ENVIRONMENTAL PROFILES, INC.

Site Assessments \* Remedial Investigation Feasibility Studies \* Soil and Water Sample Collection \* Compaction Testing

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**REPORT** 

# 3977

### **GROUNDWATER MONITORING**

Ameriflight, Inc.
Oakland Airport, Hanger 2
9171 Earhart Road
Oakland, California 94621
EPI Project No. 46591.gw1

Prepared For:

Mr. Mark Livingston Armored Transport Inc. 3280 E. Foothill Boulevard, # 290 Pasadena, California 91107

Submitted To:

Mr. Barney Chan Environmental Health Services 1131 Harbor Bay Parkway Alameda, California 94502-8577

January 28, 2000

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### Environmental Profiles, Inc.

5480 Katella Avenue, Suite 211, Los Alamitos, CA 90720-2834 \* (562)493-2190 \* FAX (562)430-5177

Project Name: Ameriflight, Inc. (Oakland)

Job#:

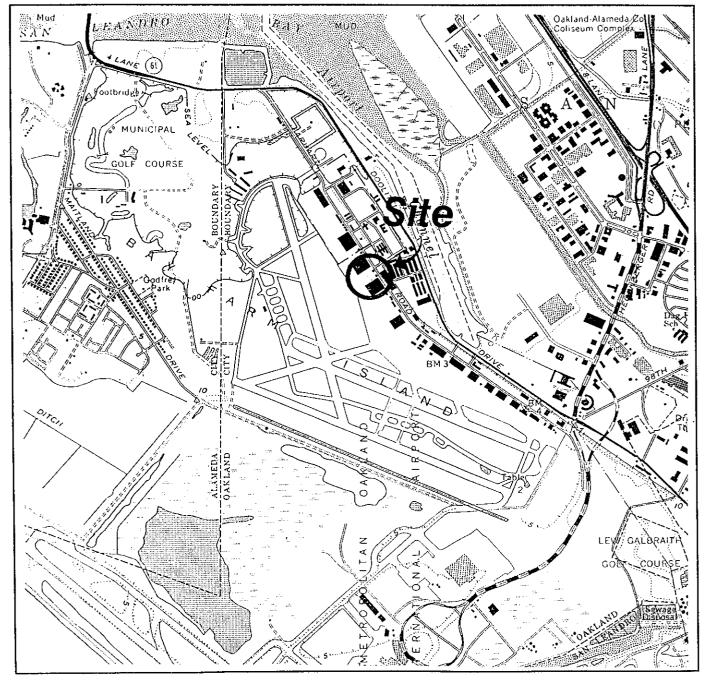
46591

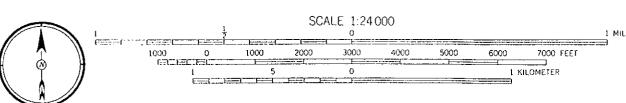
Location: 9171 Earhart Road,

9171 Earhart Road, Hangar 2, Oakland, California

Map Source: USGS 7.5 Minute Series, San Leandro Quadrangle, Photorevised 1980

### Figure 1 - Area Map







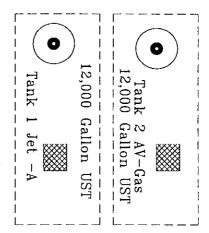
### Figure 2 - Site Diagram

**⊗** MW−5

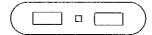
MW-3

**ॐ** MW−4

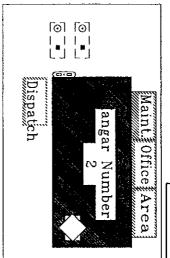




₩-1



MW-6



Ameriflight Inc. Oakland 9171 Earhart Road, Hangar Number 2 Oakland, California 94621

Drawing file: P:/dwg/46591/Fig 2/1-28-00.dwg



Explanation

Groundwater monitor well locations

Environmental Profiles, Inc. 5480 Katella Avenue, Suite 211, Los Alamitos California

(562) 493-2190\*\*\* FAX (562) 430-5177

#### 1.0 INTRODUCTION

Environmental Profiles, Inc. (EPI) is pleased to submit this report documenting groundwater monitor well installation and subsequent sampling activities recently conducted at the Ameriflight-Oakland (AMO) facility located at the Oakland Airport Hanger Number 2, 9171 Earhart Road, Oakland CA 94621 (Figure 1 - Area Map).

#### 2.0 BACKGROUND

#### 2.1 General

AMO maintained two (2) 12,000 gallon USTs at the facility (Figure 2 - Site Map). As a measure of compliance with the Port of Oakland UST regulations, AMO elected to abandon by removal the UST installation. Specifics related to the removal of the UST are found in the document, Report, Underground Storage Tank Closure, August 2, 1999, EPI.

The above referenced report documents petroleum hydrocarbon impact to groundwater that prompted Alameda County Environmental Health Services (ACEHS) to request the site be investigated further in order to delineate chemical impact to groundwater.

#### 3.0 SCOPE

#### 3.1 General

The purpose of this field investigation is to assess chemical impact to both soil and groundwater. Work performed during this recent investigation consisted of the following activities:

- Advancement of a six (6) soils borings bounding the former UST installation advanced to fifteen (15) feet bgs (Figure 2 Site Map).
- Procurement of soil samples collected at five (5) foot intervals through the total depth explored at each soils boring location.
- Conversion of the six (6) soils borings to 2-inch groundwater monitor wells.
- · Procurement of groundwater samples from the newly installed wells
- Submittal of soil and groundwater samples for laboratory chemical analysis.

#### 3.2 Drilling Activities

Field activities were conducted by an EPI Geologist working under the direct supervision of a California Registered Professional Civil Engineer.

Drilling and soil sampling activities were performed by Exploration Geoservices, San Jose, California in possession of C-57 Well Contractors License #484288. The Geologist working in conjunction with the drilling contractor ensured that drilling activities were performed in accordance with California Code of Regulations, Title 23, Chapter 16, Section 2649. Soils

Mr. Mark LivingstonJanuary 28, 200046591.gwl - Page 2

borings were drilled with a Mobile B-41 drill rig utilizing 8" O.D. hollow stem augers (HSA), and were drilled to a total depth of fifteen (15) feet bgs.

#### 3.3 Soil Sampling

The boring were sampled utilizing an 18-inch long Sprague and Henwood (S&H) 1.5-inch inside diameter split spoon sampler. Three 1.5-inch by 6-inch stainless steel inserts (rings) were placed into the S&H sampler prior to advancing the sampler at each interval. At each sample depth the sampler was advanced 18-inches into undisturbed soil. After driving the sampler to its target depth, it was extracted from the boring, removed from the drilling rod and the lowermost stainless steel sample ring removed.

Each sample collected from a soils boring was sealed at both ends with Teflon® lined plastic end caps, labeled, and immediately placed in a blue ice chilled field cooler under EPA chain of custody protocol for transport and subsequent laboratory chemical analysis at a California State Department of Health Services (DHS) certified environmental laboratory.

Soil boring lithology, sample depth and all pertinent information was logged in the field by the EPI Geologist and is presented in Appendix B - Boring Logs and Well Construction Details.

#### 3.4 Groundwater Monitor Well Installation

Six (6) groundwater monitor wells were installed and located as depicted on Figure 2 - Site Map. Permits for installation of the groundwater monitor wells are presented in Appendix D - Regulatory Documentation.

During the conversion of each soils borings to a groundwater monitor well, the augers were slowly removed from the borehole while the well was constructed. Each monitor well was constructed of two (2) inch diameter, schedule 40 PVC blank and 0.010-inch slot screened casing. Each well was screened from the total depth, approximately fifteen (15) feet below grade surface (bgs) to five (5) feet bgs. Blank well casing completed each well to 5-inches from grade surface.

The annular space between the slotted PVC well casing, and the borehole was filled with Lone Star Industries medium fine grade aquarium sand (2/12) from the total depth of the boring to approximately four (4) feet bgs. A bentonite cement slurry completed construction of each well to approximately 10-inches bgs. A traffic rated street box set in concrete completed each well to grade. All well joints were flush threaded and the bottoms of each well casing were sealed with a solid PVC flush-threaded cap. Well construction details are presented in Appendix B - Boring Logs and Well Construction Details.

#### 3.5 Monitor Well Purging

On January 18, 2000 an EPI Engineer purged groundwater monitor wells MW-1 through MW-6. Each well was purged with a variable flow rate Grundfos 1.75" submersible electric pump. Purging continued until the groundwater being removed was clear and relatively free of

sediment. Approximately 3 to 5 well volumes of groundwater were removed from each monitor well during purging activities.

spin data

#### 3.6 Groundwater Sampling Procedures

On January 18, 2000 an EPI Engineer collected groundwater samples from each newly installed well. No free floating hydrocarbon product was observed in any of the monitor wells prior to sampling activities.

Each well remained static for approximately one (1) hour prior to initiating sampling activities. Groundwater samples were collected using a disposable Teflon® brand bottom loading bailer. One groundwater sample was collected from each of the monitor wells and submitted for laboratory chemical analysis.

Each groundwater sample was carefully transferred into two (2) laboratory supplied, acidified 40 milliliter glass volatile organic analysis (VOA) vials. The sample vials were carefully sealed with Teflon® lidded screw caps after eliminating all head space, labeled, and immediately placed in a blue ice chilled cooler under EPA chain of custody protocol for transport and subsequent analysis at a State Department of Health Services (DHS) certified environmental laboratory.

#### 3.7 Equipment Cleaning

All down hole equipment (i.e. augers and sampler) was decontaminated with a biodegradable phosphate free hospital grade liquid soap (e.g. liquinox) and water solution then triple rinsed with clean water prior to use. All decontamination waters generated are contained in DOT approved 17h open top steel drums and stored on site pending removal and disposal.

#### 4.0 SAMPLE ANALYSIS

#### 4.1 Laboratory Chemical Analysis, Soil

On December 16, 1999 ten (10) soil samples were submitted under EPA chain of custody protocol to American Scientific Laboratories, LLC (ASL), Los Angeles, California for chemical analysis. Based on site background and a written request from Alameda County Environmental Health Services, samples were analyzed by the following:

- TPH reported as Aviation Fuel, EPA method 8015(M), detection limit 1 mg/kg
- TPH reported as Jet Fuel, EPA method 8015(M), detection limit 10 mg/kg
- Monoaromatics, BTEX, EPA method 8020/602, detection limit 5 to 10 μg/kg
- MTBE, EPA method 8020, detection limit 20 μg/kg
- Total Lead EPA method 6010B, detection limit 0.25 mg/kg

#### 4.2 Laboratory Chemical Analysis Results, Soil

Results of the laboratory chemical analysis are summarized below in Table 1 - Laboratory Chemical Analyses Results, Soil and are presented in Appendix A - Chain of Custody Record and Laboratory Chemical Analysis Reports, Soil.

#### TABLE 1 - LABORATORY CHEMICAL ANALYSIS RESULTS, SOIL

Ameriflight, Inc. 9171 Earhart Road Oakland, CA 94621 12-16-99

ID	TPH (mg/kg)		B (µg/kg)	Γ (μg/kg)	E (µg/kg)	X (µg/kg)	MTBE (μg/kg)	LEAD (mg/kg)
	AV FUEL	JET FUEL						
B1-5	ИD	ND	ND	ND	ND	ND	ND	0.38
B1-10	ND	ND	ND	ND	ND	ND	ND	5.37
B1-15	ND	ND	ND	11	ND	12	ND	3.28
B2-5	ND	ND	ND	5	ND	12	ND	1.80
B2-10	ND	ND	ND	ND	ND	ND	ND	2.47
B2-15	ND	ND	ND	8	ND	ND	ND	2.85
B3-5	ND	ND	ND	8	ND	13	ND	1.57
B3-10	ND	ND	ND	16	ND	15	ND	2.22
B3-15	ND	ND	ND	15	ND	12	ND	2.17
B4-5	ND	ND	ND	ND	ND	ND	ND	1.42
B4-10	ND	ND	ND	21	ND	12	ND	3.68
B4-15	ND	ND	ND	13	ND	ND	ND	2.30
B5-5	ND	ND	ND	ND	ND	ND	ND	0.95
B5-10	ND	ND	ND	ND	ND	ND	ND	2.27
B5-15	ND	ND	ND	11	ND	ND	ND	2.30
B6-5	ND	ND	ND	6	ND	ND	ND	1.50
B6-10	ND	ND	ND	9	ND	ND	ND	2.88
B6-15	ND	ND	ND	11	ND	11	ND	2.80

#### Notes:

B,T,E,X = Benzene, toluene,

= Benzene, toluene, ethyl benzene, total xylenes

mg/kg

milligrams per kilogram or ppmmicrograms per kilogram or ppb

μg/kg ND

= indicates analyte not detected at or above the noted laboratory detection limit

#### 4.3 Laboratory Chemical Analysis, Groundwater

On January 20, 2000 six (6) groundwater samples were submitted under EPA chain of custody protocol to American Scientific Laboratories, LLC (ASL), Los Angeles, California for chemical analysis. Based on site background samples were analyzed by the following:

- TPH reported Aviation fuel by EPA Method 8015(M), detection limit 0.05 mg/l
- TPH reported Jet fuel by EPA Method 8015(M), detection limit 1.0 mg/l
- Monoaromatics, BTEX, EPA Method 8020, detection limit 0.3 to 0.6 μg/l
- MTBE, EPA Method 8020, detection limit 2.0 μg/l

#### 4.4 Laboratory Chemical Analysis Results, Groundwater

Results of the laboratory chemical analysis are summarized below in Table 2 - Laboratory Chemical Analysis Results, Groundwater and are presented in Appendix C - Chain of Custody Record and Laboratory Chemical Analysis Reports, Groundwater.

TABLE	TABLE 2 - LABORATORY CHEMICAL ANALYSIS RESULTS, GROUNDWATER  Ameriflight, Inc.  9171 Earhart Road  Oakland, CA 94621  1-20-2000													
ID	TI (mg	TT.	MTBE (μg/L)	BENZENE (μg/L)	TOLUENE (μg/L)	ETHYL BENZENE	TOTAL XYLENES							
:	AV JET FUEL FUEL					(µg/L)	(µg/L)							
MW-1	ND	ND	ND	ND	ND	ND	ND							
MW-2	ND	ND	2.8	ND	ND	ND	ND							
MW-3	ND	ND	2.0	ND	ND	ND	ND							
MW-4	ND	ND	ND	ND	ND	ND	ND							
MW-5	ND	ND	ND	ND	ND	ND	ND							
MW-6	ND	ND	ND	ND	ND	ND	ND							

#### Notes:

mg/L

= milligrams per liter or ppm

μg/L

= micrograms per liter or ppb

ND

= indicates analyte not detected at or above the laboratory detection limit

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#### 4.5 Laboratory Quality Control And Quality Assurance

American Scientific Laboratories (ASL) is and operates as a California DHS certified environmental laboratory, and as such follows all appropriate procedures and guidelines for the chemical analysis of groundwater and soil. As part of ASL's quality control and assurance protocol, QA/QC reports are provided along with all laboratory analytical results, and are presented in the appropriate Appendices.

#### 5.0 DISCUSSION

#### 5.1 Chemical Analysis Results Discussion, Soil

Laboratory chemical analysis results indicate that total petroleum hydrocarbons reported as aviation fuel (TPH-AV) and jet fuel (TPH-JET) were not detected at or above the laboratory detection limits in any of the soil samples submitted for chemical analysis.

Of the monoaromatic constituents, benzene, toluene, ethyl benzene, and xylenes (BTEX) only toluene and (total) xylenes were detected in at least one (1) sample collected from each soils boring. Concentrations of toluene and xylenes ranged from a maximum of 21  $\mu$ g/l to a minimum of 5  $\mu$ g/l. Impact by these chemical constituents, at the reported concentrations is considered inconsequential, and soil mitigation is considered unwarranted as they will continue to degrade to benign or non detect levels as remediation by natural attenuation (RNA) continues.

The fuel oxygenate, MTBE was not detected at or above the laboratory detection limits in any of the soil samples submitted for analysis. The absence of MTBE from soils at UST sites can be interpreted as a strong indication that a recent fuel release has not occurred or that any release occurring at the site remains immobile.

Laboratory chemical analysis confirmed the presence of lead (Pb) in all soil samples submitted for analysis. The mean average concentration was calculated to be 2.3 mg/kg. Soil samples collected from each well (and grouped) exhibit a standard deviation from the mean of 0.25 mg/kg. The consistent detection of lead at the reported concentrations, and the insignificant deviation from the standard lend to the interpretation that the detection of lead is not resultant of a release of fuel containing lead, and is therefore considered normal background.

#### 5.2 Chemical Analysis Results Discussion, Groundwater

Total petroleum hydrocarbons reported as aviation fuel and jet fuel were not detected at or above the laboratory detection limits in any of the groundwater samples submitted for analysis.

In addition to aviation and jet fuel, all groundwater samples were reported non detect for the presence of hydrocarbons reported as crude oil, diesel fuel oil, heavy oil, hydraulic oil, kerosene and mineral spirits.

Similarly, none of the monoaromatics, BTEX were detected at or above the laboratory detection limits. However, the fuel oxygenate MTBE was detected at very low concentrations in MW-2 and MW-3. Concentrations of MTBE detected at or near the laboratory detection limit are often

Mr. Mark Livingston January 28, 2000 46591.gwl - Page 7

suspect, and with no historical groundwater analytical data to support otherwise, is interpreted as inconsequential.

#### 6.0 RECOMMENDATIONS

EPI recommends that the site be sampled once during the first or second quarter of 2000. Samples should be analyzed for the presence of TPH reported as aviation and jet fuel, and the fuel oxygenate MTBE only. Pending similar analytical results the site should be reviewed as a candidate for no further action status due to the fact that concentrations of the chemical(s) detected are extremely low and do not represent a threat to either the environment or human health.

If you have any questions, comments or require additional information regarding this project, please contact the undersigned at (562) 493-2190 during normal business hours. Thank you.

Prepared by:

No. 66050
Expires:6/00

Mark C. Bartee Senior Geologist REA 06950

Mark 1

Matthew J. Walker

Principle Engineer

Reviewed by

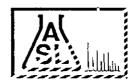
California Civil Engineer 37369

cc:

Mr. Hernan Gomez Oakland City Fire Department 505 14<sup>th</sup> Street Oakland, California 94612 Mr. Dale Cletke
Port of Oakland
530 Water Street
Jack London Square
P.O. Box 2064
Oakland, CA 94604-2064

### **APPENDIX A**

Chain of Custody Record and Laboratory Chemical Analysis Results, Soil



#### Ordered By

Environmental Profiles, Inc. 5480 Katella Ave., Suite 211 Los Alamitos, CA 90720-2834

Telephone

(562) 493-2190

Attn

Mark Bartee

Number of Pages 33

Date Received

12/20/1999

Date Reported

01/07/2000

Job Number	Submitted	Client	
6847	12/20/1999	ENVPRF	

Project ID:

46591

Project Name: Ameriflight Inc.

Site:

9171 Earhart Road

Oakland, CA 94621

Enclosed are the results of analyses on 18 soil samples analyzed as specified on attached chain of custody.

Laboratory Manager

Rojert G. Araghi Laboratory Director Date: 12-16-99

Page 1 of 2

# Chain-of-Custody

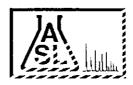
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i	KUAND CA 94621									0 2	4 hou	rs			. ,
	Sample Informa	tion										L	ab Analysis	L	ab Use Only
Sample ID	Location/Description	Date	Time	Soil	Waler	Air ö	Containers	N. P.	/kg	\$ 8 8 8	o in	54/1 54/0	Other	i	ed Chilled red Sealed
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B2-5	" \$20 5 feet		1025	-									44818	4	
B2-10	" 10 test		10.35	-			<u>/                                    </u>				$\perp$		44819	5	
B2-15	" " ( 15 feet		1040										114879	6	
B3-5	Boring #300 5 feet		1140				凵						44821	7	
B3-10	" " @ 10 fut		150										44827	3	
B3-15	" @ 15 feet		1155	-									44823	9	
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Laboratory:		-							80 Katella, Suite 211						
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								(58	52) 4	193	-219	8 08	8 FAX (562) 430-5177		

Date: 2-16-99

# Chain-of-Custody

Page 2 of 2

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BS-10	" " (010-feet		14:25				1				Ц		44878	14	
B5-15	" " 0 15 teet		1430				1						44829		•
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Laboratory:										80 Katella, Suite 211					
													fornia 90720-28 88 FAX (562) 43		



#### ANALYTICAL RESULTS

#### Ordered By

Environmental Profiles, Inc. 5480 Katella Ave., Suite 211 Los Alamitos, CA 90720-2834

Telephone: (562)493-2190 Attn: Mark Bartee

Page:

2

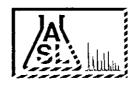
Project ID: Project Name: 46591

Ameriflight Inc.

7	Job Number	Order Date	: Client
	6847	12/20/1999	ENVPRF

Method: 6010B, Lead (ICP)

Our Lab I.D.			44815	44816	44817	44818	44819
Sample ID			B1-5	B1-10	B1-15	B2-5	B2-10
Date Sampled			12/16/1999	12/16/1999	12/16/1999	12/16/1999	12/16/1999
Date Extracted			12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Preparation Method			<u>,</u>				
Date Analyzed	<del></del>		12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	I	1	1
Analytes		PQL	Results	Results	Results	Results	Results
ICP Metals			1 ( ) San Mills ( ) ( ) ( ) ( ) ( )				
Lead		0.25	0.38	5.37	3.28	1.80	2.47



#### ANALYTICAL RESULTS

Page:

3

Project ID:

46591

Project Name:

Ameriflight Inc.

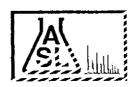
Job Number	Order Date	Client
6847	12/20/1999	ENVPRF

Method: 6010B, Lead (ICP)

#### QUALITY CONTROL REPORT

#### Batch No:

	LCS				·		
Analytes	% REC						
ICP Metals				rie Will the			
Lead	87						



#### ANALYTICAL RESULTS

#### Ordered By

Environmental Profiles, Inc. 5480 Katella Ave., Suite 211 Los Alamitos, CA 90720-2834

Telephone: (562)493-2190 Attn: Mark Bartee

Page:

4

Project ID:

46591

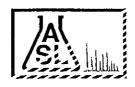
Project Name:

Ameriflight Inc.

Job Number	Order Date	Client
6847	12/20/1999	ENVPRF

Method: 6010B, Lead (ICP)

Our Lab I.D.		44820	44821	44822	44823	44824
Sample ID		B2-15	B3-5	B3-10	B3-15	B4-5
Date Sampled	 	12/16/1999	12/16/1999	12/16/1999	12/16/1999	12/16/1999
Date Extracted		12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Preparation Method			Ì			
Date Analyzed		12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Matrix		Soil	Soil	Soil	Soil	Soil
Units	 	. mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier		1	1	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
ICP Metals		i manuani saven		764 (2. VIII. 1981 198 198 198		5. \$1.50 pp. \$5.40
Lead	0.25	2.85	1.57	2.22	2.17	1.42



#### ANALYTICAL RESULTS

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Project ID:

46591

Project Name:

Ameriflight Inc.

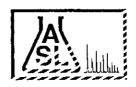
Job Number	Order Date	Client
6847	12/20/1999	ENVPRF

Method: 6010B, Lead (ICP)

#### QUALITY CONTROL REPORT

#### Batch No:

Analytes	LCS % REC						
ICP Metals			· · · · · · · · · · · · · · · · · · ·	4.5	er ir gjatja	district.	
Lead	87						



ANALYTICAL RESULTS

#### Ordered By

Environmental Profiles, Inc. 5480 Katella Ave., Suite 211 Los Alamitos, CA 90720-2834

Telephone: (562)493-2190 Attn: Mark Bartee

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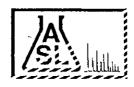
Project ID: 46591

Project Name: Ameriflight Inc.

Job Number	Order Date	Client
6847	12/20/1999	ENVPRF

Method: 6010B, Lead (ICP)

Our Lab I.D.				44825	44826	44827	44828	44829
Sample ID				B4-10	B4-15	B5-5	B5-10	B5-15
Date Sampled				12/16/1999	12/16/1999	12/16/1999	12/16/1999	12/16/1999
Date Extracted			· · ·	12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Preparation Method								
Date Analyzed				12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Matrix				Soil	Soil	Soil	Soil	Soil
Units				mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier		<del></del> .		1	1	1	1	1
Analytes	1.51		PQL	Results	Results	Results	Results	Results
ICP Metals			007,000,000000000000000000000000000000					
Lead			0.25	3.68	2.30	0.95	2.27	2.30



#### ANALYTICAL RESULTS

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Project ID:

46591

Project Name:

Ameriflight Inc.

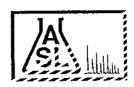
Job Number	Order Date	Client
6847	12/20/1999	ENVPRF

Method: 6010B, Lead (ICP)

#### QUALITY CONTROL REPORT

#### Batch No:

	LCS					
Analytes	% REC	r				!
ICP Metals			1000			
Lead	87					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,



#### ANALYTICAL RESULTS

#### Ordered By

Environmental Profiles, Inc. 5480 Katella Ave., Suite 211 Los Alamitos, CA 90720-2834

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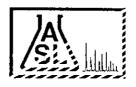
Project ID: 46591

Project Name: Ameriflight Inc.

Job Number	Order Date	Client
6847	12/20/1999	ENVPRF

Method: 6010B, Lead (ICP)

Our Lab I.D.		44830	44831	44832		
Sample ID		B6-5	B6-10	B6-15		
Date Sampled		12/16/1999	12/16/1999	12/16/1999		
Date Extracted		12/27/1999	12/27/1999	12/27/1999		
Preparation Method						
Date Analyzed		12/27/1999	12/27/1999	12/27/1999		
Matrix		Soil	Soil	Soil		
Units		mg/Kg	mg/Kg	mg/Kg	<u> </u>	
Detection Limit Multiplier		1	1	1		
Analytes	PQL	Results	Results	Results		
ICP Metals		1 - 1 (4) \$ 1 (4) (4) (4) (4) (4) (4) (4) (4) (4) (4)				
Lead	 0.25	1.50	2.88	2.80		



#### ANALYTICAL RESULTS

Page:

Project ID:

46591

Project Name:

Ameriflight Inc.

Job Number   Order Date	<b>.</b>
	2713

Client

6847

12/20/1999

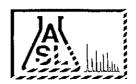
ENVPRF

Method: 6010B, Lead (ICP)

#### QUALITY CONTROL REPORT

#### Batch No:

	LCS			<u> </u>		 	<u> </u>
Analytes	% REC						:
ICP Metals			1000 0000				
Lead	87		1 A A A A A A A A A A A A A A A A A A A	- mether // 1075377886 144 . >	HKI PI AURODOLO BIRRIS		



#### ANALYTICAL RESULTS

#### Ordered By

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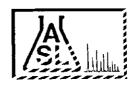
Project ID: Project Name:

46591 Ameriflight Inc. Job Number Order Date Client

6847 12/20/1999 ENVPRF

Method: 8015M/DHSLUFT, TPH as Aviation Gas

Our Lab I.D.		44815	44816	44817	44818	44819
Sample ID		B1-5	B1-10	B1-15	B2-5	B2-10
Date Sampled		12/16/1999	12/16/1999	12/16/1999	12/16/1999	12/16/1999
Date Extracted		12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Preparation Method	j					
Date Analyzed		12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier	-	1	1	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
Aviation Gas	1.0	ND	ND	ND	ND	ND



### AMERICAN SCIENTIFIC LABORATORIES, LLC

### Environmental Testing Services

#### ANALYTICAL RESULTS

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Project ID: Project Name: 46591

Ameriflight Inc.

Job Number | Order Date Client | 6847 | 12/20/1999 | ENVPRF

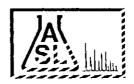
Method: 8015M/DHSLUFT, TPH as Aviation Gas

#### QUALITY CONTROL REPORT

Our Lab I.D.		954		44815	44816	44817	44818	44819
Surrogates	. :		Con.Limit	% Rec.				
Surrogate Percent Recovery		1.7			. grantus		na grantina	otrakanikan d
Bromofluorobenzene			 70-120	103				
Bromofluorobenzene			70-120		95			
Bromofluorobenzene	, <u> </u>	•	 70-120			99		
Bromofluorobenzene			70-120				86	
Bromofluorobenzene			 70-120		1			82
						,,		

Batch No: 122799

	MS	MS DUP	RPD	MS/MSD	MS RPD			
Analytes	% REC	% REC	%	% Limit	% Limit		1	
Benzene	110	111	<1	75-120	15			
Toluene (Methyl benzene)	112	112	<1	75-120	15			



#### ANALYTICAL RESULTS

#### Ordered By

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**12** 46591

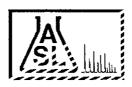
Project Name:

Ameriflight Inc.

Job Number | Order Date | Client | 6847 | 12/20/1999 | ENVPRF

Method: 8015M/DHSLUFT, TPH as Aviation Gas

Our Lab I.D.		44820	44821	44822	44823	44824
Sample ID		B2-15	B3-5	B3-10	B3-15	B4-5
Date Sampled		12/16/1999	12/16/1999	12/16/1999	12/16/1999	12/16/1999
Date Extracted		12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Preparation Method						
Date Analyzed		12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier		1	ſ	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
Aviation Gas	1.0	ND	ND	ND	ND	ND



#### ANALYTICAL RESULTS

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Project ID:

46591

Project Name: Ameriflight Inc.

Job Number	Order Date	Client
6847	12/20/1999	ENVPRF

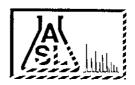
Method: 8015M/DHSLUFT, TPH as Aviation Gas

#### QUALITY CONTROL REPORT

Our Lab I.D.			44820	44821	44822	44823	44824
Surrogates		Con.Limit	% Rec.				
Surrogate Percent Recovery		. Werene .			ii kadaras	uma ar dangadi.	
Bromofluorobenzene		70-120	98				
Bromofluorobenzene	·	70-120	ļ	72			
Bromofluorobenzene	<del></del>	70-120			101		
Bromofluorobenzene	***************************************	70-120		:		92	
Bromofluorobenzene	<del></del>	70-120	!				72

Batch No: 122799

81.5	MS	MS DUP	RPD	MS/MSD	MS RPD	 ,		
Analytes	% REC	% REC	%	% Limit	% Limit			
Benzene	110	111	<1	75-120	15	 		
Toluene (Methyl benzene)	112	112	<1	75-120	15			



#### ANALYTICAL RESULTS

#### Ordered By

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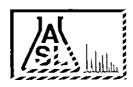
Project Name:

Ameriflight Inc.

Job Number Order Date Client 6847 12/20/1999 ENVPRF

Method: 8015M/DHSLUFT, TPH as Aviation Gas

Our Lab I.D.		44825	44826	44827	44828	44829
Sample ID		B4-10	B4-15	B5-5	B5-10	B5-15
Date Sampled		12/16/1999	12/16/1999	12/16/1999	12/16/1999	12/16/1999
Date Extracted		12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Preparation Method	 					
Date Analyzed		12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Matrix	 <del> </del> -	Soil	Soil	Soil	Soil	Soil
Units	 	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier	 <del> </del>	1	1	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
Aviation Gas	1.0	ND	ND	ND	ND	ND



### AMERICAN SCIENTIFIC LABORATORIES, LLC

### Environmental Testing Services

#### ANALYTICAL RESULTS

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Project ID:

46591

Project Name:

Ameriflight Inc.

Job Number	Order Date	Client
6847	12/20/1999	ENVPRF

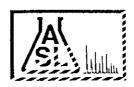
Method: 8015M/DHSLUFT, TPH as Aviation Gas

#### QUALITY CONTROL REPORT

Our Lab I.D.		44825	44826	44827	44828	44829
Surrogates	Con.Limit	% Rec.				
Surrogate Percent Recovery		The Control of the Party of the	Granin endet	un lengthaug		
Bromofluorobenzene	70-120	83				
Bromofluorobenzene	70-120		84			
Bromofluorobenzene	70-120			94		
Bromofluorobenzene	70-120		:		93	
Bromofluorobenzene	70-120				İ	71

Batch No: 122799

**************************************	MS	MS DUP	RPD	MS/MSD	MS RPD			
Analytes	% REC	% REC	%	% Limit	% Limit		ļ	
Benzene	110	111	<1	75-120				
Toluene (Methyl benzene)	112	112	<1	75-120	15			



#### ANALYTICAL RESULTS

#### Ordered By

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**16** 46591

Project Name:

Ameriflight Inc.

Job Number	Order Date	Client
6847	12/20/1999	ENVPRF

Method: 8015M/DHSLUFT, TPH as Aviation Gas

Our Lab I.D.			44830	44831	44832	
Sample ID			B6-5	B6-10	B6-15	
Date Sampled			12/16/1999	12/16/1999	12/16/1999	
Date Extracted			12/28/1999	12/28/1999	12/28/1999	
Preparation Method						
Date Analyzed			12/28/1999	12/28/1999	12/28/1999	
Matrix			Soil	Soil	Soil	
Units			mg/Kg	mg/Kg	mg/Kg	
Detection Limit Multiplier	· · · · · · · · · · · · · · · · · · ·		1	. 1	1	
Analytes		PQL	Results	Results	Results	de de la composición
Aviation Gas		1.0	ND	ND	ND	



#### ANALYTICAL RESULTS

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Project ID:

46591

Project Name:

Ameriflight Inc.

Job Number

6847

Order Date 12/20/1999 Client ENVPRF

Method: 8015M/DHSLUFT, TPH as Aviation Gas

#### QUALITY CONTROL REPORT

Our Lab I.D.				44830	44831	44832	44625747	
Surrogates			Con.Limit	% Rec.	1 - 3 9 9 4			
Surrogate Percent Recovery	<del></del>			1. 2	1 2 20 00 00 00	12 CO AGREGATICA		
Bromofluorobenzene			70-120	97	- Control Control	250 252 253 11 12 25 25 10 25 10 25 10 25 10 25 10 25 10 25 10 25 10 25 10 25 10 25 10 25 10 25 10 25 10 25 10		
Bromofluorobenzene		 	70-120		101		<del>                                     </del>	
Bromofluorobenzene		 	70-120		:	120	<del>                                     </del>	

Batch No: 122899

	MS	MS DUP	RPD	MS/MSD	MS RPD	 <u> </u>		 
Analytes	% REC	% REC	%	% Limit	% Limit		į.	
Benzene	90	93	3.3	75-120	15	 1		 
Toluene (Methyl benzene)	92	94	2.2	75-120	15	 1		



#### ANALYTICAL RESULTS

#### Ordered By

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Project ID:

46591

Project Name:

Ameriflight Inc.

Job Number		Orde.	r Da	te	Clier	ië .
6847	i	12/2	0/19	99	ENVP	RF

### Method: 8015M/DHSLUFT, Total Petroleum Hydrocarbons

Our Lab I.D.		44815	44816	44817	44818	44819
Sample ID		B1-5	B1-10	B1-15	B2-5	B2-10
Date Sampled		12/16/1999	12/16/1999	12/16/1999	12/16/1999	12/16/1999
Date Extracted		12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Preparation Method						
Date Analyzed		12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier		1	1	1	1	I
Analytes	PQL	Results	Results	Results	Results	Results
Crude Oil	 10	, ND	ND	ND	ND	ND
Diesel	10	, ND	ND	ND	ND	ND
Fuel Oil	10	ND	ND	ND	ND	ND
Heavy Oil	 10	ND	ND	ND	ND	ND
Hydraulic Oil	10	ND	ND	ND	ND	ND
Jet Fuel	 10	ND	ND	ND	ND	ND
Kerosene	 10	ND	ND	ND	ND	ND
Mineral Spirits	 10	ND	ND	ND	ND	ND
Paint Thinner	 10	ND	ND	ND	ND	ND



#### ANALYTICAL RESULTS

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Project ID:

46591

Project Name:

Ameriflight Inc.

Job Number Order Date Client
6847 12/20/1999 ENVPRF

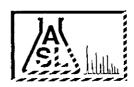
Method: 8015M/DHSLUFT, Total Petroleum Hydrocarbons

#### QUALITY CONTROL REPORT

Our Lab I.D.	4 - 4		44815	.44816	44817	44818	44819
Surrogates		Con.Limit	% Rec.	Constant Constant			
Surrogate Percent Recovery					Let 110 - 10 - 10 - 10 1 1 1 1 1 1 1 1 1 1		
Chlorobenzene		70-120	113				
Chlorobenzene		70-120		11.3			
Chlorobenzene		70-120			115		
Chlorobenzene		70-120				114	
Chlorobenzene		70-120	!				115

Batch No: 122799

	MS	MS DUP	RPD	MS/MSD	MS RPD			
Analytes	% REC	% REC	%	% Limit	% Limit			:
Diesel	88	90	2.2	75-120	15			



#### ANALYTICAL RESULTS

#### Ordered By

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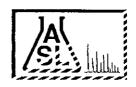
Project Name:

Ameriflight Inc.

Job Number | Order Date | Client | 6847 | 12/20/1999 | ENVPRF

Method: 8015M/DHSLUFT, Total Petroleum Hydrocarbons

Our Lab I.D.		44820	44821	44822		in Englishingsi
Sample ID		B2-15	B3-5	B3-10		
Date Sampled		12/16/1999	12/16/1999	12/16/1999		
Date Extracted		12/27/1999	12/27/1999	12/27/1999		
Preparation Method			1			
Date Analyzed		12/27/1999	12/27/1999	12/27/1999		
Matrix		Soil	Soil	Soil		
Units		mg/Kg	mg/Kg	mg/Kg		
Detection Limit Multiplier		1	1	1		
Analytes	PQL	Results	Results	Results		el Brandeville.
Crude Oil	10	. ND	ND	ND	\$1.51	
Diesel	10	ND	ND	ND		
Fuel Oil	10	ND	ND	ND		
Heavy Oil	10	ND	ND	ND	, , , , , , , , , , , , , , , , , , , ,	
Hydraulic Oil	10	ND	ND	ЙD		
Jet Fuel	10	ND	ND	ND		
Kerosene	10	ND	ND	ND		
Mineral Spirits	10	ND	ND	ND		
Paint Thinner	10	ND	ND	ND		



#### ANALYTICAL RESULTS

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Project ID:

46591

Project Name:

Ameriflight Inc.

Job Number	Order Date	Client
6847	12/20/1999	ENVPRF

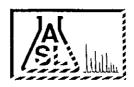
Method: 8015M/DHSLUFT, Total Petroleum Hydrocarbons

#### QUALITY CONTROL REPORT

Our Lab I.D.	.e reganistic	44820	44821	44822	
Surrogates	Con.Limit	% Rec.			Taki Sirindan (Kiningan) M
Surrogate Percent Recovery		107.00 ANT 180.77. 10 17			
Chlorobenzene	70-120	114		**************************************	The state of the s
Chlorobenzene	70-120	!	115		
Chlorobenzene	70-120			113	

Batch No: 122799

	MS	MS DUP	RPD	MS/MSD	MS RPD		1	ľ	 
Analytes	% REC	% REC	%	% Limit	% Limit				
Diesel	88	90	2.2	75-120	15	·· · · · · · · · · · · · · · · · · · ·			 



#### ANALYTICAL RESULTS

#### Ordered By

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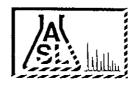
Project Name:

Ameriflight Inc.

Job Number Order Date Client 6847 12/20/1999 ENVPRF

Method: 8015M/DHSLUFT, Total Petroleum Hydrocarbons

Our Lab I.D.		44823	44824	44825	44826	44827
Sample ID		B3-15	B4-5	B4-10	B4-15	B5-5
Date Sampled		12/16/1999	12/16/1999	12/16/1999	12/16/1999	12/16/1999
Date Extracted		12/28/1999	12/28/1999	12/28/1999	12/28/1999	12/28/1999
Preparation Method						
Date Analyzed		12/28/1999	12/28/1999	12/28/1999	12/28/1999	12/28/1999
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier		l	1	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
Crude Oil	10	ND	ND	ND	ND	ND
Diesel	10	ND	ND	ИD	ND	ND
Fuel Oil	10	ND	ND	ND	- ND	ND
Heavy Oil	10	ND	ND	ND	ND	ND
Hydraulic Oil	10	ND	ND	ND	ND	ND
Jet Fuel	10	ND	ND	ND	ND	ND
Kerosene	10	ND	. ND	ND	ND	ND
Mineral Spirits	10	ND	ND	ND	ND	ND
Paint Thinner	10	ND	ND	ND	ND	ND



#### ANALYTICAL RESULTS

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Project ID:

46591

Project Name:

Ameriflight Inc.

Job Number | Order Date | Client | 6847 | 12/20/1999 | ENVPRF

Method: 8015M/DHSLUFT, Total Petroleum Hydrocarbons

#### QUALITY CONTROL REPORT

Our Lab I.D.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			44823	4	4824	44825	44826	44827
Surrogates	4.17 T		Con.Limit	% Rec.			a gereat		
Surrogate Percent Recovery							as Khallesas - Samaris		
Chlorobenzene		· · · · · · · · · · · · · · · · · · ·	 70-120	108	1 15,000	(14-14-17-1-14-14-14-14-14-14-14-14-14-14-14-14-1	AT SAME THE SAME TO SAME THE		2 (1981) 45 P. R. K.
Chlorobenzene			 70-120	<del> </del>		98			<u> </u>
Chlorobenzene			 70-120				99		
Chlorobenzene			 70-120	i	<u> </u>			120	<u> </u>
Chlorobenzene	· · · · · ·		 70-120	Ì	<del></del>				99

Batch No: 122899

	MS	MS DUP	RPD	MS/MSD	MS RPD			1	T	
Analytes	% REC	% REC	%	% Limit	% Limit		ì	•		
Diesel	91	85	6.8	75-120	15		<u> </u>	<del>                                     </del>		:



#### ANALYTICAL RESULTS

#### Ordered By

Environmental Profiles, Inc. 5480 Katella Ave., Suite 211 Los Alamitos, CA 90720-2834

Telephone: (562)493-2190 Attn: Mark Bartee

Page:

**24** 46591

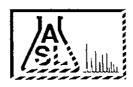
Project ID: Project Name:

Ameriflight Inc.

Job Number Order Date Client
6847 12/20/1999 ENVPRF

Method: 8015M/DHSLUFT, Total Petroleum Hydrocarbons

Our Lab I.D.		44828	44829	44830	44831	44832
Sample ID		B5-10	B5-15	B6-5	B6-10	B6-15
Date Sampled		12/16/1999	12/16/1999	12/16/1999	12/16/1999	12/16/1999
Date Extracted		12/28/1999	12/28/1999	12/28/1999	12/28/1999	12/28/1999
Preparation Method		<del>;</del>			<u> </u>	
Date Analyzed		12/28/1999	12/28/1999	12/28/1999	12/28/1999	12/28/1999
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier		1	1	1	1	<u> </u>
Analytes	PQL	Results	Results	Results	Results	Results
Crude Oil	10	ND	ND	ND	ND	ND
Diesel	10	ND	ND	ND	ND	ND
Fuel Oil	10	ND	, ND	ND	ND	ND
Heavy Oil	10	ND	ND	ND	ND	ND
Hydraulic Oil	10	ND	ND	ND	ND	ND
Jet Fuel	10	ND	ND	ND	ND	ND
Kerosene	10	ND	ND	ND	ND	ND
Mineral Spirits	10	ND	ND	ND	ND	ND
Paint Thinner	10	ND	ND	ND	ND	ND



#### ANALYTICAL RESULTS

Page:

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Project ID:

46591

Project Name:

Ameriflight Inc.

 Job Number	Order Date	Client
6847	12/20/1999	ENVPRF

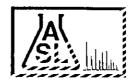
Method: 8015M/DHSLUFT, Total Petroleum Hydrocarbons

#### QUALITY CONTROL REPORT

Our Lab I.D.		11.			44828	44829	44830	44831	44832
Surrogates				Con.Limit	% Rec.				
Surrogate Percent Recovery					1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -				
Chlorobenzene				70-120	99				
Chlorobenzene	<del></del>			70-120		101			
Chlorobenzene				70-120			98		
Chlorobenzene			*	70-120				96	
Chlorobenzene				70-120					109

Batch No: 122899

	MS	MS DUP	RPD	MS/MSD	MS RPD		
Analytes	% REC	% REC	%	% Limit	% Limit		!
Diesel	91	85	6.8	75-120	15		



#### ANALYTICAL RESULTS

#### Ordered By

Environmental Profiles, Inc. 5480 Katella Ave., Suite 211 Los Alamitos, CA 90720-2834

Telephone: (562)493-2190 Attn: Mark Bartee

Page:

26

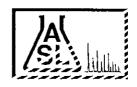
Project ID: 46591

Project Name: Ameriflight Inc.

Job Number	Order Date	Client
6847	12/20/1999	ENVPRF

Method: 8020, Aromatic Volatile Organics + MTBE

Our Lab I.D.			44815	44816	44817	44818	44819
Sample ID			B1-5	B1-10	B1-15	B2-5	B2-10
Date Sampled			12/16/1999	12/16/1999	12/16/1999	12/16/1999	12/16/1999
Date Extracted			12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Preparation Method					<u>                                     </u>	!	1
Date Analyzed			12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1	1
Analytes		PQL	Results	Results	Results	Results	Results
Benzene		5	ND	ND	ND	ND	ND
Ethylbenzene		5	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	· <del>·······</del>	5	ND	. ND	11	5	ND
Xylenes, total		10	ND	ND	12	12	ND
MTBE	·	20	ND	ND	ND	ND	ND



#### ANALYTICAL RESULTS

Page:

27

Project ID:

46591

Project Name:

Ameriflight Inc.

Job Number | Order Date | Client 6847 | 12/20/1999 | ENVPRF

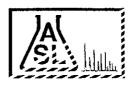
Method: 8020, Aromatic Volatile Organics + MTBE

#### QUALITY CONTROL REPORT

Our Lab I.D.		44815	44816	44817	44818	44819
Surrogates	Con.Limit	% Rec.				2.5-25-3
Surrogate Percent Recovery			or distributionis Seliminas			
Bromofluorobenzene	70-120	103				***************************************
Bromofluorobenzene	70-120		99			
Bromofluorobenzene	70-120			99		
Bromofluorobenzene	70-120		·		86	<del>                                     </del>
Bromofluorobenzene	70-120				1	82

Batch No: 122799

3	MS	MS DUP	RPD	MS/MSD	MS RPD	 T	T		
Analytes	% REC	% REC	%	% Limit	% Limit				
Benzene	110	111	<1	75-120	15		<u> </u>	<del></del>	<del> </del>
Toluene (Methyl benzene)	112	112	<1	75-120	15			<del>                                     </del>	



#### ANALYTICAL RESULTS

#### Ordered By

Environmental Profiles, Inc. 5480 Katella Ave., Suite 211 Los Alamitos, CA 90720-2834

Telephone: (562)493-2190 Attn: Mark Bartee

Page: Project ID:

28

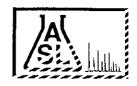
Project ID: 46591

Project Name: Ameriflight Inc.

Job Number	Order Date	Client
6847	12/20/1999	ENVPRF

Method: 8020, Aromatic Volatile Organics + MTBE

Our Lab I.D.			44820	44821	44822	44823	44824
Sample ID			B2-15	B3-5	B3-10	B3-15	B4-5
Date Sampled			12/16/1999	12/16/1999	12/16/1999	12/16/1999	12/16/1999
Date Extracted			12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Preparation Method							
Date Analyzed			12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier		<del> </del>	1	. 1	1	1	1
Analytes		PQL	Results	Results	Results	Results	Results
Benzene	. <u> </u>	5	ND	ND	ND	ND	ND
Ethylbenzene		5	ND	ND	ND	ND	ИD
Toluene (Methyl benzene)		5	8	8	16	15	ND
Xylenes, total		10	ND	13	15	12	ND
MTBE		20	ND	ND	ND	ND	ND



#### ANALYTICAL RESULTS

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Project ID:

46591

Project Name:

Ameriflight Inc.

Job Number	Order Date	Client
6847	12/20/1999	ENVPRF

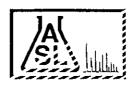
Method: 8020, Aromatic Volatile Organics + MTBE

#### QUALITY CONTROL REPORT

Our Lab I.D.		44820	44821	44822	44823	44824
Surrogates	Con.Limit	% Rec.				
Surrogate Percent Recovery		0.000				
Bromofluorobenzene	70-120	98	:			Essential Control of the
Bromofluorobenzene	70-120		72			<del> </del>
Bromofluorobenzene	70-120			104		<u> </u>
Bromofluorobenzene	70-120		- <u> </u>		92	<del> </del>
Bromofluorobenzene	70-120	· · · · · · · · · · · · · · · · · · ·				72

Batch No: 122799

	MS	MS DUP	RPD	MS/MSD	MS RPD		
Analytes	% REC	% REC	%	% Limit	% Limit		
Benzene	110	111	<1	75-120	15		
Toluene (Methyl benzene)	112	112	<1	75-120			



#### ANALYTICAL RESULTS

#### Ordered By

Environmental Profiles, Inc. 5480 Katella Ave., Suite 211 Los Alamitos, CA 90720-2834

Telephone: (562)493-2190 Attn: Mark Bartee

Page: Project ID:

**30** 46591

Project Name:

Ameriflight Inc.

Job Number | Order Date | Client | 6847 | 12/20/1999 | ENVPRE

Method: 8020, Aromatic Volatile Organics + MTBE

Our Lab I.D.		44825	44826	44827	44828	44829
Sample ID		B4-10	B4-15	B5-5	B5-10	B5-15
Date Sampled		12/16/1999	12/16/1999	12/16/1999	12/16/1999	12/16/1999
Date Extracted		12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Preparation Method		I	<u> </u>			
Date Analyzed		12/27/1999	12/27/1999	12/27/1999	12/27/1999	12/27/1999
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier		1	1	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
Benzene	5	ND	ND	ND	ND	ИD
Ethylbenzene	5	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	5	21	13	ND	ND	11
Xylenes, total	10	12	ND	ND	ND	ND
MTBE	20	ND	ND	ND	ND	ND



#### ANALYTICAL RESULTS

Page:

31

Project ID:

46591

Project Name:

Ameriflight Inc.

Job Number	Order Date	Client
6847	12/20/1999	ENVPRF

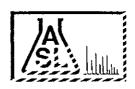
Method: 8020, Aromatic Volatile Organics + MTBE

#### QUALITY CONTROL REPORT

Our Lab I.D.		44825	44826	44827	44828	44829
Surrogates	Con.Limit	% Rec.		irin <b>angay</b> ing	a militariya (il	
Surrogate Percent Recovery				nger i grenjektion ja Rijerija		20 (20 (20 (20 (20 (20 (20 (20 (20 (20 (
Bromofluorobenzene	70-120	83				
Bromofluorobenzene	70-120		84			
Bromofluorobenzene	70-120			94		
Bromofluorobenzene	70-120				93	
Bromofluorobenzene	70-120					71

Batch No: 122799

	MS	MS DUP	RPD	MS/MSD	MS RPD			
Analytes	% REC	% REC	%	% Limit	% Limit			1
Benzene	110	111	<1	75-120				
Toluene (Methyl benzene)	112	112	<1	75-120	15			



#### ANALYTICAL RESULTS

#### Ordered By

Environmental Profiles, Inc. 5480 Katella Ave., Suite 211 Los Alamitos, CA 90720-2834

Telephone: (562)493-2190 Attn: Mark Bartee

Page: Project ID:

32

Project ID: 46591 Project Name: Ameri

Ameriflight Inc.

Job Number	Order Date	Client
6847	12/20/1999	ENVPRF

Method: 8020, Aromatic Volatile Organics + MTBE

Our Lab I.D.			44830	44831	44832	. PiG materials	(Carrier Bright)
Sample ID			B6-5	B6-10	B6-15		
Date Sampled		1	12/16/1999	12/16/1999	12/16/1999		
Date Extracted			12/28/1999	12/28/1999	12/28/1999		
Preparation Method							
Date Analyzed			12/28/1999	12/28/1999	12/28/1999		
Matrix	<del></del>		Soil	Soil	Soil		
Units			ug/kg	ug/kg	ug/kg		
Detection Limit Multiplier			1	1	1		
Analytes		PQL	Results	Results	Results	GE INDA	ic, yanggeta
Benzene		5	ND	ND	ND		recet montesamenacias as-
Ethylbenzene		5	ND	ND	ND		
Toluene (Methyl benzene)		5	6	. 9	11		
Xylenes, total		10	ND	ND	11		
МТВЕ		20	ND	ND	ND		



### AMERICAN SCIENTIFIC LABORATORIES, LLC

### Environmental Testing Services

#### ANALYTICAL RESULTS

Page:

33

Project ID:

46591

Project Name:

Ameriflight Inc.

M. 10. 144/44	Job Number	Order Date	Client
į	6847	12/20/1999	ENVPRF

Method: 8020, Aromatic Volatile Organics + MTBE

#### QUALITY CONTROL REPORT

Our Lab I.D.	<i>.</i>			42200		44831	77024		
Surrogates		. :		Con.Limit					Publishe.
Surrogate Percent Recovery	***		100			orionalijuski Granikalija		n de Konsekterage Saktor Saktoria	
Bromofluorobenzene				70-120	97				
Bromofluorobenzene				70-120		101			
Bromofluorobenzene				70-120	1		120		

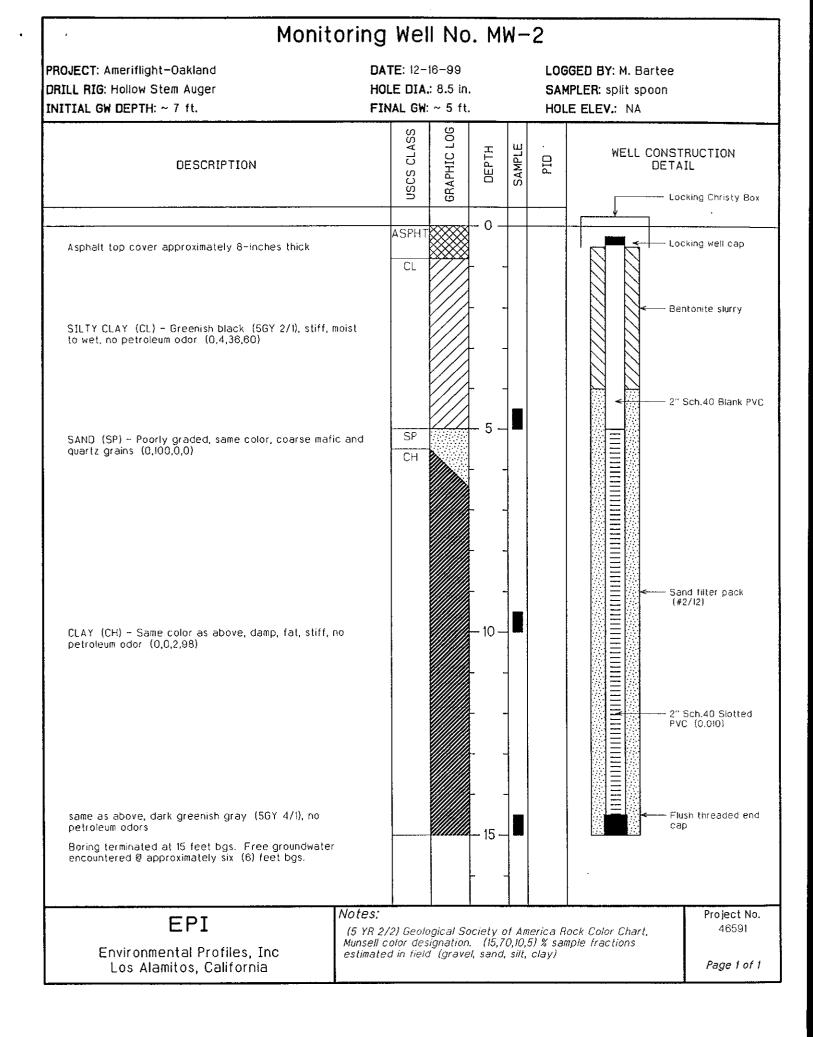
Batch No: 122899

	MS	MS DUP	RPD	MS/MSD	MS RPD			
Analytes	1	'	%	% Limit	% Limit			
Benzene	110	111	<1	75-120	15			
Toluene (Methyl benzene)	112	112	<1	75-120	15	!		

### **APPENDIX B**

Boring Logs and Well Construction Details

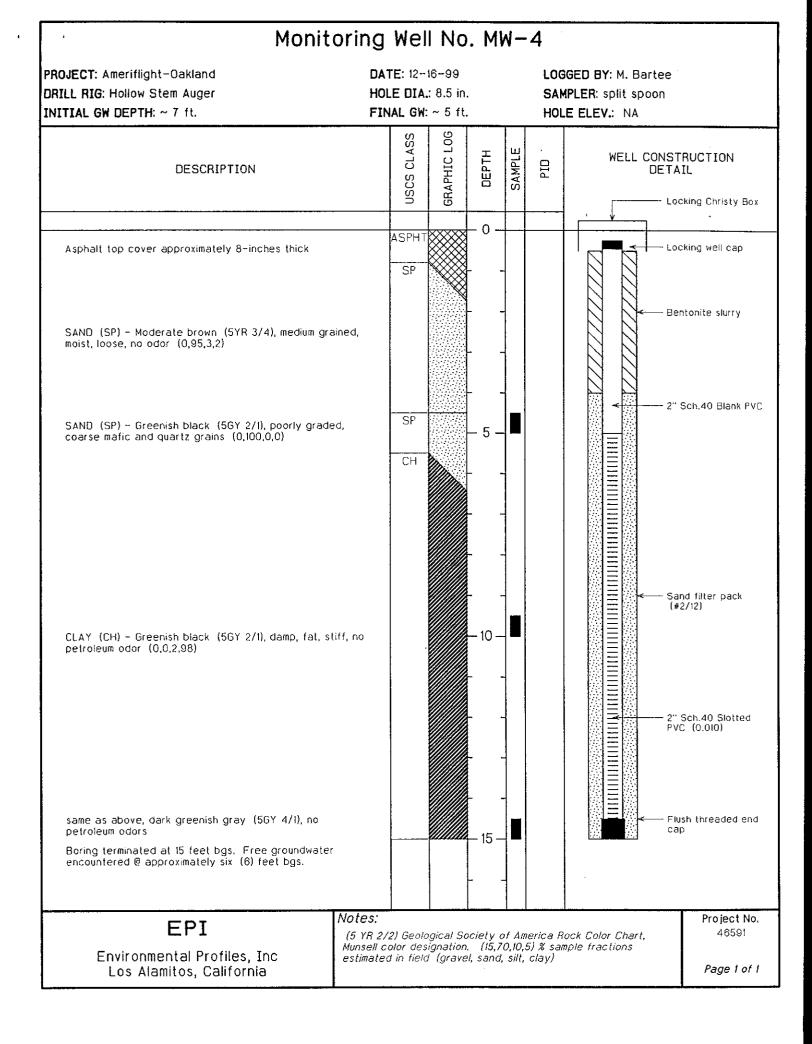
#### Monitoring Well No. MW-1 DATE: 12-16-99 PROJECT: Ameriflight-Oakland LOGGED BY: M. Bartee HOLE DIA.: 8.5 in. SAMPLER: split spoon DRILL RIG: Hollow Stem Auger FINAL GW: ~ 5 ft. HOLE ELEV .: NA INITIAL GW DEPTH: ~ 7 ft. JSCS CLASS SAMPLE DEPTH WELL CONSTRUCTION SRAPHIC PID DETAIL DESCRIPTION Locking Christy Box 0 ASPHT - Locking well cap Asphalt top cover approximately 8-inches thick CL Bentonite slurry SILTY CLAY (CL) - Greenish black (5GY 2/1), stiff, moist to wet, no petroleum odor (0,4,36,60) 2" Sch.40 Blank PVC 5 SP SAND (SP) - Poorly graded, same color, coarse mafic and quartz grains (0,100,0,0) CH Sand filter pack (#2/12) 10 CLAY (CH) - Same color as above, damp, fat, stiff, no petroleum odor (0,0,2,98) 2" Sch.40 Slotted PVC (0.010) Flush threaded end same as above, no petroleum odors 15 Boring terminated at 15 feet bgs. Free groundwater encountered @ approximately six (6) feet bgs. Notes: Project No. **EPI** 46591 (5 YR 2/2) Geological Society of America Rock Color Chart, Munsell color designation. (15,70,10,5) % sample fractions estimated in field (gravel, sand, silt, clay) Environmental Profiles, Inc Page 1 of 1 Los Alamitos, California



#### Monitoring Well No. MW-3 DATE: 12-16-99 PROJECT: Ameriflight-Oakland LOGGED BY: M. Bartee HOLE DIA.: 8.5 in. SAMPLER: split spoon DRILL RIG: Hollow Stem Auger FINAL GW: ~ 5 ft. HOLE ELEV .: NA INITIAL GW DEPTH: ~ 7 ft. CLASS DEPTH WELL CONSTRUCTION SAMPL GRAPHIC PIO DETAIL DESCRIPTION nscs ( - Locking Christy Box 0 -ASPH Locking well cap Asphalt top cover approximately 8-inches thick SP Bentonite slurry SAND (SP) - Moderate brown (5YR 3/4), medium grained, moist, loose, no odor (0.97,3,0) 2" Sch.40 Blank PVC 5 -SP SAND (SP) - Greenish black (5GY 2/1), coarse mafic and quartz grains (0,100,0,0) Sand filter pack (#2/12) 10 CLAY (CH) - Greenish black (5GY 2/I), damp, fat stiff, no petroleum odor (0,0,2,98) 2" Sch.40 Slotted PVC (0.010) Flush threaded end same as above, dark greenish gray (5GY 4/I), no petroleum odors - 15 Boring terminated at 15 feet bgs. Free groundwater encountered @ approximately six (6) feet bgs. Project No. Notes: **EPI** 46591 (5 YR 2/2) Geological Society of America Rock Color Chart, Munsell color designation. (15,70,10,5) % sample fractions estimated in field (gravel, sand, silt, clay) Environmental Profiles, Inc.

Los Alamitos, California

Page 1 of 1



### Monitoring Well No. MW-5 DATE: 12-16-99 LOGGED BY: M. Bartee PROJECT: Ameriflight-Oakland DRILL RIG: Hollow Stem Auger HOLE DIA.: 8.5 in. SAMPLER: split spoon FINAL GW: ~ 5 ft. HOLE ELEV .: NA INITIAL GW DEPTH: ~ 7 ft. CLASS DEPTH SAMPLE WELL CONSTRUCTION GRAPHIC PIO DETAIL DESCRIPTION JSCS ( - Locking Christy Box 0 ASPHI Locking well cap Asphalt top cover approximately 8-inches thick Bentonite slurry SAND (SP) - Moderate brown (5YR 3/4), medium grained, moist, loose, no odor (0,97,3,0) 2" Sch.40 Blank PVC 5 СН CLAY (CH) - Greenish black (5GY 2/1), damp, fat stiff, no petroleum odor (0,0,2,98) Sand filter pack (#2/12)- 10 same as above 2" Sch.40 Slotted PVC (0.010) Flush threaded end same as above, dark greenish gray (5GY 4/1), no petroleum odors 15 -Boring terminated at 15 feet bgs. Free groundwater

**EPI** 

encountered @ approximately six (6) feet bgs.

Environmental Profiles, Inc Los Alamitos, California Notes:

(5 YR 2/2) Geological Society of America Rock Color Chart, Munsell color designation. (15,70,10,5) % sample fractions estimated in field (gravel, sand, silt, clay) Project No. 46591

Page 1 of 1

#### Monitoring Well No. MW-6 PROJECT: Ameriflight-Oakland DATE: 12-16-99 LOGGED BY: M. Bartee DRILL RIG: Hollow Stem Auger HOLE DIA.: 8.5 in. SAMPLER: split spoon FINAL GW: ~ 5 ft. INITIAL GW DEPTH: ~ 7 ft. HOLE ELEV .: NA CLASS WELL CONSTRUCTION SAMPL **SRAPHIC** PID DESCRIPTION DETAIL nscs Locking Christy Box 0 ASPHT Locking well cap Asphalt top cover approximately 8-inches thick СН Bentonite slurry - 2" Sch.40 Blank PVC 5 -SILTY CLAY (CL) - Greenish black (5GY 2/1), stiff, moist to wet, no petroleum odor (0,4,36,60) Sand filter pack (#2/12) 10 -CLAY (CH) - Same color as above, damp, fat, stiff, no petroleum odor (0,0,2,98) 2" Sch.40 Slotted PVC (0.010) same as above, change in color to dark greenish gray Flush threaded end СН (5YG 4/1), with mottled stringers, no petroleum odors - 15 -Boring terminated at 15 feet bgs. Free groundwater encountered @ approximately six (6) feet bgs. Notes: Project No. **EPI** (5 YR 2/2) Geological Society of America Rock Color Chart, Munsell color designation. (15,70,10,5) % sample fractions estimated in field (gravel, sand, silt, clay) 46591 Environmental Profiles, Inc Los Alamitos, California Page 1 of 1

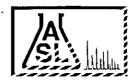
### **APPENDIX A**

Chain of Custody Record and Laboratory Chemical Analysis Results, Groundwater Date: 1.19.00

Chain-of-Custody

Page \_\_\_ of \_\_\_\_\_\_\_

Proj. Name:							Turn-Around-Time							
roj. Add.:	SAKLANA PORT	AUTH	10/20	TY	, ' 					48 hours				
	OAKLAM , CALIFO	RUA							a	24 hours		ţ	· · · · · · · · · · · · · · · · · · ·	<u></u>
Sample Information							Lab Analysis				La	Lab Use Only		
Sample ID	Location/Description	Date	Time	Soll	Water	Air 2	Containers	, Light	i kilos	POLES MY	je/	Other	□ Received	
461	morrored we the	1.18.00	2:00		L		3		2 -	4		-5 <u>964</u>		
120-2	V Mary The City to the # 2	1.18.0					3		2	-7	111			· · · · · · · · · · · · · · · · · · ·
	Mar those were the	1.13.00	्री: पर्				<del>. 3</del> -			- M	<b>*</b>	·		
nw 4	· man portale was the	1.13.00	3.15		~		3				45	5965	,_,_	
MW5		1./3.00	3.46		-		3			۳	45	966		
mw6	ROBITORIAL CERTE #6	1.19.00	4:15		_		3		-	~	45	967		
Notes/C	omments: M BOIS POR 100 6	L AU	- GAS		4110	JE	T-1	4						
	Hall	//-			<del>, ,</del>	•	-							
elinquished by:	(Signature)	1 10	Date/Tim		Re	ceived by	r:(Sigr	nature)						Date/Time
отралу:	ipany: 1-19-00 /12:00 Company				mpany:									
Relinquished by:(Signature) Date/Tim			Date/Time Received by:(Signature)						Date/Time					
ompany:	O				Cō	mpany:								
leceived By Late	(Bighature)	,ì.	Date/Time					E	nviro	nmen	tal P	rofiles, inc.		
aboratory: A	\$1	1/9x	00/0	<b>≯</b> \$5	>	-				tella, Su		1 011100; 1110.		
		l		•				Le	os Alan	iitos, Ca	lifornia	90720-2823		
								(5	62)49	3-2190	<b>88 FAX</b>	(562) 430-5177		



#### Ordered By

Environmental Profiles, Inc. 5480 Katella Ave., Suite 211 Los Alamitos, CA 90720-2834

Telephone

(562) 493-2190

Attn

Mark Bartee

Number of Pages 7 Date Received 01/20/2000 Date Reported 01/27/2000

Job Number	Submitted	Client
7060	01/20/2000	ENVPRF

Project ID:

46591

Project Name: Ameriflight

Site:

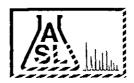
Oakland Port Authority

Oakland, CA

Enclosed are the results of analyses on 4 water samples analyzed as specified on attached chain of custody.

Laboratory Manager

Rojert G. Araghi Laboratory Director



#### ANALYTICAL RESULTS

#### Ordered By

Environmental Profiles, Inc. 5480 Katella Ave., Suite 211 Los Alamitos, CA 90720-2834 Site

Oakland Port Authority
Oakland, CA

Telephone: (562)493-2190 Attn: Mark Bartee

Page:

2

Project ID:

46591

Project Name: Ameriflight

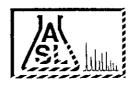
Job Number	Order Date	Client
7060	01/20/2000	ENVPRF

Method: 8015M/8020, TPH as Gasoline and BTEX + MTBE

Our Lab I.D.		45964	45965	45966	45967	
Sample ID		MW1	MW4	MW5	MW6	
Date Sampled		01/18/2000	01/18/2000	01/18/2000	01/18/2000	
Date Extracted		01/26/2000	01/26/2000	01/26/2000	01/26/2000	**************************************
Preparation Method						
Date Analyzed		01/26/2000	01/26/2000	01/26/2000	01/26/2000	
Matrix		Water	Water	Water	Water	
Units		ug/L	ug/L	ug/L	ug/L	
Detection Limit Multiplier		1	1	1	1	
Analytes	PQL	Results	Results	Results	Results	
Benzene	 0.3	ND	ND	ND	ND	
Ethylbenzene	 0.3	ND	ND	ND	ИД	
Toluene (Methyl benzene)	0.3	ND	ND	ND	ИD	
Xylenes, total	0.6	ND	ND	ИD	ND	
MTBE	2.0	ИD	ND	ND	ИD	
TPH as Gasoline (C4-C12)	 50	ИД	ИD	ND	ND	

#### QUALITY CONTROL REPORT

Our Lab I.D.		45964	45965	45966	45967	
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	
Surrogate Percent Recovery						
Bromotluorobenzene		90	79	80	91	



#### **ANALYTICAL RESULTS**

Page:

3

Project ID:

46591

Project Name:

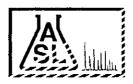
Ameriflight

Job Number	Order Date	Client
7060	01/20/2000	ENVPRF

Method: 8015M/8020, TPH as Gasoline and BTEX + MTBE

Batch No: 012600

Analytes	MS % REC	MS DUP	RPD %	MS/MSD % Limit	MS RPD % Limit		
Benzene	90	88	2.2	75-120	15		
Toluene (Methyl benzene)	93	91	2.2	75-120	15		



#### ANALYTICAL RESULTS

#### Ordered By

Site

Environmental Profiles, Inc. 5480 Katella Ave., Suite 211 Los Alamitos, CA 90720-2834

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Oakl		S 20 19 S 1	100000000000000000000000000000000000000				
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	Heisini,						

Telephone: (562)493-2190 Attn: Mark Bartee

Page:

4

Project ID:

46591

Project Name: Ameriflight

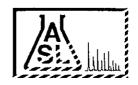
Job Number	Order Date	Client
7060	01/20/2000	ENVPRF

#### Method: 8015M/DHSLUFT, TPH as Aviation Gas

Our Lab I.D.		45964	45965	45966	45967	
Sample ID		MW1	MW4	MW5	MW6	
Date Sampled		01/18/2000	01/18/2000	01/18/2000	01/18/2000	
Date Extracted		01/26/2000	01/26/2000	01/26/2000	01/26/2000	
Preparation Method						
Date Analyzed		01/26/2000	01/26/2000	01/26/2000	01/26/2000	
Matrix		Water	Water	Water	Water	
Units		ug/L	ug/L	ug/L	ug/L	
Detection Limit Multiplier		1	1	1	1	
Analytes	PQL	Results	Results	Results	Results	
Aviation Gas	 50	ND	ND	ND	ND	

#### **QUALITY CONTROL REPORT**

Our Lab I.D.			45964	45965	45966	45967	
Surrogates		Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	
Surrogate Percent Recovery							
Bromofluorobenzene		70-120	90	79	80	91	



#### ANALYTICAL RESULTS

Page:

5

Project ID:

46591

Project Name:

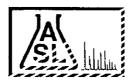
Ameriflight

Job Number	Order Date	Client
7060	01/20/2000	ENVPRF

Method: 8015M/DHSLUFT, TPH as Aviation Gas

Batch No: 012600

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit		
Benzene	90	88	2.2	75-125	15		
Toluene (Methyl benzene)	93	91	2.2	75-125			



#### ANALYTICAL RESULTS

#### Ordered By

Environmental Profiles, Inc. 5480 Katella Ave., Suite 211 Los Alamitos, CA 90720-2834 Site

Oakland Port Authority
Oakland, CA

Telephone: (562)493-2190 Attn: Mark Bartee

Page:

6

Project ID:

46591

Project Name: Ameriflight

 Job Number
 Order Date
 Client

 7060
 01/20/2000
 ENVPRF

#### Method: 8015M/DHSLUFT, Total Petroleum Hydrocarbons

Our Lab I.D.		45964	45965	45966	45967	
Sample ID		MW1	MW4	MW5	MW6	
Date Sampled		01/18/2000	01/18/2000	01/18/2000	01/18/2000	
Date Extracted		01/27/2000	01/27/2000	01/27/2000	01/27/2000	
Preparation Method						
Date Analyzed		01/27/2000	01/27/2000	01/27/2000	01/27/2000	
Matrix		Water	Water	Water	Water	
Units		mg/L	mg/L	mg/L	mg/L	\
Detection Limit Multiplier		1	1	1	1	
Analytes	PQL	Results	Results	Results	Results	
Crude Oil	1.0	ND	ИД	ИD	ND	
Diesel	1.0	ND	ND	ИD	ND	
Fuel Oil	1.0	ND	ND	ИD	ND	
Heavy Oil	1.0	ND	ND	ИD	ND	
Hydraulic Oil	1.0	ND	ND	ИD	ND	
Jet Fuel	1.0	ND	ND	ND	ND	
Kerosene	1.0	ND	ND	ND	ND	
Mineral Spirits	1.0	ND	ИD	ND	ND	



#### ANALYTICAL RESULTS

Page:

7

Project ID:

46591

Project Name:

Ameriflight

Job Number	Order Date	C1:05+
7060	01/20/2000	ENVPRF

Method: 8015M/DHSLUFT, Total Petroleum Hydrocarbons

#### QUALITY CONTROL REPORT

Our Lab I.D.			4	<b>1</b> 5964	45965	45966	45967	
Surrogates	 Al-mi	Con.Lim	it %	Rec.	% Rec.	% Rec.	% Rec.	
Surrogate Percent Recovery								
Chlorobenzene		70-120		117	113	111	111	

Batch No: 012700

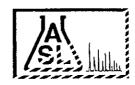
	MS	MS DUP	RPD	MS/MSD	MS RPD			
Analytes	% REC	% REC	%	% Limit	% Limit			
Diesel	104	103	<1	75-120	15			

Date: 1.19.00

# Chain-of-Custody

Page L of F

Proj. Name:	MERI FLIGHT	Proj. F: L	1659	7/							Turn-Around	d-Time	
Proj. Add.:	SAKLANA PORT /	AUTHORIC	7	+				ŀ	Routine 48 hours	5			
	OAKLAMI CALIFO	RIVA						٥	24 hours	š			
	'Sample Inform	ation								La	ab Analysis		Lab Use Only
Sample ID	Location/Description	Date Time	Soil	Water	Air	No. of Containers	1181	Wigors,	es h	Me	Other		ived Chilled ived Sealed
mut	morrowith bee #1	1-18 00 2100				3			u				
mw 2	Many Tollist wire #2	1.18.0,2:30		4		3		<u>.</u> -	<u>-</u>		46020		
MUS	more role she were the	1-18-00 2:45		r		3			-		<u>46021                                    </u>		
mw4	Mess, Toledh lesse the	11/800 3.15		~		-3		-					
MIS	Alon Bast UPLL	1.13:0 3.16				3		<u> </u>	<b>D</b>	-			
- Wws	HOPPICKET TIME #6	-1.19m 4:15				3	+	<i>~</i>	~		•		
								-					
~~~							$\perp$			-			
		•											
Notes/Co	imments: (1 > 6 0 0	11111					: 2						
110103/00	omments: (4) 5015 FOR 100 L	L AU- 4745	<i>1</i> 4	מע	<u> </u>	ET-4			-/	<del>/-</del>			
Relinquished by:(S		1./9.00 /12:00			ceived ampany	by:(Sign	lura)	1/3		95	(		Date/Time   1: 35     - 2/-00     Date/Time
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Company:				Co	mpany	:							
Received By Lab:(5	Signature)	Date/Time					548	O Kat	ella, S	Suite	ni Profiles, inc. 211 prnia 90720-2823		
											FAX (562) 430-5177		



Ordered By

Environmental Profiles, Inc. 5480 Katella Ave., Suite 211 Los Alamitos, CA 90720-2834

Telephone

(562) 493-2190

Attn

Mark Bartee

Number of Pages 7 Date Received 01/21/2000 Date Reported 01/28/2000

Job Number Submitted Client **ENVPRF** 7065 01/21/2000

Project ID:

46591

Project Name: Ameriflight

Site:

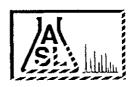
Oakland Port Authority

Okland, CA

Enclosed are the results of analyses on 2 water samples analyzed as specified on attached chain of custody.

Wendy Lu Organics Supervisor

Rojert G. Araghi Laboratory Director



#### ANALYTICAL RESULTS

#### Ordered By

Environmental Profiles, Inc. 5480 Katella Ave., Suite 211 Los Alamitos, CA 90720-2834

Telephone: (562)493-2190 Mark Bartee Attn:

Page:

2 Project ID: 46591

Project Name:

Ameriflight

Site

Oakland Port Authority Okland, CA

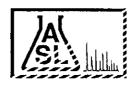
Client Job Number Order Date 7065 01/21/2000 ENVPRF

#### Method: 8015M/8020, TPH as Gasoline and BTEX + MTBE

Our Lab I.D.		46020	46021		
Sample ID		MW2	MW3		
Date Sampled		01/18/2000	01/18/2000		
Date Extracted		01/26/2000	01/26/2000		
Preparation Method					
Date Analyzed		01/26/2000	01/26/2000		
Matrix		Water	Water		
Units		ug/L	ug/L		
Detection Limit Multiplier		1	1		
Analytes	PQL	Results	Results		
Benzene	0.3	ND	ND		
Ethylbenzene	 0.3	ND	ND		
Toluene (Methyl benzene)	 0.3	ND	ND		
Xylenes, total	 0.6	ND	ND		
MIBE	 2.0	2.8	2.0		
TPH as Gasoline (C4-C12)	50	ND	ND		

#### QUALITY CONTROL REPORT

Our Lab I.D.	 		46020	46021			
Surrogates		Con.Limit	% Rec.	% Rec.			
Surrogate Percent Recovery							
Bromofluorobenzene			102	109	-	<u></u>	



#### ANALYTICAL RESULTS

Page:

3

Project ID:

46591

Project Name:

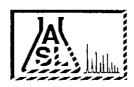
Ameriflight

	Order Date	Client
7065	01/21/2000	ENVPRF

Method: 8015M/8020, TPH as Gasoline and BTEX + MTBE

Batch No: 012600

	MS	MS DUP	RPD	MS/MSD	MS RPD			
Analytes	% REC	% REC	%	% Limit	% Limit			
Benzene	90	88	2.2	75-120	15			
Toluene (Methyl benzene)	93	91	2.2	75-120	15			



#### ANALYTICAL RESULTS

#### Ordered By

Environmental Profiles, Inc. 5480 Katella Ave., Suite 211 Los Alamitos, CA 90720-2834 Site

Dakland Por	t Authority		
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Okland, CA			
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Telephone: (562)493-2190 Attn: Mark Bartee

Page:

4

Project ID:

46591

Project Name: Ameriflight

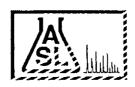
Job Number	Order Date	Client
7065	01/21/2000	ENVPRF

### Method: 8015M/DHSLUFT, TPH as Aviation Gas

Our Lab I.D.			46020	46021		
Sample ID	·		MW2	MW3		
Date Sampled			01/18/2000	01/18/2000		
Date Extracted	, , , , , , , , , , , , , , , , , , , ,		01/26/2000	01/26/2000		
Preparation Method						
Date Analyzed			01/26/2000	01/26/2000		
Matrix			Water	Water		
Units			ug/L	ug/L		
Detection Limit Multiplier			1	1		
Analytes		PQL	Results	Results		
Aviation Gas		50	ND	ИD		

#### **QUALITY CONTROL REPORT**

Our Lab I.D.	. %		46020	46021		
Surrogates		Con.Limit	% Rec.	% Rec.		
Surrogate Percent Recovery						
Bromofluorobenzene		70-120	102	109		



#### ANALYTICAL RESULTS

Page:

5

Project ID:

46591

Project Name:

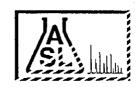
Ameriflight

Job Number	Order Date	Client
7065	01/21/2000	ENVPRF

Method: 8015M/DHSLUFT, TPH as Aviation Gas

Batch No: 012600

	MS	MS DUP	RPD	MS/MSD	MS RPD			
Analytes	 % REC	% REC	%	% Limit	% Limit			
Benzene	90	88	2.2	75-125	15			"
Toluene (Methyl benzene)	93	91	2.2	75-125	15			



#### ANALYTICAL RESULTS

#### Ordered By

Environmental Profiles, Inc.
5480 Katella Ave., Suite 211
Los Alamitos, CA 90720-2834

Site

Oakland Port Authority Okland, CA

Telephone: (562)493-2190 Attn: Mark Bartee

Page:

6

Project ID:

46591

Project Name: Ameriflight

Job Number	Order Date	Client
7065	01/21/2000	ENVPRF

### Method: 8015M/DHSLUFT, Total Petroleum Hydrocarbons

Our Lab I.D.			46020	46021		
Sample ID			MW2	MW3		
Date Sampled			01/18/2000	01/18/2000		
Date Extracted			01/27/2000	01/27/2000	<u> </u>	
Preparation Method						
Date Analyzed			01/27/2000	01/27/2000		
Matrix			Water	Water		
Units			mg/L	mg/L		
Detection Limit Multiplier			1	1		
Analytes		PQL	Results	Results		
Crude Oil	i iii uu aaaaaa	1.0	ND	ND		
Diesel		1.0	ИD	ND		
Fuel Oil		1.0	ND	ND		
Heavy Oil		1.0	ND	ND		
Hydraulic Oil		1.0	ND	ND		
Jet Fuel		1.0	ND	ND		
Kerosene		1.0	ND	ND		
Mineral Spirits		1.0	ND	ND		



#### ANALYTICAL RESULTS

Page:

7

Project ID:

46591

Project Name:

Ameriflight

Job Number	Order Date	Client
7065	01/21/2000	ENVPRF

Method: 8015M/DHSLUFT, Total Petroleum Hydrocarbons

#### QUALITY CONTROL REPORT

Our Lab I.D.		46020	46021		
Surrogates	Con.Limit	% Rec.	% Rec.		
Surrogate Percent Recovery					
Chlorobenzene	70-120	113	113		

Batch No: 012700-1

	MS	MS DUP	RPD	MS/MSD	MS RPD			
Analytes	% REC	% REC	%	% Limit	% Limit			
Diesel	110	110	<1	75-120	15			

### **APPENDIX D**

**Regulatory Documentation** 



#### ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

951 TURNER COURT, SUITE 360, HAYWARD, CA 34545-2651

PHONE (518) 670-5248 MARLON MAGALLANSES/CINDY HUTCHINSON
FAX (510) 670-6262

#### DRILLING PERMIT APPLICATION FOR APPLICANT TO COMPLETE LOCATION OF PROJECT AMALIFULGHT -PERMIT NUMBER ROAD, VANGAR WELL NUMBER OAKLAND, LA APN PERMIT CONDITIONS Circled Permit Requirements Apply CLIENT EPT 1. A permit application should be submitted to at to Address 10 KATELIA AE, S. M. Phone Sel 143. 219 O errive at the ACPWA office tive days prior to proposed starting date. Bubnit to ACPWA within 60 days efter completion at APPLICANT NAME SAME AS permitted work the original Department of Water MBDV£ Resources Water Well Drillers Report or aquivalent for (42)430 SINT well projects, or drilling logs and location aketch for Address Phone geotechnical projects. approval date. City Parmit is void if project not begun within 90 days of TYPE OF PROJECT B. WATER SUPPLY WELLS Well Construction Geotechnical Investigation 1. Minimum surface real thickness is two inches of Cathodio Protection u General п coment grout placed by tremic. Water Supply П Contomination Ü 2. Minimum seal depth is 50 feet for municipal and Menitoring Well Destruction industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is appealably approved. GROUNDWATER MONITORING WELLS PROPOSED WATER SUPPLY WELL USE - NA New Domestie | G Replacement Domestic $\mathbf{n}$ INCLUDING PIEZOMETERS Municipal ш Imigation Ų 1. Minimum surface seal thickness is two inches of Industrial П Other ٥ coment grout placed by tremic. 2. Minimum seal depth for manitoring wells is the DRILLING METHOD: maximum depth practicable or 20 feet. Mud Rowry Air Retary D. GEOTECHNICAL Cable Olyer N.S. Backfill bare hole with compacted auttings or heavy benianire and upper two fact with compacted maisrial. DRILLER'S LICENSE NO. (C-57) 484288 In areas of known or suspecied contemination, tremied coment grout shall be used in place of compacted outsings. WILL PROJECTS E. CATHODIC Drill Hole Diameter Maximum Fill hale above enode zone with concrete placed by tremie. 16 n. Casing Dismeter \_ Dep:.. \_\_\_\_ F. WELL DESTRUCTION Sutface Seal Depth Number 6 See attached. G. SPECIAL CONDITIONS GEOTECHNICAL PROJECTS Number of Borings mumissM Hole Diameter\_ Depit \_ R. hand Deblas 2449 12:16.99 ESTIMATED STARTING DATE ESTIMATED COMPLETION DATE 121 16 99 I hereby agree to camply with all requirements of this permit and Alsmeda County Ordinance No. 73-68.

\*\* TOTAL PAGE.82 \*\*

SIGNATURE MALBITA

#### **HEALTH CARE SERVICES**

**AGENCY** 



DAVID J. KEARS, Agency Director

October 25, 1999 StID # 3977

Mr. Tony Ortega Ameriflight, Inc. 4700 Empire Ave., Hanger 1 Burbank, CA 91505 ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700

Re: Work Plan for Well Installations at Amerflight, Oakland Airport, Hanger 2, 9171 Earhart Rd., Oakland CA 94621

Dear Mr. Ortega:

Our office has received a copy of the Work Plan Groundwater Investigation for the above site prepared by Environmental Profiles, Inc. The report was given to us by Mr. Dale Klettke of the Port of Oakland. Please be aware that our office, not the City of Oakland, will be overseeing the fuel release investigation from the two former underground tanks. I was also provided a site visit to appreciate the location of the former tanks and the surrounding buildings.

Upon review of the work plan, it appears that there is some inconsistency in the text of the work plan compared with that shown on Figure 2, the Well Location Diagram. Figure 2 shows that six (6) wells will be installed at the site, while the text of the Exploratory Soils Borings text states that four exploratory borings will be drilled. These borings are located relative to monitoring well MW-1, indicating perhaps that five borings/wells may be installed. Having been onsite, it appears that initially, only three monitoring wells need be installed. With concurrence from the Port of Oakland, the three well locations are labeled Well #1, Well #6 and Well #3 in Figure 2. At the time of well installation you may want to expand your investigation if significant soil or groundwater contamination is found. Soil and groundwater samples should be analyzed for TPH as aviation fuel and as jet fuel, BTEX, MTBE and lead.

If these comments are acceptable, you may proceed with this proposed work. Otherwise please contact me with your concerns. Please notify our office prior to performing this work.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely.

Barney M. Chan

Hazardous Materials Specialist

Banes Wellen

C: B. Chan, files

Mr. M. Walker, Environmental Profiles, Inc., 5480 Katella Ave., Suite 211, Los Alamitos, CA 90720-2834

Mr. D. Klettke, Port of Oakland, 530 Water St., P.O. Box 2064, Oakland CA 94604-2064 Mr. M. Livingston, Armored Transport Inc., 3280 E. Foothill Blvd., #290, Pasadena, CA 91107 wpap9171Earhart

55670445(1 HII)

000 164 DEC 51 00 14:00

### ALAMEDA COUNTY HEALTH CARE SERVICES

**AGENCY** 

DAVID J. KEARS, Agency Director



September 21, 1999 StID # 3977

Mr. Tony Ortega Ameriflight, Inc. 4700 Empire Ave., Hanger 1 Burbank, CA 91505 ENVIRONMENTAL HEALTH SERVICES 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 (510) 337-9335 (FAX)

Re: Request for Technical Report for Ameriflight, Inc., Oakland Airport, Hanger 2 9171 Earhart Rd., Oakland CA 94621

Dear Mr. Ortega:

Our office has been provided a copy of the August 2, 1999 Underground Storage Tank Closure Report Tanks LF5/6 for the above site, prepared by Environmental Profiles, Inc. The report was provided by Mr. Hernan Gomez of the City of Oakland Fire Department. As you are aware, this report details the November 11, 1998 removal of two 12,000 gallon underground tanks used to store aviation and Jet-A fuel. Based upon the results of the soil and grab groundwater sample collected at this removal, this site has experienced a confirmed release of fuel, the extent of which must be determined and possibly remediated. This site has been transferred to the Local Oversight Program (LOP), within Alameda County Environmental Health, to allow our office to provide regulatory oversight. Our office acts in behalf of the Water Board to oversee underground tank fuel release sites. A Notice of Responsibility (NOR) letter will be sent to inform you of this action. In addition, enclosed please find an Unauthorized Release (Leak) Report. This report should be completed and returned to our office within 10 days of receipt.

At this time, you are requested to submit a work plan to determine the extent of both soil and groundwater petroleum contamination at this site. Our office recommends the use of a rapid site assessment technique (eg hydropunch, geoprobe, et al) to obtain this information. Based upon the initial results, you may limit your chemical analysis to Total Petroleum Hydrocarbons as jet fuel and as aviation fuel, BTEX and MTBE. Please confirm the presence of any detected MTBE using EPA Method 8260 or 8240. Please submit your work plan to our office within 45 days or no later than November 5, 1999. You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan

Hazardous Materials Specialist

Berney U Chan

enclosure (Mr. Ortega)

c: B. Chan, files

D. Klettke, Port of Oakland, 530 Water St., P.O. Box 2064, Oakland CA 94604-2064

Wprq9171Berhart