



**Groundwater
& Environmental Services, Inc.**

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

November 19, 2018

Robert Goldstein
3921 Greenpeak Rd
Jarrettsville, MD 21084

Re: Water Filtration System Sampling Information
3921 Greenpeak Rd, Jarrettsville, MD 21084

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 October 25, 2018. 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:

- **Pre-carbon filtration** – 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.
- **Post-carbon filtration** – 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 1.8 micrograms per liter ($\mu\text{g/L}$). For reference, the Maryland Department of the Environment (MDE) action level for MTBE is 20 $\mu\text{g/L}$. There were no petroleum-related compounds, including MTBE, detected in the mid-fluent or effluent water sample from this 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. 3726. You may also contact Susan Bull of the MDE at 410-537-3499.

Sincerely,
GROUNDWATER & ENVIRONMENTAL SERVICES, INC.

Peter Reichardt
Project Hydrogeologist

Attachment

c: Susan Bull, MDE (3 copies & CD)
Peter Smith, HCHD
Herb Meade, CIFIC (e-copy)
Todd Passmore, Apex

Sample Description: 3921 Greenpeak-EFF Grab Potable Water
4101 Norrisville Rd, Jarrettsville, MD
Carroll Madonna - High's #130

GES, Inc.
ELLE Sample #: PW 9871763
ELLE Group #: 2003049
Matrix: Potable Water

Project Name: Carroll Madonna - High's #130

Submittal Date/Time: 10/26/2018 15:40
Collection Date/Time: 10/25/2018 09:10

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles		EPA 524.2	ug/l	ug/l	
03648	t-Amyl Methyl Ether	994-05-8	N.D.	0.1	1
03648	Benzene	71-43-2	N.D.	0.1	1
03648	t-Butyl Alcohol	75-65-0	N.D.	2.5	1
03648	Carbon Tetrachloride	56-23-5	N.D.	0.1	1
03648	Chlorobenzene	108-90-7	N.D.	0.1	1
03648	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	1
03648	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	1
03648	1,2-Dichloroethane	107-06-2	N.D.	0.1	1
03648	1,1-Dichloroethene	75-35-4	N.D.	0.1	1
03648	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	1
03648	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	1
03648	1,2-Dichloropropane	78-87-5	N.D.	0.1	1
03648	Ethyl t-Butyl Ether	637-92-3	N.D.	0.1	1
03648	Ethylbenzene	100-41-4	N.D.	0.1	1
03648	di-Isopropyl Ether	108-20-3	N.D.	0.1	1
03648	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	1
03648	Methylene Chloride	75-09-2	N.D.	0.3	1
03648	Naphthalene	91-20-3	N.D.	0.2	1
03648	Styrene	100-42-5	N.D.	0.1	1
03648	Tetrachloroethene	127-18-4	N.D.	0.1	1
03648	Toluene	108-88-3	N.D.	0.1	1
03648	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.2	1
03648	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	1
03648	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	1
03648	Trichloroethene	79-01-6	N.D.	0.1	1
03648	Vinyl Chloride	75-01-4	N.D.	0.1	1
03648	Xylene (Total)	1330-20-7	N.D.	0.1	1

Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S183091AA	11/05/2018 20:18	Don V Viray	1

Sample Description: 3921 Greenpeak-MID Grab Potable Water
4101 Norrisville Rd, Jarrettsville, MD
Carroll Madonna - High's #130

GES, Inc.
ELLE Sample #: PW 9871764
ELLE Group #: 2003049
Matrix: Potable Water

Project Name: Carroll Madonna - High's #130

Submittal Date/Time: 10/26/2018 15:40
Collection Date/Time: 10/25/2018 09:15

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles		EPA 524.2	ug/l	ug/l	
03648	t-Amyl Methyl Ether	994-05-8	N.D.	0.1	1
03648	Benzene	71-43-2	N.D.	0.1	1
03648	t-Butyl Alcohol	75-65-0	N.D.	2.5	1
03648	Carbon Tetrachloride	56-23-5	N.D.	0.1	1
03648	Chlorobenzene	108-90-7	N.D.	0.1	1
03648	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	1
03648	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	1
03648	1,2-Dichloroethane	107-06-2	N.D.	0.1	1
03648	1,1-Dichloroethene	75-35-4	N.D.	0.1	1
03648	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	1
03648	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	1
03648	1,2-Dichloropropane	78-87-5	N.D.	0.1	1
03648	Ethyl t-Butyl Ether	637-92-3	N.D.	0.1	1
03648	Ethylbenzene	100-41-4	N.D.	0.1	1
03648	di-Isopropyl Ether	108-20-3	N.D.	0.1	1
03648	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	1
03648	Methylene Chloride	75-09-2	N.D.	0.3	1
03648	Naphthalene	91-20-3	N.D.	0.2	1
03648	Styrene	100-42-5	N.D.	0.1	1
03648	Tetrachloroethene	127-18-4	N.D.	0.1	1
03648	Toluene	108-88-3	N.D.	0.1	1
03648	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.2	1
03648	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	1
03648	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	1
03648	Trichloroethene	79-01-6	N.D.	0.1	1
03648	Vinyl Chloride	75-01-4	N.D.	0.1	1
03648	Xylene (Total)	1330-20-7	N.D.	0.1	1

Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S183091AA	11/05/2018 20:46	Don V Viray	1

Sample Description: 3921 Greenpeak-INF Grab Potable Water
4101 Norrisville Rd, Jarrettsville, MD
Carroll Madonna - High's #130

GES, Inc.
ELLE Sample #: PW 9871765
ELLE Group #: 2003049
Matrix: Potable Water

Project Name: Carroll Madonna - High's #130

Submittal Date/Time: 10/26/2018 15:40
Collection Date/Time: 10/25/2018 09:20

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles		EPA 524.2	ug/l	ug/l	
03648	t-Amyl Methyl Ether	994-05-8	N.D.	0.1	1
03648	Benzene	71-43-2	N.D.	0.1	1
03648	t-Butyl Alcohol	75-65-0	N.D.	2.5	1
03648	Carbon Tetrachloride	56-23-5	N.D.	0.1	1
03648	Chlorobenzene	108-90-7	N.D.	0.1	1
03648	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	1
03648	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	1
03648	1,2-Dichloroethane	107-06-2	N.D.	0.1	1
03648	1,1-Dichloroethene	75-35-4	N.D.	0.1	1
03648	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	1
03648	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	1
03648	1,2-Dichloropropane	78-87-5	N.D.	0.1	1
03648	Ethyl t-Butyl Ether	637-92-3	N.D.	0.1	1
03648	Ethylbenzene	100-41-4	N.D.	0.1	1
03648	di-Isopropyl Ether	108-20-3	N.D.	0.1	1
03648	Methyl Tertiary Butyl Ether	1634-04-4	1.8	0.1	1
03648	Methylene Chloride	75-09-2	N.D.	0.3	1
03648	Naphthalene	91-20-3	N.D.	0.2	1
03648	Styrene	100-42-5	N.D.	0.1	1
03648	Tetrachloroethene	127-18-4	0.1 J	0.1	1
03648	Toluene	108-88-3	N.D.	0.1	1
03648	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.2	1
03648	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	1
03648	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	1
03648	Trichloroethene	79-01-6	N.D.	0.1	1
03648	Vinyl Chloride	75-01-4	N.D.	0.1	1
03648	Xylene (Total)	1330-20-7	N.D.	0.1	1

Volatile compounds have been detected above the LOQ in the sample. Since a field reagent blank (trip blank) was not submitted with this sample any potential contribution of volatiles from the sampling/transport process cannot be assessed.

Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S183091AA	11/05/2018 21:13	Don V Viray	1

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mL	milliliter(s)
C	degrees Celsius	MPN	Most Probable Number
cfu	colony forming units	N.D.	non-detect
CP Units	cobalt-chloroplatinate units	ng	nanogram(s)
F	degrees Fahrenheit	NTU	nephelometric turbidity units
g	gram(s)	pg/L	picogram/liter
IU	International Units	RL	Reporting Limit
kg	kilogram(s)	TNTC	Too Numerous To Count
L	liter(s)	µg	microgram(s)
lb.	pound(s)	µL	microliter(s)
m3	cubic meter(s)	umhos/cm	micromhos/cm
meq	milliequivalents	MCL	Maximum Contamination Limit
mg	milligram(s)		
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported.
P^	Concentration difference between the primary and confirmation column $>40\%$. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.