1350 Blair Drive • Suite A • Odenton, Maryland 21113 • (800) 220-3606 • FAX (410) 721-3733

March 28, 2014

Helene Davis 3914 Madonna Rd Jarrettsville, MD 21084

Re:

Water Filtration System Sampling Information 3914 Madonna Rd, Jarrettsville, MD 21084

Dear Ms. Davis:

Groundwater & Environmental Services, Inc. (GES), on behalf of High's of Baltimore, would like to thank you for your cooperation in allowing us to conduct sampling of your water filtration system on March 4, 2014. The sampling was conducted to evaluate the effectiveness of the granular activated carbon (GAC) filtration system that was installed to treat the water coming into your home.

To help better understand the results, the following information is supplied:

- <u>Pre-carbon filtration</u> water sample of the first, untreated water coming directly into your home; referred to as influent and denoted as "INF" on the laboratory report.
- Mid-carbon filtration water sample collected between the carbon vessels, on the two-train carbon system that was installed; referred to as mid-fluent and denoted as "MID" on the laboratory report.
- <u>Post-carbon filtration</u> water sample of the finished treated water; referred to as effluent and denoted as "EFF" on the laboratory report.

Water samples were collected pre-, mid- and post-carbon filtration and were tested in accordance to USEPA standards for the presence of several petroleum related compounds, including methyl tertiary butyl ether (MTBE). The results from the most recent sampling event demonstrate a detection of MTBE in the influent water of your GAC system at a concentration of 30.0 micrograms per liter (μ g/L). For reference, the Maryland Department of the Environment (MDE) action level for MTBE is 20 μ g/L. There were **no** petroleum-related compounds, including MTBE, detected in the mid-fluent or effluent water sample from the March 4, 2014 sampling event. A copy of the laboratory analysis report is attached to this correspondence.

The tests conducted on your drinking water well are part of an ongoing groundwater investigation being conducted in cooperation with the MDE and the Harford County Health Department (HCHD). Therefore we would like to continue sampling the water from your drinking water well on a periodic basis while the groundwater investigation is being conducted. We will notify you in advance of the next scheduled sampling event.

If you have any questions concerning this sampling event, please feel free to contact me at 800-220-3606, Ext. 3717. You may also contact Ms. Jeannette DeBartolomeo of the MDE at 410-537-3427.

Sincerely,

GROUNDWATER & ENVIRONMENTAL SERVICES, INC.

y- Neithers

Gregory Reichart Project Manager

Attachment



c: Jeannette DeBartolomeo, MDE Susan Bull, MDE Peter Smith, HCHD Herb Meade, CIFC Todd Passmore, Apex PSID # 474622



89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



www.fairwaylaboratories.com

State Certifications: MD 275, WV 364

GES Maryland

1350 Blair Drive, Suite A

Odenton MD, 21113

Project Manager:

Greg Reichart

Project:

CF MADONNA

Project Number:

04-02814-06-209

Reported:

Collector: JP 03/14/14 13:16

Number of Containers:

10

Client Sample ID: 3914-MADONNA-EFF-20140304

Date/Time Sampled: 03/04/14 09:40

Laboratory Sample ID:

4C05104-02 (Water/Grab)

		ſ			Date / Time		*	
Analyte	Result	MDL	RL	Units	Analyzed	Method	Analyst	Note
Purgeable Organic Compounds	by EPA Method 524.	2						
Ethyl tert-butyl ether	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
Tert-amyl methyl ether	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
tert- amyl alcohol	<2.50		2.50	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
tert- amyl ethyl ether	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
Tert-butyl alcohol	<2.50		2.50	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
Diisopropylether (DIPE)	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
Benzene	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
Carbon tetrachloride	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
Chlorobenzene	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
Naphthalene	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
1,2-Dichlorobenzene	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
,3-Dichlorobenzene	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
,2-Dichloroethane	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
,1-Dichloroethene	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
is-1,2-Dichloroethene	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
ans-1,2-Dichloroethene	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
,2-Dichloropropane	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
thylbenzene	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U

Fairway Laboratories, Inc.

Fairway Labs in Altoona, PA is a NELAP (National Environmental Laboratory Accreditation Program) accredited lab, and as such, certifies that all applicable test results meet the requirements of NELAP, unless otherwise stated on the analytical report.



Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684

89 Kristi Road

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FAIRWAY LABORATORIES

GES Maryland

1350 Blair Drive, Suite A

Odenton MD, 21113

Project Manager:

Greg Reichart

Project:

CF MADONNA

Project Number:

04-02814-06-209

Reported:

Collector:

ЛР

03/14/14 13:16

Number of Containers:

10

Client Sample ID: 3914-MADONNA-EFF-20140304

Date/Time Sampled: 03/04/14 09:40

Laboratory Sample ID:

4C05104-02 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Purgeable Organic Compounds by E	PA Method 524.2							
Methylene chloride	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
Methyl tert-butyl ether	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
Styrene	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
Tetrachloroethene	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
Toluene	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
1,2,4-Trichlorobenzene	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
1,1,2-Trichloroethane	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
1,1,1-Trichloroethane	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
Trichloroethene	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
Vinyl chloride	< 0.500		0.500	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
Xylenes (total)	<1.00		1.00	ug/l	03/06/14 22:30	EPA 524.2/4.1	wlm	U
Surrogate: 4-Bromofluorobenzene	86.0	5 %	70-1	30	03/06/14 22:30	EPA 524.2/4.1	wlm	
Surrogate: 1,2-Dichlorobenzene-d4	85.6	5 %	70-1	30	03/06/14 22:30	EPA 524.2/4.1	wlm	

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State Certifications: MD 275, WV 364

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GES Maryland

1350 Blair Drive, Suite A

Odenton MD, 21113

Project Manager:

Greg Reichart

Project:

CF MADONNA

Project Number:

04-02814-06-209

Reported:

Collector:

JP

03/14/14 13:16

Number of Containers: 10

Client Sample ID: 3914-MADONNA-MID-20140304

Date/Time Sampled: 03/04/14 09:43

Laboratory Sample ID:

4C05104-03 (Water/Grab)

					Date / Time		*	
Analyte	Result	MDL	RL	Units	Analyzed	Method	Analyst	Note
Purgeable Organic Compounds	by EPA Method 524.	2						
Ethyl tert-butyl ether	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
Tert-amyl methyl ether	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
tert- amyl alcohol	<2.50		2.50	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
tert- amyl ethyl ether	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
Tert-butyl alcohol	<2.50		2.50	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
Diisopropylether (DIPE)	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
Benzene	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
Carbon tetrachloride	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
Chlorobenzene	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
Naphthalene	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
1,2-Dichlorobenzene	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
1,3-Dichlorobenzene	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
1,2-Dichloroethane	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
1,1-Dichloroethene	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
cis-1,2-Dichloroethene	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
trans-1,2-Dichloroethene	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
1,2-Dichloropropane	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
Ethylbenzene	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U

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2019 Ninth Avenue PO Box 1925 Altoona, PA 16603 (814) 946-4306

NELAP: PA 07-062, VA 460212

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State Certifications: MD 275, WV 364

GES Maryland

1350 Blair Drive, Suite A

Odenton MD, 21113

Project Manager:

Greg Reichart

Project:

CF MADONNA

Project Number:

04-02814-06-209

Reported:

Collector:

JP

03/14/14 13:16

Number of Containers:

10

Client Sample ID: 3914-MADONNA-MID-20140304

Date/Time Sampled: 03/04/14 09:43

Laboratory Sample ID:

4C05104-03 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Purgeable Organic Compounds by E	CPA Method 524.2							
Methylene chloride	<0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
Methyl tert-butyl ether	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
Styrene	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
Tetrachloroethene	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
Toluene	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
1,2,4-Trichlorobenzene	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
1,1,2-Trichloroethane	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
1,1,1-Trichloroethane	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
Trichloroethene	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
Vinyl chloride	< 0.500		0.500	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
Xylenes (total)	<1.00		1.00	ug/l	03/06/14 22:58	EPA 524.2/4.1	wlm	U
Surrogate: 4-Bromofluorobenzene	85	.0 %	70-1	30	03/06/14 22:58	EPA 524.2/4.1	wlm	
Surrogate: 1,2-Dichlorobenzene-d4	84	.8%	70-1	30	03/06/14 22:58	EPA 524.2/4.1	wlm	

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89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

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GES Maryland

Project:

CF MADONNA

1350 Blair Drive, Suite A

Project Number:

04-02814-06-209

Reported:

Odenton MD, 21113

Collector:

JP

03/14/14 13:16

Project Manager:

Greg Reichart

Number of Containers: 10

Client Sample ID: 3914-MADONNA-INF-20140304

Date/Time Sampled: 03/04/14 09:46

Laboratory Sample ID:

4C05104-04 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Purgeable Organic Compounds	by EPA Method 524.	2						
Ethyl tert-butyl ether	< 0.500		0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U
Tert-amyl methyl ether	< 0.500		0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U
tert- amyl alcohol	<2.50		2.50	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U
tert- amyl ethyl ether	< 0.500		0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U
Tert-butyl alcohol	<2.50		2.50	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U
Diisopropylether (DIPE)	< 0.500		0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U
Benzene	< 0.500		0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U
Carbon tetrachloride	< 0.500		0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U
Chlorobenzene	< 0.500		0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U
Naphthalene	< 0.500		0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U
1,2-Dichlorobenzene	< 0.500		0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U
1,3-Dichlorobenzene	< 0.500		0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U
1,2-Dichloroethane	< 0.500		0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U
1.1-Dichloroethene	< 0.500		0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U
eis-1,2-Dichloroethene	< 0.500		0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U
rans-1,2-Dichloroethene	< 0.500		0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U
,2-Dichloropropane	< 0.500		0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U
Ethylbenzene	< 0.500		0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U

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GES Maryland

1350 Blair Drive, Suite A

Odenton MD, 21113

Project Manager:

Greg Reichart

Project:

CF MADONNA

Project Number:

04-02814-06-209

Reported:

Collector:

JP 10 03/14/14 13:16

Number of Containers:

Client Sample ID: 3914-MADONNA-INF-20140304

Date/Time Sampled: 03/04/14 09:46

Laboratory Sample ID:

4C05104-04 (Water/Grab)

Analyte	Result M.	DL RL	Units	Date / Time Analyzed	Method	* Analyst	Note	
Purgeable Organic Compounds by	EPA Method 524.2							
Methylene chloride	<0.500	0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U	
Methyl tert-butyl ether	30.0	0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm		
Styrene	< 0.500	0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U	
Tetrachloroethene	< 0.500	0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U	
Toluene	< 0.500	0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U	
1,2,4-Trichlorobenzene	< 0.500	0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U	
1,1,2-Trichloroethane	< 0.500	0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U	
1,1,1-Trichloroethane	< 0.500	0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U	
Trichloroethene	< 0.500	0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U	
Vinyl chloride	< 0.500	0.500	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U	
Xylenes (total)	<1.00	1.00	ug/l	03/06/14 23:55	EPA 524.2/4.1	wlm	U	
Surrogate: 4-Bromofluorobenzene	82.9 %	6 70-	130	03/06/14 23:55	EPA 524.2/4.1	wlm		
Surrogate: 1,2-Dichlorobenzene-d4	84.5 %	6 70-	130	03/06/14 23:55	EPA 524.2/4.1	wlm		

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GES Maryland

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Project Manager:

Greg Reichart

Project:

CF MADONNA

Project Number:

04-02814-06-209

Reported:

Collector:

JP

03/14/14 13:16

Number of Containers:

10

Notes

U

Analyte included in the analysis, but not detected

Definitions

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory.

MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

P indicates analysis performed by Fairway Laboratories, Inc. at the Pennsdale location. This location is PaDEP Chapter 252 certified.

Represents "less than" - indicates that the result was less than the reporting limit.

Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any MDL

reported result values that are less than the RL are considered estimated values.

RLReporting Limit - is the lowest or minimum level at which the analyte can be quantified.

Indicates a calculated result. Calculations use results from other analyses performed under accredited methods. [CALC]

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