

September 21, 1987

Mr. Greg Zentner
San Francisco Bay Region
Regional Water Quality Control Board
1111 Jackson ST, Room 6040
Oakland, CA 94607

RE: Econo Station
44 Lewelling BLVD
San Lorenzo, CA

Dear Mr. Zentner:

Enclosed is a brief letter report prepared by Applied Geo-Systems of the August monitoring well sampling at the referenced location.

This site is being sampled monthly from July to September then quarterly through July, 1988.

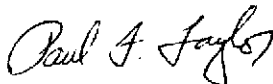
The levels of hydrocarbon constituents have continued to decrease since the initial analyses performed in June. Water levels have dropped by about a foot over this time frame as well.

September analyses will be forwarded to you when they are received.

If you have any questions, please contact me.

Sincerely,

Lodi Office: 900 S Cherokee LN
Lodi, CA 95240



Phone: 209/368-2731

Paul F. Taylor
Coordinator - Environmental Affairs

PFT/dg

Enclosure

cc: ~~Larry~~ Larry Seto - Alameda County Health Care Services

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SEP 22 1987
HAZARDOUS MATERIALS/
WASTE PROGRAM

September 10, 1987

Mr. Greg Zentner
San Francisco Bay Region
Regional Water Quality Control Board
1111 Jackson Street, Room 6040
Oakland, CA 94607

RE: Econo Station
44 Lewelling Boulevard
San Lorenzo, CA

Dear Mr. Zentner:

Enclosed is a brief letter report prepared by Applied GeoSystems presenting July water analyses of samples collected from three monitoring wells at the referenced location.

Levels of hydrocarbon constituents have remained essentially unchanged since the initial field work in June. Some decrease was noted with respect to Total Volatile Hydrocarbons.

Kayo will continue to monitor this location and provide August water analyses as it is made available.

Sincerely,

Lodi Office: 900 S Cherokee Lane
Lodi, CA 95240



Phone: 209/368-2731

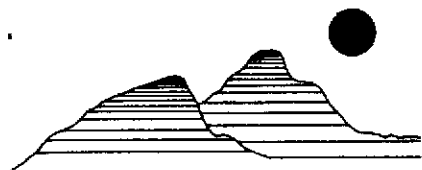
Paul Taylor
Coordinator - Environmental Affairs

PT/wml

✓cc: Larry Seto, Alameda County Environmental Health

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HAZARDOUS MATERIALS/
WASTE PROGRAM



COPY

RECEIVED

AUG 10 1987

Applied GeoSystems

43255 Mission Blvd. Suite B Fremont, CA 94539 (415) 651-1906

August 7, 1987
0807ptay
87044-4

Mr. Paul Taylor
Kayo Oil Company
900 South Cherokee Lane
Lodi, California 95240

Subject: Letter report #87044-4, regarding qualitative ground-water monitoring at Econo gasoline station, 44 Lewelling Boulevard, San Lorenzo, California.

Mr. Taylor:

This letter report summarizes the results of ground-water monitoring performed by Applied GeoSystems as required by the San Francisco Bay Region of the Regional Water Quality Control Board (RWQCB).

A geologist arrived at the above-referenced site at 10:30 A.M. on July 14, 1987, to sample wells MW-1, MW-2, and MW-3. The locations of the wells are shown on the Ground-Water Potentiometric Surface Map, Plate P-1, enclosed with this letter report. An initial sample was collected from each of the wells to check for floating product, odor, sheen, and emulsion. The samples were collected by gently lowering a teflon bailer halfway through the air/water interface and collecting a sample from the surface of the water in the well. The water in the wells showed no floating product. Slight product odor was detected in water from wells MW-1 and MW-3. No product odor was associated with the water sample retrieved from well MW-2. No product sheen or emulsion was observed in ground water at the site. Cumulative subjective analysis results are presented in Table 1, enclosed with this letter report.

After performing the subjective analyses, the wells were purged of approximately four well volumes of water and were allowed to recover to static water level. A static water-level measurement was then made using a Solinst water-level indicator. The water-level measurements were used to produce the ground-water

potentiometric surface contours shown on Plate P-1. The ground-water surface, at the time of the measurement, was sloped toward the west-southwest.

Samples for laboratory analyses were then collected with a laboratory-cleaned teflon bailer. A sample from each well was collected from below the static water level. The samples were transferred to laboratory-cleaned 40-ml glass Volatile Organic Analysis (VOA) vials. Hydrochloric acid was added to the vials to minimize bacterial degradation of the samples.

The samples were sealed with teflon-lined caps, stored on ice, and delivered to Applied GeoSystems' Certified Laboratory for analyses. A Chain of Custody form was initiated by the sampler and is enclosed with this report. The samples were analyzed for total volatile hydrocarbons and hydrocarbon constituents (BETX). The results of these analyses and previous analyses are presented in Table 2. The most recent analytical results are also presented on the laboratory Record of Analysis enclosed with this report.

TABLE 2
Laboratory Results For
Water Samples Collected From
Egono Gasoline Station - San Lorenzo, California

Date	I.D.	TVH	B	E	T	X	Det. Limit
MW-1:							
6/87	W-25-MW1	18.05	0.49	0.93	0.15	3.79	0.01
7/87	W-20-MW1	14.75	0.56	0.95	0.12	3.27	0.05
MW-2:							
6/87	W-25-MW2	4.870	0.113	0.046	0.014	0.058	0.002
7/87	W-20-MW2	2.207	0.103	0.034	0.025	0.048	0.001
MW-3:							
6/87	W-25-MW3	40.3	5.4	1.7	3.9	5.2	0.1
7/87	W-20-MW3	30.32	6.88	1.58	7.08	4.77	0.05
Note: All results in parts per million (ppm)							
Det. Limit: Detection Limit							
TVH: Total volatile hydrocarbons							
BETX: Benzene, ethylbenzene, toluene, and total xylenes							

The most recent analyses show similar concentrations of dissolved hydrocarbons to those from analyses of June 1987. The concentration of dissolved total volatile hydrocarbons has decrease since the June analyses. BETX concentrations in the most recent samples are comparable to concentrations of the June 1987 samples with the exception of a slight increase in benzene and toluene concentrations in water collected from MW-3 in July as compared to the June 1987 concentrations. Cumulative concentrations of dissolved hydrocarbons and hydrocarbon constituents (BETX) for water collected from monitoring wells MW-1 through MW-3 are presented graphically on Plates P-2 and P-3.

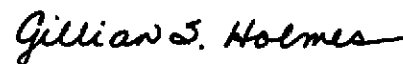
Because relatively high concentrations of dissolved hydrocarbon constituents are present in the ground water at the site, further work may be necessary to evaluate the extent of the contamination and the usefulness of the ground water in the vicinity of the site.

A copy of this report should be forwarded to Mr. Greg Zentner of the California Regional Water Quality Control Board, 1111 Jackson Street, Room 6040, Oakland, California 94607. If you have any questions regarding the material covered in this letter, please do not hesitate to call.

Sincerely,
Applied GeoSystems



Glenn R. Dembroff
Project Geologist



Gillian S. Holmes
C.E. #34812

Enclosures: Cumulative Subjective Analyses Table
Ground-Water Potentiometric Surface Map
Cumulative TVH Concentration Table
Cumulative BETX Concentration Table
Chain of Custody Record
Record Of Analysis (2)

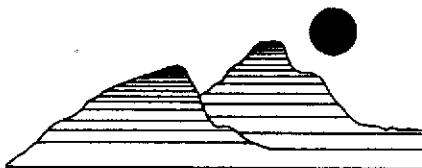
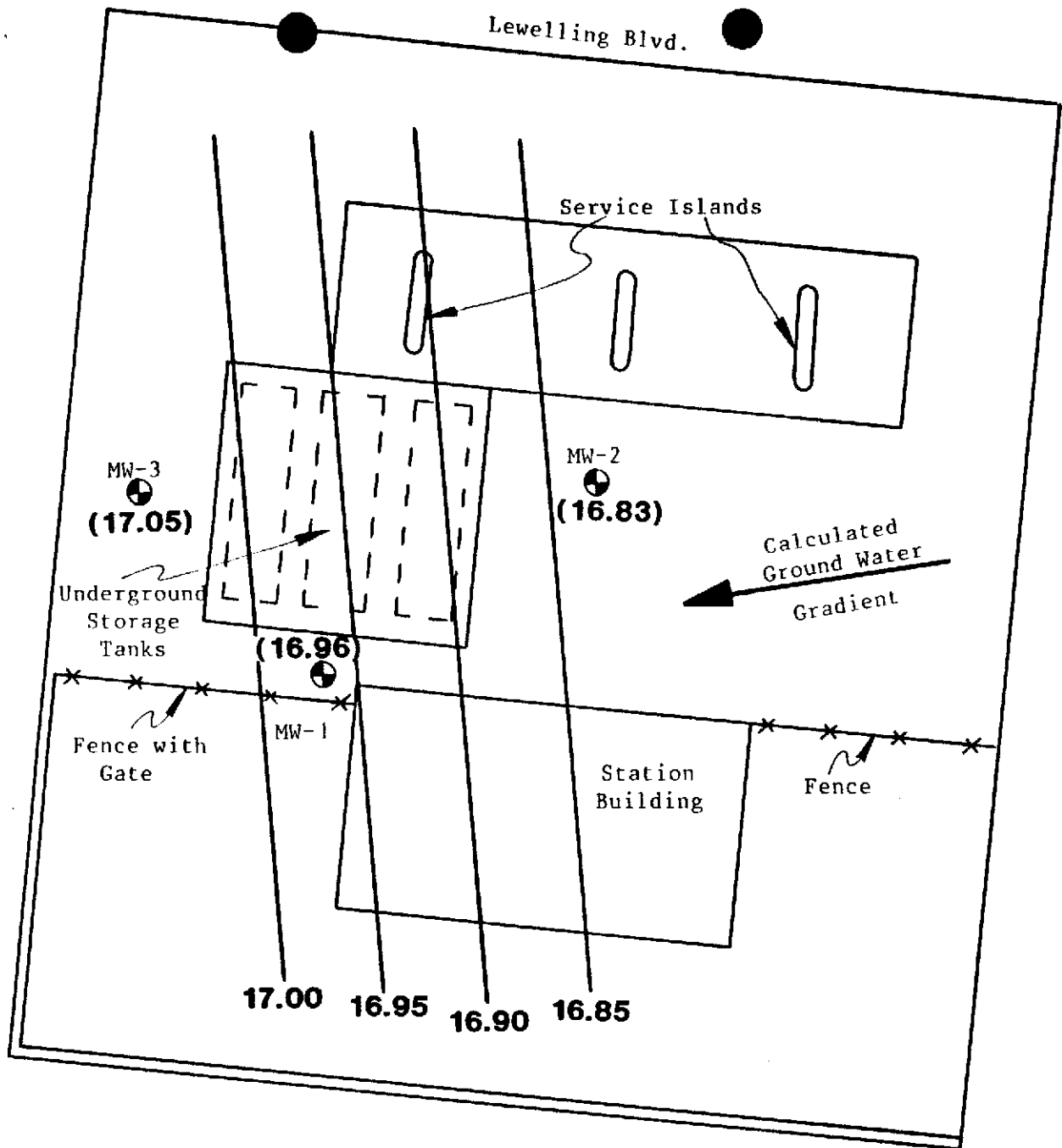


TABLE 1
Cumulative Subjective Analyses
Econo Gasoline Station
San Lorenzo, California

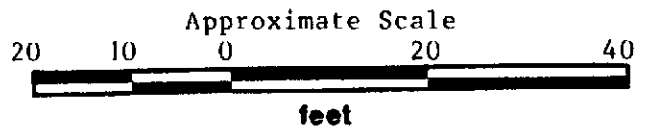
<u>Date</u>	<u>Well No.</u>	<u>Depth to Water</u>	<u>Floating Product</u>	<u>Odor</u>	<u>Sheen</u>	<u>Emulsion</u>
	MW-1:					
6/87		16.27'	NONE	MODERATE	SLIGHT	NONE
7/87		16.96'	NONE	SLIGHT	NONE	NONE
	MW-2:					
6/87		15.62'	NONE	MODERATE	STRONG	NONE
7/87		16.23'	NONE	NONE	NONE	NONE
	MW-3:					
6/87		15.89'	NONE	MODERATE	SLIGHT	NONE
7/87		16.48'	NONE	NONE	NONE	NONE



Source: Measured by Tape and Compass

⊕ = Monitoring Well Locations

16.00 — = Potentiometric Surface Depth measured in feet (below arbitrary datum)



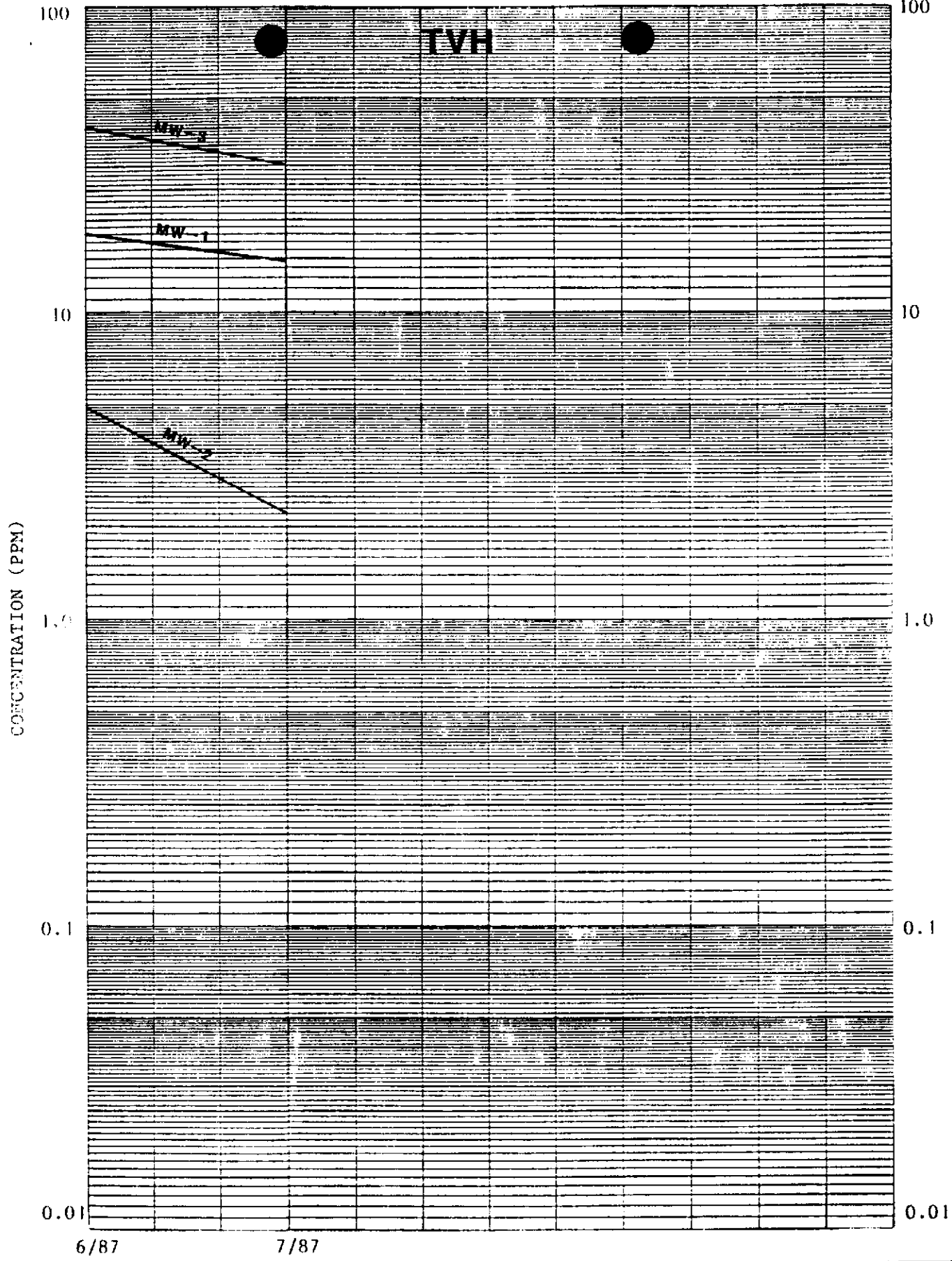
Applied GeoSystems
41255 Mission Blvd., Suite B Fremont, CA 94539 (415) 651-1906

GROUND WATER POTENTIOMETRIC SURFACE MAP
Econo Gasoline Station
San Lorenzo, California

PLATE

P-1

PROJECT NO. 87044-4



6/87 7/87



Applied GeoSystems
 4175 Mission Blvd. Suite B Fremont, CA 94538-1451-1906

CUMULATIVE TVH CONCENTRATION TABLE
 Econo Gasoline Station
 San Lorenzo, California

PLATE
 P-2

PROJECT NO. 87044-4

100

100

B E T X

10

10

CONCENTRATION (PPM)

1.0

1.0

0.1

0.1

0.01

0.01

6/87 7/87

6/87 7/87

6/87 7/87

6/87 7/87



41255 Alvarado Blvd., Suite B, Fremont, CA 94539 (415) 651-1806

CUMULATIVE BETX CONCENTRATION TABLE
Econo Gasoline Station
San Lorenzo, California

PLATE

P-3

PROJECT NO. 87044-4



Applied GeoSystems

43255 Mission Blvd. Suite B Fremont, CA 94539 (415) 651-1906

RECORD OF ANALYSIS

Date 7-30-87

Applied GeoSystems
43255 Mission Blvd.
Fremont, CA. 94539

Attention: Glenn R. Dembroff

Date Received: 7-14-87
Date Analyzed: 7-22-87

Laboratory# 8707W085

Procedure:

The water samples referenced on the attached Chain-of-Custody were analyzed for the presence and concentration of Benzene, Ethyl-Benzene, Toluene, and Xylenes (BETX) and for Total Volatile Hydrocarbons (TVH) by EPA method 602. The samples were concentrated on a Tekmar LSC-2 and ALS automatic sampler prior to injection into a 5890 Hewlett Packard gas chromatograph fitted with a Photo-Ionization detector (PID) and a Flame Ionization detector (FID). The limit of detection for these samples is 0.05 milligrams/liter (parts per million = ppm).

The results are presented in the table below:

<u>SAMPLE</u>	<u>SITE</u>	<u>BENZENE</u>	<u>ETHYL BENZENE</u>	<u>TOLUENE</u>	<u>TOTAL XYLENES</u>	<u>TVH</u>
W-20-MW1	87044-4	0.56	0.95	0.12	3.27	14.75
W-20-MW3	87044-4	6.88	1.58	7.08	4.77	30.32

Results in milligrams/liter (parts per million = ppm).

Tia Tran, Chemist

Applied GeoSystems is a State of California, Department of Health Services Certified Hazardous Waste Testing Laboratory (No. 153).



Applied GeoSystems

43255 Mission Blvd. Suite B Fremont, CA 94539 (415) 651-1906

RECORD OF ANALYSIS

Date 7-30-87

Applied GeoSystems
43255 Mission Blvd.
Fremont, CA. 94539

Attention: Glenn R. Dembroff

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The results are presented in the table below:

<u>SAMPLE</u>	<u>SITE</u>	<u>BENZENE</u>	<u>ETHYL BENZENE</u>	<u>TOLUENE</u>	<u>TOTAL XYLENES</u>	<u>TVH</u>
W-20-MW2	87044-4	0.103	0.034	0.025	0.048	2.207

Results in milligrams/liter (parts per million = ppm).

Tia Tran, Chemist

Applied GeoSystems is a State of California, Department of Health Services Certified Hazardous Waste Testing Laboratory (No. 153).