



PACIFIC
ENVIRONMENTAL
GROUP, INC.

February 10, 1997
Project 311-058.5A

Ms. Susan Keach
Oro Loma Sanitary District
2600 Grant Avenue
San Lorenzo, California 94580

Re: Wastewater Discharge Permit 024 - January 1997 Sewer Report
76 Service Station 5760
376 Lewelling Boulevard at Usher Street
San Lorenzo, California

Dear Ms. Keach:

On behalf of 76 Oil Products Company, Pacific Environmental Group, Inc. (PACIFIC) is operating a groundwater extraction (GWE) and treatment system at the site referenced above. This letter transmits treatment system operational data for the period from December 9, 1996 through January 22, 1997. Operational parameters are summarized in the table below.

<i>Current System Status:</i>	<i>Operational</i>
<i>Reporting Period:</i>	12/9/96 - 1/22/97
<i>Period Temperature:</i>	61.7
<i>Period pH reading:</i>	7.61
<i>Period Volume Discharged:</i>	42,845 gallons
<i>Total Discharged to Date:</i>	388,506 gallons
<i>Average Flow Rate:</i>	0.7 gallon per minute
<i>Analytical Reports:</i>	Attached

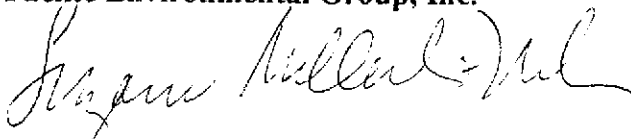
Field measurements and the analytical results indicate that the GWE system is currently in compliance with all conditions of the discharge permit.

97 FEB 14 PM 2:03
ENVIRONMENTAL
PROTECTION

Monthly analyses include total petroleum hydrocarbons and benzene, toluene, ethylbenzene and xylenes (BTEX compounds); quarterly analyses include chemical oxygen demand, pH, and total suspended solids. Operational and analytical data are included in Tables 1 and 2, and the certified analytical report and chain-of-custody documentation are included as Attachment A. If you have any questions regarding this project or require further information, please do not hesitate to call.

Sincerely,

Pacific Environmental Group, Inc.



Suzanne McClurkin-Nelson
Staff Scientist

Attachments: Table 1 - Treatment System Metered Volume
Table 2 - Groundwater Treatment System Analytical Data
Attachment A - Certified Analytical Report and Chain-of-Custody
Documentation

cc: Ms. Tina Berry, 76 Oil Products Company
Mr. Richard Hiatt, Regional Water Quality Control Board - S.F. Bay Region
Ms. Amy Leech, Alameda County Health Care Services

Table 1
Treatment System Metered Volume

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

Date Sampled	Flow Meter Reading (gallons)	Flow Meter Net Volume (gallons)	Cumulative System Discharge To Date (gallons)	Average Total System Discharge (gpm)	Average Total System Discharge (gpd)
10/18/95 a	76	0	0	N/A	N/A
10/30/95	4,040	3,964	3,964	0.2	330
11/30/95	7,751	3,711	7,675	0.1	120
12/27/95	15,031	7,280	14,955	0.2	270
01/22/96	19,350	4,319	19,274	0.1	166
02/13/96	28,980	9,630	28,904	0.3	438
03/11/96 b	82,320	53,340	82,244	1.4	1,976
04/05/96	82,660	340	82,584	0.01	14
05/15/96 c	132,610	49,950	132,534	0.87	1,249
07/02/96 d	142,690	10,080	142,614	N/A	N/A
07/17/96 e,f	194,730	52,040	194,654	2.4	3,469
10/15/96 g	243,783	49,053	243,707	N/A	N/A
11/11/96	298,271	54,488	298,195	1.4	2,018
11/27/96	331,768	33,497	331,692	1.5	2,094
12/09/96	345,737	13,969	345,661	0.8	1,164
01/22/97	388,582	42,845	388,506	0.7	974

gpm = Gallons per minute

gpd = Gallons per day

N/A = Not applicable or not available

- a. GWE continuous system operation began on October 18, 1995.
- b. GWE system found down 3/11/96; carbon changeout performed 3/25/96.
- c. GWE system shut down in May for primary carbon replacement.
- d. System restarted July 2, 1996.
- e. System temporarily shut down to address operational problems.
- f. Carbon changeout to primary on 10/13/96; primary & secondary switched.
- g. System restarted 10/15/96 following carbon changeout.

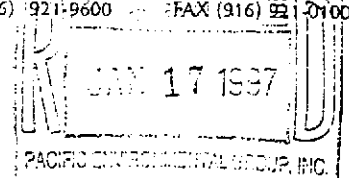
Table 2
Groundwater Treatment System Analytical Data

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

Date Sampled						Permit Compliance Parameters		
	TPPH (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	COD (mg/L)	TSS (mg/L)	pH (units)
Influent Samples								
10/30/95	33,000	480	1,400	900	7,100	N/A	N/A	N/A
11/30/95	15,000	190	310	210	3,700	N/A	N/A	N/A
12/27/95	1,100	16	23	<2.0	300	N/A	N/A	N/A
02/13/96 b	32,000	460	1,100	1,500	7,700	N/A	N/A	N/A
04/05/96	25,000	280	1,400	900	6,400	N/A	N/A	N/A
05/15/96	22,000	240	1,200	850	4,700	N/A	N/A	N/A
07/02/96	22,000	230	1,300	950	4,700	N/A	N/A	N/A
10/15/96 e	4,900	94	14	210	1,600	N/A	N/A	N/A
11/11/96	15,000	130	560	550	4,500	N/A	N/A	N/A
12/09/96	3,800	14	<5.0	10	800	N/A	N/A	N/A
01/08/97	1,800	10	5.9	16	330	N/A	N/A	N/A
Effluent Samples								
10/04/95	<50	<0.50	<0.50	<0.50	<0.50	<20	<1.0	8.89 a
10/30/95	<50	<0.50	<0.50	<0.50	<0.50	NS	NS	NS
11/30/95	<50	<0.50	<0.50	<0.50	<0.50	NS	NS	NS
12/27/95	<50	<0.50	<0.50	<0.50	<0.50	NS	NS	7.05 a
02/13/96 b	<50	<0.50	<0.50	<0.50	<0.50	<20	9.0	6.83 a
04/05/96 c	83	<0.50	0.80	<0.50	2.0	<20	11	6.83 a
05/15/96 c	<50	1.8	1.6	<0.50	5.8	<20	12	6.86 a
07/02/96 d	<50	<0.50	<0.50	<0.50	<0.50	15	2.0	7.09 a
10/15/96 e	<50	<0.50	<0.50	<0.50	0.54	NS	NS	8.74 a
11/11/96	<50	<0.50	<0.50	<0.50	<0.50	NS	NS	7.55 a
11/27/96	<50	<0.50	<0.50	<0.50	<0.50	<20	<1.0	7.2
12/09/96	<50	<0.50	<0.50	<0.50	<0.50	NS	NS	6.92 a
01/08/97	<50	<0.50	<0.50	<0.50	<0.50	NS	NS	7.61 a
TPPH = Total purgeable petroleum hydrocarbons COD = Chemical oxygen demand TSS = Total suspended solids µg/L = Micrograms per liter mg/L = Milligrams per liter N/A = Not applicable NS = Not sampled < = Denotes any potential concentrations fell below the shown detection limit for the analysis. a. The pH reading was measured by field instruments, not by laboratory analysis. b. GWE system was found down 1/17/96 and two pumps were pulled for repair and replaced 2/13/96. c. Carbon replacement of primary on 3/25/96 (switched to secondary); new primary replaced in May. d. System restarted July 2, 1996; de-activated July 17 to schedule carbon replacement to current primary. e. System restarted 10/15/96 following carbon changeout.								

ATTACHMENT A

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



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: Unocal 310-058.5A/ 5760 Sample Descript: INFL Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9701487-01	Sampled: 01/08/97 Received: 01/09/97 Analyzed: 01/13/97 Reported:
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QC Batch Number: GC011397BTEX01A
Instrument ID: GCHP01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	1800
Benzene	5.0	10
Toluene	5.0	5.9
Ethyl Benzene	5.0	16
Xylenes (Total)	5.0	330
Chromatogram Pattern:		Gas

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	80

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

SEQUOIA ANALYTICAL - ELAP #1210

Tod Granicher
Tod Granicher
Project Manager





Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: Unocal 310-058.5A/ 5760 Sample Descript: EFFL Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9701487-02	Sampled: 01/08/97 Received: 01/09/97 Analyzed: 01/13/97 Reported:
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QC Batch Number: GC011397BTEX01A
Instrument ID: GCHP01

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:		N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	82

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

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

(415) 364-9600
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(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Andrew Lehane

Client Proj. ID: Unocal 310-058.5A/ 5760

Received: 01/09/97

Lab Proj. ID: 9701487

Reported:

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 6 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

Page: 1





Pacific Environmental Group	Client Project ID: Unocal 310-058.5A / 5760, San Lorenzo
2025 Gateway Place, Suite 440	Matrix: LIQUID
San Jose, CA 95110	
Attention: Andrew Lehane	Work Order #: 9701487 01, 02
	Reported: Jan 16, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC011397BTEX01A	GC011397BTEX01A	GC011397BTEX01A	GC011397BTEX01A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler
MS/MSD #:	970138001	970138001	970138001	970138001
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	1/13/97	1/13/97	1/13/97	1/13/97
Analyzed Date:	1/13/97	1/13/97	1/13/97	1/13/97
Instrument I.D.#:	GCHP1	GCHP1	GCHP1	GCHP1
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.8	9.7	9.8	30
MS % Recovery:	98	97	98	100
Dup. Result:	9.3	9.3	9.3	29
MSD % Recov.:	93	93	93	97
RPD:	5.2	4.2	5.2	3.4
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK011397A	BLK011397A	BLK011397A	BLK011397A
Prepared Date:	1/13/97	1/13/97	1/13/97	1/13/97
Analyzed Date:	1/13/97	1/13/97	1/13/97	1/13/97
Instrument I.D.#:	GCHP1	GCHP1	GCHP1	GCHP1
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.2	9.2	9.2	28
LCS % Recov.:	92	92	92	93

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

9701487.PPP <1>



CLIENT NAME: PEG
 REC. BY (PRINT) Rich Herling

WORKORDER: 9701487
 DATE OF LOG-IN: 1/11/97

CIRCLE THE APPROPRIATE RESPONSE

- 1. Custody Seal(s) Present / Absent
Intact / Broken*
- 2. Custody Seal #: Put in Remarks Section
- 3. Chain-of-Custody Present / Absent*
- 4. Traffic Reports or Packing List: Present / Absent
- 5. Airbill: Airbill / Sticker Present / Absent
- 6. Airbill #: _____
- 7. Sample Tags: Present / Absent
Sample Tags #s: Listed / Not Listed on Chain-of-Custody
- 8. Sample Condition: Intact / Broken* / Leaking*
- 9. Does information on custody reports, traffic reports and sample tags agree? Yes / No*
- 10. Proper Preservatives used: Yes / No*
- 11. Date Rec. at Lab: 1/9/97
- 12. Time Rec. at Lab: 1131
- 13. Temp Rec. at Lab: 10°C

LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC.)
1	A-C	INFI	(3) UOA	lig	1/8/97	
2	↓	EFFI	2	1	1	
<i>[Large handwritten scribble and signature across the table]</i>						

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

Consultant Company: Pacific Env. Group, Inc. Project Name: 310-058.5A
 Address: 2025 GATEWAY PL. #440 UNOCAL Project Manager: TINA Berry
 City: San Jose State: CA Zip Code: 95110 AFE #:
 Telephone: (408) 441-7500 FAX # (408) 441-7539 Site #, City, State: 5760, SAN Lorenzo
 Report To: Andrew Lehner Sampler: Don WATENPAUGH QC Data: Level D (Standard) Level C Level B 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: 9701487

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	TPH-5/BTEX										Comments				
1. INPI	1/8/97 12:30	H ₂ O	3	VDA	1	X														
2. EFFI	1/8/97 12:30	H ₂ O	3	VDA	2	X														
3.																				
4.																				
5.																				
6.																				
7.																				
8.																				
9.																				
10.																				

Relinquished By: <u>Don Watenpugh</u>	Date: <u>1/8/97</u>	Time: <u>14:00</u>	Received By: <u>Swight</u>	Date: <u>1/9/97</u>	Time: <u>104.5A</u>
Relinquished By: <u>Swight</u>	Date: <u>1/9/97</u>	Time: <u>1:20</u>	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab: <u>R. Ollie</u>	Date: <u>1/9/97</u>	Time: <u>1:31</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: D. Aparicio Signature: D. Aparicio Company: PG&E Date: 1/21/97

Pink - Client
 Yellow - Laboratory
 White - Laboratory