

# ENVIRONMENTAL PROFILES, INC.

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

ENVIRONMENTAL  
PROTECTION

*H* 3977 - *consider for  
closure.*

00 MAY -8 AM 9:38

## REPORT GROUNDWATER MONITORING

Ameriflight, Inc.  
Oakland Airport, Hanger 2  
9171 Earhart Road  
Oakland, California 94621  
EPI Project No. 46591.gw2

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

May 12, 2000

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# Environmental Profiles, Inc.

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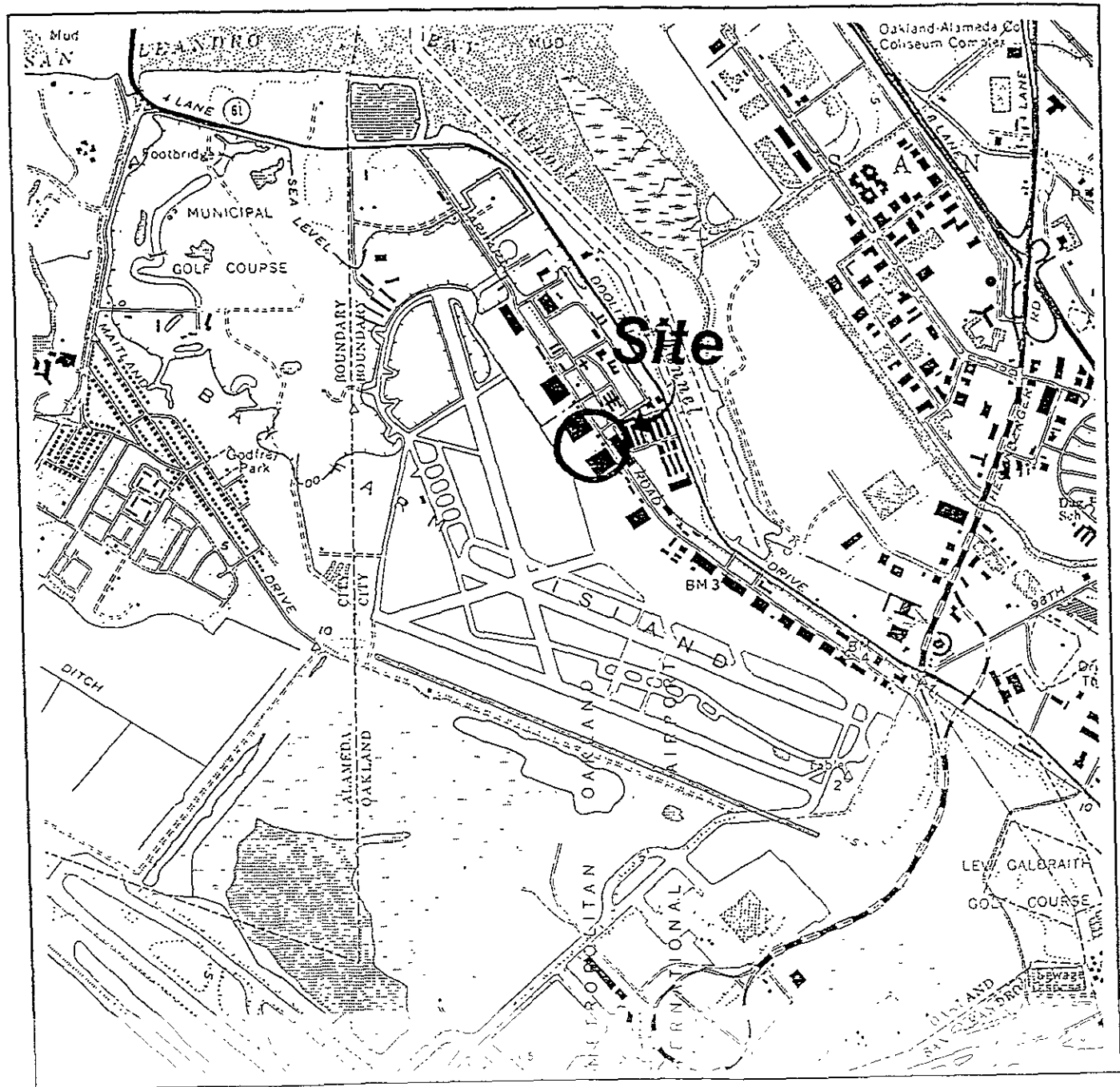
Project Name: Ameriflight, Inc. (Oakland)

Job#: 46591

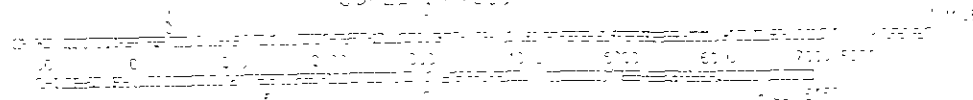
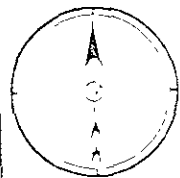
Location: 9171 Earhart Road, Hangar 2, Oakland, California

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

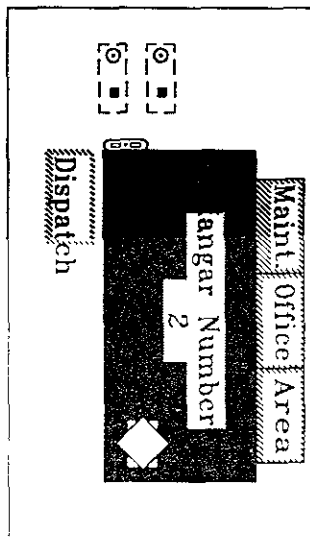
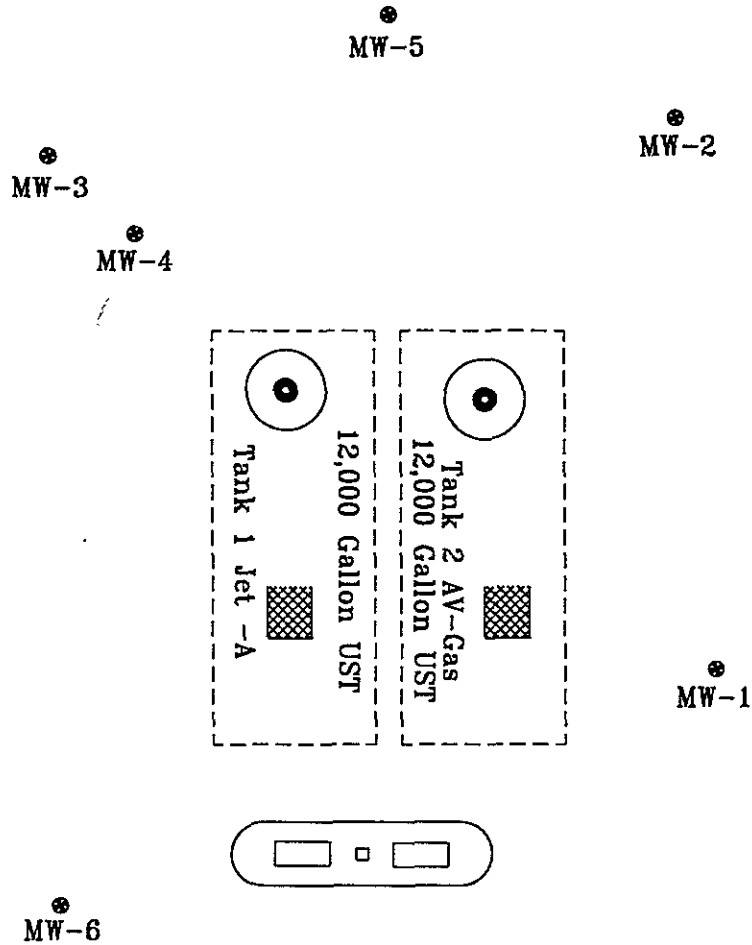
## Figure 1 - Area Map



SCALE: 1:24,000



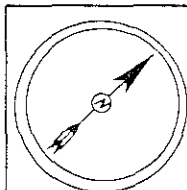
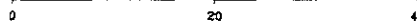
# Figure 2 - Site Diagram





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

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

APPROXIMATE SCALE IN FEET



### Explanation

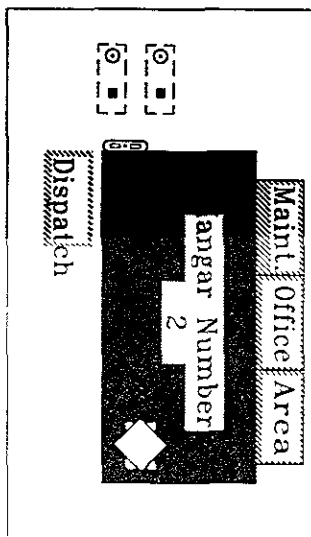
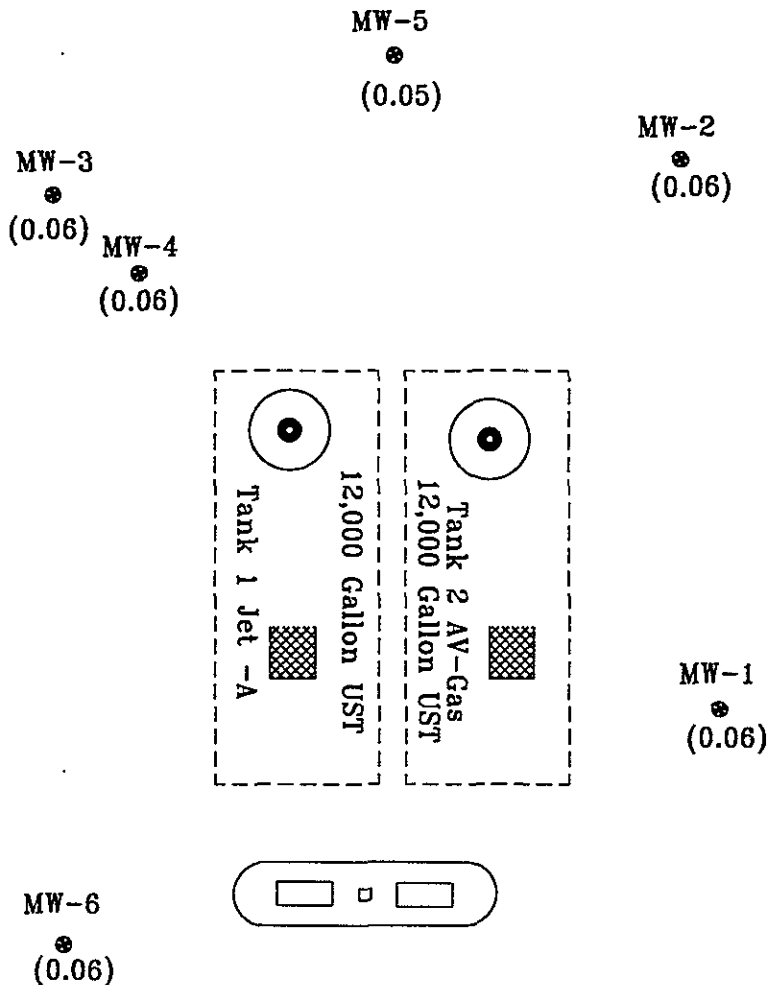
-  Groundwater monitor well locations
-  Former UST locations

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# Figure 3 - Groundwater Gradient Diagram



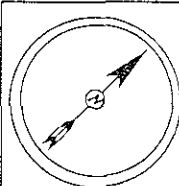
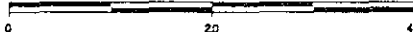
Arbitrary (point) datum



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

Drawing file: P:/dwg/46591/fig 3/4-12-00.dwg

APPROXIMATE SCALE IN FEET



### Explanation

- ⊙ Groundwater monitor well locations
- ⊠ Former UST locations
- (0.06) Groundwater elevation at well point

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## 1.0 INTRODUCTION

Environmental Profiles, Inc. (EPI) is pleased to submit this report documenting groundwater monitor and 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 (minor) 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.

### 2.2 Previous Groundwater Sampling

Initial groundwater monitoring and sampling activities conducted in January 2000 indicated that no chemical impact to groundwater was evident. Results of the groundwater monitoring event are presented in the document, Report, Groundwater Monitoring, January 28, 2000, Environmental Profiles, Incorporated.

## 3.0 ACTIVITIES

### 3.1 General

The purpose of this most recent event was to confirm no chemical impact to groundwater has occurred. The following field activities occurred on-site:

- Inspected and gauged all on-site groundwater monitor wells.
- Surveyed all on-site groundwater monitor wells relative to an artificial datum.
- Collection of groundwater samples from all on-site monitor wells.

### 3.2 Monitor Well Purging

On April 12, 2000 an EPI Geologist 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. Groundwater parameters were recorded in field and are presented in Appendix C - Field Data Sheets.

### 3.3 Groundwater Sampling Procedures

On April 12, 2000 an EPI Geologist collected groundwater samples from each well. No free floating hydrocarbon product was observed in any of the monitor wells prior to sampling activities.

Each well remained static for approximately fifteen (15) minutes 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.

### 3.4 Groundwater Gradient

Groundwater elevation calculations are referenced to an artificial datum located at the sites northern boundary with an assigned surface elevation of five (5) feet based contour line elevations found on the U.S.G.S. Topographic Map, San Leandro Quadrangle, photorevised 1980.

During this recent groundwater investigation the average depth to groundwater at the site is calculated to be 5.2 feet below grade surface (bgs) equating to an approximate groundwater surface elevation of 0.06 feet above mean sea level.

The gradient at the site is interpreted to be entirely influenced by area tidal action, and surface infiltration, and is interpreted to be relatively flat.

### 3.5 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 <sup>April</sup> Laboratory Chemical Analysis, Groundwater

On ~~May~~ 13, 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

#### 4.2 Laboratory Chemical Analysis Results, Groundwater

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

<b>TABLE 1 - LABORATORY CHEMICAL ANALYSIS RESULTS, GROUNDWATER</b> Ameriflight, Inc. 9171 Earhart Road Oakland, CA 94621 4-12-2000							
ID	TPH (mg/L)		MTBE (µg/L)	BENZENE (µg/L)	TOLUENE (µg/L)	ETHYL BENZENE (µg/L)	TOTAL XYLENES (µg/L)
	AV FUEL	JET FUEL					
MW-1	ND	ND	ND	ND	ND	ND	ND
MW-2	ND	ND	ND	ND	ND	ND	ND
MW-3	ND	ND	ND	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

#### 4.3 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, 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.

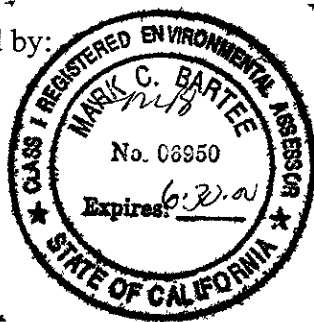
Similarly, none of the monoaromatics, BTEX, or the fuel oxygenate MTBE were detected at or above the noted laboratory detection limits.

## 6.0 RECOMMENDATIONS

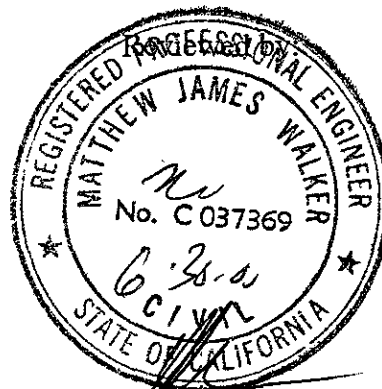
EPI recommends the site be granted no further action (NFA) required status, and the monitor wells be abandoned.

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:



Mark C. Bartee  
Senior Geologist  
REA 06950



Matthew J. Walker  
Principle Engineer  
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, Groundwater**

Date: 4/12/2K

Page 1 of 1

# Chain-of-Custody

Proj Name: AMQUELIGHT - OAKLAND Proj #: 46591  
 Proj Add: 9171 EARHART ROAD, HANGAR 2  
OAKLAND, CA

Turn-Around-Time

- Routine
- 48 hours
- 24 hours

ASL # 7776

Sample Information							Lab Analysis				Lab Use Only		
Sample ID	Location/Description	Date	Time	Soil	Water	Air	No. of Containers	418.1	M8015->QV	80204-WTBS	801 - jet	Other	<input type="checkbox"/> Received Chilled <input type="checkbox"/> Received Sealed
mw 6	monitor well # 6	4/12	0930				2	1	1	1			49875
mw 5	" # 5	"	1015				2	1	1	1			49876
mw 4	" # 4	"	1100				2	1	1	1			49877
mw 1	" # 1	"	1145				2	1	1	1			49878
mw 3	" # 3	"	1230				2	1	1	1			49879
mw 2	" # 2	"	1315				2	1	1	1			49880

Notes/Comments: RUN 8015 report as aviation and jet fuel. QUANTIFY ANY  
 WTBS DETECTIONS w/ 8200 for WTBS - ONLY!

Relinquished by (Signature): <u>[Signature]</u>	Date/Time: <u>4/13/22</u>	Received by (Signature): <u>[Signature]</u>	Date/Time: <u>4/13/22</u>
Company: <u>EPI</u>	<u>0900</u>	Company: <u>ASL</u>	<u>3:00</u>
Relinquished by (Signature): _____	Date/Time: _____	Received by (Signature): _____	Date/Time: _____
Company: _____		Company: _____	
Received By Lab (Signature): _____	Date/Time: _____	<b>Environmental Profiles, Inc.</b> 5480 Katella, Suite 211 Los Alamitos, California 90720-2823 (562) 493-2190 88 FAX (562) 430-5177	
Laboratory: _____			



AMERICAN SCIENTIFIC LABORATORIES, LLC  
*Environmental Testing Services*

Ordered By

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

Number of Pages 9  
Date Received 04/13/2000  
Date Reported 04/21/2000

Telephone (562) 493-2190  
Attn Mark Bartee

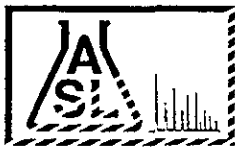
Job Number	Ordered	Client
7776	04/13/2000	ENVPRF

Project ID: 46591  
Project Name: Ameriflight-Oakland  
Site: 9171 Earhart Road, Hangar 2  
Oakland, CA

Enclosed are the results of analyses on 6 water samples analyzed as specified on attached chain of custody.

Wendy Lu  
Organics Supervisor

Rojert G. Araghi  
Laboratory Director



AMERICAN SCIENTIFIC LABORATORIES, LLC  
 Environmental Testing Services

ANALYTICAL RESULTS

Ordered By

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 Los Alamitos, CA 90720-2834

Site

9171 Earhart Road, Hangar 2  
 Oakland, CA

Telephone: (562)493-2190

Attn: Mark Bartee

Page: 2

Project ID: 46591

Project Name: Ameriflight-Oakland

Job Number	Order Date	Client
7776	04/13/2000	ENVPRF

Method: 8015M/DHSLUFT, TPH as Aviation Gas

Batch No: 041800-1

Our Lab ID.		49875	49876	49878	49879	49880
Sample ID		MW6	MW5	MW1	MW3	MW2
Date Sampled		04/12/2000	04/12/2000	04/12/2000	04/12/2000	04/12/2000
Date Extracted		04/18/2000	04/18/2000	04/18/2000	04/18/2000	04/18/2000
Preparation Method						
Date Analyzed		04/18/2000	04/18/2000	04/18/2000	04/18/2000	04/18/2000
Matrix		Water	Water	Water	Water	Water
Units		ug/L	ug/L	ug/L	ug/L	ug/L
Detection Limit Multiplier		1	1	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
Aviation Gas	50	ND	ND	ND	ND	ND

Our Lab ID.		49875	49876	49878	49879	49880
Surrogates	Con. Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Bromofluorobenzene	70-120	89	79	91	79	82

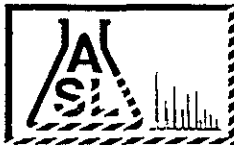
QUALITY CONTROL REPORT

Batch No: 041800-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS MSD % Limit	MS RPD % Limit
Benzene	99	99	<1	75-125	15
Toluene (Methyl benzene)	98	97	1.0	75-125	15

ND - Not Detected or the Detection Limit MS - Matrix Spike MSD - Matrix Spike D. of C. S1 - Sample SMD - Sample Duplicate

3225 San Fernando Road, Los Angeles, California 90065 • (323) 254-7700, Fax (323) 254-7799



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*Environmental Testing Services*  
ANALYTICAL RESULTS

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 Los Alamitos, CA 90720-2834

**Site**

9171 Earhart Road, Hangar 2  
 Oakland, CA

Telephone: (562)493-2190

Attn: Mark Bartee

Page: 3

Project ID: 46591

Project Name: Ameriflight-Oakland

Job Number	Order Date	Client
7776	04/13/2000	ENVPRF

Method: 8015M/DHSLUFT, TPH as Aviation Gas

Batch No: 041900-1

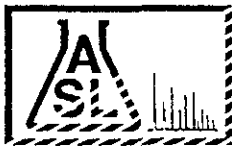
Our Lab I.D.		49877			
Sample ID		MW4			
Date Sampled		04/12/2000			
Date Extracted		04/19/2000			
Preparation Method					
Date Analyzed		04/19/2000			
Matrix		Water			
Units		ug/L			
Detection Limit Multiplier		1			
<b>Analytes</b>	<b>PQL</b>	<b>Results</b>			
Aviation Gas	50	ND			

Our Lab I.D.		49877			
Surrogates	Con. Limit	% Rec.			
Surrogate Percent Recovery					
Bromofluorobenzene	70-120	91			

QUALITY CONTROL REPORT

Batch No: 041900-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS MSD % Limit	MS RPD % Limit
Benzene	97	99	2.0	75-125	15
Toluene (Methyl benzene)	100	101	<1	75-125	15



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Site

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9171 Earhart Road, Hangar 2  
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Telephone: (562)493-2190

Attn: Mark Bartee

Page: 4

Project ID: 46591

Project Name: Ameriflight-Oakland

Job Number	Order Date	Client
7776	04/13/2000	ENVPRF

Method: 8015M/DHSLUFT, Total Petroleum Hydrocarbons

Batch No: 041900-1

Our Lab I.D.		49875	49876	49877	49878	49879
Sample ID		MW6	MW5	MW4	MW1	MW3
Date Sampled		04/12/2000	04/12/2000	04/12/2000	04/12/2000	04/12/2000
Date Extracted		04/19/2000	04/19/2000	04/19/2000	04/19/2000	04/19/2000
Preparation Method						
Date Analyzed		04/19/2000	04/19/2000	04/19/2000	04/19/2000	04/19/2000
Matrix		Water	Water	Water	Water	Water
Units		mg/L	mg/L	mg/L	mg/L	mg/L
Detection Limit Multiplier		1	1	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
Crude Oil	1.0	ND	ND	ND	ND	ND
Diesel	1.0	ND	ND	ND	ND	ND
Fuel Oil	1.0	ND	ND	ND	ND	ND
Heavy Oil	1.0	ND	ND	ND	ND	ND
Hydraulic Oil	1.0	ND	ND	ND	ND	ND
Jet Fuel	1.0	ND	ND	ND	ND	ND
Kerosene	1.0	ND	ND	ND	ND	ND
Mineral Spirits	1.0	ND	ND	ND	ND	ND

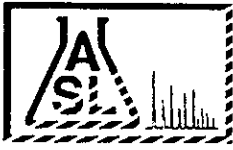
Our Lab I.D.		49875	49876	49877	49878	49879
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Chlorobenzene	70-120	109	115	106	102	105

QUALITY CONTROL REPORT

Batch No: 041900-1

Analytes	MS	MS DUP	RPD	MS MSD	MS RPD
	% REC	% REC	%	% Limit	% Limit

ND - Not Detected at The Detection Limit MS - Matrix Spike MSD - Matrix Spike Duplicates SM - Sample SMD - Sample Duplicate



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Environmental Testing Services

ANALYTICAL RESULTS

Page: 5  
Project ID: 46591  
Project Name: Ameriflight-Oakland

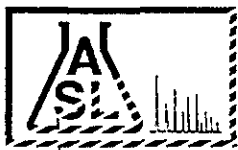
Job Number	Order Date	Client
7776	04/13/2000	ENVPRF

Method: 8015M/DHSLUFT, Total Petroleum Hydrocarbons  
QUALITY CONTROL REPORT

Batch No: 041900-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	97	97	<1	75-120	15					





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 Environmental Testing Services

ANALYTICAL RESULTS

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Site

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 Oakland, CA

Telephone: (562)493-2190

Attn: Mark Bartee

Page: 6

Project ID: 46591

Project Name: Ameriflight-Oakland

Job Number	Order Date	Client
7776	04/13/2000	ENVPRF

Method: 8015M/DHSLUFT, Total Petroleum Hydrocarbons

Batch No: 041900-1

Our Lab I.D.		49880				
Sample ID		MW2				
Date Sampled		04/12/2000				
Date Extracted		04/19/2000				
Preparation Method						
Date Analyzed		04/19/2000				
Matrix		Water				
Units		mg/L				
Detection Limit Multiplier		1				
<b>Analytes</b>	<b>PQL</b>	<b>Results</b>				
Crude Oil	1.0	ND				
Diesel	1.0	ND				
Fuel Oil	1.0	ND				
Heavy Oil	1.0	ND				
Hydraulic Oil	1.0	ND				
Jet Fuel	1.0	ND				
Kerosene	1.0	ND				
Mineral Spirits	1.0	ND				

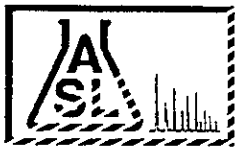
Our Lab I.D.		49880				
Surrogates	Con. Limit	% Rec.				
Surrogate Percent Recovery						
Chlorobenzene	70-120	103				

QUALITY CONTROL REPORT

Batch No: 041900-1

Analytes	MS	MS DUP	RPD	MS,MSD	MS,RPD
	% REC	% REC	%	% Limit	% Limit

ND - Not Detected at the Detection Limit MS - Matrix Spike MSD - Matrix Spike Duplicate SM - Sample SMD - Sample Duplicate



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Environmental Testing Services

ANALYTICAL RESULTS

Page: 7  
Project ID: 46591  
Project Name: Ameriflight-Oakland

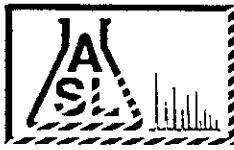
Job Number	Order Date	Client
7776	04/13/2000	ENVPRF

Method: 8015M/DHSLUFT, Total Petroleum Hydrocarbons

QUALITY CONTROL REPORT

Batch No: 041900-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	97	97	<1	75-120	15					



**AMERICAN SCIENTIFIC LABORATORIES, LLC**  
*Environmental Testing Services*  
**ANALYTICAL RESULTS**

Ordered By

Site

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

9171 Earhart Road, Hangar 2  
 Oakland, CA

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

Page: 8  
 Project ID: 46591  
 Project Name: Ameriflight-Oakland

Job Number	Order Date	Client
7776	04/13/2000	ENVPRF

Method: 8020, Aromatic Volatile Organics + MTBE

Batch No: 041800-1

Our Lab ID.		49875	49876	49878	49879	49880
Sample ID		MW6	MW5	MW1	MW3	MW2
Date Sampled		04/12/2000	04/12/2000	04/12/2000	04/12/2000	04/12/2000
Date Extracted		04/18/2000	04/18/2000	04/18/2000	04/18/2000	04/18/2000
Preparation Method						
Date Analyzed		04/18/2000	04/18/2000	04/18/2000	04/18/2000	04/18/2000
Matrix		Water	Water	Water	Water	Water
Units		ug/L	ug/L	ug/L	ug/L	ug/L
Detection Limit Multiplier		1	1	1	1	1
<b>Analytes</b>	<b>PQL</b>	<b>Results</b>	<b>Results</b>	<b>Results</b>	<b>Results</b>	<b>Results</b>
Benzene	0.3	ND	ND	ND	ND	ND
Ethylbenzene	0.3	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.3	ND	ND	ND	ND	ND
Xylenes, total	0.6	ND	ND	ND	ND	ND
MTBE	2	ND	ND	ND	ND	ND

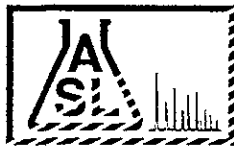
Our Lab ID.		49875	49876	49878	49879	49880
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Bromofluorobenzene	70-120	89	79	91	79	82

QUALITY CONTROL REPORT

Batch No: 041800-1

Analytes	MS	MS DUP	RPD	MS MSD	MS RPD
	% REC	% REC	%	% Limit	% Limit
Benzene	99	99	<1	75-120	15
Toluene (Methyl benzene)	98	97	1.0	75-120	15

ND - Not Detected at The Detection Limit MS - Matrix Spike MSD - Matrix Spike Duplicate SM - Sample SMD - Sample Duplicate



**AMERICAN SCIENTIFIC LABORATORIES, LLC**  
*Environmental Testing Services*  
**ANALYTICAL RESULTS**

Ordered By

Site

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

9171 Earhart Road, Hangar 2  
 Oakland, CA

Telephone: (562)493-2190

Attn: Mark Bartec

Page: 9  
 Project ID: 46591  
 Project Name: Ameriflight-Oakland

Job Number	Order Date	Client
7776	04/13/2000	ENVPRF

Method: 8020, Aromatic Volatile Organics + MTBE

Batch No: 041900-1

Our Lab I.D.		49877				
Sample ID		MW4				
Date Sampled		04/12/2000				
Date Extracted		04/19/2000				
Preparation Method						
Date Analyzed		04/19/2000				
Matrix		Water				
Units		ug/L				
Detection Limit Multiplier		1				
<b>Analytes</b>	<b>PQL</b>	<b>Results</b>				
Benzene	0.3	ND				
Ethylbenzene	0.3	ND				
Toluene (Methyl benzene)	0.3	ND				
Xylenes, total	0.6	ND				
MTBE	2	ND				

Our Lab I.D.		49877				
Surrogates	Con. Limit	% Rec.				
Surrogate Percent Recovery						
Bromofluorobenzene	70-120	91				

QUALITY CONTROL REPORT

Batch No: 041900-1

Analytes	MS	MS DUP	RPD	MS MSD	MS RPD
	% REC	% REC	%	% Limit	% Limit
Benzene	97	99	2.0	75-120	15
Toluene (Methyl benzene)	100	101	<1	75-120	15

ND - Not Detected; DL - Detection Limit; MS - Matrix Spike; MSD - Matrix Spike Duplicate; SM - Sample; SMD - Sample Duplicate

3225 San Fernando Road, Los Angeles, California 90065 • (323) 254-7700, Fax: (323) 254-7799

**APPENDIX B**  
**Regulatory Documentation**

ALAMEDA COUNTY  
HEALTH CARE SERVICES



AGENCY  
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES  
ENVIRONMENTAL PROTECTION  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577  
(510) 567-6700  
(510) 337-9432

February 8, 2000  
StID # 3977

Mr. Tony Ortega  
Ameriflight, Inc.  
4700 Empire Ave., Hangar 1  
Burbank, CA 91505

**Re: Subsurface Investigation at Ameriflight, Oakland Airport, Hanger 2,  
9171 Earhart Rd., Oakland CA 94621**

Dear Mr. Ortega:

Our office has received and reviewed the January 28, 2000 Environmental Profiles, Inc. report detailing the installation and sampling of six (6) groundwater monitoring wells at the above referenced site. As you are aware, very little petroleum contamination was found in the soil and groundwater samples. It appears that this site poses a low risk, therefore, your consultant recommends one additional sampling event to verify these initial results. Should they be consistent with these, site closure will be recommended.

Our office agrees with this interpretation and recommendation, however, we have the following additional requirements:

- Please provide a groundwater gradient map for the initial and any subsequent monitoring event. You may use an arbitrary reference point for your elevation readings.
- Please include copies of each well's sampling data sheet in your report.
- Please run the entire suite of organic parameters; TPH as aviation and jet fuel, BTEX and MTBE. You should also run total dissolved solids to verify water quality.

You may perform your next monitoring event in April 2000. You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan  
Hazardous Materials Specialist

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 L. Foothill Blvd., #290, Pasadena,  
CA, 91107

ss09171Earhart

ENTR 11

# **APPENDIX C**

## **Field Data Sheets**





# ENVIRONMENTAL PROFILES, INC.

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

## GROUNDWATER SAMPLING FORM

Project Name: AMF - CAK Project #: 46591  
 Project Address: 9171 EARHART RD Date: 4-12-00  
OAKLAND, CA Sampled By: [Signature]  
 Recorded By: [Signature]

Well Number: MW1

**Purge Volume**

Casing Diameter (D in inches): 2"  
 Total Depth of Casing (TD in feet): 14.4  
 Water Level Depth (WL in feet): 5.34

$$\frac{14.4}{(TD)} - \frac{5.3}{(DTW)} \times \frac{0.17}{\text{g/linear ft}} = \frac{1.5}{\text{well vol.}} \times \frac{3}{\# \text{ volumes}} = \frac{4.6}{\text{calculated purge}}$$

**Purge Time**

Start 11:00 Stop 11:20 Elapsed 15 min. 5  
actual purge  
 Flow Rate (g/min): ~0.3  
 Volume Purged (g): 5  
 Purging Method: Sub Pump

**Field Parameter Measurements**

Time Elapsed (min)	Temperature (°F)	pH	Conductivity (umhos/cm)	Other (gal)
5	69.8	7.01	3.03	~1.5
10	67.2	7.11	3.17	3
15	69.7	7.19	3.14	5

\* Conductivity  
 X10 \_\_\_ X100 \_\_\_ X1000 \_\_\_

Time Sampled: 11:45  
 Number of Sample Containers: 2

Sample I.D.: MW1  
 Preservation Method: ICE

Sampling Method:  
 Bailor-Type Disp  
 Submersible Pump

Observations: COLOURLESS, CLEAR, NO ODOR -> ENTIRE PURGE

# ENVIRONMENTAL PROFILES, INC.

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

## GROUNDWATER SAMPLING FORM

Project Name: AMF - CAK Project #: 46591  
 Project Address: 9171 EARHART RD Date: 4-12-00  
OAKLAND, CA Sampled By: [Signature]  
 Recorded By: [Signature]

Well Number: MW 2

**Purge Volume**

Casing Diameter (D in inches): 2"  
 Total Depth of Casing (TD in feet): 14.5  
 Water Level Depth (WL in feet): 5.2

$$\frac{14.5}{(TD)} - \frac{5.2}{(DTW)} \times \frac{0.17}{g/linear\ ft} = \frac{6.6}{well\ vol.} \times \frac{3}{\#\ volumes} = \frac{4.7}{calculated\ purge}$$

**Purge Time**

Start 1245 Stop 1300 Elapsed 15 min.  
 Flow Rate (g/min): ~0.3  
 Volume Purged (g): 3  
 Purging Method: SW pump

5  
actual purge

**Field Parameter Measurements**

Time Elapsed (Min)	Temperature (°F)	pH	Conductivity* (umhos/cm)	Other (Sal)
5	68.7	7.59	3.15	~ 1.5
10	67.3	7.47	3.09	~ 3.0
15	67.8	7.41	3.11	~ 5.0

\* Conductivity  
 X10 \_\_\_ X100 \_\_\_ X1000 \_\_\_

Time Sampled: 1315  
 Number of Sample Containers: 2

Sample ID: MW-2  
 Preservation Method: 100%

Sampling Method  
 Bailor-Type: Push  
 Submersible Pump

Observations: NO OIL OR COAL

# ENVIRONMENTAL PROFILES, INC.

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

## GROUNDWATER SAMPLING FORM

Project Name: AMF - OAK Project #: 46591  
Project Address: 9171 EARHART RD Date: 4-12-00  
OAKLAND, CA Sampled By: [Signature]  
Recorded By: [Signature]

Well Number: MW-3

### Purge Volume

Casing Diameter (D in inches): 2"  
Total Depth of Casing (TD in feet): 14.2  
Water Level Depth (WL in feet): 5.12

$$\frac{14.2}{(TD)} - \frac{5.1}{(DTW)} \times 0.17 \text{ g/linear ft} = \frac{1.5}{\text{well vol.}} \times \frac{3}{\# \text{ volumes}} = \frac{4.6}{\text{calculated purge}}$$

### Purge Time

Start 12:00 Stop 12:15 Elapsed 15 min.

Flow Rate (g/min): 0.13

Volume Purged (g): 3

Purging Method: Sub. Pump

5  
actual purge

### Field Parameter Measurements

Time Elapsed (min)	Temperature (°F)	pH	Conductivity (umhos/cm)	Other (gal)
5	68.9	7.11	3.03	1.5
10	67.1	7.15	3.21	3.5
15	67.4	7.21	3.18	5

\* Conductivity

X10 \_\_\_ X100 \_\_\_ X1000 X

Time Sampled: 12:30  
Number of Sample Containers: 2

Sample ID: MW-3  
Preservation Method: 100

### Sampling Method

Bailor-Type: [Signature]  
 Submersible Pump

Observations: COLORLESS, CLEAR, NO OIL

# ENVIRONMENTAL PROFILES, INC.

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

## GROUNDWATER SAMPLING FORM

Project Name: AMF - CAK Project #: 46591  
 Project Address: 9171 EARHART RD Date: 4-12-00  
OAKLAND, CA Sampled By: [Signature]  
 Recorded By: [Signature]

Well Number: MW4

**Purge Volume**

Casing Diameter (D in inches): 2"  
 Total Depth of Casing (TD in feet): 14.5  
 Water Level Depth (WL in feet): 5.3

$$\frac{14.5}{(TD)} - \frac{5.3}{(DTW)} \times \frac{0.17}{\text{g/linear ft}} = \frac{1.6}{\text{well vol.}} \times \frac{3}{\# \text{ volumes}} = \frac{4.7}{\text{calculated purge}}$$

**Purge Time**

Start 10:30 Stop 10:45 Elapsed 15 min.

Flow Rate (g/min): ~0.3

Volume Purged (g): 5

Purging Method: sub pump

5  
actual purge

**Field Parameter Measurements**

Time Elapsed (min)	Temperature (°F)	pH	Conductivity (umhos/cm)	Other (gpd)
5	68.2	7.31	2.99	~1.5
10	66.9	7.41	3.41	3.5
15	67.4	7.37	3.37	5

\* Conductivity

X10 \_\_\_ X100 \_\_\_ X1000 X

Time Sampled: 11:00  
 Number of Sample Containers: 2

Sample I.D.: MW4  
 Preservation Method: IC1

**Sampling Method**

Bailor-Type MSP  
 Submersible Pump

Observations: COLORLESS CLEAR, NO ODOR FOR ENTIRE PURGE

# ENVIRONMENTAL PROFILES, INC.

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

## GROUNDWATER SAMPLING FORM

Project Name: AMF - CAK Project #: 46591  
 Project Address: 9171 EARHART RD Date: 4-12-00  
OAKLAND, CA Sampled By: [Signature]  
 Recorded By: [Signature]

Well Number: MWS

**Purge Volume**

Casing Diameter (D in inches): 2"  
 Total Depth of Casing (TD in feet): 14.4  
 Water Level Depth (WL in feet): 5.14

$$\frac{5.14 \text{ (TD)} - 14.4 \text{ (DTW)}}{0.17 \text{ g/linear ft}} = 1.6 \text{ well vol.} \times 3 \text{ \# volumes} = 4.7 \text{ calculated purge}$$

Purge Time  
 Start 0945 Stop 1000 Elapsed 15 min.  
 Flow Rate (g/min): ~0.3  
 Volume Purged (g): 5  
 Purging Method: Sub pump

5  
actual purge

**Field Parameter Measurements**

Time Elapsed (min)	Temperature (°F)	pH	Conductivity (umhos/cm)	Other (SPD)
5	67.3	7.39	3.03	1.5
10	66.9	7.47	3.15	3.
15	66.3	7.44	3.09	5

\* Conductivity  
 X10 \_\_\_ X100 \_\_\_ X1000 X

Time Sampled: 1015  
 Number of Sample Containers: 2

Sample I.D.: MWS  
 Preservation Method: ICE

Sampling Method  
 Bailor-Type Dispersive  
 Submersible Pump

Observations: COLORLESS, CLEAR, NO OIL FOR ENTIRE PURGE

# ENVIRONMENTAL PROFILES, INC.

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

## GROUNDWATER SAMPLING FORM

Project Name: AMF - CAK Project #: 46591  
 Project Address: 9171 EARHART RD Date: 4-12-00  
OAKLAND, CA Sampled By: [Signature]  
 Recorded By: [Signature]

Well Number: MW-6

**Purge Volume**

Casing Diameter (D in inches): 2"  
 Total Depth of Casing (TD in feet): 14.5  
 Water Level Depth (WL in feet): 5.2

$$\frac{14.5}{(TD)} - \frac{5.2}{(DTW)} \times 0.17 \text{ g/linear ft} = 1.6 \text{ well vol.} \times 3 \text{ \# volumes} = 4.7 \text{ calculated purge}$$

**Purge Time**

Start 0900 Stop 0915 Elapsed 15 min.  
 Flow Rate (g/min): 0.3  
 Volume Purged (g): 5  
 Purging Method: Sub pump

5  
actual purge

**Field Parameter Measurements**

Time Elapsed (Min)	Temperature (°F)	pH	Conductivity* (umhos/cm)	Other (Sal)
1 - 5	69.3	6.87	2.89	1.5
2 - 10	67.2	7.49	3.05	3.5
3 - 15	66.4	7.53	3.10	5.0

\* Conductivity  
 X10 \_\_\_ X100 \_\_\_ X1000 X

Time Sampled: 0930  
 Number of Sample Containers: 2

Sample ID: MW-6  
 Preservation Method: ICE

Sampling Method  
 Bailer-Type: DISP.  
 Submersible Pump

Observations: (1) COLORLESS, CLEAR, NO PET ODOR  
(2) "  
(3) "