

2012 Annual Residential Well Sampling Report
Project No: 1036-10081

Prepared For:
Franklin Waste Facility Monitoring Committee

Prepared By:



WHAT WE DO TODAY TOUCHES SEVEN GENERATIONS.

In May of 1992 an agreement between The Waste Management Metro Landfill and Recycling Facility (Waste Facility) and the neighboring Municipalities was signed; a Host agreement. This agreement defined the rights and responsibilities of a Monitoring Committee that would be made up of representatives from the neighboring municipalities and the “host” community, City of Franklin. The Monitoring Committee was titled the Franklin Waste Facility Monitoring Committee (Franklin WFMC). The other communities with seats on the Franklin WFMC are:

- Milwaukee County
- Waukesha County
- Racine County
- City of Muskego
- Town of Raymond
- Town of Norway

One of the responsibilities of the Waste Facility is to procure annual sampling and testing of thirty five (35) residential wells, selected by the Franklin WFMC. The samples under go testing for constituents regulated by both the Primary and Secondary Federal Drinking Water Standards. The results of this testing is presented to the Franklin WFMC by the Waste Facility.

In 1996 the Franklin WFMC initiated a contract with Environmental Graphics, Inc.; a consultant to analyze the results from the Annual Residential Well Sampling and provide a report summarizing results, recording sampling history, and providing recommendations for the subsequent annual sampling. In 2003, the Franklin WFMC engaged the services of Ruekert Mielke, Inc. to perform the Annual Residential Well Sampling Report Contract for 2003 through 2005. The Franklin WFMC awarded the 2006-Annual Residential Well Sampling Contract to JSA Civil Environmental Engineers, Inc. (JSA). JSA has maintained the contract since 2006.

This year, 2012, the Franklin WFMC appointed Davy Laboratories¹ to perform the sampling and testing of the 35 wells. Davy had been selected the previous two years, following an open bid process and the previous years sampling protocols were in compliance with the contract between the Franklin WFMC and the Waste Facility.

JSA initiated the 2012 contract by reviewing the findings from the August 2012 testing of the 35 residential wells, sampled in July of 2012. JSA also made the commitment to generate this report, maintain the historic database, and aid the Franklin WFMC in the selection of the 35 residential wells for sampling in 2012.

On November 1, 2012; JSA has completed Tasks 1,2, and 3 of the “Annual Well Sampling Report”, by submitting the Well Sampling Report to the Franklin WFMC. This report includes a Map of Wells Sampled, Table 1- 2012 Residential Well Sampling, Table 2 – Historic Sampling Summary, Table 3 – 2012 Residential Well Samples Exceeding the Federal Secondary Drinking Water Standard, Table 4 – History of Constituents Detected Above LOD. All tables have been sized to fit on standard Letter sized paper and when applicable are produced in duplex, however the map still requires 11”x17” formatting.

¹ Davy Laboratories, 115 Sixth Street, P.O. Box 2076, Lacrosse, WI 54602-2076
Performed sampling and analysis in 2009 thru 2012.

Wells Sampled

In June 2012, JSA made recommendations to the Franklin WPMC for the selection of the 35 residential wells for the 2012 sampling. Wells were selected based on past sampling frequency, most recent sampling, and potential for trend analysis in organic constituents detected; as recommended in the 2011 Annual Residential Well Sampling Report. All wells selected were sampled in 2012. Five (5) wells were sampled that were not currently within the database. Well sampling frequency was focused on newer wells and wells that had had limited sampling to date. Several wells had been sampled once within the 2009 to 2011 period, but with only one sampling event in that period. This year sampling included wells located adjacent to the Waste Facility property North and South of the Facility, with wells further away from the facility to the East and South as well.

The sampling was performed by Davy Laboratories during August of 2012. The locations are marked on MAP 1 of the report, using Tax ID to identify the property that the well is located on. The Well location data is found in Table 1, providing Property Owner, Property Address, and previous sampling date. Due to the map's limited size two of the sites are not visible.

Davy sampled only from external locations with immediate connections to the well. They performed purging (discharging of water from the well for at least two minutes) prior to all sample gathering. Samples were handled and returned to the lab following protocols established by the US EPA for drinking water sampling and testing.

Federal Primary Drinking Water Standards

In 2010 the US EPA updated the Federal Primary Drinking Water Standards Maximum Contaminant Level (MCL) for several constituents that are in the protocols. The majority of these constituents are heavy metals, none of the affected constituents have ever been detected in the Franklin WPMC Annual Residential Well Sampling history.

The 2012 Annual Residential Well Sampling Laboratory Testing yielded no constituents that exceeded the Federal Primary Drinking Water Standards Maximum Contaminant Level (MCL). Three wells that were tested had a Volatile Organic Compound (VOC), detected above the Limit of Quantification (LOQ), but still several orders of magnitude below the MCL. Do to the contaminant types re-sampling was not warranted.

The constituent detected was Chloroform, and is described in detail below:

- Chloroform - is an organic compound, CHCl_3 , which is a dense liquid at room temperature. It has been used as a refrigerant and solvent in the past and in the medical industry. It belongs to the Trihalomethane family as well, formed in a similar chlorinated environment without the presence of ionic Bromide. The MCL for Chloroform is 6.00 mg/L, the Preventative Action Limit (PAL) is 0.6 mg/L

The Trihalomethane family constituent Chloroform was detected in the Kopp, Thiessenhussen, and Thompson wells. All concentrations detected are significantly below the PAL and MCL values that there is no health risk even from prolonged exposure. The neighboring wells do not have any matching constituents, suggesting that the well was treated with an excessive amount of chlorine. JSA contacted all three well owners and each had chlorinated their well during 2012, by their own personal method. JSA recommended that in

future a Wisconsin Well or Water Supply Professional was contacted for future treatment. In past sampling events other members of the Trihalomethane Family were detected and are all, most commonly, a result of improper chlorination of the well.

The Wisconsin Department of Natural Resources also maintains a set of parameters for groundwater contaminants. All constituents detected in the Well Sampling are found in NR 140 – Groundwater Quality. The Public Health Groundwater Quality Standards are similar to the Federal Primary Drinking Water standards.. The VOC's detected in the 2012 Well Sampling had no samples with constituents that exceeded the Preventative Action Limit (PAL), therefore no constituents that exceeded the Enforcement Standard.

JSA identified a repeated trend in detections of Dichlorodifluoromethane throughout the history of the Annual Well Sampling. This year, 2012, no Dichlorodifluoromethane hits occurred.

Federal Secondary Drinking Water Standards

The secondary standards act as guide lines for public water systems. Each well that had been previously sampled was compared to its past history. The 2012 Well Samples are consistent with the Well Sampling history and with the groundwater constituents of Southeastern Wisconsin.

Of the constituents measured under the Federal Secondary Drinking Water Standards, Iron (Fe) and Sulfate (SO₄) are detected in excess. Eighteen (18)² wells had Iron concentrations higher than 0.30 milligrams per liter (mg/L) and five (5)³ wells had Sulfate concentrations equal to or greater than 250 mg/L. There is no indication to suggest that these concentrations are anything other than naturally occurring and have been consistent over more than 15 years of sampling and testing.

In past years of sampling many wells had Sulfate concentrations above 250 mg/L; the majority of these wells are now owned by the the landfill or are outside of the defined sampling area. No well in 2012 showed significant changes to the Secondary Drinking Water Standards with regards to previous years results.

Conclusions

The 2012 Well Sampling Laboratory Results yielded the existence of four contaminants. These contaminants have been recorded before and are all beneath the MCL of the Federal Primary Drinking Water Standards. The contaminants were all VOCs and are listed below:

- One Member of the Trihalomethane Family
 - Chloroform

One member Trihalomethane family was detected in three wells, this chemical indicates that the wells in question were over chlorinated recently. Contact with well owners supported the rational that chlorination had been performed, by the owner, in 2012 prior to the sampling date.

2 See Table 3 Results Fe+

3 See Table 3 Results SO₄

The subject wells sampled were consistent with historic sampling results with respect to The US EPA Secondary Drinking Water Standards, exceedances were found in Iron and Sulfate concentrations; but do not pose a threat to public health.

Recommendations

JSA recommends that sampling for the 2013 report be focused on new wells and wells with close proximity to the landfill.

**Franklin Waste Facility Monitoring Committee
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Table 1 2011 Residential Well Sampling

<u>Tax ID</u>	<u>Owner</u>	<u>Street</u>	<u>City</u>	<u>Zip</u>	<u>Site #</u>	<u>Prev Sample</u>
985.9996.000	Duane Acker	8731 8 Mile Road	Franksville	53126	1	2011
012.04.21.07.011.000	Joseph Bedalov	11403 W. 7 Mile Road	Franksville	53126	2	2003
939.9996.006	Roger S. Berndt	12320 W. Oakwood Road	Franklin	53132	3	2009
012.04.21.06.010.020	Doris Carriveau	218 N. 124. Street	Franksville	53126	4	2009
891.9992.000	Colleen Domask/Steve Vallee	11808 W. Loomis Rd	Franklin	53132	5	2011
012.04.21.06.065.000	Robert F. Foulston	444 Adeline Dr	Franksville	53126	6	2003
985.9999.000	Diana/Scott Fredrickson	8432 8 Mile Road	Franksville	53126	7	2009
939.9999.000	Ruth Grandlich	11722 W. Oakwood Rd	Franklin	53132	8	2010
934.9998.001	Earl Holterman	8032 W. Oakwood Rd	Franklin	53132	9	2008
893.9999.000	Ted Ignasiak	9880 S. 112th Street	Franklin	53132	10	2009
942.0004.000	Anthony/Anne Kraus	10233 W. Oakwood Rd	Franklin	53132	11	*
938.9999.004	Adeline & Helmut Kopp	10944 W. Oakwood Rd	Franklin	53132	12	2011
012.04.21.06.059.004	Jerry Krause	627 Shirley Dr	Franksville	53126	13	2007
938.9988.008	James Langenohl	9970 S. 112th street	Franklin	53132	14	2010
942.0002.000	Jack F. Liebl	10155 W. Oakwood Rd	Franklin	53132	15	*
012.04.21.06.035.000	Preston Ludtke	11230 W. 7 Mile Rd	Franksville	53126	16	2009
892.9994.000	Eugene Magarich	11327 W. Ryan Rd	Franklin	53132	17	2011
012.04.21.06.066.000	Don Mateicka, Jr	500 Shirley Dr	Franksville	53126	18	*
012.04.21.06.066.000	Jon & Barbara Olson	612 Adeline Dr	Franksville	53126	19	2009
935.9999.002	Darlene M Pasniak	9910 S. 92 St	Franklin	53132	20	*
938.9989.000	Dennis F. Schaefer	10004 S. 112 St	Franklin	53132	21	*
012.04.21.07.019.000	Ken Schingeck	11756 W. 7 Mile Rd	Franksville	53126	22	2009
943.9997.010	William Schittinger	10341 s. 92nd Street	Franklin	53132	23	2009
012.04.21.06.013.000	Kim/Paul Thiessenhusen	326 124th Street	Franksville	53126	24	2006
987.9997.003	Sally Thompson	10280 W. South Cnty Line Road	Franklin	53132	25	2011
012.04.21.07.005.000	Gary Vanden Boom	11507 7 Mile Rd	Franksville	53126	26	2011
012.04.21.06.019.000	Ronald Vanden Boom	524 N Raynor Avenue	Franksville	53126	27	2010
012.04.21.05.005.000	Ludwig & Shirley Vretenar	301 92nd street	Franksville	53126	28	2009
894.9997.001	Gegory T. Weber	9865 S. 92nd street	Franklin	53132	29	2010
012.04.21.06.002.000	Carol Welch	359 S. 108th Street	Franksville	53126	30	2009
899.9990.052	Marion Woelbing	8850 W. Bosch Lane	Franklin	53132	31	2008
935.9994.006	Marvin Wolff	8502 W. Oakwood Rd	Franklin	53132	32	2011
012.04.21.07.017.000	Steven/Laura Zirzow	11757 W. 7 Mile Rd	Franksville	53126	33	2004
891.9989.003	Michael Zolecki	11835 W. Ryan Rd	Franklin	53132	34	*
938.9999.006	Jenny & Steve Heckler	10810 W. Oakwood Rd	Franklin	53132	35	2011

* Well not previously sampled

** Well not sampled due to Owner

WELL ID	Owner(s)	Well Address	CityStateZip	Taxkey Id	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
48	Jon & Barbara Olson	610.612 Adeline Dr.	Franksville, WI 53126	012.04.21.06.066.000	X					X	X	X			X			X			X			X
49	Sanford & Kathleen Olson Trust	11308 7 Mile Rd.	Franksville, WI 53126	012.04.21.06.037.000	X						X	X				X								
50	Michael Penn	11735 W. Oakwood Rd.	Hales Corners, WI 53130	940.9989.000	X						X			X		X		X	X	X				
51	John Perkovich	10386 S. 124th St.	Franklin, WI 53132	940.9994.000	X									X										
53	Dennis & Judith Sanford	8606 Raynor Ave.	Franksville, WI 53126	010.04.20.01.013.000	X					X	X				X			X	X	X			X	
54	Schaefer Family Living Trust	21224 7 Mile Rd.	Franksville, WI 53126	010.04.20.01.017.002	X													X						
55	Elfriede Schemeit Trust	461 Adeline Dr.	Franksville, WI 53126	012.04.21.06.041.000	X						X			X										
56	Michael N. & Pamela K. Lewis	11600 7 Mile Rd.	Franksville, WI 53126	012.04.21.06.040.000	X						X							X				X		
57	Greg Schrubbe	741 S. 108th St.	Franksville, WI 53126	012.04.21.06.069.000	X																			
58	Personally Yours Senior Living	12115 7 Mile Rd.	Waterford, WI 53185	012.04.21.07.014.000	X																			
59	Robert Schweitzer	10555 S. 92nd St.	Franklin, WI 53132	943.9997.007	X				X		X		X			X								
60	Timothy Smith	9209 W. Oakwood Rd.	Franklin, WI 53132	943.9996.001	X					X	X				X			X				X		
61	Charles Sobbe	707 Adeline Dr.	Franksville, WI 53126	012.04.21.06.045.000	X																			
62	John Stroud	702 Highway 45	Franksville, WI 53126	012.04.21.06.030.000	X								X			X							X	
63	Joseph D. & Doreen A. Langfeldt	880 Adeline Dr.	Franksville, WI 53126	012.04.21.06.038.000	X		X				X	X				X								
64	Michael Theys	10509 8 Mile Rd.	Franksville, WI 53126	012.04.21.05.016.000	X						X					X					X			
65	Gary VandenBoom	11507 7 Mile Rd.	Franksville, WI 53126	012.04.21.07.005.000	X						X			X					X				X	X
66	Carol Welch	359 S. 108th St.	Franksville, WI 53126	012.04.21.06.002.000	X				X		X	X				X					X			X
67	Gregory Worman	499.501 Adeline Dr.	Greenfield, WI 53228	012.04.21.06.046.000	X			X			X				X			X						
68	Bill Zamecnik	10614 7 Mile Rd.	Franksville, WI 53126	012.04.21.05.022.000	X						X	X		X			X				X		X	
69	Faro R & Florence Balisteri	10623 W. Oakwood Rd.	Franklin, WI 53132	942.9998.000		X					X	X			X									
70	Frederick R. Gaffney	8820 Raynor Ave.	Oak Creek, WI 53154	010.04.20.01.005.000		X		X			X												X	
71	Joseph G. & Diana L. Gellings	642 S. 108th St.	Franksville, WI 53126	012.04.21.06.068.000		X							X											
72	Steve Bodi & Nanette Carlson	11207 W. 7 Mile Rd.	Franksville, WI 53126	012.04.21.07.008.000		X		X										X						
73	Ronald R. Heritz	538 Raynor Ave.	Franksville, WI 53126	012.04.21.06.021.000		X					X			X			X				X			
74	Jeffrey & Penny Hill	653 Adeline Dr.	Franksville, WI 53126	012.04.21.06.044.000		X					X							X			X			
75	Kim Williams & Paul Thiessenhusen	326 S. 124th St.	Franksville, WI 53126	012.04.21.06.013.000		X																	X	
76	Kenneth & Mary Schingeck	11765 7 Mile Rd.	Franksville, WI 53126	012.04.21.07.019.000		X					X			X			X				X			X
77	Brian E. & Lana M. VanScoy	642 Raynor Ave.	Franksville, WI 53126	012.04.21.06.017.000		X																		
78	Ronald VandenBoom	524 Raynor Ave.	Franksville, WI 53126	012.04.21.06.019.000		X	X					X	X			X	X				X	X		X
80	Wayne Ziemer	11400 7 Mile Rd.	Franksville, WI 53126	012.04.21.06.032.000		X	X					X	X		X			X						
81	Dale/Linda Meyer	660 Adeline Dr.	Franksville, WI 53126	012.04.21.06.060.000			X				X						X							
82	Norm/Laura Swenson	11285 Shirley Dr.	Franksville, WI 53126	012.04.21.06.055.000			X				X			X	X					X				
83	William Schittinger	10341 S. 92nd St.	Franklin, WI 53132	943.9997.010			X				X			X		X					X			X
84	Amalia Weber	10632 S. 112th St.	Franksville, WI 53126	941.9998.000			X																	
85	Jeffrey & Penny Hill	651 Adeline Dr.	Franksville, WI 53126	012.04.21.06.044.000			X									X								
86	Kim Williams & Paul Thiessenhusen	326 S. 124th St.	Franksville, WI 53126	012.04.21.06.013.000			X				X				X			X						X
87	Blanche Meyers	8916 Raynor Ave.	Franksville, WI 53126	010.04.20.01.003.000				X																
88	Frank Nowag	580 Shirley Dr.	Franksville, WI 53126	012.04.21.06.042.010					X					X		X	X					X		
89	Lisa Gardner	664 Shirley Dr.	Franksville, WI 53126	012.04.21.06.042.000					X				X											
90	Ronald J. Plevak	S98 W12712 Loomis Rd.	Palmyra, WI 53156	010.04.20.01.001.000							X													
91	Roger Berndt	12320 W. Oakwood Rd.	Franklin, WI 53132	939.9996.006							X	X				X					X			X
92	James Bonney	10146 S. 124th St.	Franklin, WI 53132	939.9996.002							X										X			
93	John T. Bunich	11210 W. 7 Mile Rd.	Franksville, WI 53126	012.04.21.06.043.000	X				X		X		X				X				X			
94	James Drzewiecki	10780 S. 92nd St.	Franklin, WI 53132	985.9994.002							X	X			X			X				X		
95	William K & Rose Hinkel	9612 W. Oakwood Rd.	Franklin, WI 53132	936.9997.000							X	X	X		X					X			X	
97	Norbert & Susan Kita	10728 S. 92nd St.	Franklin, WI 53132	985.9993.003							X		X						X					
98	Craig & Sheryl Comp	10944 W. Oakwood Rd.	Franklin, WI 53132	938.9997.000							X		X				X		X					
100	Anthony H. & Jane A. Mathews	11523 W. 7 Mile Rd.	Franksville, WI 53126	012.04.21.07.006.000							X				X									
101	Mayer, S	11100 W. Oakwood Rd.	Franklin, WI 53132	938.9999.009							X			X			X							

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Table 3 2012 Residential Well Samples Exceeding the Federal Secondary Drinking Water Standards

<u>Tax ID</u>	<u>2012</u>	<u>Owner</u>	<u>Site #</u>	<u>Results Fe+</u>		<u>Results SO4</u>	
				<u>Iron</u> (mg/L)	<u>MCL</u>	<u>Sulfate</u> (mg/L)	<u>MCL</u>
985.9996.000		Duane Acker	1	3.120	0.300		
012.04.21.07.011.000		Joseph Bedalov	2	0.331	0.300		
939.9996.006		Roger S. Berndt	3	0.356	0.300		
012.04.21.06.010.020		Doris Carriveau	4	0.303	0.300	275	250
891.9992.000		Colleen Domask/Steve Vallee	5				
012.04.21.06.065.000		Robert F. Foulston	6				
985.9999.000		Diana/Scott Fredrickson	7	0.535	0.300	310	250
939.9999.000		Ruth Grandlich	8	0.392	0.300		
938.9999.004		Adeline & Helmut Kopp	12				
012.04.21.06.059.004		Jerry Krause	13	0.416	0.300		
892.9994.000		Eugene Magarich	17	0.464	0.300		
012.04.21.06.066.000		Don Mateicka, Jr	18			283	250
012.04.21.06.066.000		Jon & Barbara Olson	19	0.360	0.300	274	250
935.9999.002		Darlene M Pasniak	20	0.507	0.300		
938.9989.000		Dennis F. Schaefer	21	0.328	0.300		
012.04.21.06.013.000		Kim/Paul Thiessenhusen	24	0.324	0.300		
987.9997.003		Sally Thompson	25	0.357	0.300		
012.04.21.07.005.000		Gary Vanden Boom	26	0.302	0.300		
012.04.21.06.019.000		Ronald Vanden Boom	27	0.517	0.300		
012.04.21.05.005.000		Ludwig & Shirley Vretenar	28			365	250
894.9997.001		Gegory T. Weber	29	0.531	0.300		
899.9990.052		Marion Woelbing	31	1.120	0.300		
935.9994.006		Marvin Wolff	32	0.378	0.300		

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**Table 4 Historic Residential Well Samples Exceeding Constituent LOD
2011 Residential Well Samples Exceeding Constituent LOD**

<u>Tax ID</u>	<u>Site #</u>	<u>Owner</u>	<u>Iron</u> (mg/L)	<u>MCL</u>	<u>Sulfate</u> (mg/L)	<u>MCL</u>	<u>Dichloro difluoro methane</u> (µg/L)	<u>Bromodic hloromet hane</u> (µg/L)	<u>Chloroform</u> (µg/L)	<u>Chlorodi bromom ethane</u> (µg/L)
985.9996.000	2	Duane Acker	3.47	0.30		250				
012.04.21.06.059.016	3	Sandra J. Blazek			251	250				
012.04.21.06.010.010	4	Vince Carriveau			279	250				
987.9997.002	5	Robert & M Coblentz			325	250				
892.9991.000	6	Robert Diedrich	0.31	0.30						
891.9992.000	7	Colleen Domask	0.805	0.30				3.26	2.02	1
935.9994.004	9	Christine Gaulke	0.314	0.30		250				
012.04.21.06.062.000	11	Diane/Kay Hackstein			346	250				
938.9999.006	12	Mark Hagert	0.791	0.30		250				
938.9999.006		Jenny & Steve Heckler				5.43**				
888.9998.001	16	Nick/Jackie Ioder	0.319	0.30		250			1	
892.9994.000	20	Eugene Magarich	0.526	0.30	350	250				
012.04.21.06.064.000	22	Jerome M./Marilyn Metz	0.375	0.30		250				
938.9998.000	23	Charles Presser	0.445	0.30						
012.04.21.05.019.000	25	William & Susie Seager		0.30	262	250	1.82**			
012.04.21.06.030.000	28	John Stroud	0.47	0.30		250				
012.04.21.07.005.000	32	Gary Vanden Boom	0.44	0.30		250				
012.04.21.05.022.000	35	William Zamecnik	4.96	0.30		250				

* Exceedence of the Federal Secondary Drinking Water Standards

** Above the LOQ

2010 Residential Well Samples Exceeding Constituent LOD

<u>Tax ID</u>	<u>Well ID</u>	<u>Owner</u>	<u>Iron*</u> (mg/L)	<u>Sulfate*</u> (mg/L)	<u>Dichloro difluoro methane</u> (µg/L)
012.04.21.07.018.000	119	Anderson	0.488		
940.9997.000	14	Couillard	0.59		
939.9999.000	138	Grandlich	0.31		
012.04.21.06.007.000	155	Kochnowicz	0.93		
941.9983.000	38	Lange	0.668		
941.9996.000	39	Losey	1.43		
892.9994.000	814	Magarich	0.37		
010.04.20.01.020.000	43	Mente	0.714		
939.9996.005	165	Millin	0.546		
012.04.21.06.042.010	88	Nowag	0.326		
012.04.21.05.013.000	815	Schultz		318	
012.04.21.05.019.000	146	Seager	0.548		0.62**
012.04.21.06.025.000	807	Eperen	0.343		
012.04.21.06.019.000	78	Vandenboom	0.474		

* Exceedence of the Federal Secondary Drinking Water Standards

** Above the LOQ

2009 Residential Well Samples Exceeding Constituent LOD

<u>Tax ID</u>	<u>Well ID</u>	<u>Owner</u>	<u>Iron*</u> (mg/L)	<u>Sulfate*</u> (mg/L)	<u>Bromodi chlorome thane</u> (µg/L)	<u>Chloroform</u> (µg/L)
012.04.21.06.036.000	36	Knox			0.05	0.2
012.04.21.05.010.000	5	Bedalov	0.564			
012.04.21.07.010.000	8	Block	0.367			
012.04.21.06.043.000	93	Bunich	0.664			
012.04.21.06.010.020	13	Carriveau	0.31	255		
985.9999.000	135	Fredrickson	0.632	299		
012.04.21.06.021.000	73	Heritz	0.43			
012.04.21.06.057.000	809	Jorgenson	0.332			
012.04.21.06.036.000	36	Knox	1.87			
012.04.21.05.013.000	815	Knutsen		320		
012.04.21.06.064.000	45	Metz	0.427			
012.04.21.06.066.000	48	Olson	0.532	292		
012.04.21.05.002.000	102	Perdzeck	0.33			
938.9998.000	103	Presser	0.58			
935.9998.000	114	Rynders	0.43			
012.04.21.05.024.000	105	Sinda		277		
012.04.21.07.019.000	76	Schingeck	0.40			
012.04.21.06.019.000	78	VandenBoom	0.363			
012.04.21.05.005.000	109	Vretenar		364		
012.04.21.06.002.000	66	Welch	0.332			
012.04.21.05.022.000	680	Zamecnik	7.68			

* Exceedence of the Federal Secondary Drinking Water Standards

** Above the LOQ

2008 Residential Well Samples Exceeding Constituent LOD

<u>Tax ID</u>	<u>Well ID</u>	<u>Owner</u>	<u>Iron*</u> (mg/L)	<u>Sulfate*</u> (mg/L)	<u>Dichloro difluoro methane</u> (µg/L)	<u>Chloro- methane</u> (µg/L)	<u>Toluene</u> (µg/L)
985.9997.001	118	Acker	0.46				
012.04.21.05.012.010	149	Arnold		350			
012.04.21.06.059	125	Blazek		260			
012.04.21.07.010	8	Block	0.35	260			
939.9996.002	92	Bonney	0.33				
938.9999.004	110	Kopp			0.21		
985.9999.000	135	Fredrickson	0.69	340			
012.04.21.06.003	25	Gellings	0.39	290			
012.04.21.06.062.000	141	Hackstein		350			
941.9996.000	39	Losey	0.42				
012.04.21.06.058	810	Mateika		340			
010.04.20.01.027	23	Parsons	0.51				
940.9989.000	50	Penn					0.36
012.04.21.05.002	102	Perdzock		280	0.28		
010.04.20.01.013	53	Sanford	0.35				
012.04.21.05.019	146	Seager	0.48	250	0.84		
938.9999.005	181	Sumiejski	0.48				
012.04.21.05.016	64	Theys/Wilke		260			
012.04.21.06.025	807	Van Eperen	0.54				
944.9996.000	778	Vogt/Stieff	0.33			6.40**	
935.9995.000	111	Woelbing	1.40				
012.04.21.05.022.000	680	William Zamecnik	7.68				

* Exceedence of the Federal Secondary Drinking Water Standards

** Above the LOQ

2007 Residential Well Samples Exceeding Constituent LOD

<u>Tax ID</u>	<u>Well ID</u>	<u>Owner</u>	<u>Iron*</u> (mg/L)	<u>Sulfate*</u> (mg/L)	<u>Dichloro difluoro methane</u> (µg/L)	<u>Styrene</u> (µg/L)	<u>Toluene</u> (µg/L)
012.04.21.06.012.100	294	Bayer	0.42	250			
938.9997.000	98	Comp	0.31				
939.9999.000	138	Grandlich	0.93				
012.04.21.06.062.000	141	Hackstein		360			
936.9998.003	121	Hinkel	0.48				
012.04.21.07.007.000	147	Kietzke	0.38				
012.04.21.06.007.000	155	Kochnowicz	1.30				
938.9999.004	110	Kopp			0.16		
012.04.21.06.059.004	177	Krause	0.49				
941.9985.000	20	Latus	0.36				
941.9997.000	42	Mateicka, Sr.		370			
010.04.20.01.001.000	17	Olson	0.32	340			
940.9989.000	50	Penn	0.97				0.48
012.04.21.05.002.000	102	Perdzeck		260	0.22		
938.9998.000	103	Presser			0.61**		
010.04.20.01.013.000	53	Sanford	0.37				
012.04.21.05.019.000	146	Seager	0.37	250	0.37		
012.04.21.06.025.000	807	Van Eperen	0.48	250			
012.04.21.06.017.000	65	VandenBoom	0.51	260	0.74**		
935.9999.009	808	Woelbing				0.20	

* Exceedence of the Federal Secondary Drinking Water Standards

** Above the LOQ

2006 Residential Well Samples Exceeding Constituent LOD

<u>Tax ID</u>	<u>Well ID</u>	<u>Owner</u>	<u>Iron*</u> (mg/L)	<u>Sulfate*</u> (mg/L)	<u>Dichloro difluoro methane</u> (µg/L)	<u>Chloroform</u> (µg/L)
985.9997.003	355	Acker	1.40			
012.04.21.05.010.000	149	Arnold		340		0.16
012.04.21.06.012.100	294	Bayer	0.42	260		
012.04.21.07.011.000	5	Bedalov	0.36	260		
012.04.21.06.059.016	125	Blazek		270		
012.04.21.07.008.000	72	Carlson	0.55			
012.04.21.06.010.020	13	Carriveau		360		
940.9997.000	14	Couillard	0.35			
985.9994.002	94	Drzewieki,				0.33
012.04.21.06.042.000	89	Gardner	0.36	300		
012.04.21.06.008.000	24	Gellings	0.74	270		
012.04.21.06.044.000	6	Hill		330		
941.9982.000	38	Lange	0.62			
939.9998.001	165	Millin	0.62			
012.04.21.06.066.000	48	Olson	0.30	370		
940.9989.000	50	Penn	0.37		2.7**	
012.04.21.05.002.000	102	Perdzock		270	0.25	
012.04.21.06.013.000	86	Thiessenhusen	0.42			
012.04.21.06.017.000	65	VandenBoom	0.39			
935. 9999.009	808	Woelbing	1.50			
012.04.21.06.046.000	67	Worman	0.42	310		
012.04.21.06.032.000	80	Ziemer	1.30	250		

* Exceedence of the Federal Secondary Drinking Water Standards

** Above the LOQ

2005 Residential Well Samples Exceeding Constituent LOD

<u>Tax ID</u>	<u>Well ID</u>	<u>Owner</u>	<u>Iron*</u> (mg/L)	<u>Sulfate*</u> (mg/L)	<u>Dichloro difluoro methane</u> (µg/L)	<u>Chloro- methane</u> (µg/L)	<u>Chlorofo rm</u> (µg/L)	<u>Toluene</u> (µg/L)
012.04.21.07.018.000	119	Anderson	0.31					
012.04.21.05.010.000	149	Arnold	0.33	340				
010.04.20.01.026.000	12	Bruhn		260				
987.9997.002	167	Coblentz	0.43	310				
012.04.21.06.048.000	46	Fleming, Sr.		320				
012.04.21.06.004.000	803	Gellings	0.46	280				
939.9999.000	138	Grandlich	0.97					
012.04.21.07.002.000	28	Hebron	0.36					
012.04.21.06.021.00	73	Heritz	0.48					
938.9999.004	110	Kopp	0.31		0.18			
012.04.21.06.035.000	7	Ludke	0.31					
939.9995.000	722	Machulak	0.81					
012.04.21.06.060.000	81	Meyer	0.57	270				
939.9996.005	165	Millin	0.55					
012.04.21.06.042.010	88	Nowag	0.71	390			1.2**	0.19
989.9998.003	3	Schill						
012.04.21.07.019.000	76	Schingeck	0.56					
012.04.21.05.019.000	146	Seager	0.53	250	0.37			
012.04.21.05.024.000	105	Sinda		310				
944.9999.002	782	Stanisz				0.19		
012.04.21.06.025.000	807	Van Eperen		260				
012.04.21.06.019.000	78	VandenBoom	0.36	250	0.16			

* Exceedence of the Federal Secondary Drinking Water Standards

** Above the LOQ

2004 Residential Well Samples Exceeding Constituent LOD

<u>Tax ID</u>	<u>Well ID</u>	<u>Owner</u>	<u>Iron*</u> (mg/L)	<u>Sulfate*</u> (mg/L)	<u>Dichloro difluoro methane</u> (µg/L)	<u>Toluene</u> (µg/L)
939.9996.006	91	Berndt	0.42			
012.04.21.07.010.00	8	Block	0.35	260		
010.04.20.01.001.000	16	DeBack	0.46	300		
892.9991.000	214	Diekow	1			
012.04.21.06.048.000	46	Fleming, Sr.		300		
012.04.21.06.008.000	24	Gellings		250		0.16
012.04.21.06.003.000	25	Gellings		250		
012.04.21.05.021.000	26	Gellings	0.35			
012.04.21.06.044.000	6	Hill		330		
012.04.21.06.042.010	88	Nowag	0.34	370		
012.04.21.06.037.000	49	Olson	0.52		0.94**	
940.9989.000	50	Penn	0.35		0.93**	
938.9999.006	716	Werther			0.27	

* Exceedence of the Federal Secondary Drinking Water Standards

** Above the LOQ

2003 Residential Well Samples Exceeding Constituent LOD

<u>Tax ID</u>	<u>Well ID</u>	<u>Owner</u>	<u>Iron*</u> (mg/L)	<u>Sulfate*</u> (mg/L)	<u>Dichloro difluoro methane</u> (µg/L)
985.9996.000	117	Acker	1		
012.04.21.07.018.000	119	Anderson	0.33		
942.9998.000	69	Balisteri	0.32		0.87**
012.04.21.06.010.020	13	Carriveau		390	
012.04.21.05.007.000	131	Drewitz	0.36	250	
985.9999.000	135	Fredrickson	0.68	310	
938.9992.000	705	Immekus	0.51		
012.04.21.07.007.000	147	Kietzke	0.51		
012.04.21.06.059.004	177	Krause	0.55	270	
941.9985.000	20	Latus	0.31		
941.9997.000	42	Mateicka, Sr.	0.53	320	
012.04.21.07.006.000	100	Mathews			0.44
939.9996.005	165	Millin	0.49		
012.04.21.06.066.000	48	Olson	0.34	320	
012.04.21.05.002.000	102	Perdzock			0.38
010.04.20.01.013.000	53	Sandford	0.35		
Surface Water			0.31		
012.04.21.05.005.000	109	Vretenar		360	
935.9999.009	808	Woelbing	6.1		
012.04.21.06.046.000	67	Worman	0.33	270	
012.04.21.06.032.000	80	Zierner	2.9		

* Exceedence of the Federal Secondary Drinking Water Standards

** Above the LOQ

2002 Residential Well Samples Exceeding Constituent LOD

<u>Tax ID</u>	<u>Well ID</u>	<u>Owner</u>	<u>Iron*</u> (mg/L)	<u>Sulfate*</u> (mg/L)	<u>Dichloro difluoro methane</u> (µg/L)	<u>Chloroform</u> (µg/L)
01204.21.07.011.000	5	Bedalov	0.43	260		
012.04.21.06.059.016	125	Blazek		260		
012.04.21.07.010.00	8	Block		280		
987.9997.002	167	Coblentz	0.95	370		0.75
012.04.21.06.008.000	24	Gellings	0.62	270		
012.04.21.06.003.000	25	Gellings		270		
012.04.21.06.062.000	141	Hackstein		360		
012.04.21.06.021.000	73	Heritz	1.2			
010.04.20.01.004.000	30	Hintz	0.35	250		
Unknown	Unknown	Kolp		350		
012.04.21.06.035.000	7	Ludke	0.3			
940.9989.000	50	Penn			2.8**	
012.04.21.06.042.010	88	Nowag		340		
012.04.21.06.041.000	55	Schemeit	0.65			
012.04.21.07.019.000	76	Schingeck	0.38			
012.04.21.06.055.000	82	Swenson	0.87			
012.04.21.06.017.000	65	VandenBoom	0.41			
012.04.21.06.019.000	78	VandenBoom	0.51		0.33	
012.04.21.05.005.000	109	Vretenar		390		
938.9997.000	98	Whipple			0.25	
012.04.21.06.013.000	86	Williams	0.52	250		
012.04.21.05.022.000	68	Zamecnik	0.45			

* Exceedence of the Federal Secondary Drinking Water Standards

** Above the LOQ

2001 Residential Well Samples Exceeding Constituent LOD

<u>Tax ID</u>	<u>Well ID</u>	<u>Owner</u>	<u>Iron*</u> (mg/L)	<u>Sulfate*</u> (mg/L)	<u>Dichloro difluoro methane</u> (µg/L)
012.04.21.06.019.000	78	VandenBoom			0.33
012.04.21.07.016.000	35	Janikowski			0.36
012.04.21.06.030.000	62	Stroud	0.47		
012.04.21.06.064.000	45	Metz	0.32	250	
941.9997.000	42	Mateicka, Sr.	0.39	350	
941.9982.000	745	Lange	0.62		
012.04.21.05.021.000	26	Gellings	0.58		
012.04.21.06.042.000	89	Gardner	0.48	290	
012.04.21.06.048.000	46	Fleming	0.33	300	
010.04.20.01.031.000	1	Abramowski		260	

* Exceedence of the Federal Secondary Drinking Water Standards

** Above the LOQ

2000 Residential Well Samples Exceeding Constituent LOD

<u>Tax ID</u>	<u>Well ID</u>	<u>Owner</u>	<u>Iron*</u> (mg/L)	<u>Sulfate*</u> (mg/L)	<u>Dichloro difluoro methane</u> (µg/L)	<u>Chloro- methane</u> (µg/L)	<u>Ortho Xylene</u> (µg/L)	<u>1,2,4.Trim ethylbenz ene</u> (µg/L)
985.9996.000	117	Acker	3.2					
012.04.21.07.018.000	119	Anderson	0.49					
942.9998.000	69	Balisteri			0.56**			
939.9996.006	91	Berndt	0.47					
012.04.21.06.059.016	125	Blazek	0.35	250				
010.04.20.01.001.000	16	DeBack		280	0.13			
985.9999.000	135	Fredrickson	0.53	300				
012.04.21.06.042.000	89	Gardner	0.59	290				
012.04.21.06.004.000	803	Gellings	0.49	260				
939.9999.000	138	Grandlich	0.35					
012.04.21.06.042.000	140	Haasch		270				
936.9997.000	95	Hinkel	0.34					
010.04.20.01.031.000	1	Abramowski			0.25			
	Unknown	Unknown Kolp	0.31	300				
941.9997.000	42	Mateicka, Sr.	0.39	340				
010.04.20.01.020.000	44	Mente	0.99					
939.9996.005	165	Millin	0.47					
012.04.21.06.037.000	49	Olson	0.52		0.92**			
012.04.21.06.066.000	48	Olson	0.79	300				
012.04.21.05.002.000	102	Perdzock		260	0.33			
012.04.21.06.069.000	192	Prodoehl	0.37	420				
935.9994.002	114	Rynders					0.12	0.27
944.9998.000	107	Stick	0.36					
	Surface Water		1.7					
938.9999.005	181	Tomczak	0.54					
012.04.21.06.019.000	78	VandenBoom	0.59			0.29		
938.9997.000	98	Whipple	0.36		0.51			

* Exceedence of the Federal Secondary Drinking Water Standards

** Above the LOQ

1999 Residential Well Samples Exceeding Constituent LOD

<u>Tax ID</u>	<u>Well ID</u>	<u>Owner</u>	<u>Iron*</u> (mg/L)	<u>Sulfate*</u> (mg/L)	<u>Dichloro difluoro methane</u> (µg/L)	<u>Chloroform</u> (µg/L)	<u>Toluene</u> (µg/L)
010.04.20.01.001.000	90	Alex	1.7		0.44		
942.9998.000	69	Balisteri			0.32		
012.04.21.06.027.000	4	Barbian	9.2				
01204.21.07.011.000	5	Bedalov	0.37				
939.9996.006	91	Berndt	0.37				
012.04.21.07.010.00	8	Block	0.51				0.13
012.04.21.06.043.000	93	Buncich	0.42				
940.9997.000	14	Couillard	0.33				
010.04.20.01.001.000	16	DeBack	0.3				
010.04.20.01.005.000	70	Gaffney	0.37				
012.04.21.06.003.000	25	Gellings	1.2				
012.04.21.06.031.000	27	Harris	0.32				
012.04.21.06.021.00	73	Heritz	0.43				
936.9997.000	95	Hinkel	0.38				
012.04.21.06.013.000	86	Hubbard	0.46				
012.04.21.06.057.000	809	Jorgenson	0.51				
010.04.20.01.031.000	1	Abramowski			0.22		
938.9999.004	110	Kopp	0.42				
941.9982.000	38	Lange	0.36				
012.04.21.06.038.000	63	Langfeldt	0.5				
941.9997.000	42	Mateicka, Sr.	0.35				
012.04.21.06.066.000	48	Olson	0.32				
012.04.21.06.037.000	49	Olson	0.44		0.44		
940.9989.000	50	Penn	1.3		0.7**		
012.04.21.05.002.000	102	Perdzock			0.29		
010.04.20.01.013.000	53	Sandford	0.45				
012.04.21.05.009.000	104	Savenac	0.5				
012.04.21.07.019.000	76	Schingeck	0.41				
012.04.21.06.040.000	56	Schmid	0.36				
944.9998.000	107	Stick				0.26	
Trip Blank							0.2
012.04.21.06.019.000	78	VandenBoom	0.59				

* Exceedence of the Federal Secondary Drinking Water Standards

** Above the LOQ

938.9997.000

98 Whipple

0.35

Continued – 1999 Residential Well Samples Exceeding Constituent LOD

<u>Tax ID</u>	<u>Well ID</u>	<u>Owner</u>	<u>Iron*</u> (mg/L)	<u>Sulfate*</u> (mg/L)	<u>Dichloro difluoro methane</u> (µg/L)	<u>Chloroform</u> (µg/L)	<u>Toluene</u> (µg/L)
935.9999.009	808	Woelbing	0.88				
012.04.21.05.022.000	68	Zamecnik					0.13

* Exceedence of the Federal Secondary Drinking Water Standards

** Above the LOQ

1998 Residential Well Samples Exceeding Constituent LOD

<u>Tax ID</u>	<u>Well ID</u>	<u>Owner</u>	<u>Iron*</u> (mg/L)	<u>Sulfate*</u> (mg/L)	<u>Dichloro difluoro methane</u> (µg/L)
940.9997.000	14	Couillard	0.36		
892.9991.000	214	Diekow	0.78		
012.04.21.06.008.000	24	Gellings	0.72		
012.04.21.06.003.000	25	Gellings	0.35		
012.04.21.06.057.000	809	Jorgenson	0.4	250	
010.04.20.01.031.000	1	Abramowski			0.27
012.04.21.06.066.000	48	Olson	1.2	250	
012.04.21.06.037.000	49	Olson	0.37		

1997 Residential Well Samples Exceeding Constituent LOD

<u>Tax ID</u>	<u>Well ID</u>	<u>Owner</u>	<u>Iron*</u> (mg/L)	<u>Sulfate*</u> (mg/L)	<u>Dichloro difluoro methane</u> (µg/L)	<u>1,1,1.Trichlor o.ethane</u> (µg/L)
012.04.21.07.016.000	35	Janikowski	0.38		0.094	
941.9996.000	39	Losey	0.3			0.06
010.04.20.01.020.000	44	Mente	1		0.13	
012.04.21.07.017.000	40	Zirzow			0.25	

1996 Residential Well Samples Exceeding Constituent LOD

<u>Tax ID</u>	<u>Well ID</u>	<u>Owner</u>	<u>Iron*</u> (mg/L)	<u>Sulfate*</u> (mg/L)	<u>Dichloro difluoro methane</u> (µg/L)
012.04.21.06.010.020	13	Carriveau		270	
012.04.21.06.048.000	46	Fleming, Sr.		280	
010.04.20.01.005.000	70	Gaffney	0.3		
941.9997.000	42	Mateicka, Sr.	0.52	310	0.16
010.04.20.01.003.000	87	Meyers	0.49		
012.04.21.06.046.000	67	Worman		260	

* Exceedence of the Federal Secondary Drinking Water Standards

** Above the LOQ



● Well Sampling Locations



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