



PACIFIC  
ENVIRONMENTAL  
GROUP, INC.

AN  COMPANY

ENVIRONMENTAL  
PROTECTION

90 JUL 17 PM 4:07

*REW*  
*BO AG*

*STW*      *1748*  
*[Signature]*

July 14, 1998  
Project 311-058.1B

Ms. Tina Berry  
Tosco Marketing Company  
2000 Crow Canyon Place, Suite 400  
San Ramon, California 94583

Re: **Station Upgrade Activities**  
76 Service Station 5760  
376 Lewelling Boulevard at Usher Street  
San Lorenzo, California

Dear Ms. Berry:

On behalf of Tosco Marketing Company (Tosco), Pacific Environmental Group, Inc. (PEG) has prepared this letter to document environmental assessment performed in association with service station upgrade activities at the site referenced above. The service station upgrade activities included the installation of spill containment sumps on the tops of the existing underground fuel storage tanks, and the replacement of the product dispensers and associated underground product piping.

#### **INSTALLATION OF SPILL CONTAINMENT SUMPS**

In May 1998, spill containment sumps were installed at the tops of the existing underground fuel storage tanks by Paradiso Mechanical, Inc. (Paradiso) of San Leandro, California.

Because the underground storage tanks were not removed, and native soils were not exposed, soil sampling was not performed in the area of the fuel tanks.

#### **REMOVAL OF PRODUCT DISPENSERS AND PIPING**

Paradiso removed the four product dispensers and the underground product piping from the site prior to the arrival of PEG field personnel on May 27, 1998. The removed product piping was of double-walled fiberglass construction. However, the piping had

to be replaced to achieve an appropriate slope of the piping toward the spill containment sumps on the fuel tanks.

On May 27, 1998, PEG collected four soil samples, designated D-1 through D-4, from beneath the removed dispensers. PEG also collected five soil samples, designated P-1 through P-5, from beneath the removed product piping. Sample locations are shown on Figure 1. Field procedures used during sample collection are described in Attachment A.

The product dispenser and piping samples were analyzed for the presence of total purgeable petroleum hydrocarbons calculated as gasoline (TPPH-g), benzene, toluene, ethylbenzene, xylenes (BTEX compounds), methyl tert-butyl ether (MtBE), and total lead by a state-certified analytical laboratory. Maximum concentrations of 0.020 parts per million (ppm) MtBE and 90 ppm total lead were detected in the soil samples analyzed. The results of laboratory analyses performed on the product dispenser and piping samples are presented in Table 1. The certified analytical report and chain-of-custody documentation are presented as Attachment B.

### **STOCKPILED SOIL CHARACTERIZATION**

Approximately 50 cubic yards of soil generated during the activities described above were stockpiled briefly on site for characterization. Four soil samples, designated SP-1 through SP-4, were collected from the stockpiled soils on May 27, 1998. The four soil samples were composited four-into-one at the analytical laboratory prior to analysis. The resulting composite soil sample was analyzed for TPPH-g, BTEX compounds, MtBE, and total lead. The results of these laboratory analyses are presented in Table 1.

The stockpiled soils were transported to a temporary stockpiling area at the Forward, Inc. (Forward) disposal facility in Manteca, California. The excavated soils were transported to Forward by Denbeste Transportation, Inc. (Denbeste) of Windsor, California, on June 1, 1998. The soils were accepted at the landfill under Forward acceptance number 705122. A total of 67 tons of soil were transported to Forward.

Upon receipt of the analytical results for stockpiled soil sample SP-1(A-D), the soils were transferred to an appropriate area within Forward landfill for disposal.

### **COMPLETION OF SERVICE STATION UPGRADE ACTIVITIES**

Upon completion of the installation of the spill prevention sumps on the existing fuel tanks, Paradiso covered the tanks with the pea gravel which had been removed to expose the tops of the tanks. The area overlying the tank complex was then re-paved.

July 14, 1998

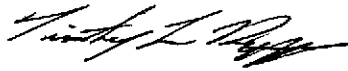
Page 3

Upon completion of soil sampling activities in the area of the removed product dispensers and product piping, new product dispensers and underground double-walled fiberglass product piping were installed by Paradiso in the locations of the removed dispensers and piping. Spill containment boxes were fitted beneath the new product dispensers during installation.

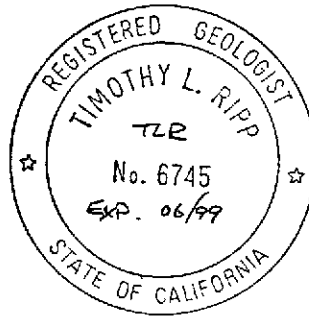
Should you have any questions regarding the contents of this letter, please feel free to call.

Sincerely,

**Pacific Environmental Group, Inc.**



Timothy L. Ripp  
Project Geologist  
RG 6745



Attachments: Table 1 - Soil Analytical Data - Total Petroleum Hydrocarbons (TPPH as Gasoline, BTEX Compounds, MtBE, and TTLC Lead)  
Figure 1 - Site Map  
Attachment A - Field and Laboratory Procedures  
Attachment B - Certified Analytical Report and Chain-of-Custody Documentation

cc: Mr. Robert Weston, Alameda County Health Care Services Agency

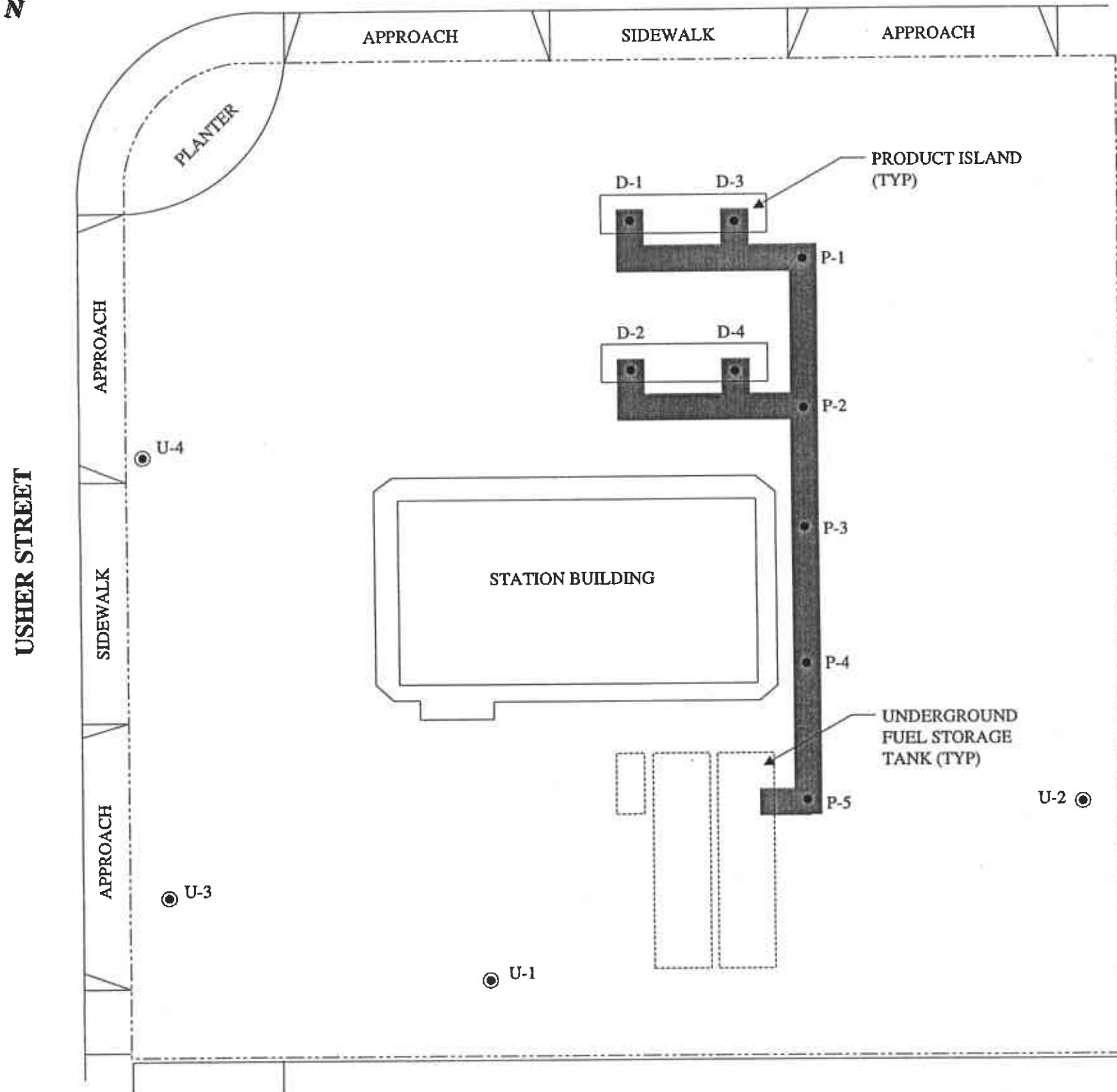
Table 1  
**Soil Analytical Data**  
 (TPPH as Gasoline, BTEX Compounds, MtBE, and TTLC Lead)

76 Service Station 5760  
 376 Lewelling Boulevard at Usher Street  
 San Lorenzo, California

Sample ID	Sample Depth (feet)	Date Sampled	TPPH as Gasoline (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-Benzene (ppm)	Total Xylenes (ppm)	MtBE (ppm)	TTLC Lead (ppm)
<b>In-Situ Soil Samples:</b>									
D-1	3	05/27/98	ND	ND	ND	ND	ND	ND	7.3
D-2	3	05/27/98	ND	ND	ND	ND	ND	ND	43
D-3	3	05/27/98	ND	ND	ND	ND	ND	ND	ND
D-4	3	05/27/98	ND	ND	ND	ND	ND	0.020	6.7
P-1	2	05/27/98	ND	ND	ND	ND	ND	ND	6.5
P-2	2	05/27/98	ND	ND	ND	ND	ND	ND	90
P-3	2	05/27/98	ND	ND	ND	ND	ND	ND	5.3
P-4	2	05/27/98	ND	ND	ND	ND	ND	ND	5.9
P-5	2	05/27/98	ND	ND	ND	ND	ND	ND	7.7
<b>Stockpiled Soil Samples:</b>									
SP-(1-4)	NA	05/27/98	ND	ND	ND	ND	ND	NA	26
TPPH = Total purgeable petroleum hydrocarbons MtBE = Methyl tert-butyl ether TTLC = Total threshold limit concentration ppm = Parts per million ND = Not detected NA = Not applicable Detection limits are indicated in certified analytical reports.									

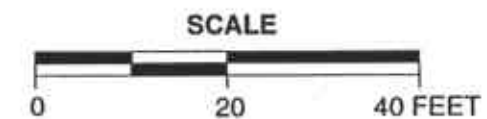


# LEWELLING BOULEVARD



### LEGEND

- U-4 ● GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- D-1 ● SOIL SAMPLE LOCATION AND DESIGNATION



PACIFIC ENVIRONMENTAL GROUP, INC.

TITLE: <b>SITE MAP</b>		
PREPARED FOR: <b>76 SERVICE STATION 5760 376 Lewelling Boulevard at Usher Street San Lorenzo, California</b>		
DATE: 7/7/98	PROJECT: 311-058.1B	FIGURE: 1

**ATTACHMENT A**  
**FIELD AND LABORATORY PROCEDURES**

## ATTACHMENT A

### FIELD AND LABORATORY PROCEDURES

---

#### **Collection of Soil Samples**

Soil samples were collected from undisturbed soil, or soil removed from an excavation by a backhoe bucket, using 2-inch diameter brass sample liners. The soil samples were retained in the brass liners and capped with Teflon® sheets and plastic end caps. The samples were then labeled, placed in sealed plastic bags, and transported on ice to the analytical laboratory, accompanied by the appropriate chain-of-custody documentation.

#### **Laboratory Analyses**

Soil samples were analyzed for the presence of total purgeable petroleum hydrocarbons calculated as gasoline (TPPH-g) by EPA Method 8015 (modified). Soil samples were also analyzed for the presence of benzene, toluene, ethylbenzene, and xylenes (BTEX compounds), and methyl tert-butyl ether (MtBE) by EPA Method 8020. These analytical methods utilize gas chromatography coupled with a photo-ionization detector or flame-ionization detector.

Prior to analysis for total lead, soil samples were extracted by acid digestion, EPA Method 3050. This extraction method is used to determine the total threshold limit concentration (TTLC) within a sample. Analyses for lead were performed using inductively coupled plasma, by EPA Method 6010.

All laboratory analyses were performed by a California State-certified analytical laboratory.

**ATTACHMENT B**  
**CERTIFIED ANALYTICAL REPORT AND**  
**CHAIN-OF-CUSTODY DOCUMENTATION**





Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 311-058.1B/5760, San Lorenzo  Lab Proj. ID: 9805H58	Sampled: 05/27/98 Received: 05/28/98 Analyzed: see below  Reported: 06/05/98
Attention: Tim Ripp		

**LABORATORY ANALYSIS**

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9805H58-01 Sample Desc: SOLID,D-1				
Lead by ICP	mg/Kg	06/01/98	5.0	7.3
Lab No: 9805H58-02 Sample Desc: SOLID,D-2				
Lead by ICP	mg/Kg	06/01/98	5.0	43
Lab No: 9805H58-03 Sample Desc: SOLID,D-3				
Lead by ICP	mg/Kg	06/01/98	5.0	N.D.
Lab No: 9805H58-04 Sample Desc: SOLID,D-4				
Lead by ICP	mg/Kg	06/01/98	5.0	6.7
Lab No: 9805H58-05 Sample Desc: SOLID,P-1				
Lead by ICP	mg/Kg	06/01/98	5.0	6.5
Lab No: 9805H58-06 Sample Desc: SOLID,P-2				
Lead by ICP	mg/Kg	06/01/98	5.0	90
Lab No: 9805H58-07 Sample Desc: SOLID,P-3				
Lead by ICP	mg/Kg	06/01/98	5.0	5.3

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

**SEQUOIA ANALYTICAL - ELAP #1210**

  
\_\_\_\_\_  
Tod Granicher  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8  
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954

(650) 364-9600  
(510) 988-9600  
(916) 921-9600  
(707) 792-1865

FAX (650) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100  
FAX (707) 792-0342

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 311-058.1B/5760, San Lorenzo Lab Proj. ID: 9805H58	Sampled: 05/27/98 Received: 05/28/98 Analyzed: see below Reported: 06/05/98
Attention: Tim Ripp		

## LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9805H58-08 Sample Desc: SOLID,P-4				
Lead by ICP	mg/Kg	06/01/98	5.0	5.9
Lab No: 9805H58-09 Sample Desc: SOLID,P-5				
Lead by ICP	mg/Kg	06/01/98	5.0	7.7
Lab No: 9805H58-10 Sample Desc: SOLID,SP-(1-4)comp				
Lead by ICP	mg/Kg	06/01/98	5.0	26

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Tod Granicher  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8  
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954

(650) 364-9600  
(510) 988-9600  
(916) 921-9600  
(707) 792-1865


FAX (650) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100  
FAX (707) 792-0342

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Tim Ripp	Client Proj. ID: 311-058.1B/5760, San Lorenzo Sample Descript: D-1 Matrix: SOLID Analysis Method: 8015Mod/8020 Lab Number: 9805H58-01	Sampled: 05/27/98 Received: 05/28/98 Analyzed: 06/02/98 Reported: 06/05/98
---	---	---

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	0.50	N.D.
Methyl t-Butyl Ether	0.0050	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140
		Q

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

**SEQUOIA ANALYTICAL** - ELAP #1849

  
\_\_\_\_\_  
Tod Granicher  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiger Lane  
819 Striker Avenue, Suite 8  
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954

(650) 364-9600  
(510) 988-9600  
(916) 921-9600  
(707) 792-1865


FAX (650) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100  
FAX (707) 792-0342

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Tim Ripp	Client Proj. ID: 311-058.1B/5760, San Lorenzo Sample Descript: D-2 Matrix: SOLID Analysis Method: 8015Mod/8020 Lab Number: 9805H58-02	Sampled: 05/27/98 Received: 05/28/98 Analyzed: 06/02/98 Reported: 06/05/98
---	---	---

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	0.50	N.D.
Methyl t-Butyl Ether	0.0050	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	120
4-Bromofluorobenzene	60 140	Q

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

**SEQUOIA ANALYTICAL** - ELAP #1849

  
\_\_\_\_\_  
Tod Granicher  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
 404 N. Wiget Lane  
 819 Striker Avenue, Suite 8  
 1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063  
 Walnut Creek, CA 94598  
 Sacramento, CA 95834  
 Petaluma, CA 94954

(650) 364-9600  
 (510) 988-9600  
 (916) 921-9600  
 (707) 792-1865


FAX (650) 364-9233  
 FAX (510) 988-9673  
 FAX (916) 921-0100  
 FAX (707) 792-0342

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Tim Ripp	Client Proj. ID: 311-058.1B/5760, San Lorenzo Sample Descript: D-3 Matrix: SOLID Analysis Method: 8015Mod/8020 Lab Number: 9805H58-03	Sampled: 05/27/98 Received: 05/28/98 Analyzed: 06/02/98 Reported: 06/05/98
---	---	---

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	0.50	N.D.
Methyl t-Butyl Ether	0.0050	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140

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

**SEQUOIA ANALYTICAL** - ELAP #1849

  
 \_\_\_\_\_  
 Tod Granicher  
 Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite B  
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954

(650) 364-9600  
(510) 988-9600  
(916) 921-9600  
(707) 792-1865

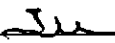
FAX (650) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100  
FAX (707) 792-0342

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Tim Ripp	Client Proj. ID: 311-058.1B/5760, San Lorenzo Sample Descript: D-4 Matrix: SOLID Analysis Method: 8015Mod/8020 Lab Number: 9805H58-04	Sampled: 05/27/98 Received: 05/28/98 Analyzed: 06/02/98 Reported: 06/05/98
---	---	---

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	0.50	N.D.
Methyl t-Butyl Ether	0.0050	0.020
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	110
4-Bromofluorobenzene	60 140	Q

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

**SEQUOIA ANALYTICAL - ELAP #1849**

  
\_\_\_\_\_  
Tod Granicher  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8  
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954


(650) 364-9600 FAX (650) 364-9233  
(510) 988-9600 FAX (510) 988-9673  
(916) 921-9600 FAX (916) 921-0100  
(707) 792-1865 FAX (707) 792-0342

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 311-058.1B/5760, San Lorenzo Sample Descript: P-1 Matrix: SOLID Analysis Method: 8015Mod/8020 Lab Number: 9805H58-05	Sampled: 05/27/98 Received: 05/28/98  Analyzed: 06/02/98 Reported: 06/05/98
Attention: Tim Ripp		

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	0.0050	N.D.
Methyl t-Butyl Ether	0.0050	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140
		Q

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

**SEQUOIA ANALYTICAL** - ELAP #1849

  
\_\_\_\_\_  
Tod Granicher  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8  
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954

(650) 364-9600  
(510) 988-9600  
(916) 921-9600  
(707) 792-1865


FAX (650) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100  
FAX (707) 792-0342

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Tim Ripp	Client Proj. ID: 311-058.1B/5760, San Lorenzo Sample Descript: P-2 Matrix: SOLID Analysis Method: 8015Mod/8020 Lab Number: 9805H58-06	Sampled: 05/27/98 Received: 05/28/98 Analyzed: 06/02/98 Reported: 06/05/98
---	---	---

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	0.50	N.D.
Methyl t-Butyl Ether	0.0050	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	120
4-Bromofluorobenzene	60 140	Q

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

**SEQUOIA ANALYTICAL** - ELAP #1849

  
\_\_\_\_\_  
Tod Granicher  
Project Manager







# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8  
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954

(650) 364-9600  
(510) 988-9600  
(916) 921-9600  
(707) 792-1865


FAX (650) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100  
FAX (707) 792-0342

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Tim Ripp	Client Proj. ID: 311-058.1B/5760, San Lorenzo Sample Descript: P-3 Matrix: SOLID Analysis Method: 8015Mod/8020 Lab Number: 9805H58-07	Sampled: 05/27/98 Received: 05/28/98 Analyzed: 06/02/98 Reported: 06/05/98
---	---	---

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	0.50	N.D.
Methyl t-Butyl Ether	0.0050	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140
		Q

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

**SEQUOIA ANALYTICAL - ELAP #1849**

  
\_\_\_\_\_  
Tod Granicher  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiger Lane  
819 Striker Avenue, Suite B  
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954

(650) 364-9600  
(510) 988-9600  
(916) 921-9600  
(707) 792-1865


FAX (650) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100  
FAX (707) 792-0342

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 311-058.1B/5760, San Lorenzo Sample Descript: P-4 Matrix: SOLID Analysis Method: 8015Mod/8020 Lab Number: 9805H58-08	Sampled: 05/27/98 Received: 05/28/98 Analyzed: 06/02/98 Reported: 06/05/98
Attention: Tim Ripp		

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	0.5	N.D.
Methyl t-Butyl Ether	0.0050	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.000	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	120
4-Bromofluorobenzene	60 140	Q

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

**SEQUOIA ANALYTICAL** - ELAP #1849

  
\_\_\_\_\_  
Tod Granicher  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8  
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954

(650) 364-9600  
(510) 988-9600  
(916) 921-9600  
(707) 792-1865


FAX (650) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100  
FAX (707) 792-0342

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Tim Ripp	Client Proj. ID: 311-058.1B/5760, San Lorenzo Sample Descript: P-5 Matrix: SOLID Analysis Method: 8015Mod/8020 Lab Number: 9805H58-09	Sampled: 05/27/98 Received: 05/28/98 Analyzed: 06/02/98 Reported: 06/05/98
---	---	---

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	0.5	N.D.
Methyl t-Butyl Ether	0.0050	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140

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

**SEQUOIA ANALYTICAL** - ELAP #1849

  
\_\_\_\_\_  
Tod Granicher  
Project Manager





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8  
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954

(650) 364-9600  
(510) 988-9600  
(916) 921-9600  
(707) 792-1865

FAX (650) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100  
FAX (707) 792-0342


Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 311-058.1B/5760, San Lorenzo Sample Descript: SP-(1-4)comp Matrix: SOLID Analysis Method: 8015Mod/8020 Lab Number: 9805H58-10	Sampled: 05/27/98 Received: 05/28/98 Analyzed: 06/02/98 Reported: 06/05/98
Attention: Tim Ripp		

## Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	110

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

**SEQUOIA ANALYTICAL** - ELAP #1210

  
\_\_\_\_\_  
Tod Granicher  
Project Manager





Pacific Environmental Group  
2025 Gateway Place, Suite 440  
San Jose, CA 95110  
Attention: Tim Ripp

Client Project ID: 311-058.1B/5760, San Lorenzo  
Matrix: SOLID

Work Order #: 9805H58 01-10

Reported: Jun 15, 1998

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethylbenzene	Xylenes
QC Batch#:	06Y8023	06Y8023	06Y8023	06Y8023
Analy. Method:	EPA 8015M/8020	EPA 8015M/8020	EPA 8015M/80	EPA 8015M/8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	N.A.	N.A.	N.A.	N.A.
LCS/LCSD #:	LCS060298	LCS060498	LCS060498	LCS060498
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	N.A.	N.A.	N.A.	N.A.
Analyzed Date:	6/2/98	6/2/98	6/2/98	6/2/98
Instrument I.D.#:	N.A.	N.A.	N.A.	N.A.
Conc. Spiked:	0.010 mg/Kg	0.010 mg/Kg	0.010 mg/Kg	0.010 mg/Kg
Result:	0.011	0.011	0.010	0.012
LCS % Recov.:	110	110	100	120
Dup. Result:	0.011	0.010	0.0096	0.010
LCSD % Recov:	110	100	96	100
RPD:	0.0	10	4.1	18
RPD Limit:	0-25	0-25	0-25	0-25

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130
Control Limits				

**SEQUOIA ANALYTICAL  
ELAP #1849**

Tod Granicher  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9805H58.PPP <1>





# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8  
1455 McDowell Blvd. North. Ste. D

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954

(650) 364-9600  
(510) 988-9600  
(916) 921-9600  
(707) 792-1865

FAX (650) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100  
FAX (707) 792-0342

Pacific Environmental Group  
2025 Gateway Place, Suite 440  
San Jose, CA 95110  
Attention: Tim Ripp

Client Project ID: 311-058.1B/5760, San Lorenzo  
Matrix: SOLID

Work Order #: 9805H58 01

Reported: Jun 15, 1998

## QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME0601986010MDE	ME0601986010MDE	ME0601986010MDE	ME0601986010MDE
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050

Analyst:	C. Caoile	C. Caoile	C. Caoile	C. Caoile
MS/MSD #:	980543602	980543602	980543602	980543602
Sample Conc.:	N.D.	N.D.	42	32
Prepared Date:	6/1/98	6/1/98	6/1/98	6/1/98
Analyzed Date:	6/1/98	6/1/98	6/1/98	6/1/98
Instrument I.D.#:	MTJA5	MTJA5	MTJA5	MTJA5
Conc. Spiked:	50 mg/Kg	50 mg/Kg	50 mg/Kg	50 mg/Kg
Result:	43	45	91	78
MS % Recovery:	86	90	98	92
Dup. Result:	43	45	98	77
MSD % Recov.:	86	90	110	90
RPD:	0.0	0.0	7.4	1.3
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	BLK060198	BLK060198	BLK060198	BLK060198
Prepared Date:	6/1/98	6/1/98	6/1/98	6/1/98
Analyzed Date:	6/1/98	6/1/98	6/1/98	6/1/98
Instrument I.D.#:	MTJA5	MTJA5	MTJA5	MTJA5
Conc. Spiked:	50 mg/Kg	50 mg/Kg	50 mg/Kg	50 mg/Kg
LCS Result:	47	48	48	48
LCS % Recov.:	94	96	96	96

MS/MSD	80-120	80-120	80-120	80-120
LCS	80-120	80-120	80-120	80-120
Control Limits				

SEQUOIA ANALYTICAL

  
Tod Granicher  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9805H58.PPP <2>





Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite B  
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954

(650) 364-9600  
(510) 988-9600  
(916) 921-9600  
(707) 792-1865

FAX (650) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100  
FAX (707) 792-0342

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Tim Ripp	Client Proj. ID: 311-058.1B/5760, San Lorenzo  Lab Proj. ID: 9805H58	Received: 05/28/98  Reported: 06/05/98
---	--	--

### LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 156 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

\_\_\_\_\_  
Tod Granicher  
Project Manager



SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: Pacific Environmental  
 REC. BY (PRINT) E/B

WORKORDER: 9805158  
 DATE OF LOG-IN: 5-29-98

CIRCLE THE APPROPRIATE RESPONSE

		LAB						
		SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC.)
1. Custody Seal(s)	Present <input checked="" type="checkbox"/> Absent Intact / Broken*	1	D-B	D- 1	1 x ure	solid	5/27/98	
2. Custody Seal #:	Put in Remarks Section	2		↓ 2				
3. Chain-of-Custody	<input checked="" type="checkbox"/> Present / Absent*	3		↓ 3				
4. Traffic Reports or Packing List:	Present / <input checked="" type="checkbox"/> Absent	4		↓ 4				
5. Airbill:	Airbill / Sticker Present <input checked="" type="checkbox"/> Absent	5		P- 1				
6. Airbill #:	<u>                    </u>	6		↓ 2				
7. Sample Tags:	<input checked="" type="checkbox"/> Present / Absent	7		↓ 3				
Sample Tags #s:	<input checked="" type="checkbox"/> Listed / Not Listed on Chain-of-Custody	8		↓ 4				
8. Sample Condition:	<input checked="" type="checkbox"/> Intact / Broken* / Leaking*	9		↓ 5				
9. Does information on custody reports, traffic reports and sample tags agree?	<input checked="" type="checkbox"/> Yes / No*	10	AS	SP - 1				
10. Proper Preservatives used:	<input checked="" type="checkbox"/> Yes / No*	1	BI	↓ 2				
11. Date Rec. at Lab:	<u>5-28-98</u>	↓	CG	↓ 3				
12. Time Rec. at Lab:	<u>1630</u>	√	DH	↓ 4				
13. Temp Rec. at Lab:	<u>14°C</u>							

\*If Circled, contact Project Manager and attach record of resolution.



# UNOCAL 76

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600  
 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600  
 404 N. Wiget Lane • Walnut Creek, CA 94598 • (510) 988-9600

18939 120th Ave., N.E., Suite 101 • Bothell, WA 98011 • (206) 481-9200  
 East 11115 Montgomery, Suite B • Spokane, WA 99206 • (509) 924-9200  
 15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Consultant Company: <u>Pacific Environmental</u>		Project Name: <u>Unocal # 5760</u>	
Address: <u>2025 Gateway Place Suite 440</u>		UNOCAL Project Manager: <u>Tina Berry</u>	
City: <u>San Jose</u> State: <u>CA</u> Zip Code: <u>95110</u>	AFE #:		
Telephone: <u>(408) 441-7500</u> FAX #: <u>(408) 441-7539</u>	Site #, City, State: <u>376 Lewelling Blvd, San Lorenzo, CA</u>		
Report To: <u>Tim Ripp</u> Sampler: <u>Darren Croteau</u>	QC Data: <input type="checkbox"/> Level D (Standard) <input type="checkbox"/> Level C <input type="checkbox"/> Level B <input type="checkbox"/> Level A		

Turnaround  10 Work Days  5 Work Days  3 Work Days  
 Time:  2 Work Days  1 Work Day  2-8 Hours  
 CODE:  Misc.  Detect.  Eval.  Remed.  Demol.  Closure

Drinking Water  Waste Water  Other  
 Analyses Requested: 980 5458

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	Analyses Requested				Comments
						TPPH-Cas F045/F020	BTEX F015 F020	MHBE F020	TTLIC Lead	
1. D-1 ✓	5/27/98	Soil	1	2X6 Grass	1	X	X	X	X	
2. D-2 ✓					2	X	X	X	X	
3. D-3 ✓					3	X	X	X	X	
4. D-4 ✓					4	X	X	X	X	
5. P-1 ✓					5	X	X	X	X	
6. P-2 ✓					6	X	X	X	X	
7. P-3 ✓					7	X	X	X	X	
8. P-4 ✓					8	X	X	X	X	
9. P-5 ✓					9	X	X	X	X	
10.										

Relinquished By: <u>Darren Croteau</u>	Date: <u>5/27/98</u> Time: <u>4:45</u>	Received By: <u>[Signature]</u>	Date: <u>5/28/98</u> Time: <u>10:30 AM</u>
Relinquished By: <u>[Signature]</u>	Date: <u>5/28/98</u> Time: <u>10:35 AM</u>	Received By: <u>[Signature]</u>	Date: <u>5/28/98</u> Time: <u>1:25</u>
Relinquished By: <u>[Signature]</u>	Date: <u>5/28/98</u> Time:	Received By Lab: <u>[Signature]</u>	Date: <u>5/28/98</u> Time: <u>16:30</u>

Were Samples Received in Good Condition?  Yes  No     
 Samples on Ice?  Yes  No     
 Method of Shipment \_\_\_\_\_     
 Page \_\_\_ of \_\_\_

To be completed upon receipt of report:

- 1) Were the analyses requested on the Chain of Custody reported?  Yes  No If no, what analyses are still needed? \_\_\_\_\_
- 2) Was the report issued within the requested turnaround time?  Yes  No If no, what was the turnaround time? \_\_\_\_\_

Approved by: \_\_\_\_\_ Signature: \_\_\_\_\_ Company: \_\_\_\_\_ Date: \_\_\_\_\_

Pink - Client  
 Yellow - Laboratory  
 White - Laboratory

