Permit Fact Sheet

General Information

Permit Number	WI-0050971-11-0
Permittee Name and Address	DAIRICONCEPTS LP 832 East Arthur Avenue, Bruce, WI 54819
Permitted Facility Name and Address	DAIRICONCEPTS LP NEQ, NWQ, SECTION 8, T34N-R7W
Permit Term	July 01, 2025 to June 30, 2030
Discharge Location	NEQ, NWQ, Section 8, T34N-R7W, Stubbs Township, near Bruce Wisconsin
Receiving Water	The Groundwater of the Soft Maple and Hay Creeks Watershed in the Upper Chippewa Drainage Basin in Rusk County
Stream Flow ($Q_{7,10}$)	N/A
Stream Classification	N/A
Discharge Type	Existing continuous

Facility Description

DairiConcepts (Dairy Farmers of America) produces powdered dairy and non-dairy products. The facility dry blends various cheese powders and flavors for the food industry. The facility has a ridge and furrow system covering approximately 6.2 acres containing 14 cells. Wastewater discharged is composed of noncontact cooling water, process water, storm water, boiler blowdown and cooling tower blowdown. These combined components are considered "normal" flow which is identified and reported as sample point 101.

Periodic clean-ups of the entire dry blending and dryer system produce "Clean In Place" (CIP) wastewater. This wastewater has different characteristics than the normal discharge and is monitored separately in the permit under sample point 102. CIPs occur on an as needed basis between product change outs which are typically every three weeks with an increase of normal daily flow. Sample point 102, when sampled, includes the normal 101 wastewater flow and CIP water.

Wastewater flow is directed by gravity to a buried solids-settling tank (~10,000 gallons) then directed to a wet well before pumped discharge through a ridge and furrow land treatment system (Outfall 001). A ridge and furrow system is a series of interconnected ditches (furrows) which allow distribution, infiltration, and treatment of wastewater. Ridges between the ditches support a cover crop which takes up nutrients and water and protects the ditches during the winter. The water not used by the cover crop is further treated as it percolates through the soil eventually reaching groundwater. There are seven monitoring wells located around the ridge and furrow system to assess any groundwater impacts of the discharge.

During periodic maintenance of the solids-settling tank, pumps remove settled solids and wastewater which is authorized for land application and/or discharge to another WPDES permitted facility (Viresco) via Outfall 002.

Domestic wastewater from the facility is segregated from process wastewater and discharged to a separate sub-soil absorption system and is not regulated by the permit.

Substantial Compliance Determination

There have been several exceedances of preventive action limits during the current permit term. However after a desk top review of all discharge monitoring reports, groundwater monitoring forms, land application reports, management plans, and a site visit on January 13, 2023, by Arthur Ryzak, WDNR, DairiConcepts has been found to be in substantial compliance with their permit.

Sample Point Descriptions

Sample Point Designation		
Sample Point Number	**Discharge Flow, Units, and Averaging Period**	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**
001	**RIDGE AND FURROW (R&F)** An average of 21,464 gallons per day (2020 – 2024 data)	Representative samples shall be collected from the lift station prior to discharge to the ridge and furrow system.
002	**LAND APPLICATION** All high strength was is sent to another WPDES permitted facility.	Representative samples shall be collected prior to land application of high strength wastewater onto approved sites.
101	**"NORMAL" FLOW** *= Ridge and Furrow flow (001) – CIP water (102)* An average of 20,865 gallons per day (2020 – 2024 data)	Representative samples of the plant effluent to the ridge and furrow system shall be taken during "normal" conditions (not during CIP clean-up events).
102	**"CIP" FLOW** An average of 33,750 gallons per day over 16 days per year (2020 – 2024 data)	Representative samples of the plant effluent to the ridge and furrow system shall be taken at the lift station during CIP clean-up events.

Sample Point Designation For Groundwater Monitoring Systems	
Well Name	**Comments**
801	Upgradient well used to measure background groundwater quality and calculate PALs, located north of the R&F system
803	Down gradient non-point of standard well located east of the R&F system (northeast of wells 806 and 807)
804	Down gradient point of standard well located east of the R&F system (northernmost downgradient well)
805	Down gradient point of standard well located east of the R&F system (northeast of well 803)
806	Down gradient point of standard well located south of the R&F system
807 (Piezometer)	Down gradient point of standard piezometer located south of the R&F system
808	Down gradient point of standard well located east of the R&F system (north of well 805)

Permit Requirements

1 Inplant - Monitoring and Limitations

1.1 Sample Point Number: 101- At Lift Station

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Chloride		mg/L	2/Month	Flow Prop Comp	
Nitrogen, Total Kjeldahl		mg/L	2/Month	Flow Prop Comp	
Solids, Total Dissolved		mg/L	2/Month	Flow Prop Comp	
Nitrogen, Total		mg/L	2/Month	Flow Prop Comp	

1.1.1 Changes from Previous Permit:

In-plant limitations and monitoring requirements were evaluated for this permit term and the following changes were made from the previous permit. See additional explanation of limits under "Explanation of Limits and Monitoring Requirements" below.

Total nitrogen monitoring is required.

1.1.2 Explanation of Limits and Monitoring Requirements

This sample point is limited to "normal" wastewater discharge produced when cleaning in place (CIP) is not occurring.

Flow – Flow is not a required parameter at this sample point. Flow rate of "normal" wastewater (101) = Flow rate of Sample Point 001 (to ridge and furrow) – Flow rate of Sample Point 102 (CIP wastewater).

Total nitrogen has been added to the inplant sample points to facilitate calculation of the parameter Maximum Nitrogen Applied On Any Zone found under Outfall 001.

1.2 Sample Point Number: 102- At Lift Station during CIP

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		gpd	Daily	Total Daily	
Chloride		mg/L	Monthly	Flow Prop Comp	

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Nitrogen, Total Kjeldahl		mg/L	Monthly	Flow Prop Comp	
Solids, Total Dissolved		mg/L	Monthly	Flow Prop Comp	
Nitrogen, Total		mg/L	Monthly	Flow Prop Comp	

1.2.1 Changes from Previous Permit:

In-plant limitations and monitoring requirements were evaluated for this permit term and the following changes were made from the previous permit. See additional explanation of limits under "Explanation of Limits and Monitoring Requirements" below.

Total nitrogen monitoring is required.

1.2.2 Explanation of Limits and Monitoring Requirements

This sample point is limited to the period when cleaning in place (CIP) is occurring. During these events sampling shall be taken of combined "normal" and "CIP" waste streams.

Flow – Flow is not a required parameter at this sample point. Flow rate of "normal" wastewater (101) = Flow rate of Sample Point 001 (to ridge and furrow) – Flow rate of Sample Point 102 (CIP wastewater).

Total nitrogen has been added to the inplant sample points to facilitate calculation of the parameter Maximum Nitrogen Applied On Any Zone found under Outfall 001.

2 Land Treatment – Monitoring and Limitations

2.1 Sample Point Number: 001- RIDGE AND FURROW

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		gpd	Daily	Total Daily	
Hydraulic Application Rate	Monthly Avg	10,000 gal/ac/day	Monthly	Calculated	
Chloride, Max Applied to Any Zone		lbs/ac/yr	Annual	Total Annual	Use the effluent chloride concentration when calculating the annual total. See the Maximum Applied Nitrogen/Chloride On Any Zone section.

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Nitrogen, Max Applied On Any Zone	Annual Total	800 lbs/ac/yr	Annual	Total Annual	Limit becomes effective July 1, 2028. Use the effluent total nitrogen concentration from the In-plant sample points when calculating the annual total. See the Maximum Applied Nitrogen/Chloride On Any Zone section.

2.1.1 Changes from Previous Permit:

Effluent limitations and monitoring requirements were evaluated for this permit term and the following changes were made from the previous permit. See additional explanation of limits under "Explanation of Limits and Monitoring Requirements" below.

- **Chloride, Max Applied to Any Zone** has been moved to the monitoring table.
- **Nitrogen, Max Applied to Any Zone** has been moved to the monitoring table and a limit will become effective at the end of the "Pollutant Minimization Program - Land Treatment" schedule.

2.1.2 Explanation of Limits and Monitoring Requirements

All requirements for land treatment of industrial wastewater are determined in accordance with ch. NR 214, Wis. Adm. Code. All categorical limits are based on ch. NR 214.13 Wis. Adm. Code. More information on the limitations can be found in the **"**DairiConcepts LP **–** Land Treatment System Evaluation Report, WPDES Permit #WI-0050971" memo dated December 5, 2024.

Nitrogen and chloride max applied to any zone – These two parameters previously found in the Annual Report have been moved to the monitoring table. This eliminates the additional report allowing all data to be entered into eDMRs. To calculate nitrogen max applied to any zone use the total nitrogen values collected through sample points 101 and 102.

Nitrogen max applied on any zone – A limit of 800 lbs/acre/year will become effective at the end of the "Pollutant Minimization Program - Land Treatment" schedule. The annual nitrogen application rate is limited to the nitrogen needs of the cover crop plus demonstrable denitrification occurring in the treatment system. Section 4.3 of the "Establishing nitrogen limitations in WPDES permits at industrial land treatment facilities" guidance signed May 30, 2023 states groundwater impacts have consistently been observed at ridge and furrow facilities loading above 800 lbs/acre/year. Any limits above this value must be evaluated on a case-by-case basis through an exemption request per NR 214.06 Wis. Adm. Code.

3 Groundwater – Monitoring and Limitations

3.1 Groundwater Monitoring System for Monitoring Well System

Location of Monitoring system: Around the perimeter of the ridge and furrow system

Groundwater Monitoring Well(s) to be Sampled: 801, 803, 804, 805, 808, 806, 807 (Piezometer)

Groundwater Monitoring Well(s) Used to Evaluate Background Groundwater Quality: 801

Groundwater Monitoring Well(s) Used for Point of Standards Application: 807 (Piezometer), 806, 808, 805, 804

Parameter	Units	Preventative Action Limit	Enforcement Standard	Frequency
Depth To Groundwater	feet	N/A	N/A	Quarterly
Groundwater Elevation	feet	N/A	N/A	Quarterly
Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	2.0	10	Quarterly
Chloride Dissolved	mg/L	125	250	Quarterly
pH Field	su	9.0	N/A	Quarterly
Solids, Total Dissolved	mg/L	290	N/A	Quarterly
Nitrogen, Ammonia (NH3-N) Total	mg/L	0.97	9.7	Quarterly
Nitrogen, Organic Dissolved	mg/L	2.2	N/A	Quarterly

3.1.1 Changes from Previous Permit:

Groundwater limitations and monitoring requirements were evaluated for this permit term and the following changes were made from the previous permit. See additional explanation of limits under "Explanation of Limits and Monitoring Requirements" below.

- PAL and Enforcement Standard (ES) limits remain the same except **pH field** and **total dissolved solids** have been adjusted based on background water quality.
- Groundwater **alkalinity** and **hardness** monitoring are no longer needed and have been removed from the permit.

3.1.2 Explanation of Limits and Monitoring Requirements

Groundwater limits and requirements are determined in accordance with ch. NR 140, Wis. Adm. Code. Indicator parameter Preventive Action Limit (PAL) values are established per s. NR 140.20, Wis. Adm. Code. See the "DairiConcepts LP – Land Treatment System Evaluation Report, WPDES Permit #WI-0050971" memo dated December 5, 2024 for more information.

4 Land Application - Sludge/By-Product Solids

4.1 Sample Point Number: 002- LAND APPLICATION

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Nitrogen, Total Kjeldahl		mg/L	Annual	Grab	
Chloride		mg/L	Annual	Grab	
Phosphorus, Total		mg/L	Annual	Grab	

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Phosphorus, Water Extractable		% of Tot P	Annual	Grab	
Potassium, Total Recoverable		mg/L	Annual	Grab	

4.1.1 Changes from Previous Permit:

Sludge limitations and monitoring requirements were evaluated for this permit term and no changes were required in this permit section.

4.1.2 Explanation of Limits and Monitoring Requirements

Requirements for land application of industrial sludge are determined in accordance with ch. NR 214 Wis. Adm. Code. Currently the permittee hauls all high strength waste to another WPDES permitted facility (Viresco). Monitoring is only required if land spreading occurs.

5 Schedules

5.1 Pollutant Minimization Program - Land Treatment

Required Action	Due Date
Pollutant Minimization Plan Development: The permittee shall develop and submit to the Department a plan for a cost-effective pollutant minimization program (PMP) which has as its goal the reduction of nitrogen for the purpose of maintaining compliance with permit effluent limitations and ch. NR 140, Wis. Adm. Code.	12/31/2025
Implementation: The permittee shall implement the pollutant minimization program as submitted or as amended by agreement of the permittee and the Department.	06/30/2026
Annual Status Report: The permittee shall submit to the Department, an annual status report on the progress of the pollutant minimization program. Submittal of the first annual status report is required by the Date Due.	06/30/2027
Achieve Compliance: The permittee shall achieve compliance with the Maximum Nitrogen Applied to Any Zone limit of 800 pounds/acre/year.	06/30/2028

5.1.1 Explanation of Schedule

Pollutant Minimization Program – Land Treatment - Data from the groundwater monitoring system shows an increasing trend in the nitrogen concentrations. A schedule has been included to lay out a set of actions that will identify and implement changes to minimize nitrogen levels in the groundwater.

5.2 Groundwater Monitoring Well Site Map Submittal

Required Action	Due Date
Monitoring Well Site Map: Submit a site map in accordance with s. NR 141.065, Wis. Adm. Code. All monitoring well locations shall be reported to the department on a plan map drawn to a specific scale. The map shall indicate structure boundaries, property boundaries, and any nearby surface waters and a north arrow. The plan shall show the wells in relation to each other, to property and structure boundaries and to a common reference point on a horizontal grid system. The origin of the grid system shall be located according to latitude and longitude or according to the state plane coordinate system. The exact vertical location of the top of the well casing shall be referenced to the nearest benchmark for the national geodetic survey datum to an accuracy of 0.01 feet. This plan map shall show the exact location of the installed well on a horizontal grid system which is accurate to within 1 foot.	09/30/2025

5.2.1 Explanation of Schedule

Groundwater Monitoring Well Site Map Submittal – Accurate well information is needed to ensure the requirements of ch. NR 140, Wis. Adm. Code are met.

5.3 Land Application Management Plan

A management plan is required for the land application system.

Required Action	Due Date
Land Application Management Plan: Submit an update to the management plan to optimize the land application system performance and demonstrate compliance with Wisconsin Administrative Code NR 214.	09/30/2025

5.3.1 Explanation of Schedule

Land Application Management Plan - An up-to-date Land Application Management plan is a standard requirement in reissued industrial permits per s. NR 214.17(6)(c), Wis. Adm. Code.

5.4 Land Treatment Management Plan

A management plan is required for the land treatment system.

Required Action	Due Date
Land Treatment Management Plan: Submit an update to the management plan to optimize the land treatment system performance and demonstrate compliance with Wisconsin Administrative Code NR 214.	09/30/2025

5.4.1 Explanation of Schedule

Land Treatment Management Plan - An up-to-date Land Treatment Management plan is a standard requirement in reissued industrial permits per ch. NR 214, Wis. Adm. Code.

Attachments

Water Flow Schematic updated February 2019

"DairiConcepts LP – Land Treatment System Evaluation Report, WPDES Permit #WI-0050971" memo dated December 5, 2024

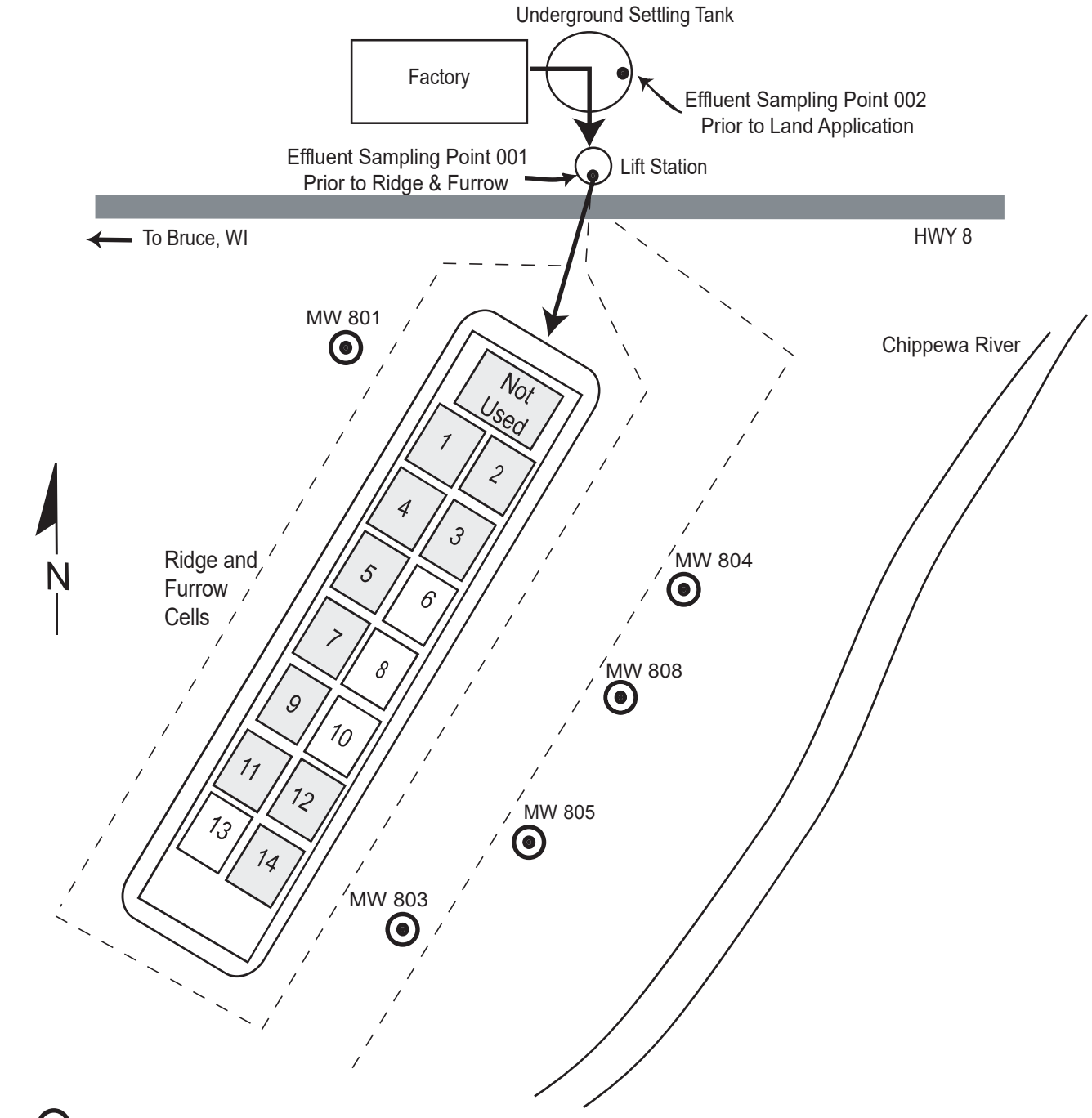
Justification Of Any Waivers From Permit Application Requirements

No waivers requested or granted as part of this permit reissuance

Prepared By: Sheri A. Snowbank Wastewater Specialist **Date:** March 14, 2025

DairiConcepts, LP
Wastewater Treatment Facility

DairiConcepts has a ridge and furrow wastewater treatment system. This 6-acre system was expanded in 2004 to 14 cells to increase the load and rest capability during operation. Land application and discharge to manure pits is authorized. There are 5 groundwater monitoring wells in the vicinity of the system. The diagram below shows the treatment units and sampling locations.



CORRESPONDENCE/MEMORANDUM — State of Wisconsin

DATE: December 5, 2024

TO: File

FROM: Woody Myers - WCR

SUBJECT: Dairiconcepts LP - Land Treatment System Evaluation Report, WPDES Permit # WI-0050971

Site Information

Dairiconcepts LP is regulated as an industrial facility and is located at 832 East Arthur Avenue, Bruce, Rusk County. Wastewater is currently treated and discharged to groundwater via infiltration by way of a ridge & furrow system located in the NE ¼ of the NW ¼ of Section 8, T34N, R07W, Town of Thornapple. This discharge has been determined to be a functional equivalent of a surface water discharge given its proximity to the Chippewa River and hydrologic gradients.

Land Treatment Effluent & Groundwater Evaluation Summary

Table 1 In-Plant Sampling Point Parameters and Limits
Sampling Point 101 At Lift Station

	Current Permit WI-0050971-10-1		Proposed Permit WI-0050971-11	
Parameter	Limits and Units	Limit Type	Limits and Units	Limit Type
Chloride	- mg/l		- mg/l	
Nitrogen, Total Kjeldahl	- mg/l		- mg/l	
Total Solids	- mg/l		- mg/l	
***Nitrogen Total**	Not Required		- mg/l	

* Proposed permit changes

Table 2 In-Plant Sampling Point Parameters and Limits
Sampling Point 102 At Lift Station during CIP

	Current Permit WI-0050971-10-1		Proposed Permit WI-0050971-11	
Parameter	Limits and Units	Limit Type	Limits and Units	Limit Type
Flow Rate	- gpd		- gpd	
Chloride	- mg/l		- mg/l	
Nitrogen, Total Kjeldahl	- mg/l		- mg/l	
Total Solids	- mg/l		- mg/l	
***Nitrogen Total**	Not Required		- mg/l	

* Proposed permit changes

Table 3 Land Treatment Outfall Sampling Point Parameters and Limits
Outfall 001 Ridge & Furrow

Parameter	Current Permit WI-0050971-10-1		Proposed Permit WI-0050971-11	
	Limits and Units	Limit Type	Limits and Units	Limit Type
Flow Rate	- gpd		- gpd	
Hydraulic Application Rate	10,000 gal/ac/day	Monthly Avg	10,000 gal/ac/day	Monthly Avg
***Chloride, Max Applied to Any Zone**	Not Listed		- lbs/ac/yr	**Annual Total**
***Nitrogen, Max Applied to Any Zone**	Not Listed		***800 lbs/ac/yr (1)**	**Annual Total**

* Proposed permit changes
(1) This effluent limit will go into effect on the third year of the permit. See report conclusions for details.

Table 4 Groundwater Monitoring Wells

Well	Current Permit WI-0050971-10-1		Proposed Permit WI-0050971-11	
	Well Location	Well Designation	Well Location	Well Designation
801	Up-gradient	Background	Up-gradient	Background
803	Down-gradient	Non-Point of Standard	Down-gradient	Non-Point of Standard
804	Down-gradient	Point of Standard	Down-gradient	Point of Standard
805	Down-gradient	Point of Standard	Down-gradient	Point of Standard
806	Down-gradient	Point of Standard	Down-gradient	Point of Standard
807	Down-gradient	Point of Standard	Down-gradient	Point of Standard
808	Down-gradient	Point of Standard	Down-gradient	Point of Standard

No recommended changes from previous permit

Table 5 Groundwater Quality Standards

Parameter	Current Permit WI-0050971-10-1		Proposed WI-0050971-11	
	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
Nitrogen, Nitrite + Nitrate	2.0 mg/l	10.0 mg/l	2.0 mg/l	10.0 mg/l
Chloride	125 mg/l	250 mg/l	125 mg/l	250 mg/l
pH, field	5.9-7.9 su	N/A	***7.0-9.0** su	N/A
Total Dissolved Solids	280 mg/l	N/A	***290** mg/l	N/A
Nitrogen, Ammonia	0.97 mg/l	9.7 mg/l	0.97 mg/l	9.7 mg/l
Nitrogen, Organic	2.2 mg/l	N/A	2.2 mg/l	N/A
***Alkalinity (as $CaCO_3$)**	150 mg/l	N/A	***Discontinue**	
***Hardness (as $CaCO_3$)**	160 mg/l	N/A	***Discontinue**	

* Proposed permit changes

Geology

The bedrock under this facility is a felsic and intermediate metavolcanic rock bedded and massive metapyroclastic rock with subordinate mafic lavas; volcanogenic massive sulfide occurrences and greenschist assemblages (*Bedrock Geology of Wisconsin, Regional Map Series Northwest Sheet*, Wisconsin Geological and Natural History Survey (WGNHS), 1987). Bedrock is anticipated to be less than 50 feet below ground surface (bgs) (*Depth to Bedrock in Wisconsin,* WGNHS, 1973). The regolith consists of material ranging from medium to coarse sand. Surface soil primarily consists of the Mahtomedi loamy sand (USDA NRCS Web Soil Survey).

Hydrogeology

Calculated groundwater elevation ranges between 1065 and 1067 feet above mean sea level (msl). Depth to groundwater was reported to be between 5 and 10 feet bgs. Groundwater flow direction was calculated to be predominantly to the east-southeast. Regional groundwater is to the southeast in this area of Rusk County (*Mean Elevation of Water Table*, Map, United States Department of Interior, 1968). The site is bound on the east by the Chippewa River. There are four wells (municipal, other than municipal, private and high-capacity) within a 1,500-foot range of this facility's groundwater discharge.

Land Treatment Effluent Quality and Loading Rates

Outfall 001 is the discharge associated with the groundwater monitoring network. The following table is the average flow (hydraulic loading), total nitrogen and chloride loading summations for the land treatment system. The data was averaged from the results submitted for Outfall 001 and In-Plant sampling Points 101 and 102.

Table 6 Land Treatment Loading Averages

Year	Flow (gpd)	Nitrogen (mg/l)	Chloride (mg/l)
2024#	27,200	57.8	344
2023	20,800	76.5	415
2022	20,100	97.1	422
2021	20,700	98.2	494
2020	18,600	99.8	430
2019	21,000	86.6	363

# Indicates partial year

Table 7 Land Treatment Nitrogen Mass Loading

Year	Nitrogen Maximum (lbs/ac/yr)	Nitrogen Average (lbs/ac/yr)
2023	1020.9	721.7
2022	1280.2	951.8
2021	1374.1	896.5
2020	90.6	69.5
2019	1284.7	760.2

Groundwater Monitoring System and Sampling Frequency

Groundwater samples were collected quarterly from all wells. All of the groundwater sampling parameters were 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 8 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	1076.88		1064.8	1059.8	5.0	17.1	WT
803	MW-3	1073.11		1068.1	1063.1	5.0	10.0	WT
804	MW-4	1071.85	1070.3	1068.9	1058.9	10.0	13.0	WT
805	MW-5	1073.26		1066.8	1061.8	5.0	21.5	WT
806	MW-6	1094.67	1092.7	1071.4	1061.4	10.0	33.3	WT
807	MW-7	1094.91	1092.7	1054.5	1052.0	2.5	42.9	P
808	MW-8	1074.84	1072.8	1069.3	1059.3	10.0	13.5	WT

WT-Water table Observation P-Piezometer O-Other

Groundwater Sampling Results

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 sampling results from January 1, 2019 – April 18, 2024.

Background Groundwater Quality

The background groundwater monitoring well sampling results for the past five years have not had any ch. NR 140 Wis. Adm. Code groundwater quality exceedances.

Down-gradient Groundwater Quality

Groundwater monitoring wells 806, 807 and 808 had regular nitrite + nitrate PAL exceedances. There were no ES exceedances. The trend of these exceedances appears to be stable. There were no other groundwater quality exceedances.

Land Treatment System Impact to Groundwater Quality

Concentrations and trends in the groundwater monitoring data were compared to the loading data for the land treatment system. There were no correlations between the effluent loading levels and the groundwater monitoring results.

Proposed Groundwater Monitoring Requirements Permit WI-0002666-10

Table 9 Groundwater Quality Sampling Frequency and Limits
Outfall 001 Ridge & Furrow

Sample Point	Well Name	Sample Frequency	Well Designation
801	MW-1	Quarterly	Background
803	MW-3	Quarterly	Non-Point of Standard
804	MW-4	Quarterly	Point of Standard
805	MW-5	Quarterly	Point of Standard
806	MW-6	Quarterly	Point of Standard
807	MW-7	Quarterly	Point of Standard
808	MW-8	Quarterly	Point of Standard
Parameter	PAL	ES	Source
Depth to Groundwater	N/A	N/A	Measured
Groundwater Elevation	N/A	N/A	Measured
Nitrogen, Nitrite + Nitrate	2.0 mg/l	10.0 mg/l	Calculated, NR 140 Table 1
Chloride	125 mg/l	250 mg/l	NR 140 Table 2
pH, Field	***7.0-9.0** su	N/A	Calculated
Total Dissolved Solids	***290** mg/l	N/A	Calculated
Nitrogen, Ammonia	0.97 mg/l	9.7 mg/l	NR 140 Table 1
Nitrogen, Organic	2.2 mg/l	N/A	Calculated
***Alkalinity (as $CaCO_3$)**	***Discontinue**		
***Hardness (as $CaCO_3$)**	***Discontinue**		

* 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 compound. The following equations were used to calculate the indicator parameter PALs:

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

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:

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

Conclusions

According to s. NR 214.13 (3) (c) Wis. Adm. Code the nitrogen is to be reported according to the full nitrogen species (mass reporting lbs/ac/yr). Therefore, Total nitrogen is being added to the parameters for sampling points 101 and 102. In the future the mass loading of the ridge & furrow should be calculated using total nitrogen and not total Kjeldahl nitrogen.

In the past the mass for nitrogen and chloride were to be submitted in an annual report. This will change during the first annual report after permit reissuance. The nitrogen max and chloride max will be reported on an annual electronic discharge monitoring report. In addition, the mass nitrogen loading has been quantified to 800 lbs/ac/yr.

This facility has been determined to be a functional equivalent of a surface water discharge given the distance, groundwater flow direction and depth to groundwater. As a result of this determination the PAL exceedances for nitrite + nitrate are not causing a long term impact to the aquifer and the levels will not cause an impact to the Chippewa River. As a result, the department will take no s. NR 140.24 Wis. Adm. Code response action.

The PALs for pH and TDS have been modified based on background groundwater quality sampling results. The range for pH and the limit for TDS have been increased.

Hardness and alkalinity are no longer used and can be discontinued for the sampling parameters in groundwater.

Compliance Schedule Recommendations

A total nitrogen mass limit has been applied to the effluent sampling point to the ridge & furrow of 800 lbs/ac/yr. Give past loading several years have exceeded the new limit, so the limit will go into effect on the third year of the permit. In the interim the facility should evaluate options to reduce the overall nitrogen mass loaded to the ridge and furrow. A brief summary of options and actions should be reported to the department January of the following year reported on.

A map is required of the land Treatment system per ch. NR141.065 Wis. Adm. Code.

"All monitoring well locations shall be reported to the department on a plan map drawn to a specific scale. The map shall indicate structure boundaries, property boundaries, any nearby surface waters and a north arrow. The plan shall show the wells in relation to each other, to property and structure boundaries and to a common reference point on a horizontal grid system. The origin of the grid system shall be located according to latitude and longitude or according to the state plane coordinate system. The exact vertical location of the top of the well casing shall be referenced to the nearest benchmark for the national geodetic survey datum to an accuracy of 0.01 feet. This plan map shall show the exact location of the installed well on a horizontal grid system which is accurate to within 1 foot."

The permittee shall develop and submit to the Department a plan for a cost-effective pollutant minimization program (PMP) which has as its goal the reduction of nitrogen for the purpose of maintaining compliance with permit effluent limitations.

The s. NR 214.13 (5)(e) 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.

Appendix A

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

well		param	parm_unit_	sample_date	resi	result_amt
801	801	Chloride Dissolved	mg/L	01/15/2019 0:00	<	2
801	801	Chloride Dissolved	mg/L	05/29/2019 0:00	<	2
801	801	Chloride Dissolved	mg/L	08/28/2019 0:00	<	2
801	801	Chloride Dissolved	mg/L	11/18/2019 0:00	<	2
801	801	Chloride Dissolved	mg/L	03/13/2020 0:00		2
801	801	Chloride Dissolved	mg/L	06/17/2020 0:00	<	2
801	801	Chloride Dissolved	mg/L	08/13/2020 0:00	<	2
801	801	Chloride Dissolved	mg/L	10/28/2020 0:00	<	2
801	801	Chloride Dissolved	mg/L	01/07/2021 0:00	<	2
801	801	Chloride Dissolved	mg/L	05/26/2021 0:00		2
801	801	Chloride Dissolved	mg/L	08/05/2021 0:00	<	2
801	801	Chloride Dissolved	mg/L	11/18/2021 0:00		2
801	801	Chloride Dissolved	mg/L	03/24/2022 0:00		2
801	801	Chloride Dissolved	mg/L	06/22/2022 0:00		44
801	801	Chloride Dissolved	mg/L	09/07/2022 0:00		2
801	801	Chloride Dissolved	mg/L	10/20/2022 0:00		2
801	801	Chloride Dissolved	mg/L	03/23/2023 0:00		3
801	801	Chloride Dissolved	mg/L	06/27/2023 0:00	<	2
801	801	Chloride Dissolved	mg/L	08/23/2023 0:00	<	2
801	801	Chloride Dissolved	mg/L	10/10/2023 0:00		3
801	801	Chloride Dissolved	mg/L	01/10/2024 0:00		2
801	801	Chloride Dissolved	mg/L	04/18/2024 0:00	<	2
				Mean		4
				Standard Dev		8.733426

well		param	parm_unit_	sample_date	resi	result_amt
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/15/2019 0:00	<	0.1
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/29/2019 0:00	<	0.1
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/28/2019 0:00	<	0.1
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/18/2019 0:00	<	0.1
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/13/2020 0:00	<	0.1
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2020 0:00	<	0.1
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/13/2020 0:00	<	0.1
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020 0:00	<	0.1
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/07/2021 0:00	<	0.1
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/26/2021 0:00		0.1
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/05/2021 0:00	<	0.1
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/18/2021 0:00	<	0.1
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2022 0:00		0.2
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2022 0:00	<	1
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/07/2022 0:00	<	0.1
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022 0:00	<	0.1
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023 0:00		0.1
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/27/2023 0:00		0.4
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/23/2023 0:00		0.06
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/10/2023 0:00		0.08
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/10/2024 0:00		0.08
801	801	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	04/18/2024 0:00		0.03
				Mean		0.152273
				Standard Dev		0.197391
801	801	Nitrogen, Organic Dissolved	mg/L	01/15/2019 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	05/29/2019 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	08/28/2019 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	11/18/2019 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	03/13/2020 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	06/17/2020 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	08/13/2020 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	10/28/2020 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	01/07/2021 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	05/26/2021 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	08/05/2021 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	11/18/2021 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	03/24/2022 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	06/22/2022 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	09/07/2022 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	10/20/2022 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	03/23/2023 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	06/27/2023 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	08/23/2023 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	10/10/2023 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	01/10/2024 0:00	<	0.5
801	801	Nitrogen, Organic Dissolved	mg/L	04/18/2024 0:00	<	0.5
				Mean		0.5
				Standard Dev		0

well		param	parm_unit_	sample_date	resi	result_amt
801	801	pH Field	su	01/15/2019 0:00		8.31
801	801	pH Field	su	05/29/2019 0:00		8.2
801	801	pH Field	su	08/28/2019 0:00		7.55
801	801	pH Field	su	11/18/2019 0:00		8.24
801	801	pH Field	su	03/13/2020 0:00		8.61
801	801	pH Field	su	06/17/2020 0:00		8.47
801	801	pH Field	su	08/13/2020 0:00		8.02
801	801	pH Field	su	10/28/2020 0:00		8.15
801	801	pH Field	su	01/07/2021 0:00		8.25
801	801	pH Field	su	05/26/2021 0:00		7.92
801	801	pH Field	su	08/05/2021 0:00		7.85
801	801	pH Field	su	11/18/2021 0:00		6.67
801	801	pH Field	su	03/24/2022 0:00		8.42
801	801	pH Field	su	06/22/2022 0:00		8.24
801	801	pH Field	su	09/07/2022 0:00		7.05
801	801	pH Field	su	10/20/2022 0:00		6.51
801	801	pH Field	su	03/23/2023 0:00		8.47
801	801	pH Field	su	06/27/2023 0:00		7.75
801	801	pH Field	su	08/23/2023 0:00		7.65
801	801	pH Field	su	10/10/2023 0:00		7.78
801	801	pH Field	su	01/10/2024 0:00		8.01
801	801	pH Field	su	04/18/2024 0:00		8.01
				Mean		7.915
				Standard Dev		0.544583

801	801	Solids, Total Dissolved	mg/L	01/15/2019 0:00		65
801	801	Solids, Total Dissolved	mg/L	05/29/2019 0:00		86
801	801	Solids, Total Dissolved	mg/L	08/28/2019 0:00		83
801	801	Solids, Total Dissolved	mg/L	11/18/2019 0:00		95
801	801	Solids, Total Dissolved	mg/L	03/13/2020 0:00		82
801	801	Solids, Total Dissolved	mg/L	06/17/2020 0:00		68
801	801	Solids, Total Dissolved	mg/L	08/13/2020 0:00		79
801	801	Solids, Total Dissolved	mg/L	10/28/2020 0:00		56
801	801	Solids, Total Dissolved	mg/L	01/07/2021 0:00		86
801	801	Solids, Total Dissolved	mg/L	05/26/2021 0:00		54
801	801	Solids, Total Dissolved	mg/L	08/05/2021 0:00		106
801	801	Solids, Total Dissolved	mg/L	11/18/2021 0:00		75
801	801	Solids, Total Dissolved	mg/L	03/24/2022 0:00		51
801	801	Solids, Total Dissolved	mg/L	06/22/2022 0:00		206
801	801	Solids, Total Dissolved	mg/L	09/07/2022 0:00		73
801	801	Solids, Total Dissolved	mg/L	10/20/2022 0:00		93
801	801	Solids, Total Dissolved	mg/L	03/23/2023 0:00		86
801	801	Solids, Total Dissolved	mg/L	06/27/2023 0:00		56
801	801	Solids, Total Dissolved	mg/L	08/23/2023 0:00		86
801	801	Solids, Total Dissolved	mg/L	10/10/2023 0:00		96
801	801	Solids, Total Dissolved	mg/L	01/10/2024 0:00		66
801	801	Solids, Total Dissolved	mg/L	04/18/2024 0:00		75
				Mean		82.86364
				Standard Dev		30.53507

well		param	parm_unit_	sample_date	resi	result_amt
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/15/2019 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	05/29/2019 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/28/2019 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	11/18/2019 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/13/2020 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/17/2020 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/13/2020 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/28/2020 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/07/2021 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	05/26/2021 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/05/2021 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	11/18/2021 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/24/2022 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/22/2022 0:00		0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	09/07/2022 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/20/2022 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/23/2023 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/27/2023 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/23/2023 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/10/2023 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/10/2024 0:00	<	0.1
801	801	Nitrogen, Ammonia (NH3-N) Total	mg/L	04/18/2024 0:00	<	0.1
				Mean		0.1
				Standard Dev		0
803	803	Chloride Dissolved	mg/L	01/15/2019 0:00		17
803	803	Chloride Dissolved	mg/L	05/29/2019 0:00		46
803	803	Chloride Dissolved	mg/L	08/28/2019 0:00		2
803	803	Chloride Dissolved	mg/L	11/18/2019 0:00		3
803	803	Chloride Dissolved	mg/L	03/13/2020 0:00		3
803	803	Chloride Dissolved	mg/L	06/17/2020 0:00		2
803	803	Chloride Dissolved	mg/L	08/13/2020 0:00		4
803	803	Chloride Dissolved	mg/L	10/28/2020 0:00		2
803	803	Chloride Dissolved	mg/L	01/07/2021 0:00		3
803	803	Chloride Dissolved	mg/L	05/26/2021 0:00		3
803	803	Chloride Dissolved	mg/L	08/05/2021 0:00		3
803	803	Chloride Dissolved	mg/L	11/18/2021 0:00		4
803	803	Chloride Dissolved	mg/L	03/24/2022 0:00		3
803	803	Chloride Dissolved	mg/L	06/22/2022 0:00		8
803	803	Chloride Dissolved	mg/L	09/07/2022 0:00		9
803	803	Chloride Dissolved	mg/L	10/20/2022 0:00		8
803	803	Chloride Dissolved	mg/L	03/23/2023 0:00		6
803	803	Chloride Dissolved	mg/L	06/27/2023 0:00		4
803	803	Chloride Dissolved	mg/L	08/23/2023 0:00		4
803	803	Chloride Dissolved	mg/L	10/10/2023 0:00		5
803	803	Chloride Dissolved	mg/L	01/10/2024 0:00		5
803	803	Chloride Dissolved	mg/L	04/18/2024 0:00		5

well		param	parm_unit_	sample_date	resi	result_amt
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/15/2019 0:00		0.1
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/29/2019 0:00	<	0.1
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/28/2019 0:00	<	0.1
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/18/2019 0:00	<	0.1
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/13/2020 0:00	<	0.1
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2020 0:00	<	0.1
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/13/2020 0:00	<	0.1
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020 0:00	<	0.1
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/07/2021 0:00	<	0.1
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/26/2021 0:00		0.3
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/05/2021 0:00	<	0.1
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/18/2021 0:00	<	0.1
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2022 0:00		0.2
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2022 0:00		0.2
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/07/2022 0:00		0.2
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022 0:00		0.2
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023 0:00		0.2
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/27/2023 0:00		0.09
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/23/2023 0:00	<	0.05
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/10/2023 0:00		0.09
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/10/2024 0:00		0.09
803	803	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	04/18/2024 0:00		0.23
803	803	Nitrogen, Organic Dissolved	mg/L	01/15/2019 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	05/29/2019 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	08/28/2019 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	11/18/2019 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	03/13/2020 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	06/17/2020 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	08/13/2020 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	10/28/2020 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	01/07/2021 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	05/26/2021 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	08/05/2021 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	11/18/2021 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	03/24/2022 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	06/22/2022 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	09/07/2022 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	10/20/2022 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	03/23/2023 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	06/27/2023 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	08/23/2023 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	10/10/2023 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	01/10/2024 0:00	<	0.5
803	803	Nitrogen, Organic Dissolved	mg/L	04/18/2024 0:00	<	0.5

well		param	parm_unit_	sample_date	resi	result_amt
803	803	pH Field	su	01/15/2019 0:00		6.82
803	803	pH Field	su	05/29/2019 0:00		7.3
803	803	pH Field	su	08/28/2019 0:00		6.94
803	803	pH Field	su	11/18/2019 0:00		6.83
803	803	pH Field	su	03/13/2020 0:00		7.35
803	803	pH Field	su	06/17/2020 0:00		7.18
803	803	pH Field	su	08/13/2020 0:00		6.45
803	803	pH Field	su	10/28/2020 0:00		6.68
803	803	pH Field	su	01/07/2021 0:00		7.12
803	803	pH Field	su	05/26/2021 0:00		6.87
803	803	pH Field	su	08/05/2021 0:00		6.68
803	803	pH Field	su	11/18/2021 0:00		6.33
803	803	pH Field	su	03/24/2022 0:00		7.75
803	803	pH Field	su	06/22/2022 0:00		7.09
803	803	pH Field	su	09/07/2022 0:00		6.41
803	803	pH Field	su	10/20/2022 0:00		6.18
803	803	pH Field	su	03/23/2023 0:00		7.65
803	803	pH Field	su	06/27/2023 0:00		6.74
803	803	pH Field	su	08/23/2023 0:00		6.67
803	803	pH Field	su	10/10/2023 0:00		6.52
803	803	pH Field	su	01/10/2024 0:00		6.87
803	803	pH Field	su	04/18/2024 0:00		7.24
803	803	Solids, Total Dissolved	mg/L	01/15/2019 0:00		74
803	803	Solids, Total Dissolved	mg/L	05/29/2019 0:00		240
803	803	Solids, Total Dissolved	mg/L	08/28/2019 0:00		58
803	803	Solids, Total Dissolved	mg/L	11/18/2019 0:00		79
803	803	Solids, Total Dissolved	mg/L	03/13/2020 0:00		50
803	803	Solids, Total Dissolved	mg/L	06/17/2020 0:00		60
803	803	Solids, Total Dissolved	mg/L	08/13/2020 0:00		69
803	803	Solids, Total Dissolved	mg/L	10/28/2020 0:00		33
803	803	Solids, Total Dissolved	mg/L	01/07/2021 0:00		57
803	803	Solids, Total Dissolved	mg/L	05/26/2021 0:00		51
803	803	Solids, Total Dissolved	mg/L	08/05/2021 0:00		77
803	803	Solids, Total Dissolved	mg/L	11/18/2021 0:00		59
803	803	Solids, Total Dissolved	mg/L	03/24/2022 0:00		20
803	803	Solids, Total Dissolved	mg/L	06/22/2022 0:00		51
803	803	Solids, Total Dissolved	mg/L	09/07/2022 0:00		61
803	803	Solids, Total Dissolved	mg/L	10/20/2022 0:00		84
803	803	Solids, Total Dissolved	mg/L	03/23/2023 0:00		49
803	803	Solids, Total Dissolved	mg/L	06/27/2023 0:00		49
803	803	Solids, Total Dissolved	mg/L	08/23/2023 0:00		61
803	803	Solids, Total Dissolved	mg/L	10/10/2023 0:00		68
803	803	Solids, Total Dissolved	mg/L	01/10/2024 0:00		44
803	803	Solids, Total Dissolved	mg/L	04/18/2024 0:00		74

well		param	parm_unit_	sample_date	resı	result_amt
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/15/2019 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	05/29/2019 0:00		0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/28/2019 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	11/18/2019 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/13/2020 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/17/2020 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/13/2020 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/28/2020 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/07/2021 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	05/26/2021 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/05/2021 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	11/18/2021 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/24/2022 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/22/2022 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	09/07/2022 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/20/2022 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/23/2023 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/27/2023 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/23/2023 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/10/2023 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/10/2024 0:00	<	0.1
803	803	Nitrogen, Ammonia (NH3-N) Total	mg/L	04/18/2024 0:00	<	0.1
804	804	Chloride Dissolved	mg/L	01/15/2019 0:00		49
804	804	Chloride Dissolved	mg/L	05/29/2019 0:00		50
804	804	Chloride Dissolved	mg/L	08/28/2019 0:00		48
804	804	Chloride Dissolved	mg/L	11/18/2019 0:00		52
804	804	Chloride Dissolved	mg/L	03/13/2020 0:00		61
804	804	Chloride Dissolved	mg/L	06/17/2020 0:00		49
804	804	Chloride Dissolved	mg/L	08/13/2020 0:00		52
804	804	Chloride Dissolved	mg/L	10/28/2020 0:00		54
804	804	Chloride Dissolved	mg/L	01/07/2021 0:00		63
804	804	Chloride Dissolved	mg/L	05/26/2021 0:00		57
804	804	Chloride Dissolved	mg/L	08/05/2021 0:00		50
804	804	Chloride Dissolved	mg/L	11/18/2021 0:00		48
804	804	Chloride Dissolved	mg/L	03/24/2022 0:00		41
804	804	Chloride Dissolved	mg/L	06/22/2022 0:00	<	2
804	804	Chloride Dissolved	mg/L	09/07/2022 0:00		47
804	804	Chloride Dissolved	mg/L	10/20/2022 0:00		50
804	804	Chloride Dissolved	mg/L	03/23/2023 0:00		52
804	804	Chloride Dissolved	mg/L	06/27/2023 0:00		47
804	804	Chloride Dissolved	mg/L	08/23/2023 0:00		37
804	804	Chloride Dissolved	mg/L	10/10/2023 0:00		57
804	804	Chloride Dissolved	mg/L	01/10/2024 0:00		55
804	804	Chloride Dissolved	mg/L	04/18/2024 0:00		53

well		param	parm_unit_	sample_date	resı	result_amt
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/15/2019 0:00	<	0.1
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/29/2019 0:00	<	0.1
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/28/2019 0:00	<	0.1
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/18/2019 0:00	<	0.1
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/13/2020 0:00	<	0.1
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2020 0:00	<	0.1
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/13/2020 0:00	<	0.1
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020 0:00	<	0.1
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/07/2021 0:00	<	0.1
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/26/2021 0:00	<	0.1
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/05/2021 0:00	<	0.1
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/18/2021 0:00	<	0.1
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2022 0:00	<	0.1
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2022 0:00	<	0.1
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/07/2022 0:00	<	0.1
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022 0:00	<	0.1
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023 0:00	<	0.1
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/27/2023 0:00	<	0.05
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/23/2023 0:00	<	0.05
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/10/2023 0:00	<	0.05
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/10/2024 0:00	<	0.05
804	804	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	04/18/2024 0:00	<	0.02
804	804	Nitrogen, Organic Dissolved	mg/L	01/15/2019 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	05/29/2019 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	08/28/2019 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	11/18/2019 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	03/13/2020 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	06/17/2020 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	08/13/2020 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	10/28/2020 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	01/07/2021 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	05/26/2021 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	08/05/2021 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	11/18/2021 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	03/24/2022 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	06/22/2022 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	09/07/2022 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	10/20/2022 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	03/23/2023 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	06/27/2023 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	08/23/2023 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	10/10/2023 0:00	<	0.5
804	804	Nitrogen, Organic Dissolved	mg/L	01/10/2024 0:00	<	0.05
804	804	Nitrogen, Organic Dissolved	mg/L	04/18/2024 0:00	<	0.5

well		param	parm_unit_	sample_date	resi	result_amt
804	804	pH Field	su	01/15/2019 0:00		7.12
804	804	pH Field	su	05/29/2019 0:00		7.2
804	804	pH Field	su	08/28/2019 0:00		7.07
804	804	pH Field	su	11/18/2019 0:00		7.07
804	804	pH Field	su	03/13/2020 0:00		7.14
804	804	pH Field	su	06/17/2020 0:00		6.98
804	804	pH Field	su	08/13/2020 0:00		6.85
804	804	pH Field	su	10/28/2020 0:00		6.8
804	804	pH Field	su	01/07/2021 0:00		7.07
804	804	pH Field	su	05/26/2021 0:00		6.94
804	804	pH Field	su	08/05/2021 0:00		6.87
804	804	pH Field	su	11/18/2021 0:00		6.71
804	804	pH Field	su	03/24/2022 0:00		7.41
804	804	pH Field	su	06/22/2022 0:00		7.05
804	804	pH Field	su	09/07/2022 0:00		6.41
804	804	pH Field	su	10/20/2022 0:00		6.57
804	804	pH Field	su	03/23/2023 0:00		7.22
804	804	pH Field	su	06/27/2023 0:00		6.68
804	804	pH Field	su	08/23/2023 0:00		6.65
804	804	pH Field	su	10/10/2023 0:00		6.64
804	804	pH Field	su	01/10/2024 0:00		6.77
804	804	pH Field	su	04/18/2024 0:00		6.89
804	804	Solids, Total Dissolved	mg/L	01/15/2019 0:00		216
804	804	Solids, Total Dissolved	mg/L	05/29/2019 0:00		223
804	804	Solids, Total Dissolved	mg/L	08/28/2019 0:00		210
804	804	Solids, Total Dissolved	mg/L	11/18/2019 0:00		239
804	804	Solids, Total Dissolved	mg/L	03/13/2020 0:00		273
804	804	Solids, Total Dissolved	mg/L	06/17/2020 0:00		250
804	804	Solids, Total Dissolved	mg/L	08/13/2020 0:00		246
804	804	Solids, Total Dissolved	mg/L	10/28/2020 0:00		215
804	804	Solids, Total Dissolved	mg/L	01/07/2021 0:00		262
804	804	Solids, Total Dissolved	mg/L	05/26/2021 0:00		273
804	804	Solids, Total Dissolved	mg/L	08/05/2021 0:00		271
804	804	Solids, Total Dissolved	mg/L	11/18/2021 0:00		230
804	804	Solids, Total Dissolved	mg/L	03/24/2022 0:00		186
804	804	Solids, Total Dissolved	mg/L	06/22/2022 0:00		56
804	804	Solids, Total Dissolved	mg/L	09/07/2022 0:00		191
804	804	Solids, Total Dissolved	mg/L	10/20/2022 0:00		251
804	804	Solids, Total Dissolved	mg/L	03/23/2023 0:00		214
804	804	Solids, Total Dissolved	mg/L	06/27/2023 0:00		216
804	804	Solids, Total Dissolved	mg/L	08/23/2023 0:00		227
804	804	Solids, Total Dissolved	mg/L	10/10/2023 0:00		242
804	804	Solids, Total Dissolved	mg/L	01/10/2024 0:00		234
804	804	Solids, Total Dissolved	mg/L	04/18/2024 0:00		242

well		param	parm_unit_	sample_date	res	result_amt
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/15/2019 0:00		0.1
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	05/29/2019 0:00	<	0.1
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/28/2019 0:00	<	0.1
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	11/18/2019 0:00		0.1
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/13/2020 0:00		0.1
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/17/2020 0:00		0.1
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/13/2020 0:00		0.1
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/28/2020 0:00		0.1
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/07/2021 0:00		0.1
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	05/26/2021 0:00	<	0.1
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/05/2021 0:00		0.1
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	11/18/2021 0:00		0.1
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/24/2022 0:00	<	0.1
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/22/2022 0:00	<	0.1
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	09/07/2022 0:00		0.1
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/20/2022 0:00		0.2
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/23/2023 0:00		0.1
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/27/2023 0:00	<	0.1
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/23/2023 0:00		0.2
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/10/2023 0:00		0.2
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/10/2024 0:00		0.1
804	804	Nitrogen, Ammonia (NH3-N) Total	mg/L	04/18/2024 0:00		0.1
805	805	Chloride Dissolved	mg/L	01/15/2019 0:00		28
805	805	Chloride Dissolved	mg/L	05/29/2019 0:00		28
805	805	Chloride Dissolved	mg/L	08/28/2019 0:00		39
805	805	Chloride Dissolved	mg/L	11/18/2019 0:00		45
805	805	Chloride Dissolved	mg/L	03/13/2020 0:00		26
805	805	Chloride Dissolved	mg/L	06/17/2020 0:00		32
805	805	Chloride Dissolved	mg/L	08/13/2020 0:00		42
805	805	Chloride Dissolved	mg/L	10/28/2020 0:00		33
805	805	Chloride Dissolved	mg/L	01/07/2021 0:00		25
805	805	Chloride Dissolved	mg/L	05/26/2021 0:00		29
805	805	Chloride Dissolved	mg/L	08/05/2021 0:00		22
805	805	Chloride Dissolved	mg/L	11/18/2021 0:00		25
805	805	Chloride Dissolved	mg/L	03/24/2022 0:00		25
805	805	Chloride Dissolved	mg/L	06/22/2022 0:00		56
805	805	Chloride Dissolved	mg/L	09/07/2022 0:00		27
805	805	Chloride Dissolved	mg/L	10/20/2022 0:00		26
805	805	Chloride Dissolved	mg/L	03/23/2023 0:00		22
805	805	Chloride Dissolved	mg/L	06/27/2023 0:00		41
805	805	Chloride Dissolved	mg/L	08/23/2023 0:00		37
805	805	Chloride Dissolved	mg/L	10/10/2023 0:00		30
805	805	Chloride Dissolved	mg/L	01/10/2024 0:00		22
805	805	Chloride Dissolved	mg/L	04/18/2024 0:00		21

well		param	parm_unit_	sample_date	resi	result_amt
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/15/2019 0:00	<	0.1
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/29/2019 0:00		0.6
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/28/2019 0:00	<	0.1
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/18/2019 0:00	<	0.1
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/13/2020 0:00	<	0.1
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2020 0:00	<	0.1
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/13/2020 0:00	<	0.1
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020 0:00	<	0.1
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/07/2021 0:00	<	0.1
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/26/2021 0:00	<	0.1
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/05/2021 0:00	<	0.1
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/18/2021 0:00	<	0.1
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2022 0:00	<	0.1
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2022 0:00	<	0.1
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/07/2022 0:00	<	0.1
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022 0:00	<	0.1
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023 0:00	<	0.1
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/27/2023 0:00	<	0.05
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/23/2023 0:00	<	0.05
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/10/2023 0:00	<	0.05
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/10/2024 0:00	<	0.05
805	805	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	04/18/2024 0:00		0.05
805	805	Nitrogen, Organic Dissolved	mg/L	01/15/2019 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	05/29/2019 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	08/28/2019 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	11/18/2019 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	03/13/2020 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	06/17/2020 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	08/13/2020 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	10/28/2020 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	01/07/2021 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	05/26/2021 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	08/05/2021 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	11/18/2021 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	03/24/2022 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	06/22/2022 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	09/07/2022 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	10/20/2022 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	03/23/2023 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	06/27/2023 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	08/23/2023 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	10/10/2023 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	01/10/2024 0:00	<	0.5
805	805	Nitrogen, Organic Dissolved	mg/L	04/18/2024 0:00	<	0.5

well		param	parm_unit_	sample_date	resi	result_amt
805	805	pH Field	su	01/15/2019 0:00		7.19
805	805	pH Field	su	05/29/2019 0:00		6.96
805	805	pH Field	su	08/28/2019 0:00		7.07
805	805	pH Field	su	11/18/2019 0:00		7.16
805	805	pH Field	su	03/13/2020 0:00		7.08
805	805	pH Field	su	06/17/2020 0:00		7.05
805	805	pH Field	su	08/13/2020 0:00		6.92
805	805	pH Field	su	10/28/2020 0:00		6.78
805	805	pH Field	su	01/07/2021 0:00		7.11
805	805	pH Field	su	05/26/2021 0:00		7.09
805	805	pH Field	su	08/05/2021 0:00		6.98
805	805	pH Field	su	11/18/2021 0:00		6.87
805	805	pH Field	su	03/24/2022 0:00		7.54
805	805	pH Field	su	06/22/2022 0:00		7.09
805	805	pH Field	su	09/07/2022 0:00		6.52
805	805	pH Field	su	10/20/2022 0:00		6.73
805	805	pH Field	su	03/23/2023 0:00		7.33
805	805	pH Field	su	06/27/2023 0:00		9.73
805	805	pH Field	su	08/23/2023 0:00		6.78
805	805	pH Field	su	10/10/2023 0:00		6.76
805	805	pH Field	su	01/10/2024 0:00		6.99
805	805	pH Field	su	04/18/2024 0:00		7.02
805	805	Solids, Total Dissolved	mg/L	01/15/2019 0:00		173
805	805	Solids, Total Dissolved	mg/L	05/29/2019 0:00		175
805	805	Solids, Total Dissolved	mg/L	08/28/2019 0:00		190
805	805	Solids, Total Dissolved	mg/L	11/18/2019 0:00		204
805	805	Solids, Total Dissolved	mg/L	03/13/2020 0:00		166
805	805	Solids, Total Dissolved	mg/L	06/17/2020 0:00		179
805	805	Solids, Total Dissolved	mg/L	08/13/2020 0:00		227
805	805	Solids, Total Dissolved	mg/L	10/28/2020 0:00		172
805	805	Solids, Total Dissolved	mg/L	01/07/2021 0:00		152
805	805	Solids, Total Dissolved	mg/L	05/26/2021 0:00		177
805	805	Solids, Total Dissolved	mg/L	08/05/2021 0:00		175
805	805	Solids, Total Dissolved	mg/L	11/18/2021 0:00		159
805	805	Solids, Total Dissolved	mg/L	03/24/2022 0:00		114
805	805	Solids, Total Dissolved	mg/L	06/22/2022 0:00		209
805	805	Solids, Total Dissolved	mg/L	09/07/2022 0:00		155
805	805	Solids, Total Dissolved	mg/L	10/20/2022 0:00		172
805	805	Solids, Total Dissolved	mg/L	03/23/2023 0:00		129
805	805	Solids, Total Dissolved	mg/L	06/27/2023 0:00		190
805	805	Solids, Total Dissolved	mg/L	08/23/2023 0:00		181
805	805	Solids, Total Dissolved	mg/L	10/10/2023 0:00		176
805	805	Solids, Total Dissolved	mg/L	01/10/2024 0:00		134
805	805	Solids, Total Dissolved	mg/L	04/18/2024 0:00		157

well		param	parm_unit_	sample_date	resi	result_amt
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/15/2019 0:00	<	0.1
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	05/29/2019 0:00	<	0.1
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/28/2019 0:00		0.1
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	11/18/2019 0:00		0.2
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/13/2020 0:00		0.1
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/17/2020 0:00		0.1
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/13/2020 0:00		0.2
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/28/2020 0:00		0.1
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/07/2021 0:00	<	0.1
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	05/26/2021 0:00	<	0.1
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/05/2021 0:00		0.1
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	11/18/2021 0:00		0.1
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/24/2022 0:00	<	0.1
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/22/2022 0:00	<	0.1
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	09/07/2022 0:00		0.2
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/20/2022 0:00		0.1
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/23/2023 0:00	<	0.1
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/27/2023 0:00		0.1
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/23/2023 0:00		0.2
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/10/2023 0:00		0.2
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/10/2024 0:00		0.1
805	805	Nitrogen, Ammonia (NH3-N) Total	mg/L	04/18/2024 0:00	<	0.1
806	806	Chloride Dissolved	mg/L	01/15/2019 0:00		2
806	806	Chloride Dissolved	mg/L	05/29/2019 0:00	<	2
806	806	Chloride Dissolved	mg/L	08/28/2019 0:00	<	2
806	806	Chloride Dissolved	mg/L	11/18/2019 0:00	<	2
806	806	Chloride Dissolved	mg/L	03/13/2020 0:00		2
806	806	Chloride Dissolved	mg/L	06/17/2020 0:00		2
806	806	Chloride Dissolved	mg/L	08/13/2020 0:00		2
806	806	Chloride Dissolved	mg/L	10/28/2020 0:00		2
806	806	Chloride Dissolved	mg/L	01/07/2021 0:00		2
806	806	Chloride Dissolved	mg/L	05/26/2021 0:00		3
806	806	Chloride Dissolved	mg/L	08/05/2021 0:00	<	2
806	806	Chloride Dissolved	mg/L	11/18/2021 0:00		3
806	806	Chloride Dissolved	mg/L	03/24/2022 0:00		3
806	806	Chloride Dissolved	mg/L	06/22/2022 0:00		13
806	806	Chloride Dissolved	mg/L	09/07/2022 0:00		3
806	806	Chloride Dissolved	mg/L	10/20/2022 0:00		3
806	806	Chloride Dissolved	mg/L	03/23/2023 0:00		3
806	806	Chloride Dissolved	mg/L	06/27/2023 0:00		2
806	806	Chloride Dissolved	mg/L	08/23/2023 0:00		21
806	806	Chloride Dissolved	mg/L	10/10/2023 0:00		2
806	806	Chloride Dissolved	mg/L	01/10/2024 0:00		3
806	806	Chloride Dissolved	mg/L	04/18/2024 0:00		23

well		param	parm_unit	sample_date	res	result_amt
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/15/2019 0:00		2
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/29/2019 0:00		0.4
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/28/2019 0:00		2.7
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/18/2019 0:00		1
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/13/2020 0:00		2.4
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2020 0:00		2
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/13/2020 0:00		1.3
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020 0:00		2.7
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/07/2021 0:00		3.2
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/26/2021 0:00		1.8
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/05/2021 0:00		1.9
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/18/2021 0:00		2.7
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2022 0:00		2.1
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2022 0:00		1
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/07/2022 0:00		2.1
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022 0:00		2.4
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023 0:00		1.2
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/27/2023 0:00		1.41
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/23/2023 0:00		0.61
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/10/2023 0:00		3.14
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/10/2024 0:00		2
806	806	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	04/18/2024 0:00		0.35
806	806	Nitrogen, Organic Dissolved	mg/L	01/15/2019 0:00	<	0.5
806	806	Nitrogen, Organic Dissolved	mg/L	05/29/2019 0:00	<	0.5
806	806	Nitrogen, Organic Dissolved	mg/L	08/28/2019 0:00	<	0.5
806	806	Nitrogen, Organic Dissolved	mg/L	11/18/2019 0:00	<	0.5
806	806	Nitrogen, Organic Dissolved	mg/L	03/13/2020 0:00	<	0.5
806	806	Nitrogen, Organic Dissolved	mg/L	06/17/2020 0:00	<	0.5
806	806	Nitrogen, Organic Dissolved	mg/L	08/13/2020 0:00	<	0.5
806	806	Nitrogen, Organic Dissolved	mg/L	10/28/2020 0:00	<	0.5
806	806	Nitrogen, Organic Dissolved	mg/L	01/07/2021 0:00		0.8
806	806	Nitrogen, Organic Dissolved	mg/L	05/26/2021 0:00	<	0.5
806	806	Nitrogen, Organic Dissolved	mg/L	08/05/2021 0:00	<	0.5
806	806	Nitrogen, Organic Dissolved	mg/L	11/18/2021 0:00		0.6
806	806	Nitrogen, Organic Dissolved	mg/L	03/24/2022 0:00	<	0.5
806	806	Nitrogen, Organic Dissolved	mg/L	06/22/2022 0:00	<	0.5
806	806	Nitrogen, Organic Dissolved	mg/L	09/07/2022 0:00	<	0.5
806	806	Nitrogen, Organic Dissolved	mg/L	10/20/2022 0:00	<	0.5
806	806	Nitrogen, Organic Dissolved	mg/L	03/23/2023 0:00	<	0.5
806	806	Nitrogen, Organic Dissolved	mg/L	06/27/2023 0:00	<	0.5
806	806	Nitrogen, Organic Dissolved	mg/L	08/23/2023 0:00	<	0.5
806	806	Nitrogen, Organic Dissolved	mg/L	10/10/2023 0:00	<	0.5
806	806	Nitrogen, Organic Dissolved	mg/L	01/10/2024 0:00		0.5
806	806	Nitrogen, Organic Dissolved	mg/L	04/18/2024 0:00	<	0.5

well		param	parm_unit_	sample_date	resi	result_amt
806	806	pH Field	su	01/15/2019 0:00		7.06
806	806	pH Field	su	05/29/2019 0:00		7.25
806	806	pH Field	su	08/28/2019 0:00		6.99
806	806	pH Field	su	11/18/2019 0:00		7.1
806	806	pH Field	su	03/13/2020 0:00		6.99
806	806	pH Field	su	06/17/2020 0:00		6.78
806	806	pH Field	su	08/13/2020 0:00		6.7
806	806	pH Field	su	10/28/2020 0:00		6.79
806	806	pH Field	su	01/07/2021 0:00		7.09
806	806	pH Field	su	05/26/2021 0:00		6.88
806	806	pH Field	su	08/05/2021 0:00		6.77
806	806	pH Field	su	11/18/2021 0:00		6.67
806	806	pH Field	su	03/24/2022 0:00		7.4
806	806	pH Field	su	06/22/2022 0:00		6.83
806	806	pH Field	su	09/07/2022 0:00		6.71
806	806	pH Field	su	10/20/2022 0:00		6.92
806	806	pH Field	su	03/23/2023 0:00		7.05
806	806	pH Field	su	06/27/2023 0:00		6.56
806	806	pH Field	su	08/23/2023 0:00		6.68
806	806	pH Field	su	10/10/2023 0:00		6.82
806	806	pH Field	su	01/10/2024 0:00		6.96
806	806	pH Field	su	04/18/2024 0:00		6.89
806	806	Solids, Total Dissolved	mg/L	01/15/2019 0:00		68
806	806	Solids, Total Dissolved	mg/L	05/29/2019 0:00		72
806	806	Solids, Total Dissolved	mg/L	08/28/2019 0:00		82
806	806	Solids, Total Dissolved	mg/L	11/18/2019 0:00		72
806	806	Solids, Total Dissolved	mg/L	03/13/2020 0:00		76
806	806	Solids, Total Dissolved	mg/L	06/17/2020 0:00		79
806	806	Solids, Total Dissolved	mg/L	08/13/2020 0:00		79
806	806	Solids, Total Dissolved	mg/L	10/28/2020 0:00		69
806	806	Solids, Total Dissolved	mg/L	01/07/2021 0:00		47
806	806	Solids, Total Dissolved	mg/L	05/26/2021 0:00		70
806	806	Solids, Total Dissolved	mg/L	08/05/2021 0:00		118
806	806	Solids, Total Dissolved	mg/L	11/18/2021 0:00		99
806	806	Solids, Total Dissolved	mg/L	03/24/2022 0:00		51
806	806	Solids, Total Dissolved	mg/L	06/22/2022 0:00		88
806	806	Solids, Total Dissolved	mg/L	09/07/2022 0:00		77
806	806	Solids, Total Dissolved	mg/L	10/20/2022 0:00		88
806	806	Solids, Total Dissolved	mg/L	03/23/2023 0:00		69
806	806	Solids, Total Dissolved	mg/L	06/27/2023 0:00		52
806	806	Solids, Total Dissolved	mg/L	08/23/2023 0:00		75
806	806	Solids, Total Dissolved	mg/L	10/10/2023 0:00		88
806	806	Solids, Total Dissolved	mg/L	01/10/2024 0:00		77
806	806	Solids, Total Dissolved	mg/L	04/18/2024 0:00		119

well		param	parm_unit_	sample_date	resı	result_amt
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/15/2019 0:00	<	0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	05/29/2019 0:00	<	0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/28/2019 0:00	<	0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	11/18/2019 0:00	<	0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/13/2020 0:00	<	0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/17/2020 0:00	<	0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/13/2020 0:00	<	0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/28/2020 0:00	<	0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/07/2021 0:00		0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	05/26/2021 0:00	<	0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/05/2021 0:00		0.2
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	11/18/2021 0:00	<	0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/24/2022 0:00	<	0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/22/2022 0:00	<	0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	09/07/2022 0:00	<	0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/20/2022 0:00	<	0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/23/2023 0:00	<	0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/27/2023 0:00	<	0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/23/2023 0:00	<	0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/10/2023 0:00	<	0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/10/2024 0:00	<	0.1
806	806	Nitrogen, Ammonia (NH3-N) Total	mg/L	04/18/2024 0:00	<	0.1
807	807 (F	Chloride Dissolved	mg/L	01/15/2019 0:00		22
807	807 (F	Chloride Dissolved	mg/L	05/29/2019 0:00		37
807	807 (F	Chloride Dissolved	mg/L	08/28/2019 0:00		11
807	807 (F	Chloride Dissolved	mg/L	11/18/2019 0:00		17
807	807 (F	Chloride Dissolved	mg/L	03/13/2020 0:00		17
807	807 (F	Chloride Dissolved	mg/L	06/17/2020 0:00		7
807	807 (F	Chloride Dissolved	mg/L	08/13/2020 0:00		6
807	807 (F	Chloride Dissolved	mg/L	10/28/2020 0:00		10
807	807 (F	Chloride Dissolved	mg/L	01/07/2021 0:00		11
807	807 (F	Chloride Dissolved	mg/L	05/26/2021 0:00		6
807	807 (F	Chloride Dissolved	mg/L	08/05/2021 0:00		7
807	807 (F	Chloride Dissolved	mg/L	11/18/2021 0:00		17
807	807 (F	Chloride Dissolved	mg/L	03/24/2022 0:00		22
807	807 (F	Chloride Dissolved	mg/L	06/22/2022 0:00		3
807	807 (F	Chloride Dissolved	mg/L	09/07/2022 0:00		25
807	807 (F	Chloride Dissolved	mg/L	10/20/2022 0:00		26
807	807 (F	Chloride Dissolved	mg/L	03/23/2023 0:00		28
807	807 (F	Chloride Dissolved	mg/L	06/27/2023 0:00		9
807	807 (F	Chloride Dissolved	mg/L	08/23/2023 0:00		21
807	807 (F	Chloride Dissolved	mg/L	10/10/2023 0:00		23
807	807 (F	Chloride Dissolved	mg/L	01/10/2024 0:00		15
807	807 (F	Chloride Dissolved	mg/L	04/18/2024 0:00		3

well	param	parm_unit_	sample_date	resi	result_amt
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/15/2019 0:00		0.4
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/29/2019 0:00		0.2
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/28/2019 0:00		1.8
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/18/2019 0:00		1.4
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/13/2020 0:00		0.7
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2020 0:00		1.5
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/13/2020 0:00		2.1
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020 0:00		1.2
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/07/2021 0:00		1
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/26/2021 0:00		1.5
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/05/2021 0:00		1.3
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/18/2021 0:00		0.8
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2022 0:00		0.4
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2022 0:00		0.6
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/07/2022 0:00		0.6
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022 0:00		0.4
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023 0:00		0.5
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/27/2023 0:00		0.97
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/23/2023 0:00		0.61
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/10/2023 0:00		0.33
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/10/2024 0:00		0.56
807	807 (F Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	04/18/2024 0:00		0.88
807	807 (F Nitrogen, Organic Dissolved	mg/L	01/15/2019 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	05/29/2019 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	08/28/2019 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	11/18/2019 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	03/13/2020 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	06/17/2020 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	08/13/2020 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	10/28/2020 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	01/07/2021 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	05/26/2021 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	08/05/2021 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	11/18/2021 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	03/24/2022 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	06/22/2022 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	09/07/2022 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	10/20/2022 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	03/23/2023 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	06/27/2023 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	08/23/2023 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	10/10/2023 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	01/10/2024 0:00	<	0.5
807	807 (F Nitrogen, Organic Dissolved	mg/L	04/18/2024 0:00	<	0.5

well	param	parm_unit_	sample_date	resi	result_amt
807	807 (F pH Field	su	01/15/2019 0:00		6.95
807	807 (F pH Field	su	05/29/2019 0:00		7.02
807	807 (F pH Field	su	08/28/2019 0:00		7.04
807	807 (F pH Field	su	11/18/2019 0:00		6.95
807	807 (F pH Field	su	03/13/2020 0:00		6.81
807	807 (F pH Field	su	06/17/2020 0:00		6.7
807	807 (F pH Field	su	08/13/2020 0:00		6.74
807	807 (F pH Field	su	10/28/2020 0:00		6.46
807	807 (F pH Field	su	01/07/2021 0:00		6.99
807	807 (F pH Field	su	05/26/2021 0:00		6.86
807	807 (F pH Field	su	08/05/2021 0:00		6.78
807	807 (F pH Field	su	11/18/2021 0:00		6.63
807	807 (F pH Field	su	03/24/2022 0:00		7.39
807	807 (F pH Field	su	06/22/2022 0:00		6.83
807	807 (F pH Field	su	09/07/2022 0:00		6.56
807	807 (F pH Field	su	10/20/2022 0:00		6.62
807	807 (F pH Field	su	03/23/2023 0:00		7.02
807	807 (F pH Field	su	06/27/2023 0:00		6.56
807	807 (F pH Field	su	08/23/2023 0:00		6.63
807	807 (F pH Field	su	10/10/2023 0:00		6.62
807	807 (F pH Field	su	01/10/2024 0:00		6.75
807	807 (F pH Field	su	04/18/2024 0:00		6.9
807	807 (F Solids, Total Dissolved	mg/L	01/15/2019 0:00		86
807	807 (F Solids, Total Dissolved	mg/L	05/29/2019 0:00		160
807	807 (F Solids, Total Dissolved	mg/L	08/28/2019 0:00		94
807	807 (F Solids, Total Dissolved	mg/L	11/18/2019 0:00		108
807	807 (F Solids, Total Dissolved	mg/L	03/13/2020 0:00		109
807	807 (F Solids, Total Dissolved	mg/L	06/17/2020 0:00		85
807	807 (F Solids, Total Dissolved	mg/L	08/13/2020 0:00		102
807	807 (F Solids, Total Dissolved	mg/L	10/28/2020 0:00		70
807	807 (F Solids, Total Dissolved	mg/L	01/07/2021 0:00		87
807	807 (F Solids, Total Dissolved	mg/L	05/26/2021 0:00		81
807	807 (F Solids, Total Dissolved	mg/L	08/05/2021 0:00		101
807	807 (F Solids, Total Dissolved	mg/L	11/18/2021 0:00		91
807	807 (F Solids, Total Dissolved	mg/L	03/24/2022 0:00		80
807	807 (F Solids, Total Dissolved	mg/L	06/22/2022 0:00		49
807	807 (F Solids, Total Dissolved	mg/L	09/07/2022 0:00		107
807	807 (F Solids, Total Dissolved	mg/L	10/20/2022 0:00		135
807	807 (F Solids, Total Dissolved	mg/L	03/23/2023 0:00		120
807	807 (F Solids, Total Dissolved	mg/L	06/27/2023 0:00		73
807	807 (F Solids, Total Dissolved	mg/L	08/23/2023 0:00		108
807	807 (F Solids, Total Dissolved	mg/L	10/10/2023 0:00		115
807	807 (F Solids, Total Dissolved	mg/L	01/10/2024 0:00		82
807	807 (F Solids, Total Dissolved	mg/L	04/18/2024 0:00		87

well		param	parm_unit_	sample_date	resi	result_amt
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/15/2019 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	05/29/2019 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/28/2019 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	11/18/2019 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/13/2020 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/17/2020 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/13/2020 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/28/2020 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/07/2021 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	05/26/2021 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/05/2021 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	11/18/2021 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/24/2022 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/22/2022 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	09/07/2022 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/20/2022 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/23/2023 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/27/2023 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/23/2023 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/10/2023 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/10/2024 0:00	<	0.1
807	807 (F	Nitrogen, Ammonia (NH3-N) Total	mg/L	04/18/2024 0:00	<	0.1
808	808	Chloride Dissolved	mg/L	01/15/2019 0:00		76
808	808	Chloride Dissolved	mg/L	05/29/2019 0:00		32
808	808	Chloride Dissolved	mg/L	08/28/2019 0:00		76
808	808	Chloride Dissolved	mg/L	11/18/2019 0:00		46
808	808	Chloride Dissolved	mg/L	03/13/2020 0:00		74
808	808	Chloride Dissolved	mg/L	06/17/2020 0:00		58
808	808	Chloride Dissolved	mg/L	08/13/2020 0:00		49
808	808	Chloride Dissolved	mg/L	10/28/2020 0:00		64
808	808	Chloride Dissolved	mg/L	01/07/2021 0:00		66
808	808	Chloride Dissolved	mg/L	05/26/2021 0:00		58
808	808	Chloride Dissolved	mg/L	08/05/2021 0:00		13
808	808	Chloride Dissolved	mg/L	11/18/2021 0:00		59
808	808	Chloride Dissolved	mg/L	03/24/2022 0:00		92
808	808	Chloride Dissolved	mg/L	06/22/2022 0:00		28
808	808	Chloride Dissolved	mg/L	09/07/2022 0:00		68
808	808	Chloride Dissolved	mg/L	10/20/2022 0:00		83
808	808	Chloride Dissolved	mg/L	03/23/2023 0:00		64
808	808	Chloride Dissolved	mg/L	06/27/2023 0:00		84
808	808	Chloride Dissolved	mg/L	08/23/2023 0:00		21
808	808	Chloride Dissolved	mg/L	10/10/2023 0:00		85
808	808	Chloride Dissolved	mg/L	01/10/2024 0:00		72
808	808	Chloride Dissolved	mg/L	04/18/2024 0:00		56

well		param	parm_unit	sample_date	res	result_amt
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/15/2019 0:00		4.5
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/29/2019 0:00	<	0.1
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/28/2019 0:00	<	0.1
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/18/2019 0:00	<	0.1
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/13/2020 0:00		0.6
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2020 0:00	<	0.1
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/13/2020 0:00	<	0.1
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020 0:00	<	0.1
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/07/2021 0:00		2.9
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	05/26/2021 0:00		1.6
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/05/2021 0:00		0.8
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	11/18/2021 0:00		0.9
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2022 0:00		4.2
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2022 0:00	<	0.1
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/07/2022 0:00		1.6
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022 0:00		3.2
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023 0:00		4
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/27/2023 0:00	<	0.05
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	08/23/2023 0:00		0.61
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/10/2023 0:00		2.14
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	01/10/2024 0:00		1.81
808	808	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	04/18/2024 0:00		1.87
808	808	Nitrogen, Organic Dissolved	mg/L	01/15/2019 0:00		0.7
808	808	Nitrogen, Organic Dissolved	mg/L	05/29/2019 0:00	<	0.5
808	808	Nitrogen, Organic Dissolved	mg/L	08/28/2019 0:00	<	0.5
808	808	Nitrogen, Organic Dissolved	mg/L	11/18/2019 0:00	<	0.5
808	808	Nitrogen, Organic Dissolved	mg/L	03/13/2020 0:00	<	0.5
808	808	Nitrogen, Organic Dissolved	mg/L	06/17/2020 0:00	<	0.5
808	808	Nitrogen, Organic Dissolved	mg/L	08/13/2020 0:00	<	0.5
808	808	Nitrogen, Organic Dissolved	mg/L	10/28/2020 0:00	<	0.5
808	808	Nitrogen, Organic Dissolved	mg/L	01/07/2021 0:00		0.8
808	808	Nitrogen, Organic Dissolved	mg/L	05/26/2021 0:00	<	0.5
808	808	Nitrogen, Organic Dissolved	mg/L	08/05/2021 0:00	<	0.5
808	808	Nitrogen, Organic Dissolved	mg/L	11/18/2021 0:00	<	0.5
808	808	Nitrogen, Organic Dissolved	mg/L	03/24/2022 0:00		0.5
808	808	Nitrogen, Organic Dissolved	mg/L	06/22/2022 0:00	<	0.5
808	808	Nitrogen, Organic Dissolved	mg/L	09/07/2022 0:00	<	0.5
808	808	Nitrogen, Organic Dissolved	mg/L	10/20/2022 0:00	<	0.5
808	808	Nitrogen, Organic Dissolved	mg/L	03/23/2023 0:00	<	0.5
808	808	Nitrogen, Organic Dissolved	mg/L	06/27/2023 0:00	<	0.5
808	808	Nitrogen, Organic Dissolved	mg/L	08/23/2023 0:00	<	0.5
808	808	Nitrogen, Organic Dissolved	mg/L	10/10/2023 0:00	<	0.5
808	808	Nitrogen, Organic Dissolved	mg/L	01/10/2024 0:00	<	0.5
808	808	Nitrogen, Organic Dissolved	mg/L	04/18/2024 0:00	<	0.5

well		param	parm_unit_	sample_date	resi	result_amt
808	808	pH Field	su	01/15/2019 0:00		6.7
808	808	pH Field	su	05/29/2019 0:00		6.67
808	808	pH Field	su	08/28/2019 0:00		6.98
808	808	pH Field	su	11/18/2019 0:00		7.05
808	808	pH Field	su	03/13/2020 0:00		6.85
808	808	pH Field	su	06/17/2020 0:00		6.82
808	808	pH Field	su	08/13/2020 0:00		6.75
808	808	pH Field	su	10/28/2020 0:00		6.7
808	808	pH Field	su	01/07/2021 0:00		6.88
808	808	pH Field	su	05/26/2021 0:00		6.81
808	808	pH Field	su	08/05/2021 0:00		6.87
808	808	pH Field	su	11/18/2021 0:00		6.68
808	808	pH Field	su	03/24/2022 0:00		7.04
808	808	pH Field	su	06/22/2022 0:00		6.83
808	808	pH Field	su	09/07/2022 0:00		6.61
808	808	pH Field	su	10/20/2022 0:00		6.54
808	808	pH Field	su	03/23/2023 0:00		6.74
808	808	pH Field	su	06/27/2023 0:00		6.5
808	808	pH Field	su	08/23/2023 0:00		6.61
808	808	pH Field	su	10/10/2023 0:00		6.64
808	808	pH Field	su	01/10/2024 0:00		6.76
808	808	pH Field	su	04/18/2024 0:00		6.83
808	808	Solids, Total Dissolved	mg/L	01/15/2019 0:00		293
808	808	Solids, Total Dissolved	mg/L	05/29/2019 0:00		151
808	808	Solids, Total Dissolved	mg/L	08/28/2019 0:00		309
808	808	Solids, Total Dissolved	mg/L	11/18/2019 0:00		278
808	808	Solids, Total Dissolved	mg/L	03/13/2020 0:00		313
808	808	Solids, Total Dissolved	mg/L	06/17/2020 0:00		264
808	808	Solids, Total Dissolved	mg/L	08/13/2020 0:00		230
808	808	Solids, Total Dissolved	mg/L	10/28/2020 0:00		280
808	808	Solids, Total Dissolved	mg/L	01/07/2021 0:00		360
808	808	Solids, Total Dissolved	mg/L	05/26/2021 0:00		231
808	808	Solids, Total Dissolved	mg/L	08/05/2021 0:00		243
808	808	Solids, Total Dissolved	mg/L	11/18/2021 0:00		268
808	808	Solids, Total Dissolved	mg/L	03/24/2022 0:00		305
808	808	Solids, Total Dissolved	mg/L	06/22/2022 0:00		165
808	808	Solids, Total Dissolved	mg/L	09/07/2022 0:00		288
808	808	Solids, Total Dissolved	mg/L	10/20/2022 0:00		379
808	808	Solids, Total Dissolved	mg/L	03/23/2023 0:00		250
808	808	Solids, Total Dissolved	mg/L	06/27/2023 0:00		295
808	808	Solids, Total Dissolved	mg/L	08/23/2023 0:00		108
808	808	Solids, Total Dissolved	mg/L	10/10/2023 0:00		349
808	808	Solids, Total Dissolved	mg/L	01/10/2024 0:00		275
808	808	Solids, Total Dissolved	mg/L	04/18/2024 0:00		279

well		param	parm_unit	sample_date	res	result_amt
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/15/2019 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	05/29/2019 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/28/2019 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	11/18/2019 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/13/2020 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/17/2020 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/13/2020 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/28/2020 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/07/2021 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	05/26/2021 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/05/2021 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	11/18/2021 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/24/2022 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/22/2022 0:00		0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	09/07/2022 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/20/2022 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	03/23/2023 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	06/27/2023 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	08/23/2023 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	10/10/2023 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	01/10/2024 0:00	<	0.1
808	808	Nitrogen, Ammonia (NH3-N) Total	mg/L	04/18/2024 0:00	<	0.1