CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: November 11, 2024

TO: File

FROM: Woody Myers - WCR

SUBJECT: Village of Bay City - Groundwater Evaluation Report, WPDES Permit # WI-0061255

Site Information

The Village of Bay City wastewater treatment facility is located at West STH 35, Village of Bay City, Pierce County. This is a municipal wastewater treatment facility. Wastewater is currently treated via aerated lagoons and a settling pond and discharged to groundwater via infiltration by way of absorption ponds (seepage cells). The land disposal system is located in the NW ¼ of the NW ¼ of Section 8, T24N, R17W, Town of Isabelle.

Land Disposal Effluent & Groundwater Evaluation Summary

Table 1 Land Disposal Outfall Sampling Point Parameters and Limits
Outfall 003 Absorption Ponds

Parameter	Current Permit WI-0061255-06		Proposed Permit WI-0061255-07	
	Limits and Units	Limit Type	Limits and Units	Limit Type
Flow Rate	- MGD		- MGD	
BOD_5	50 mg/l	Monthly Avg	50 mg/l	Monthly Avg
Total Suspended Solids	- mg/l		- mg/l	
pH, Field	- su		- su	
Nitrogen, Total Kjeldahl	- mg/l		- mg/l	
Nitrogen. Ammonia	- mg/l		- mg/l	
Nitrogen, Organic	- mg/l		- mg/l	
Nitrogen, Nitrite + Nitrate	- mg/l		- mg/l	
Nitrogen, Total	- mg/l			
Total Dissolved Solids	- mg/l		- mg/l	
Chloride	- mg/l		- mg/l	

No proposed permit changes

Table 2 Monitoring Wells

Well	Current Permit WI-0061255-06		Proposed Permit WI-0061255-07	
	Well Location	Well Designation	Well Location	Well Designation
801 (MW-1)	Down-gradient	Non-Point of Standard	Down-gradient	Non-Point of Standard
802 (MW-2)	Down-gradient	Non-Point of Standard	Down-gradient	Non-Point of Standard
803 (MW-3)	Up-gradient	Background	Up-gradient	Background

No proposed permit changes

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Table 3 Groundwater Quality Standards

Parameter	Current Permit WI-0061255-06		Proposed WI-0061255-07	
	PAL	ES	PAL	ES
Depth to Groundwater	N/A	N/A	N/A	N/A
Groundwater Elevation	N/A	N/A	N/A	N/A
Chloride	125 mg/l	250 mg/l	125 mg/l	250 mg/l
Nitrogen, Nitrite + Nitrate	9.5 mg/l (ACL)	10.0 mg/l	***Exempt**	
Nitrogen, Ammonia	0.97 mg/l	9.7 mg/l	0.97 mg/l	9.7 mg/l
pH, Field	6.8-8.8 su	N/A	***6.4-8.4** su	N/A
Nitrogen, Organic	2.7 mg/l	N/A	***2.1** mg/l	N/A
Total Dissolved Solids	920 mg/l	N/A	***580** mg/l	N/A
Phosphorus, Total	N/A	N/A	**N/A**	**N/A**

* Proposed permit changes

Geology

The bedrock under this facility is the Trempealeau Group, which is comprised of the Jordan and St. Lawrence Formations. The Jordon Formation is comprised of the Coon Valley, Van Oser and Norwalk Members and the St. Lawrence is comprised of the Lodi Member. The St. Lawrence formation is comprised of dolomite and the Jordan is comprised of sandstone (*Bedrock Geology of Wisconsin, Regional Map Series West-Central Sheet*, Wisconsin Geological and Natural History Survey (WGNHS), 1988). Bedrock is anticipated to be between 100 and 200 feet below ground surface (bgs) (*Depth to Bedrock in Wisconsin,* WGNHS, 1973). The regolith consists of material ranging from fine gravel to silt. Surface soil primarily consists of the Finchford loamy sand (USDA NRCS Web Soil Survey).

Hydrogeology

Calculated groundwater elevations range between 669 and 675 feet above mean sea level (msl). Depth to groundwater was reported to be between 75 and 88 feet bgs. Groundwater flow direction was calculated to be predominately to the southeast. Regional groundwater flow direction in this area of Pierce County is to the south (*Generalized Water-Table Elevation of Pierce County, Wisconsin*, Map, WGNHS, 1990). The site is directly north of the Mississippi River approximately 400 feet from a back water and approximately 7000 feet from the main channel. The river is approximately 675 feet MSL. Bay City is at the north end (upstream boundary) of Lake Pepin.

Land Disposal Effluent Quality and Loading Rates

The following table is the average flow (hydraulic loading), total nitrogen, chloride and BOD_5 loading summations for the land disposal system.

Table 4 Land Treatment Disposal Loading Averages

Year	Flow (MGD)	Nitrogen (mg/l)	Chloride (mg/l)	BOD5 (mg/l)
2024#	0.030	29.0	254	7.4
2023	0.024	29.1	242	3.0
2022	0.020	27.9	239	5.5
2021	0.043	14.0	224	13.5
2020	0.022	26.9	148	8.6
2019	0.026	20.7	172	8.2

# Indicates partial year

Groundwater Monitoring System and Sampling Frequency

All parameters are analyzed for the dissolved phase in groundwater. Established groundwater quality standards are found in Table 1 Public Health Groundwater Quality Standards s. NR 140.10 Wis. Adm. Code, and Table 2 Public Welfare Groundwater Standards s. NR 140.12 Wis. Adm. Code. The thresholds of these standards are the Enforcement Standard (ES) and the Preventative Action Limit (PAL).

Table 5 Groundwater Monitoring Well Data

Sample Point	Well Name	Elevation (feet above msl)				Length (feet)		Well Type
		Casing Top	Ground Surface	Screen Top	Screen Bottom	Screen Length	Well Depth	
801	MW-1	757.33	754.2	670.7	655.7	15.0	104.0	WT
802	MW-2	756.58	753.7	671.7	661.7	10.0	94.0	WT
803	MW-3	749.09	746.5	675.1	665.1	10.0	81.5	WT

All measurements in feet
WT-Water table Observation P-Piezometer O-Other

Groundwater sampling results from this facility have been analyzed for each well to evaluate trends of the regulated compounds in groundwater and to calculate PALs for s. NR 140.22 Wis. Adm. Code Indicator Parameters and to evaluate potential exemptions under s. NR 140.28 Wis. Adm. Code. The groundwater was evaluated by looking at the groundwater data from March 11, 2019 – September 15, 2024.

Background Groundwater Quality

The only PAL exceedances observed in the background groundwater quality was for nitrite + nitrate. The exceedances were consistent and the trend for the results are stable. There were no ES exceedances for this compound or any other tested parameters.

Down-Gradient Groundwater Quality

The down-gradient groundwater sample results had infrequent PAL exceedances of chloride and consistent exceedances of the PAL and ES for nitrite + nitrate. A trend of the chloride results indicates a potential increase over time. The trends for nitrite + nitrate in wells 801 and 802 indicate a slightly increasing trend over time. See Figure 1.

Land Disposal System Impact to Groundwater Quality

Concentrations and trends in the groundwater monitoring data were compared to the loading data for the land disposal system. There is not a clear correlation between the effluent loading levels and the groundwater monitoring results.

Proposed Groundwater Monitoring Requirements Permit WI-0061255-07

Table 6 Groundwater Quality Sampling Frequency and Limits
Sampling Point Outfall 003 Absorption Ponds

Sample Point	Well Name	Sample Frequency	Well Designation
801	MW-1	Quarterly	Non-Point of Standard
802	MW-2	Quarterly	Non-Point of Standard
803	MW-3	Quarterly	Background
Parameter	PAL	ES	Source
Depth to Groundwater	N/A	N/A	Measured
Groundwater Elevation	N/A	N/A	Measured
Chloride	125 mg/l	250 mg/l	NR 140 Table 2
Nitrogen, Nitrite + Nitrate	***Exempt**		NR 140.28
Nitrogen, Ammonia	0.97 mg/l	9.7 mg/l	NR 140 Table 1
pH, Field	***6.4-8.4** su	N/A	Calculated
Nitrogen, Organic	***2.1** mg/l	N/A	Calculated
Total Dissolved Solids	***580** mg/l	N/A	Calculated
Phosphorus	N/A	N/A	

* Proposed permit changes

Indicator Parameter PALs

Indicator Parameter PALs are developed following the procedures described in s. NR 140.20(2), Wis. Adm. Code. Indicator parameters do not have Enforcement Standards. The PAL for an indicator parameter is a benchmark for evaluating site specific trends. When significant increases in the trends are observed, the facility and the department's response action under s. NR 140.24 Wis. Adm. Code should be to investigate the source of the increase. The following equations were used to calculate the indicator parameter PALs:

$$\sum \text{[Mean of the background groundwater quality + Minimum Increase (NR 140.20 Table 3)]} = \text{PAL}$$

And for pH:

$$\sum \text{[Mean of the background groundwater quality} \pm 1 \text{ su]} = \text{upper and lower PAL}$$

Alternative Concentration Limits

Alternative concentration Limits (ACLs) can be developed and provided for a groundwater monitoring system utilizing the procedures described in s. NR 140.28, Wis. Adm. Code. ACLs were calculated using the following equation:

$$\sum \text{[Mean of the background groundwater quality +(2) x Standard Deviation of Results]} = \text{ACL}$$

Conclusions

This facility has been designated as a functional equivalent of a surface water discharge. This means the wastewater applied to the absorption ponds infiltrates to the groundwater and the groundwater quickly migrates and combines with the Mississippi River.

There are no recommended changes to the sampling point (Outfall 003) parameters and limits at this time. However, if the chloride levels continue to rise, they could exceed the surface water criteria for the river.

A conditional exemption has been granted for the compound of nitrite + nitrate. The conditions are for this facility and its current groundwater monitoring wells. The exemption is for the reissued permit and will be re-evaluated during the next permit issuance. In addition, if the sampling point (Outfall 003) levels of nitrogen increase significantly the exemption can be rescinded. The facility should continue to test groundwater samples for nitrite + nitrate, but no ss. NR 140.24 or NR 140.26 Wis. Adm. Code response action will be required.

Based on background groundwater quality trends the pH PAL range has been reduced from 6.8-8.8 to 6.4-8.4 su. The indicator parameter PALs for organic nitrogen and TDS have been reduced from 2.7 to 2.1 mg/l and 920 to 580 mg/l respectively based on the background groundwater quality sample results.

Compliance Schedule Recommendations

Section NR 206.07 (2)(h) 1. Wis. Adm. Code requires a land disposal management plan for facilities with land disposal systems. The facility should review their plan within 90 days of permit reissuance and any revisions should be submitted to the department for approval.

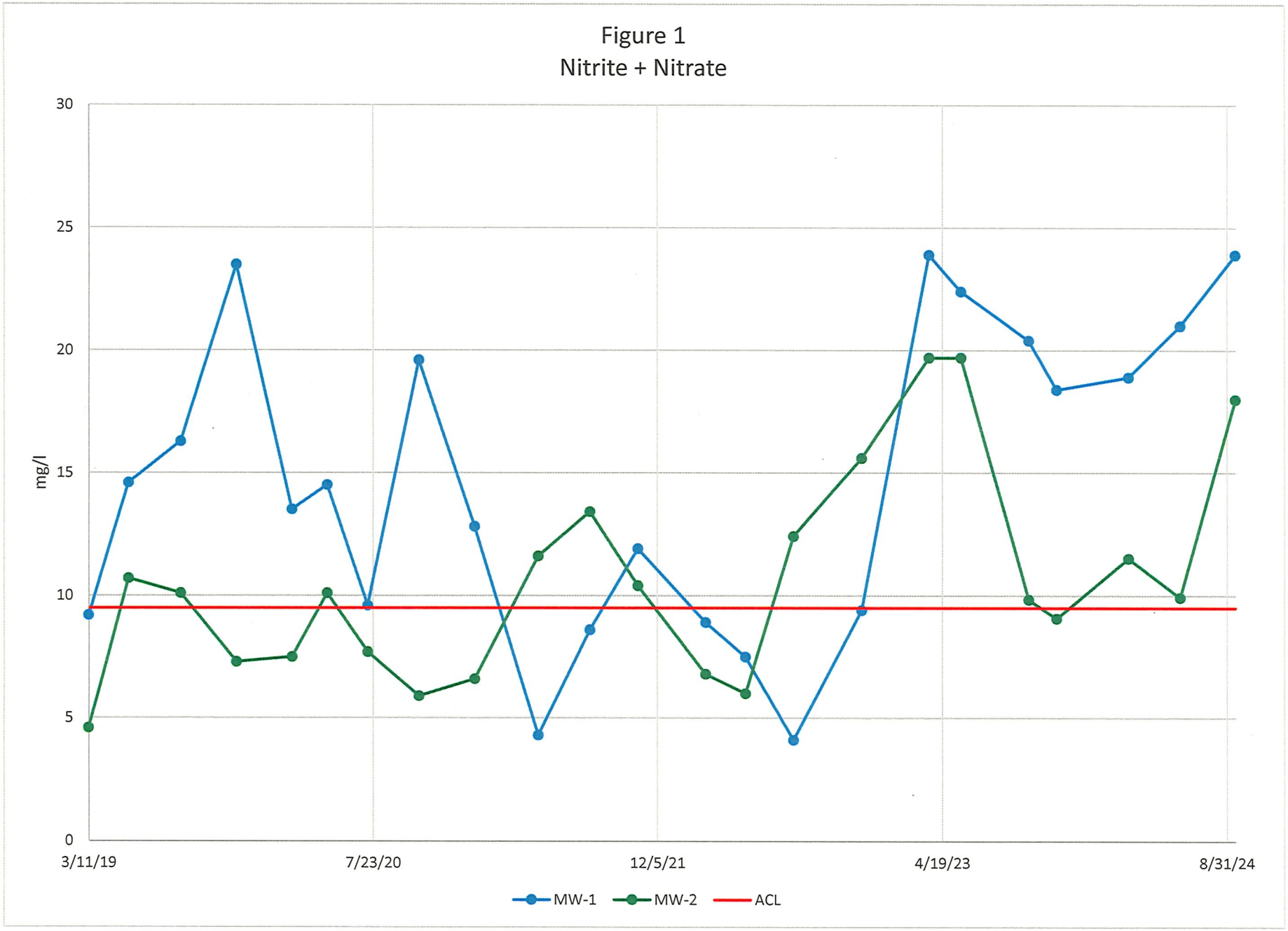
Figure 1
Nitrite + Nitrate
30
25
20
15
10
5
0
mg/l
3/11/19
7/23/20
12/5/21
4/19/23
8/31/24
MW-1
MW-2
ACL

APPENDIX

well		param	parm_u	sample_date	resi	result_amt
801	MW-1	Chloride Dissolved	mg/L	03/11/2019 0:00		76
801	MW-1	Chloride Dissolved	mg/L	05/20/2019 0:00		106
801	MW-1	Chloride Dissolved	mg/L	08/20/2019 0:00		117
801	MW-1	Chloride Dissolved	mg/L	11/26/2019 0:00		170
801	MW-1	Chloride Dissolved	mg/L	03/03/2020 0:00		110
801	MW-1	Chloride Dissolved	mg/L	05/04/2020 0:00		125
801	MW-1	Chloride Dissolved	mg/L	07/14/2020 0:00		82
801	MW-1	Chloride Dissolved	mg/L	10/12/2020 0:00		126
801	MW-1	Chloride Dissolved	mg/L	01/18/2021 0:00		88
801	MW-1	Chloride Dissolved	mg/L	05/10/2021 0:00		20
801	MW-1	Chloride Dissolved	mg/L	08/09/2021 0:00		126
801	MW-1	Chloride Dissolved	mg/L	11/01/2021 0:00		185
801	MW-1	Chloride Dissolved	mg/L	02/28/2022 0:00		112
801	MW-1	Chloride Dissolved	mg/L	05/09/2022 0:00		91
801	MW-1	Chloride Dissolved	mg/L	08/01/2022 0:00		20
801	MW-1	Chloride Dissolved	mg/L	11/29/2022 0:00		82
801	MW-1	Chloride Dissolved	mg/L	03/27/2023 0:00		222
801	MW-1	Chloride Dissolved	mg/L	05/22/2023 0:00		217
801	MW-1	Chloride Dissolved	mg/L	09/18/2023 0:00		172
801	MW-1	Chloride Dissolved	mg/L	11/06/2023 0:00		175
801	MW-1	Chloride Dissolved	mg/L	03/11/2024 0:00		231
801	MW-1	Chloride Dissolved	mg/L	06/10/2024 0:00		221
801	MW-1	Chloride Dissolved	mg/L	09/15/2024 0:00		219
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	03/11/2019 0:00	<	0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	05/20/2019 0:00	<	0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	08/20/2019 0:00	<	0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	11/26/2019 0:00	<	0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	03/03/2020 0:00	<	0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	05/04/2020 0:00	<	0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	07/14/2020 0:00	<	0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	10/12/2020 0:00	<	0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	01/18/2021 0:00	<	0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	05/10/2021 0:00	<	0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	08/09/2021 0:00	<	0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	11/01/2021 0:00	<	0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	02/28/2022 0:00	<	0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	05/09/2022 0:00	<	0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	08/01/2022 0:00	<	0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	11/29/2022 0:00	<	0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	03/27/2023 0:00	<	0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	05/22/2023 0:00	<	0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	09/18/2023 0:00	<	0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	11/06/2023 0:00		0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	03/11/2024 0:00		0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	06/10/2024 0:00		0.1
801	MW-1	Nitrogen, Ammonia Dissolved	mg/L	09/15/2024 0:00		0.1

well		param	parm_u	sample_date	resi	result_amt
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/11/2019 0:00		9.2
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/20/2019 0:00		14.6
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/20/2019 0:00		16.3
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/26/2019 0:00		23.5
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/03/2020 0:00		13.5
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/04/2020 0:00		14.5
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	07/14/2020 0:00		9.6
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/12/2020 0:00		19.6
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/18/2021 0:00		12.8
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/10/2021 0:00		4.3
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/09/2021 0:00		8.6
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/01/2021 0:00		11.9
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	02/28/2022 0:00		8.9
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/09/2022 0:00		7.5
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/01/2022 0:00		4.1
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/29/2022 0:00		9.4
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/27/2023 0:00		23.9
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/22/2023 0:00		22.4
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/18/2023 0:00		20.4
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/06/2023 0:00		18.4
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/11/2024 0:00		18.9
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/10/2024 0:00		21
801	MW-1	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/15/2024 0:00		23.9
801	MW-1	Nitrogen, Organic Dissolved	mg/L	03/11/2019 0:00		1
801	MW-1	Nitrogen, Organic Dissolved	mg/L	05/20/2019 0:00		14.6
801	MW-1	Nitrogen, Organic Dissolved	mg/L	08/20/2019 0:00		1.2
801	MW-1	Nitrogen, Organic Dissolved	mg/L	11/26/2019 0:00		1.6
801	MW-1	Nitrogen, Organic Dissolved	mg/L	03/03/2020 0:00		1.2
801	MW-1	Nitrogen, Organic Dissolved	mg/L	05/04/2020 0:00		1.4
801	MW-1	Nitrogen, Organic Dissolved	mg/L	07/14/2020 0:00		1.3
801	MW-1	Nitrogen, Organic Dissolved	mg/L	10/12/2020 0:00		1.3
801	MW-1	Nitrogen, Organic Dissolved	mg/L	01/18/2021 0:00		1.7
801	MW-1	Nitrogen, Organic Dissolved	mg/L	05/10/2021 0:00		0.9
801	MW-1	Nitrogen, Organic Dissolved	mg/L	08/09/2021 0:00		1
801	MW-1	Nitrogen, Organic Dissolved	mg/L	11/01/2021 0:00		1.1
801	MW-1	Nitrogen, Organic Dissolved	mg/L	02/28/2022 0:00		1.2
801	MW-1	Nitrogen, Organic Dissolved	mg/L	05/09/2022 0:00	<	0.5
801	MW-1	Nitrogen, Organic Dissolved	mg/L	08/01/2022 0:00	<	0.5
801	MW-1	Nitrogen, Organic Dissolved	mg/L	11/29/2022 0:00		1.1
801	MW-1	Nitrogen, Organic Dissolved	mg/L	03/27/2023 0:00		1
801	MW-1	Nitrogen, Organic Dissolved	mg/L	05/22/2023 0:00		0.9
801	MW-1	Nitrogen, Organic Dissolved	mg/L	09/18/2023 0:00		1.4
801	MW-1	Nitrogen, Organic Dissolved	mg/L	11/06/2023 0:00		0.9
801	MW-1	Nitrogen, Organic Dissolved	mg/L	03/11/2024 0:00		1
801	MW-1	Nitrogen, Organic Dissolved	mg/L	06/10/2024 0:00		1.4
801	MW-1	Nitrogen, Organic Dissolved	mg/L	09/15/2024 0:00		1.8

well		param	parm_u	sample_date	resi	result_amt
801	MW-1	pH Field	su	03/11/2019 0:00		7.42
801	MW-1	pH Field	su	05/20/2019 0:00		7.29
801	MW-1	pH Field	su	08/20/2019 0:00		7.44
801	MW-1	pH Field	su	11/26/2019 0:00		7.32
801	MW-1	pH Field	su	03/03/2020 0:00		7.23
801	MW-1	pH Field	su	05/04/2020 0:00		7.37
801	MW-1	pH Field	su	07/14/2020 0:00		7.51
801	MW-1	pH Field	su	10/12/2020 0:00		7.21
801	MW-1	pH Field	su	01/18/2021 0:00		6.82
801	MW-1	pH Field	su	05/10/2021 0:00		6.94
801	MW-1	pH Field	su	08/09/2021 0:00		6.82
801	MW-1	pH Field	su	11/01/2021 0:00		6.91
801	MW-1	pH Field	su	02/28/2022 0:00		6.83
801	MW-1	pH Field	su	05/09/2022 0:00		6.92
801	MW-1	pH Field	su	08/01/2022 0:00		7.01
801	MW-1	pH Field	su	11/29/2022 0:00		7
801	MW-1	pH Field	su	03/27/2023 0:00		7.45
801	MW-1	pH Field	su	05/22/2023 0:00		7.73
801	MW-1	pH Field	su	09/18/2023 0:00		7.95
801	MW-1	pH Field	su	11/06/2023 0:00		8.07
801	MW-1	pH Field	su	03/11/2024 0:00		7.63
801	MW-1	pH Field	su	06/10/2024 0:00		7.89
801	MW-1	pH Field	su	09/15/2024 0:00		8.21
801	MW-1	Phosphorus, Total	mg/L	03/11/2019 0:00	<	0.05
801	MW-1	Phosphorus, Total	mg/L	05/20/2019 0:00	<	0.05
801	MW-1	Phosphorus, Total	mg/L	08/20/2019 0:00	<	0.05
801	MW-1	Phosphorus, Total	mg/L	11/26/2019 0:00	<	0.05
801	MW-1	Phosphorus, Total	mg/L	03/03/2020 0:00	<	0.05
801	MW-1	Phosphorus, Total	mg/L	05/04/2020 0:00	<	0.5
801	MW-1	Phosphorus, Total	mg/L	07/14/2020 0:00	<	0.05
801	MW-1	Phosphorus, Total	mg/L	10/12/2020 0:00	<	0.05
801	MW-1	Phosphorus, Total	mg/L	01/18/2021 0:00		0.06
801	MW-1	Phosphorus, Total	mg/L	05/10/2021 0:00	<	0.05
801	MW-1	Phosphorus, Total	mg/L	08/09/2021 0:00	<	0.05
801	MW-1	Phosphorus, Total	mg/L	11/01/2021 0:00		0.11
801	MW-1	Phosphorus, Total	mg/L	02/28/2022 0:00		0.08
801	MW-1	Phosphorus, Total	mg/L	05/09/2022 0:00		0.07
801	MW-1	Phosphorus, Total	mg/L	08/01/2022 0:00	<	0.05
801	MW-1	Phosphorus, Total	mg/L	11/29/2022 0:00	<	0.05
801	MW-1	Phosphorus, Total	mg/L	03/27/2023 0:00		0.005
801	MW-1	Phosphorus, Total	mg/L	05/22/2023 0:00	<	0.05
801	MW-1	Phosphorus, Total	mg/L	09/18/2023 0:00		0.09
801	MW-1	Phosphorus, Total	mg/L	11/06/2023 0:00		0.05
801	MW-1	Phosphorus, Total	mg/L	03/11/2024 0:00		0.07
801	MW-1	Phosphorus, Total	mg/L	06/10/2024 0:00		0.07
801	MW-1	Phosphorus, Total	mg/L	09/15/2024 0:00		0.1

well		param	parm_u	sample_date	resu	result_amt
801	MW-1	Solids, Total Dissolved	mg/L	03/11/2019 0:00		479
801	MW-1	Solids, Total Dissolved	mg/L	05/20/2019 0:00		692
801	MW-1	Solids, Total Dissolved	mg/L	08/20/2019 0:00		641
801	MW-1	Solids, Total Dissolved	mg/L	11/26/2019 0:00		669
801	MW-1	Solids, Total Dissolved	mg/L	03/03/2020 0:00		572
801	MW-1	Solids, Total Dissolved	mg/L	05/04/2020 0:00		546
801	MW-1	Solids, Total Dissolved	mg/L	07/14/2020 0:00		517
801	MW-1	Solids, Total Dissolved	mg/L	10/12/2020 0:00		642
801	MW-1	Solids, Total Dissolved	mg/L	01/18/2021 0:00		506
801	MW-1	Solids, Total Dissolved	mg/L	05/10/2021 0:00		320
801	MW-1	Solids, Total Dissolved	mg/L	08/09/2021 0:00		623
801	MW-1	Solids, Total Dissolved	mg/L	11/01/2021 0:00		644
801	MW-1	Solids, Total Dissolved	mg/L	02/28/2022 0:00		551
801	MW-1	Solids, Total Dissolved	mg/L	05/09/2022 0:00		519
801	MW-1	Solids, Total Dissolved	mg/L	08/01/2022 0:00		325
801	MW-1	Solids, Total Dissolved	mg/L	11/29/2022 0:00		487
801	MW-1	Solids, Total Dissolved	mg/L	03/27/2023 0:00		844
801	MW-1	Solids, Total Dissolved	mg/L	05/22/2023 0:00		859
801	MW-1	Solids, Total Dissolved	mg/L	09/18/2023 0:00		720
801	MW-1	Solids, Total Dissolved	mg/L	11/06/2023 0:00		689
801	MW-1	Solids, Total Dissolved	mg/L	03/11/2024 0:00		718
801	MW-1	Solids, Total Dissolved	mg/L	06/10/2024 0:00		814
801	MW-1	Solids, Total Dissolved	mg/L	09/15/2024 0:00		779
802	MW-2	Chloride Dissolved	mg/L	03/11/2019 0:00		38
802	MW-2	Chloride Dissolved	mg/L	05/20/2019 0:00		94
802	MW-2	Chloride Dissolved	mg/L	08/20/2019 0:00		87
802	MW-2	Chloride Dissolved	mg/L	11/26/2019 0:00		67
802	MW-2	Chloride Dissolved	mg/L	03/03/2020 0:00		48
802	MW-2	Chloride Dissolved	mg/L	05/04/2020 0:00		66
802	MW-2	Chloride Dissolved	mg/L	07/14/2020 0:00		59
802	MW-2	Chloride Dissolved	mg/L	10/12/2020 0:00		35
802	MW-2	Chloride Dissolved	mg/L	01/18/2021 0:00		44
802	MW-2	Chloride Dissolved	mg/L	05/10/2021 0:00		97
802	MW-2	Chloride Dissolved	mg/L	08/09/2021 0:00		130
802	MW-2	Chloride Dissolved	mg/L	11/01/2021 0:00		112
802	MW-2	Chloride Dissolved	mg/L	02/28/2022 0:00		119
802	MW-2	Chloride Dissolved	mg/L	05/09/2022 0:00		200
802	MW-2	Chloride Dissolved	mg/L	08/01/2022 0:00		209
802	MW-2	Chloride Dissolved	mg/L	11/29/2022 0:00		240
802	MW-2	Chloride Dissolved	mg/L	03/28/2023 0:00		188
802	MW-2	Chloride Dissolved	mg/L	05/22/2023 0:00		216
802	MW-2	Chloride Dissolved	mg/L	09/18/2023 0:00		63
802	MW-2	Chloride Dissolved	mg/L	11/06/2023 0:00		62
802	MW-2	Chloride Dissolved	mg/L	03/11/2024 0:00		99
802	MW-2	Chloride Dissolved	mg/L	06/10/2024 0:00		64
802	MW-2	Chloride Dissolved	mg/L	09/15/2024 0:00		143

well		param	parm_u	sample_date	resu	result_amt
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	05/20/2019 0:00	<	0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	08/20/2019 0:00	<	0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	11/26/2019 0:00	<	0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	03/03/2020 0:00	<	0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	05/04/2020 0:00	<	0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	07/14/2020 0:00	<	0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	10/12/2020 0:00	<	0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	01/18/2021 0:00	<	0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	05/10/2021 0:00	<	0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	08/09/2021 0:00	<	0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	11/01/2021 0:00	<	0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	02/28/2022 0:00	<	0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	05/09/2022 0:00	<	0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	08/01/2022 0:00	<	0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	11/29/2022 0:00	<	0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	03/28/2023 0:00	<	0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	05/22/2023 0:00	<	0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	09/18/2023 0:00	<	0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	11/06/2023 0:00		0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	03/11/2024 0:00		0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	06/10/2024 0:00		0.1
802	MW-2	Nitrogen, Ammonia Dissolved	mg/L	09/15/2024 0:00		0.1
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/11/2019 0:00		4.6
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/20/2019 0:00		10.7
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/20/2019 0:00		10.1
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/26/2019 0:00		7.3
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/03/2020 0:00		7.5
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/04/2020 0:00		10.1
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	07/14/2020 0:00		7.7
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/12/2020 0:00		5.9
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/18/2021 0:00		6.6
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/10/2021 0:00		11.6
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/09/2021 0:00		13.4
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/01/2021 0:00		10.4
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	02/28/2022 0:00		6.8
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/09/2022 0:00		6
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/01/2022 0:00		12.4
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/29/2022 0:00		15.6
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/28/2023 0:00		19.7
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/22/2023 0:00		19.7
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/18/2023 0:00		9.83
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/06/2023 0:00		9.06
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/11/2024 0:00		11.5
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/10/2024 0:00		9.91
802	MW-2	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/15/2024 0:00		18

well		param	parm_u	sample_date	resi	result_amt
802	MW-2	Nitrogen, Organic Dissolved	mg/L	03/11/2019 0:00		0.9
802	MW-2	Nitrogen, Organic Dissolved	mg/L	05/20/2019 0:00		1
802	MW-2	Nitrogen, Organic Dissolved	mg/L	08/20/2019 0:00		1
802	MW-2	Nitrogen, Organic Dissolved	mg/L	11/26/2019 0:00		0.7
802	MW-2	Nitrogen, Organic Dissolved	mg/L	03/03/2020 0:00		0.8
802	MW-2	Nitrogen, Organic Dissolved	mg/L	05/04/2020 0:00		0.9
802	MW-2	Nitrogen, Organic Dissolved	mg/L	07/14/2020 0:00		0.9
802	MW-2	Nitrogen, Organic Dissolved	mg/L	10/12/2020 0:00		0.7
802	MW-2	Nitrogen, Organic Dissolved	mg/L	01/18/2021 0:00		0.8
802	MW-2	Nitrogen, Organic Dissolved	mg/L	05/10/2021 0:00		1.4
802	MW-2	Nitrogen, Organic Dissolved	mg/L	08/09/2021 0:00		1.1
802	MW-2	Nitrogen, Organic Dissolved	mg/L	11/01/2021 0:00		1
802	MW-2	Nitrogen, Organic Dissolved	mg/L	02/28/2022 0:00		1.3
802	MW-2	Nitrogen, Organic Dissolved	mg/L	05/09/2022 0:00	<	0.5
802	MW-2	Nitrogen, Organic Dissolved	mg/L	08/01/2022 0:00		0.5
802	MW-2	Nitrogen, Organic Dissolved	mg/L	11/29/2022 0:00		0.8
802	MW-2	Nitrogen, Organic Dissolved	mg/L	03/28/2023 0:00		1
802	MW-2	Nitrogen, Organic Dissolved	mg/L	05/22/2023 0:00		1
802	MW-2	Nitrogen, Organic Dissolved	mg/L	09/18/2023 0:00		0.8
802	MW-2	Nitrogen, Organic Dissolved	mg/L	11/06/2023 0:00		0.8
802	MW-2	Nitrogen, Organic Dissolved	mg/L	03/11/2024 0:00		0.9
802	MW-2	Nitrogen, Organic Dissolved	mg/L	06/10/2024 0:00		1.1
802	MW-2	Nitrogen, Organic Dissolved	mg/L	09/15/2024 0:00		1.3
802	MW-2	pH Field	su	03/11/2019 0:00		7.37
802	MW-2	pH Field	su	05/20/2019 0:00		7.37
802	MW-2	pH Field	su	08/20/2019 0:00		7.43
802	MW-2	pH Field	su	11/26/2019 0:00		9.2
802	MW-2	pH Field	su	03/03/2020 0:00		7.15
802	MW-2	pH Field	su	05/04/2020 0:00		7.26
802	MW-2	pH Field	su	07/14/2020 0:00		7.41
802	MW-2	pH Field	su	10/12/2020 0:00		7.14
802	MW-2	pH Field	su	01/18/2021 0:00		6.85
802	MW-2	pH Field	su	05/10/2021 0:00		7.37
802	MW-2	pH Field	su	08/09/2021 0:00		6.87
802	MW-2	pH Field	su	11/01/2021 0:00		6.76
802	MW-2	pH Field	su	02/28/2022 0:00		6.68
802	MW-2	pH Field	su	05/09/2022 0:00		6.74
802	MW-2	pH Field	su	08/01/2022 0:00		6.95
802	MW-2	pH Field	su	11/29/2022 0:00		7.16
802	MW-2	pH Field	su	03/28/2023 0:00		7.41
802	MW-2	pH Field	su	05/22/2023 0:00		7.54
802	MW-2	pH Field	su	09/18/2023 0:00		7.88
802	MW-2	pH Field	su	11/06/2023 0:00		8.08
802	MW-2	pH Field	su	03/11/2024 0:00		7.47
802	MW-2	pH Field	su	06/10/2024 0:00		7.82
802	MW-2	pH Field	su	09/15/2024 0:00		8.04

well		param	parm_u	sample_date	resi	result_amt
802	MW-2	Phosphorus, Total	mg/L	03/11/2019 0:00	<	0.05
802	MW-2	Phosphorus, Total	mg/L	05/20/2019 0:00	<	0.05
802	MW-2	Phosphorus, Total	mg/L	08/20/2019 0:00	<	0.05
802	MW-2	Phosphorus, Total	mg/L	11/26/2019 0:00	<	0.05
802	MW-2	Phosphorus, Total	mg/L	03/03/2020 0:00	<	0.05
802	MW-2	Phosphorus, Total	mg/L	05/04/2020 0:00	<	0.05
802	MW-2	Phosphorus, Total	mg/L	07/14/2020 0:00	<	0.05
802	MW-2	Phosphorus, Total	mg/L	10/12/2020 0:00	<	0.05
802	MW-2	Phosphorus, Total	mg/L	01/18/2021 0:00	<	0.05
802	MW-2	Phosphorus, Total	mg/L	05/10/2021 0:00	<	0.05
802	MW-2	Phosphorus, Total	mg/L	08/09/2021 0:00	<	0.05
802	MW-2	Phosphorus, Total	mg/L	11/01/2021 0:00		0.07
802	MW-2	Phosphorus, Total	mg/L	02/28/2022 0:00		0.06
802	MW-2	Phosphorus, Total	mg/L	05/09/2022 0:00		0.05
802	MW-2	Phosphorus, Total	mg/L	08/01/2022 0:00	<	0.05
802	MW-2	Phosphorus, Total	mg/L	11/29/2022 0:00	<	0.05
802	MW-2	Phosphorus, Total	mg/L	03/28/2023 0:00	<	0.05
802	MW-2	Phosphorus, Total	mg/L	05/22/2023 0:00	<	0.05
802	MW-2	Phosphorus, Total	mg/L	09/18/2023 0:00		0.39
802	MW-2	Phosphorus, Total	mg/L	11/06/2023 0:00		0.05
802	MW-2	Phosphorus, Total	mg/L	03/11/2024 0:00		0.07
802	MW-2	Phosphorus, Total	mg/L	06/10/2024 0:00		0.06
802	MW-2	Phosphorus, Total	mg/L	09/15/2024 0:00		0.1
802	MW-2	Solids, Total Dissolved	mg/L	03/11/2019 0:00		384
802	MW-2	Solids, Total Dissolved	mg/L	05/20/2019 0:00		563
802	MW-2	Solids, Total Dissolved	mg/L	08/20/2019 0:00		647
802	MW-2	Solids, Total Dissolved	mg/L	11/26/2019 0:00		438
802	MW-2	Solids, Total Dissolved	mg/L	03/03/2020 0:00		467
802	MW-2	Solids, Total Dissolved	mg/L	05/04/2020 0:00		522
802	MW-2	Solids, Total Dissolved	mg/L	07/14/2020 0:00		555
802	MW-2	Solids, Total Dissolved	mg/L	10/12/2020 0:00		463
802	MW-2	Solids, Total Dissolved	mg/L	01/18/2021 0:00		549
802	MW-2	Solids, Total Dissolved	mg/L	05/10/2021 0:00		643
802	MW-2	Solids, Total Dissolved	mg/L	08/09/2021 0:00		722
802	MW-2	Solids, Total Dissolved	mg/L	11/01/2021 0:00		584
802	MW-2	Solids, Total Dissolved	mg/L	02/28/2022 0:00		741
802	MW-2	Solids, Total Dissolved	mg/L	05/09/2022 0:00		757
802	MW-2	Solids, Total Dissolved	mg/L	08/01/2022 0:00		694
802	MW-2	Solids, Total Dissolved	mg/L	11/29/2022 0:00		787
802	MW-2	Solids, Total Dissolved	mg/L	03/28/2023 0:00		739
802	MW-2	Solids, Total Dissolved	mg/L	05/22/2023 0:00		851
802	MW-2	Solids, Total Dissolved	mg/L	09/18/2023 0:00		557
802	MW-2	Solids, Total Dissolved	mg/L	11/06/2023 0:00		537
802	MW-2	Solids, Total Dissolved	mg/L	03/11/2024 0:00		632
802	MW-2	Solids, Total Dissolved	mg/L	06/10/2024 0:00		580
802	MW-2	Solids, Total Dissolved	mg/L	09/15/2024 0:00		676

well		param	parm_u	sample_date	resi	result_amt
803	MW-3	Chloride Dissolved	mg/L	03/11/2019 0:00		14
803	MW-3	Chloride Dissolved	mg/L	05/20/2019 0:00		13
803	MW-3	Chloride Dissolved	mg/L	08/20/2019 0:00		10
803	MW-3	Chloride Dissolved	mg/L	11/26/2019 0:00		8
803	MW-3	Chloride Dissolved	mg/L	03/03/2020 0:00		22
803	MW-3	Chloride Dissolved	mg/L	05/04/2020 0:00		12
803	MW-3	Chloride Dissolved	mg/L	07/14/2020 0:00		12
803	MW-3	Chloride Dissolved	mg/L	10/12/2020 0:00		10
803	MW-3	Chloride Dissolved	mg/L	01/18/2021 0:00		8
803	MW-3	Chloride Dissolved	mg/L	05/10/2021 0:00		8
803	MW-3	Chloride Dissolved	mg/L	08/09/2021 0:00		10
803	MW-3	Chloride Dissolved	mg/L	11/01/2021 0:00		13
803	MW-3	Chloride Dissolved	mg/L	02/28/2022 0:00		8
803	MW-3	Chloride Dissolved	mg/L	05/09/2022 0:00		8
803	MW-3	Chloride Dissolved	mg/L	08/01/2022 0:00		9
803	MW-3	Chloride Dissolved	mg/L	11/29/2022 0:00		12
803	MW-3	Chloride Dissolved	mg/L	03/28/2023 0:00		12
803	MW-3	Chloride Dissolved	mg/L	05/22/2023 0:00		9
803	MW-3	Chloride Dissolved	mg/L	09/18/2023 0:00		11
803	MW-3	Chloride Dissolved	mg/L	11/06/2023 0:00		11
803	MW-3	Chloride Dissolved	mg/L	03/11/2024 0:00		14
803	MW-3	Chloride Dissolved	mg/L	06/10/2024 0:00		12
803	MW-3	Chloride Dissolved	mg/L	09/15/2024 0:00		20
				Mean		11.56522
				Std Dev		3.499392

803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	03/11/2019 0:00	<	0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	05/20/2019 0:00	<	0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	08/20/2019 0:00	<	0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	11/26/2019 0:00	<	0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	03/03/2020 0:00	<	0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	05/04/2020 0:00	<	0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	07/14/2020 0:00	<	0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	10/12/2020 0:00	<	0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	01/18/2021 0:00	<	0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	05/10/2021 0:00	<	0.01
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	08/09/2021 0:00	<	0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	11/01/2021 0:00		0.2
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	02/28/2022 0:00	<	0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	05/09/2022 0:00	<	0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	08/01/2022 0:00	<	0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	11/29/2022 0:00	<	0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	03/28/2023 0:00	<	0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	05/22/2023 0:00	<	0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	09/18/2023 0:00	<	0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	11/06/2023 0:00		0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	03/11/2024 0:00		0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	06/10/2024 0:00		0.1
803	MW-3	Nitrogen, Ammonia Dissolved	mg/L	09/15/2024 0:00		0.1
				Mean		0.100435
				Std Dev		0.028049

well		param	parm_u	sample_date	resi	result_amt
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/11/2019 0:00		4.5
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/20/2019 0:00		4.8
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/20/2019 0:00		3.8
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/26/2019 0:00		2.9
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/03/2020 0:00		4.4
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/04/2020 0:00		4.3
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	07/14/2020 0:00		3.7
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/12/2020 0:00		3.6
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/18/2021 0:00		4.7
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/10/2021 0:00		4.5
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/09/2021 0:00		4
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/01/2021 0:00		3.9
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	02/28/2022 0:00		3.7
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/09/2022 0:00		3.5
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/01/2022 0:00		3.9
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/29/2022 0:00		3.4
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/28/2023 0:00		3.2
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/22/2023 0:00		3.4
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/18/2023 0:00		3.53
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/06/2023 0:00		3.08
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/11/2024 0:00		3.34
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/10/2024 0:00		2.9
803	MW-3	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/15/2024 0:00		3.69
				Mean		3.771304
				Std Dev		0.53997

803	MW-3	Nitrogen, Organic Dissolved	mg/L	03/11/2019 0:00		0.5
803	MW-3	Nitrogen, Organic Dissolved	mg/L	05/20/2019 0:00		0.9
803	MW-3	Nitrogen, Organic Dissolved	mg/L	08/20/2019 0:00	<	0.5
803	MW-3	Nitrogen, Organic Dissolved	mg/L	11/26/2019 0:00		0.5
803	MW-3	Nitrogen, Organic Dissolved	mg/L	03/03/2020 0:00	<	0.5
803	MW-3	Nitrogen, Organic Dissolved	mg/L	05/04/2020 0:00		0.7
803	MW-3	Nitrogen, Organic Dissolved	mg/L	07/14/2020 0:00		0.7
803	MW-3	Nitrogen, Organic Dissolved	mg/L	10/12/2020 0:00		3.6
803	MW-3	Nitrogen, Organic Dissolved	mg/L	01/18/2021 0:00		0.9
803	MW-3	Nitrogen, Organic Dissolved	mg/L	05/10/2021 0:00		1
803	MW-3	Nitrogen, Organic Dissolved	mg/L	08/09/2021 0:00		1
803	MW-3	Nitrogen, Organic Dissolved	mg/L	11/01/2021 0:00	<	0.5
803	MW-3	Nitrogen, Organic Dissolved	mg/L	02/28/2022 0:00	<	0.5
803	MW-3	Nitrogen, Organic Dissolved	mg/L	05/09/2022 0:00	<	0.5
803	MW-3	Nitrogen, Organic Dissolved	mg/L	08/01/2022 0:00	<	0.5
803	MW-3	Nitrogen, Organic Dissolved	mg/L	11/29/2022 0:00	<	0.5
803	MW-3	Nitrogen, Organic Dissolved	mg/L	03/28/2023 0:00	<	0.5
803	MW-3	Nitrogen, Organic Dissolved	mg/L	05/22/2023 0:00	<	0.5
803	MW-3	Nitrogen, Organic Dissolved	mg/L	09/18/2023 0:00	<	0.5
803	MW-3	Nitrogen, Organic Dissolved	mg/L	11/06/2023 0:00		0.5
803	MW-3	Nitrogen, Organic Dissolved	mg/L	03/11/2024 0:00		0.5
803	MW-3	Nitrogen, Organic Dissolved	mg/L	06/10/2024 0:00		0.5
803	MW-3	Nitrogen, Organic Dissolved	mg/L	09/15/2024 0:00		0.5
				Mean		0.730435
				Std Dev		0.635497

well		param	parm_u	sample_date	resu	result_amt
803	MW-3	pH Field	su	03/11/2019 0:00		7.19
803	MW-3	pH Field	su	05/20/2019 0:00		7.22
803	MW-3	pH Field	su	08/20/2019 0:00		7.35
803	MW-3	pH Field	su	11/26/2019 0:00		9.9
803	MW-3	pH Field	su	03/03/2020 0:00		6.53
803	MW-3	pH Field	su	05/04/2020 0:00		7.24
803	MW-3	pH Field	su	07/14/2020 0:00		7.47
803	MW-3	pH Field	su	10/12/2020 0:00		7.17
803	MW-3	pH Field	su	01/18/2021 0:00		7.1
803	MW-3	pH Field	su	05/10/2021 0:00		7.24
803	MW-3	pH Field	su	08/09/2021 0:00		6.62
803	MW-3	pH Field	su	11/01/2021 0:00		6.78
803	MW-3	pH Field	su	02/28/2022 0:00		6.67
803	MW-3	pH Field	su	05/09/2022 0:00		6.74
803	MW-3	pH Field	su	08/01/2022 0:00		6.84
803	MW-3	pH Field	su	11/29/2022 0:00		7.06
803	MW-3	pH Field	su	03/28/2023 0:00		7.51
803	MW-3	pH Field	su	05/22/2023 0:00		7.65
803	MW-3	pH Field	su	09/18/2023 0:00		7.93
803	MW-3	pH Field	su	11/06/2023 0:00		7.74
803	MW-3	pH Field	su	03/11/2024 0:00		7.66
803	MW-3	pH Field	su	06/10/2024 0:00		7.91
803	MW-3	pH Field	su	09/15/2024 0:00		8.2
				Mean		7.37913

803	MW-3	Phosphorus, Total	mg/L	03/11/2019 0:00	<	0.05
803	MW-3	Phosphorus, Total	mg/L	05/20/2019 0:00	<	0.05
803	MW-3	Phosphorus, Total	mg/L	08/20/2019 0:00	<	0.05
803	MW-3	Phosphorus, Total	mg/L	11/26/2019 0:00	<	0.05
803	MW-3	Phosphorus, Total	mg/L	03/03/2020 0:00	<	0.05
803	MW-3	Phosphorus, Total	mg/L	05/04/2020 0:00	<	0.05
803	MW-3	Phosphorus, Total	mg/L	07/14/2020 0:00	<	0.05
803	MW-3	Phosphorus, Total	mg/L	10/12/2020 0:00	<	0.05
803	MW-3	Phosphorus, Total	mg/L	01/18/2021 0:00	<	0.05
803	MW-3	Phosphorus, Total	mg/L	05/10/2021 0:00	<	0.05
803	MW-3	Phosphorus, Total	mg/L	08/09/2021 0:00	<	0.05
803	MW-3	Phosphorus, Total	mg/L	11/01/2021 0:00		0.05
803	MW-3	Phosphorus, Total	mg/L	02/28/2022 0:00		0.06
803	MW-3	Phosphorus, Total	mg/L	05/09/2022 0:00	<	0.05
803	MW-3	Phosphorus, Total	mg/L	08/01/2022 0:00	<	0.05
803	MW-3	Phosphorus, Total	mg/L	11/29/2022 0:00	<	0.05
803	MW-3	Phosphorus, Total	mg/L	03/28/2023 0:00	<	0.05
803	MW-3	Phosphorus, Total	mg/L	05/22/2023 0:00	<	0.05
803	MW-3	Phosphorus, Total	mg/L	09/18/2023 0:00		0.19
803	MW-3	Phosphorus, Total	mg/L	11/06/2023 0:00		0.05
803	MW-3	Phosphorus, Total	mg/L	03/11/2024 0:00		0.06
803	MW-3	Phosphorus, Total	mg/L	06/10/2024 0:00		0.06
803	MW-3	Phosphorus, Total	mg/L	09/15/2024 0:00		0.1
				Mean		0.059565

well	param	parm_u	sample_date	resu	result_amt
803 MW-3	Solids, Total Dissolved	mg/L	03/11/2019 0:00		407
803 MW-3	Solids, Total Dissolved	mg/L	05/20/2019 0:00		471
803 MW-3	Solids, Total Dissolved	mg/L	08/20/2019 0:00		379
803 MW-3	Solids, Total Dissolved	mg/L	11/26/2019 0:00		344
803 MW-3	Solids, Total Dissolved	mg/L	03/03/2020 0:00		409
803 MW-3	Solids, Total Dissolved	mg/L	05/04/2020 0:00		381
803 MW-3	Solids, Total Dissolved	mg/L	07/14/2020 0:00		403
803 MW-3	Solids, Total Dissolved	mg/L	10/12/2020 0:00		371
803 MW-3	Solids, Total Dissolved	mg/L	01/18/2021 0:00		392
803 MW-3	Solids, Total Dissolved	mg/L	05/10/2021 0:00		390
803 MW-3	Solids, Total Dissolved	mg/L	08/09/2021 0:00		409
803 MW-3	Solids, Total Dissolved	mg/L	11/01/2021 0:00		335
803 MW-3	Solids, Total Dissolved	mg/L	02/28/2022 0:00		386
803 MW-3	Solids, Total Dissolved	mg/L	05/09/2022 0:00		399
803 MW-3	Solids, Total Dissolved	mg/L	08/01/2022 0:00		371
803 MW-3	Solids, Total Dissolved	mg/L	11/29/2022 0:00		357
803 MW-3	Solids, Total Dissolved	mg/L	03/28/2023 0:00		367
803 MW-3	Solids, Total Dissolved	mg/L	05/22/2023 0:00		383
803 MW-3	Solids, Total Dissolved	mg/L	09/18/2023 0:00		358
803 MW-3	Solids, Total Dissolved	mg/L	11/06/2023 0:00		345
803 MW-3	Solids, Total Dissolved	mg/L	03/11/2024 0:00		347
803 MW-3	Solids, Total Dissolved	mg/L	06/10/2024 0:00		365
803 MW-3	Solids, Total Dissolved	mg/L	09/15/2024 0:00		367
			Mean		379.8261
			Std Dev		28.92667

The preceding results were provided by the facility or their agent. The mean and standard deviation were calculated electronically.