



**GeoStrategies Inc.**

2140 WEST WINTON AVENUE  
HAYWARD, CALIFORNIA 94545

(510) 352-4800

June 2, 1992

Hazardous Materials Specialist  
City of Pleasanton  
Pleasanton Fire Department  
Post Office Box 520  
Pleasanton, California 94566-0802

Reference: Shell Service Station  
5251 Hopyard Road  
Pleasanton, California  
WIC 204-6138-0907

Gentlemen:

As requested by Mr. Dan Kirk of Shell Oil Company, we are forwarding a copy of the June 2, 1992 Quarterly Report prepared for the above referenced location. The report documents the results of the ground-water sampling conducted during the second quarter of 1992.

If you have any questions, please call.

Sincerely,

A handwritten signature in cursive script that reads "Ellen Fostersmith".

Ellen Fostersmith  
Geologist

enclosure

cc: Mr. Dan Kirk, Shell Oil Company  
Mr. Tom Callaghan, Regional Water Quality Control Board

A faint circular stamp is visible on the right side of the page. Below it, the handwritten text "JM-5" is present. There are also some other faint, illegible markings.

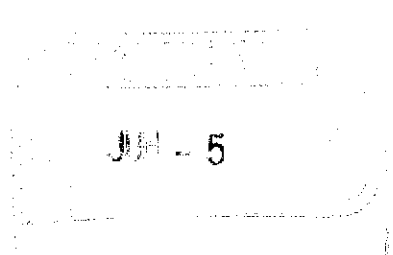


**GeoStrategies Inc.**

**QUARTERLY REPORT**

Shell Service Station  
5251 Hopyard Road  
Pleasanton, California  
WIC #204-6138-0907

763301-14



June 2, 1992



**GeoStrategies Inc.**

2140 WEST WINTON AVENUE  
HAYWARD, CALIFORNIA 94545

(510) 352-4800

June 2, 1992

Shell Oil Company  
P.O. Box 5278  
Concord, California 94520

Attn: Mr. Dan Kirk

Re: QUARTERLY REPORT  
Shell Service Station  
5251 Hopyard Road  
Pleasanton, California  
WIC# 204-6138-0907

Mr. Kirk:

This Quarterly Report has been prepared by GeoStrategies Inc. (GSI) and presents the results of the 1992 second quarter sampling for the above referenced site (Plate 1). Sampling data were furnished by the Shell Oil Company sampling contractor.

There are currently eight ground-water monitoring wells at the site; Wells S-1 through S-8 (Plate 2). There are also three vadose zone wells; Wells V-1 through V-3. These wells were installed between 1988 and 1989 by Pacific Environmental Group and GSI. The old underground storage tanks were replaced in January 1988.

**CURRENT QUARTER SAMPLING RESULTS**

Depth to water-level measurements were obtained in each monitoring well on April 27, 1992. Static ground-water levels were measured from the surveyed top of each well box and recorded to the nearest  $\pm 0.01$  foot. Water level elevations, referenced to Mean Sea Level (MSL) datum and the stabilized values of measured physical parameters are presented in the EMCON monitoring report (Appendix A). Water level data were used to construct a quarterly potentiometric map (Plate 2). Shallow ground-water flow is to the north-northwest at an approximate hydraulic gradient of 0.002.

Each well was checked for the presence of floating product. Floating product was not observed in the wells this quarter.

# GeoStrategies Inc.

Shell Oil Company  
June 2, 1992  
Page 2

Ground-water samples were collected on April 27, 1992. Samples were analyzed for Total Petroleum Hydrocarbons calculated as Gasoline (TPH-Gasoline) and as Diesel (TPH-Diesel) according to EPA Method 8015 (Modified) and for Benzene, Toluene, Ethylbenzene and Xylenes (BTEX) according to EPA Method 8020. The ground-water samples were analyzed by International Technology (IT) Analytical Services, a California State-certified laboratory located in San Jose, California. The laboratory analytical report and Chain-of-Custody form are presented in Appendix A. A chemical isoconcentration map for benzene is presented on Plate 3. Historical chemical analytical data are presented in Appendix A.

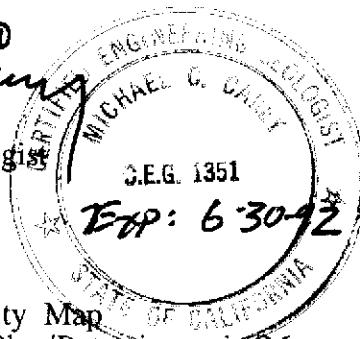
If you have any questions, please call.

GeoStrategies Inc. by,

*Ellen C. Fostersmith*

Ellen C. Fostersmith  
Geologist

*Michael Carey*  
Michael C. Carey  
Engineering Geologist  
C.E.G. 1351



ECF/MCC/shl

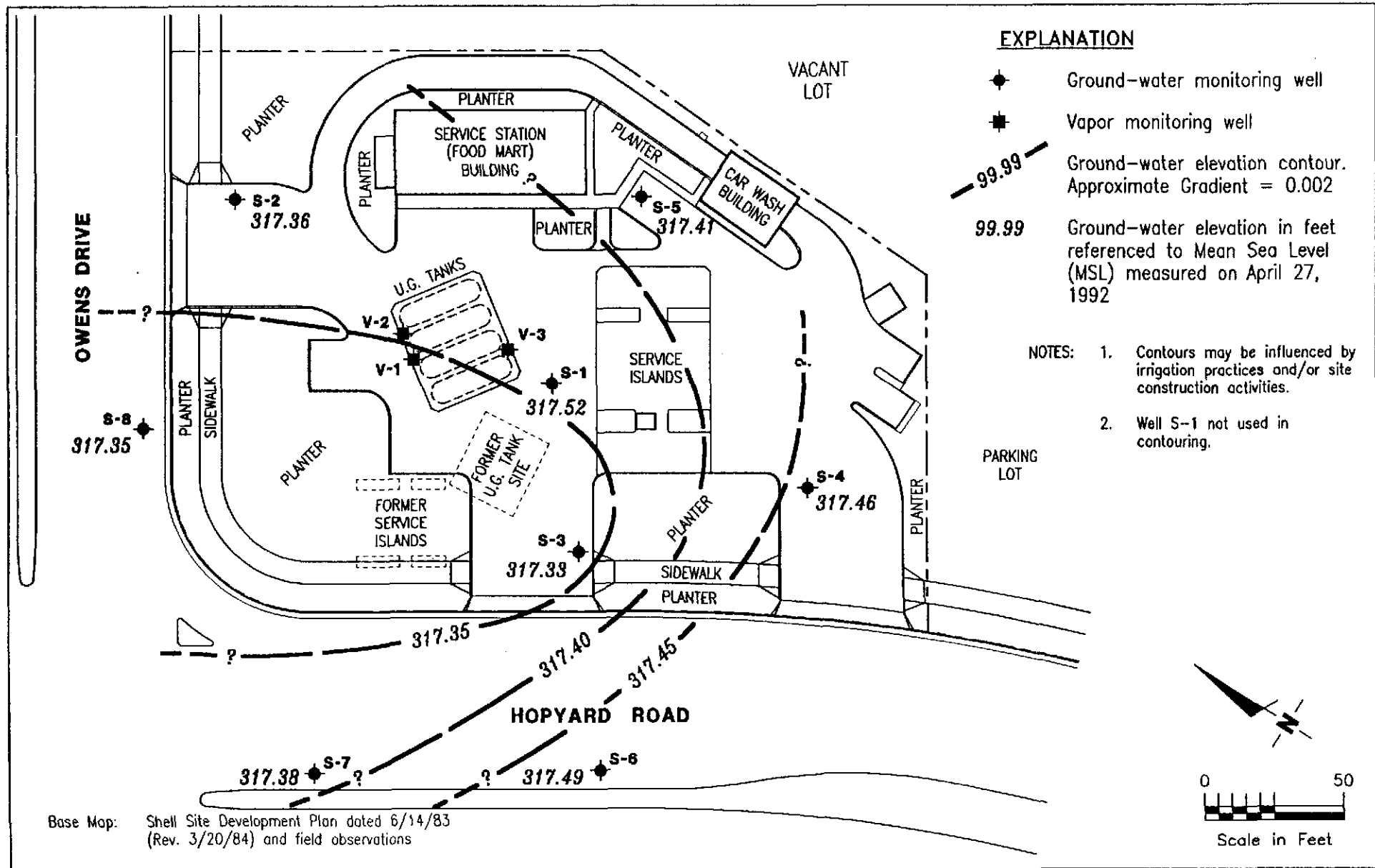
Plate 1. Vicinity Map  
Plate 2. Site Plan/Potentiometric Map  
Plate 3. Benzene Isoconcentration Map

Appendix A: EMCON Monitoring Report and Chain-of-Custody

QC Review: *JSR*

763301-14





GeoStrategies Inc.

**SITE PLAN/POTENTIOMETRIC MAP**

Shell Service Station  
5251 Hopyard Road  
Pleasanton, California

PLATE

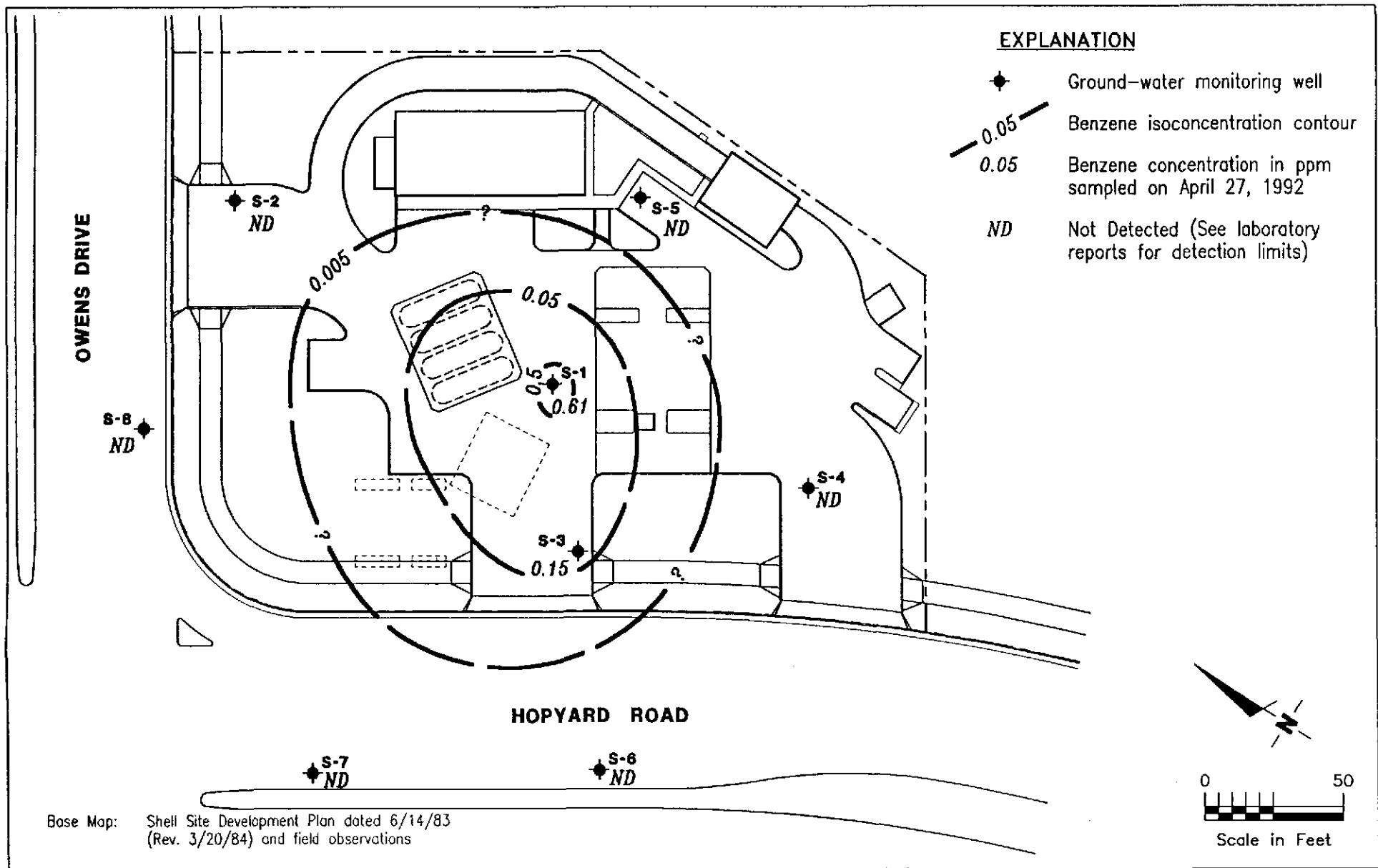
**2**

JOB NUMBER  
763301-14

REVIEWED BY  
ER

DATE  
6/92

REVISED DATE



GeoStrategies Inc.

**BENZENE ISOCONCENTRATION MAP**

Shell Service Station  
5251 Hopyard Road  
Pleasanton, California

PLATE

**3**

JOB NUMBER  
763301-14

REVIEWED BY  
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DATE  
6/92

REVISED DATE



**EMCON**  
ASSOCIATES

Consultants in Wastes  
Management and  
Environmental Control

● RECEIVED

MAY 28 1992

GeoStrategies Inc.

May 28, 1992  
Project: G67-27.01  
WIC#: 204-6138-0907

Ms. Ellen Fostersmith  
Geo Strategies Inc.  
2140 West Winton Avenue  
Hayward, California 94545

Re: Second quarter 1992 ground-water monitoring report, Shell Oil  
Company, 5251 Hopyard Road, Pleasanton, California

Dear Ms. Fostersmith:

This letter presents the results of the second quarter 1992 ground-water monitoring event for the Shell Oil Company (Shell) site located at 5251 Hopyard Road, Pleasanton, California. Second quarter monitoring was conducted on April 27, 1992. The site is monitored quarterly.

#### **GROUND-WATER LEVEL SURVEY**

A water-level survey preceded the purging and sampling of the monitoring wells. The wells included in the survey are identified in figure 1 (supplied by Geo Strategies Inc.). During the survey, wells S-1 through S-8 were measured for depth to water, floating product thickness, and total depth. Depth to water and floating product thickness were measured to the nearest 0.01 foot with an oil/water interface probe. No floating product was observed in any wells. Total depth was measured to the nearest 0.1 foot. Results of the second quarter water-level survey, and available data from four previous surveys, are summarized in table 1.

#### **SAMPLING AND ANALYSIS**

Ground-water samples were collected from wells S-1 through S-8 on April 27, 1992. Prior to sample collection, the wells were purged with polyvinyl chloride or Teflon® bailers. During the purging operation, ground water was monitored for pH, electrical conductivity, and temperature as a function of volume of water removed. Purging continued until these parameters were stable and a minimum of three casing volumes of ground water were removed. Field measurements from second quarter monitoring, and available measurements from four previous monitoring events, are summarized in table 1. Purge water from the monitoring wells was contained in 55-gallon drums. The drums were identified with Shell-approved labels and secured for on-site storage.

G672701B.DOC





Ground-water samples were collected with a Teflon bailer, labeled, placed on ice, and transported to a Shell-approved and state-certified analytical laboratory for analysis. Shell chain-of-custody documents accompanied all samples to the laboratory.

All equipment that was placed down a well or that came in contact with ground water was steam cleaned with deionized water prior to use at each well.

Quality control samples for second quarter monitoring included a trip blank (TB) and a duplicate well sample (SD-3) collected at well S-3. All water samples collected during second quarter monitoring were analyzed for total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and total petroleum hydrocarbons as diesel (TPH-d).

### **ANALYTICAL RESULTS**

Analytical results for the second quarter 1992 monitoring event, and available results from four previous monitoring events, are summarized in table 2. The original certified analytical report and copy of the final chain-of-custody document are attached.

If you have any questions, please call.

Very truly yours,

EMCON Associates



David Larsen  
Environmental Sampling Coordinator



Orrin Childs  
Environmental Sampling Supervisor

DL/OC:dl

Attachments: Table 1 - Monitoring well field measurement data  
Table 2 - Summary of analytical results  
Figure 1 - Monitoring well locations  
Certified analytical report  
Chain-of-custody document

Table 1  
Monitoring Well Field Measurement Data  
Second Quarter 1992

Shell Station: 5251 Hopyard Road  
Pleasanton, California  
WIC #: 204-6138-0907

Date: 05/28/92  
Project Number: 087-27.01

Well Designation	Water Level Field Date	TOB Elevation (ft-MSL)	Depth to Water (feet)	Ground-water Elevation (ft-MSL)	Total Well Depth (feet)	Floating Product Thickness (feet)	Water Sample Field Date	pH (std. units)	Electrical Conductivity (micromhos/cm)	Temperature (degrees F)	Turbidity (NTU)
S-1	04/16/91	326.73	9.18	317.55	28.5	ND	04/16/91	7.26	2820	67.9	NR
S-1	07/24/91	326.73	10.39	316.34	28.4	ND	07/24/91	7.08	3030	67.9	NR
S-1	10/18/91	326.73	8.85	317.88	28.5	ND	10/18/91	7.04	2270	70.4	NR
S-1	01/23/92	326.73	9.42	317.31	28.5	ND	01/23/92	7.48	3320	52.1	>200
S-1	04/27/92	326.73	9.21	317.52	30.0	ND	04/27/92	7.49	3080	68.2	>1000
S-2	04/16/91	326.59	9.08	317.53	24.6	ND	04/16/91	7.19	3920	65.0	NR
S-2	07/24/91	326.59	9.10	317.49	24.6	ND	07/24/91	7.31	4090	64.2	NR
S-2	10/18/91	326.59	8.83	317.76	24.6	ND	10/18/91	7.43	3280	66.4	NR
S-2	01/23/92	326.59	9.49	317.10	24.5	ND	01/23/92	7.21	4530	53.8	>200
S-2	04/27/92	326.59	9.23	317.36	24.6	ND	04/27/92	7.30	4500	68.4	610
S-3	04/16/91	327.38	8.95	318.43	24.9	ND	04/16/91	7.09	3070	65.4	NR
S-3	07/24/91	327.38	9.92	317.46	24.8	ND	07/24/91	7.11	3150	66.5	NR
S-3	10/18/91	327.38	9.64	317.74	24.9	ND	10/18/91	7.20	2520	68.2	NR
S-3	01/23/92	327.38	9.86	317.52	25.0	ND	01/23/92	7.15	3370	51.8	>200
S-3	04/27/92	327.38	10.05	317.33	24.8	ND	04/27/92	7.25	2870	68.0	>1000
S-4	04/16/91	327.38	8.93	318.45	24.4	ND	04/16/91	7.56	1392	64.2	NR
S-4	07/24/91	327.38	9.10	318.28	24.4	ND	07/24/91	7.52	1400	67.4	NR
S-4	10/18/91	327.38	8.82	318.56	24.5	ND	10/18/91	7.86	1228	71.8	NR
S-4	01/23/92	327.38	10.05	317.33	24.5	ND	01/23/92	7.56	1847	53.1	>200
S-4	04/27/92	327.38	9.92	317.46	24.5	ND	04/27/92	7.64	1927	70.0	>1000

TOB = top of well box

ft-MSL = elevation in feet, relative to mean sea level

std. units = standard pH units

micromhos/cm = micromhos per centimeter

degrees F = degrees Fahrenheit

NTU = nephelometric turbidity units

ND = None detected

NR = Not reported; data not available

Table 1  
Monitoring Well Field Measurement Data  
Second Quarter 1992

Shell Station: 5251 Hopyard Road  
Pleasanton, California  
WIC #: 204-6138-0907

Date: 05/28/92  
Project Number: G67-27.01

Well Designation	Water Level Field Date	TOB Elevation (ft-MSL)	Depth to Water (feet)	Ground-water Elevation (ft-MSL)	Total Well Depth (feet)	Floating Product Thickness (feet)	Water Sample Field Date	pH (std. units)	Electrical Conductivity (micromhos/cm)	Temperature (degrees F)	Turbidity (NTU)
S-5	04/16/91	327.76	10.00	317.76	24.7						
S-5	07/24/91	327.78	10.15	317.61	24.8	ND	04/16/91	7.15	1400	62.5	NR
S-5	10/18/91	327.78	10.00	317.78	24.7	ND	07/24/91	7.95	1455	64.4	NR
S-5	01/23/92	327.78	10.63	317.13	24.5	ND	10/18/91	7.66	1179	65.5	NR
S-5	04/27/92	327.76	10.35	317.41	24.7	ND	01/23/92	7.12	1584	55.8	>200
							04/27/92	7.49	1395	68.7	>1000
S-6	04/16/91	328.58	9.05	317.51	25.5	ND					
S-6	07/24/91	328.58	8.93	317.63	25.4	ND	04/16/91	7.22	1128	66.3	NR
S-6	10/18/91	328.58	8.84	317.72	26.1	ND	07/24/91	7.85	1172	68.4	NR
S-6	01/23/92	328.58	9.43	317.13	26.0	ND	10/18/91	7.62	941	70.3	NR
S-6	04/27/92	328.58	8.07	317.49	26.1	ND	01/23/92	7.78	1690	58.6	>200
							04/27/92	7.76	895	70.1	>1000
S-7	04/16/91	326.49	9.09	317.40	25.3	ND					
S-7	07/24/91	326.49	9.14	317.35	25.4	ND	04/16/91	6.92	5500	67.3	NR
S-7	10/18/91	326.49	8.92	317.57	25.4	ND	07/24/91	7.38	2830	68.9	NR
S-7	01/23/92	326.49	9.26	317.23	25.5	ND	10/18/91	7.26	2870	70.5	NR
S-7	04/27/92	326.49	9.11	317.38	25.4	ND	01/23/92	7.05	9400	52.0	>200
							04/27/92	7.23	6900	72.8	>1000
S-8	04/16/91	325.32	7.87	317.45	25.3	ND					
S-8	07/24/91	325.32	7.87	317.45	25.2	ND	04/16/91	6.85	5700	65.4	NR
S-8	10/18/91	325.32	7.62	317.70	25.3	ND	07/24/91	7.17	6110	68.2	NR
S-8	01/23/92	325.32	8.23	317.09	25.0	ND	10/18/91	7.40	4880	68.0	NR
S-8	04/27/92	325.32	7.97	317.35	25.3	ND	01/23/92	7.06	6810	55.3	>200
							04/27/92	7.04	5940	71.2	>1000

TOB = top of well box  
ft-MSL = elevation in feet, relative to mean sea level  
std. units = standard pH units  
micromhos/cm = micromhos per centimeter  
degrees F = degrees Fahrenheit  
NTU = nephelometric turbidity units  
ND = None detected  
NR = Not reported; data not available

Table 2  
Summary of Analytical Results  
Second Quarter 1992  
milligrams per liter (mg/l) or parts per million (ppm)

Shell Station: 5251 Hopyard Road  
Pleasanton, California  
WIC #: 204-6138-0907

Date: 05/28/92  
Project Number: G87-27.01

Sample Designation	Water Sample Field Date	TPH-g (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethyl-benzene (mg/l)	Total Xylenes (mg/l)	TPH-d (mg/l)
S-1	04/16/91	6.7	2.6	0.014	0.58	0.25	2.6*
S-1	07/24/91	8.8	2.3	0.03	0.64	0.22	3.8*
S-1	10/18/91	12.	3.6	0.38	0.99	0.58	3.3*
S-1	01/23/92	1.6	0.45	0.003	0.12	0.017	0.89*
S-1	04/27/92	1.1+	0.61	<0.01	0.11	0.01	0.50*
S-2	04/16/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
S-2	07/24/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
S-2	10/18/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
S-2	01/23/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
S-2	04/27/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
S-3	04/16/91	0.19	0.012	0.0008	0.0062	0.0015	0.14*
S-3	07/24/91	1.7	0.45	0.0044	0.15	0.0029	1.2*
S-3	10/18/91	1.9	0.37	0.0031	0.12	0.22	0.5
S-3	01/23/92	2.0	0.58	0.003	0.20	<0.002	0.65*
S-3	04/27/92	1.1+	0.15	<0.003	0.076	0.014	0.23*
SD-3	04/27/92	1.0+	0.19	<0.003	0.094	0.018	0.23*
S-4	04/16/91	<0.05	0.0007	<0.0005	<0.0005	<0.0005	<0.05
S-4	07/24/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
S-4	10/18/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
S-4	01/23/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
S-4	04/27/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05

TPH-g = total petroleum hydrocarbons as gasoline

TPH-d = total petroleum hydrocarbons as diesel

\* = Compounds detected and calculated as diesel appear to be the less volatile constituents of gasoline

+ = The chromatographic pattern of the purgeable hydrocarbons found in the sample is similar to the pattern of weathered gasoline

Table 2  
 Summary of Analytical Results  
 Second Quarter 1992  
 milligrams per liter (mg/l) or parts per million (ppm)

Shell Station: 5251 Hopyard Road  
 Pleasanton, California  
 WIC #: 204-6138-0907

Date: 05/28/92  
 Project Number: 087-27.01

Sample Designation	Water Sample Field Date	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH-d
		(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
S-5	04/16/91	<0.05	<0.0005	<0.0005	<0.0005	0.0008	<0.05
S-5	07/24/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
S-5	10/18/91	0.12 <sup>^</sup>	0.043	<0.0005	0.001	0.0007	<0.05
S-5	01/23/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
S-5	04/27/92	<0.05	<0.0005	<0.0005	<0.0005	0.0006	<0.05
S-6	04/16/91	<0.05	<0.0005	<0.0005	<0.0005	0.0006	<0.05
S-6	07/24/91	<0.05	<0.0005	<0.0005	<0.0005	0.0005	<0.05
S-6	10/18/91	<0.05	<0.0005	<0.0005	<0.0005	0.0005	<0.05
S-6	01/23/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
S-6	04/27/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
S-7	04/16/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
S-7	07/24/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
S-7	10/18/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	0.14&
S-7	01/23/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
S-7	04/27/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
S-8	04/16/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
S-8	07/24/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
S-8	10/18/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	0.36&
S-8	01/23/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	0.09
S-8	04/27/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05

TPH-g = total petroleum hydrocarbons as gasoline

TPH-d = total petroleum hydrocarbons as diesel

<sup>^</sup> = Compounds detected and calculated as gasoline are not characteristic of the standard gasoline chromatographic pattern

& = Compounds detected and calculated as diesel are not characteristic of the standard diesel chromatographic pattern

Table 2  
 Summary of Analytical Results  
 Second Quarter 1992  
 milligrams per liter (mg/L) or parts per million (ppm)

Shell Station: 5251 Hopyard Road  
 Pleasanton, California  
 WIC #: 204-6138-0907

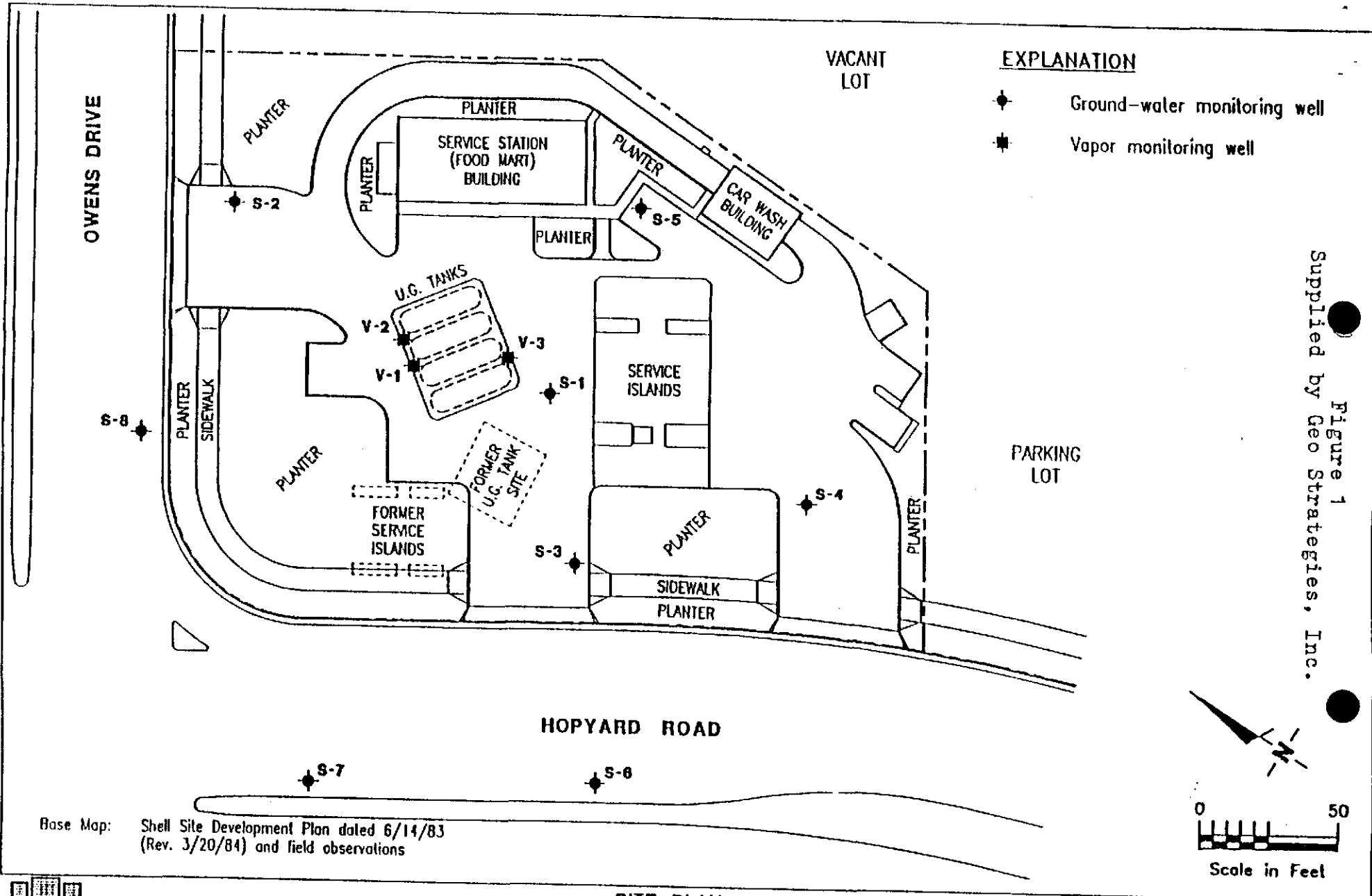
Date: 05/28/92  
 Project Number: 067-27.01

Sample Desig- nation	Water Sample Field Date	TPH-g	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPH-d
		(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
TB	01/25/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05
TB	01/23/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	0.60#
TB	04/27/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.05

TPH-g = total petroleum hydrocarbons as gasoline

TPH-d = total petroleum hydrocarbons as diesel

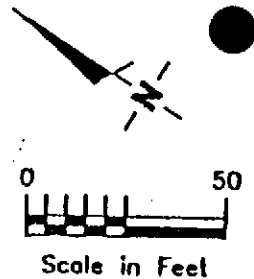
# = Positive result for diesel in the TB was confirmed with the laboratory; no explanation was given by the laboratory



**EXPLANATION**

- ◆ Ground-water monitoring well
- ◆ Vapor monitoring well

Figure 1  
Supplied by Geo Strategies, Inc.



Base Map: Shell Site Development Plan dated 6/14/83  
(Rev. 3/20/84) and field observations



GeoStrategies Inc.

**SITE PLAN**  
Shell Service Station  
5251 Hopyard Road  
Pleasanton, California

JOB NUMBER  
763301-11

REVIEWED BY  
CFS

DATE  
9/91

REVISED DATE



INTERNATIONAL  
TECHNOLOGY  
CORPORATION

# ANALYTICAL SERVICES

## CERTIFICATE OF ANALYSIS

EMCON ASSOCIATES  
1938 JUNCTION AVE  
SAN JOSE CA 95131  
DAVID LARSEN

Date: 05/13/92

Work Order: C2-04-243

Project/P.O.#: 204-6138-0907  
SHELL NORTH

This is the Certificate of Analysis for the following samples:

Client Work ID: 5251 Hopyard Road, Pleasanton  
Date Received: 04/30/92 275000  
Number of Samples: 13  
Sample Type: LIQUID

Shell Site: 5251 Hopyard Road, Pleasanton  
WIC No.: 204-6138-0907  
Shell Engineer: Kurt Miller  
Shell Consultant: EMCON Associates / David Larsen  
Work Description: Quarterly Monitoring  
Class Type: 5461

Samples were labeled as follows:

<u>SAMPLE IDENTIFICATION</u>	<u>LABORATORY #</u>
S-1	C2-04-243-01
S-2	C2-04-243-02
S-3	C2-04-243-03
SD-3	C2-04-243-04
S-4	C2-04-243-05
S-5	C2-04-243-06
S-6	C2-04-243-07

Reviewed and Approved:

Marla Miller  
Marla Miller  
Project Manager

EMCON ASSOCIATES

MAY 14 1992

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American Council of Independent Laboratories  
International Association of Environmental Testing Laboratories  
American Association for Laboratory Accreditation



Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

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Samples, continued from above:

<u>SAMPLE IDENTIFICATION</u>	<u>LABORATORY #</u>
S-7	C2-04-243-08
S-8	C2-04-243-09
TRIP BLANK	C2-04-243-10
MATRIX SPIKE	C2-04-243-11
MATRIX SPIKE DUPLICATE	C2-04-243-12
METHOD BLANK	C2-04-243-13

Company: ENCOM ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: HIGH BOILING FUEL HCs

SAMPLE ID: S-1

LAB SAMPLE ID: C204243-01D

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/08/92

EXTRACTION DATE: 05/01/92

	Results in	MG/L:	Detection Limit
TPHC AS DIESEL		0.50**	0.05

Surrogate	% Recovery	Limit
BENZO(A)PYRENE	92	50 - 150

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

## TEST NAME: VOLATILE FUEL HYDROCARBONS

SAMPLE ID: S-1

LAB SAMPLE ID: C204243-01A

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/04/92

EXTRACTION DATE:

	Results in	MG/L:	Detection Limit
TPHC AS UNLEADED GASOLINE		1.1***	0.05

Surrogate	% Recovery
A,A,A-TRIFLUOROTOLUENE	105

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
'NA' indicates not applicable  
'\*' Surrogate recovery is outside QC limit.  
'D' Surrogate is diluted out.  
'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: BTEX BY METHOD 8020

SAMPLE ID: S-1

LAB SAMPLE ID: C204243-01A

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/05/92

CONFIRMATION DATE:

	Results in	MG/L:	Detection Limit
BENZENE		0.61	0.01
TOLUENE		ND	0.01
ETHYLBENZENE		0.11	0.01
XYLENES (TOTAL)		0.01	0.01

Surrogate	% Recovery	Limits
A,A,A-TRIFLUOROTOLUENE	98	75 - 125
1-CHLORO-2-FLUOROBENZENE		-

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: HIGH BOILING FUEL HCs

SAMPLE ID: S-2

LAB SAMPLE ID: C204243-02D

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/08/92

EXTRACTION DATE: 05/01/92

	Results in	MG/L:	Detection Limit
TPHC AS DIESEL		ND	0.05

	Surrogate	% Recovery	Limit
BENZO(A)PYRENE		75	50 - 150

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: VOLATILE FUEL HYDROCARBONS

SAMPLE ID: S-2

LAB SAMPLE ID: C204243-02A

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/04/92

EXTRACTION DATE:

	Results in	MG/L:	Detection Limit
TPHC AS UNLEADED GASOLINE		ND	0.05

Surrogate	% Recovery
A,A,A-TRIFLUOROTOLUENE	103

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: ENCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: BTEX BY METHOD 8020

SAMPLE ID: S-2

LAB SAMPLE ID: C204243-02A

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/04/92

CONFIRMATION DATE:

	Results in	MG/L:	Detection Limit
BENZENE		ND	0.0005
TOLUENE		ND	0.0005
ETHYLBENZENE		ND	0.0005
XYLENES (TOTAL)		ND	0.0005

Surrogate	% Recovery	Limits
A,A,A-TRIFLUOROTOLUENE	95	75 - 125
1-CHLORO-2-FLUOROBENZENE		-

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: ENCOM ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: HIGH BOILING FUEL HCs

SAMPLE ID: S-3

LAB SAMPLE ID: C204243-03D

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/08/92

EXTRACTION DATE: 05/01/92

	Results in	MG/L:	Detection Limit
TPHC AS DIESEL		0.23**	0.05

Surrogate	% Recovery	Limit
BENZO(A)PYRENE	92	50 - 150

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.



Company: EMCOR ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: VOLATILE FUEL HYDROCARBONS

SAMPLE ID: S-3

LAB SAMPLE ID: C204243-03A

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/05/92

EXTRACTION DATE:

	Results in	MG/L:	Detection Limit
TPHC AS UNLEADED GASOLINE		1.1***	0.05

Surrogate	% Recovery
A,A,A-TRIFLUOROTOLUENE	102

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: BTEX BY METHOD 8020

SAMPLE ID: S-3

LAB SAMPLE ID: C204243-03A

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/05/92

CONFIRMATION DATE:

	Results in	MG/L:	Detection Limit
BENZENE		0.15	0.003
TOLUENE		ND	0.003
ETHYLBENZENE		0.076	0.003
XYLENES (TOTAL)		0.014	0.003

	Surrogate	% Recovery	Limits	
A,A,A-TRIFLUOROTOLUENE		97	75	- 125
1-CHLORO-2-FLUOROBENZENE				-

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
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 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

## TEST NAME: HIGH BOILING FUEL HCs

SAMPLE ID: SD-3

LAB SAMPLE ID: C204243-04D

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/08/92

EXTRACTION DATE: 05/01/92

	Results in	MG/L:	Detection Limit
TPHC AS DIESEL		0.23**	0.05

	Surrogate	% Recovery	Limit
BENZO(A)PYRENE		91	50 - 150

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

## TEST NAME: VOLATILE FUEL HYDROCARBONS

SAMPLE ID: SD-3

LAB SAMPLE ID: C204243-04A

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/05/92

EXTRACTION DATE:

	Results in	MG/L:	Detection Limit
TPHC AS UNLEADED GASOLINE		1.0***	0.05

Surrogate	% Recovery
A,A,A-TRIFLUOROTOLUENE	103

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
'NA' indicates not applicable  
'\*' Surrogate recovery is outside QC limit.  
'D' Surrogate is diluted out.  
'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: ENCOM ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: BTEX BY METHOD 8020

SAMPLE ID: SD-3

LAB SAMPLE ID: C204243-04A

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/06/92

CONFIRMATION DATE:

	Results in	MG/L:	Detection Limit
BENZENE		0.19	0.003
TOLUENE		ND	0.003
ETHYLBENZENE		0.094	0.003
XYLENES (TOTAL)		0.018	0.003

	Surrogate	% Recovery	Limits	
A,A,A-TRIFLUOROTOLUENE		102	75	- 125
1-CHLORO-2-FLUOROBENZENE				-

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' surrogate recovery is outside QC limit.  
 'D' surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: ENCOM ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: HIGH BOILING FUEL HC:

SAMPLE ID: S-4

LAB SAMPLE ID: C204243-05D

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/08/92

EXTRACTION DATE: 05/01/92

	Results in	MG/L:	Detection Limit
TPHC AS DIESEL		ND	0.05

	Surrogate	% Recovery	Limit
BENZO(A)PYRENE		83	50 - 150

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*\*' surrogate recovery is outside QC limit.  
 'D' surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EDICOM ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: VOLATILE FUEL HYDROCARBONS

SAMPLE ID: S-4

LAB SAMPLE ID: C204243-05A

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/05/92

EXTRACTION DATE:

	Results in	MG/L:	Detection Limit
TPHC AS UNLEADED GASOLINE		ND	0.05

Surrogate	% Recovery
A,A,A-TRIFLUOROTOLUENE	106

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: BTEX BY METHOD 8020

SAMPLE ID: 8-4

LAB SAMPLE ID: C204243-05A

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/06/92

CONFIRMATION DATE:

	Results in	MG/L:	Detection Limit
BENZENE		ND	0.0005
TOLUENE		ND	0.0005
ETHYLBENZENE		ND	0.0005
XYLENES (TOTAL)		ND	0.0005

	Surrogate	% Recovery	Limits
A,A,A-TRIFLUOROTOLUENE		99	75 - 125
1-CHLORO-2-FLUOROBENZENE			-

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
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 '\*' surrogate recovery is outside QC limit.  
 'D' surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.



Company: ENCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: HIGH BOILING FUEL HCs

SAMPLE ID: S-5

LAB SAMPLE ID: C204243-06D

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/08/92

EXTRACTION DATE: 05/01/92

	Results in	MG/L:	Detection Limit
TPHC AS DIESEL		ND	0.05

Surrogate	% Recovery	Limit
BENZO(A)PYRENE	87	50 - 150

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCOR ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 94500

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: VOLATILE FUEL HYDROCARBONS

SAMPLE ID: S-5

LAB SAMPLE ID: C204243-06A

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/05/92

EXTRACTION DATE:

	Results in	MG/L:	Detection Limit
TPHC AS UNLEADED GASOLINE		ND	0.05

Surrogate	% Recovery
A,A,A-TRIFLUOROTOLUENE	108

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: ENCOM ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: BTEX BY METHOD 8020

SAMPLE ID: S-5

LAB SAMPLE ID: C204243-06A

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/05/92

CONFIRMATION DATE:

	Results in	MG/L:	Detection Limit
BENZENE		ND	0.0005
TOLUENE		ND	0.0005
ETHYLBENZENE		ND	0.0005
XYLENES (TOTAL)		0.0006	0.0005

	Surrogate	% Recovery	Limits	
A,A,A-TRIFLUOROTOLUENE		103	75	- 125
1-CHLORO-2-FLUOROBENZENE				-

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: HIGH BOILING FUEL HCs

SAMPLE ID: S-6

LAB SAMPLE ID: C204243-07D

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/08/92

EXTRACTION DATE: 05/01/92

	Results in	MG/L:	Detection Limit
TPHC AS DIESEL		ND	0.05

	Surrogate	% Recovery	Limit
BENZO(A)PYRENE		91	50 - 150

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: VOLATILE FUEL HYDROCARBONS

SAMPLE ID: S-6

LAB SAMPLE ID: C204243-07A

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/05/92

EXTRACTION DATE:

	Results in	MG/L:	Detection Limit
TPHC AS UNLEADED GASOLINE		ND	0.05

Surrogate	% Recovery
A,A,A-TRIFLUOROTOLUENE	107

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: ENCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

Work Order: C2-04-243

TEST NAME: BTEX BY METHOD 8020

SAMPLE ID: S-6

LAB SAMPLE ID: C204243-07A

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/05/92

CONFIRMATION DATE:

	Results in	MG/L:	Detection Limit
BENZENE		ND	0.0005
TOLUENE		ND	0.0005
ETHYLBENZENE		ND	0.0005
XYLENES (TOTAL)		ND	0.0005

Surrogate	% Recovery	Limits
A,A,A-TRIFLUOROTOLUENE	102	75 - 125
1-CHLORO-2-FLUOROBENZENE		-

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' surrogate recovery is outside QC limit.  
 'D' surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: HIGH BOILING FUEL HCs

SAMPLE ID: 8-7

LAB SAMPLE ID: C204243-08D

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/08/92

EXTRACTION DATE: 05/01/92

	Results in	MG/L:	Detection Limit
TPHC AS DIESEL		ND	0.05

	Surrogate	% Recovery	Limit
BENZO(A)PYRENE		88	50 - 150

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: ENCOM ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: VOLATILE FUEL HYDROCARBONS

SAMPLE ID: S-7

LAB SAMPLE ID: C204243-08A

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/05/92

EXTRACTION DATE:

	Results in	MG/L:	Detection Limit
TPHC AS UNLEADED GASOLINE		ND	0.05

Surrogate	% Recovery
A,A,A-TRIFLUOROTOLUENE	103

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.



Company: ENCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: BTEX BY METHOD 8020

SAMPLE ID: S-7

LAB SAMPLE ID: C204243-08A

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/05/92

CONFIRMATION DATE:

	Results in	MG/L:	Detection Limit
BENZENE		ND	0.0005
TOLUENE		ND	0.0005
ETHYLBENZENE		ND	0.0005
XYLENES (TOTAL)		ND	0.0005

Surrogate	% Recovery	Limits
A,A,A-TRIFLUOROTOLUENE	98	75 - 125
1-CHLORO-2-FLUOROBENZENE		-

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: ENCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: HIGH BOILING FUEL HCs

SAMPLE ID: S-8

LAB SAMPLE ID: C204243-09D

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/08/92

EXTRACTION DATE: 05/01/92

	Results in	MG/L:	Detection Limit
TPHC AS DIESEL		ND	0.05

Surrogate	% Recovery	Limit
BENZO(A)PYRENE	79	50 - 150

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' surrogate recovery is outside QC limit.  
 'D' surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: VOLATILE FUEL HYDROCARBONS

SAMPLE ID: 8-8

LAB SAMPLE ID: C204243-09A

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/05/92

EXTRACTION DATE:

	Results in	MG/L:	Detection Limit
TPHC AS UNLEADED GASOLINE		ND	0.05

Surrogate	% Recovery
A,A,A-TRIFLUOROTOLUENE	104

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: BTEX BY METHOD 8020

SAMPLE ID: 8-8

LAB SAMPLE ID: C204243-09A

SAMPLE DATE: 04/27/92

ANALYSIS DATE: 05/05/92

CONFIRMATION DATE:

	Results in	MG/L:	Detection Limit
BENZENE		ND	0.0005
TOLUENE		ND	0.0005
ETHYLBENZENE		ND	0.0005
XYLENES (TOTAL)		ND	0.0005

	Surrogate	% Recovery	Limits
A,A,A-TRIFLUOROTOLUENE		98	75 - 125
1-CHLORO-2-FLUOROBENZENE			-

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*\*' surrogate recovery is outside QC limit.  
 'D' surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: HIGH BOILING FUEL HCs

SAMPLE ID: TRIP BLANK

LAB SAMPLE ID: C204243-10C

SAMPLE DATE: not spec

ANALYSIS DATE: 05/08/92

EXTRACTION DATE: 05/01/92

	Results in	MG/L:	Detection Limit
TPHC AS DIESEL		ND	0.05

Surrogate	% Recovery	Limit
BENZO(A)PYRENE	90	50 - 150

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: VOLATILE FUEL HYDROCARBONS

SAMPLE ID: TRIP BLANK  
LAB SAMPLE ID: C204243-10A  
SAMPLE DATE: not spec  
ANALYSIS DATE: 05/05/92  
EXTRACTION DATE:

	Results in	MG/L:	Detection Limit
TPHC AS UNLEADED GASOLINE		ND	0.05

Surrogate	% Recovery
A,A,A-TRIFLUOROTOLUENE	107

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' surrogate recovery is outside QC limit.  
 'D' surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

Work Order: C2-04-243

TEST NAME: BTEX BY METHOD 8020

SAMPLE ID: TRIP BLANK  
 LAB SAMPLE ID: C204243-10A  
 SAMPLE DATE: not spec  
 ANALYSIS DATE: 05/05/92  
 CONFIRMATION DATE:

	Results in	MG/L:	Detection Limit
BENZENE		ND	0.0005
TOLUENE		ND	0.0005
ETHYLBENZENE		ND	0.0005
XYLENES (TOTAL)		ND	0.0005

Surrogate	% Recovery	Limits
A,A,A-TRIFLUOROTOLUENE	101	75 - 125
1-CHLORO-2-FLUOROBENZENE		-

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: ENCOM ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: HIGH BOILING FUEL HCs

SAMPLE ID: MATRIX SPIKE

LAB SAMPLE ID: C204243-11A

SAMPLE DATE: not spec

ANALYSIS DATE: 05/08/92

EXTRACTION DATE: 05/01/92

	Results in	%REC:	Detection Limit
TPHC AS DIESEL		75	-

	Surrogate	% Recovery	Limit
BENZO(A)PYRENE		91	50 - 150

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.



Company: EMCOR ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: VOLATILE FUEL HYDROCARBONS

SAMPLE ID: MATRIX SPIKE  
LAB SAMPLE ID: C204243-11A  
SAMPLE DATE: not spec  
ANALYSIS DATE: 05/04/92  
EXTRACTION DATE:

	Results in	%REC:	Detection Limit
TPHC AS UNLEADED GASOLINE		90	-

Surrogate	% Recovery
A,A,A-TRIFLUOROTOLUENE	98

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: BTEX BY METHOD 8020

SAMPLE ID: MATRIX SPIKE

LAB SAMPLE ID: C204243-11A

SAMPLE DATE: not spec

ANALYSIS DATE: 05/04/92

CONFIRMATION DATE:

	Results in	%REC:	Detection Limit
BENZENE		98	-
TOLUENE		93	-
ETHYLBENZENE		93	-
XYLENES (TOTAL)		93	-

Surrogate	% Recovery	Limits
A,A,A-TRIFLUOROTOLUENE	97	75 - 125
1-CHLORO-2-FLUOROBENZENE		-

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: **EMCON ASSOCIATES**

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 94566

**IT ANALYTICAL SERVICES  
CERRITOS, CA**

Work Order: C2-04-243

TEST NAME: HIGH BOILING FUEL HCs

SAMPLE ID: MATRIX SPIKE DUPLICATE

LAB SAMPLE ID: C204243-12A

SAMPLE DATE: not spec

ANALYSIS DATE: 05/08/92

EXTRACTION DATE: 05/01/92

	Results in	%REC:	Detection Limit
TPHC AS DIESEL		81	-

	Surrogate	% Recovery	Limit
BENZO(A)PYRENE		96	50 - 150

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCOR ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: VOLATILE FUEL HYDROCARBONS

SAMPLE ID: MATRIX SPIKE DUPLICATE

LAB SAMPLE ID: C204243-12A

SAMPLE DATE: not spec

ANALYSIS DATE: 05/04/92

EXTRACTION DATE:

	Results in	%REC:	Detection Limit
TPHC AS UNLEADED GASOLINE		91	-

Surrogate	% Recovery
A,A,A-TRIFLUOROTOLUENE	100

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EDICOM ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: BTEX BY METHOD 8020

SAMPLE ID: MATRIX SPIKE DUPLICATE

LAB SAMPLE ID: C204243-12A

SAMPLE DATE: not spec

ANALYSIS DATE: 05/04/92

CONFIRMATION DATE:

	Results in	%REC:	Detection Limit
BENZENE		99	-
TOLUENE		94	-
ETHYLBENZENE		93	-
XYLENES (TOTAL)		93	-

Surrogate	% Recovery	Limits
A,A,A-TRIFLUOROTOLUENE	99	75 - 125
1-CHLORO-2-FLUOROBENZENE		-

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: ENCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: HIGH BOILING FUEL HCs

SAMPLE ID: METHOD BLANK  
LAB SAMPLE ID: C204243-13A  
SAMPLE DATE: not spec  
ANALYSIS DATE: 05/08/92  
EXTRACTION DATE: 05/01/92

	Results in	MG/L:	Detection Limit
TPHC AS DIESEL		ND	0.05

	Surrogate	% Recovery	Limit
BENZO(A)PYRENE		93	50 - 150

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: ENCOM ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: VOLATILE FUEL HYDROCARBONS

SAMPLE ID: METHOD BLANK  
LAB SAMPLE ID: C204243-13A  
SAMPLE DATE: not spec  
ANALYSIS DATE: 05/04/92  
EXTRACTION DATE:

	Results in	MG/L:	Detection Limit
TPHC AS UNLEADED GASOLINE		ND	0.05

Surrogate	% Recovery
A,A,A-TRIFLUOROTOLUENE	105

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.

Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME: BTEX BY METHOD 8020

SAMPLE ID: METHOD BLANK  
LAB SAMPLE ID: C204243-13A  
SAMPLE DATE: not spec  
ANALYSIS DATE: 05/04/92  
CONFIRMATION DATE:

	Results in	MG/L:	Detection Limit
BENZENE		ND	0.5
TOLUENE		ND	0.5
ETHYLBENZENE		ND	0.5
XYLENES (TOTAL)		ND	1

	Surrogate	% Recovery	Limits	
	A,A,A-TRIFLUOROTOLUENE	98	75	- 125
	1-CHLORO-2-FLUOROBENZENE			-

Comments: 'ND' or '<' indicates that the compound is not detected at the specified limit.  
 'NA' indicates not applicable  
 '\*' Surrogate recovery is outside QC limit.  
 'D' Surrogate is diluted out.  
 'B' indicates analyte found in the associated blank as well as in the sample, value reported is not blank corrected.



Company: EDCOM ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

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COMMENTS

\*\* The chromatographic pattern of the extractable hydrocarbons found in the sample does not match the diesel pattern. The pattern in the sample is consistent with the pattern of low boiling fuel hydrocarbons.

\*\*\* The chromatographic pattern of the purgeable hydrocarbons found in the sample contains components of gasoline and may be a weathered gasoline. The sample sample is quantitated against a "fresh" gasoline standard.

Company: EMCON ASSOCIATES

Date: 05/13/92

Client Work ID: 5251 Hopyard Road, Pleasanton 275000

IT ANALYTICAL SERVICES  
CERRITOS, CA

Work Order: C2-04-243

TEST NAME HIGH BOILING FUEL HCs TEST CODE 8015D1

High boiling fuel hydrocarbons are analyzed by methods established by the California DHS' LUFT manual. An aliquot of the sample is serially extracted with methylene chloride. The extracts are combined, exchanged with hexane, and concentrated to a final volume of 2 ml. A portion of the extract is directly injected into a gas chromatograph equipped with a 30 meter capillary column. Detection and quantitation is made by a flame ionization detector. Diesel Fuel Number 2 is used as the calibration standard.

TEST NAME VOLATILE FUEL HYDROCARBONS TEST CODE 8015U

Low boiling fuel hydrocarbons are analyzed by methods established by the California DHS' LUFT manual. An aliquot of the sample is purged with helium and the volatile fuel hydrocarbons are transferred to the vapor phase. The vapor is swept through a sorbent column where the hydrocarbons are adsorbed. Upon completion, the sorbent column is heated and backflushed onto a gas chromatograph equipped with a 30 meter capillary column. Detection and quantitation is made by a flame ionization detector. Unleaded gasoline is used as the calibration standard.

TEST NAME BTEX BY METHOD 8020 TEST CODE BTEX\_W

The sample was analyzed for benzene, toluene, ethylbenzene and total xylenes according to USEPA Methods 8020 and 5030. An aliquot of the sample is purged with helium and the volatile compounds are transferred to the vapor phase. The vapor is swept through a sorbent column where the aromatics are adsorbed. Upon completion the sorbent column is heated and backflushed onto a GC column. The trapped compounds are separated by the megabore column and detected by a photoionization detector.

Site Address: **5251 Hopyard Road**  
**Pleasanton CA**

WIC#: **204-6138-0907**

Shell Engineer: **Kurt Miller**  
 Phone No. (510) \_\_\_\_\_  
 Fax #: 685-3853

Consultant Name & Address: **EMCON Assoc.**  
**1938 Junction Ave.**  
**San Jose, CA 95131**

Consultant Contact: **David Larsen**  
 Phone No. (408) \_\_\_\_\_  
 Fax #: 453-2269

Comments: **3-VOAs for g, BTEX**  
**12-Liters for Diesel**  
**2-VOAs & 1 Liter for TB**

Sampled By: **Steve Horton**  
 Printed Name: **Steve Horton**

**Analysis Required**

TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal																
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**LAB:**

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
Quarterly Monitoring <input checked="" type="checkbox"/>	5461	24 hours <input type="checkbox"/>
Site Investigation <input type="checkbox"/>	5441	48 hours <input type="checkbox"/>
Soil for disposal <input type="checkbox"/>	5442	15 days <input checked="" type="checkbox"/> (Normal)
Water for disposal <input type="checkbox"/>	5443	Other <input type="checkbox"/>
Air Sample- Sys O&M <input type="checkbox"/>	5452	NOTE: No Lab as soon as possible of 24/48 hrs. TAT.
Water Sample - Sys O&M <input type="checkbox"/>	5453	
Other <input type="checkbox"/>		

Sample ID	Date	Soil	Water	Air	No. of conds.
SD-3	4/27/92		X		54
TB			↓		3

Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION COMMENTS
40 ml	HC	No	Intact Va	3°C
			↓	

Relinquished By (signature): **Steve Horton**  
 Printed name: **Steve Horton**

Relinquished By (signature): **David Sulewski ET**  
 Printed name: **DAVID SULEWSKI**

Relinquished By (signature): \_\_\_\_\_  
 Printed name: \_\_\_\_\_

Date: **4/29/92** Received (signature): \_\_\_\_\_  
 Time: **9:10**

Date: **4/29/92** Received (signature): **J. Mark**  
 Time: **09:15**

Date: \_\_\_\_\_ Received (signature): \_\_\_\_\_  
 Time: \_\_\_\_\_

Printed name: **DAVID SULEWSKI**  
 Date: **4/29/92**  
 Time: **09:10**

Printed name: **J. Mark**  
 Date: **4/30/92**  
 Time: **07:00**

Printed name: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Time: \_\_\_\_\_

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

Last Revision Date: 10/15/91

**T2-04-014 / C204243**



Site Address: 5251 Hopyard Road  
Pleasanton CA

WIC#: 204-6138-0907

Shell Engineer: Kurt Miller  
Phone No. (510) \_\_\_\_\_  
Fax #: 685-3853

Consultant Name & Address: EMCON Assoc.  
1938 Junction Ave.  
San Jose, CA 95131

Consultant Contact: David Larsen  
Phone No. (408) \_\_\_\_\_  
Fax #: 453-2269

Comments: 3-VOAs for g, BTEX  
12-Liters for Diesel  
2-VOAs & 1-liter for TB

Sampled By: Steve Horton / Dave Larsen  
Printed Name: *Steve Horton*

**Analysis Required**

TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal																	
X	X	X																			

LAB: IT Analytical - Corvito

CHECK ONE (1) BOX ONLY		CT/DT	TURN AROUND TIME
Quarterly Monitoring	<input checked="" type="checkbox"/>	5461	24 hours <input type="checkbox"/>
Site Investigation	<input type="checkbox"/>	5441	48 hours <input type="checkbox"/>
Soil for disposal	<input type="checkbox"/>	5442	15 days <input checked="" type="checkbox"/> (Normal)
Water for disposal	<input type="checkbox"/>	5443	Other <input type="checkbox"/>
Air Sample - Sys O&M	<input type="checkbox"/>	5452	NOTE: Notify Lab as soon as possible of 24/48 hrs. TAT.
Water Sample - Sys O&M	<input type="checkbox"/>	5453	
Other	<input type="checkbox"/>		

Sample ID	Date	Soil	Water	Air	No. of conis.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION COMMENT
S-2	4/27/92		X		54	X	X	X			40 ml	HC	No	INTACT	50c
S-4	4/27/92				54	X	X	X							
S-5	4/27/92				54	X	X	X							
S-6	4/27/92				54	X	X	X							
S-7	4/27/92				54	X	X	X							
S-8	4/27/92				54	X	X	X							
S-3	4/27/92				54	X	X	X							
S-1	4/27/92				54	X	X	X							

Relinquished By (signature): *Steve Horton*

Printed name: Steve Horton

Relinquished By (signature): *David Solewski*

Printed name: DAVID SOLEWSKI

Relinquished By (signature): \_\_\_\_\_

Printed name: \_\_\_\_\_

Date: 4/27/92 Received (signature): *David Solewski*

Time: 9:10

Date: 4/27/92 Received (signature): *J. Mentel*

Time: 9:15

Date: \_\_\_\_\_ Received (signature): \_\_\_\_\_

Time: \_\_\_\_\_

Printed name: DAVID SOLEWSKI

Date: 4/27/92

Printed name: J. Mentel

Date: 4/30/92

Printed name: \_\_\_\_\_

Date: \_\_\_\_\_

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