

City of Morenci

4490

Feb-20

Name of Supply

WSSN

Day of the month	Raw Pumpage in Million of Gallons per Day		Raw Pumpage Daily Total MGD	Raw Water To Iron Removal Plant MG	Raw Water To Iron Removal Plant Lbs	Comments
	Well 1	Well 2				
1	0.175		0.175	0.175	1.460	
2	0.191		0.191	0.191	1.593	
3	0.211		0.211	0.211	1.760	
4	0.132		0.132	0.132	1.101	
5	0.129		0.129	0.129	1.076	
6	0.060	0.045	0.105	0.105	0.876	
7	0.087	0.040	0.127	0.127	1.059	Bacteriological sample - Well meter is not operational (Estimated.)
8	0.032	0.063	0.095	0.095	0.792	
9	0.081	0.040	0.121	0.121	1.009	
10	0.111	0.040	0.151	0.151	1.259	
11	0.071	0.075	0.146	0.146	1.218	
12	0.097	0.061	0.158	0.158	1.318	
13	0.095	0.065	0.160	0.160	1.334	
14	0.099	0.067	0.166	0.166	1.384	
15	0.101	0.061	0.162	0.162	1.351	
16	0.106	0.060	0.166	0.166	1.384	
17	0.155	0.220	0.375	0.375	3.128	
18	0.032	0.106	0.138	0.138	1.151	
19	0.177	0.053	0.230	0.230	1.918	
20	0.056	0.115	0.171	0.171	1.426	
21	0.246	0.221	0.467	0.467	3.895	Water Main Break
22	0.091	0.107	0.198	0.198	1.651	Water Main Break
23	0.088	0.069	0.157	0.157	1.309	
24	0.095	0.075	0.170	0.170	1.418	
25	0.086	0.063	0.149	0.149	1.243	
26	0.098	0.074	0.172	0.172	1.434	
27	0.095	0.073	0.168	0.168	1.401	
28	0.096	0.073	0.169	0.169	1.409	
29	0.101	0.072	0.173	0.173	1.443	
30			0.000	0.000	0.000	
31			0.000	0.000	0.000	
Total	3.194	1.938	5.132	5.132	42.801	
Avg	0.110	0.081	0.191	0.191	1.592	
Max	0.246	0.221	0.467	0.467	3.895	
Min	0.032	0.040	0.072	0.072	0.600	

Pumpage

Day of the month	Water in Millions of Gallons				Head Loss Thru Filter ft/psi	Oxidant/Chlorine		Plant Tap/Hydrant Chlorine Residual		IRP Filter Chlorine Residual		Plant Tap Analysis	
	Raw Water To Plant	Filter Backwash To WWTP	Total Water To System	Total Million Pounds		Cl ₂ Applied Pounds	Cl ₂ Applied mg/L	Free	Total	Free	Total	Iron as Fe mg/L	Manganese as Mn mg/L
1	0.175		0.175	1.460		4.0	2.74			0.29	0.38		
2	0.191		0.191	1.593		5.0	3.14			0.11	0.40		
3	0.211		0.211	1.760		15.0	8.52			0.04	0.61		
4	0.132		0.132	1.101		6.0	5.45						
5	0.129		0.129	1.076		4.0	3.72						
6	0.105		0.105	0.876		5.0	5.71			0.21	0.25		
7	0.127	0.040	0.087	1.059		5.0	4.72			0.10	0.21		
8	0.095		0.095	0.792		5.0	6.31			0.14	0.20		
9	0.121		0.121	1.009		5.0	4.95			0.07	0.19		
10	0.151		0.151	1.259		6.0	4.76			0.16	0.19		
11	0.146		0.146	1.218		5.0	4.11			0.16	0.18		
12	0.158		0.158	1.318		6.0	4.55			0.25	0.31		
13	0.160		0.160	1.334		7.0	5.25			0.21	0.24		
14	0.166	0.040	0.126	1.384		6.0	4.33			0.25	0.27		
15	0.162		0.162	1.351		6.0	4.44			0.25	0.34		
16	0.166		0.166	1.384		6.0	4.33			0.29	0.30		
17	0.375		0.375	3.128		5.0	1.60			0.46	0.53		
18	0.138		0.138	1.151		6.0	5.21						
19	0.230		0.230	1.918		3.0	1.56						
20	0.171		0.171	1.426		7.0	4.91						
21	0.467	0.040	0.427	3.895		13.0	3.34			0.01	0.29		
22	0.198		0.198	1.651		4.0	2.42						
23	0.157		0.157	1.309		8.0	6.11						
24	0.170		0.170	1.418		5.0	3.53			0.27	0.33		
25	0.149		0.149	1.243		6.0	4.83			0.25	0.32		
26	0.172		0.172	1.434		6.0	4.18			0.19	0.31		
27	0.168		0.168	1.401		6.0	4.28			0.23	0.28		
28	0.169	0.040	0.129	1.409		5.0	3.55			0.13	0.30		
29	0.173		0.173	1.443		6.0	4.16			0.27	0.32		
30													
31													
Total	5.132	0.160	4.972	42.801		176.0	126.73			4.3	6.8		
Avg	0.177	0.040	0.171	1.476		6.1	4.37			0.20	0.31		
Max	0.467	0.040	0.427	3.895		15.0	8.52			0.46	0.61		
Min	0.095	0.040	0.087	0.792		3.0	1.56			0.01	0.18		

Name of Supply

WSSN

Day of Month	Conductivity		Temperature		Total - Hardness mg/L		Total - Alkalinity mg/L		Chloride mg/l		Calcium mg/l		Iron mg/l		Manganese mg/L		Sulfate mg/l		pH Analysis		Phosphate mg/l	
	Raw Sample Tap	Plant Tap	Raw Temp°C	Tap Temp°C	Raw Sample Tap	Plant Tap	Raw Sample Tap	Plant Tap	Raw Sample Tap	Plant Tap	Raw Sample Tap	Plant Tap	Raw Sample Tap	Plant Tap	Raw Sample Tap	Plant Tap	Raw Sample Tap	Plant Tap	Raw Sample Tap	Plant Tap	Raw Sample Tap	Plant Tap
1																						
2																						
3																						
4																						
5																						
6																						
7		600		13.4		260		294		6.0		134.0					14.0			7.57		
8																						
9																						
10																						
11																						
12																						
13																						
14																						
15																						
16																						
17																						
18																						
19																						
20																						
21																						
22																						
23																						
24																						
25																						
26																						
27																						
28		796		12		280		280		7.0		104.0								7.76		
29																						
30																						
31																						
Total:																						
Average:		698.0		12.7		270.0		287.0		6.5		119.0					14.0			7.67		
Maximum:		796.0		13.4		280.0		294.0		7.0		134.0					14.0			7.76		
Minimum:		600.0		12.0		260.0		280.0		6.0		104.0					14.0			7.57		

Comments: * Morenci is obtaining quotes for setting up its very own water testing laboratory which should be operational by April 2020.

Day of the month	Treated Water		Oxidant / Chlorine		Chlorine Residual mg/L						Comments	
	Metered		Avail 99.8% Cl ₂ Gas in lbs	Cl ₂ Applied mg/L	Distribution (DPW)		Distribution System		Distribution System Location	Applied IRP Filters		
	Million Gallons	Million lbs			Free	Total	Free	Total		Free		Total
1	0.175	1.460	4.0	2.74	0.64	0.69	0.31	0.35	215 E LaGrange	0.30	0.51	
2	0.191	1.593	5.0	3.14	0.57	0.64	0.53	0.64	607 Maple Drive	0.03	0.44	
3	0.211	1.760	15.0	8.52	0.45	0.56				0.05	0.16	
4	0.132	1.101	6.0	5.45	0.04	0.07				0.10	0.29	
5	0.129	1.076	4.0	3.72	0.35	0.37	0.29	0.32	City Hall	0.10	0.26	
6	0.105	0.876	5.0	5.71	0.36	0.43	0.21	0.24	City Hall	0.37	0.40	
7	0.127	1.059	5.0	4.72	0.23	0.31				0.20	0.21	
8	0.095	0.792	5.0	6.31	0.17	0.20	0.20	0.22	Laundromat	0.05	0.33	
9	0.121	1.009	5.0	4.95	0.15	0.20	0.06	0.07	City Hall	0.33	0.40	
10	0.151	1.259	6.0	4.76	0.16	0.22				0.14	0.26	
11	0.146	1.218	5.0	4.11	0.14	0.15	0.38	0.47	City Hall	0.26	0.32	
12	0.158	1.318	6.0	4.55	0.39	0.45				0.13	0.38	
13	0.160	1.334	7.0	5.25	0.55	0.58	0.38	0.47	City Hall	0.19	0.22	
14	0.166	1.384	6.0	4.33	0.59	0.67				0.20	0.22	
15	0.162	1.351	6.0	4.44	0.62	0.70				0.34	0.31	
16	0.166	1.384	6.0	4.33	0.64	0.77	0.40	0.52	City Hall	0.29	0.30	
17	0.375	3.128	5.0	1.60	0.45	0.59	0.73	0.79	City Hall	0.16	0.24	
18	0.138	1.151	6.0	5.21	0.49	0.60	0.70	0.83	City Hall	0.29	0.40	
19	0.230	1.918	3.0	1.56	0.44	0.53	0.88	0.96	City Hall	0.08	0.59	
20	0.171	1.426	7.0	4.91	0.05	0.06				0.34	0.35	
21	0.467	3.895	13.0	3.34	0.33	0.49				0.11	0.25	
22	0.198	1.651	4.0	2.42			0.18	0.22	1096 E. Main	0.03	0.33	
23	0.157	1.309	8.0	6.11	0.48	0.56	0.04	0.19	1096 E. Main	0.01	0.23	
24	0.170	1.418	5.0	3.53	0.62	0.71	0.61	0.79	City Hall	0.07	0.09	
25	0.149	1.243	6.0	4.83	0.75	0.88	0.62	0.74	City Hall	0.02	0.15	
26	0.172	1.434	6.0	4.18	0.98	1.16	0.55	0.62	City Hall	0.02	0.24	
27	0.168	1.401	6.0	4.28	0.71	0.81	0.55	0.66	City Hall	0.13	0.22	
28	0.169	1.409	5.0	3.55	0.81	0.90				0.25	0.27	
29	0.173	1.443	6.0	4.16	0.59	0.72	0.31	0.42	215 E LaGrange	0.21	0.30	
30												
31												
Total	5.132	42.801	176.0			15.0	7.9	9.5		4.8	8.7	
Avg	0.191	1.476	6.1	4.11	0.46	0.54	0.42	0.50		0.17	0.30	
Max	0.467	3.895	15.0	8.52	0.98	1.16	0.88	0.96		0.37	0.59	
Min	0.072	0.792	3.0	1.56	0.04	0.06	0.04	0.07		0.01	0.09	

City of Morenci

004490

Feb 2020

Name of Supply

WSSN

Month

Year

2	Routine samples required	0	Repeat samples taken	Cl ₂ residuals from routine & repeat		
6	Routine samples taken	0	Repeat samples total coliform positive			
0	Routine samples positive	P/A	Analytical Method			
				Average	0.57	0.69
				Maximum	1.84	2.03
				Mininum	0.04	0.19

Distribution System - Routine Samples

Count	Sample Location	Date Collected	Chlorine Residual (mg/L)	
			Free	Total
1	597 West Chestnut Street	02/11/20	0.23	0.32
2	118 Orchard Street	02/11/20	1.84	2.03
3	485 West Main - Well #1 - Raw	02/11/20	N/A	N/A
4	485 West Main - Well #2 - Raw	02/11/20	N/A	N/A
5	1096 East Main Street - Watermain Break/Isolation	02/22/20	0.18	0.22
6	1096 East Main Street - Watermain Break/Isolation	02/23/20	0.04	0.19
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
19				

Distribution System - Repeat Samples-Contact District if > one Positive

Count	Sample Location	Date Collected	Chlorine Residual (mg/L)	
			Free	Total
1				
2				
3				
4				
5				
6				
7				
8				
9				

Other: Triggered Source Water Samples, entry point (plant tap) ...

Count	Sample Location	Date Collected	Chlorine Residual (mg/L)	
			Free	Total
1				
2				
3				
4				
5				
6				
7				
8				
9				

DRINKING WATER ANALYSIS				DO NOT WRITE IN SHADED AREA (LABORATORY USE ONLY)			
Village of Blissfield W.T.P. Laboratory MDEQ ID#0750 1330 Beamer Rd. Blissfield, MI. 49228 (517) 486-3350							
COMPLETE FOR ALL SAMPLES (Please Print)							
WSSN or Pool ID# 00490	Chlorinated? <input checked="" type="radio"/> Yes <input type="radio"/> No	Cl- Residual mg/L F-1.84 T-2.05		Sample ID#	7297		
Sample Collector Name PAUL SEEGERT	Date Collected 2-11-2020	Time Collected 11:10 AM		Incubator Time			
System/ Owner Name CITY OF MORENCI	Collection Site (street address) 118 ORCHARD ST.			In	14:40		
City/Twp MORENCI	State MI	County LENAWEE	Zip 49256	Out	14:40		
Sampling Point (kitchen, bath, etc.) BATH FAUCET	Phone Number 517.458.6828			Analyst	J. Flores		
REPORT RESULTS TO: (please print)				Received in Lab	2-11-2020		
Name CITY OF MORENCI	Address 118 ORCHARD STREET			Time	14:30		
City MORENCI	State MI	Zip 49256		Result	Neg.		
Signature Paul D. Seeger	PD	<input checked="" type="radio"/> CH	PS	Analysis	Coliform		
			PU		MF		
			TX		HPC		
			FK		E. coli Enumeration		
					CHEMICAL		
					Chlorine		
					Fluoride		
					Nitrate		
					A TRUE COPY VILLAGE OF BLISSFIELD WTP		
					No Coliform or E. coli Detected		
					Comment		

The analyses performed by the Blissfield Drinking Water Laboratory were conducted using methods approved by the U.S.E.P.A. and other regulatory agencies as appropriate.

DRINKING WATER ANALYSIS				DO NOT WRITE IN SHADED AREA (LABORATORY USE ONLY)			
Village of Blissfield W.T.P. Laboratory MDEQ ID#0750 1330 Beamer Rd. Blissfield, MI. 49228 (517) 486-3350							
COMPLETE FOR ALL SAMPLES (Please Print)							
WSSN or Pool ID# 004490	Chlorinated? <input checked="" type="radio"/> Yes <input type="radio"/> No	Cl- Residual mg/L F-0.23 T-0.32		Sample ID#	7298		
Sample Collector Name PAUL SEEGERT	Date Collected 2-11-2020	Time Collected 10:40 AM		Incubator Time			
System/ Owner Name CITY OF MORENCI	Collection Site (street address) 597 W. CHESTNUT			In	14:40		
City/Twp MORENCI	State MI	County LENAWEE	Zip 49256	Out	14:40		
Sampling Point (kitchen, bath, etc.) BATH ROOM FAUCET	Phone Number 517.458.6828			Analyst	J. Flores		
REPORT RESULTS TO: (please print)				Received in Lab	2-11-2020		
Name CITY OF MORENCI	Address 118 ORCHARD STREET			Time	14:30		
City MORENCI	State MI	Zip 49256		Result	Neg.		
Signature Paul D. Seeger	PD	<input checked="" type="radio"/> CH	PS	Analysis	Coliform		
			PU		MF		
			TX		HPC		
			FK		E. coli Enumeration		
					CHEMICAL		
					Chlorine		
					Fluoride		
					Nitrate		
					A TRUE COPY VILLAGE OF BLISSFIELD WTP		
					No Coliform or E. coli Detected		
					Comment		

The analyses performed by the Blissfield Drinking Water Laboratory were conducted using methods approved by the U.S.E.P.A. and other regulatory agencies as appropriate.

DRINKING WATER ANALYSIS				DO NOT WRITE IN SHADED AREA (LABORATORY USE ONLY)			
Village of Blissfield W.T.P. Laboratory MDEQ ID#0750 1330 Beamer Rd. Blissfield, MI. 49228 (517) 486-3350							
COMPLETE FOR ALL SAMPLES (Please Print)							
WSSN or Pool ID# 004490	Chlorinated? Yes <input checked="" type="radio"/> No	Cl- Residual mg/L		Sample ID# 7299	Comment No E Coli or Coliform Detected		
Sample Collector Name PAUL SEEGER	Date Collected 2-11-2020	Time Collected 10:54 a.m.					
System/ Owner Name CITY OF MORENCI		Collection Site (street address) 485 W. MAIN		Incubator Time In: 14:40 Out: 14:40	Analyst J. Flores		
City/Twp. MORENCI	State MI	County LELAWEE	Zip 49256				
Sampling Point (kitchen, bath, etc.) WELL # 1		Phone Number 517.458.6828		Received in Lab Date: 2-11-2020 Time: 14:30	Result Coliform Neg		
REPORT RESULTS TO: (please print)							
Name City Of Morenci				Analysis	BACTERIOLOGICAL		
Address 118 ORCHARD STREET							
City MORENCI		State MI	Zip 49256	MF	CHEMICAL		
Signature Paul Seeger							
PD <input checked="" type="radio"/> CH PS PU TX FX				E. coli Enumeration	A TRUE COPY VILLAGE OF BLISSFIELD WTP		

The analyses performed by the Blissfield Drinking Water Laboratory were conducted using methods approved by the U.S.E.P.A. and other regulatory agencies as appropriate.

DRINKING WATER ANALYSIS				DO NOT WRITE IN SHADED AREA (LABORATORY USE ONLY)			
Village of Blissfield W.T.P. Laboratory MDEQ ID#0750 1330 Beamer Rd. Blissfield, MI. 49228 (517) 486-3350							
COMPLETE FOR ALL SAMPLES (Please Print)							
WSSN or Pool ID# 004490	Chlorinated? Yes <input checked="" type="radio"/> No	Cl- Residual mg/L		Sample ID# 7300	Comment No Coliform or E Coli Detected.		
Sample Collector Name PAUL SEEGER	Date Collected 2-11-2020	Time Collected 10:59 AM					
System/ Owner Name CITY OF MORENCI		Collection Site (street address) 485 WEST MAIN		Incubator Time In: 14:40 Out: 14:40	Analyst J. Flores		
City/Twp. MORENCI	State MI	County LELAWEE	Zip 49256				
Sampling Point (kitchen, bath, etc.) WELL # 2		Phone Number 517.458.6828		Received in Lab Date: 2-11-2020 Time: 14:30	Result Coliform Neg		
REPORT RESULTS TO: (please print)							
Name City Of Morenci				Analysis	BACTERIOLOGICAL		
Address 118 ORCHARD STREET							
City MORENCI		State MI	Zip 49256	MF	CHEMICAL		
Signature Paul Seeger							
PD <input checked="" type="radio"/> CH PS PU TX FX				E. coli Enumeration	A TRUE COPY VILLAGE OF BLISSFIELD WTP		

The analyses performed by the Blissfield Drinking Water Laboratory were conducted using methods approved by the U.S.E.P.A. and other regulatory agencies as appropriate.

DRINKING WATER ANALYSIS				DO NOT WRITE IN SHADED AREA (LABORATORY USE ONLY)	
Village of Blissfield W.T.P. Laboratory MDEQ ID#0750 1330 Beamer Rd. Blissfield, MI. 49228 (517) 486-3350					
COMPLETE FOR ALL SAMPLES (Please Print)					
WSSN or Pool ID# 04490	Chlorinated? Yes No	Cl- Residual mg/L 0.18-1.0	Sample ID# 19735Z		
Sample Collector Name Michael Sessions	Date Collected 2/22/2020	Time Collected 3:53 pm	Comment NO COLIFORMS OR E. COLI DETECTED		
System/ Owner Name City of Morenci	Collection Site (street address) 1096 E. Main Street				
City/Twp. Morenci	State MI	County Lenawee	Zip 49256	Incubator Time In: 17:20 Out: 17:20	
Sampling Point (kitchen, bath, etc.) Bath Sink	Phone Number (517) 458-6828				
REPORT RESULTS TO: (please print)					
Name Michael Sessions, City of Morenci					
Address 118 Orchard Street					
City Morenci	State MI	Zip 49256	Received in Lab Date: 2/22/20 Time: 17:17		
Signature 	PD	CH	PS	PU	TX
			Analysis		
			Result		
			BACTERIOLOGICAL		
			Coliform		
			MF		
			HPC		
			E. coli Enumeration		
			CHEMICAL		
			Chlorine		
			Fluoride		
			Nitrate		

The analyses performed by the Blissfield Drinking Water Laboratory were conducted using methods approved by the U.S.E.P.A. and other regulatory agencies as appropriate.

DRINKING WATER ANALYSIS				DO NOT WRITE IN SHADED AREA (LABORATORY USE ONLY)	
Village of Blissfield W.T.P. Laboratory MDEQ ID#0750 1330 Beamer Rd. Blissfield, MI. 49228 (517) 486-3350					
COMPLETE FOR ALL SAMPLES (Please Print)					
WSSN or Pool ID# 04490	Chlorinated? Yes No	Cl- Residual mg/L Free: 0 Tot: 1.0	Sample ID# 197357		
Sample Collector Name Michael Sessions	Date Collected 2/23/2020	Time Collected 4:00 p.m.	Comment		
System/ Owner Name City of Morenci	Collection Site (street address) 1096 E. Main Street				
City/Twp. Morenci	State MI	County Lenawee	Zip 49256	Incubator Time In: 18:30 Out: 18:30	
Sampling Point (kitchen, bath, etc.) Breakroom Sink	Phone Number (517) 458-6828				
REPORT RESULTS TO: (please print)					
Name Michael Sessions, City of Morenci					
Address 118 Orchard Street					
City Morenci	State MI	Zip 49256	Received in Lab Date: 2/23/20 Time: 16:35		
Signature 	PD	CH	PS	PU	TX
			Analysis		
			Result		
			BACTERIOLOGICAL		
			Coliform		
			MF		
			HPC		
			E. coli Enumeration		
			CHEMICAL		
			Chlorine		
			Fluoride		
			Nitrate		

A TRUE COPY
VILLAGE OF BLISSFIELD
WTP

The analyses performed by the Blissfield Drinking Water Laboratory were conducted using methods approved by the U.S.E.P.A. and other regulatory agencies as appropriate.