ENVIRONMENTAL PROFILES, INC.

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

Ro 465

MONITOR WELL ABANDONMENT

REPORT

Alameda County SEP 0 5 2003

Ameriflight, Inc.
Oakland Airport, Hanger 2
9171 Earhart Road
Oakland, California 94621
StID # 3977

Environmental Health

EPI Project File: 46591.well-abandon

Prepared For:

Mr. Mark Livingston AT Systems, Inc. 3280 E. Foothill Boulevard, Suite 290 Pasadena, CA 91107

Submitted To:

Mr. Barney Chan
Alameda County Health Care Services Agency
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502 - 6577

August 29, 2003

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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, Hangar 2, Oakland, California

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

Figure 1 - Area Map





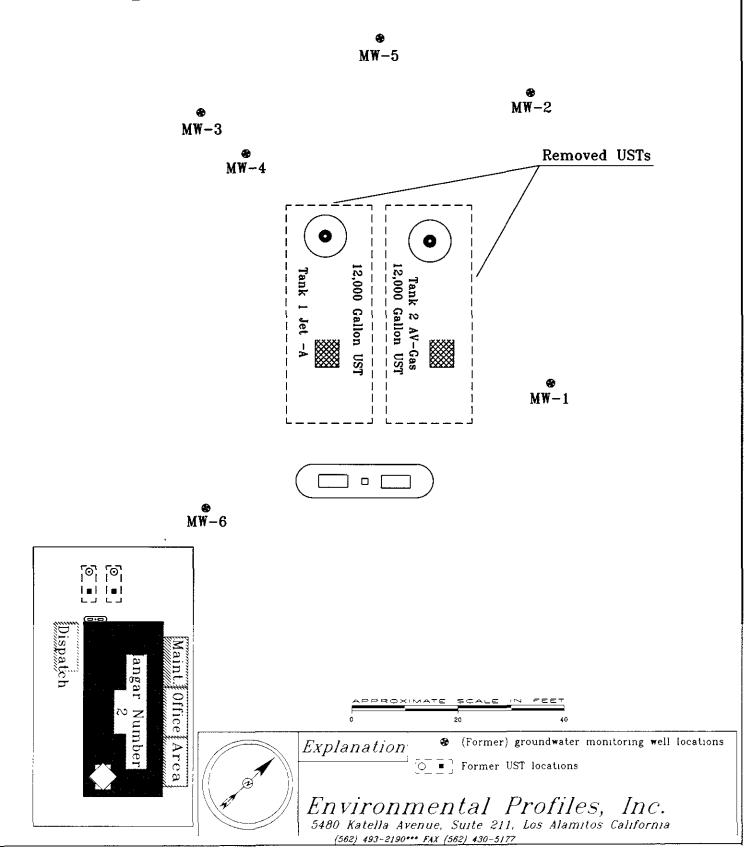
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Ameriflight Inc. Oakland 9171 Earhart Road, Hangar Number 2 Oakland, California 94621

Figure 2 - Site Diagram



1.0 INTRODUCTION

1.1 General

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Environmental Profiles, Inc. (EPI) submits this report documenting the abandonment of six (6) groundwater monitoring wells previously installed at the Ameriflight-Oakland (AMO) facility located at the Oakland Airport Hanger No. 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, prepared by Environmental Profiles, Inc.

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

2.2 Groundwater Monitoring

Following the installation of the groundwater monitor wells, EPI conducted three (3) consecutive groundwater monitoring events during the interval of January 8, 2000 and August 9, 2000.

Laboratory chemical analyses by EPA approved methods consistently demonstrated the absence of (to minimum laboratory detection limits) dissolved phase hydrocarbons, the monoaromatic constituents BTEX and the fuel additive MTBE in groundwater surrounding the former USTs.

3.0 WELL ABANDONMENT

3.1 General

Groundwater monitoring wells MW-1 through MW-6 were abandoned on February 23, 2001. All field activities associated with abandonment of the wells were performed in accordance with the Department of Water Resources, California Water Well Standards, Bulletin 74-90, Part III, Destruction of Monitor Wells, and the County of Alameda guidelines for well abandonment. Field activities were supervised by an EPI Geologist working under the direct supervision of an EPI California Registered Civil Engineer.

3.2 Request for Well Abandonment

Post their review of the above mentioned data, ACEHS issued a written directive for closure of each of the six (6) on-site groundwater monitoring wells as a prelude to Site closure. A copy of the Departments written directive is presented in Appendix A - Well Closure Directive.

Mr. Mark Livingston August 29, 2003 46591.well-abandon - Page 2

3.3 Well Destruction Permitting

Permitting to abandon each of the on-site groundwater monitor wells was accommodated by James Yoo of the Alameda County Public Works Agency. A copy of the original well installation permit and Department of Water Resources (DWR) form 188 is presented in Appendix B - Well Destruction Documentation.

3.4 Drillers

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On February 23, 2001 an EPI Geologist was on Site to supervise the destruction and removal of the groundwater monitor wells as depicted in Figure 2 - Site Diagram. EPI subcontracted Exploration Geoservices, Inc., San Jose, California in possession of California drillers licence C-57-484288 to perform all drilling and removal activities.

3.5 Well Destruction and Removal

A Mobile B-45 type drill rig equipped with 8-inch outside diameter hollow stem augers was utilized to destroy each well and seal. Each traffic ratted protective well box and surrounding concrete was removed from each well location prior to "over drilling" the well.

Following removal of the protective box, each wells annular seal was "over drilled" to a total depth of approximately sixteen (16) feet below grade surface (bgs) with the hollow stem augers as necessary to remove the grout and annular sand. The entire casing length (approximately 15 feet) was then extracted from the well boring.

Following well casing extraction, each of the well borings was slurried to approximately eight (8) inches from grade surface with ready mix rapid set concrete. The abandoned well borings were subsequently finished to grade surface with approximately eight (8) inches of asphalt cold patch to match existing top cover. The boring logs documenting the abandonment of each of the onsite groundwater monitoring wells is provided in Appendix C - Well Destruction Logs.

3.6 Debris Removal

All waste generated during well abandonment activities was stored on-site in 55-gallon, DOT approved 17h open top steel drums pending characterization and coordination for disposal. Each drum was ultimately trucked off-site on April 18, 2001 for disposal by Asbury Environmental Services. A copy of the Uniform Hazardous Waste Manifest attesting to the disposition of the waste is presented in Appendix D - Waste Disposal Manifest.

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4.0 CONCLUSION

The removal of each of the six (6) on-site groundwater monitoring wells concludes all post UST installation monitoring and Site work. As such, EPI requests the project Site be granted a "no further action" (NFA) status with Alameda County Health and the Regional Water Quality Control Board.

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

Prepared by:

No. 000050

Expires; COM

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PROPERTY OF CALIFORNIE

PR

Mark C. Bartee Senior Geologist, Registered Environmental Assessor 06950

cc: Mr. Dale Klettke
Port of Oakland
530 Water Street
Oakland, CA 94607

PROFESSIONAL PROFE

Matthew J. Walker Principal Engineer, California Civil Engineer 37369

Mr. James Yoo Alameda County PW Agency Water Resources Section 399 Elmhurst Street Hayward, CA 94544

APPENDIX A

Well Closure Directive

ALAMEDA COUNTY **HEALTH CARE SERVICES**

AGENCY



DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

November 15, 2000 StID # 3977

Ameriflight, Inc. c/o Mr. Tony Ortega

4700 Empire Ave., Hangar 1

Burbank, CA 91505

Port of Oakland Mr. Dale Klettke P.O. Box 2064

Oakland, CA 94607-2064

Re: Closure of Monitoring Wells at 9171 Earhart Rd., Oakland CA 94621

Dear Messrs. Ortega and Klettke:

Our office has received concurrence from the Regional Water Quality Control Board on our recommendation for site closure of the above referenced location. Prior to issuing the closure letter, our office requests the proper closure of the six (6) existing monitoring wells installed on this site.

You may contact Alameda County Public Works Water Resources Section at (510) 670-5554 for specific requirements of well closure.

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

Sincerely,

Barney M. Chan

Hazardous Materials Specialist

Banez ar Cha

C: B. Chan, files

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

wlclrq9171Earhart

APPENDIX B

Well Destruction Documentation



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
951 TURNER COURT, SUITE 301, HAYWARD, CA. M545-2651
PHONE (510) 676-5248 MARLON MAGALLANSES/CINDY HUTCHINSON
FAX (510) 676-5262

| DRILLING PA | ERMIT APPLICATION |
|---|--|
| FOR APPLICANT TO COMPLETE LOCATION OF PROJECT AMERICANT TO COMPLETE LOCATION OF PROJECT AMERICANT LOAD, USINGAR FI CAKLAND, CA GUAH CLIENT NAME EPI Address SYRC KARELLA AK, SIM Phone Sel 493-2190 City LES AMERICANS (See Zip 9072- APPLICANT NAME SAME AS MISONE City From Fas (Sec) 430-3177 Address Phone City Zip TYPE OF PROJECT Well Company Confinition U Water Supply Confinition U Monitoring Well Destruction C PROPOSED WATER SUPPLY WELL USE — NA | PERMIT NUMBER PERMIT CONDITIONS Circled Permit Requirements Apply APN PERMIT CONDITIONS Circled Permit Requirements Apply A GENDRAL 1. permit application should be submitted so as to survive at the ACPWA office live days prior to proposed starting date. 2. bubmit to ACPWA within 60 days after completion at permitted work the original Department of Water Actources Water Well Drillers Report or aquivalent for well projects, or drilling logs and location stretch for the original projects. 3. Permit is void if project not begun within 90 days of approval date. B. WATER SUPPLY WELLS 1. Minimum surface seal thickness is two inches of coment grout placed by tremic. 2. Minimum seal depth is 50 feet for municipal and industrial wells of 20 feet for domestic and irrigation wells unless a leaser depth is specially approved. |
| New Domestic G Replacement Domestic D Municipal U Irrigation U Jindustrial D Other D DRILLING METHOD: Mud Rotory D Air Ratary D Auger Cebic D Other U H.S. DRILLER'S LICENSE NO. (C-57) U847288 WELL PROJECTS Drill Hole Diameter 8/2 in. Maximum Casing Diameter 2 in. Dept. 16 n Suffers Seal Depth 5 n. Number 6 GEOTECHNICAL PROJECTS Number of Barings Maximum Hole Diameter in. Depth n. ESTIMATED STARTING DATE 12: 16:99 I hereby agree to comply with all requirements of this parmit and Alameda County Ordinance No 73-68 | C.GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS 1. Minimum surface seal thickness is two inches of coment grout placed by semic. 2. Minimum seal depth for manitoring wells is the maximum depth practicable or 20 feet. D. GEOTECHNICAL. Blackfill bare hole with compacted authings or beavy benumice and upper two feet with compacted material. In greas of known or suspected contamination, tramied coment grout shall be used in place of compacted authings. E. CATBODIC Fill hole above anode zone with concrete placed by tramic. F. WELL DESTRUCTION See attached. G. SPECIAL CONDITIONS APPROVED AP |
| SIGNATURE MONTH BITTO DATE 12.12.91 | |

TOTAL PAGE. 82 **

CONFIDENTIAL

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

REMOVED

APPENDIX C

Well Destruction Logs

| Monitoring Well No. MW-1 | | | | | | | | | |
|--|---|------------|-------------|--------|--------|-----|---------------------------------------|--|--|
| ROJECT: Ameriflight Inc. RILL RIG: Hollow Stem Auger NITIAL GW DEPTH: ~6 ft. | DATE: 2-23-01 LOGGED BY: M. Bartee HOLE DIA.: ~ 8.5 in. SAMPLER: na FINAL GW: na ft. HOLE ELEV.: na | | | | | | | | |
| DESCRIPTION | | USCS CLASS | GRAPHIC LOG | рертн | SAMPLE | PID | WELL CONSTRUCTION DETAIL | | |
| | | | | - 0 - | | | × | | |
| Entire well annular seal and sand drilled out Fifteen (15) feet of 2" diameter, Sch 40 PVC casing removed from boring | | | | - 10 - | | | X X X X X X X X X X X X X X X X X X X | | |
| EPI No. | tes | | | | | | Project 11: | | |
| Environmental Profiles, Inc Los Alamitos, California | | | | | | | Page 1 of | | |

| Monitor | ing | Wel | l No | . M | W- | 2 | |
|---|------|-------------------------------|--|---------------------|-------------|-----|---------------------------------------|
| PROJECT: Ameriflight Inc. DRILL RIG: Hollow Stem Auger INITIAL GW DEPTH: ~6 ft. | HO | TE: 2-2 LE DIA. NAL GW: | GED BY: M. Bartee PLER: na E ELEV.: na | | | | |
| DESCRIPTION | | USCS CLASS | GRAPHIC LOG | ОЕРТН | SAMPLE | PID | WELL CONSTRUCTION DETAIL |
| Traffic rated protective street box and surrounding concrete removed | | | | - 0 - | | | x x x x x x x x x x x x x x x x x x x |
| Entire well annular seal and sand drilled out | | | | - 5 - - 10 - | | | X X X X X X X X X X X X X X X X X X X |
| Fifteen (15) feet of 2" diameter, Sch. 40 PVC casing removed from boring. | | | | | | | * |
| | | | | 15 | | | X |
| EPI No. | tes: | <u> </u> | | | <u> </u> '_ | | Project No |
| Environmental Profiles, Inc Los Alamitos, California | | | | | | | Page 1 of C |

| Monitoring Well No. MW-3 | | | | | | | | | |
|---|-----------------|---|---|-----------------------|--------|-------|---------------------------------------|---|--|
| PROJECT: Ameriflight Inc. DRILL RIG: Hollow Stem Auger INITIAL GW DEPTH: ~6 ft. | | | | | | | | | |
| DESCRIPTION | | USCS CLASS | GRAPHIC LOG | ОЕРТН | SAMPLE | PID | WELL CONST DETA | RUCTION IL | |
| Traffic rated protective street box and surrounding concrete removed | | | | - 0 - | | | * | | |
| Entire well annular seal and sand drilled out | | | | - 10 - | | | ×_3 with | ing abandoned i neat cement to al depth | |
| Fifteen (15) feet of 2" diameter, Sch. 40 PVC casing removed from boring. | 7,421 | 1920 - 192 | - Park - | | | 77.00 | x x x x x x x x x x x x x x x x x x x | | |
| | | | | - 15 - - | | | X | | |
| EPI Environmental Profiles, Inc. Los Alamitos, California | <u>.</u> es. | | | | | | | Project No | |

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| Monitoring Well No. MW-4 | | | | | | | | | |
|--|-------------------------------|------------|-------------|--------|----------|-----|--|--|--|
| PROJECT: Ameriflight Inc. PRILL RIG: Hollow Stem Auger NITIAL GW DEPTH: ~6 ft. | HOLE DIA.: ~ 8.5 in. SAMPLER: | | | | | | GED BY: M. Bartee KPLER: na E ELEV.: na | | |
| DESCRIPTION | | USCS CLASS | GRAPHIC LOG | ОЕРТН | SAMPLE | PID | WELL CONSTRUCTION DETAIL | | |
| | | | | - 0 - | | | [x] | | |
| Traffic rated protective street box and surrounding concrete removed | | | | - 5 - | | | \(\delta \) \(\del | | |
| Entire well annular seal and sand drilled out | | | | - 10 | | | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | | |
| Fifteen (15) feet of 2" diameter, Sch. 40 PVC casing removed from boring. | 77.1 | | | | | | × ; | | |
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| EPI Not | es | | | | <u> </u> | | Project N | | |
| Environmental Profies, Inc Los Alamitos, California | | | | | | | Page 1 of | | |

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|---|-------|------------------------------|--|-------|--------|-----|---------------------------------------|
| PROJECT: Ameriflight Inc. DRILL RIG: Hollow Stem Auger INITIAL GW DEPTH: ~8 ft. | HOI | TE: 2-2 LE DIA NAL GW: | GED BY: M. Bartee PLER: na E ELEV.: na | | | | |
| DESCRIPTION | | USCS CLASS | GRAPHIC LOG | ОЕРТН | SAMPLE | PID | WELL CONSTRUCTION DETAIL |
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| Entire well annular seal and sand drilled out | | | | - 5 - | | | X X X X X X X X X X X X X X X X X X X |
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| EPI (1/2 | otes: | | | | | | Project No |
| Environmental Profiles, Inc Los Alamitos, California | | | | | | | Page Lof O |

Monitoring Well No. MW-6 PROJECT: Ameriflight Inc. DATE: 2-23-01 LOGGED BY: M. Bartee DRILL RIG: Hollow Stem Auger HOLE DIA.: ~ 8.5 in. SAMPLER: na INITIAL GW DEPTH: ~6 ft. FINAL GW: na ft. HOLE ELEV.: na CLASS GRAPHIC LOG SAMPLE WELL CONSTRUCTION DESCRIPTION DETAIL uscs (0 -Traffic rated protective street box and surrounding concrete removed 5 -Entire well annular seal and sand drilled out Boring abandoned with neat cement to total depth - 10 Fifteen (15) feet of 2" diameter, Sch. 40 PVC casing removed from boring. $\,$ 15 -Notes EPI Project No Environmental Profiles, Inc. Los Alamitos, Californa Page 1 of C

APPENDIX D

Waste Disposal Manifest

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| -806 | 7. Transporter 2 Company Name | D. Tromporter, Physics (310)688-3400 E. Soon Trop-point D (Instruct.) | | | | | | | | | | |
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| 3 | 16 GENERATOR'S CERTIFICATION: Thereby declare that marked, and labeled, and are in all respects in proper | the contents of this consignment are fully and ac condition for transport by highway according | curately describ to applicable i | bed above by | r proper shipping no and national gover | ome and are classified, packed, rement regulations. | | | | | | |
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| S S | producable and that I have selected the practicable me and the environment; OR, if I am a small quantity ger available to me and that I can afford. | If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be accommically procticable and that I have selected the practicable method of treatment, storage, or disposal currently available to the which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to reinimize my waste generation and select the best waste management method that is available to me and that I can efford. | | | | | | | | | | |
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