



March 2, 1994

Juliet Shin
Alameda County Department of
Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621-1426

Re: Shell Service Station
WIC #204-0072-0502
2160 Otis Drive
Alameda, California
WA Job #81-429-104

Dear Ms. Shin:

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 1994 and proposed work for the second quarter 1994.

First Quarter 1994 Activities:

- Blaine Tech Services, Inc., (BTS) of San Jose, California measured depths to ground water and collected ground water samples from the site wells. BTS' report describing these sampling activities and including the laboratory analytic report for ground water samples is included as Attachment A.
- Weiss Associates (WA) compiled the ground water elevation data and the laboratory analytic results (Tables 1 and 2) and prepared a ground water elevation contour map (Figure 2).

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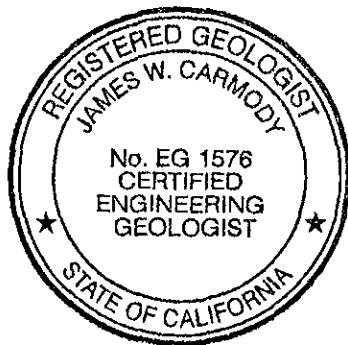
Anticipated Second Quarter 1994 Activities:

WA will submit a report presenting the results of the second 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.

Conclusions and Recommendations

- The ground water flow direction has shifted from the northeast to the north since the fourth quarter 1993.
- No hydrocarbons have been detected in wells S-1 and MW-1, and hydrocarbon concentrations have remained stable in monitoring well MW-2 for the last four years. Based on these results WA recommends biannual sampling of well MW-2. We will implement a biannual sampling schedule next quarter unless we here from you within 30 days.

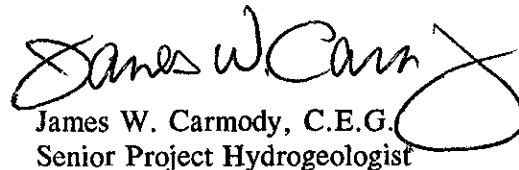
Please call if you have any questions.



Sincerely,
Weiss Associates



John Wolf
Technical Assistant



James W. Carmody, C.E.G.
Senior Project Hydrogeologist

JAW/JWC:jaw

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Attachments: A - BTS's Ground Water Monitoring Report

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

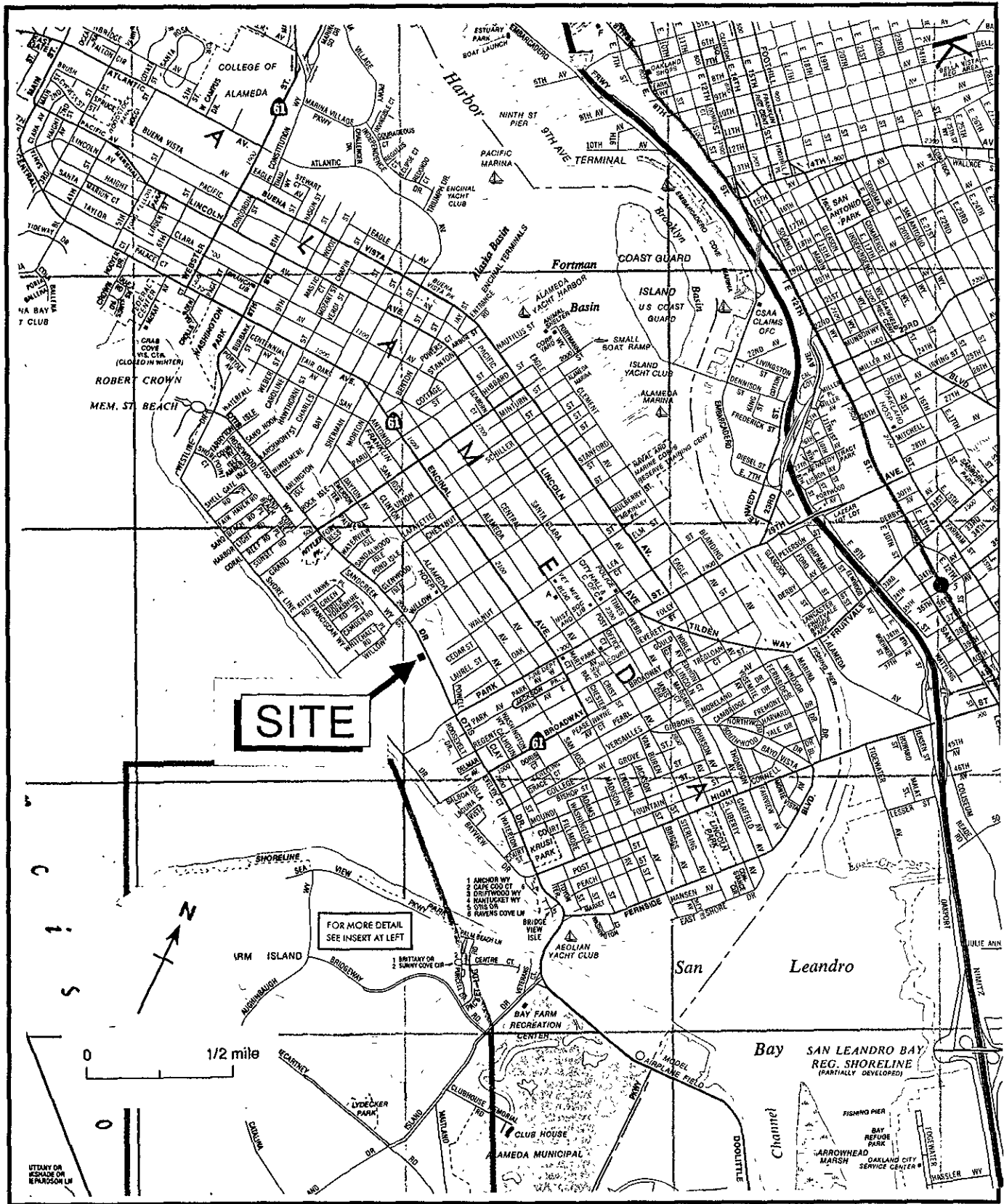


Figure 1. Site Location Map - Shell Service Station, WIC# 204-0072-0502, 2160 Otis Drive, Alameda, CA

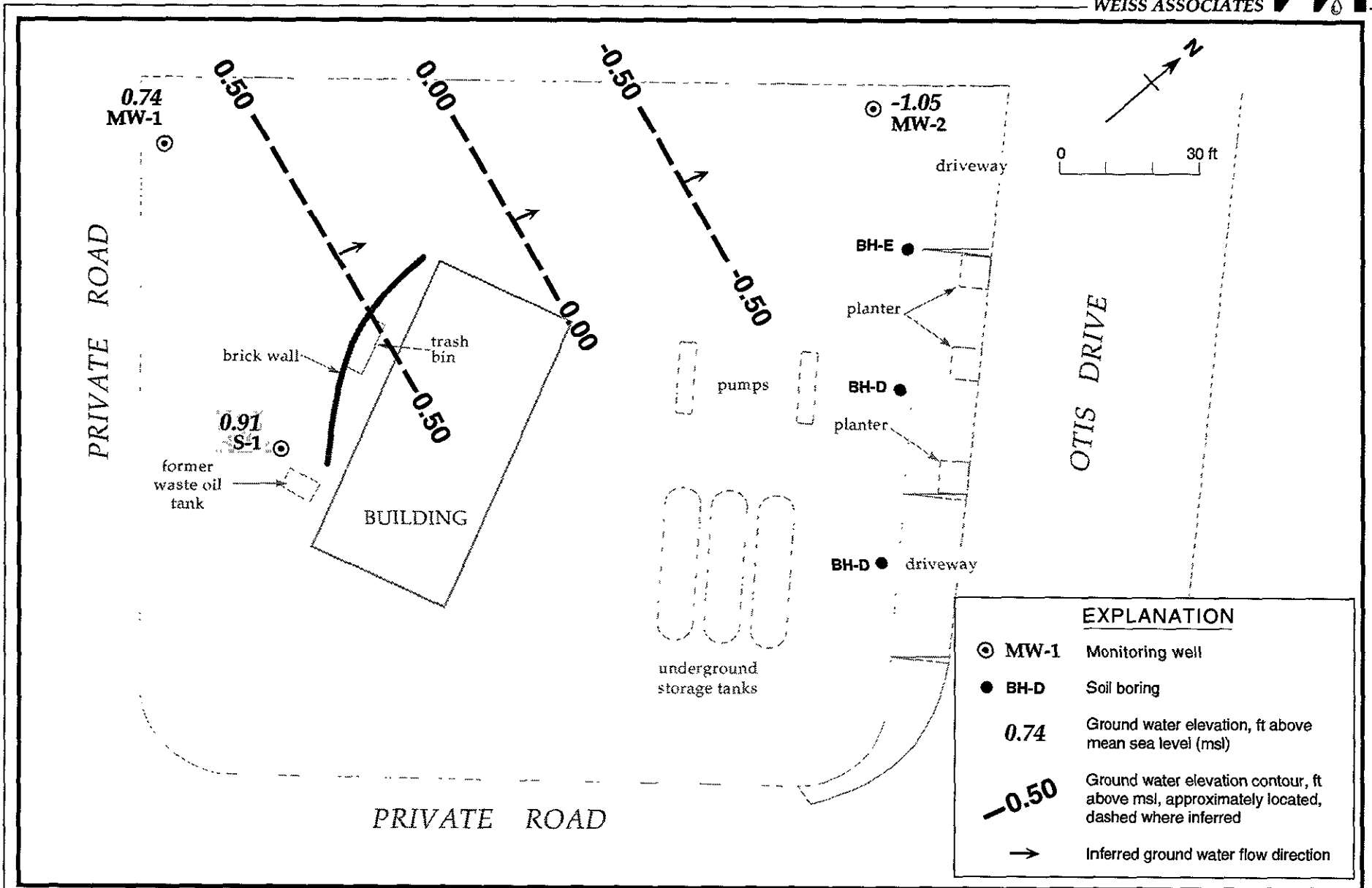


Figure 2. Monitoring Well Locations, Soil Boring Locations and Ground Water Elevation Contours - January 7, 1994 - Shell Service Station
WIC #204-0072-2160, 2160 Otis Drive, Alameda, California

Table 1. Ground Water Elevations - Shell Service Station WIC #204-0072-0502, 2160 Otis Drive, Alameda, California

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
MW-1	04/11/90	6.00	5.23	0.77
	07/10/90		5.40	0.60
	10/09/90		5.61	0.39
	01/17/91		5.66	0.34
	04/09/91		4.96	1.04
	07/10/91		5.52	0.48
	10/09/91		5.70	0.30
	01/24/92		5.51	0.49
	04/23/92		5.14	0.86
	07/01/92		4.48	1.52
	10/02/92		5.80	0.20
	01/05/93		5.34	0.66
	04/08/93		4.62	1.38
	07/20/93		5.20	0.80
	10/15/93		4.37	1.63
	01/07/94		5.26	0.74
MW-2	04/11/90	3.29	4.51	-1.22
	07/10/90		4.61	-1.32
	10/09/90		4.74	-1.45
	01/17/91		4.73	-1.44
	04/09/91		4.09	-0.80
	07/10/91		4.66	-1.37
	10/09/91		4.81	-1.52
	01/24/92		4.66	-1.37
	04/23/92		4.51	-1.22
	07/01/92		4.57	-1.28
	10/02/92		4.80	-1.51
	01/05/93		4.39	-1.1
	04/08/93		4.15	-0.86
	07/20/93		4.40	-1.11
	10/15/93		5.41	-2.12
	01/07/94		4.34	-1.05
S-1	09/11/90	5.10	4.29	0.81
	04/11/90		4.00	1.10
	07/10/90		4.25	0.85
	10/09/90		4.46	0.64
	01/17/91		4.53	0.57
	04/09/91		4.20	0.90

-- Table 1 continues on next page --

Table 1. Ground Water Elevations - Shell Service Station WIC #204-0072-0502, 2160 Otis Drive, Alameda, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
	07/10/91		4.42	0.68
	10/09/91		4.87	0.23
	01/24/92		4.90	0.20
	04/23/92		4.66	0.44
	07/01/92		4.85	0.25
	10/02/92		4.80	0.30
	01/05/93		5.38	-0.28
	04/08/93		3.69	1.41
	07/20/93		4.20	0.90
	10/15/93		4.38	0.72
	01/07/94		4.19	0.91

Table 2A. Analytic Results for Ground Water - Petroleum Hydrocarbons - Shell Service Station WIC #204-0072-0502, 2160 Otis Drive, Alameda, California

Well ID (Sampling Frequency)	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	-----parts per billion (µg/L)-----					POG
					B	E	T	X		
S-1 (Annually 1st Qtr)	09/04/87		---	---	<5	<5	<5	<5	---	
	09/11/89 ^a	4.29	<50	<100	<0.5	<1	<1	<3	<1,000	
	04/11/90	4.00	<50	<50	<0.5	<0.5	<0.5	<0.5	<10,000	
	07/10/90	4.25	<90	---	<0.5	<0.5	<0.5	<0.5	<10,000	
	10/09/90	4.46	<50	---	<0.5	<0.5	<0.5	<0.5	<5,000	
	01/17/91	4.53	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	04/09/91	4.20	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	07/10/91	4.42	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	10/09/91	4.87	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	01/24/92	4.90	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	04/23/92	4.66	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	07/01/92	4.85	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	10/02/92	5.80	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	01/05/93	5.38	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	01/07/94	4.19	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	01/07/94	4.19	<50	---	<0.5	<0.5	<0.5	<0.5	---	
MW-1 (Annually 1st Qtr)	04/11/90	5.23	<50	<50	<0.5	<0.5	<0.5	<0.5	<10,000	
	07/10/90	5.40	100	---	<0.5	<0.5	<0.5	<0.5	<10,000	
	10/09/90	5.61	<50	---	<0.5	<0.5	<0.5	<0.5	<5,000	
	01/17/91	5.66	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	04/09/91	4.96	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	07/10/91	5.52	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	10/09/91	5.70	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	01/24/92	5.51	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	04/23/92	5.14	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	07/01/92	4.48	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	10/02/92	4.80	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	01/05/93	5.34	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	01/05/93 ^{dup}	5.34	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	01/07/94	5.26	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	MW-2 (Quarterly)	04/11/90	4.51	200 ^b	220	2.7	<0.5	0.5	2.4	<10,000
07/10/90		4.61	570 ^b	450	150	<0.5	0.9	3.1	<10,000	
10/09/90		4.74	190 ^b	51	55	<0.5	<0.5	<0.5	<5,000	
01/17/91		4.73	350 ^b	<50	51	<0.5	<0.5	<0.5	---	
04/09/91		4.09	---	<50	21	<5	<5	<5	---	
07/10/91		4.66	50 ^b	<50	8.4	<0.5	<0.5	<0.5	---	
10/09/91		4.81	150	---	22	<0.5	<0.5	<0.5	---	
01/24/92		4.66	<50	---	4.8	<0.5	<0.5	<0.5	---	
04/23/92		4.51	<50	---	2.3	1.5	<0.5	<0.5	---	
07/01/92		4.57	130 ^c	---	19	<0.5	<0.5	<0.5	---	
10/02/92	4.80	120 ^c	---	7.8	<0.5	<0.5	<0.8	---		

-- Table 2A continues on next page --



Table 2A. Analytic Results for Ground Water - Petroleum Hydrocarbons - Shell Service Station WIC #204-0072-0502, 2160 Otis Drive, Alameda, California (continued)

Well ID (Sampling Frequency)	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	E	T	X	POG
	01/05/93	4.39	200 ^c	---	9.0	<0.5	0.6	1.8	---
	04/08/93	4.15	170 ^c	---	9.6	<0.5	<0.5	1.6	---
	07/20/93	4.40	80 ^d	---	16	1.3	1.4	6.1	---
	10/15/93	4.38	400 ^c	---	37	0.6	1.1	4.7	---
	01/07/94	4.34	86 ^d	---	12	<0.5	<0.5	1.1	<500
BH-C	12/17/92	5.0	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---
BH-D	12/17/92	5.0	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---
BH-E	12/17/92	5.5	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---
Trip	07/10/90		<50	---	<0.5	<0.5	<0.5	<0.5	---
Blank	10/09/90		<50	---	<0.5	<0.5	<0.5	<0.5	---
	01/17/91		<50	---	<0.5	<0.5	<0.5	<0.5	---
	04/09/91		<50	---	<0.5	<0.5	<0.5	<0.5	---
	07/10/91		<50	---	<0.5	<0.5	<0.5	<0.5	---
	10/09/91		<50	---	<0.5	<0.5	<0.5	<0.5	---
	01/24/92		<50	---	<0.5	<0.5	<0.5	<0.5	---
	04/23/92		<50	---	<0.5	<0.5	<0.5	<0.5	---
	07/01/92		<50	---	<0.5	<0.5	<0.5	<0.5	---
	10/02/92		<50	---	<0.5	<0.5	<0.5	<0.5	---
	01/05/93		<50	---	<0.5	<0.5	<0.5	<0.5	---
	04/08/93		<50	---	<0.5	<0.5	<0.5	<0.5	---
	07/20/93		<50	---	<0.5	<0.5	<0.5	<0.5	---
	10/15/93		<50	---	<0.5	<0.5	<0.5	<0.5	---
	01/07/94		<50	---	<0.5	<0.5	<0.5	<0.5	---

DTSC MCLs

-- Table 2A continues on next page --

Table 2A. Analytic Results for Ground Water - Petroleum Hydrocarbons - Shell Service Station WIC #204-0072-0502, 2160 Otis Drive, Alameda, 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
B = Benzene by EPA Method 8020, or 8240
E = Ethylbenzene by EPA Method 8020, or 8240
T = Toluene by EPA Method 8020, or 8240
X = Xylenes by EPA Method 8020, or 8240
POG = Petroleum oil and grease by American Public Health Association Standard Methods 503, or EPA method 5520 8F
DTSC MCLs = Department of Toxic Substances Control maximum contaminant levels
<n = Not detected above detection limit of n ppb
NE = DTSC MCL not established
BH-C = Grab Ground Water Sample

Notes:

a = 0.090 ppm chromium, 0.090 ppm lead and 0.10 ppm Zn detected; no cadmium detected above detection limit of 0.010 ppm by EPA Method 6010. No semi-volatile organic compounds or PCBs detected by EPA Method 625. DHS MCLs for Cr = 0.05 ppm; Pb = 0.05 ppm; secondary MCL for Zn = 5 ppm.
b = Chromatographic pattern not typical for gasoline; the concentration is due mostly to lighter hydrocarbon compounds.
c = The concentration reported as gasoline is partially due to the presence of discrete peaks not indicative of gasoline.
d = The concentration reported as gasoline is primarily due to the presence of discrete peaks not indicative of gasoline.
e = DTSC recommended action level for drinking water; MCL not established

Table 2B. Analytic Results for Ground Water - Volatile Organic Compounds - Shell Service Station WIC #204-0072-0502, 2160 Otis Drive, Alameda, California

Well ID	Date Sampled	Depth to Water (ft)	TCE	TCA	PCE	Chloroform	cis-1,2-DCE	trans-1,2-DCE	1,2-DCA	Carbon Disulfate	Vinyl Chloride
S-1	09/04/87 ^a	---	---	---	---	---	---	---	---	---	---
	09/11/89	4.29	ND	ND	ND	ND	ND	ND	ND	ND	ND
	04/11/90	4.00	<0.4	<0.4	<0.4	1.7	<0.4	<0.4	<0.4	---	<0.4
	07/10/90	9.25	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	---	<2
	10/09/90	4.96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	<2
	01/07/94	4.19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	<0.5
	01/07/94 ^{dup}	4.19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	<0.5
MW-1	04/11/90	5.23	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	---	<0.4
	07/10/90	5.40	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	---	<2
	10/09/90	5.61	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	<2
	01/07/94	5.26	---	---	---	---	---	---	---	---	---
MW-2	04/11/90	4.51	1.2	<0.4	<0.4	4.5	<0.4	16	<0.4	---	<2
	07/10/90	4.61	0.93	<0.4	<0.4	1.7	<0.4	11	0.44	---	<2
	10/09/90	4.74	1.3	<0.5	1.6	15	46	6.7	<0.5	---	2.5
	01/17/91 ^b	4.73	1.2	<0.5	0.6	2.6	74	12	0.5	---	3.0
	04/09/91	4.09	<5	<5	<5	<5	64	<5	<5	<0.5	<10
	07/10/91	4.66	<0.5	<0.5	6.9	43	<0.5	<0.5	<0.5	14	<10
	10/09/91	4.81	1.9	<1	28	7.4	54	16	<1	---	1.7
	01/24/92	4.66	2.5	<0.5	7.0	19	16	4.3	0.6	---	<0.5
	04/23/92	4.51	<3	<3	3.0	<3	84	18	<3	---	<3
	07/01/92	4.57	2.0	<1	2.0	<1	54	14	<1	---	1.0
	10/92/92	4.80	1.0	<1	<1	<1	61	12	<1	---	<1
	01/05/93	4.39	1.7	<0.5	2.2	<0.5	33	8.7	<0.5	---	.67
	04/08/93	4.15	1.3	<1	<1	<1	38	7.8	<1	---	<1
	07/20/93	4.40	2.4	<1	4.7	2.3	43	10	<0.5	---	<0.5
	10/15/93	4.38	<2.5	<2.5	<2.5	<2.5	110	25	<2.5	---	<2.5
	01/07/94	4.34	3.8	<0.5	14.0	8.9	29	5.4	<0.5	---	<0.5
BH-C	12/17/93	5.0	<2	<2	<2	<2	<2	<2	<2	---	2
BH-D	12/17/93	5.0	<2	<2	<2	<2	<2	<2	<2	---	2
BH-E	12/17/93	5.5	<2	<2	<2	<2	<2	<2	<2	---	2
DTSC MCLs			5	200	5	NE	6	10	0.5	NE	0.5

-- Table 2B continues on next page --



Table 2B. Analytic Results for Ground Water - Volatile Organic Compounds - Shell Service Station WIC #204-0072-0502, 2160 Otis Drive, Alameda, California
(continued)

Abbreviations:

TCE = Trichloroethene by EPA Method 601/8010 or 8240
TCA = 1,1,1-Trichloroethane by EPA Method 601/8010 or 8240
PCE = Tetrachloroethene by EPA Method 601/8010 or 8240
cis-1,2-DCE = cis-1,2-Dichloroethene by EPA Method 601/8010 or 8240
trans-1,2-DCE = trans-1,2-Dichloroethene by EPA Method 601/8010 or 8240
--- = Not analyzed
<n = Not detected above detection limit of n ppb
1,2-DCA = 1,2 dichloroethane by EPA Method 601/8010 or 8240

DTCS MCLs = Department of Toxic Substance control maximum contaminant levels

NE = DTSC MCL not established

ND = Analyte not detected, detection limit not known

Notes:

a = 7.0 ppb unknown alcohol and 270 ppb acetone detected

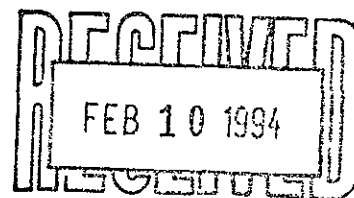
b = 5.0 ppb chlorobenzene detected

ATTACHMENT A
BTS GROUND WATER MONITORING REPORT

January 31, 1994

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

Attn: Daniel T. Kirk



SITE:
Shell WIC #204-0072-0502
2160 Otis Drive
Alameda, California

QUARTER:
1st quarter of 1994

QUARTERLY GROUNDWATER SAMPLING REPORT 940107-L-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 dewateres 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.

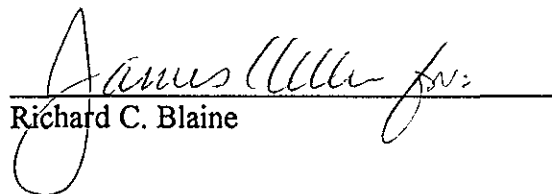
Objective Information Collection

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)
S-1 *	1/7/94	TOC	--	NONE	--	--	4.19	18.75
MW-1	1/7/94	TOC	--	NONE	--	--	5.26	16.54
MW-2	1/7/94	TOC	--	NONE	--	--	4.34	17.10

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

476

9401080 (18) (16) 10/28 11:20 P.D.

 SHELL OIL COMPANY RETAIL ENVIRONMENTAL ENGINEERING - WEST		CHAIN OF CUSTODY RECORD Serial No: <u>940107-41</u>			Date: <u>11/7/94</u> Page 1 of 1																																																							
Silo Address: 2160 Otis Drive, Alameda WIC#: 204-0072-0502		Analysis Required			LAB: <u>Anametrix</u>																																																							
Shell Engineer: Dan Kirk Phone No.: (510) 675-6168 Fax #: 675-6160		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 <u>EPA 601</u> <u>5520 B+F</u> Asbestos Container Size Preparation Used Composite Y/N			<table border="1"> <tr> <th>CHECK ONE (1) BOX ONLY</th> <th>CT/DT</th> <th>TURN AROUND TIME</th> </tr> <tr> <td>Quantity Monitoring <input checked="" type="checkbox"/></td> <td>6441</td> <td>24 hours <input type="checkbox"/></td> </tr> <tr> <td>Site Investigation <input type="checkbox"/></td> <td>6441</td> <td>48 hours <input type="checkbox"/></td> </tr> <tr> <td>Soil Cleanup/Disposal <input type="checkbox"/></td> <td>6442</td> <td>15 days <input checked="" type="checkbox"/> (Normal)</td> </tr> <tr> <td>Water Cleanup/Disposal <input type="checkbox"/></td> <td>6443</td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Soil/Air Rem. or Sys. O & M <input type="checkbox"/></td> <td>6442</td> <td></td> </tr> <tr> <td>Water Rem. or Sys. O & M <input type="checkbox"/></td> <td>6443</td> <td></td> </tr> <tr> <td>Other <input type="checkbox"/></td> <td></td> <td></td> </tr> </table>		CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME	Quantity Monitoring <input checked="" type="checkbox"/>	6441	24 hours <input type="checkbox"/>	Site Investigation <input type="checkbox"/>	6441	48 hours <input type="checkbox"/>	Soil Cleanup/Disposal <input type="checkbox"/>	6442	15 days <input checked="" type="checkbox"/> (Normal)	Water Cleanup/Disposal <input type="checkbox"/>	6443	Other <input type="checkbox"/>	Soil/Air Rem. or Sys. O & M <input type="checkbox"/>	6442		Water Rem. or Sys. O & M <input type="checkbox"/>	6443		Other <input type="checkbox"/>																																
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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		Commons: Sampled by: <u>LAD B OLIVER</u> Printed Name: <u>LAD B OLIVER</u>																																																										
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Relinquished By (signature): <u>[Signature]</u> Printed Name: <u>LAD B OLIVER</u> Date: <u>1-10-94</u> Time: <u>0935</u>		Received (signature): <u>[Signature]</u> Printed Name: <u>BENNY S. GREGG</u> Date: <u>1-10-94</u> Time: <u>0935</u>		Relinquished By (signature): <u>[Signature]</u> Printed Name: <u>BENNY S. GREGG</u> Date: <u>1-10-94</u> Time: <u>10:00</u>																																																								
Relinquished By (signature): <u>[Signature]</u> Printed Name: <u>Josephine DePauli</u> Date: <u>1-10-94</u> Time: <u>10:00</u>		Received (signature): <u>[Signature]</u> Printed Name: <u>Josephine DePauli</u> Date: <u>1-10-94</u> Time: <u>10:00</u>		Relinquished By (signature): <u>[Signature]</u> Printed Name: <u>Josephine DePauli</u> Date: <u>1-10-94</u> Time: <u>10:00</u>																																																								

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

Shell Oil Company



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 # : 9401080
 Date Received : 01/10/94
 Project ID : 204-0072-0502
 Purchase Order: MOH-B813

The following samples were received at Anametrix for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9401080- 1	MW-1
9401080- 2	MW-2
9401080- 3	S-1
9401080- 4	DUP
9401080- 5	T.B.

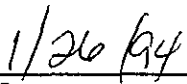
This report consists of 19 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group which performed the analysis(es) and generated the data.

The results contained within this report relate to only the sample(s) tested. Additionally, these data should be considered in their entirety and Anametrix cannot be responsible for the detachment, separation, or otherwise partial use of this report.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234.

If you have any further questions or comments on this report, please call us as soon as possible. Thank you for using Anametrix.


 Doug Robbins
 Laboratory Director


 Date



ANAMATRIX REPORT DESCRIPTION GC

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 Anamatrix ID number.

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

Anamatrix uses several data qualifiers (Q) in its 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 reported amount exceeded the linear range of the instrument calibration.
- D - Indicates that the compound was detected in an analysis performed at a secondary dilution.

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 # : 9401080
Date Received : 01/10/94
Project ID : 204-0072-0502
Purchase Order: MOH-B813
Department : GC
Sub-Department: VOA

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9401080- 2	MW-2	WATER	01/07/94	8010
9401080- 3	S-1	WATER	01/07/94	8010
9401080- 4	DUP	WATER	01/07/94	8010

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

MR. JIM KELLER
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Workorder # : 9401080
Date Received : 01/10/94
Project ID : 204-0072-0502
Purchase Order: MOH-B813
Department : GC
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QA/QC SUMMARY :

- No QA/QC problems encountered for samples.

M. Hasselina 1/20/94
Department Supervisor Date

Tajhi Memarzadeh 1/20/94
Chemist Date

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
 ANAMETRIX, INC. (408)432-8192

Project ID : 204-0072
 Sample ID : MW-2
 Matrix : WATER
 Date Sampled : 1/ 7/94
 Date Analyzed : 1/14/94
 Instrument ID : HP24

Anamatrix ID : 9401080-02
 Analyst : TM
 Supervisor : DL
 Dilution Factor : 1.0
 Conc. Units : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
75-35-4	1,1-Dichloroethene	.50	ND	U
75-09-2	Methylene chloride	1.0	ND	U
156-60-5	trans-1,2-Dichloroethene	.50	5.4	U
75-34-3	1,1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	29.	U
67-66-3	Chloroform	.50	8.9	U
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56-23-5	Carbon tetrachloride	.50	ND	U
107-06-2	1,2-Dichloroethane	.50	ND	U
79-01-6	Trichloroethene	.50	3.8	U
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	U
110-75-8	2-Chloroethylvinylether	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
10061-02-6	trans-1,3-Dichloropropene	.50	ND	U
79-00-5	1,1,2-Trichloroethane	.50	ND	U
127-18-4	Tetrachloroethene	.50	14.	U
124-48-1	Dibromochloromethane	.50	ND	U
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	U
541-73-1	1,3-Dichlorobenzene	.50	ND	U
106-46-7	1,4-Dichlorobenzene	.50	ND	U
95-50-1	1,2-Dichlorobenzene	.50	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
 ANAMETRIX, INC. (408)432-8192

Project ID : 204-0072
 Sample ID : S-1
 Matrix : WATER
 Date Sampled : 1/ 7/94
 Date Analyzed : 1/14/94
 Instrument ID : HP24

Anamatrix ID : 9401080-03
 Analyst : TM
 Supervisor : Sh
 Dilution Factor : 1.0
 Conc. Units : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
75-35-4	1,1-Dichloroethene	.50	ND	U
75-09-2	Methylene chloride	1.0	ND	U
156-60-5	trans-1,2-Dichloroethene	.50	ND	U
75-34-3	1,1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	ND	U
67-66-3	Chloroform	.50	ND	U
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56-23-5	Carbon tetrachloride	.50	ND	U
107-06-2	1,2-Dichloroethane	.50	ND	U
79-01-6	Trichloroethene	.50	ND	U
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	U
110-75-8	2-Chloroethylvinylether	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
10061-02-6	trans-1,3-Dichloropropene	.50	ND	U
79-00-5	1,1,2-Trichloroethane	.50	ND	U
127-18-4	Tetrachloroethene	.50	ND	U
124-48-1	Dibromochloromethane	.50	ND	U
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	U
541-73-1	1,3-Dichlorobenzene	.50	ND	U
106-46-7	1,4-Dichlorobenzene	.50	ND	U
95-50-1	1,2-Dichlorobenzene	.50	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
 ANAMETRIX, INC. (408)432-8192

Project ID : 204-0072
 Sample ID : DUP
 Matrix : WATER
 Date Sampled : 1/ 7/94
 Date Analyzed : 1/14/94
 Instrument ID : HP24

Anamatrix ID : 9401080-04
 Analyst : TM
 Supervisor : sh
 Dilution Factor : 1.0
 Conc. Units : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
75-35-4	1,1-Dichloroethene	.50	ND	U
75-09-2	Methylene chloride	1.0	ND	U
156-60-5	trans-1,2-Dichloroethene	.50	ND	U
75-34-3	1,1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	ND	U
67-66-3	Chloroform	.50	ND	U
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56-23-5	Carbon tetrachloride	.50	ND	U
107-06-2	1,2-Dichloroethane	.50	ND	U
79-01-6	Trichloroethene	.50	ND	U
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	U
110-75-8	2-Chloroethylvinylether	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
10061-02-6	trans-1,3-Dichloropropene	.50	ND	U
79-00-5	1,1,2-Trichloroethane	.50	ND	U
127-18-4	Tetrachloroethene	.50	ND	U
124-48-1	Dibromochloromethane	.50	ND	U
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	U
541-73-1	1,3-Dichlorobenzene	.50	ND	U
106-46-7	1,4-Dichlorobenzene	.50	ND	U
95-50-1	1,2-Dichlorobenzene	.50	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
 ANAMETRIX, INC. (408)432-8192

Project ID : 204-00
 Sample ID : VBLKB1
 Matrix : WATER
 Date Sampled : 0/ 0/ 0
 Date Analyzed : 1/13/94
 Instrument ID : HP24

Anamatrix ID : BJ1303I1
 Analyst : JM
 Supervisor : sh
 Dilution Factor : 1.0
 Conc. Units : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
75-35-4	1,1-Dichloroethene	.50	ND	U
75-09-2	Methylene chloride	1.0	ND	U
156-60-5	trans-1,2-Dichloroethene	.50	ND	U
75-34-3	1,1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	ND	U
67-66-3	Chloroform	.50	ND	U
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56-23-5	Carbon tetrachloride	.50	ND	U
107-06-2	1,2-Dichloroethane	.50	ND	U
79-01-6	Trichloroethene	.50	ND	U
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	U
110-75-8	2-Chloroethylvinylether	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
10061-02-6	trans-1,3-Dichloropropene	.50	ND	U
79-00-5	1,1,2-Trichloroethane	.50	ND	U
127-18-4	Tetrachloroethene	.50	ND	U
124-48-1	Dibromochloromethane	.50	ND	U
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	U
541-73-1	1,3-Dichlorobenzene	.50	ND	U
106-46-7	1,4-Dichlorobenzene	.50	ND	U
95-50-1	1,2-Dichlorobenzene	.50	ND	U

SURROGATE RECOVERY SUMMARY -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID : 204-0072
Matrix : LIQUID

Anamatrix ID : 9401080
Analyst : TM
Supervisor : dh

	SAMPLE ID	SU1	SU2	SU3
1	VBLKB1	68	85	85
2	MW-2	87	90	95
3	S-1	62	76	75
4	DUP	61	75	78
5				
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23				
24				
25				
26				
27				
28				
29				
30				

QC LIMITS

SU1 = Bromochloromethane (56- 99)
SU2 = 1-Chloro-2-fluorobenze (73-110)
SU3 = 2-Bromochlorobenzene (65-108)

* Values outside of Anamatrix QC limits

LABORATORY CONTROL SAMPLE
 EPA METHOD 601/8010
 ANAMETRIX, INC. (408)432-8192

Sample I.D. : LABORATORY CONTROL SAMPLE
 Matrix : WATER
 SDG/Batch : 01080
 Date analyzed : 01/13/94

Anamatrix I.D. : MJ1302I1
 Analyst : TM
 Supervisor : *[Signature]*
 Instrument I.D. : HP24

COMPOUND	SPIKE AMOUNT (ug/L)	AMOUNT RECOVERED (ug/L)	PERCENT RECOVERY	%RECOVERY LIMITS
Trichlorotrifluoroethane	10	7.1	71%	65 - 116
1,1-Dichloroethene	10	9.0	90%	64 - 125
trans-1,2-Dichloroethene	10	9.1	91%	77 - 113
1,1-Dichloroethane	10	9.8	98%	85 - 129
cis-1,2-Dichloroethene	10	9.9	99%	78 - 130
1,1,1-Trichloroethane	10	9.5	95%	83 - 125
Trichloroethene	10	9.6	96%	76 - 124
Tetrachloroethene	10	9.2	92%	80 - 118
Chlorobenzene	10	9.3	93%	81 - 130
1,3-Dichlorobenzene	10	9.4	94%	82 - 115
1,4-Dichlorobenzene	10	9.3	93%	85 - 122
1,2-Dichlorobenzene	10	9.6	96%	86 - 122

* Limits based on data generated by Anamatrix, Inc., December, 1993.

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

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

Workorder # : 9401080
Date Received : 01/10/94
Project ID : 204-0072-0502
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9401080- 1	MW-1	WATER	01/07/94	TPHgBTEX
9401080- 2	MW-2	WATER	01/07/94	TPHgBTEX
9401080- 3	S-1	WATER	01/07/94	TPHgBTEX
9401080- 4	DUP	WATER	01/07/94	TPHgBTEX
9401080- 5	T.B.	WATER	01/07/94	TPHgBTEX

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

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

Workorder # : 9401080
Date Received : 01/10/94
Project ID : 204-0072-0502
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- The concentration reported as gasoline for sample MW-2 is primarily due to the presence of discrete peaks not indicative of gasoline.

Cheryl Balmer 2/14/94
Department Supervisor Date

Lucia Sher 2/14/94
Chemist Date

Organic Analysis Data Sheet
 Total Petroleum Hydrocarbons as Gasoline with BTEX
 ITS - Anametrix Laboratories - (408)432-8192

Lab Workorder : 9401080
 Matrix : WATER

Client Project ID : 204-0072-0502
 Units : ug/L

Compound Name	Method Reporting Limit*	Client ID	Client ID	Client ID	Client ID	Client ID
		Lab ID	Lab ID	Lab ID	Lab ID	Lab ID
		Method Blank				
Benzene	0.50	ND				
Toluene	0.50	ND				
Ethylbenzene	0.50	ND				
Total Xylenes	0.50	ND				
TPH as Gasoline	50	ND				
Surrogate Recovery		92%				
Instrument ID		HP4				
Date Sampled		N/A				
Date Analyzed		01/14/94				
RLMF		1				
Filename Reference		BJ1402E1.D				

* The Method Reporting Limit must be multiplied by the Reporting Limit Multiplication Factor (RLMF) to achieve the compound's reporting limit in the analysis.

ND : Not detected at or above the reporting limit for the analysis as performed.

TPHg : Determined by GC/FID following sample purge & trap by EPA Method 5030.

BTEX : Determined by modified EPA Method 8020 following sample purge & trap by EPA Method 5030.

Lab Control Limits for surrogate compound p-Bromofluorobenzene are 61-139%.

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

Peggie Davison 1/19/94
 Analyst Date

Cheryl B. ... 1/19/94
 Supervisor Date

Matrix Spike Report
Total Petroleum Hydrocarbons as BTEX
ITS - Anametrix Laboratories - (408)432-8192

Project ID : 204-0072-0502
 Sample ID : S-1
 Matrix : WATER
 Date Sampled : 01/07/94

Laboratory ID : 9401080-03
 Analyst : RD
 Supervisor : CJ
 Instrument ID : HP4
 Units : ug/L

COMPOUND NAME	SPIKE AMOUNT	SAMPLE RESULTS	MS RECOVERY	MSD RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS
Benzene	20	ND	110%	105%	45-139	5%	30
Toluene	20	ND	110%	100%	51-138	10%	30
Ethylbenzene	20	ND	115%	110%	48-146	4%	30
Total Xylenes	20	ND	105%	90%	50-139	15%	30
Surrogate Recovery		97%	102%	103%			
Date Analyzed		01/14/94	01/14/94	01/14/94			
Multiplier		1	1	1			
Filename Reference		FPJ08003.D	FMJ08003.D	FDJ08003.D			

* Limits established by Inchcape Testing Services, Anametrix Laboratories.

Laboratory Control Spike Report
Total Petroleum Hydrocarbons as BTEX
ITS - Anametrix Laboratories - (408)432-8192

Instrument ID : HP4

Analyst : *RD*

Matrix : LIQUID

Supervisor : *LS*

Units : ug/L

COMPOUND NAME	SPIKE AMOUNT	LCS RECOVERY	RECOVERY LIMITS
Benzene	20	125%	52-133
Toluene	20	130%	57-136
Ethylbenzene	20	135%	56-139
Total Xylenes	20	125%	56-141
Surrogate Recovery		100%	61-139
Date Analyzed		01/14/94	
Multiplier		1	
Filename Reference		MJ1401E1.D	

* Limits established by Incheape Testing Services, Anametrix Laboratories.

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

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

Workorder # : 9401080
Date Received : 01/10/94
Project ID : 204-0072-0502
Purchase Order: MOH-B813
Department : PREP
Sub-Department: PREP

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9401080- 2	MW-2	WATER	01/07/94	5520BF

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

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

Workorder # : 9401080
Date Received : 01/10/94
Project ID : 204-0072-0502
Purchase Order: MOH-B813
Department : PREP
Sub-Department: PREP

QA/QC SUMMARY :

- No QA/QC problems encountered for this sample.

Cathy Muehlenberg 1/20/94
Department Supervisor Date

El Emami 1/19/94
Chemist Date

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

Project I.D. : 204-0072-0502 Anametrix I.D. : 9401080
 Matrix : WATER Analyst : *HE*
 Date sampled : 01/07/94 Supervisor : *Ch*
 Date extracted: 01/12/94 Date released : 01/19/94
 Date analyzed : 01/13/94

Workorder #	Sample I.D.	Reporting Limit (mg/L)	Amount Found (mg/L)
9401080-02	MW-2	5	ND
BJ1211W4	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
 Matrix : WATER
 Date sampled : N/A
 Date extracted : 01/12/94
 Date analyzed : 01/13/94

Anamatrix I.D. : MJ1211W4
 Analyst : HE
 Supervisor : CW
 Date Released : 01/19/94

COMPOUND	SPIKE AMT. (mg/L)	LCS (mg/L)	%REC LCS	LCSD (mg/L)	%REC LCSD	%RPD	%REC LIMITS
Motor Oil	50	47	94	42	84	11	44-128

* Quality control limits established by Anamatrix Laboratories.