

SSPTS Environmental Detachment Vallejo, Calif



We Don't Inherit Our Resources From Our Ancestors
We Borrow Them From Our Offspring

SSPTS Environmental
Installation Restoration and
Environmental Compliance
Code 120

FACSIMILE
COVERSHEET

Date: 12/

FROM: A. RODRIGUEZ

CODE: 120 (Bldg 229)

FAX NUMBER: (707) 562-3243

PHONE NUMBER: (707) 562-3244

TO: EVA CH4

ALAMEDA COUNTY HEALTH
AGENCY

FAX NUMBER: 510-337-9335

PHONE NUMBER: 510-567-6262

REMARKS:

EVA, HERE ARE THE LAB ANALYSIS RESULTS OF THE
UST REMOVED AT CAMP PARKS. Bldg 334

Thanks: Angel Rodriguez



Number of pages including this one: _____

If any problems are noted with this transmission - please call (707) 562-3242



Calscience
Environmental
Laboratories, Inc.

December 08, 1998

Russ Finlinson
Mare Island Naval Shipyard
Building 229, P.O. Box 2135
Vallejo, CA 94582-2135

Subject: **Calscience Work Order Number: 98-11-0594**
Client Reference: **Contract No. N00244-96-D-2009**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 11/20/98 and analyzed in accordance with the attached chain-of-custody.

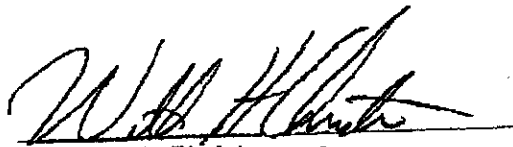
The results in this analytical report are limited to the samples tested, and any reproduction of this report must be made in its entirety.

If you have any questions regarding this report, require sampling supplies or field services, or information on our analytical services, please feel free to call me at (714) 895-5494.

Sincerely,



Calscience Environmental
Laboratories, Inc.
William H. Christensen
Quality Assurance Manager



William H. Christensen
Quality Assurance Manager



594

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92641-1432
TEL: (714) 893-5494 FAX: (714) 894-7501

CHAIN OF CUSTODY

DATE: 11/19/98 Page: 1 of 1

LABORATORY CLIENT: MINSY CLIENT PROJECT NAME/NUMBER: CAMP PARKS UST (A. RODRIGUEZ) (2 3244)

ADDRESS: SPORTS ENVIRONMENTAL DETACHMENT PROJECT CONTACT: ROBERT TURPIN (707) 562-3495

CITY: VALLEJO STATE: CA ZIP: 94592-0135 SAMPLER(S): (SIGNATURE) *WR. W. W. W.* JO # 9110CC JW 35

TEL: (707) 562-3495 FAX: (707) 562-3497

TURN AROUND TIME:
 SAME DAY (<6 HRS) 100% 24 HOURS, 50% 48 HOURS, 25% 5 DAYS 10 DAYS RUSH WRITTEN REPORT, 10%
 1. All turnaround times are based on working hours of 8 a.m., M-F. 2. Prior confirmation is strongly recommended. 3. 3 days for Tedlar bag samples.

SPECIAL INSTRUCTIONS/REQUIREMENTS: PLEASE TEST FOR MTBE METHOD 8020

WRITTEN QC REPORT REQUIRED?
 ROUTINE QC RWQCB QC
 W98-355

SAMPLE ID	LOCATION/DESCRIPTION	SAMPLING		WATER		PRESV		Solid/ Soil/Filter	No. of Containers	ANALYSES REQUIRED
		DATE	TIME	Comp	Grab	HNO3	Other			
117298	CAMP PARKS-334- SE-10-01	11-18-98	1343		✓			✓	1	0019AB LEAD, 0020AD TOTAL DIGEST 0018AE BTXE AND MTBE METHOD 8020
117398	CAMP PARKS-334- NE-10-02	11-18-98	1353		✓			✓	1	0024AA TPH _d METHOD 5030 0024AB TPH _d METHOD 3550 <small>WR 11-19-98</small>
117498	CAMP PARKS-334 PILE 03	11-18-98	1400		✓			✓	1	0018AR TPH _d 0018AR TPH _o
117598	CAMP PARKS-334 PILES 01 AND 02	11-18-98	1407	✓				✓	1	

Relinquished by: (Signature) <i>M.D. [Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date: 11-19-98	Time: 1440
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature) <i>[Signature]</i>	Date: 11/20/98	Time: 0800

Unless otherwise requested, all samples will be disposed of 30 days after receipt.
 PLEASE RETURN SAMPLE TUBES TO SSPTS

BLANK

Dec-09-98 08:09A UST DIV. 3 SSPTS Env Det 707-562-3243 P.02

P.02

CAI SCIENCE ENVIRONMENTAL LABORATORY, INC.
1440 LINCOLN WAY
GARDEN GROVE, CA 92641-1432
TEL: (714) 893-5494 FAX: (714) 894-7301

for 594

1051

DATE: 11/19/98

CHAIN OF CUSTODY

LABORATORY CLIENT: MINSY	CLIENT PROJECT NAME/NUMBER: CAMP PARKS (IST) (A RODRIGUEZ)
ADDRESS: SPORTS ENVIRONMENTAL DETACHMENT	PROJECT CONTACT: ROBERT TURPIN (707) 562-3495
CITY: VALLEJO STATE: CA ZIP: 94592-0135	SAMPLER(S): (SIGNATURE) [Signature]
TEL: (707) 562-3495 FAX: (707) 562-3497	50.15 9110CC JW 35

TURN AROUND TIME:
 SAME DAY (<6 HRS) 100% 24 HOURS, 50% 48 HOURS, 25% 5 DAYS 10 DAYS REUSE WRITTEN REPORT, 10%
 1. All turnaround times are based on working hours of 8 a.m. - 5 p.m. 2. Prior confirmation is strongly recommended. 3. 3 days for Tedlar bag samples.

SPECIAL INSTRUCTIONS/REQUIREMENTS:
 PLEASE TEST FOR MTBE HE 7110 8020
 REPORTABLE LIMITS MUST MEET TRI-REGIONAL REQUIREMENTS (USE)

TPH & TPH D BTXE 1.0 PPM 1.0 PPM 0.005 PPM

WRITTEN QC REPORT REQUIRED?
 ROUTINE QC RWQCR QC
 W98-355

SAMPLE ID	LOCATION/DESCRIPTION	SAMPLING		-WATER-		PRESY		Solid Soluble	No. of Containers	ANALYSES REQUIRED
		DATE	TIME	Comp	Grab	HNO3	Other			
117298	CAMP PARKS-334- SE-10-01	11-18-98	1343		✓			✓	1	0019 AB LEAD, 0020 AD TOTAL DIGEST 0018 AE BIXE AND MTBE METHOD 8020
117398	CAMP PARKS-334- NE-10-02	11-18-98	1353		✓			✓	1	0024 AB TPH METHOD 5030 0024 AB TPH METHOD 3550 11-18-98
117498	CAMP PARKS-334- PILE 03	11-18-98	1400		✓			✓	1	0018 AB TPHc 0018 AB TPHd
117598	CAMP PARKS-334- PILES 01 AND 02	11-18-98	1407		✓			✓	1	

Relinquished by: (Signature) [Signature]	Received by: (Signature) [Signature]	Date: 11-19-98	Time: 1443
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

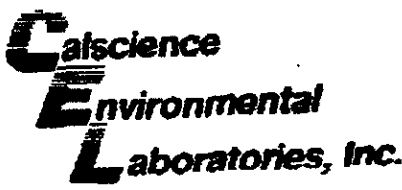
Unless otherwise requested, all samples will be disposed of 30 days after receipt

PLEASE RETURN SAMPLE TUBES TO SPORTS

BLANK

707 562 3497
NOV-23-98 09:47A G 130 MBZ WASTE

Dec-09-98 08:10A UST D.V.3 SSports Env Det 707-562-3243
DEC-08-1998 17:10 CALSCEIENVE P.03



ANALYTICAL REPORT

Mare Island Naval Shipyard
Building 229, P.O. Box 2135
Vallejo, CA 94592-2135

Date Sampled: 11/18/98
Date Received: 11/20/98
Date Extracted: 11/30/98
Date Analyzed: 11/30/98-12/01/98
Work Order No.: 98-11-0594
Method: EPA 8015M
Page 1 of 1

Attn: Russ Finlinson
RE: Contract No. N00244-98-D-2009

All total petroleum hydrocarbon concentrations are reported in mg/kg (ppm) using diesel fuel as a standard.

<u>Sample Number</u>	<u>Concentration</u>	<u>Reporting Limit</u>
1172-98 (CAMP PARKS-334-SE-10-01)	ND	1.0
1173-98 (CAMP PARKS-334-NE-10-02)	ND	1.0
1174-98 (CAMP PARKS-334 PILE 03)	ND	1.0
1175-98 (CAMP PARKS-334 PILES 01 AND 02)	ND	1.0
Method Blank	ND	1.0

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

Calscience
Environmental
Laboratories, Inc.

ANALYTICAL REPORT

Mare Island Naval Shipyard
 Building 229, P.O. Box 2135
 Vallejo, CA 94592-2135

Date Sampled: 11/18/98
 Date Received: 11/20/98
 Date Digested: 11/23/98
 Date Analyzed: 11/24/98
 Work Order No.: 98-11-0594
 Method: EPA 7420
 Page 1 of 1

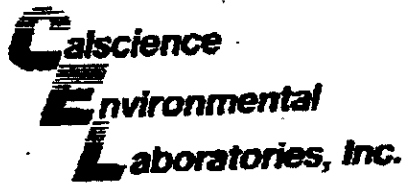
Attn: Russ Finlinson
 RE: Contract No. N00244-96-D-2009

All concentrations are reported in mg/kg (ppm). Analyses for lead were conducted on a total digestion.

<u>Sample Number</u>	<u>Lead Concentration</u>	<u>Reporting Limit</u>
1172-98 (CAMP PARKS-334-SE-10-01)	7.6	5.0
1173-98 (CAMP PARKS-334-NE-10-02)	15.0	5.0
1174-98 (CAMP PARKS-334 PILE 03)	15.0	5.0
1175-98 (CAMP PARKS-334 PILES 01 AND 02)	7.4	5.0
Method Blank	ND	5.0

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.



ANALYTICAL REPORT
 EPA 8015M/8020A TPH(g)/BTXE/MTBE

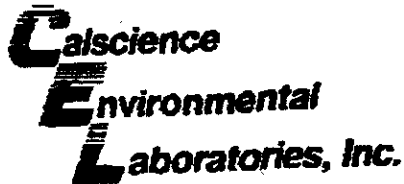
Client Name: Mare Island Naval Shipyard
 Project ID: Contract No. N00244-96-D-2009
 Work Order Number: 98-11-0594
 QC Batch ID: 98120101sa
 Matrix: Solid
 Preparation: EPA 5030A
 Method: EPA 8015M/8020A

Date Collected: 11/18/98
 Date Received: 11/20/98
 Date Prepared: N/A
 Date Analyzed: 12/01/98

Client Sample Number: 1172-98 (CAMP PARKS-334-SE-10-01)
 Lab Sample Number: 98-11-0594-1

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>Qualifiers</u>	<u>Units</u>
Benzene	ND	0.005		mg/kg
Toluene	ND	0.005		mg/kg
Ethylbenzene	ND	0.005		mg/kg
Xylenes (total)	ND	0.010		mg/kg
Methyl-tert-Butyl Ether	ND	0.025		mg/kg
TPH for Gasoline	ND	0.5		mg/kg

<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	90	65-140	
1,4-Bromofluorobenzene - FID	98	45-141	



ANALYTICAL REPORT
 EPA 8015M/8020A TPH(g)/BTXE/MTBE

Client Name:	Mare Island Naval Shipyard	Date Collected:	11/18/98
Project ID:	Contract No. N00244-96-D-2009	Date Received:	11/20/98
Work Order Number:	98-11-0594	Date Prepared:	N/A
QC Batch ID:	98120101sa	Date Analyzed:	12/01/98
Matrix:	Solid		
Preparation:	EPA 5030A		
Method:	EPA 8015M/8020A		

Client Sample Number: 1173-98 (CAMP PARKS-334-NE-10-02)
 Lab Sample Number: 98-11-0594-2

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>Qualifiers</u>	<u>Units</u>
Benzene	ND	0.005		mg/kg
Toluene	ND	0.005		mg/kg
Ethylbenzene	ND	0.005		mg/kg
Xylenes (total)	ND	0.010		mg/kg
Methyl-tert-Butyl Ether	ND	0.025		mg/kg
TPH for Gasoline	ND	0.5		mg/kg

<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	82	65-140	
1,4-Bromofluorobenzene - FID	88	45-141	



ANALYTICAL REPORT
 EPA 8015M/8020A TPH(g)/BTXE/MTBE

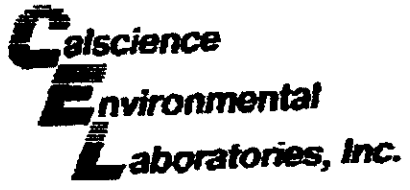
Client Name: Mare Island Naval Shipyard
 Project ID: Contract No. N00244-96-D-2009
 Work Order Number: 98-11-0594
 QC Batch ID: 98120101sa
 Matrix: Solid
 Preparation: EPA 5030A
 Method: EPA 8015M/8020A

Date Collected: 11/18/98
 Date Received: 11/20/98
 Date Prepared: N/A
 Date Analyzed: 12/01/98

Client Sample Number: 1174-98 (CAMP PARKS-334 PILE 03)
 Lab Sample Number: 98-11-0594-3

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>Qualifiers</u>	<u>Units</u>
Benzene	ND	0.005		mg/kg
Toluene	ND	0.005		mg/kg
Ethylbenzene	ND	0.005		mg/kg
Xylenes (total)	ND	0.010		mg/kg
Methyl-tert-Butyl Ether	ND	0.025		mg/kg
TPH for Gasoline	ND	0.5		mg/kg

<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	83	65-140	
1,4-Bromofluorobenzene - FID	88	45-141	



ANALYTICAL REPORT
 EPA 8015M/8020A TPH(g)/BTXE/MTBE

Client Name:	Mare Island Naval Shipyard	Date Collected:	11/18/98
Project ID:	Contract No. N00244-96-D-2009	Date Received:	11/20/98
Work Order Number:	98-11-0594	Date Prepared:	N/A
QC Batch ID:	98120101sa	Date Analyzed:	12/01/98
Matrix:	Solid		
Preparation:	EPA 5030A		
Method:	EPA 8015M/8020A		

Client Sample Number: 1175-98 (CAMP PARKS-334 PILES 01 AND 02)
 Lab Sample Number: 98-11-0594-4

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>Qualifiers</u>	<u>Units</u>
Benzene	ND	0.005		mg/kg
Toluene	ND	0.005		mg/kg
Ethylbenzene	ND	0.005		mg/kg
Xylenes (total)	ND	0.010		mg/kg
Methyl-tert-Butyl Ether	ND	0.025		mg/kg
TPH for Gasoline	ND	0.5		mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	90	65-140		
1,4-Bromofluorobenzene - FID	96	45-141		



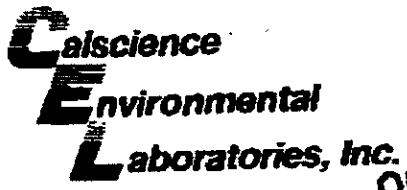
ANALYTICAL REPORT
 EPA 8015M/8020A TPH(g)/BTXE/MTBE

Client Name:	Mare Island Naval Shipyard	Date Collected:	N/A
Project ID:	Contract No. N00244-96-D-2009	Date Received:	N/A
Work Order Number:	98-11-0594	Date Prepared:	N/A
QC Batch ID:	98120101sa	Date Analyzed:	12/01/98
Matrix:	Solid		
Preparation:	EPA 5030A		
Method:	EPA 8015M/8020A		

Client Sample Number: Method Blank
 Lab Sample Number: 098-01-002-461

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>Qualifiers</u>	<u>Units</u>
Benzene	ND	0.005		mg/kg
Toluene	ND	0.005		mg/kg
Ethylbenzene	ND	0.005		mg/kg
Xylenes (total)	ND	0.010		mg/kg
Methyl-tert-Butyl Ether	ND	0.025		mg/kg
TPH for Gasoline	ND	0.5		mg/kg

<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	95	65-140	
1,4-Bromofluorobenzene - FID	102	45-141	



QUALITY ASSURANCE SUMMARY
Method EPA 8015M - D

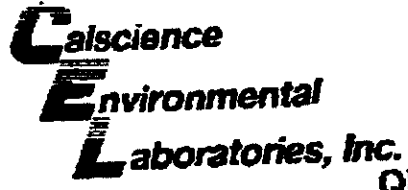
Mare Island Naval Shipyard
Page 1 of 1

Work Order No.: 98-11-0594
Date Analyzed: 12/01/98

Matrix Spike/Matrix Spike Duplicate

Sample Spiked: 1173-98 (CAMP PARKS-334-NE-10-02)

<u>Analyte</u>	<u>MS%REC</u>	<u>MSD%REC</u>	<u>Control Limits</u>	<u>%RPD</u>	<u>Control Limits</u>
Total Petroleum Hydrocarbons	79	81	52 - 149	2	0 - 29



QUALITY ASSURANCE SUMMARY Flame AA Metals (Solids)

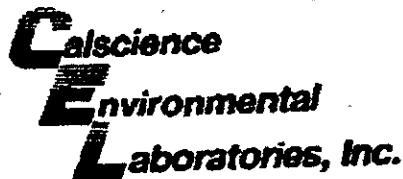
Mare Island Naval Shipyard
Page 1 of 1

Work Order No.: 98-11-0594
Date Analyzed: 11/24/98

Post Digestion Spike/Post Digestion Spike Duplicate

Sample Spiked: 98-11-0660-1

<u>Analyte</u>	<u>Method</u>	<u>PDS%REC</u>	<u>PDSD%REC</u>	<u>Control Limits</u>	<u>%RPD</u>	<u>Control Limits</u>
Lead	EPA 7420	89	94	75 - 125	4	0 - 20



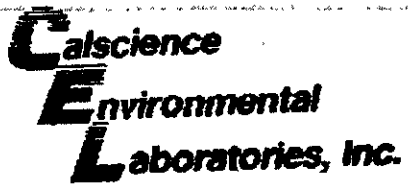
Quality Control - Spike/Spike Duplicate
 EPA 8015M/8020A TPH(g)/BTXE/MTBE

MS/MSD Batch Number: 98120101ms
 Matrix: Solid
 Method: EPA 8015M/8020A

Instrument: GC 21
 Date Extracted: N/A
 Date Analyzed: 12/01/98

Spiked Sample ID: 98-12-0001-3

<u>Parameter</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Benzene	98	102	39-150	4	0-25	
Toluene	94	98	46-148	4	0-25	
Ethylbenzene	95	98	32-160	3	0-25	
p/m-Xylene	97	99	45-150	2	0-25	
o-Xylene	96	97	45-150	1	0-25	
TPH for Gasoline	109	108	52-149	3	0-29	



Quality Control - LCS/LCS Duplicate
EPA 8015M/8020A TPH(g)/BTXE/MTBE

LCS/LCSD Batch Number: 88120101sa
Matrix: Solid
Method: EPA 8015M/8020A

Instrument: GC 21
Date Extracted: N/A
Date Analyzed: 12/01/98

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	97	95	39-150	2	0-25	
Toluene	93	91	46-148	2	0-25	
Ethylbenzene	91	92	32-160	1	0-25	
p/m-Xylene	92	93	45-150	1	0-25	
o-Xylene	91	93	45-150	2	0-25	
TPH for Gasoline	97	101	79-137	4	0-29	