Del Monte Foods. Inc. Public Noticed Permit Fact Sheet

General Information

Permit Number	WI-0051241-11-0
Permittee	Del Monte Foods, Inc., 1400 Plover Road, Plover, WI 54467
Facility	Del Monte Foods Plover Plant #107, 1400 Plover Rd., Plover, WI
Permit Term	October 01, 2025 to September 30, 2030
Discharge Location	NE¼, Section 26, T23N R8E and NE¼, Section 23, T23N R8E, Portage County, WI
Receiving Water	groundwater of Four Mile & Five Mile Creek Watersheds of the Upper Wisconsin River Basin in Portage County

Facility Description

Del Monte Foods Plant #107 in Plover, WI produces canned vegetables for human consumption. Vegetables processed at the plant include green beans, wax beans, Italian beans, beets, potatoes and carrots at a rate of approximately 11 million common cases per year. The facility uses city-supplied and onsite well water for vegetable processing and equipment sanitation. On average, from June to December of each year the facility produces about 84 million gallons (MG) of process wastewater (not including cooling water). This process wastewater is discharged through the following four irrigation wastewater treatment systems located near the factory: 1) a full sweep center pivot irrigation system that covers 125 acres (Outfall 001), 2) a half pivot irrigation system that covers 49 acres (Outfall 007), 3) a center pivot irrigation system on 112.6 acres (Outfall 008) and 4) full pivot spray irrigation on 36 acres (Outfall 010). The process wastewater is applied in a load/rest cycle to hold the water in the top few feet of soil for treatment and uptake of the applied nutrients by the harvested cover crops. The cover crops are harvested two or more times each year and are used as cattle feed on nearby farms.

Two land treatment systems are in operation for the treatment of approximately 57.7 million gallons (MG) of non-process wastewaters annually: 1) Can cooling water is spray irrigated via the plant lawn sprinkler system with an average flow of 28.5 MG annually on 16 acres (Outfall 003), and 2) infiltration of approximately 29.2 MG annually of noncontact cooling water (NCCW) and can cooling water on a 3-acre grassed area 6600 feet north of the facility (Outfall 009). This helps enhance groundwater recharge in the vicinity of the Little Plover River.

All sanitary waste from the facility and overflow of brine from the lidding operation is segregated from the rest of the process wastewater and discharged to the Village of Plover municipal sewer system. A groundwater monitoring system is in place onsite to monitor impacts to groundwater from the spray irrigation systems. The facility also disposes of vegetable processing wastewater (Outfall 011) and by-product solids (Outfall 005) via land application on Department approved fields.

Three groundwater monitoring wells are no longer used for determining compliance, therefore a compliance schedule has been included in the permit that requires the permittee determine whether to abandon or annually inspect the well. Other compliance schedules included in the permit require the permittee submit updated land application and land treatment management plans, as well as investigate elevated concentrations of nitrite + nitrate nitrogen found in two groundwater monitoring wells.

See specific sections of the fact sheet for additional changes in monitoring and/or limits for this permit term.

Substantial Compliance Determination

Enforcement During Last Permit: No enforcement actions were taken during the previous permit term.

After a desk top review of discharge monitoring reports, and a site visit on 11/1/2024, this facility has been found to be in substantial compliance with their current permit.

Compliance determination made by Mike Chang on November 14, 2024.

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)**
101	In plant: 0.5834 MGD (avg 2024)	Representative samples of the mixed canning process wastewater after the storage tank/pump reservoir. The wastewater will be used for land treatment through irrigation at outfalls 001, 007, 008 or 010 for recycling of the water and nutrients into the cover crop.
001	Spray Irrigation: 0.308 MGD (avg. 2024)	Vegetable canning process wastewater discharge to the 125 acre full pivot system located south of the factory and County Highway B.
003	Lawn Sprinkler: 0.24 MGD (avg 2024)	Representative samples shall be collected prior to discharging to lawn and buffer sprinkler system. Discharge is limited to can cooling water and non-contact cooling water.
007	Spray Irrigation: 0.19 MGD (avg 2024)	Vegetable canning process wastewater discharge to the 49 acre 1/2 Pivot system located south of the factory and County Highway B.
008	Spray Irrigation: 0.426 MGD (avg 2024)	Vegetable canning process wastewater discharged to the 112.6 acre full pivot system located north of the factory buildings and west of County Highway R.
009	Seepage: 0.82 MGD (avg 2024)	Representative samples shall be collected prior to discharging to clear water infiltration system located west of Cty Road R and north of the factory. Discharge is limited to can cooling water and non-contact cooling water.
010	Spray Irrigation 0.229 MGD (avg 2024)	Vegetable canning process wastewater and cooling water discharged via spray irrigation to the new spray field located north of the 112.6 acre spray field (Outfall 008).
005	Land Application: No discharge reported in 2024	Representative samples shall be collected in a time and a manner that will yield the most representative samples. Discharge is limited to vegetable by-product solids from processing green beans, wax beans, Italian beans, potatoes, beets and carrots. Records of by-product daily spreading amounts, site acres used, test results, and calendar year nitrogen and chloride pounds/acre loadings shall be maintained on site for at least three years.
011	Land Application: No discharge reported in 2024	Representative samples shall be collected in a time and a manner that will yield the most representative samples. Discharge is limited to vegetable processing wastewaters from processing by-product solids from green beans, wax beans, Italian beans, potatoes, beets and carrots.

Sample Point Designation		
Sample Point Number	**Discharge Flow, Units, and Averaging Period**	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**
		Records of wastewater daily spreading amounts, site acres used, test results, and calendar year nitrogen and chloride pounds/acre loadings shall be maintained on site for at least three years.

Groundwater Monitoring Well Descriptions

Sample Point Designation For Groundwater Monitoring Systems			
System	**Sample Pt Number**	**Well Name**	**Comments**
125 Acre Center Pivot Spray Irrigation (Outfall 001)	809	809 (W2B-R(PIEZ))	Non-Point of Standard
	812	812 (W4B-R)	Background
	814	814 (W2AR)	Non-Point of Standard
	815	815 (W4AR-R)	Non-Point of Standard
49 Acre Spray Irrigation Field (Outfall 007)	827	827 (W17)	Background
	828	828 (W18)	Non-Point of Standard
	829	829 (W19A)	Non-Point of Standard
	830	830 (W19B)	Non-Point of Standard
112 Acre Full Pivot Spray Irrigation (Outfall 008)	833	833 (W21)	Non-Point of Standard
	834	834 (W22)	Non-Point of Standard
	835	835 (W23)	Background
36 Acre Full Pivot Spray Irrigation (Outfall 010)	836	836 (W-24)	Non-Point of Standard
	837	837 (W-25)	Non-Point of Standard

1 Inplant - Monitoring and Limitations

1.1 Sample Point Number: 101- PROCESS WW PRIOR TO IRRIGATION

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Total Daily	
Chloride		mg/L	2/Month	Composite	
Nitrogen, Nitrite + Nitrate Total		mg/L	2/Month	Composite	
Nitrogen, Total Kjeldahl		mg/L	2/Month	Composite	
Nitrogen, Total		mg/L	2/Month	Composite	

1.1.1 Changes from Previous Permit:

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

1.1.2 Explanation of Limits and Monitoring Requirements

All requirements for the in-plant monitoring and limitations are determined in accordance with ch. NR 214.17(4), Wis. Adm. Code.

2 Land Treatment – Monitoring and Limitations

2.1 Sample Point Number: 001- 125 ACRE CTR PIVOT SYSTEM; 007- 49 ACRE PARTIAL PIVOT SYSTEM; 008- 112.6 ACRE CTR PIVOT SYSTEM, and 010- NEW SPRAY IRRIGATION FIELD

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 Subchapter II Wis. Adm. Code. More information on the limitations can be found in the April 4, 2025 report written by Woody Myers titled "Groundwater Evaluation Report for Del Monte Foods Plover Plant #107, WI-0051241".

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Total Daily	
Hydraulic Application Rate	Monthly Avg	9,000 gal/ac/day	Monthly	Calculated	This limitation applies May - Nov of each year.
Hydraulic Application Rate	Monthly Avg	4,500 gal/ac/day	Monthly	Calculated	This limitation applies Dec of each year.
Hydraulic Application Rate	Monthly Avg	0 gal/ac/day	Monthly	Calculated	This limitation applies Jan - April of each year.
Nitrogen, Max Applied On Any Zone	Annual Total	350 lbs/ac/yr	Annual	Total Annual	
Chloride, Max Applied to Any Zone		lbs/ac/yr	Annual	Total Annual	
Soil - Nitrogen, Available		mg/kg	Annual	Grab	
Soil - Phosphorus, Available		mg/kg	Annual	Grab	
Soil - Potassium, Available		mg/kg	Annual	Grab	
Soil - pH Lab		su	Annual	Grab	
Fertilizer Used		lbs/ac/yr	Annual	Measure	

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:

- Soil testing (available nitrogen, available phosphorus, available potassium and pH) and other sources of nitrogen (ie fertilizer or manure) – Annual soil monitoring of the spray field(s) is required by NR 214.14(5)(c), Wis. Adm. Code and was previously submitted through the Annual Report. These parameters have been moved to the monitoring table.

This eliminates the additional report and allows all data to be entered into eDMRs. Only one set of samples is required, but if the facility completes multiple soil tests or the department asks for additional samples for the fields/zones used under the outfall sample point, there is a feature within the eDMRs that allows additional data to be recorded. It is asked that the additional sample points' field/zone(s) are identified in the form's general comments section.

2.2 Sample Point Number: 003- PRIOR TO LAWN SPRINKLER and 009- PRIOR TO COOLING WATER SEEPAGE

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Total Daily	

2.2.1 Changes from Previous Permit:

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

3 Groundwater – Monitoring and Limitations

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. Alternative Concentration Limits as allowed under s. NR 140.28, Wis. Adm. Code, are established on a case-by-case basis.

For more information, please refer to the April 4, 2025 report written by Woody Myers titled "Groundwater Evaluation Report for Del Monte Foods Plover Plant #107, WI-0051241".

3.1 Groundwater Monitoring System for 125 Acre Center Pivot Spray Irrigation (001)

Location of Monitoring system: Area Surrounding Land Treatment Outfall 001, E ½ of Section 23, T23N, R8E and E ½ of Section 26, T23N E8E, Town of Plover.

Groundwater Monitoring Well(s) to be Sampled: 809 (W2B-R(PIEZ), 812 (W4B-R), 814 (W2AR), 815 (W4AR-R)

Groundwater Monitoring Well(s) Used to Evaluate Background Groundwater Quality: 812 (W4B-R)

Groundwater Monitoring Well(s) Used for Point of Standards Application: None

Parameter	Units	Preventative Action Limit	Enforcement Standard	Frequency
Depth To Groundwater	feet	N/A	N/A	Quarterly
Groundwater Elevation	feet MSL	N/A	N/A	Quarterly
Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	N/A	N/A	Quarterly

Chloride Dissolved	mg/L	125	250	Quarterly
pH Field	su	8.8	N/A	Quarterly
Nitrogen, Ammonia Dissolved	mg/L	0.97	9.7	Quarterly
Nitrogen, Organic Dissolved	mg/L	2.5	N/A	Quarterly
Solids, Total Dissolved	mg/L	640	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: 1) the alternate concentration limit for (ACL) for chloride was removed, 2) an exemption was approved for the nitrite + nitrate PAL and ES, 3) the pH PAL range increased, 4) the preventative action limit (PAL) for organic nitrogen decreased, and 5) the PAL for total dissolved solids increased.

3.2 Groundwater Monitoring System for 49 Acre Spray Irrigation Field (007)

Location of Monitoring system: Area Surrounding Land Treatment Outfall 001, E ½ of Section 23, T23N, R8E and E ½ of Section 26, T23N E8E, Town of Plover.

Groundwater Monitoring Well(s) to be Sampled: 827 (W17), 828 (W18), 829 (W19A), 830 (W19B)

Groundwater Monitoring Well(s) Used to Evaluate Background Groundwater Quality: 827 (W17)

Groundwater Monitoring Well(s) Used for Point of Standards Application: None

Parameter	Units	Preventative Action Limit	Enforcement Standard	Frequency
Depth To Groundwater	feet	N/A	N/A	Quarterly
Groundwater Elevation	feet MSL	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	8.9	N/A	Quarterly
Nitrogen, Ammonia Dissolved	mg/L	0.97	9.7	Quarterly
Nitrogen, Organic Dissolved	mg/L	2.8	N/A	Quarterly
Solids, Total Dissolved	mg/L	550	N/A	Quarterly

3.2.1 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: 1) the alternate concentration limits (ACLs) for chloride and nitrite + nitrate were removed and 2) the preventative action limits (PALs) for organic nitrogen and total dissolved solids were increased.

3.3 Groundwater Monitoring System for 112 Acre Full Pivot Spray Irrigation (008)

Location of Monitoring system: Area Surrounding Land Treatment Outfall 008, E ½ of Section 23, T23N, R8E and E ½ of Section 26, T23N E8E, Town of Plover

Groundwater Monitoring Well(s) to be Sampled: 833 (W21), 834 (W22), 835 (W23)

Groundwater Monitoring Well(s) Used to Evaluate Background Groundwater Quality: 835 (W23)

Groundwater Monitoring Well(s) Used for Point of Standards Application: None

Parameter	Units	Preventative Action Limit	Enforcement Standard	Frequency
Depth To Groundwater	feet	N/A	N/A	Quarterly
Groundwater Elevation	feet MSL	N/A	N/A	Quarterly
Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	4.7	10	Quarterly
Chloride Dissolved	mg/L	125	250	Quarterly
pH Field	su	8.4	N/A	Quarterly
Nitrogen, Ammonia Dissolved	mg/L	0.97	9.7	Quarterly
Nitrogen, Organic Dissolved	mg/L	2.7	N/A	Quarterly
Solids, Total Dissolved	mg/L	430	N/A	Quarterly

3.3.1 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: 1) the alternate concentration limit for (ACL) nitrite + nitrate preventative action limit (PAL) was decreased and it was removed from the and enforcement standard (ES), 2) the ACL for the chloride PAL was removed, 3) the pH PAL range increased, 4) the preventative action limit (PAL) for organic nitrogen and total dissolved solids decreased.

3.4 Groundwater Monitoring System for 36 Acre Full Pivot Spray Irrigation (010)

Location of Monitoring system: Area Surrounding Land Treatment Outfall 010, E ½ of Section 23, T23N, R8E and E ½ of Section 26, T23N E8E, Town of Plover.

Groundwater Monitoring Well(s) to be Sampled: 836 (W-24), 837 (W-25)

Groundwater Monitoring Well(s) Used to Evaluate Background Groundwater Quality: 837 (W-25)

Groundwater Monitoring Well(s) Used for Point of Standards Application: None

Parameter	Units	Preventative Action Limit	Enforcement Standard	Frequency
Depth To Groundwater	feet	N/A	N/A	Quarterly
Groundwater Elevation	feet MSL	N/A	N/A	Quarterly
Nitrogen, Nitrite + Nitrate (as	mg/L	4.7	10	Quarterly

N) Dissolved				
Chloride Dissolved	mg/L	125	250	Quarterly
pH Field	su	8.4	N/A	Quarterly
Nitrogen, Ammonia Dissolved	mg/L	0.97	9.7	Quarterly
Nitrogen, Organic Dissolved	mg/L	2.7	N/A	Quarterly
Solids, Total Dissolved	mg/L	430	N/A	Quarterly

3.4.1 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: 1) the alternate concentration limit for (ACL) nitrite + nitrate preventative action limit (PAL) was decreased and it was removed from the and enforcement standard (ES), 2) the ACL for the chloride PAL was removed, 3) the pH PAL range increased, 4) the preventative action limit (PAL) for organic nitrogen and total dissolved solids decreased.

4 Land Application - By-Product Solids & Liquid Waste

4.1 Sample Point Number: 005- VEGETABLE BY-PRODUCT SOLIDS

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Solids, Total		Percent	Annual	Grab	
Nitrogen, Total Kjeldahl		Percent	Annual	Grab	
Chloride		Percent	Annual	Grab	
Phosphorus, Total		Percent	Annual	Grab	
Phosphorus, Water Extractable		Percent	Annual	Grab	
Potassium, Total Recoverable		Percent	Annual	Grab	

4.1.1 Changes from Previous Permit:

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 byproduct solids are determined in accordance with ch. NR 214 Wis. Adm. Code.

4.2 Sample Point Number: 011- LIQUID WASTE LANDSPREADING

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

4.2.1 Changes from Previous Permit:

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

4.2.2 Explanation of Limits and Monitoring Requirements

Requirements for land application of industrial liquid waste are determined in accordance with ch. NR 214 Wis. Adm. Code.

5 Schedules

5.1 Land Treatment Management Plan

A management plan is required for the land treatment system.

Required Action	Due Date
Land Treatment Management Plan: Submit an updated management plan to optimize the land treatment system performance and demonstrate compliance with Wisconsin Administrative Code NR 214. The management plan shall be consistent with the requirements of this permit, and NR 214.14 Wis. Adm. Code. To ensure this consistency, the management plan shall address the information identified in NR 214.14. The plan shall specify information on pretreatment processes, load and rest schedules, scheduled maintenance, vegetative cover control and removal, operational strategies for periods of adverse weather, monitoring procedures and any other pertinent information. If operational changes are needed, the Land Treatment Management Plan shall be amended by submitting a written request to the Department for approval of such amendments.	12/31/2025

Explanation of Schedule: An up-to-date Land Treatment Management plan is a standard requirement in reissued industrial permits per s. NR 214.13(5)(e) Wis. Adm. Code.

5.2 Groundwater Monitoring Well Abandonment/Inspection

Required Action	Due Date
Abandonment or Annual Inspection: Groundwater monitoring wells 810, 811 and 813 shall either be abandoned or annually inspected in accordance with s. NR 141.25, Wis. Adm Code. The permittee shall notify the department by the due date of their intended direction for these wells.	10/31/2025
Abandonment of Wells 810, 811 and 813: If the permittee decides that abandonment is the chosen method to address groundwater monitoring wells 810, 811 and 813, the wells shall be abandoned in accordance with s. NR 141.25 Wis. Adm. Code by the due date and documentation of the well abandonment must be submitted to the Department within 60 days of the well abandonment.	12/31/2025
Annual Inspection of Wells 810, 811 and 813: If the permittee decides to forgo abandonment of groundwater monitoring wells 810, 811 & 813, and instead chooses to annually inspect the wells in accordance with s. NR 141.25 Wis. Adm. Code, the permittee shall submit an annual report detailing the inspection and its findings. The first report is due by the due date and annually on December 31 of subsequent years. In the event this permit is not reissued by the expiration date, the permittee shall continue to submit annual well inspection reports by December 31 each year.	12/31/2025

Explanation of Schedule: The location of wells 810, 811 and 813 do not serve as wells that properly examine the land treatment system's impacts to groundwater, therefore their use has been discontinued and they shall be abandoned or inspected annually per s. NR 141.25 Wis. Adm. Code.

5.3 Nitrite + Nitrate Investigation and Report

Required Action	Due Date
Investigation & Nitrite + Nitrate Reduction: The permittee shall investigate potential nitrite + nitrate nitrogen concentration reduction possibilities in the groundwater. A report shall be submitted to the department by the due date listing potential reduction activities and the feasibility of implementation. Possibilities could include, but are not limited to, reduction of nitrite + nitrate in the effluent and optimization of the facility's load and rest cycles. Also included in the report shall be potential sources of the high levels of nitrite + nitrate in groundwater monitoring wells 812 & 815.	09/30/2026
Submit Annual NO2 + NO3 Reduction Progress Report #1: Submit a report outlining actions taken in the previous year to reduce nitrite + nitrate concentrations in the groundwater.	09/30/2027
Submit Annual NO2 + NO3 Reduction Progress Report #3: Submit a report outlining actions taken in the previous year to reduce nitrite + nitrate concentrations in the groundwater.	09/30/2028
Submit Annual NO2 + NO3 Reduction Progress Report #3: Submit a report outlining actions taken in the previous year to reduce nitrite + nitrate concentrations in the groundwater.	09/30/2029
Submit Annual NO2 + NO3 Reduction Progress Report #4: Submit a report outlining actions taken in the previous year to reduce nitrite + nitrate concentrations in the groundwater.	09/30/2030

Explanation of Schedule: Wells 812 and 815 had exceedances for nitrite + nitrate. The s. NR 140.27 Wis. Adm. Code response action is for the facility to continue groundwater sampling and investigate potential nitrogen reduction options.

5.4 Land Application Management Plan

A management plan is required for the land application system.

Required Action	Due Date
Land Application Management Plan: Submit a management plan to optimize the land application system performance and demonstrate compliance with Wisconsin Administrative Code NR 214. The plan shall specify information on pretreatment processes, site identification on plat and soil maps, aerial photographs, if available, description of all site limitations, vegetative cover management and removal, availability of storage, type of transporting and spreading vehicle, load and rest schedules, monitoring procedures, contingency plans for periods of adverse weather or odor or nuisance abatement and any other pertinent information. If operational changes are needed, the Land Application Management Plan shall be amended by submitting a written request to the Department for approval of such amendments.	12/31/2025

Explanation of Schedule: 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.

Other Comments

Publishing Newspaper: Stevens Point Journal, PO Box 7, Stevens Point, WI 54481-0007

Attachments

NR 140 Groundwater Evaluation Report: April 4, 2025 report written by Woody Myers titled “Groundwater Evaluation Report for Del Monte Foods Plover Plant #107, WI-0051241”

Justification Of Any Waivers From Permit Application Requirements

No waivers requested or granted as part of this permit reissuance

Prepared By: Holly Heldstab, Wastewater Specialist **Date:** August 7, 2025

CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: April 4, 2025

TO: File

FROM: Woody Myers - WCR

SUBJECT: Groundwater Evaluation Report for Del Monte Foods Plover Plant #107, WI-0051241

Site Information

The Del Monte Foods Plover Plant #107 facility is located at 1400 Plover Road, Plover, Portage County. This is an industrial facility. Wastewater is currently discharged to groundwater via spray irrigation fields, a land treatment system located in the E ½ of Section 23, T23N, R8E and E ½ of Section 26, T23N E8E, Town of Plover.

Land Treatment Effluent & Groundwater Evaluation Summary

Table 1 In Plant Sampling Point 101 Parameters and Limits Prior to Spray Irrigation

	Current Permit WI-0051241-10-1		Proposed Permit WI-0051241-11	
Parameter	Limits and Units	Limit Type	Limits and Units	Limit Type
Flow Rate	- MGD		- MGD	
Chloride	- mg/l		- mg/l	
Nitrogen, Nitrite + Nitrate	- mg/l		- mg/l	
Nitrogen, Total Kjeldahl	- mg/l		- mg/l	
Total Suspended Solids	- mg/l		- mg/l	
***Nitrogen, Total**	Not Required		- mg/l	

* Proposed permit changes

Printed on Recycled Paper

Table 2 Land Treatment Sampling Point (Outfalls) 001, 007, 008 & 010
Parameters and Limits Spray Irrigation

Parameter	Current Permit WI-0051241-10-1		Proposed Permit WI-0051241-11	
	Limits and Units	Limit Type	Limits and Units	Limit Type
Flow Rate	- MGD		- MGD	
Hydraulic Application Rate (May-Nov)	9,000 gal/ac/day	Monthly Avg	9,000 gal/ac/day	Monthly Avg
Hydraulic Application Rate (Dec)	4,500 gal/ac/day	Monthly Avg	4,500 gal/ac/day	Monthly Avg
Hydraulic Application Rate (Jan-Apr)	0 gal/ac/day	Monthly Avg	0 gal/ac/day	Monthly Avg
Nitrogen, Max Applied to Any Zone	350 lbs/ac/yr	Annual Total	350 lbs/ac/yr	Annual Total
***Chloride, Max Applied to Any Zone**	**Not Required**		**- lbs/ac/yr**	**Annual Total**
***Soil Nitrogen, Available**	**This information was previously required in the annual report. It is the spray field annual soil sample required in s. NR 206.08 (2) (b) 7, Wis. Adm. Code**		**- mg/kg**	
***Soil Phosphorus, Available**			**- mg/kg**	
***Soil Potassium, Available**			**- mg/kg**	
***Soil pH, Lab**			**- su**	
***Fertilizer Used**			**- lbs/ac/yr**	

*Proposed permit changes

Table 3 Land Treatment Sampling Point (Outfalls) 003 & 009
Parameters and Limits Spray Irrigation (lawn sprinkler)

Parameter	Current Permit WI-0051241-10-1		Proposed Permit WI-0051241-11	
	Limits and Units	Limit Type	Limits and Units	Limit Type
Flow Rate	- MGD		- MGD	

No proposed permit changes

These recommendations are based on evaluation of groundwater compliance and should not replace the needs for up-stream treatment evaluation.

Table 4 Monitoring Wells

Well	Current Permit WI-0051241-10-1		Proposed Permit WI-0051241-11	
	Well Location	Well Designation	Well Location	Well Designation
809	Down-gradient	Non-Point of Standard	Down-gradient	Non-Point of Standard
812	Up-gradient	Background	Up-gradient	Background
814	Down-gradient	Non-Point of Standard	Down-gradient	Non-Point of Standard
815	Up-gradient	Background	Up-gradient	***Non-Point of Standard**
810	Down-gradient	Non-Point of Standard	***Discontinue**	
811	Down-gradient	Non-Point of Standard	***Discontinue**	
813	Up-gradient	Background	***Discontinue**	
827	Up-gradient	Background	Up-gradient	Background
828	Down-gradient	Non-Point of Standard	Down-gradient	Non-Point of Standard
829	Down-gradient	Non-Point of Standard	Down-gradient	Non-Point of Standard
830	Down-gradient	Non-Point of Standard	Down-gradient	Non-Point of Standard
833	Down-gradient	Non-Point of Standard	Down-gradient	Non-Point of Standard
834	Down-gradient	Non-Point of Standard	Down-gradient	Non-Point of Standard
835	Up-gradient	Background	Up-gradient	Background
836	Down-gradient	Non-Point of Standard	Down-gradient	Non-Point of Standard
837	Up-gradient	Non-Point of Standard	Up-gradient	Non-Point of Standard

*Proposed permit changes

Table 5 Groundwater Quality Standards Sampling Point (Outfall) 001

Parameter	Current Permit WI-0051241-10-1		Proposed WI-0051241-11	
	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	19.0 mg/l (ACL)	19.0 mg/l (ACL)	***Exempt**	***Exempt**
Chloride	180 mg/l (ACL)	250 mg/l	***125 mg/l**	250 mg/l
pH	6.5-8.5 su	N/A	***6.8-8.8 su**	N/A
Nitrogen, Ammonia	0.97 mg/l	9.7 mg/l	0.97 mg/l	9.7 mg/l
Nitrogen, Organic	2.6 mg/l	N/A	***2.5 mg/l**	N/A
Total Dissolved Solids	600 mg/l	N/A	***640 mg/l**	N/A

*Proposed permit changes

Table 6 Groundwater Quality Standards Sampling Point (Outfall) 007

Parameter	Current Permit WI-0051241-10-1		Proposed WI-0051241-11	
	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
Chloride	190 mg/l (ACL)	250 mg/l	***125 mg/l**	250 mg/l
Nitrogen, Nitrite + Nitrate	3.2 mg/l (ACL)	10.0 mg/l	***2.0 mg/l**	10.0 mg/l
pH	6.9-8.9 su	N/A	6.9-8.9 su	N/A
Nitrogen, Ammonia	0.97 mg/l	9.7 mg/l	0.97 mg/l	9.7 mg/l
Nitrogen, Organic	2.6 mg/l	N/A	***2.8 mg/l**	N/A
Total Dissolved Solids	500 mg/l	N/A	***550 mg/l**	N/A

*Proposed permit changes

Table 7 Groundwater Quality Standards Sampling Point (Outfall 008)

Parameter	Current Permit WI-0051241-10-1		Proposed WI-0051241-11	
	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
Chloride	200 mg/l (ACL)	250 mg/l	***125 mg/l**	250 mg/l
Nitrogen, Nitrite + Nitrate	13.2 mg/l (ACL)	13.2 mg/l (ACL)	***4.7 mg/l**	***10.0 mg/l**
pH	5.4-7.4 su	N/A	***6.4-8.4 su**	N/A
Nitrogen, Ammonia	0.97 mg/l	9.7 mg/l	0.97 mg/l	9.7 mg/l
Nitrogen, Organic	9.0 mg/l	N/A	***2.7 mg/l**	N/A
Total Dissolved Solids	630 mg/l	N/A	***430 mg/l**	N/A

*Proposed permit changes

Table 8 Groundwater Quality Standards Sampling Point (Outfall 010)

Parameter	Current Permit WI-0051241-10-1		Proposed WI-0051241-11	
	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
Chloride	200 mg/l (ACL)	250 mg/l	***125 mg/l**	250 mg/l
Nitrogen, Nitrite + Nitrate	13.2 mg/l (ACL)	13.2 mg/l	***4.7 mg/l**	***10.0 mg/l**
pH	5.4-7.4 su	N/A	***6.4-8.4 su**	N/A
Nitrogen, Ammonia	0.97 mg/l	9.7 mg/l	0.97 mg/l	9.7 mg/l
Nitrogen, Organic	9.0 mg/l	N/A	***2.7 mg/l**	N/A
Total Dissolved Solids	630 mg/l	N/A	***430 mg/l**	N/A

*Proposed permit changes

Geology

The bedrock under this facility is a red to pink biotite-granite and granodiorite equigranular massive to porphyritic(*Bedrock Geologic Map of Wisconsin*, Wisconsin Geological and Natural History Survey (WGNHS), 1982). Bedrock was not encountered during installation of the groundwater monitoring

wells but is anticipated to be no deeper than 100 feet below ground surface (bgs)(*Depth to Bedrock in Wisconsin,* WGNHS, 1973). The regolith consists of sand with occasional cobbles. Surface soil primarily consists of the Richford loamy sand and the Friendship loamy sand (USDA NRCS Web Soil Survey).

Hydrogeology

Calculated groundwater elevation ranges between 1077 and 1085 feet above mean sea level (msl). Depth to groundwater was reported to be between 8 and 17 feet bgs. Groundwater flow direction was calculated to be predominantly to the west. Regional groundwater flows to the west in this area of Portage County. The site is approximately 2,000 feet south of the Little Plover River. There are 3 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

Outfalls 001, 007, 008 and 010 are the discharges associated with the groundwater monitoring networks. The following tables are the average flow (hydraulic loading), nitrite + nitrate (concentration), nitrogen (Mass) and chloride (concentration) loading summations for the land treatment systems. Nitrite + nitrate and chloride samples were collected from a common up-stream source, In Plant 101, so the results are the same for all of the Outfalls.

Table 9 Land Treatment Loading Averages
Sampling Point 001

Year	Flow (MGD)	Nitrogen (mg/l)	Nitrogen Mass (lbs/ac/yr)	Chloride (mg/l)
2024	0.155	9.67	228.74	236
2023	0.100	3.83	128.11	148
2022	0.134	5.40	217.33	153
2021	0.155	6.02	276.45	243
2020	0.142	8.23	290.41	200

Table 10 Land Treatment Loading Averages
Sampling Point 007

Year	Flow (MGD)	Nitrogen (mg/l)	Nitrogen Mass (lbs/ac/yr)	Chloride (mg/l)
2024	0.075	9.67	257.59	236
2023	0.067	3.83	219.48	148
2022	0.080	5.40	289.39	153
2021	0.067	6.02	343.77	243
2020	0.039	8.23	199.86	200

Table 11 Land Treatment Loading Averages
Sampling Point 008

Year	Flow (MGD)	Nitrogen (mg/l)	Nitrogen Mass (lbs/ac/yr)	Chloride (mg/l)
2024	0.267	9.67	491.18	236
2023	0.120	3.83	182.76	148
2022	0.154	5.40	308.00	153
2021	0.111	6.02	337.18	243
2020	0.158	8.23	354.11	200

Table 12 Land Treatment Loading Averages
Sampling Point 010

Year	Flow (MGD)	Nitrogen (mg/l)	Nitrogen Mass (lbs/ac/yr)	Chloride (mg/l)
2024	0.034	9.67	113.09	236

2024 was the first year this field was used.

Groundwater Monitoring System and Sampling Frequency

Groundwater samples were collected quarterly from all of the 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 13 Groundwater Monitoring Well Data

Sample Point	Well Name	Elevation (feet above msl)				Length (feet)		Well Type	Outfall
		Casing Top	Ground Surface	Screen Top	Screen Bottom	Screen Length	Well Depth		
809	W2B-R	1091.18	1089.0	1068.0	1063.0	5.0	26.0	P	001
810	W16A	1092.10	1087.0	1066.0	1061.0	5.0	26.0	P	002
811	W16B	1091.43	1087.0	1082.0	1072.0	10.0	15.0	WT	002
812	W4B-R	1092.72	1090.2	1080.7	1070.7	10.0	19.5	P	001
813	11R	1091.34	1089.3	1083.4	1073.4	10.0	15.9	WT	002
814	W2AR	1089.86	1089.0	1082.5	1072.5	10.0	16.5	WT	001
815	W4AR-R	1094.73	1091.8	1082.8	1072.8	10.0	19.0	P	001
827	W17	1095.94	1093.9	1083.9	1068.9	15.0	25.0	WT	007
828	W18	1090.41	1087.6	1078.1	1063.1	15.0	25.0	P	007
829	W19A	1089.82	1087.2	1080.2	1065.2	15.0	22.0	WT	007
830	W19B	1089.82	1087.4	1043.4	1033.4	10.0	55.0	P	007
833	W21	1086.67	1084.0	1079.0	1064.0	15.0	20.0	WT	008
834	W22	1087.62	1085.1	1080.1	1065.1	15.0	20.0	WT	008
835	W23	1088.65	1086.5	1081.5	1066.5	15.0	20.0	WT	008
836	W-24	1085.20	1082.7	1078.7	1068.7	10.0	14.0	WT	010
837	W-25	1088.31	1085.8	1081.8	1071.8	10.0	14.0	WT	010

WT-Water table Observation P-Piezometer O-Other

Effluent Quality

The concentrations of nitrogen in the effluent are based on total Kjeldahl nitrogen. It should be based on total nitrogen (the comprehensive nitrogen series). The magnitude of the Kjeldahl nitrogen is moderate. The chloride concentrations for chloride in the effluent are moderate.

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 groundwater data from March 24, 2020 – December 10, 2024.

Background Groundwater Quality

The background (up-gradient) groundwater quality is typical with the exception of groundwater monitoring wells 812 and 815 (assigned to Outfall 001). These two wells have nitrate + nitrate consistently over the s. NR 140.10 Wis. Adm. Code ES of 10 mg/l. At times the results approach 3 times the ES. There are no other ES exceedances in these two or the other background wells. The cause of these exceedances is unknown.

The background groundwater monitoring wells 835 (assigned to Outfall 008) and 837 (assigned to Outfall 010) have consistent PAL exceedances for nitrite + nitrate. It is assumed the exceedances in well 835 and 837 are from up-gradient agricultural practices.

Down-gradient Groundwater Quality

There were no groundwater monitoring sampling results from Outfall 001 (wells 809 and 814) that exceeded any of the groundwater limits. Although the nitrite + nitrate was consistently below the previously established ACL of 19.0 mg/l (see Figure 1), the concentrations are still consistently above the s. NR 140.10 Wis. Adm. Code PAL and frequently above the ES. The up-gradient (background wells) to this outfall (discussed previously) significantly exceed the ES for nitrite + nitrate. The trend for nitrite + nitrate in these wells is stable overall.

Nitrite + nitrate are the only exceedances observed for any of the groundwater limits for Outfall 007. These exceedances were observed in the three down-gradient wells; 828, 829 and 830 (see Figure 2). The ACL of 3.2 mg/l was consistently exceeded, and the ES of 10 mg/l was frequently exceeded. Per s. NR 140.27 Wis. Adm. Code the department can require a response action for ES exceedances in non-point of standards wells. The trend for nitrite + nitrate in these wells is stable overall.

There are elevated nitrite + nitrate results observed in the down-gradient wells (833 and 834) for Outfall 008. These concentrations exceed the s. NR 140.10 Wis. Adm. Code PAL for nitrite + nitrate but are below the previously established ACL of 13.2 mg/l for this Outfall (see Figure 3). The overall trend for nitrite + nitrate is stable and declining over the past two years.

Evaluation of the groundwater monitoring well results for Outfall 010 (well 836) has not been performed given that only two rounds have been collected since the well's installation.

There were infrequent exceedances of PAL for TDS in many of the groundwater monitoring wells, but no trends could be established for these exceedances. In addition, TDS is an indicator parameter and only used as a warning for other potential problems.

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 are no clear correlations between the effluent loading levels and the groundwater monitoring results.

Proposed Groundwater Monitoring Requirements Permit WI-0051241-11

Table 14 Groundwater Quality Sampling Frequency and Limits
Outfall 001

Sample Point	Well Name	Sample Frequency	Well Designation
809	W2BR-Piez	Quarterly	Non-Point of Standard
812	W4BR	Quarterly	Background
814	W2AR	Quarterly	Non-Point of Standard
815	W2AR-R	Quarterly	***Non-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	***Exempt**	***Exempt**	NR 140.28
Chloride	***125 mg/l**	250 mg/l	NR 140 Table 2
pH, Field	***6.8-8.8 su**	N/A	Calculated
Nitrogen, Ammonia	0.97 mg/l	9.7 mg/l	NR 140 Table 1
Nitrogen, Organic	***2.5 mg/l**	N/A	Calculated
Total Dissolved Solids	***640 mg/l**	N/A	Calculated

*Proposed permit changes

Table 15 Groundwater Quality Sampling Frequency and Limits
Outfall 007

Sample Point	Well Name	Sample Frequency	Well Designation
827	W17	Quarterly	Background
828	W18	Quarterly	Non-Point of Standard
829	W19A	Quarterly	Non-Point of Standard
830	W19B	Quarterly	Non-Point of Standard
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	***2.0 mg/l**	10.0 mg/l	NR 140 Table 1
pH, Field	6.9-8.9 su	N/A	Calculated
Nitrogen, Ammonia	0.97 mg/l	9.7 mg/l	NR 140 Table 1
Nitrogen, Organic	***2.8 mg/l**	N/A	Calculated
Total Dissolved Solids	***550 mg/l**	N/A	Calculated

*Proposed permit changes

Table 16 Groundwater Quality Sampling Frequency and Limits
Outfall 008

Sample Point	Well Name	Sample Frequency	Well Designation
833	W21	Quarterly	Non-Point of Standard
834	W22	Quarterly	Non-Point of Standard
835	W23	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	***4.7 mg/l (ACL)**	***10.0 mg/l**	Calculated, NR 140 Table 1
pH, Field	***6.4-8.4 su**	N/A	Calculated
Nitrogen, Ammonia	0.97 mg/l	9.7 mg/l	NR 140 Table 1
Nitrogen, Organic	***2.7 mg/l**	N/A	Calculated
Total Dissolved Solids	***430 mg/l**	N/A	Calculated

*Proposed permit changes

Table 17 Groundwater Quality Sampling Frequency and Limits
Outfall 010

Sample Point	Well Name	Sample Frequency	Well Designation
836	W-24	Quarterly	Non-Point of Standard
837	W-25	Quarterly	Non-Point of Standard
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	***4.7 mg/l (ACL)**	***10.0 mg/l**	Calculated, NR 140 Table 1
pH, Field	***6.4-8.4 su**	N/A	Calculated
Nitrogen, Ammonia	0.97 mg/l	9.7 mg/l	NR 140 Table 1
Nitrogen, Organic	***2.7 mg/l**	N/A	Calculated
Total Dissolved Solids	***430 mg/l**	N/A	Calculated

*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:

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

The Conclusions

Total nitrogen has been added to the in plant sampling point due to the s. NR 214.14 (3) (c) Wis. Adm. Code requirement for total pounds of nitrogen applied to a spray field. The mass loading (lbs/ac/yr) should be calculated using total nitrogen and not total Kjeldahl nitrogen.

The calculation and reporting of annual mass loading for chloride has been added, without a limit, to the Outfall requirements. There is no additional sampling required given the water volume and chloride concentrations are already being measured and reported.

Groundwater monitoring wells 810, 811 and 813 are no longer required now that Outfall 002 has been discontinued. If Del Monte no longer has use for these wells they need to be abandoned per s. NR 141.25 Wis. Adm. Code.

There are two groundwater monitoring wells that are up-gradient of Outfall 001. Well 812 (W4B-R) was used given the resulting PALs are higher than those calculated for well 815 (W4AR-R).

The PAL and ES for nitrite + nitrate are conditionally exempt for Outfall 001 wells 809 and 814. The collection of groundwater samples for nitrite + nitrate continues to be required, but there will be no limits (PAL/ACL/ES). The exemption is in place under the following conditions:

- There are no significant increases in the nitrogen effluent concentration to the spray irrigation fields
- The exemption is in place for the term of this permit
- The facility remain is compliance with the other restrictions and limits for this Outfall.

The ACL for chloride has been rescinded for Outfall 001 and has reverted back to the s. NR 140.12 Wis. Adm. Code PAL of 125 mg/l. An ACL was calculated using the background groundwater quality data, but the product of this calculation was less than 125 mg/l therefore the code PAL is used. The pH range and TDS PALs have been increased (6.5-8.5 to 6.8-8.8 su pH and 600 to 640 mg/l TDS) based on the background groundwater quality from well 812. The indicator parameter PAL for organic nitrogen was reduced from 2.6 mg/l to 2.5 mg/l based on the background groundwater quality data.

The ACLs for nitrite + nitrate and chloride have been rescinded for Outfall 007 and has reverted back to the ss. NR 140.10 and NR 140.12 Wis. Adm. Code PAL of 2.0 mg/l and 125 mg/l respectively. ACLs were calculated using the background groundwater quality data, but the product of this calculation was less than the code PAL therefore the code PAL is used. The organic nitrogen and TDS PALs have been increased (2.6 to 2.8 mg/l organic nitrogen and 500 to 550 mg/l TDS) based on the background groundwater quality from well 828.

The ACL for nitrite + nitrate has been decreased for Outfall 008 from 13.2 to 4.7 mg/l based on background groundwater quality data. The ACL for chloride has been rescinded for Outfall 001 and has reverted back to the s. NR 140.12 Wis. Adm. Code PAL of 125 mg/l. An ACL was calculated using the background groundwater quality data, but the product of this calculation was less than 125 mg/l therefore the code PAL is used. The pH range has been increased from 5.4-7.4 to 6.4-8.4 su based on the background groundwater quality from well 835. The indicator parameter PALs for organic nitrogen and TDS were reduced from 9.0 mg/l to 2.7 mg/l 630 to 430 mg/l respectively based on the background groundwater quality data.

Groundwater limits could not be calculated for Outfall 010 (using background well 837) because there are only two rounds of groundwater sample results. This is less than the eight rounds needed. In lieu of the ss. NR 140.10 and NR 140.12 Wis. Adm. Code PALs and ESs the groundwater limits for the adjacent Outfall 008 have been used. The procedure in s. NR 140.24 Wis. Adm. Code will be used to evaluate any exceedances in down-gradient well 836.

The department is requiring a response action to address the ES exceedances in the down-gradient groundwater monitoring wells of Outfall 007. The response action will start with the simplest actions first in the hopes no drastic action is needed. The response actions will be applied to all four of the Outfalls 001, 007, 008 and 010.

Compliance Schedule Recommendations

The s. NR 214.14 (5)(d) Wis. Adm. Code requires a land treatment management plan for facilities with land treatment systems. The facility should review their plan within 90 days of permit reissuance and any revisions should be submitted to the department for approval.

Because Outfall 002 has been discontinued, groundwater monitoring wells 810, 811 and 813 need either be inspected annually with a brief report to the department, or the wells need to be abandoned in accordance with s. NR 141.25 Wis. Adm. Code. Del Monte should notify the department withing 30 days of permit reissuance of their intended direction for these wells.

The facility should investigate and propose to the department a method to reduce the concentration of nitrite + nitrate in groundwater. A report should be submitted to the department withing one year of permit reissuance. The report should outline the proposed activities. An annual progress report should be submitted to the department outlining the actions taken for the permit term. In addition, the facility should gather as much information as possible as to the source of the high levels of nitrite + nitrate in wells 812 and 815 and report this information in a brief report to the department.

The department suggests the optimization for the load/rest cycles as part of the facility's s. NR140.27 response actions. If the facility keeps logs of start time, end time and volume for hydraulic application to each field, then these should be submitted to the department. If not, the facility should create a log with the date, field, start time, end time and hydraulic application volume (gal/ac). After reviewing the loading, a resting period can be calculated. The overall intent is to increase the rest cycles until the system is optimized.

Figure 1
Nitrite + Nitrate
Outfall 001

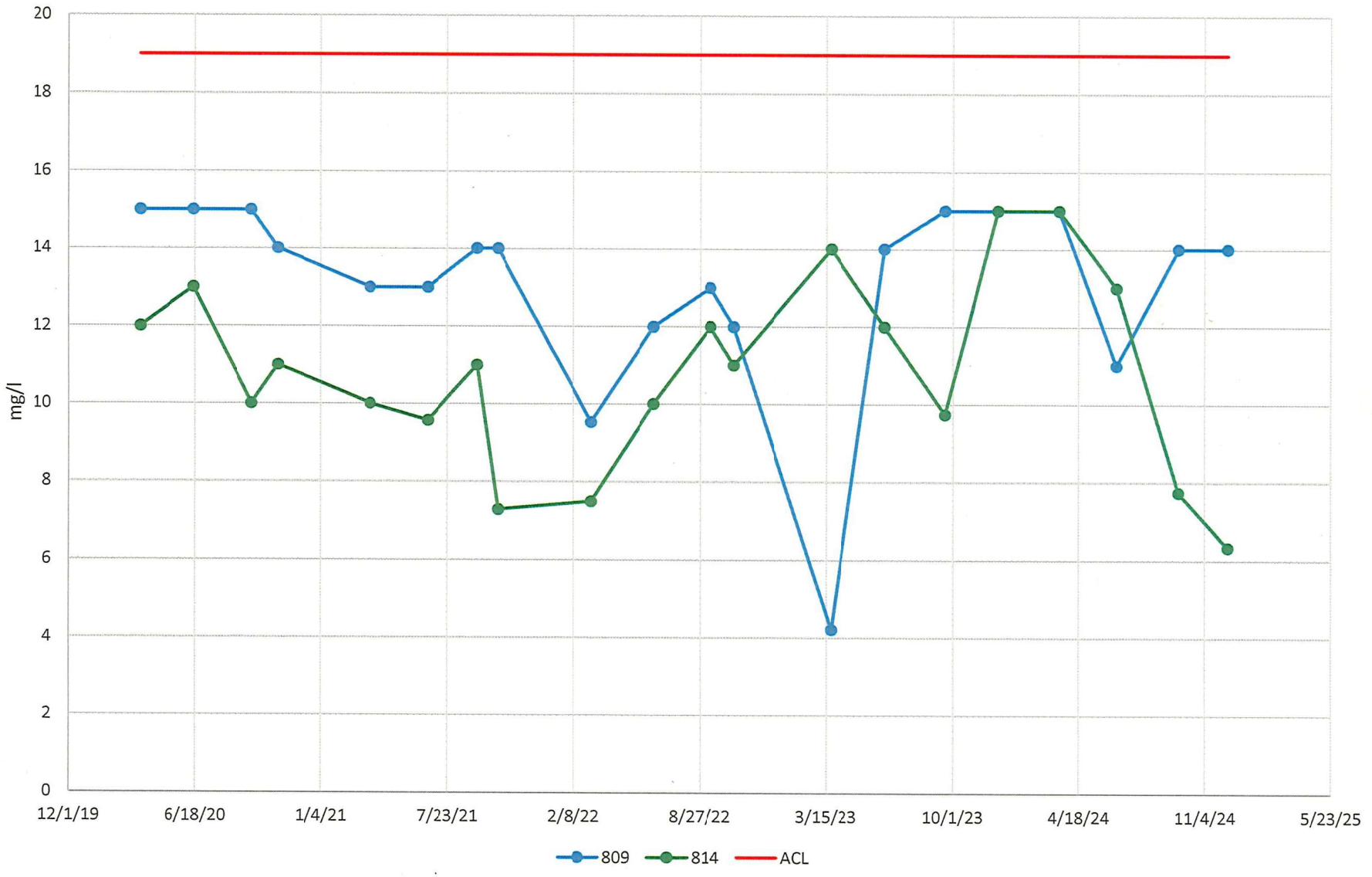


Figure 2
Nitrite + Nitrate
Outfall 007

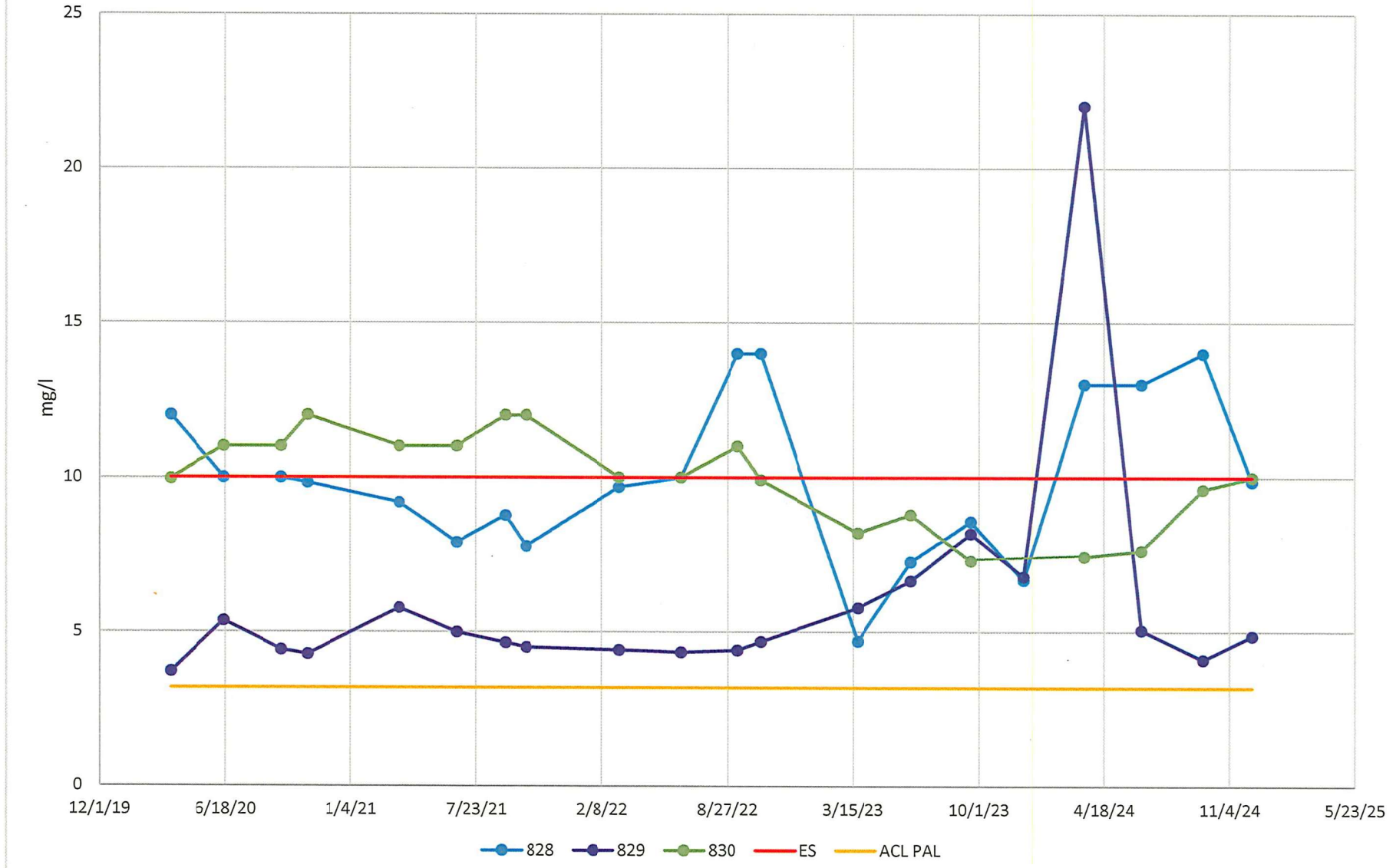
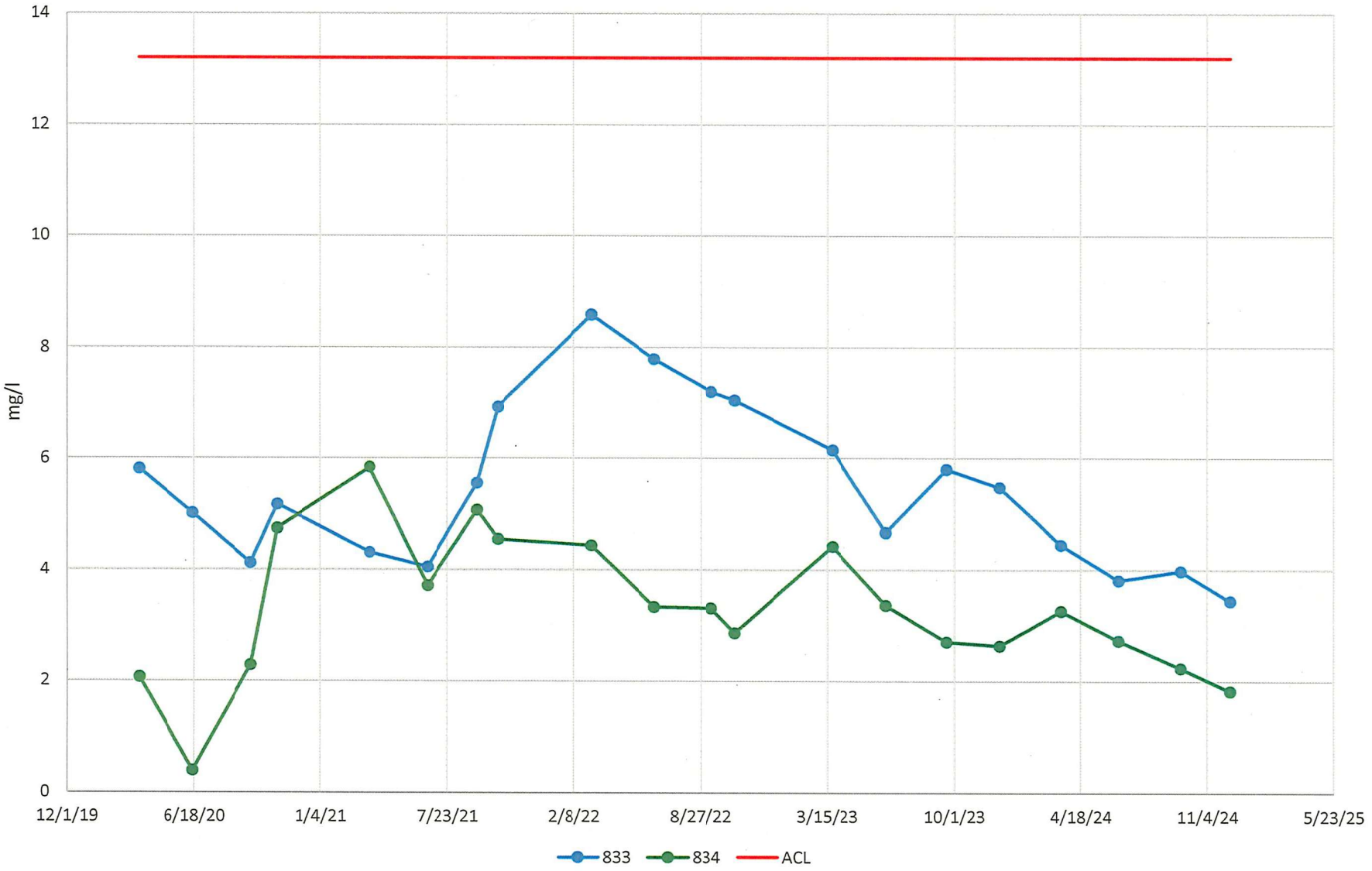


Figure 3
Nitrite + Nitrate
Outfall 008



Appendix

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

well	parameter	unit	date		result
809	Chloride Dissolved	mg/L	03/24/2020		41
809	Chloride Dissolved	mg/L	06/16/2020		52
809	Chloride Dissolved	mg/L	09/16/2020		60
809	Chloride Dissolved	mg/L	10/28/2020		66
809	Chloride Dissolved	mg/L	03/23/2021		67
809	Chloride Dissolved	mg/L	06/22/2021		73
809	Chloride Dissolved	mg/L	09/08/2021		71
809	Chloride Dissolved	mg/L	10/11/2021		77
809	Chloride Dissolved	mg/L	03/08/2022		74
809	Chloride Dissolved	mg/L	06/15/2022		61
809	Chloride Dissolved	mg/L	09/13/2022		67
809	Chloride Dissolved	mg/L	10/20/2022		67
809	Chloride Dissolved	mg/L	03/23/2023		70
809	Chloride Dissolved	mg/L	06/15/2023		42
809	Chloride Dissolved	mg/L	09/19/2023		46
809	Chloride Dissolved	mg/L	12/12/2023		42
809	Chloride Dissolved	mg/L	03/18/2024		44
809	Chloride Dissolved	mg/L	06/17/2024		63
809	Chloride Dissolved	mg/L	09/23/2024		73
809	Chloride Dissolved	mg/L	12/10/2024		47
809	Nitrogen, Ammonia Dissolved	mg/L	03/24/2020	<	0.18
809	Nitrogen, Ammonia Dissolved	mg/L	06/16/2020	<	0.18
809	Nitrogen, Ammonia Dissolved	mg/L	09/16/2020	<	0.18
809	Nitrogen, Ammonia Dissolved	mg/L	10/28/2020	<	0.18
809	Nitrogen, Ammonia Dissolved	mg/L	03/23/2021	<	0.13
809	Nitrogen, Ammonia Dissolved	mg/L	06/22/2021	<	0.13
809	Nitrogen, Ammonia Dissolved	mg/L	09/08/2021	<	0.13
809	Nitrogen, Ammonia Dissolved	mg/L	10/11/2021	<	0.13
809	Nitrogen, Ammonia Dissolved	mg/L	03/08/2022	<	0.13
809	Nitrogen, Ammonia Dissolved	mg/L	06/15/2022	<	0.13
809	Nitrogen, Ammonia Dissolved	mg/L	09/13/2022	<	0.13
809	Nitrogen, Ammonia Dissolved	mg/L	10/20/2022	<	0.13
809	Nitrogen, Ammonia Dissolved	mg/L	03/23/2023	<	0.13
809	Nitrogen, Ammonia Dissolved	mg/L	06/15/2023	<	0.13
809	Nitrogen, Ammonia Dissolved	mg/L	09/19/2023	<	0.13
809	Nitrogen, Ammonia Dissolved	mg/L	12/12/2023		0.297
809	Nitrogen, Ammonia Dissolved	mg/L	03/18/2024	<	0.13
809	Nitrogen, Ammonia Dissolved	mg/L	06/17/2024	<	0.13
809	Nitrogen, Ammonia Dissolved	mg/L	09/23/2024		3.646
809	Nitrogen, Ammonia Dissolved	mg/L	12/10/2024	<	0.13

well	parameter	unit	date		result
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2020		15
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/16/2020		15
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/16/2020		15
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020		14
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2021		13
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2021		13
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/08/2021		14
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/11/2021		14
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/08/2022		9.53
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2022		12
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/13/2022		13
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022		12
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023		4.21
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2023		14
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/19/2023		15
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/12/2023		15
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/18/2024		15
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2024		11
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/23/2024		14
809	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/10/2024		14
809	Nitrogen, Organic Dissolved	mg/L	03/24/2020	<	0.431
809	Nitrogen, Organic Dissolved	mg/L	06/16/2020	<	0.431
809	Nitrogen, Organic Dissolved	mg/L	09/16/2020		0.508
809	Nitrogen, Organic Dissolved	mg/L	10/28/2020	<	0.431
809	Nitrogen, Organic Dissolved	mg/L	03/23/2021	<	0.431
809	Nitrogen, Organic Dissolved	mg/L	06/22/2021	<	0.431
809	Nitrogen, Organic Dissolved	mg/L	09/08/2021	<	0.431
809	Nitrogen, Organic Dissolved	mg/L	10/11/2021	<	0.431
809	Nitrogen, Organic Dissolved	mg/L	03/08/2022	<	0.431
809	Nitrogen, Organic Dissolved	mg/L	06/15/2022	<	0.431
809	Nitrogen, Organic Dissolved	mg/L	09/13/2022	<	0.431
809	Nitrogen, Organic Dissolved	mg/L	10/20/2022	<	0.431
809	Nitrogen, Organic Dissolved	mg/L	03/23/2023	<	0.431
809	Nitrogen, Organic Dissolved	mg/L	06/15/2023		0.616
809	Nitrogen, Organic Dissolved	mg/L	09/19/2023	<	0.431
809	Nitrogen, Organic Dissolved	mg/L	12/12/2023		0.639
809	Nitrogen, Organic Dissolved	mg/L	03/18/2024	<	0.431
809	Nitrogen, Organic Dissolved	mg/L	06/17/2024	<	0.431
809	Nitrogen, Organic Dissolved	mg/L	09/23/2024	<	0.431
809	Nitrogen, Organic Dissolved	mg/L	12/10/2024	<	0.431

well	parameter	unit	date	result
809	pH Field	su	03/24/2020	7.65
809	pH Field	su	06/16/2020	7.57
809	pH Field	su	09/16/2020	7.2
809	pH Field	su	10/28/2020	7.55
809	pH Field	su	03/23/2021	7.55
809	pH Field	su	06/22/2021	7.48
809	pH Field	su	09/08/2021	7.63
809	pH Field	su	10/11/2021	7.61
809	pH Field	su	03/08/2022	7.67
809	pH Field	su	06/15/2022	7.71
809	pH Field	su	09/13/2022	7.71
809	pH Field	su	10/20/2022	7.39
809	pH Field	su	03/23/2023	7.53
809	pH Field	su	06/15/2023	7.6
809	pH Field	su	09/19/2023	7.75
809	pH Field	su	12/12/2023	7.78
809	pH Field	su	03/18/2024	8.02
809	pH Field	su	06/17/2024	7.73
809	pH Field	su	09/23/2024	7.47
809	pH Field	su	12/10/2024	7.55
809	Solids, Total Dissolved	mg/L	03/24/2020	644
809	Solids, Total Dissolved	mg/L	06/16/2020	550
809	Solids, Total Dissolved	mg/L	09/16/2020	650
809	Solids, Total Dissolved	mg/L	10/28/2020	580
809	Solids, Total Dissolved	mg/L	03/23/2021	580
809	Solids, Total Dissolved	mg/L	06/22/2021	557
809	Solids, Total Dissolved	mg/L	09/08/2021	457
809	Solids, Total Dissolved	mg/L	10/11/2021	580
809	Solids, Total Dissolved	mg/L	03/08/2022	590
809	Solids, Total Dissolved	mg/L	06/15/2022	583
809	Solids, Total Dissolved	mg/L	09/13/2022	550
809	Solids, Total Dissolved	mg/L	10/20/2022	543
809	Solids, Total Dissolved	mg/L	03/23/2023	497
809	Solids, Total Dissolved	mg/L	06/15/2023	440
809	Solids, Total Dissolved	mg/L	09/19/2023	407
809	Solids, Total Dissolved	mg/L	12/12/2023	723
809	Solids, Total Dissolved	mg/L	03/18/2024	473
809	Solids, Total Dissolved	mg/L	06/17/2024	503
809	Solids, Total Dissolved	mg/L	09/23/2024	477
809	Solids, Total Dissolved	mg/L	12/10/2024	409

well	parameter	unit	date		result
810	Chloride Dissolved	mg/L	03/24/2020		61
810	Chloride Dissolved	mg/L	06/16/2020		44
810	Chloride Dissolved	mg/L	09/16/2020		63
810	Chloride Dissolved	mg/L	10/28/2020		73
810	Chloride Dissolved	mg/L	03/23/2021		69
810	Chloride Dissolved	mg/L	06/22/2021		49
810	Chloride Dissolved	mg/L	09/08/2021		127
810	Chloride Dissolved	mg/L	10/11/2021		81
810	Chloride Dissolved	mg/L	03/08/2022		61
810	Chloride Dissolved	mg/L	06/15/2022		49
810	Chloride Dissolved	mg/L	09/13/2022		78
810	Chloride Dissolved	mg/L	10/20/2022		87
810	Chloride Dissolved	mg/L	03/23/2023		43
810	Chloride Dissolved	mg/L	06/15/2023		52
810	Chloride Dissolved	mg/L	09/19/2023		76
810	Chloride Dissolved	mg/L	12/12/2023		138
810	Chloride Dissolved	mg/L	03/18/2024		63
810	Chloride Dissolved	mg/L	06/17/2024		82
810	Chloride Dissolved	mg/L	09/23/2024		74
810	Chloride Dissolved	mg/L	12/10/2024		66
810	Nitrogen, Ammonia Dissolved	mg/L	03/24/2020	<	0.18
810	Nitrogen, Ammonia Dissolved	mg/L	06/16/2020	<	0.18
810	Nitrogen, Ammonia Dissolved	mg/L	09/16/2020	<	0.18
810	Nitrogen, Ammonia Dissolved	mg/L	10/28/2020		0.21
810	Nitrogen, Ammonia Dissolved	mg/L	03/23/2021	<	0.13
810	Nitrogen, Ammonia Dissolved	mg/L	06/22/2021		0.306
810	Nitrogen, Ammonia Dissolved	mg/L	09/08/2021	<	0.13
810	Nitrogen, Ammonia Dissolved	mg/L	10/11/2021	<	0.13
810	Nitrogen, Ammonia Dissolved	mg/L	03/08/2022		0.737
810	Nitrogen, Ammonia Dissolved	mg/L	06/15/2022		0.294
810	Nitrogen, Ammonia Dissolved	mg/L	09/13/2022	<	0.13
810	Nitrogen, Ammonia Dissolved	mg/L	10/20/2022	<	0.13
810	Nitrogen, Ammonia Dissolved	mg/L	03/23/2023		0.289
810	Nitrogen, Ammonia Dissolved	mg/L	06/15/2023	<	0.13
810	Nitrogen, Ammonia Dissolved	mg/L	09/19/2023	<	0.13
810	Nitrogen, Ammonia Dissolved	mg/L	12/12/2023	<	0.13
810	Nitrogen, Ammonia Dissolved	mg/L	03/18/2024		0.526
810	Nitrogen, Ammonia Dissolved	mg/L	06/17/2024		0.352
810	Nitrogen, Ammonia Dissolved	mg/L	09/23/2024		0.447
810	Nitrogen, Ammonia Dissolved	mg/L	12/10/2024		0.595

well	parameter	unit	date		result
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2020		1
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/16/2020		1.08
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/16/2020		2.77
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020		2.43
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2021		1.93
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2021		1.14
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/08/2021		1.4
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/11/2021		3.38
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/08/2022	<	0.015
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2022	<	0.015
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/13/2022		0.56
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022		0.85
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023		1.29
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2023	<	0.015
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/19/2023		0.66
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/12/2023		0.4
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/18/2024		1
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2024		0.29
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/23/2024		0.55
810	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/10/2024		0.037
810	Nitrogen, Organic Dissolved	mg/L	03/24/2020	<	0.431
810	Nitrogen, Organic Dissolved	mg/L	06/16/2020		0.46
810	Nitrogen, Organic Dissolved	mg/L	09/16/2020		0.68
810	Nitrogen, Organic Dissolved	mg/L	10/28/2020	<	0.431
810	Nitrogen, Organic Dissolved	mg/L	03/23/2021	<	0.431
810	Nitrogen, Organic Dissolved	mg/L	06/22/2021	<	0.431
810	Nitrogen, Organic Dissolved	mg/L	09/08/2021	<	0.431
810	Nitrogen, Organic Dissolved	mg/L	10/11/2021		0.791
810	Nitrogen, Organic Dissolved	mg/L	03/08/2022	<	0.431
810	Nitrogen, Organic Dissolved	mg/L	06/15/2022		0.487
810	Nitrogen, Organic Dissolved	mg/L	09/13/2022	<	0.431
810	Nitrogen, Organic Dissolved	mg/L	10/20/2022		0.786
810	Nitrogen, Organic Dissolved	mg/L	03/23/2023	<	0.431
810	Nitrogen, Organic Dissolved	mg/L	06/15/2023		1.724
810	Nitrogen, Organic Dissolved	mg/L	09/19/2023		2.185
810	Nitrogen, Organic Dissolved	mg/L	12/12/2023		1.078
810	Nitrogen, Organic Dissolved	mg/L	03/18/2024	<	0.431
810	Nitrogen, Organic Dissolved	mg/L	06/17/2024	<	0.431
810	Nitrogen, Organic Dissolved	mg/L	09/23/2024	<	0.431
810	Nitrogen, Organic Dissolved	mg/L	12/10/2024	<	0.431

well	parameter	unit	date	result
810	pH Field	su	03/24/2020	6.9
810	pH Field	su	06/16/2020	7.07
810	pH Field	su	09/16/2020	6.85
810	pH Field	su	10/28/2020	6.87
810	pH Field	su	03/23/2021	7.22
810	pH Field	su	06/22/2021	7.45
810	pH Field	su	09/08/2021	7.1
810	pH Field	su	10/11/2021	7.62
810	pH Field	su	03/08/2022	7.52
810	pH Field	su	06/15/2022	7.61
810	pH Field	su	09/13/2022	7.37
810	pH Field	su	10/20/2022	6.98
810	pH Field	su	03/23/2023	7.39
810	pH Field	su	06/15/2023	7.18
810	pH Field	su	09/19/2023	8.31
810	pH Field	su	12/12/2023	7.56
810	pH Field	su	03/18/2024	7.88
810	pH Field	su	06/17/2024	7.72
810	pH Field	su	09/23/2024	7.33
810	pH Field	su	12/10/2024	6.65
810	Solids, Total Dissolved	mg/L	03/24/2020	524
810	Solids, Total Dissolved	mg/L	06/16/2020	350
810	Solids, Total Dissolved	mg/L	09/16/2020	427
810	Solids, Total Dissolved	mg/L	10/28/2020	350
810	Solids, Total Dissolved	mg/L	03/23/2021	377
810	Solids, Total Dissolved	mg/L	06/22/2021	310
810	Solids, Total Dissolved	mg/L	09/08/2021	487
810	Solids, Total Dissolved	mg/L	10/11/2021	510
810	Solids, Total Dissolved	mg/L	03/08/2022	433
810	Solids, Total Dissolved	mg/L	06/15/2022	377
810	Solids, Total Dissolved	mg/L	09/13/2022	403
810	Solids, Total Dissolved	mg/L	10/20/2022	380
810	Solids, Total Dissolved	mg/L	03/23/2023	403
810	Solids, Total Dissolved	mg/L	06/15/2023	497
810	Solids, Total Dissolved	mg/L	09/19/2023	450
810	Solids, Total Dissolved	mg/L	12/12/2023	1147
810	Solids, Total Dissolved	mg/L	03/18/2024	473
810	Solids, Total Dissolved	mg/L	06/17/2024	527
810	Solids, Total Dissolved	mg/L	09/23/2024	480
810	Solids, Total Dissolved	mg/L	12/10/2024	374

well	parameter	unit	date	result
811	Chloride Dissolved	mg/L	03/24/2020	67
811	Chloride Dissolved	mg/L	06/16/2020	34
811	Chloride Dissolved	mg/L	09/16/2020	64
811	Chloride Dissolved	mg/L	10/28/2020	93
811	Chloride Dissolved	mg/L	03/23/2021	88
811	Chloride Dissolved	mg/L	06/22/2021	254
811	Chloride Dissolved	mg/L	09/08/2021	153
811	Chloride Dissolved	mg/L	10/11/2021	67
811	Chloride Dissolved	mg/L	03/08/2022	70
811	Chloride Dissolved	mg/L	06/15/2022	146
811	Chloride Dissolved	mg/L	09/13/2022	115
811	Chloride Dissolved	mg/L	10/20/2022	105
811	Chloride Dissolved	mg/L	03/23/2023	83
811	Chloride Dissolved	mg/L	06/15/2023	66
811	Chloride Dissolved	mg/L	09/19/2023	69
811	Chloride Dissolved	mg/L	12/12/2023	74
811	Chloride Dissolved	mg/L	03/18/2024	60
811	Chloride Dissolved	mg/L	06/17/2024	70
811	Chloride Dissolved	mg/L	09/23/2024	73
811	Chloride Dissolved	mg/L	12/10/2024	61
811	Nitrogen, Ammonia Dissolved	mg/L	03/24/2020 <	0.18
811	Nitrogen, Ammonia Dissolved	mg/L	06/16/2020 <	0.18
811	Nitrogen, Ammonia Dissolved	mg/L	09/16/2020 <	0.18
811	Nitrogen, Ammonia Dissolved	mg/L	10/28/2020 <	0.18
811	Nitrogen, Ammonia Dissolved	mg/L	03/23/2021 <	0.13
811	Nitrogen, Ammonia Dissolved	mg/L	06/22/2021 <	0.13
811	Nitrogen, Ammonia Dissolved	mg/L	09/08/2021 <	0.13
811	Nitrogen, Ammonia Dissolved	mg/L	10/11/2021 <	0.13
811	Nitrogen, Ammonia Dissolved	mg/L	03/08/2022 <	0.13
811	Nitrogen, Ammonia Dissolved	mg/L	06/15/2022 <	0.13
811	Nitrogen, Ammonia Dissolved	mg/L	09/13/2022 <	0.13
811	Nitrogen, Ammonia Dissolved	mg/L	10/20/2022 <	0.13
811	Nitrogen, Ammonia Dissolved	mg/L	03/23/2023 <	0.13
811	Nitrogen, Ammonia Dissolved	mg/L	06/15/2023 <	0.13
811	Nitrogen, Ammonia Dissolved	mg/L	09/19/2023 <	0.13
811	Nitrogen, Ammonia Dissolved	mg/L	12/12/2023 <	0.13
811	Nitrogen, Ammonia Dissolved	mg/L	03/18/2024 <	0.13
811	Nitrogen, Ammonia Dissolved	mg/L	06/17/2024 <	0.13
811	Nitrogen, Ammonia Dissolved	mg/L	09/23/2024 <	0.13
811	Nitrogen, Ammonia Dissolved	mg/L	12/10/2024 <	0.13

well	parameter	unit	date		result
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2020		3.36
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/16/2020		2.71
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/16/2020		2.31
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020		2.18
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2021		3.08
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2021		2.52
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/08/2021		2.75
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/11/2021		2.94
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/08/2022		2.51
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2022		2.56
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/13/2022		2.55
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022		3.6
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023		1.17
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2023		3.73
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/19/2023		3.58
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/12/2023		5.77
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/18/2024		5.08
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2024		5.33
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/23/2024		1.68
811	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/10/2024		3.85
811	Nitrogen, Organic Dissolved	mg/L	03/24/2020	<	0.431
811	Nitrogen, Organic Dissolved	mg/L	06/16/2020	<	0.431
811	Nitrogen, Organic Dissolved	mg/L	09/16/2020		0.517
811	Nitrogen, Organic Dissolved	mg/L	10/28/2020	<	0.431
811	Nitrogen, Organic Dissolved	mg/L	03/23/2021	<	0.431
811	Nitrogen, Organic Dissolved	mg/L	06/22/2021	<	0.431
811	Nitrogen, Organic Dissolved	mg/L	09/08/2021	<	0.431
811	Nitrogen, Organic Dissolved	mg/L	10/11/2021		0.895
811	Nitrogen, Organic Dissolved	mg/L	03/08/2022	<	0.431
811	Nitrogen, Organic Dissolved	mg/L	06/15/2022		0.815
811	Nitrogen, Organic Dissolved	mg/L	09/13/2022	<	0.431
811	Nitrogen, Organic Dissolved	mg/L	10/20/2022		0.594
811	Nitrogen, Organic Dissolved	mg/L	03/23/2023	<	0.431
811	Nitrogen, Organic Dissolved	mg/L	06/15/2023		1.357
811	Nitrogen, Organic Dissolved	mg/L	09/19/2023	<	0.431
811	Nitrogen, Organic Dissolved	mg/L	12/12/2023		0.746
811	Nitrogen, Organic Dissolved	mg/L	03/18/2024	<	0.431
811	Nitrogen, Organic Dissolved	mg/L	06/17/2024	<	0.431
811	Nitrogen, Organic Dissolved	mg/L	09/23/2024		2.505
811	Nitrogen, Organic Dissolved	mg/L	12/10/2024	<	0.431

well	parameter	unit	date	result
811	pH Field	su	03/24/2020	6.95
811	pH Field	su	06/16/2020	7.18
811	pH Field	su	09/16/2020	7.01
811	pH Field	su	10/28/2020	7.06
811	pH Field	su	03/23/2021	7.29
811	pH Field	su	06/22/2021	7.41
811	pH Field	su	09/08/2021	7.1
811	pH Field	su	10/11/2021	7.61
811	pH Field	su	03/08/2022	7.44
811	pH Field	su	06/15/2022	7.44
811	pH Field	su	09/13/2022	7.24
811	pH Field	su	10/20/2022	4.85
811	pH Field	su	03/23/2023	7.16
811	pH Field	su	06/15/2023	7.07
811	pH Field	su	09/19/2023	7.85
811	pH Field	su	12/12/2023	7.83
811	pH Field	su	03/18/2024	7.78
811	pH Field	su	06/17/2024	8.21
811	pH Field	su	09/23/2024	7.14
811	pH Field	su	12/10/2024	6.76
811	Solids, Total Dissolved	mg/L	03/24/2020	520
811	Solids, Total Dissolved	mg/L	06/16/2020	260
811	Solids, Total Dissolved	mg/L	09/16/2020	283
811	Solids, Total Dissolved	mg/L	10/28/2020	370
811	Solids, Total Dissolved	mg/L	03/23/2021	423
811	Solids, Total Dissolved	mg/L	06/22/2021	593
811	Solids, Total Dissolved	mg/L	09/08/2021	437
811	Solids, Total Dissolved	mg/L	10/11/2021	373
811	Solids, Total Dissolved	mg/L	03/08/2022	473
811	Solids, Total Dissolved	mg/L	06/15/2022	620
811	Solids, Total Dissolved	mg/L	09/13/2022	433
811	Solids, Total Dissolved	mg/L	10/20/2022	623
811	Solids, Total Dissolved	mg/L	03/23/2023	397
811	Solids, Total Dissolved	mg/L	06/15/2023	420
811	Solids, Total Dissolved	mg/L	09/19/2023	367
811	Solids, Total Dissolved	mg/L	12/12/2023	617
811	Solids, Total Dissolved	mg/L	03/18/2024	387
811	Solids, Total Dissolved	mg/L	06/17/2024	417
811	Solids, Total Dissolved	mg/L	09/23/2024	643
811	Solids, Total Dissolved	mg/L	12/10/2024	443

well	parameter	unit	date		result
812	Chloride Dissolved	mg/L	03/24/2020		30
812	Chloride Dissolved	mg/L	06/16/2020		26
812	Chloride Dissolved	mg/L	09/16/2020		24
812	Chloride Dissolved	mg/L	10/28/2020		27
812	Chloride Dissolved	mg/L	03/23/2021		27
812	Chloride Dissolved	mg/L	06/22/2021		26
812	Chloride Dissolved	mg/L	09/08/2021		16
812	Chloride Dissolved	mg/L	10/11/2021		26
812	Chloride Dissolved	mg/L	03/08/2022		42
812	Chloride Dissolved	mg/L	06/15/2022		34
812	Chloride Dissolved	mg/L	09/13/2022		36
812	Chloride Dissolved	mg/L	10/20/2022		44
812	Chloride Dissolved	mg/L	03/23/2023		51
812	Chloride Dissolved	mg/L	06/15/2023		34
812	Chloride Dissolved	mg/L	09/19/2023		33
812	Chloride Dissolved	mg/L	12/12/2023		38
812	Chloride Dissolved	mg/L	03/18/2024		29
812	Chloride Dissolved	mg/L	06/17/2024		20
812	Chloride Dissolved	mg/L	09/23/2024		16
812	Chloride Dissolved	mg/L	12/10/2024		28
			Mean		30.35
			St. Dev		8.71
812	Nitrogen, Ammonia Dissolved	mg/L	03/24/2020	<	0.18
812	Nitrogen, Ammonia Dissolved	mg/L	06/16/2020	<	0.18
812	Nitrogen, Ammonia Dissolved	mg/L	09/16/2020	<	0.18
812	Nitrogen, Ammonia Dissolved	mg/L	10/28/2020	<	0.18
812	Nitrogen, Ammonia Dissolved	mg/L	03/23/2021	<	0.13
812	Nitrogen, Ammonia Dissolved	mg/L	06/22/2021	<	0.13
812	Nitrogen, Ammonia Dissolved	mg/L	09/08/2021	<	0.13
812	Nitrogen, Ammonia Dissolved	mg/L	10/11/2021	<	0.13
812	Nitrogen, Ammonia Dissolved	mg/L	03/08/2022		0.371
812	Nitrogen, Ammonia Dissolved	mg/L	06/15/2022	<	0.13
812	Nitrogen, Ammonia Dissolved	mg/L	09/13/2022	<	0.13
812	Nitrogen, Ammonia Dissolved	mg/L	10/20/2022	<	0.13
812	Nitrogen, Ammonia Dissolved	mg/L	03/23/2023	<	0.13
812	Nitrogen, Ammonia Dissolved	mg/L	06/15/2023	<	0.13
812	Nitrogen, Ammonia Dissolved	mg/L	09/19/2023	<	0.13
812	Nitrogen, Ammonia Dissolved	mg/L	12/12/2023	<	0.13
812	Nitrogen, Ammonia Dissolved	mg/L	03/18/2024	<	0.13
812	Nitrogen, Ammonia Dissolved	mg/L	06/17/2024	<	0.13
812	Nitrogen, Ammonia Dissolved	mg/L	09/23/2024	<	0.13
812	Nitrogen, Ammonia Dissolved	mg/L	12/10/2024	<	0.13
			Mean		0.15205
			St. Dev		0.054017

well	parameter	unit	date		result
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2020		16
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/16/2020		15
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/16/2020		13
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020		15
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2021		19
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2021		19
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/08/2021		11
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/11/2021		17
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/08/2022		20
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2022		20
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/13/2022		23
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022		25
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023		28
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2023		20
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/19/2023		26
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/12/2023		25
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/18/2024		22
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2024		12
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/23/2024		12
812	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/10/2024		23
			Mean		19.05
			St. Dev		4.944441
812	Nitrogen, Organic Dissolved	mg/L	03/24/2020		0.58
812	Nitrogen, Organic Dissolved	mg/L	06/16/2020	<	0.431
812	Nitrogen, Organic Dissolved	mg/L	09/16/2020		0.585
812	Nitrogen, Organic Dissolved	mg/L	10/28/2020	<	0.431
812	Nitrogen, Organic Dissolved	mg/L	03/23/2021	<	0.431
812	Nitrogen, Organic Dissolved	mg/L	06/22/2021	<	0.431
812	Nitrogen, Organic Dissolved	mg/L	09/08/2021	<	0.431
812	Nitrogen, Organic Dissolved	mg/L	10/11/2021	<	0.431
812	Nitrogen, Organic Dissolved	mg/L	03/08/2022	<	0.431
812	Nitrogen, Organic Dissolved	mg/L	06/15/2022	<	0.431
812	Nitrogen, Organic Dissolved	mg/L	09/13/2022	<	0.431
812	Nitrogen, Organic Dissolved	mg/L	10/20/2022	<	0.431
812	Nitrogen, Organic Dissolved	mg/L	03/23/2023	<	0.431
812	Nitrogen, Organic Dissolved	mg/L	06/15/2023	<	0.431
812	Nitrogen, Organic Dissolved	mg/L	09/19/2023	<	0.431
812	Nitrogen, Organic Dissolved	mg/L	12/12/2023		0.515
812	Nitrogen, Organic Dissolved	mg/L	03/18/2024	<	0.431
812	Nitrogen, Organic Dissolved	mg/L	06/17/2024	<	0.431
812	Nitrogen, Organic Dissolved	mg/L	09/23/2024	<	0.431
812	Nitrogen, Organic Dissolved	mg/L	12/10/2024	<	0.431
			Mean		0.45035
			St. Dev		0.047689

well	parameter	unit	date	result
812	pH Field	su	03/24/2020	7.04
812	pH Field	su	06/16/2020	7.4
812	pH Field	su	09/16/2020	7.42
812	pH Field	su	10/28/2020	7.41
812	pH Field	su	03/23/2021	7.75
812	pH Field	su	06/22/2021	7.94
812	pH Field	su	09/08/2021	7.9
812	pH Field	su	10/11/2021	7.88
812	pH Field	su	03/08/2022	8.07
812	pH Field	su	06/15/2022	8.33
812	pH Field	su	09/13/2022	8.08
812	pH Field	su	10/20/2022	7.79
812	pH Field	su	03/23/2023	7.91
812	pH Field	su	06/15/2023	7.48
812	pH Field	su	09/19/2023	7.73
812	pH Field	su	12/12/2023	7.78
812	pH Field	su	03/18/2024	8.43
812	pH Field	su	06/17/2024	9.32
812	pH Field	su	09/23/2024	7.63
812	pH Field	su	12/10/2024	7.2
			Mean	7.8245
812	Solids, Total Dissolved	mg/L	03/24/2020	380
812	Solids, Total Dissolved	mg/L	06/16/2020	460
812	Solids, Total Dissolved	mg/L	09/16/2020	393
812	Solids, Total Dissolved	mg/L	10/28/2020	297
812	Solids, Total Dissolved	mg/L	03/23/2021	433
812	Solids, Total Dissolved	mg/L	06/22/2021	343
812	Solids, Total Dissolved	mg/L	09/08/2021	280
812	Solids, Total Dissolved	mg/L	10/11/2021	330
812	Solids, Total Dissolved	mg/L	03/08/2022	357
812	Solids, Total Dissolved	mg/L	06/15/2022	330
812	Solids, Total Dissolved	mg/L	09/13/2022	410
812	Solids, Total Dissolved	mg/L	10/20/2022	1033
812	Solids, Total Dissolved	mg/L	03/23/2023	543
812	Solids, Total Dissolved	mg/L	06/15/2023	517
812	Solids, Total Dissolved	mg/L	09/19/2023	377
812	Solids, Total Dissolved	mg/L	12/12/2023	490
812	Solids, Total Dissolved	mg/L	03/18/2024	387
812	Solids, Total Dissolved	mg/L	06/17/2024	470
812	Solids, Total Dissolved	mg/L	09/23/2024	470
812	Solids, Total Dissolved	mg/L	12/10/2024	354
			Mean	432.7
			St. Dev	154.8064

well	parameter	unit	date		result
813	Chloride Dissolved	mg/L	03/24/2020		98
813	Chloride Dissolved	mg/L	06/16/2020		71
813	Chloride Dissolved	mg/L	09/16/2020		166
813	Chloride Dissolved	mg/L	10/28/2020		218
813	Chloride Dissolved	mg/L	03/23/2021		104
813	Chloride Dissolved	mg/L	06/22/2021		94
813	Chloride Dissolved	mg/L	09/08/2021		137
813	Chloride Dissolved	mg/L	10/11/2021		112
813	Chloride Dissolved	mg/L	03/08/2022		58
813	Chloride Dissolved	mg/L	06/15/2022		40
813	Chloride Dissolved	mg/L	09/13/2022		107
813	Chloride Dissolved	mg/L	10/20/2022		140
813	Chloride Dissolved	mg/L	03/23/2023		92
813	Chloride Dissolved	mg/L	06/15/2023		70
813	Chloride Dissolved	mg/L	09/19/2023		161
813	Chloride Dissolved	mg/L	12/12/2023		254
813	Chloride Dissolved	mg/L	03/18/2024		0.51
813	Chloride Dissolved	mg/L	06/17/2024		100
813	Chloride Dissolved	mg/L	09/23/2024		7.76
813	Chloride Dissolved	mg/L	12/10/2024		182
813	Nitrogen, Ammonia Dissolved	mg/L	03/24/2020	<	0.18
813	Nitrogen, Ammonia Dissolved	mg/L	06/16/2020	<	0.18
813	Nitrogen, Ammonia Dissolved	mg/L	09/16/2020	<	0.18
813	Nitrogen, Ammonia Dissolved	mg/L	10/28/2020	<	0.18
813	Nitrogen, Ammonia Dissolved	mg/L	03/23/2021	<	0.13
813	Nitrogen, Ammonia Dissolved	mg/L	06/22/2021		0.444
813	Nitrogen, Ammonia Dissolved	mg/L	09/08/2021	<	0.13
813	Nitrogen, Ammonia Dissolved	mg/L	10/11/2021	<	0.13
813	Nitrogen, Ammonia Dissolved	mg/L	03/08/2022	<	0.13
813	Nitrogen, Ammonia Dissolved	mg/L	06/15/2022	<	0.13
813	Nitrogen, Ammonia Dissolved	mg/L	09/13/2022	<	0.13
813	Nitrogen, Ammonia Dissolved	mg/L	10/20/2022	<	0.13
813	Nitrogen, Ammonia Dissolved	mg/L	03/23/2023	<	0.13
813	Nitrogen, Ammonia Dissolved	mg/L	06/15/2023	<	0.13
813	Nitrogen, Ammonia Dissolved	mg/L	09/19/2023	<	0.13
813	Nitrogen, Ammonia Dissolved	mg/L	12/12/2023	<	0.13
813	Nitrogen, Ammonia Dissolved	mg/L	03/18/2024	<	0.13
813	Nitrogen, Ammonia Dissolved	mg/L	06/17/2024	<	0.13
813	Nitrogen, Ammonia Dissolved	mg/L	09/23/2024	<	0.13
813	Nitrogen, Ammonia Dissolved	mg/L	12/10/2024	<	0.13

well	parameter	unit	date		result
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2020		1.63
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/16/2020		1.5
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/16/2020		1.45
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020		1.24
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2021		1.49
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2021		1.78
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/08/2021		1.63
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/11/2021		2.54
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/08/2022		1.34
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2022		1.06
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/13/2022		2.04
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022		2.52
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023		12
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2023		8.51
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/19/2023		6.41
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/12/2023		11
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/18/2024		8.71
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2024		3.96
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/23/2024		5.64
813	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/10/2024		6.8
813	Nitrogen, Organic Dissolved	mg/L	03/24/2020	<	0.431
813	Nitrogen, Organic Dissolved	mg/L	06/16/2020	<	0.431
813	Nitrogen, Organic Dissolved	mg/L	09/16/2020		0.716
813	Nitrogen, Organic Dissolved	mg/L	10/28/2020	<	0.431
813	Nitrogen, Organic Dissolved	mg/L	03/23/2021	<	0.431
813	Nitrogen, Organic Dissolved	mg/L	06/22/2021	<	0.431
813	Nitrogen, Organic Dissolved	mg/L	09/08/2021	<	0.431
813	Nitrogen, Organic Dissolved	mg/L	10/11/2021		0.563
813	Nitrogen, Organic Dissolved	mg/L	03/08/2022	<	0.431
813	Nitrogen, Organic Dissolved	mg/L	06/15/2022		0.751
813	Nitrogen, Organic Dissolved	mg/L	09/13/2022	<	0.431
813	Nitrogen, Organic Dissolved	mg/L	10/20/2022	<	0.431
813	Nitrogen, Organic Dissolved	mg/L	03/23/2023	<	0.431
813	Nitrogen, Organic Dissolved	mg/L	06/15/2023		1.325
813	Nitrogen, Organic Dissolved	mg/L	09/19/2023	<	0.431
813	Nitrogen, Organic Dissolved	mg/L	12/12/2023		0.503
813	Nitrogen, Organic Dissolved	mg/L	03/18/2024	<	0.431
813	Nitrogen, Organic Dissolved	mg/L	06/17/2024	<	0.431
813	Nitrogen, Organic Dissolved	mg/L	09/23/2024	<	0.431
813	Nitrogen, Organic Dissolved	mg/L	12/10/2024		0.634

well	parameter	unit	date	result
813	pH Field	su	03/24/2020	7.7
813	pH Field	su	06/16/2020	7.55
813	pH Field	su	09/16/2020	7.45
813	pH Field	su	10/28/2020	7.61
813	pH Field	su	03/23/2021	7.92
813	pH Field	su	06/22/2021	7.93
813	pH Field	su	09/08/2021	7.9
813	pH Field	su	10/11/2021	7.99
813	pH Field	su	03/08/2022	8.19
813	pH Field	su	06/15/2022	8.44
813	pH Field	su	09/13/2022	8.14
813	pH Field	su	10/20/2022	7.81
813	pH Field	su	03/23/2023	7.97
813	pH Field	su	06/15/2023	7.62
813	pH Field	su	09/19/2023	7.82
813	pH Field	su	12/12/2023	8.47
813	pH Field	su	03/18/2024	8.26
813	pH Field	su	06/17/2024	5.84
813	pH Field	su	09/23/2024	7.6
813	pH Field	su	12/10/2024	7.46
813	Solids, Total Dissolved	mg/L	03/24/2020	416
813	Solids, Total Dissolved	mg/L	06/16/2020	413
813	Solids, Total Dissolved	mg/L	09/16/2020	603
813	Solids, Total Dissolved	mg/L	10/28/2020	607
813	Solids, Total Dissolved	mg/L	03/23/2021	617
813	Solids, Total Dissolved	mg/L	06/22/2021	350
813	Solids, Total Dissolved	mg/L	09/08/2021	357
813	Solids, Total Dissolved	mg/L	10/11/2021	393
813	Solids, Total Dissolved	mg/L	03/08/2022	317
813	Solids, Total Dissolved	mg/L	06/15/2022	340
813	Solids, Total Dissolved	mg/L	09/13/2022	437
813	Solids, Total Dissolved	mg/L	10/20/2022	483
813	Solids, Total Dissolved	mg/L	03/23/2023	427
813	Solids, Total Dissolved	mg/L	06/15/2023	403
813	Solids, Total Dissolved	mg/L	09/19/2023	613
813	Solids, Total Dissolved	mg/L	12/12/2023	607
813	Solids, Total Dissolved	mg/L	03/18/2024	493
813	Solids, Total Dissolved	mg/L	06/17/2024	310
813	Solids, Total Dissolved	mg/L	09/23/2024	480
813	Solids, Total Dissolved	mg/L	12/10/2024	566

well	parameter	unit	date		result
814	Chloride Dissolved	mg/L	03/24/2020		77
814	Chloride Dissolved	mg/L	06/16/2020		73
814	Chloride Dissolved	mg/L	09/16/2020		68
814	Chloride Dissolved	mg/L	10/28/2020		68
814	Chloride Dissolved	mg/L	03/23/2021		84
814	Chloride Dissolved	mg/L	06/22/2021		69
814	Chloride Dissolved	mg/L	09/08/2021		69
814	Chloride Dissolved	mg/L	10/11/2021		70
814	Chloride Dissolved	mg/L	03/08/2022		89
814	Chloride Dissolved	mg/L	06/15/2022		74
814	Chloride Dissolved	mg/L	09/13/2022		66
814	Chloride Dissolved	mg/L	10/20/2022		62
814	Chloride Dissolved	mg/L	03/23/2023		52
814	Chloride Dissolved	mg/L	06/15/2023		56
814	Chloride Dissolved	mg/L	09/19/2023		93
814	Chloride Dissolved	mg/L	12/12/2023		75
814	Chloride Dissolved	mg/L	03/18/2024		68
814	Chloride Dissolved	mg/L	06/17/2024		49
814	Chloride Dissolved	mg/L	09/23/2024		79
814	Chloride Dissolved	mg/L	12/10/2024		69
814	Nitrogen, Ammonia Dissolved	mg/L	03/24/2020	<	0.18
814	Nitrogen, Ammonia Dissolved	mg/L	06/16/2020	<	0.18
814	Nitrogen, Ammonia Dissolved	mg/L	09/16/2020	<	0.18
814	Nitrogen, Ammonia Dissolved	mg/L	10/28/2020	<	0.18
814	Nitrogen, Ammonia Dissolved	mg/L	03/23/2021	<	0.13
814	Nitrogen, Ammonia Dissolved	mg/L	06/22/2021	<	0.13
814	Nitrogen, Ammonia Dissolved	mg/L	09/08/2021	<	0.13
814	Nitrogen, Ammonia Dissolved	mg/L	10/11/2021	<	0.13
814	Nitrogen, Ammonia Dissolved	mg/L	03/08/2022	<	0.13
814	Nitrogen, Ammonia Dissolved	mg/L	06/15/2022	<	0.13
814	Nitrogen, Ammonia Dissolved	mg/L	09/13/2022	<	0.13
814	Nitrogen, Ammonia Dissolved	mg/L	10/20/2022	<	0.13
814	Nitrogen, Ammonia Dissolved	mg/L	03/23/2023	<	0.13
814	Nitrogen, Ammonia Dissolved	mg/L	06/15/2023	<	0.13
814	Nitrogen, Ammonia Dissolved	mg/L	09/19/2023	<	0.13
814	Nitrogen, Ammonia Dissolved	mg/L	12/12/2023	<	0.13
814	Nitrogen, Ammonia Dissolved	mg/L	03/18/2024		0.484
814	Nitrogen, Ammonia Dissolved	mg/L	06/17/2024	<	0.13
814	Nitrogen, Ammonia Dissolved	mg/L	09/23/2024	<	0.13
814	Nitrogen, Ammonia Dissolved	mg/L	12/10/2024	<	0.13

well	parameter	unit	date		result
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2020		12
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/16/2020		13
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/16/2020		10
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020		11
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2021		10
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2021		9.57
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/08/2021		11
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/11/2021		7.28
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/08/2022		7.49
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2022		10
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/13/2022		12
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022		11
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023		14
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2023		12
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/19/2023		9.74
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/12/2023		15
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/18/2024		51
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2024		13
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/23/2024		7.74
814	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/10/2024		6.33
814	Nitrogen, Organic Dissolved	mg/L	03/24/2020	<	0.431
814	Nitrogen, Organic Dissolved	mg/L	06/16/2020	<	0.431
814	Nitrogen, Organic Dissolved	mg/L	09/16/2020		0.489
814	Nitrogen, Organic Dissolved	mg/L	10/28/2020	<	0.431
814	Nitrogen, Organic Dissolved	mg/L	03/23/2021	<	0.431
814	Nitrogen, Organic Dissolved	mg/L	06/22/2021	<	0.431
814	Nitrogen, Organic Dissolved	mg/L	09/08/2021	<	0.431
814	Nitrogen, Organic Dissolved	mg/L	10/11/2021	<	0.431
814	Nitrogen, Organic Dissolved	mg/L	03/08/2022	<	0.431
814	Nitrogen, Organic Dissolved	mg/L	06/15/2022	<	0.431
814	Nitrogen, Organic Dissolved	mg/L	09/13/2022	<	0.431
814	Nitrogen, Organic Dissolved	mg/L	10/20/2022	<	0.431
814	Nitrogen, Organic Dissolved	mg/L	03/23/2023	<	0.431
814	Nitrogen, Organic Dissolved	mg/L	06/15/2023	<	0.431
814	Nitrogen, Organic Dissolved	mg/L	09/19/2023	<	0.431
814	Nitrogen, Organic Dissolved	mg/L	12/12/2023		0.645
814	Nitrogen, Organic Dissolved	mg/L	03/18/2024	<	0.431
814	Nitrogen, Organic Dissolved	mg/L	06/17/2024	<	0.431
814	Nitrogen, Organic Dissolved	mg/L	09/23/2024	<	0.431
814	Nitrogen, Organic Dissolved	mg/L	12/10/2024	<	0.431

well	parameter	unit	date	result
814	pH Field	su	03/24/2020	7.35
814	pH Field	su	06/16/2020	7.41
814	pH Field	su	09/16/2020	7.2
814	pH Field	su	10/28/2020	7.4
814	pH Field	su	03/23/2021	7.54
814	pH Field	su	06/22/2021	7.45
814	pH Field	su	09/08/2021	7.6
814	pH Field	su	10/11/2021	7.63
814	pH Field	su	03/08/2022	7.56
814	pH Field	su	06/15/2022	7.75
814	pH Field	su	09/13/2022	7.68
814	pH Field	su	10/20/2022	7.44
814	pH Field	su	03/23/2023	7.58
814	pH Field	su	06/15/2023	7.5
814	pH Field	su	09/19/2023	7.98
814	pH Field	su	12/12/2023	7.6
814	pH Field	su	03/18/2024	7.8
814	pH Field	su	06/17/2024	7.69
814	pH Field	su	09/23/2024	7.44
814	pH Field	su	12/10/2024	7.47
814	Solids, Total Dissolved	mg/L	03/24/2020	640
814	Solids, Total Dissolved	mg/L	06/16/2020	590
814	Solids, Total Dissolved	mg/L	09/16/2020	697
814	Solids, Total Dissolved	mg/L	10/28/2020	547
814	Solids, Total Dissolved	mg/L	03/23/2021	570
814	Solids, Total Dissolved	mg/L	06/22/2021	570
814	Solids, Total Dissolved	mg/L	09/08/2021	477
814	Solids, Total Dissolved	mg/L	10/11/2021	687
814	Solids, Total Dissolved	mg/L	03/08/2022	580
814	Solids, Total Dissolved	mg/L	06/15/2022	510
814	Solids, Total Dissolved	mg/L	09/13/2022	563
814	Solids, Total Dissolved	mg/L	10/20/2022	473
814	Solids, Total Dissolved	mg/L	03/23/2023	543
814	Solids, Total Dissolved	mg/L	06/15/2023	467
814	Solids, Total Dissolved	mg/L	09/19/2023	567
814	Solids, Total Dissolved	mg/L	12/12/2023	510
814	Solids, Total Dissolved	mg/L	03/18/2024	527
814	Solids, Total Dissolved	mg/L	06/17/2024	470
814	Solids, Total Dissolved	mg/L	09/23/2024	610
814	Solids, Total Dissolved	mg/L	12/10/2024	500

well	parameter	unit	date		result
815	Chloride Dissolved	mg/L	03/24/2020		26
815	Chloride Dissolved	mg/L	06/16/2020		27
815	Chloride Dissolved	mg/L	09/16/2020		16
815	Chloride Dissolved	mg/L	10/28/2020		15
815	Chloride Dissolved	mg/L	03/23/2021		17
815	Chloride Dissolved	mg/L	06/22/2021		29
815	Chloride Dissolved	mg/L	09/08/2021		60
815	Chloride Dissolved	mg/L	10/11/2021		59
815	Chloride Dissolved	mg/L	03/08/2022		56
815	Chloride Dissolved	mg/L	06/15/2022		76
815	Chloride Dissolved	mg/L	09/13/2022		64
815	Chloride Dissolved	mg/L	10/20/2022		74
815	Chloride Dissolved	mg/L	03/23/2023		55
815	Chloride Dissolved	mg/L	06/15/2023		35
815	Chloride Dissolved	mg/L	09/19/2023		38
815	Chloride Dissolved	mg/L	12/12/2023		33
815	Chloride Dissolved	mg/L	03/18/2024		30
815	Chloride Dissolved	mg/L	06/17/2024		35
815	Chloride Dissolved	mg/L	09/23/2024		50
815	Chloride Dissolved	mg/L	12/10/2024		39
			Mean		41.7
			St Dev		18.34693
815	Nitrogen, Ammonia Dissolved	mg/L	03/24/2020	<	0.18
815	Nitrogen, Ammonia Dissolved	mg/L	06/16/2020	<	0.18
815	Nitrogen, Ammonia Dissolved	mg/L	09/16/2020	<	0.18
815	Nitrogen, Ammonia Dissolved	mg/L	10/28/2020	<	0.18
815	Nitrogen, Ammonia Dissolved	mg/L	03/23/2021	<	0.13
815	Nitrogen, Ammonia Dissolved	mg/L	06/22/2021	<	0.13
815	Nitrogen, Ammonia Dissolved	mg/L	09/08/2021	<	0.13
815	Nitrogen, Ammonia Dissolved	mg/L	10/11/2021	<	0.13
815	Nitrogen, Ammonia Dissolved	mg/L	03/08/2022	<	0.13
815	Nitrogen, Ammonia Dissolved	mg/L	06/15/2022	<	0.13
815	Nitrogen, Ammonia Dissolved	mg/L	09/13/2022	<	0.13
815	Nitrogen, Ammonia Dissolved	mg/L	10/20/2022	<	0.13
815	Nitrogen, Ammonia Dissolved	mg/L	03/23/2023	<	0.13
815	Nitrogen, Ammonia Dissolved	mg/L	06/15/2023	<	0.13
815	Nitrogen, Ammonia Dissolved	mg/L	09/19/2023	<	0.13
815	Nitrogen, Ammonia Dissolved	mg/L	12/12/2023	<	0.13
815	Nitrogen, Ammonia Dissolved	mg/L	03/18/2024	<	0.13
815	Nitrogen, Ammonia Dissolved	mg/L	06/17/2024	<	0.13
815	Nitrogen, Ammonia Dissolved	mg/L	09/23/2024	<	0.13
815	Nitrogen, Ammonia Dissolved	mg/L	12/10/2024	<	0.13
			Mean		0.14
			St Dev		0.02

well	parameter	unit	date		result
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2020		20
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/16/2020		20
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/16/2020		16
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020		15
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2021		14
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2021		14
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/08/2021		19
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/11/2021		20
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/08/2022		21
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2022		24
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/13/2022		26
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022		27
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023		27
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2023		21
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/19/2023		44
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/12/2023		25
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/18/2024		24
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2024		22
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/23/2024		23
815	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/10/2024		21
			Mean		22.15
			St Dev		6.342515
815	Nitrogen, Organic Dissolved	mg/L	03/24/2020	<	0.431
815	Nitrogen, Organic Dissolved	mg/L	06/16/2020	<	0.431
815	Nitrogen, Organic Dissolved	mg/L	09/16/2020		0.597
815	Nitrogen, Organic Dissolved	mg/L	10/28/2020	<	0.431
815	Nitrogen, Organic Dissolved	mg/L	03/23/2021	<	0.431
815	Nitrogen, Organic Dissolved	mg/L	06/22/2021	<	0.431
815	Nitrogen, Organic Dissolved	mg/L	09/08/2021	<	0.431
815	Nitrogen, Organic Dissolved	mg/L	10/11/2021	<	0.431
815	Nitrogen, Organic Dissolved	mg/L	03/08/2022	<	0.431
815	Nitrogen, Organic Dissolved	mg/L	06/15/2022	<	0.431
815	Nitrogen, Organic Dissolved	mg/L	09/13/2022	<	0.431
815	Nitrogen, Organic Dissolved	mg/L	10/20/2022	<	0.431
815	Nitrogen, Organic Dissolved	mg/L	03/23/2023	<	0.431
815	Nitrogen, Organic Dissolved	mg/L	06/15/2023	<	0.431
815	Nitrogen, Organic Dissolved	mg/L	09/19/2023	<	0.431
815	Nitrogen, Organic Dissolved	mg/L	12/12/2023		0.551
815	Nitrogen, Organic Dissolved	mg/L	03/18/2024	<	0.431
815	Nitrogen, Organic Dissolved	mg/L	06/17/2024	<	0.431
815	Nitrogen, Organic Dissolved	mg/L	09/23/2024	<	0.431
815	Nitrogen, Organic Dissolved	mg/L	12/10/2024	<	0.431
			Mean		0.4453
			St Dev		0.043512

well	parameter	unit	date	result
815	pH Field	su	03/24/2020	8.19
815	pH Field	su	06/16/2020	8.17
815	pH Field	su	09/16/2020	7.98
815	pH Field	su	10/28/2020	8.12
815	pH Field	su	03/23/2021	8.31
815	pH Field	su	06/22/2021	8.32
815	pH Field	su	09/08/2021	8.4
815	pH Field	su	10/11/2021	8.39
815	pH Field	su	03/08/2022	8.29
815	pH Field	su	06/15/2022	8.45
815	pH Field	su	09/13/2022	8.5
815	pH Field	su	10/20/2022	8.21
815	pH Field	su	03/23/2023	8.19
815	pH Field	su	06/15/2023	8.18
815	pH Field	su	09/19/2023	8.17
815	pH Field	su	12/12/2023	9
815	pH Field	su	03/18/2024	8.63
815	pH Field	su	06/17/2024	5.33
815	pH Field	su	09/23/2024	8.08
815	pH Field	su	12/10/2024	8.35
			Mean	8.163
				0.685267
815	Solids, Total Dissolved	mg/L	03/24/2020	568
815	Solids, Total Dissolved	mg/L	06/16/2020	397
815	Solids, Total Dissolved	mg/L	09/16/2020	553
815	Solids, Total Dissolved	mg/L	10/28/2020	190
815	Solids, Total Dissolved	mg/L	03/23/2021	323
815	Solids, Total Dissolved	mg/L	06/22/2021	297
815	Solids, Total Dissolved	mg/L	09/08/2021	297
815	Solids, Total Dissolved	mg/L	10/11/2021	513
815	Solids, Total Dissolved	mg/L	03/08/2022	390
815	Solids, Total Dissolved	mg/L	06/15/2022	500
815	Solids, Total Dissolved	mg/L	09/13/2022	593
815	Solids, Total Dissolved	mg/L	10/20/2022	450
815	Solids, Total Dissolved	mg/L	03/23/2023	440
815	Solids, Total Dissolved	mg/L	06/15/2023	387
815	Solids, Total Dissolved	mg/L	09/19/2023	337
815	Solids, Total Dissolved	mg/L	12/12/2023	283
815	Solids, Total Dissolved	mg/L	03/18/2024	413
815	Solids, Total Dissolved	mg/L	06/17/2024	370
815	Solids, Total Dissolved	mg/L	09/23/2024	453
815	Solids, Total Dissolved	mg/L	12/10/2024	373
			Mean	406.35
			St Dev	102.1603

well	parameter	unit	date		result
827	Chloride Dissolved	mg/L	03/24/2020		14
827	Chloride Dissolved	mg/L	06/16/2020		29
827	Chloride Dissolved	mg/L	09/16/2020		24
827	Chloride Dissolved	mg/L	10/28/2020		21
827	Chloride Dissolved	mg/L	03/23/2021		14
827	Chloride Dissolved	mg/L	06/22/2021		27
827	Chloride Dissolved	mg/L	09/08/2021		32
827	Chloride Dissolved	mg/L	10/11/2021		20
827	Chloride Dissolved	mg/L	03/08/2022		8.01
827	Chloride Dissolved	mg/L	06/15/2022		17
827	Chloride Dissolved	mg/L	09/13/2022		31
827	Chloride Dissolved	mg/L	10/20/2022		31
827	Chloride Dissolved	mg/L	03/23/2023		15
827	Chloride Dissolved	mg/L	06/15/2023		21
827	Chloride Dissolved	mg/L	09/19/2023		32
827	Chloride Dissolved	mg/L	12/12/2023		39
827	Chloride Dissolved	mg/L	03/18/2024		26
827	Chloride Dissolved	mg/L	06/17/2024		37
827	Chloride Dissolved	mg/L	09/23/2024		50
827	Chloride Dissolved	mg/L	12/10/2024		19
			Mean		25.3505
			St Dev		9.854448
827	Nitrogen, Ammonia Dissolved	mg/L	03/24/2020	<	0.18
827	Nitrogen, Ammonia Dissolved	mg/L	06/16/2020	<	0.18
827	Nitrogen, Ammonia Dissolved	mg/L	09/16/2020	<	0.18
827	Nitrogen, Ammonia Dissolved	mg/L	10/28/2020	<	0.18
827	Nitrogen, Ammonia Dissolved	mg/L	03/23/2021	<	0.13
827	Nitrogen, Ammonia Dissolved	mg/L	06/22/2021	<	0.13
827	Nitrogen, Ammonia Dissolved	mg/L	09/08/2021	<	0.13
827	Nitrogen, Ammonia Dissolved	mg/L	10/11/2021	<	0.13
827	Nitrogen, Ammonia Dissolved	mg/L	03/08/2022	<	0.13
827	Nitrogen, Ammonia Dissolved	mg/L	06/15/2022	<	0.13
827	Nitrogen, Ammonia Dissolved	mg/L	09/13/2022	<	0.13
827	Nitrogen, Ammonia Dissolved	mg/L	10/20/2022	<	0.13
827	Nitrogen, Ammonia Dissolved	mg/L	03/23/2023	<	0.13
827	Nitrogen, Ammonia Dissolved	mg/L	06/15/2023	<	0.13
827	Nitrogen, Ammonia Dissolved	mg/L	09/19/2023	<	0.13
827	Nitrogen, Ammonia Dissolved	mg/L	12/12/2023	<	0.13
827	Nitrogen, Ammonia Dissolved	mg/L	03/18/2024	<	0.13
827	Nitrogen, Ammonia Dissolved	mg/L	06/17/2024	<	0.13
827	Nitrogen, Ammonia Dissolved	mg/L	09/23/2024		3.236
827	Nitrogen, Ammonia Dissolved	mg/L	12/10/2024	<	0.13
			Mean		0.2953
			St Dev		0.674935

well	parameter	unit	date		result
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2020		0.88
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/16/2020		0.62
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/16/2020		0.53
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020		0.41
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2021		0.56
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2021		0.53
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/08/2021		0.86
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/11/2021		0.55
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/08/2022		0.51
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2022		0.62
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/13/2022		0.93
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022		0.62
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023		0.71
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2023		0.59
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/19/2023		0.68
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/12/2023		0.87
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/18/2024		0.58
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2024		0.6
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/23/2024		0.85
827	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/10/2024		0.47
			Mean		0.6485
			St Dev		0.148063
827	Nitrogen, Organic Dissolved	mg/L	03/24/2020	<	0.431
827	Nitrogen, Organic Dissolved	mg/L	06/16/2020	<	0.431
827	Nitrogen, Organic Dissolved	mg/L	09/16/2020		0.583
827	Nitrogen, Organic Dissolved	mg/L	10/28/2020	<	0.431
827	Nitrogen, Organic Dissolved	mg/L	03/23/2021	<	0.431
827	Nitrogen, Organic Dissolved	mg/L	06/22/2021	<	0.431
827	Nitrogen, Organic Dissolved	mg/L	09/08/2021	<	0.431
827	Nitrogen, Organic Dissolved	mg/L	10/11/2021		0.542
827	Nitrogen, Organic Dissolved	mg/L	03/08/2022	<	0.431
827	Nitrogen, Organic Dissolved	mg/L	06/15/2022	<	0.431
827	Nitrogen, Organic Dissolved	mg/L	09/13/2022	<	0.431
827	Nitrogen, Organic Dissolved	mg/L	10/20/2022	<	0.431
827	Nitrogen, Organic Dissolved	mg/L	03/23/2023	<	0.431
827	Nitrogen, Organic Dissolved	mg/L	06/15/2023	<	0.431
827	Nitrogen, Organic Dissolved	mg/L	09/19/2023	<	0.431
827	Nitrogen, Organic Dissolved	mg/L	12/12/2023		0.743
827	Nitrogen, Organic Dissolved	mg/L	03/18/2024	<	0.431
827	Nitrogen, Organic Dissolved	mg/L	06/17/2024	<	0.431
827	Nitrogen, Organic Dissolved	mg/L	09/23/2024		6.46
827	Nitrogen, Organic Dissolved	mg/L	12/10/2024	<	0.431
			Mean		0.7612
			St Dev		1.309599

well	parameter	unit	date	result
827	pH Field	su	03/24/2020	8.1
827	pH Field	su	06/16/2020	8.34
827	pH Field	su	09/16/2020	7.54
827	pH Field	su	10/28/2020	7.67
827	pH Field	su	03/23/2021	8.12
827	pH Field	su	06/22/2021	8.06
827	pH Field	su	09/08/2021	8.1
827	pH Field	su	10/11/2021	7.86
827	pH Field	su	03/08/2022	8.37
827	pH Field	su	06/15/2022	8.54
827	pH Field	su	09/13/2022	8.95
827	pH Field	su	10/20/2022	8.35
827	pH Field	su	03/23/2023	8.3
827	pH Field	su	06/15/2023	8.08
827	pH Field	su	09/19/2023	8.51
827	pH Field	su	12/12/2023	8
827	pH Field	su	03/18/2024	9
827	pH Field	su	06/17/2024	3.26
827	pH Field	su	09/23/2024	8.17
827	pH Field	su	12/10/2024	7.73
			Mean	7.9525
827	Solids, Total Dissolved	mg/L	03/24/2020	596
827	Solids, Total Dissolved	mg/L	06/16/2020	240
827	Solids, Total Dissolved	mg/L	09/16/2020	203
827	Solids, Total Dissolved	mg/L	10/28/2020	280
827	Solids, Total Dissolved	mg/L	03/23/2021	213
827	Solids, Total Dissolved	mg/L	06/22/2021	280
827	Solids, Total Dissolved	mg/L	09/08/2021	260
827	Solids, Total Dissolved	mg/L	10/11/2021	517
827	Solids, Total Dissolved	mg/L	03/08/2022	253
827	Solids, Total Dissolved	mg/L	06/15/2022	420
827	Solids, Total Dissolved	mg/L	09/13/2022	233
827	Solids, Total Dissolved	mg/L	10/20/2022	550
827	Solids, Total Dissolved	mg/L	03/23/2023	200
827	Solids, Total Dissolved	mg/L	06/15/2023	293
827	Solids, Total Dissolved	mg/L	09/19/2023	280
827	Solids, Total Dissolved	mg/L	12/12/2023	430
827	Solids, Total Dissolved	mg/L	03/18/2024	260
827	Solids, Total Dissolved	mg/L	06/17/2024	373
827	Solids, Total Dissolved	mg/L	09/23/2024	290
827	Solids, Total Dissolved	mg/L	12/10/2024	766
			Mean	346.85
			St Dev	149.8193

well	parameter	unit	date		result
828	Chloride Dissolved	mg/L	03/24/2020		44
828	Chloride Dissolved	mg/L	06/16/2020		40
828	Chloride Dissolved	mg/L	09/16/2020		45
828	Chloride Dissolved	mg/L	10/28/2020		46
828	Chloride Dissolved	mg/L	03/23/2021		41
828	Chloride Dissolved	mg/L	06/22/2021		42
828	Chloride Dissolved	mg/L	09/08/2021		45
828	Chloride Dissolved	mg/L	10/11/2021		39
828	Chloride Dissolved	mg/L	03/08/2022		44
828	Chloride Dissolved	mg/L	06/15/2022		43
828	Chloride Dissolved	mg/L	09/13/2022		58
828	Chloride Dissolved	mg/L	10/20/2022		60
828	Chloride Dissolved	mg/L	03/23/2023		83
828	Chloride Dissolved	mg/L	06/15/2023		64
828	Chloride Dissolved	mg/L	09/19/2023		75
828	Chloride Dissolved	mg/L	12/12/2023		138
828	Chloride Dissolved	mg/L	03/18/2024		79
828	Chloride Dissolved	mg/L	06/17/2024		66
828	Chloride Dissolved	mg/L	09/23/2024		80
828	Chloride Dissolved	mg/L	12/10/2024		45
828	Nitrogen, Ammonia Dissolved	mg/L	03/24/2020	<	0.18
828	Nitrogen, Ammonia Dissolved	mg/L	06/16/2020	<	0.18
828	Nitrogen, Ammonia Dissolved	mg/L	09/16/2020	<	0.18
828	Nitrogen, Ammonia Dissolved	mg/L	10/28/2020	<	0.18
828	Nitrogen, Ammonia Dissolved	mg/L	03/23/2021	<	0.13
828	Nitrogen, Ammonia Dissolved	mg/L	06/22/2021	<	0.13
828	Nitrogen, Ammonia Dissolved	mg/L	09/08/2021	<	0.13
828	Nitrogen, Ammonia Dissolved	mg/L	10/11/2021	<	0.13
828	Nitrogen, Ammonia Dissolved	mg/L	03/08/2022	<	0.13
828	Nitrogen, Ammonia Dissolved	mg/L	06/15/2022	<	0.13
828	Nitrogen, Ammonia Dissolved	mg/L	09/13/2022	<	0.13
828	Nitrogen, Ammonia Dissolved	mg/L	10/20/2022		0.178
828	Nitrogen, Ammonia Dissolved	mg/L	03/23/2023	<	0.13
828	Nitrogen, Ammonia Dissolved	mg/L	06/15/2023	<	0.13
828	Nitrogen, Ammonia Dissolved	mg/L	09/19/2023	<	0.13
828	Nitrogen, Ammonia Dissolved	mg/L	12/12/2023	<	0.13
828	Nitrogen, Ammonia Dissolved	mg/L	03/18/2024	<	0.13
828	Nitrogen, Ammonia Dissolved	mg/L	06/17/2024	<	0.13
828	Nitrogen, Ammonia Dissolved	mg/L	09/23/2024	<	0.13
828	Nitrogen, Ammonia Dissolved	mg/L	12/10/2024	<	0.13

well	parameter	unit	date		result
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2020		12
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/16/2020		10
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/16/2020		10
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020		9.83
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2021		9.19
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2021		7.89
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/08/2021		8.76
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/11/2021		7.76
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/08/2022		9.69
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2022		10
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/13/2022		14
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022		14
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023		4.69
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2023		7.26
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/19/2023		8.56
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/12/2023		6.67
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/18/2024		13
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2024		13
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/23/2024		14
828	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/10/2024		9.86
828	Nitrogen, Organic Dissolved	mg/L	03/24/2020	<	0.431
828	Nitrogen, Organic Dissolved	mg/L	06/16/2020	<	0.431
828	Nitrogen, Organic Dissolved	mg/L	09/16/2020	<	0.431
828	Nitrogen, Organic Dissolved	mg/L	10/28/2020	<	0.431
828	Nitrogen, Organic Dissolved	mg/L	03/23/2021	<	0.431
828	Nitrogen, Organic Dissolved	mg/L	06/22/2021	<	0.431
828	Nitrogen, Organic Dissolved	mg/L	09/08/2021	<	0.431
828	Nitrogen, Organic Dissolved	mg/L	10/11/2021	<	0.431
828	Nitrogen, Organic Dissolved	mg/L	03/08/2022	<	0.431
828	Nitrogen, Organic Dissolved	mg/L	06/15/2022	<	0.431
828	Nitrogen, Organic Dissolved	mg/L	09/13/2022	<	0.431
828	Nitrogen, Organic Dissolved	mg/L	10/20/2022	<	0.431
828	Nitrogen, Organic Dissolved	mg/L	03/23/2023	<	0.431
828	Nitrogen, Organic Dissolved	mg/L	06/15/2023	<	0.431
828	Nitrogen, Organic Dissolved	mg/L	09/19/2023	<	0.431
828	Nitrogen, Organic Dissolved	mg/L	12/12/2023		0.612
828	Nitrogen, Organic Dissolved	mg/L	03/18/2024	<	0.431
828	Nitrogen, Organic Dissolved	mg/L	06/17/2024	<	0.431
828	Nitrogen, Organic Dissolved	mg/L	09/23/2024	<	0.431
828	Nitrogen, Organic Dissolved	mg/L	12/10/2024	<	0.431

well	parameter	unit	date	result
828	pH Field	su	03/24/2020	7.55
828	pH Field	su	06/16/2020	7.63
828	pH Field	su	09/16/2020	7.24
828	pH Field	su	10/28/2020	7.75
828	pH Field	su	03/23/2021	7.82
828	pH Field	su	06/22/2021	7.85
828	pH Field	su	09/08/2021	7.8
828	pH Field	su	10/11/2021	7.95
828	pH Field	su	03/08/2022	8.05
828	pH Field	su	06/15/2022	8.24
828	pH Field	su	09/13/2022	7.91
828	pH Field	su	10/20/2022	7.62
828	pH Field	su	03/23/2023	7.79
828	pH Field	su	06/15/2023	7.69
828	pH Field	su	09/19/2023	7.6
828	pH Field	su	12/12/2023	7.85
828	pH Field	su	03/18/2024	8.07
828	pH Field	su	06/17/2024	8.17
828	pH Field	su	09/23/2024	7.44
828	pH Field	su	12/10/2024	7.42
828	Solids, Total Dissolved	mg/L	03/24/2020	400
828	Solids, Total Dissolved	mg/L	06/16/2020	447
828	Solids, Total Dissolved	mg/L	09/16/2020	477
828	Solids, Total Dissolved	mg/L	10/28/2020	853
828	Solids, Total Dissolved	mg/L	03/23/2021	400
828	Solids, Total Dissolved	mg/L	06/22/2021	350
828	Solids, Total Dissolved	mg/L	09/08/2021	367
828	Solids, Total Dissolved	mg/L	10/11/2021	363
828	Solids, Total Dissolved	mg/L	03/08/2022	333
828	Solids, Total Dissolved	mg/L	06/15/2022	340
828	Solids, Total Dissolved	mg/L	09/13/2022	430
828	Solids, Total Dissolved	mg/L	10/20/2022	330
828	Solids, Total Dissolved	mg/L	03/23/2023	483
828	Solids, Total Dissolved	mg/L	06/15/2023	423
828	Solids, Total Dissolved	mg/L	09/19/2023	557
828	Solids, Total Dissolved	mg/L	12/12/2023	493
828	Solids, Total Dissolved	mg/L	03/18/2024	493
828	Solids, Total Dissolved	mg/L	06/17/2024	620
828	Solids, Total Dissolved	mg/L	09/23/2024	563
828	Solids, Total Dissolved	mg/L	12/10/2024	566

well	parameter	unit	date		result
829	Chloride Dissolved	mg/L	03/24/2020		26
829	Chloride Dissolved	mg/L	06/16/2020		38
829	Chloride Dissolved	mg/L	09/16/2020		33
829	Chloride Dissolved	mg/L	10/28/2020		33
829	Chloride Dissolved	mg/L	03/23/2021		34
829	Chloride Dissolved	mg/L	06/22/2021		35
829	Chloride Dissolved	mg/L	09/08/2021		33
829	Chloride Dissolved	mg/L	10/11/2021		28
829	Chloride Dissolved	mg/L	03/08/2022		27
829	Chloride Dissolved	mg/L	06/15/2022		30
829	Chloride Dissolved	mg/L	09/13/2022		32
829	Chloride Dissolved	mg/L	10/20/2022		35
829	Chloride Dissolved	mg/L	03/23/2023		34
829	Chloride Dissolved	mg/L	06/15/2023		29
829	Chloride Dissolved	mg/L	09/19/2023		34
829	Chloride Dissolved	mg/L	12/12/2023		37
829	Chloride Dissolved	mg/L	03/18/2024		38
829	Chloride Dissolved	mg/L	06/17/2024		40
829	Chloride Dissolved	mg/L	09/23/2024		55
829	Chloride Dissolved	mg/L	12/10/2024		41
829	Nitrogen, Ammonia Dissolved	mg/L	03/24/2020	<	0.18
829	Nitrogen, Ammonia Dissolved	mg/L	06/16/2020	<	0.18
829	Nitrogen, Ammonia Dissolved	mg/L	09/16/2020	<	0.18
829	Nitrogen, Ammonia Dissolved	mg/L	10/28/2020	<	0.18
829	Nitrogen, Ammonia Dissolved	mg/L	03/23/2021	<	0.13
829	Nitrogen, Ammonia Dissolved	mg/L	06/22/2021	<	0.13
829	Nitrogen, Ammonia Dissolved	mg/L	09/08/2021	<	0.13
829	Nitrogen, Ammonia Dissolved	mg/L	10/11/2021	<	0.13
829	Nitrogen, Ammonia Dissolved	mg/L	03/08/2022	<	0.13
829	Nitrogen, Ammonia Dissolved	mg/L	06/15/2022	<	0.13
829	Nitrogen, Ammonia Dissolved	mg/L	09/13/2022	<	0.13
829	Nitrogen, Ammonia Dissolved	mg/L	10/20/2022	<	0.13
829	Nitrogen, Ammonia Dissolved	mg/L	03/23/2023	<	0.13
829	Nitrogen, Ammonia Dissolved	mg/L	06/15/2023	<	0.13
829	Nitrogen, Ammonia Dissolved	mg/L	09/19/2023	<	0.13
829	Nitrogen, Ammonia Dissolved	mg/L	12/12/2023	<	0.13
829	Nitrogen, Ammonia Dissolved	mg/L	03/18/2024	<	0.13
829	Nitrogen, Ammonia Dissolved	mg/L	06/17/2024	<	0.13
829	Nitrogen, Ammonia Dissolved	mg/L	09/23/2024	<	0.13
829	Nitrogen, Ammonia Dissolved	mg/L	12/10/2024	<	0.13

well	parameter	unit	date		result
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2020		3.71
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/16/2020		5.35
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/16/2020		4.41
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020		4.27
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2021		5.77
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2021		4.98
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/08/2021		4.64
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/11/2021		4.49
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/08/2022		4.4
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2022		4.33
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/13/2022		4.39
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022		4.67
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023		5.77
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2023		6.64
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/19/2023		8.17
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/12/2023		6.78
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/18/2024		22
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2024		5.04
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/23/2024		4.09
829	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/10/2024		4.85
829	Nitrogen, Organic Dissolved	mg/L	03/24/2020	<	0.431
829	Nitrogen, Organic Dissolved	mg/L	06/16/2020	<	0.431
829	Nitrogen, Organic Dissolved	mg/L	09/16/2020	<	0.431
829	Nitrogen, Organic Dissolved	mg/L	10/28/2020		0.74
829	Nitrogen, Organic Dissolved	mg/L	03/23/2021	<	0.431
829	Nitrogen, Organic Dissolved	mg/L	06/22/2021	<	0.431
829	Nitrogen, Organic Dissolved	mg/L	09/08/2021	<	0.431
829	Nitrogen, Organic Dissolved	mg/L	10/11/2021	<	0.431
829	Nitrogen, Organic Dissolved	mg/L	03/08/2022	<	0.431
829	Nitrogen, Organic Dissolved	mg/L	06/15/2022	<	0.431
829	Nitrogen, Organic Dissolved	mg/L	09/13/2022	<	0.431
829	Nitrogen, Organic Dissolved	mg/L	10/20/2022	<	0.431
829	Nitrogen, Organic Dissolved	mg/L	03/23/2023	<	0.431
829	Nitrogen, Organic Dissolved	mg/L	06/15/2023	<	0.431
829	Nitrogen, Organic Dissolved	mg/L	09/19/2023	<	0.431
829	Nitrogen, Organic Dissolved	mg/L	12/12/2023		5.161
829	Nitrogen, Organic Dissolved	mg/L	03/18/2024	<	0.431
829	Nitrogen, Organic Dissolved	mg/L	06/17/2024	<	0.431
829	Nitrogen, Organic Dissolved	mg/L	09/23/2024	<	0.431
829	Nitrogen, Organic Dissolved	mg/L	12/10/2024		1.082

well	parameter	unit	date	result
829	pH Field	su	03/24/2020	8
829	pH Field	su	06/16/2020	7.93
829	pH Field	su	09/16/2020	7.41
829	pH Field	su	10/28/2020	7.81
829	pH Field	su	03/23/2021	7.91
829	pH Field	su	06/22/2021	8
829	pH Field	su	09/08/2021	8
829	pH Field	su	10/11/2021	8.15
829	pH Field	su	03/08/2022	8.05
829	pH Field	su	06/15/2022	8.04
829	pH Field	su	09/13/2022	8.07
829	pH Field	su	10/20/2022	7.77
829	pH Field	su	03/23/2023	7.68
829	pH Field	su	06/15/2023	7.53
829	pH Field	su	09/19/2023	7.98
829	pH Field	su	12/12/2023	8.36
829	pH Field	su	03/18/2024	8.05
829	pH Field	su	06/17/2024	8.31
829	pH Field	su	09/23/2024	7.51
829	pH Field	su	12/10/2024	7.88
829	Solids, Total Dissolved	mg/L	03/24/2020	880
829	Solids, Total Dissolved	mg/L	06/16/2020	313
829	Solids, Total Dissolved	mg/L	09/16/2020	283
829	Solids, Total Dissolved	mg/L	10/28/2020	360
829	Solids, Total Dissolved	mg/L	03/23/2021	273
829	Solids, Total Dissolved	mg/L	06/22/2021	217
829	Solids, Total Dissolved	mg/L	09/08/2021	257
829	Solids, Total Dissolved	mg/L	10/11/2021	220
829	Solids, Total Dissolved	mg/L	03/08/2022	300
829	Solids, Total Dissolved	mg/L	06/15/2022	247
829	Solids, Total Dissolved	mg/L	09/13/2022	273
829	Solids, Total Dissolved	mg/L	10/20/2022	227
829	Solids, Total Dissolved	mg/L	03/23/2023	257
829	Solids, Total Dissolved	mg/L	06/15/2023	323
829	Solids, Total Dissolved	mg/L	09/19/2023	333
829	Solids, Total Dissolved	mg/L	12/12/2023	390
829	Solids, Total Dissolved	mg/L	03/18/2024	357
829	Solids, Total Dissolved	mg/L	06/17/2024	773
829	Solids, Total Dissolved	mg/L	09/23/2024	630
829	Solids, Total Dissolved	mg/L	12/10/2024	294

well	parameter	unit	date		result
830	Chloride Dissolved	mg/L	03/24/2020		14
830	Chloride Dissolved	mg/L	06/16/2020		15
830	Chloride Dissolved	mg/L	09/16/2020		15
830	Chloride Dissolved	mg/L	10/28/2020		16
830	Chloride Dissolved	mg/L	03/23/2021		15
830	Chloride Dissolved	mg/L	06/22/2021		15
830	Chloride Dissolved	mg/L	09/08/2021		16
830	Chloride Dissolved	mg/L	10/11/2021		15
830	Chloride Dissolved	mg/L	03/08/2022		14
830	Chloride Dissolved	mg/L	06/15/2022		14
830	Chloride Dissolved	mg/L	09/13/2022		14
830	Chloride Dissolved	mg/L	10/20/2022		14
830	Chloride Dissolved	mg/L	03/23/2023		15
830	Chloride Dissolved	mg/L	06/15/2023		14
830	Chloride Dissolved	mg/L	09/19/2023		14
830	Chloride Dissolved	mg/L	03/18/2024		14
830	Chloride Dissolved	mg/L	06/17/2024		13
830	Chloride Dissolved	mg/L	09/23/2024		15
830	Chloride Dissolved	mg/L	12/10/2024		15
830	Nitrogen, Ammonia Dissolved	mg/L	03/24/2020	<	0.18
830	Nitrogen, Ammonia Dissolved	mg/L	06/16/2020	<	0.18
830	Nitrogen, Ammonia Dissolved	mg/L	09/16/2020	<	0.18
830	Nitrogen, Ammonia Dissolved	mg/L	10/28/2020	<	0.18
830	Nitrogen, Ammonia Dissolved	mg/L	03/23/2021	<	0.13
830	Nitrogen, Ammonia Dissolved	mg/L	06/22/2021	<	0.13
830	Nitrogen, Ammonia Dissolved	mg/L	09/08/2021	<	0.13
830	Nitrogen, Ammonia Dissolved	mg/L	10/11/2021	<	0.13
830	Nitrogen, Ammonia Dissolved	mg/L	03/08/2022	<	0.13
830	Nitrogen, Ammonia Dissolved	mg/L	06/15/2022	<	0.13
830	Nitrogen, Ammonia Dissolved	mg/L	09/13/2022	<	0.13
830	Nitrogen, Ammonia Dissolved	mg/L	10/20/2022	<	0.13
830	Nitrogen, Ammonia Dissolved	mg/L	03/23/2023	<	0.13
830	Nitrogen, Ammonia Dissolved	mg/L	06/15/2023		0.762
830	Nitrogen, Ammonia Dissolved	mg/L	09/19/2023	<	0.13
830	Nitrogen, Ammonia Dissolved	mg/L	03/18/2024	<	0.13
830	Nitrogen, Ammonia Dissolved	mg/L	06/17/2024	<	0.13
830	Nitrogen, Ammonia Dissolved	mg/L	09/23/2024		0.477
830	Nitrogen, Ammonia Dissolved	mg/L	12/10/2024	<	0.13

well	parameter	unit	date		result
830	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2020		9.96
830	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/16/2020		11
830	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/16/2020		11
830	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020		12
830	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2021		11
830	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2021		11
830	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/08/2021		12
830	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/11/2021		12
830	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/08/2022		10
830	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2022		10
830	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/13/2022		11
830	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022		9.92
830	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023		8.2
830	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2023		8.78
830	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/19/2023		7.29
830	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/18/2024		7.43
830	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2024		7.62
830	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/23/2024		9.61
830	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/10/2024		10
830	Nitrogen, Organic Dissolved	mg/L	03/24/2020	<	0.431
830	Nitrogen, Organic Dissolved	mg/L	06/16/2020	<	0.431
830	Nitrogen, Organic Dissolved	mg/L	09/16/2020	<	0.431
830	Nitrogen, Organic Dissolved	mg/L	10/28/2020	<	0.431
830	Nitrogen, Organic Dissolved	mg/L	03/23/2021	<	0.431
830	Nitrogen, Organic Dissolved	mg/L	06/22/2021	<	0.431
830	Nitrogen, Organic Dissolved	mg/L	09/08/2021	<	0.431
830	Nitrogen, Organic Dissolved	mg/L	10/11/2021	<	0.431
830	Nitrogen, Organic Dissolved	mg/L	03/08/2022	<	0.431
830	Nitrogen, Organic Dissolved	mg/L	06/15/2022	<	0.431
830	Nitrogen, Organic Dissolved	mg/L	09/13/2022	<	0.431
830	Nitrogen, Organic Dissolved	mg/L	10/20/2022	<	0.431
830	Nitrogen, Organic Dissolved	mg/L	03/23/2023	<	0.431
830	Nitrogen, Organic Dissolved	mg/L	06/15/2023	<	0.431
830	Nitrogen, Organic Dissolved	mg/L	09/19/2023	<	0.431
830	Nitrogen, Organic Dissolved	mg/L	03/18/2024	<	0.431
830	Nitrogen, Organic Dissolved	mg/L	06/17/2024	<	0.431
830	Nitrogen, Organic Dissolved	mg/L	09/23/2024	<	0.431
830	Nitrogen, Organic Dissolved	mg/L	12/10/2024		0.835

well	parameter	unit	date	result
830	pH Field	su	03/24/2020	7.95
830	pH Field	su	06/16/2020	8
830	pH Field	su	09/16/2020	7.61
830	pH Field	su	10/28/2020	7.95
830	pH Field	su	03/23/2021	7.94
830	pH Field	su	06/22/2021	7.93
830	pH Field	su	09/08/2021	8
830	pH Field	su	10/11/2021	8.11
830	pH Field	su	03/08/2022	8.17
830	pH Field	su	06/15/2022	8.14
830	pH Field	su	09/13/2022	8.15
830	pH Field	su	10/20/2022	7.83
830	pH Field	su	03/23/2023	7.87
830	pH Field	su	06/15/2023	7.89
830	pH Field	su	09/19/2023	8.06
830	pH Field	su	03/18/2024	8.15
830	pH Field	su	06/17/2024	8.46
830	pH Field	su	09/23/2024	7.86
830	pH Field	su	12/10/2024	7.84
830	Solids, Total Dissolved	mg/L	03/24/2020	320
830	Solids, Total Dissolved	mg/L	06/16/2020	297
830	Solids, Total Dissolved	mg/L	09/16/2020	250
830	Solids, Total Dissolved	mg/L	10/28/2020	227
830	Solids, Total Dissolved	mg/L	03/23/2021	337
830	Solids, Total Dissolved	mg/L	06/22/2021	433
830	Solids, Total Dissolved	mg/L	09/08/2021	310
830	Solids, Total Dissolved	mg/L	10/11/2021	267
830	Solids, Total Dissolved	mg/L	03/08/2022	297
830	Solids, Total Dissolved	mg/L	06/15/2022	640
830	Solids, Total Dissolved	mg/L	09/13/2022	297
830	Solids, Total Dissolved	mg/L	10/20/2022	327
830	Solids, Total Dissolved	mg/L	03/23/2023	393
830	Solids, Total Dissolved	mg/L	06/15/2023	373
830	Solids, Total Dissolved	mg/L	09/19/2023	377
830	Solids, Total Dissolved	mg/L	03/18/2024	777
830	Solids, Total Dissolved	mg/L	06/17/2024	363
830	Solids, Total Dissolved	mg/L	09/23/2024	263
830	Solids, Total Dissolved	mg/L	12/10/2024	563

well	parameter	unit	date		result
833	Chloride Dissolved	mg/L	03/24/2020		74
833	Chloride Dissolved	mg/L	06/16/2020		65
833	Chloride Dissolved	mg/L	09/16/2020		71
833	Chloride Dissolved	mg/L	10/28/2020		76
833	Chloride Dissolved	mg/L	03/23/2021		71
833	Chloride Dissolved	mg/L	06/22/2021		83
833	Chloride Dissolved	mg/L	09/08/2021		70
833	Chloride Dissolved	mg/L	10/11/2021		60
833	Chloride Dissolved	mg/L	03/08/2022		63
833	Chloride Dissolved	mg/L	06/15/2022		53
833	Chloride Dissolved	mg/L	09/13/2022		60
833	Chloride Dissolved	mg/L	10/20/2022		60
833	Chloride Dissolved	mg/L	03/23/2023		79
833	Chloride Dissolved	mg/L	06/15/2023		70
833	Chloride Dissolved	mg/L	09/19/2023		74
833	Chloride Dissolved	mg/L	12/12/2023		148
833	Chloride Dissolved	mg/L	03/18/2024		84
833	Chloride Dissolved	mg/L	06/17/2024		73
833	Chloride Dissolved	mg/L	09/23/2024		81
833	Chloride Dissolved	mg/L	12/10/2024		79
833	Nitrogen, Ammonia Dissolved	mg/L	03/24/2020	<	0.18
833	Nitrogen, Ammonia Dissolved	mg/L	06/16/2020	<	0.18
833	Nitrogen, Ammonia Dissolved	mg/L	09/16/2020	<	0.18
833	Nitrogen, Ammonia Dissolved	mg/L	10/28/2020	<	0.18
833	Nitrogen, Ammonia Dissolved	mg/L	03/23/2021	<	0.13
833	Nitrogen, Ammonia Dissolved	mg/L	06/22/2021		0.494
833	Nitrogen, Ammonia Dissolved	mg/L	09/08/2021	<	0.13
833	Nitrogen, Ammonia Dissolved	mg/L	10/11/2021	<	0.13
833	Nitrogen, Ammonia Dissolved	mg/L	03/08/2022		0.583
833	Nitrogen, Ammonia Dissolved	mg/L	06/15/2022	<	0.13
833	Nitrogen, Ammonia Dissolved	mg/L	09/13/2022		0.37
833	Nitrogen, Ammonia Dissolved	mg/L	10/20/2022	<	0.13
833	Nitrogen, Ammonia Dissolved	mg/L	03/23/2023	<	0.13
833	Nitrogen, Ammonia Dissolved	mg/L	06/15/2023	<	0.13
833	Nitrogen, Ammonia Dissolved	mg/L	09/19/2023	<	0.13
833	Nitrogen, Ammonia Dissolved	mg/L	12/12/2023	<	0.13
833	Nitrogen, Ammonia Dissolved	mg/L	03/18/2024		1.321
833	Nitrogen, Ammonia Dissolved	mg/L	06/17/2024	<	0.13
833	Nitrogen, Ammonia Dissolved	mg/L	09/23/2024	<	0.13
833	Nitrogen, Ammonia Dissolved	mg/L	12/10/2024	<	0.13

well	parameter	unit	date		result
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2020		5.81
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/16/2020		5.01
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/16/2020		4.12
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020		5.17
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2021		4.31
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2021		4.05
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/08/2021		5.56
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/11/2021		6.93
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/08/2022		8.59
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2022		7.79
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/13/2022		7.2
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022		7.05
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023		6.15
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2023		4.67
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/19/2023		5.8
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/12/2023		5.48
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/18/2024		4.45
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2024		3.81
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/23/2024		3.98
833	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/10/2024		3.44
833	Nitrogen, Organic Dissolved	mg/L	03/24/2020	<	0.431
833	Nitrogen, Organic Dissolved	mg/L	06/16/2020	<	0.431
833	Nitrogen, Organic Dissolved	mg/L	09/16/2020		0.548
833	Nitrogen, Organic Dissolved	mg/L	10/28/2020		0.528
833	Nitrogen, Organic Dissolved	mg/L	03/23/2021		0.642
833	Nitrogen, Organic Dissolved	mg/L	06/22/2021	<	0.431
833	Nitrogen, Organic Dissolved	mg/L	09/08/2021	<	0.431
833	Nitrogen, Organic Dissolved	mg/L	10/11/2021		1.255
833	Nitrogen, Organic Dissolved	mg/L	03/08/2022	<	0.431
833	Nitrogen, Organic Dissolved	mg/L	06/15/2022		0.929
833	Nitrogen, Organic Dissolved	mg/L	09/13/2022	<	0.431
833	Nitrogen, Organic Dissolved	mg/L	10/20/2022		1.009
833	Nitrogen, Organic Dissolved	mg/L	03/23/2023	<	0.431
833	Nitrogen, Organic Dissolved	mg/L	06/15/2023		0.688
833	Nitrogen, Organic Dissolved	mg/L	09/19/2023	<	0.434
833	Nitrogen, Organic Dissolved	mg/L	12/12/2023		1.244
833	Nitrogen, Organic Dissolved	mg/L	03/18/2024	<	0.431
833	Nitrogen, Organic Dissolved	mg/L	06/17/2024		0.783
833	Nitrogen, Organic Dissolved	mg/L	09/23/2024		0.745
833	Nitrogen, Organic Dissolved	mg/L	12/10/2024	<	0.431

well	parameter	unit	date	result
833	pH Field	su	03/24/2020	6.69
833	pH Field	su	06/16/2020	6.9
833	pH Field	su	09/16/2020	6.89
833	pH Field	su	10/28/2020	7.05
833	pH Field	su	03/23/2021	7.34
833	pH Field	su	06/22/2021	7.22
833	pH Field	su	09/08/2021	7.4
833	pH Field	su	10/11/2021	7.58
833	pH Field	su	03/08/2022	7.62
833	pH Field	su	06/15/2022	7.74
833	pH Field	su	09/13/2022	7.61
833	pH Field	su	10/20/2022	7.33
833	pH Field	su	03/23/2023	7.36
833	pH Field	su	06/15/2023	7.19
833	pH Field	su	09/19/2023	7.53
833	pH Field	su	12/12/2023	7.54
833	pH Field	su	03/18/2024	7.42
833	pH Field	su	06/17/2024	8.06
833	pH Field	su	09/23/2024	7.28
833	pH Field	su	12/10/2024	7.24
833	Solids, Total Dissolved	mg/L	03/24/2020	408
833	Solids, Total Dissolved	mg/L	06/16/2020	317
833	Solids, Total Dissolved	mg/L	09/16/2020	293
833	Solids, Total Dissolved	mg/L	10/28/2020	380
833	Solids, Total Dissolved	mg/L	03/23/2021	380
833	Solids, Total Dissolved	mg/L	06/22/2021	393
833	Solids, Total Dissolved	mg/L	09/08/2021	323
833	Solids, Total Dissolved	mg/L	10/11/2021	420
833	Solids, Total Dissolved	mg/L	03/08/2022	323
833	Solids, Total Dissolved	mg/L	06/15/2022	367
833	Solids, Total Dissolved	mg/L	09/13/2022	337
833	Solids, Total Dissolved	mg/L	10/20/2022	337
833	Solids, Total Dissolved	mg/L	03/23/2023	433
833	Solids, Total Dissolved	mg/L	06/15/2023	493
833	Solids, Total Dissolved	mg/L	09/19/2023	347
833	Solids, Total Dissolved	mg/L	12/12/2023	440
833	Solids, Total Dissolved	mg/L	03/18/2024	350
833	Solids, Total Dissolved	mg/L	06/17/2024	413
833	Solids, Total Dissolved	mg/L	09/23/2024	370
833	Solids, Total Dissolved	mg/L	12/10/2024	574

well	parameter	unit	date	result
834	Chloride Dissolved	mg/L	03/24/2020	27
834	Chloride Dissolved	mg/L	06/16/2020	14
834	Chloride Dissolved	mg/L	09/16/2020	16
834	Chloride Dissolved	mg/L	10/28/2020	20
834	Chloride Dissolved	mg/L	03/23/2021	41
834	Chloride Dissolved	mg/L	06/22/2021	42
834	Chloride Dissolved	mg/L	09/08/2021	46
834	Chloride Dissolved	mg/L	10/11/2021	54
834	Chloride Dissolved	mg/L	03/08/2022	61
834	Chloride Dissolved	mg/L	06/15/2022	48
834	Chloride Dissolved	mg/L	09/13/2022	67
834	Chloride Dissolved	mg/L	10/20/2022	71
834	Chloride Dissolved	mg/L	03/23/2023	86
834	Chloride Dissolved	mg/L	06/15/2023	78
834	Chloride Dissolved	mg/L	09/19/2023	78
834	Chloride Dissolved	mg/L	12/12/2023	140
834	Chloride Dissolved	mg/L	03/18/2024	81
834	Chloride Dissolved	mg/L	06/17/2024	66
834	Chloride Dissolved	mg/L	09/23/2024	72
834	Chloride Dissolved	mg/L	12/10/2024	57
834	Nitrogen, Ammonia Dissolved	mg/L	03/24/2020 <	0.18
834	Nitrogen, Ammonia Dissolved	mg/L	06/16/2020 <	0.18
834	Nitrogen, Ammonia Dissolved	mg/L	09/16/2020 <	0.18
834	Nitrogen, Ammonia Dissolved	mg/L	10/28/2020 <	0.18
834	Nitrogen, Ammonia Dissolved	mg/L	03/23/2021 <	0.13
834	Nitrogen, Ammonia Dissolved	mg/L	06/22/2021 <	0.13
834	Nitrogen, Ammonia Dissolved	mg/L	09/08/2021 <	0.13
834	Nitrogen, Ammonia Dissolved	mg/L	10/11/2021 <	0.13
834	Nitrogen, Ammonia Dissolved	mg/L	03/08/2022 <	0.13
834	Nitrogen, Ammonia Dissolved	mg/L	06/15/2022 <	0.13
834	Nitrogen, Ammonia Dissolved	mg/L	09/13/2022 <	0.13
834	Nitrogen, Ammonia Dissolved	mg/L	10/20/2022 <	0.13
834	Nitrogen, Ammonia Dissolved	mg/L	03/23/2023 <	0.13
834	Nitrogen, Ammonia Dissolved	mg/L	06/15/2023 <	0.13
834	Nitrogen, Ammonia Dissolved	mg/L	09/19/2023 <	0.13
834	Nitrogen, Ammonia Dissolved	mg/L	12/12/2023 <	0.13
834	Nitrogen, Ammonia Dissolved	mg/L	03/18/2024 <	0.13
834	Nitrogen, Ammonia Dissolved	mg/L	06/17/2024 <	0.13
834	Nitrogen, Ammonia Dissolved	mg/L	09/23/2024 <	0.13
834	Nitrogen, Ammonia Dissolved	mg/L	12/10/2024 <	0.13

well	parameter	unit	date		result
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2020		2.06
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/16/2020		0.39
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/16/2020		2.28
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020		4.74
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2021		5.84
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2021		3.71
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/08/2021		5.07
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/11/2021		4.55
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/08/2022		4.44
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2022		3.33
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/13/2022		3.31
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022		2.86
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023		4.42
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2023		3.36
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/19/2023		2.7
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/12/2023		2.63
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/18/2024		3.26
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2024		2.72
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/23/2024		2.23
834	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/10/2024		1.82
834	Nitrogen, Organic Dissolved	mg/L	03/24/2020	<	0.431
834	Nitrogen, Organic Dissolved	mg/L	06/16/2020	<	0.431
834	Nitrogen, Organic Dissolved	mg/L	09/16/2020		0.921
834	Nitrogen, Organic Dissolved	mg/L	10/28/2020		1.109
834	Nitrogen, Organic Dissolved	mg/L	03/23/2021		0.694
834	Nitrogen, Organic Dissolved	mg/L	06/22/2021		3.635
834	Nitrogen, Organic Dissolved	mg/L	09/08/2021	<	0.431
834	Nitrogen, Organic Dissolved	mg/L	10/11/2021		1.313
834	Nitrogen, Organic Dissolved	mg/L	03/08/2022	<	0.431
834	Nitrogen, Organic Dissolved	mg/L	06/15/2022		0.899
834	Nitrogen, Organic Dissolved	mg/L	09/13/2022	<	0.431
834	Nitrogen, Organic Dissolved	mg/L	10/20/2022		0.997
834	Nitrogen, Organic Dissolved	mg/L	03/23/2023	<	0.431
834	Nitrogen, Organic Dissolved	mg/L	06/15/2023		0.826
834	Nitrogen, Organic Dissolved	mg/L	09/19/2023	<	0.431
834	Nitrogen, Organic Dissolved	mg/L	12/12/2023		0.897
834	Nitrogen, Organic Dissolved	mg/L	03/18/2024	<	0.431
834	Nitrogen, Organic Dissolved	mg/L	06/17/2024		0.973
834	Nitrogen, Organic Dissolved	mg/L	09/23/2024		72
834	Nitrogen, Organic Dissolved	mg/L	12/10/2024		1.019

well	parameter	unit	date	result
834	pH Field	su	03/24/2020	7.7
834	pH Field	su	06/16/2020	7.76
834	pH Field	su	09/16/2020	7.04
834	pH Field	su	10/28/2020	7.49
834	pH Field	su	03/23/2021	7.71
834	pH Field	su	06/22/2021	7.66
834	pH Field	su	09/08/2021	7.5
834	pH Field	su	10/11/2021	7.58
834	pH Field	su	03/08/2022	7.91
834	pH Field	su	06/15/2022	8.08
834	pH Field	su	09/13/2022	7.77
834	pH Field	su	10/20/2022	7.57
834	pH Field	su	03/23/2023	7.45
834	pH Field	su	06/15/2023	7.23
834	pH Field	su	09/19/2023	8.27
834	pH Field	su	12/12/2023	7.62
834	pH Field	su	03/18/2024	7.56
834	pH Field	su	06/17/2024	7.8
834	pH Field	su	09/23/2024	7.13
834	pH Field	su	12/10/2024	7.59
834	Solids, Total Dissolved	mg/L	03/24/2020	328
834	Solids, Total Dissolved	mg/L	06/16/2020	190
834	Solids, Total Dissolved	mg/L	09/16/2020	153
834	Solids, Total Dissolved	mg/L	10/28/2020	263
834	Solids, Total Dissolved	mg/L	03/23/2021	310
834	Solids, Total Dissolved	mg/L	06/22/2021	290
834	Solids, Total Dissolved	mg/L	09/08/2021	200
834	Solids, Total Dissolved	mg/L	10/11/2021	240
834	Solids, Total Dissolved	mg/L	03/08/2022	367
834	Solids, Total Dissolved	mg/L	06/15/2022	297
834	Solids, Total Dissolved	mg/L	09/13/2022	470
834	Solids, Total Dissolved	mg/L	10/20/2022	320
834	Solids, Total Dissolved	mg/L	03/23/2023	367
834	Solids, Total Dissolved	mg/L	06/15/2023	340
834	Solids, Total Dissolved	mg/L	09/19/2023	387
834	Solids, Total Dissolved	mg/L	12/12/2023	1480
834	Solids, Total Dissolved	mg/L	03/18/2024	337
834	Solids, Total Dissolved	mg/L	06/17/2024	417
834	Solids, Total Dissolved	mg/L	09/23/2024	310
834	Solids, Total Dissolved	mg/L	12/10/2024	426

well	parameter	unit	date		result
835	Chloride Dissolved	mg/L	03/24/2020		9.99
835	Chloride Dissolved	mg/L	06/16/2020		20
835	Chloride Dissolved	mg/L	09/16/2020		16
835	Chloride Dissolved	mg/L	10/28/2020		15
835	Chloride Dissolved	mg/L	03/23/2021		13
835	Chloride Dissolved	mg/L	06/22/2021		12
835	Chloride Dissolved	mg/L	09/08/2021		24
835	Chloride Dissolved	mg/L	10/11/2021		23
835	Chloride Dissolved	mg/L	03/08/2022		12
835	Chloride Dissolved	mg/L	06/15/2022		12
835	Chloride Dissolved	mg/L	09/13/2022		68
835	Chloride Dissolved	mg/L	10/20/2022		60
835	Chloride Dissolved	mg/L	03/23/2023		49
835	Chloride Dissolved	mg/L	06/15/2023		42
835	Chloride Dissolved	mg/L	09/19/2023		19
835	Chloride Dissolved	mg/L	12/12/2023		12
835	Chloride Dissolved	mg/L	03/18/2024		5.48
835	Chloride Dissolved	mg/L	06/17/2024		4.47
835	Chloride Dissolved	mg/L	09/23/2024		3.26
835	Chloride Dissolved	mg/L	12/10/2024		4.33
			Mean		21.2265
			St Dev		18.23308
835	Nitrogen, Ammonia Dissolved	mg/L	03/24/2020	<	0.18
835	Nitrogen, Ammonia Dissolved	mg/L	06/16/2020	<	0.18
835	Nitrogen, Ammonia Dissolved	mg/L	09/16/2020	<	0.18
835	Nitrogen, Ammonia Dissolved	mg/L	10/28/2020	<	0.18
835	Nitrogen, Ammonia Dissolved	mg/L	03/23/2021	<	0.13
835	Nitrogen, Ammonia Dissolved	mg/L	06/22/2021	<	0.13
835	Nitrogen, Ammonia Dissolved	mg/L	09/08/2021	<	0.13
835	Nitrogen, Ammonia Dissolved	mg/L	10/11/2021	<	0.13
835	Nitrogen, Ammonia Dissolved	mg/L	03/08/2022	<	0.13
835	Nitrogen, Ammonia Dissolved	mg/L	06/15/2022	<	0.13
835	Nitrogen, Ammonia Dissolved	mg/L	09/13/2022	<	0.13
835	Nitrogen, Ammonia Dissolved	mg/L	10/20/2022	<	0.13
835	Nitrogen, Ammonia Dissolved	mg/L	03/23/2023	<	0.13
835	Nitrogen, Ammonia Dissolved	mg/L	06/15/2023	<	0.13
835	Nitrogen, Ammonia Dissolved	mg/L	09/19/2023	<	0.13
835	Nitrogen, Ammonia Dissolved	mg/L	12/12/2023	<	0.13
835	Nitrogen, Ammonia Dissolved	mg/L	03/18/2024	<	0.13
835	Nitrogen, Ammonia Dissolved	mg/L	06/17/2024		0.177
835	Nitrogen, Ammonia Dissolved	mg/L	09/23/2024	<	0.13
835	Nitrogen, Ammonia Dissolved	mg/L	12/10/2024	<	0.13
			Mean		0.14235
			St Dev		0.021399

well	parameter	unit	date		result
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/24/2020		2.47
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/16/2020		1.91
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/16/2020		3.16
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/28/2020		4.8
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2021		4.91
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/22/2021		4.05
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/08/2021		2.32
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/11/2021		2.57
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/08/2022		2.09
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2022		1.51
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/13/2022		1.67
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	10/20/2022		1.65
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/23/2023		2.43
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/15/2023		2.36
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/19/2023		3.38
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/12/2023		1.1
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	03/18/2024		2.21
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	06/17/2024		1.46
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/23/2024		1.08
835	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/10/2024		1.51
			Mean		2.432
			St Dev		1.088823
835	Nitrogen, Organic Dissolved	mg/L	03/24/2020	<	0.431
835	Nitrogen, Organic Dissolved	mg/L	06/16/2020	<	0.431
835	Nitrogen, Organic Dissolved	mg/L	09/16/2020		2.522
835	Nitrogen, Organic Dissolved	mg/L	10/28/2020	<	0.431
835	Nitrogen, Organic Dissolved	mg/L	03/23/2021	<	0.431
835	Nitrogen, Organic Dissolved	mg/L	06/22/2021	<	0.431
835	Nitrogen, Organic Dissolved	mg/L	09/08/2021	<	0.431
835	Nitrogen, Organic Dissolved	mg/L	10/11/2021		1.126
835	Nitrogen, Organic Dissolved	mg/L	03/08/2022	<	0.431
835	Nitrogen, Organic Dissolved	mg/L	06/15/2022		0.978
835	Nitrogen, Organic Dissolved	mg/L	09/13/2022	<	0.431
835	Nitrogen, Organic Dissolved	mg/L	10/20/2022		1.02
835	Nitrogen, Organic Dissolved	mg/L	03/23/2023	<	0.431
835	Nitrogen, Organic Dissolved	mg/L	06/15/2023		0.836
835	Nitrogen, Organic Dissolved	mg/L	09/19/2023	<	0.431
835	Nitrogen, Organic Dissolved	mg/L	12/12/2023		0.44
835	Nitrogen, Organic Dissolved	mg/L	03/18/2024	<	0.431
835	Nitrogen, Organic Dissolved	mg/L	06/17/2024		0.5
835	Nitrogen, Organic Dissolved	mg/L	09/23/2024	<	0.431
835	Nitrogen, Organic Dissolved	mg/L	12/10/2024		0.747
			Mean		0.66705
			St Dev		0.482481

well	parameter	unit	date	result
835	pH Field	su	03/24/2020	6.77
835	pH Field	su	06/16/2020	7.77
835	pH Field	su	09/16/2020	6.11
835	pH Field	su	10/28/2020	6.85
835	pH Field	su	03/23/2021	7.68
835	pH Field	su	06/22/2021	7.41
835	pH Field	su	09/08/2021	7.7
835	pH Field	su	10/11/2021	7.95
835	pH Field	su	03/08/2022	8.1
835	pH Field	su	06/15/2022	8.41
835	pH Field	su	09/13/2022	7.77
835	pH Field	su	10/20/2022	7.45
835	pH Field	su	03/23/2023	7.46
835	pH Field	su	06/15/2023	5.95
835	pH Field	su	09/19/2023	6.42
835	pH Field	su	12/12/2023	7.96
835	pH Field	su	03/18/2024	8.06
835	pH Field	su	06/17/2024	8.18
835	pH Field	su	09/23/2024	7.55
835	pH Field	su	12/10/2024	6.66
			Mean	7.4105
835	Solids, Total Dissolved	mg/L	03/24/2020	128
835	Solids, Total Dissolved	mg/L	06/16/2020	163
835	Solids, Total Dissolved	mg/L	09/16/2020	290
835	Solids, Total Dissolved	mg/L	10/28/2020	207
835	Solids, Total Dissolved	mg/L	03/23/2021	293
835	Solids, Total Dissolved	mg/L	06/22/2021	333
835	Solids, Total Dissolved	mg/L	09/08/2021	117
835	Solids, Total Dissolved	mg/L	10/11/2021	153
835	Solids, Total Dissolved	mg/L	03/08/2022	130
835	Solids, Total Dissolved	mg/L	06/15/2022	453
835	Solids, Total Dissolved	mg/L	09/13/2022	180
835	Solids, Total Dissolved	mg/L	10/20/2022	213
835	Solids, Total Dissolved	mg/L	03/23/2023	170
835	Solids, Total Dissolved	mg/L	06/15/2023	147
835	Solids, Total Dissolved	mg/L	09/19/2023	180
835	Solids, Total Dissolved	mg/L	12/12/2023	293
835	Solids, Total Dissolved	mg/L	03/18/2024	70
835	Solids, Total Dissolved	mg/L	06/17/2024	240
835	Solids, Total Dissolved	mg/L	09/23/2024	236
835	Solids, Total Dissolved	mg/L	12/10/2024	529
			Mean	226.25
			St Dev	111.0472

well	parameter	unit	date		result
836	Chloride Dissolved	mg/L	09/23/2024		11
836	Chloride Dissolved	mg/L	12/10/2024		7.4
836	Nitrogen, Ammonia Dissolved	mg/L	09/23/2024		0.317
836	Nitrogen, Ammonia Dissolved	mg/L	12/10/2024	<	0.13
836	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/23/2024		8.53
836	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/10/2024		4.63
836	Nitrogen, Organic Dissolved	mg/L	09/23/2024	<	0.431
836	Nitrogen, Organic Dissolved	mg/L	12/10/2024	<	0.431
836	pH Field	su	09/23/2024		7.42
836	pH Field	su	12/10/2024		7.83
836	Solids, Total Dissolved	mg/L	09/23/2024		293
836	Solids, Total Dissolved	mg/L	12/10/2024		740
837	Chloride Dissolved	mg/L	09/23/2024		2.95
837	Chloride Dissolved	mg/L	12/10/2024		4.25
837	Nitrogen, Ammonia Dissolved	mg/L	09/23/2024	<	0.13
837	Nitrogen, Ammonia Dissolved	mg/L	12/10/2024	<	0.13
837	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	09/23/2024		1.37
837	Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	12/10/2024		1.15
837	Nitrogen, Organic Dissolved	mg/L	09/23/2024	<	0.431
837	Nitrogen, Organic Dissolved	mg/L	12/10/2024	<	0.431
837	pH Field	su	09/23/2024		7.68
837	pH Field	su	12/10/2024		7.08
837	Solids, Total Dissolved	mg/L	09/23/2024		477
837	Solids, Total Dissolved	mg/L	12/10/2024		403