

585 5710 258

December 2, 1998 Project 311-127.1B

AN COMPANY

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

Re: Product Piping Removal Activities
76 Service Station 5367
500 Bancroft Avenue at Dowling Boulevard
San Leandro, 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 station upgrade activities at the site referenced above.

The station upgrade activities performed at the site included the replacement of the product dispensers and associated underground product piping, the installation of spill containment sumps on the existing underground fuel storage tanks, and the installation of an electronic leak detection monitoring system.

REMOVAL OF PRODUCT DISPENSERS AND UNDERGROUND PIPING

Henderson Construction, Inc. (Henderson) of Stockton, California removed the six product dispensers and underground product piping from the site in mid-October 1998. The removed product piping was of single-walled fiberglass construction, but had been installed with fiberglass trench liners which acted as secondary containment.

On October 26, 1998, at the direction of Mr. Karl Busche of the San Leandro Fire Department (SLFD), PEG collected six soil samples, designated P-1 through P-6, from beneath the removed product dispensers and piping. The locations of these soil samples are shown on Figure 1. Sample collection depths are presented Table 1. Field and laboratory procedures are presented as Attachment A.

Soil samples P-1 through P-6 were analyzed for the presence of total purgeable petroleum hydrocarbons calculated as gasoline (TPPH-g), benzene, toluene, ethylbenzene, and xylenes (BTEX compounds), total extractable petroleum hydrocarbons calculated as diesel (TEPH-d), methyl tert-butyl ether (MtBE), and total lead. The results of these analyses are presented in Table 1. The certified analytical reports and chain-of-custody documentation are presented as Attachment B.

Additional excavation to remove hydrocarbon-impacted soils was not performed in the areas of the removed product dispensers or underground product piping. Upon completion of piping removal and soil sampling activities, a maximum residual concentration of 3.1 parts per million (ppm) TEPH-d was detected in a soil sample collected at the maximum extent of excavation. The analytical laboratory noted an atypical chromatograph pattern for this TEPH-d quantification. Concentrations of TPPH-g, BTEX compounds, or MtBE were not detected in soil samples collected at the maximum extent of excavation. Concentrations of total lead ranged from 6.8 to 10 ppm in in-situ soil samples.

INSTALLATION OF SPILL CONTAINMENT SUMPS

In October 1998, spill containment sumps were installed at the tops of the existing underground fuel storage tanks by Henderson. Because the tanks were not removed, and native soils were not exposed, soil sampling was not performed in the area of the fuel tanks.

STOCKPILED SOIL CHARACTERIZATION

Approximately 30 cubic yards of soil generated from the area of the removed product dispensers and associated piping were stockpiled briefly on site for characterization prior to disposal. On October 26, 1998, four soil samples, designated SP(1) through SP(4), were collected from these stockpiled soils. The four soil samples were composited four-into-one at the analytical laboratory prior to analysis, resulting in the analysis of a single composite soil sample, SP(1-4). Sample SP(1-4) was analyzed for the presence of TPPH-g, BTEX compounds, MtBE, TEPH-d, and total lead. The results of these analyses are presented in Table 1. The certified analytical reports and chain-of-custody documentation are presented as Attachment B.

The excavated soils were transported to a temporary holding area at the Forward, Inc. (Forward) disposal facility in Manteca, California. These stockpiled soils were transported to Forward by Denbeste Transportation, Inc. (Denbeste) of Windsor, California, on November 6, 1998. Upon evaluation of the analytical data for stockpiled soil composite sample SP(1-4), these stockpiled soils were transferred to an appropriate area within the Forward facility for disposal.

COMPLETION OF SERVICE STATION UPGRADE ACTIVITIES

Upon completion of the removal of the product dispensers and associated underground product piping, new product piping and dispensers were installed by Henderson in the

same locations as the removed piping and dispensers. Spill containment boxes were fitted beneath the new product dispensers during installation.

Upon completion of the installation of the spill containment sumps on the existing underground fuel tanks, the fuel tanks were covered with pea gravel and the area overlying the fuel tanks was re-paved.

A leak detection monitoring system was also installed by Henderson during the installation and modification of service station improvements at the site.

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

Figure 1 - Site Map

Attachment A - Field and Laboratory Procedures

Attachment B - Certified Analytical Reports and Chain-of-Custody

HOTHY

No. 6745

OF CAUF

Documentation

cc: Mr. Karl Busche, San Leandro Fire Department

Mr. Tom Peacock, Alameda County Health Care Services Agency

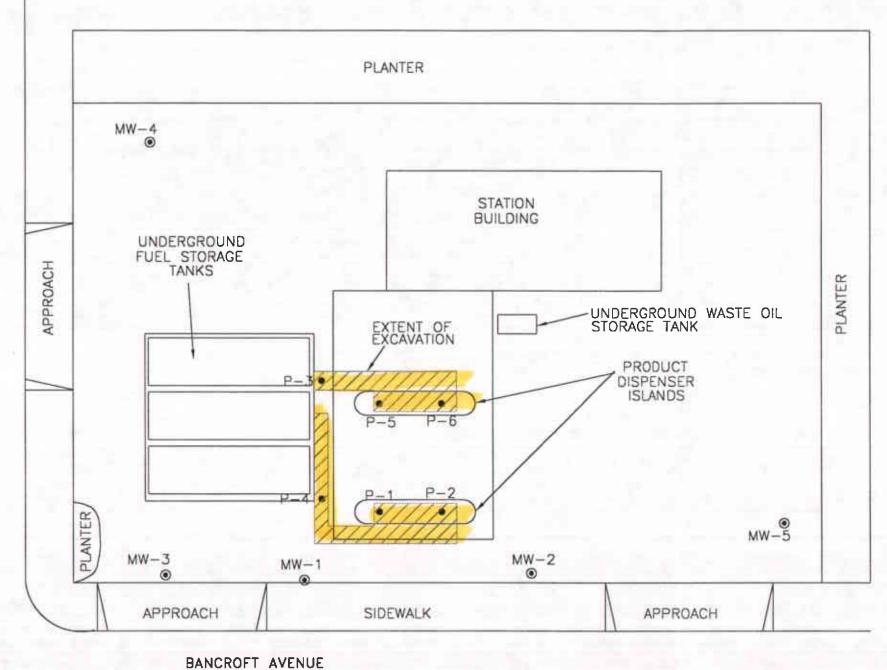
Table 1 Soil Analytical Data

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

	Sample		TPPH as			Ethyl-	Total	TEPH as		TTLC
Sample	Depth	Date	Gasoline	Benzene	Toluene	Benzene	Xylenes	Diesel	MtBE	Lead
ID	(feet)	Sampled	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
In-Situ Soil	Samples:									
P-1	3	10/26/98	ND	ND	ND	ND	ND	3.10)	ND	10
P-2	4	10/26/98	ND	ND	ND	ND	ND	ND	ND	10
P-3	5-1/2	10/26/98	ND	ND	ND	ND	ND	1.8(1)	ND	8.8
P-4	5	10/26/98	ND	ND	ND	ND	ND	1.0(1)	ND	8,6
P-5	4-1/2	10/26/98	ND	ND	ND	ND	ND	ND	ND	6.8
P-6	4	10/26/98	ND	ND	ND	ND	ND	ND	ND	9.2
SP(1-4)	NA	10/26/98	ND	ND	ND	ND	0.040	ND	ND	11
ГРРН	- Total nume	sable petroleur	n hwimcarbon	ah						
VIBE	= Methyl tert		r ryunssareur	10						
TEPH		ctable petroleu	m hydrocarbo	ns						
TLC		hold limit conc								
opm	= Parts per n									
ND	= Not detecte									
VA.	= Not applica	able								
[1)	= Atypical ch	romatograph p	attem reporte	d by analytical	laboratory.					
	Detection lim	its are indicate	d in certified a	nalytical report	ls.					

DOWLING BOULEVARD

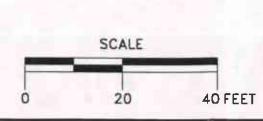
311\127\Site_Map.dwg



LEGEND:

MW-1_● GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION

P-1 • SOIL SAMPLE LOCATION AND DESIGNATION





TITLE: SITE MAP PREPARED FOR: 76 Service Station 5367 500 Bancroft Avenue at Dowling Boulevard San Leandro, California DATE: PROJECT: SCALE: FIGURE: 10-23-98 311-127.1B AS SHOWN

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 to be analyzed for total purgeable petroleum hydrocarbons calculated as gasoline (TPPH-g), benzene, toluene, ethylbenzene, xylenes (BTEX compounds), and methyl tert-butyl ether (MtBE) were extracted by the purge-and-trap technique, EPA Method 5030. Soil samples to be analyzed for total extractable petroleum hydrocarbons calculated as diesel (TEPH-d), were extracted by sonnication, EPA Method 3550. Analyses for TPPH-g and TEPH-d were performed by EPA Method 8015 (modified). Analyses for BTEX compounds and MtBE were performed by EPA Method 8020. These analytical methods utilize gas chromatography, and flame- or photo-ionization detection.

Samples to be analyzed for the presence of lead were extracted by acid digestion, EPA Method 3050. This extraction method is used to determine the total lead concentration, or 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 REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110

Attention:

Tina Berry

Client Proj. ID:

311-127.1B/5367, 500 Bancoft

Sampled: 10/26/98 Received: 10/27/98 Analyzed: see below

Lab Proj. ID: 9810177

Reported: 11/06/98

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9810177-01 Sample Desc : SOLID,P-1			**************************************	W
Lead by ICP	mg/Kg	10/29/98	5.0	10
Lab No: 9810177-02 Sample Dest: SOLID,P-2		A - 14 - 10 - 10 - 10 - 10 - 10 - 10 - 10		
Lead by ICP	mg/Kg	10/29/98	5.0	10
Lab No: 9810177-03 Sample Desc : SOLID,P-3				
Lead by ICP	mg/Kg	10/29/98	5.0	8.8
Lab No: 9810177-04 Sample Desc : SOLID,P-4				
Lead by ICP	mg/Kg	10/29/98	5.0	8.6
Lab No: 9810177-05 Sample Desc : SOLID,P-5			<u> </u>	and the second s
Lead by ICP	mg/Kg	10/29/98	5.0	6.8
Lab No: 9810177-06 Sample Desc : SOLID,P-6	- Control of the Cont			
Lead by ICP	mg/Kg	10/29/98	5.0	9.2
Lab No: 9810177-07 Sample Desc : SOLID,SP(1-4) Comp			**************************************	
Lead by ICP	mg/Kg	10/29/98	5.0	11

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

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Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110

Environmental Group Client Proj. |D: 311-127.1B/5367, 500 Bancoft Sampled: 10/26/98

Received: 10/27/98

Sample Descript: P-1 Matrix: SOLID

Extracted: 11/03/98 Analyzed: 11/04/98 Analysis Method: 8015Mod/8020

Lab Number: 9810177-01

Reported: 11/06/98

Attention: Tina Berry

C Batch Number: GC110398BTEXEXB

strument ID: GCHP7

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:	1.0 0.025 0.0050 0.0050 0.0050 0.0050	N.D. N.D. N.D. N.D. N.D. N.D.
Surrogates Trifluorotoluene 4-Bromofluorobenzene	Control Limits % 70 60	% Recovery 130 100 140 78

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

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bd Granicher oject Manager



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Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110

Client Proj. ID: Sample Descript: P-1

311-127.1B/5367, 500 Bancoft

Sampled: 10/26/98 Received: 10/27/98 Extracted: 10/29/98

Matrix: SOLID

Analysis Method: EPA 8015 Mod

Analyzed: 11/03/98

Attention: Tina Berry

Lab Number: 9810177-01

Reported: 11/06/98

QC Batch Number: GC1029980HBPEXC

nstrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg		Sample Results mg/Kg
TEPH as Diesel	1.0		3.1
Chromatogram Pattern: Unidentified HC			C9-C24
Surrogates	Control Limits %	•	% Recovery
n-Pentacosane (C25)	50	150	80

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

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

(650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865

FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Pacific Environmental Group 2025 Gateway Place, Suite 440 Client Proj. ID: Sample Descript: P-2

311-127.1B/5367, 500 Bancoft

Sampled: 10/26/98

San Jose, CA 95110

Matrix: SOLID

Received: 10/27/98 Extracted: 11/03/98 Analyzed: 11/04/98

Analysis Method: 8015Mod/8020

Reported: 11/06/98

Attention: Tina Berry Lab Numb

Lab Number: 9810177-02

QC Batch Number: GC110398BTEXEXB

Instrument ID: GCHP7

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:	1.0 0.025 0.0050 0.0050 0.0050 0.0050	N.D. N.D. N.D. N.D. N.D. N.D.
Surrogates Trifluorotoluene 4-Bromofluorobenzene	Control Limits % 130 60 140	% Recovery 107 90

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

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Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 958341 Petaluma, CA 94954

(650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Pacific Environmental Group 2025 Gateway Place, Suite 440 Client Proj. ID:

311-127.1B/5367, 500 Bancoft

Sampled: 10/26/98

San Jose, CA 95110

Sample Descript: P-2 Matrix: SOLID

Analysis Method: EPA 8015 Mod Attention: Tina Berry Lab Number: 9810177-02

Received: 10/27/98 Extracted: 10/29/98 Analyzed: 11/03/98 Reported: 11/06/98

QC Batch Number: GC1029980HBPEXC

nstrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte

Detection Limit mg/Kg

Sample Results mg/Kg

TEPH as Diesel Chromatogram Pattern: 1.0

N.D.

Surrogates n-Pentacosane (C25) **Control Limits %**

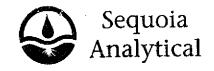
150

% Recovery

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

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Environmental Group Client Proj. ID: 311-127.1B/5367, 500 Bancoft

Sample Descript: P-3 Matrix: SOLID

Analysis Method: 8015Mod/8020 Lab Number: 9810177-03 Sampled: 10/26/98 Received: 10/27/98 Extracted: 11/03/98 Analyzed: 11/04/98 Reported: 11/06/98

Attention: Tina Berry

C Batch Number: GC110398BTEXEXB

nstrument ID: GCHP7

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:	1.0 0.025 0.0050 0.0050 0.0050 0.0050	N.D. N.D. N.D. N.D. N.D. N.D.
Surrogates Trifluorotoluene 4-Bromofluorobenzene	Control Limits % 70 130 60 140	% Recovery 101 88

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

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Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 958341 Petaiuma, CA 94954

(650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865

FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

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Pacific Environmental Group Client Proj. ID: 311-127.1B/5367, 500 Bancoft Sampled: 10/26/98

Sample Descript: P-4

Matrix: SOLID Cuermon: Fina Berry Lab Number: 9810177-04

QC Batch Number: GC110398BTEXEXB
hstrument ID: GCHP7

Received: 10/27/98 Extracted: 11/03/98

Analyzed: 11/04/98 Reported: 11/06/98

nstrument ID: GCHP7

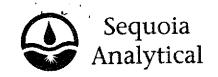
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:	1.0 0.025 0.0050 0.0050 0.0050 0.0050	N.D. N.D. N.D. N.D. N.D. N.D.
Surrogates Trifluorotoluene 4-Bromofluorobenzene	Control Limits % 70 130 60 140	% Recovery 101 93

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

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FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110

Sample Descript: P-4

Environmental Group Client Proj. ID: 311-127.1B/5367, 500 Bancoft Sampled: 10/26/98

Matrix: SOLID

oft Sampled: 10/26/98 Received: 10/27/98 Extracted: 10/29/98 Analyzed: 11/03/98 Reported: 11/06/98

Analysis Method: EPA 8015 Mod Lab Number: 9810177-04

Attention: Tina Berry
C Batch Number: GC1029980HBPEXC

nstrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sa	ample Results mg/Kg
TEPH as Diesel	1.0		1.0
Chromatogram Pattern: Unidentified HC	•		C9-C24
Surrogates	Control Limits %	%	Recovery
Surrogates n-Pentacosane (C25)	50	150	90

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

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Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 958341 Petaluma, CA 94954

(650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110

311-127.1B/5367, 500 Bancoft Client Proj. ID: Sample Descript: P-5 Matrix: SOLID

Analysis Method: 8015Mod/8020 Lab Number: 9810177-05

Sampled: 10/26/98 Received: 10/27/98 Extracted: 11/03/98 Analyzed: 11/04/98 Reported: 11/06/98

Attention: Tina Berry C Batch Number: GC110398BTEXEXB

strument ID: GCHP7

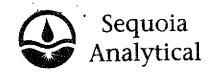
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg		
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:	1.0 0.025 0.0050 0.0050 0.0050 0.0050	N.D. N.D. N.D. N.D. N.D. N.D.		
Surrogates Trifluorotoluene 4-Bromofluorobenzene	Control Limits % 70 130 60 140	% Recovery 97 80		

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

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Pacific Environmental Group 2025 Gateway Place, Suite 440 Client Proj. ID: 311-127.1B/5367, 500 Bancoft Sample Descript: P-5

Sampled: 10/26/98 Received: 10/27/98

San Jose, CA 95110 Attention: Tina Berry

Matrix: SOLID

Extracted: 10/29/98

Analysis Method: EPA 8015 Mod Lab Number: 9810177-05

Analyzed: 11/03/98 Reported: 11/06/98

C Batch Number: GC1029980HBPEXC

nstrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte

Detection Limit mg/Kg

Sample Results mg/Kg

TEPH as Diesel

1.0

N.D.

Chromatogram Pattern:

Surrogates n-Pentacosane (C25) Control Limits %

% Recovery 150

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

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

Detection Limit

(650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Pacific Environmental Group 2025 Gateway Place, Suite 440

San Jose, CA 95110

Attention: Tina Berry

Client Proj. ID: 311-127.1B/5367, 500 Bancoft

Sample Descript: P-6

Matrix: SOLID Analysis Method: 8015Mod/8020

Lab Number: 9810177-06

Sampled: 10/26/98 Received: 10/27/98

Extracted: 11/03/98 Analyzed: 11/04/98

Reported: 11/06/98

Sample Results

C Batch Number: GC110398BTEXEXB

strument ID: GCHP7

Analyte

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

•	mg/Kç)	mg/Kg
TPPH as Gas	1.0		N.D.
Methyl t-Butyl Ether	0.02	5	N,D.
Benzene	0.00	50	N.D.
Toluene	0.00	50	N.D.
Ethyl Benzene	0.00	50	N.D.
Xvlenes (Total)	0.00	50	N.D.
Xylenes (Total) Chromatogram Pattern:			
Surrogates	Control Lir	nits %	% Recovery
Trifluorotoluene	70	130	102
4-Bromofluorobenzene	60	140	98

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

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

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2025 Gateway Place, Suite 440

San Jose, CA 95110

Attention: Tina Berry

Pacific Environmental Group Client Proj. ID: 311-127.1B/5367, 500 Bancoft

Sample Descript: P-6 Matrix: SOLID

Analysis Method: EPA 8015 Mod Lab Number: 9810177-06

Sampled: 10/26/98 Received: 10/27/98 Extracted: 10/29/98

Analyzed: 11/03/98 Reported: 11/06/98

C Batch Number: GC1029980HBPEXC

nstrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte **Detection Limit** Sample Results mg/Kg mg/Kg TEPH as Diesel 1.0 N.D. Chromatogram Pattern:

Surrogates n-Pentacosane (C25) **Control Limits %** 150 % Recovery

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

EQUOIA ANALYTICAL - ELAP #1210

d Granicher oject Manager



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 958341 Petaluma, CA 94954

(650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110

311-127.1B/5367, 500 Bancoft Client Proj. ID: Sample Descript: SP(1-4) Comp

Sampled: 10/26/98

Matrix: SOLID

Analysis Method: EPA 8015 Mod Lab Number: 9810177-07

Received: 10/27/98 Extracted: 10/29/98 Analyzed: 11/03/98 Reported: 11/06/98

Attention: Tina Berry C Batch Number: GC1029980HBPEXC

strument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte

Detection Limit mg/Kg

Sample Results mg/Kg

FEPH as Diesel

Chromatogram Pattern:

1.0

N.D.

Burrogates h-Pentacosane (C25)

Control Limits % 50

150

% Recovery

93

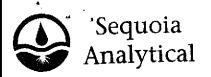
alytes reported as N.D. were not present above the stated limit of detection.

EQUOIA ANALYTICAL - ELAP #1210

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Page:

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Pacific Environmental Group 2025 Gateway Place, Ste. 440

San Jose, CA 95110 Attention: Tina Berry Client Project ID: 311-127.1B/5367, 500 Bancroft

QC Sample Group: 9810177

Reported: Nov 6, 1998

QUALITY CONTROL DATA REPORT

Solid Matrix: **EPA 8020** Method: G.P. Analyst: Xylenes Ethylbenzene Toluene Benzene ANALYTE QC Batch #: GC110398BTEXEXB Sample No.: 9810177-3 11/3/98 11/3/98 11/3/98 11/3/98 Date Prepared: 11/4/98 11/4/98 11/4/98 11/4/98 Date Analyzed: GCHP22 GCHP22 GCHP22 GCHP22 Instrument I.D.#: N.D. N.D. N.D. N.D. Sample Conc., mg/Kg: 0.60 0.20 0.20 0.20 Conc. Spiked, mg/Kg: 0.59 0.20 0.20 0.20 Matrix Spike, mg/Kg: 98 100 100 100 % Recovery: Matrix 0.60 0.21 0.20 0.20 Spike Duplicate, mg/Kg: 100 105 100 100 % Recovery: 2.0 4.9 0.0 0.0 Relative % Difference: 0-25 0-25 **RPD Control Limits:** 0-25 0-25 LCS Batch#: GC110398BTEXEXB 11/3/98 11/3/98 11/3/98 11/3/98 Date Prepared: 11/4/98 11/4/98 11/4/98 11/4/98 Date Analyzed: GCHP22 GCHP22 GCHP22 GCHP22 Instrument 1.D.#: 0.60 0.20 0.20 0.20 Conc. Spiked, mg/Kg: 0.66 0.21 0.21 Recovery, mg/Kg: 0.22 110 105 LCS % Recovery: 105 110 Percent Recovery Control Limits: 60-140 60-140 60-140 60-140 MS/MSD

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

70-130

Please Note:

70-130

70-130

SEQUOIA ANALYTICAL

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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.

70-130

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Pacific Environmental Group 2025 Gateway Place, Ste. 440 Client Project ID: 311-127.1B/5367, 500 Bancroft

San Jose, CA 95110 Attention: Tina Berry

QC Sample Group: 9810177

Reported: Nov 6, 1998

QUALITY CONTROL DATA REPORT

Matrix:

Method:

EPA 8015M A. PORTER

Analyst: ANALYTE

Diesel

QC Batch #: GC1029980HBPEXC

Sample No.: 9810183-5 Date Prepared:

Date Analyzed:

10/28/98 10/30/98

Instrument I.D.#:

GCHP5B

Sample Conc., mg/Kg:

10 mg/Kg

Conc. Spiked, mg/Kg:

17

THE MS AND MSD ARE REFERED FROM GC1028980HBPEXB.

Matrix Spike, mg/Kg:

20 % Recovery: 59

Matrix

Spike Duplicate, mg/Kg:

23

% Recovery:

76

Relative % Difference:

25

RPD Control Limits:

0 - 50

LCS Batch#: BLK102998CS

Date Prepared:

10/29/98

Date Analyzed:

11/3/98

Instrument I.D.#:

GCHP4B

Conc. Spiked, mg/Kg:

17

Recovery, mg/Kg: LCS % Recovery: 17 100

Percent Recovery Control Limits:

MS/MSD

LCS

50-150 60-140

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

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.

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acific Environmental Group 2025 Gateway Place, Suite 440

Client Proj. ID: 311-127.1B/5367, 500 Bancoft

Received: 10/27/98

San Jose, CA 95110 Tina Berry Attention:

Lab Proj. ID: 9810177

Reported: 11/06/98

LABORATORY NARRATIVE

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

EQUOIA ANALYTICAL

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1. Custody Seal(s)	Present / Absent Intact / Broken	SAMPLE	<u>"</u> -	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	·	SAMP.	REMARKS: CONDITION (ETC.)
2. Custody Seal #	Put in Remarks Section	<u>Q</u>	A	P-1 -2	IX CORE	2	idzi AB	
3. Chain-of-Custody	Puseli / Absent*	<u> </u>				*		
4. Traffic Reports or Packing List:	Present / Apsent	05		-4 -5				*
5. Aubill:	Airbill / Sticker Present /Absect	a _o	7	4-6			7	
6. Airbill #:		ر7	B	SP 2				
7. Sample Tags:	resent / Absent		Ç	3				
Sample Tags #s:	Liste⊅/ Not Listed on Chain-of-Custody	-	<u>)</u>	44		4	4	
8. Sample Condition:	tolach Broken' /							
Does information on custody reports, traffic reports and sample tags agree?	Yes/ No.			2 J 10	27 198			
10. Proper Preservatives used:	CPS/ Ho*			9 7 10				
11. Date Rec. at Lab:	10/27/98		-					
12. Time Rec. at Lab:	13:10			· · · · · · · · · · · · · · · · · · ·	·			
13. Temp Rec. at Lab:	160		=					
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*if Circled, contact Project Manager and attach record of resolution.

Revision 6/18/97

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Sample ID Number	b Sample Number	Number of Containers	S=Soil A=Air W=Water C=Charcoal	G=Grab C=Composite D=Discrete	Sample Date	Sample Time	Sample Preservation	BTEX + TPH GAS ← MT/3 (8021/602 + 8015 modified)	H (8015 modified) FC	BTEX + MTBE (8021/602) (8260)	20) (413.1) (413.2)	geable Halocarbons 21) (601)	geable Aromatics 21) (602)	Volatile Organics (8260) (624)	ni Volatile Organics 70) (625)	Total Lead	ЭН 8.1)	MTBE Confirmation (8260)	7C P6		99	3.10 17	17
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Date: ____