



53 JUL 17 11 21 AM '93



**Scott Seery
Alameda County Department
of Environmental Health
80 Swan Way, Room 200
Oakland, California 94621-1426**

**Re: Shell Service Station
WIC #204-6852-0703
1285 Bancroft Avenue
San Leandro, California 94577
WA Job #81-423-203**

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 second quarter 1993 and proposed work for the third quarter 1993.

Second Quarter 1993 Activities:

- Blaine Tech Services, Inc. (BTS) of San Jose, California measured ground water depths and collected ground water samples from the three site wells. BTS' report describing these activities and the analytic report for the ground water samples are 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).

Anticipated Third Quarter 1993 Activities:

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

Conclusions and Recommendations:

Ground water elevations have decreased approximately two feet compared to the previous quarter, but ground water is still about seven ft higher than during the fourth quarter of 1992. However, despite two quarters of elevated ground water, hydrocarbon concentrations are consistent with previous results.

WA recommends that all site wells be sampled semi-annually during the first and third quarters of each year. This recommendation is based on the following facts:

- All site wells have been sampled for at least six consecutive quarters with no increase in hydrocarbon concentrations despite a recent rise in ground water elevation,
- Petroleum hydrocarbon concentrations detected in ground water are near or below Department of Toxic Substances Control (DTSC) maximum contaminant levels for drinking water (MCLs),
- Ground water has consistently flowed northwestward placing well MW-3 downgradient of the underground fuel storage tanks, and
- ~~The absence of elevated VOCs in the three wells sampled in the third quarter is consistent with a regional VOC problem that is not appear to have originated from the Shell station.~~

are they?

Scott Seery
July 15, 1993

3

Weiss Associates 

We will implement semi-annual sampling at this site unless notified otherwise.

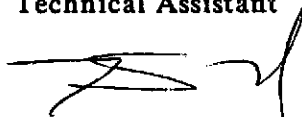
Please call if you have any questions or comments.



Sincerely,
Weiss Associates



J. Michael Asport
Technical Assistant



N. Scott MacLeod, R.G.
Project Geologist

JMA/NSM:jma

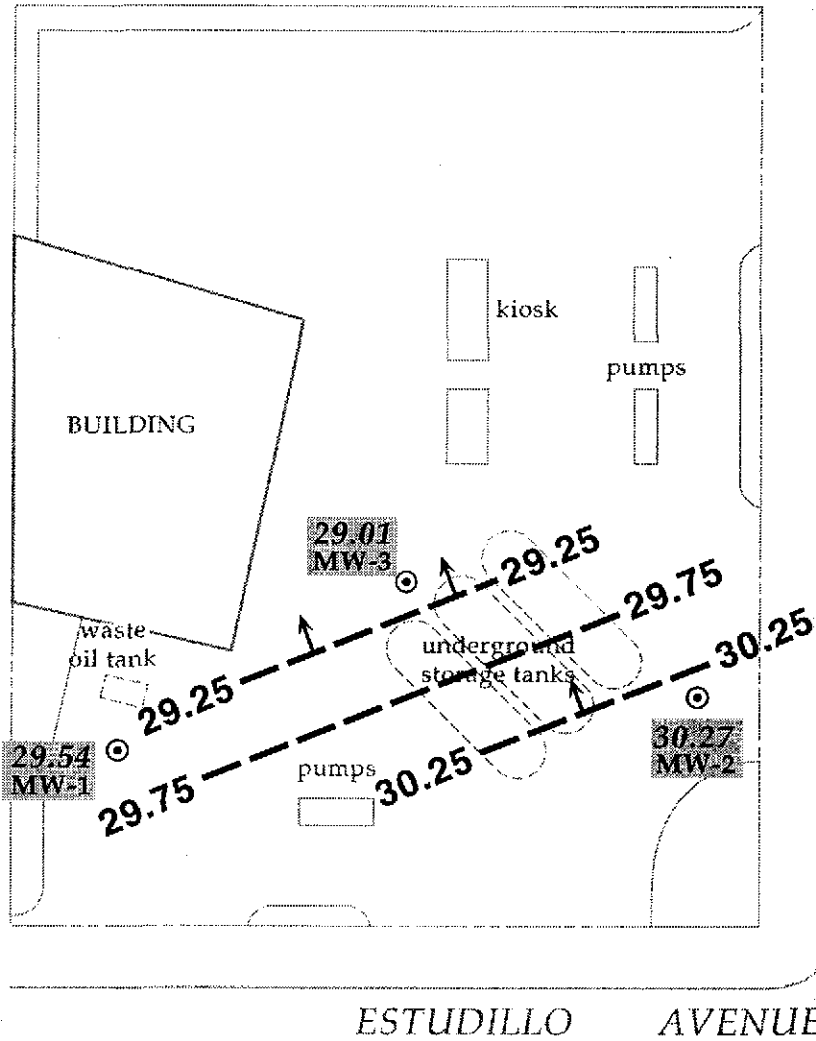
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Attachments: A - Ground Water Monitoring Report and Analytic Report

cc: Dan Kirk, Shell Oil Company, P.O. Box 5278, Concord, California 94520-9998
Lester Feldman, California Regional Water Quality Control Board - San Francisco Bay
Region, 2101 Webster Street, Oakland, California 94612



Figure 1. Site Location Map - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California



EXPLANATION	
⊙ MW-2	Monitoring well
30.27	Ground water elevation, ft above mean sea level
— 30.25	Ground water elevation contour, ft above mean sea level, approximately located, dashed where inferred
→	Inferred ground water flow direction

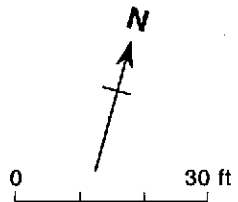


Figure 2. Monitoring Well Locations and Ground Water Elevation Contours - June 22, 1993 - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California

Table 1. Ground Water Elevations, Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
MW-1	03/13/90	66.29	42.65	23.64
	06/12/90		43.14	23.15
	09/13/90		44.71	21.58
	12/18/90		45.23	21.06
	03/07/91		43.32	22.97
	06/07/91		42.18	24.11
	09/17/91		44.85	21.44
	03/01/92		41.56	24.73
	06/03/92		40.74	25.55
	09/01/92		43.05	23.24
	12/07/92		44.19	22.10
	03/01/93		34.96	31.33
	06/22/93		36.75	29.54
	MW-2		03/01/92	66.91
06/03/92		40.56	26.35	
09/01/92		42.94	23.97	
12/07/92		44.13	22.78	
03/01/93		34.82	32.09	
06/22/93		36.64	30.27	
MW-3	03/01/92	66.31	42.00	24.31
	06/03/92		44.30	22.01
	09/01/92		43.62	22.69
	12/07/92		44.77	21.54
	03/01/93		35.50	30.81
	06/22/93		37.30	29.01

Table 2. Analytical Results for Ground Water - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	E	T	X
			-----parts per million (mg/L)-----					
1001	09/17/91	44.85	0.05 ^a	0.16 ^b	<0.0005	<0.0005	<0.0005	<0.0005
	03/01/92	41.56	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
	06/03/92	40.74	<0.05	---	0.0008	0.0009	<0.0005	<0.0005
	09/01/92	43.05	<0.05	---	<0.0005	0.0053	0.0058	0.0072
	12/07/92	44.19	0.068	---	<0.0005	<0.0005	0.0008	0.0012
	03/01/93	34.96	<0.05	---	<0.0005	<0.0005	<0.0005	<0.0005
	03/01/93 ^{dup}			<0.05	---	<0.0005	<0.0005	<0.0005
	06/22/93	36.75	<0.05	---	<0.0005	<0.0005	<0.0005	<0.0005
1002	03/01/92	41.57	0.91	<0.05	0.011	0.050	0.0052	0.140
	06/03/92	40.56	1.4	---	0.033	0.15	0.016	0.24
	09/01/92	42.94	0.23	---	0.0052	0.015	0.0041	0.019
	09/01/92 ^{dup}				0.0056	0.018	0.0050	0.22
	12/07/92	44.13	0.24	---	0.0015	0.0095	0.0013	0.0099
	12/07/92 ^{dup}			<0.05	0.0017	0.013	0.0010	0.012
	03/01/93	34.82		---	0.260	0.027	0.310	0.066
	06/22/93	36.64		---	0.018	0.0036	0.0034	0.0052
06/22/93 ^{dup}				0.029	0.0042	0.0048	0.0061	
1003	03/01/92	42.00	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
	06/03/92	44.30	<0.05	---	<0.0005	<0.0005	<0.0005	<0.0005
	09/01/92	43.62	<0.05	---	<0.0005	0.0011	<0.0005	0.0032
	12/07/92	44.77	0.052	---	<0.0005	<0.0005	<0.0005	0.0005
	03/01/93	35.50	<0.05	---	<0.0005	<0.0005	<0.0005	<0.0005
	06/22/93	37.30	<0.05	---	<0.0005	<0.0005	<0.0005	<0.0005
Bailer Blank	09/01/92		<0.05	---	<0.0005	<0.0005	<0.0005	0.0010
	12/07/92		<0.05	---	<0.0005	<0.0005	<0.0005	<0.0005
Trip Blank	09/17/91		<0.05	---	<0.0005	<0.0005	<0.0005	<0.0005
	03/01/92		<0.05	---	<0.0005	<0.0005	<0.0005	<0.0005
	06/03/92		<0.05	---	<0.0005	<0.0005	<0.0005	<0.0005
	09/01/92		<0.05	---	<0.0005	<0.0005	<0.0005	<0.0005
	12/07/92		<0.05	---	<0.0005	<0.0005	<0.0005	<0.0005
	03/01/93		<0.05	---	<0.0005	<0.0005	<0.0005	<0.0005
	06/22/93		<0.05	---	<0.0005	<0.0005	<0.0005	<0.0005
DTSC MCLs			NE	NE	0.001	0.680	0.10 ^c	1.750



Table 2. Analytical Results for Ground Water - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, 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

E = Ethylbenzene by EPA Method 8020

T = Toluene by EPA Method 8020

X = Xylenes by EPA Method 8020

dup = Duplicate sample

NE = Not established

DTSC MCLs = California Department of Toxic Substances Control maximum contaminant levels for drinking water

--- = Not analyzed

<n = Not detected at detection limits of n ppm

Notes:

a = Result due to a non-gasoline hydrocarbon compound

b = Result due to a non-diesel hydrocarbon compound

c = DTSC recommended action level; MCL not established

Table 2B. Analytic Reports for Ground Water - Non-Fuel Compounds - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California

Well ID	Date Sampled	Depth to Water	TCE	TOG	PCE	Chloroform	cis-1,2-DCE	trans-1,2-DCE
			----->					
MW-1	03/08/90	42.65	---	<10	0.035	0.0063	---	---
	06/12/90	43.14	---	<10	0.0019	0.063	---	---
	09/13/90	44.71	---	<10	0.026	0.0090	---	---
	12/18/90	45.23	---	<10	<0.0004	0.0053	---	---
	03/07/91	43.32	---	---	0.023	0.0037	---	---
	06/07/91	42.18	---	---	0.021	0.0066	---	---
	09/17/91	44.85	---	---	0.023	0.0074	---	---
	03/01/92	41.56	<0.0004	---	0.021	0.0063	---	<0.0004
	06/03/92	40.74	0.017	---	<0.0005	0.0067	<0.0005	<0.0005
	09/01/92	43.05	0.012	---	<0.0005	0.0058	<0.0005	<0.0005
	12/07/92	44.19	<0.0005	---	0.017	0.009	<0.0005	<0.0005
	03/01/93	34.96	<0.0005	---	0.022	0.013	<0.0005	<0.0005
	03/01/93 ^{dup}		<0.0005	---	0.022	0.013	<0.0005	<0.0005
	06/23/93	36.75	<0.0005	---			<0.0005	<0.0005
	MW-2	03/01/92	41.57	<0.0004	---	0.011	0.0089	---
06/03/92		40.56	0.0074	---	<0.0005	<0.0005	0.00076	0.0063
09/01/92		42.94	0.0084	---	<0.0005	0.0091	<0.0005	<0.0005
09/01/92 ^{dup}			0.0084	---	<0.0005	0.0081	<0.0005	<0.0005
12/07/92		44.13	<0.0005	---	0.010	0.010	<0.0005	<0.0005
12/07/92 ^{dup}			<0.0005	---	0.010	0.009	<0.0005	<0.0005
03/01/93		34.82	<0.0005	---	<0.0005	<0.0005	<0.0005	<0.0005
06/22/93		36.64	<0.0005	---			<0.0005	<0.0005
06/22/93 ^{dup}			<0.0005	---			<0.0005	<0.0005
MW-3	03/01/92	42.00	<0.0004	---	0.0088	0.0024	---	<0.0004
	06/03/92	44.30	0.0030	---	<0.0005	0.0015	<0.0005	<0.0005
	09/01/92	43.62	0.0088	---	<0.0005	0.0023	<0.0005	<0.0005
	12/07/92	44.77	<0.0005	---	0.010	0.003	<0.0005	<0.0005
	03/01/93	35.50	<0.0005	---	0.0092	0.0094	<0.0005	<0.0005
	06/22/93	37.30	<0.0005	---			<0.0005	<0.0005
Bailer Blank	09/01/92		<0.0005	---	<0.0005	<0.0005	<0.0005	<0.0005
	12/07/92		<0.0005	---	<0.0005	<0.0005	<0.0005	<0.0005
Trip Blank	09/01/92		<0.0005	---	<0.0005	<0.0005	<0.0005	<0.0005
	12/07/92 ^a		<0.0005	---	<0.0005	<0.0005	<0.0005	<0.0005
	03/01/93		<0.0005	---	<0.0005	<0.0005	<0.0005	<0.0005
	06/22/93 ^a		<0.0005	---	<0.0005	<0.0005	<0.0005	<0.0005
DTSC MCLs		0.005	NE	0.005	NE	0.006	0.01	

Weiss Associates



Table 2B. Analytic Reports for Ground Water - Non-Fuel Compounds - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California (continued)

Abbreviations:

TCE = Trichloroethene by EPA Method 601
TOG = Total non-polar oil and grease by American Public Health Association Standard Methods 503A&E
PCE = Tetrachloroethene by EPA Method 601
cis-1,2-DCE = cis-1,2-Dichloroethene by EPA Method 601
trans-1,2-DCE = trans-1,2-Dichloroethene by EPA Method 601
CHLOR = Chloroform by EPA Method 601
--- = Not analyzed
dup = Duplicate sample
DTSC MCLs = Department of Toxic Substances Control maximum contaminant levels for drinking water
NE = DTSC MCL not established

Notes:

a = Sample contained 0.014 mg/L of 1,3-Dichlorobenzene.
b = Although 0.0014 ppm methylene chloride was detected in one of the ground water samples from well MW-2, the laboratory indicated that this was within normal laboratory background concentrations.

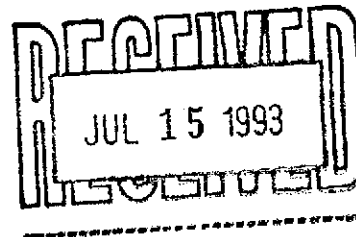
ATTACHMENT A
GROUND WATER MONITORING REPORT AND ANALYTIC REPORT



BLAINE TECH SERVICES INC.

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

June 28, 1993



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

Attn: Daniel T. Kirk

SITE:
Shell WIC # 204-6852-0703
1285 Bancroft Avenue
San Leandro, California

QUARTER:
2nd quarter of 1993

QUARTERLY GROUNDWATER SAMPLING REPORT 930622-N-1

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

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

TABLE OF WELL GAUGING DATA

WELL I.D.	WELL DIAMETER (inches)	DATA COLLECTION DATE	MEASUREMENTS REFERENCED TO	QUALITATIVE OBSERVATIONS (sheen)	DEPTH TO FIRST IMMISCIBLE LIQUID (FPZ) (feet)	THICKNESS OF IMMISCIBLE LIQUID ZONE (feet)	VOLUME OF IMMISCIBLES REMOVED (ml)	DEPTH TO WATER (feet)	DEPTH TO WELL BOTTOM (feet)
MW-1	4	06-22-93	TOC	--	NONE	--	--	36.75	59.33
MW-2 *	4	06-22-93	TOC	--	NONE	--	--	36.64	59.28
MW-3	4	06-22-93	TOC	--	NONE	--	--	37.30	58.02

* Sample "DUP" was a duplicate sample taken from well MW-2.

STANDARD PROCEDURES

Evacuation

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

Normal evacuation removes three case volumes of water from the well. More than three case volumes of water may be removed in cases where more evacuation is needed to achieve stabilization of water parameters. Less than three case volumes of water may be obtained in cases where the well 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.

Free Product Skimmer

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

Sample Containers

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

Sampling

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

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

Sample Designations

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

Chain of Custody

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

Hazardous Materials Testing Laboratory

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

Objective Information Collection

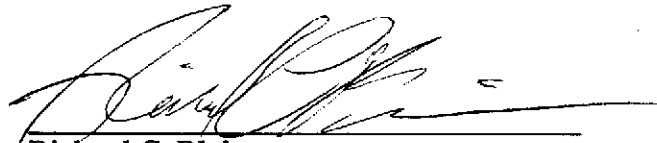
Blaine Tech Services, Inc. performs specialized environmental sampling and documentation as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc.

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

Reportage

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

Please call if we can be of any further assistance.



Richard C. Blaine

RCB/cdk


attachments: chain of custody
certified analytical report

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

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9304 344

16 18

 SHELL OIL COMPANY RETAIL ENVIRONMENTAL ENGINEERING - WEST		CHAIN OF CUSTODY RECORD Serial No: _____		Date: 6/22/93 Page 1 of 1									
Site Address: 1285 BANCROFT AVE, SAN LEANDRO CA		Analysis Required		LAB: ANAMETRIX									
WIC#: 204-6852-0703		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 601 Asbestos Container Size Preparation Used Composite Y/N		CHECK ONE (1) BOX ONLY C1/D1 TURN AROUND TIME									
Shell Engineer: DAN KIRK				Phone No.: 510 Fax #: 675 6168		Quarterly Monitoring <input checked="" type="checkbox"/> 6441 24 hours <input type="checkbox"/>							
Consultant Name & Address: BTS 985 TIMOTHY SAN JOSE CA 95122				Consultant Contact: JIM KELLER		Site Investigation <input type="checkbox"/> 6441 48 hours <input type="checkbox"/>							
Comments:				Phone No.: 408 Fax #: 995 5535		Soil Classfy/Disposal <input type="checkbox"/> 6442 16 days <input type="checkbox"/> (Normal)							
Sampled by: <i>Nate Overmeyer</i> Printed Name: NATE OVERMEYER				Other <input type="checkbox"/> 6443		Water Classfy/Disposal <input type="checkbox"/> 6443 Soil/Air Exam. of Sys. O & M <input type="checkbox"/> 6442 Water Exam. of Sys. O & M <input type="checkbox"/> 6443 Other <input type="checkbox"/>							
Sample ID		Date	Sludge	Soil	Water	Alt	No. of conis.	MATERIAL DESCRIPTION		SAMPLE CONDITION/ COMMENTS			
① MW-1	6/22/93				X		6	X	X	HL	N	GROUNDWATER	
② MW-2								X	X				
③ MW-3								X	X				
④ DUP.								X	X				
⑤ TB							2	X					TRIP BLANK
Relinquished By (signature): <i>Nate Overmeyer</i>		Printed Name: NATE OVERMEYER		Date: 6-24-93 Time: 16:55		Received (signature): <i>GENNY S. CARAZOSA</i>		Printed Name: GENNY S. CARAZOSA		Date: 6-24-93 Time: 16:51			
Relinquished By (signature): <i>GENNY S. CARAZOSA</i>		Printed Name: GENNY S. CARAZOSA		Date: 6-24-93 Time: 16:50		Received (signature): <i>Maria Barajas</i>		Printed Name: Maria Barajas		Date: 6/24/93 Time: 11:30			
Relinquished By (signature):		Printed Name:		Date:		Received (signature):		Printed Name:		Date:			

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

Printed On: 6/24/93



Inchcape Testing Services

Anamatrix 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 # : 9306344
 Date Received : 06/24/93
 Project ID : 204-6852-0703
 Purchase Order: MOH-B813

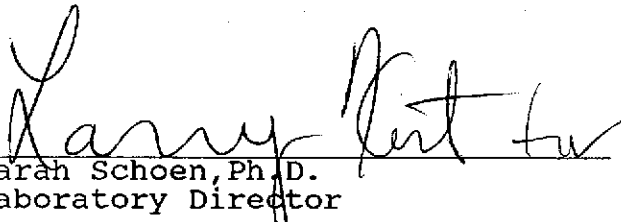
The following samples were received at Anamatrix, Inc. for analysis :

ANAMATRIX ID	CLIENT SAMPLE ID
9306344- 1	MW-1
9306344- 2	MW-2
9306344- 3	MW-3
9306344- 4	DUP
9306344- 5	TB

This report consists of 19 pages not including the cover letter, and is organized in sections according to the specific Anamatrix 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 Anamatrix 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.

Anamatrix 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 Anamatrix.


 Sarah Schoen, Ph.D.
 Laboratory Director

7-9-93
 Date

ANAMETRIX 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 STREET
SAN JOSE, CA 95133

Workorder # : 9306344
Date Received : 06/24/93
Project ID : 204-6852-0703
Purchase Order: MOH-B813
Department : GC
Sub-Department: VOA

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9306344- 1	MW-1	WATER	06/22/93	8010
9306344- 2	MW-2	WATER	06/22/93	8010
9306344- 3	MW-3	WATER	06/22/93	8010
9306344- 4	DUP	WATER	06/22/93	8010

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

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

Workorder # : 9306344
Date Received : 06/24/93
Project ID : 204-6852-0703
Purchase Order: MOH-B813
Department : GC
Sub-Department: VOA

QA/QC SUMMARY :

- The amount of methylene chloride reported in sample MW-2 is within normal laboratory background levels.
- In the matrix spike/matrix spike duplicate of sample MW-2, the percent recoveries of 1,3-dichlorobenzene and 1,2-dichlorobenzene are outside of Anamatrix control limits for EPA Method 8010.

Corinne Khan
Department Supervisor

06/30/93
Date

Jaghi Memarzadeh 6/30/93
Chemist Date

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

Project ID : 204-6852
Sample ID : MW-1
Matrix : WATER
Date Sampled : 6/22/93
Date Analyzed : 6/29/93
Instrument ID : HP24

Anamatrix ID : 9306344-01
Analyst : TM
Supervisor : LP
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	8.0	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	18.	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	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ND	U
95-50-1	1,2-Dichlorobenzene	1.0	ND	U

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

Project ID : 204-6852
 Sample ID : MW-2
 Matrix : WATER
 Date Sampled : 6/22/93
 Date Analyzed : 6/29/93
 Instrument ID : HP24

Anamatrix ID : 9306344-02
 Analyst : TM
 Supervisor : CP
 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	1.4	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	7.9	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	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	13.	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	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ND	U
95-50-1	1,2-Dichlorobenzene	1.0	ND	U

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

Project ID : 204-6852
 Sample ID : MW-3
 Matrix : WATER
 Date Sampled : 6/22/93
 Date Analyzed : 6/29/93
 Instrument ID : HP24

Anamatrix ID : 9306344-03
 Analyst : TM
 Supervisor : CP
 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	9.6	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	7.8	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	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ND	U
95-50-1	1,2-Dichlorobenzene	1.0	ND	U

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

Project ID : 204-6852
 Sample ID : DUP
 Matrix : WATER
 Date Sampled : 6/22/93
 Date Analyzed : 6/29/93
 Instrument ID : HP24

Anamatrix ID : 9306344-04
 Analyst : TM
 Supervisor : CP
 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	6.9	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	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	12.	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	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ND	U
95-50-1	1,2-Dichlorobenzene	1.0	ND	U

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

Project ID : 204-68
 Sample ID : BLK629
 Matrix : WATER
 Date Sampled : 0/ 0/ 0
 Date Analyzed : 6/29/93
 Instrument ID : HP24

Anamatrix ID : 24B0629H01
 Analyst : TM
 Supervisor : CP
 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	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ND	U
95-50-1	1,2-Dichlorobenzene	1.0	ND	U

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

Project ID : 204-6852
 Matrix : LIQUID

Anamatrix ID : 9306344
 Analyst : TM
 Supervisor : CP

	SAMPLE ID	SU1	SU2	SU3
1	BLK629	105		
2	MW-1	105		
3	MW-2	96		
4	MW-2 MS	112		
5	MW-2 MSD	107		
6	MW-3	102		
7	DUP	104		
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

QC LIMITS

SU1 = Chlorofluorobenzene (51-136)

* Values outside of Anamatrix QC limits

MATRIX SPIKE RECOVERY FORM -- EPA METHOD 8010
 ANAMETRIX, INC. (408)432-8192

Project ID : 204-6852
 Sample ID : MW-2
 Matrix : WATER
 Date Sampled : 6/22/93
 Date Analyzed : 6/29/93
 Instrument ID : HP24

Anamatrix ID : 9306344-02
 Analyst : TM
 Supervisor : CP

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	%REC LIMITS
Trichlorotrifluoroethan	10.0	.0	10.5	105	28-127
1,1-Dichloroethene	10.0	.0	9.8	98	47-119
trans-1,2-Dichloroethen	10.0	.0	10.4	104	46-112
1,1-Dichloroethane	10.0	.0	11.0	110	57-124
cis-1,2-Dichloroethene	10.0	.0	10.2	102	70-139
1,1,1-Trichloroethane	10.0	.0	10.6	106	57-125
Trichloroethene	10.0	.0	10.8	108	61-133
Tetrachloroethene	10.0	13.2	24.8	116	61-132
Chlorobenzene	10.0	.0	11.5	115	81-120
1,3-Dichlorobenzene	10.0	.0	11.8	118 *	56-113
1,4-Dichlorobenzene	10.0	.0	11.7	117	62-119
1,2-Dichlorobenzene	10.0	.0	12.1	121 *	69-116

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	RPD LIMITS	%REC LIMITS
Trichlorotrifluoroethan	10.0	10.4	104	1	25	28-127
1,1-Dichloroethene	10.0	10.5	105	7	25	47-119
trans-1,2-Dichloroethen	10.0	10.6	106	2	25	46-112
1,1-Dichloroethane	10.0	11.1	111	0	25	57-124
cis-1,2-Dichloroethene	10.0	10.0	100	1	25	70-139
1,1,1-Trichloroethane	10.0	10.3	103	3	25	57-125
Trichloroethene	10.0	10.9	109	1	25	61-133
Tetrachloroethene	10.0	23.0	99	16	25	61-132
Chlorobenzene	10.0	11.2	112	3	25	81-120
1,3-Dichlorobenzene	10.0	11.4	114 *	3	25	56-113
1,4-Dichlorobenzene	10.0	11.7	117	0	25	62-119
1,2-Dichlorobenzene	10.0	11.7	117 *	3	25	69-116

* Value is outside of Anamatrix QC limits

RPD: 0 out of 12 outside limits
 Spike Recovery: 4 out of 24 outside limits

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

Project/Case : LABORATORY CONTROL SAMPLE
 Matrix : WATER
 SDG/Batch : N/A
 Date analyzed : 06/29/93

Anamatrix I.D. : W0062993
 Analyst : JM
 Supervisor : CD
 Instrument I.D.: HP24

COMPOUND	SPIKE AMOUNT (ug/L)	AMOUNT RECOVERED (ug/L)	PERCENT RECOVERY	%RECOVERY LIMITS
FREON 113	10	8.4	84%	34 - 128
1,1-DICHLOROETHENE	10	8.1	81%	63 - 133
trans-1,2-DICHLOROETHENE	10	8.3	83%	55 - 145
1,1-DICHLOROETHANE	10	9.2	92%	49 - 121
cis-1,2-DICHLOROETHENE	10	8.1	81%	66 - 168
1,1,1-TRICHLOROETHANE	10	8.5	85%	72 - 143
TRICHLOROETHENE	10	8.8	88%	63 - 147
TETRACHLOROETHENE	10	9.0	90%	60 - 133
CHLOROBENZENE	10	9.1	91%	70 - 148
1,3-DICHLOROBENZENE	10	9.1	91%	49 - 139
1,4-DICHLOROBENZENE	10	9.5	95%	70 - 133
1,2-DICHLOROBENZENE	10	9.5	95%	69 - 140

* Limits based on data generated by Anamatrix, Inc., August, 1992.

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

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

Workorder # : 9306344
Date Received : 06/24/93
Project ID : 204-6852-0703
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9306344- 1	MW-1	WATER	06/22/93	TPHgBTEX
9306344- 2	MW-2	WATER	06/22/93	TPHgBTEX
9306344- 3	MW-3	WATER	06/22/93	TPHgBTEX
9306344- 4	DUP	WATER	06/22/93	TPHgBTEX
9306344- 5	TB	WATER	06/22/93	TPHgBTEX

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

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

Workorder # : 9306344
Date Received : 06/24/93
Project ID : 204-6852-0703
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Cheryl Beerman
Department Supervisor

7/9/93
Date

Kamel A. Kamel 7/9/93
Chemist Date

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

Anamatrix W.O.: 9306344
Matrix : WATER
Date Sampled : 06/22/93

Project Number : 204-6852-0703
Date Released : 07/09/93

Reporting Limit	Sample I.D.# MW-1	Sample I.D.# MW-2	Sample I.D.# MW-3	Sample I.D.# DUP	Sample I.D.# TB	
(ug/L)	-01	-02	-03	-04	-05	
COMPOUNDS						
Benzene	0.5	ND	18	ND	29	ND
Toluene	0.5	ND	3.4	ND	4.8	ND
Ethylbenzene	0.5	ND	3.6	ND	4.2	ND
Total Xylenes	0.5	ND	5.2	ND	6.1	ND
TPH as Gasoline	50	ND	220	ND	320	ND
% Surrogate Recovery	109%	118%	108%	117%	108%	
Instrument I.D.	HP8	HP8	HP8	HP8	HP8	
Date Analyzed	07/01/93	07/06/93	07/01/93	07/06/93	07/01/93	
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.

Anamatrix 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 7/1/93
Analyst Date

Charles Baermer 7/1/93
Supervisor Date

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

Anamatrix W.O.: 9306344
Matrix : WATER
Date Sampled : N/A

Project Number : 204-6852-0703
Date Released : 07/09/93

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# BL0101E3 BLANK	Sample I.D.# BL0201E3 BLANK	Sample I.D.# BL0601E2 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		99%	104%	114%
Instrument I.D.		HP8	HP8	HP8
Date Analyzed		07/01/93	07/02/93	07/06/93
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.

Anamatrix 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 7/9/93
Analyst Date

Cheryl Baerman 7/9/93
Supervisor Date

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

Sample I.D. : 204-6852-0703 MW-1
 Matrix : WATER
 Date Sampled : 06/22/93
 Date Analyzed : 07/01/93

Anamatrix I.D. : 06344-01
 Analyst : KK
 Supervisor : B
 Date Released : 07/09/93
 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	500	0	310	62%	380	76%	20%	48-149
P-BFB				105%		100%		61-139

* Limits established by Anamatrix, 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 : 07/01/93

Anamatrix I.D. : ML0101E1
 Analyst :
 Supervisor : *JK*
 Date Released : 07/09/93
 Instrument I.D.: HP8

COMPOUND	SPIKE AMT. (ug/L)	REC LCS (ug/L)	%REC LCS	% REC LIMITS
GASOLINE	500	460	92%	67-127
p-BFB			111%	61-139

* Quality control established by Anamatrix, 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 : 07/02/93

Anamatrix I.D. : ML0201E3
 Analyst :
 Supervisor : *KK*
 Date Released : 07/08/93
 Instrument I.D.: HP8

COMPOUND	SPIKE AMT. (ug/L)	LCS (ug/L)	REC LCS	%REC LIMITS
Benzene	20.0	22.1	111%	52-133
Toluene	20.0	23.7	119%	57-136
Ethylbenzene	20.0	24.0	120%	56-139
TOTAL Xylenes	20.0	23.9	119%	61-139
P-BFB			120%	61-139

* Limits established by Anamatrix, 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 : 07/06/93

Anamatrix I.D. : ML0601E1
 Analyst :
 Supervisor : *as* KK
 Date Released : 07/09/93
 Instrument I.D.: HP8

COMPOUND	SPIKE AMT. (ug/L)	REC LCS (ug/L)	%REC LCS	% REC LIMITS
GASOLINE	500	410	82%	67-127
p-BFB			91%	61-139

* Quality control established by Anamatrix, Inc.