



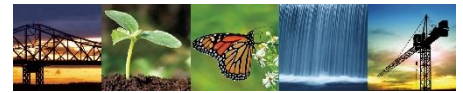
Rose & Westra
A Division of GZA

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March 21, 2019
File: 16.0062335.54

Ms. Abigail Hendershott
Michigan Department of Environmental Quality
5th Floor – Unit 10
350 Ottawa Avenue NE
Grand Rapids, MI 49503

Re: Wolverine World Wide, Inc. (Wolverine)
House Street Area – Select Residential Well Resampling Summary

Dear Ms. Hendershott:

On October 16, 2018, R&W/GZA submitted, on behalf of Wolverine, a scope of work for resampling of select residential wells within the House Street Study Area.

The purpose of the resampling effort was to gather additional data points to assist with the House Street Study Area groundwater assessment. The technical approach used as the basis for the residential well reselection was summarized in the October 2018 scope of work.

A total of 75 wells were identified for resampling; which is summarized on the following table.

Response	Number of Wells
Permission to Sample/Sampled	62
Filtration Identified/Not Sampled	1
Declined Sampling	3
Appear to be Vacant	3
No Response After Multiple Attempts to Contact	6

The samples were collected as access allowed and were analyzed using US EPA Method 537, 1.1. R&W/GZA provided the results to the MDEQ, KCHD, and MDHHS as received. R&W/GZA has also provided notice to the property owners.

Fifty-three of the resampled wells were previously ND for PFOS+PFOA. The resampling confirmed these results for all 53 wells with no new detections of PFOS+PFOA.



Nine of the resampled wells previously had detections of PFOS+PFOA; six resampled wells again had PFOS+PFOA detections (concentrations similar to prior samples); and at three wells PFOS+PFOA was not identified during the resampling effort.

The resampling results were remarkably similar to the prior analytical results for the selected wells. A table summarizing the original and recent resampling results is attached. As you may recall, the vast majority of the original well samples were collected September 2017 to December 2017 and were analyzed using DOD QSM 5.0 1 isotope dilution analysis. The resampling shows consistency in results even with over a year of time between sampling, different subcontracted laboratory analysis, and differing analytical methods.

All of the residents in this area are still eligible to receive bottled water delivery service.

Please let us know if you have any questions about implementation of this resampling effort.

Sincerely,

Rose & Westra, a Division of GZA GeoEnvironmental, Inc.

Loretta J. Powers
Senior Project Manager

Mark Westra
Associate Principal

ljp/maw

c/enc: Mr. Dave Latchana – Wolverine World Wide, Inc.
Mr. John V. Byl – Warner Norcross & Judd LLP

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Select Residential Well Resampling Summary
WWW - House Street Area

Address	Original Result PFOS+PFOA/Total PFAS	Resample Result PFOS+PFOA/Total PFAS
FROND ST NE	0/0	0/0
VAN DAM DR NE	0/0	0/0
ROGUE RIVER RD NE	0/0	0/5.3 (PFBS) Back and 0/0 Front
ROGUE RIVER RD NE	0/0	0/0
BELSHIRE AVE NE	0/0	0/0
PIXLEY AVE NE	0/0	0/0
PIXLEY AVE NE	0/0	0/7.1 (PFBS)
BELMONT AVE NE	0/0	0/0
BELMONT AVE NE	0/0	0/0
PACKER DR NE	0/0	0/0
BELMONT AVE NE	0/0	0/0
BELMONT AVE NE	0/0	0/0
BELMONT AVE NE	0/0	0/0
BELMONT AVE NE	0/0	0/0
CHANDLER DR NE	0/0	0/0
PACKER DR NE	0/0	0/3.6 (PFBS)
ROGUE LN NE	0/0	0/6.7 (PFBS)
MAKSIMOWSKI AVE NE	0/0	0/0
VAN DAM DR NE	0/0	0/4.3 (PFBS)
HOUSE ST NE	0/0	0/0
MAKSIMOWSKI AVE NE	0/0	0/0
MAKSIMOWSKI AVE NE	0/0	0/0
BELMONT AVE NE	0/0	0/0
BELMONT AVE NE	0/0	0/0
BLUE RIDGE DR NE	0/0	0/0
HERRINGTON AVE NE	0/0	0/0
PACKER DR NE	0/0	0/0
HOUSE ST NE	0/0	0/0
MAKSIMOWSKI AVE NE	0/0	0/0
BELMONT AVE NE	0/0	0/0
PIXLEY AVE NE	0/0	0/0
MAKSIMOWSKI AVE NE	0/0	0/0
BELMONT AVE NE	0/0	0/0
HERRINGTON AVE NE	0/0	0/0
BELMONT AVE NE	0/0	0/0
FROND ST NE	0/0	0/3.5 (PFBS)
VAN DAM DR NE	0/0	0/0
HOUSE ST NE	0/0	0/0
BELMONT AVE NE	0/0	0/0
BELMONT AVE NE	0/0	0/0
VAN DAM DR NE	0/0	0/0
VAN DAM DR NE	0/0	0/0
MAKSIMOWSKI AVE NE	0/0	0/0
PACKER (WOODS) DR NE	0/11 (PFHxS)	0/13 (PFHxS)
BELMONT AVE NE	0/12.5 (PFBS/PFHxA)	0/0
10 MILE RD NE	0/15.4 (PFBS/PFHxA)	0/6.8 (PFBS)
BELMONT AVE NE	0/31.6 (several)	0/29.5 (several)
BELMONT AVE NE	0/4.5 (PFBS)	0/6.2 (PFBS)
PIXLEY AVE NE	0/4.7 (PFBS)	0/5 (PFBS)
ROGUE RIVER RD NE	0/4.8 (PFBS)	0/4.6 (PFBS)
PACKER DR NE	0/5 (PFBS)	0/5.7 (PFBS)
MAKSIMOWSKI AVE NE	0/67 (PFBS)	0/40 (PFBS)
LYNHURST ST NE	0/9.4 (PFBS)	0/7.9 (PFBS)
10 MILE RD NE	1.21/4.099 (PFBS/PFHxS)	0/0
HERRINGTON AVE NE	12.3/16.9 (PFBS)	9.2/13.2 (PFHxS)
BELSHIRE AVE NE	12.7/32.8 (several)	8.4/27.8 (several)
HOUSE ST NE	2.1/2.1	0/0
CHANDLER DR NE	28/50.2 (PFHpA/PFHxS)	14/23.1 (PFHxS)
SPRUCEWOOD CT NE	5.6/17.6 (PFBS)	5.1/22.2 (PFBS/PFHxS)
HERRINGTON AVE NE	5.9/17.9 (PFBS)	0/7.6 (PFBS)
HERRINGTON AVE NE	5/24.8 (several)	4.9/8.0 (PFBS)
HERRINGTON AVE NE	8.1/8.1	7.7/7.7

Compounds in parantheses are PFAS compounds detected other than PFOS or PFOA.