

# **BASELINE**

# COPY

## ENVIRONMENTAL CONSULTING

04 November 1991  
S9134.40

Mr. Andrew Clark-Clough  
Environmental Department  
Port of Oakland  
530 Water Street  
Oakland, CA 94607

**Subject: Disposition of Soil Removed from Former Underground Tank Nos. EF11, EF12, EF13, and EF14 (American President Line, 1395 Middle Harbor Road, Oakland)**

Dear Andrew:

The purpose of this letter is to document the disposition of **approximately 330 cubic yards of soil** removed from the vicinity of four underground fuel tanks at the subject site. The tanks were removed in August and September 1990; the tank removal activities are described in a BASELINE report entitled, *Underground Tank Removal Activities APL Container Yard Earthquake Repair, November 1990*. It is our understanding that the PORT has transmitted a copy of the report to the Alameda County Department of Environmental Health, Hazardous Materials Division (County).

### **Background**

Samples collected in the excavated soil at the time of tank removal (by BASELINE) indicated that the soil contained oil and grease, diesel, gasoline, xylenes, cadmium, chromium, lead, and zinc. Additional laboratory analyses indicated that the soil was not hazardous waste according to Title 26 of the California Code of Regulations. The analytical results were documented in the above report and are summarized in tabular form in Attachment A.

### **Bioremediation Treatment**

Following tank removal and receipt of analytical results for the stockpile soil samples, IT Corporation transported the soil to a central, temporary bioremediation site on PORT property which is located at Langley Street and Doolittle Drive in Oakland. Bay Area Tank and Marine of Pacheco (BATM) treated the soil in accordance with a work plan approved by the Regional Water Quality Control Board, San Francisco Bay Region for the site. The soil was laid out in four treatment beds (identified as A, B, C, D). Soil excavated from the individual tanks were segregated to the maximum extent possible.

### **Confirmatory Soil Samples**

Upon completion of the bioremediation process, BASELINE collected a total of 20 confirmatory soil samples in the treatment beds. Each treatment bed was divided into five cells and a sampling location was selected in each cell by a random sampling technique.

# BASELINE

A. Clark-Clough  
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Approximately one foot of soil was removed before each sample was collected (the average treatment bed depth was three feet). Samples were collected in clean brass sleeves, covered with teflon and plastic caps, labeled, and stored in a cooled container for transport to Curtis and Tompkins, Ltd. in Berkeley.

The laboratory reports and chain-of-custody documents for the confirmatory samples are provided in Attachment B. The first letter of each sample ID indicates the treatment bed (A through D); the second letter indicates the cell that was sampled (a through e). All soil samples indicated that fuel hydrocarbon levels were below the reporting levels (see reports in Attachment B), with the exception of the sample collected from treatment bed C, cell d, which contained 11 mg/kg diesel.

## Disposition of Soil

Upon confirmation that bioremediation treatment was completed, the soil was transported to fill locations on PORT property. On 29 August 1991, BATM transported the soil in treatment beds C and D (approximately 180 cubic yards) to an undeveloped property located at Hassler and Oakport streets in Oakland (Figure 1). On 18 October 1991, BATM transported soil in treatment beds A and B (approximately 150 yards) to a median area located at the intersection of Doolittle Drive, Hegenberger Road, Earhart Road, and Airport Drive (Figure 2).

The treated soil was placed on the ground surface (and subsequently graded) at both properties, such that there would be no direct contact with groundwater, and such that surface runoff from the soil would not flow directly into any body of surface water.

Please do not hesitate to call if you have any questions regarding the activities described in this report.

Sincerely,



Irene F. Kan, M.P.H.  
Vice President

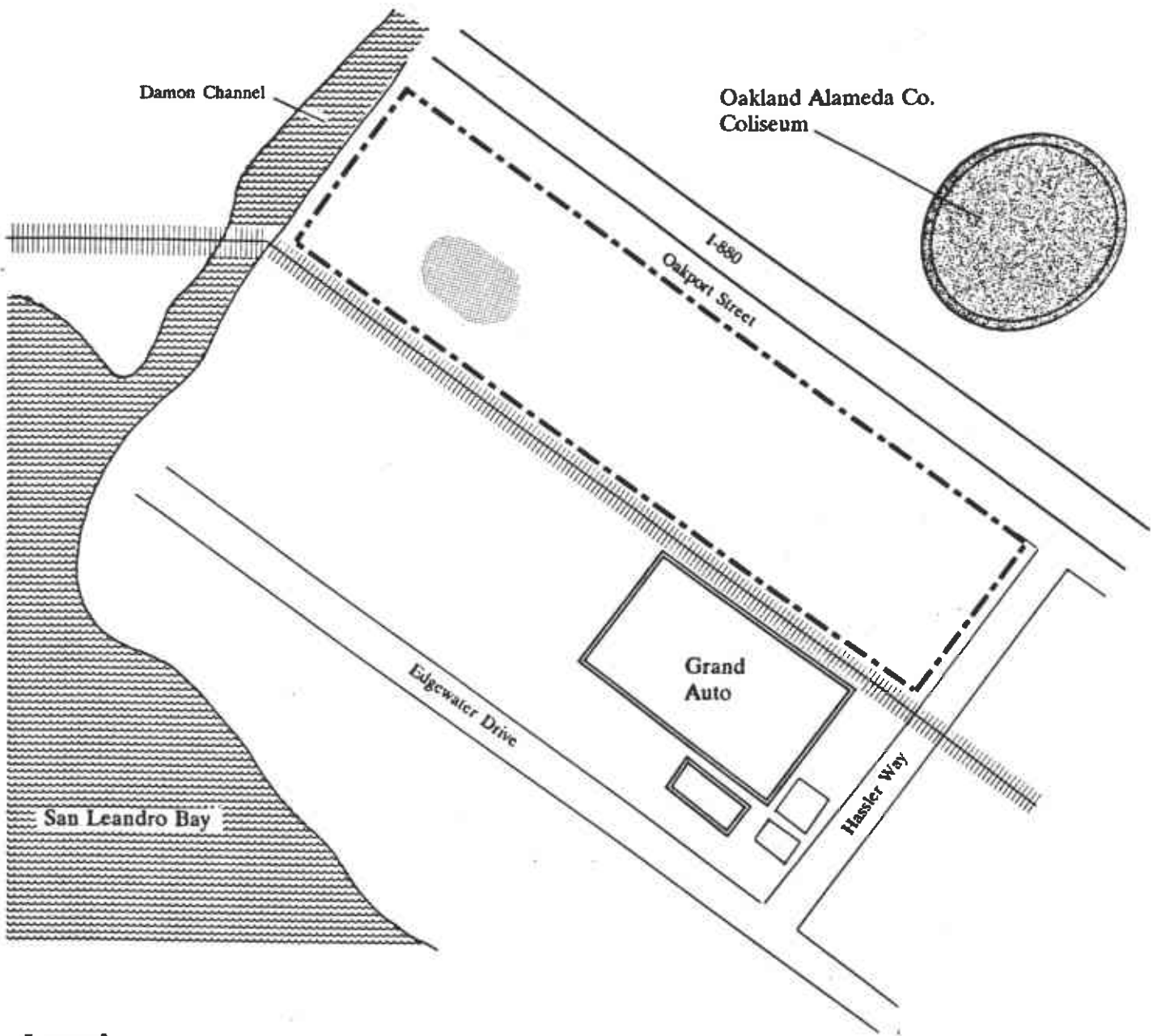
IK:ic

cc: Patricia Murphy, Port of Oakland  
Tom La Basco, Port of Oakland  
John Verheul, Port of Oakland  
Jon Amdur, Port of Oakland




Attachments  
S91c(S9134dsp.40)

# FILL LOCATION

## Figure 1



### Legend

-  Approximate Fill Location (August 1991) for Soil Bioremediated at Langley and Doolittle Site
-  Railroad Tracks
-  Project Site Boundary

## Oakport Parcel Oakland, California

Source: Pacific Aerial Surveys, 1969.

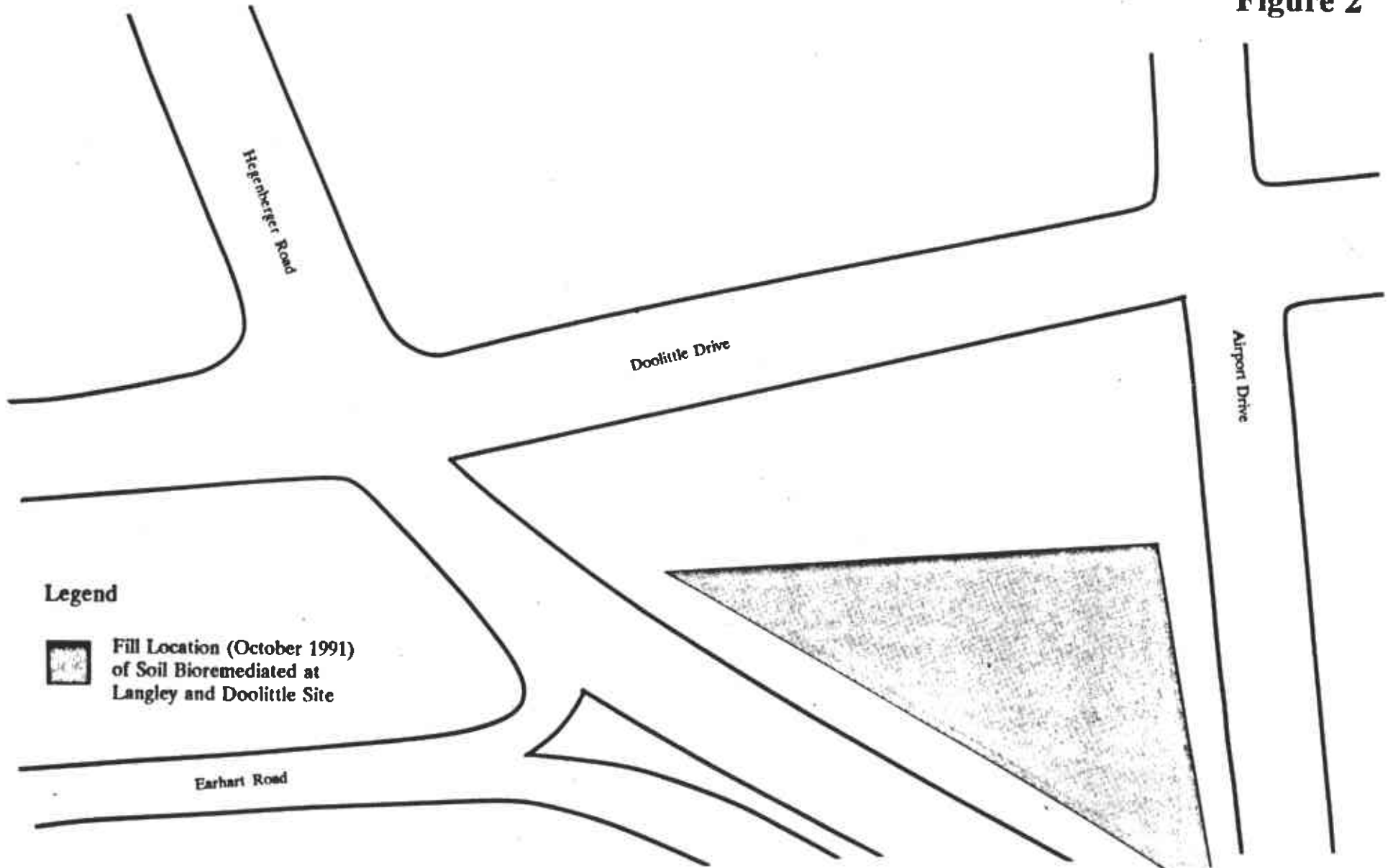
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**BASELINE**

# FILL LOCATION

Figure 2



### Legend

 Fill Location (October 1991)  
of Soil Bioremediated at  
Langley and Doolittle Site

Not to Scale

**BASELINE**

**ATTACHMENT A**

**SUMMARY OF PRE-BIOREMEDIATION TREATMENT  
ANALYTICAL RESULTS**

**(Source: *Underground Tank Removal Activities*  
*APL Container Yard Earquake Repair*  
BASELINE Environmental Consulting, November 1990)**

TABLE 2

**ANALYTICAL RESULTS, SOILS AND GROUNDWATER**  
**APL Container Yard Earthquake Repair**  
**1395 Middle Harbor Road, Oakland<sup>1</sup>**  
**Tanks EF11, EF12, EF13 (M & R Building<sup>2</sup>)**  
**(mg/kg, except where noted)**

Sample Location <sup>3</sup>	Date Sampled	Sample Depth (feet)	Diesel	Gasoline	Oil and Grease	Benzene	Toluene	Xylenes	Ethylbenzene	Organic Lead	Metals <sup>4</sup>	Volatile Organics	Semi-Volatile Organics
<b>Tank EF11</b>													
EF11-1	9/05/90	8.0	NA	8.3	NA	0.024	ND	0.130	0.096	ND	NA	NA	NA
EF11-2	9/05/90	8.0	NA	1.7	NA	0.036	ND	0.010	0.070	ND	NA	NA	NA
<b>Tank EF12</b>													
EF12-3	9/05/90	10.0	ND	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA
EF12-4	9/05/90	10.0	ND	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA
GW6/GW7 <sup>5</sup>	9/05/90	11.5	5.8	NA	NA	ND	0.009	0.008	ND	NA	NA	NA	NA
<b>Tank EF13</b>													
EF13-5 <sup>6</sup>	9/05/90	7.0	NA	NA	94	NA	NA	NA	NA	NA	Cd 0.6 Cr 15.0 Pb ND Zn 28.0	ND	ND
EPA Method: <sup>7</sup>				8015M	8015M	503E <sup>7</sup>	5030/8020	5030/8020	5030/8020	5030/8020	7420	6010 <sup>9</sup>	5030/8240/8020
Detection Limit (mg/kg):10.0				10.0	0.005	0.005	0.005	0.005	0.005	0.5	Rept.	Rept.	Rept.

<sup>1</sup> Tanks EF11, EF12, and EF13 were located at the 1579 Middle Harbor Road address until APL assumed operational responsibility for the site. The tanks are now considered part of 1395 Middle Harbor Road.

<sup>2</sup> Referred to by APL as the Rigging Loft Building.

<sup>3</sup> All samples were collected in place after completion of overexcavation activities (except for sample EF13-5). Sampling locations are shown in Figure 3; laboratory reports are included in Appendix C.

<sup>4</sup> Cd = Cadmium, Cr = Chromium (total), Pb = Lead, and Zn = Zinc.

<sup>5</sup> Groundwater sample; results reported as mg/L.

<sup>6</sup> Sampled material subsequently excavated and stockpiled. Due to presence of oil and grease, excavated materials were transported to PORT site for bioremediation (see Soils Management).

<sup>7</sup> Soils analytical methods only.

<sup>8</sup> Source: Standard Methods for the Examination of Water and Wastewater.

<sup>9</sup> EPA Method 7420 used for analysis of lead.

Notes: NA = Not analyzed.

ND = None detected.

Rept. = See laboratory report in Appendix C.

TABLE 3

**ANALYTICAL RESULTS, STOCKPILED SOILS**  
**APL Container Yard Earthquake Repair**  
**1395 Middle Harbor Road, Oakland**  
**Tank EF14 (Wharf Area)**

(mg/kg)

Source of Soils and Sample I.D. <sup>1</sup>	Date Sampled	Diesel	Benzene	Toluene	Xylenes	Ethylbenzene
<b>Tank EF14</b>						
<b>Stockpile A</b>						
SA-1,2,3,4*	8/30/90	150	ND	ND	ND	ND
SA-5 <sup>2</sup>	8/30/90	NA	NA	NA	NA	NA
SA-6 <sup>2</sup>	8/30/90	NA	NA	NA	NA	NA
<b>Stockpile B</b>						
SB-1,2*	8/30/90	390	ND	ND	ND	ND
<b>Stockpile C</b>						
SC-1,2*	8/30/90	120	ND	ND	ND	ND
<b>Stockpile D</b>						
SD-1,2*	8/30/90	ND	ND	ND	ND	ND
SD-3	9/04/90	ND	ND	ND	ND	ND
SD-4	9/04/90	ND	ND	ND	ND	ND
SD-5	9/04/90	ND	ND	ND	ND	ND
SD-6	9/04/90	420	ND	ND	ND	ND
SD-7	9/04/90	ND	ND	ND	ND	ND
<b>Hose and Reel Pit Stockpile</b>						
HP-S1	9/11/90	32	ND	ND	0.010	ND
<b>Pipeline Stockpile</b>						
HP-S2 <sup>4</sup>	9/11/90	ND	ND	ND	0.0065	ND
EPA Method:		8015M	5030/8020	5030/8020	5030/8020	5030/8020
Detection Limit (mg/kg):		10.0	0.005	0.005	0.005	0.005

<sup>1</sup> Locations shown in Figure 4; laboratory results are in Appendix C.

<sup>2</sup> Samples SA-5 and SA-6 were collected from stockpile A to verify that these soils were not hazardous waste according to CCR Title 26. Sample SA-5 was analyzed for Title 26 metals. None were detected at levels greater than Title 26 STLCS or TTLCS.

<sup>3</sup> Sample SA-6 was analyzed by Kennedy/Jenks/Chilton Laboratory for aquatic toxicity by a 96-hour static acute bioassay. The LC<sub>50</sub> exceeded 750 mg/L.

<sup>4</sup> Sample HP-S1 was also analyzed for volatile organics by EPA Method 8240 because a previous sample, P-1-4, collected in the hose and reel pit contained acetone and 2-butanone. Volatile organics were not detected in sample HP-S1.

Notes: \* = Composited samples.

ND = None detected.

NA = Not analyzed.

TABLE 4

**ANALYTICAL RESULTS, STOCKPILED SOILS**  
**APL Container Yard Earthquake Repair**  
**1395 Middle Harbor Road, Oakland<sup>1</sup>**  
**Tanks EF11, EF12, EF13 (M & R Building<sup>2</sup>)**  
**(mg/kg)**

Tank Excavation (stockpile source)	Stockpile	Sample Depth (feet)	Diesel	Gasoline	Oil and Grease	Benzene	Toluene	Xylenes	Ethyl-benzene	Cadmium	Chromium	Lead	Zinc	Volatile Organics	Semi-Volatile Organics
<b>Tank EF11</b> (2,000-gallon gasoline)	S1	EF11	NA	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA
	S2	EF11	NA	ND	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA
	S3	EF11	NA	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA
	S4	EF11	NA	ND	NA	0.0078	ND	ND	ND	NA	NA	NA	NA	NA	NA
	S5	EF11	NA	1.5	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA
	S6	EF11	NA	ND	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA
<b>Tank EF12</b> (10,000-gallon diesel)	S7	EF12	ND	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA
	S8	EF12	ND	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA
	S9	EF12	ND	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA
	S10	EF12	ND	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA
	S11	EF12	ND	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA
	S12	EF12	41	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA
	S13	EF12	50	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA
	S14	EF12	ND	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA
	S15	EF12	63	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA
	S16	EF12	ND	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA
<b>Tank EF13</b> (550-gallon waste oil)	S17	EF13	NA	NA	ND	NA	NA	NA	NA	1.3	15	23	37	ND	ND
	S18	EF13	NA	NA	ND	NA	NA	NA	NA	0.9	13	12	26	ND	ND
<b>EPA Method:</b>			8015M	8015M	503E	5030/8020	5030/8020	5030/8020	5030/8020	6010	6010	5030/7420	3550/8270	8240	8270
<b>Detection Limit (mg/kg):</b>			10.0	10.0	50	0.005	0.005	0.005	0.005	0.5	0.5	2.5	0.5	Rept.	Rept.

Notes: NA = Not analyzed.

ND = None detected.

Sampling locations depicted in Figure 5; laboratory reports are included as Appendix C.

Samples collected on 5 September 1990.

Rept. = See laboratory report in Appendix C.

Stockpiles S19, S20, and S21 (see Figure 5) were not sampled. Stockpiles S19, S20, and S21 were not sampled because the soils would be transported to the Langley and Doolittle site for treatment. Combustible vapor readings were elevated for stockpiles S19 and S20; stockpile S21 was assumed to contain diesel hydrocarbons in the same range as stockpiles S12 and S15.



**ATTACHMENT B**

**LABORATORY REPORTS FOR CONFIRMATION SAMPLES**

Treatment Beds A and B



LABORATORY NUMBER: 105330  
CLIENT: BASELINE ENVIRONMENTAL  
PROJECT ID: S9-134-40  
LOCATION: AMERICAN PRESIDENT LINES

DATE RECEIVED: 10/01/91  
DATE EXTRACTED: 10/07/91  
DATE ANALYZED: 10/10,11/91  
DATE REPORTED: 10/14/91

Extractable Petroleum Hydrocarbons in Soils & Wastes  
California DOHS Method  
LUFT Manual October 1989

LAB ID	SAMPLE ID	KEROSENE RANGE (mg/Kg)	DIESEL RANGE (mg/Kg)	REPORTING LIMIT* (mg/Kg)
105330-1	Aa-1091	ND	ND	10
105330-2	Ab-1091	ND	ND	10
105330-3	Ac-1091	ND	ND	10
105330-4	Ad-1091	ND	ND	10
105330-5	Ae-1091	ND	ND	10
105330-6	Ba-1091	ND	ND	10
105330-7	Bb-1091	ND	ND	10
105330-8	Bc-1091	ND	ND	10
105330-9	Bd-1091	ND	ND	10
105330-10	Be-1091	ND	ND	10

NOTE: All extracts underwent triple silica gel clean up.

ND = Not Detected at or above reporting limit.

\*Reporting limit applies to all analytes.

QA/QC SUMMARY

=====  
RPD, % <1  
RECOVERY, % 85  
=====

Treatment Beds A, B, C and D



LABORATORY NUMBER: 104203  
 CLIENT: BASELINE ENVIRONMENTAL  
 PROJECT ID: S9-134.40  
 LOCATION: APL 1395 MIDDLE HARBOR

DATE RECEIVED: 06/19/91  
 DATE ANALYZED: 06/28.29/91  
 DATE REPORTED: 07/02/91

Benzene, Toluene, Ethyl Benzene, Xylenes by EPA 8020  
 Extraction by EPA 5030 Purge and Trap

LAB ID	SAMPLE ID	BENZENE (ug/kg)	TOLUENE (ug/kg)	ETHYL BENZENE (ug/kg)	TOTAL XYLENES (ug/kg)	REPORTING LIMIT * (ug/kg)
104203-1	Aa	ND	ND	ND	ND	5.0
104203-2	Ab	ND	ND	ND	ND	5.0
104203-3	Ac	ND	ND	ND	ND	5.0
104203-4	Ad	ND	ND	ND	ND	5.0
104203-5	Ae	ND	ND	ND	ND	5.0
104203-6	Ba	ND	ND	ND	ND	5.0
104203-7	Bb	ND	ND	ND	ND	5.0
104203-8	Bc	ND	ND	ND	ND	5.0
104203-9	Bd	ND	ND	ND	ND	5.0
104203-10	Be	ND	ND	ND	ND	5.0
104203-11	Ca	ND	ND	ND	ND	5.0
104203-12	Cb	ND	ND	ND	ND	5.0
104203-13	Cc	ND	ND	ND	ND	5.0
104203-14	Cd	ND	ND	ND	ND	5.0
104203-15	Ce	ND	ND	ND	ND	5.0
104203-16	Da	ND	ND	ND	ND	5.0
104203-17	Db	ND	ND	ND	ND	5.0
104203-18	Dc	ND	ND	ND	ND	5.0
104203-19	Dd	ND	ND	ND	ND	5.0
104203-20	De	ND	ND	ND	ND	5.0

ND = Not detected at or above reporting limit.

\* Reporting Limit applies to all analytes.

QA/QC SUMMARY

RPD, %	3
RECOVERY, %	92

Treatment Bed A



Client: Baseline Environmental

Laboratory Login Number: 104784

Project Name: Port of Oakland  
Project Number: S9-117.05

Report Date: 13 August 91

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric)

METHOD: SMWW 17:5520EF

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
104784-005	COMPOSITE LD-E	Soil	09-AUG-91	09-AUG-91	12-AUG-91	ND	mg/Kg	50	TR	2313
104784-006	LD-AA	Soil	09-AUG-91	09-AUG-91	12-AUG-91	ND	mg/Kg	50	TR	2313
104784-007	LD-AB	Soil	09-AUG-91	09-AUG-91	12-AUG-91	ND	mg/Kg	50	TR	2313
104784-008	LD-AC	Soil	09-AUG-91	09-AUG-91	12-AUG-91	ND	mg/Kg	50	TR	2313
104784-009	LD-AD	Soil	09-AUG-91	09-AUG-91	12-AUG-91	ND	mg/Kg	50	TR	2313

ND = Not Detected at or above Reporting Limit (RL).

## Q C Batch Report

 Client: Baseline Environmental  
 Project Name: Port of Oakland  
 Project Number: S9-117.05

 Laboratory Login Number: 104784  
 Report Date: 13 August 91

ANALYSIS: Hydrocarbon Oil &amp; Grease (Gravimetric)

QC Batch Number: 2313

## Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	50	mg/Kg	SMWW 17:5520EF	12-AUG-91

## Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	87%	SMWW 17:5520EF	12-AUG-91
BSD	85%	SMWW 17:5520EF	12-AUG-91

		Control Limits
Average Spike Recovery	86%	80% - 120%
Relative Percent Difference	2.4%	< 20%

**BASELINE**

5900 Hoffis Street, Suite D  
Emeryville, CA 94608  
(415) 420-8686

**CHAIN OF CUSTODY RECORD**

184203

Turn-Around Time Normal

Lab Curtis & Donkin

Contact Person Tiscar

Project No.		Project Name and Location						Analysis										Remarks		Detection Limits	
S9-13440		Ap L 1395 Middle Harbor						<div style="display: flex; justify-content: space-between;"> <span>ALL</span><span>DIS</span><span>BTX/E</span> </div>													
Samplers: (Signature)																					
William K Scott																					
No. Station	Date	Time	Media	Depth	Compo-sites	No. of Con-tainers	Station Location	ALL	DIS	BTX/E											
1	6-19-91	9:42	Soil	1 ft				X	X	X									50 mg/kg DTG		
2		9:48						X	X	X									1 mg/kg Pb/Cd		
3		9:54						X	X	X									0.05 mg/kg BTX/E		
4		10:02						X	X	X											
5		10:11						X	X	X											
		10:43							X	X											
		10:45							X	X											
		10:55							X	X											
		11:02						X	X												

Relinquished by: (Signature) <i>William K Scott</i>	Date / Time 6-19-91 16:16	Received by: (Signature) <i>Christopher J. [unclear]</i>	Date / Time 6/19 1616	Condition of Samples upon Arrival at Laboratory:  Lcd - Good
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	
Remarks: Bill To Port of Oakland Date [unclear]				

P.7  
19 '63 10:21 CAT BERKELEY

**BASELINE**

5900 Hollis Street, Suite D  
Emeryville, CA 94608  
(415) 420-8686

**CHAIN OF CUSTODY RECORD**

104203

Turn-Around Time Normal

Lab Culic & Tompkins

Contact Person Deane

Project No.		Project Name and Location						Analysis												Remarks	Detection Limits
Samplers: (Signature) <i>William K. Hunt</i>								<div style="writing-mode: vertical-rl; transform: rotate(180deg);">                     Diesel BTEX/E                 </div>													
No. Station	Date	Time	Media	Depth	Compo-sites	No. of Con-tainers	Station Location														
10	Be	6-19-97	11:13	Soil	1 ft		1		X	X									1 mg/kg Diesel		
11	Ca		11:37	Soil			1		X	X									0.05 mg/kg BTEX/E		
12	Cb		11:41				1		X	X											
13	Cc		11:49				1		X	X											
14	Cd		11:59				1		X	X											
15	Ce		12:04				1		X	X											
16	Dg		12:39				1		X	X											
17	Db		12:43				1		X	X											
18	Dc		12:49				1		X	X											

19 '53 10:22 CAT BEP/ELEY

Relinquished by: (Signature) <i>William K. Hunt</i>	Date / Time 6-19-97 16:16	Received by: (Signature) <i>Christy</i>	Date / Time 6/19 / 6/6	Condition of Samples upon Arrival at Laboratory: <u>COG - GOOD</u>
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	
Remarks:				<u>Bill to Port of Oakland</u>

DATE 1/20/01

**BASELINE**

5900 Hollis Street, Suite D  
 Emeryville, CA 94608  
 (415) 420-8686

**CHAIN OF CUSTODY RECORD**

104203

Turn-Around Time Normal  
 Lab Curis & Tompkins  
 Contact Person F. Lane

Project No. <u>S9-134.4</u>		Project Name and Location <u>APL 1395 Middle Harbor</u>						Analysis <i>(Diagonal lines)</i>									
Samplers: (Sign) <u>William K. Lantz</u>																	
No. Station	Date	Time	Media	Depth	Compo-sites	No. of Con-tainers	Station Location										
<u>19</u> Dd	<u>6-19-91</u>	<u>12:54</u>	<u>Soil</u>	<u>1 ft</u>		<u>1</u>		X	X							<u>1 mg/kg diesel</u>	
<u>20</u> De	<u>6-19-91</u>	<u>12:58</u>	<u>Soil</u>	<u>1 ft</u>		<u>1</u>		X	X							<u>0.05 mg/l BTEX</u>	

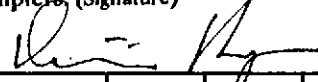
Relinquished by: (Signature) <u>William K. Lantz</u>	Date / Time <u>6-19-91 16:16</u>	Received by: (Signature) <u>Christopher G. [Signature]</u>	Date / Time <u>6/19 1616</u>	Condition of Samples upon Arrival at Laboratory: <u>GOOD - GOOD</u>
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: <u>Bill To Port of Oakland</u> <u>P.O.# 60876</u>

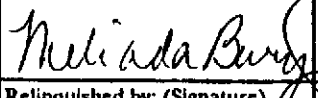

19 '53 10:23 C&T BEPVELEY



**BASELINE**5900 Hollis Street, Suite D  
Emeryville, CA 94608  
(415) 420-8686**CHAIN OF CUSTODY RECORD**Turn-Around Time 48 hoursLab Curtis & Tompkins

Contact Person

Project No.		Project Name and Location						Analysis										Detection Limits															
S9-117.05		Berth of Oakland Langley & Doolittle Wharf						<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">OIL &amp; GREASE</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">DIESEL</div> </div>											Remarks	Detection Limits													
Samplers (Signature)																		No. Station			Date	Time	Media	Depth	Compos-ites	No. of Con-tainers	Station Location						
								LD-Ea	8/9/91	1029	Soil	6-12" bgs	YES	1	1	X														50mg/kg			
								LD-Eb		1025			YES	1	} COMPOSITE 2	X																	
								LD-Ec		1015			YES	1		3	X																
								LD-Ed		1020			YES	1		4	X																
								<del>LD-Aa</del>		1105			NO	1	6	X	X																Diesel 1mg/kg DL
								LD-Ab		1110			NO	1	7	X	X																
								LD-Ac		1115			NO	1	8	X	X																
								LD-Ad		1120			NO	1	9	X	X																
								LD-Ba	↓	1130	↓	↓	NO	1	analyse for diesel only	X	X																

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Condition of Samples upon Arrival at Laboratory:
	8/9/91 2:55		9 Aug 91 2:55	
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: see John Hayette regarding compact interference with diesel and with oil and grease measurements.

**BASELINE**5900 Hollis Street, Suite D  
Emeryville, CA 94608  
(415) 420-8686**CHAIN OF CUSTODY RECORD**Turn-Around Time 48 hoursLab Certes Thompson

Contact Person

Project No.		Project Name and Location						Analysis						Remarks	Detection Limits		
S9-117.05		Langelly-Doolittle															
Samplers: (Signature) <i>Kornig</i>																	
No. Station	Date	Time	Media	Depth	Compo- sites	No. of Con- tainers	Station Location	<input type="checkbox"/> Gas <input type="checkbox"/> Lead <input type="checkbox"/> Benzene <input type="checkbox"/> Diesel <input type="checkbox"/> PCBs <input type="checkbox"/> Silica						Remarks	Detection Limits		
LD-Bb	8/9/91	1135	Soil	6"-12" bgs	No	1	11	X									1 mg/kg
LD-Bc		1143					12	X									
LD-Bd		1140					13	X									
LD-Ca		1145					14	X									
LD-Cb		1150					15	X									
LD-Cac		1155					16	X									
LD-Cd		1200					17	X									
LD-Da		1205					18	X									
LD-Db	✓	1210	✓	✓	✓	✓	19	X									

Relinquished by: (Signature) <i>Melinda Burg</i>	Date / Time 8/9/91 2:55	Received by: (Signature) <i>Max Messick</i>	Date / Time 8-9-91 14:55	Condition of Samples upon Arrival at Laboratory:
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: see John Hoyette regarding compact interlamps will diesel oil with actual grease measurement.

**BASELINE**

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**CHAIN OF CUSTODY RECORD**

Turn-Around Time 48 hours

Lab Curtis & Thompson

Contact Person \_\_\_\_\_

Project No.		Project Name and Location						Analysis										Detection Limits	
S9-117.05		Langley - Doolittle						DIESEL											
Samplers: (Signature)												Remarks		Detection Limits					
No. Station	Date	Time	Media	Depth	Compo-sites	No. of Con-tainers	Station Location												
LD-Dc	8/9/91	1215	Soil	6-12" bgs	No	1	20		X										1 mg/kg
LD-Dd	8/9/91	1220	↓	↓	↓	1	21		X										↓

Relinquished by: (Signature) <i>Melinda Perry</i>	Date / Time <i>8/9/91 12:58</i>	Received by: (Signature) <i>Matt Messick</i>	Date / Time <i>8-9-91 14:55</i>	Condition of Samples upon Arrival at Laboratory:  Remarks: <i>see John Gayette regarding compost interfered with diesel oil with oil and grease measurement</i>
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	

**BASELINE**

5900 Hollis Street, Suite D  
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**CHAIN OF CUSTODY RECORD**

Turn-Around Time \_\_\_\_\_

Lab Curtis Tompkins

Contact Person John Gayette

Project No.		Project Name and Location						Analysis										Remarks	Detection Limits	
S9-117.05		Langley-Doolittle (						DIR SEL - TECH EXA 50" BTXCE												
Samplers: (Signature)																				
No. Station	Date	Time	Media	Depth	Compo-sites	No. of Con-tainers	Station Location													
LD-Ce	8-14-91	10:55	SOIL	6"-12" 625		1	Dirt Pile C													10 mg/kg DISSEL
LD-De	↓	11:00	↓	↓		1	" " D													↓
													1)	24-HR TURNAROUND FOR DIESEL, NORMAL FOR STE (SEE JOHN GAYETTE)						
													2)	APPLY TRIPLE-EXTRACTION FOR REMOVAL OF VEGETABLE OIL						

Relinquished by: (Signature) <i>[Signature]</i>	Date / Time 8/14/91 2:59 p	Received by: (Signature) <i>[Signature]</i>	Date / Time 8/14/91 14:59	Condition of Samples upon Arrival at Laboratory:  Remarks:
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) <i>[Signature]</i>	Date / Time 8/14/91 16:00	

**BASELINE**

5900 Hollis Street, Suite D  
Emeryville, CA 94608  
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**CHAIN OF CUSTODY RECORD**

**105330**

Turn-Around Time 10-DAYS

Lab CURTIS & TOMPKINS

BASELINE Contract Person Drew

Project No.		Project Name and Location						Analysis										Remarks	Detection Limits	
S9 134-40		America President Lines						DISEC (Can 3015)												
Samplers: (Signature)																				
William K. East																				
No. Station	Date	Time	Media	Depth	Compo- sites	No. of Con- tainers	Station Location													
-1	Aa-1091	10-1-91	12:35	Soil	1	1	Stackpile A - Bioremediation site	X											Use triple operation method with silica gel to avoid inclusion of vegetable kit in laboratory results.	mg/kg
-2	Ab-1091	10-1-91	12:38		1	1	↓	X												
-3	Ac-1091		12:41		1	1	↓	X												
-4	Ad-1091		12:45		1	1	↓	X												
-5	Ae-1091		12:48		1	1	↓	X												
-6	Ba-1091		12:56		1	1	Stackpile B - Bioremediation site	X												
-7	Bb-1091		13:01		1	1	↓	X												
-8	Bc-1091		13:04		1	1	↓	X												
-9	Bd-1091		13:07		1	1	↓	X												
-10	Be-1091		13:10		1	1	↓	X												

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Condition of Samples upon Arrival at Laboratory:  Cold
William K. East	10-1-91 15:30			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: See John Hayette for Special instructions. Bill to Port of Oakland.
		Mark Merrill	10/1/91 15:30	