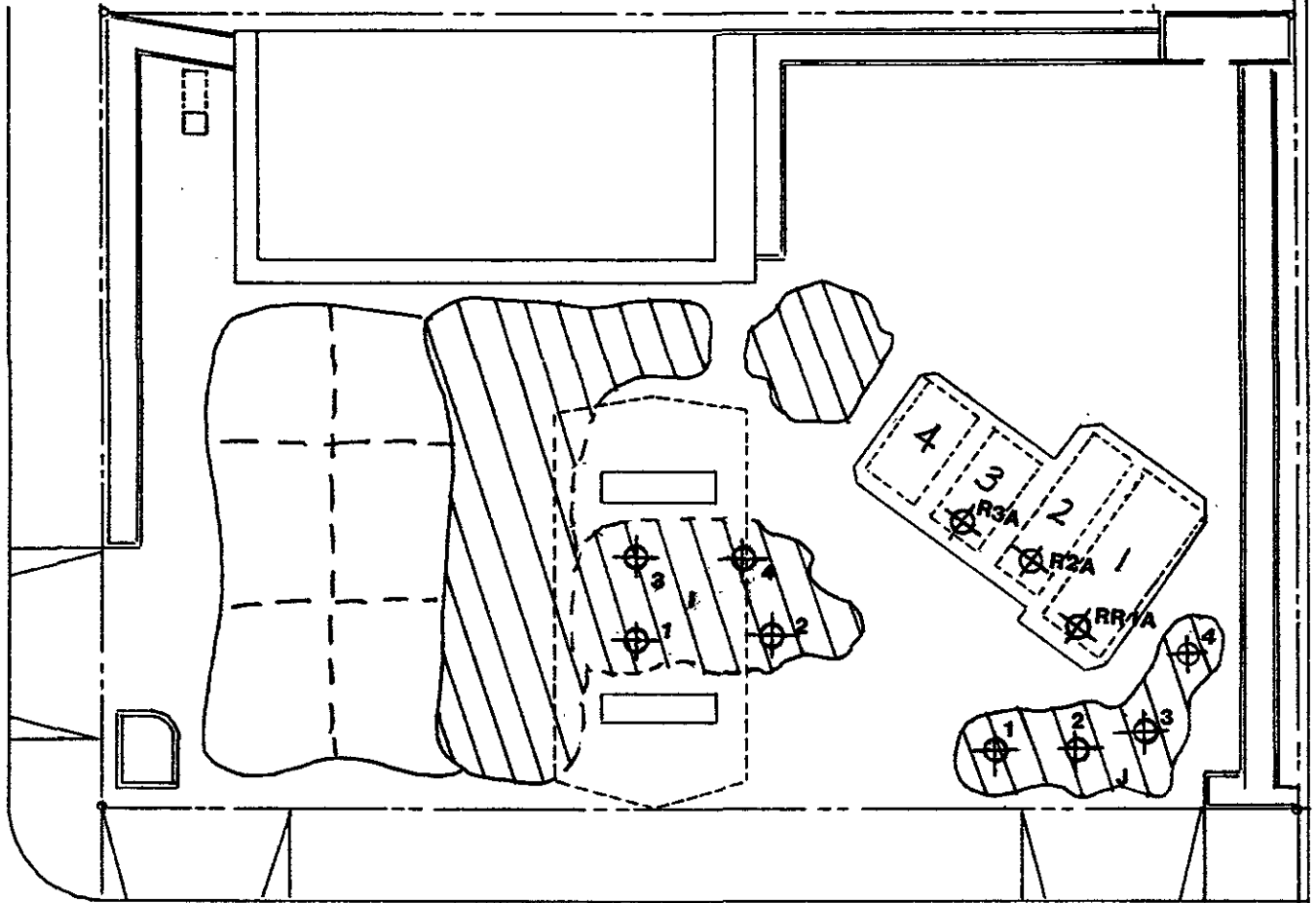


831.02 /
Balance

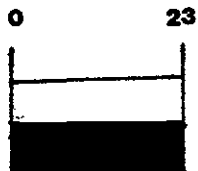
SITE # 575
STID # 1976



SOIL SAMPLE LOCATIONS

SAMPLE DATE
DECEMBER 12, 1989

SCALE
1" = 23'



SITE MAP
Shell Service Station
318 South Livermore Ave.
Livermore, Ca.

AGIS JOB NO. 89-041

DRAWN BY: Ed Bernard DATE: Dec. 18, 1989
REVIEWED BY: DATE:



SEQUOIA ANALYTICAL

880 Chesapeake Drive • Redwood City, CA 94063
(415) 384-9600 • FAX (415) 384-9233

Aegis Environmental Consultants 801 Riverside Ave., Suite C Roseville, CA 95678 Attention: Pat Wright	Client Project ID: #89-041, Shell, Livermore, 318 So. Livermore Matrix Descript: Soil Analysis Method: EPA 5030/8015/8020 First Sample #: 912-1487	Sampled: Dec 12, 1989 Received: Dec 13, 1989 Analyzed: Dec 13, 1989 Reported: Dec 18, 1989
--	---	---

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
912-1487	RR1A	180	N.D.	N.D.	N.D.	0.35
912-1488	R2A	N.D.	N.D.	N.D.	N.D.	N.D.
912-1489	R3A	N.D.	N.D.	N.D.	N.D.	N.D.
9121490 A-D	J1,2,3,4, Composite	12	N.D.	N.D.	N.D.	N.D.
9121491 A-D	J1,2,3,4, Composite	70	N.D.	N.D.	0.11	0.72

Detection Limits:

1.0

0.05

0.1

0.1

0.1

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

V. Tague
Vickie Tague
Project Manager

9121487.AAA <1>



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9800 • FAX (415) 364-9233

Aegis Environmental Consultants 801 Riverside Ave., Suite C Roseville, CA 95678 Attention: Pat Wright	Client Project ID: #89-041, Shell, Livermore, 318 So. Livermore Sample Descript: Soil Analysis for: Lead First Sample #: 912-1487	Sampled: Dec 12, 1989 Received: Dec 13, 1989 Extracted: Dec 14, 1989 Analyzed: Dec 14, 1989 Reported: Dec 18, 1989
--	--	--

LABORATORY ANALYSIS FOR: Lead

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
912-1487	RR1A	0.05	8.1
912-1488	R2A	0.05	8.1
912-1489	R3A	0.05	8.1
9121490 A-D	I1,2,3,4, Composite	0.05	13
9121491 A-D	J1,2,3,4, Composite	0.05	7.2

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Vickie Tague
Project Manager

9121487.AAA <2>



INTERNATIONAL
TECHNOLOGY
CORPORATION

Sequoia Analytical
Redwood City

CHAIN-OF-CUSTODY RECORD

R/A Control No. _____

C/C Control No. **A 80841**

PROJECT NAME/NUMBER Livermore Shell/89-041

LAB DESTINATION Sequoia Analytical

SAMPLE TEAM MEMBERS Tracy Schilling

CARRIER/WAYBILL NO. _____

any questions - CALL 916/782-2110

Sample Number	Sample Location and Description	Date and Time Collected	Sample Type	Container Type	Condition on Receipt (Name and Date)	Disposal Record No.
RK1A	Livermore Shell ; Soil	12/12/89/1:00pm	Soil	Biogestyl		
R2A	↓ ex	↓ ↓	↓	↓		
R3A	↓ ex	↓ ↓	↓	↓		
I,2,3,4	↓ sp	↓ ↓	↓	↓		
J,1,2,3,4	↓ sp	↓ ↓	↓	↓		

Special Instructions: 24 hour turnaround Mod 8015 TTH-CW/BTX4E, EIA 7421 Total Pb.

Possible Sample Hazards: _____

SIGNATURES: (Name, Company, Date and Time)

ex - excavation
sp - stock pile

1. Relinquished By: Tracy Schilling / Acqui / 12/12/89/3:00pm

3. Relinquished By: _____
Received by: _____

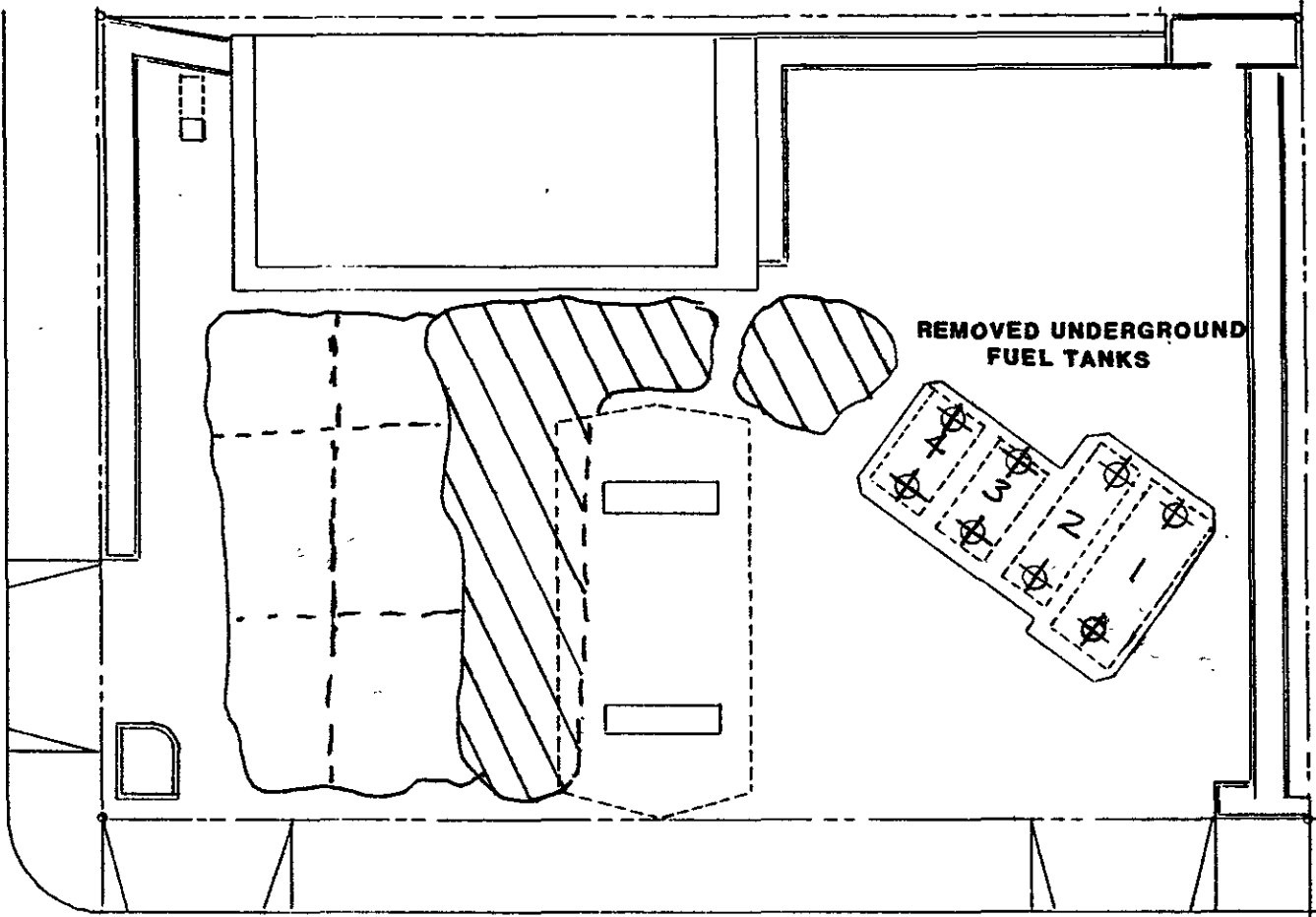
2. Relinquished By: _____
Received By: _____

4. Relinquished By: _____
Received By: _____

WIC: 204-4380-0303
AFE: 986683
Exp Code: 5441

318 So. Livermore Ave
Cross Street: 3rd Street
Livermore, CA

Shell Eng:
MR. STAN ROLLER



SOIL SAMPLE LOCATIONS

**SAMPLE DATE
DECEMBER 5, 1989**

**SCALE
1" = 23'**



**SITE MAP
Shell Service Station
318 South Livermore Ave.
Livermore, Ca.**

AEGIS JOB NO. 89-041

**DRAWN BY: Ed Bernard DATE: Dec. 18, 1989
REVIEWED BY: DATE:**



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

RECEIVED
12-17

Aegis Environmental Consultants
801 Riverside Ave., Suite C
Roseville, CA 95678
Attention: Tracy Schilling

Project: #89-041, Shell, Livermore

Enclosed are the results from 8 soil samples received at Sequoia Analytical on December 6, 1989. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
9120384	Soil, 1A	12/5/89	EPA 5030/8015/8020 Lead
9120385	Soil, 2A	12/5/89	EPA 5030/8015/8020 Lead
9120386	Soil, 3A	12/5/89	EPA 5030/8015/8020 Lead
9120387	Soil, 4A	12/5/89	EPA 5030/8015/8020 Lead
9120388	Soil, 1B	12/5/89	EPA 5030/8015/8020 Lead
9120389	Soil, 2B	12/5/89	EPA 5030/8015/8020 Lead
9120390	Soil, 3B	12/5/89	EPA 5030/8015/8020 Lead
9120391	Soil, 4B	12/5/89	EPA 5030/8015/8020 Lead

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL


Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Aegis Environmental Consultants
801 Riverside Ave., Suite C
Roseville, CA 95678
Attention: Tracy Schilling

Client Project ID: #89-041, Shell, Livermore
Matrix Descript: Soil
Analysis Method: EPA 5030/8015/8020
First Sample #: 912-0384

Sampled: Dec 5, 1989
Received: Dec 6, 1989
Analyzed: Dec 7, 1989
Reported: Dec 8, 1989

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
912-0384	1A	870	N.D.	0.17	0.87	16
912-0385	2A	3.8	N.D.	N.D.	N.D.	N.D.
912-0386	3A	1.6	N.D.	N.D.	N.D.	N.D.
912-0387	4A	N.D.	N.D.	N.D.	N.D.	N.D.
912-0388	1B	N.D.	N.D.	N.D.	N.D.	N.D.
912-0389	2B	1.6	N.D.	N.D.	N.D.	N.D.
912-0390	3B	N.D.	N.D.	N.D.	N.D.	N.D.
912-0391	4B	1.3	N.D.	N.D.	N.D.	N.D.

Detection Limits:	1.0	0.05	0.1	0.1	0.1
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Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Aegis Environmental Consultants 801 Riverside Ave., Suite C Roseville, CA 95678 Attention: Tracy Schilling	Client Project ID: #89-041, Shell, Livermore Sample Descript: Soil Analysis for: Lead First Sample #: 912-0384	Sampled: Dec 5, 1989 Received: Dec 6, 1989 Extracted: Dec 7, 1989 Analyzed: Dec 7, 1989 Reported: Dec 8, 1989
---	---	---

LABORATORY ANALYSIS FOR: Lead

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
912-0384	1A	0.25	4.8
912-0385	2A	0.25	31
912-0386	3A	0.25	5.4
912-0387	4A	0.25	3.0
912-0388	1B	0.25	3.4
912-0389	2B	0.25	6.6
912-0390	3B	0.25	2.6
912-0391	4B	0.25	2.2

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Vickie Tague
Project Manager



Shell Eng. Stan Roller

REQUEST FOR ANALYSIS

SEQUOIA
Redwood City

PROJECT NAME SHELL LIVERMORE
PROJECT NUMBER 89-041
PROJECT MANAGER PAT WRIGHT
BILL TO SHELL

DATE SAMPLES SHIPPED _____
LAB DESTINATION _____
LABORATORY CONTACT _____
SEND LAB REPORT TO _____

R/A Control No. _____
C/C Control No. 12/5/89
~~TPH G w/ BTEX & E~~
~~TPH G w/ BTEX & E~~
AEGIS ENVIRONMENTAL
801 RIVERSIDE AVE
ROSEVILLE, CA 95678
12/7/89
PAT WRIGHT
(916) 782-2110

PURCHASE ORDER NO. _____
Address: 318 So. Livermore Ave / Cross St. : 3rd
Livermore CA
WIC 204 4380 0303 AFE 9816683 Exp Code 5441

DATE REPORT REQUIRED _____
PROJECT CONTACT _____
PROJECT CONTACT PHONE NO. _____

Sample No.	Sample Type	Sample Volume	Preservative	Requested Testing Program	Special Instructions
1A	Soil	BRASS Cyl.	N/A	Mod 8015	(24 hr)
2A	↓	↓	↓	(TPH G w/ BTEX & E)	Turn Around
3A	↓	↓	↓	+ Total Pb	Mod 8015
4A	↓	↓	↓	EPA 7420	(TPH G w/
1B	↓	↓	↓	↓	(BTEX & E in series)
2B	↓	↓	↓	↓	Total Pb
3B	↓	↓	↓	↓	
4B	↓	↓	↓	↓	
				all samples	

Add organic lead for 2A per Tracy

TURNAROUND TIME REQUIRED: (Rush must be approved by the Project Manager.)
Normal _____ Rush (Subject to rush surcharge)

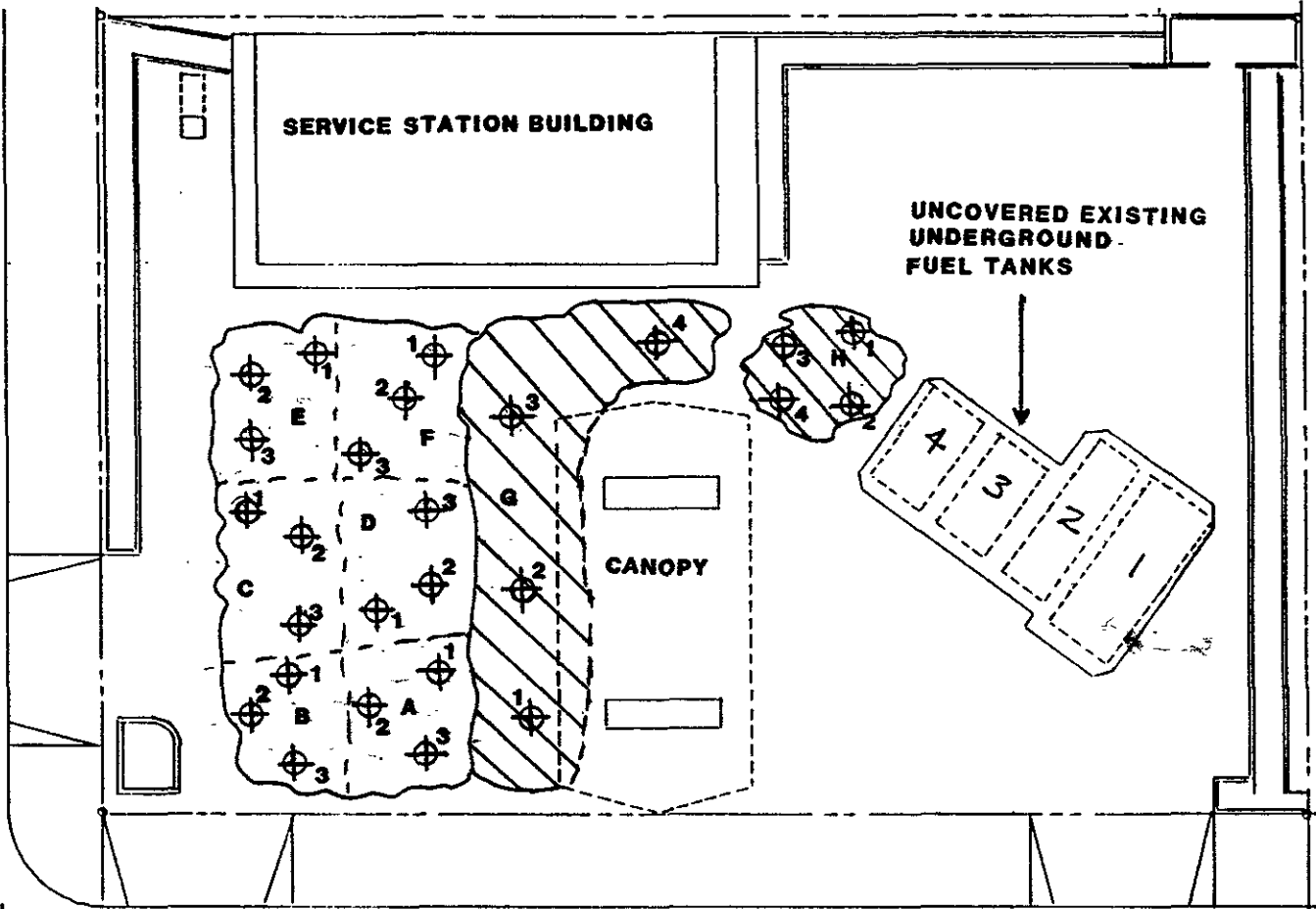
* PLEASE FREEZE FOR FURTHER ANALYSIS.





POSSIBLE HAZARD IDENTIFICATION: (Please indicate if sample(s) are hazardous materials and/or suspected to contain high levels of hazardous substances)
Nonhazardous _____ Flammable _____ Skin Irritant _____ Highly Toxic _____ Other _____ (Please Specify)

SAMPLE DISPOSAL: (Please indicate disposition of sample following analysis. Lab will charge for packing, shipping, and disposal.)
Return to Client _____ Disposal by Lab

Any QUESTIONS PLEASE Call.

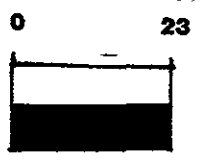
FOR LAB USE ONLY
Received By _____ Date/Time _____



-  - EXCAVATED SOILS
-  - SOIL SAMPLE LOCATIONS
-  - TYPICAL NON-DETECTED SOILS
-  - TYPICAL DETECTED SOILS

SAMPLE DATE
NOVEMBER 30, 1989

SCALE
 1"=23'



<p>SITE MAP Shell Service Station 318 South Livermore Ave. Livermore, Ca.</p>
<p>AEGIS JOB NO. 89-041</p>
<p>DRAWN BY: Ed Bernard DATE: Dec. 18, 1989 REVIEWED BY: DATE:</p>



INTERNATIONAL
TECHNOLOGY
CORPORATION

ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

Aegis Environmental Consultants
801 Riverside Avenue, Suite C
Roseville, CA 95678
ATTN: Tracy Schilling

Date: December 7, 1989

Work Order Number: S9-11-370

P.O. Number: MOH 890501A

This is the Certificate of Analysis for the following samples:

Client Project ID: Aegis #89-041, Shell, 318 S. Livermore
Avenue/3rd Street, Livermore, CA
Date Received by Lab: 11/30/89
Number of Samples: 26
Sample Type: Soil

The methods of analysis for metals and general chemistry are taken from E.P.A. protocol, using methods from SW-846, 3rd Edition or Methods for Chemical Analysis of Water and Wastes, 600/4-79-020. The method used is listed adjacent to the parameter in the table.

The samples were prepared by extracting with 0.2M sodium citrate for 48 hours. The resulting values are the soluble threshold limit limit concentrations for the requested parameters.

The method of analysis for low boiling hydrocarbons is taken from EPA Methods 8015, 8020 and 5030. The sample is examined using the purge and trap technique. Final detection is by gas chromatography using a flame ionization detector as well as a photoionization detector. The result for total low boiling hydrocarbons is calculated as gasoline and includes benzene, toluene, ethyl benzene and xylenes.

Reviewed and Approved

Michael E. Dean
Project Manager

MED/an

16 Pages Following - Tables of Results

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

Page: 2 of 16
Date: December 7, 1989
Client Project ID: Aegis #89-041, Shell,
318 S. Livermore Ave./3rd St., Livermore, CA

IT ANALYTICAL SERVICES
SAN JOSE, CA

Work Order Number: S9-11-370

Client Sample ID: A-1, A-2, A-3 [composite]
Sample Date: 11/30/89
Lab Sample ID: S9-11-370-01, S9-11-370-02, S9-11-370-03 [composite]
Receipt Condition: Cool
Extraction Date: 12/1/89
Analysis Date: 12/1/89

Total Petroleum Hydrocarbons - Modified E.P.A. Methods 8015, 8020

Results - Milligrams per Kilogram

Parameter	Detection Limit	Detected
Low Boiling Hydrocarbons, calculated as Gasoline	2.5	None
Benzene	0.025	None
Toluene	0.025	None
Ethyl Benzene	0.025	None
Xylenes (total)	0.05	None

Page: 4 of 16
Date: December 7, 1989
Client Project ID: Aegis #89-041, Shell,
318 S. Livermore Ave./3rd St., Livermore, CA

IT ANALYTICAL SERVICES
SAN JOSE, CA

Work Order Number: S9-11-370

Client Sample ID: B-1, B-2, B-3 [composite]

Sample Date: 11/30/89
Lab Sample ID: S9-11-370-04, S9-11-370-05, S9-11-370-06 [composite]
Receipt Condition: Cool
Extraction Date: 12/1/89
Analysis Date: 12/1/89

Total Petroleum Hydrocarbons - Modified E.P.A. Methods 8015, 8020

Results - Milligrams per Kilogram

Parameter	Detection Limit	Detected
Low Boiling Hydrocarbons, calculated as Gasoline	2.5	None
Benzene	0.025	None
Toluene	0.025	None
Ethyl Benzene	0.025	None
Xylenes (total)	0.05	None

Page: 6 of 16
Date: December 7, 1989
Client Project ID: Aegis #89-041, Shell,
318 S. Livermore Ave./3rd St., Livermore, CA

IT ANALYTICAL SERVICES
SAN JOSE, CA

Work Order Number: S9-11-370

Client Sample ID: C-1, C-2, C-3 [composite]

Sample Date: 11/30/89
Lab Sample ID: S9-11-370-07, S9-11-370-08, S9-11-370-09 [composite]
Receipt Condition: Cool
Extraction Date: 12/1/89
Analysis Date: 12/1/89

Total Petroleum Hydrocarbons - Modified E.P.A. Methods 8015, 8020

Results - Milligrams per Kilogram

Parameter	Detection Limit	Detected
Low Boiling Hydrocarbons, calculated as Gasoline	2.5	None
Benzene	0.025	None
Toluene	0.025	None
Ethyl Benzene	0.025	None
Xylenes (total)	0.05	None

Page: 8 of 16
Date: December 7, 1989
Client Project ID: Aegis #89-041, Shell,
318 S. Livermore Ave./3rd St., Livermore, CA

IT ANALYTICAL SERVICES
SAN JOSE, CA

Work Order Number: S9-11-370

Client Sample ID: D-1, D-2, D-3 [composite]
Sample Date: 11/30/89
Lab Sample ID: S9-11-370-10, S9-11-370-11, S9-11-370-12 [composite]
Receipt Condition: Cool
Extraction Date: 12/1/89
Analysis Date: 12/4/89

Total Petroleum Hydrocarbons - Modified E.P.A. Methods 8015, 8020

Results - Milligrams per Kilogram

Parameter	Detection Limit	Detected
Low Boiling Hydrocarbons, calculated as Gasoline	2.5	None
Benzene	0.025	None
Toluene	0.025	None
Ethyl Benzene	0.025	None
Xylenes (total)	0.05	None

Page: 10 of 16
Date: December 7, 1989
Client Project ID: Aegis #89-041, Shell,
318 S. Livermore Ave./3rd St., Livermore, CA

IT ANALYTICAL SERVICES
SAN JOSE, CA

Work Order Number: S9-11-370

Client Sample ID: E-1, E-2, E-3 [composite]
Sample Date: 11/30/89
Lab Sample ID: S9-11-370-13, S9-11-370-14, S9-11-370-15 [composite]
Receipt Condition: Cool
Extraction Date: 12/1/89
Analysis Date: 12/1/89

Total Petroleum Hydrocarbons - Modified E.P.A. Methods 8015, 8020

Results - Milligrams per Kilogram

Parameter	Detection Limit	Detected
Low Boiling Hydrocarbons, calculated as Gasoline	2.5	None
Benzene	0.025	None
Toluene	0.025	None
Ethyl Benzene	0.025	None
Xylenes (total)	0.05	None

Page: 12 of 16
Date: December 7, 1989
Client Project ID: Aegis #89-041, Shell,
318 S. Livermore Ave./3rd St., Livermore, CA

IT ANALYTICAL SERVICES
SAN JOSE, CA

Work Order Number: S9-11-370

Client Sample ID: F-1, F-2, F-3 [composite]
Sample Date: 11/30/89
Lab Sample ID: S9-11-370-16, S9-11-370-17, S9-11-370-18 [composite]
Receipt Condition: Cool
Extraction Date: 12/1/89
Analysis Date: 12/5/89

Total Petroleum Hydrocarbons - Modified E.P.A. Methods 8015, 8020

Results - Milligrams per Kilogram

Parameter	Detection Limit	Detected
Low Boiling Hydrocarbons, calculated as Gasoline	2.5	None
Benzene	0.025	None
Toluene	0.025	None
Ethyl Benzene	0.025	None
Xylenes (total)	0.05	None

Page: 1 of 16
Date: December 7, 1989
Client Project ID: Aegis #89-041, Shell,
318 S. Livermore Ave./3rd St., Livermore, CA

IT ANALYTICAL SERVICES
SAN JOSE, CA

Work Order Number: S9-11-370

Client Sample ID: A-1, A-2, A-3 [composite]
Sample Date: 11/30/89
Lab Sample ID: S9-11-370-01, S9-11-370-02, S9-11-370-03 [composite]
Receipt Condition: Cool

Results - Milligrams per Kilogram

Parameter	E.P.A. Method	Detection Limit	Detected
Lead	6010	1.5	25.

Wet Results - Milligrams per Liter

Parameter	E.P.A. Method	Detection Limit	Detected
Lead	6010	0.06	0.98

Page: 3 of 16
Date: December 7, 1989
Client Project ID: Aegis #89-041, Shell,
318 S. Livermore Ave./3rd St., Livermore, CA

IT ANALYTICAL SERVICES
SAN JOSE, CA

Work Order Number: S9-11-370

Client Sample ID: B-1, B-2, B-3 [composite]
Sample Date: 11/30/89
Lab Sample ID: S9-11-370-04, S9-11-370-05, S9-11-370-06 [composite]
Receipt Condition: Cool

Results - Milligrams per Kilogram

Parameter	E.P.A. Method	Detection Limit	Detected
Lead	6010	1.5	9.3

Wet Results - Milligrams per Liter

Parameter	E.P.A. Method	Detection Limit	Detected
Lead	6010	0.06	0.22

Page: 5 of 16
Date: December 7, 1989
Client Project ID: Aegis #89-041, Shell,
318 S. Livermore Ave./3rd St., Livermore, CA

IT ANALYTICAL SERVICES
SAN JOSE, CA

Work Order Number: S9-11-370

Client Sample ID: C-1, C-2, C-3 [composite]
Sample Date: 11/30/89
Lab Sample ID: S9-11-370-07, S9-11-370-08, S9-11-370-09 [composite]
Receipt Condition: Cool

Results - Milligrams per Kilogram

Parameter	E.P.A. Method	Detection Limit	Detected
Lead	6010	1.5	9.9

Wet Results - Milligrams per Liter

Parameter	E.P.A. Method	Detection Limit	Detected
Lead	6010	0.06	0.11

Page: 7 of 16
Date: December 7, 1989
Client Project ID: Aegis #89-041, Shell,
318 S. Livermore Ave./3rd St., Livermore, CA

IT ANALYTICAL SERVICES
SAN JOSE, CA

Work Order Number: S9-11-370

Client Sample ID: D-1, D-2, D-3 [composite]
Sample Date: 11/30/89
Lab Sample ID: S9-11-370-10, S9-11-370-11, S9-11-370-12 [composite]
Receipt Condition: Cool

Results - Milligrams per Kilogram

Parameter	E.P.A. Method	Detection Limit	Detected
Lead	6010	1.5	8.2

Wet Results - Milligrams per Liter

Parameter	E.P.A. Method	Detection Limit	Detected
Lead	6010	0.06	0.13

Page: 9 of 16
Date: December 7, 1989
Client Project ID: Aegis #89-041, Shell,
318 S. Livermore Ave./3rd St., Livermore, CA

IT ANALYTICAL SERVICES
SAN JOSE, CA

Work Order Number: S9-11-370

Client Sample ID: E-1, E-2, E-3 [composite]
Sample Date: 11/30/89
Lab Sample ID: S9-11-370-13, S9-11-370-14, S9-11-370-15 [composite]
Receipt Condition: Cool

Results - Milligrams per Kilogram

Parameter	E.P.A. Method	Detection Limit	Detected
Lead	6010	1.5	15.

Wet Results - Milligrams per Liter

Parameter	E.P.A. Method	Detection Limit	Detected
Lead	6010	0.06	0.28

Page: 11 of 16
Date: December 7, 1989
Client Project ID: Aegis #89-041, Shell,
318 S. Livermore Ave./3rd St., Livermore, CA

IT ANALYTICAL SERVICES
SAN JOSE, CA

Work Order Number: S9-11-370

Client Sample ID: F-1, F-2, F-3 [composite]

Sample Date: 11/30/89

Lab Sample ID: S9-11-370-16, S9-11-370-17, S9-11-370-18 [composite]

Receipt Condition: Cool

Results - Milligrams per Kilogram

Parameter	E.P.A. Method	Detection Limit	Detected
Lead	6010	1.5	11.

Wet Results - Milligrams per Liter

Parameter	E.P.A. Method	Detection Limit	Detected
Lead	6010	0.06	0.69

Page: 14 of 16
Date: December 7, 1989
Client Project ID: Aegis #89-041, Shell,
318 S. Livermore Ave./3rd St., Livermore, CA

IT ANALYTICAL SERVICES
SAN JOSE, CA

Work Order Number: S9-11-370

Client Sample ID: G-1, G-2, G-3, G-4 [composite]
Sample Date: 11/30/89
Lab Sample ID: S9-11-370-19, S9-11-370-20, S9-11-370-21,
S9-11-370-22 [composite]
Receipt Condition: Cool
Extraction Date: 12/1/89
Analysis Date: 12/5/89

Total Petroleum Hydrocarbons - Modified E.P.A. Methods 8015, 8020

Results - Milligrams per Kilogram

Parameter	Detection Limit	Detected
Low Boiling Hydrocarbons, calculated as Gasoline	34.	190.
Benzene	0.025	0.38
Toluene	0.025	3.0
Ethyl Benzene	0.025	1.4
Xylenes (total)	0.05	11.

Page: 13 of 16
Date: December 7, 1989
Client Project ID: Aegis #89-041, Shell,
318 S. Livermore Ave./3rd St., Livermore, CA

IT ANALYTICAL SERVICES
SAN JOSE, CA

Work Order Number: S9-11-370

Client Sample ID: G-1, G-2, G-3, G-4 [composite]
Sample Date: 11/30/89
Lab Sample ID: S9-11-370-19, S9-11-370-20, S9-11-370-21
S9-11-370-22 [composite]
Receipt Condition: Cool

Results - Milligrams per Kilogram

Parameter	E.P.A. Method	Detection Limit	Detected
Lead	6010	1.5	21.

Wet Results - Milligrams per Liter

Parameter	E.P.A. Method	Detection Limit	Detected
Lead	6010	0.06	0.49

Page: 16 of 16
Date: December 7, 1989
Client Project ID: Aegis #89-041, Shell,
318 S. Livermore Ave./3rd St., Livermore, CA

IT ANALYTICAL SERVICES
SAN JOSE, CA

Work Order Number: S9-11-370

Client Sample ID: H-1, H-2, H-3, H-4 [composite]

Sample Date: 11/30/89

Lab Sample ID: S9-11-370-23, S9-11-370-24, S9-11-370-25,
S9-11-370-26 [composite]

Receipt Condition: Cool

Extraction Date: 12/1/89

Analysis Date: 12/5/89

Total Petroleum Hydrocarbons - Modified E.P.A. Methods 8015, 8020

Results - Milligrams per Kilogram

Parameter	Detection Limit	Detected
Low Boiling Hydrocarbons, calculated as Gasoline	16.	100.
Benzene	0.2	0.3
Toluene	0.2	3.2
Ethyl Benzene	0.2	1.6
Xylenes (total)	0.3	14.

Page: 15 of 16
Date: December 7, 1989
Client Project ID: Aegis #89-041, Shell,
318 S. Livermore Ave./3rd St., Livermore, CA

IT ANALYTICAL SERVICES
SAN JOSE, CA

Work Order Number: S9-11-370

Client Sample ID: H-1, H-2, H-3, H-4 [composite]
Sample Date: 11/30/89
Lab Sample ID: S9-11-370-23, S9-11-370-24, S9-11-370-25
S9-11-370-26 [composite]
Receipt Condition: Cool

Results - Milligrams per Kilogram

Parameter	E.P.A. Method	Detection Limit	Detected
Lead	6010	1.5	11.

Wet Results - Milligrams per Liter

Parameter	E.P.A. Method	Detection Limit	Detected
Lead	6010	0.06	0.35



INTERNATIONAL
TECHNOLOGY
CORPORATION

RECEIVED
12-9-89

December 02, 1989

AEGIS Enviromental Cons.
801 Riverside Avae. Suite C
Roseville, CA. 95678

RE:Project #: 204-4380-0303 986683 5441 M60

8904)

ATTENTION: Tracy Schilling

On November 30, 1989, the following samples were received at the
ITAS San Jose Laboratory:

Your Sample ID's :

A-1	G-4
A-2	H-1
A-3	H-2
B-1	H-3
B-2	H-4
B-3	
C-1	
C-2	
C-3	
D-1	
D-2	
D-3	
E-1	
E-2	
E-3	
F-1	
F-2	
F-3	
G-1	
G-2	
G-3	

The samples were checked into our sample tracking system as order
number S9-11-370 and assigned testing for the following parameters:

Waste Extraction Test Soil
EPA 6010
Modified 8015/8020

When the above analyses are completed, your report will be issued
to the address or addresses stated on the request for analysis form.
If you need to arrange for other reporting, please contact me.

Sincerely,

Josephine DeCarli

Josephine Decarli

AEGIS

59-11-370



CHAIN-OF-CUSTODY RECORD

R/A Control No. _____

C/C Control No. A 80836

PROJECT NAME/NUMBER LIVERMORE SHELL; 89-041

LAB DESTINATION It 2055 JUNCTION AVE, SAN JOSE

SAMPLE TEAM MEMBERS TRACY SCHILLING, Pat Weight

CARRIER/WAYBILL NO. _____

Sample Number	Sample Location and Description	Date and Time Collected	Sample Type	Container Type	Condition on Receipt (Name and Date)	Disposal Record No.
A1,2,3	↓ 318 So Livermore Ave ("Sandy") Livermore, CA	11/30/89 10:45 AM	Soil	Bios Tube	cool/ok	
B1,2,3		↓	↓	↓		
C1,2,3		↓	↓	↓		
D1,2,3		↓	↓	↓		
E1,2,3		↓	↓	↓		
F1,2,3		↓	↓	↓		
G1,2,3,4		↓	↓	↓		
H1,2,3,4		12:15			NIC 26A 4380 0303 AFE 981683 EXP CODE 5441 CROSS STREET → 3 rd St. STAN Roller SHELL Eng	

Special Instructions: 24 hr turn around ; Modified 8015 EPA METHOD

Possible Sample Hazards: (TPH G w/ BTX+E SERIES)

Call if any QUESTIONS (916) 782-2110.

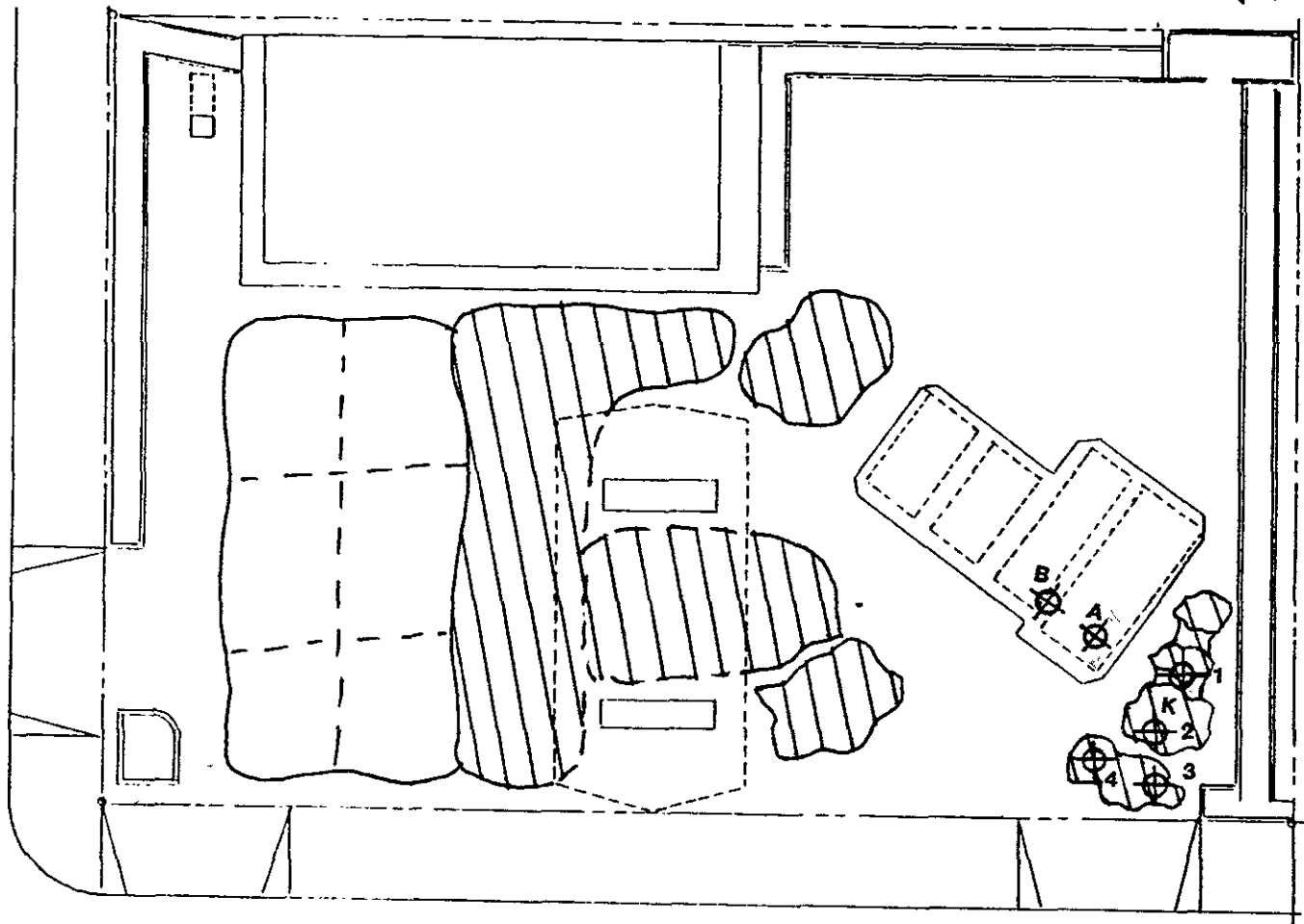
SIGNATURES: (Name, Company, Date and Time)

1. Relinquished By: Tracy Schilling 11/30/89 (12:30pm) 3. Relinquished By: _____

Received By: [Signature] 11/30/89 16:50 Received by: _____

2. Relinquished By: _____ 4. Relinquished By: _____

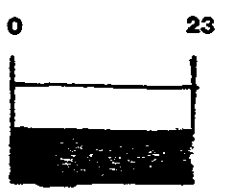
Received By: _____ Received By: _____



 - SOIL SAMPLE LOCATIONS

SAMPLE DATE
DECEMBER 15, 1989

SCALE
1" = 23'



SITE MAP Shell Service Station 318 South Livermore Ave. Livermore, Ca.	
AEGIS JOB NO. 89-041	
DRAWN BY: Ed Bernard	DATE: Dec. 18, 1989
REVIEWED BY:	DATE:



SEQUOIA ANALYTICAL

880 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Aegis Environmental Consultants 801 Riverside Ave., Suite C Roseville, CA 95678 Attention: Clarke Owen	Client Project ID: #89-041, Livermore, Shell Sample Descript: Soil Analysis for: Lead First Sample #: 912-2284 A-D	Sampled: Dec 15, 1989 Received: Dec 18, 1989 Extracted: Dec 18, 1989 Analyzed: Dec 18, 1989 Reported: Dec 19, 1989
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LABORATORY ANALYSIS FOR: Lead

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
9122284 A-D	K1,2,3,4, Composite	0.05	14
912-2285	A	0.05	11
912-2286	B	0.05	12

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

V. Tague
Vickie Tague
Project Manager

Please Note:
318 So. Livermore, Livermore



SEQUOIA ANALYTICAL

880 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Aegle Environmental Consultants 801 Riverside Ave., Suite C Roseville, CA 95678 Attention: Clarke Owen	Client Project ID: #89-041, Livermore, Shall Matrix Descript: Soil Analysis Method: EPA 5030/8015/8020 First Sample #: 912-2284 A-D	Sampled: Dec 15, 1989 Received: Dec 18, 1989 Analyzed: Dec 18, 1989 Reported: Dec 19, 1989
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TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
9122284 A-D	K1,2,3,4, Composite	530	0.32	0.84	4.2	24
912-2285	A	12	0.090	N.D.	N.D.	0.41
912-2286	B	13	0.11	N.D.	N.D.	0.13

Detection Limits:

1.0

0.05

0.1

0.1

0.1

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

V. Tague
Vickie Tague
Project Manager

Please Note:

318 So. Livermore, Livermore



Jettler — ryan inc.

RECEIVED
11-1-89

general contractors

March 9, 1989

Mr. Stanley J. Roller
Shell Oil Company
Post Office Box 4023
Concord, California 94520

Reference: Shell Service Station
318 S. Livermore Avenue
Livermore, California

Mr. Roller:

Enclosed are five copies of the report issued by Woodward-Clyde Consultants, dated March 8, 1989, discussing the soil investigation conducted on at the referenced location.

On February 27, 1989, four exploratory soil borings were drilled in the native soil adjacent to the existing underground storage tank complex. Soil samples, collected at five foot depth intervals, were tested in the field for the presence of volatile organic compounds using an HNu photoionization detector. Volatile organic vapors were not detected in any of the soil samples collected. Soil samples collect from the 15-16.5' depth interval from each boring were retained for laboratory analysis. Low boiling hydrocarbons, benzene, toluene, ethyl benzene, and xylenes were not detected in any of the soil samples analyzed.

Please note that the boring logs indicate that groundwater is encountered at an approximate depth of 15 feet below grade.

Copies of this report should be forwarded to the agencies listed on the attached letter.

Please do not hesitate to call should you have any question or comment.

John P. Werfal

enclosures