

AQUA TERRA, INC.
ENVIRONMENTAL CONSULTANTS

April 17, 1998

06915
1998

Ms. Luisa Simo
Broward County Department of
Natural Resource Protection
218 S.W. 1st Avenue
Fort Lauderdale, Florida 33301

**RE: PERMA-FIX OF FORT LAUDERDALE, INC
3670 S.W. 47TH AVENUE, DAVIE, FLORIDA
AT-1260**

Dear Ms. Simo:

In response to your letter of December 2, 1998 and our meeting of January 9, 1998, Aqua Terra, Inc. (Aqua Terra) has completed the following requirements:

1. Monitoring well ATMW-7 was removed from the subject property. The void created by the well removal was grouted from the bottom to the top. Additionally, monitoring well ATMW-13, located approximately two feet north of monitoring well ATMW-7, did not reveal the presence of free product.
2. Isopleth maps indicating free product, benzene, vinyl chloride, MTBE and lead were provided to you as part of a letter sent to your department dated February 16, 1998.
3. Groundwater elevation data and a groundwater flow map were provided to you as part of a letter sent to your department dated February 16, 1998.
4. Two (2) shallow monitoring wells were installed on the northern boundary of the Petroleum Management, Inc. (PMI) property. On March 26, 1998, groundwater samples were collected from these wells for analysis of EPA Method 601 and 602 constituents, total recoverable petroleum hydrocarbons (TRPH) by FL-PRO and total RCRA metals. With the exception of TRPH in monitoring well ATMW-15, no other compounds exceed the Groundwater Cleanup Target Levels For Resource Protection/Recovery per 62-770 F.A.C. The TRPH concentration in monitoring well ATMW-15 (5.1 mg/l) slightly exceeds the cleanup target level of 5.0 mg/l. A copy of a site plan depicting the monitoring well locations and a copy of the laboratory analytical reports are attached.

Perma-Fix of Fort Lauderdale, Inc.
3670 S.W. 47th Avenue, Davie, Florida


Based on the analytical results of the two newly installed monitoring wells at the PMI property, Aqua Terra and Perma-Fix see no point in continuing to monitor the groundwater at PMI. We request permission to either remove these wells or properly abandon them. A date for removal/abandonment can be discussed at a future date.

Additionally, since no free product exists at the Perma-Fix facility and the dissolved concentrations do not appear to be severe, Aqua Terra requests that a "Monitoring Only Plan" be granted for the Perma-Fix facility. Should this request be approved, the wells to be sampled and the analysis to be performed can be discussed at a future date.

Should you have any questions or require additional information, please do not hesitate to call me at (954) 433-8804.

Sincerely,

AQUA TERRA, INC.

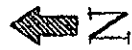


Richard K. Meyers
Sr. Project Scientist

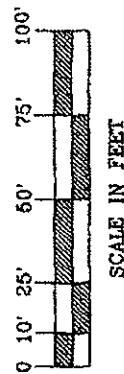
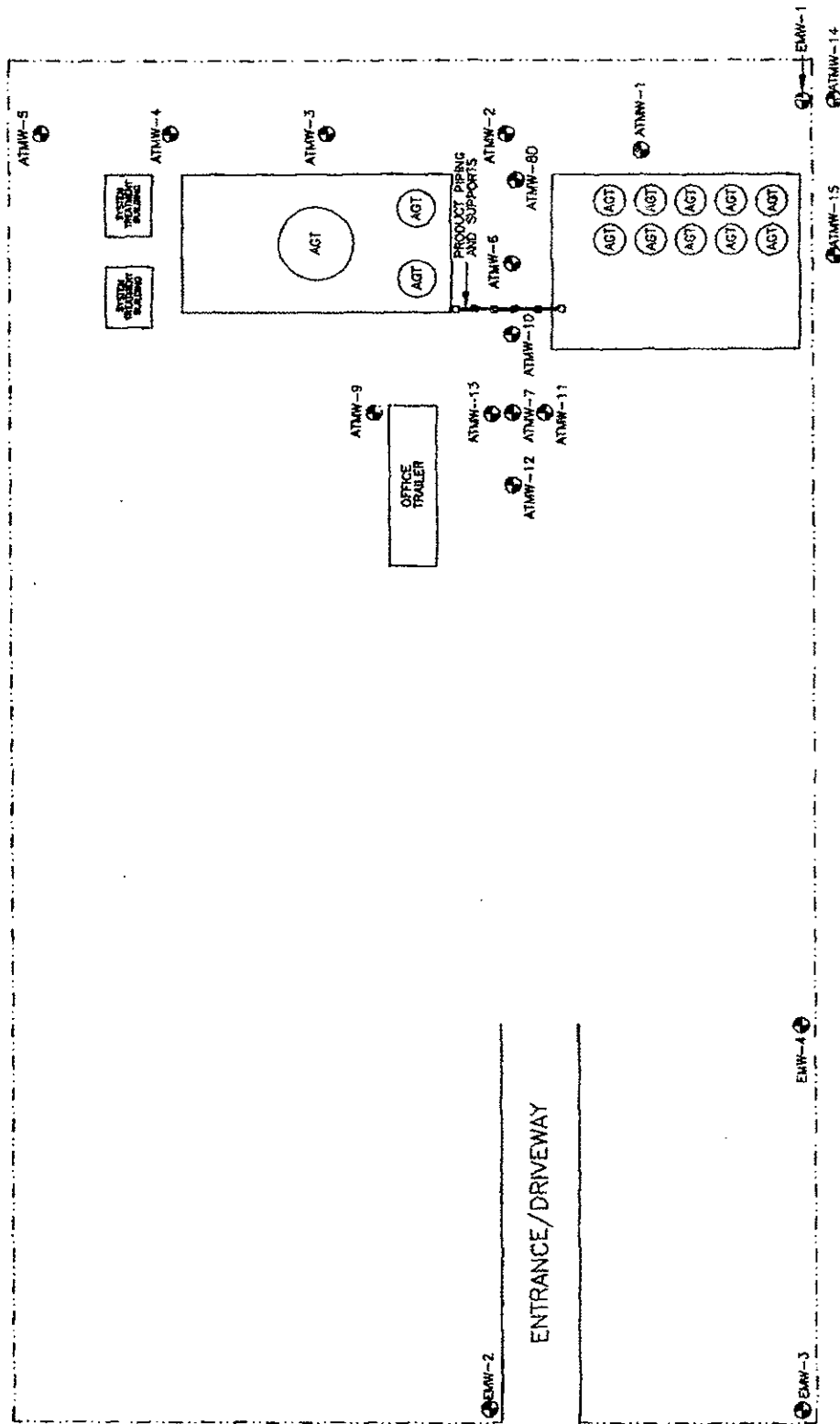
cc: Chris Blanton, Perma-Fix
Tom Trebonik, Mintech

AQUA TERRA, INC.
AT-1260

OAKES ROAD (S.W. 36TH STREET)



S.W. 47TH AVENUE



LEGEND:

● - MONITORING WELL LOCATIONS

FIGURE: SITE PLAN

DRAWN BY: RKM

PROJECT NAME: PERMA-FIX OF FORT LAUDERDALE, INC.

4/17/98

ADDRESS: 3670 S.W. 47TH AVENUE, DAVIE, FLORIDA

PROJ. #: AT-1260

AQUA TERRA, INC.
ENVIRONMENTAL CONSULTANTS

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

414 SW 12th Avenue • Deerfield Beach, Florida 33442 • (954) 421-7400 • Fax (954) 421-2584

OFFICE OF NATURAL
RESOURCES PROTECTION
30 APR 21 AM 9:05

LOG NO: D894065
Received: 26 MAR 98
Reported: 06 APR 98

Mr. Richard Meyers
Aqua Terra, Inc.
3250 Corporate Way
Miramar, FL 33025

Project: #AT-1260 (Perma-Fix/PMI)
Sampled By: R. Meyers
Code: 15118046
Page 1

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED		
40655-1	ATMW-14	03-26-98/1230		
40655-2	ATMW-15	03-26-98/1339		
40655-3	Equipment Blank	03-26-98/1200		
PARAMETER		40655-1	40655-2	40655-3
Purgeables (601/602)				
Bromodichloromethane, ug/l		<1.0	<1.0	<1.0
Bromoform, ug/l		<1.0	<1.0	<1.0
Bromomethane, ug/l		<1.0	<1.0	<1.0
Carbon Tetrachloride, ug/l		<1.0	<1.0	<1.0
Chlorobenzene, ug/l		<1.0	<1.0	<1.0
Chloroethane, ug/l		<1.0	<1.0	<1.0
2-Chloroethylvinyl Ether, ug/l		<10	<10	<10
Chloroform, ug/l		<1.0	<1.0	<1.0
Chloromethane, ug/l		<1.0	<1.0	<1.0
Dibromochloromethane, ug/l		<1.0	<1.0	<1.0
1,2-Dichlorobenzene, ug/l		<1.0	<1.0	<1.0
1,3-Dichlorobenzene, ug/l		<1.0	<1.0	<1.0
1,4-Dichlorobenzene, ug/l		<1.0	<1.0	<1.0
Dichlorodifluoromethane, ug/l		<1.0	<1.0	<1.0
1,1-Dichloroethane, ug/l		<1.0	<1.0	<1.0
1,2-Dichloroethane, ug/l		<1.0	<1.0	<1.0
1,1-Dichloroethene, ug/l		<1.0	<1.0	<1.0
cis-1,2-Dichloroethylene, ug/l		<1.0	<1.0	<1.0
trans-1,2-Dichloroethylene, ug/l		<1.0	<1.0	<1.0
1,2-Dichloropropane, ug/l		<1.0	<1.0	<1.0
cis-1,3-Dichloropropene, ug/l		<1.0	<1.0	<1.0
trans-1,3-Dichloropropene, ug/l		<1.0	<1.0	<1.0
Methylene Chloride, ug/l		<5.0	<5.0	<5.0

Laboratories in Savannah, GA • Tallahassee, FL • Tampa, FL • Deerfield Beach, FL • Mobile, AL

SL SAVANNAH LABORATORIES
& ENVIRONMENTAL SERVICES, INC.

414 SW 12th Avenue • Deerfield Beach, Florida 33442 • (954) 421-7400 • Fax (954) 421-2584

LOG NO: D8-40655
Received: 26 MAR 98
Reported: 06 APR 98Mr. Richard Meyers
Aqua Terra, Inc.
3250 Corporate Way
Miramar, FL 33025Project: #AT-1260 (Perma-Fix/PMI)
Sampled By: R. Meyers
Code: 15118046
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REPORT OF RESULTS

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40655-2	ATMW-15	03-26-98/1339	
40655-3	Equipment Blank	03-26-98/1200	
PARAMETER	40655-1	40655-2	40655-3
1,1,2,2-Tetrachloroethane, ug/l	<1.0	<1.0	<1.0
Tetrachloroethene, ug/l	<1.0	<1.0	<1.0
1,1,1-Trichloroethane, ug/l	<1.0	<1.0	<1.0
1,1,2-Trichloroethane, ug/l	<1.0	<1.0	<1.0
Trichloroethene, ug/l	<1.0	<1.0	<1.0
Trichlorofluoromethane, ug/l	<1.0	<1.0	<1.0
Vinyl chloride, ug/l	<1.0	<1.0	<1.0
Benzene, ug/l	<1.0	<1.0	<1.0
Ethylbenzene, ug/l	<1.0	<1.0	<1.0
Toluene, ug/l	<1.0	<1.0	<1.0
Xylenes, ug/l	<2.0	<2.0	<2.0
Methyl-tert-butyl ether (MTBE), ug/l	<10	<10	<10
Date Analyzed	03.31.98	03.31.98	03.31.98
Petroleum Hydrocarbons by GC (FL PRO)			
Petroleum Hydrocarbons (FL PRO), mg/l	<0.30	5.1	<0.30
Date Extracted	03.26.98	03.26.98	03.26.98
Date Analyzed	03.30.98	03.30.98	03.30.98
Arsenic (7060)			
Arsenic, mg/l	<0.010	<0.010	<0.010
Date Analyzed	04.03.98	04.03.98	04.03.98
Barium (6010)			
Barium, mg/l	0.046	0.12	<0.010
Date Analyzed	04.02.98	04.02.98	04.02.98
Cadmium (6010)			
Cadmium, mg/l	<0.0050	<0.0050	<0.0050
Date Analyzed	04.02.98	04.02.98	04.02.98

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40655-1	ATMW-14	03-26-98/1230		
40655-2	ATMW-15	03-26-98/1339		
40655-3	Equipment Blank	03-26-98/1200		
PARAMETER		40655-1	40655-2	40655-3
Chromium (6010)				
Chromium, mg/l		<0.010	<0.010	<0.010
Date Analyzed		04.02.98	04.02.98	04.02.98
Lead (7421)				
Lead, mg/l		<0.0050	<0.0050	<0.0050
Date Analyzed		03.31.98	03.31.98	03.31.98
Mercury (7470)				
Mercury, mg/l		<0.00020	<0.00020	<0.00020
Date Analyzed		04.01.98	04.01.98	04.01.98
Selenium (7740)				
Selenium, mg/l		<0.0050	<0.010*F65	<0.0050
Date Analyzed		03.31.98	03.31.98	03.31.98
Silver (6010)				
Silver, mg/l		<0.010	<0.010	<0.010
Date Analyzed		04.02.98	04.02.98	04.02.98

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED		
40655-4	Method Blank			
40655-5	Accuracy (%Rec)			
40655-6	Precision (%RPD)			
40655-7	Reporting Limit (RL)			
PARAMETER	40655-4	40655-5	40655-6	40655-7
Purgeables (601/602)				
Bromodichloromethane, ug/l	<1.0	---	---	1.0
Bromoform, ug/l	<1.0	---	---	1.0
Bromomethane, ug/l	<1.0	---	---	1.0
Carbon Tetrachloride, ug/l	<1.0	---	---	1.0
Chlorobenzene, ug/l	<1.0	92 %	3.3 %	1.0
Chloroethane, ug/l	<1.0	---	---	1.0
2-Chloroethylvinyl Ether, ug/l	<1.0	---	---	1.0
Chloroform, ug/l	<1.0	---	---	1.0
Chloromethane, ug/l	<1.0	---	---	1.0
Dibromochloromethane, ug/l	<1.0	---	---	1.0
1,2-Dichlorobenzene, ug/l	<1.0	---	---	1.0
1,3-Dichlorobenzene, ug/l	<1.0	---	---	1.0
1,4-Dichlorobenzene, ug/l	<1.0	---	---	1.0
Dichlorodifluoromethane, ug/l	<1.0	---	---	1.0
1,1-Dichloroethane, ug/l	<1.0	---	---	1.0
1,2-Dichloroethane, ug/l	<1.0	---	---	1.0
1,1-Dichloroethene, ug/l	<1.0	---	---	1.0
cis-1,2-Dichloroethylene, ug/l	<1.0	96 %	5.2 %	1.0
trans-1,2-Dichloroethylene, ug/l	<1.0	---	---	1.0
1,2-Dichloropropane, ug/l	<1.0	---	---	1.0
cis-1,3-Dichloropropene, ug/l	<1.0	---	---	1.0
trans-1,3-Dichloropropene, ug/l	<1.0	---	---	1.0

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LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED		
40655-4	Method Blank			
40655-5	Accuracy (%Rec)			
40655-6	Precision (%RPD)			
40655-7	Reporting Limit (RL)			
PARAMETER	40655-4	40655-5	40655-6	40655-7
Methylene Chloride, ug/l	<5.0	---	---	5.0
1,1,2,2-Tetrachloroethane, ug/l	<1.0	---	---	1.0
Tetrachloroethene, ug/l	<1.0	---	---	1.0
1,1,1-Trichloroethane, ug/l	<1.0	---	---	1.0
1,1,2-Trichloroethane, ug/l	<1.0	---	---	1.0
Trichloroethene, ug/l	<1.0	106 %	3.8 %	1.0
Trichlorofluoromethane, ug/l	<1.0	---	---	1.0
Vinyl chloride, ug/l	<1.0	---	---	1.0
Benzene, ug/l	<1.0	88 %	4.5 %	1.0
Ethylbenzene, ug/l	<1.0	---	---	1.0
Toluene, ug/l	<1.0	91 %	4.4 %	1.0
Xylenes, ug/l	<2.0	---	---	2.0
Methyl-tert-butyl ether (MTBE), ug/l	<10	---	---	10
Date Analyzed	03.31.98	---	---	---
Petroleum Hydrocarbons by GC (FL PRO)				
Petroleum Hydrocarbons (FL PRO), mg/l	<0.30	101 %	5.9 %	0.30
Date Extracted	03.26.98	---	---	---
Date Analyzed	03.30.98	---	---	---
Arsenic (7060)				
Arsenic, mg/l	<0.010	102 %	11 %	0.010
Date Analyzed	04.03.98	---	---	---
Barium (6010)				
Barium, mg/l	<0.010	118 %	0.84 %	0.010
Date Analyzed	04.02.98	---	---	---

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Page 6

REPORT OF RESULTS

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40655-4	Method Blank			
40655-5	Accuracy (%Rec)			
40655-6	Precision (%RPD)			
40655-7	Reporting Limit (RL)			
PARAMETER	40655-4	40655-5	40655-6	40655-7
Cadmium (6010)				
Cadmium, mg/l	<0.0050	94 %	9.6 %	0.0050
Date Analyzed	04.02.98	---	---	---
Chromium (6010)				
Chromium, mg/l	<0.010	94 %	1.1 %	0.010
Date Analyzed	04.02.98	---	---	---
Lead (7421)				
Lead, mg/l	<0.0050	86 %	3.5 %	0.0050
Date Analyzed	03.31.98	---	---	---
Mercury (7470)				
Mercury, mg/l	<0.00020	112 %	0 %	0.00020
Date Analyzed	04.01.98	---	---	---
Selenium (7740)				
Selenium, mg/l	<0.0050	80 %	5.0 %	0.0050
Date Analyzed	03.31.98	---	---	---
Silver (6010)				
Silver, mg/l	<0.010	88 %	1.1 %	0.010
Date Analyzed	04.02.98	---	---	---

Comprehensive Quality Assurance Plan #890142G.

SL Certifications: E86221/86371

Method References: EPA 40 CFR Part 136, EPA SW-846 and Florida Method for Petroleum Range Organics.



Marino Fernandez, Project Manager

Final Page Of Report

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SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Phone: (912) 354-7858 Fax: (912) 352-0165
Phone: (904) 878-3894 Fax: (904) 878-8504
Phone: (305) 421-7400 Fax: (305) 421-2584
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- ☐ 8102 La Roche Avenue, Savannah, GA 31404
☐ 2846 Industrial Plaza Drive, Tallahassee, FL 32301
☐ 414 SW 12th Avenue, Deerfield Beach, FL 33442
☐ 900 Lakeside Drive, Mobile, AL 36683
☐ 6712 Benjamin Road, Suite 100, Tampa, FL 33634
☐ 100 Alpha Drive, Suite 110, Destrehan, LA 70047

PROJECT REFERENCE		PROJECT NO.	P.O. NUMBER	REQUIRED ANALYSES		PAGE 1 OF 1
Perma-Fix/PMI		AT-1260				
PROJECT LOC. (State)	SAMPLER(S) NAME	PHONE	954-433-8804			
FL	Richard Meyers	FAX	954-433-8913			
CLIENT NAME		CLIENT PROJECT MANAGER				
Aqua Terra, Inc.		Richard Meyers				
CLIENT ADDRESS (CITY, STATE, ZIP)						
3250 Corporate Way, Miramar, FL 33025						
SAMPLE	SL NO.	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS SUBMITTED		REMARKS	
DATE	TIME					
3/26	12:30	ATMW-14	X	X		
3/26	13:30	ATMW-15	X	X		
3/26	12:00	Equipment Blank	X	X		
NON-AQUEOUS LIQUID (FOR SOLVENTS ONLY)						
AQUEOUS (WATER)						
SOLID OR SEMISOLID						
AIR						
MATRIX TYPE						
601/602						
FL-PRO						
8 Rocka Mech						
HCL HCL/HMS						
STANDARD REPORT DELIVERY <input checked="" type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge) <input type="checkbox"/>						
Date Due						
RECEIVED BY: (SIGNATURE) DATE TIME						
J. A. Cote 3/26/98 15:40						
RECEIVED BY: (SIGNATURE) DATE TIME						
Richard K. Meyers 3/26/98 15:40						
RECEIVED BY: (SIGNATURE) DATE TIME						
J. A. Cote 3/26/98 15:40						
LABORATORY USE ONLY						
RECEIVED BY: (SIGNATURE)		DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SI LOG NO.
J. A. Cote		3/26/98	1630	<input type="checkbox"/> YES <input type="checkbox"/> NO		D840655
LABORATORY REMARKS:						

ORIGINAL