



91 SEP -5 AM 11: 19

August 30, 1991

Mr. Barney Chan, Hazardous Materials Specialist  
Division of Hazardous Materials  
Department of Environmental Health  
Alameda County Health Agency  
80 Swan Way, Room 200  
Oakland, CA 94621

**Subject:** Tank Removal Results  
Federal Aviation Administration  
Oakland International Airport TRACON facility

Dear Mr. Chan:

This letter has been prepared to provide the Alameda County Department of Environmental Health (DEH) with a description of soil sampling, and soil analytical methods and results associated with the removal of an underground 1,000-gallon-capacity diesel tank. The tank was located at the Federal Aviation Administration (FAA) Oakland International Airport Terminal Radar Approach Control (TRACON) facility. Based upon tank removal observations, no diesel is suspected to have leaked from the tank due to tank failure. Based on laboratory analytical results, diesel hydrocarbons were not detected in soil samples collected from the tank excavation. Petroleum hydrocarbons detected in a groundwater sample from beneath the tank are heavier than diesel with carbon-chain ranges slightly below, at, and above C-23. These petroleum hydrocarbons may be fuel oil. In addition, no benzene, toluene, ethylbenzene, or xylenes (BTEX) were detected in the groundwater beneath the tank. Based upon this evidence and on behalf of the FAA, site closure is requested from the Alameda County DEH.

## **BACKGROUND**

The site is located at 8250 Earhart Road, Oakland in the northeast quarter of the southwest quarter of Section 20, Township 2 South, Range 3 West of the San Leandro 7 1/2 minute quadrangle, Alameda County, California (Figure 1). The FAA Oakland Airport TRACON facility consists of a control building with an emergency generator and an underground 1,000-gallon-capacity diesel tank (Figure 2). The site is located in a portion of a former Naval fuel storage area. The land is owned by the Port of Oakland and leased by the FAA. The facility is at an elevation of approximately 7 feet above mean sea level (MSL). The FAA contracted with Advanced Sciences, Inc. (ASI) to conduct soil sampling following the removal of the tank by the FAA. ASI provided the following services in accordance with the scope of work provided by the FAA.

- Visually assessed the condition of the tank immediately upon removal and observed soil conditions directly beneath the tank;
- Collected two soil samples beneath the tank, and one soil sample from the soil stockpile and arranged for laboratory analysis of the samples;
- Collected two groundwater samples beneath the tank and arranged for laboratory analysis of the samples; and
- Prepared this report.

### SOIL SAMPLING, HANDLING, AND ANALYSIS

On May 2, 1991, the FAA excavated and removed the 1,000-gallon-capacity diesel tank adjacent to the FAA Oakland Airport TRACON facility. During tank excavation activities, the excavated soil was monitored for volatile organic vapors using a calibrated photoionization detector (PID).

Upon excavation, the tank appeared intact with no visible diesel leaks or stains. Groundwater was observed in the bottom of the excavation. No hydrocarbon odors were detected by ASI personnel and the PID did not detect volatile organics above background levels in the excavated soil or in the tank pit. Groundwater was observed and sampled in the tank excavation at a depth of 5 feet below ground surface.

After the tank was removed from the excavation, two areas beneath the tank and the soil stockpile were sampled under the direction of Mr. Barney Chan, Hazardous Materials Specialist, and in accordance with a tank removal permit issued by Alameda County Health Department, DEH.

1. The northern end of the bottom of the tank pit, (soil sample TRACON-3), at a depth of approximately 5 feet below ground surface. This sample was collected at 1005 on May 2, 1991.
2. The southern end of the bottom of the tank pit, (soil sample TRACON-4), at a depth of approximately 5 feet below ground surface. This sample was collected at 1010 on May 2, 1991.
3. The excavated soil stockpile (soil sample TRACON-5). This discrete sample was collected at 1015 on May 2, 1991.

The three soil samples were a dark-brown-to-black, silty clay of the Younger Bay Mud. The soil samples were put into 250-milliliter (ml) glass jars, sealed with a Teflon-lined cap, labeled, logged, sealed in a plastic bag, and placed in an insulated cooler with ice. Samples were shipped by ASI field personnel under strict chain-of-custody protocol to Quality Assurance Laboratory of San Diego, California, for analysis. The chain-of-custody form is presented as Attachment 1.

The soil samples were analyzed for total petroleum hydrocarbons (TPH) using California Department of Health Services (DHS) methods and BTEX using Modified EPA Method 8020.

### Soil Analytical Results

TPH and BTEX were not detected in soil samples TRACON-3 and TRACON-4. Sample TRACON-5 analytical results are considered not valid because the sample was received by the laboratory in a broken container. Soil analytical results are presented as Attachment 1.

## GROUNDWATER SAMPLING, HANDLING, AND ANALYSIS

After the tank was removed from the excavation, two groundwater samples were collected from the bottom of the tank pit excavation under the direction of Mr. Barney Chan, Hazardous Materials Specialist.

The groundwater samples were put into a 1-liter glass jar (sample TRACON-1) and a 40-ml glass vial (sample TRACON-2), sealed with a Teflon-lined cap, labeled, logged, sealed in a plastic bag, and placed in an insulated cooler with ice. Samples were shipped under strict chain-of-custody protocol to Quality Assurance Laboratory (QAL) of San Diego, California, for analysis (Attachment 1).

Groundwater sample TRACON-1 was analyzed for TPH using California DHS methods and groundwater sample TRACON-2 was analyzed for BTEX using Modified EPA Method 602.

### Groundwater Analytical Results

A TPH concentration of 36.6 milligrams per liter (mg/l) was detected in groundwater sample TRACON-1. Groundwater sample TRACON-2 had no detectable BTEX concentrations. The analytical chromatogram for sample of TRACON-1 (Attachment 3) indicates that the majority of the petroleum hydrocarbons detected in sample TRACON-1 had hydrocarbons with a carbon-chain range slightly less than, at, and greater than C-23 (above the diesel hydrocarbon range). These petroleum hydrocarbons are within the carbon-chain range of fuel oil (QAL, personal communication).

### **Tank Disposal**

The tank was inerted with 100 pounds of dry ice, plugged with a 1,000 pounds-per-square-inch (psi) pressure valve, and transported under Uniform Hazardous Waste Manifest #90542266 (Attachment 4) by H&H Ship Service Company (H&H) of San Francisco, California. The tank was steam cleaned at the H&H facility and the rinsate was collected and treated. H&H is a licensed treatment and disposal facility (License No. CAD 004771168). H&H issued a Certificate of Disposal for the Oakland Airport TRACON facility tank on May 7, 1991 (Attachment 5).

### **Groundwater Discussion**

Groundwater was observed and sampled in the tank pit excavation at a depth of approximately 5 feet below ground surface near MSL. The site is less than one mile south of San Francisco Bay and the groundwater beneath the site may be subjected to San Francisco Bay influences.

### **CONCLUSION**

A 1,000-gallon-capacity diesel tank was removed by the FAA on May 2, 1991, under a permit issued by Alameda County Health Agency, DEH. Upon excavation, the tank appeared intact with no visible leaks or holes. ASI field personnel observed no soil staining and detected no hydrocarbon odors adjacent to or in the soil beneath the tank. The presence of hydrocarbon odors was not detected by the PID in the excavated soil or in the tank excavation.


TPH and BTEX were not detected in soil samples TRACON-3 and TRACON-4. Sample TRACON-5 was received by the laboratory in a broken container, thus, sample integrity has been compromised and analytical results are not valid.

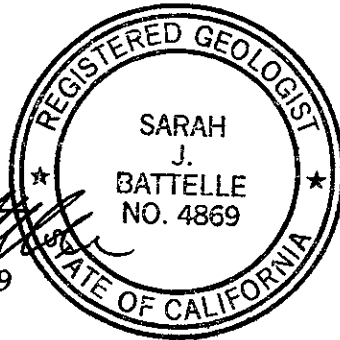
Groundwater was observed and sampled in the tank pit excavation at a depth of approximately 5 feet below ground surface. Groundwater sample TRACON-1 had a TPH concentration of 36.6 mg/l, with the majority of hydrocarbons slightly less than, at, and greater than C-23, indicating the presence of hydrocarbons heavier than the diesel fuel previously stored in the FAA tank. These petroleum hydrocarbons may be fuel oil. Because laboratory analysis indicates that the petroleum in groundwater may not be diesel, the FAA has notified the landowner, the Port of Oakland, of their concern for potential past releases associated with other tanks near or at the site (see Attachment 6). In addition, analytical results indicate BTEX was not detected in the groundwater beneath the tank.

Based upon analytical results and tank observations presented in this report and on behalf of the FAA, site closure is requested from Alameda County DEH.

If you have any questions or comments, please contact Len Sinfield or me at (619) 560-8552.

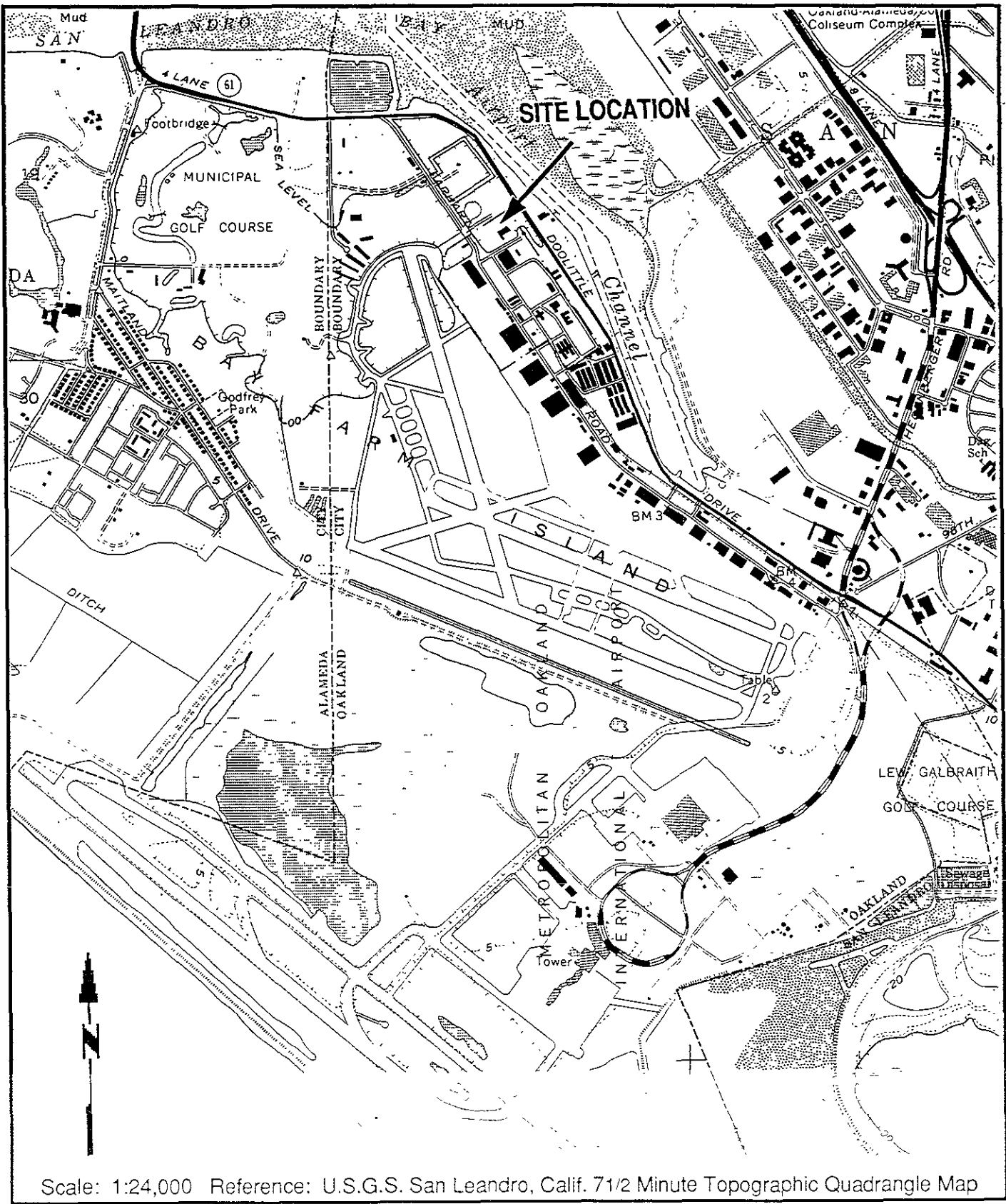
Sincerely,

  
Sarah Battelle, R.G. #4869  
Project Manager



- Attachments:
- 1 - Chain-of-Custody Form
  - 2 - Laboratory Analytical Reports
  - 3 - Sample TRACON-1 Chromatogram
  - 4 - Uniform Hazardous Waste Manifest #90542267
  - 5 - Certificate of Disposal
  - 6 - Letter from FAA to Port of Oakland

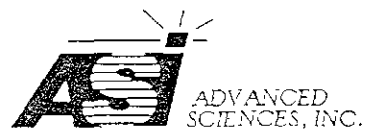
cc: Charley Chamness - FAA, Los Angeles  
ASI File 9788-2212

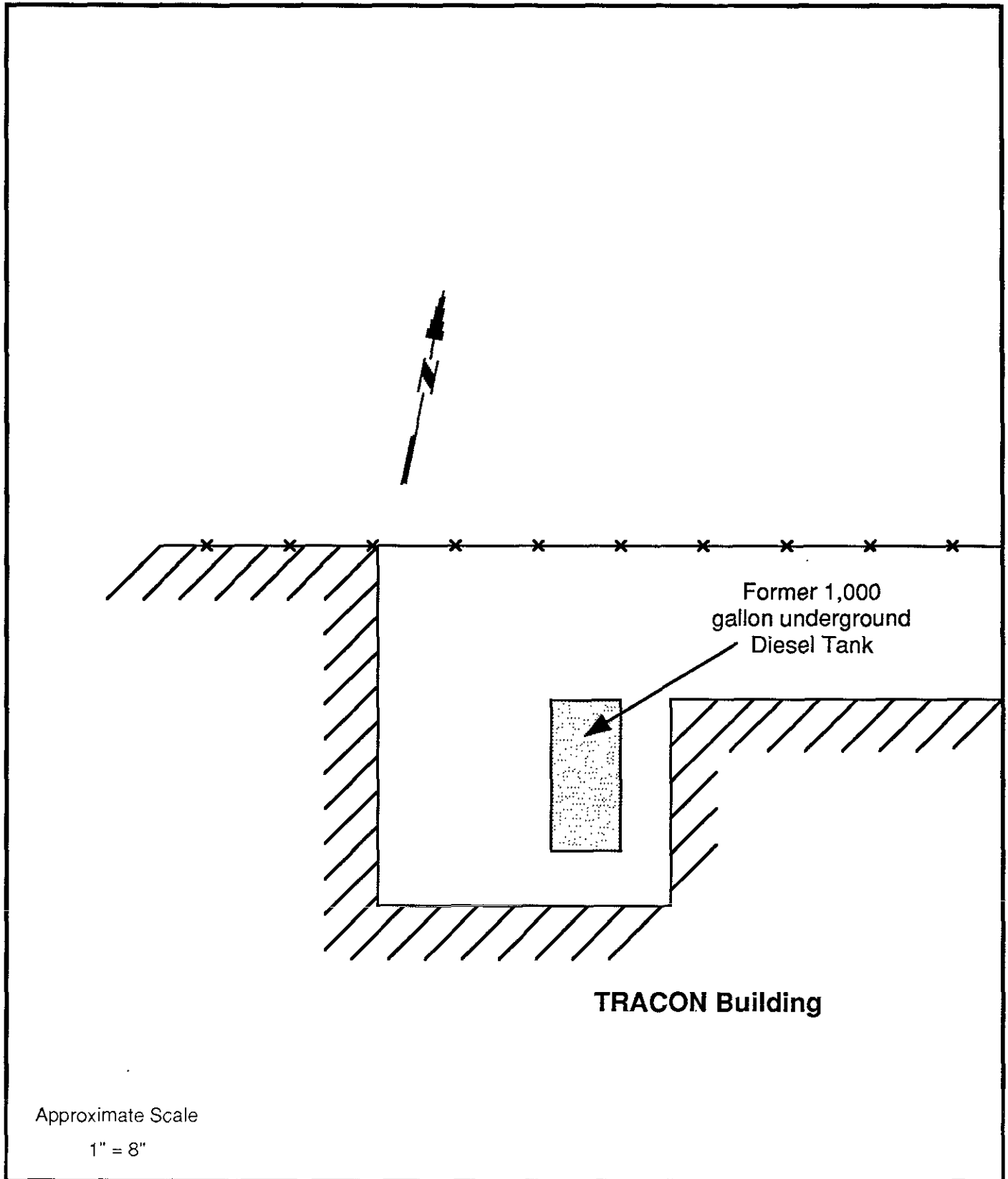


Scale: 1:24,000 Reference: U.S.G.S. San Leandro, Calif. 7 1/2 Minute Topographic Quadrangle Map

**Site Location**  
**Federal Aviation Administration**  
**Oakland International Airport TRACON Facility**  
**Tank Removal**

PROJECT NO 9788-2212  
 FIGURE 1





**SITE PLAN**  
**Federal Aviation Administration**  
**Oakland Airport TRACON Facility**

PROJECT NO. 9788-2212

FIGURE 2

**CHAIN-OF-CUSTODY FORM**



# CHAIN OF CUSTODY

CUSTOMER INFORMATION		PROJECT INFORMATION		NUMBER OF CONTAINERS	ANALYSIS REQUEST																
COMPANY: <u>ARMS Inc</u>	PROJECT NAME/NUMBER: <u>FAA TANKS - 9788-22</u>	<b>BILLING INFORMATION</b>			TPH (Desc) BTEX																
PROJECT MANAGER: <u>[Signature]</u>	BILL TO: <u>SRNA AS 101#</u>	ADDRESS:																			
ADDRESS: <u>1401 S. Imperial Ave. San Diego, CA 92123</u>	ADDRESS:	PHONE: <u>619-552-5552</u>																			
PHONE: <u>619-552-5552</u>	PHONE:	PO #:																			

QA LOG #	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	TPH	BTEX	ANALYSIS REQUEST
1	Trace 1	5-2-91	0920	WATER	1 liter Glass	1	X	Wrong Container
1	Trace 2	5-2-91	0930	WATER	40 ml Vials	1	X	
1	Trace 3	5-2-91	1005	Soil	250 ml Glass	1	X	
1	Trace 4	5-2-91	1010	Soil	250 ml Glass	1	X	
1	Soil pit 1	5-2-91	1015	Soil	250 ml Glass	1	X	Broken
1	ARS 1	5-2-91	1050	Soil	250 ml Glass	1	X	
1	ARS 2	5-2-91	1055	Soil	250 ml Glass	1	X	
1	ARS 3 Soil pit	5-2-91	1100	Soil	250 ml Glass	1	X	

Cancel TPH on Trace 2 (0124). Do TPH on Trace 1 per Len. 5/4/91 SJ

Do extraction on the 1 liter water sample.

## SAMPLE INTEGRITY

HOLDING TIME	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N
CORRECT CONTAINER	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N

<b>1. RELINQUISHED BY:</b> SIGNATURE: <u>[Signature]</u> PRINTED NAME: <u>Len Siskind</u> COMPANY: <u>ARMS Inc</u>		DATE: <u>5/2/91</u> TIME: <u>1850</u>	<b>2. RELINQUISHED BY:</b> SIGNATURE: PRINTED NAME: COMPANY:		DATE: TIME:	<b>3. RELINQUISHED BY:</b> SIGNATURE: PRINTED NAME: COMPANY:		DATE: TIME:	<b>SAMPLE RECEIPT / SPECIAL INSTRUCTIONS</b> RECEIVED ON ICE YES/NO TAPE SEAL INTACT YES/NO/NA PRESERVATIVE YES/NO PRECAUTIONS: TAT REQUESTED:		Wrote on Report Broken Jar #11 Rinse through Tr WAS BROKEN NCR 107
<b>1. RECEIVED BY:</b> SIGNATURE: <u>[Signature]</u> PRINTED NAME: COMPANY:		DATE: <u>5/2/91</u> TIME: <u>7:35</u>	<b>2. RECEIVED BY:</b> SIGNATURE: PRINTED NAME: COMPANY:		DATE: TIME:	<b>3. RECEIVED BY:</b> SIGNATURE: PRINTED NAME: COMPANY:		DATE: TIME:			

## **LABORATORY ANALYTICAL REPORTS**

QUALITY ASSURANCE LABORATORY  
 6605 NANCY RIDGE DRIVE  
 SAN DIEGO, CALIFORNIA 92121  
 (619) 552-3636

ADVANCED SCIENCES, INC.  
 ATTN: L. SINFIELD  
 4909 MURPHY CYN. RD., #400  
 SAN DIEGO, CA 92123

DATE OF REPORT	MAY 17, 1991
DATE RECEIVED	MAY 3, 1991
DATE OF SAMPLE	MAY 2, 1991
DATE COMPLETED	MAY 16, 1991
ANALYZED BY	VJ
SAMPLE TYPE	2 WATER
PROJECT NAME	FAA TANKS
PROJECT NUMBER	9788-22

ANALYSES RESULTS

ANALYSIS	METHOD	UNITS	LOG NUMBER:	6123-91	6124-91
			SAMPLE ID:	TRACON 1	TRACON 2
TPH	DHS	MG/L		36.6 *	
BENZENE	EPA 602	UG/L			<0.5
TOLUENE	EPA 602	UG/L			<0.5
ETHYLBENZENE	EPA 602	UG/L			<0.5
XYLENE	EPA 602	UG/L			<1.5

TPH - TOTAL PETROLEUM HYDROCARBONS

DHS - RECOMMENDED PROCEDURE FROM LEAKING UNDERGROUND FUEL TANK FIELD  
 MANUAL, MAY 1988

TOTAL PETROLEUM HYDROCARBON ANALYSES RESULTING IN HYDROCARBONS  
 OF THE RANGE C10-C23

\* CONTAINS OTHER HEAVY MOLECULAR WEIGHT COMPOUNDS

PETER SHEN  
 LABORATORY DIRECTOR

PS/ft

QUALITY ASSURANCE LABORATORY  
 6605 NANCY RIDGE DRIVE  
 SAN DIEGO, CALIFORNIA 92121  
 (619) 552-3636

ADVANCED SCIENCES, INC.  
 ATTN: L. SINFIELD  
 4909 MURPHY CYN. RD., #500  
 SAN DIEGO, CA 92123

DATE OF REPORT	JULY 9, 1991
DATE RECEIVED	MAY 3, 1991
DATE OF SAMPLE	MAY 2, 1991
DATE COMPLETED	MAY 16, 1991
ANALYZED BY	VJ
SAMPLE TYPE	6 SOIL
PROJECT NAME	FAA TANKS
PROJECT NUMBER	9788-22

ANALYSES RESULTS

LOG NUMBER	SAMPLE ID	ANALYSIS: TPH		BENZENE	TOLUENE		ETHYLBENZENE		XYLENE	
		METHOD: DHS	UNITS: MG/KG DF	EPA 8020 UG/KG	EPA 8020 UG/KG	DF	EPA 8020 UG/KG	DF	EPA 8020 UG/KG	DF
6125-91	TRACON 3		<10.0	<1.0	<1.0		<1.0		<3.0	
6126-91	TRACON 4		<10.0	<1.0	<1.0		<1.0		<3.0	
6127-91	TRACON 5 "STOCKPILE"		375*	<1.0	<1.0		<1.0		<3.0	
6128-91	ARS 1		24,000*	100	1.9	<125	125	1,060	125	961 125
6129-91	ARS 2		15.1*		<1.0	<1.0		<1.0		<3.0
6130-91	ARS 3 "STOCKPILE"		144*		<1.0	<1.0		<1.0		<3.0

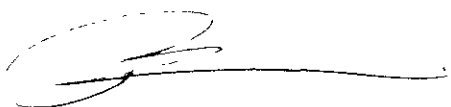
TPH - TOTAL PETROLEUM HYDROCARBONS

DHS - RECOMMENDED PROCEDURE FROM LEAKING UNDERGROUND FUEL TANK FIELD MANUAL, MAY 1988

\* TOTAL PETROLEUM HYDROCARBON ANALYSES RESULTING IN HYDROCARBONS OF THE RANGE C10-C23

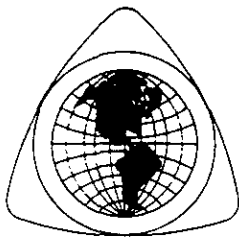
DF = DILUTION FACTOR. THE DETECTION LIMITS AND ANALYSIS RESULTS WERE CORRECTED ACCORDINGLY.

SAMPLE LOG # 6127-91 WAS RECEIVED IN A BROKEN CONTAINER. ENOUGH SOIL WAS OBTAINED FOR ANALYSES TO BE PERFORMED ON REMAINING SAMPLE OUT OF THE BROKEN CONTAINER. SAMPLE INTEGRITY MAY HAVE BEEN COMPROMISED



PETER SHEN  
 LABORATORY DIRECTOR

PS/ft



# QUALITY ASSURANCE LABORATORY

## QUALITY CONTROL DATA REPORT

MAY 20, 1991

ADVANCED SCIENCES, IUNC. (ASI)  
LOG #6123-91 THROUGH 6130-91  
DATE ANALYZED: MAY 9, 1991

ANALYSES	METHOD	CCCV %RECOVERY	SPIKE %RECOVERY	DUPLICATE RPD
BENZENE	602	103%	56%*	4%
TOLUENE	602	99%	86%	23%
ETHYLBENZENE	602	99%	91%	39%*
XYLENES	602	94%	87%	38%*
TPH	DHS	106%	99%	2%

\* SPIKE RECOVERY AND DUPLICATE RPD WERE HIGH DUE TO SAMPLE MATRIX EFFECT.

*Lisa MacCellellan MS*  
LISA MACCLELLAN  
QA/QC DIRECTOR

#### QUALITY CONTROL TERMINOLOGY

°CCCV-CONTINUING CALIBRATION CURVE VERIFICATION REPORTED AS % RECOVERY OF AN INDEPENDENT STANDARD TO VERIFY LINEARITY OF THE OPERATING STANDARD CURVE ACCEPTABLE RANGE IS 80%-120% RECOVERY

°SPIKE-ENVIRONMENTAL SAMPLE IS MATRIX SPIKED WITH METHOD COMPOUNDS AND % RECOVERY OF CONCENTRATION SPIKED INTO SAMPLE IS CALCULATED REPORTED AS % RECOVERY ACCEPTABLE RANGE FOR "NORMAL MATRIX SAMPLES" IS 75% 125% RECOVERY

°SURROGATES-COMPOUNDS REPRESENTATIVE OF A GROUP OF COMPOUNDS SURROGATES ARE SPIKED INTO ENVIRONMENTAL SAMPLES AND °- RECOVERY OF CONCENTRATION SPIKED IS CALCULATED AND REPORTED ACCEPTABLE RANGE VARIES DEPENDING UPON SAMPLE MATRIX AND ANALYSES METHOD

FOR A MORE DETAILED EXPLANATION OF QC DATA, PLEASE REFER TO QUALITY ASSURANCE LABORATORY'S "QUALITY ASSURANCE PLAN" OR "UNDERSTANDING YOUR QUALITY CONTROL DATA". BOTH PUBLICATIONS ARE AVAILABLE FROM QAL.

QUALITY CONTROL REPORT, CONTINUED  
MAY 20, 1991

ADVANCED SCIENCES, IUNC. (ASI)  
LOG #6123-91 THROUGH 6130-91  
DATE ANALYZED: MAY 14, 1991

ANALYSES	METHOD	CCCV %RECOVERY	SPIKE %RECOVERY	DUPLICATE RPD
BENZENE	602	99%	56%*	4%
TOLUENE	602	101%	86%	23%
ETHYLBENZENE	602	108%	91%	39%*
XYLENES	602	104%	87%	38%*
TPH	DHS	105%	98%	2%

\* SPIKE RECOVERY AND DUPLICATE RPD WERE HIGH DUE TO SAMPLE MATRIX EFFECT.

*Lisa MacCellellan MS*  
LISA MACCLELLAN MS  
QA/QC DIRECTOR

QUALITY CONTROL TERMINOLOGY

\*CCCV-CONTINUING CALIBRATION CURVE VERIFICATION REPORTED AS % RECOVERY OF AN INDEPENDENT STANDARD TO VERIFY LINEARITY OF THE OPERATING STANDARD CURVE ACCEPTABLE RANGE IS 80%-120% RECOVERY

\*SPIKE-ENVIRONMENTAL SAMPLE IS MATRIX SPIKED WITH METHOD COMPOUNDS AND % RECOVERY OF CONCENTRATION SPIKED INTO SAMPLE IS CALCULATED REPORTED AS % RECOVERY ACCEPTABLE RANGE FOR "NORMAL MATRIX SAMPLES" IS 75%-125% RECOVERY

\*SURROGATES-COMPOUNDS REPRESENTATIVE OF A GROUP OF COMPOUNDS SURROGATES ARE SPIKED INTO ENVIRONMENTAL SAMPLES AND % RECOVERY OF CONCENTRATION SPIKED IS CALCULATED AND REPORTED ACCEPTABLE RANGE VARIES DEPENDING UPON SAMPLE MATRIX AND ANALYSES METHOD

**SAMPLE TRACON-1 CHROMATOGRAM**

C10-C23

+ heavier mol. wt comp

36.6 ppm

6123-91 (1 Processed: 05-11-1991 06:52:52, segment 27, cycle 86  
RAW DATA SAVED IN FILE K:G050886.PTS

\*\*\*\*\* AREA PERCENT REPORT \*\*\*\*\*

\*\*\*\*\* 05-11-1991 06:52:57 Version 5.0 \*\*\*\*\*  
\* Sample Name: 6123-91 (10MLS) Data File: K:G050886 \*  
\* Date: 05-11-1991 06:18:01 Method: N:9015 \*  
\* Interface: 5 Cycle#: 86 Operator GMB Channel#: 1 Vial#: N.A. \*  
\* Starting Peak Width: 5 Threshold: .1 Area Threshold: 5 \*  
\*\*\*\*\*  
\* Instrument Type: Hewlett-Packard 5890 Column Type: Megabore; OV-5 \*  
\* Solvent Description: N/A(Purge & Trap)/ CS2 \*  
\* Conditions: 40 C for 3 min; 8 C/ min to 250 C; 40 C min-1280/4 \*  
\* Detector 0: FID Detector 1: FID \*  
\* Misc. Information: \*  
\*\*\*\*\*  
Starting Delay: 0.00 Run Time: 35.00

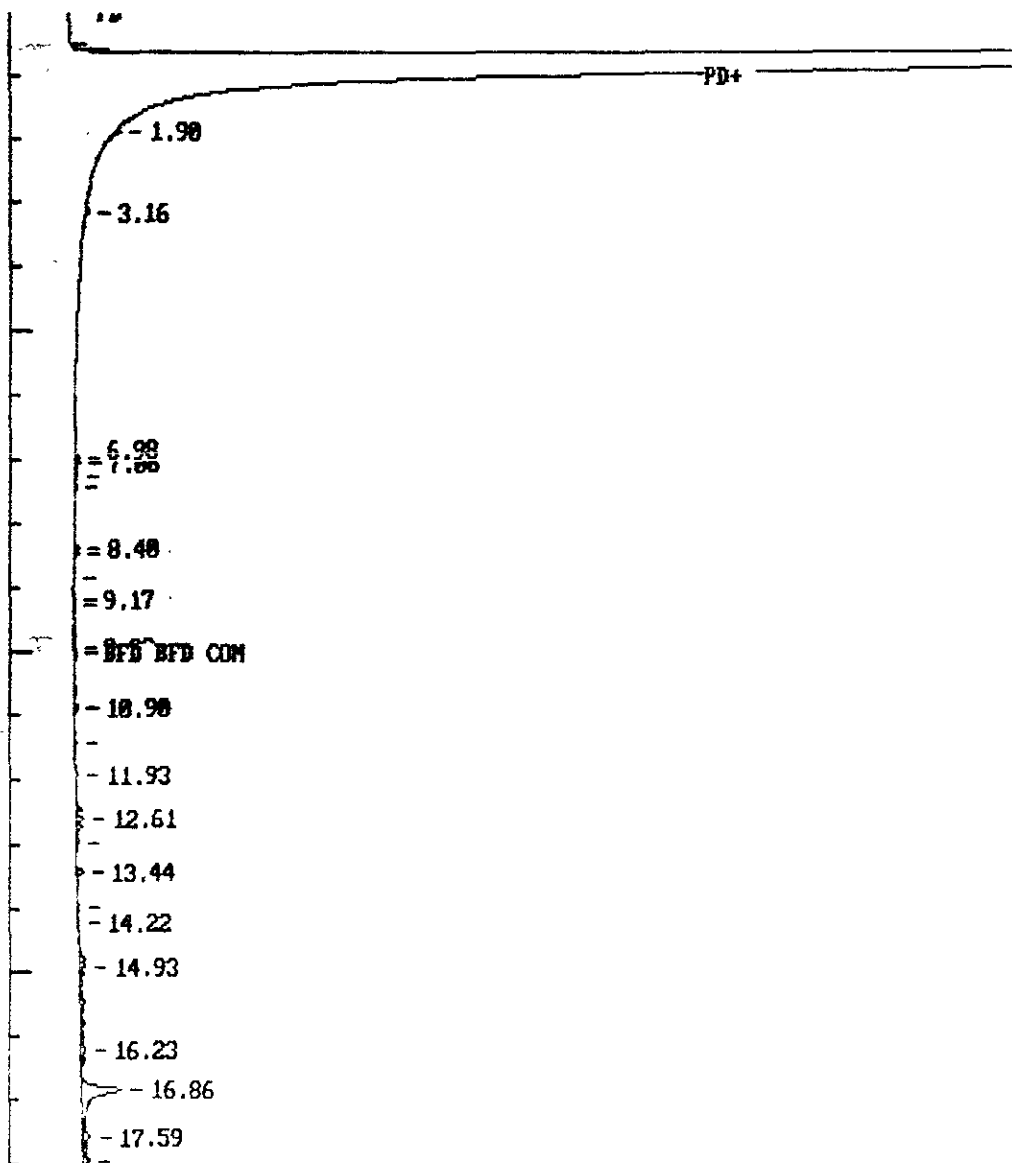
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	1.900	370	0.0708	1	132	0.490	2.8
3	3.160	483	0.0926	1	100	0.641	4.8
9	6.980	420	0.0804	2	100	0.557	4.2
10	7.060	673	0.1289	2	120	0.893	5.6
11	7.280	327	0.0626	2	54	0.433	6.1
12	7.440	124	0.0238	2	23	0.165	5.4
17	8.400	505	0.0968	2	127	0.670	4.0
18	8.480	599	0.1147	2	118	0.794	5.1
19	8.830	193	0.0370	1	27	0.256	7.1
20	9.170	117	0.0224	2	23	0.155	5.0
21	9.280	154	0.0295	2	26	0.204	6.0
23	9.920	265	0.0507	2	31	0.351	8.7
24	10.030	795	0.1523	2	55	1.055	14.5
25	10.900	762	0.1459	2	83	1.010	9.2
26	11.440	876	0.1678	2	67	1.162	13.0
27	11.930	517	0.0990	2	62	0.685	8.3
28	12.610	2580	0.4943	2	196	3.423	13.1
29	12.970	791	0.1515	2	63	1.049	12.5
30	13.440	1230	0.2357	2	168	1.632	7.3
31	13.980	388	0.0743	2	69	0.514	5.6
32	14.220	671	0.1285	2	58	0.890	11.5
33	14.930	3552	0.6804	2	170	4.712	20.8
34	16.230	6581	1.2606	2	140	8.729	45.9
35	16.860	13350	2.5977	3	1018	17.712	13.1
36	17.590	2132	0.4084	4	181	2.808	11.8
37	17.890	1853	0.3549	4	164	2.457	11.0
38	18.340	7007	1.3575	2	448	9.401	15.0
39	19.130	4345	0.8322	2	174	5.760	24.9
40	19.670	2998	0.5744	2	244	3.977	12.0
41	20.060	3117	0.5971	2	268	4.105	11.0
42	20.800	2453	0.4698	2	169	3.253	14.5
43	21.530	1067	0.2044	2	105	1.416	10.1
44	21.970	4245	0.8134	2	352	5.000	12.1
45	22.820	514	0.0984	2	50	0.682	9.7
46	23.100	863	0.1654	1	115	1.145	7.5
47	23.620	2961	0.5673	2	210	3.908	9.4

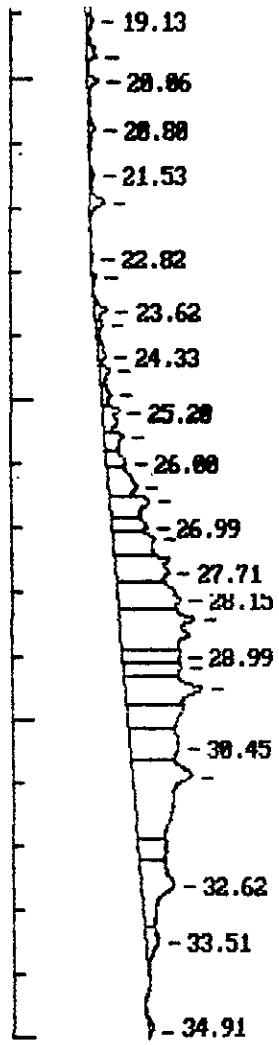


49	24.330		0.6024	2	194	4.171	18.2	
50	24.560	286	0.5494	2	246	3.804	11.7	
51	24.930	3262	0.6248	2	230	4.31	14.2	
52	25.200	7722	1.4792	2	419	10.243	18.4	
53	25.600	6319	1.2103	2	472	8.382	13.4	
54	26.000	7001	1.3411	2	490	9.287	14.3	
55	26.400	15611	2.9903	2	695	20.708	22.4	
56	26.610	16229	3.1087	2	976	21.528	16.6	
57	26.990	11910	2.2814	2	888	15.799	13.4	233601
58	27.180	20882	3.9999	2	1034	27.699	20.2	
59	27.710	29703	5.6895	2	1298	39.400	22.9	110-223
60	28.150	37120	7.1104	2	1533	49.239	24.2	
61	28.440	58265	11.1607	2	1867	77.288	31.2	
62	28.990	20159	3.8615	2	1432	26.741	14.1	
63	29.190	18258	3.4974	2	1435	24.219	12.7	heavier mol wt comp
64	29.520	41717	7.9909	2	1891	55.337	22.1	
65	30.450	33712	6.4574	2	1186	44.718	28.4	
66	30.910	75387	14.4404	2	1455	100.000	51.8	
67	32.620	32607	6.2459	2	800	43.253	40.8	
68	33.510	7286	1.3956	2	293	9.665	24.8	
69	34.910	1066	0.2042	1	85	1.414	12.6	288457

Total Area: 522058 Area Reject: 100 One sample per 0.500 sec.

Areas, times, and heights stored in: K:G050886.ATB  
 Data File = K:G050886.PTS Printed on 05-11-1991 at 06:53:02  
 Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.  
 Full Range: 25 millivolts





**UNIFORM HAZARDOUS WASTE MANIFEST #90542266**

**UNIFORM HAZARDOUS  
 WASTE MANIFEST**

1. Generator's US EPA ID No. **C A C 0 0 0 1 7 9 1 9 7 0 0 0 0 1** Manifest Document No.

2. Page 1 of 1 Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address  
**F. A. A. AIRWAYS FACILITIES, GOLDEN GATE SECTOR  
 21615 Hesperian Blvd., Ste. A, Hayward, Ca. 94541**

A. State Manifest Document Number  
**90542266**

4. Generator's Phone **(415) 784-8513**

B. State Generator's ID

5. Transporter 1 Company Name  
**H & H Ship Service Company**

6. US EPA ID Number  
**C A D 0 0 4 7 7 1 1 6 8**

C. State Transporter's ID  
**200554/200510**

D. Transporter's Phone **(415) 543-4835**

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address  
**H & H Ship Service Company  
 220 China Basin Street  
 San Francisco, CA 94107**

10. US EPA ID Number  
**C A D 0 0 4 7 7 1 1 6 8**

G. State Facility's ID  
**C A D 0 0 4 7 7 1 1 6 8**

H. Facility's Phone  
**(415) 543-4835**

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers No. Type 13. Total Quantity 14. Unit Wt/Vol I. Waste No.

a. **RESIDUE DIESEL TANK  
 NON RCRA HAZARDOUS WASTE SOLID**

**0 0 1 T P 0 1 0 0 0 P**

State **512**

EPA/Other

State

EPA/Other

State

EPA/Other

State

EPA/Other

J. Additional Descriptions for Materials Listed Above

**PUMPED OUT 1,000 gallon tank last containing diesel. Tank inerted with dry ice for transport.**

K. Handling Codes for Wastes Listed Above

a. **01**

c.

d.

**PROFILE #A0**

15. Special Handling instructions and Additional Information

**JOB #7512  
 24 Hr. Emergency Contact: H & H #(415) 543-4835  
 APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR.**

**JOB SITE: OAKLAND AIRPORT (TRACON)  
 8250 Earhart Road  
 Oakland, California**

16.

**GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

**WILLIAM L COPELAN**

Signature

*William L Copelan*

Month Day Year

**0 5 0 2 9 1**

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

**DAVID E. RIGSBY**

Signature

*David Rigby*

Month Day Year

**0 5 0 2 9 1**

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 9

Printed/Typed Name

*Clayton Valley*

Signature

*Clayton Valley*

Month Day Year

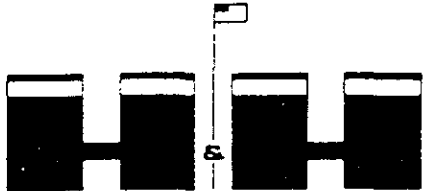
**0 5 0 2 9 1**

Do Not Write Below This Line

White COPY SENDS THIS COPY TO DOHS WITHIN 30 DAYS  
 To P.O. Box 1700 Sacramento, CA 95812

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802, WITHIN CALIFORNIA CALL 1 800-852-7550

## **CERTIFICATE OF DISPOSAL**



**ENVIRONMENTAL SERVICES**  
 (DIVISION OF H&H SHIP SERVICE CO., INC.)

**CERTIFICATE OF DISPOSAL**  
 -----

MAY 07, 1991

220 CHINA BASIN, SAN FRANCISCO, CA 94107 • DAY AND NIGHT: 543-4835

H & H Ship Service Company hereby certifies to F. A. A.  
 that:

1. The storage tank(s), size(s) ONE (1) 1,000 GALS.

removed from the OAKLAND AIRPORT (TRACON)

facility at 8250 EARHART ROAD

OAKLAND, CALIFORNIA

were transported to H & H Ship Service Company, 220 China Basin St.,  
 San Francisco, California 94107.

2. The following tank(s), H & H Job Number 7512

have been steamed cleaned, cut with approximately 2' X 2' holes,  
 rendered harmless and disposed of as scrap metal.

3. Disposal site: SCHNITZER STEEL, OAKLAND, CALIFORNIA.

4. The foregoing method of destruction/disposal is suitable for the  
 materials involved, and fully complies with all applicable  
 regulatory and permit requirements.

5. Should you require further information, please call  
 (415) 543-4835.

Very Truly Yours,

  
 Cleveland Valrey  
 Operations Coordinator



**LETTER FROM FAA TO PORT OF OAKLAND**



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

Western-Pacific Region

P.O. Box 92007  
Worldway Postal Center  
Los Angeles, CA 90009

AUG 26 1991

Ms. Karen G. Watson  
Port of Oakland  
Airport Properties Department  
P.O. Box 2064  
Oakland, California 94604-2064

Dear Ms. Watson:

Lease - FAA TRACON Oakland International Airport

On May 2, 1991 the FAA excavated and removed a 1,000 gallon capacity diesel tank adjacent to the FAA Oakland Airport TRACON facility. Upon excavation the tank appeared intact with no visible diesel leaks or stains. FAA has annual tank integrity tests going back three years which indicate that this tank has not leaked.

Soil samples and water samples were taken on May 2, 1991. Detectable concentrations of hydrocarbons and volatile organics were not identified in the soil samples collected in the bottom of the tank excavation. Water sample TRACON-1 showed a TPH concentration of 36.6 Milligrams per liter (mg/l) of hydrocarbons with a carbon chain range slightly less than, at, and greater than C-23 (above the diesel hydrocarbon range). These petroleum hydrocarbons are within the carbon chain range of fuel oil.

In reviewing this lease file reference is made to the Port of Oakland removing numerous abandoned fuel storage structures and underground tanks from this property prior to FAA accepting the location for construction of the TRACON. It is our understanding that fuel oil was stored at this tank farm. The FAA has never accepted nor used any of the tanks that were on the property prior to the lease agreement.

In Title 42 of the United States Code, Subsection IX, Regulation of Underground Storage Tanks, Section 6991, Definitions and exemptions, states:  
(3) The term "Owner" means



Under these regulations the Port of Oakland is the owner and Responsible Party in any remedial action required by the Alameda County Department of Environmental Health (DEH). Mr. Barney Chan, Hazardous Materials Specialist, Division of Hazardous Materials, Department of Environmental Health, Alameda County Health Agency, 80 Swan Way, Room 200, Oakland, California, 94621 has been identified as the contact point.

If you have any questions or comments, please contact Mr. James Williams at (213) 297-0471 or Mr. Charley Chamness at (213) 297-1109.

Sincerely,



Charley Chamness

Manager, Air Hazardous Materials, AWP-464.10  
Airway Facilities Division