.59
	11/19/93		**17.58**		**174.94**
MW-4	06/03/91	193.37	16.77		176.60
	08/30/91		18.71		174.66
	11/22/91		---		---
	03/18/92[a]		13.15	0.24	180.41
	05/28/92[a]		16.22	0.12	177.25
	08/19/92[a]		18.05	0.09	175.39
	11/17/92		18.89		174.48
	02/12/93		11.78	<0.01	181.59
	06/10/93		14.20		179.17

-- Table 1 continues on next page --

Table 1. Ground Water Elevations - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Floating Hydrocarbon Thickness (ft)	Ground Water Elevation (ft above msl)[a]
	08/18/93		15.95	0.01	177.43
	11/19/93		**18.48**	**0.01**	**174.90**
MW-5	08/30/91	190.35	16.74		173.61
	11/22/91		17.27		173.08
	03/18/92		11.28		179.07
	05/28/92[b]		---		---
	08/19/92		15.99		174.36
	11/17/92		16.84		173.51
	02/12/93		10.30		180.05
	06/10/93		12.36		177.99
	08/18/93		14.02		176.33
	11/19/93		**16.50**		**173.85**

Notes:

a = When floating hydrocarbons are present, ground water elevation is corrected by the relation: Corrected ground water elevation = (Top-of-Casing Elevation) - (depth to water) + (0.8 x floating hydrocarbon thickness)
b = Well inaccessible
--- = Data not available

Table 2. Analytic Results for Ground Water - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California

Well/Boring ID	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	TPH-MO	POG	B	E	T	X	HVOCs
			<----------parts per billion (ug/L)---------->								
MW-1	06/03/91	17.82	ND	ND	ND	---	ND	ND	ND	ND	---
	08/30/91	19.87	ND	520	ND	---	ND	ND	ND	ND	---
	11/22/91	20.58	<50	<50	<500	---	<0.5	<0.5	<0.5	<0.5	---
	03/18/92	13.55	<30	<50	---	---	<0.3	<0.3	<0.3	<0.3	---
	05/28/92	17.08	<50	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/19/92	19.07	<50	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/17/92	20.11	<50	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	02/12/93	12.10	<50	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	06/10/93	14.87	<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
	06/10/93 dup	14.87	<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/18/93	16.90	<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/19/93	19.72	<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
MW-2	06/03/91	17.00	ND	ND	ND	---	ND	ND	ND	ND	---
	08/30/91	18.95	ND	ND	ND	---	ND	ND	ND	ND	---
	11/22/91	19.55	<50	<50	<500	---	<0.5	<0.5	<0.5	<0.5	---
	03/18/92	12.91	<30	---	---	---	<0.3	<0.3	<0.3	<0.3	---
	05/28/92	16.25	<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/19/92	18.21	<50	---	---	---	<0.5	1.2	2	1.9	---
	11/17/92	19.15	<50	---	---	---	<0.5	1.2	2	1.9	---
	02/12/93 dup	11.60	<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
	02/12/93	11.60	<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
	06/10/93	14.14	<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/18/93	16.10	<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/18/93 dup	16.10	<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/19/93	18.77	<50	---	---	---	<0.5	<0.5	<0.5	<0.5	ND
MW-3	06/03/91	15.84	1,700	690[a]	ND	---	260	98	13	24	---
	08/30/91	17.79	870	370[b]	500	---	44	10	6.1	2.9	---
	11/22/91	18.40	310	140	500	---	18	3.3	1.2	2.9	---
	03/18/92	12.03	67,100	1,900	20,000	---	620	220	28	38	---
	05/28/92	15.16	2,300	1,100[c]	4,600	---	200	71	9	17	---
	08/19/92	17.03	5,700	1,000[c]	1,800	---	71	52	77	130	---
	11/17/92	17.94	3,600	160[c]	1,200	---	16	24	8.6	50	---
	02/12/93	9.16	4,700	560[c]	<50	---	820	130	58	77	---
	06/10/93	13.20	2,200	---	940[d]	---	310	89	23	23	---
	08/18/93	14.93	260	---	460[d]	---	27	7.0	2.0	2.2	---
	11/19/93	17.58	1,500[e]	---	960d	<5,000	24	37	54	17	---
MW-4	06/03/91	16.77	670[f]	1,100[g]	ND	---	240	1.6	2.3	2.3	---
	08/30/91	18.71	570	280[g]	2,000	---	64	0.9	1.8	0.9	---
	11/22/91 FHC	---	---	---	---	---	---	---	---	---	---
	03/18/92 FHC	13.15	---	---	---	---	---	---	---	---	---
	05/28/92 FHC	16.22	---	---	---	---	---	---	---	---	---

-- Table 2 continues on next page --

Table 2. Analytic Results for Ground Water - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Well/Boring ID	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	TPH-MO	POG	B	E	T	X	HVOCs
			<----------parts per billion (ug/L)---------->								
	08/19/92[FHC]	18.05	---	---	---	---	---	---	---	---	---
	11/17/92[FHC]	18.89	---	---	---	---	---	---	---	---	---
	02/12/93[FHC]	11.78	---	---	---	---	---	---	---	---	---
	06/10/93	14.20	---	---	---	---	---	---	---	---	---
	08/18/93[FHC]	15.95	---	---	---	---	---	---	---	---	---
	11/19/93[FHC]	**18.48**	---	---	---	---	---	---	---	---	---
MW-5	08/30/91	16.74	ND	80	ND	---	ND	ND	ND	ND	---
	11/22/91	17.27	<50	<50	<500	---	<0.5	<0.5	<0.5	<0.5	---
	03/18/92	11.28	<30	<50	---	---	<0.3	<0.3	<0.3	<0.3	---
	05/28/92[h]	---	---	---	---	---	---	---	---	---	---
	08/19/92	15.99	<50	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/17/92	16.84	<50	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	02/12/93	10.30	<50	<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	06/10/93	12.36	<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/18/93	14.02	<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/19/93	**16.50**	**<50**	---	---	---	**<0.5**	**<0.5**	**<0.5**	**<0.5**	---
	11/19/93[dup]	**16.50**	**<50**	---	---	---	**<0.5**	**<0.5**	**<0.5**	**<0.5**	---
MW-6	09/21/93	14.64	<50	<50	---	<5,000	<0.5	<0.5	<0.5	<0.5	ND
	11/19/93[i]	---	---	---	---	---	---	---	---	---	---
BH-A	09/09/93	16.50	4,900	2,900[c]	---	<5,000	18	54	<5	11	[j]
BH-B	09/09/93	15.85	<50	150	---	<5,000	<0.5	<0.5	<0.5	<0.5	ND
BH-C[k]	09/10/93	15.80	640[l]	100	---	<5,000	3.5	0.6	<0.5	<0.5	ND
BH-D[k]	09/10/93	14.2	24,000[l]	25,000[c]	---	20,000	720	44	86	11	[m]
Bailer Blank	08/19/92		<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/17/92		<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
Trip Blank	06/03/91		ND	---	---	---	ND	ND	ND	ND	---
	08/30/91		ND	---	---	---	ND	ND	ND	ND	---
	03/18/92		<30	<50	---	---	<0.3	<0.3	<0.3	<0.3	---
	05/28/92		<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/19/92		<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/17/92		<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
	02/12/93		<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
	06/10/93		<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/19/93		**<50**	---	---	---	**<0.5**	**<0.5**	**<0.5**	**<0.5**	---
DTSC MCLs			NE	NE	NE	---	1	680	100[n]	1,750	---

Table 2. Analytic Results for Ground Water - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Abbreviations:

TPH-G = Total petroleum hydrocarbons as gasoline by Modified EPA Method 8015
TPH-D = Total petroleum hydrocarbons as diesel by Modified EPA Method 8015
TPH-MO = Total petroleum hydrocarbons as motor oil by 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
POG = Petroleum Oil & Grease by EPA Method 5520B/F
NE = Not established
DTSC MCLs = California Department of Toxic Substances Control maximum contaminant levels for drinking water
--- = Not analyzed or measured
<n = Not detected at detection limits of n ppb
ND = Not detected, detection limit not known
FHC = Floating hydrocarbons in well, not sampled
dup = Duplicate sample

Notes:

a = Positive results for diesel appear to be less volatile constituents of gasoline
b = Positive results for diesel has a typical diesel pattern
c = Concentration reported as diesel is primarily due to the presence of a lighter petroleum product, possibly gasoline or kerosene
d = Concentration reported as motor oil is due to the presence of a combination of motor oil and a lighter petroleum product of hydrocarbon range C6-C12, possibly gasoline
e = Concentration reported as gasoline is due to the presence of gasoline and a descrete peak not indicative of gasoline
f = Compounds are within chromaticgraphic range of gasoline but are not characteristic of the standard gasoline pattern
g = Results include compounds apparently due to gasoline as well as those due to diesel
h = Well inaccessible and not sampled
i = Well inadvertantly not sampled
j = 13 ppb-methylnaphthalene and 23 ppb naphthalene detected
k = Due to chain of custody mis-communication analyses run after holding time expiration
l = The positive result has an atypical pattern for gasoline analysis
m = 75 ppb 2-methylnapthalene and 18 ppb napthalene detected
n = DTSC recommended action level; MCL not established

Table 3. Floating Hydrocarbon Removal - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California

Well ID	Date	Floating Hydrocarbon Thickness (ft)	Volume of Floating Hydrocarbons Removed (gal).	Cumulative Volume of Hydrocarbons Removed (gal)
MW-4[a]	01/15/92	---	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
	02/12/93	<0.01	---	1.64
	06/10/93	0.02	0.01	1.65
	08/18/93	0.01	<0.01	1.65
	11/19/93	0.01	<0.01	1.65

a = Petrotrap passive floating hydrocarbon skimmer installed in well
--- = Not measured or no hydrocarbons bailed

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: Daniel T. Kirk

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

QUARTER:
4th quarter of 1993

QUARTERLY GROUNDWATER SAMPLING REPORT 931119-K-2

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
Emeryville, 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)
MW-1	11/19/93	TOC	--	NONE	--	--	19.72	24.41
MW-2	11/19/93	TOC	--	NONE	--	--	18.77	24.36
MW-3	11/19/93	TOC	SHEEN/ODOR	--	--	--	17.58	24.81
MW-4	11/19/93	TOC	FREE PRODUCT	18.47	0.01	10	18.48	--
MW-5 *	11/19/93	TOC	--	NONE	--	--	16.50	28.64
T-1	11/19/93	TOC	DRY	NONE	--	--	--	4.26
T-2	11/19/93	TOC	DRY	NONE	--	--	--	8.42

* Sample DUP was a duplicate sample taken from well MW-5.

#293 9311294 (10/28) (18) 21.30 LB.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date:
Page / of /

Site Address: 6039 College Ave., Oakland

WIC#: 204-5508-3301

Shell Engineer: Dan Kirk — Phone No.: (510) 675-6168 Fax #: 675-6160

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: Kurt C. B

Printed Name: Keith Brown

LAB: Anametrix

CHECK ONE (1) BOX ONLY — C1/D1

- Quarterly Monitoring [X] 8461
- Site Investigation [ ] 8461
- Soil Closure/Disposal [ ] 8462
- Water Closure/Disposal [ ] 8463
- Soil/Air Rem. or Sys. O & M [ ] 8462
- Water Rem. or Sys. O & M [ ] 8463
- Other [ ]

TURN AROUND TIME

- 24 hours [ ]
- 48 hours [ ]
- 15 days [X] (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	8270 - SVOC	TPH Motor Oil	POG - Oil & Grease	Container Size	Preservation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
(1)	MW1	11/19			W		3						X				1 Liter	HCl			
(2)	MW2				W		3						X				1 Liter	HCl			
(3)	MW3				W		9						X	X	X	X	1 Liter / VOA	HCl / HCl	1+2 504		
(4)	MW5				W		3						X				1 Liter	HCl			
(5)	DUP				W		3						X				↓	HCl			
(6)	TB	↓			W		2						X				↓	HCl			

Relinquished By (signature)	Printed Name	Date/Time	Received (signature)	Printed Name	Date/Time
[signature]	Keith Brown	Date: 11-22-93 Time: 1615	[signature]	BENNY S. GARRIDO	Date: 11-22-93 Time: 1615
[signature]	BENNY S. GARRIDO	Date: 11-22-93 Time: 1630	[signature]	Maria Barajas	Date: 11/22/93 Time: 16:35
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
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 # : 9311294
Date Received : 11/22/93
Project ID : 204-5508-3301
Purchase Order: MOH-B813

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

ANAMETRIX ID	CLIENT SAMPLE ID
9311294- 1	MW1
9311294- 2	MW2
9311294- 3	MW3
9311294- 4	MW5
9311294- 5	DUP
9311294- 6	TB

This report consists of 23 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 Ham for
Sarah Schoen, Ph.D.
Laboratory Director

12/08/93
Date

ANAMETRIX REPORT DESCRIPTION
GCMS

Organic Analysis Data Sheets (OADS)

OADS forms contain tabulated results for target compounds. The OADS are grouped by method and, within each method, organized sequentially in order of increasing Anametrix ID number.

Tentatively Identified Compounds (TICs)

TIC forms contain tabulated results for non-target compounds detected in GC/MS analyses. TICs must be requested at the time samples are submitted at Anametrix. TIC forms immediately follow the OADS form for each sample. If TICs are requested but not found, then TIC forms will not be included with the report.

Surrogate Recovery Summary (SRS)

SRS forms contain quality assurance data. An SRS form will be printed for each method, if the method requires surrogate compounds. They will list surrogate percent recoveries for all samples and any method blanks. Any surrogate recovery outside the established limits will be flagged with an "*", and the total number of surrogates outside the limits will be listed in the column labelled "Total Out".

Matrix Spike Recovery Form (MSR)

MSR forms contain quality assurance data. They summarize percent recovery and relative percent difference information for matrix spikes and matrix spike duplicates. This information is a statement of both accuracy and precision. Any percent recovery or relative percent difference outside established limits will be flagged with an "*", and the total number outside the limits will be listed at the bottom of the page. Not all reports will contain an MSR form.

Qualifiers

Anametrix uses several data qualifiers (Q) in it's report forms. These qualifiers give additional information on the compounds reported. They should help a data reviewer to verify the integrity of the analytical results. The following is a list of qualifiers and their meanings:

- U - Indicates that the compound was analyzed for, but was not detected at or above the specified reporting limit.
- B - Indicates that the compound was detected in the associated method blank.
- J - Indicates that the compound was detected at an amount below the specified reporting limit. Consequently, the amount should be considered an approximate value. Tentatively identified compounds will always have a "J" qualifier because they are not included in the instrument calibration.
- E - Indicates that the amount reported exceeded the linear range of the instrument calibration.
- D - Indicates that the compound was detected in an analysis performed at a secondary dilution.
- A - Indicates that the tentatively identified compound is a suspected aldol condensation product. This is common in EPA Method 8270 soil analyses.

Absence of a qualifier indicates that the compound was detected at a concentration at or above the specified reporting limit.

REPORTING CONVENTIONS

- Due to a size limitation in our data processing step, only the first eight (8) characters of your project ID and sample ID will be printed on the report forms. However, the report cover letter and report summary pages display up to twenty (20) characters of your project and sample IDs.
- Amounts reported are gross values, i.e., not corrected for method blank contamination.

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

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

Workorder # : 9311294
Date Received : 11/22/93
Project ID : 204-5508-3301
Purchase Order: MOH-B813
Department : GCMS
Sub-Department: GCMS

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9311294- 3	MW3	WATER	11/19/93	8270

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

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

Workorder # : 9311294
Date Received : 11/22/93
Project ID : 204-5508-3301
Purchase Order: MOH-B813
Department : GCMS
Sub-Department: GCMS

QA/QC SUMMARY :

- The relative percent differences of phenol and 2-chlorophenol are outside established limits in the EPA Method 8270 laboratory control spike and laboratory control spike duplicate analyses extracted on 11-24-93.

Department Supervisor 11-30-93 Date

Chemist 11-30-93 Date

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8270
ANAMETRIX, INC. (408)432-8192

Project ID : 204-5508
Sample ID : MW3
Matrix : WATER
Date Sampled :11/19/93
Date Extracted :11/24/93
Amount Extracted : 1000.0 mL
Date Analyzed :11/26/93
Instrument ID : MSD4

Anametrix ID : 9311294-03
Analyst : [illegible]
Supervisor : [illegible]

Dilution Factor : 1.0
Conc. Units : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
62-75-9	N-Nitrosodimethylamine	10.	ND	U
108-95-2	Phenol	10.	ND	U
4165-61-1	Aniline	10.	ND	U
111-44-4	bis(2-Chloroethyl)ether	10.	ND	U
95-57-8	2-Chlorophenol	10.	ND	U
541-73-1	1,3-Dichlorobenzene	10.	ND	U
106-46-7	1,4-Dichlorobenzene	10.	ND	U
100-51-6	Benzyl Alcohol	10.	ND	U
95-48-7	2-Methylphenol	10.	ND	U
95-50-1	1,2-Dichlorobenzene	10.	ND	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10.	ND	U
106-44-5	4-Methylphenol	10.	ND	U
621-64-7	N-Nitroso-di-n-propylamine	10.	ND	U
67-72-1	Hexachloroethane	10.	ND	U
98-95-3	Nitrobenzene	10.	ND	U
78-59-1	Isophorone	10.	ND	U
105-67-9	2,4-Dimethylphenol	10.	ND	U
88-75-5	2-Nitrophenol	10.	ND	U
65-85-0	Benzoic Acid	50.	ND	U
111-91-1	bis(2-Chloroethoxy)methane	10.	ND	U
120-83-2	2,4-Dichlorophenol	10.	ND	U
120-82-1	1,2,4-Trichlorobenzene	10.	ND	U
91-20-3	Naphthalene	10.	ND	U
106-47-8	4-Chloroaniline	10.	ND	U
87-68-3	Hexachlorobutadiene	10.	ND	U
59-50-7	4-Chloro-3-methylphenol	10.	ND	U
91-57-6	2-Methylnaphthalene	10.	ND	U
77-47-4	Hexachlorocyclopentadiene	10.	ND	U
88-06-2	2,4,6-Trichlorophenol	10.	ND	U
95-95-4	2,4,5-Trichlorophenol	50.	ND	U
91-58-7	2-Chloronaphthalene	10.	ND	U
88-74-4	2-Nitroaniline	50.	ND	U
131-11-3	Dimethylphthalate	10.	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8270
ANAMETRIX, INC. (408)432-8192

Project ID : 204-5508
Sample ID : MW3
Matrix : WATER
Date Sampled :11/19/93
Date Extracted :11/24/93
Amount Extracted : 1000.0 mL
Date Analyzed :11/26/93
Instrument ID : MSD4

Anametrix ID : 9311294-03
Analyst : LH
Supervisor : MCT

Dilution Factor : 1.0
Conc. Units : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
606-20-2	2,6-Dinitrotoluene	10.	ND	U
208-96-8	Acenaphthylene	10.	ND	U
99-09-2	3-Nitroaniline	50.	ND	U
83-32-9	Acenaphthene	10.	ND	U
51-28-5	2,4-Dinitrophenol	50.	ND	U
100-02-7	4-Nitrophenol	50.	ND	U
132-64-9	Dibenzofuran	10.	ND	U
121-14-2	2,4-Dinitrotoluene	10.	ND	U
84-66-2	Diethylphthalate	10.	ND	U
7005-72-3	4-Chlorophenyl-phenylether	10.	ND	U
86-73-7	Fluorene	10.	ND	U
100-01-6	4-Nitroaniline	50.	ND	U
534-52-1	4,6-Dinitro-2-methylphenol	50.	ND	U
86-30-6	N-Nitrosodiphenylamine (1)	10.	ND	U
103-33-3	Azobenzene	10.	ND	U
101-55-3	4-Bromophenyl-phenylether	10.	ND	U
118-74-1	Hexachlorobenzene	10.	ND	U
87-86-5	Pentachlorophenol	50.	ND	U
85-01-8	Phenanthrene	10.	ND	U
120-12-7	Anthracene	10.	ND	U
84-74-2	Di-n-butylphthalate	10.	ND	U
206-44-0	Fluoranthene	10.	ND	U
92-87-5	Benzidine	10.	ND	U
129-00-0	Pyrene	10.	ND	U
85-68-7	Butylbenzylphthalate	10.	ND	U
117-81-7	bis(2-Ethylhexyl)phthalate	10.	ND	U
91-94-1	3,3'-Dichlorobenzidine	20.	ND	U
56-55-3	Benzo(a)anthracene	10.	ND	U
218-01-9	Chrysene	10.	ND	U
117-84-0	Di-n-octylphthalate	10.	ND	U
205-99-2	Benzo(b)fluoranthene	10.	ND	U
207-08-9	Benzo(k)fluoranthene	10.	ND	U
50-32-8	Benzo(a)pyrene	10.	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	10.	ND	U
53-70-3	Dibenz(a,h)anthracene	10.	ND	U
191-24-2	Benzo(g,h,i)perylene	10.	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8270
ANAMETRIX, INC. (408)432-8192

Project ID :
Sample ID : SBLK4G
Matrix : WATER
Date Sampled : 0/ 0/ 0
Date Extracted :11/24/93
Amount Extracted : 1000.0 mL
Date Analyzed :11/26/93
Instrument ID : MSD4

Anametrix ID : BN2411B1
Analyst : LH
Supervisor : MCT

Dilution Factor : 1.0
Conc. Units : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
62-75-9	N-Nitrosodimethylamine	10.	ND	U
108-95-2	Phenol	10.	ND	U
4165-61-1	Aniline	10.	ND	U
111-44-4	bis(2-Chloroethyl)ether	10.	ND	U
95-57-8	2-Chlorophenol	10.	ND	U
541-73-1	1,3-Dichlorobenzene	10.	ND	U
106-46-7	1,4-Dichlorobenzene	10.	ND	U
100-51-6	Benzyl Alcohol	10.	ND	U
95-48-7	2-Methylphenol	10.	ND	U
95-50-1	1,2-Dichlorobenzene	10.	ND	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10.	ND	U
106-44-5	4-Methylphenol	10.	ND	U
621-64-7	N-Nitroso-di-n-propylamine	10.	ND	U
67-72-1	Hexachloroethane	10.	ND	U
98-95-3	Nitrobenzene	10.	ND	U
78-59-1	Isophorone	10.	ND	U
105-67-9	2,4-Dimethylphenol	10.	ND	U
88-75-5	2-Nitrophenol	10.	ND	U
65-85-0	Benzoic Acid	50.	ND	U
111-91-1	bis(2-Chloroethoxy)methane	10.	ND	U
120-83-2	2,4-Dichlorophenol	10.	ND	U
120-82-1	1,2,4-Trichlorobenzene	10.	ND	U
91-20-3	Naphthalene	10.	ND	U
106-47-8	4-Chloroaniline	10.	ND	U
87-68-3	Hexachlorobutadiene	10.	ND	U
59-50-7	4-Chloro-3-methylphenol	10.	ND	U
91-57-6	2-Methylnaphthalene	10.	ND	U
77-47-4	Hexachlorocyclopentadiene	10.	ND	U
88-06-2	2,4,6-Trichlorophenol	10.	ND	U
95-95-4	2,4,5-Trichlorophenol	50.	ND	U
91-58-7	2-Chloronaphthalene	10.	ND	U
88-74-4	2-Nitroaniline	50.	ND	U
131-11-3	Dimethylphthalate	10.	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8270
ANAMETRIX, INC. (408)432-8192

Project ID :
Sample ID : SBLK4G
Matrix : WATER
Date Sampled : 0/ 0/ 0
Date Extracted :11/24/93
Amount Extracted : 1000.0 mL
Date Analyzed :11/26/93
Instrument ID : MSD4

Anametrix ID : BN2411B1
Analyst : 4
Supervisor : MC

Dilution Factor : 1.0
Conc. Units : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
606-20-2	2,6-Dinitrotoluene	10.	ND	U
208-96-8	Acenaphthylene	10.	ND	U
99-09-2	3-Nitroaniline	50.	ND	U
83-32-9	Acenaphthene	10.	ND	U
51-28-5	2,4-Dinitrophenol	50.	ND	U
100-02-7	4-Nitrophenol	50.	ND	U
132-64-9	Dibenzofuran	10.	ND	U
121-14-2	2,4-Dinitrotoluene	10.	ND	U
84-66-2	Diethylphthalate	10.	ND	U
7005-72-3	4-Chlorophenyl-phenylether	10.	ND	U
86-73-7	Fluorene	10.	ND	U
100-01-6	4-Nitroaniline	50.	ND	U
534-52-1	4,6-Dinitro-2-methylphenol	50.	ND	U
86-30-6	N-Nitrosodiphenylamine (1)	10.	ND	U
103-33-3	Azobenzene	10.	ND	U
101-55-3	4-Bromophenyl-phenylether	10.	ND	U
118-74-1	Hexachlorobenzene	10.	ND	U
87-86-5	Pentachlorophenol	50.	ND	U
85-01-8	Phenanthrene	10.	ND	U
120-12-7	Anthracene	10.	ND	U
84-74-2	Di-n-butylphthalate	10.	ND	U
206-44-0	Fluoranthene	10.	ND	U
92-87-5	Benzidine	10.	ND	U
129-00-0	Pyrene	10.	ND	U
85-68-7	Butylbenzylphthalate	10.	ND	U
117-81-7	bis(2-Ethylhexyl)phthalate	10.	ND	U
91-94-1	3,3'-Dichlorobenzidine	20.	ND	U
56-55-3	Benzo(a)anthracene	10.	ND	U
218-01-9	Chrysene	10.	ND	U
117-84-0	Di-n-octylphthalate	10.	ND	U
205-99-2	Benzo(b)fluoranthene	10.	ND	U
207-08-9	Benzo(k)fluoranthene	10.	ND	U
50-32-8	Benzo(a)pyrene	10.	ND	U
193-39-5	Indeno(1,2,3-cd)pyrene	10.	ND	U
53-70-3	Dibenz(a,h)anthracene	10.	ND	U
191-24-2	Benzo(g,h,i)perylene	10.	ND	U

SURROGATE RECOVERY SUMMARY -- EPA METHOD 8270
ANAMETRIX, INC. (408)432-8192

Project ID : 204-5508
Matrix : LIQUID

Anametrix ID : 9311294
Analyst : [illegible]
Supervisor : MCT

	SAMPLE ID	SU1	SU2	SU3	SU4	SU5	SU6
1	SBLK4G	35	25	63	69	56	89
2	LCS4G	37	26	64	67	63	83
3	LCSD4G	28	21	56	60	65	93
4	MW3	26	19	71	77	58	78
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
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27							
28							
29							
30							

	QC LIMITS
SU1 = 2-Fluorophenol	(21-100)
SU2 = Phenol-d5	(10- 94)
SU3 = Nitrobenzene-d5	(35-114)
SU4 = 2-Fluorobiphenyl	(43-116)
SU5 = 2,4,6-Tribromophenol	(10-123)
SU6 = Terphenyl-d14	(33-141)

* Values outside of Anametrix QC limits

LABORATORY CONTROL SPIKE RECOVERY FORM --- EPA METHOD 8270
ANAMETRIX, INC. (408)432-8192

Project/Case	:	Anametrix ID	: MN2411B1
Matrix	: WATER	Analyst	: LY
Date Sampled	: 0/ 0/00	Supervisor	: MCF
Date Extracted	: 11/24/93	SDG/Batch	:
Date Analyzed	: 11/26/93		LCS/LCSD 4G
Instrument ID	: MSD4		

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	%REC LIMITS
Phenol	75	0	24	32	12-110
2-Chlorophenol	75	0	43	57	27-123
1,4-Dichlorobenzene	50	0	30	60	36-97
N-nitroso-di-n-propylamine	50	0	32	64	41-116
1,2,4-Trichlorobenzene	50	0	32	64	39-98
4-Chloro-3-methylphenol	75	0	49	65	23-97
Acenaphthene	50	0	34	68	46-118
4-Nitrophenol	75	0	14	19	10-80
2,4-Dinitrotoluene	50	0	32	64	24-96
Pentachlorophenol	75	0	37	49	10-103
Pyrene	50	0	44	88	26-127

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD PERCENT RECOVERY	% RPD	%RPD LIMITS
Phenol	75	17	23	34	25
2-Chlorophenol	75	34	45	30	25
1,4-Dichlorobenzene	50	27	54	9	25
N-nitroso-di-n-propylamine	50	33	66	-3	25
1,2,4-Trichlorobenzene	50	30	60	6	25
4-Chloro-3-methylphenol	75	44	59	13	25
Acenaphthene	50	33	66	3	25
4-Nitrophenol	75	16	21	-9	25
2,4-Dinitroluene	50	38	76	-25	25
Pentachlorophenol	75	45	60	-21	25
Pyrene	50	52	104	-18	25

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

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

Workorder # : 9311294
Date Received : 11/22/93
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
9311294- 3	MW3	WATER	11/19/93	TPHd
9311294- 1	MW1	WATER	11/19/93	TPHgBTEX
9311294- 2	MW2	WATER	11/19/93	TPHgBTEX
9311294- 3	MW3	WATER	11/19/93	TPHgBTEX
9311294- 4	MW5	WATER	11/19/93	TPHgBTEX
9311294- 5	DUP	WATER	11/19/93	TPHgBTEX
9311294- 6	TB	WATER	11/19/93	TPHgBTEX

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

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

Workorder # : 9311294
Date Received : 11/22/93
Project ID : 204-5508-3301
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- The concentration reported as gasoline for sample MW3 is due to the presence of a combination of gasoline and a discrete peak not indicative of gasoline.
- The concentration reported as motor oil for sample MW-3 is due to the presence of a combination of motor oil and a lighter petroleum product of hydrocarbon range C6-C12, possibly gasoline.

Department Supervisor — Date 1/18/94

Chemist — Date 1/18/94

(GASOLINE WITH BTEX)
ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9311294
Matrix : WATER
Date Sampled : 11/19/93

Project Number : 204-5508-3301
Date Released : 12/06/93

	Reporting Limit	Sample I.D.# MW1	Sample I.D.# MW2	Sample I.D.# MW3	Sample I.D.# MW5	Sample I.D.# DUP
COMPOUNDS	(ug/L)	-01	-02	-03	-04	-05
Benzene	0.5	ND	ND	24	ND	ND
Toluene	0.5	ND	ND	54	ND	ND
Ethylbenzene	0.5	ND	ND	37	ND	ND
Total Xylenes	0.5	ND	ND	17	ND	ND
TPH as Gasoline	50	ND	ND	1500	ND	ND
% Surrogate Recovery		102%	100%	97%	103%	101%
Instrument I.D.		HP8	HP8	HP8	HP8	HP8
Date Analyzed		11/24/93	11/24/93	11/29/93	11/24/93	11/24/93
RLMF		1	1	5	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.

Reggie Davison 12/7/93
Analyst Date

Supervisor 12/7/93
Date

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

Anametrix W.O.: 9311294
Matrix : WATER
Date Sampled : 11/19/93

Project Number : 204-5508-3301
Date Released : 12/06/93

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# TB -06	Sample I.D.# BN2403E3 BLANK	Sample I.D.# BN2903E1 BLANK
Benzene	0.5	ND	ND	ND
Toluene	0.5	ND	ND	ND
Ethylbenzene	0.5	ND	ND	ND
Total Xylenes	0.5	ND	ND	ND
TPH as Gasoline	50	ND	ND	ND
% Surrogate Recovery		101%	93%	100%
Instrument I.D.		HP8	HP8	HP8
Date Analyzed		11/24/93	11/24/93	11/29/93
RLMF		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.

Reggie Dawson 12/7/93
Analyst Date

Cheryl Balmer 12/7/93
Supervisor Date

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

Anametrix W.O.: 9311294
Matrix : WATER
Date Sampled : 11/19/93
Date Extracted: 11/24/93

Project Number : 204-5508-3301
Date Released : 12/06/93
Instrument I.D.: HP9

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (ug/L)	Amount Found (ug/L)	Surrogate %Rec
9311294-03	MW3	11/26/93	50	960	62%
BN2411F1	METHOD BLANK	12/04/93	50	ND	59%

Note : Reporting limit is obtained by multiplying the dilution factor times 50 ug/L.
The surrogate recovery limits for C25 are 30-130%.

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 Davisson 12/8/93
Analyst Date

Cheryl Bateman 12/8/93
Supervisor Date

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

Sample I.D. : 204-5508-3301 MW5
Matrix : WATER
Date Sampled : 11/19/93
Date Analyzed : 11/24/93

Anametrix I.D. : 11294-04
Analyst : RO
Supervisor :
Date Released : 12/06/93
Instrument I.D.: HP8

COMPOUND	SPIKE AMT (ug/L)	SAMPLE CONC (ug/L)	REC MS (ug/L)	%REC MS	REC MD (ug/L)	%REC MD	RPD	%REC LIMITS *
BENZENE	20.0	0.0	22.9	115%	22.1	111%	-4%	45-139
TOLUENE	20.0	0.0	22.7	114%	24.6	123%	8%	51-138
ETHYLBENZENE	20.0	0.0	21.6	108%	21.0	105%	-3%	48-146
TOTAL XYLENES	20.0	0.0	18.8	94%	18.2	91%	-3%	50-139
p-BFB				100%		102%		61-139

* Quality control limits established by Anametrix, Inc.

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

Sample I.D. : 204-5508-3301 MW3
Matrix : WATER
Date Sampled : 11/19/93
Date Analyzed : 11/29/93

Anametrix I.D. : 11294-03
Analyst : AD
Supervisor : [illegible]
Date Released : 12/06/93
Instrument ID : HP8

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	2500	1500	4030	101%	3420	77%	-27%	48-149
P-BFB				136%		134%		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
Matrix : WATER
Date Sampled : N/A
Date Analyzed : 11/24/93

Anametrix I.D. : MN2401E3
Analyst : RD
Supervisor : [illegible]
Date Released : 12/06/93
Instrument I.D.: HP8

COMPOUND	SPIKE AMT. (ug/L)	LCS (ug/L)	REC LCS	%REC LIMITS *
Benzene	20.0	21.1	106%	52-133
Toluene	20.0	23.6	118%	57-136
Ethylbenzene	20.0	20.1	101%	56-139
Total Xylenes	20.0	17.6	88%	56-141
P-BFB			104%	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 : 11/29/93

Anametrix I.D. : MN2901E1
Analyst : RD
Supervisor : [illegible]
Date Released : 11/30/93
Instrument I.D.: HP8

COMPOUND	SPIKE AMT. (ug/L)	REC LCS (ug/L)	%REC LCS	% REC LIMITS *
GASOLINE	500	480	96%	67-127
p-BFB			72%	61-139

* Quality control limits established by Anametrix, Inc.

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

Sample I.D. : LAB CONTROL SAMPLE
Matrix : WATER
Date Sampled : N/A
Date Extracted: 11/24/93
Date Analyzed : 12/04/93

Anametrix I.D. : MN2411F1
Analyst : RD
Supervisor : [illegible]
Date Released : 12/06/93
Instrument I.D.: HP9

COMPOUND	SPIKE AMT (ug/L)	LCS REC (ug/L)	% REC LCS	LCSD REC (ug/L)	% REC LCSD	RPD	% REC LIMITS
DIESEL	1250	930	74%	780	62%	-18%	47-130
SURROGATE			61%		53%		30-130

* Quality control limits established by Anametrix, Inc.

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

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

Workorder # : 9311294
Date Received : 11/22/93
Project ID : 204-5508-3301
Purchase Order: MOH-B813
Department : PREP
Sub-Department: PREP

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9311294- 3	MW3	WATER	11/19/93	5520BF

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

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

Workorder # : 9311294
Date Received : 11/22/93
Project ID : 204-5508-3301
Purchase Order: MOH-B813
Department : PREP
Sub-Department: PREP

QA/QC SUMMARY :

- No QA/QC problems encountered for this sample.

Department Supervisor 12/1/93 Date

Chemist 12/1/93 Date

ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS
ANAMETRIX LABORATORY (408) 432-8192

Project I.D. : 204-5508-3301
Matrix : WATER
Date sampled : 11/19/93
Date extracted: 11/29/93
Date analyzed : 11/30/93

Anametrix I.D. : 9311294
Analyst : EK
Supervisor : [signature]
Date released : 12/01/93

Workorder #	Sample I.D.	Reporting Limit (mg/L)	Amount Found (mg/L)
9311294-03	MW3	5	ND
BN2911W4	METHOD BLANK	5	ND

ND - Not detected above the reporting limit for the method.
TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520BF.

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

LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS
STANDARD METHOD 5520BF
ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D.	: LAB CONTROL SAMPLE	Anametrix I.D.	: MN2911W4
Matrix	: WATER	Analyst	: EK
Date sampled	: N/A	Supervisor	:
Date extracted	: 11/29/93	Date Released	: 12/01/93
Date analyzed	: 11/30/93		

COMPOUND	SPIKE AMT. (mg/L)	LCS (mg/L)	%REC LCS	LCSD (mg/L)	%REC LCSD	%RPD	%REC LIMITS
Motor Oil	50	48	96	49	98	2	44-128

* Quality control limits established by Anametrix Laboratories.