

PACIFIC  
ENVIRONMENTAL  
GROUP INC.

RECEIVED

11:37 am, Jun 17, 2009

Alameda County  
Environmental Health

Date: April 4, 1997

Project: 311-127.5A

To: City of San Leandro - WPCP  
3000 Davis Street  
San Leandro, California 94577-2236

FILE #	<u>5367</u>	SS	<input checked="" type="checkbox"/>	BP	<input type="checkbox"/>
RPT	<input checked="" type="checkbox"/>	QM	<input type="checkbox"/>	TRANSMITTAL	<input type="checkbox"/>
1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>
4	<input type="checkbox"/>	5	<input type="checkbox"/>	6	<input type="checkbox"/>

We have enclosed:

Copies	Description
<u>1</u>	<u>Monthly Discharge Report (2/19/97 - 3/17/97)</u>
<u>1</u>	<u>Table 1 - Treatment System Metered Volume</u>
<u>1</u>	<u>Table 2 - Groundwater Extraction System Analytical Data</u>
<u>1</u>	<u>Certified analytical report chain-of-custody documentation (3/6/97)</u>
	<u>(Re: 76 Station 5367, 500 Bancroft Avenue, San Leandro)</u>

For your:  Use  
 and Approval  
 Review  
 Information

Comments: Attached are the monthly discharge report for the site referenced above,  
tables providing operational and analytical data, and the certified analytical report for  
samples taken March 6, 1997. Please note that the groundwater system was shut down  
March 17, 1997. Unless otherwise instructed, we will discontinue monthly sewer reports  
as long as the system remains down. Please call if you have any questions.

Suzanne McClurkin-Nelson *SM*  
Staff Scientist

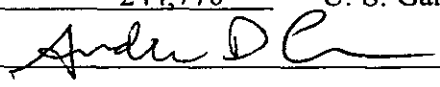
cc: Ms. Tina Berry, Unocal Corporation

3111275AMSR0397

MONTHLY DISCHARGE REPORT  
UNOCAL GROUNDWATER CLEAN-UP PROJECT

This letter and enclosed documents are to serve as Unocal's Groundwater Clean-up project monthly discharge report to the City of San Leandro for the reporting period of: 02/19/97 to 03/17/97.

This report is in compliance with 40 CFR 403.12 and Part IV-A of our Discharge Permit No. SD-023. The information contained in this report is accurate and complete. For any questions or comments in this report, contact me at (408) 441-7500.

Number of days discharged: 22 days  
Total monthly discharge: 244,770 U. S. Gallons  
Signature of Certifying Official:   
Printed Name of Official: Andrew D. Lehane  
Title: Project Engineer, Pacific Environmental Group, Inc.  
Date: April 4, 1997

Attach a brief statement summarizing the months operations.

Site visits were made on March 6, 13 and 17, 1997. The system was shut down on March 17, 1997 in response to a decision to deactivate the soil vapor extraction system for which the groundwater system acted as a dewatering mechanism. Until such time as the groundwater system is reactivated, we will discontinue monthly sewer reports, with your approval.

Table 1  
Treatment System Metered Volume

76 Service Station 5367  
500 Bancroft Avenue at Dowling  
San Leandro, California

Date Sampled	Volume Reading (gallons)	Net Volume (gallons)	Cumulative System Discharge To Date (gallons)	Average Total System Discharge (gpm)	Average Total System Discharge (gpd)
03/18/96	0	0	0	0.0	0
03/22/96	16,200	16,200	16,200	2.8	4,050
04/08/96	77,630	61,430	77,630	2.5	3,614
04/26/96	95,700	18,070	95,700	0.7	1,004
05/16/96 a	133,800	38,100	133,800	1.3	1,905
06/06/96	216,850	83,050	216,850	2.7	3,955
07/17/96	233,320	16,470	233,320	0.3	402
08/05/96	249,570	16,250	249,570	0.6	855
08/19/96	249,670	100	249,670	0.005	7
09/10/96	249,820	150	249,820	0.005	7
09/26/96	250,300	480	250,300	0.02	30
10/15/96	266,527	16,227	266,527	0.6	854
10/28/96	267,653	1,126	267,653	N/A	N/A
11/14/96 b	267,653	0	267,653	N/A	N/A
12/11/96 b	267,663	10	267,663	N/A	N/A
12/20/96	267,869	206	267,869	N/A	N/A
01/09/97	270,121 c	2,252	270,121	N/A	N/A
02/19/97	122,270 c	122,260	392,381	2.1	2,982
03/06/97	314,460	192,190	584,571	8.9	12,813
03/13/97 d	367,040	52,580	637,151	5.2	7,511
<b>REPORTING PERIOD:</b>				<b>02/19/97 - 03/17/97</b>	
<b>PERIOD VOLUME DISCHARGED:</b>				<b>244,770</b>	
<b>PERIOD DAYS DISCHARGED:</b>				<b>22</b>	
gpm = Gallons per minute					
gpd = Gallons per day					
a. Project transferred to Pacific Environmental Group, Inc. from PSI.					
b. Pumps are operating but not pumping any groundwater.					
c. Totalizer replaced 1/9/97 (starting at 00010 gallons).					
d. GWE and SVE systems deactivated on 3/17/97.					

Table 2  
**Groundwater Extraction System Analytical Data**  
 Total Petroleum Hydrocarbons  
 (TPPH and BTEX Compounds)

76 Service Station 5367  
 500 Bancroft Avenue at Dowling  
 San Leandro, California

Date Sampled	TPPH (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)
<b>Influent Samples</b>					
05/16/96	17,000	98	92	1,300	3,900
06/06/96	5,500	35	17	200	780
07/17/96	1,700	14	<5.0	91	89
08/05/96	1,800	10	<5.0	160	410
09/10/96	9,700	29	<10	600	1,600
10/15/96	54,000	200	90	2,800	8,900
12/11/96	12,000	56	21	820	2,700
01/09/97	19,000	44	<20	1,200	2,700
02/06/97	19,000	61	10	1,200	2,700
03/06/97	36,000	91	1,300	1,600	7,800
<b>Midpoint Samples</b>					
05/16/96	<50	<0.50	<0.50	<0.50	<0.50
06/06/96	<50	<0.50	<0.50	<0.50	<0.50
07/17/96	<50	<0.50	<0.50	<0.50	<0.50
08/05/96	<50	<0.50	<0.50	<0.50	<0.50
09/10/96	<50	<0.50	<0.50	<0.50	0.60
10/15/96	<50	<0.50	<0.50	<0.50	0.60
11/14/96	<50	<0.50	<0.50	<0.50	<0.50
12/11/96	<50	<0.50	<0.50	<0.50	<0.50
01/09/97	<50	<0.50	<0.50	<0.50	<0.50
02/06/97	<50	<0.50	<0.50	<0.50	<0.50
03/06/97	<50	<0.50	<0.50	<0.50	<0.50
<b>Effluent Samples</b>					
05/16/96	<50	<0.50	<0.50	<0.50	<0.50
06/06/96	<50	<0.50	<0.50	<0.50	<0.50
07/17/96	<50	<0.50	<0.50	<0.50	<0.50
08/05/96	<50	<0.50	<0.50	<0.50	<0.50
09/10/96	<50	<0.50	<0.50	<0.50	<0.50
10/15/96	<50	<0.50	<0.50	<0.50	<0.50
11/14/96	<50	<0.50	<0.50	<0.50	<0.50
12/11/96	<50	<0.50	<0.50	<0.50	<0.50
01/09/97	<50	<0.50	<0.50	<0.50	<0.50
02/06/97	<50	<0.50	<0.50	<0.50	<0.50
03/06/97	<50	<0.50	<0.50	<0.50	<0.50
TPPH = Total purgeable petroleum hydrocarbons µg/L = Micrograms per liter a. Project transferred to Pacific Environmental Group, Inc. from PSI.					



# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite B

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Walnut Creek, CA 94598  
Sacramento, CA 95834

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FAX (916) 921-0100

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 311-127.5A/ 5367/ San Leandro Sample Descript: INFL Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9703466-01	Sampled: 03/06/97 Received: 03/07/97 Analyzed: 03/13/97 Reported: 03/16/97
Attention: Jessica Nelligan		

QC Batch Number: GC031397BTEX02A  
Instrument ID: GCHP2

## Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	5000	36000
Benzene	50	91
Toluene	50	1300
Ethyl Benzene	50	1600
Xylenes (Total)	50	7800
Chromatogram Pattern:		Gas
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	89

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

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Todd Granicher  
Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive	Redwood City, CA 94063	(415) 364-9600	FAX (415) 364-9233
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819 Striker Avenue, Suite 8	Sacramento, CA 95834	(916) 921-9600	FAX (916) 921-0100

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 311-127.5A/ 5367/ San Leandro Sample Descript: MID-2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9703466-02	Sampled: 03/06/97 Received: 03/07/97 Analyzed: 03/12/97 Reported: 03/16/97
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Attention: Jessica Nelligan  
QC Batch Number: GC031297BTEX21A  
Instrument ID: GCHP21

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	99

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

**SEQUOIA ANALYTICAL - ELAP #1210**

312  
Tod Granicher  
Project Manager



**Sequoia  
Analytical**

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Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 311-127.5A/ 5367/ San Leandro Sample Descript: EFFL Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9703466-03	Sampled: 03/06/97 Received: 03/07/97 Analyzed: 03/12/97 Reported: 03/16/97
Attention: Jessica Nelligan		

QC Batch Number: GC031297BTEX21A  
Instrument ID: GCHP21

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	96

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

**SEQUOIA ANALYTICAL - ELAP #1210**

710  
Tod Granicher  
Project Manager



# Sequoia Analytical

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Pacific Environmental Group  
2025 Gateway Place, Suite 440  
San Jose, CA 95110  
Attention: Jessica Nelligan

Client Project ID: 311-127.5A / 5367 / San Leandro  
Matrix: LIQUID

Work Order #: 9703466 01-03

Reported: Apr 5, 1997

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC031297BTEX21A	GC031297BTEX21A	GC031297BTEX21A	GC031297BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	970315301	970315301	970315301	970315301
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/12/97	3/12/97	3/12/97	3/12/97
Analyzed Date:	3/12/97	3/12/97	3/12/97	3/12/97
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.9	10	10	30
MS % Recovery:	99	100	100	100
Dup. Result:	10	11	11	35
MSD % Recov.:	100	110	110	117
RPD:	1.0	9.5	9.5	15
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK031297A	BLK031297A	BLK031297A	BLK031297A
Prepared Date:	3/12/97	3/12/97	3/12/97	3/12/97
Analyzed Date:	3/12/97	3/12/97	3/12/97	3/12/97
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.5	9.9	10	32
LCS % Recov.:	95	99	100	107

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

SEQUOIA ANALYTICAL

*Jirsa*  
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

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Pacific Environmental Group  
2025 Gateway Place, Suite 440  
San Jose, CA 95110  
Attention: Jessica Nelligan

Client Project ID: 311-127.5A / 5367 / San Leandro  
Matrix: LIQUID

Work Order #: 9703466 01-03

Reported: Apr 5, 1997

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC031397BTEX02A	GC031397BTEX02A	GC031397BTEX02A	GC031397BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	A. MirafTAB	A. MirafTAB	A. MirafTAB	A. MirafTAB
MS/MSD #:	970336507	970336507	970336507	970336507
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/13/97	3/13/97	3/13/97	3/13/97
Analyzed Date:	3/13/97	3/13/97	3/13/97	3/13/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L

Result:	9.5	9.4	9.5	30
MS % Recovery:	95	94	95	100

Dup. Result:	9.3	9.2	9.3	29
MSD % Recov.:	93	92	93	97

RPD:	2.1	2.2	2.1	3.4
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK031397A	BLK031397A	BLK031397A	BLK031397A
Prepared Date:	3/13/97	3/13/97	3/13/97	3/13/97
Analyzed Date:	3/13/97	3/13/97	3/13/97	3/13/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.0	9.1	9.3	29
LCS % Recov.:	90	91	93	97

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

**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.

SEQUOIA ANALYTICAL

*Tod Granicher*  
Tod Granicher  
Project Manager

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

9703466.PPP <2>



**Sequoia  
Analytical**

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Pacific Environmental Group	Client Proj. ID: 311-127.5A/ 5367/ San Leandro	Received: 03/07/97
2025 Gateway Place, Suite 440		
San Jose, CA 95110	Lab Proj. ID: 9703466	Reported: 03/16/97
Attention: Jessica Nelligan		

### LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 8 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

**SEQUOIA ANALYTICAL**

311  
Tod Granicher  
Project Manager

Consultant Company: <u>Pacific Env Group Inc</u>		Project Name: <u>311-127.5A</u>	
Address: <u>2025 GATEWAY PL 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>	
Report To: <u>Jessica Nelligan</u>		Sampler: <u>Don Waterman</u>	
Turnaround <input checked="" type="checkbox"/> 10 Work Days <input type="checkbox"/> 5 Work Days <input type="checkbox"/> 3 Work Days		Site #: <u>5367</u> City, State: <u>SAN LEANDRO CA.</u>	
Time: <input type="checkbox"/> 2 Work Days <input type="checkbox"/> 1 Work Day <input type="checkbox"/> 2-8 Hours		QC Data: <input checked="" type="checkbox"/> Level D (Standard) <input type="checkbox"/> Level C <input type="checkbox"/> Level B <input type="checkbox"/> Level A	

Drinking Water  Waste Water  Other  
 Analyses Requested: 9703466  
 CODE:  Misc.  Detect.  Eval.  Remed.  Demol.  Closure

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	Comments
1. <u>INF1</u> ✓	<u>3/6/97 11:45</u>	<u>H<sub>2</sub>O</u>	<u>3</u>	<u>UDA</u>	<u>1</u>	<u>X</u>
2. <u>MBO-2</u> ✓	↓	↓	↓	↓	<u>2</u>	↓
3. <u>EFF1</u> ✓	↓	↓	↓	↓	<u>3</u>	↓
4.						
5.						
6.						
7.						
8.						
9.						
10.						

Relinquished By: <u>Don Waterman</u>	Date: <u>3/6/97</u>	Time: <u>15:15</u>	Received By: <u>Julie Warren</u>	Date: <u>3/6/97</u>	Time: <u>15:15</u>
Relinquished By: <u>Julie Warren</u>	Date: <u>3/7/97</u>	Time: <u>11:23</u>	Received By: <u>[Signature]</u>	Date: <u>3/7/97</u>	Time: <u>11:23</u>
Relinquished By: <u>[Signature]</u>	Date: <u>3/7/97</u>	Time: _____	Received By Lab: <u>[Signature]</u>	Date: <u>3/7/97</u>	Time: <u>1233</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