TWEED SHIRE COUNCIL

EVIRON ROAD QUARRY LANDFILL

ANNUAL ENVIRONMENTAL MANAGEMENT REVIEW 2023

SUSTAINABLE COMMUNITIES AND ENVIRONMENT
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EXECUTIVE SUMMARY

This Annual Environmental Report (AER) addresses Approval 08_0068, Schedule 6, Condition 6 for works at the Tweed Shire Councils Eviron Quarry and Landfill Project on properties:

- Lot 1 DP 34555
- Lot 1 DP 1159352
- Lot 602 DP 1001049 (changed to 2// DP1170442)

The project approval identifies the following works on these properties:

- A landfill within the void space created by Quirks Quarry,
- Development of two further quarries to be used as landfills after exhaustion of quarry resources, and
- Operational infrastructure such as haul roads, an acid sulphate soil treatment area and other service buildings/storage facilities as required.

The report satisfies Schedule 6, Condition 6 which states:

By the end of March each year, the proponent shall review the environmental performance of the project to the satisfaction of the Director-General. This review must:

a) Detailed baseline data.

b) A description of
   - The relevant statutory requirements (including any relevant approval, licence or lease conditions);
   - Any relevant limits or performance measures/criteria; and
   - The specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures.

c) A description of the measures that will be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria.

d) A program to monitor and report on the:
   - Impacts and environmental performance of the project; and
   - Effectiveness of any management measures (see (c) above).

e) A contingency plan to manage any unpredicted impacts and their consequences.

f) A program to investigate and implement ways to improve the environmental performance of the project over time:

g) A protocol for managing and reporting any:
   - Incidents
   - Complaints
   - Non-compliances with stator requirements; and
   - Exceedances of the impact assessment criteria and/or performance criteria: and

h) A protocol for periodic review of the plan

This AER has been prepared for the NSW Department of Planning, Industry and Environment, with the focus of providing the data required by and information relating to compliance with the Project Approvals.

13/02/2023	Rod Dawson	Approved for publication
05/02/2023	Mitch Cambridge	Reviewed
31/01/2023	Michael Dobbs	A Draft
Date	**Author**	**Revision**

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1. Introduction

Residents within the Tweed Shire Council (the Council) Local Government Area (LGA) currently generate approximately 100,000 tonnes of waste annually which is largely recycled or reused. A component of this waste, however, cannot be reused and therefore must be safely managed in landfill.

Waste within the Tweed is currently landfilled at Council's Stotts Creek Resource Recovery Centre; however, this facility is nearing its design capacity. In planning for the Shire's future landfill requirements, Council sought an approval from the NSW Department of Planning, Industry and Environment (formerly known as the Department of Planning and infrastructure (DoPI)) in December 2012 to develop new waste infrastructure at Eviron Road, Eviron (Project Approval 08_0068).

2. Project Overview

In December 2012, Council sought an approval from the NSW Department of Planning, Industry and Environment (formerly known as the Department of Planning and infrastructure (DoPI)) to develop new waste infrastructure at Eviron Road, Eviron. Approval was granted (Project Approval 08_0068) following an environmental assessment prepared by GHD Pty Ltd (GHD) in accordance with the requirements of Part 3A of the Environmental Planning and Assessment Act 1979 (EP&A Act). This approval includes:

- A landfill within the void space created by Quirks Quarry
- Development of two further quarries to be used as landfills after exhaustion of quarry resources and
- Operational infrastructure such as haul roads, an acid sulphate soil treatment area and other service buildings/storage facilities as required.

As part of the approval process, Council must submit an annual Environmental Management Report. The purpose of this report is to satisfy the requirements of Schedule 6, Condition 6 of Project Approval 08_0068, namely that an Annual Review be produced detailing the works carried out in the previous twelve months, being the reporting period from 1 January 2023 to 31 December 2023. The structure of this report is designed to provide monitoring data, other collected data, and information outlining how compliance was achieved during the previous 12 months of the project.

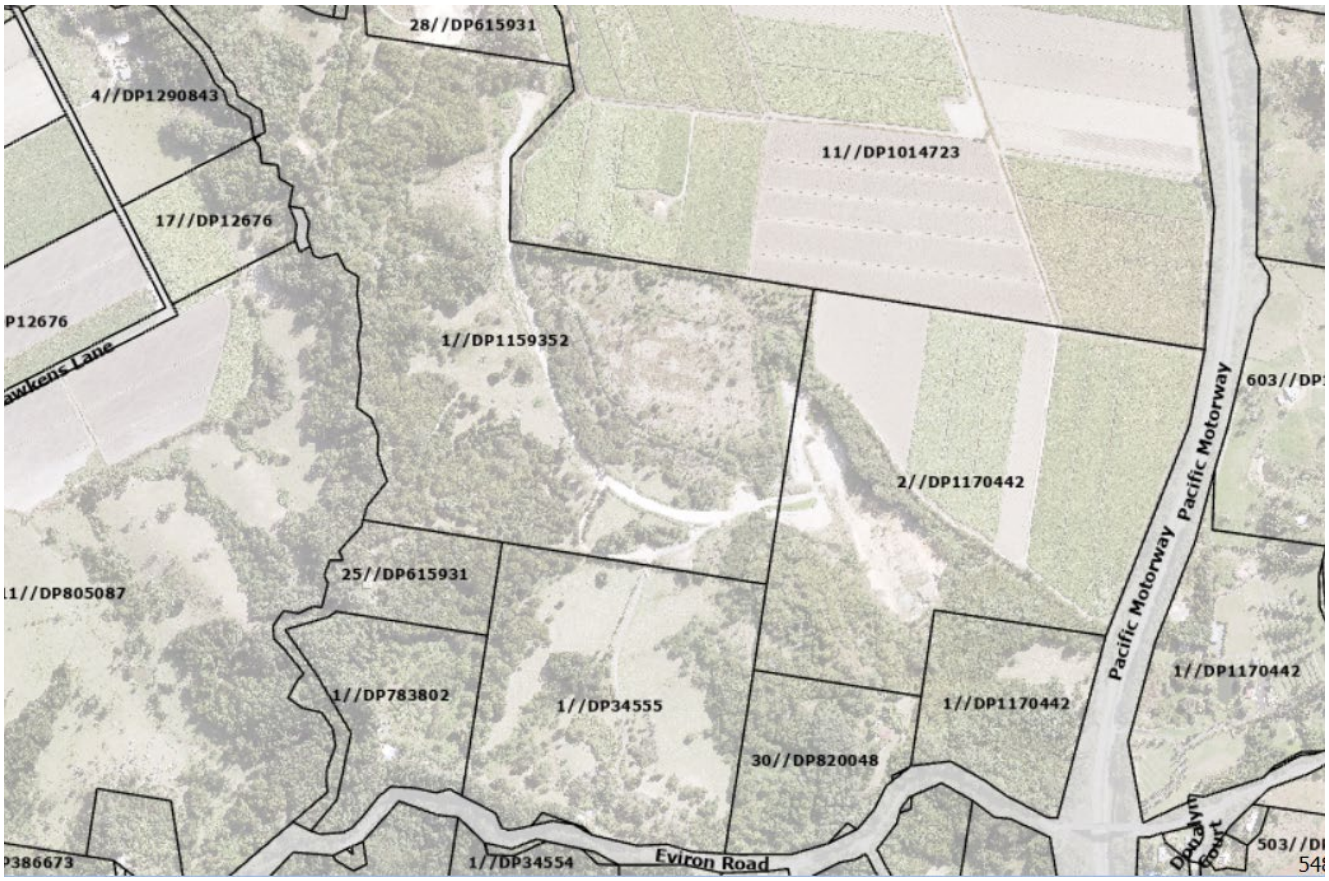
3. Project Location

The subject site is located at Eviron Road, Eviron, within the Tweed LGA. The site is approximately 16km northeast of Murwillumbah and adjoins the existing Stotts Creek Resource Recovery Centre which is located to the northwest of the site.

The Council owned site has an area of 136 hectares (excluding Stotts Creek Resource Recovery Centre) which previously comprised Lot 1 of DP 34555, Lot 26 of DP 615931, and Lot 602 DP 1001049. Following a series of property acquisitions and boundary adjustments, the subject site now comprises of:

- Lot 1 DP 34555
- Lot 1 DP 1159352
- Lot 2// DP1170442

Figure 1:Project Location



4. Statement of Compliance

This report confirms compliance with specific requirements within the Project Approval

Table 1: Statement of Compliance

Were all conditions of the approval MP08_0068 complied with:	
Schedule 2	YES/~~NO~~
Schedule 3	YES/~~NO~~
Schedule 4	YES/~~NO~~
Schedule 6	YES/~~NO~~
Appendix 1	YES/~~NO~~

5. Project Approvals

Table 2: Project approval applicable to the development

Approval Number	Approval Authority	Approval Date
MP08_0068	Minister for Planning and Infrastructure	21 November 2012

6. Key Personnel

Table 3: Key Personnel

Name	Position	Role	Phone No.	Email
Naomi Searle	Director Sustainable Communities and Environment	Client	02 6670 2430	nsearle@tweed.nsw.gov.au
Rodney Dawson	Unit Coordinator – Resource Recovery	Client	0428864440	rdawson@tweed.nsw.gov.au
Shaun Halberstater	Projects & Operations Officer - Resource Recovery	Project Officer	0427407099	shalberstater@tweed.nsw.gov.au
Athol Kiem	Technical Officer – Quarry Operations and Quality	Site Supervisor	02 6670 2716	atholk@tweed.nsw.gov.au

7. Management Plans

In the 2023 reporting period no new management plans were prepared, however all plans were reviewed and updated as necessary.

During the review and in consultation with NSW Department of Planning, Industry and Environment, Council identified that, as the proponent of the licence, it is not required to submit a Landscape Management Plan (LMP) until such time as the quarry operation is closer to being developed and prior to its operation.

On approval of the LMP and in accordance with Schedule 4, Condition 32, the conservation bond is to be submitted by Council within 6 months of the LMP approval. Council will ensure the LMP is submitted prior to the quarry's development.

A number of management plans which are required under the project approval have been previously prepared and submitted to the Director General for necessary approval. A summary of these plans and their progress is presented in Table 4 below.

At time of writing there are 5 (five) Management Plans outstanding and yet to be submitted for approval. These plans, identified below, are directly related to quarrying operations within the project area and to date the quarrying operation commencement timeframe exceeds 8 years. Council is to ensure these plans are prepared, submitted, and approved prior to the commencement of any quarrying operations.

- Air Quality Management Plan
- Noise Management Plan
- Blast Management Plan
- Water Management Plan
- Traffic Management Plan

Table 4: Status summary of management plans and submissions under Project Approval 08_0068

Management Plan	Summary	Status
Environmental Management Strategy	Schedule 6, Condition 3 of Project Approval 08_0068, requires that an Environmental Management Strategy be prepared and implemented for the project to the satisfaction of the Director-General. The Environmental Management Strategy outlines all plans required under the approval, who is responsible for preparation of each plan, who is responsible for implementing each plan and who audits each plan within recommended timeframes. The Environmental Management Strategy was prepared and submitted to the Director General on 27 May 2014 and was granted approval by NSW DoPE on 4 June 2014.	✓ Completed - 27 May 2014 ✓ Approved - 4 June 2014
Heritage Management Plan	A Heritage Management Plan is required as per Schedule 4, Condition 28 of Project Approval 08_0068. This plan was prepared in consultation with the Tweed Byron Local Aboriginal Land Council and included a Heritage Awareness Induction for all those involved. To date any personnel attending the site have been inducted prior to commencement of any activities. The Heritage Management Plan was submitted to the Director General on 8 January 2014 and approved by the NSW DoPE on 4 June 2014.	✓ Completed - 8 January 2014 ✓ Approved - 4 June 2014
Biodiversity Offset Strategy	The Biodiversity Offset Strategy is a requirement of Schedule 4, Condition 29 of Project Approval 08_0068. In regard to Area 1 -in the Biodiversity Offset, it refers to a minimum size area of 6.5Ha instead of the actual size of 3.5 Ha as per the EIS approved plans which were used for the offset. Council will make an application to modify a consent under Section 4.55(1) of the Act as the modification involves a minor error and the modification does not involve an expansion of the total footprint of the project. In terms of the Biodiversity Offset Strategy several key commitments within the strategy have been undertaken which include: • Delineation of Vegetation Protection Areas by survey and the engagement of a fencing contractor to erect a permanent fence that will restrict access from site operations. • Vegetation planting in the Northern and Southern Riparian corridor in accordance with the Biodiversity Offset Restoration plan.	✓ Completed - 18 December 2013 X Submission modification report to modify minimum size area of the biodiversity offset. X Commencing February 24 ✓ Completed ✓ Completed

	• Continued maintenance and weed control program to the vegetative areas.	✓ Completed
	• Due to the unsuccessful propagation of the White Lace flower, Council has sourced and currently out planted 50 locally sourced species. These have been planted into the recipient site within Lot1 DP 1159352 in line with the White Lace Flower Translocation Plan.	✓ Completed
	• The establishment of nest boxes for the petaurid glider within the area.	✓ Completed
	• A total of 13,700 tube stock of Sclerophyll species have been planted on the site since 2017 in accordance with the Strategy.	✓ Completed
White Lace flower Translocation Plan	This plan is required as per Schedule 4, Condition 30 of Project Approval 08_0068. This plan was submitted 28 August 2013 and approved by NSW DoPE 4 June 2014. Upon implementation of the approved WLFTP, Council has been unsuccessful in sourcing local White Lace Flower (WLF) seed despite several attempts to survey and extract seeds at the project site and from WLF individuals within the surrounding areas of the Tweed Shire. In the absence of WLF seed, Council also attempted to propagate via cuttings which proved to be unsuccessful. Given the attempts that have been made to source seed without success, it was recommended in the independent environmental audit (2018 Eviron Road Quarry and Landfill Project: Environmental Audit, page 10) that the approved WLFTP be amended to discuss and justify the opportunity to source seed other than local seed. Council was successful in the sourcing of local WLF tube stock which was out plant in 5 recipient sites on the northern ridgeline as per figure 2 within the White Lace Flower Translocation Plan.	✓ Completed - 28 August 13 ✓ Approved - 4 June 2014 ✓ Amendment approved – September 2019 ✓ Out planting completed – September 2023
Landscape Management Plan	A Landscape Management Plan (LMP) is a requirement of Schedule 4, Condition 31 of Project Approval 08_0068. This plan was submitted to NSW DoPE 4 April 2014. NSW DoPE advised that further discussions would be required with the Office of Environment and Heritage. Under the provision of Condition 32, Schedule 4, a conservation and rehabilitation bond is to be lodged within six (6) months of the approval of the Landscape Management Plan. Once approval has been received, necessary arrangements will be made for lodgement of this bond.	✓ Completed - 4 April 2014 ✓ Awaiting submission – LMP is to be submitted 6 months prior to the commencement of the West

		Valley Quarry
Air Quality Management Plan	An Air Quality Management Plan is a requirement of Schedule 4 Condition 5 of the approval and shall be implemented for the quarrying operations in consultations with the EPA and approved by the Director General.	X Not yet triggered
Noise Management Plan	A Noise Management Plan is a requirement of Schedule 4 Condition 10 of the approval and shall be implemented for the quarrying operations in consultations with the EPA and approved by the Director General.	X Not yet triggered
Blast Management Plan	A Blast Management Plan is a requirement of Schedule 4 Condition 17 of the approval and shall be implemented for the quarrying operations in consultations with the EPA and approved by the Director General.	X Not yet triggered
Water Management Plan	A Water Management Plan is a requirement of Schedule 4 Condition 21 of the approval and shall be implemented for the quarrying operations in consultations with the EPA, NSW Water and approved by the Director General.	X Not yet triggered
Traffic Management Plan	A Traffic Management Plan is a requirement of Schedule 4 Condition 27 of the approval and shall be implemented for the quarrying operations in consultations with the RMS and approved by the Director General.	X Not yet triggered

7.1 Biodiversity Offset

During the annual review Council identified that the biodiversity off set area was referring to minimum size area of 6.5Ha instead of the actual 3.5Ha, (as per approved EIS). Council has made application to modify the SSD consent under Section 4.55(1) of the Act as the modification involves a minor error and the modification does not involve an expansion of the total footprint of the project.

Under the EP&A Act, a consent authority may modify a SSD development consent provided the development to which the consent as modified relates is substantially the same as the development for which the consent was originally granted. This modification is being prepared at the time of writing.

A total of 13,700 tube stock of sclerophyll species were planted at the site in 2017 in accordance with the submitted Biodiversity Offset Strategy. These works were aimed at improving the quality of corridor vegetation composition and connectivity through enhancement plantings, bush regeneration and weed control in two defined corridor alignments; being the Northern Riparian Corridor (NRC) and Southern Ridgeline Corridor (SRC) (refer appendix A).

During the 2022 reporting period the 5-year maintenance program was finalised following the completion of a final maintenance and weed control event in February 2022. Significant growth of planted trees and effective weed control, including stem injection of Camphor

laurel, has provided a positive impact on the success of the planted biodiversity offset for this development.

7.2 White Lace Flower

This translocation plan is one element of the management measures committed to by TSC as part of the Eviron Rd Q&L project to achieve a 'maintain or improve' outcome for biodiversity values.

The development footprint was designed to avoid areas of higher conservation significance. Construction and operational impact mitigation measures were developed to minimise direct and indirect impacts within the development footprint and receiving environment; these are incorporated into an approved Environmental Management Plan (EMP) for the site.

Out-planting was undertaken during spring to take advantage of good growing conditions (warming temperatures, more sunlight hours). This ensured the most intensive period of maintenance (watering and weeding) occurs during the first spring and summer when hot and sometimes dry conditions may otherwise cause heat stress and rapid weed growth.

In accordance with recommendations in the White Lace Flower Plan, planting arrangement was in clusters of tube stock in 5 (five) recipient sites. This mimics the natural occurrence of this species in low density isolated clusters. During the out planting each plant remained tagged with its plant id code. A GPS coordinate was taken for each plant planted into the. ground and a mud map of the location of each plant, labelled with its plant id code. Each transplant was planted in a hole approximately 1.5 – 2 times the width and depth of the existing root ball. Care was taken when digging holes to avoid damage to the root system of existing vegetation. Tube stock was watered in, and fertilizer applied. Weed-free mulch was placed around the base of the stock but kept clear of the stem. Out planting data is provided in table 5 below.

Table 5: White Lace Flower Data

	Recipient Site 1	Recipient Site 2	Recipient Site 3	Recipient Site 4	Recipient Site5
GPS Location	28.29734 S 153.49918 E	28.29750 S 15349930 E	28.29742 S 153.49906 E	28.29759 S 153.49925 E	28.29744 S 153.49925 E
Altitude	25m	24m	24m	23m	24m
Slope	Steep	Gradual	Gradual	Slight	Slight
Aspect	North	North	North	North	North
Canopy Coverage	Healthy & Mature Wet sclerophyll Upper canopy	Healthy & Mature Wet sclerophyll Upper canopy	Healthy & Mature Wet sclerophyll Upper canopy	Healthy & Mature Wet sclerophyll Upper canopy	Healthy & Mature Wet sclerophyll Upper canopy
Vegetation community Association	Archidendron *hendersonii*	Archidendron *hendersonii*	Archidendron *hendersonii*	Archidendron *hendersonii*	Archidendron *hendersonii*
Soil Type	Metasediment	Metasediment	Metasediment	Metasediment	Metasediment
Landform Morphology	South-North trending ridgeline	South-North trending ridgeline	South-North trending ridgeline	South-North trending ridgeline	South-North trending ridgeline
Disturbances & overall ecological condition	Moderate weed invasion	Moderate weed invasion	Moderate weed invasion	Moderate weed invasion	Moderate weed invasion

8. Operations Summary

8.1 General Activities

During the 2023 reporting period, the following general activities were carried out at the site:

- Ongoing surface water and groundwater sample collection and environmental baseline monitoring of water as per the Environmental Assessment recommendations.
- Monitoring, maintenance, and rectification (as required) of vegetation protection measures installed at the site.
- Monitoring, maintenance, and rectification (as required) of environmental controls installed at the site.
- Out planting of White Lace Flower at designated recipient sites
- Integrated weed and pest management of the site
- Surveying of alignment footprint for Biodiversity Offset Area 1

8.2 Construction Activities

Construction activities under this approval have been delayed, however, to improve the soil bearing capacity of the haul road (Stott's Creek Resource Recovery Centre to the new landfill area at Quirks Quarry), pre-loading has progressed.

During January 1 until April 20, 2023, the importation, placement, and compaction of approximately 7,144 tonnes of loose fill material was placed onto the haul road, including EPRM under Council's Resource Recovery Order and Exemption, June 2023. The placement of imported fill material was generally concentrated in the soft soil areas at either ends of the alignment. (The Excavated Public Road Material (EPRM) Resource Recovery Order and Exemption is valid until 5 June 2024.)

Management and maintenance of the fob activated boom gate at the entry to the site occurred during the reporting period to manage, control, and monitor all material coming into the site during construction. In addition, the installation, monitoring and maintenance of permanent and temporary erosion and sediment controls occurred in current active areas of disturbance.

9. Actions Required from Previous Annual Review

Table 6: Recommended Actions from 2022 Audit

Recommendation from Environmental Audit	Action Taken during 2023
Section 3.1.1: **Biodiversity Offset Strategy Approval –** TSC is currently in discussions with DPE to negotiate an appropriate outcome. BCD correspondence of 21 February 2020, BCD agreed in principle to the use of an s88B. TSC is in negotiations with DPE (Post Approvals) to action the s88B. In the meantime, TSC have commenced actions and management of offset areas (trees) in	During the 2023 reporting period, Council confirmed with DPE that Council will submit a modification report to adjust the Biodiversity Offset Area to 3.5Ha. The physical works for the BOS have been completed, however, this administrative non-compliance cannot be finalised until DPE approve the BOS.

Recommendation from Environmental Audit	Action Taken during 2023
anticipation of approval consistent with the Biodiversity Offset Strategy (BOS). Offsetting measures outlined in the CoA 29, Areas 1 to 6 have been undertaken. It is noted that the Area 1's actual size is 3.5Ha not 6.5Ha. The EIS approved plans show the correct area and were used for the offset. The 6.5Ha is in error. The offsetting requirements have been implemented but not by 31 December 2013, however DPE have not approved the BOS. TSC actions to commence offsetting have been consistent with the BOS and have been successful. Notwithstanding this, DPE approval of the BOS should be sought and an s88b covenant created once agreement is reached. Correction of the minor administrative error in the Area 1 should be undertaken in order to close out compliance of this condition.	
Section 3.1.2: **Landscape Management Plan Approval –** Actions outlined in the LMP have progressed. For example, 14,000 plants have been planted, nest boxes were installed, tallowwood hollows were installed (not a requirement) and maintenance has occurred from 2016-2022. However, these actions have been undertaken from the BOS / LMP which has not, as yet been approved. On the basis of the notes and interviews for Condition 30 (above), we understand TSC is in negotiations with DPE to approve the LMP and proceed with the s88B. TSC actions to commence offsetting have been consistent with the BOS and has been successful. Notwithstanding this, DPE approval of the LMP should be sought and an s88b covenant created once agreement is reached.	During the 2023 reporting period, Council continued ongoing negotiations with the NSW DPE in relation to obtaining approvals for both the BOS and the LMP. The physical works for the LMP have been completed, however, as it relates to the submission of the LMP prior to the commencement of the West Valley Quarry, this is not a non-compliance
Section 3.1.3: **Conservation and Rehabilitation Bond Payment –** Bond not paid as the BOS and LMP has not been approved by DPE. Once the LMP is approved by DPE, TSC will be in a position to pay the Bond and satisfy this condition. See Section 3.1.2 for audit results for Condition 31 relating to the LMP.	During the 2023 reporting period, Council continued ongoing negotiations with the NSW DPE and has determined that the bond will be paid once the LMP is submitted for approval. The LMP will be submitted prior to the commencement of the West Valley Quarry as per the conditions of the project approval.
Section 3.1.4: **Conservation and Rehabilitation Bond Review –** The Bond has not been reviewed as the BOS and LMP has not been approved by DPE. Once the LMP is approved by DPE, TSC will be able to review and if necessary, revise the Bond and satisfy this condition. See Section 3.1.2 and	During the 2023 reporting period, Council continued ongoing negotiations with the NSW DPE in relation to obtaining approvals for both the BOS and the LMP. As it relates to the submission of the LMP prior to the commencement of the West Valley Quarry, this is not a non-compliance.

Recommendation from Environmental Audit	Action Taken during 2023
3.1.3 for audit results for Condition 31 and 32 relating to the LMP.	
Section 3.1.5: **Environmental Management System Review Schedule** – EMS has been approved by DPE (4.6.14). DPE stated the EMS was a dynamic document which was to be reviewed quarterly. The works on site have been minimal and hence TSC have not needed to review the EMS. This will be required as the project matures. The works onsite have been minimal and restricted to placing settlement material on Stage 1 of Phase 1 of the Haul Road. Other works include offsetting works, weed management and revegetation. It is considered given the minor nature of the works that the failing to review the EMS quarterly is a negligible issue. Furthermore, it is considered this requirement relates to the full operation of the land and/or quarry.	Item noted. Review of EMS to be undertaken once more substantial works have occurred at the site. No further action required at this stage.
Section 3.1.6: **Timing of independent Audit** - This audit addresses this requirement. The audit is now complete however is late mainly due to delays getting access to the site due to the northern rivers flooding and flood damage, and various parties to the audit contracting covid and needing to isolate. Given the circumstances, this noncompliance is considered negligible.	Independent audit has been completed. No further action required.
Section 3.1.7: **Timing of Independent Environmental Audit** - This audit team was approved by DPE on the 4 February 2022 however due to flooding, access and covid the audit does not meet this requirement. Site inspection and audit occurred on the 2 June 2022. Under the circumstances, this noncompliance is considered negligible.	Independent audit has been completed. No further action required.
Section 3.1.8: **Site Inspections** - During the site inspection it was noted that the ERSED controls were in place however a number of rock checks had sediment built up.	Action ongoing. Council has implemented a program of quarterly environmental inspections which includes ERSED controls. Following inspections, maintenance of ERSED controls is undertaken as required. Inspection process to continue indefinitely.
Although, it is a positivise sign that ERSED controls are in place and working they need regular inspection and cleaning out to ensure they are operating as designed and are prepared for the next wet weather event.	Action ongoing. Council has implemented a program of quarterly environmental inspections which includes ERSED controls. Following inspections, maintenance of ERSED controls is undertaken as required.

Recommendation from Environmental Audit	Action Taken during 2023
	Inspection process to continue indefinitely.

10. Environmental Management

Environmental monitoring and recording will continue at the site in accordance with the approved Environmental Management Plans submitted to date.

Continual reviews of the timelines for activities will be carried out to ensure they align with the Environmental Management Strategy.

Ongoing maintenance of the biodiversity offset plantings is proposed throughout 2024 which will include follow- up weed control of the NRC and SRC plantings, stem injection of remaining Camphor Laurels in SRC, planting of propagated Swamp Hibiscus, replacement of dead plants and ongoing monitoring.

10.1 Environmental Performance

Given the limited extent of works that have been undertaken to date, it is too difficult to compare the environmental performance of the project against the predictions made within the EIS.

Notwithstanding, the environmental audit undertaken by Geolink Pty Ltd in 2022 concluded that “at the time of the Audit, Eviron Quarry and Landfill was generally compliant with the requirements of the Eviron Quarry and Landfill Project Approval, Statement of Commitments, relevant regulations and good management practice”.

Furthermore, the audit identified that the level of awareness among staff of good environmental practice was generally satisfactory with several examples of good environmental practices observed during the site inspection.

The ground water and surface water systems have been monitored (appendix B) for the purposes of gathering baseline data to be used at a later date to determine if any anthropogenic influences on the system have occurred during the project works and/or during the life of the landfill and quarries.

10.1.1 Incidents and non-compliances during reporting period

There were no environmental incidents or non-compliances recorded during the reporting period.

10.1.2 Complaints

During the 2023 reporting period no non-compliances were recorded relating to the project.

10.1.3 Community

During the 2023 reporting period no community engagement activities or initiatives were undertaken in relation to the proposal. Similarly, there were no community contributions to the project and there have been no complaints raised in relation to the works undertaken.

10.1.4 Rehabilitation

Condition 35 of Schedule 3 states that the Proponent shall rehabilitate the site to the satisfaction of the Director General. This rehabilitation must be generally consistent with the proposed rehabilitation strategy in the EA and depicted in Appendix 5, and comply with the following objectives (Refer Table 8):

Table 7: Rehabilitation objectives for the subject site

Feature	Objective
Site (as a whole)	Safe, stable, and non-polluting
Quirks Quarry Landfill	Suitable for grazing
Benched Quarry Walls	Landscaped with native endemic flora species
Quarry Pit Floors	Suitable for grazing
Other land affected by the project	Restore ecosystem function, including maintaining or self-sustaining eco-systems comprising of native endemic species.
Surface Infrastructure	To be decommissioned and removed, unless the Director General agrees otherwise.

11. Water Management

11.1 Surface Water Quality

In 2008 Council implemented surface water monitoring program for the purposes of gathering sufficient data to establish a benchmark baseline assessment prior to major works at the site.

This monitoring program comprises three (3) monitoring sites (SW1, SW2 and SW4) (refer Figure 2) which are sampled on a quarterly basis and chosen as being considered sufficient for the purposes of gathering the baseline data.

For the suite of parameters that are monitored, there are currently no specific trigger values. Trigger values are conservative assessment levels, not “pass/fail” compliance criteria. Local conditions vary naturally between waterways and tailored trigger values to local conditions will be established from baseline data prior to the commencement of any major works. It is

anticipated that once operations commence, the surface water monitoring program will be a specific requirement in the Environmental Protection Licences for the site.

The results of surface water monitoring and their graphs are provided in Appendix B. Surface water monitoring data continues to be considered baseline at this stage as no significant project works have been undertaken at the site.

Nonetheless, a summary analysis of results for each monitoring site has been undertaken which is provided below. A more detailed analysis of hydrochemical parameters will be undertaken once substantial construction works are undertaken.

During the reporting period the monitoring undertaken has indicated that water quality at the three locations is similar with no differences recorded between the locations. All trends indicate stable concentrations with no anthropogenic influences from project works.

Figure 2:Surface Water Monitoring Points

11.1.1 Surface Water 1

SW1 is located to the South of the site at the western extent of the proposed landfill. During the reporting period the monitoring point was only sampled twice due to no flow occurring at time of sampling. As such As, Cd, Cr, Cu, Pb, Mg, Mn, Ni and Zn are not reported.

SW1	**Result Summary** ***(2023 Mean)***
	• Alkalinity $CaCO_3$ (average 30 mg/L) • NH_3 (average 0.mg/L) is at non detection rates. • BOD_5 (average 9.5 mg/L) • Ca (12.5 average mg/L) slightly elevated during sampling rounds. • Cl (average 25.5 mg/L) consistent with previous reporting period • EC is quite stable at 256 µS/cm, ranging up to 319 µS/cm. • DO (average 1.15 mg/L) • Mg (average 4.25 mg/L) slightly elevated than previous sampling rounds. • Nitrogen Total (1.4 mg/L), slightly lower than the long-term average. • pH (average 5) consistent with previous reporting period and remains slightly acidic than previous reporting periods. • P (average 0.19 mg/L) were generally consistent with historical results. • K (average 1.15 mg/L) • Na (average 23.50 mg/L) marginally elevated than previous reporting periods. • SS (average 92.5 mg/L) marginally elevated than previous reporting periods. • SO_4 (average 38.65 mg/L) is consistent with previous periods excluding a spike during a high flow. • TKN (1.39 average mg/L) marginally lower than previous reporting periods. • TOC (average 8.1 mg/L) reflecting natural conditions is consistent with historical results.

11.1.2 Surface Water 2

SW2 is beside an unnamed channel on northern boundary of Lot 25 DP615931 downstream of future West Valley operations and Quirks Quarry, upstream of North Valley. During the reporting period the monitoring point was sampled 4 times.

SW2

Result Summary *(2023 Mean)*

- Alkalinity $CaCO_3$ (average 24.5 mg/L)
- NH_3 (average 0.23mg/L)
- As (average 0.002)
- BOD_5 (average 8.28 mg/L)
- Cd (average 0.001mg/L)
- Ca (10.10 average mg/L)
- Cl (average 35.75 mg/L)
- Cr (average 0.001 mg/L)
- EC is quite stable at 172 µS/cm, ranging up to 405 µS/cm.
- Cu (average 0.001 mg/L)
- DO (average 2.2 mg/L)
- Pb (average 0.001 mg/L)
- Mg (average 4.7 mg/L)
- Mn (average 0.787 mg/L)
- Ni (average 0.001 mg/L)
- Nitrogen Total (1.45 mg/L)
- pH (average 5.6)
- P (average 0.118 mg/L).
- K (average 2.16 mg/L)
- Na (average 22.50 mg/L)
- SS (average 36 mg/L)
- SO_4 (average 27.35 mg/L)
- TKN (average 1.44 mg/L)
- TOC (average 8.75 mg/L)
- Zn (average 0.005 mg/L)

Elevated result in Ammonia being above long-term average of 0.06 mg/L

SO_4 shows an identical trend to conductivity, again indicating a direct effect on EC

11.1.3 Surface Water 4

SW4 is further north-west of SW2 in an unnamed channel on the far north-eastern boundary of Lot 25 DP615931 upstream (south-east) of O'Keeffe's Quarry and Stotts Creek RRC, downstream of North and West Valley and Quirks Quarry. During the reporting period the monitoring point was sampled 3 times.

SW4

Result Summary *(2023 Mean)*

- Alkalinity $CaCO_3$ (average 64.33 mg/L)
- NH_3 (average 0.053 mg/L)
- As (average 0.002)
- BOD_5 (average 9.73 mg/L)
- Cd (average 0.001mg/L)
- Ca (average 28.33 mg/L)
- Cl (average 23 mg/L)
- Cr (average 0.001 mg/L)
- EC is quite stable at 229 µS/cm, ranging up to 333 µS/cm.
- Cu (average 0.001 mg/L)
- DO (average 5.56 mg/L)
- Pb (average 0.001)
- Mg (average 5.3 mg/L)
- Mn (average 0.278 mg/L)
- Ni (average 0.02 mg/L)
- Nitrogen Total (1.7 mg/L)
- pH (average 6.8)
- P (average 0.19 mg/L)
- K (average 4.76 mg/L)
- Na (average 12.66 mg/L)
- SS (average 41.33 mg/L)
- SO_4 (average 31.23 mg/L)
- TKN (average 1.7 mg/L)
- TOC (average 11.96 mg/L)
- Zn (average 0.005 mg/L)

SO_4 shows an identical trend to conductivity, again indicating a direct effect on EC

11.2 Ground Water Quality

There are currently eighteen (18) groundwater monitoring bores located on the site which are monitored on a quarterly basis, measuring both groundwater levels and groundwater quality (refer figure 3). Based upon groundwater levels at Quirks Quarry, which were investigated for development of the landfill concept design, it is currently understood that groundwater at the site flows from the south-west to the north-east (GHD, 2009).

Similar to the surface water monitoring program, there are currently no specific trigger values for groundwater at the site. Upon commencement of significant construction works, a range of operational trigger values will be developed for each site based on the collected baseline data. These trigger values will be applicable during quarrying and landfill activities and will feed into the Quarry Plan of Management and Landfill Environmental Management Plan (LEMP). It is anticipated that once operations commence, the groundwater monitoring program will be a specific requirement in the Environmental Protection Licences for the site.

The results of groundwater monitoring and their graphs are provided in Appendix B. Groundwater monitoring data continues to be considered baseline at this stage as no significant project works have been undertaken at the site. Nonetheless, a summary analysis of data trends to date for each monitoring site has been undertaken which is provided below. A more detailed analysis of data will be undertaken once substantial construction works are undertaken at the site.

NOTE: Ground Water 2 is an alluvial monitoring site to the North of the project area with no access since November 2017, so no sampling has been undertaken within the monitoring period. The access will be reinstated during haul road development works.

Figure 3:Eviron Ground Water Monitoring Locations

11.2.1 Ground Water Point 1

GW1 is a bedrock (predominantly siltstone) monitoring site located downstream in the West Valley 12 m below natural ground surface.

GW1	Result Summary *(2023 Mean)*
	• Alkalinity $CaCO_3$ (average 48.23 mg/L) • Al (average 7.28 mg/L) • NH_3 (average 1.23 mg/L) • As (average 0.001 mg/L) • BOD_5 (average 6.97 mg/L) • Cd (average 0.001mg/L) • Ca (average 7.62 mg/L) • Cl (average 47.5 mg/L) • Cr (average 0.002 mg/L) • EC is quite stable at 126 µS/cm, ranging up to 374 µS/cm. • Cu (average 0.007 mg/L) • DO (average 3.45 mg/L) • F- (average 0.06 mg/L) • Fe (average 7.7 mg/L) • Pb (average 0.011 mg/L) • Mg (average 5.5 mg/L) • Mn (average 0.375 mg/L) • Ni (average 0.004 mg/L) • Nitrogen Total (2.1 mg/L) • pH (average 5.9 pH) • P (average 0.38 mg/L) • K (average 1.15 mg/L) • Na (average 31 mg/L) • SO_4 (average 9.4 mg/L) • TKN (average 2.1 mg/L) • TOC (average 2.35 mg/L) • Total Acidity $CaCO_3$ (average 54.25 mg/L) • Zn (average 1.34 mg/L) • Depth to Ground Water (6.05 m)

11.2.2 GW4

GW4 is an alluvial monitoring site and is a shallow groundwater monitoring bore located on the Eastern side of Quirks Quarry.

GW4	**Result Summary *(2023 Mean)***
	• Alkalinity $CaCO_3$ (average 1101 mg/L) • Al (average 2 mg/L) • NH_3 (average 0.2 mg/L) • As (average 0.001 mg/L) • BOD_5 (average 3.1 mg/L) • Cd (average 0.001mg/L) • Ca (average 52.25 mg/L) • Cl (average 1477 mg/L) • Cr (average 0.003 mg/L) • EC is quite stable at 6113 µS/cm, ranging up to 6697 µS/cm. • Cu (average 0.002 mg/L) • DO (average 3.40 mg/L) • F- (average 0.87 mg/L) • Fe (average 2.47 mg/L) • Pb (average 0.001 mg/L) • Mg (average 199 mg/L) • Mn (average 3.01 mg/L) • Ni (average 0.001 mg/L) • Nitrogen Total (1.94 mg/L) • pH (average 7.25 pH) • P (average 6.54 mg/L) • K (average 47.5 mg/L) • Na (average 1060 mg/L) • SO_4 (average 289 mg/L) • TKN (average 1.8 mg/L) • TOC (average 32.75 mg/L) • Total Acidity $CaCO_3$ (average 65 mg/L) • Zn (average 0.2 mg/L) • Depth to Ground Water (1.4 m)

11.2.3 GW5

GW5 is a bedrock monitoring site located in the vicinity of the Quirks quarry 12 m below natural ground surface.

GW5	**Result Summary *(2023 Mean)***
	• Alkalinity $CaCO_3$ (average 4 mg/L) • Al (average 81.7 mg/L) • NH_3 (average 0.02 mg/L) • As (average 0.05 mg/L) • BOD_5 (average 1 mg/L) • Cd (average 0.001mg/L) • Ca (average 0.47 mg/L) • Cl (average 20.33 mg/L) • Cr (average 0.05 mg/L) • EC is quite stable at 88 µS/cm, ranging up to 96 µS/cm. • Cu (average 0.1 mg/L) • DO (average 4.3 mg/L) • F- (average 0.04 mg/L) • Fe (average 94 mg/L) • Pb (average 0.044 mg/L) • Mg (average 1.1 mg/L) • Mn (average 15.4 mg/L) • Ni (average 0.049 mg/L) • Nitrogen Total (1.1 mg/L) • pH (average 4.8 pH) • P (average 0.5 mg/L) • K (average 0.5 mg/L) • Na (average 11.67 mg/L) • SO_4 (average 6.43 mg/L) • TKN (average 0.72 mg/L) • TOC (average 0.73 mg/L) • Total Acidity $CaCO_3$ (average 64 mg/L) • Zn (average 0.18 mg/L) • Depth to Ground Water (10.03 m)

11.2.4 GW6

GW6 is an alluvial monitoring site located in the vicinity of the Quirks Quarry and is a shallow monitoring bore.

GW6	**Result Summary *(2023 Mean)***
	• Alkalinity $CaCO_3$ (average 28 mg/L) • Al (average 31 mg/L) • NH_3 (average 0.4 mg/L) • As (average 0.008 mg/L) • BOD_5 (average 3.1 mg/L) • Cd (average 0.001mg/L) • Ca (average 13.8 mg/L) • Cl (average 91.8 mg/L) • Cr (average 0.023 mg/L) • EC is quite stable at 409 µS/cm, ranging up to 524 µS/cm. • Cu (average 0.017 mg/L) • DO (average 3.2 mg/L) • F- (average 0.2 mg/L) • Fe (average 41.4 mg/L) • Pb (average 0.013 mg/L) • Mg (average 15.5 mg/L) • Mn (average 0.9 mg/L) • Ni (average 0.031 mg/L) • Nitrogen Total (1.7 mg/L) • pH (average 5.4 pH) • P (average 0.5 mg/L) • K (average 4.1 mg/L) • Na (average 39.8 mg/L) • SO_4 (average 62 mg/L) • TKN (average 1.4 mg/L) • TOC (average 2.6 mg/L) • Total Acidity $CaCO_3$ (average 74.3 mg/L) • Zn (average 0.5 mg/L) • Depth to Ground Water (1.8 m)

11.2.5 GW7

GW7 is an alluvial monitoring site located in the vicinity of the Quirks Quarry and is a shallow monitoring bore.

GW7	**Result Summary *(2023 Mean)***
	• Alkalinity $CaCO_3$ (average 1 mg/L) • Al (average 17 mg/L) • NH_3 (average 0.09 mg/L) • As (average 0.01 mg/L) • BOD_5 (average 1 mg/L) • Cd (average 0.001mg/L) • Ca (average 2.55 mg/L) • Cl (average 109 mg/L) • Cr (average 0.01 mg/L) • EC is quite stable at 364 µS/cm, ranging up to 406 µS/cm. • Cu (average 0.01 mg/L) • DO (average 3.50 mg/L) • F- (average 0.04 mg/L) • Fe (average 36.1 mg/L) • Pb (average 0.01 mg/L) • Mg (average 6.6 mg/L) • Mn (average 0.13 mg/L) • Ni (average 0.01 mg/L) • Nitrogen Total (1.18 mg/L) • pH (average 4.5 pH) • P (average 0.17 mg/L) • K (average 2.08 mg/L) • Na (average 53.5 mg/L) • SO_4 (average 8.93 mg/L) • TKN (average 0.76 mg/L) • TOC (average 0.95 mg/L) • Total Acidity $CaCO_3$ (average 73 mg/L) • Zn (average 0.14 mg/L) • Depth to Ground Water (1.98 m) •

11.2.6 GW8

GW8 is an alluvial monitoring site located in the vicinity of the Quirks Quarry and is a shallow groundwater monitoring bore.

GW8	**Result Summary *(2023 Mean)***
	• Alkalinity $CaCO_3$ (average 70.5 mg/L) • Al (average 33.6 mg/L) • NH_3 (average 0.02 mg/L) • As (average 0.04 mg/L) • BOD_5 (average 2 mg/L) • Cd (average 0.001mg/L) • Ca (average 5.8 mg/L) • Cl (average 95 mg/L) • Cr (average 0.03 mg/L) • EC is quite stable at 372 µS/cm, ranging up to 513 µS/cm. • Cu (average 0.02 mg/L) • DO (average 3.25 mg/L) • F- (average 0.17 mg/L) • Fe (average 57.10 mg/L) • Pb (average 0.02 mg/L) • Mg (average 6.08 mg/L) • Mn (average 0.53 mg/L) • Ni (average 0.02 mg/L) • Nitrogen Total (1.06 mg/L) • pH (average 6.15 pH) • P (average 0.29 mg/L) • K (average 2.28 mg/L) • Na (average 66.25 mg/L) • SO_4 (average 14 mg/L) • TKN (average 1.05 mg/L) • TOC (average 1.4 mg/L) • Total Acidity $CaCO_3$ (average 61.25 mg/L) • Zn (average 0.23 mg/L) • Depth to Ground Water (1.2 m)

11.2.7 GW9

GW9 is an alluvial monitoring site located in the vicinity of the Quirks Quarry and is a shallow monitoring bore.

GW9	**Result Summary *(2023 Mean)***
	• Alkalinity $CaCO_3$ (average 21.8 mg/L) • Al (average 15.4 mg/L) • NH_3 (average 0.04 mg/L) • As (average 0.01 mg/L) • BOD_5 (average 1.43 mg/L) • Cd (average 0.001mg/L) • Ca (average 24 mg/L) • Cl (average 412.5 mg/L) • Cr (average 0.003 mg/L) • EC is quite stable at 819 µS/cm, ranging up to 2019 µS/cm. • Cu (average 0.02 mg/L) • DO (average 3.63 mg/L) • F- (average 0.04 mg/L) • Fe (average 16.7 mg/L) • Pb (average 0.07 mg/L) • Mg (average 24.25 mg/L) • Mn (average 1.81 mg/L) • Ni (average 0.01 mg/L) • Nitrogen Total (0.87 mg/L) • pH (average 5.43 pH) • P (average 0.14 mg/L) • K (average 2.1 mg/L) • Na (average 148.73 mg/L) • SO_4 (average 68.75 mg/L) • TKN (average .86 mg/L) • TOC (average 4.83 mg/L) • Total Acidity $CaCO_3$ (average 70.5 mg/L) • Zn (average 0.09 mg/L) • Depth to Ground Water (2.4 m)

11.2.8 GW10

GW10 is an alluvial monitoring site located in the vicinity of the Quirks Quarry and is a shallow groundwater monitoring bore. This bore was damaged in 2022 and was returned to service October 2023. Only one round of sampling has occurred in this reporting period and for this reason Al, As, Cd, Cr, Cu, Fe, Pb, Mn, Ni and Zn were not tested.

GW10	**Result Summary *(2023 Mean)***
	• Alkalinity $CaCO_3$ (average 60 mg/L) • NH_3 (average 1.2 mg/L) • BOD_5 (average 16 mg/L) • Ca (average 7.6 mg/L) • Cl (average 49 mg/L) • EC 285 µS/cm. • DO (average 2 mg/L) • F- (average 0.03 mg/L) • Mg (average 5.1 mg/L) • Nitrogen Total (4.55 mg/L) • pH (average 6 pH) • P (average 1.84 mg/L) • K (average 1.7 mg/L) • Na (average 23 mg/L) • SO_4 (average 8.1 mg/L) • TKN (average 4.52 mg/L) • TOC (average 15 mg/L) • Total Acidity $CaCO_3$ (average 100 mg/L) • Depth to Ground Water (3.6 m)

11.2.9 GW11

GW11 is an alluvial monitoring site located in the vicinity of the West Valley Quarry. This is a shallow groundwater monitoring bore.

GW11	**Result Summary *(2023 Mean)***
	• Alkalinity $CaCO_3$ (average 5.75 mg/L) • Al (average 110 mg/L) • NH_3 (average 0.04 mg/L) • As (average 0.02 mg/L) • BOD_5 (average 1 mg/L) • Cd (average 0.001mg/L) • Ca (average 0.6 mg/L) • Cl (average 19 mg/L) • Cr (average 0.04 mg/L) • EC is quite stable at 63 µS/cm, ranging up to 89 µS/cm. • Cu (average 0.11 mg/L) • DO (average 3.93 mg/L) • F- (average 0.03 mg/L) • Fe (average 67.9 mg/L) • Pb (average 0.05 mg/L) • Mg (average 1.43 mg/L) • Mn (average 1.16 mg/L) • Ni (average 0.03 mg/L) • Nitrogen Total (2.48 mg/L) • pH (average 4.95 pH) • P (average 0.34 mg/L) • K (average 0.5 mg/L) • Na (average 10.08 mg/L) • SO_4 (average 6.63 mg/L) • TKN (average 1.94 mg/L) • TOC (average 1.43 mg/L) • Total Acidity $CaCO_3$ (average 64.25 mg/L) • Zn (average 0.28 mg/L) • Depth to Ground Water (3.8 m)

11.2.10 GW14

GW14 is a bedrock monitoring site located in the vicinity of the West Valley Quarry. This is a shallow groundwater monitoring bore. Due to site access the bore was only sampled twice during the reporting period. The access was restored in December 2023.

GW14	**Result Summary *(2023 Mean)***
	• Alkalinity $CaCO_3$ (average 2 mg/L) • Al (average 143 mg/L) • NH_3 (average 0.05 mg/L) • As (average 0.06 mg/L) • BOD_5 (average 1.25 mg/L) • Cd (average 0.001mg/L) • Ca (average 0.25 mg/L) • Cl (average 29 mg/L) • Cr (average 0.01 mg/L) • EC is quite stable at 110 µS/cm, ranging up to 119 µS/cm. • Cu (average 0.12 mg/L) • DO (average 3.15 mg/L) • F- (average 0.02 mg/L) • Fe (average 216 mg/L) • Pb (average 0.13 mg/L) • Mg (average 0.8 mg/L) • Mn (average 0.27 mg/L) • Ni (average 0.01 mg/L) • Nitrogen Total (1.68 mg/L) • pH (average 4.6 pH) • P (average 0.23 mg/L) • K (average 0.5 mg/L) • Na (average 15.5 mg/L) • SO_4 (average 6.95 mg/L) • TKN (average 1.45 mg/L) • TOC (average 0.9 mg/L) • Total Acidity $CaCO_3$ (average 97 mg/L) • Zn (average 0.08 mg/L) • Depth to Ground Water (3.45 m)

11.2.11 GW15

GW15 is a bedrock monitoring site located downgradient of the West Valley Quarry and is a shallow groundwater monitoring bore.

GW15	**Result Summary *(2023 Mean)***
	• Alkalinity $CaCO_3$ (average 75 mg/L) • Al (average 20.8 mg/L) • NH_3 (average 0.03 mg/L) • As (average 0.02 mg/L) • BOD_5 (average 1.13 mg/L) • Cd (average 0.001mg/L) • Ca (average 15.75 mg/L) • Cl (average 145 mg/L) • Cr (average 0.01 mg/L) • EC is quite stable at 550 µS/cm, ranging up to 774 µS/cm. • Cu (average 0.01 mg/L) • DO (average 4.53 mg/L) • F- (average 0.26 mg/L) • Fe (average 29.9 mg/L) • Pb (average 0.02 mg/L) • Mg (average 12.2 mg/L) • Mn (average 0.26 mg/L) • Ni (average 0.01 mg/L) • Nitrogen Total (3.02 mg/L) • pH (average 5.93 pH) • P (average 0.12 mg/L) • K (average 2.10 mg/L) • Na (average 100 mg/L) • SO_4 (average 44.5 mg/L) • TKN (average 0.32 mg/L) • TOC (average 4.58 mg/L) • Total Acidity $CaCO_3$ (average 69.3 mg/L) • Zn (average 0.1 mg/L) • Depth to Ground Water (1.3 m)

11.2.12 GW16

GW16 is a bedrock monitoring site located in the vicinity of the North Valley Quarry and is a down gradient shallow groundwater monitoring bore.

GW16	**Result Summary *(2023 Mean)***
	• Alkalinity $CaCO_3$ (average 8.5 mg/L) • Al (average 26.2 mg/L) • NH_3 (average 0.03 mg/L) • As (average 0.004 mg/L) • BOD_5 (average 1.13 mg/L) • Cd (average 0.001mg/L) • Ca (average 0.2 mg/L) • Cl (average 24 mg/L) • Cr (average 0.008 mg/L) • EC is quite stable at 140 µS/cm, ranging up to 160 µS/cm. • Cu (average 0.008 mg/L) • DO (average 4.5 mg/L) • F- (average 0.02 mg/L) • Fe (average 11.60 mg/L) • Pb (average 0.013 mg/L) • Mg (average 1 mg/L) • Mn (average 0.16 mg/L) • Ni (average 0.003 mg/L) • Nitrogen Total (0.86 mg/L) • pH (average 5.18 pH) • P (average 0.16 mg/L) • K (average 0.5 mg/L) • Na (average 26.25 mg/L) • SO_4 (average 19.25 mg/L) • TKN (average 0.67 mg/L) • TOC (average 1.28 mg/L) • Total Acidity $CaCO_3$ (average 43.25 mg/L) • Zn (average 0.005 mg/L) • Depth to Ground Water (2.13 m) •

11.2.13 GW17

GW17 is an alluvial monitoring site located in the vicinity of the North Valley Quarry and is a down gradient shallow groundwater monitoring bore.

GW17	**Result Summary *(2023 Mean)***
	• Alkalinity $CaCO_3$ (average 64.5mg/L) • Al (average 10.2 mg/L) • NH_3 (average 0.64 mg/L) • As (average 0.012 mg/L) • BOD_5 (average 3.75 mg/L) • Cd (average 0.001mg/L) • Ca (average 53.25 mg/L) • Cl (average 25.75 mg/L) • Cr (average 0.013 mg/L) • EC is quite stable at 420 µS/cm, ranging up to 586 µS/cm. • Cu (average 0.024 mg/L) • DO (average 4.17 mg/L) • F- (average 0.208 mg/L) • Fe (average 31.2 mg/L) • Pb (average 0.009 mg/L) • Mg (average 8.9 mg/L) • Mn (average 0.46 mg/L) • Ni (average 0.006 mg/L) • Nitrogen Total (1.67 mg/L) • pH (average 5.77 pH) • P (average 0.24 mg/L) • K (average 3.45 mg/L) • Na (average 22.5 mg/L) • SO_4 (average 149.2 mg/L) • TKN (average 40.49 mg/L) • TOC (average 11 mg/L) • Total Acidity $CaCO_3$ (average 112 mg/L) • Zn (average 0.08 mg/L) • Depth to Ground Water (2.16 m)

11.2.14 GW19

GW19 is an alluvial monitoring site located in the vicinity of the North Valley Quarry and is a down gradient shallow ground water monitoring bore.

GW19	**Result Summary *(2023 Mean)***
	• Alkalinity $CaCO_3$ (average 43.75 mg/L) • Al (average 0.4 mg/L) • NH_3 (average 0.02 mg/L) • As (average 0.001 mg/L) • BOD_5 (average 1.13 mg/L) • Cd (average 0.001mg/L) • Ca (average 1.33 mg/L) • Cl (average 42.5 mg/L) • Cr (average 0.001 mg/L) • EC is quite stable at 298 µS/cm, ranging up to 308 µS/cm. • Cu (average 0.001 mg/L) • DO (average 7.8 mg/L) • F- (average 0.2 mg/L) • Fe (average 1.21 mg/L) • Pb (average 0.001 mg/L) • Mg (average 0.97 mg/L) • Mn (average 0.02 mg/L) • Ni (average 0.001 mg/L) • Nitrogen Total (0.67 mg/L) • pH (average 6.58 pH) • P (average 0.1 mg/L) • K (average 1.3 mg/L) • Na (average 56.25 mg/L) • SO_4 (average 31.8 mg/L) • TKN (average 0.1mg/L) • TOC (average 0.7 mg/L) • Total Acidity $CaCO_3$ (average 11.5 mg/L) • Zn (average 0.34 mg/L) • Depth to Ground Water (2 m)

11.2.15 GW20

GW20 is a bedrock monitoring site located in the vicinity of the North Valley Quarry and is an upgradient 12m ground water monitoring bore.

GW20	**Result Summary *(2023 Mean)***
	• Alkalinity $CaCO_3$ (average 337.5 mg/L) • Al (average 0.49 mg/L) • NH_3 (average 0.86 mg/L) • As (average 0.005 mg/L) • BOD_5 (average 4.13 mg/L) • Cd (average 0.001mg/L) • Ca (average 85 mg/L) • Cl (average 58 mg/L) • Cr (average 0.001 mg/L) • EC is quite stable at 775 µS/cm, ranging up to 784 µS/cm. • Cu (average 0.002 mg/L) • DO (average 3.08 mg/L) • F- (average 0.67 mg/L) • Fe (average 1.94 mg/L) • Pb (average 0.001 mg/L) • Mg (average 12 mg/L) • Mn (average 0.74 mg/L) • Ni (average 0.001 mg/L) • Nitrogen Total (1.07 mg/L) • pH (average 7.05 pH) • P (average 0.14 mg/L) • K (average 2.38 mg/L) • Na (average 64 mg/L) • SO_4 (average 1.73 mg/L) • TKN (average 1.07 mg/L) • TOC (average 2.73 mg/L) • Total Acidity $CaCO_3$ (average 28 mg/L) • Zn (average 0.06 mg/L) • Depth to Ground Water (16 m) •

11.2.16 GW21

GW21 is an alluvial monitoring site located in the West Valley Quarry and is a shallow downgradient groundwater monitoring bore.

GW21	**Result Summary *(2023 Mean)***
	• Alkalinity $CaCO_3$ (average 45.75 mg/L) • Al (average 0.06 mg/L) • NH_3 (average 0.02 mg/L) • As (average 0.001 mg/L) • BOD_5 (average 1 mg/L) • Cd (average 0.001mg/L) • Ca (average 15.75 mg/L) • Cl (average 140 mg/L) • Cr (average 0.001 mg/L) • EC is quite stable at 559 µS/cm, ranging up to 579 µS/cm. • Cu (average 0.001 mg/L) • DO (average 3.38 mg/L) • F- (average 0.09 mg/l) • Fe (average 3.44 mg/L) • Pb (average 0.001 mg/L) • Mg (average 15 mg/L) • Mn (average 0.04 mg/L) • Ni (average 0.001 mg/L) • Nitrogen Total (0.07 mg/L) • pH (average 5.83 pH) • P (average 0.08 mg/L) • K (average 2.3 mg/L) • Na (average 60.5 mg/L) • SO_4 (average 7.2 mg/L) • TKN (average 0.05 mg/L) • TOC (average 0.53 mg/L) • Total Acidity $CaCO_3$ (average 61.25 mg/L) • Zn (average 0.01 mg/L) • Depth to Ground Water (0.2 m) •

11.2.17 GW22

GW22 is a bedrock monitoring site located in the West Valley Quarry and is a 12m upgradient groundwater monitoring bore.

GW22	**Result Summary *(2023 Mean)***

- Alkalinity $CaCO_3$ (average 572.3 mg/L)
- Al (average 0.7 mg/L)
- NH_3 (average 0.25 mg/L)
- As (average 0.008)
- BOD_5 (average 2.5 mg/L)
- Cd (average 0.001mg/L)
- Ca (average 130.8 mg/L)
- Cl (average 91.5 mg/L)
- Cr (average 0.001 mg/L)
- EC is quite stable at 1384 µS/cm, ranging up to 1410 µS/cm.
- Cu (average 0.002 mg/L)
- DO (average 3 mg/L)
- F- (average 0.3 mg/L)
- Fe (average 5.2 mg/L)
- Pb (average 0.001 mg/L)
- Mg (average 11.3 mg/L)
- Mn (average 1.6 mg/L)
- Ni (average 0.001 mg/L)
- Nitrogen Total (0.5 mg/L)
- pH (average 6.7 pH)
- P (average 0.1 mg/L)
- K (average 4.3 mg/L)
- Na (average 173.5 mg/L)
- SO_4 (average 75.3 mg/L)
- TKN (average 0.4 mg/L)
- TOC (average 2.4 mg/L)
- Total Acidity $CaCO_3$ (average 107 mg/L)
- Zn (average 0.1 mg/L)
- Depth to Ground Water (12.5 m)

11.2.18 GW23

GW23 is an alluvial monitoring site located in the vicinity of the Quirks Quarry is a shallow downgradient groundwater monitoring bore.

GW23	**Result Summary *(2023 Mean)***
	• Alkalinity $CaCO_3$ (average 89.25 mg/L) • Al (average 0.03 mg/L) • NH_3 (average 0.075 mg/L) • As (average 0.001) • BOD_5 (average 6.27 mg/L) • Cd (average 0.001mg/L) • Ca (average 22 mg/L) • Cl (average 127.5 mg/L) • Cr (average 0.001 mg/L) • EC is quite stable at 604 µS/cm, ranging up to 700 µS/cm. • Cu (average 0.003 mg/L) • DO (average 3.225 mg/L) • F- (average 0.1 mg/L) • Fe (average 3.54 mg/L) • Pb (average 0.001 mg/L) • Mg (average 13.75 mg/L) • Mn (average 1.18 mg/L) • Ni (average 0.002 mg/L) • Nitrogen Total (0.263 mg/L) • pH (average 6.32 pH) • P (average 0.105 mg/L) • K (average 3.22 mg/L) • Na (average 77.5 mg/L) • SO_4 (average 75.3 mg/L) • TKN (average 0.263 mg/L) • TOC (average 3.15 mg/L) • Total Acidity $CaCO_3$ (average 38.5 mg/L) • Zn (average 0.015 mg/L) • Depth to Ground Water (3.45 m)

12. Appendix A – Site Plan and Photos

12.1 Site Location

Figure 4:Site Location

12.2 White Lace Flower

Figure 5:White Lace Flower planting

Figure 6:White Lace Flower protection

Figure 7:Recipient Site 1

Figure 8:Recipient Site 2

Figure 9:White Lace Flower ID tag

12.3 Haul Road

Figure 10:Flicker tape installed around vegetation protection areas.

Figure 11:Rock check dams installed within table drains for erosion and sediment control.

Figure 12:Material placed within haul road alignment looking east at approximately CH150

Figure 13:Material placed within haul road alignment looking south at approximately CH600

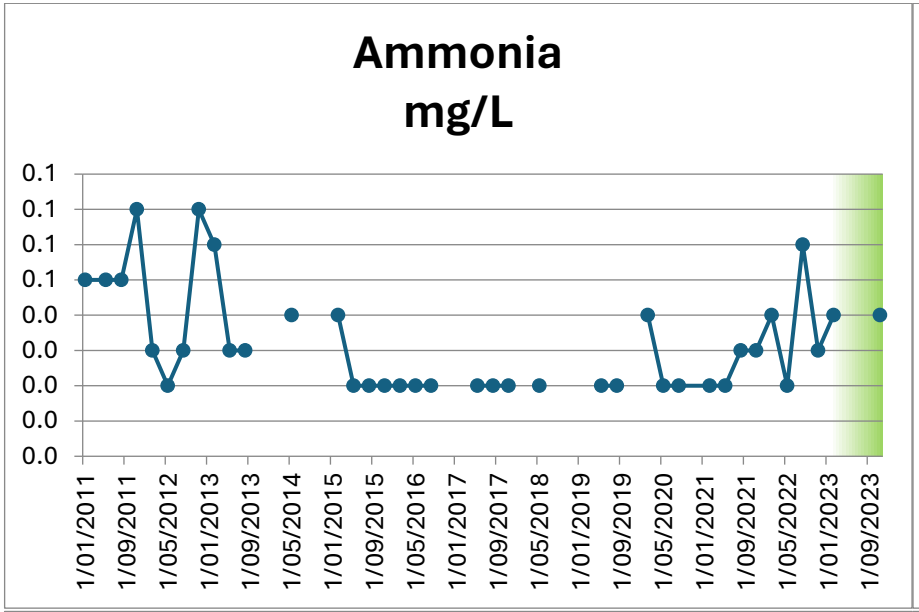
Figure 14:Material placed within haul road alignment looking south at approximately CH900

13. Appendix B – Water Quality Monitoring Data and Graphs

13.1 Surface Water Monitoring Charts and Graphs

Table 8: Surface Water 1

SW1	Alkalinity mg/L as CaCO3	Ammonia mg/L	Arsenic (Total) mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Conductivity µScm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	Nitrate N mg/L	Nitrite N mg/L	Nitrogen Oxidised mg/L	Nitrogen Total mg/L	Orthophosphate mg/L	pH pH units	Phosphorus Total mg/L	Potassium Total mg/L	Redox Potential mV	Sodium (Total) mg/L	Solids Suspended mg/L	Sulphate mg/L	TKN mg/L	TOC mg/L	Zinc (Total) mg/L
31/01/2011	31	0.1	0.1	21	0.0	3	44	0.0	120	0.0	1.0	0.0	1.6	3.3	0.0	0.1	0.1	0.1	0.8	0.1	6.4	0.1	5.0	-13	13	1237	1.7	0.8	5.3	0.0
10/05/2011	22	0.1	0.0	4	0.0	5	25	0.0	150	0.0	5.6	0.0	1.9	4.0	0.0	0.1	0.1	0.1	0.9	0.1	6.4	0.1	5.0	196	16	89	2.5	0.9	2.7	0.0
9/08/2011	77	0.1	0.1	18	0.0	13	44	0.0	265	0.1	3.6	0.0	4.0	74.0	0.0	0.1	0.1	0.1	10.0	0.1	6.7	0.6	5.0	218	24	2970	4.8	10.0	5.1	0.1
8/11/2011	160	0.1	0.3	108	0.0	19	35	0.0	309	0.2	0.1	0.0	5.3	67.0	0.0	0.1	0.0	0.1	11.0	0.0	6.5	0.8	5.0	-56	18	6820	2.6	10.9	3.2	0.3
6/02/2012	51	0.0	0.0	20	0.0	7	22	0.0	193	0.0	1.0	0.0	4.8	4.1	0.0	0.0	0.0	0.1	5.1	0.0	6.4	0.2	5.0	53	16	764	1.8	5.1	6.1	0.1
8/05/2012	20	0.0	0.0	1	0.0	4	22	0.0	108	0.1	4.8	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	6.3	0.1	5.0	226	15	38	1.4	0.5	0.6	0.0
7/08/2012	36	0.0	0.0	7	0.0	7	30	0.0	188	0.0	1.2	0.0	2.6	1.6	0.0	0.0	0.0	0.0	0.4	0.0	6.3	0.0	5.0	-1	13	334	2.1	0.3	3.7	0.0
14/11/2012	44	0.1	0.0	10	0.0	16	34	0.0	301	0.0	0.4	0.0	4.9	1.3	0.0	0.1	0.0	0.1	1.2	0.0	6.6	0.2	5.0	-44	18	263	21.0	1.1	8.4	0.0
14/02/2013	30	0.1	0.0	4	0.0	7	24	0.0	203	0.0	1.0	0.0	3.2	0.9	0.0	0.0	0.0	0.1	1.8	0.0	6.2	0.2	5.0	-38	17	58	2.6	1.7	11.0	0.0
15/05/2013	17	0.0	0.0	2	0.0	5	25	0.0	138	0.0	1.5	0.0	1.5	0.4	0.0	0.0	0.0	0.0	1.1	0.0	6.0	0.2	5.0	30	15	74	4.1	1.1	3.4	0.0
7/08/2013	22	0.0	0.0	6	0.0	4	24	0.0	124	0.0	4.2	0.0	1.8	0.1	0.0	0.0	0.0	0.0	0.5	0.0	6.1	0.1	5.0	148	17	414	3.2	0.5	2.7	0.0
12/11/2013																														
11/02/2014																														
14/05/2014	26	0.0	0.0	5	0.0	10	58	0.0	326	0.0	1.0	0.0	4.3	0.4	0.0	0.0	0.0	0.0	0.7	0.0	5.8	0.1	5.0	-2	40	28	28.0	0.7	7.7	0.0
12/08/2014																														
10/11/2014																														
10/02/2015	59	0.0	0.0	7	0.0	11	24	0.0	230	0.0	0.1	0.0	4.4	1.7	0.0	0.0	0.0	0.1	1.3	0.0	6.6	0.1	5.0	-63	14	12	2.7	1.3	22.0	0.1
12/05/2015	12	0.0	0.0	4	0.0	3	20	0.0	103	0.0	3.9	0.0	1.4	0.1	0.0	0.0	0.0	0.0	0.2	0.0	5.6	0.0	5.0	105	14	13	2.6	0.2	3.0	0.0
12/08/2015	17	0.0	0.0	3	0.0	4	24	0.0	125	0.0	3.4	0.0	1.8	0.6	0.0	0.0	0.0	0.0	1.4	0.0	6.6	0.3	5.0	97	16	165	2.8	1.4	4.2	0.0
11/11/2015	24	0.0	0.0	2	0.0	7	20	0.0	146	0.0	2.1	0.0	2.3	0.6	0.0	0.0	0.0	0.0	1.5	0.0	6.3	0.2	5.0	48	14	50	6.9	1.5	7.3	0.0
9/02/2016	42	0.0	0.0	14	0.0	10	28	0.0	196	0.0	0.6	0.0	3.3	1.2	0.0	0.0	0.0	0.0	4.1	0.0	6.5	0.7	5.0	8	17	402	3.0	4.1	8.7	0.0
10/05/2016	37	0.0	0.0	6	0.0	8	30	0.0	203	0.0	1.6	0.0	3.1	0.8	0.0	0.0	0.0	0.0	0.7	0.0	6.2	0.1	5.0	88	19	40	2.6	0.7	6.0	0.0
10/08/2016	15	0.0	NT	7	NT	4	23		121		3.7		1.6			0.0	0.0	0.0	2.9	0.0	5.8	0.6	5.0	174	17	178	3.4	2.9	4.3	
8/11/2016																														
7/02/2017																														
9/05/2017	22	0.0	0.0	1	0.0	8	20	0.0	139	0.0	2.4	0.0	2.4	0.2	0.0	0.0	0.0	0.0	0.4	0.0	5.9	0.0	5.0	256	13	9	11.4	0.4	5.2	0.0
9/08/2017	28	0.0		3		5	50		159		0.9		2.5			0.0	0.0	0.0	4.6	0.0	6.0	0.9	5.0	135	17	119	1.5	4.6	5.2	
8/11/2017	37	0.0		2		12	28		199		1.2		3.1			0.0	0.0	0.0	0.4	0.0	5.6	0.1	5.0	115	17	10	12.3	0.4	5.6	
10/02/2018																														
9/05/2018	29	0.0	0.0	2	0.0	8	23	0.0	146	0.0	1.6	0.0	2.5	0.4	0.0	0.0	0.0	0.0	0.6	0.0	6.2	0.1	1.5	112	15	30	3.8	0.6	5.7	0.0
10/08/2018																														
12/11/2018																														
10/02/2019																														
15/05/2019	31	0.0	0.0	4	0.0	10	31	0.0	189	0.0	0.8	0.0	3.5	0.6	0.0	0.0	0.0	0.0	1.0	0.0	6.1	0.2	1.3	-13	21	28	6.0	1.0	11.0	0.0
14/08/2019	25	0.0		5		8	30		161		0.5		2.8			0.0	0.0	0.0	7.6	0.0	6.1	2.0	1.1	281	20	160	4.0	7.6	8.5	
13/11/2019																														
26/02/2020	31	0.0		7		10	19		162		0.9		2.7			0.0	0.0	0.0	1.7	0.0	6.3	0.2	2.0	23	13	53	10.0	1.7	13.0	
13/05/2020	29	0.0	0.0	11	0.0	6	28	0.0	159	0.0	1.4	0.0	2.5	1.3	0.0	0.0	0.0	0.0	5.8	0.0	6.1	0.7	0.6	28	17	525	4.3	5.8	11.0	0.0
12/08/2020	21	0.0		5		8	25		151		4.2		2.3			0.0	0.0	0.0	5.1	0.0	5.9	0.5	1.0	259	17	315	13.0	5.1	5.6	
10/02/2021	40	0.0		10		8	18		183		0.8		3.2			0.0	0.1	0.1	4.0		6.0	0.6	0.9	-22	15	344	3.5	3.9	49.0	
12/05/2021	29	0.0	0.0	9	0.0	6	25	0.0	139	0.0	3.3	0.0	3.1	3.0	0.0	0.0	0.0	0.0	4.7		6.2	0.2	1.0	64	14	372	2.0	4.7	8.3	0.0
11/08/2021	19	0.0		6		4	24		126		3.5		1.7			0.0	0.0	0.0	2.7		5.7	0.4	0.9	89	15	122	2.9	2.7	4.2	
9/11/2021	94	0.0		58		9	45		207		1.5		3.1			0.0	0.0	0.0	19.2		6.4	3.8	1.3	-21	19	1740	2.3	19.1	6.8	
9/02/2022	43	0.0		14		9	25		204		1.0		3.8			0.0	0.1	0.0	3.7		6.4	0.6	1.2	-52	15	384	2.1	3.7	25.0	
11/05/2022	14	0.0	0.0	1	0.0	4	20	0.0	105	0.0	5.2	0.0	1.4	0.1	0.0	0.0	0.0	0.0	0.6		6.2	0.1	1.1	75	13	58	3.3	0.6	5.3	0.0
10/08/2022	23	0.1		1		5	20		139		3.5		2.1			0.0	0.0	0.0	0.4		6.2	0.1	0.9	71	16	34	1.6	0.4	4.8	
9/11/2022	32	0.0		4		6	21		154		1.6		2.9			0.0	0.0	0.0	2.2		6.2	0.4	0.6	40	15	160	1.2	2.2	6.6	
14/02/2023	59	0.0		18		12	24		256		0.9		4.1			0.0	0.0	0.0	2.3	0.0	6.2	0.3	1.3	-52	22	173	2.3	2.2	11.0	
10/05/2023																														
9/08/2023																														
15/11/2023	1	0.0		1		13	27		319		1.4		4.4			0.0	0.0	0.0	0.5	0.0	3.8	0.0	1.0	329	25	12	75.0	0.5	5.2	
2023 Min	**1.0**	**0.0**	**0.0**	**1.0**	**0.0**	**12.0**	**24.0**	**0.0**	**256.0**	**0.0**	**0.9**	**0.0**	**4.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.5**	**0.0**	**3.8**	**0.0**	**1.0**	**-51.8**	**22.0**	**12.0**	**2.3**	**0.5**	**5.2**	**0.0**
2023 Max	**59.0**	**0.0**	**0.0**	**18.0**	**0.0**	**13.0**	**27.0**	**0.0**	**319.0**	**0.0**	**1.4**	**0.0**	**4.4**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**2.3**	**0.0**	**6.2**	**0.3**	**1.3**	**328.9**	**25.0**	**173.0**	**75.0**	**2.2**	**11.0**	**0.0**
2023 Mean	**30.0**	**0.0**	**#####**	**9.5**	**#DIV/0!**	**12.5**	**25.5**	**#DIV/0!**	**287.5**	**#####**	**1.2**	**#####**	**4.3**	**#####**	**#####**	**0.0**	**0.0**	**0.0**	**1.4**	**0.0**	**5.0**	**0.2**	**1.2**	**138.6**	**23.5**	**92.5**	**38.7**	**1.4**	**8.1**	**#DIV/0!**
Long-term Average	**35.5**	**0.0**	**0.0**	**10.8**	**0.0**	**7.8**	**27.8**	**0.0**	**180.1**	**0.0**	**2.0**	**0.0**	**2.9**	**7.0**	**0.0**	**0.0**	**0.0**	**0.0**	**3.0**	**0.0**	**6.1**	**0.4**	**3.4**	**76.1**	**17.1**	**489.4**	**6.9**	**3.0**	**8.2**	**0.0**


Ammonia
mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
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1/01/2021
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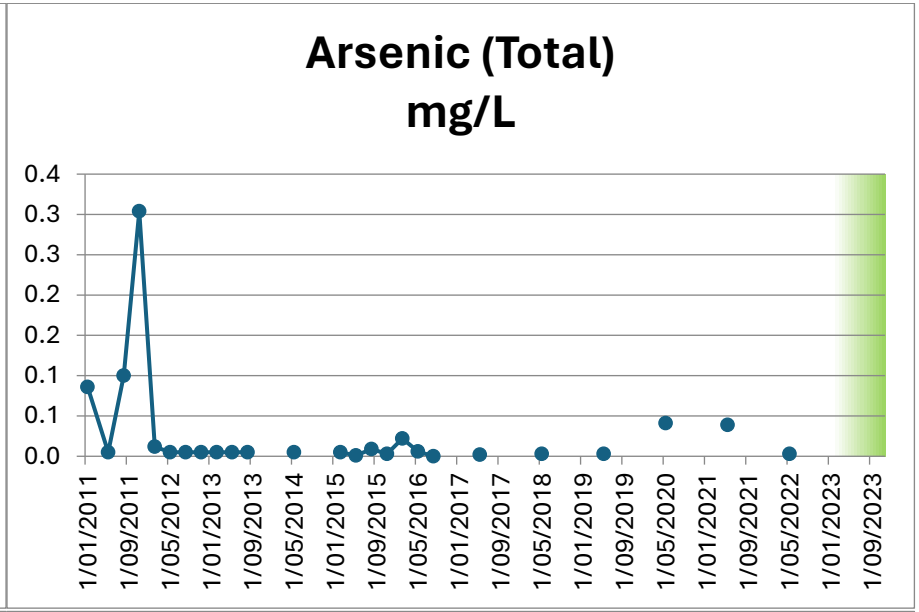
Arsenic (Total)
mg/L
0.4
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
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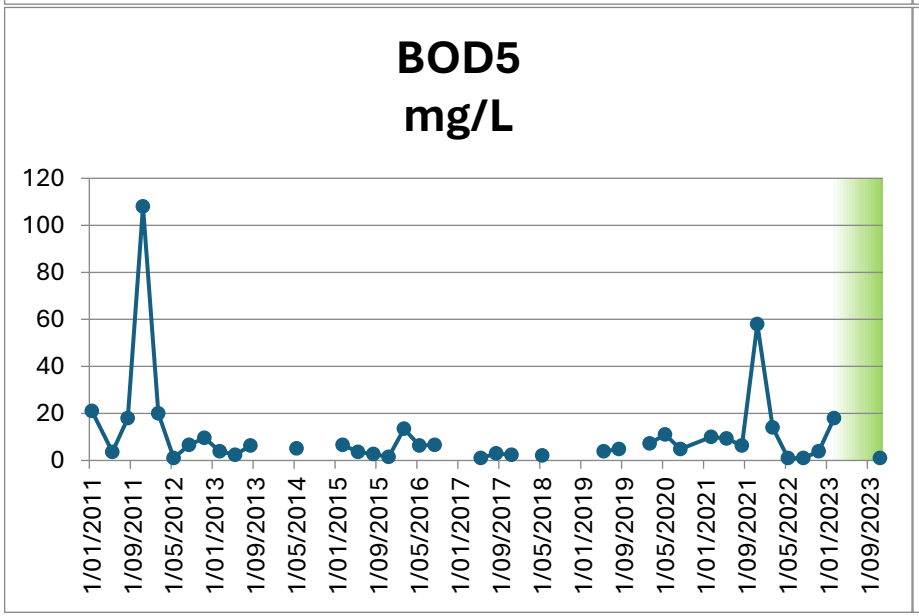
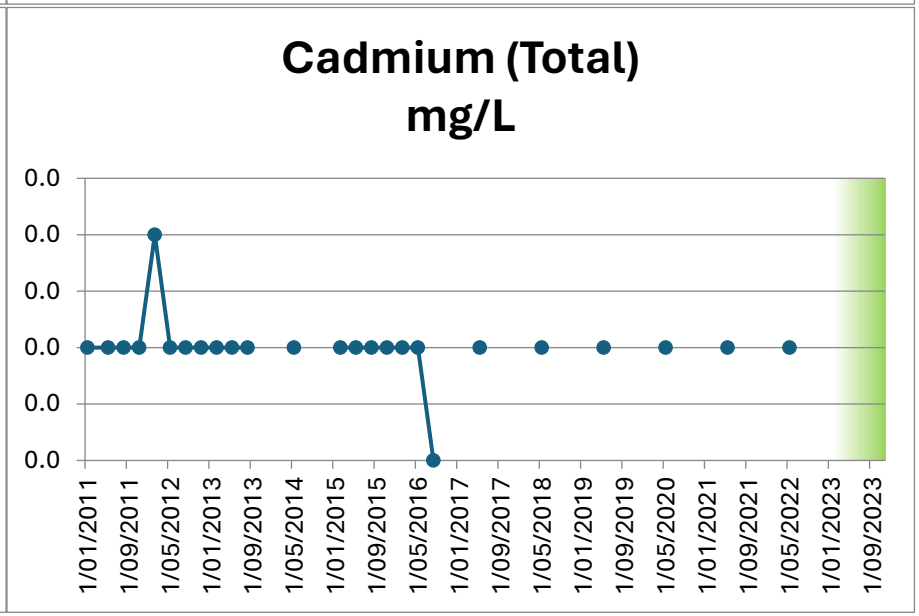

BOD5
mg/L
120
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
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1/05/2018
1/01/2019
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1/01/2021
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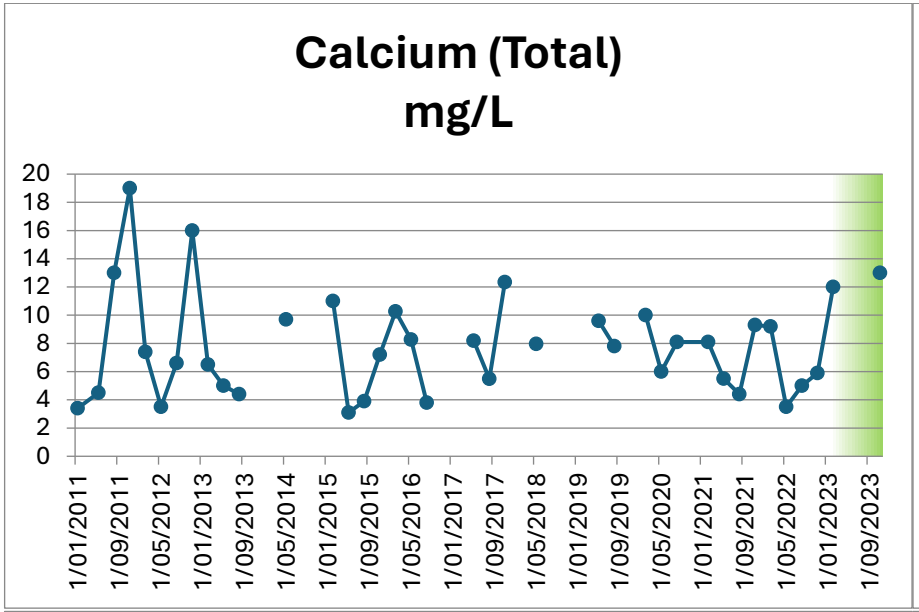
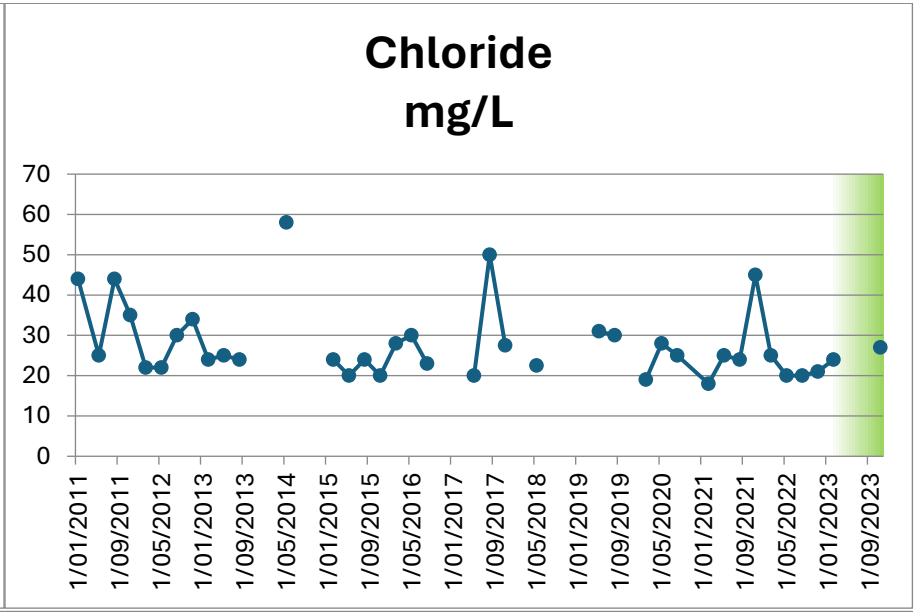
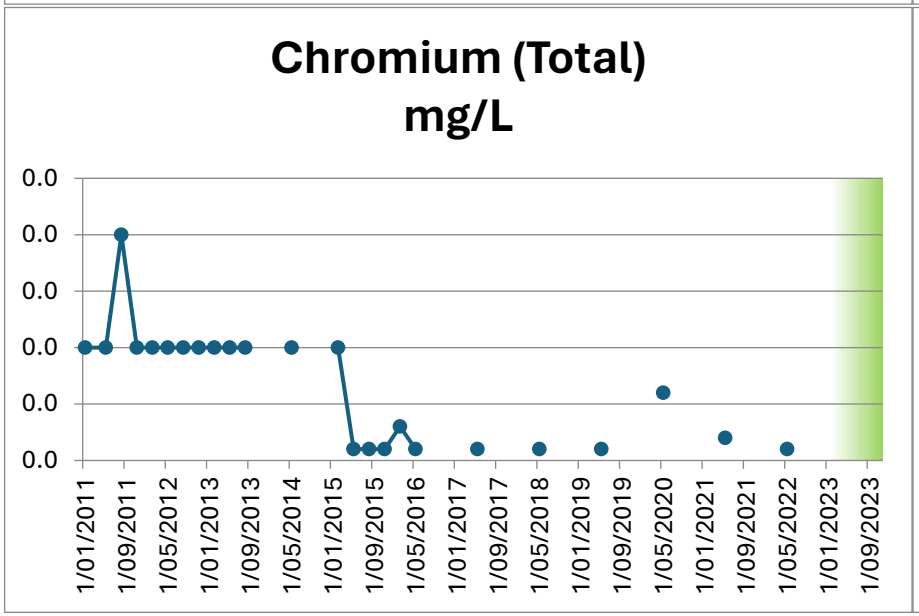
1/09/2023


Calcium (Total)
mg/L
20
18
16
14
12
10
8
6
4
2
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Chloride
mg/L
70
60
50
40
30
20
10
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Chromium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
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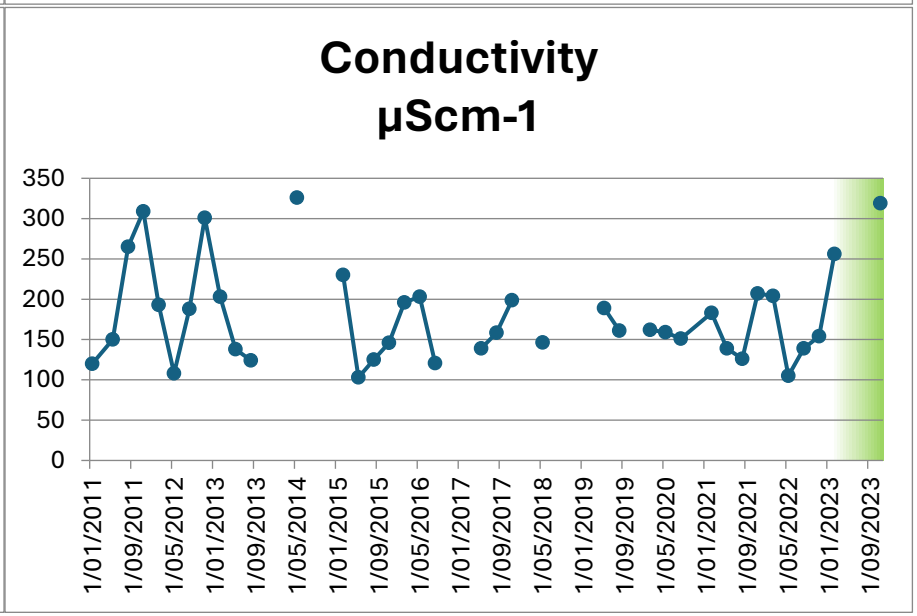
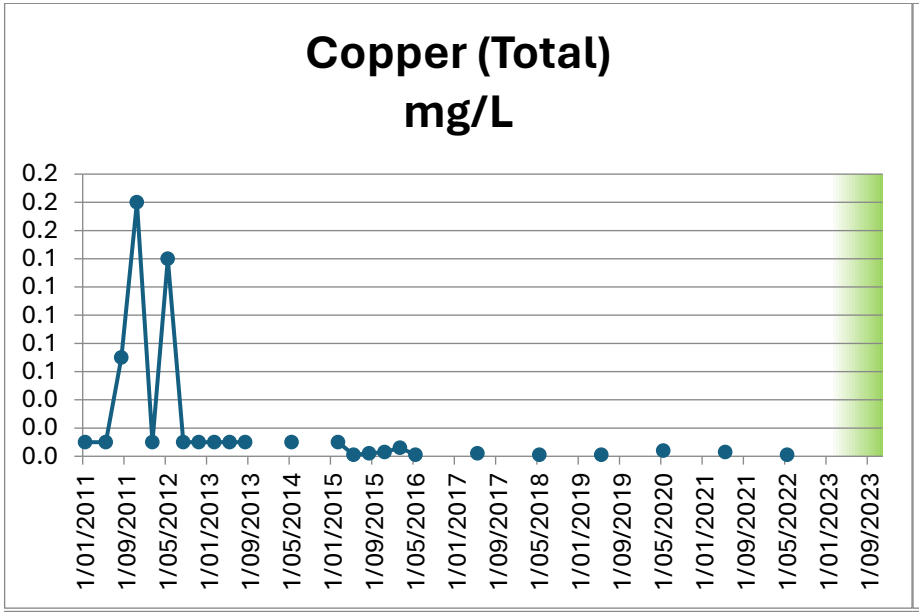

Conductivity
µScm-1
350
300
250
200
150
100
50
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Copper (Total)
mg/L
0.2
0.2
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
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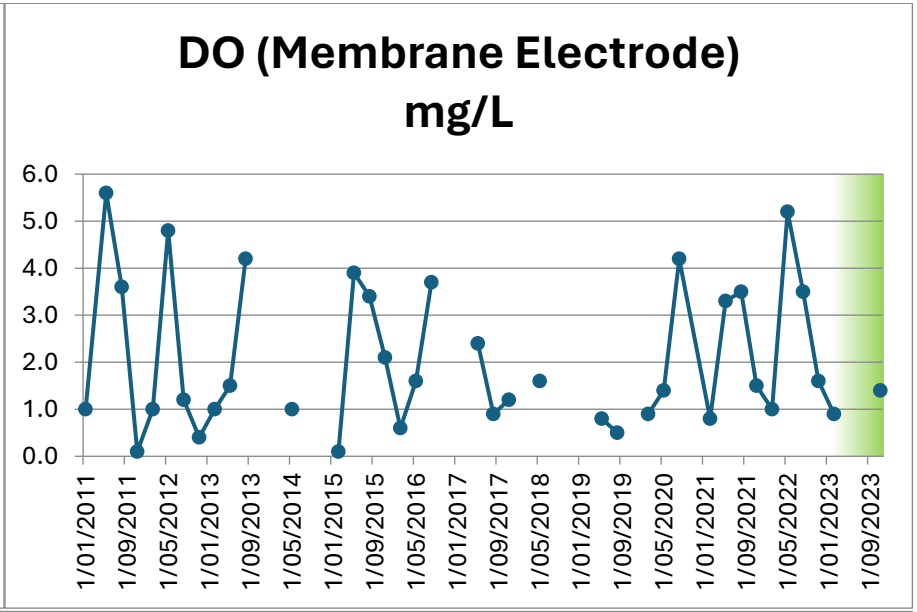
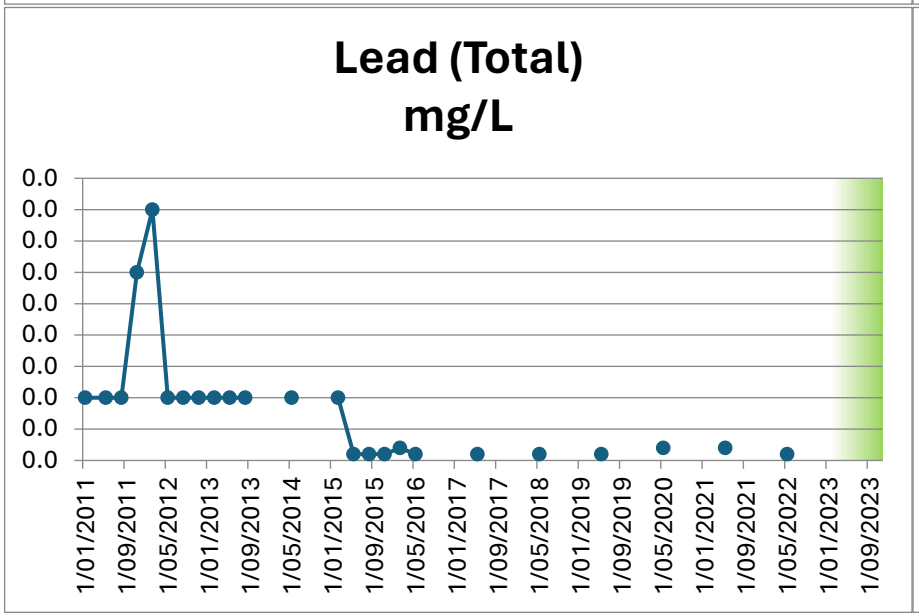
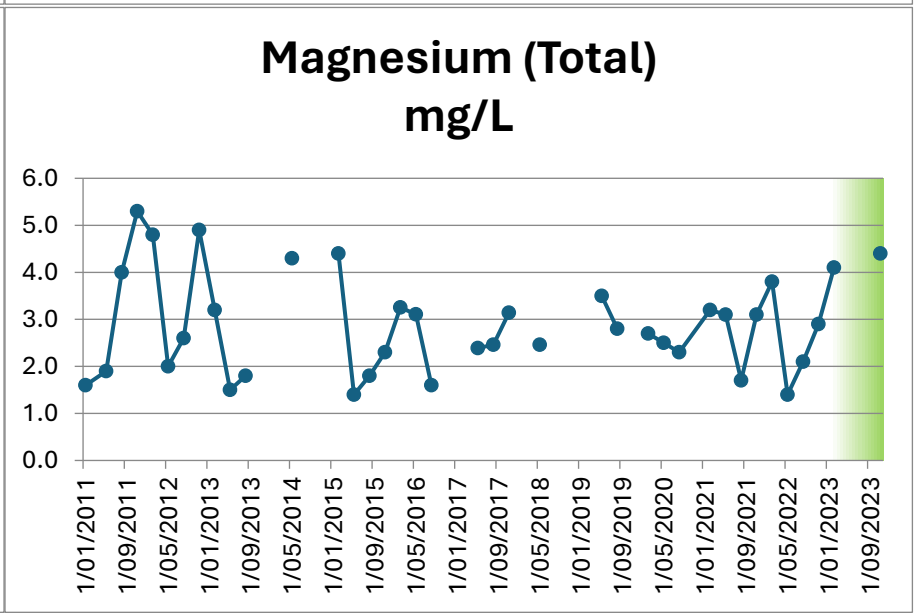
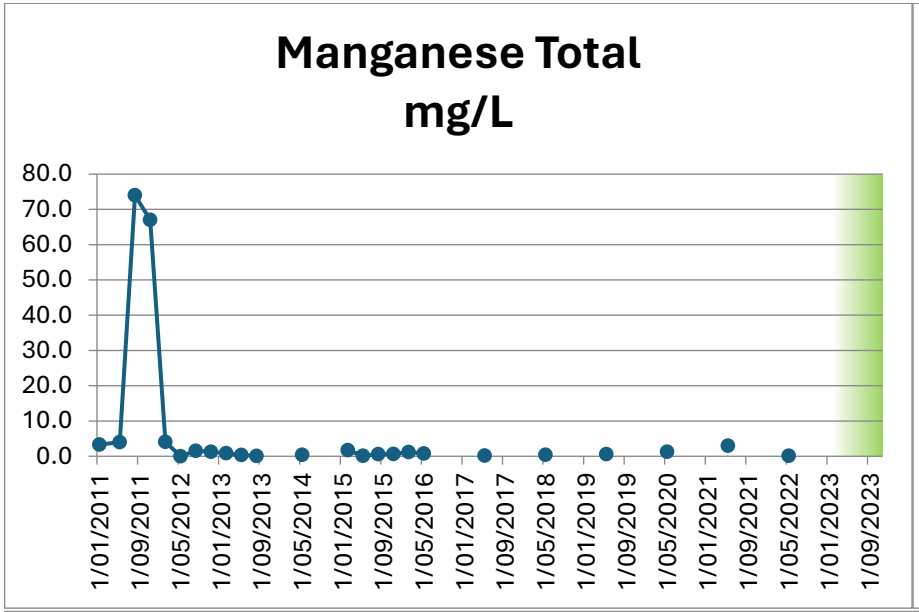
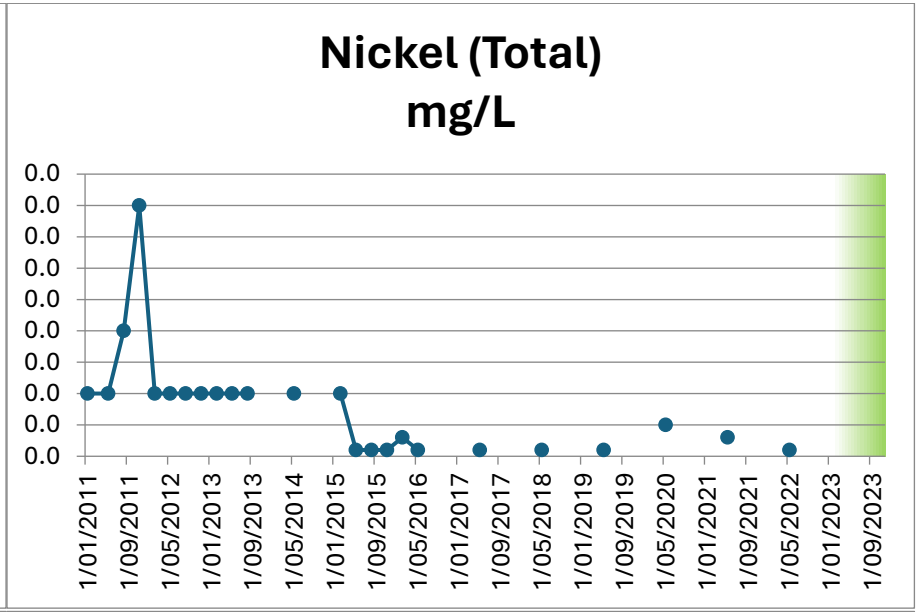
1/01/2023
1/09/2023

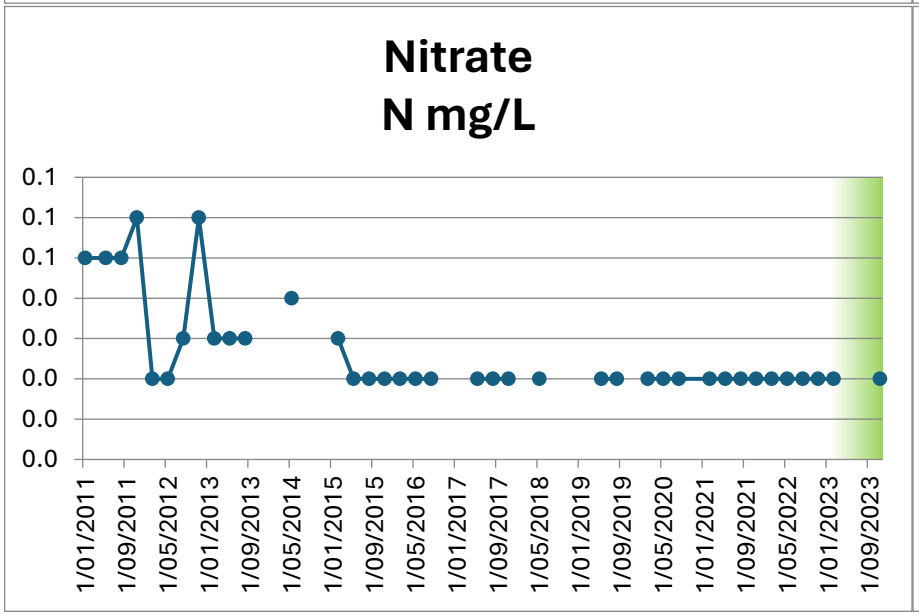

DO (Membrane Electrode)
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

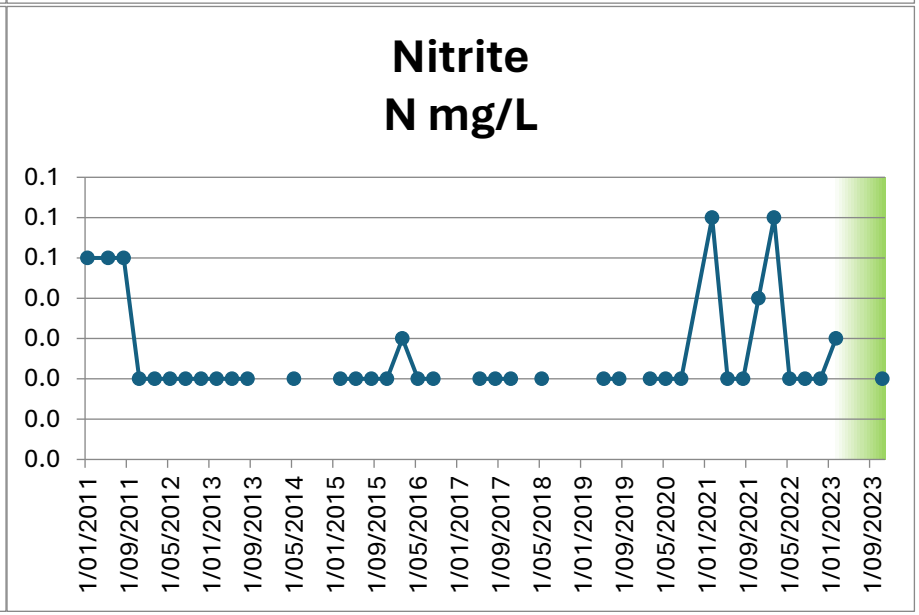

Lead (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

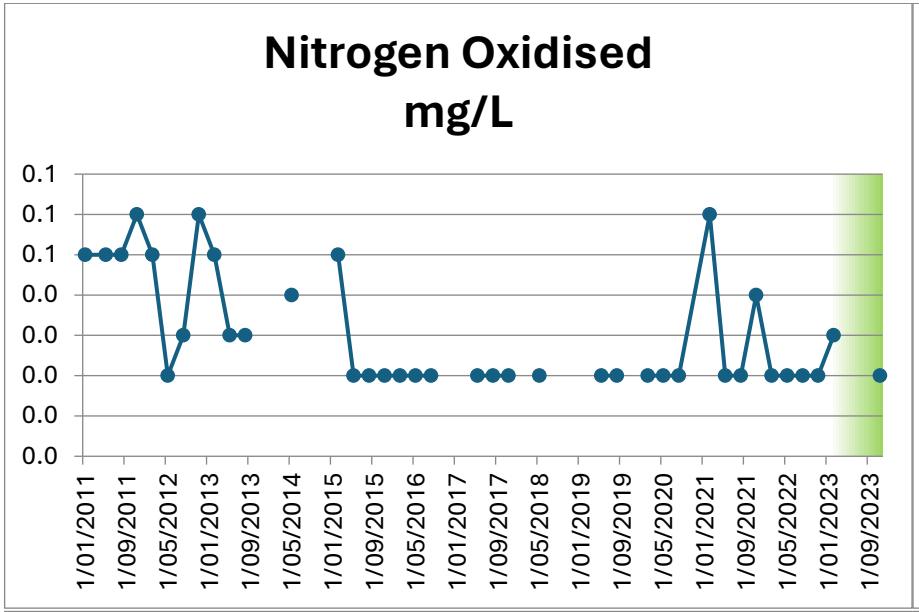

Magnesium (Total)
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

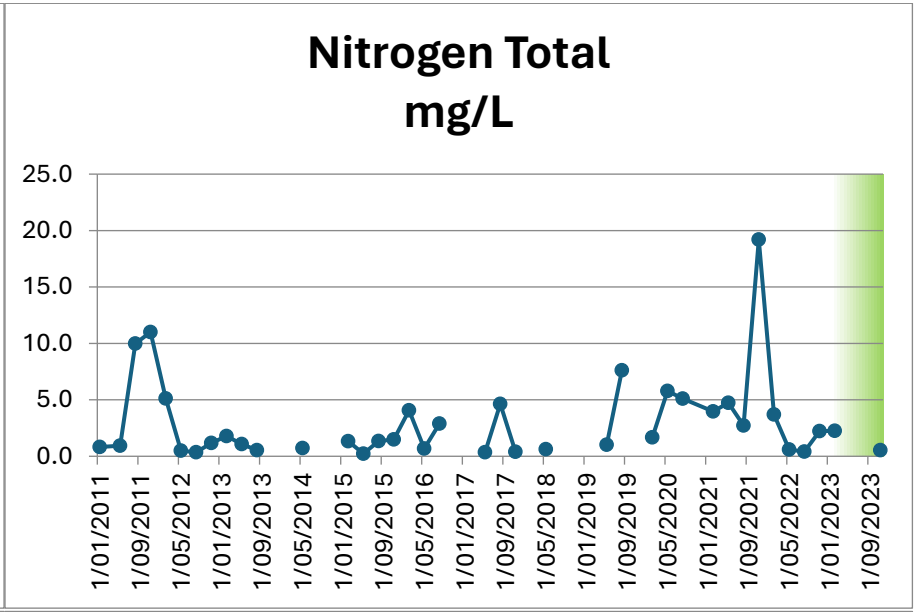

Manganese Total
mg/L
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

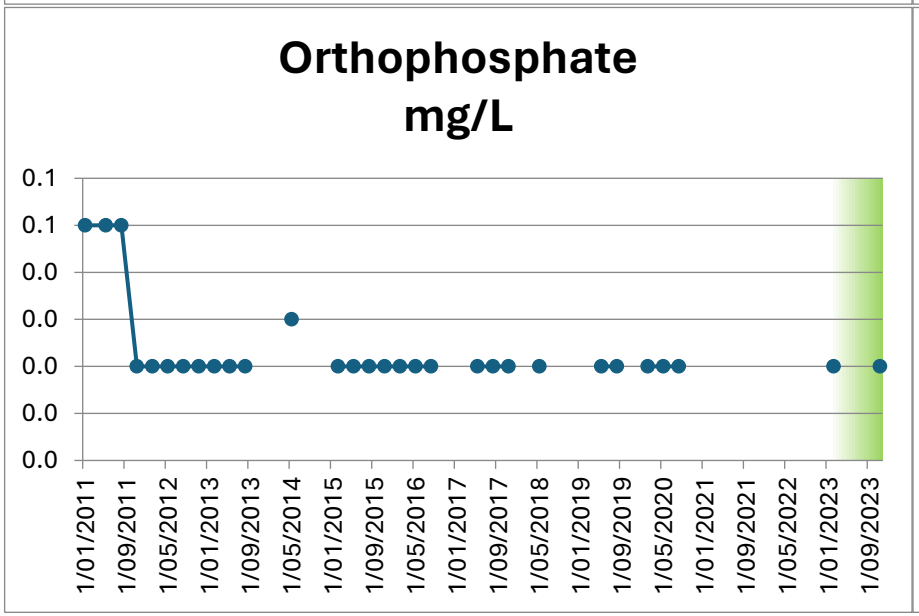

Nickel (Total)
mg/L
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

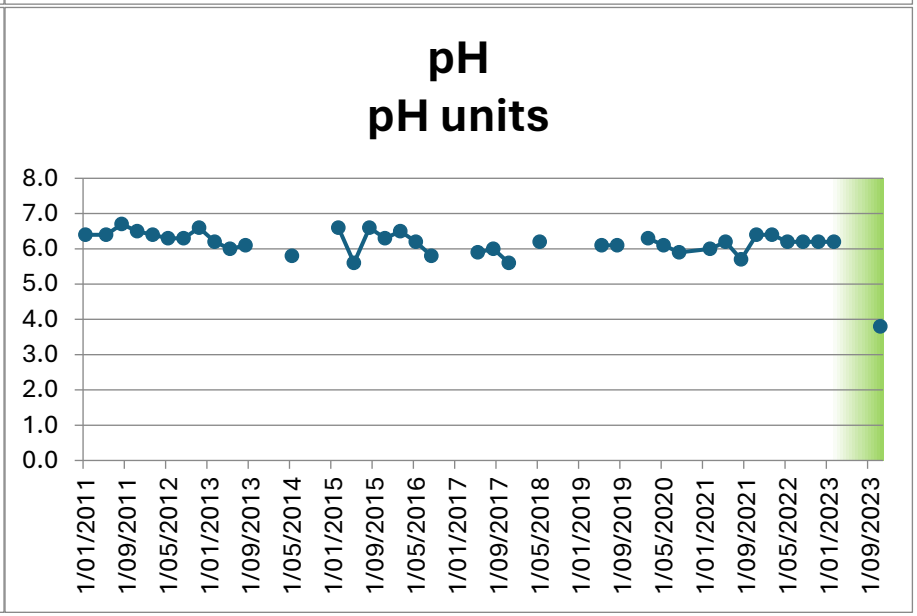

Nitrate
N mg/L
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

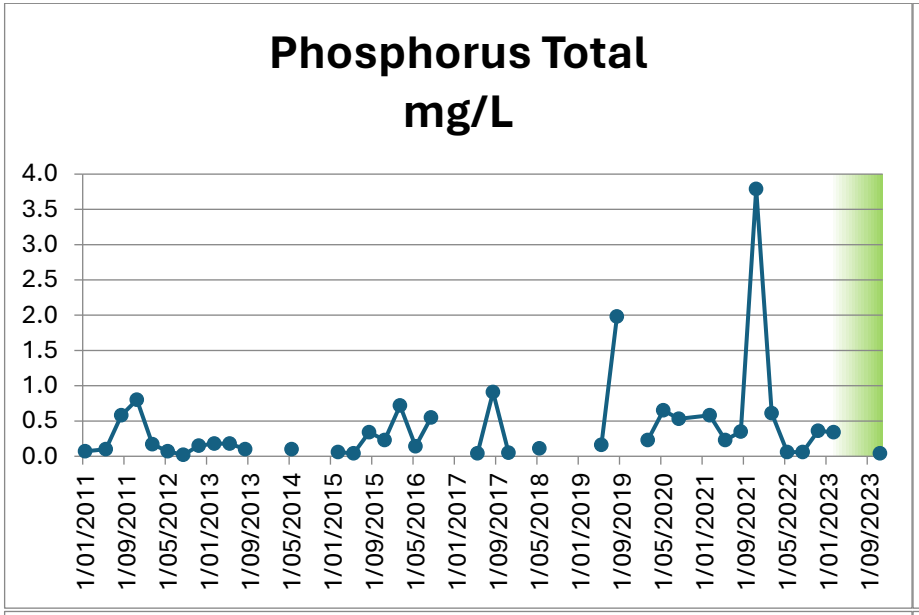

Nitrite
N mg/L
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

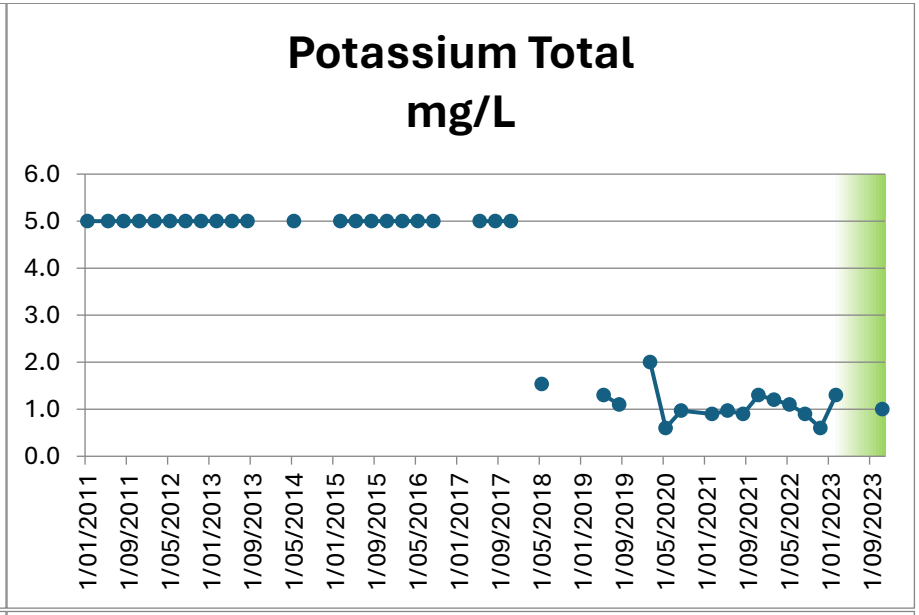

Nitrogen Oxidised
mg/L
0.1
0.1
0.1
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

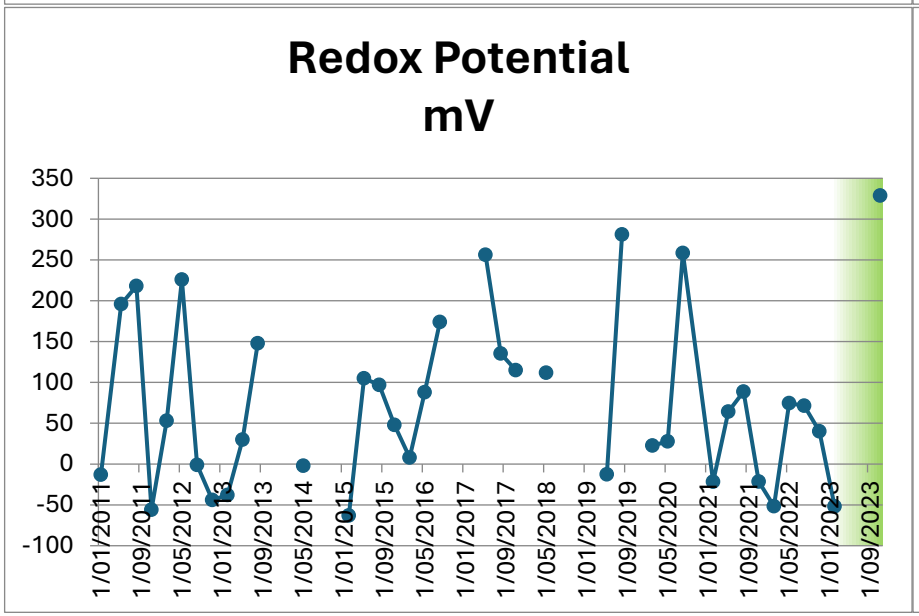

Nitrogen Total
mg/L
25.0
20.0
15.0
10.0
5.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

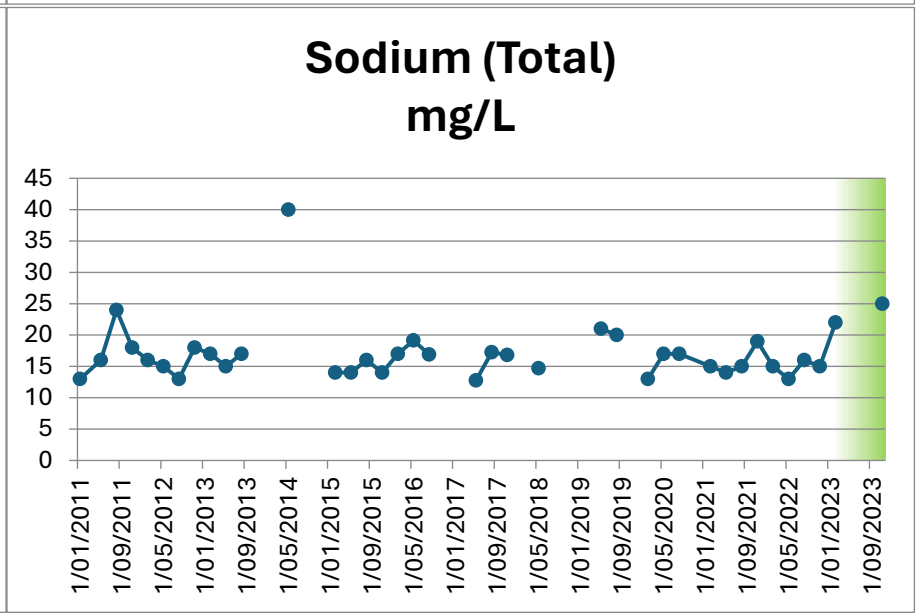

Orthophosphate
mg/L
0.1
0.1
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

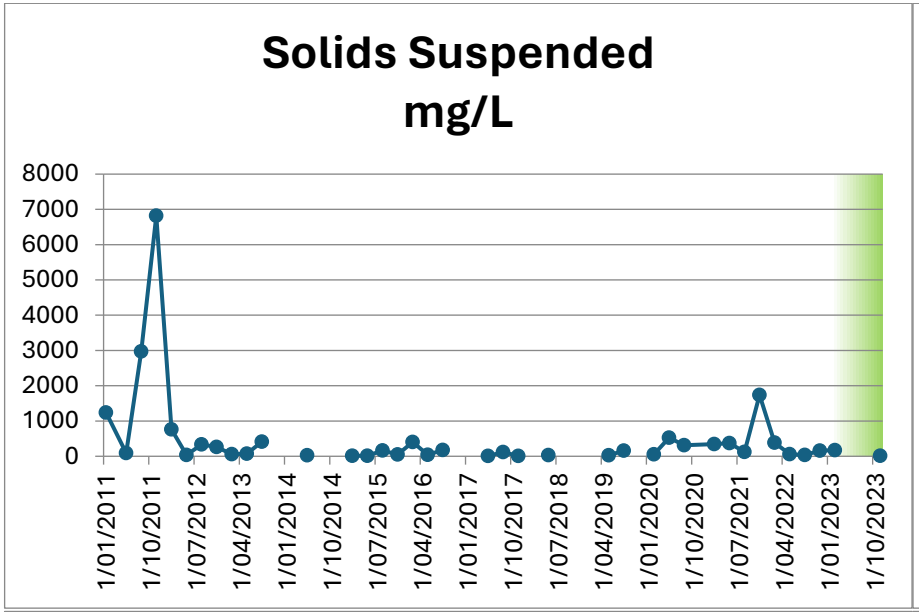

pH
pH units
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

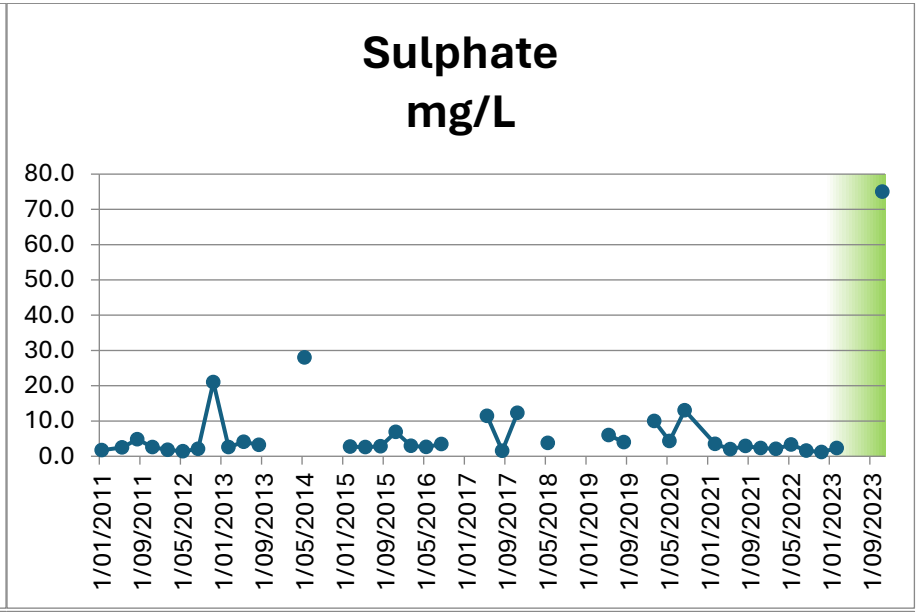

Phosphorus Total
mg/L
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

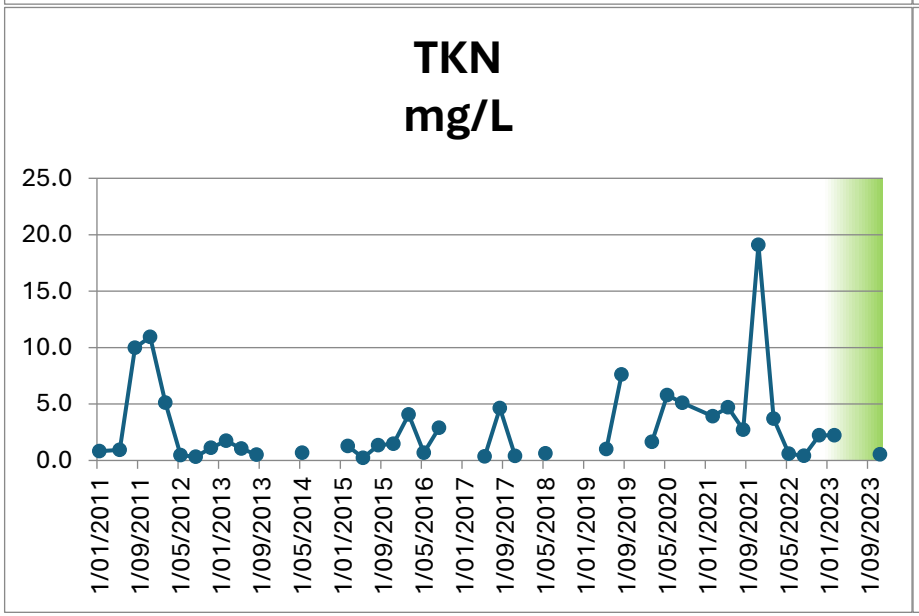

Potassium Total
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

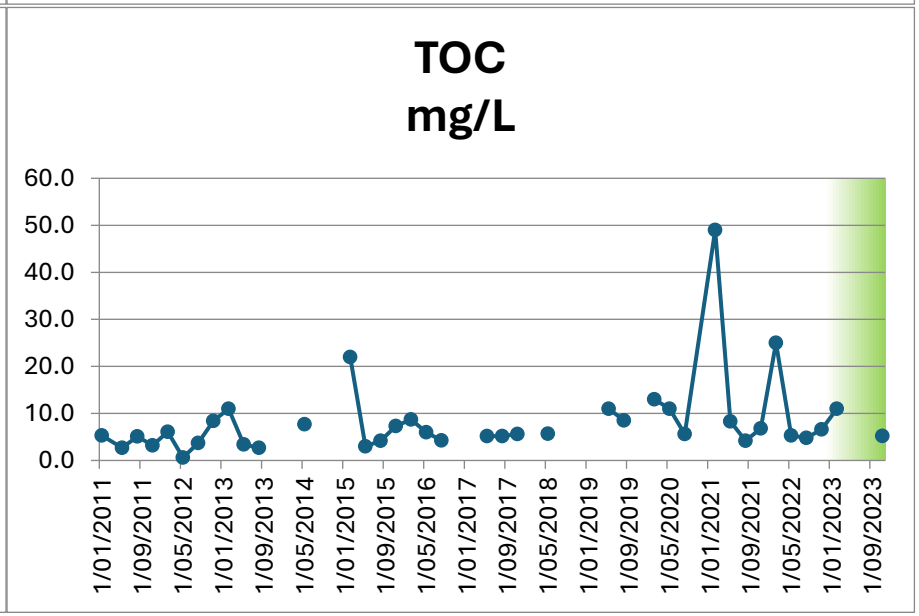

Redox Potential
mV
350
300
250
200
150
100
50
0
-50
-100
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

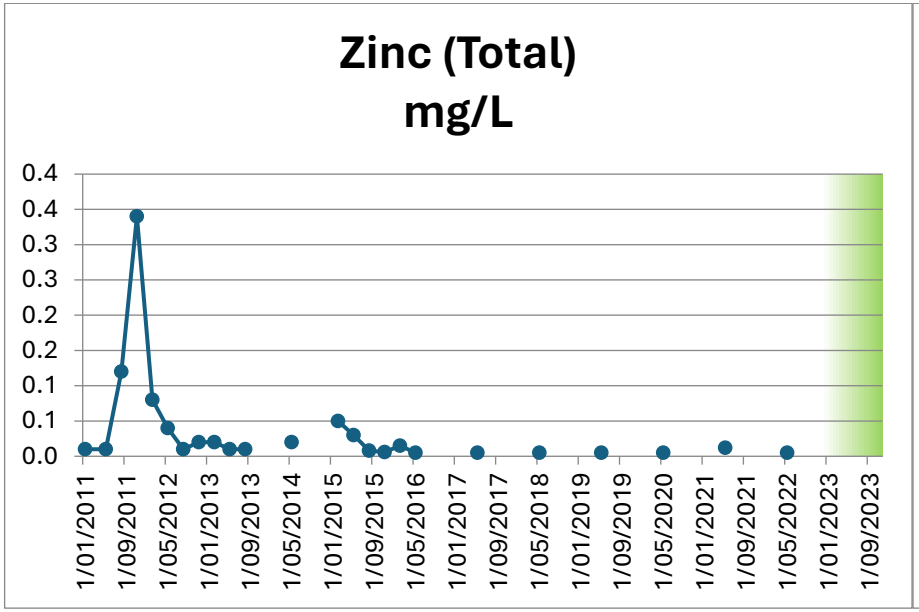

Sodium (Total)
mg/L
45
40
35
30
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Solids Suspended
mg/L
8000
7000
6000
5000
4000
3000
2000
1000
0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023


Sulphate
mg/L
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TKN
mg/L
25.0
20.0
15.0
10.0
5.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TOC
mg/L
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Zinc (Total)
mg/L
0.4
0.4
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

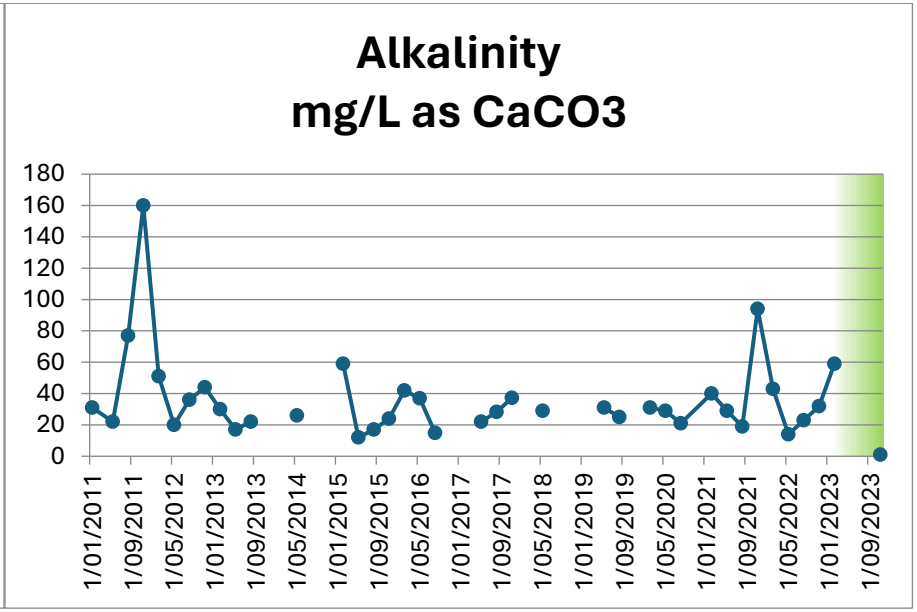
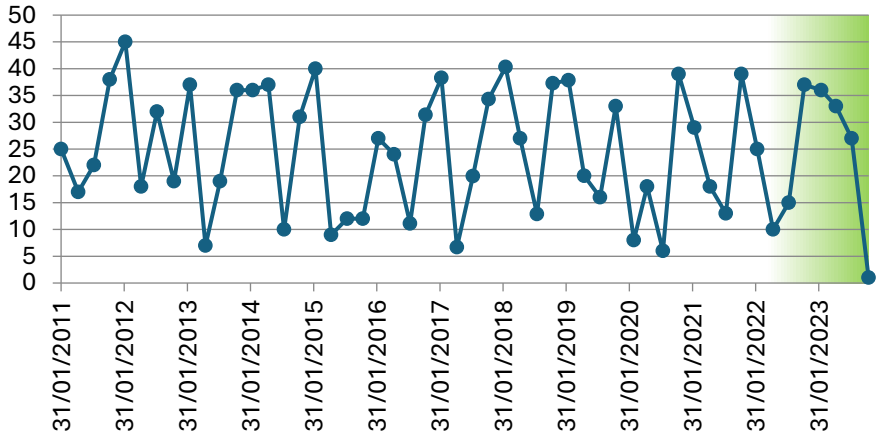

Alkalinity
mg/L as CaCO3
180
160
140
120
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

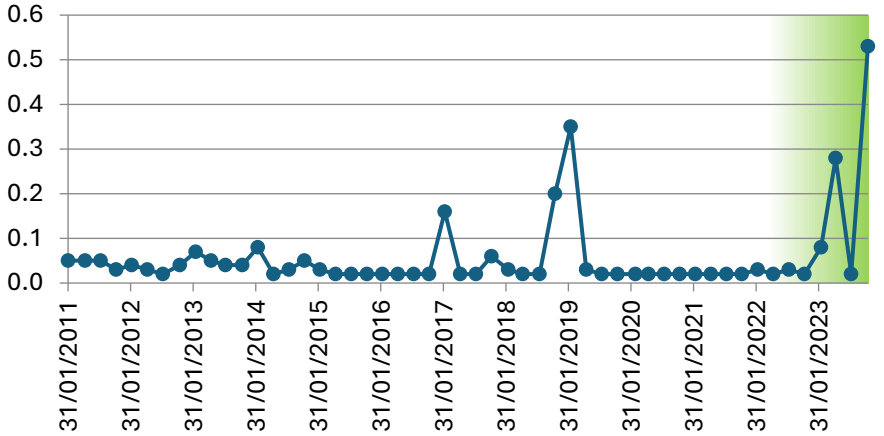
Table 9: Surface Water 2

SW2	Alkalinity mg/L as CaCO3	Ammonia mg/L	Arsenic (Total) mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Conductivity µScm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	Nitrate N mg/L	Nitrite N mg/L	Nitrogen Oxidised mg/L	Nitrogen Total mg/L	Orthophosphate mg/L	pH pH units	Phosphorus Total mg/L	Potassium Total mg/L	Redox Potential mV	Sodium (Total) mg/L	Solids Suspended mg/L	Sulphate mg/L	TKN mg/L	TOC mg/L	Zinc (Total) mg/L
31/01/2011	25	0.1	0.0	7.8	0.0	3.9	20	0.0	142	0.0	1.1	0.0	2.1	1.4	0.0	0.1	0.1	0.1	1.0	0.1	6.2	0.1	5.0	-18	13	82	1.0	1.0	6	0.0
10/05/2011	17	0.1	0.0	2.4	0.0	3.6	28	0.0	163	0.0	3.1	0.0	2.2	0.0	0.0	0.1	0.1	0.1	0.4	0.1	5.5	0.1	5.0	186	19	6	3.2	0.4	3	0.0
9/08/2011	22	0.1	0.0	18.0	0.0	5.9	44	0.0	224	0.0	6.9	0.0	3.1	0.7	0.0	0.1	0.1	0.1	0.7	0.1	6.0	0.1	5.0	244	23	167	4.7	0.7	8	0.0
8/11/2011	38	0.0	0.0	6.0	0.0	9.9	40	0.0	229	0.0	2.4	0.0	4.3	1.5	0.0	0.0	0.0	0.0	0.8	0.0	6.3	0.1	5.0	107	13	52	1.8	0.8	5	0.0
6/02/2012	45	0.0	0.0	6.0	0.0	9.0	24	0.0	205	0.0	1.0	0.0	5.4	2.9	0.0	0.1	0.0	0.1	1.2	0.0	6.4	0.5	5.0	34	17	44	2.3	1.1	5	0.0
8/05/2012	18	0.0	0.0	7.8	0.0	3.3	26	0.0	123	0.0	5.1	0.0	2.2	0.3	0.0	0.0	0.0	0.0	0.8	0.0	5.9	0.1	5.0	228	17	68	1.9	0.7	1	0.0
7/08/2012	32	0.0	0.0	1.0	0.0	5.3	32	0.0	192	0.0	3.1	0.0	4.2	0.1	0.0	0.0	0.0	0.0	0.3	0.0	6.1	0.0	5.0	114	15	4	1.8	0.3	4	0.0
14/11/2012	19	0.0	0.0	2.7	0.0	7.5	56	0.0	325	0.0	1.5	0.0	5.2	1.6	0.0	0.0	0.0	0.0	0.8	0.0	6.2	0.1	5.0	41	27	52	20.0	0.8	7	0.0
14/02/2013	37	0.1	0.0	14.0	0.0	8.3	38	0.0	272	0.0	1.0	0.0	4.4	1.6	0.0	0.0	0.0	0.0	1.0	0.0	6.2	0.1	5.0	-47	22	39	2.6	1.0	15	0.0
15/05/2013	7	0.1	0.0	3.9	0.0	3.3	35	0.0	149	0.0	2.1	0.0	1.7	0.4	0.0	0.0	0.0	0.0	0.2	0.0	5.7	0.0	5.0	78	18	20	4.0	0.2	3	0.0
7/08/2013	19	0.0	0.0	4.5	0.0	4.0	31	0.0	144	0.0	3.6	0.0	2.6	0.3	0.0	0.0	0.0	0.0	0.8	0.0	6.0	0.1	5.0	146	20	90	1.5	0.7	4	0.0
13/11/2013	36	0.0	0.0	7.2	0.0	8.4	51	0.0	257	0.0	4.5	0.0	4.9	1.0	0.0	0.0	0.0	0.0	1.2	0.0	6.5	0.1	5.0	90	29	35	2.2	1.2	7	0.1
12/02/2014	36	0.1	0.0	22.0	0.0	9.0	56	0.0	260	0.0	3.6	0.0	5.2	0.7	0.0	0.1	0.0	0.1	2.7	0.0	6.4	0.2	5.0	145	34	64	2.4	2.6	9	0.1
14/05/2014	37	0.0	0.0	5.7	0.0	7.1	67	0.0	321	0.0	4.2	0.0	4.9	0.4	0.0	0.0	0.0	0.0	1.6	0.0	6.3	0.2	5.0	34	38	34	4.4	1.6	12	0.0
13/08/2014	10	0.0	0.0	2.7	0.0	6.2	59	0.0	269	0.0	3.8	0.0	4.0	0.1	0.0	0.0	0.0	0.0	0.4	0.0	5.8	0.1	5.0	153	37	10	18.0	0.4	5	0.0
11/11/2014	31	0.1	0.0	5.4	0.0	7.5	60	0.0	248	0.0	3.9	0.0	4.6	0.4	0.0	0.0	0.0	0.0	1.2	0.0	7.1	0.2	5.0	79	33	23	3.3	1.2	11	0.0
10/02/2015	40	0.0	0.0	5.7	0.0	8.3	29	0.0	196	0.0	0.1	0.0	4.8	2.0	0.0	0.0	0.0	0.0	1.5	0.0	6.5	0.1	5.0	-1	16	22	2.6	1.4	20	0.0
12/05/2015	9	0.0	0.0	4.8	0.0	2.3	24	0.0	111	0.0	1.5	0.0	1.5	0.2	0.0	0.0	0.0	0.0	0.4	0.0	5.4	0.1	5.0	124	16	21	2.7	0.4	4	0.0
12/08/2015	12	0.0	0.0	1.2	0.0	3.1	31	0.0	140	0.0	4.8	0.0	2.1	0.1	0.0	0.0	0.0	0.0	0.3	0.0	6.3	0.0	5.0	139	20	3	3.1	0.3	4	0.0
11/11/2015	12	0.0	0.0	1.8	0.0	4.0	29	0.0	148	0.0	2.5	0.0	2.4	0.4	0.0	0.0	0.0	0.0	0.5	0.0	5.9	0.0	5.0	80	18	17	9.8	0.5	7	0.0
9/02/2016	27	0.0	0.0	6.3	0.0	6.1	39	0.0	182	0.0	1.1	0.0	3.0	0.5	0.0	0.0	0.0	0.0	0.7	0.0	6.4	0.1	5.0	84	21	28	3.0	0.7	9	0.0
10/05/2016	24	0.0	0.0	6.3	0.0	5.8	37	0.0	176	0.0	2.5	0.0	3.2	0.6	0.0	0.0	0.0	0.0	1.1	0.0	6.2	0.1	5.0	116	21	34	1.9	1.1	6	0.0
10/08/2016	11	0.0		3.9		4.1	41		181		2.0		2.7			0.0	0.0	0.0	0.5	0.0	5.6	0.1	5.0	134	22	16	6.4	0.5	4	
8/11/2016	31	0.0		3.6		7.2	40		191		2.0		3.7			0.0	0.0	0.0	0.9	0.0	6.3	0.1	5.0	408	25	16	2.5	0.9	8	
8/02/2017	38	0.2		3.0		6.9	38		215		1.5		4.2			0.0	0.0	0.0	1.2	0.0	6.4	0.1	5.0	331	24	16	3.7	1.2	13	
9/05/2017	7	0.0	0.0	1.0	0.0	3.5	32	0.0	142	0.0	2.0	0.0	2.2	0.2	0.0	0.0	0.0	0.0	0.4	0.0	5.4	0.0	5.0	346	18	6	10.4	0.4	5	0.0
9/08/2017	20	0.0		3.9		3.6	28		140		2.3		2.3			0.0	0.0	0.0	0.5	0.0	6.0	0.1	5.0	359	19	16	1.1	0.5	5	
8/11/2017	34	0.1		4.8		8.3	40		216		1.2		4.2			0.0	0.0	0.0	0.7	0.0	5.6	0.1	5.0	121	24	18	2.9	0.7	9	
14/02/2018	40	0.0		9.6		8.2	35		202		1.4		3.7			0.0	0.0	0.0	1.1	0.0	6.4	0.1	5.0	165	24	31	2.0	1.1	11	
9/05/2018	27	0.0	0.0	4.8	0.0	6.5	29	0.0	161	0.0	1.9	0.0	3.4	0.6	0.0	0.0	0.0	0.0	0.6	0.0	6.1	0.0	1.1	275	19	9	2.5	0.6	9	0.0
15/08/2018	13	0.0		6.6		4.0	35		148		2.3		2.1			0.0	0.0	0.0	0.4	0.0	6.0	0.1	1.0	434	21	14	1.4	0.4	4	
14/11/2018	37	0.2		9.3		9.2	44		227		1.2		4.6			0.0	0.0	0.0	1.1	0.0	6.3	0.1	2.7	57	27	22	2.9	1.1	18	
13/02/2019	38	0.4		15.0		8.9	38		206		1.7		4.3			0.0	0.0	0.0	2.5	0.0	6.5	0.2	3.8	88	23	54	2.5	2.5	14	
15/05/2019	20	0.0	0.0	3.6	0.0	6.2	38	0.0	186	0.0	1.2	0.0	3.3	0.2	0.0	0.0	0.0	0.0	0.6	0.0	6.0	0.1	1.4	57	26	7	5.7	0.6	10	0.0
14/08/2019	16	0.0		1.2		4.8	33		163		1.2		2.8			0.0	0.0	0.0	0.5	0.0	6.1	0.1	0.7	299	22	7	2.7	0.5	8	
13/11/2019	33	0.0		5.7		7.8	50		237		5.8		4.6			0.0	0.0	0.0	1.2	0.0	6.7	0.2	2.1	322	28	10	2.1	1.2	12	
26/02/2020	8	0.0		1.0		4.0	29		143		1.3		2.3			0.0	0.0	0.0	0.7	0.0	5.6	0.1	1.4	178	16	9	14.0	0.7	9	
13/05/2020	18	0.0	0.0	2.7	0.0	4.8	32	0.0	148	0.0	2.7	0.0	2.7	0.5	0.0	0.0	0.0	0.0	0.6	0.0	6.0	0.1	0.6	119	17	27	3.7	0.6	7	0.0
12/08/2020	6	0.0		1.0		4.6	32		166		2.7		2.9			0.0	0.0	0.0	0.2	0.0	5.3	0.0	0.8	204	20	4	17.0	0.2	5	
11/11/2020	39	0.0		8.5		9.0	43		248		1.6		4.7			0.0	0.0	0.0	1.3	0.0	6.2	0.1	1.3	6	26	41	3.2	1.2	14	
10/02/2021	29	0.0		5.5		7.5	26		187		0.8		3.6			0.0	0.0	0.0	1.2		5.9	0.1	1.0	37	18	38	3.8	1.2	19	
12/05/2021	18	0.0	0.0	3.9	0.0	4.4	28	0.0	146	0.0	2.4	0.0	3.1	0.6	0.0	0.0	0.0	0.0	0.4		6.0	0.0	1.0	136	18	5	5.2	0.4	6	0.0
11/08/2021	13	0.0		1.0		3.1	30		134		5.0		2.1			0.0	0.0	0.0	0.7		5.6	0.1	0.9	229	18	7	2.8	0.7	3	
9/11/2021	39	0.0		4.5		8.3	42		221		1.4		4.3			0.0	0.0	0.0	0.7		6.3	0.1	1.4	9	21	32	2.3	0.7	1	
9/02/2022	25	0.0		3.6		5.6	30		186		1.4		3.4			0.0	0.1	0.0	1.1		6.3	0.1	1.1	6	17	28	3.3	1.1	17	
11/05/2022	10	0.0	0.0	1.0	0.0	2.8	26	0.0	120	0.0	4.5	0.0	1.8	0.1	0.0	0.0	0.0	0.0	0.5		6.0	0.0	1.0	166	15	10	6.0	0.5	5	0.0
10/08/2022	15	0.0		1.8		3.8	32		156		2.6		2.6			0.0	0.0	0.0	0.3		5.9	0.0	0.9	95	19	9	4.1	0.3	5	
9/11/2022	37	0.0		3.9		6.4	28		173		2.1		3.6			0.0	0.0	0.0	0.6		6.2	0.1	0.9	71	18	23	1.7	0.6	9	
14/02/2023	36	0.1		9.5		8.4	32		206		2.1		4.5			0.0	0.0	0.0	1.0	0.0	6.2	0.1	1.3	55	24	37	1.5	1.0	11	
10/05/2023	33	0.3	0.0	16.0	0.0	6.7	45	0.0	203	0.0	1.4	0.0	3.8	0.8	0.0	0.0	0.0	0.0	2.6	0.0	6.2	0.2	1.0	34	22	62	0.9	2.6	10	0.0
9/08/2023	27	0.0		6.6		5.3	35		172		3.3		3.1			0.0	0.0	0.0	1.2	0.0	6.3	0.2	1.5	173	21	30	1.0	1.2	7	
15/11/2023	1	0.5		1.0		20.0	31		405		2.0		7.4			0.0	0.0	0.0	1.0	0.0	3.7	0.1	4.9	392	23	15	106.0	1.0	7	
2023 Min	**1.00**	**0.02**	**0.00**	**1.00**	**0.00**	**5.30**	**31.00**	**0.00**	**172.00**	**0.00**	**1.40**	**0.00**	**3.10**	**0.79**	**0.00**	**0.02**	**0.02**	**0.02**	**1.00**	**0.02**	**3.70**	**0.05**	**0.97**	**33.90**	**21.00**	**15.00**	**0.90**	**0.99**	**6.80**	**0.01**
2023 Max	**36.00**	**0.53**	**0.00**	**16.00**	**0.00**	**20.00**	**45.00**	**0.00**	**405.00**	**0.00**	**3.30**	**0.00**	**7.40**	**0.79**	**0.00**	**0.02**	**0.03**	**0.03**	**2.59**	**0.02**	**6.30**	**0.21**	**4.90**	**392.10**	**24.00**	**62.00**	**#####**	**2.56**	**11.00**	**0.01**
2023 Mean	**24.25**	**0.23**	**0.00**	**8.28**	**0.00**	**10.10**	**35.75**	**0.00**	**246.50**	**0.00**	**2.20**	**0.00**	**4.70**	**0.79**	**0.00**	**0.02**	**0.02**	**0.02**	**1.45**	**0.02**	**5.60**	**0.12**	**2.17**	**163.28**	**22.50**	**36.00**	**27.35**	**1.44**	**8.75**	**0.01**
Long-term Average	**24.48**	**0.06**	**0.00**	**5.59**	**0.00**	**6.26**	**36.45**	**0.01**	**194.33**	**0.01**	**2.47**	**0.01**	**3.50**	**0.70**	**0.01**	**0.03**	**0.02**	**0.03**	**0.88**	**0.02**	**6.05**	**0.09**	**3.44**	**143.49**	**21.58**	**29.45**	**6.22**	**0.87**	**8.10**	**0.02**

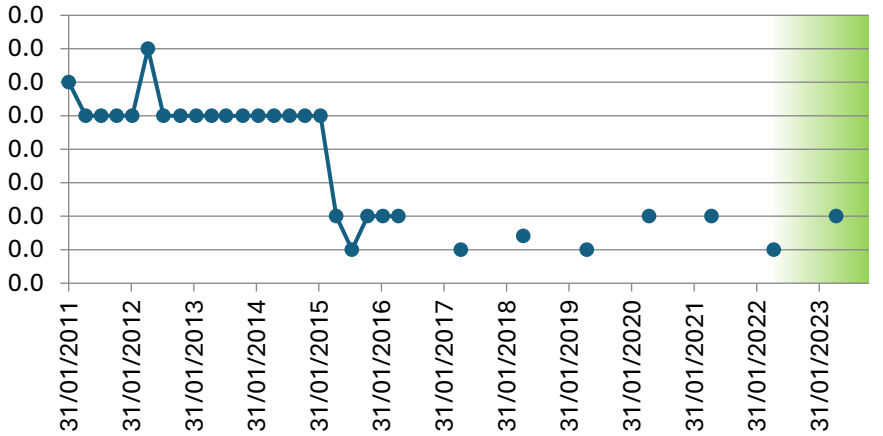
Alkalinity
mg/L as CaCO3



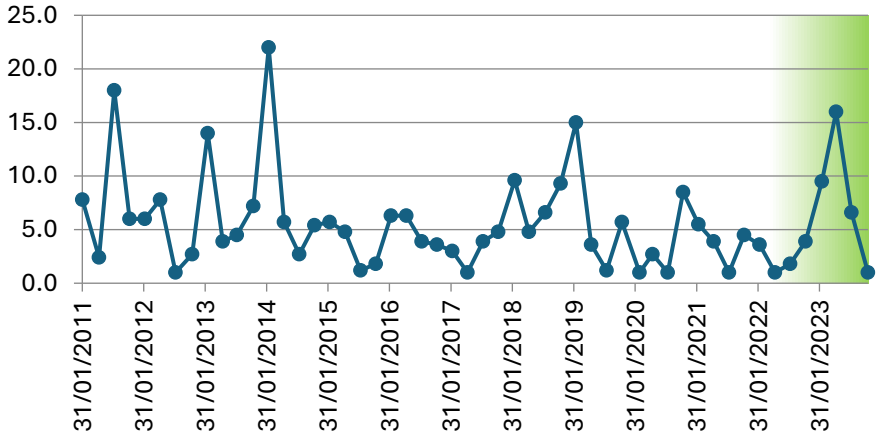
Ammonia
mg/L

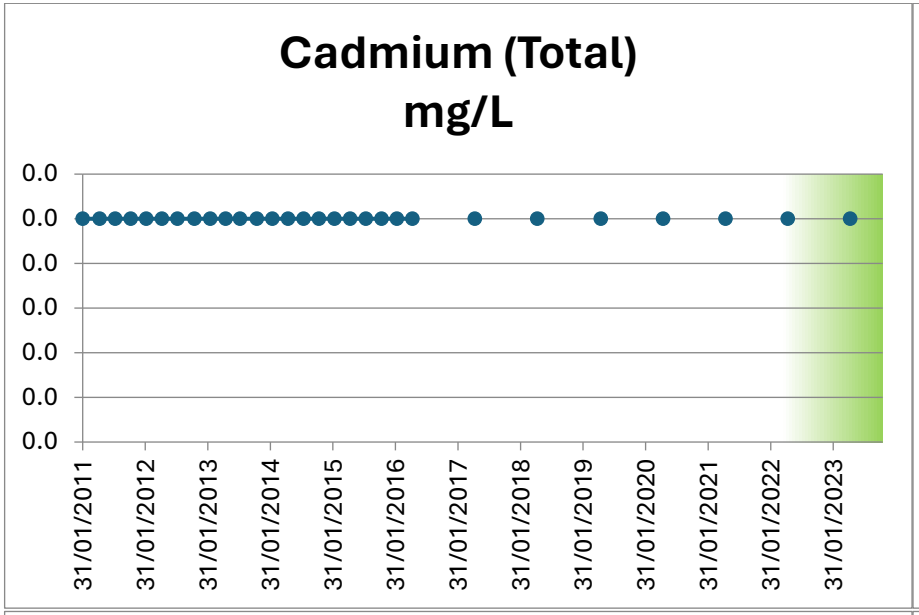


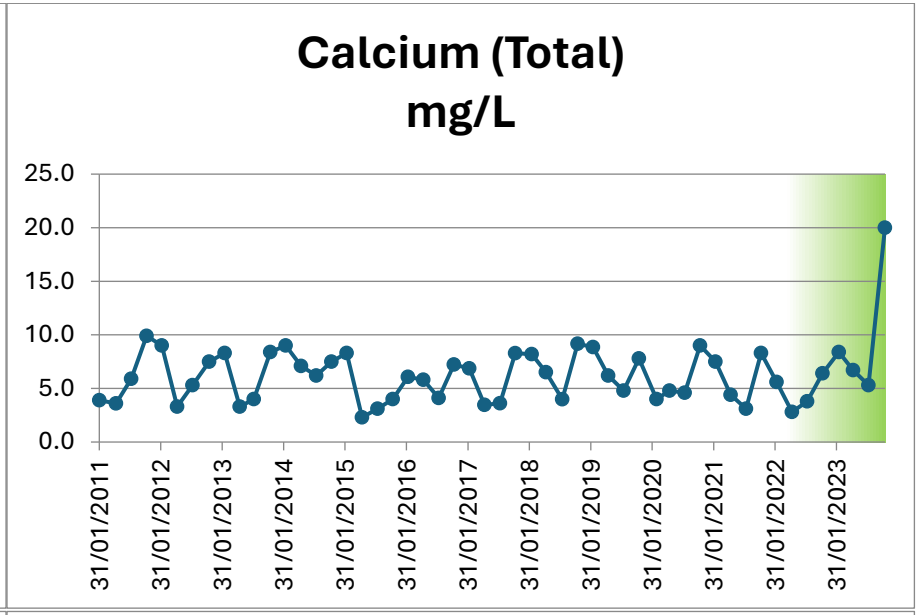
Arsenic (Total)
mg/L

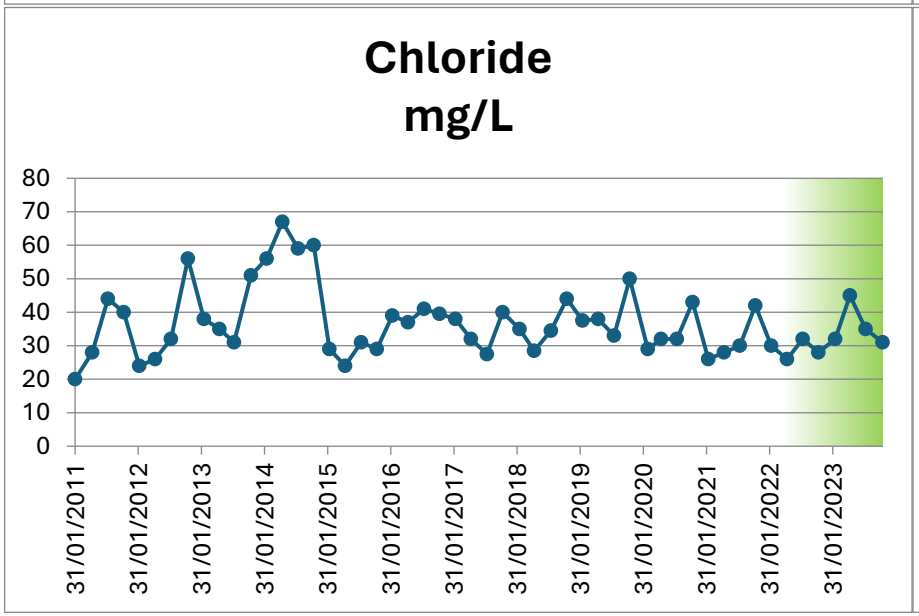


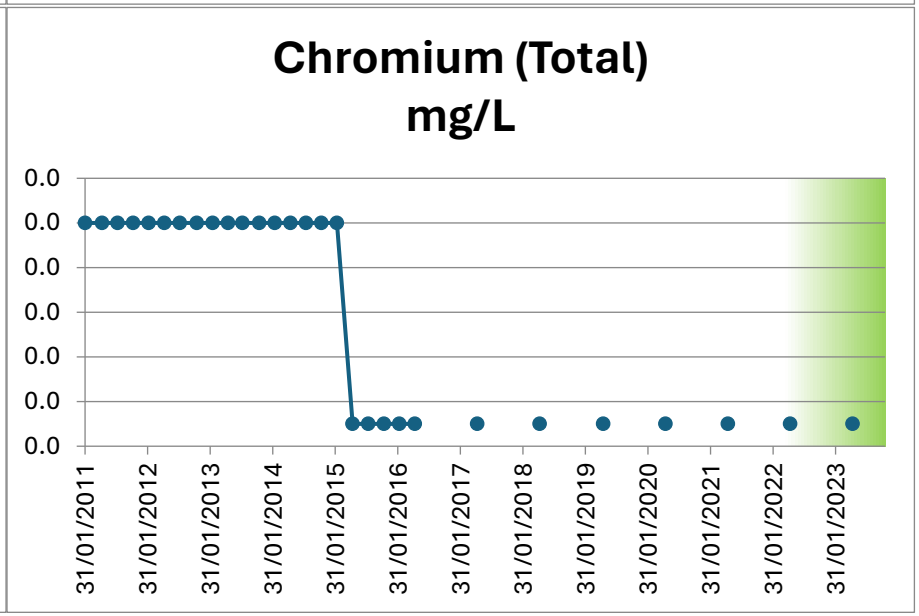
BOD5
mg/L

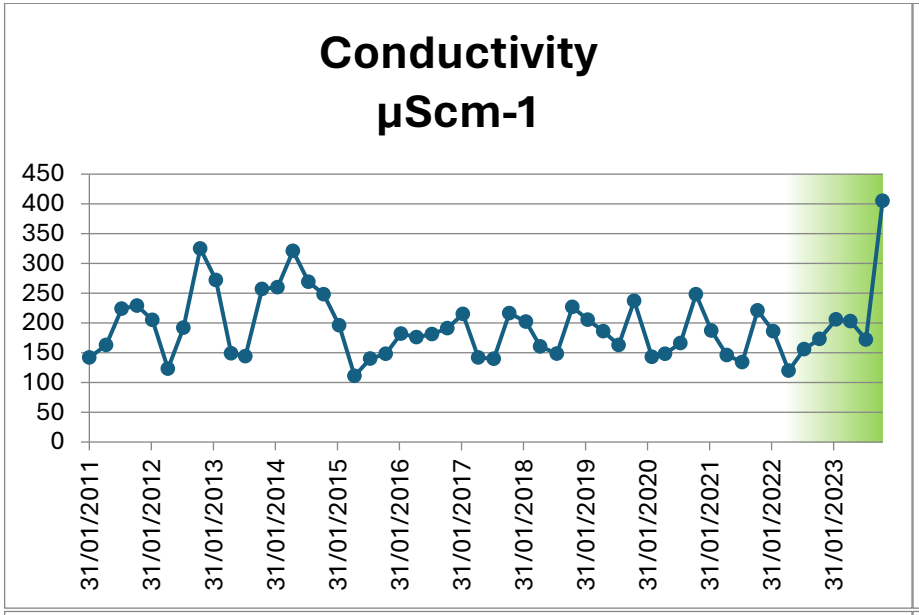


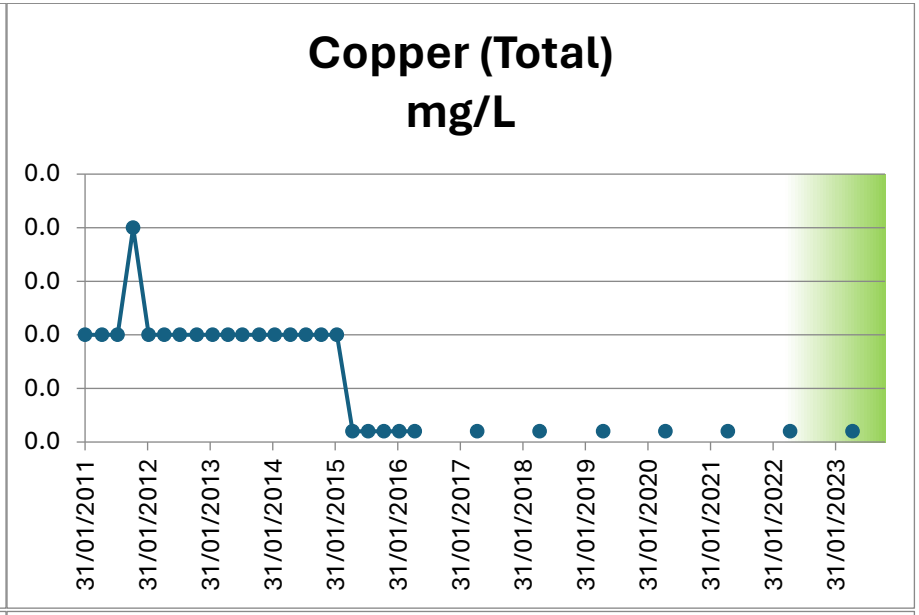

Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

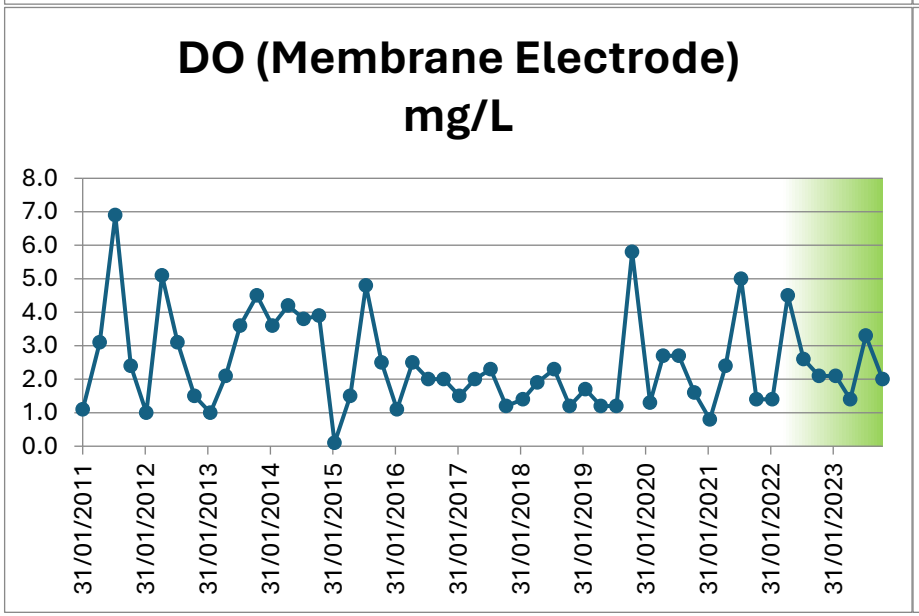

Calcium (Total)
mg/L
25.0
20.0
15.0
10.0
5.0
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

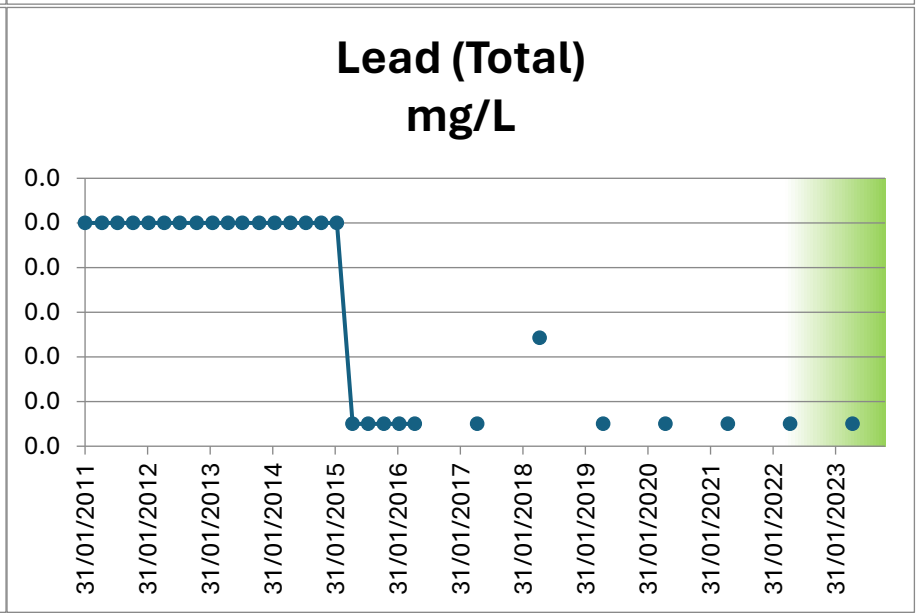

Chloride
mg/L
80
70
60
50
40
30
20
10
0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

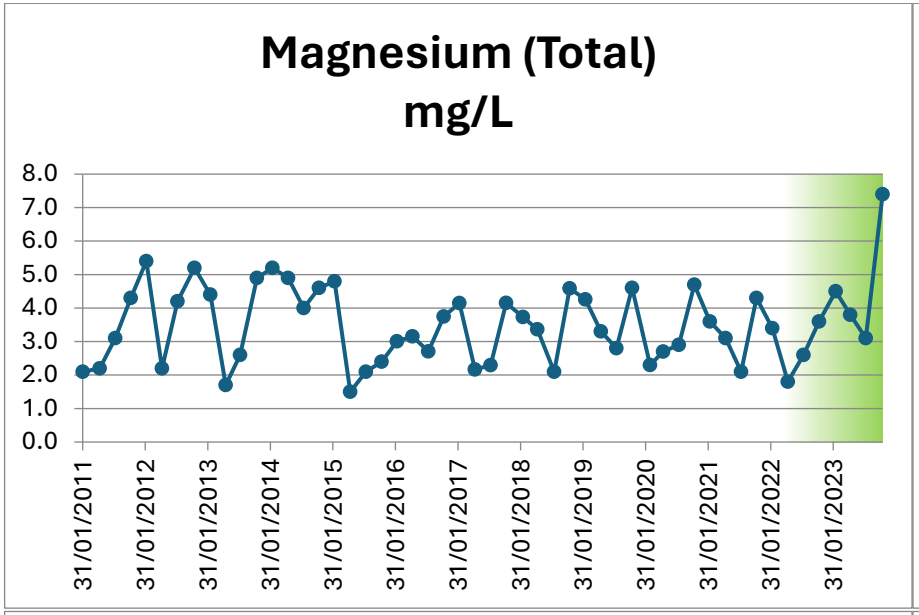

Chromium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

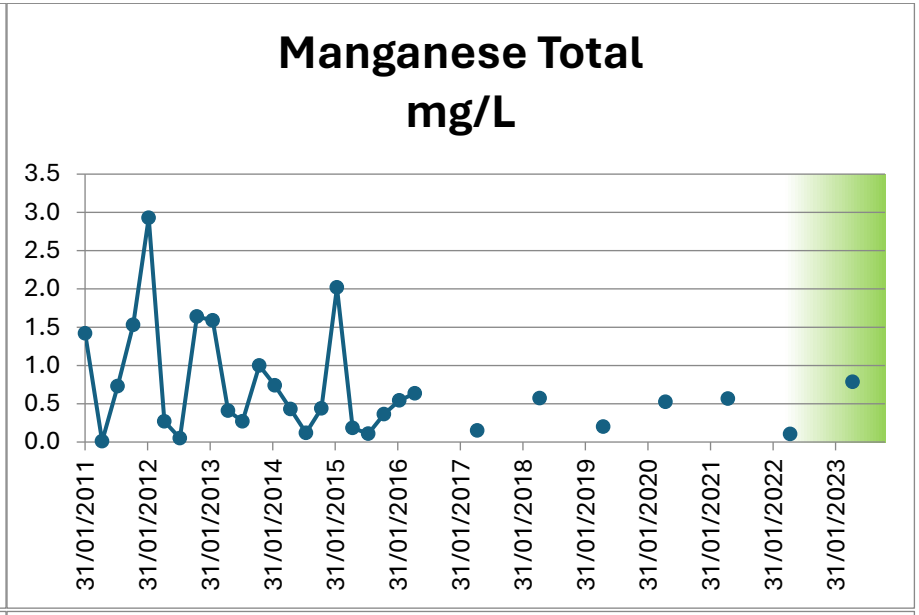

Conductivity
µScm-1
450
400
350
300
250
200
150
100
50
0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

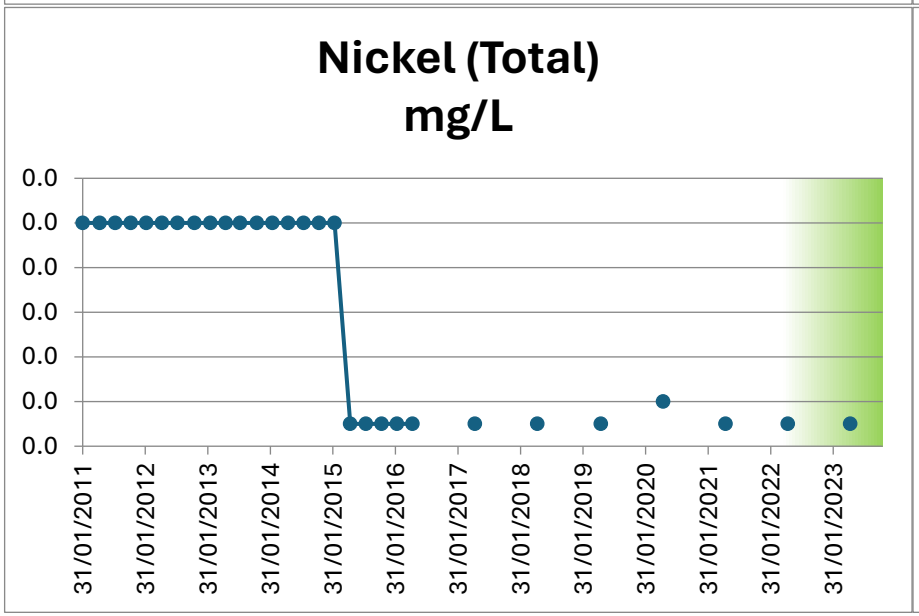

Copper (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

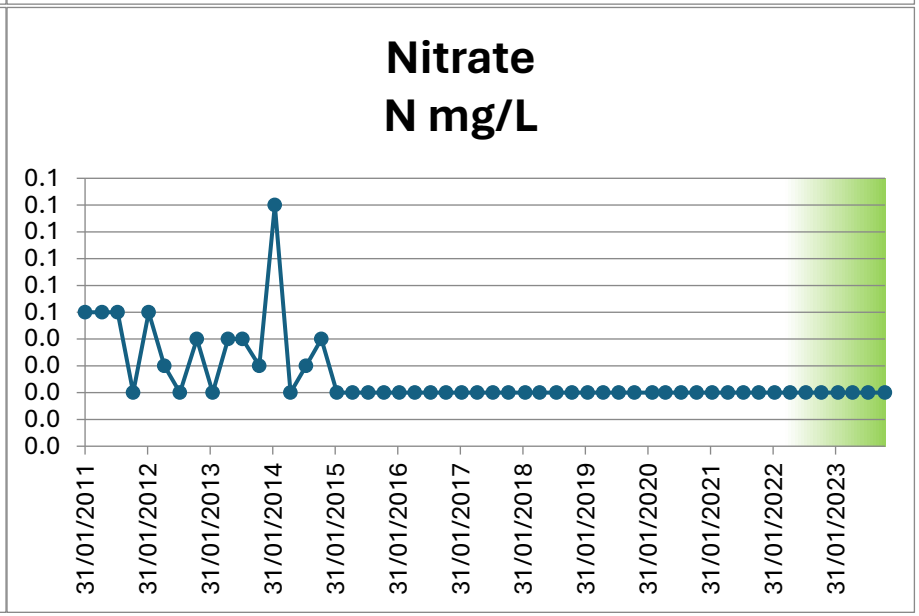

DO (Membrane Electrode)
mg/L
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

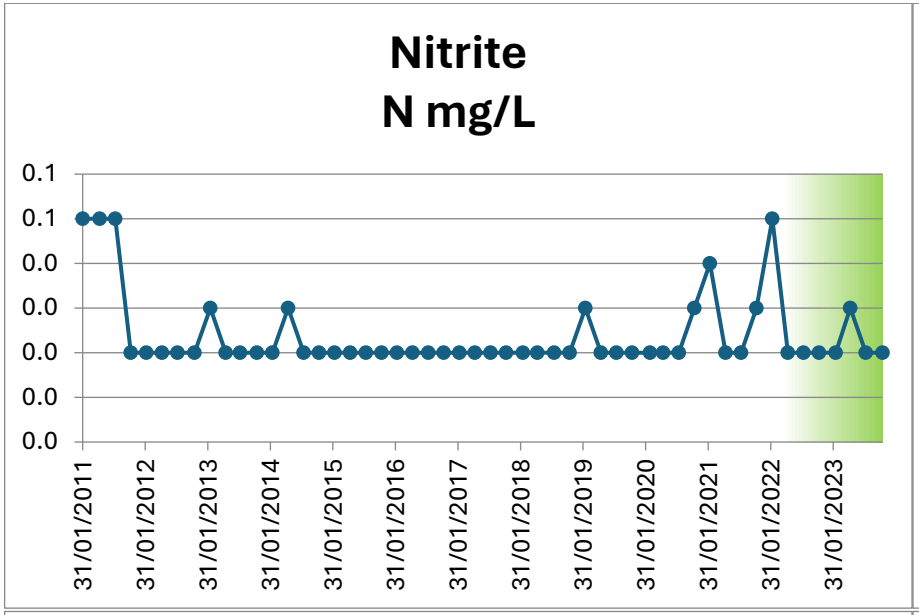

Lead (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

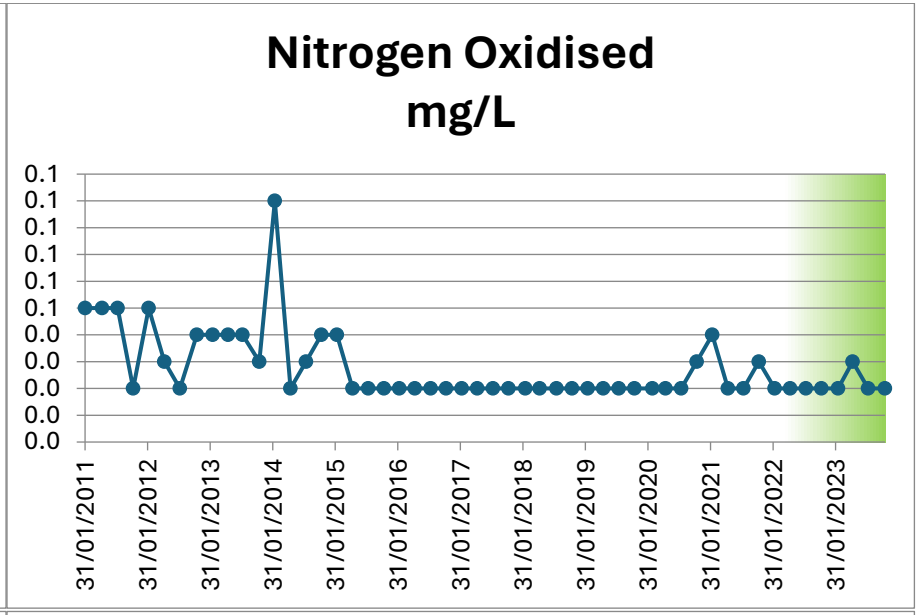

Magnesium (Total)
mg/L
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

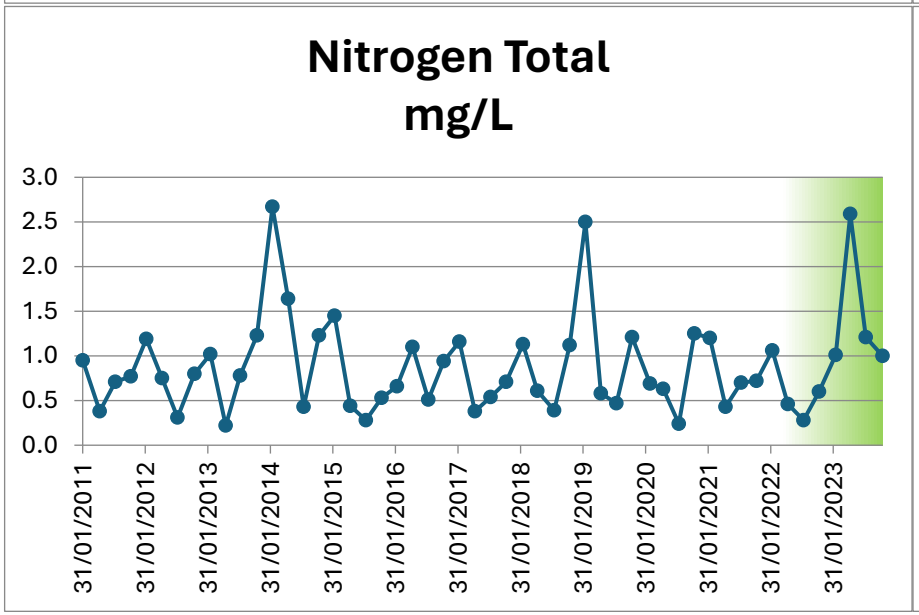

Manganese Total
mg/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

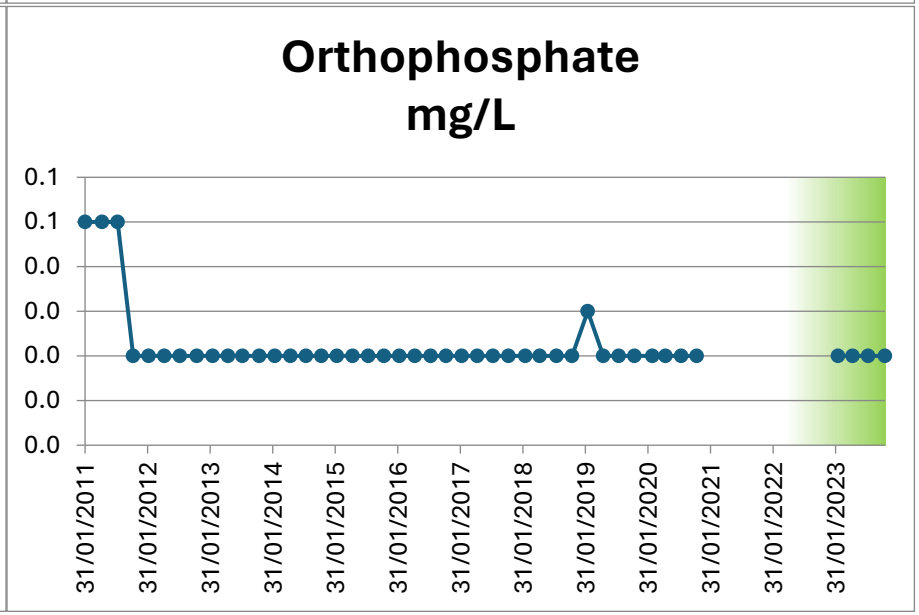

Nickel (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

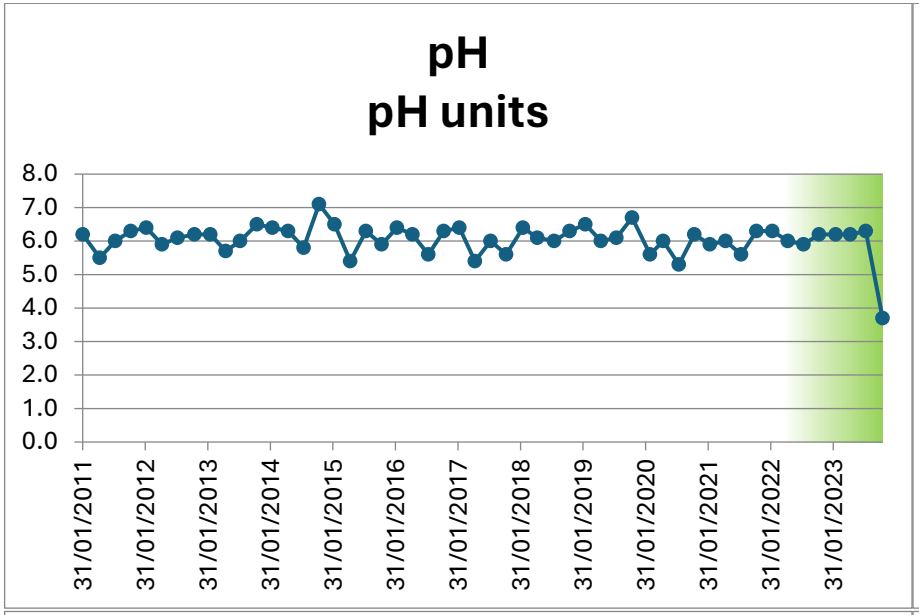

Nitrate
N mg/L
0.1
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

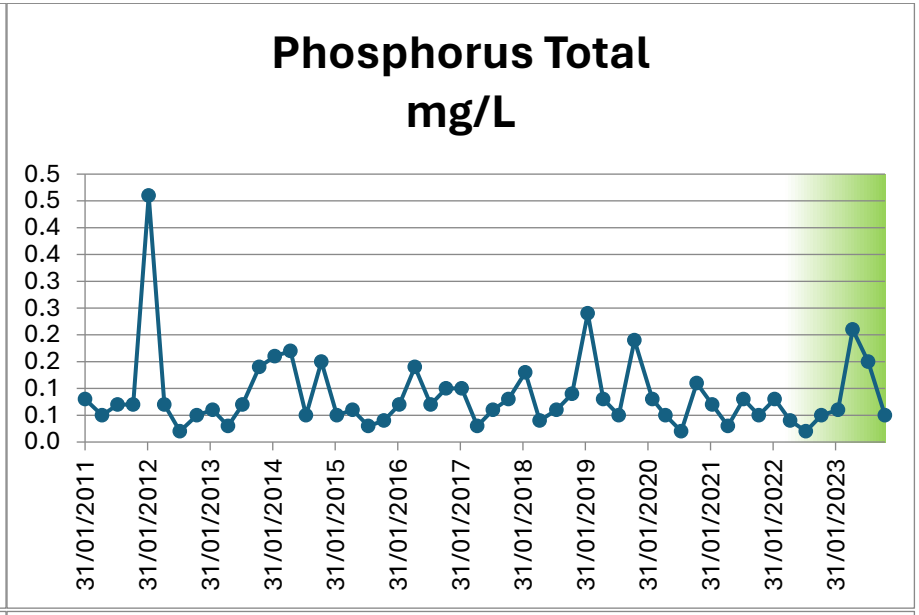

Nitrite
N mg/L
0.1
0.1
0.0
0.0
0.0
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

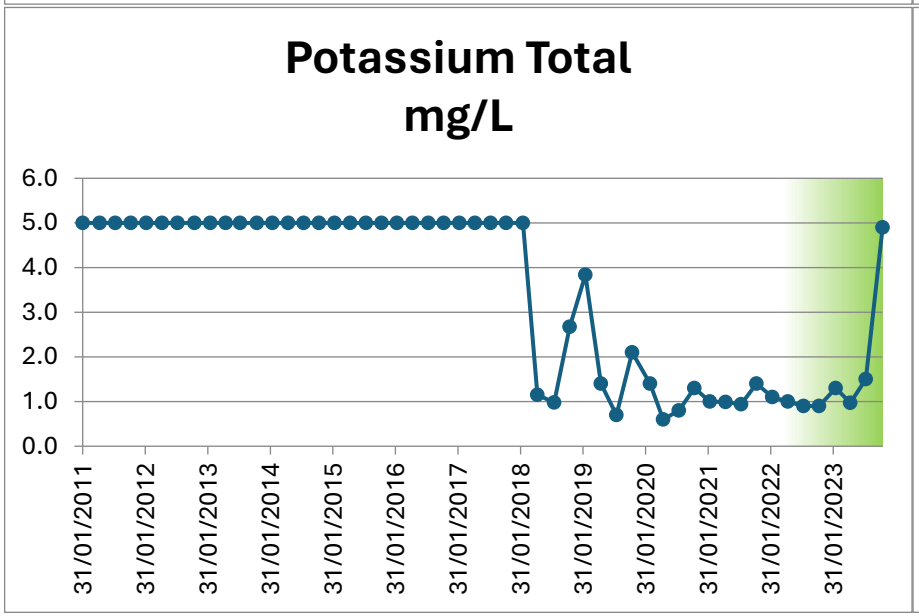

Nitrogen Oxidised
mg/L
0.1
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

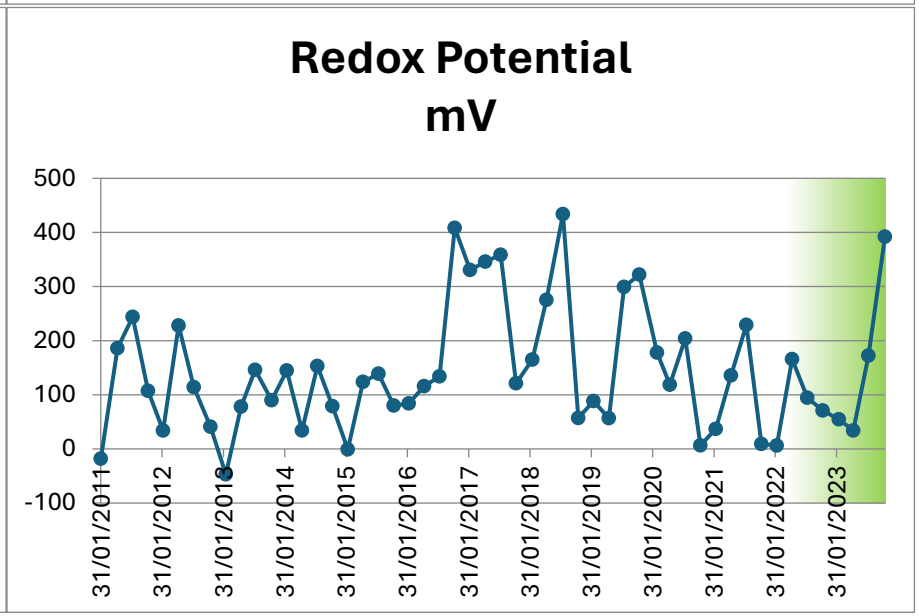

Nitrogen Total
mg/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

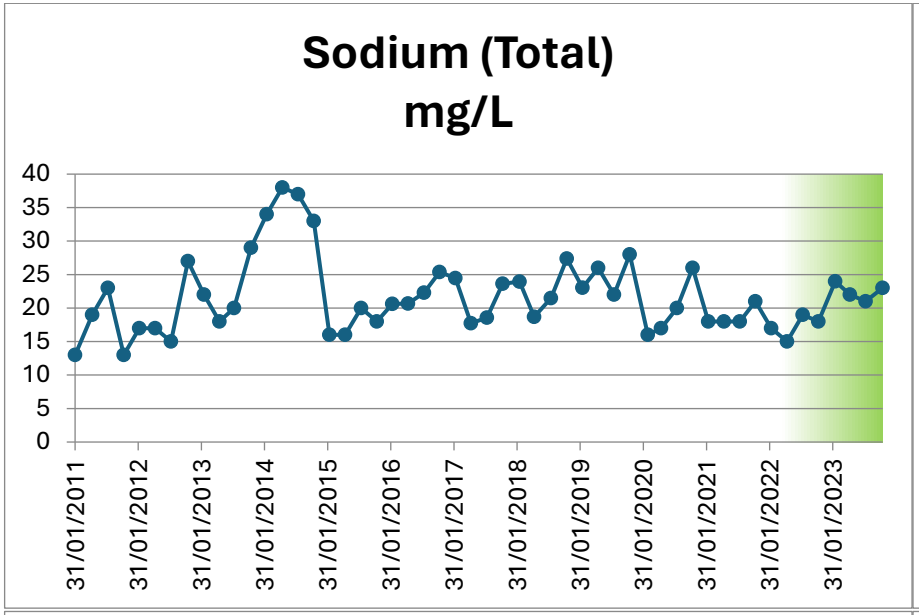

Orthophosphate
mg/L
0.1
0.1
0.0
0.0
0.0
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

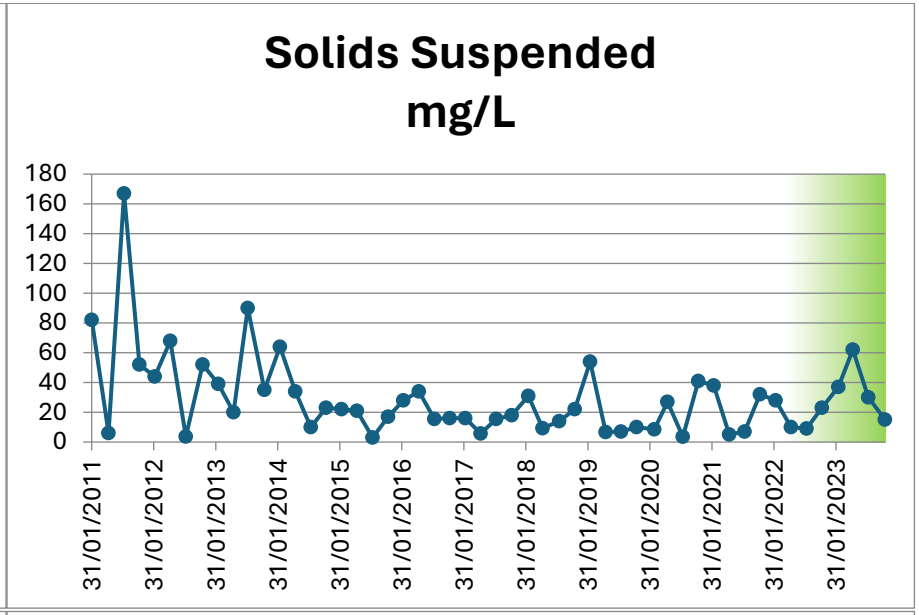

pH
pH units
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

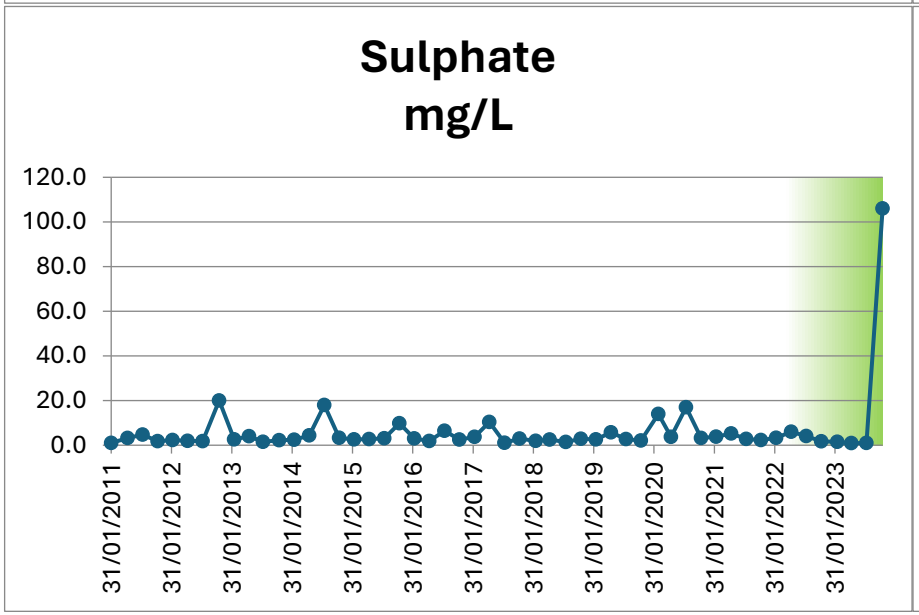

Phosphorus Total
mg/L
0.5
0.5
0.4
0.4
0.3
0.3
0.2
0.2
0.1
0.1
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

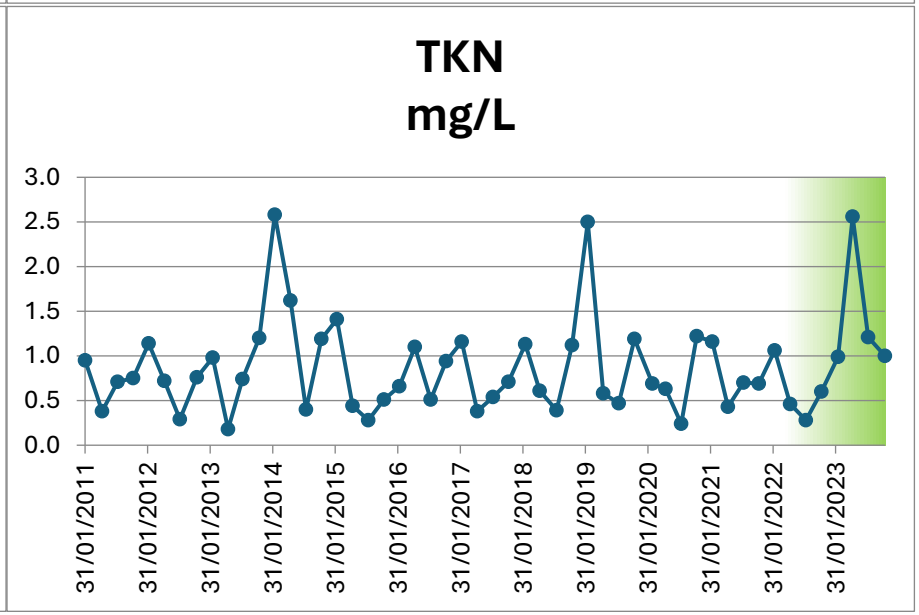

Potassium Total
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

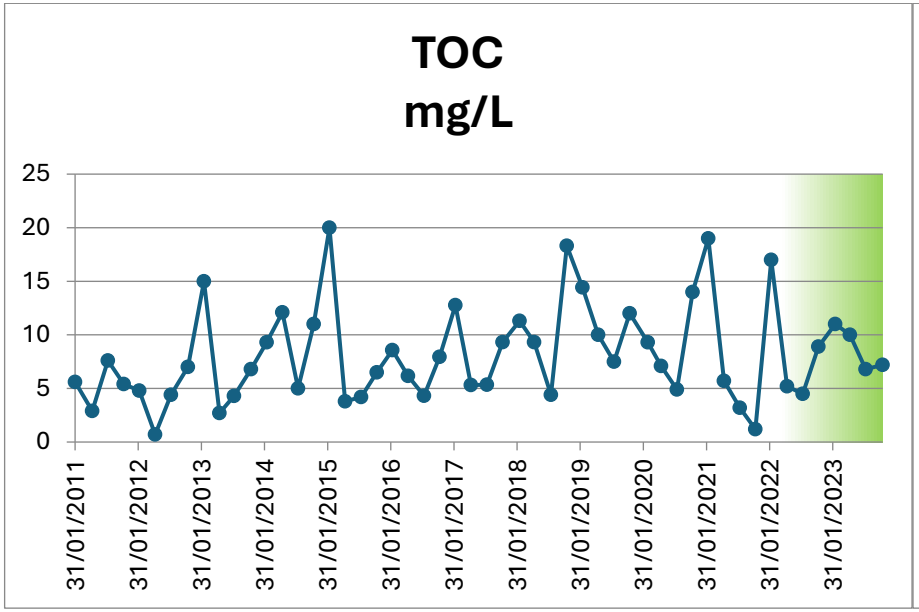

Redox Potential
mV
500
400
300
200
100
0
-100
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023


Sodium (Total)
mg/L
40
35
30
25
20
15
10
5
0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023


Solids Suspended
mg/L
180
160
140
120
100
80
60
40
20
0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023


Sulphate
mg/L
120.0
100.0
80.0
60.0
40.0
20.0
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023


TKN
mg/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023


TOC
mg/L
25
20
15
10
5
0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

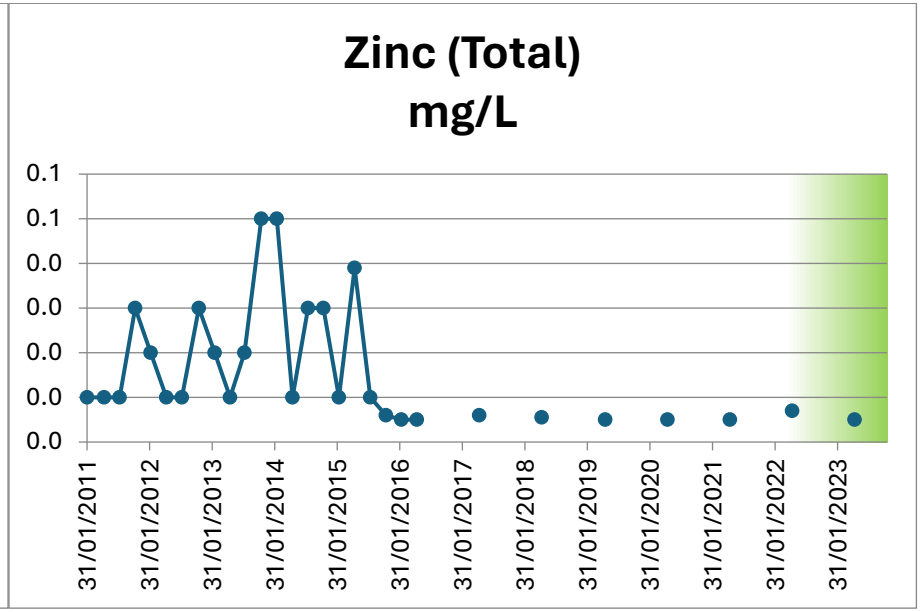
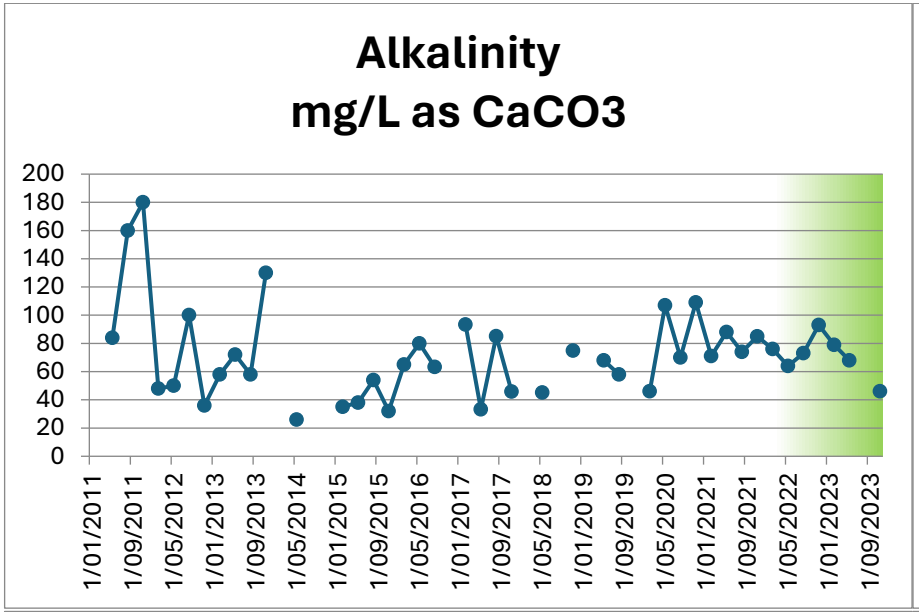
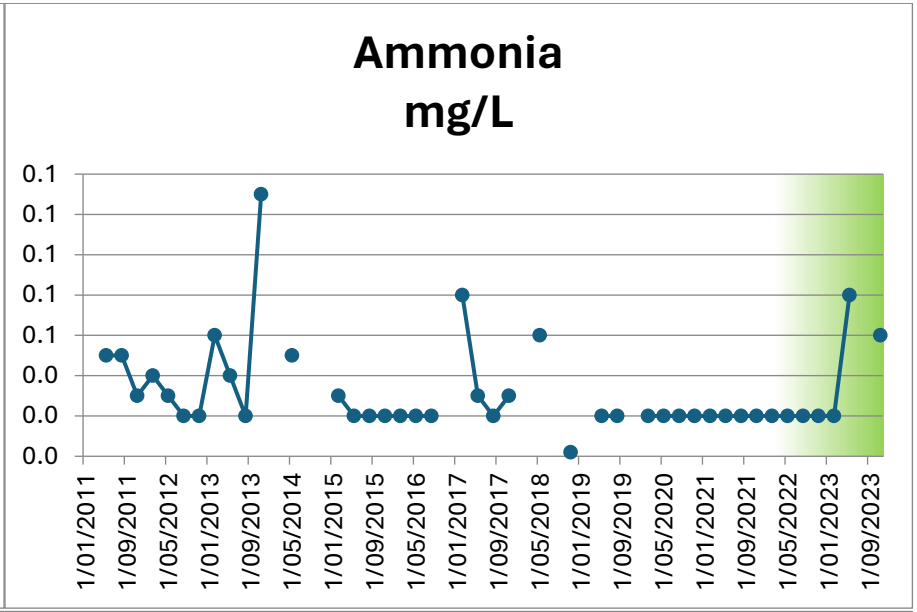
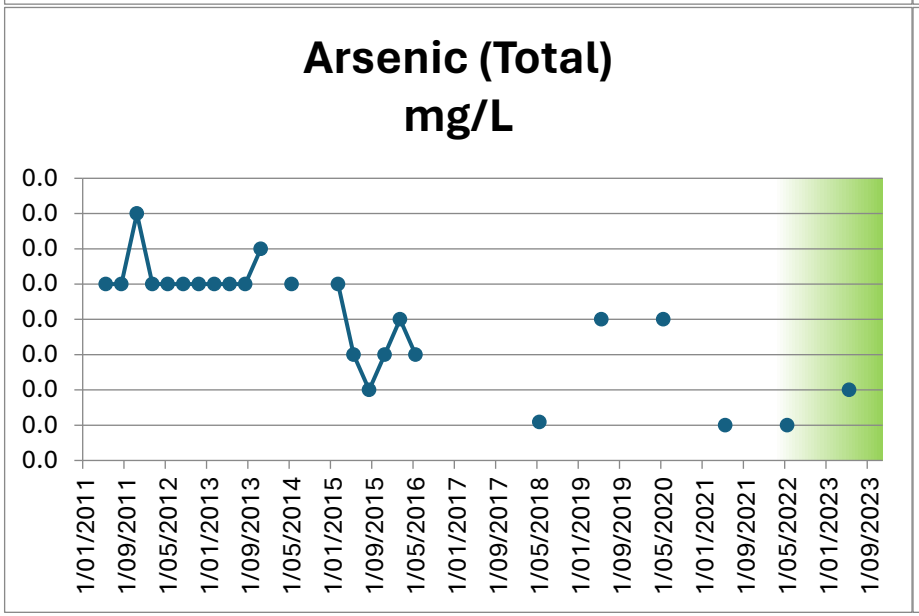

Zinc (Total)
mg/L
0.1
0.1
0.0
0.0
0.0
0.0
0.0
31/01/2011
31/01/2012
31/01/2013
31/01/2014
31/01/2015
31/01/2016
31/01/2017
31/01/2018
31/01/2019
31/01/2020
31/01/2021
31/01/2022
31/01/2023

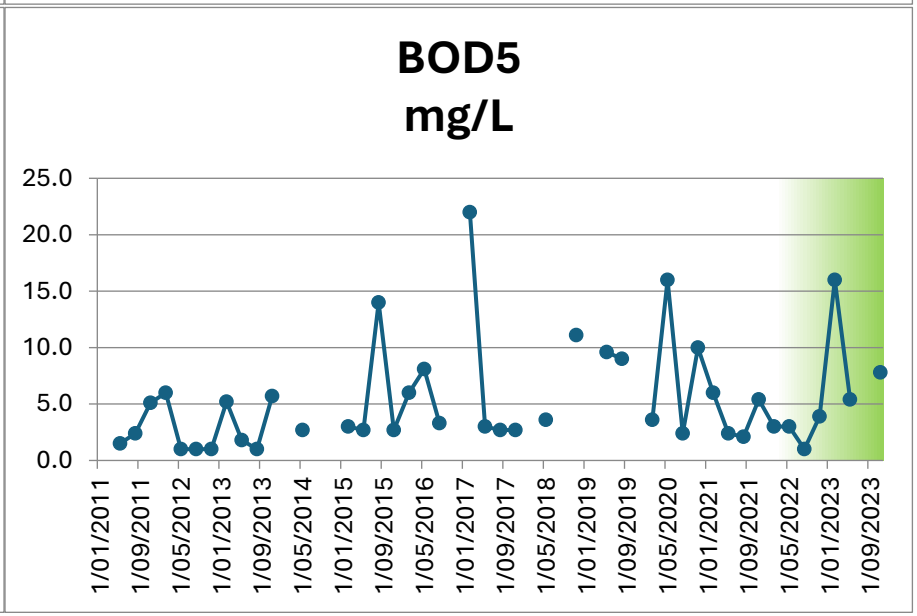
Table 10:Surface Water 4

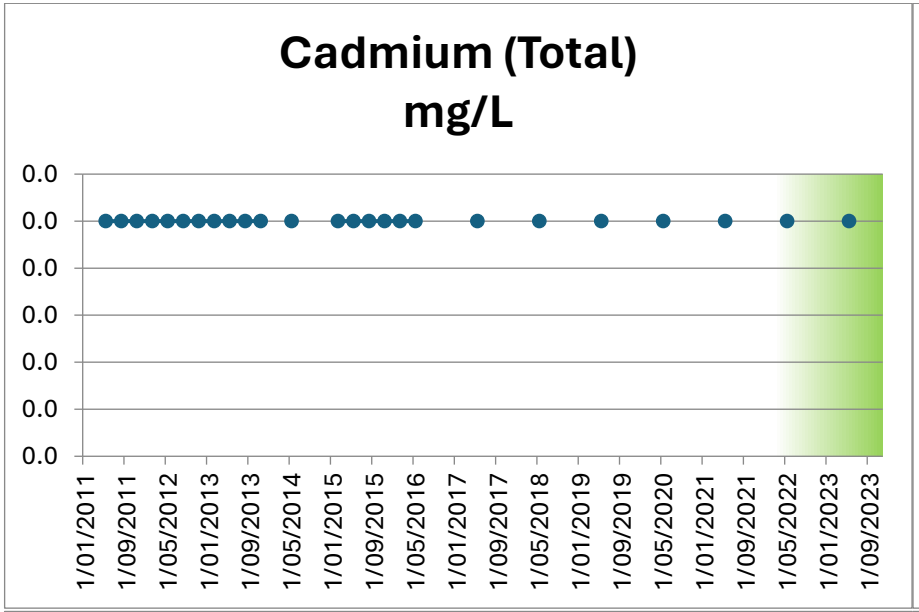
SW4	Alkalinity mg/L as CaCO3	Ammonia mg/L	Arsenic (Total) mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Conductivity µScm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	Nitrate N mg/L	Nitrite N mg/L	Nitrogen Oxidised mg/L	Nitrogen Total mg/L	Orthophosphate mg/L	pH pH units	Phosphorus Total mg/L	Potassium Total mg/L	Redox Potential mV	Sodium (Total) mg/L	Solids Suspended mg/L	Sulphate mg/L	TKN mg/L	TOC mg/L	Zinc (Total) mg/L
31/01/2011																														
10/05/2011	84	0.1	0.0	1.5	0.0	24	15	0.0	260	0.0	1.7	0.0	3.9	1.5	0.0	0.1	0.1	0.1	0.4	0.1	6.1	0.1	5.0	148	12	12	3.7	0.4	3.2	0.0
9/08/2011	160	0.1	0.0	2.4	0.0	40	25	0.0	395	0.0	2.6	0.0	6.9	0.8	0.0	0.1	0.1	0.1	0.4	0.1	6.7	0.1	5.0	208	18	11	7.4	0.4	8.5	0.0
8/11/2011	180	0.0	0.0	5.1	0.0	58	30	0.0	439	0.1	1.9	0.0	9.8	3.3	0.0	0.0	0.0	0.0	0.8	0.0	6.8	0.1	6.0	69	14	609	5.1	0.8	12.0	0.0
6/02/2012	48	0.0	0.0	6.0	0.0	12	11	0.0	142	0.0	1.0	0.0	3.4	2.3	0.0	0.0	0.0	0.1	0.7	0.0	6.4	0.1	5.0	137	9	29	1.0	0.7	4.6	0.0
8/05/2012	50	0.0	0.0	1.0	0.0	11	11	0.0	118	0.0	4.3	0.0	2.5	1.1	0.0	0.0	0.0	0.0	0.4	0.0	6.3	0.0	5.0	207	8	18	2.8	0.4	3.8	0.0
7/08/2012	100	0.0	0.0	1.0	0.0	23	17	0.0	255	0.0	3.3	0.0	4.3	0.1	0.0	0.0	0.0	0.0	0.2	0.0	6.7	0.0	5.0	176	9	5	7.2	0.2	4.3	0.0
14/11/2012	36	0.0	0.0	1.0	0.0	19	23	0.0	257	0.0	2.3	0.0	4.1	0.5	0.0	0.0	0.0	0.0	0.4	0.0	6.5	0.1	5.0	161	12	15	31.0	0.4	4.3	0.0
14/02/2013	58	0.1	0.0	5.2	0.0	17	25	0.0	224	0.0	1.0	0.0	4.0	2.0	0.0	0.0	0.0	0.0	0.7	0.0	6.2	0.1	5.0	146	14	37	6.9	0.6	6.6	0.0
15/05/2013	72	0.0	0.0	1.8	0.0	24	20	0.0	242	0.0	1.3	0.0	3.8	1.6	0.0	0.0	0.0	0.0	0.4	0.0	6.3	0.0	5.0	137	12	20	9.4	0.3	4.5	0.0
7/08/2013	58	0.0	0.0	1.0	0.0	19	12	0.0	158	0.0	2.1	0.0	3.1	0.2	0.0	0.0	0.0	0.0	0.4	0.0	6.4	0.1	5.0	143	10	12	5.0	0.4	3.4	0.0
13/11/2013	130	0.1	0.0	5.7	0.0	40	50	0.0	510	0.0	4.2	0.0	7.4	5.7	0.0	0.1	0.0	0.1	0.9	0.0	6.1	0.0	5.0	-9	35	445	39.0	0.8	6.6	0.1
11/02/2014																														
14/05/2014	26	0.1	0.0	2.7	0.0	14	28	0.0	214	0.0	7.1	0.0	2.4	0.7	0.0	1.2	0.0	1.3	2.0	0.0	6.1	0.2	5.0	33	14	127	16.0	0.7	4.5	0.0
12/08/2014																														
10/11/2014																														
10/02/2015	35	0.0	0.0	3.0	0.0	10	17	0.0	118	0.0	2.7	0.0	2.2	0.3	0.0	0.0	0.0	0.0	0.9	0.0	7.0	0.1	5.0	153	7	14	2.7	0.9	7.2	0.0
12/05/2015	38	0.0	0.0	2.7	0.0	12	10	0.0	116	0.0	3.4	0.0	2.5	0.5	0.0	0.0	0.0	0.0	0.8	0.0	6.0	0.1	5.0	186	8	26	2.0	0.8	5.0	0.0
12/08/2015	54	0.0	0.0	14.0	0.0	18	12	0.0	152	0.0	5.3	0.0	3.4	0.7	0.0	0.0	0.0	0.0	1.0	0.0	7.0	0.1	5.0	135	10	52	3.2	1.0	6.0	0.0
11/11/2015	32	0.0	0.0	2.7	0.0	11	11	0.0	124	0.0	1.7	0.0	2.5	0.7	0.0	0.0	0.0	0.0	0.8	0.0	6.4	0.1	5.0	148	8	73	8.6	0.8	5.9	0.0
9/02/2016	65	0.0	0.0	6.0	0.0	21	26	0.0	215	0.0	3.8	0.0	3.7	0.7	0.0	0.0	0.0	0.0	2.2	0.0	6.8	0.3	5.0	131	13	28	6.1	2.2	9.0	0.0
10/05/2016	80	0.0	0.0	8.1	0.0	24	26	0.0	257	0.0	5.5	0.0	4.3	0.8	0.0	0.0	0.0	0.0	1.3	0.0	6.7	0.2	5.5	104	15	18	3.0	1.3	11.3	0.0
10/08/2016	63	0.0		3.3		20	14		194		3.1		4.2			0.0	0.0	0.0	0.5	0.0	6.4	0.1	5.0	240	11	11	8.7	0.5	6.0	
8/11/2016																														
8/02/2017	93	0.1		22.0		26	24		287		1.1		5.2			0.0	0.1	0.0	2.8	0.0	6.5	0.5	6.4	84	17	109	5.5	2.8	15.8	
9/05/2017	33	0.0		3.0	0.0	13	16	0.0	159	0.0	2.0	0.0	3.0	0.4	0.0	0.2	0.0	0.2	0.7	0.0	6.0	0.1	5.0	362	10	13	16.6	0.4	4.9	0.0
9/08/2017	85	0.0		2.7		25	20		224		2.0		4.5			0.0	0.0	0.0	0.5	0.0	6.0	0.1	5.0	334	12	18	4.3	0.5	7.7	
8/11/2017	46	0.0		2.7		16	23		190		1.9		3.0			0.0	0.1	0.1	0.7	0.0	6.1	0.2	5.0	392	12	19	10.5	0.6	7.0	
10/02/2018																														
9/05/2018	45	0.1	0.0	3.6	0.0	16	20	0.0	162	0.0	4.4	0.0	2.8	0.3	0.0	0.0	0.0	0.0	0.9	0.0	6.5	0.1	2.2	254	11	8	5.9	0.9	6.8	0.0
1/08/2018																														
14/11/2018	75	0.0		11.1		24	25		235		2.2		4.3			0.0	0.0	0.0	1.4	0.0	6.5	0.2	4.0	9	14	32	3.0	1.4	14.3	
10/02/2019																														
15/05/2019	68	0.0	0.0	9.6	0.0	23	18	0.0	204	0.0	3.6	0.0	4.2	0.5	0.0	0.0	0.0	0.0	1.3	0.0	6.4	0.3	3.7	42	13	64	3.0	1.3	12.0	0.0
14/08/2019	58	0.0		9.0		19	16		178		2.0		3.7			0.0	0.0	0.0	0.9	0.0	6.5	0.3	3.0	258	11	144	2.2	0.9	12.0	
12/11/2019																														
26/02/2020	46	0.0		3.6		13	10		125		1.6		2.1			0.0	0.0	0.0	0.8	0.0	6.6	0.1	2.7	193	6	8	2.3	0.8	11.0	
13/05/2020	107	0.0	0.0	16.0	0.0	30	30	0.0	266	0.0	5.8	0.0	5.2	1.5	0.0	0.0	0.0	0.0	2.2	0.0	6.6	0.2	2.8	279	14	51	2.2	2.2	16.0	0.0
12/08/2020	70	0.0		2.4		21	17		187		4.2		3.7			0.0	0.0	0.0	0.6	0.0	6.6	0.1	2.5	267	12	7	3.6	0.6	11.0	
11/11/2020	109	0.0		10.0		31	18		276		1.1		5.8			0.0	0.0	0.0	1.7	0.0	6.5	0.3	3.0	45	15	31	2.3	1.7	18.0	
10/02/2021	71	0.0		6.0		22	16		201		1.3		3.6			0.0	0.0	0.0	1.2		6.3	0.1	2.0	254	11	22	2.3	1.1	14.0	
12/05/2021	88	0.0	0.0	2.4	0.0	26	18	0.0	204	0.0	3.8	0.0	3.8	0.1	0.0	0.0	0.0	0.0	0.7		7.0	0.1	2.8	303	10	8	2.3	0.7	8.2	0.0
11/08/2021	74	0.0		2.1		22	16		199		5.3		3.6			0.0	0.0	0.0	0.5		6.5	0.0	2.9	337	12	4	2.9	0.5	7.5	
9/11/2021	85	0.0		5.4		24	22		225		2.4		4.2			0.0	0.0	0.0	1.1		6.9	0.1	3.8	213	13	15	2.0	1.1	12.0	
9/02/2022	76	0.0		3.0		21	13		194		2.4		3.3			0.0	0.0	0.0	1.4		6.8	0.2	3.0	286	10	23	1.7	1.4	10.0	
11/05/2022	64	0.0	0.0	3.0	0.0	18	11	0.0	162	0.0	2.9	0.0	3.3	0.3	0.0	0.0	0.0	0.0	0.9		6.8	0.1	2.9	250	8	16	2.0	0.9	7.8	0.0
10/08/2022	73	0.0		1.0		21	10		184		3.9		3.5			0.0	0.0	0.0	0.4		6.8	0.0	2.1	124	9	4	1.3	0.4	6.1	
9/11/2022	93	0.0		3.9		27	18		230		3.1		4.2			0.0	0.0	0.0	0.8		6.9	0.1	3.1	139	10	14	1.2	0.8	9.8	
14/02/2023	79	0.0		16.0		29	18		247		8.8		5.2			2.0	0.0	0.0	2.7	0.0	7.2	0.3	2.9	60	11	65	16.0	2.7	12.0	
10/05/2023	68	0.1	0.0	5.4	0.0	22	30	0.0	229	0.0	6.9	0.0	4.2	0.3	0.0	0.0	0.0	0.0	1.0	0.0	7.0	0.1	3.0	64	15	23	4.7	1.0	7.9	0.0
9/08/2023																														
15/11/2023	46	0.1		7.8		34	21		333		1.0		6.6			0.0	0.0	0.0	1.4	0.0	6.3	0.2	8.4	13	12	36	73.0	1.4	16.0	
2023 Min	**46.0**	**0.0**	**0.0**	**5.4**	**0.0**	**22.0**	**18.0**	**0.0**	**229.0**	**0.0**	**1.0**	**0.0**	**4.2**	**0.3**	**0.0**	**0.0**	**0.0**	**0.0**	**1.0**	**0.0**	**6.3**	**0.1**	**2.9**	**12.6**	**11.0**	**23.0**	**4.7**	**1.0**	**7.9**	**0.0**
2023 Max	**79.0**	**0.1**	**0.0**	**16.0**	**0.0**	**34.0**	**30.0**	**0.0**	**333.0**	**0.0**	**8.8**	**0.0**	**6.6**	**0.3**	**0.0**	**2.0**	**0.0**	**0.0**	**2.7**	**0.0**	**7.2**	**0.3**	**8.4**	**63.7**	**15.0**	**65.0**	**73.0**	**2.7**	**16.0**	**0.0**
2023 Mean	**64.3**	**0.1**	**0.0**	**9.7**	**0.0**	**28.3**	**23.0**	**0.0**	**269.7**	**0.0**	**5.6**	**0.0**	**5.3**	**0.3**	**0.0**	**0.7**	**0.0**	**0.0**	**1.7**	**0.0**	**6.8**	**0.2**	**4.8**	**45.3**	**12.7**	**41.3**	**31.2**	**1.7**	**12.0**	**0.0**
Long-term Average	**71.9**	**0.0**	**0.0**	**5.4**	**0.0**	**22.4**	**19.3**	**0.0**	**221.2**	**0.0**	**3.1**	**0.0**	**4.1**	**1.1**	**0.0**	**0.1**	**0.0**	**0.1**	**1.0**	**0.0**	**6.5**	**0.1**	**4.3**	**171.8**	**12.1**	**54.6**	**8.1**	**0.9**	**8.7**	**0.0**

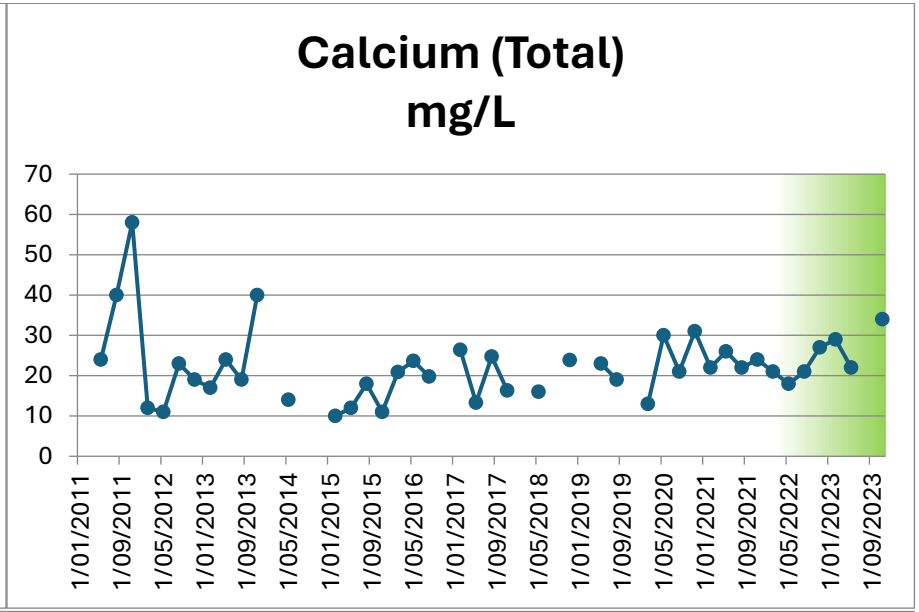

Alkalinity
mg/L as CaCO3
200
180
160
140
120
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

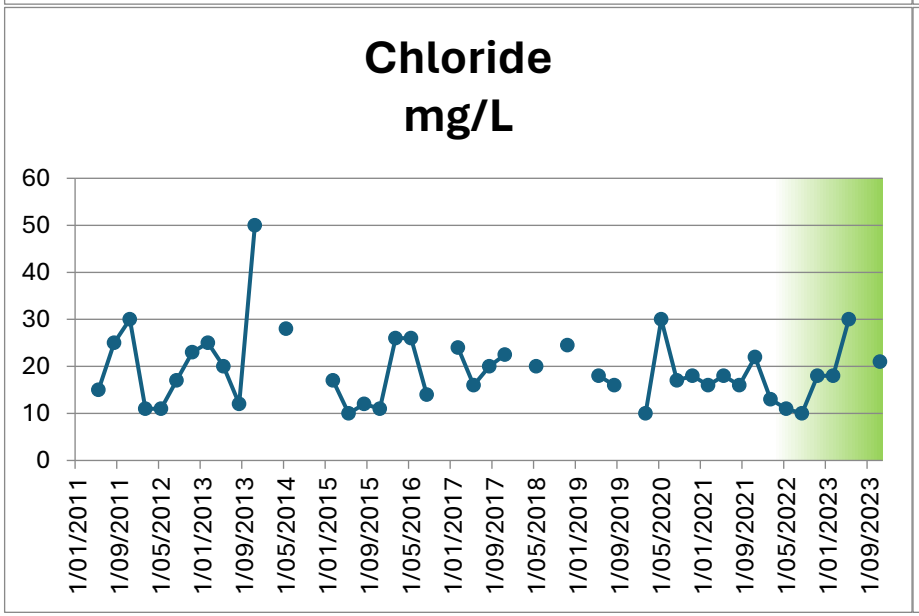

Ammonia
mg/L
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

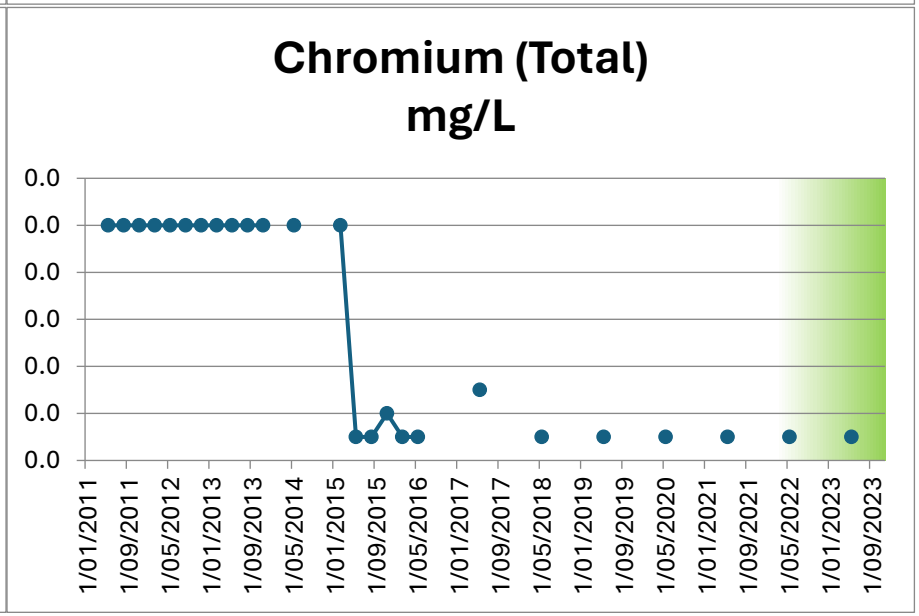

Arsenic (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

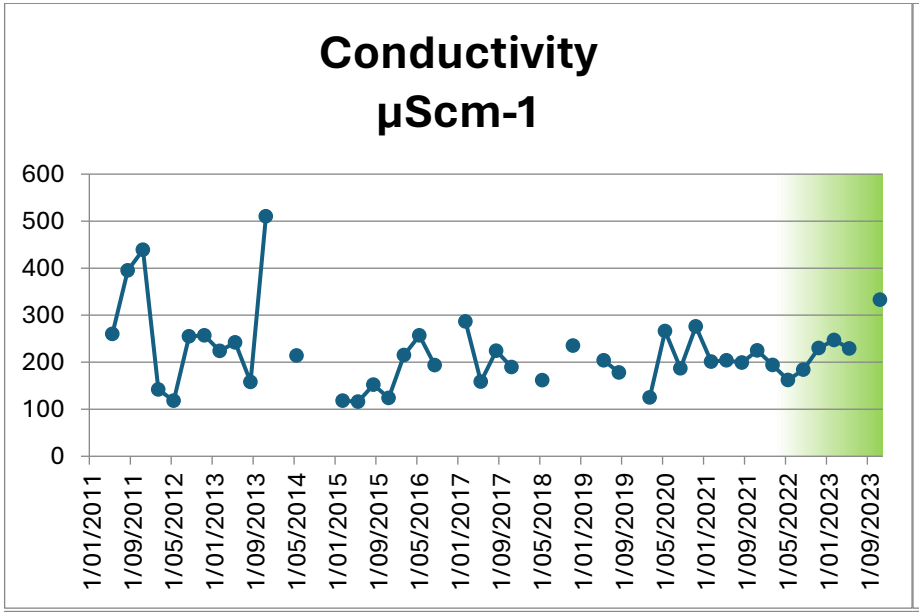

BOD5
mg/L
25.0
20.0
15.0
10.0
5.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

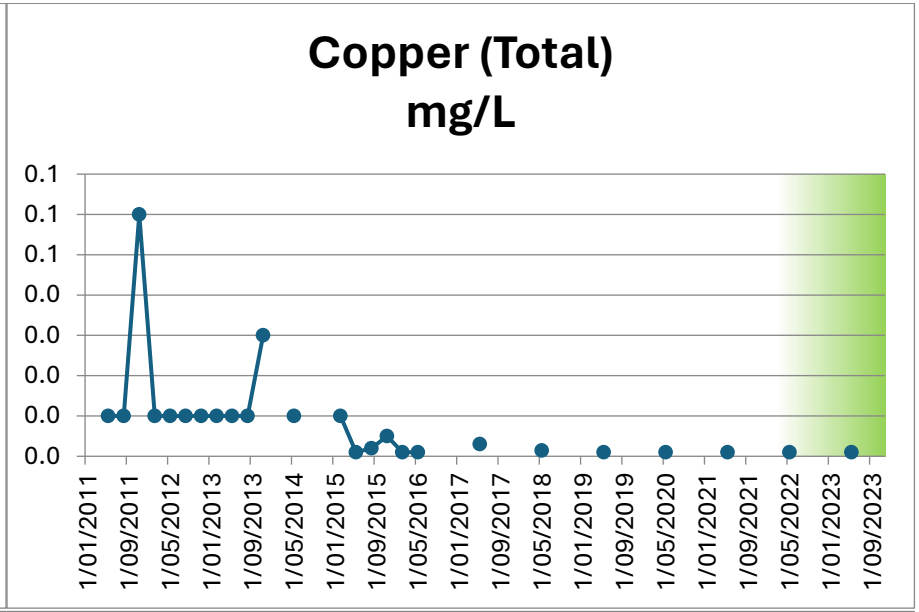

Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

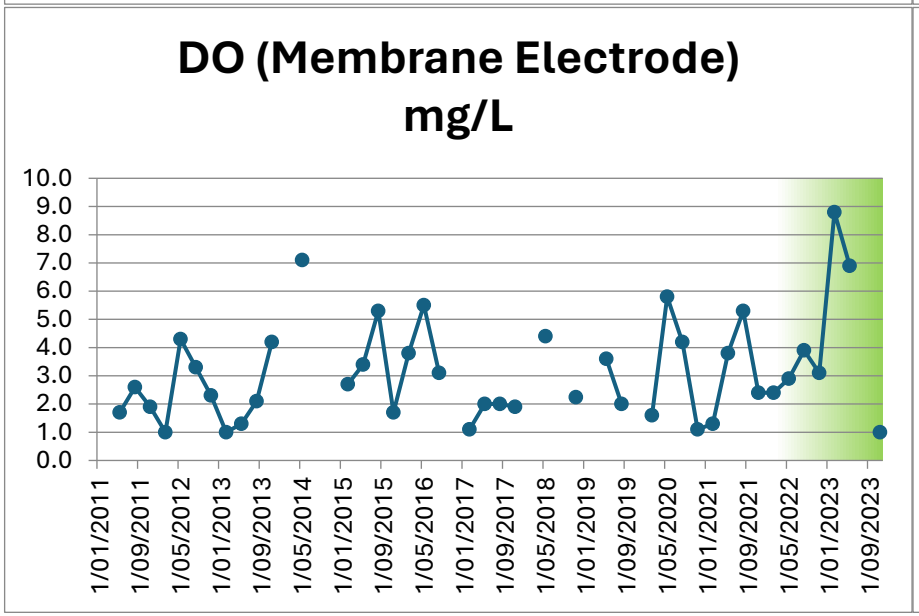

Calcium (Total)
mg/L
70
60
50
40
30
20
10
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

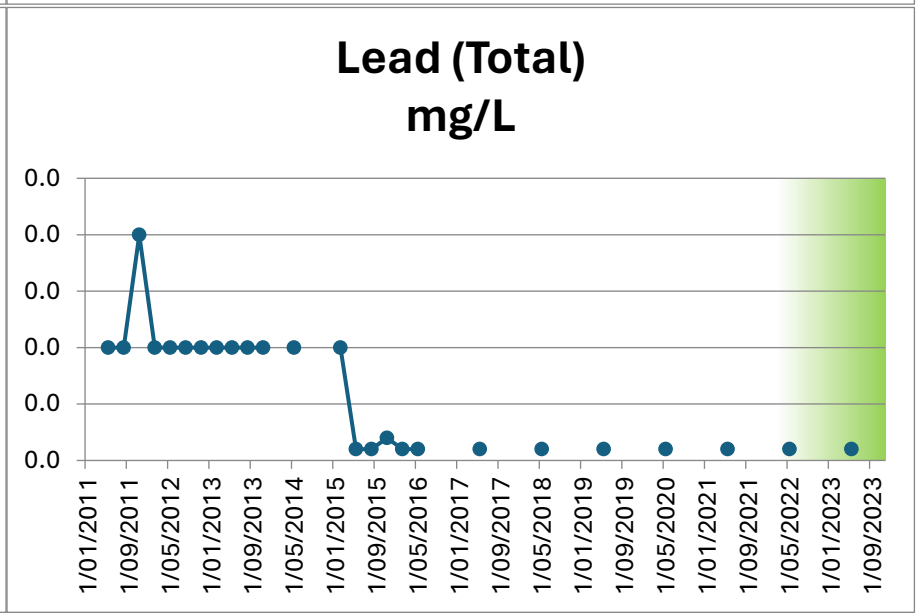

Chloride
mg/L
60
50
40
30
20
10
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

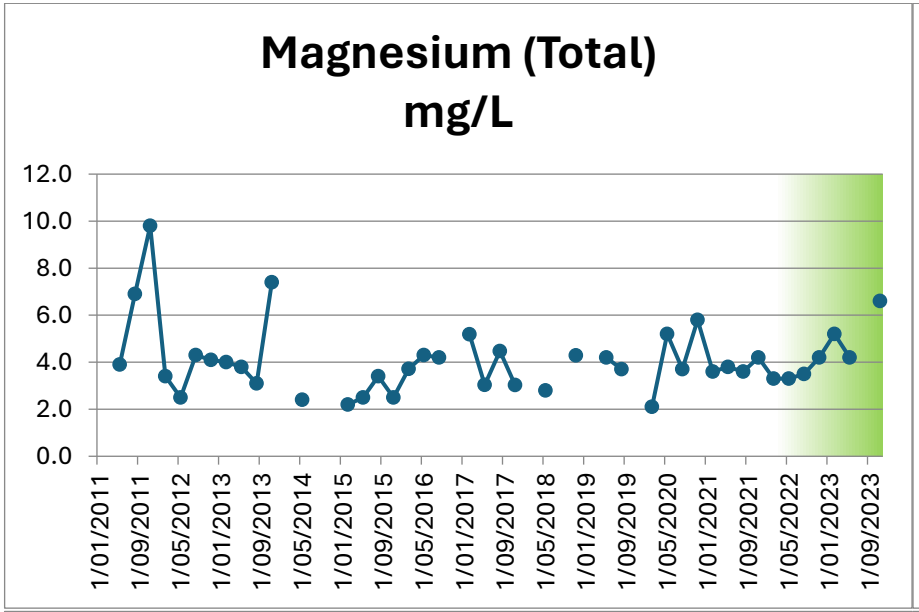

Chromium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

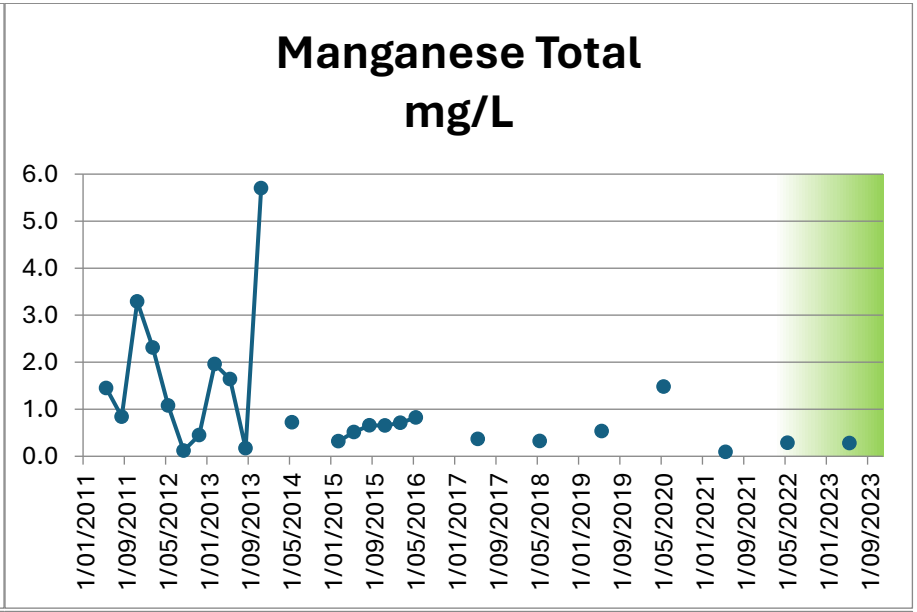

Conductivity
µScm-1
600
500
400
300
200
100
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

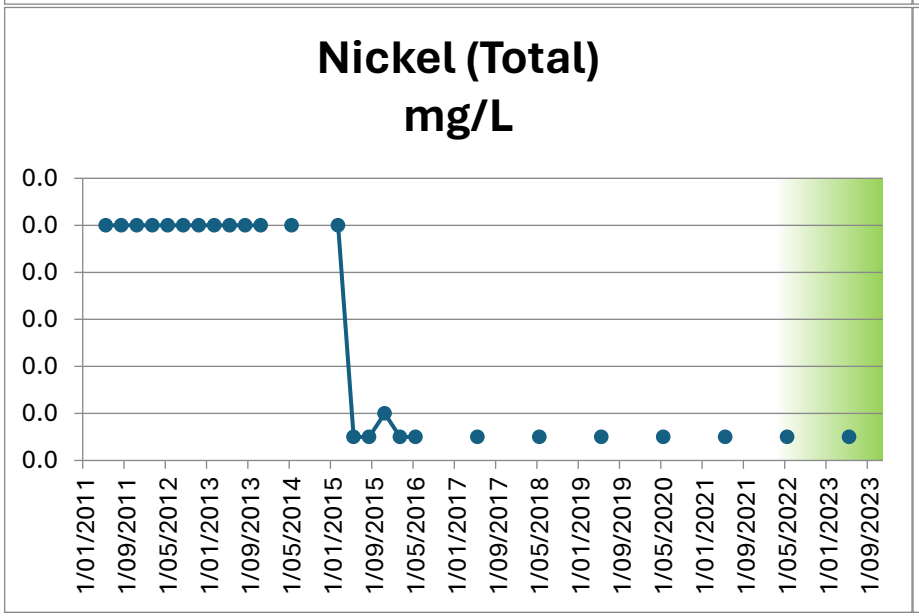

Copper (Total)
mg/L
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

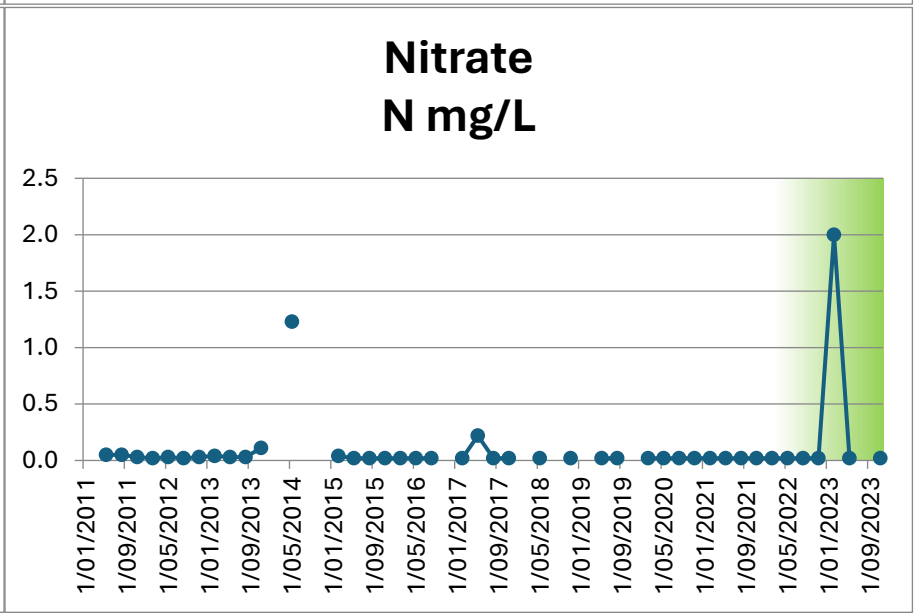

DO (Membrane Electrode)
mg/L
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

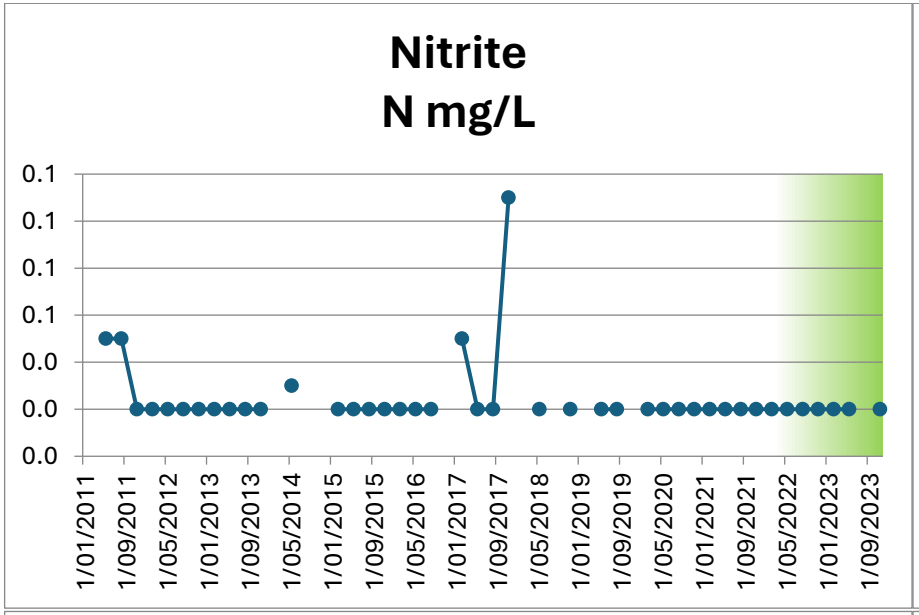

Lead (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

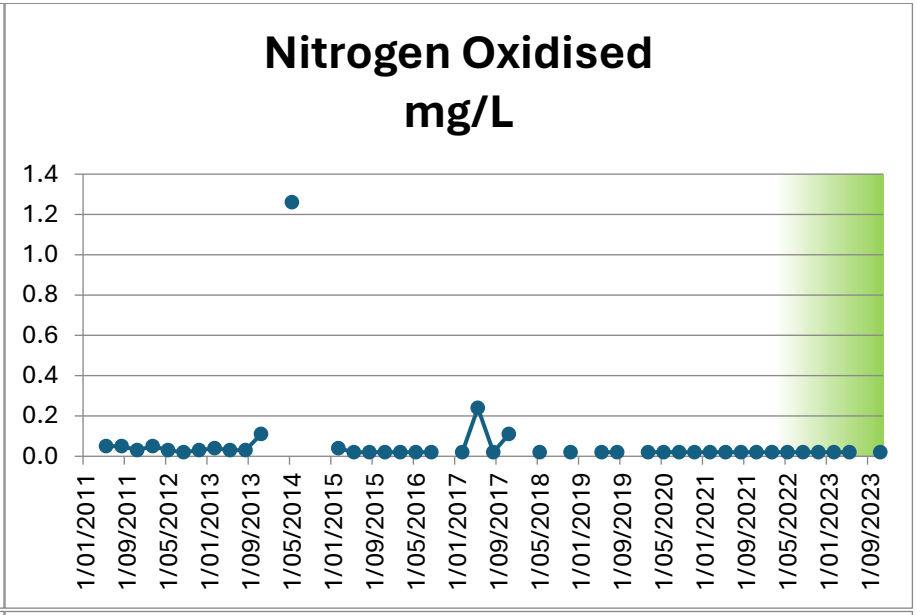

Magnesium (Total)
mg/L
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

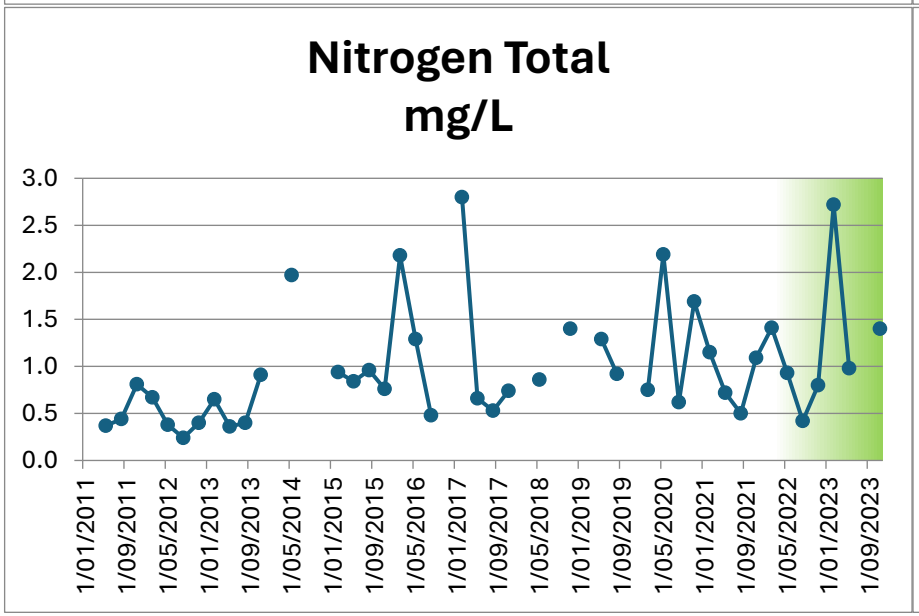

Manganese Total
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

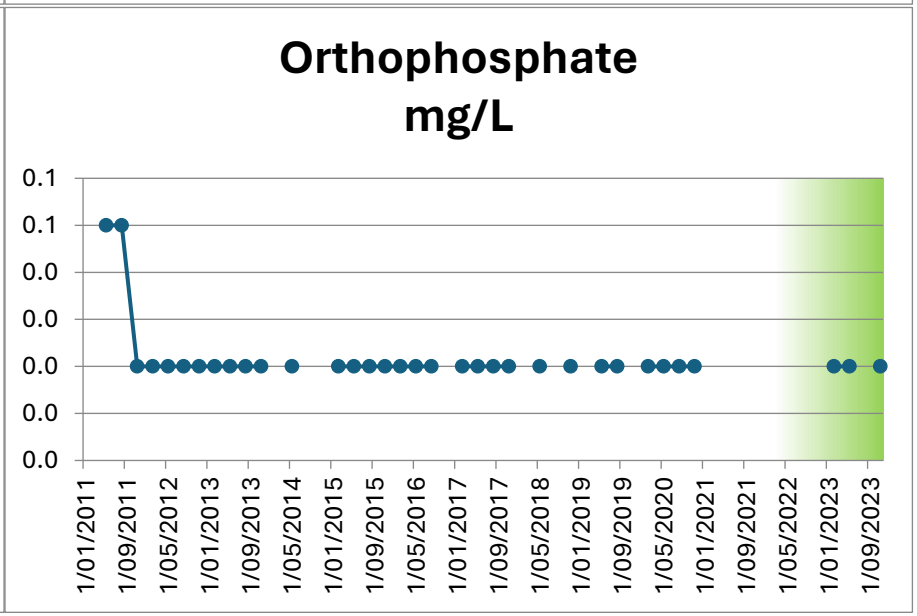

Nickel (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

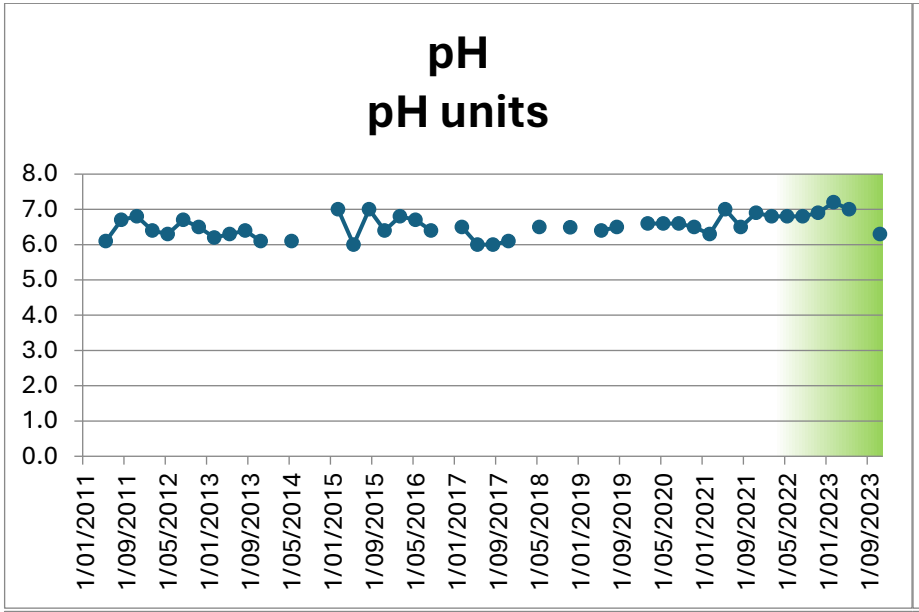

Nitrate
N mg/L
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

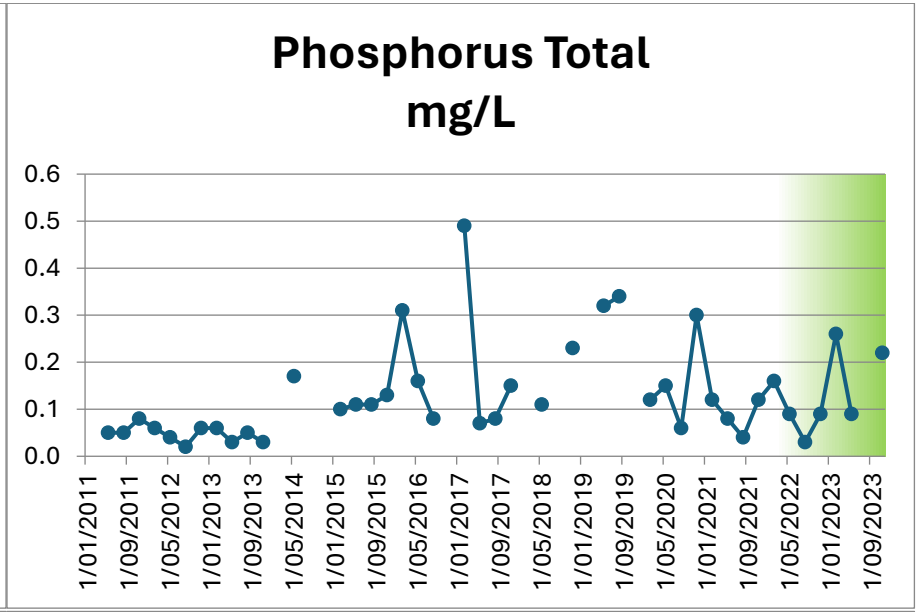

Nitrite
N mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

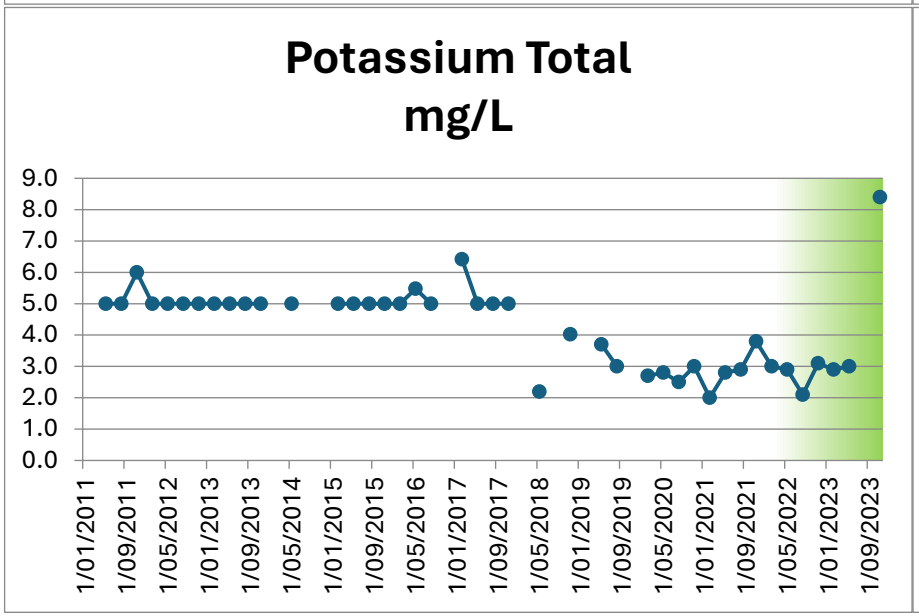

Nitrogen Oxidised
mg/L
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

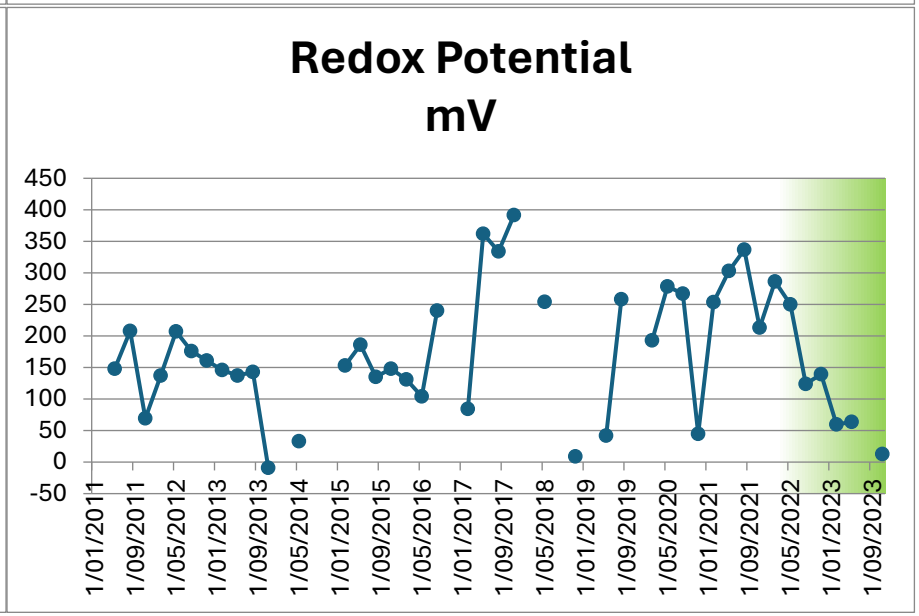

Nitrogen Total
mg/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

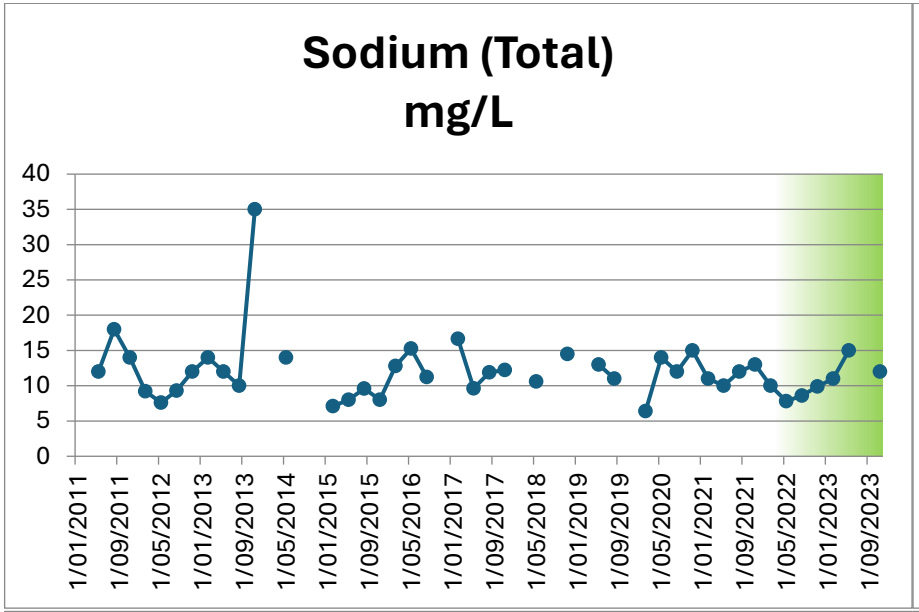

Orthophosphate
mg/L
0.1
0.1
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

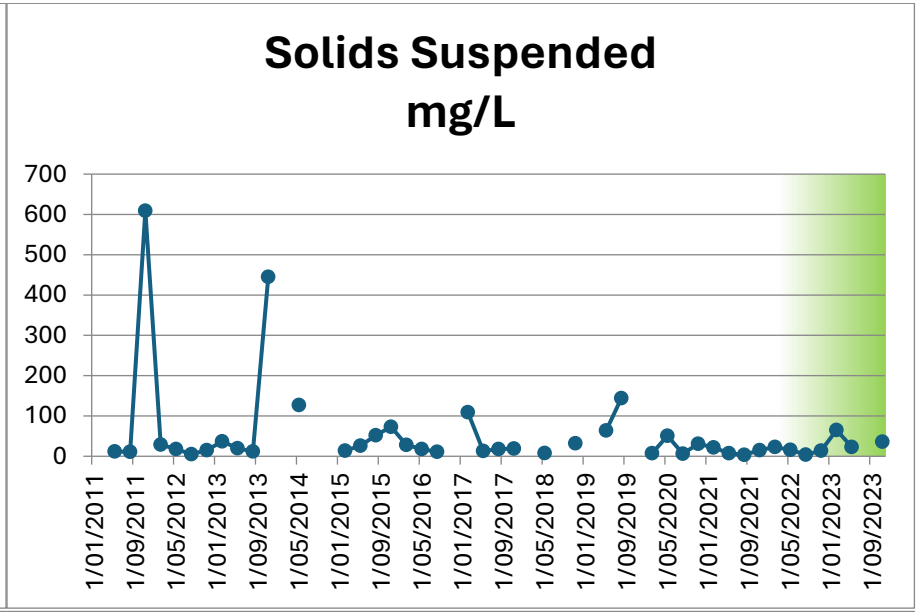

pH
pH units
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

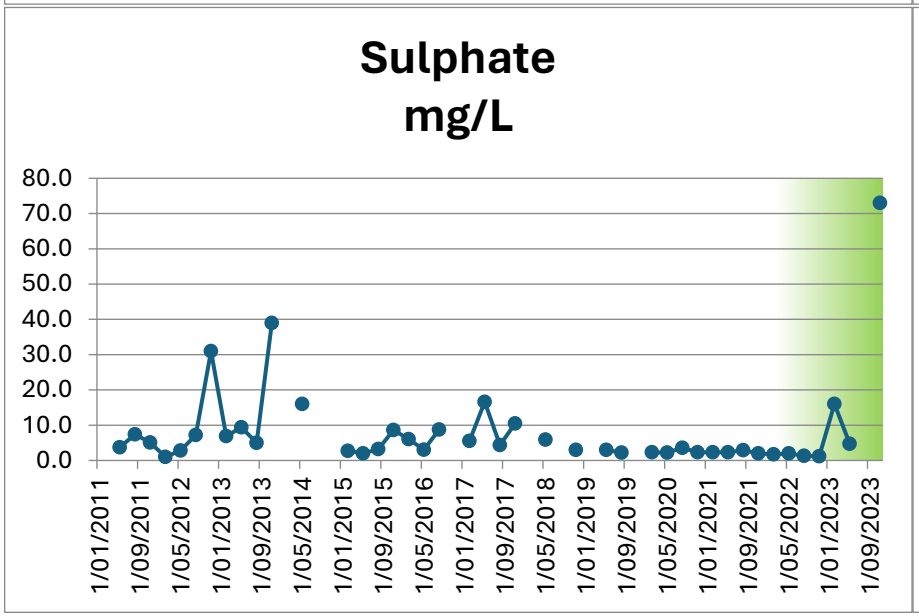

Phosphorus Total
mg/L
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

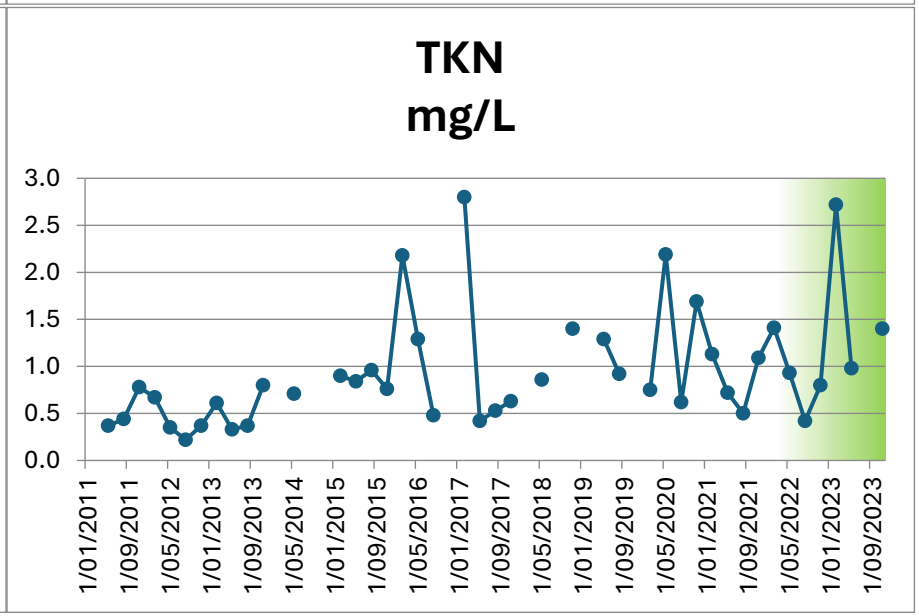

Potassium Total
mg/L
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

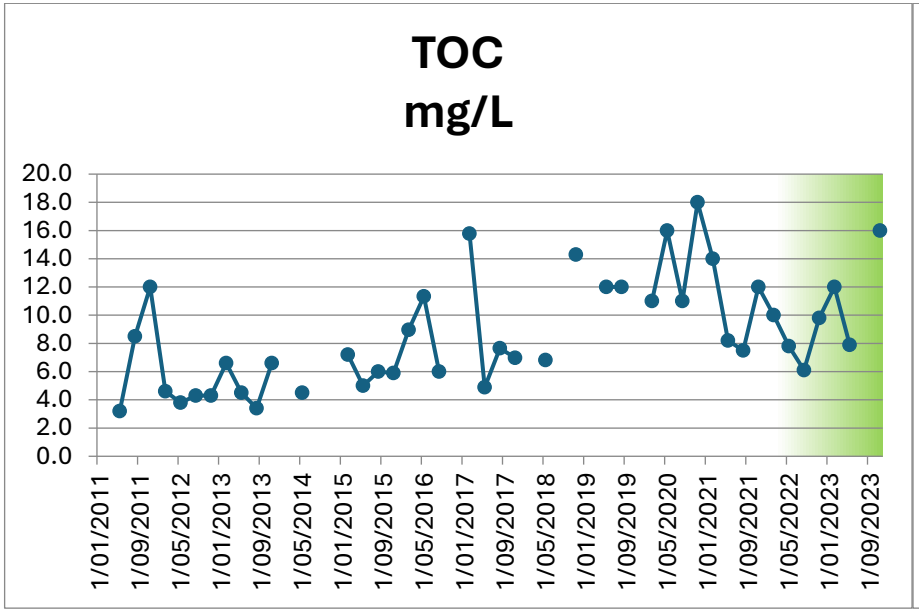

Redox Potential
mV
450
400
350
300
250
200
150
100
50
0
-50
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

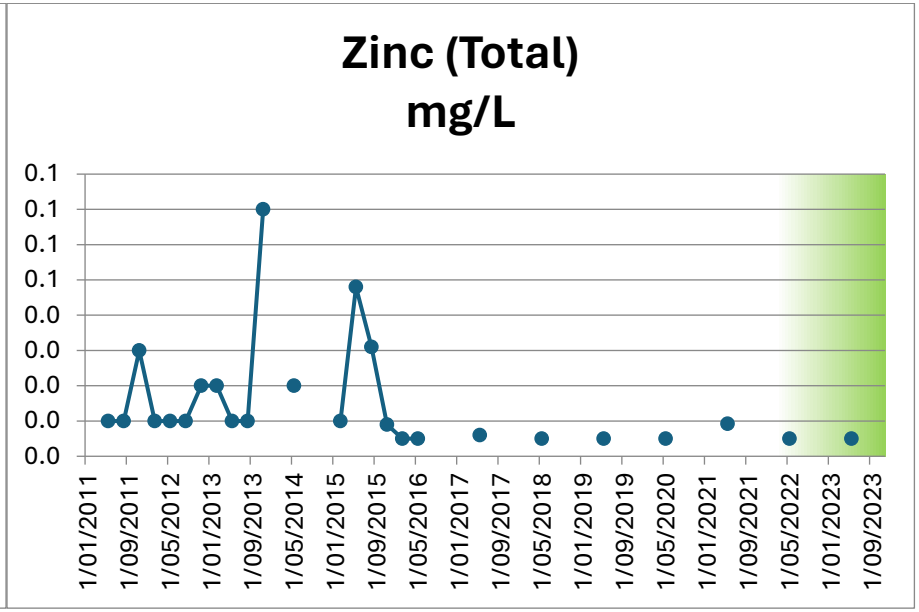

Sodium (Total)
mg/L
40
35
30
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Solids Suspended
mg/L
700
600
500
400
300
200
100
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Sulphate
mg/L
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TKN
mg/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

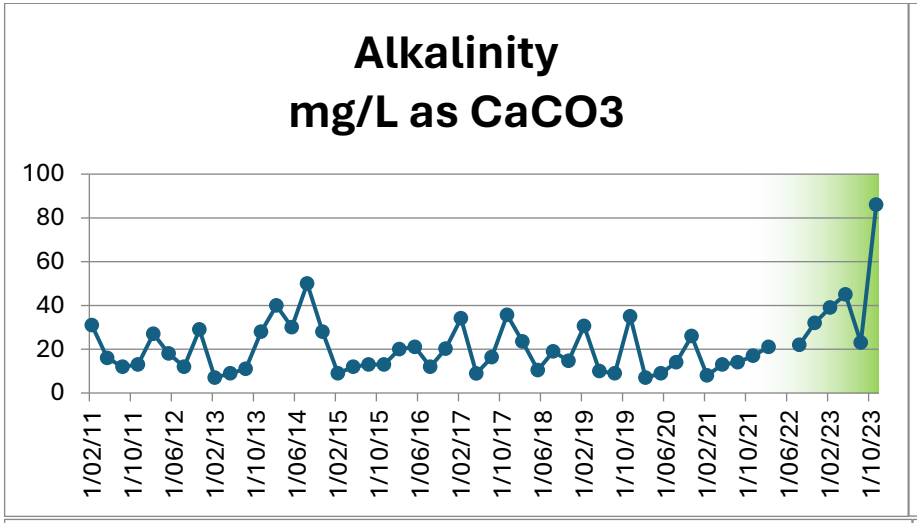

TOC
mg/L
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

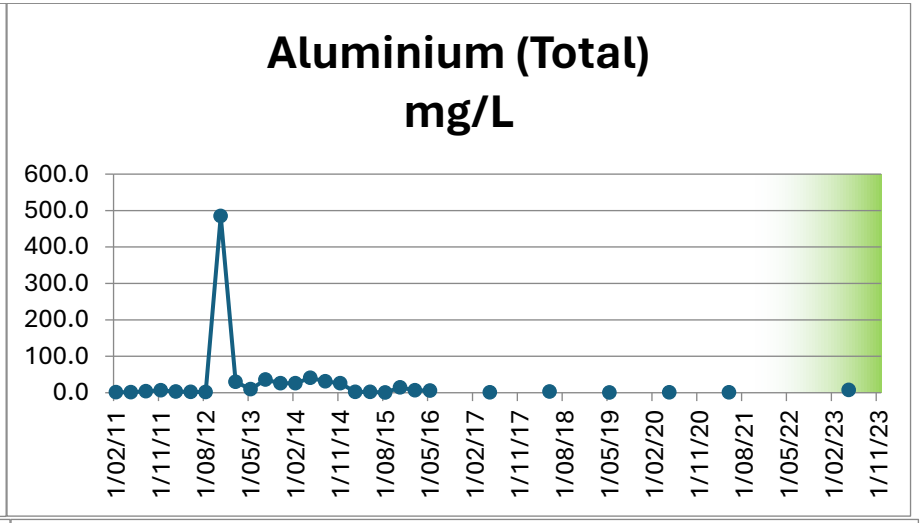

Zinc (Total)
mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

13.2 Ground Water Monitoring Charts and Graphs

Table 11 Ground Water 1

GW1	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µScm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride mg/L	Iron Total mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	Nitrate N mg/L	Nitrite N mg/L	Nitrogen Oxidised mg/L	Nitrogen Total mg/L	pH pH units	Phenol Alkalinity mg/L as CaCO3	Phosphorus Total mg/L	Potassium Total mg/L	Redox Potential mV	Sodium (Total) mg/L	Sulphate mg/L	Temperature C	TKN mg/L	TOC mg/L	Total Acidity mg/L CaCO3	Zinc (Total) mg/L	Depth to Groundwater m
1/02/11	31	1.1	0.1	0.0	19	1.0	0.0	4.8	34	0.0	0.0	0.0	184	0.0	1.6	0.1	1.0	0.0	2.5	0.2	0.0	0.1	0.1	0.1	0.3	6.2		0.1	5.0	381	16	4.1	22	0.3	2.1	39	0.1	
11/05/11	16	1.1	0.1	0.0	10	1.6	0.0	2.7	35	0.0	0.0	0.0	181	0.0	3.1	0.1	0.8	0.0	2.6	0.1	0.0	0.1	0.1	0.1	0.2	4.9		0.1	5.0	271	15	5.2	20	0.2	1.3	48	0.0	
10/08/11	12	3.9	0.1	0.0	7	1.8	0.0	2.7	34	0.0	0.0	0.0	179	0.0	2.9	0.0	2.5	0.0	3.4	0.2	0.0	0.1	0.1	0.1	0.2	5.3		0.1	5.0	307	21	5.4	20	0.1	1.5	45	0.0	
9/11/11	13	6.6	0.0	0.0	8	6.3	0.0	3.6	36	0.0	0.0	0.0	154	0.0	2.5	0.1	5.0	0.0	4.2	0.2	0.0	0.1	0.0	0.1	0.2	5.4		0.1	5.0	310	13	8.1	20	0.1	0.7	50	0.0	
7/02/12	27	3.0	0.0	0.0	16	2.4	0.0	6.1	39	0.0	0.0	0.0	211	0.0	1.4	0.1	2.6	0.0	4.2	0.2	0.0	0.1	0.0	0.1	0.2	5.7		0.6	5.0	197	30	9.0	21	0.1	0.3	58	0.0	
9/05/12	18	2.1	0.0	0.0	11	2.1	0.0	3.8	34	0.0	0.0	0.0	171	0.0	4.5	0.0	1.5	0.0	3.3	0.1	0.0	0.2	0.0	0.2	0.3	5.6		0.1	5.0	273	19	6.1	21	0.1	4.5	42	0.1	
7/08/12	12	1.7	0.0	0.0	7	1.5	0.0	2.8	31	0.0	0.0	0.0	160	0.0	1.0	0.0	1.0	0.0	3.2	0.1	0.0	0.0	0.0	0.0	0.1	5.2		0.1	5.0	239	14	5.4	19	0.1	0.7	28	0.0	
14/11/12	29	485	0.0	0.2	18	1.8	0.0	5.5	56	0.2	0.2	0.0	266	1.2	1.4	0.1	581	0.9	4.9	9.4	0.3	0.1	0.0	0.1	0.5	5.2		0.8	5.0	138	25	7.6	21	0.5	0.8	101	1.9	
14/02/13	7	30.0	0.1	0.0	4	1.0	0.0	2.1	27	0.0	0.0	0.0	130	0.0	3.1	0.0	31.0	0.0	2.2	0.5	0.0	0.2	0.0	0.2	0.6	5.3		0.2	5.0	207	16	5.2	21	0.5	1.3	37	0.1	
15/05/13	9	9.7	0.0	0.0	5	1.5	0.0	2.5	32	0.0	0.0	0.0	136	0.0	4.2	0.0	7.1	0.0	2.2	0.1	0.0	0.1	0.0	0.1	0.4	5.4		0.2	5.0	156	17	4.8	21	0.3	1.3	63	0.2	
7/08/13	11	36.0	0.1	0.0	7	1.0	0.0	3.5	40	0.0	0.0	0.0	150	0.0	2.1	0.1	28.0	0.0	2.5	0.5	0.0	0.1	0.0	0.1	0.6	5.5		0.5	5.0	60	21	4.5	20	0.5	1.0	77	0.2	
13/11/13	28	26.0	0.1	0.0	17	1.0	0.0	8.7	59	0.0	0.0	0.0	289	0.0	1.6	0.1	23.0	0.0	6.3	0.8	0.0	0.1	0.0	0.1	0.6	5.7		0.2	5.0	148	37	10.0	21	0.5	0.6	71	0.1	
12/02/14	40	26.0	0.1	0.0	24	1.0	0.0	9.8	70	0.0	0.0	0.0	328	0.0	1.2	0.1	26.0	0.0	6.5	1.0	0.0	0.1	0.0	0.1	0.7	5.9		0.2	5.0	77	43	13.0	21	0.6	0.7	187	0.3	
14/05/14	30	41.0	0.7	0.0	18	8.1	0.0	5.6	54	0.0	0.0	0.0	282	0.1	1.9	0.1	50.0	0.1	4.5	1.1	0.0	0.2	0.0	0.2	1.8	5.7		0.4	5.0	19	34	11.0	20	1.7	1.6	68	0.2	
13/08/14	50	31.0	0.1	0.0	30	1.0	0.0	13.0	77	0.0	0.0	0.0	375	0.0	1.3	0.1	20.0	0.0	7.8	0.6	0.0	0.1	0.0	0.1	0.6	6.3		0.3	5.0	149	53	13.0	20	0.5	0.5	159	0.1	
11/11/14	28	26.0	0.0	0.0	17	2.1	0.0	6.7	60	0.0	0.0	0.0	262	0.0	3.1	0.0	18.0	0.0	5.5	0.4	0.0	0.1	0.0	0.1	0.8	6.1		0.2	5.0	78	37	10.0	21	0.8	1.0	67	0.1	
10/02/15	9	2.2	0.0	0.0	6	1.0	0.0	2.1	28	0.0	0.0	0.0	122	0.0	2.6	0.0	0.8	0.0	1.8	0.0	0.0	0.2	0.0	0.2	0.5	6.4		0.1	5.0	88	16	6.4	21	0.3	2.5	36	0.0	
12/05/15	12	2.4	0.0	0.0	7	2.7	0.0	2.4	27	0.0	0.0	0.0	130	0.0	5.7	0.0	1.2	0.0	2.4	0.1	0.0	0.2	0.0	0.2	0.4	5.6		0.1	5.0	165	18	4.9	21	0.2	1.6	30	0.0	
12/08/15	13	0.5	0.0	0.0	13	2.1	0.0	3.6	32	0.0	0.0	0.0	149	0.0	2.3	0.0	0.3	0.0	3.1	0.1	0.0	0.0	0.0	0.0	0.2	5.6		0.0	5.0	116	19	4.5	18	0.1	0.8	67	0.0	
11/11/15	13	14.3	0.0	0.0	13	1.5	0.0	4.2	40	0.0	0.0	0.0	177	0.0	3.2	0.0	10.6	0.0	4.0	0.2	0.0	0.2	0.0	0.2	0.8	5.4		0.2	5.0	123	23	5.0	21	0.6	0.8	74	0.1	
9/02/16	20	6.6	0.0	0.0	20	1.0	0.0	5.1	53	0.0	0.0	0.0	238	0.0	1.0	0.0	3.8	0.0	4.9	0.1	0.0	0.1	0.0	0.1	0.5	5.5		0.3	5.0	192	29	7.3	21	0.4	0.6	97	0.0	
10/05/16	21	5.7	0.0	0.0	21	1.0	0.0	3.5	40	0.0	0.0	0.0	180	0.0	1.5	0.0	3.0	0.0	3.4	0.1	0.0	0.1	0.0	0.1	0.3	5.4		0.2	5.0	184	23	5.8	22	0.2	1.5	71	0.1	
10/08/16	12		0.0		12	1.0		3.1	36				166		5.3	0.1			3.5			0.0	0.0	0.0	0.2	5.2		0.0	5.0	292	21	6.1	20	0.1	1.1	81		
8/11/16	20		0.0		20	1.8		5.9	46				202		2.5	0.0			4.7			0.0	0.0	0.0	0.1	5.5		0.1	5.0	356	25	7.2	22	0.1	2.6	89		
8/02/17	34		0.0		34	1.5		8.3	58				288		1.6	0.1			5.9			0.0	0.0	0.0	0.4	5.6		0.1	5.0	357	34	9.6	22	0.4	1.6	113		
9/05/17	9	0.9	0.1	0.0	9	1.2	0.0	1.8	23	0.0	0.0	0.0	110	0.0	3.0	0.1	0.7	0.0	1.8	0.0	0.0	0.2	0.0	0.2	0.5	5.4		0.1	5.0	406	15	6.1	21	0.3	1.8	41	0.1	
9/08/17	16		0.0		16	1.0		2.5	35				135		5.8	0.0			2.6			0.1	0.0	0.1	0.2	5.4		0.0	5.0	407	17	4.8	20	0.1	1.8	29		3.0
8/11/17	36		0.8		36	5.1		7.6	58				289		1.0	0.1			5.7			0.0	0.0	0.0	1.3	5.7		0.3	5.0	105	35	8.1	20	1.3	2.7	64		4.8
14/02/18	24		0.0		24	2.4		5.3	43				216		3.1	0.0			4.2			0.0	0.0	0.0	0.5	5.6		0.1	5.0	190	28	6.9	21	0.4	1.8	66		6.0
9/05/18	10	3.2	0.0	0.0	10	2.1	0.0	2.3	29	0.0	0.0	0.0	138	0.0	1.8	0.0	1.4	0.0	2.5	0.0	0.0	0.4	0.0	0.4	0.8	5.3		0.2	0.6	267	18	6.0	21	0.3	1.4	60	0.0	2.3
15/08/18	19		0.0		19	1.8		4.6	40				194		5.0	0.0			4.2			0.3	0.0	0.3	0.5	5.6		0.1	0.5	375	27	7.1	20	0.2	3.8	54		5.9
14/11/18	15		0.0		15	2.4		3.7	30				153		3.6	0.0			3.0			0.1	0.0	0.1	0.3	5.7		0.1	0.5	203	21	6.5	22	0.2	1.9	47		4.6
13/02/19	31		0.4		31	3.6		6.9	48				237		1.3	0.1			4.6			0.1	0.0	0.1	1.2	5.9	0.0	0.2	0.9	130	31	8.7	23	1.1	2.7	55		6.5
15/05/19	10	0.4	0.3	0.0	10	1.5	0.0	2.9	34	0.0	0.0	0.0	145	0.0	3.3	0.0	0.8	0.0	2.7	0.1	0.0	0.3	0.0	0.3	0.8	5.6	0.0	0.2	0.7	62	21	4.1	21	0.5	1.9	31	0.1	4.8
14/08/19	9		0.0		9	1.0		3.4	36				162		5.6	0.0			3.7			0.2	0.0	0.2	0.3	5.5	0.0	0.1	0.5	340	21	6.3	20	0.2	0.7	37		4.1
13/11/19	35		0.0		35	3.0		8.9	60				300		2.2	0.1			6.2			0.2	0.0	0.2	0.8	5.9	0.0	0.4	1.1	170	37	11.0	21	0.7	1.3	52		6.8
26/02/20	7		0.0		7	1.0		1.6	25				107		4.2	0.1			1.8			0.2	0.0	0.2	0.5	5.4	0.0	0.1	0.5	211	14	5.0	22	0.3	2.2	26		1.0
13/05/20	9	0.7	0.0	0.0	9	1.0	0.0	2.3	28	0.0	0.0	0.0	114	0.0	3.8	0.1	0.4	0.0	1.9	0.0	0.0	0.3	0.0	0.3	0.4	5.6	0.0	0.1	0.5	174	15	5.5	21	0.1	1.8	22	0.0	3.4
12/08/20	14		0.0		14	1.0		3.2	34				159		4.3	0.0			3.7			0.0	0.0	0.0	0.1	5.4	0.0	0.0	0.5	243	21	6.2	19	0.1	1.1	67		1.4
11/11/20	26		0.0		26	1.0		6.5	51				247		4.0	0.1			5.2			0.0	0.0	0.0	0.2	5.6	0.0	0.1	0.7	177	30	8.6	21	0.2	1.5	49		4.2
10/02/21	8		0.0		8	1.0		2.4	30				137		5.0	0.1			2.5			0.3	0.0	0.3	0.5	5.1	0.0	0.1	0.6	220	18	5.3	23	0.2	2.6	18		2.0
12/05/21	13	1.0	0.0	0.0	13	3.6	0.0	3.0	34	0.0	0.0	0.0	155	0.0	3.7	0.1	2.2	0.0	3.3	0.1	0.0	0.4	0.0	0.4	0.7	5.6	0.0	0.1	0.9	181	21	5.5	21	0.3	2.2	28	0.4	1.2
11/08/21	14		0.0		14	1.5		3.8	36				168		5.0	0.0			3.8			0.1	0.0	0.1	0.4	5.4	0.0	0.1	0.5	257	20	5.4	19	0.3	1.3	53		3.0
9/11/21	17		0.2		17	1.5		3.8	41				178		3.7	0.0			3.7			0.0	0.0	0.0	0.6	5.5	0.0	0.1	0.5	113	21	4.5	21	0.6	1.7	38		3.5
9/02/22	21		0.1		21	1.0		4.4	36				188		3.9	0.0			3.7			0.1	0.0	0.1	0.4	5.6	0.0	0.1	0.6	181	23	6.8	21	0.2	1.0	64		1.3
11/05/22																																						
10/08/22	22		0.0		22	1.0		5.0	38				188		6.7	0.0			4.2			0.2	0.0	0.2	0.4	6.0	0.0	0.1	0.6	306	22	5.2	19	0.2	1.2	32		1.4
9/11/22	32		0.1		32	1.0		5.6	41				219		4.6	0.1			4.5			0.0	0.0	0.0	0.3	5.7	0.0	0.1	0.7	94	24	5.3	20	0.3	1.5	67		1.5
14/02/2023	39.0		0.1		39.0	1.0		9.6	61.0				312.0		3.3	0.1			7.0			0.0	0.0		0.3	5.7		0.1	0.8	89.5	38.0	11.0	20.7	0.2	0.7	63.0		4.8
08/05/2023	45.0	7.3	1.4	0.0	45.0	9.3	0.0	6.2	45.0	0.0	0.0	0.0	256.0	0.0	3.8	0.1	7.7	0.0	4.7	0.4	0.0	0.0	0.0	0.0	2.1	5.9	3.0	0.4	1.8	-48.1	30.0	6.4	20.5	2.1	4.0	49.0	1.3	5.7
08/08/2023	23.0		1.5		23.0	3.6		2.7	23.0				126.0		3.6	0.0			2.3			0.1	0.0	0.1	2.1	6.0		0.3	0.7	-63.7	14.0	2.4	19.9	2.0	2.1	26.0		6.2
15/11/2023	86.0		1.9		86.0	14.0		12.0	61.0				374.0		3.1	0.1			8.0			0.1	0.0	0.1	4.1	6.0		0.7	1.3	-80.0	42.0	18.0	21.7	4.1	2.6	79.0		7.5
2023 Min	**23.00**	**7.28**	**0.06**	**0.00**	**23.00**	**1.00**	**0.00**	**2.70**	**23.00**	**0.00**	**0.01**	**0.01**	**126.00**	**0.01**	**3.10**	**0.03**	**7.74**	**0.01**	**2.30**	**0.36**	**0.00**	**0.03**	**0.02**	**0.04**	**0.27**	**5.70**	**3.00**	**0.11**	**0.70**	**-80.00**	**14.00**	**2.40**	**19.90**	**0.24**	**0.70**	**26.00**	**1.34**	**4.80**
2023 Max	**86.00**	**7.28**	**1.93**	**0.00**	**86.00**	**14.00**	**0.00**	**12.00**	**61.00**	**0.00**	**0.01**	**0.01**	**374.00**	**0.01**	**3.80**	**0.09**	**7.74**	**0.01**	**8.00**	**0.36**	**0.00**	**0.08**	**0.03**	**0.08**	**4.14**	**6.00**	**3.00**	**0.72**	**1.80**	**89.50**	**42.00**	**18.00**	**21.70**	**4.08**	**4.00**	**79.00**	**1.34**	**7.50**
2023 Mean	**48.25**	**7.28**	**1.23**	**0.00**	**48.25**	**6.98**	**0.00**	**7.63**	**47.50**	**0.00**	**0.01**	**0.01**	**267.00**	**0.01**	**3.45**	**0.06**	**7.74**	**0.01**	**5.50**	**0.36**	**0.00**	**0.05**	**0.02**	**0.06**	**2.15**	**5.90**	**3.00**	**0.38**	**1.15**	**-25.58**	**31.00**	**9.45**	**20.70**	**2.10**	**2.35**	**54.25**	**1.34**	**6.05**
Longterm average	**21.65**	**27.69**	**0.18**	**0.01**	**18.71**	**2.28**	**0.00**	**4.79**	**41.12**	**0.01**	**0.02**	**0.01**	**198.35**	**0.06**	**3.16**	**0.05**	**29.69**	**0.05**	**3.94**	**0.60**	**0.02**	**0.12**	**0.02**	**0.12**	**0.62**	**5.60**	**0.19**	**0.18**	**3.16**	**188.07**	**24.40**	**6.98**	**20.69**	**0.50**	**1.61**	**59.10**	**0.21**	**3.88**


Alkalinity
mg/L as CaCO3
100
80
60
40
20
0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23


Aluminium (Total)
mg/L
600.0
500.0
400.0
300.0
200.0
100.0
0.0
1/02/11
1/11/11
1/08/12
1/05/13
1/02/14
1/11/14
1/08/15
1/05/16
1/02/17
1/11/17
1/08/18
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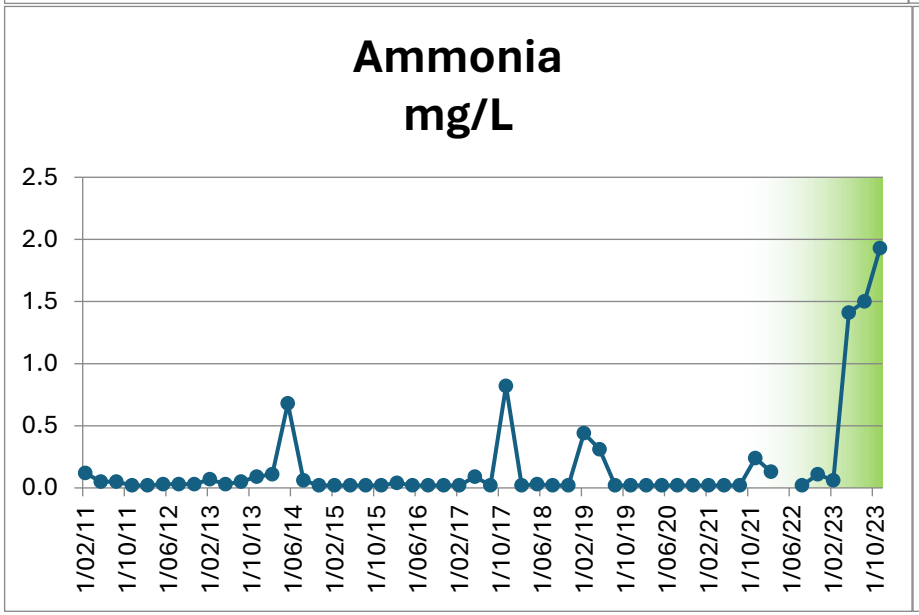
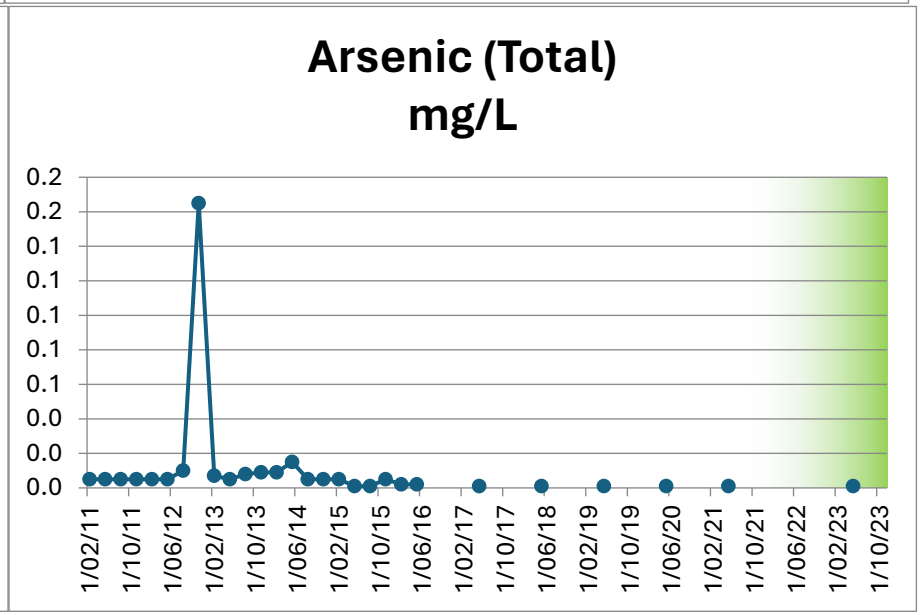
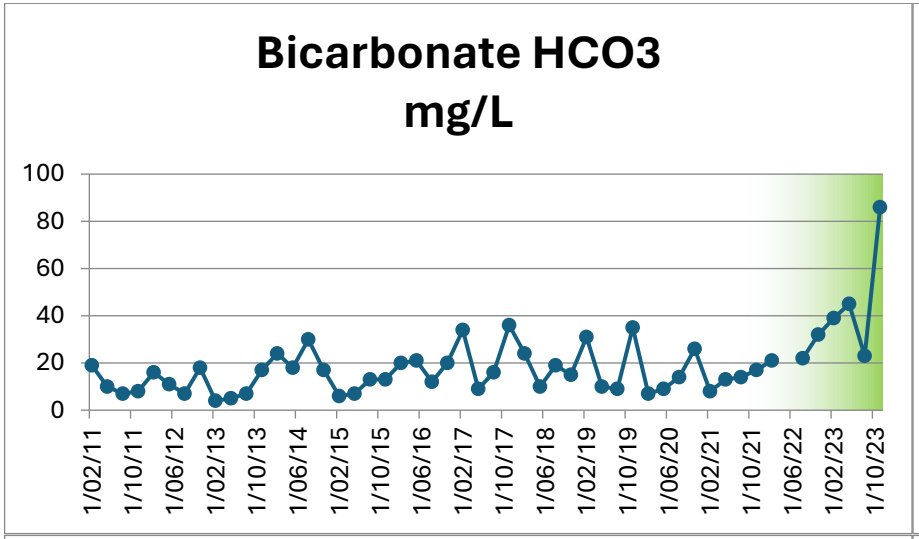
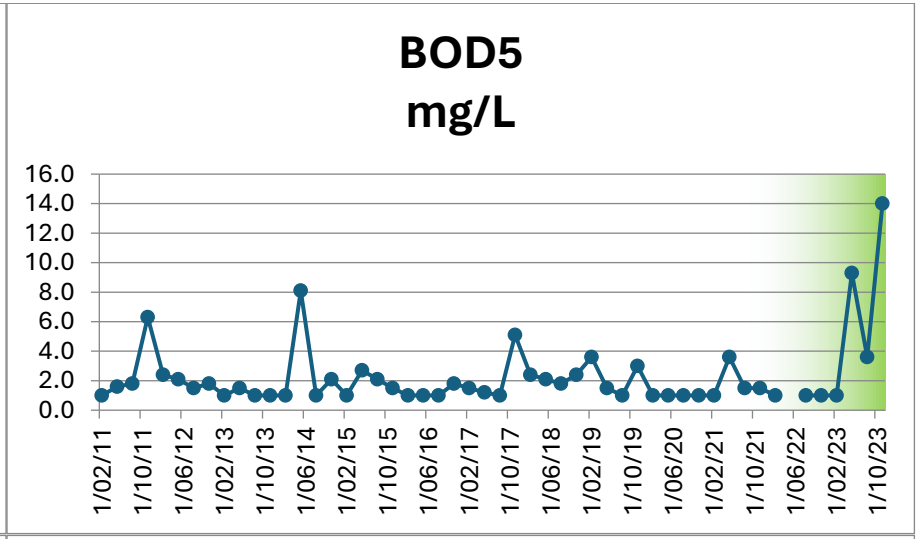
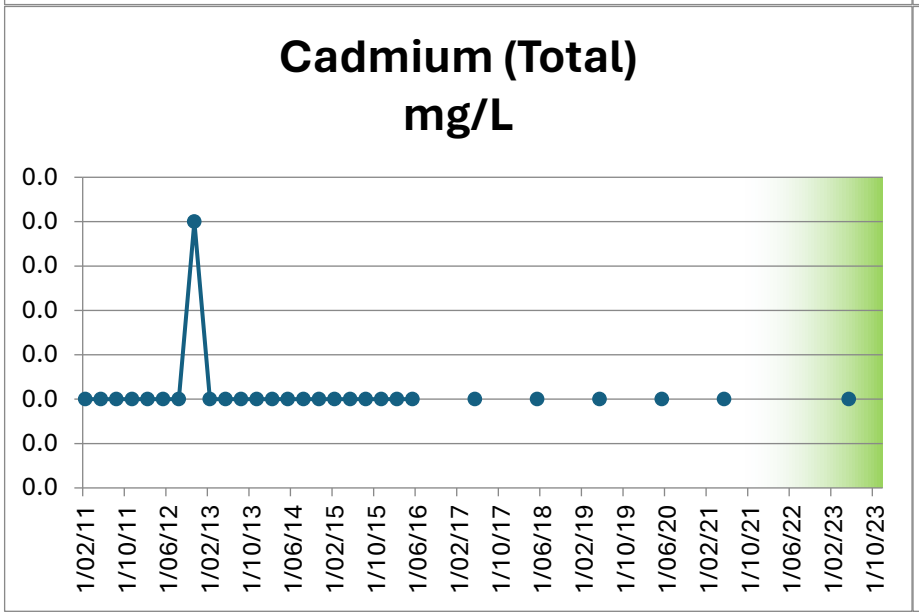
1/02/20
1/11/20
1/08/21
1/05/22
1/02/23
1/11/23

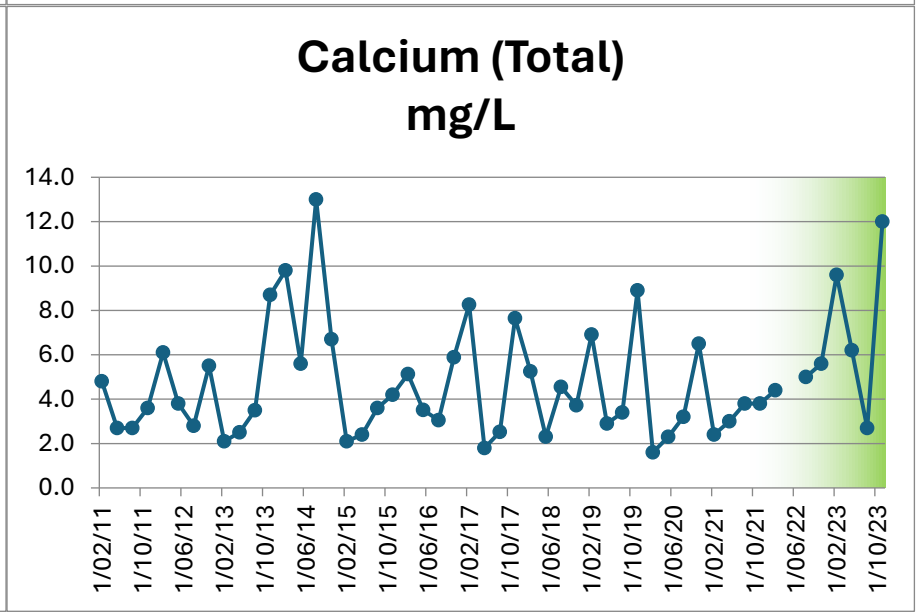

Ammonia
mg/L
2.5
2.0
1.5
1.0
0.5
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23

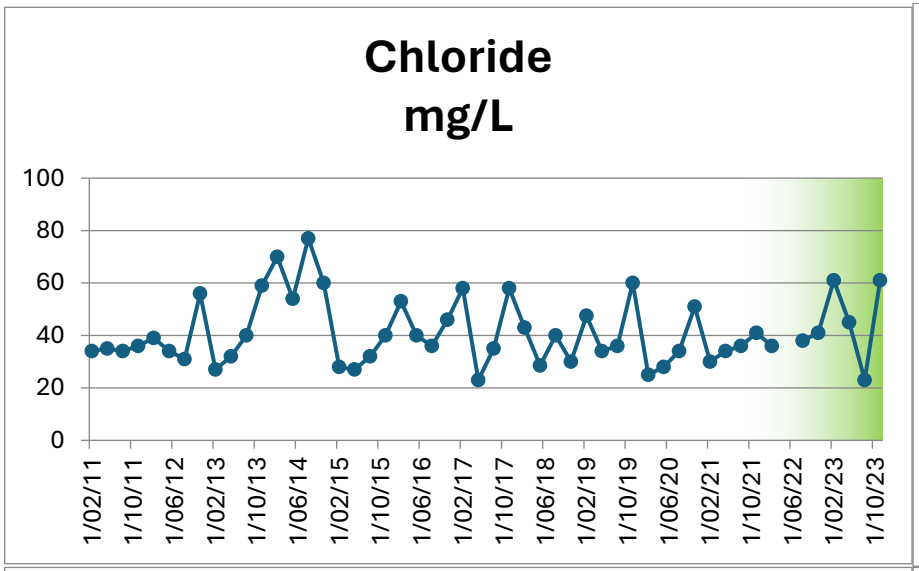

Arsenic (Total)
mg/L
0.2
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23

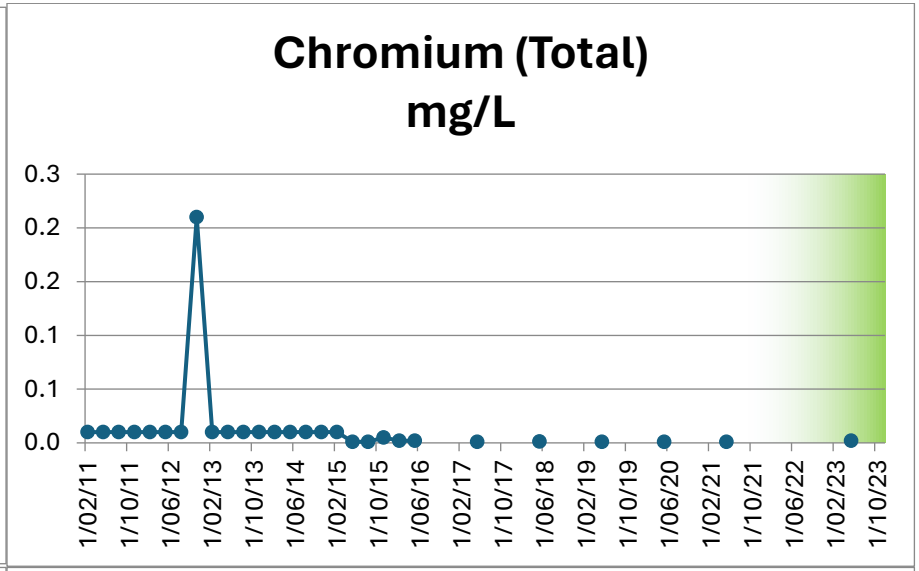

Bicarbonate HCO3
mg/L
100
80
60
40
20
0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23


BOD5
mg/L
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23


Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23


Calcium (Total)
mg/L
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23


Chloride
mg/L
100
80
60
40
20
0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23


Chromium (Total)
mg/L
0.3
0.2
0.2
0.1
0.1
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
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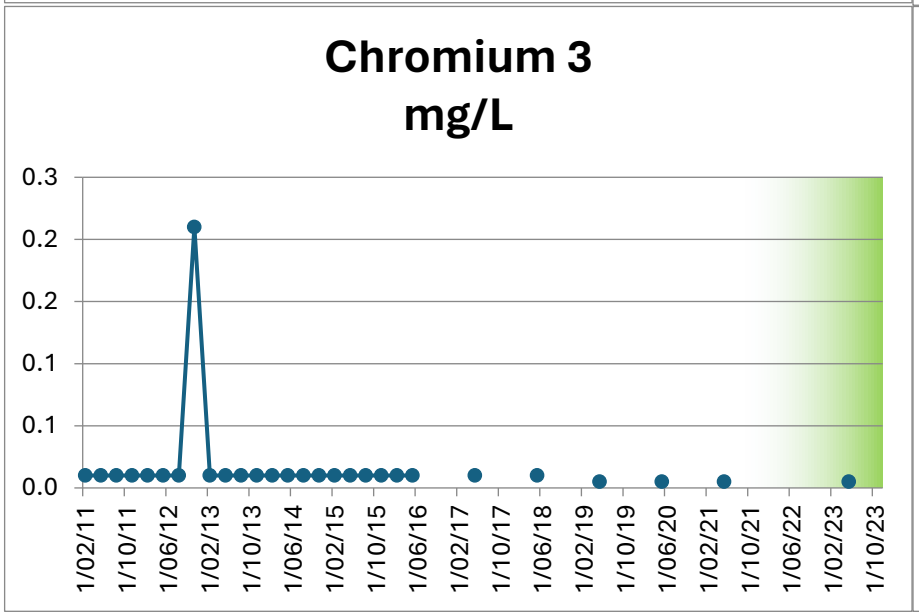
1/10/21
1/06/22
1/02/23
1/10/23


Chromium 3
mg/L
0.3
0.2
0.2
0.1
0.1
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
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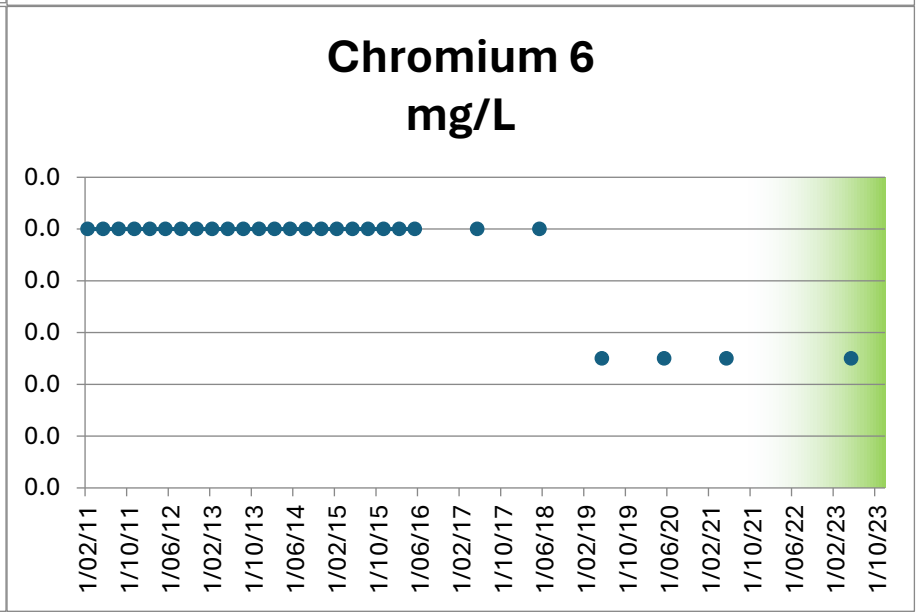
1/02/23
1/10/23


Chromium 6
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
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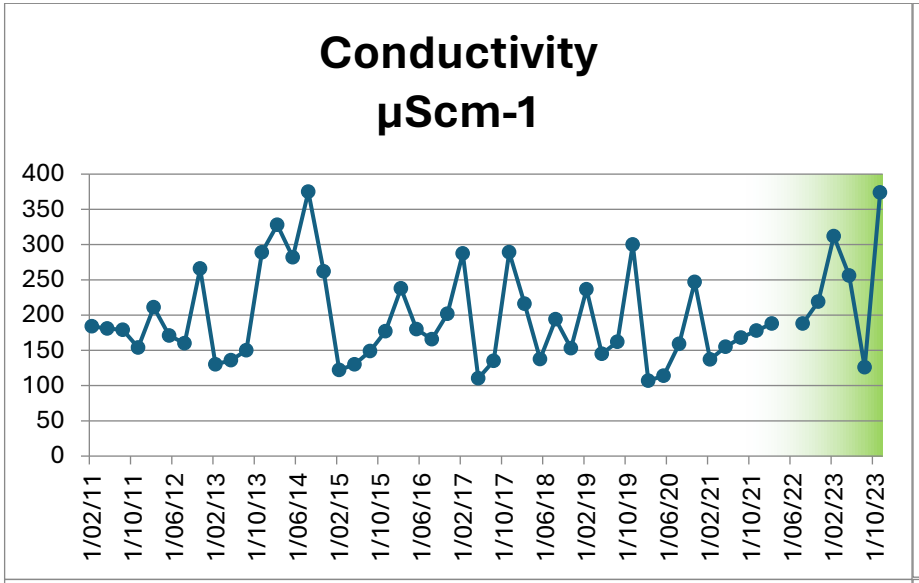
1/02/23
1/10/23


Conductivity
µScm-1
400
350
300
250
200
150
100
50
0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
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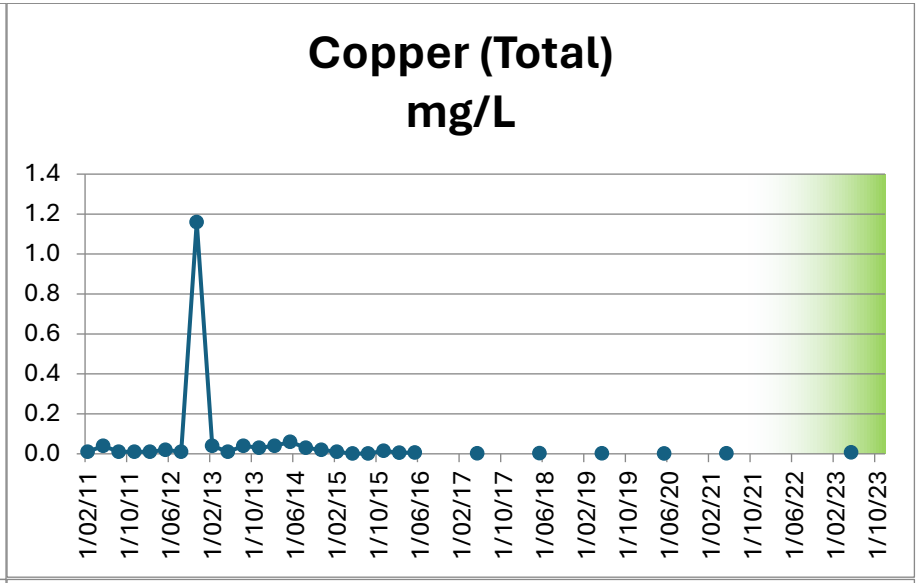
1/02/23
1/10/23


Copper (Total)
mg/L
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
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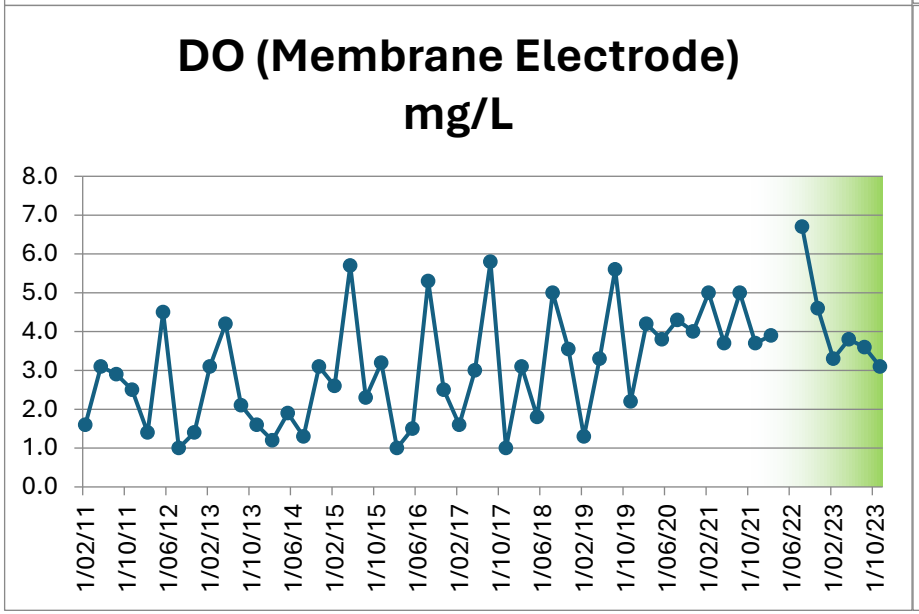
1/02/23
1/10/23


DO (Membrane Electrode)
mg/L
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
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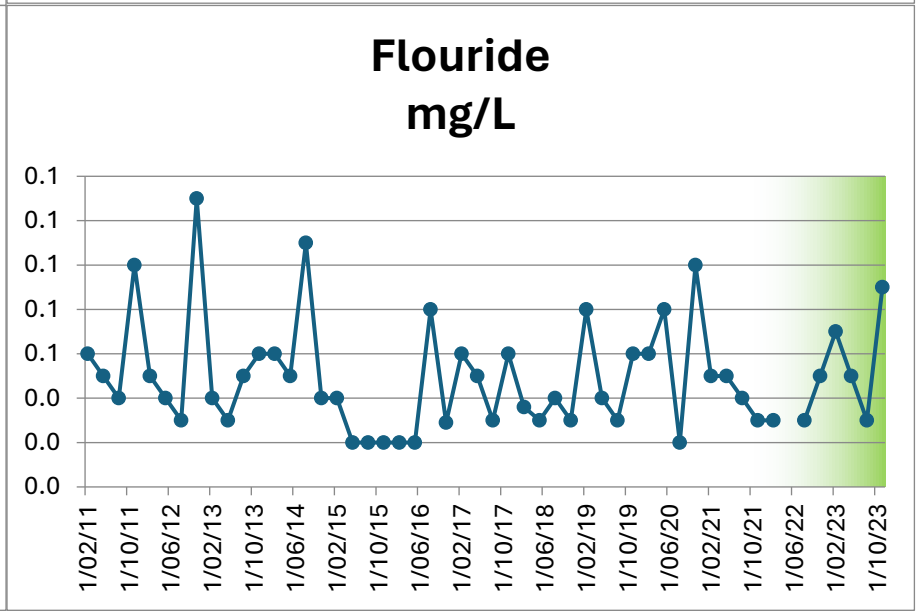
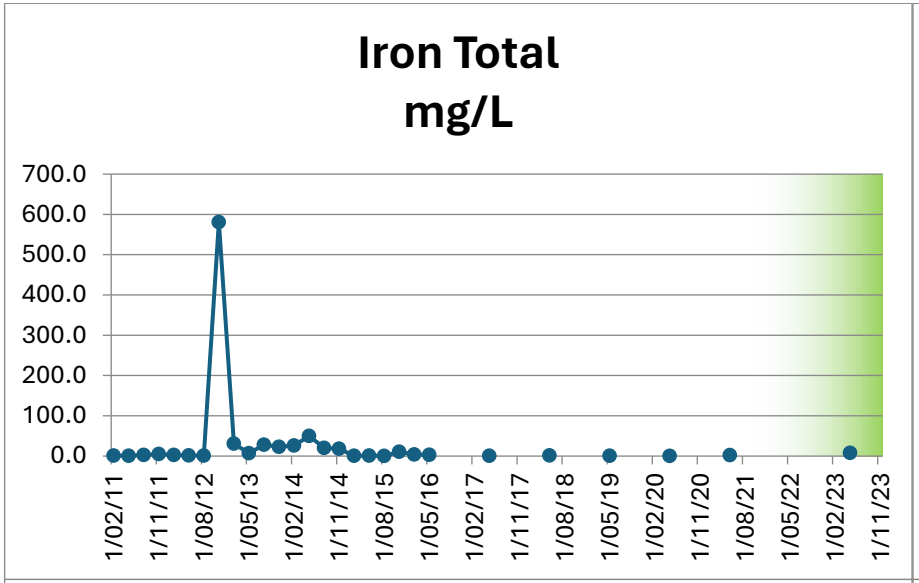
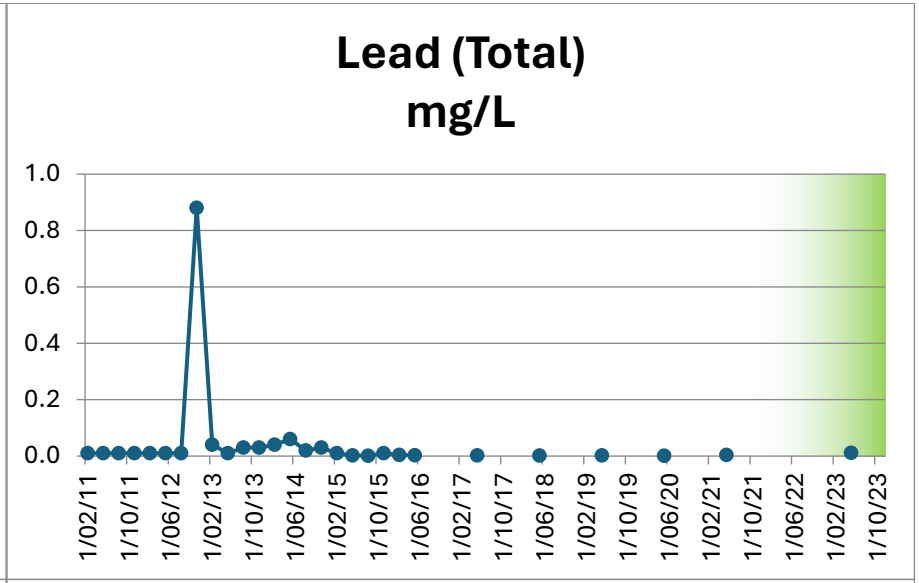
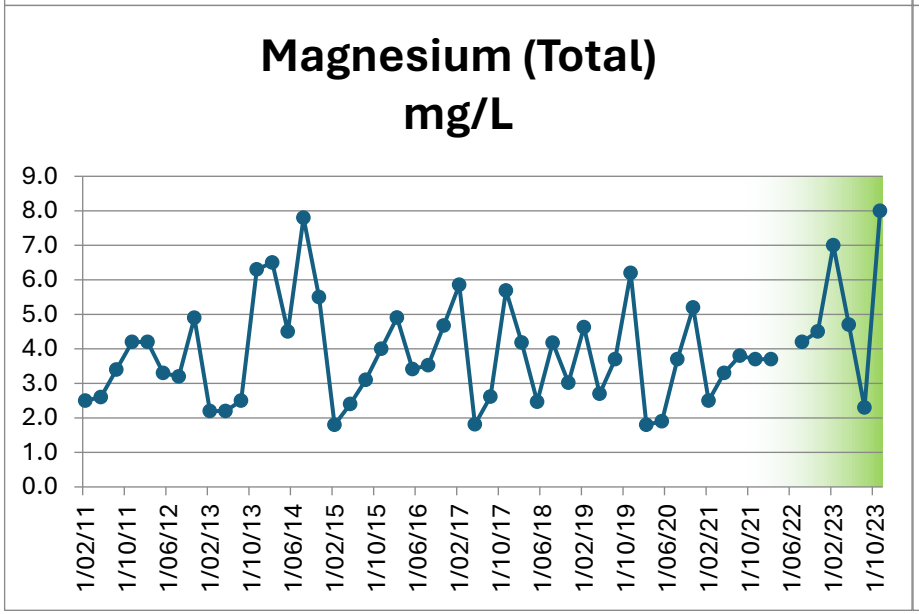
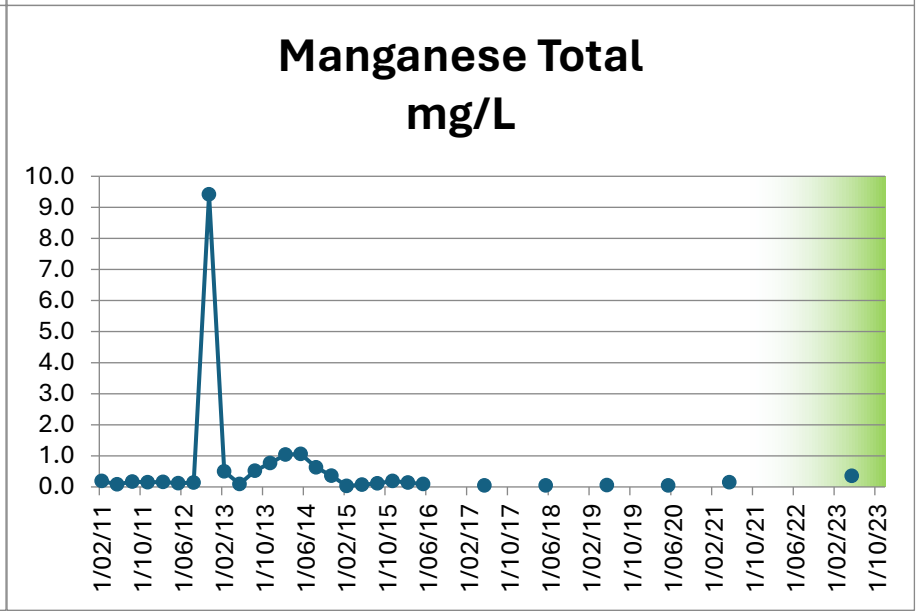
1/02/23
1/10/23

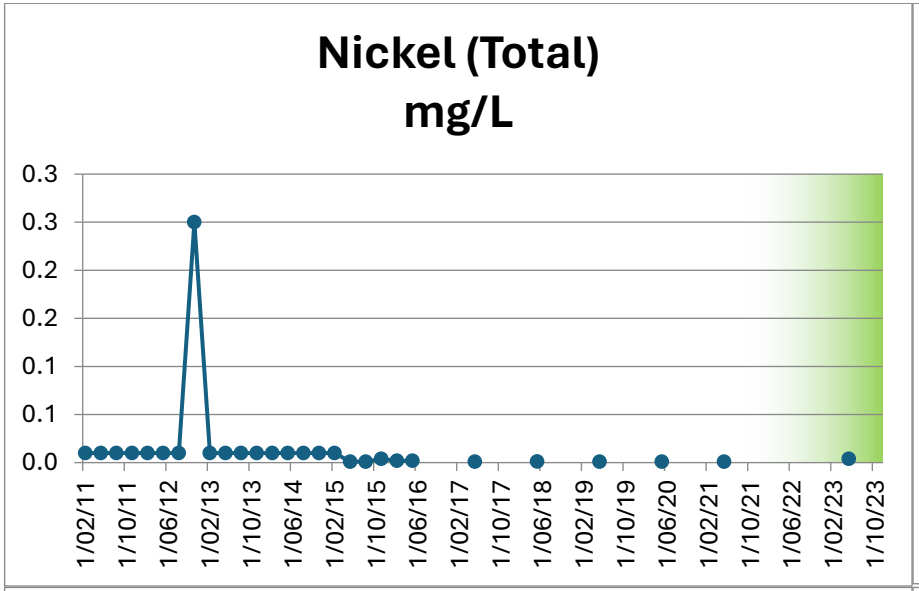

Flouride
mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23

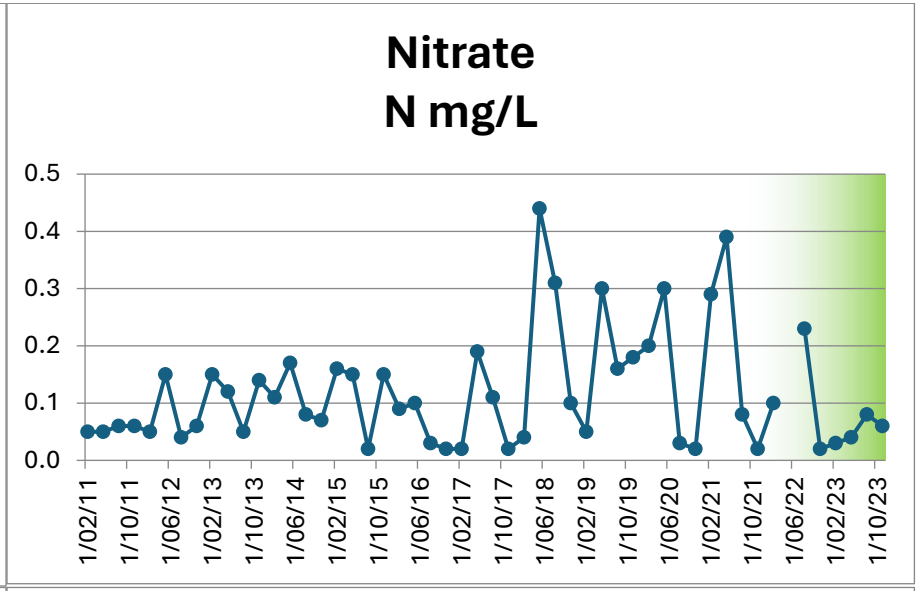

Iron Total
mg/L
700.0
600.0
500.0
400.0
300.0
200.0
100.0
0.0
1/02/11
1/11/11
1/08/12
1/05/13
1/02/14
1/11/14
1/08/15
1/05/16
1/02/17
1/11/17
1/08/18
1/05/19
1/02/20
1/11/20
1/08/21
1/05/22
1/02/23
1/11/23

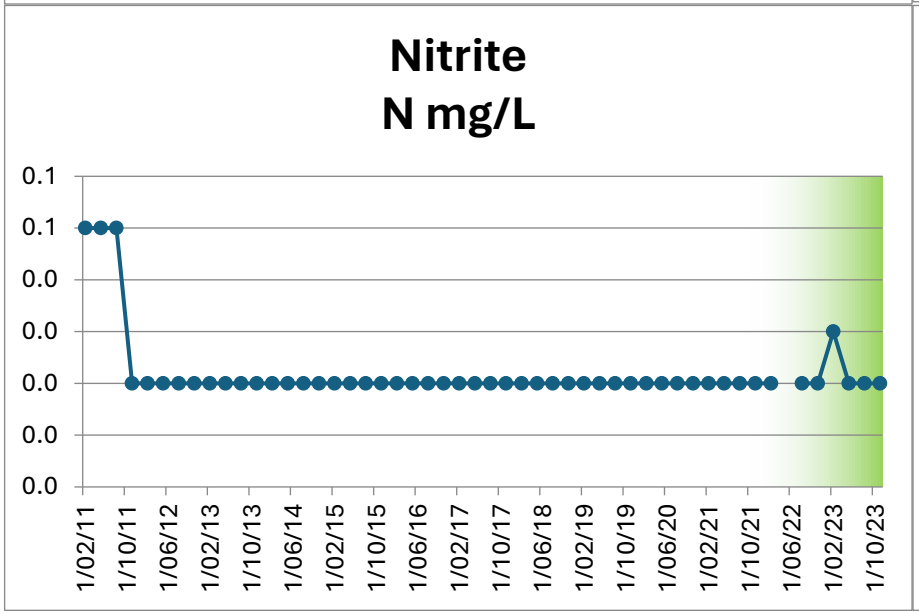

Lead (Total)
mg/L
1.0
0.8
0.6
0.4
0.2
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23

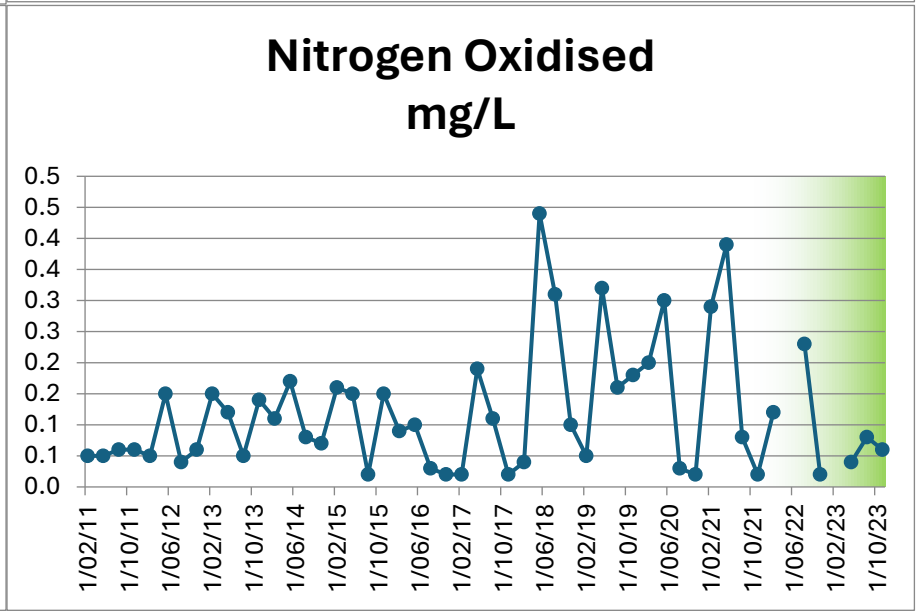

Magnesium (Total)
mg/L
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23

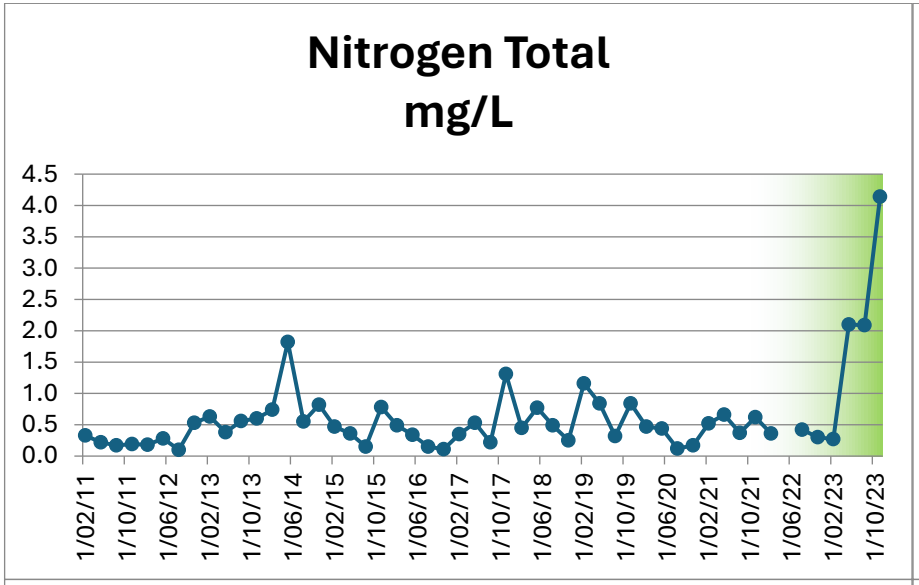

Manganese Total
mg/L
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23

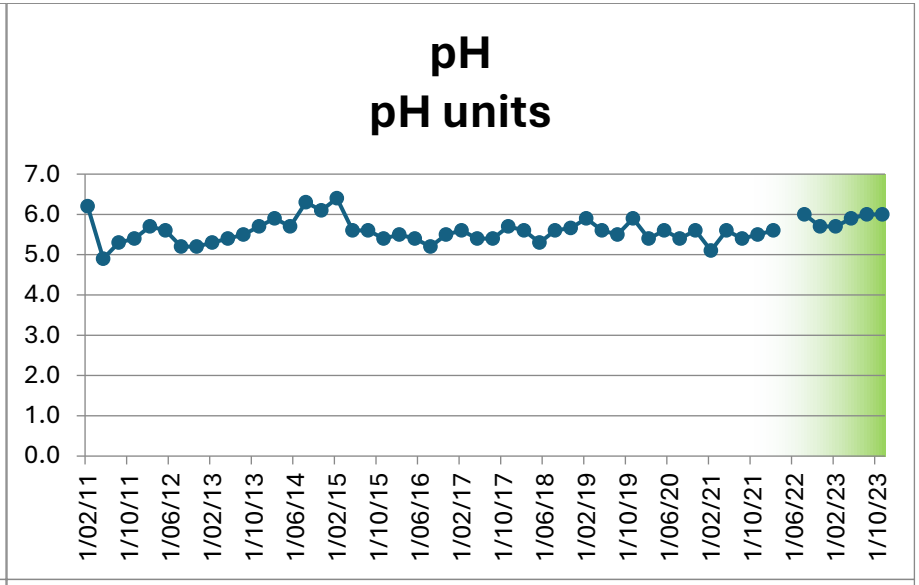

Nickel (Total)
mg/L
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23

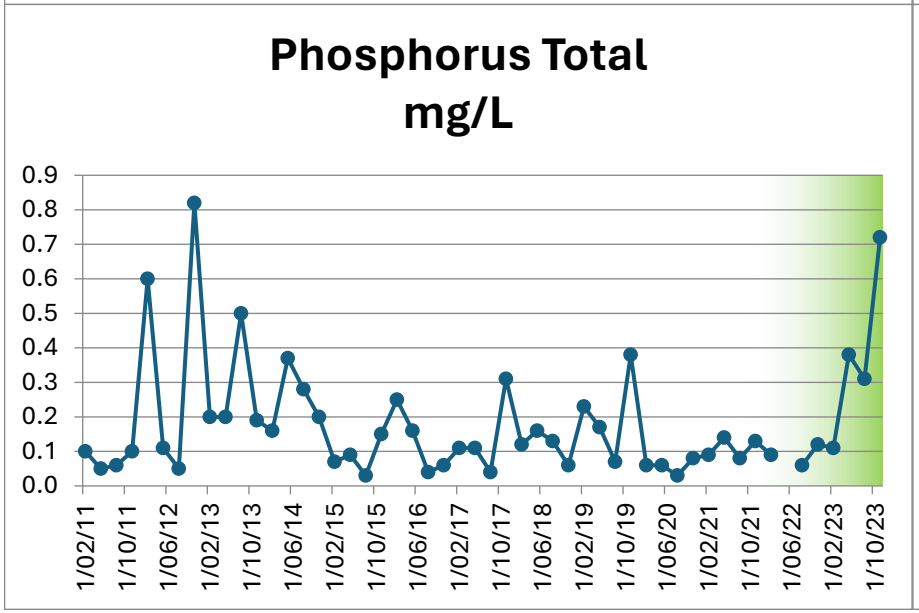

Nitrate
N mg/L
0.5
0.4
0.3
0.2
0.1
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23

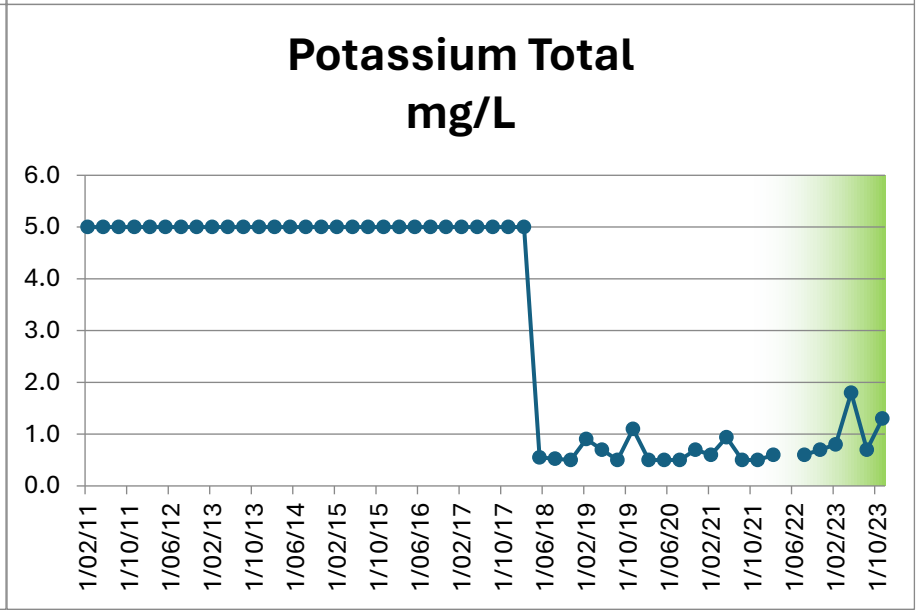

Nitrite
N mg/L
0.1
0.1
0.0
0.0
0.0
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23

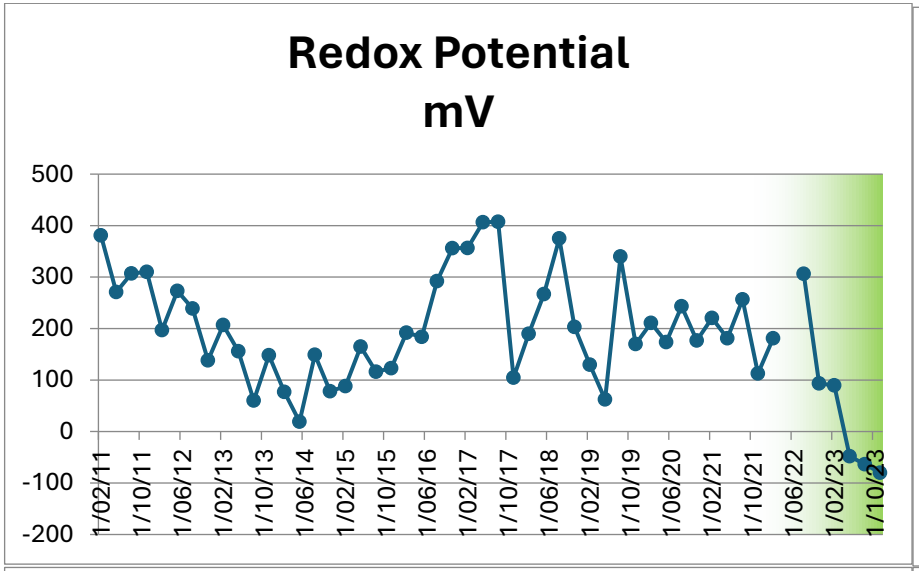

Nitrogen Oxidised
mg/L
0.5
0.5
0.4
0.4
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23

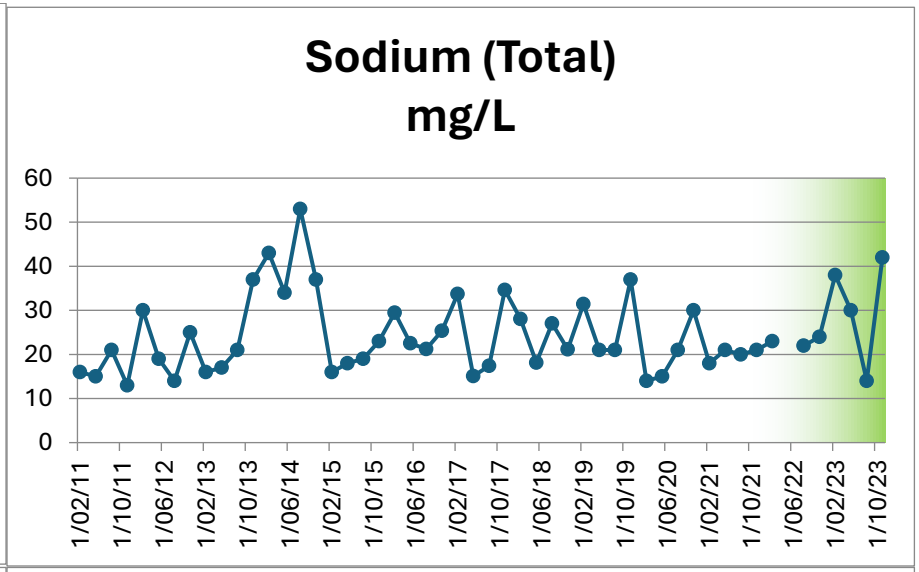

Nitrogen Total
mg/L
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23

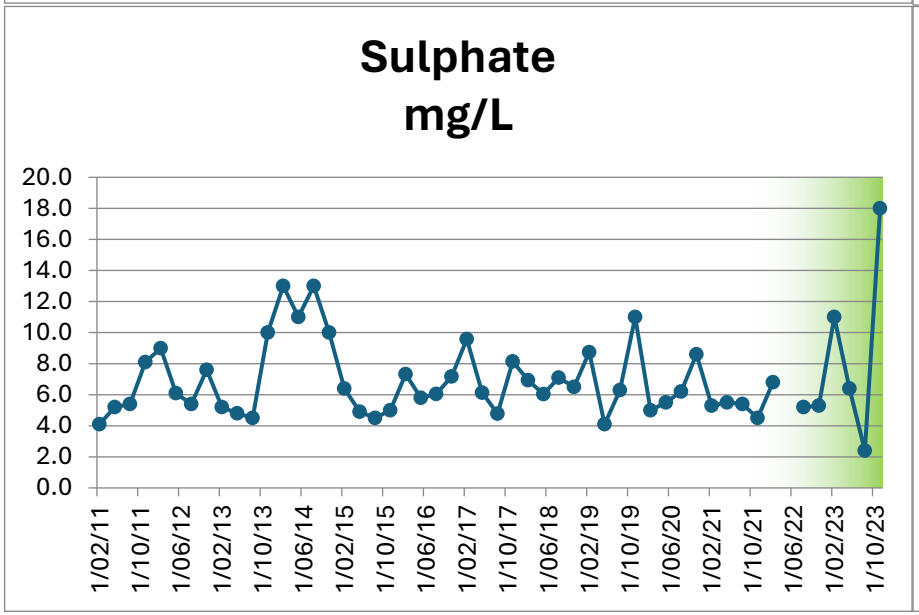

pH
pH units
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23

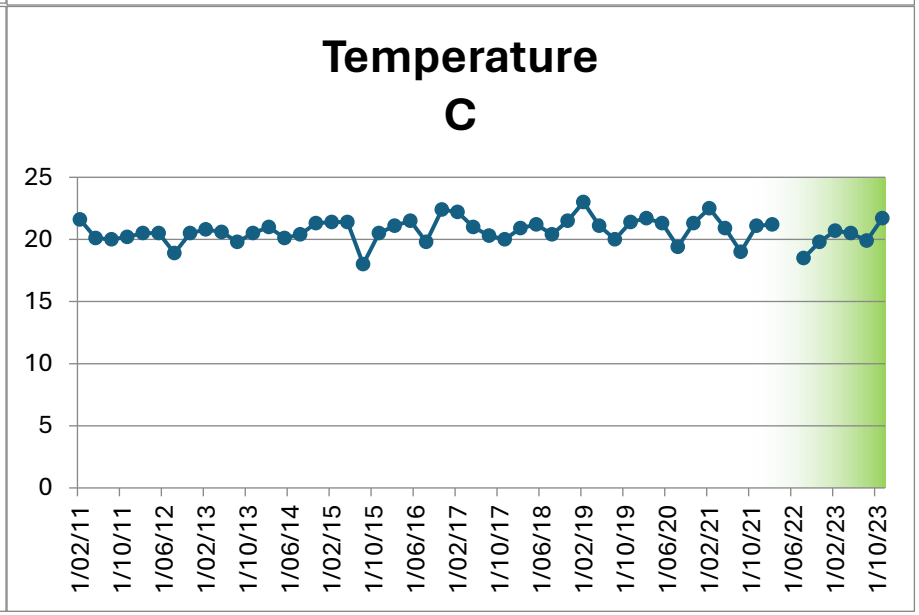

Phosphorus Total
mg/L
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23

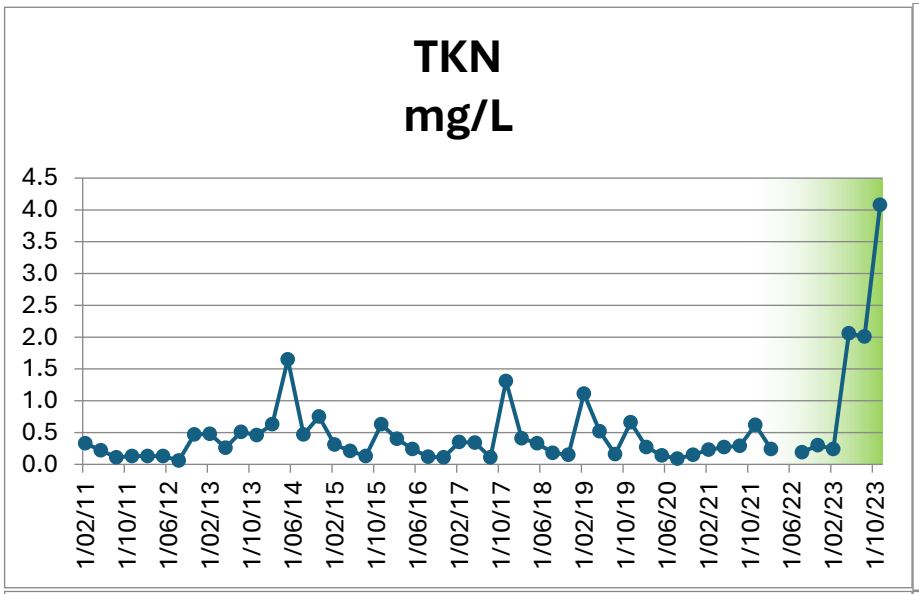

Potassium Total
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23

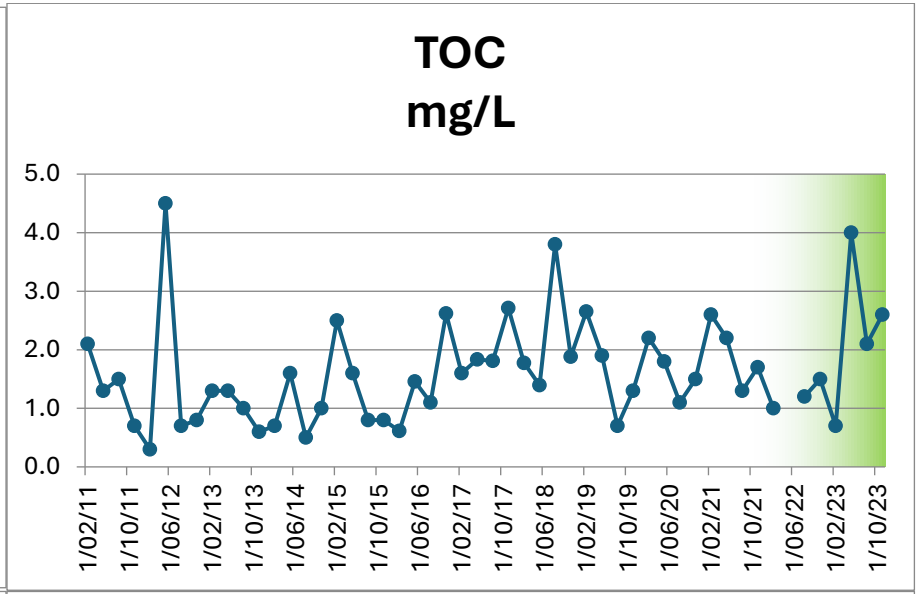

Redox Potential
mV
500
400
300
200
100
0
-100
-200
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23

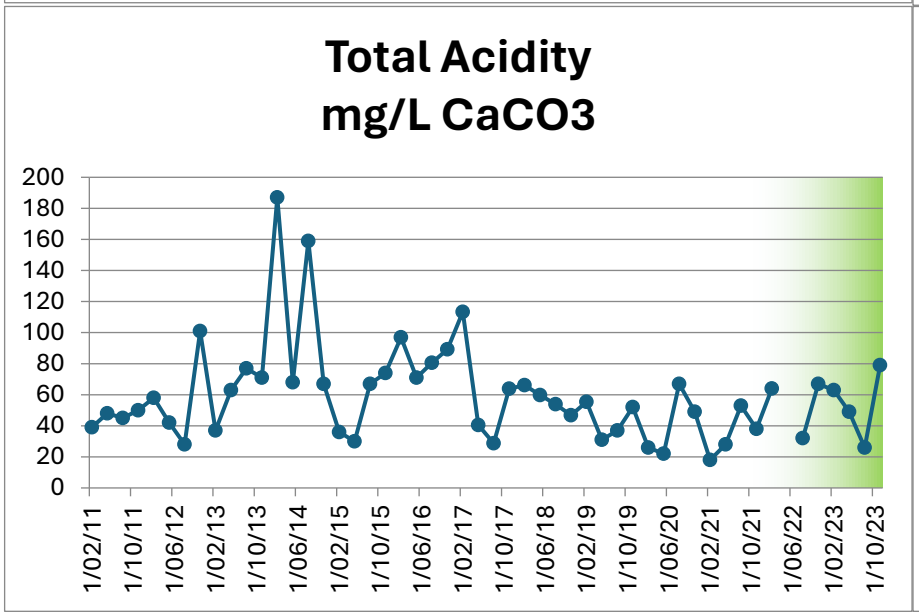

Sodium (Total)
mg/L
60
50
40
30
20
10
0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23

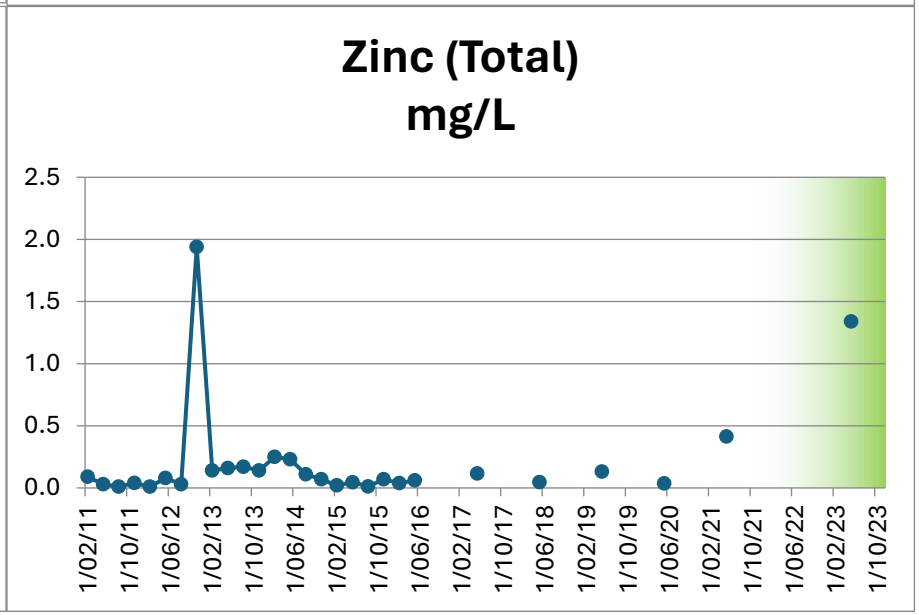

Sulphate
mg/L
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23


Temperature
C
25
20
15
10
5
0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23


TKN
mg/L
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23


TOC
mg/L
5.0
4.0
3.0
2.0
1.0
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23


Total Acidity
mg/L CaCO3
200
180
160
140
120
100
80
60
40
20
0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23


Zinc (Total)
mg/L
2.5
2.0
1.5
1.0
0.5
0.0
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23

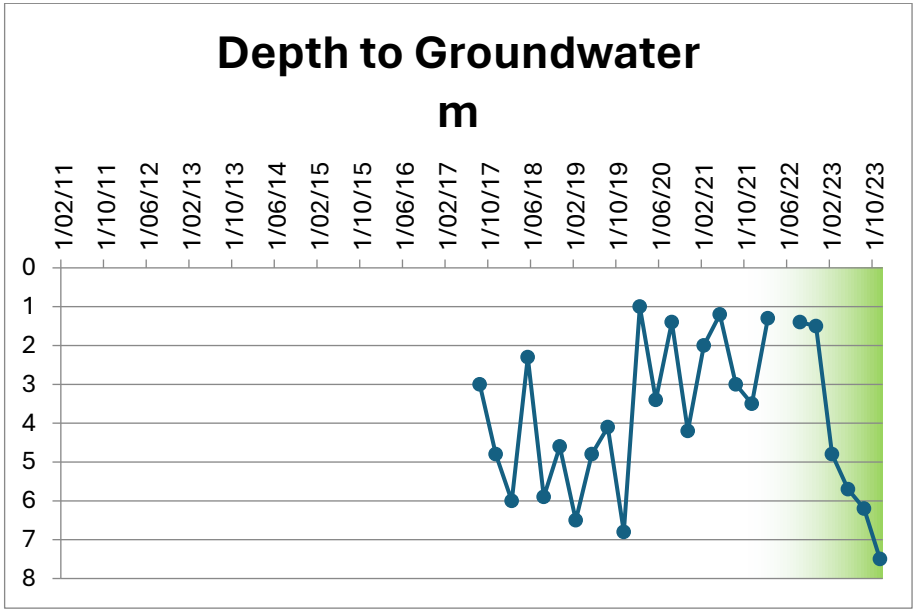
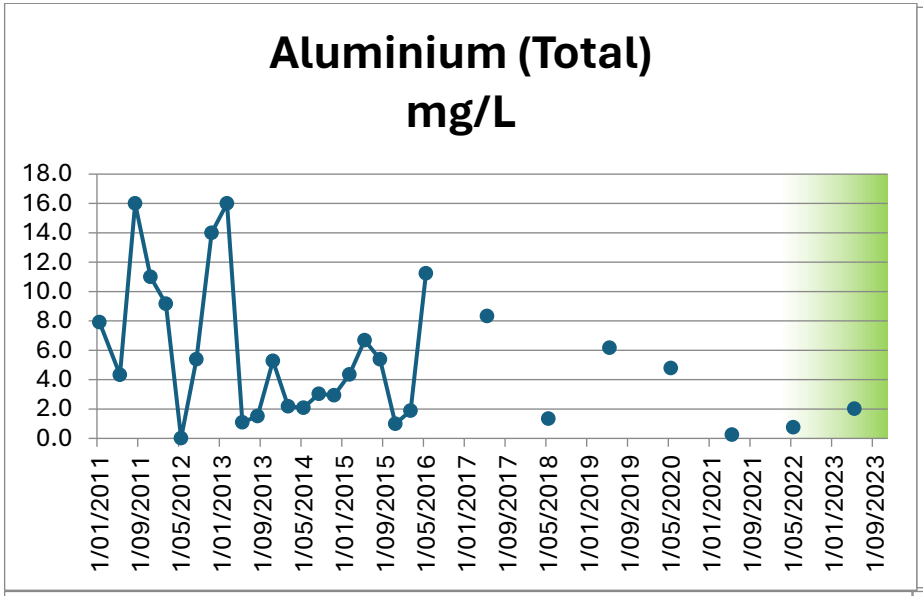

Depth to Groundwater
m
1/02/11
1/10/11
1/06/12
1/02/13
1/10/13
1/06/14
1/02/15
1/10/15
1/06/16
1/02/17
1/10/17
1/06/18
1/02/19
1/10/19
1/06/20
1/02/21
1/10/21
1/06/22
1/02/23
1/10/23
0
1
2
3
4
5
6
7
8

Table 12:Ground Water 4

GW4	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µScm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride mg/L	Iron Total mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	Nitrate N mg/L	Nitrite N mg/L	Nitrogen Oxidised mg/L	Nitrogen Total mg/L	pH pH units	Phenol Alkalinity mg/L as CaCO3	Phosphorus Total mg/L	Potassium Total mg/L	Redox Potential mV	Sodium (Total) mg/L	Sulphate mg/L	Temperature C	TKN mg/L	TOC mg/L	Total Acidity mg/L CaCO3	Zinc (Total) mg/L	Depth to Grounwater m
31/01/2011	1082	7.9	0.3	0.0	660	7.0	0.0	64	1850	0.0	0.0	0.0	6843	0.0	1.2	0.8	13	0.0	253	3.2	0.0	0.1	0.1	0.1	2.5	6.9		6.3	65	-107	1054	324	23	2.5	196	81	0.2	
10/05/2011	350	4.3	0.2	0.0	214	1.8	0.0	53	1490	0.0	0.0	0.0	6080	0.0	1.7	0.7	8	0.0	229	3.3	0.0	0.1	0.1	0.1	1.9	7.3		4.8	66	68	1092	318	21	1.8	17	92	0.0	
9/08/2011	1380	16.0	0.6	0.0	840	12.0	0.0	51	2000	0.0	0.0	0.0	6680	0.0	1.2	0.7	19	0.0	200	3.1	0.0	0.2	0.1	0.2	3.0	7.2		5.5	42	57	1058	266	20	2.8	37	91	0.3	
8/11/2011	1397	11.0	0.7	0.0	852	10.0	0.0	68	1845	0.0	0.0	0.0	7715	0.0	1.7	1.0	17	0.0	307	3.8	0.0	0.0	0.0	0.0	2.8	7.2		6.9	297	-103	1059	310	21	2.8	36	90	0.4	
6/02/2012	550	9.2	1.8	0.0	336	14.0	0.0	26	855	0.0	0.0	0.0	3770	0.0	1.0	0.4	18	0.0	102	1.8	0.0	0.6	0.3	0.9	4.4	7.1		2.9	34	114	566	150	22	3.5	17	52	5.6	
8/05/2012	1100	0.0	1.1	0.0	671	6.6	0.0	52	1630	0.0	0.0	0.0	7151	0.0	3.6	0.7	0	0.0	223	3.7	0.0	0.1	0.1	0.2	3.2	7.3		5.8	50	181	1148	256	21	3.0	33	59	0.0	
6/08/2012	1028	5.4	0.1	0.0	627	3.6	0.0	47	1500	0.0	0.0	0.0	6750	0.0	2.6	0.7	7	0.0	177	2.7	0.0	0.2	0.0	0.2	1.8	7.3		4.7	52	-80	835	275	19	1.7	29	65	0.6	
13/11/2012	1388	14.0	0.4	0.0	847	9.9	0.0	49	1870	0.0	0.0	0.0	7760	0.0	1.7	0.7	21	0.0	203	2.6	0.0	0.1	0.0	0.1	2.4	7.2		5.5	49	-65	998	198	21	2.3	37	110	2.6	
13/02/2013	772	16.0	0.4	0.0	471	8.7	0.0	34	1240	0.0	0.0	0.0	5140	0.0	5.0	0.4	19	0.0	133	2.0	0.0	0.9	0.0	0.9	2.9	7.3		2.4	31	21	940	154	22	2.0	22	41	3.4	
14/05/2013	1326	1.1	0.3	0.0	809	1.8	0.0	48	1800	0.0	0.0	0.0	7200	0.0	4.1	0.7	2	0.0	191	2.6	0.0	0.1	0.0	0.1	1.8	7.3		6.0	48	-40	1103	252	22	1.7	35	117	0.1	
6/08/2013	146	1.5	0.0	0.0	89	1.0	0.0	51	1290	0.0	0.0	0.0	6000	0.0	4.9	0.7	2	0.0	180	3.0	0.0	0.1	0.0	0.1	1.5	7.5		4.7	42	115	954	383	20	1.5	27	93	0.1	
12/11/2013	1251	5.3	0.2	0.0	763	3.3	0.0	57	1680	0.0	0.0	0.0	7430	0.0	3.1	0.8	7	0.0	220	3.2	0.0	0.1	0.0	0.1	2.2	7.3		5.5	49	-80	1212	316	21	2.1	36	37	0.4	
11/02/2014	1236	2.2	0.3	0.0	754	3.0	0.0	53	1730	0.0	0.0	0.0	7298	0.0	3.5	0.6	3	0.0	205	3.0	0.0	0.1	0.0	0.1	2.0	7.2		1.9	44	-51	1334	269	22	1.9	34	186	0.2	
13/05/2014	1000	2.1	0.2	0.0	61	2.1	0.0	52	1440	0.0	0.0	0.0	7050	0.0	3.4	0.8	3	0.0	190	2.4	0.0	0.3	0.0	0.3	2.0	7.3		5.9	47	48	1219	272	23	1.7	31	76	0.1	
12/08/2014	1088	3.0	0.2	0.0	664	2.7	0.0	52	1650	0.0	0.0	0.0	6950	0.0	4.5	0.8	5	0.0	193	2.8	0.0	0.1	0.0	0.1	2.0	7.4		5.4	44	-16	1126	293	20	1.9	211	116	0.3	
10/11/2014	1165	2.9	0.2	0.0	711	1.5	0.0	50	1690	0.0	0.0	0.0	7	0.0	3.9	0.8	4	0.0	195	2.5	0.0	0.1	0.0	0.1	2.0	7.3		5.3	44	59	1247	300	21	1.9	226	165	0.2	
9/02/2015	1322	4.4	28.2	0.0	806	190.0	0.0	46	1600	0.0	0.0	0.0	7050	0.0	1.0	0.8	13	0.0	211	2.9	0.0	0.0	0.0	0.1	46.6	7.2		15.0	52	-216	1220	788	23	46.6	144	180	1.6	
11/05/2015	1241	6.7	3.8	0.0	757	36.0	0.0	52	1700	0.0	0.0	0.0	7100	0.0	1.3	0.8	12	0.0	206	3.0	0.0	0.1	0.0	0.1	9.3	7.3		9.0	43	-81	1232	183	22	9.2	207	104	1.3	
11/08/2015	1198	5.4	2.4	0.0	1198	14.0	0.0	58	1620	0.0	0.0	0.0	6940	0.0	2.2	0.8	11	0.0	224	2.6	0.0	0.1	0.0	0.1	6.6	7.4		5.8	46	-78	1270	237	20	6.5	188	92	1.1	
10/11/2015	1170	1.0	1.0	0.0	1170	4.5	0.0	53	1400	0.0	0.0	0.0	6020	0.0	1.3	0.8	4	0.0	194	3.0	0.0	0.0	0.0	0.0	2.8	7.3		7.0	38	-62	990	307	21	2.8	193	76	0.2	
8/02/2016	1250	1.9	3.1	0.0	1250	10.2	0.0	52	1550	0.0	0.0	0.0	6920	0.0	2.2	0.7	5	0.0	202	2.8	0.0	0.1	0.0	0.1	6.9	7.2		6.0	43	-86	1165	220	22	6.8	41	114	1.0	
9/05/2016	1320	11.2	8.7	0.0	1320	69.0	0.0	50	1535	0.0	0.0	0.0	6680	0.0	0.1	0.8	33	0.0	194	3.0	0.0	0.2	0.0	0.2	15.0	7.2		6.5	45	-144	1119	256	23	14.8	49	120	3.6	
9/08/2016	935		2.4		935	12.0		40	1275				5728		1.3	0.7			154			0.1	0.0	0.1	6.0	7.2		4.1	37	-67	954	212	20	5.9	24	115			
7/11/2016	1120		0.6		1120	2.0		51	1650				6321		2.9	0.8			193			0.0	0.0	0.0	2.3	7.2		6.7	42	183	1083	282	21	2.2	30	77			
7/02/2017	1200		1.1		1200	8.5		46	1550				6965		1.6	0.7			184			0.1	0.0	0.1	3.4	7.2		5.2	37	33	1041	211	22	3.4	33	134			
8/05/2017	946	8.3	2.1	0.0	946	8.5	0.0	37	1290	0.0	0.0	0.0	5581	0.0	2.2	0.7	27	0.0	149	2.1	0.0	0.1	0.0	0.1	4.3	7.2		3.9	35	-15	881	194	22	4.3	27	78	4.9	
8/08/2017	973		0.0		973	2.0		47	1225				5962		4.2	0.7			172			0.6	0.0	0.6	2.4	7.4		5.6	38	281	942	304	20	1.8	29	50		1.4
7/11/2017	1		0.5			4.2		54	1850				7777		1.8	0.1			220			0.1	0.0	0.1	3.4	7.2		4.7	46	-44	1278	255	21	3.3	37	113		0.9
13/02/2018	1164		0.4		1164	2.1		51	1540				6535		2.7	0.8			189			0.2	0.0	0.2	2.5	7.2		6.1	40	-19	1064	281	22	2.2	34	55		1.4
8/05/2018	1177	1.3	0.5	0.0	1177	3.0	0.0	53	1600	0.0	0.0	0.0	6730	0.0	2.7	0.9	3	0.0	206	2.9	0.0	0.3	0.0	0.3	2.3	7.2		5.9	44	31	1160	292	22	2.0	36	39	0.2	1.0
14/08/2018	985		0.0		985	2.1		52	1400				5801		4.4	0.7			185			0.2	0.0	0.2	0.8	7.4		2.7	41	314	1030	345	20	0.6	34	19		1.4
13/11/2018	1042		0.4		1042	1.8		51	1370				6150		2.9	0.8			188			0.1	0.0	0.1	2.0	7.4		5.3	41	48	1040	328	21	1.9	32	49		1.3
21/02/2019	1148		0.7		1148	2.4		55	1615				6826		2.6	0.8			206			0.1	0.0	0.1	2.8	7.3		6.3	44	94	1201	285	24	2.7	39	47		1.9
14/05/2019	1	6.2	2.1	0.0	0	13.0	0.0	57	1620	0.0	0.0	0.0	6890	0.0	2.0	0.8	15	0.0	214	3.4	0.0	0.2	0.0	0.2	5.3	7.2		6.5	50	-74	1250	271	22	5.1	40	49	1.5	1.2
13/08/2019	1007		0.1		1007	6.6		53	1380				6010		3.2	0.8			196			0.5	0.0	0.5	2.4	7.5		5.8	43	241	1070	330	20	1.9	33	20		1.6
12/11/2019	1073		0.3		1073	1.5		51	1440				6429		2.6	0.7			196			0.1	0.0	0.1	2.0	7.1		6.0	41	73	1070	324	21	1.9	30	49		1.9
25/02/2020	1342		4.6		1342	69.0		55	1820				7722		1.3	0.7			220			0.1	0.0	0.1	12.1	7.1	0.0	6.7	50	-199	1280	217	22	12.0	53	100		0.9
12/05/2020	1357	4.8	3.0	0.0	1357	19.0	0.0	51	1780	0.0	0.0	0.0	7337	0.0	1.9	0.8	12	0.0	204	3.1	0.0	0.1	0.0	0.1	8.0	7.2	0.0	6.7	46	-114	1200	150	22	7.9	40	66	1.5	1.5
11/08/2020	1110		0.5		1110	6.0		51	1400				6283		2.6	0.8			190			0.1	0.1	0.1	3.0	7.4	0.0	7.0	42	107	1040	271	20	2.9	34	28		1.1
10/11/2020	1117		0.7		1117	12.0		51	1420				6398		3.0	0.7			193			0.0	0.0	0.0	2.7	7.3	0.0	7.1	42	-114	1030	307	20	2.7	33	35		1.1
9/02/2021	935		1.8		935	6.9		50	1100				5272		2.6	0.8			170			0.0	0.0	0.0	3.4	7.3	0.0	6.1	36	-112	829	293	23	3.4	30	37		1.1
11/05/2021	180	0.3	0.1	0.0	180	2.7	0.0	51	1080	0.0	0.0	0.0	5003	0.0	3.9	0.8	1	0.0	173	3.4	0.0	0.7	0.0	0.7	2.3	7.6	0.0	6.1	39	158	821	331	22	1.6	30	13	0.1	1.1
10/08/2021	1051		0.4		1051	3.6		51	1330				5956		2.6	0.8			193			0.2	0.0	0.2	2.2	7.3	0.0	6.2	45	222	1000	303	19	2.0	32	41		1.7
8/11/2021	1211		0.3		1211	3.9		53	1530				6478		3.1	0.8			201			0.1	0.0	0.1	1.9	7.2	0.0	6.2	45	23	1040	290	21	1.9	33	61		1.0
8/02/2022	1052		1.1		1052	8.4		51	1320				5951		2.3	0.6			183			0.0	0.0	0.0	3.2	7.3	0.0	6.8	42	-53	921	269	23	3.1	36	75		1.0
10/05/2022	314	0.8	0.5	0.0	314	6.6	0.0	20	390	0.0	0.0	0.0	2026	0.0	2.0	0.3	2	0.0	62	1.5	0.0	4.2	0.0	4.2	5.9	7.1	0.0	2.7	18	-16	292	115	22	1.7	13	29	1.2	0.7
9/08/2022	1062		0.0		1062	3.3		51	1800				6295		3.8	0.9			194			0.2	0.0	0.2	1.9	7.4	0.0	5.6	44	125	1040	298	20	1.7	30	40		1.1
8/11/2022	1097		0.4		1097	1.5		50	1410				6321		3.0	0.8			173			0.0	0.0	0.0	3.0	7.2	0.0	6.3	52	-25	995	299	20	3.0	32	50		1.3
13/02/2023	1064		0.3		1064	4.2		54	1450				6113		2.8	0.9			198			0.0	0.0	0.0	1.8	7.2		7.1	45	-11	1020	322	23	1.8	32	62		1.4
8/05/2023	1180	2.0	0.3	0.0	1180	3.0	0.0	53	1620	0.0	0.0	0.0	6468	0.0	3.7	0.9	2	0.0	202	3.0	0.0	0.1	0.0	0.1	2.0	7.2	0.0	6.8	47	-111	1100	274	22	1.9	34	66	0.2	1.5
8/08/2023	989		0.1		989	3.0		50	1300				6181		4.4	0.9			190			0.4	0.0	0.4	2.1	7.4		5.6	54	111	1020	289	20	1.7	30	42		1.5
13/11/2023	1171		0.2		1171	2.1		52	1540				6697		2.7	0.8			206			0.0	0.0	0.0	1.8	7.2		6.7	44	-33	1100	273	21	1.8	35	90		1.1
2023 Min	**989**	**2**	**0**	**0**	**989**	**2**	**0**	**50**	**1300**	**0**	**0**	**0**	**6113**	**0**	**3**	**1**	**2**	**0**	**190**	**3**	**0**	**0**	**0**	**0**	**2**	**7**	**0**	**6**	**44**	**-111**	**1020**	**273**	**20**	**2**	**30**	**42**	**0**	**1**
2023 Max	**1180**	**2**	**0**	**0**	**1180**	**4**	**0**	**54**	**1620**	**0**	**0**	**0**	**6697**	**0**	**4**	**1**	**2**	**0**	**206**	**3**	**0**	**0**	**0**	**0**	**2**	**7**	**0**	**7**	**54**	**111**	**1100**	**322**	**23**	**2**	**35**	**90**	**0**	**2**
2023 Mean	**1101**	**2**	**0**	**0**	**1101**	**3**	**0**	**52**	**1478**	**0**	**0**	**0**	**6365**	**0**	**3**	**1**	**2**	**0**	**199**	**3**	**0**	**0**	**0**	**0**	**2**	**7**	**0**	**7**	**48**	**-11**	**1060**	**290**	**21**	**2**	**33**	**65**	**0**	**1**
Long-term Average	**1015**	**5**	**2**	**0**	**880**	**12**	**0**	**50**	**1501**	**0**	**0**	**0**	**6283**	**0**	**3**	**1**	**10**	**0**	**193**	**3**	**0**	**0**	**0**	**0**	**4**	**7**	**0**	**6**	**49**	**9**	**1053**	**280**	**21**	**4**	**54**	**75**	**1**	**1**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mg/L
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16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
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1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
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1/05/2018
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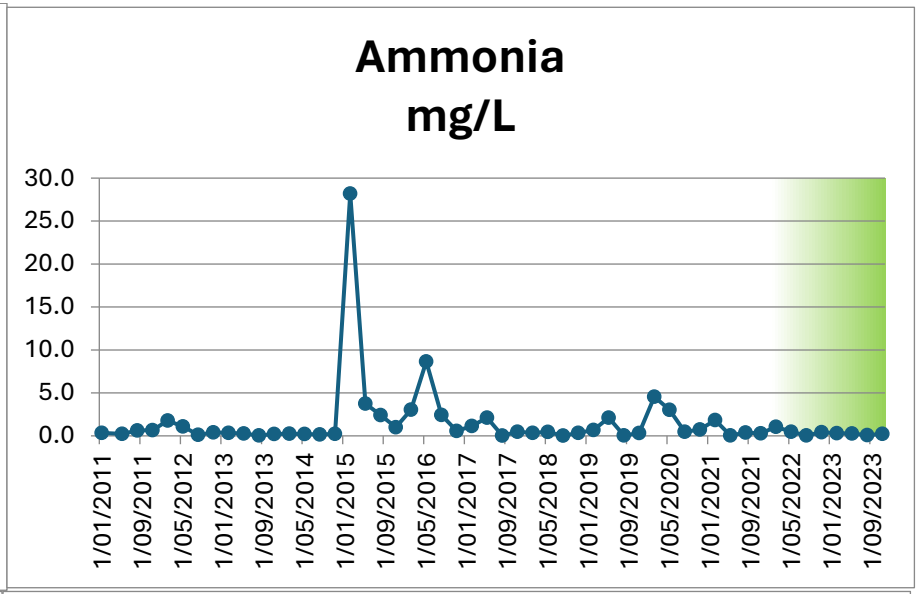
1/09/2023


Ammonia
mg/L
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25.0
20.0
15.0
10.0
5.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
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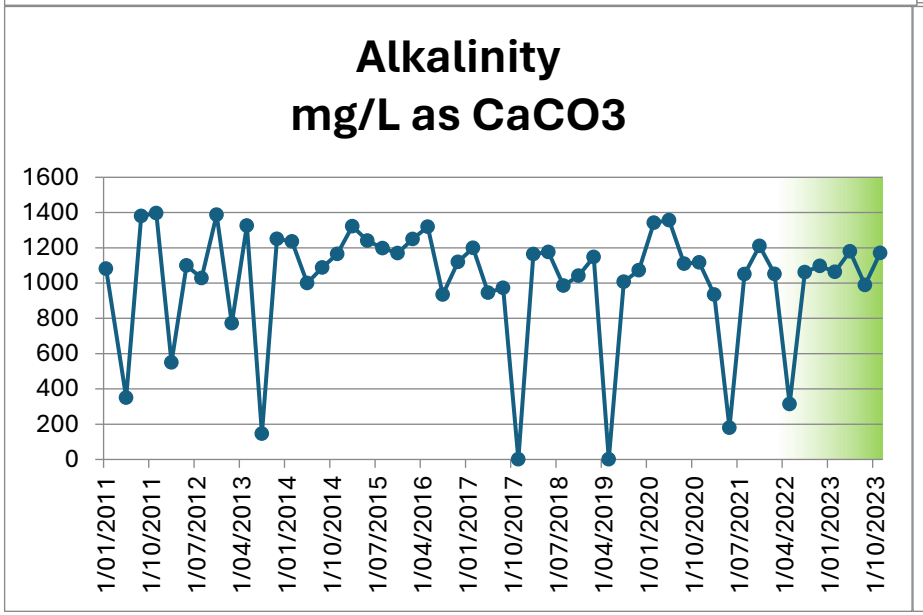
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Alkalinity
mg/L as CaCO3
1600
1400
1200
1000
800
600
400
200
0
1/01/2011
1/10/2011
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1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
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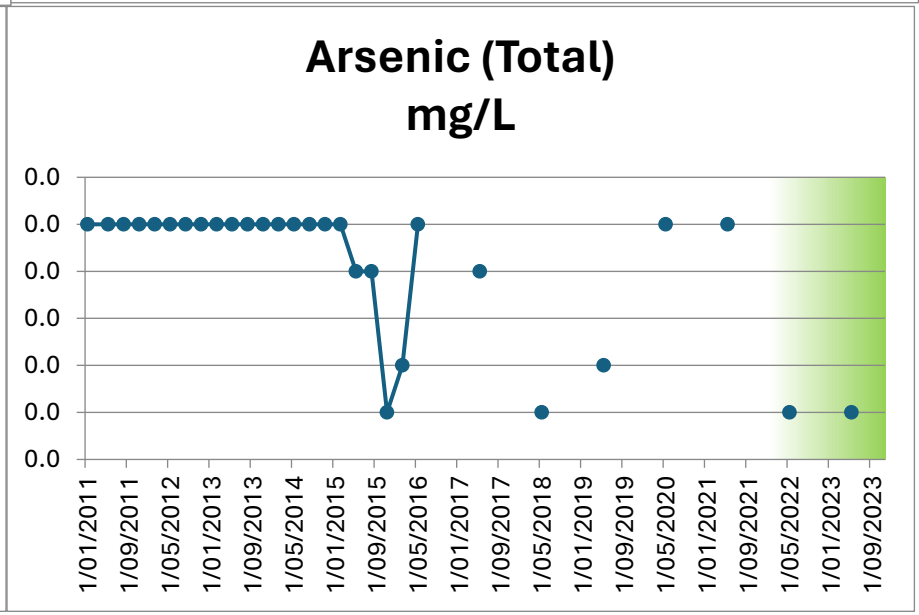
1/04/2022
1/01/2023
1/10/2023


Arsenic (Total)
mg/L
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0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
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1/01/2013
1/09/2013
1/05/2014
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1/09/2015
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1/05/2018
1/01/2019
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1/01/2023
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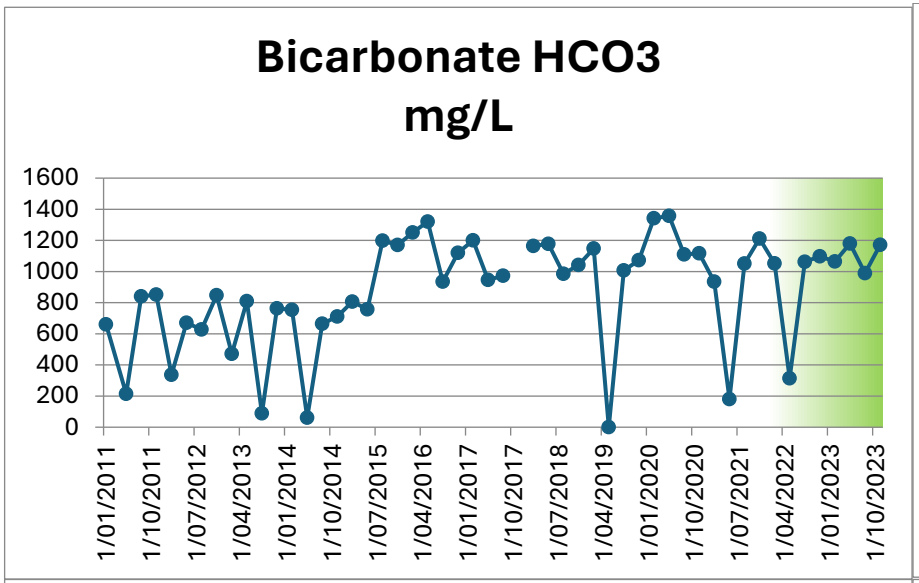
Bicarbonate HCO3
mg/L
1600
1400
1200
1000
800
600
400
200
0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
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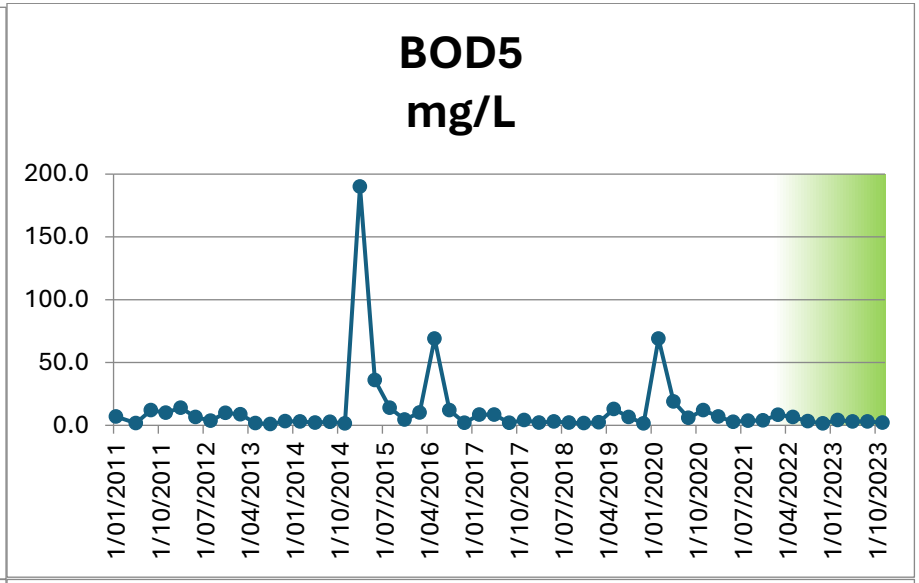
1/04/2022
1/01/2023
1/10/2023


BOD5
mg/L
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150.0
100.0
50.0
0.0
1/01/2011
1/10/2011
1/07/2012
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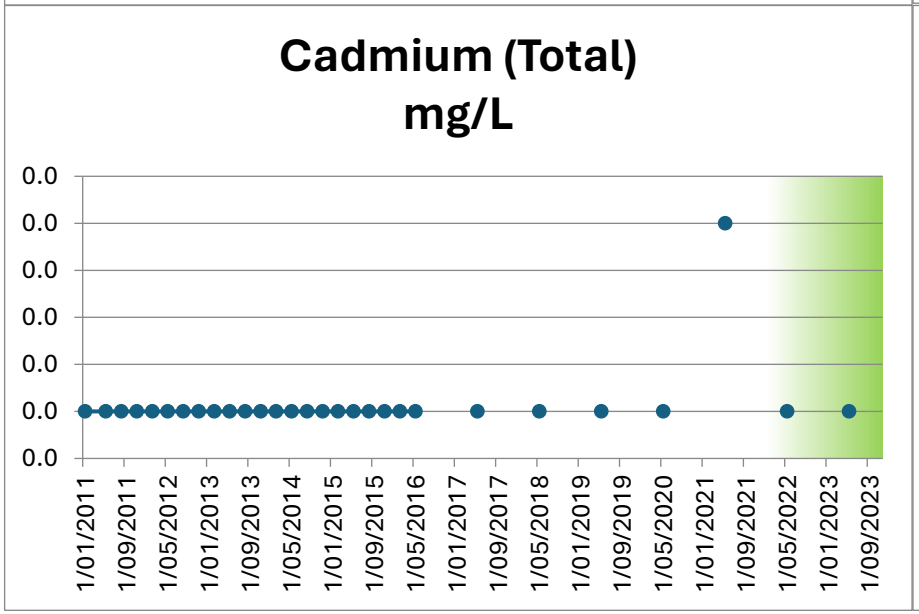
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023


Cadmium (Total)
mg/L
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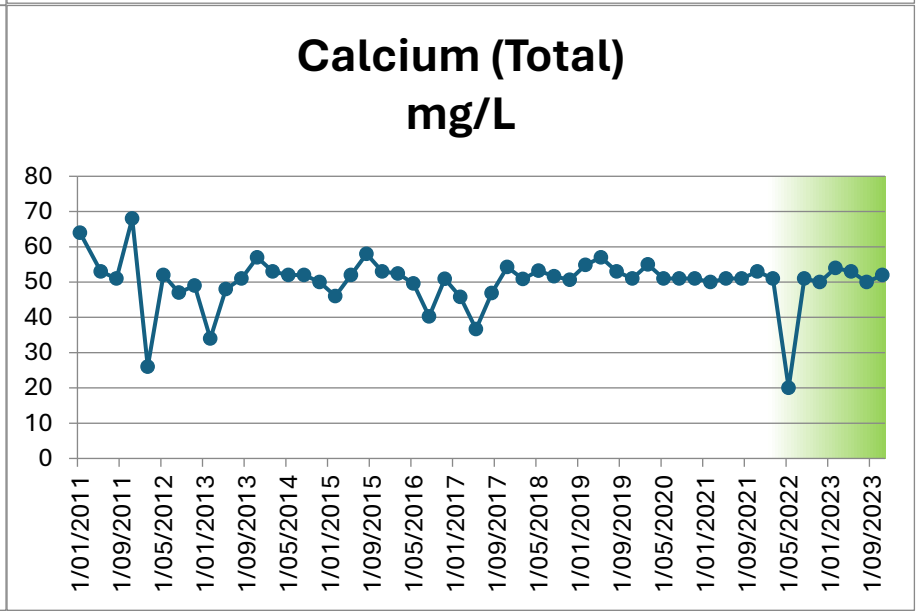
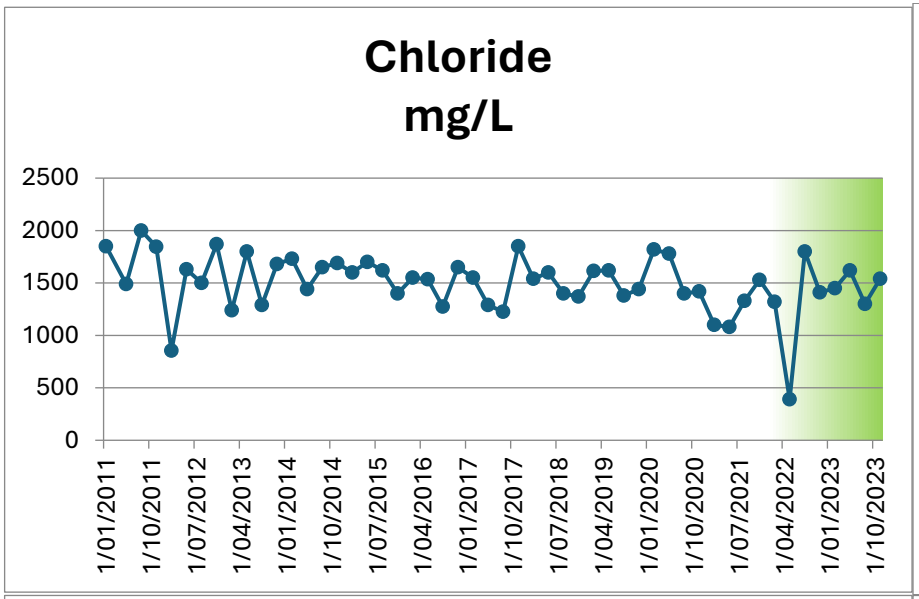
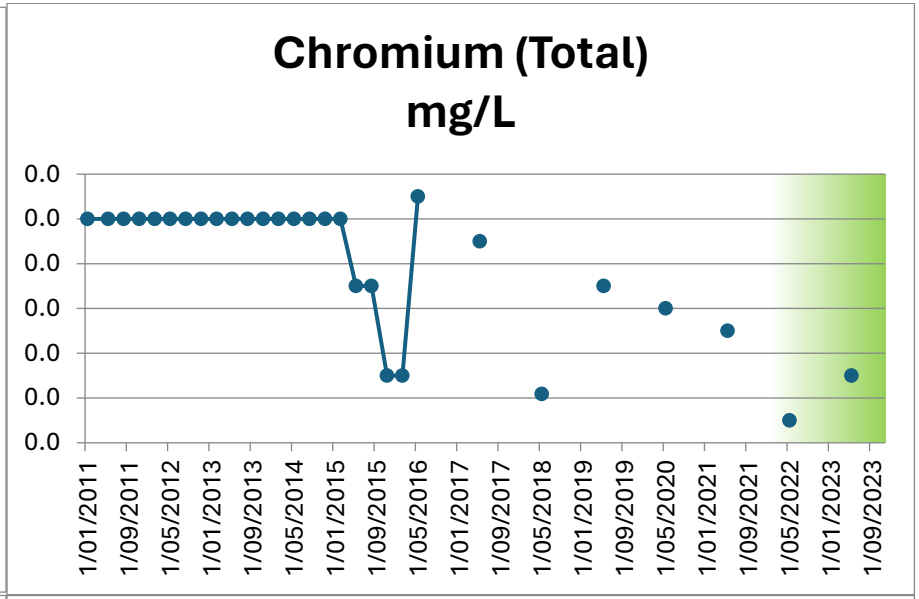
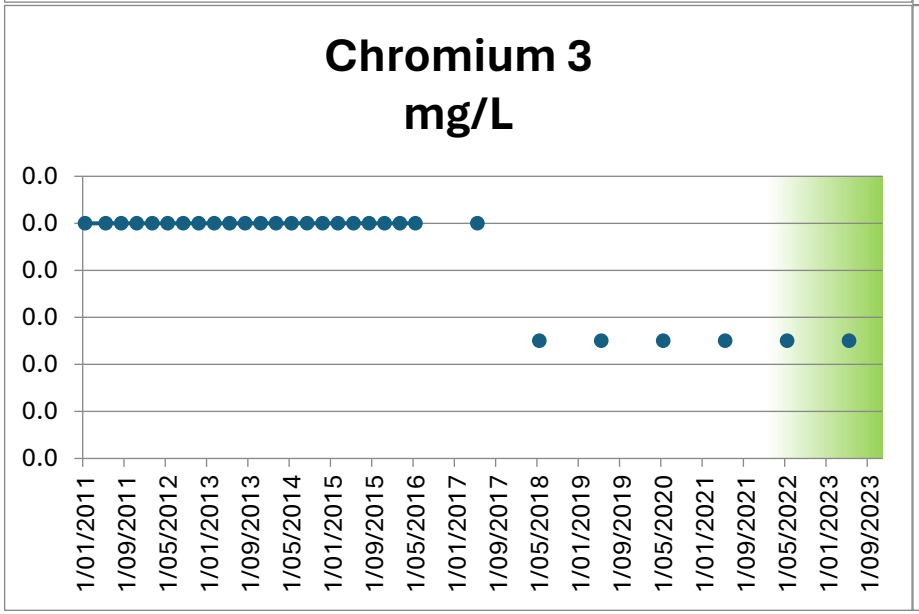
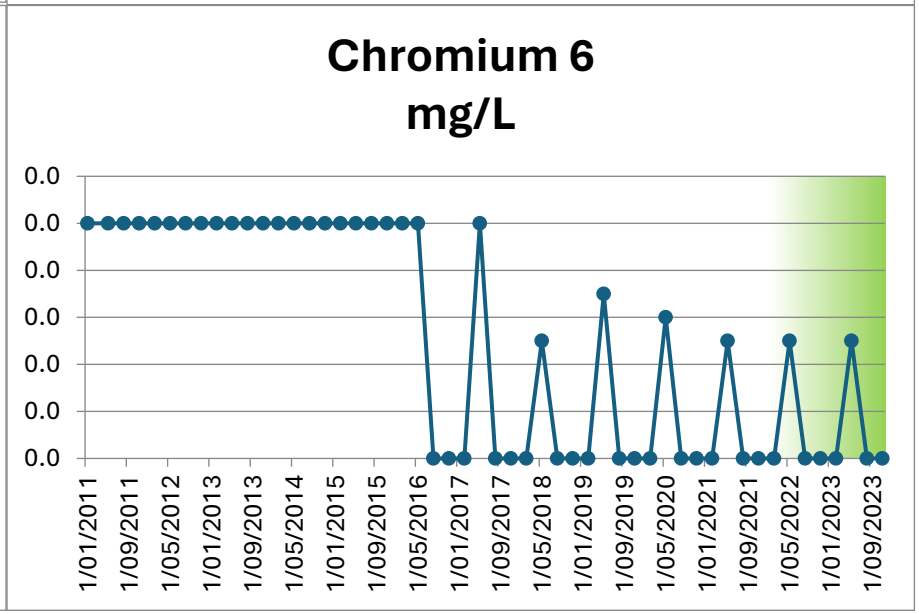
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

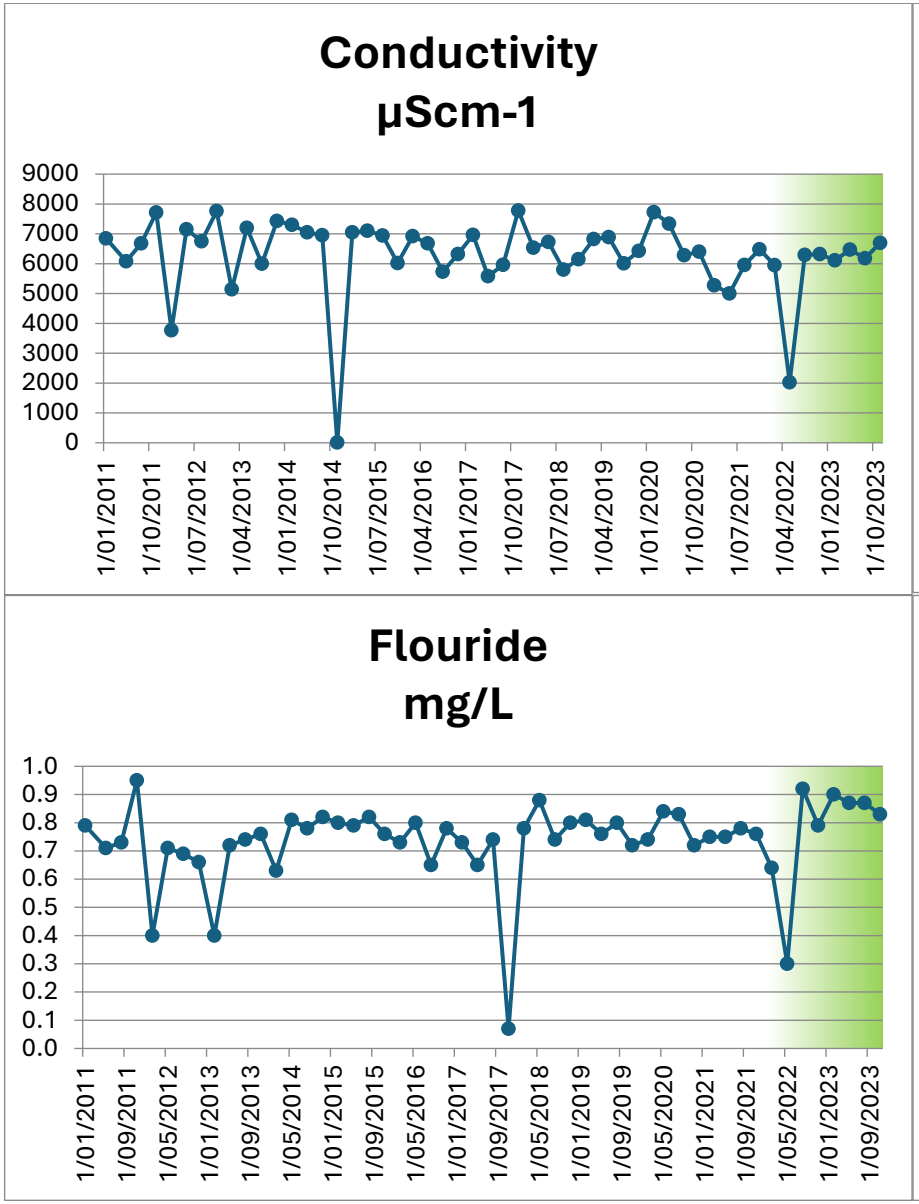

Calcium (Total)
mg/L
80
70
60
50
40
30
20
10
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

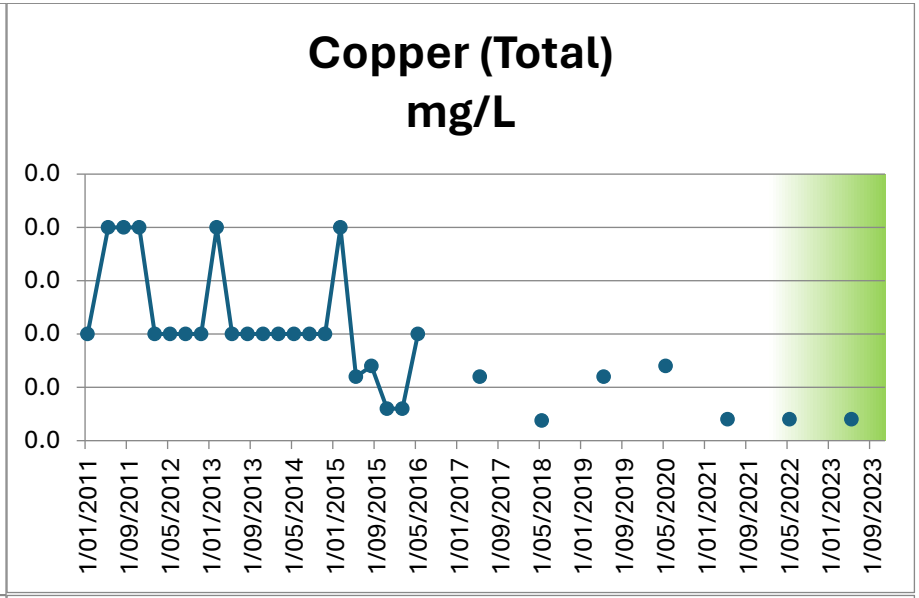

Chloride
mg/L
2500
2000
1500
1000
500
0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023


Chromium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

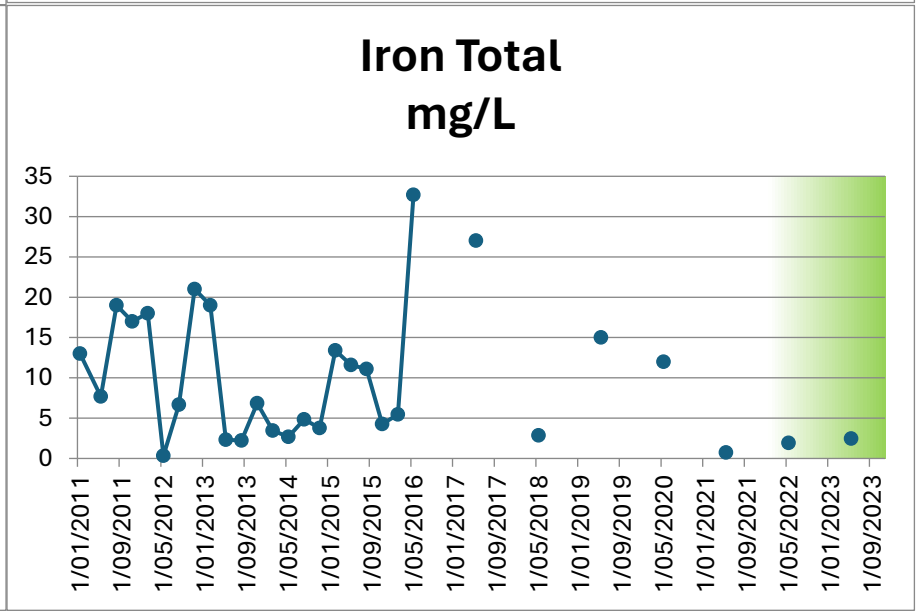

Chromium 3
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

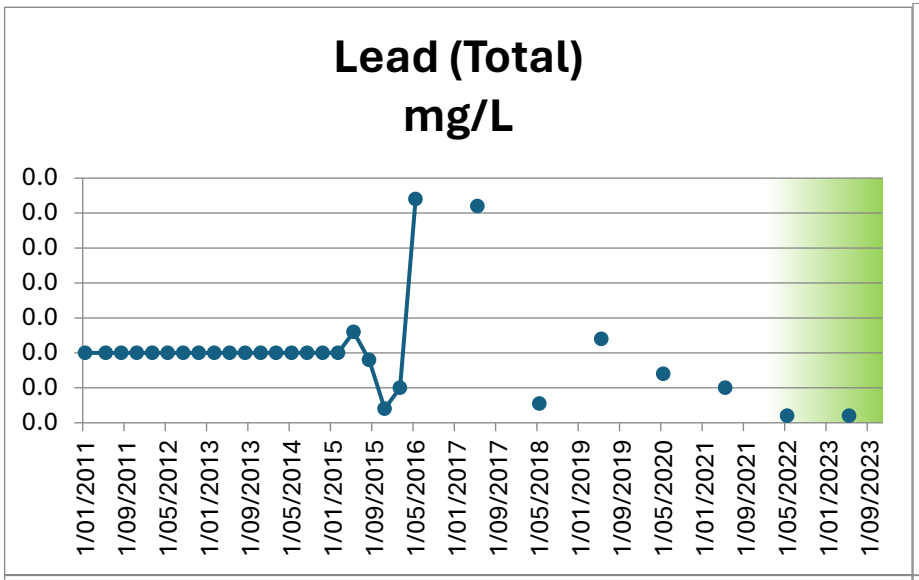

Chromium 6
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

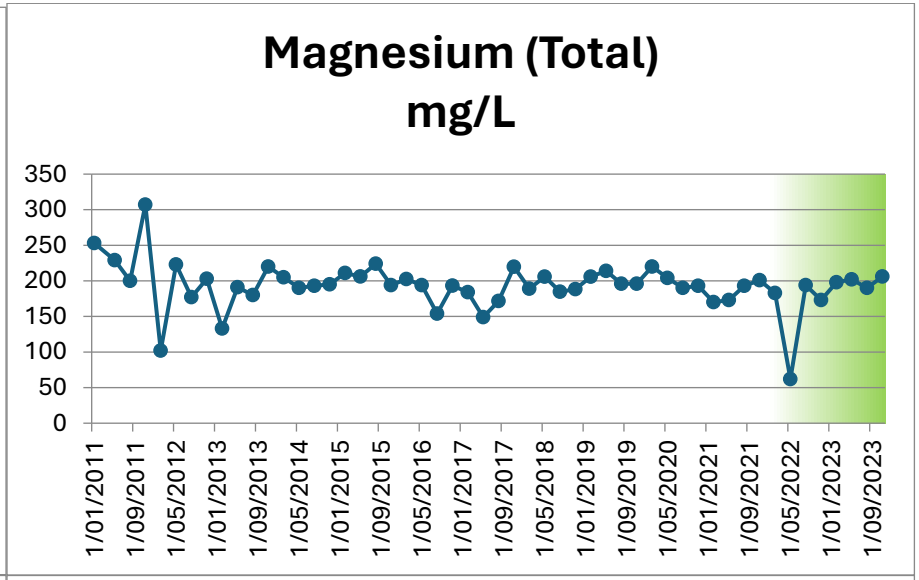

Conductivity
µScm-1
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

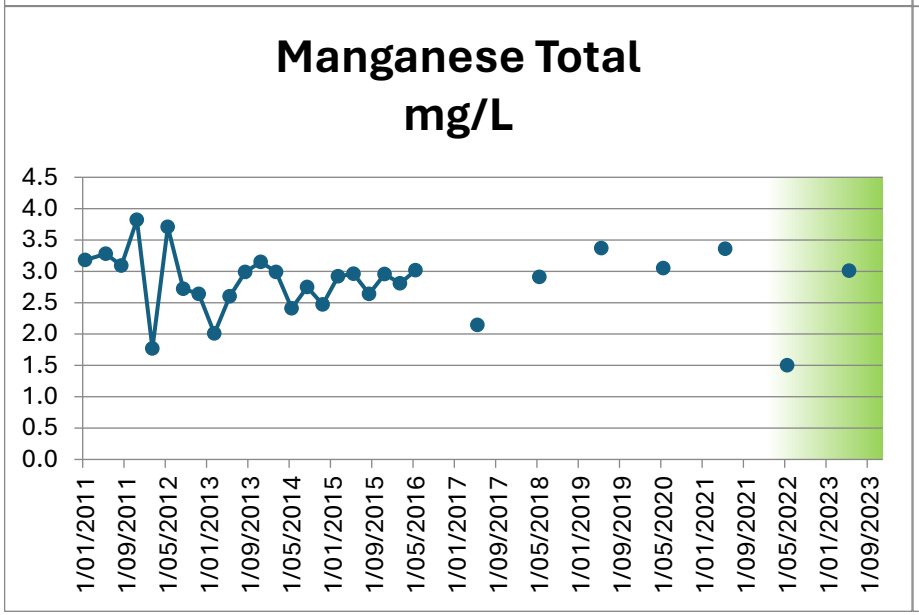

Copper (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

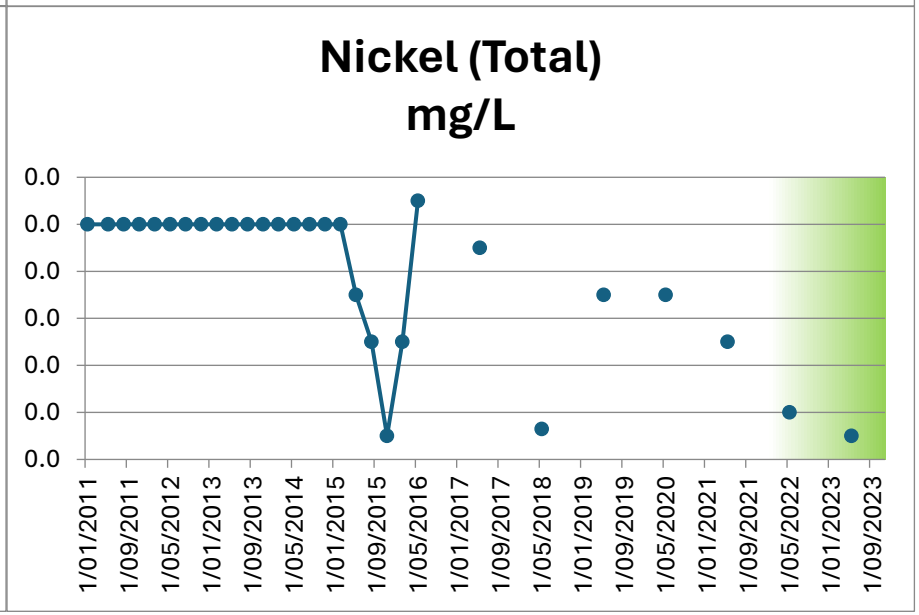
Flouride
mg/L
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

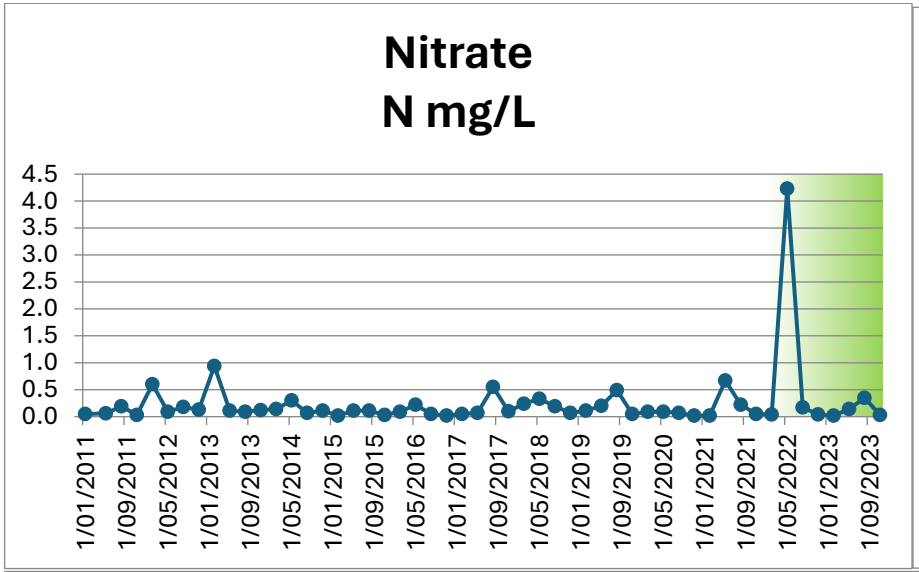

Iron Total
mg/L
35
30
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

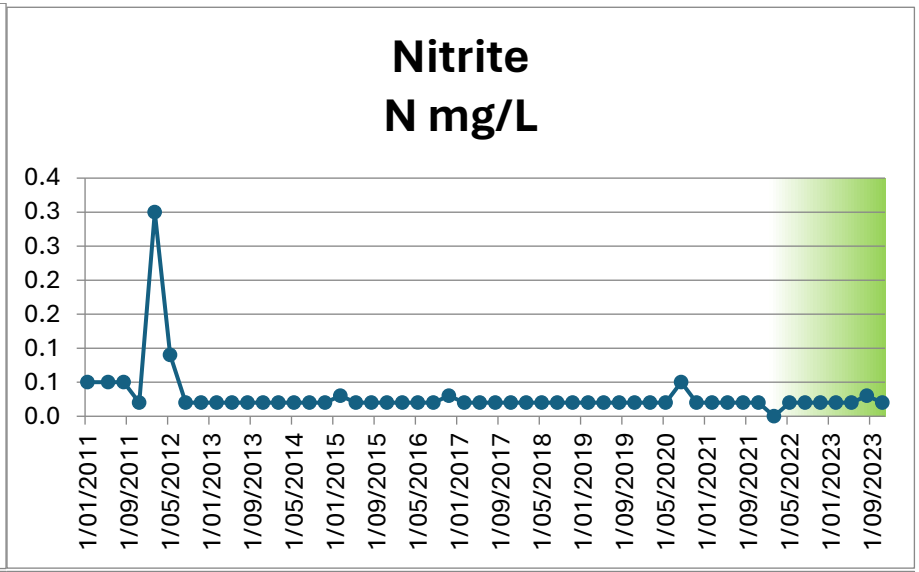

Lead (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

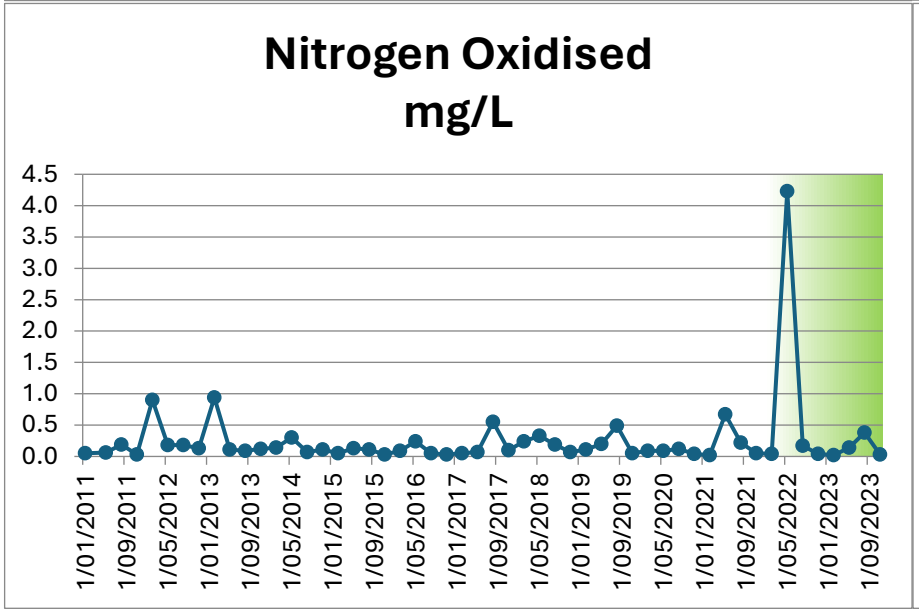

Magnesium (Total)
mg/L
350
300
250
200
150
100
50
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

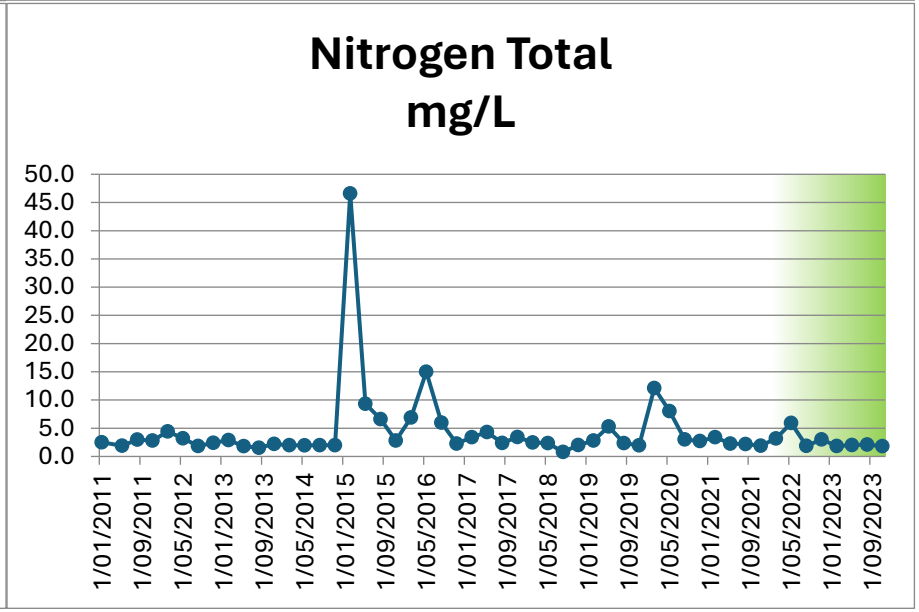

Manganese Total
mg/L
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

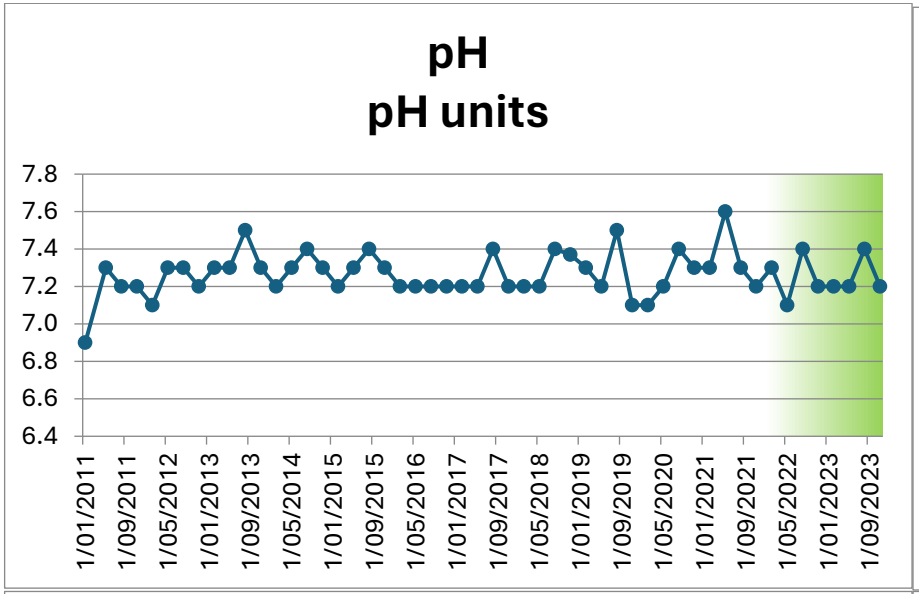

Nickel (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

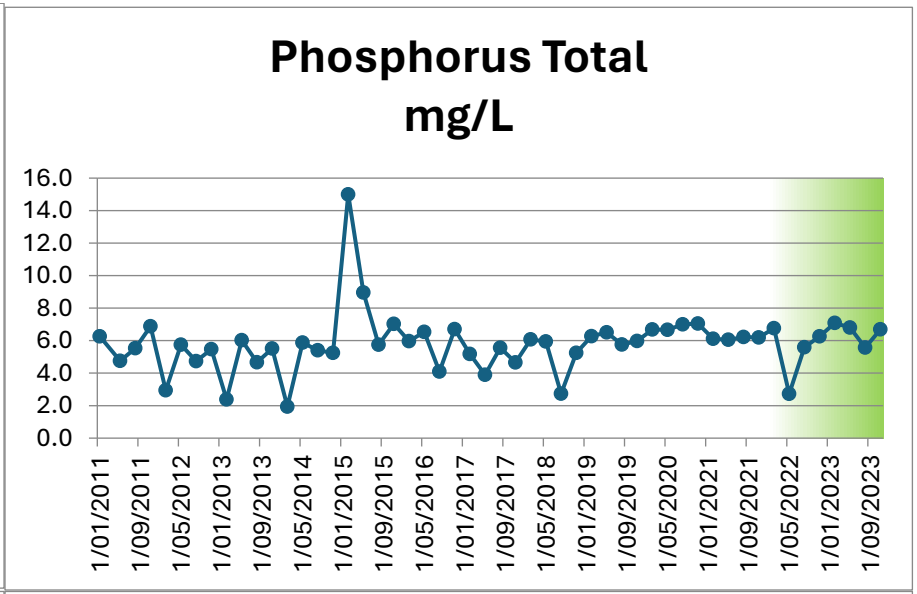

Nitrate
N mg/L
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

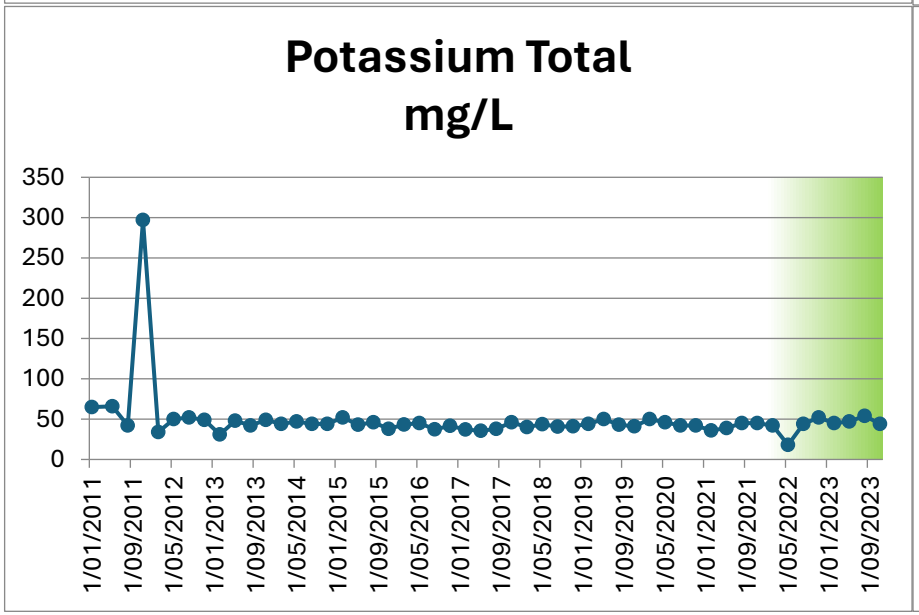

Nitrite
N mg/L
0.4
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

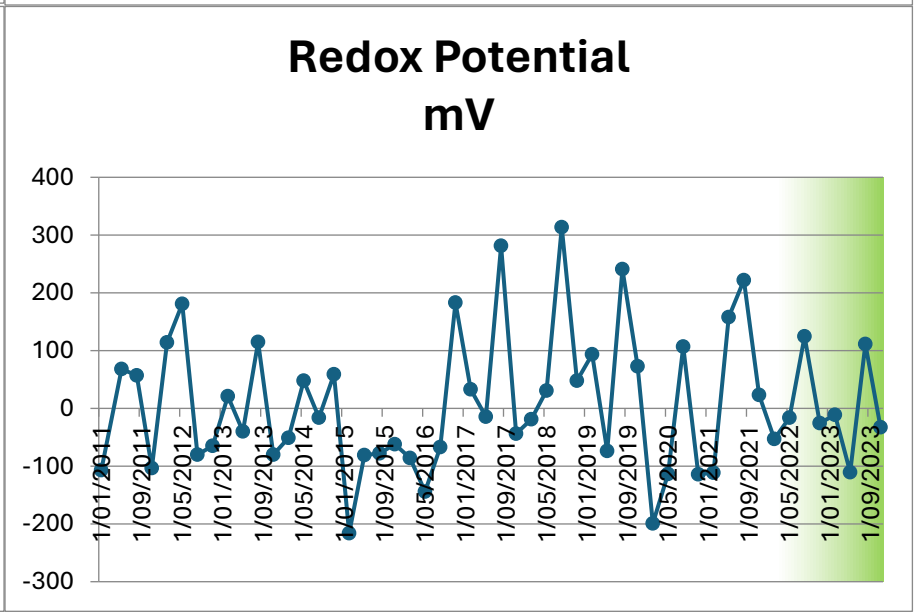

Nitrogen Oxidised
mg/L
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

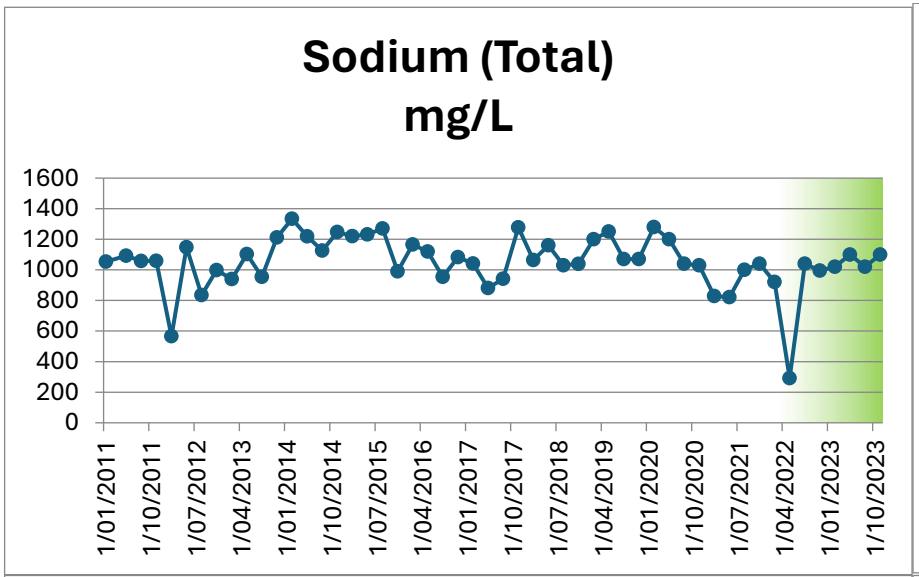

Nitrogen Total
mg/L
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

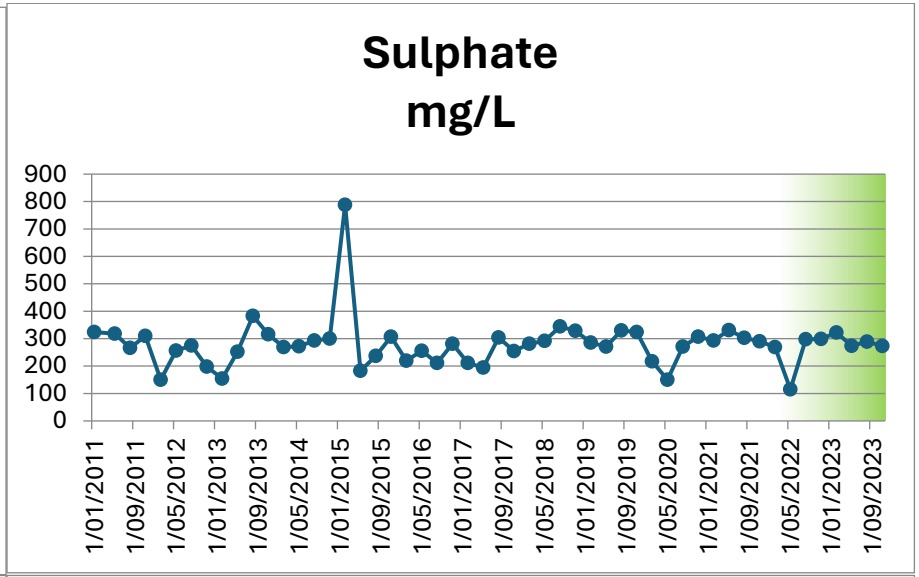

pH
pH units
7.8
7.6
7.4
7.2
7.0
6.8
6.6
6.4
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

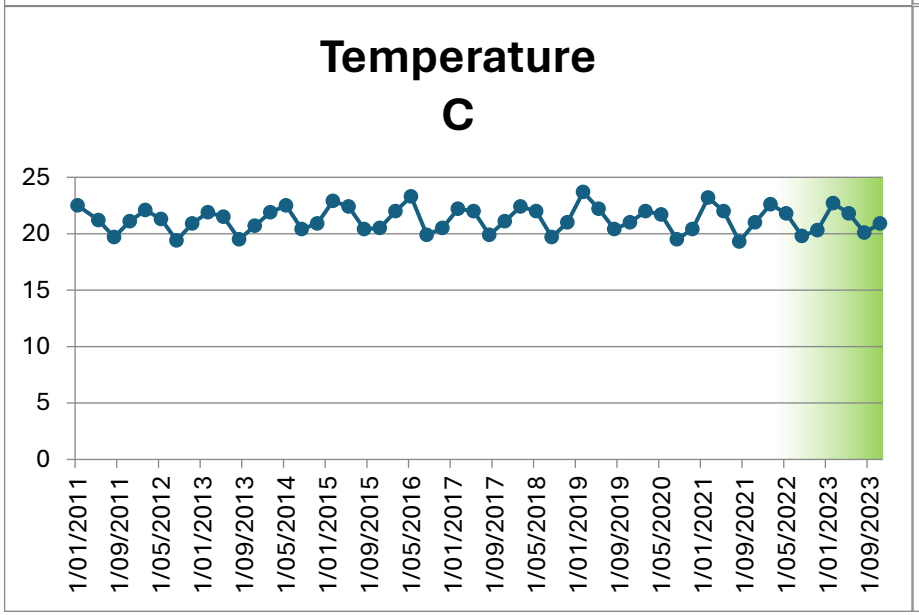

Phosphorus Total
mg/L
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

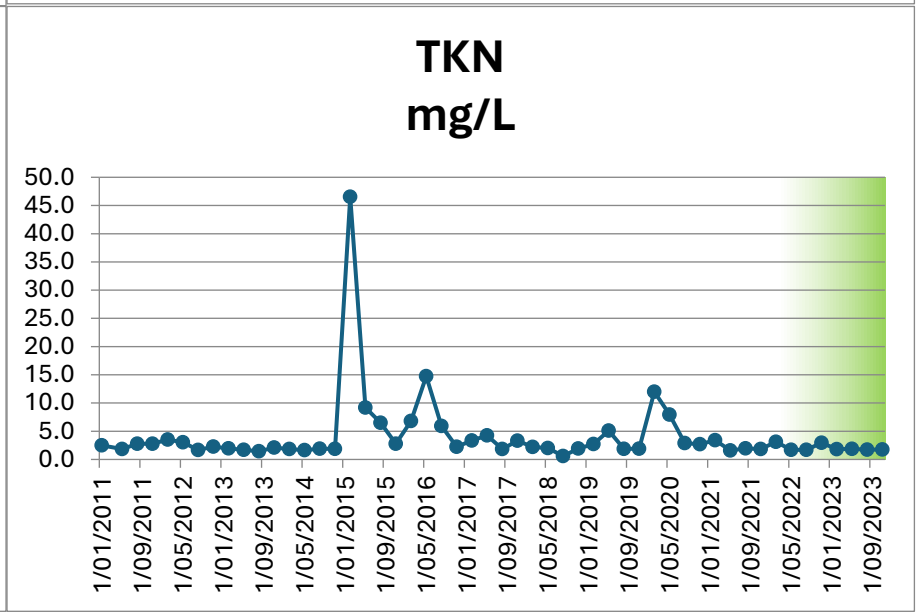

Potassium Total
mg/L
350
300
250
200
150
100
50
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

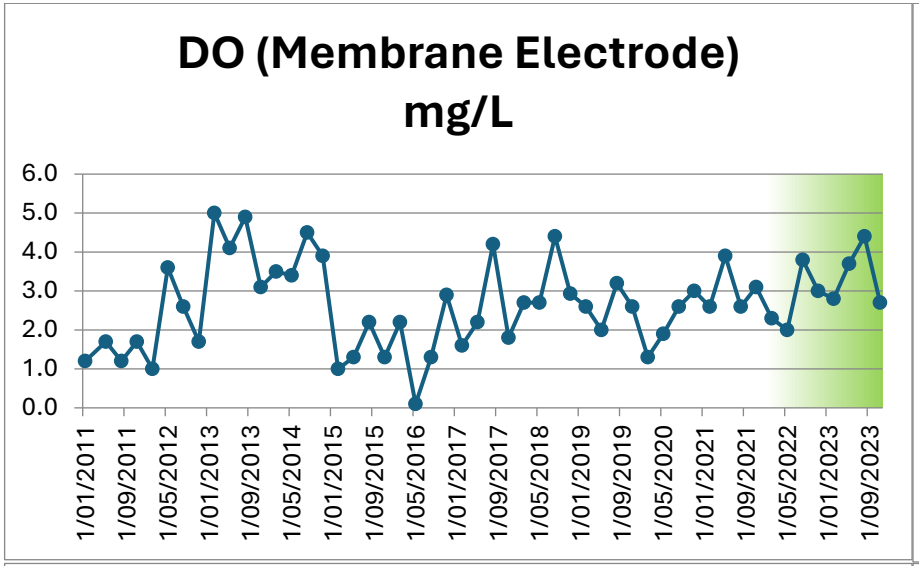

Redox Potential
mV
400
300
200
100
0
-100
-200
-300
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

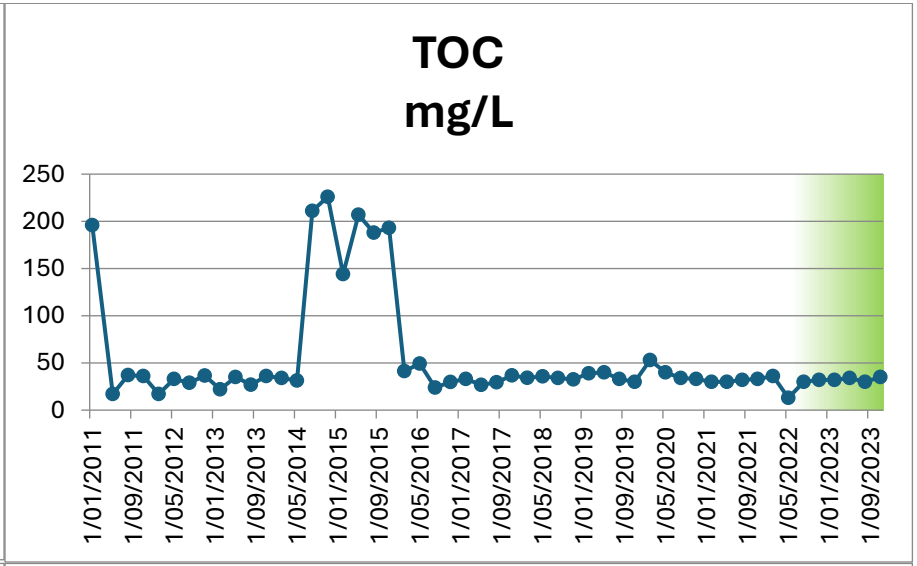

Sodium (Total)
mg/L
1600
1400
1200
1000
800
600
400
200
0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

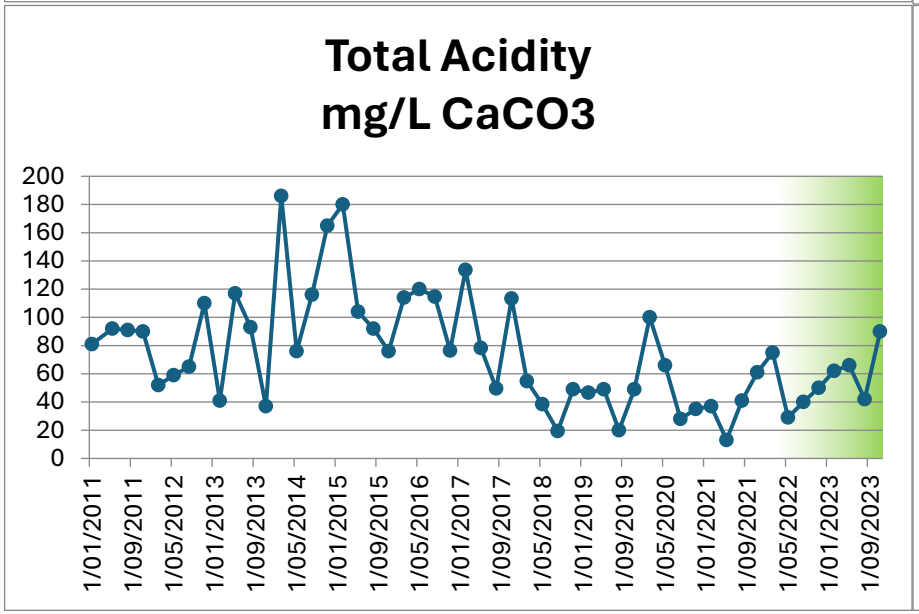

Sulphate
mg/L
900
800
700
600
500
400
300
200
100
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

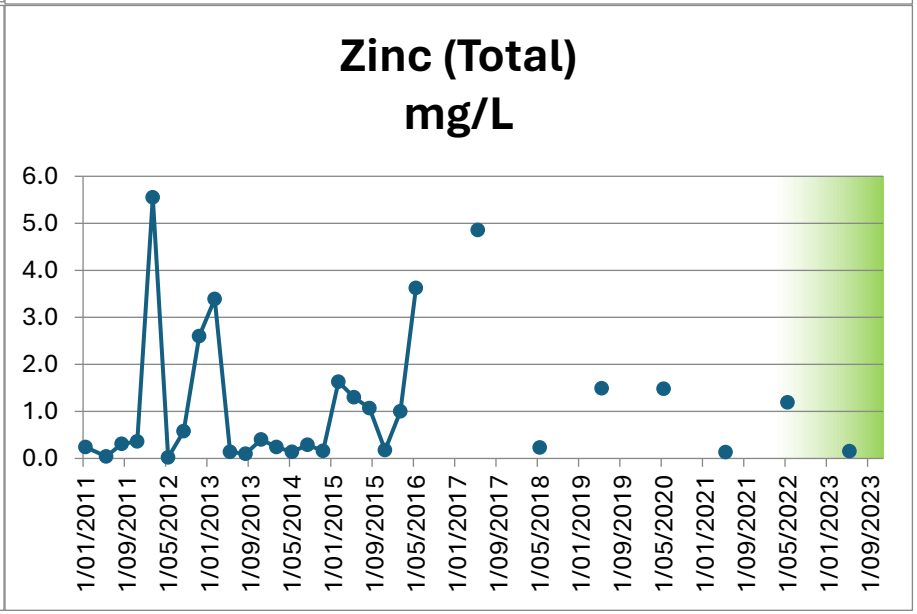

Temperature
C
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TKN
mg/L
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


DO (Membrane Electrode)
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TOC
mg/L
250
200
150
100
50
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Total Acidity
mg/L CaCO3
200
180
160
140
120
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Zinc (Total)
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

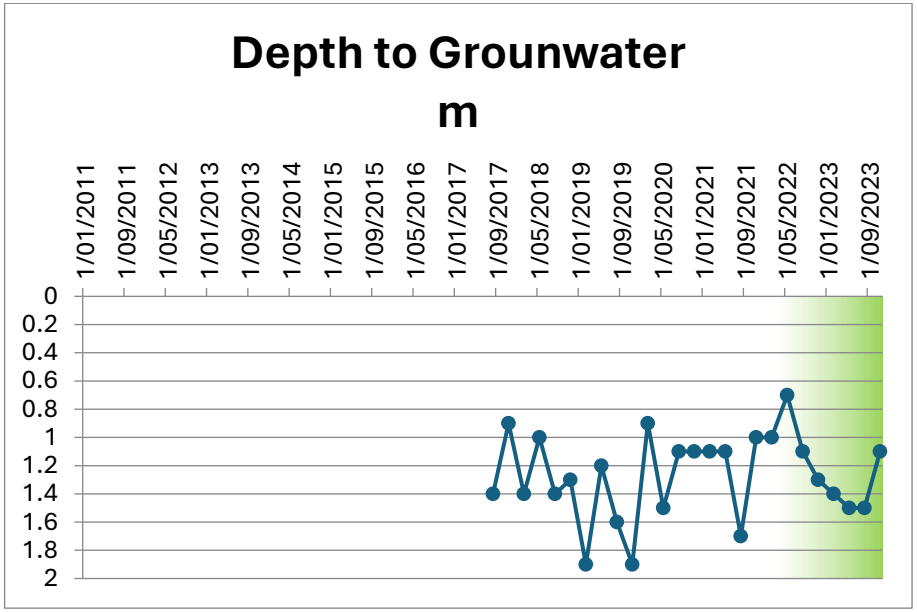
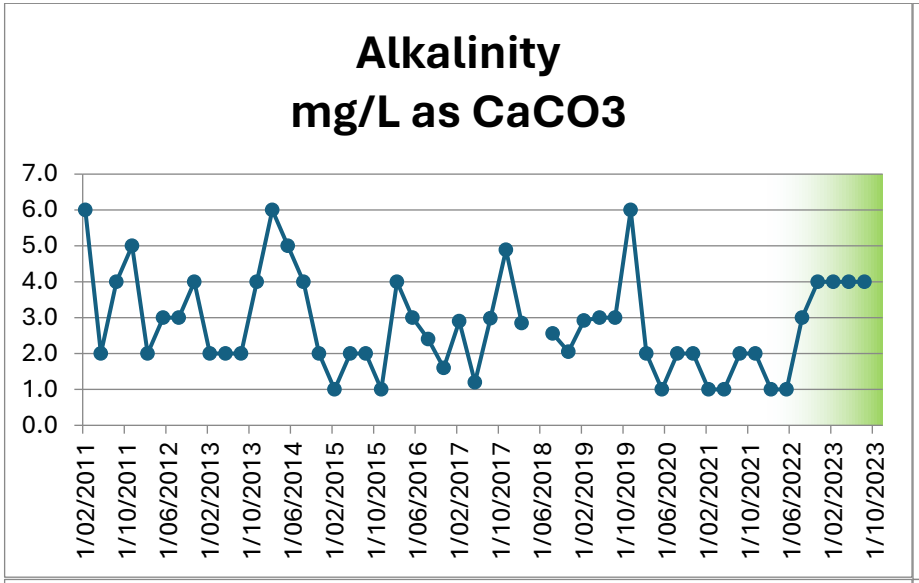
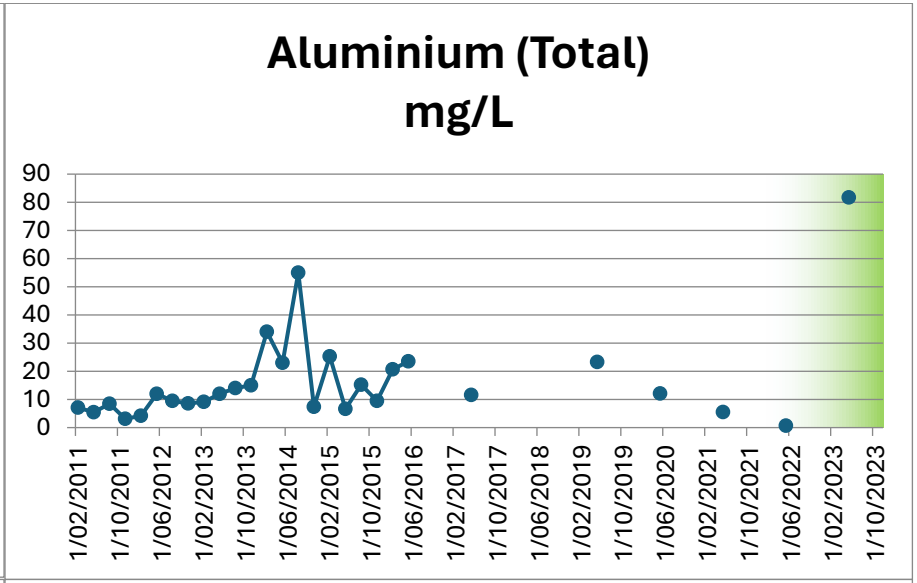
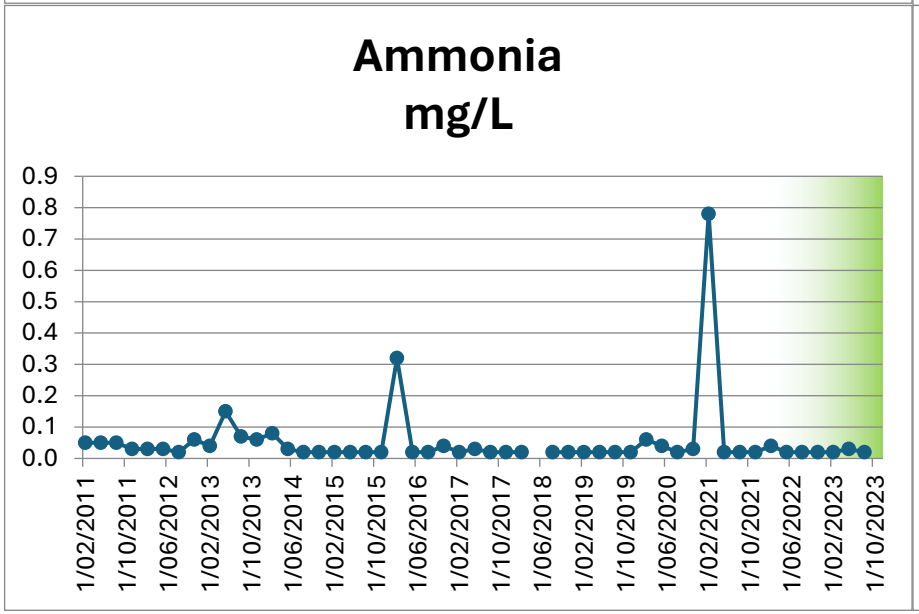

Depth to Grounwater
m
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

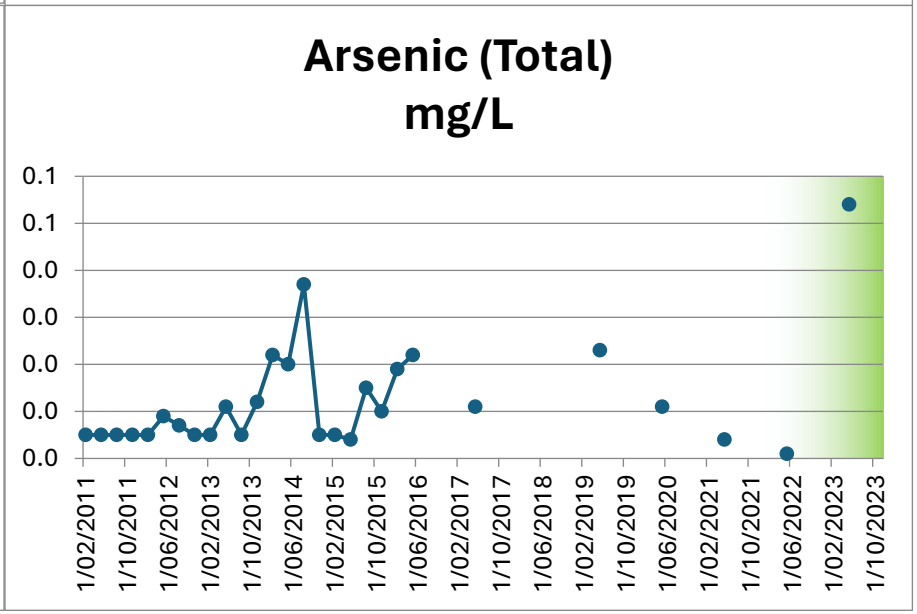
Table 13: Ground Water 5

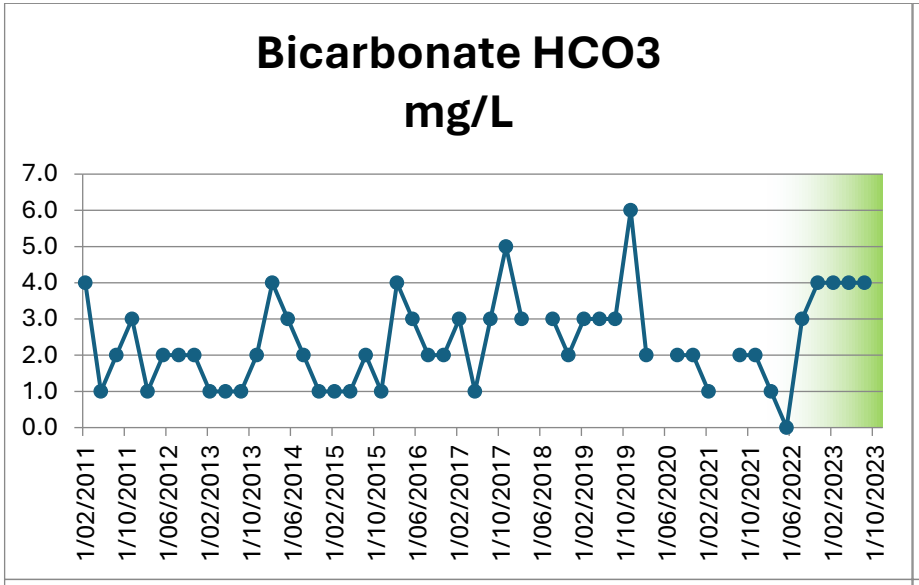
GW5	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µScm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride mg/L	Iron Total mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	Nitrate N mg/L	Nitrite N mg/L	Nitrogen Oxidised mg/L	Nitrogen Total mg/L	pH pH units	Phenol Alkalinity mg/L as CaCO3	Phosphorus Total mg/L	Potassium Total mg/L	Redox Potential mV	Sodium (Total) mg/L	Sulphate mg/L	Temperature C	TKN mg/L	TOC mg/L	Total Acidity mg/L CaCO3	Zinc (Total) mg/L	Depth to Groundwater m
1/02/2011	6.0	7	0.1	0.0	4.0	1.0	0.0	1.2	22	0.0	0.0	0.0	99	0.0	4.9	0.1	12	0.0	1.0	3.1	0.0	0.2	0.1	0.2	0.3	5.4		0.2	5.0	216	9	7.5	22	0.1	3.4	50	0.0	
11/05/2011	2.0	5	0.1	0.0	1.0	1.0	0.0	2.2	19	0.0	0.0	0.0	111	0.0	5.8	0.0	8	0.0	1.4	2.8	0.0	0.5	0.1	0.5	0.7	3.8		0.3	5.0	317	11	6.8	21	0.1	1.0	47	0.1	
10/08/2011	4.0	8	0.1	0.0	2.0	2.4	0.0	0.7	19	0.0	0.0	0.0	106	0.0	4.7	0.0	12	0.0	1.2	2.7	0.0	0.3	0.1	0.3	0.5	4.8		0.2	5.0	303	13	5.2	21	0.2	1.0	48	0.0	
9/11/2011	5.0	3	0.0	0.0	3.0	6.0	0.0	0.7	18	0.0	0.0	0.0	90	0.0	4.7	0.1	4	0.0	2.2	0.9	0.0	0.3	0.0	0.3	0.4	5.1		0.2	5.0	310	7	7.4	22	0.1	0.6	48	0.0	
7/02/2012	2.0	4	0.0	0.0	1.0	2.1	0.0	0.5	20	0.0	0.0	0.0	97	0.0	4.4	0.0	8	0.0	1.3	2.2	0.0	0.3	0.0	0.3	0.4	4.7		0.1	5.0	282	14	7.5	22	0.1	0.1	46	0.0	
9/05/2012	3.0	12	0.0	0.0	2.0	1.0	0.0	0.4	21	0.0	0.0	0.0	96	0.0	5.4	0.0	19	0.0	1.2	5.3	0.0	0.3	0.0	0.3	0.4	4.9		0.1	5.0	298	11	6.5	21	0.1	0.7	56	0.3	
7/08/2012	3.0	9	0.0	0.0	2.0	1.0	0.0	1.2	16	0.0	0.0	0.0	91	0.0	5.1	0.0	8	0.0	1.5	1.7	0.0	0.4	0.0	0.4	0.4	4.6		0.1	5.0	289	9	6.3	21	0.1	0.2	37	0.2	
14/11/2012	4.0	9	0.1	0.0	2.0	1.0	0.0	0.6	18	0.0	0.0	0.0	95	0.0	4.9	0.1	10	0.0	0.8	3.1	0.0	0.3	0.0	0.3	0.7	5.0		0.7	5.0	226	10	5.3	23	0.5	7.3	56	0.4	
14/02/2013	2.0	9	0.0	0.0	1.0	1.0	0.0	0.4	20	0.0	0.0	0.0	95	0.0	4.9	0.1	9	0.0	1.2	1.0	0.0	0.3	0.0	0.3	0.3	4.6		0.1	5.0	256	12	6.0	22	0.1	0.6	43	0.1	
15/05/2013	2.0	12	0.2	0.0	1.0	1.8	0.0	0.5	15	0.0	0.0	0.0	88	0.0	5.1	0.0	13	0.0	1.0	2.7	0.0	0.3	0.0	0.3	0.5	4.5		0.1	5.0	209	11	6.1	21	0.2	0.6	113	0.1	
7/08/2013	2.0	14	0.1	0.0	1.0	1.0	0.0	0.4	16	0.0	0.0	0.0	84	0.0	5.2	0.0	17	0.0	1.0	4.1	0.0	0.3	0.0	0.3	0.6	4.7		0.5	5.0	236	12	7.4	21	0.3	0.3	107	0.1	
13/11/2013	4.0	15	0.1	0.0	2.0	1.5	0.0	0.5	18	0.0	0.0	0.0	101	0.0	4.1	0.0	21	0.0	1.0	6.1	0.0	0.3	0.0	0.3	0.7	4.8		0.4	5.0	196	13	7.3	23	0.4	0.3	67	0.1	
12/02/2014	6.0	34	0.1	0.0	4.0	2.7	0.0	0.5	17	0.0	0.0	0.0	83	0.1	5.3	0.0	61	0.1	0.7	20.0	0.1	0.3	0.0	0.3	0.9	5.2		0.6	5.0	148	11	6.0	22	0.7	0.4	108	0.7	
14/05/2014	5.0	23	0.0	0.0	3.0	1.5	0.0	0.5	25	0.0	0.0	0.0	100	0.1	6.1	0.0	50	0.0	0.8	9.4	0.0	1.0	0.0	1.0	1.1	4.8		0.2	5.0	139	12	5.3	21	0.1	0.5	58	0.4	
13/08/2014	4.0	55	0.0	0.0	2.0	2.4	0.0	0.4	20	0.0	0.0	0.0	109	0.1	6.1	0.0	68	0.1	1.2	14.0	0.1	0.7	0.0	0.7	0.9	5.3		0.4	5.0	147	15	7.4	21	0.2	0.5	101	0.7	
11/11/2014	2.0	7	0.0	0.0	1.0	3.0	0.0	0.5	17	0.0	0.0	0.0	109	0.0	5.7	0.0	10	0.0	1.5	1.9	0.0	0.5	0.0	0.5	0.8	4.8		0.2	5.0	178	15	7.6	21	0.3	0.4	70	0.2	
10/02/2015	1.0	25	0.0	0.0	1.0	1.8	0.0	0.8	18	0.0	0.0	0.0	86	0.0	6.2	0.0	11	0.0	1.1	1.8	0.0	0.7	0.0	0.7	1.1	4.8		0.1	5.0	191	10	6.6	22	0.4	0.5	65	0.0	
12/05/2015	2.0	7	0.0	0.0	1.0	3.0	0.0	0.9	16	0.0	0.0	0.0	85	0.0	6.3	0.0	6	0.0	1.4	1.3	0.0	0.9	0.0	0.9	1.3	4.9		0.1	5.0	219	11	5.5	22	0.4	2.4	50	0.1	
12/08/2015	2.0	15	0.0	0.0	2.0	1.8	0.0	0.9	16	0.0	0.0	0.0	89	0.0	6.3	0.0	21	0.0	1.6	4.1	0.0	0.6	0.0	0.6	1.2	4.7		0.2	5.0	235	12	5.3	21	0.6	0.9	65	0.1	
11/11/2015	1.0	9	0.0	0.0	1.0	1.0	0.0	1.3	13	0.0	0.0	0.0	85	0.0	6.0	0.0	12	0.0	1.6	2.7	0.0	1.5	0.0	1.5	1.8	4.6		0.1	5.0	227	10	4.7	21	0.3	1.0	63	0.1	
9/02/2016	4.0	21	0.3	0.0	4.0	1.8	0.0	1.4	26	0.0	0.0	0.0	120	0.1	4.8	0.0	27	0.0	2.0	5.8	0.0	0.3	0.0	0.3	1.3	5.1		0.2	5.0	234	16	6.2	23	1.0	1.3	94	0.1	
10/05/2016	3.0	24	0.0	0.0	3.0	1.0	0.0	0.5	20	0.0	0.0	0.0	94	0.1	4.8	0.0	32	0.0	1.2	5.7	0.0	0.3	0.0	0.3	1.1	4.8		0.4	5.0	247	12	5.9	22	0.8	0.4	83	0.1	
10/08/2016	2.4		0.0		2.0	2.1		1.0	16				92		4.7	0.0			1.5			0.4	0.0	0.4	0.7	4.6		0.1	5.0	329	13	5.5	21	0.3	0.8	74		
8/11/2016	1.6		0.0		2.0	1.0		0.5					92		4.5	0.0			1.4			0.4	0.0	0.4	0.7	4.5		0.2	5.0	377	13	6.6	22	0.3	0.6	88		
8/02/2017	2.9		0.0		3.0	1.0		0.5	20				96		5.2	0.0			1.3			0.5	0.0	0.5	1.0	4.4		0.4	5.0	418	12	6.2	22	0.6	0.5	123		
9/05/2017	1.2	12	0.0	0.0	1.0	1.2	0.0	2.0	17	0.0	0.0	0.0	104	0.0	5.5	0.0	16	0.0	2.3	3.0	0.0	3.7	0.0	3.7	4.1	4.4		0.2	5.0	415	10	4.9	21	0.5	1.0	85	0.1	
9/08/2017	3.0		0.0		3.0	1.2		1.0	20				102		5.6	0.0			1.5			1.2	0.0	1.2	1.9	4.5		0.3	5.0	459	12	6.5	21	0.7	1.0	70		8.0
8/11/2017	4.9		0.0		5.0	1.5		1.1	16				74		4.9	0.0			1.3			0.6	0.0	0.6	1.1	4.7		0.3	5.0	424	9	4.4	21	0.5	1.3	71		9.5
14/02/2018	2.9		0.0		3.0	3.9		0.7	17				94		5.1	0.0			1.4			0.7	0.0	0.7	1.1	4.7		0.3	5.0	454	12	6.5	22	0.4	2.8	69		10.0
8/05/2018																																						
15/08/2018	2.6		0.0		3.0	1.5		0.6	19				94		5.6	0.0			1.5			0.6	0.0	0.6	1.0	4.7		0.3	0.5	456	13	6.9	21	0.5	7.5	60		10.1
14/11/2018	2.1		0.0		2.0	1.8		0.6	15				94		5.6	0.0			1.4			0.6	0.0	0.6	1.1	4.7		0.3	0.5	341	13	7.1	22	0.5	0.7	70		9.0
13/02/2019	2.9		0.0		3.0	1.2		0.5	23				96		5.6	0.0			1.4			0.4	0.0	0.4	1.1	4.6		0.4	0.6	419	14	7.6	22	0.7	0.8	63		10.4
15/05/2019	3.0	23	0.0	0.0	3.0	1.0	0.0	0.6	18	0.0	0.0	0.0	92	0.1	5.9	0.0	36	0.0	1.3	6.5	0.0	0.6	0.0	0.6	1.1	4.7		0.5	0.6	316	13	7.1	21	0.4	0.4	63	0.3	8.7
14/08/2019	3.0		0.0		3.0	1.0		0.8	17				94		6.2	0.0			1.5			0.7	0.0	0.7	1.1	4.8		0.4	0.5	365	13	6.9	20	0.4	1.0	54		8.6
13/11/2019	6.0		0.0		6.0	1.0		0.3	32				100		5.6	0.1			1.0			0.4	0.0	0.4	1.3	5.0		0.5	0.6	322	14	7.3	21	0.8	0.5	64		11.0
26/02/2020	2.0		0.1		2.0	1.0		0.9	16				84		6.9	0.0			1.2			0.7	0.0	0.7	1.0	4.9	0.0	0.1	0.5	245	10	6.0	22	0.3	1.0	39		5.0
13/05/2020	1.0	12	0.0	0.0		3.3	0.0	0.6	22	0.0	0.0	0.0	99	0.0	6.0	0.0	14	0.0	1.4	3.1	0.0	0.7	0.0	0.7	1.1	4.4	0.0	0.1	0.5	331	12	6.9	21	0.4	0.6	56	0.1	7.9
12/08/2020	2.0		0.0		2.0	1.0		0.8	16				86		6.4	0.0			1.4			0.5	0.0	0.5	0.7	4.5	0.0	0.1	0.5	364	12	5.7	21	0.2	1.0	54		7.3
11/11/2020	2.0		0.0		2.0	1.2		0.6	20				90		5.3	0.1			1.4			0.6	0.0	0.6	1.8	4.4	0.0	0.5	0.5	409	12	6.4	21	1.2	0.7	65		9.5
10/02/2021	1.0		0.8		1.0	2.7		0.9	20				95		4.6	0.1			1.3			1.4	0.1	1.5	2.6	4.3	0.0	0.2	0.5	352	10	6.2	21	1.2	1.1	36		7.5
12/05/2021	1.0	5	0.0	0.0		1.0	0.0	0.7	16	0.0	0.0	0.0	89	0.0	5.2	0.0	5	0.0	1.5	0.9	0.0	0.9	0.0	0.9	1.2	4.5	0.0	0.1	0.5	360	11	6.3	21	0.3	1.0	47	0.4	6.3
11/08/2021	2.0		0.0		2.0	1.0		1.0	16				96		5.9	0.1			1.6			1.5	0.0	1.5	1.8	4.5	0.0	0.2	0.5	372	10	5.5	21	0.3	0.6	54		8.1
9/11/2021	2.0		0.0		2.0	1.0		0.7	28				97		5.5	0.0			1.5			0.7	0.0	0.7	1.0	4.5	0.0	0.2	0.5	383	12	6.2	22	0.4	0.7	61		8.7
9/02/2022	1.0		0.0		1.0	1.0		0.9	18				97		5.9	0.0			1.6			1.5	0.0	1.5	1.7	4.6	0.0	0.1	<0.5	354	11	5.5	21	0.2	0.6	63		6.2
11/05/2022	1.0	1	0.0	0.0	NP	1.0	0.0	1.1	12	0.0	0.0	0.0	75	0.0	5.3	0.0	1	0.0	1.3	0.1	0.0	1.4	0.0	1.4	1.7	4.5	0.0	0.1	0.6	343	7	4.3	21	0.3	1.9	42	0.2	4.9
10/08/2022	3.0		0.0		3.0	1.0		1.0	16				101		5.2	0.0			1.7			1.4	0.0	1.4	1.7	4.7	0.0	0.2	0.5	330	12	6.0	21	0.3	0.7	63		7.3
9/11/2022	4.0		0.0		4.0	1.5		0.7	21				103		4.7	0.0			1.4			0.4	0.0	0.4	0.7	4.8	0.0	0.6	0.5	302	13	6.6	21	0.3	1.3	68		7.1
14/02/2023	4.0		0.0		4.0	1.0		0.5	20				90		3.8	0.0			1.2			0.4	0.0	0.4	1.2	4.6		0.4	0.5	308	12	6.7	22	0.8	0.8	70		9.7
10/05/2023	4.0	82	0.0	0.1	4.0	1.0	0.0	0.4	20	0.0	0.0	0.0	88	0.1	4.3	0.0	94	0.0	1.1	15.4	0.0	0.4	0.0	0.4	1.1	4.8	0.0	0.5	0.5	223	11	6.2	21	0.7	0.7	67	0.2	10.0
8/08/2023	4.0		0.0		4.0	1.0		0.5	21				96		4.5	0.0			1.1			0.4	0.0	0.4	1.0	4.8		0.4	0.6	291	12	6.4	21	0.6	0.7	55		10.4
15/11/2023																																						
2023 Min	**4.00**	**81.70**	**0.02**	**0.05**	**4.00**	**1.00**	**0.00**	**0.40**	**20.00**	**0.05**	**0.01**	**0.05**	**88.00**	**0.14**	**3.80**	**0.03**	**93.60**	**0.04**	**1.10**	**15.40**	**0.05**	**0.37**	**0.02**	**0.37**	**1.00**	**4.60**	**0.00**	**0.40**	**0.50**	**222.60**	**11.00**	**6.20**	**21.00**	**0.63**	**0.70**	**55.00**	**0.18**	**9.70**
2023 Max	**4.00**	**81.70**	**0.03**	**0.05**	**4.00**	**1.00**	**0.00**	**0.50**	**21.00**	**0.05**	**0.01**	**0.05**	**96.00**	**0.14**	**4.50**	**0.04**	**93.60**	**0.04**	**1.20**	**15.40**	**0.05**	**0.43**	**0.02**	**0.43**	**1.22**	**4.80**	**0.00**	**0.45**	**0.60**	**307.60**	**12.00**	**6.70**	**21.50**	**0.79**	**0.80**	**70.00**	**0.18**	**10.40**
2023 Mean	**4.00**	**81.70**	**0.02**	**0.05**	**4.00**	**1.00**	**0.00**	**0.47**	**20.33**	**0.05**	**0.01**	**0.05**	**91.33**	**0.14**	**4.20**	**0.04**	**93.60**	**0.04**	**1.13**	**15.40**	**0.05**	**0.40**	**0.02**	**0.40**	**1.12**	**4.73**	**0.00**	**0.42**	**0.53**	**273.57**	**11.67**	**6.43**	**21.17**	**0.72**	**0.73**	**64.00**	**0.18**	**10.03**
Long-term Average	**2.83**	**16.55**	**0.05**	**0.01**	**2.43**	**1.60**	**0.00**	**0.77**	**18.81**	**0.01**	**0.01**	**0.01**	**94.49**	**0.04**	**5.33**	**0.04**	**21.55**	**0.02**	**1.35**	**4.68**	**0.02**	**0.68**	**0.02**	**0.68**	**1.10**	**4.70**	**0.00**	**0.26**	**3.17**	**303.24**	**11.69**	**6.29**	**21.34**	**0.42**	**1.13**	**65.38**	**0.19**	**8.38**

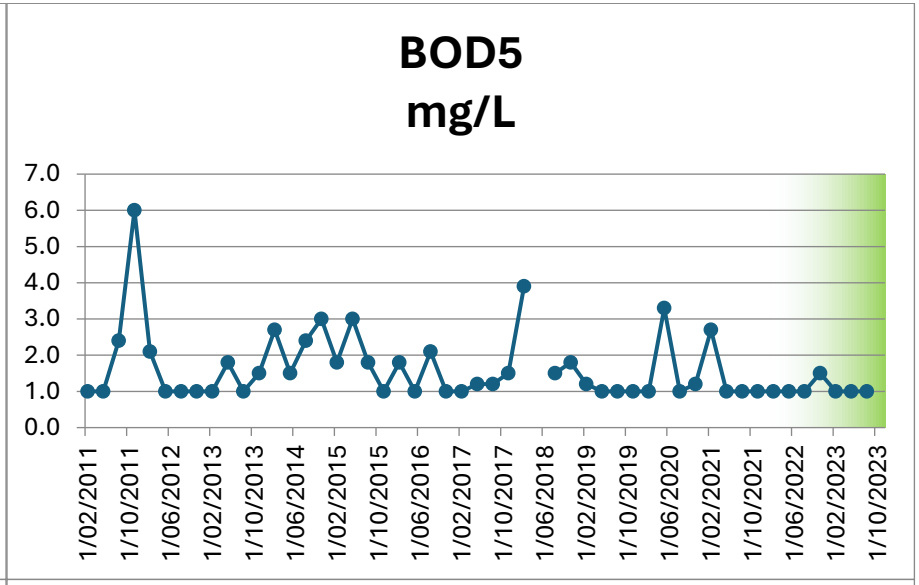

Alkalinity
mg/L as CaCO3
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

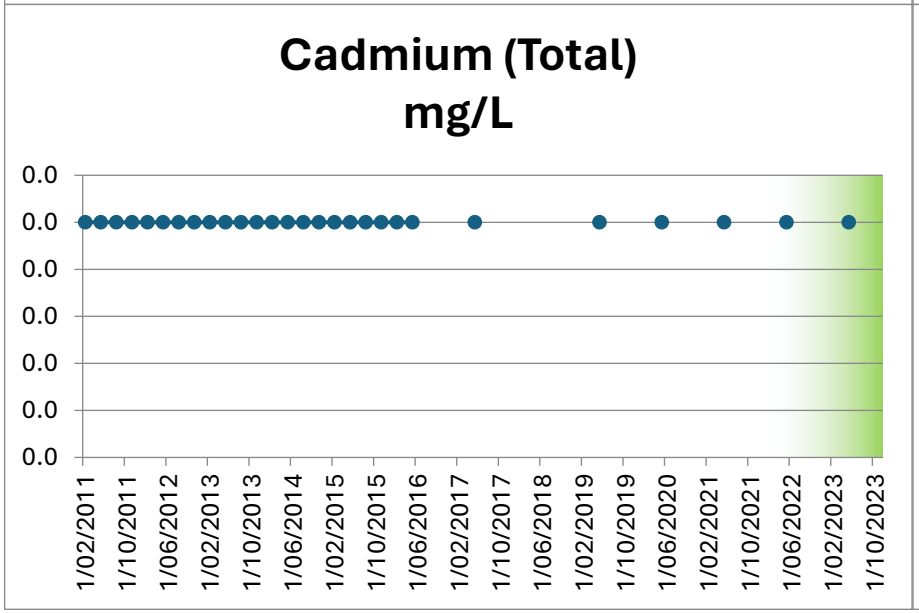

Aluminium (Total)
mg/L
90
80
70
60
50
40
30
20
10
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

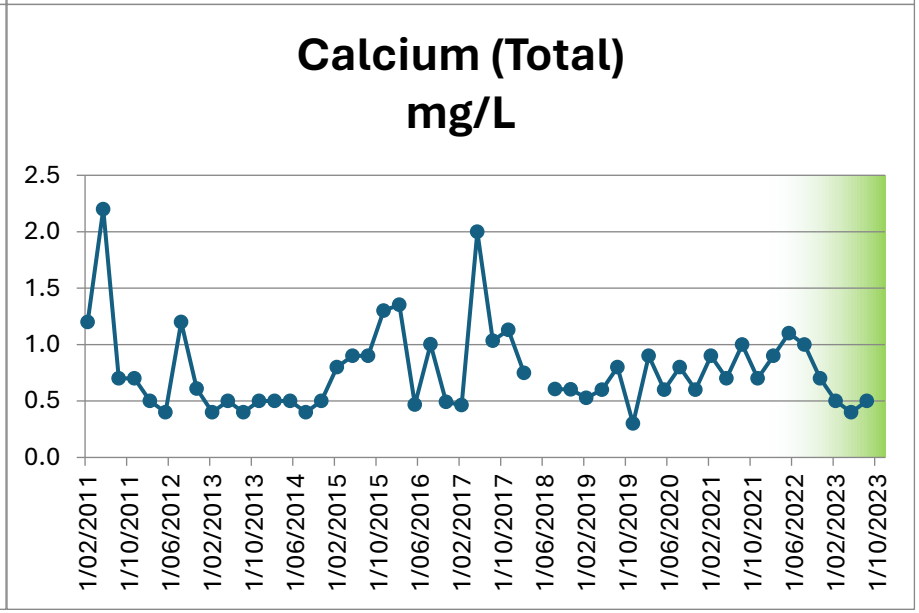

Ammonia
mg/L
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

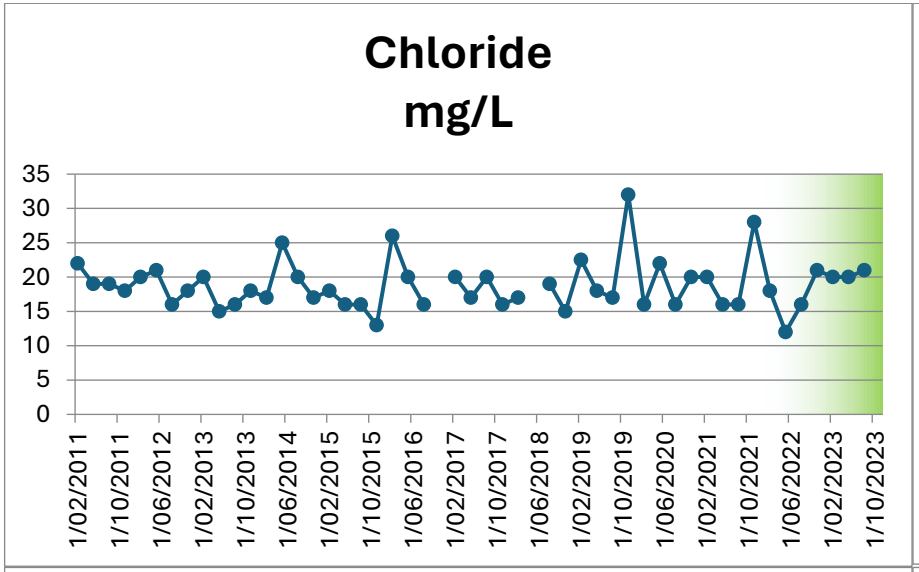

Arsenic (Total)
mg/L
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

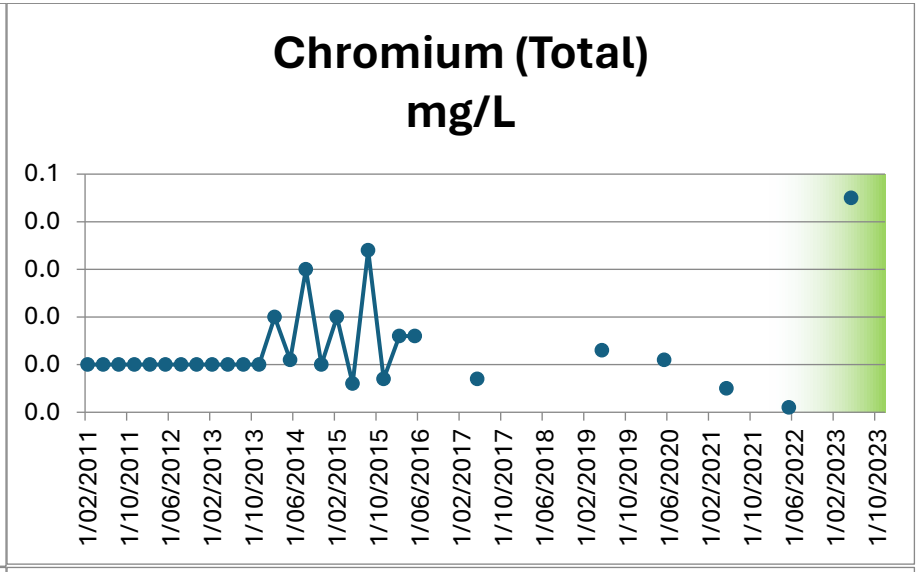

Bicarbonate HCO3
mg/L
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

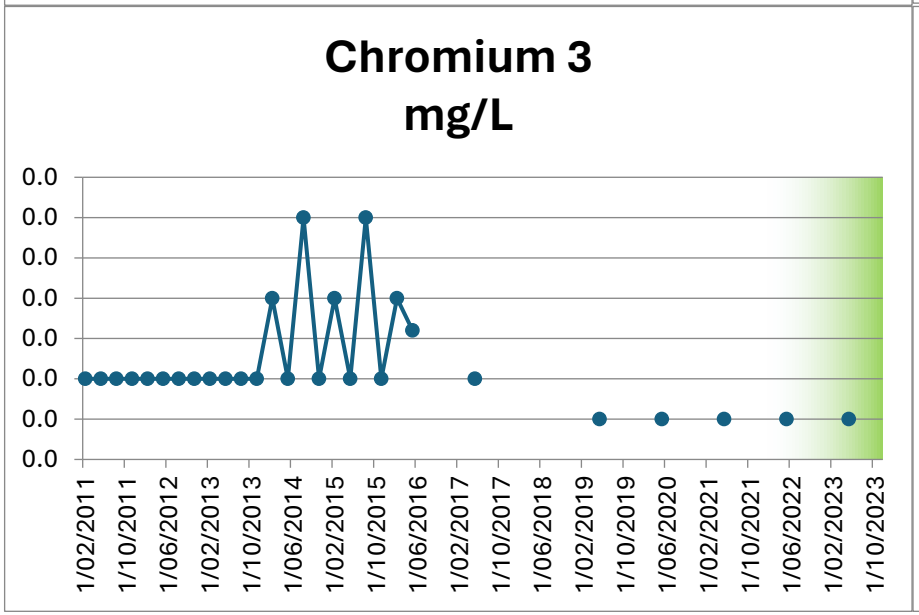

BOD5
mg/L
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

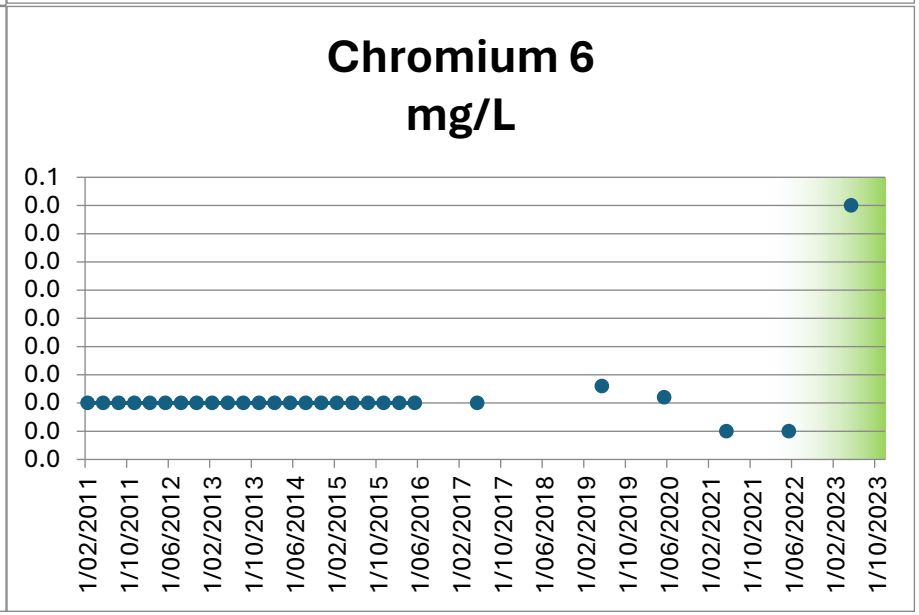

Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

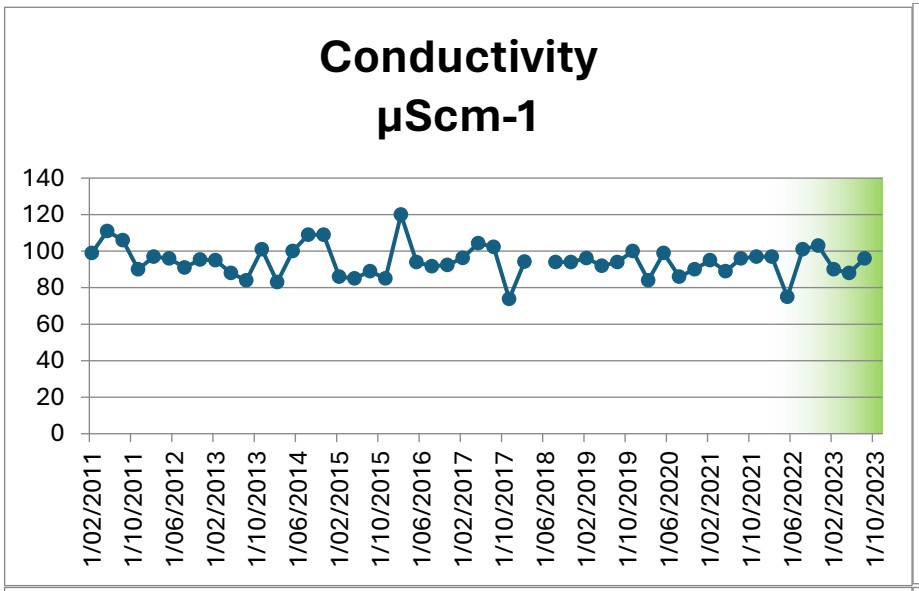

Calcium (Total)
mg/L
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

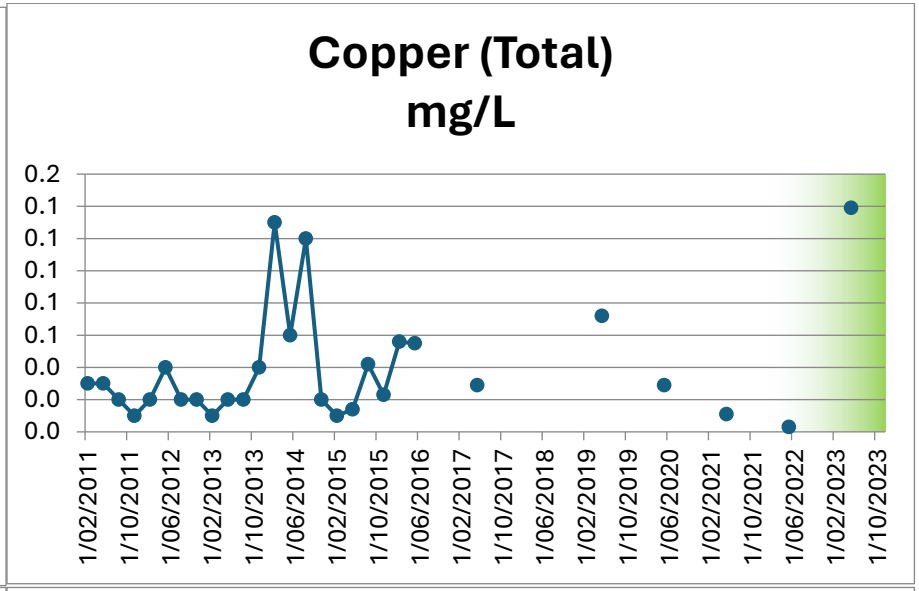

Chloride
mg/L
35
30
25
20
15
10
5
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

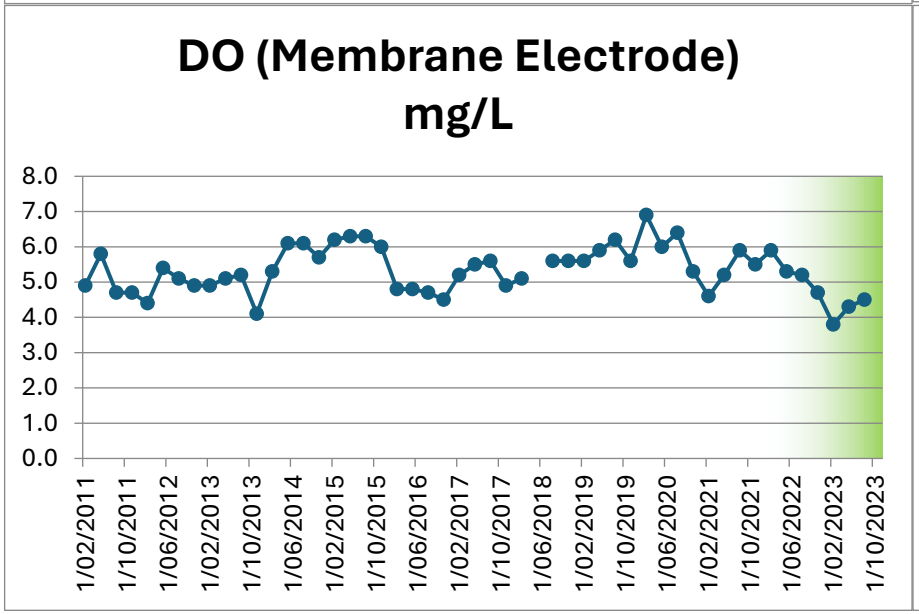

Chromium (Total)
mg/L
0.1
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

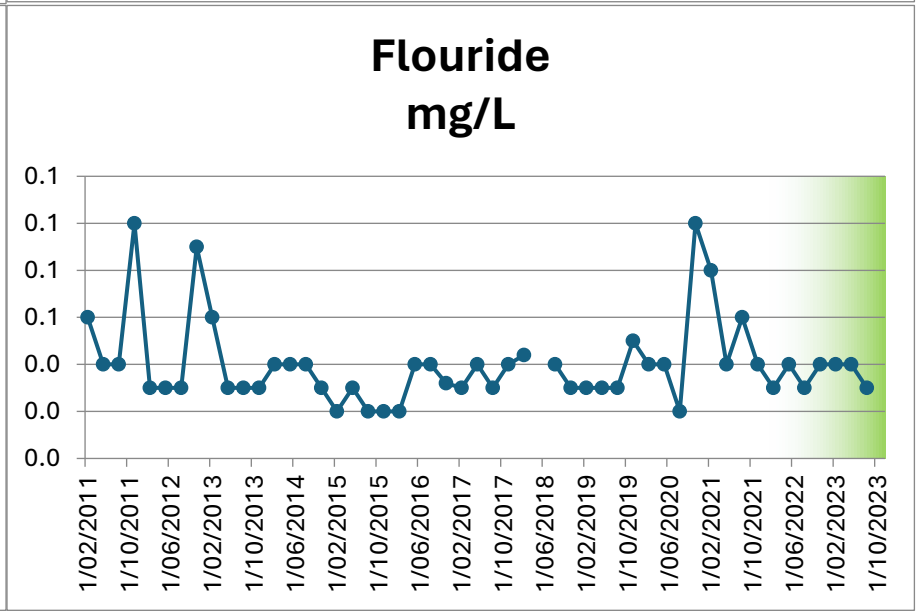

Chromium 3
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

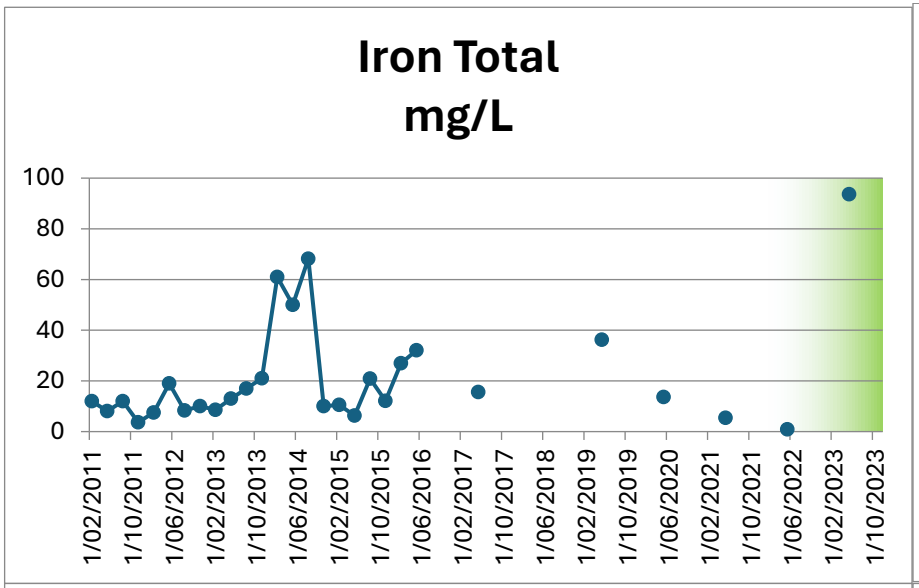

Chromium 6
mg/L
0.1
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

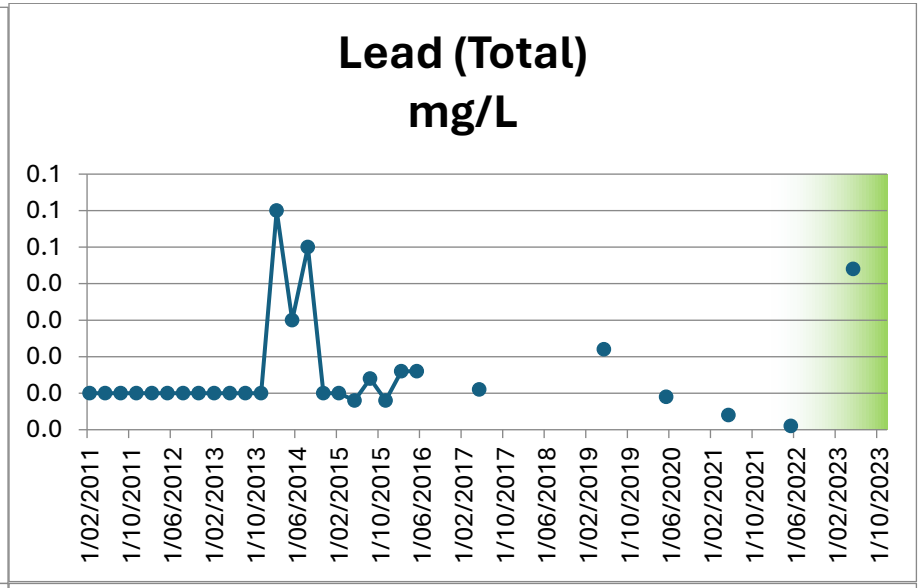

Conductivity
µScm-1
140
120
100
80
60
40
20
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

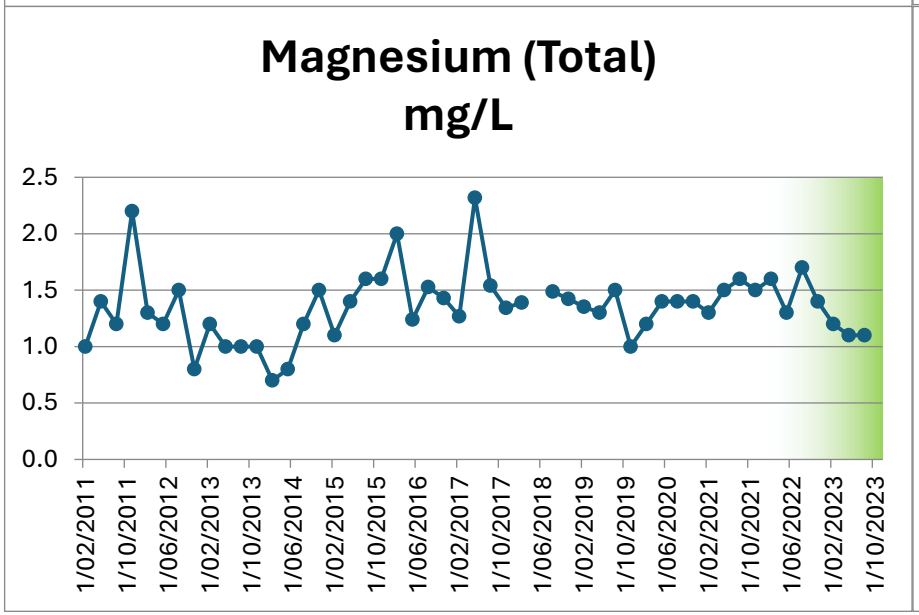

Copper (Total)
mg/L
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

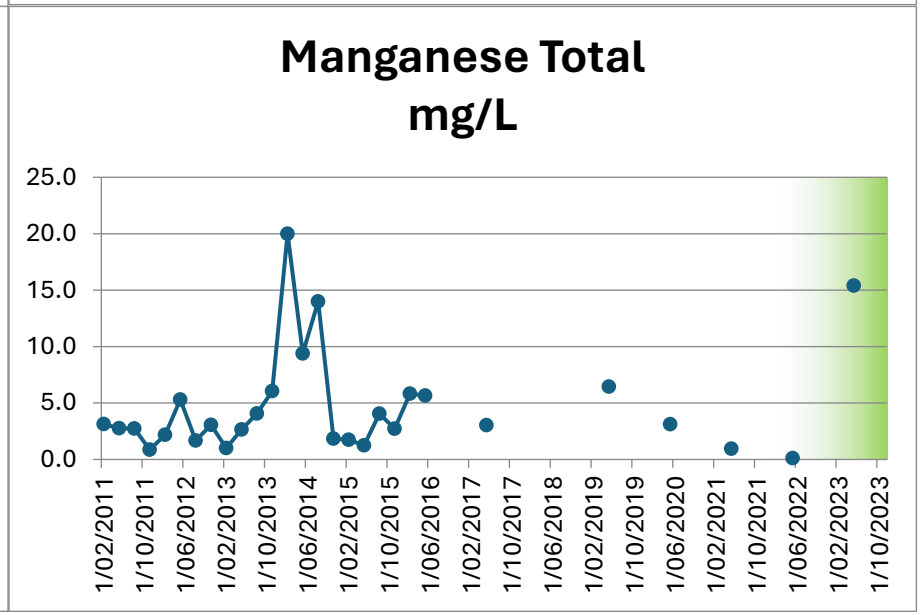

DO (Membrane Electrode)
mg/L
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Flouride
mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Iron Total
mg/L
100
80
60
40
20
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Lead (Total)
mg/L
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Magnesium (Total)
mg/L
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Manganese Total
mg/L
25.0
20.0
15.0
10.0
5.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
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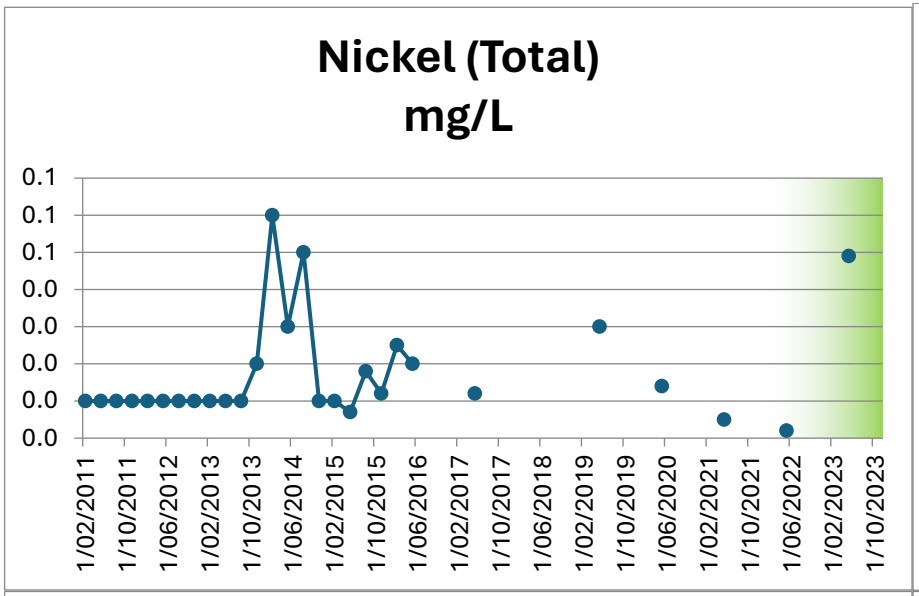
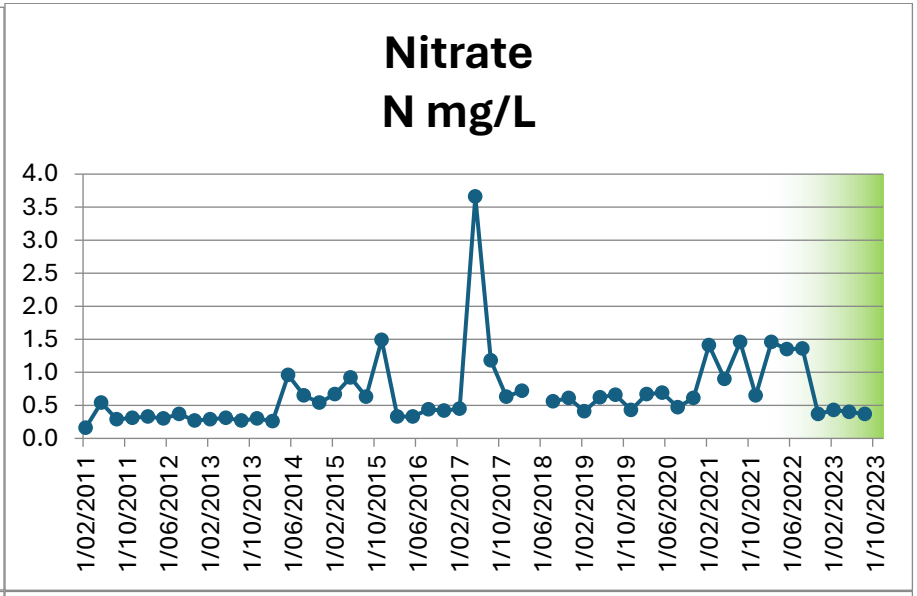
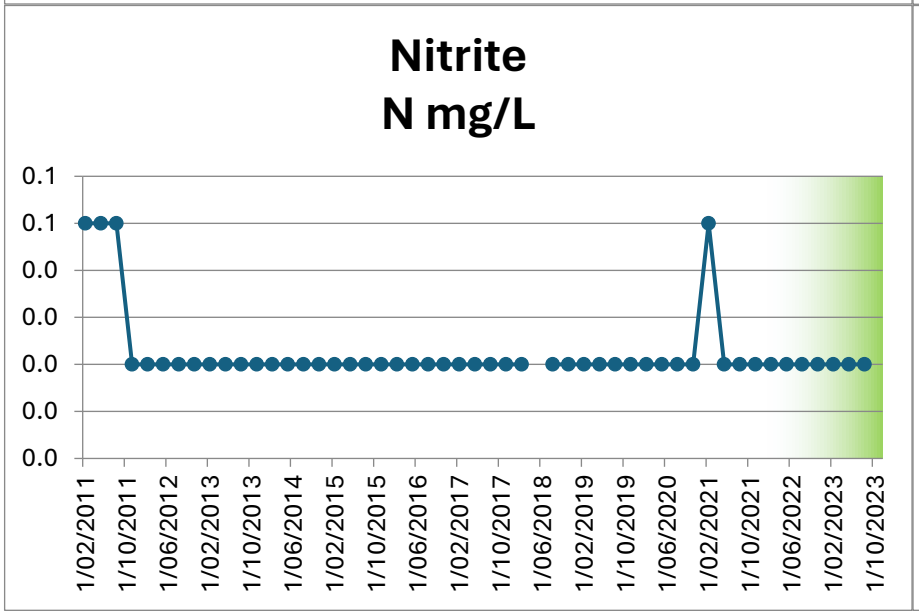
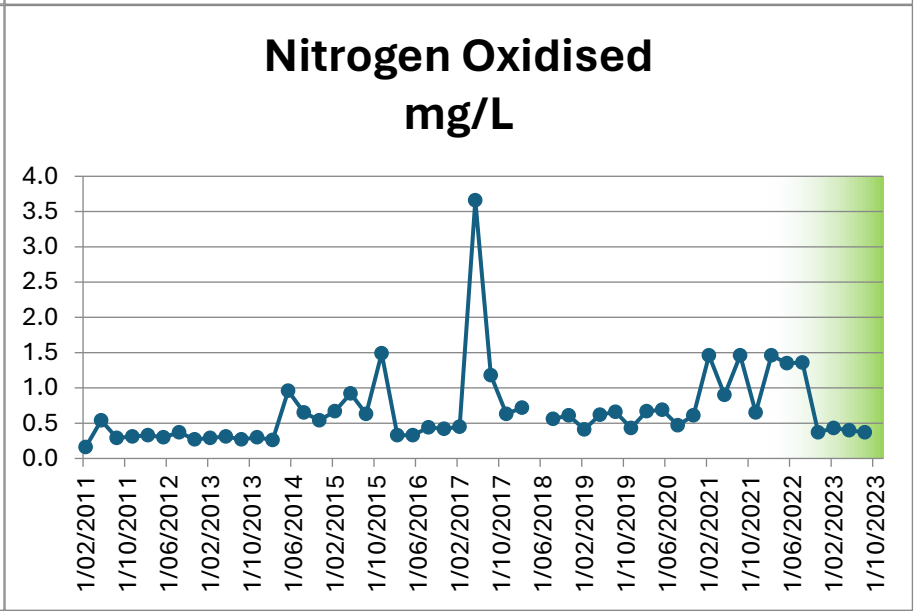
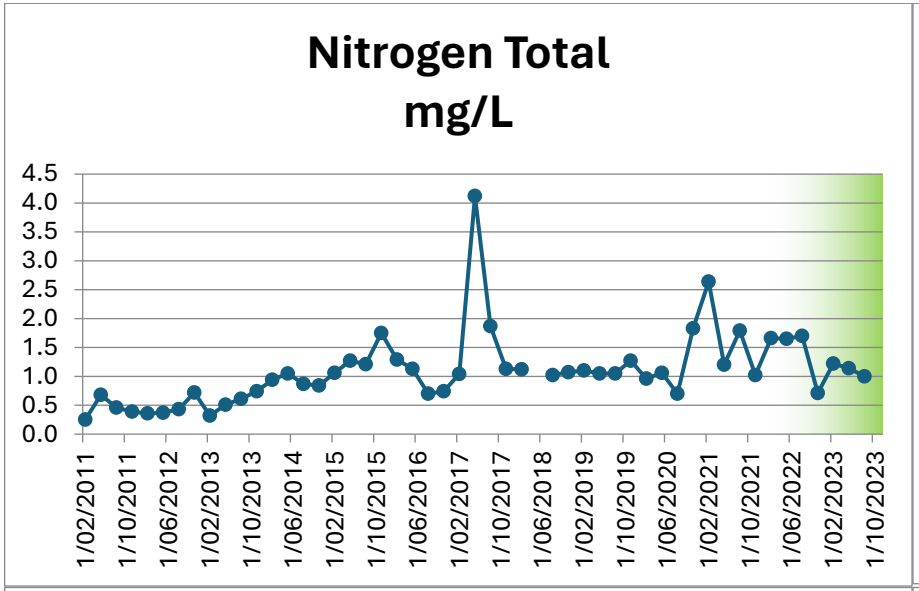
1/06/2022
1/02/2023
1/10/2023

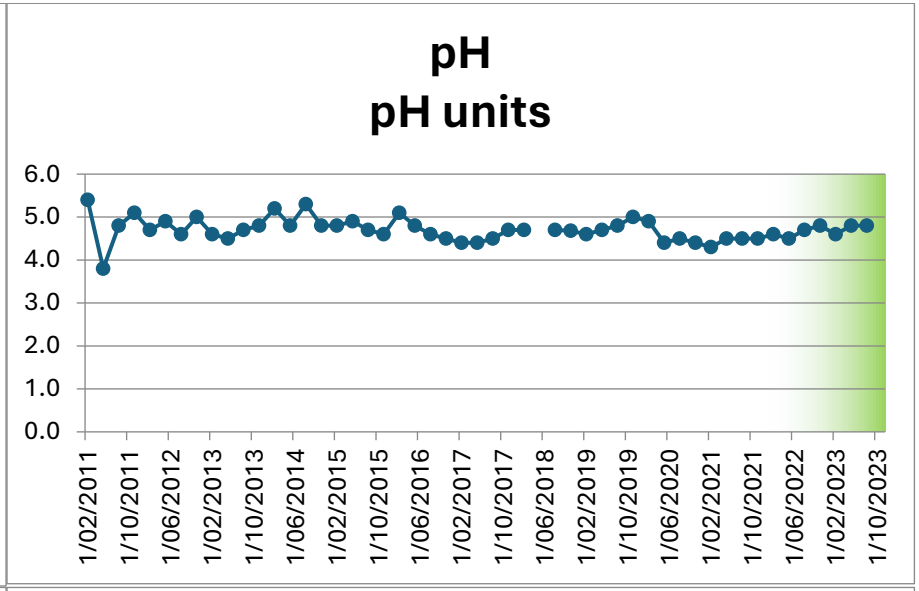

Nickel (Total)
mg/L
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

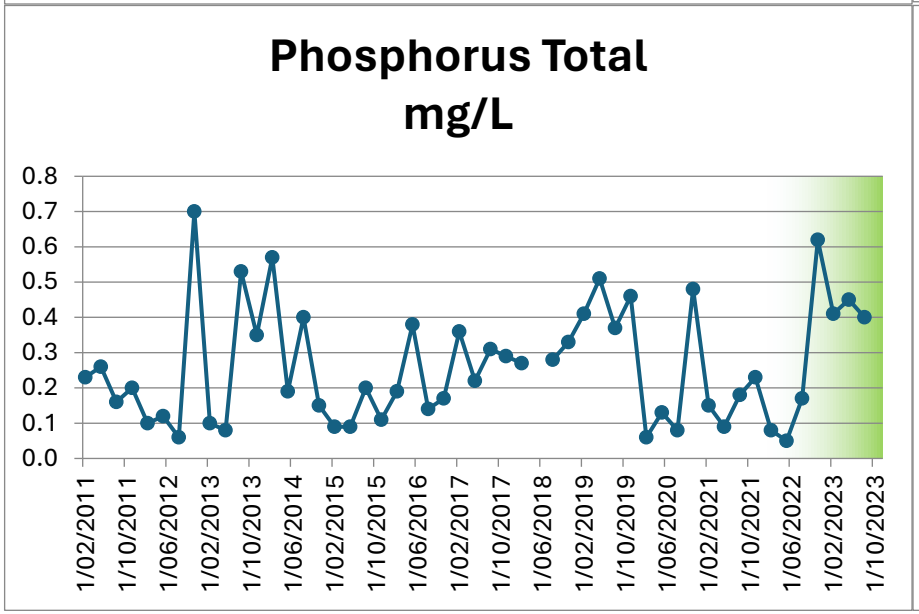

Nitrate
N mg/L
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

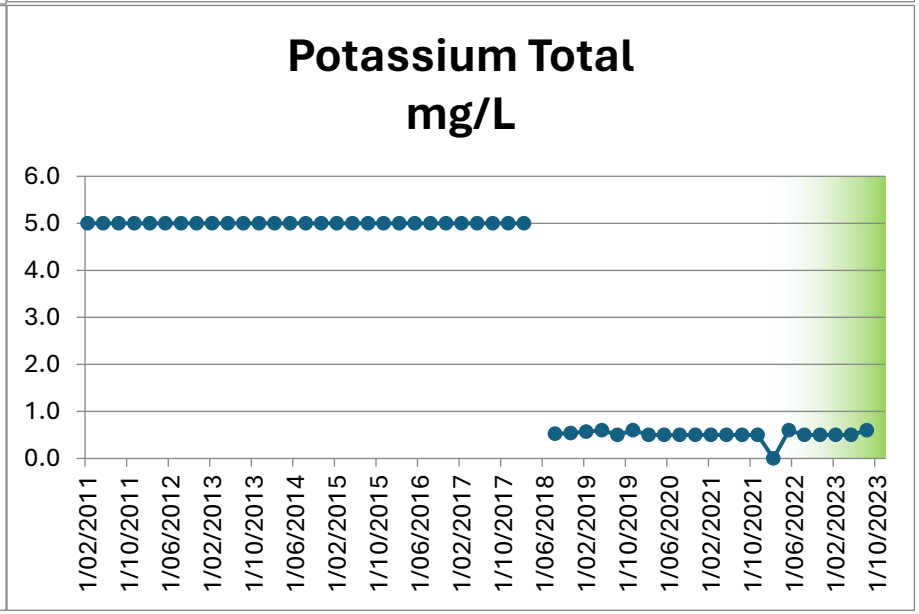

Nitrite
N mg/L
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

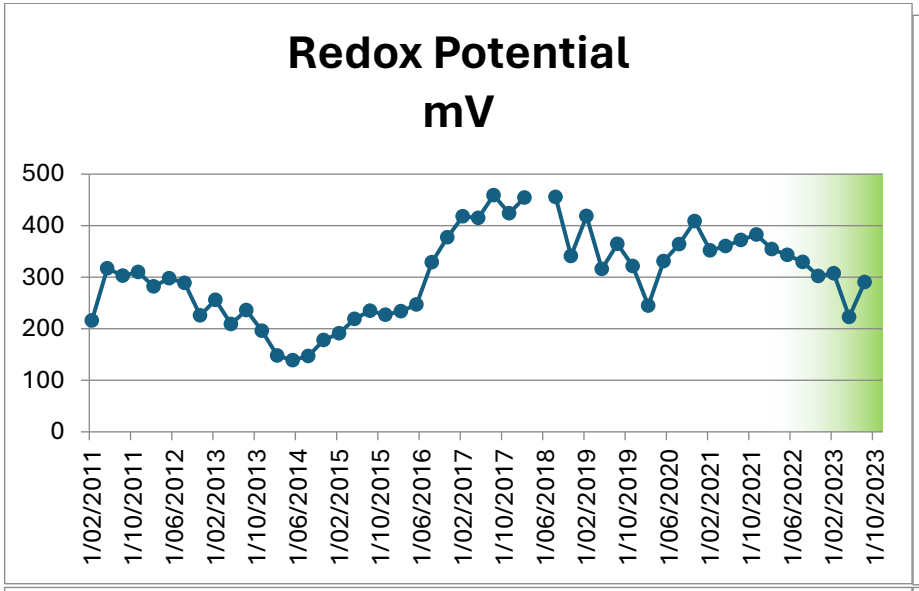

Nitrogen Oxidised
mg/L
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

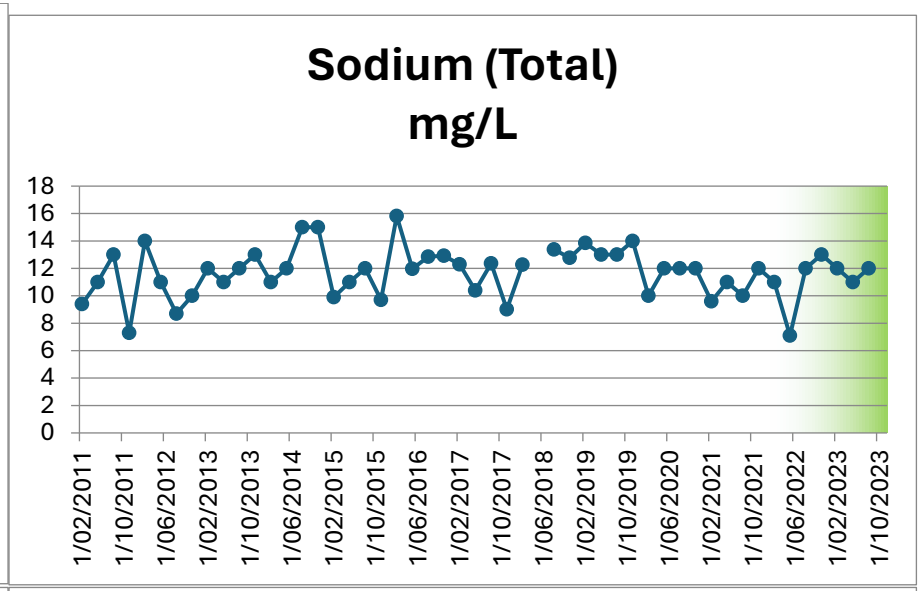

Nitrogen Total
mg/L
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

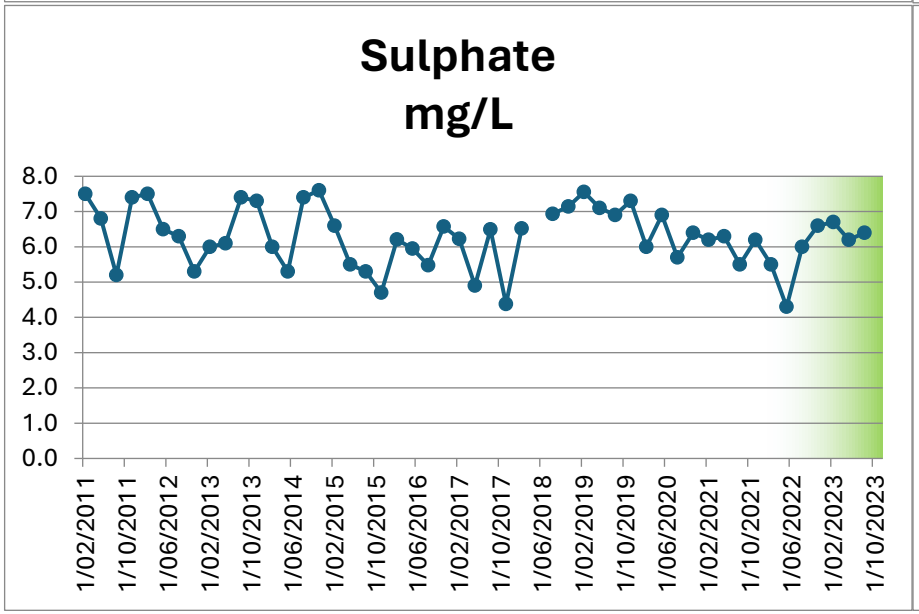

pH
pH units
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

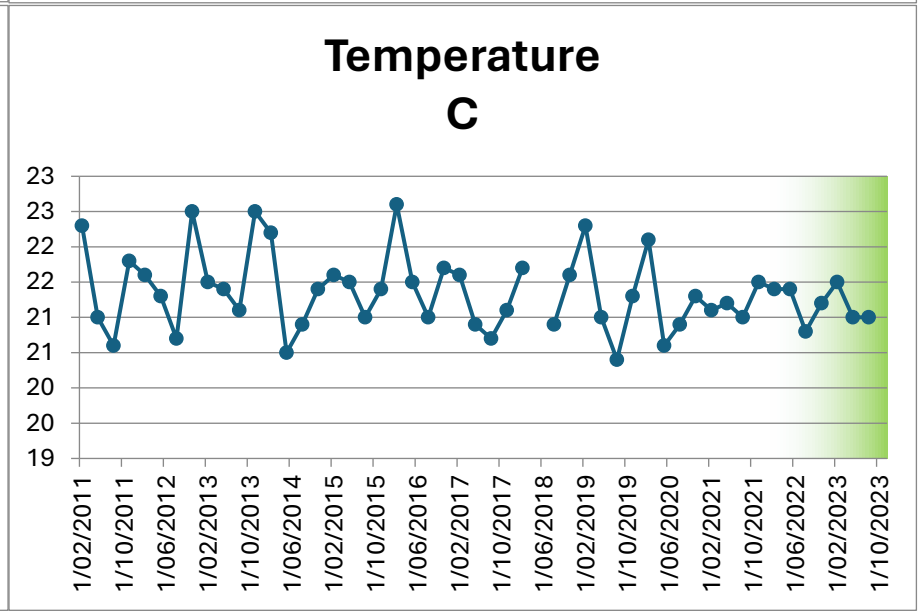

Phosphorus Total
mg/L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

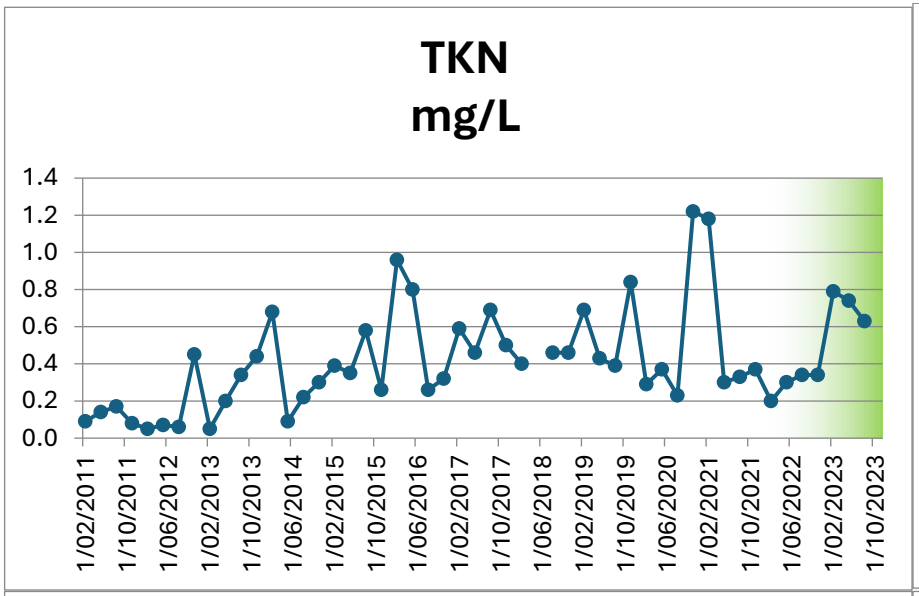

Potassium Total
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

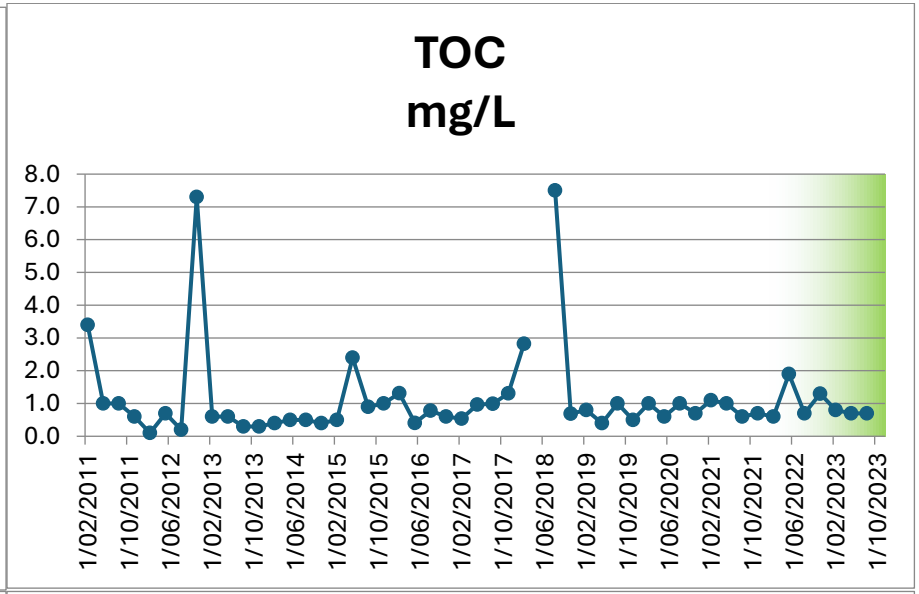

Redox Potential
mV
500
400
300
200
100
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

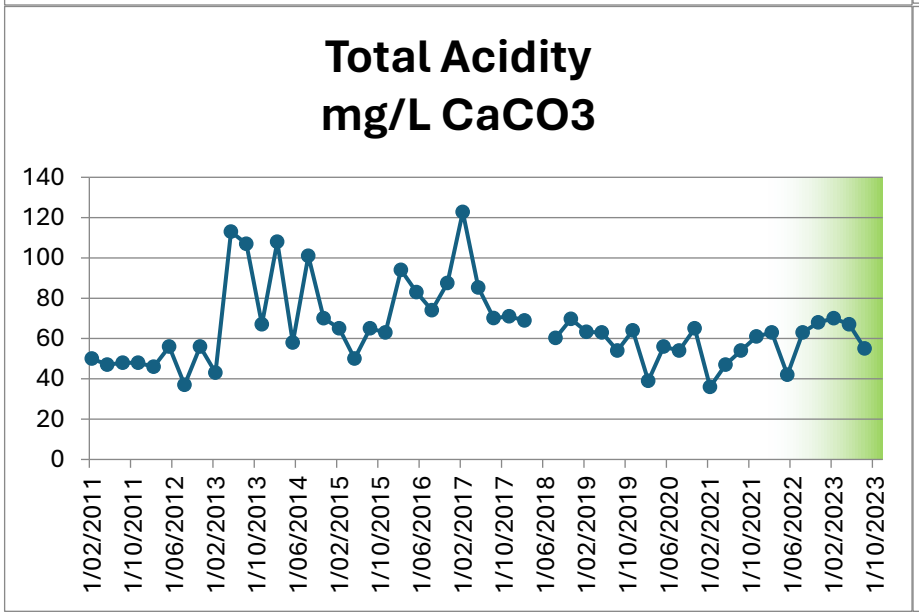

Sodium (Total)
mg/L
18
16
14
12
10
8
6
4
2
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

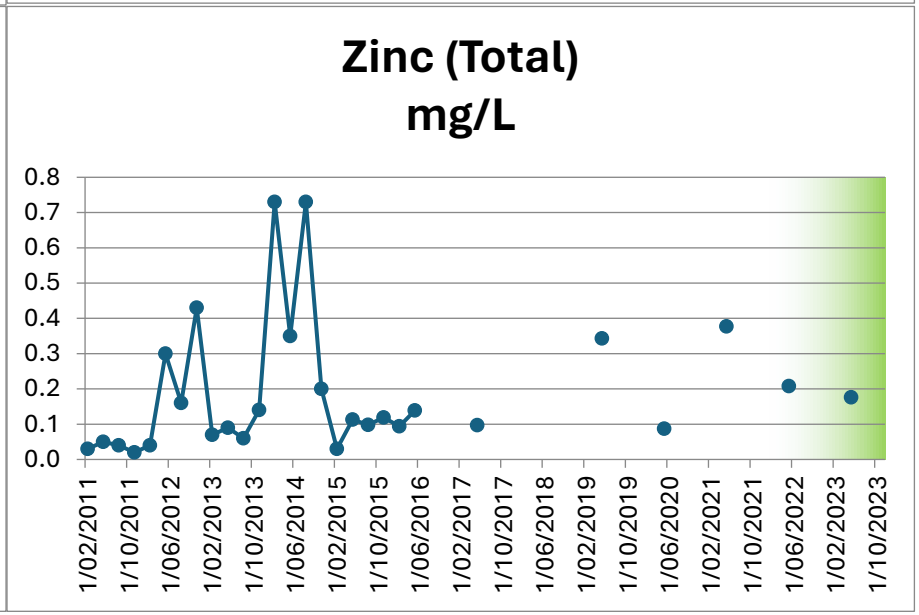

Sulphate
mg/L
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Temperature
C
23
23
22
22
21
21
20
20
19
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


TKN
mg/L
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


TOC
mg/L
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Total Acidity
mg/L CaCO3
140
120
100
80
60
40
20
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Zinc (Total)
mg/L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

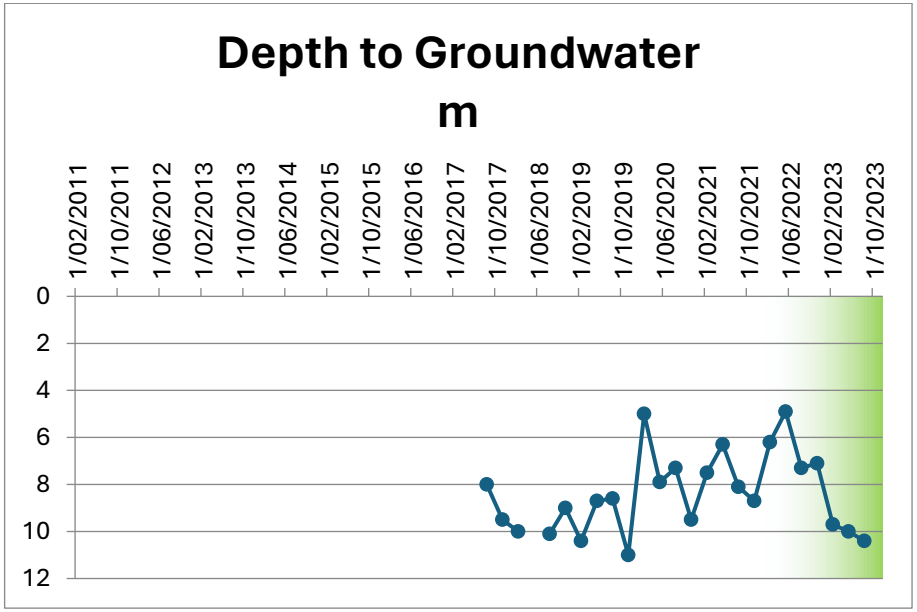
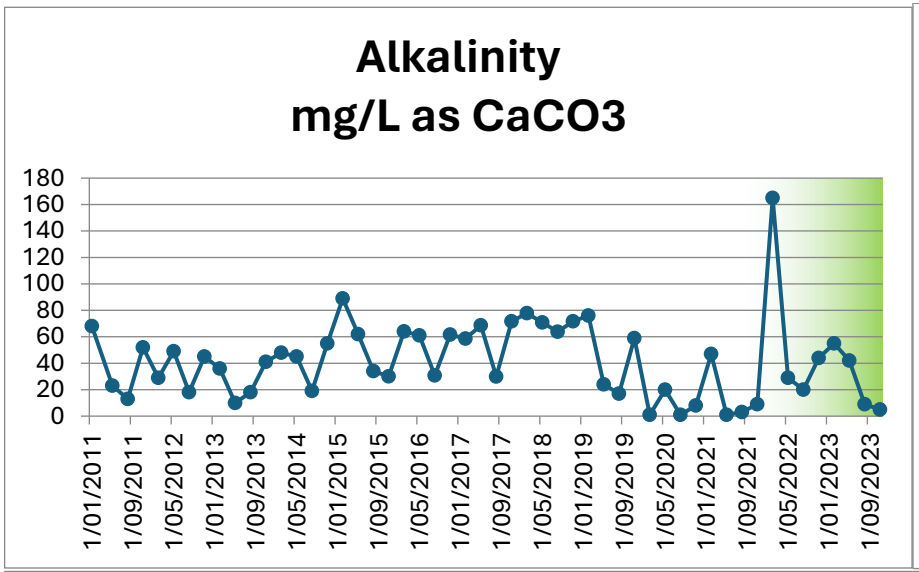
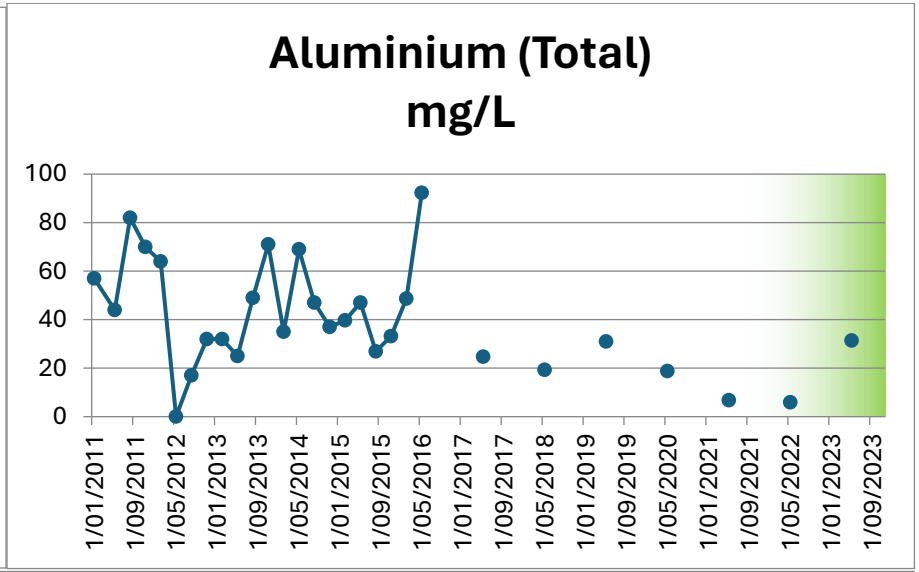
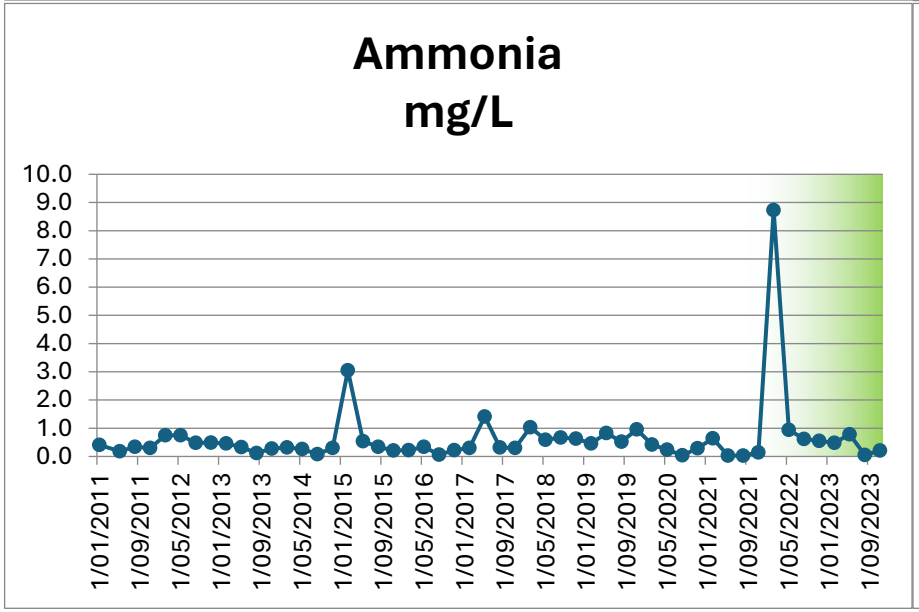

Depth to Groundwater
m
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023
0
2
4
6
8
10
12

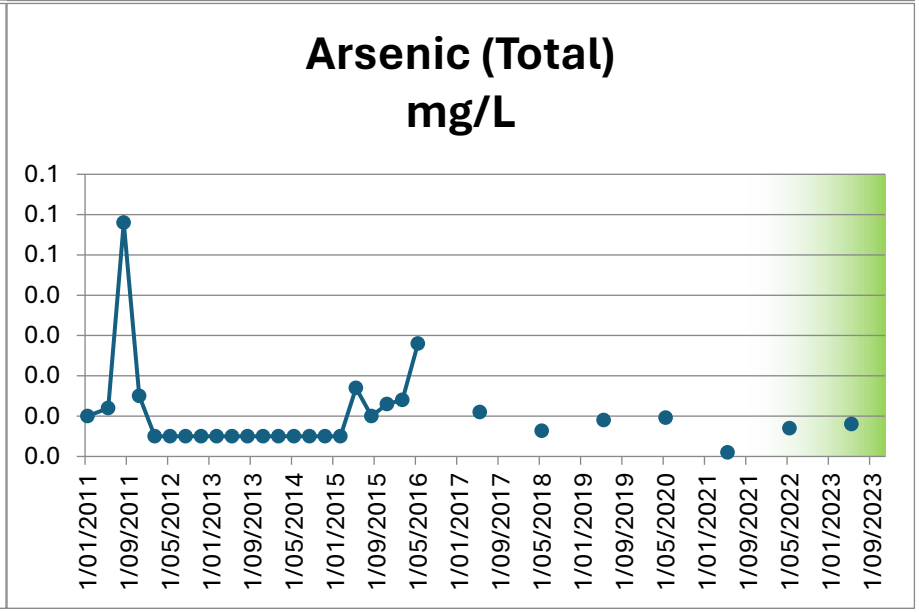
Table 14: Ground Water 6

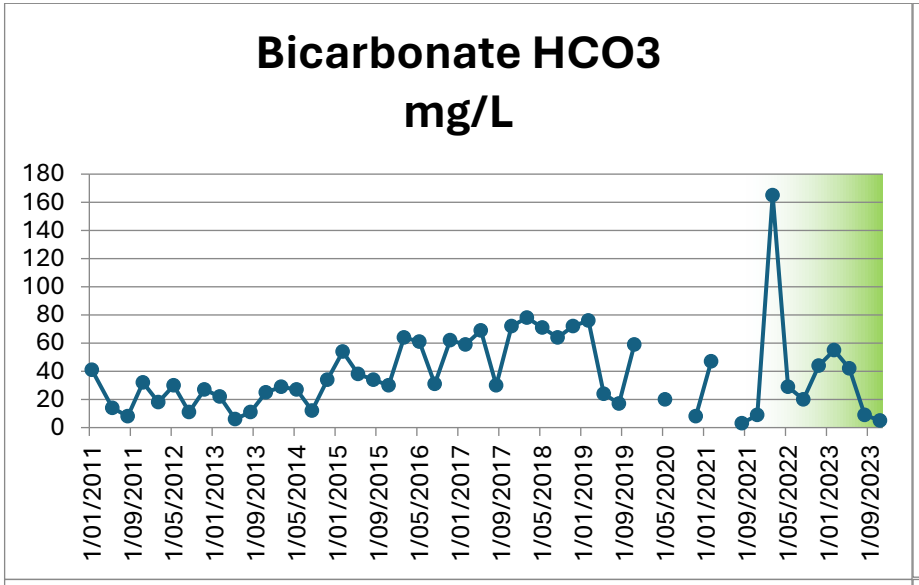
GW6	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µScm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride mg/L	Iron Total mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	Nitrate N mg/L	Nitrite N mg/L	Nitrogen Oxidised mg/L	Nitrogen Total mg/L	pH pH units	Phenol Alkalinity mg/L as CaCO3	Phosphorus Total mg/L	Potassium Total mg/L	Redox Potential mV	Sodium (Total) mg/L	Sulphate mg/L	Temperature C	TKN mg/L	TOC mg/L	Total Acidity mg/L CaCO3	Zinc (Total) mg/L	Depth to Groundwater m
31/01/2011	68	57	0.4	0.0	41	14	0.0	19	500	0.1	0.1	0.0	546	0.1	1.0	0.1	96	0.0	20	1.9	0.1	0.1	0.1	0.1	1.3	6.0		0.3	5.0	-10	29	127	23	1.3	7	120	0.7	
10/05/2011	23	44	0.2	0.0	14	4	0.0	17	44	0.1	0.1	0.0	399	0.1	1.1	0.1	70	0.0	10	1.0	0.0	0.1	0.1	0.1	1.6	5.1		0.4	5.0	203	20	84	21	1.6	2.8	66	0.6	
9/08/2011	13	82	0.3	0.1	8	10	0.0	20	88	0.1	0.1	0.0	567	0.1	1.5	0.1	174	0.0	22	2.4	0.1	0.1	0.1	0.1	1.6	5.4		0.5	5.0	254	33	159	18	1.5	4.7	178	0.7	
8/11/2011	52	70	0.3	0.0	32	8	0.0	20	140	0.1	0.1	0.0	530	0.1	1.3	0.2	157	0.0	27	1.8	0.1	0.1	0.0	0.1	1.1	6.0		0.5	17.0	36	26	103	21	1.0	2.3	110	0.5	
6/02/2012	29	64	0.8	0.0	18	35	0.0	30	86	0.1	0.1	0.0	532	0.1	1.1	0.1	94	0.1	18	1.6	0.1	0.1	0.0	0.1	2.2	5.4		0.3	5.0	161	38	126	23	2.2	6.8	120	1.3	
8/05/2012	49	0	0.8	0.0	30	14	0.0	20	70	0.0	0.0	0.0	559	0.0	3.0	0.2	0	0.0	25	2.5	0.0	0.2	0.0	0.2	1.6	5.9		0.4	8.0	74	39	110	22	1.3	3.6	80	0.0	
6/08/2012	18	17	0.5	0.0	11	7	0.0	17	84	0.0	0.0	0.0	578	0.0	2.0	0.1	52	0.0	19	1.1	0.0	0.1	0.0	0.1	1.4	5.2		0.4	5.0	102	29	85	18	1.4	3.8	35	0.3	
13/11/2012	45	32	0.5	0.0	27	8	0.0	20	290	0.0	0.0	0.0	630	0.0	1.3	0.7	92	0.0	22	1.4	0.0	0.1	0.0	0.1	1.4	6.0		0.5	5.0	39	44	88	21	1.4	3.7	130	0.6	
13/02/2013	36	32	0.5	0.0	22	6	0.0	18	92	0.0	0.0	0.0	586	0.0	1.5	0.2	67	0.0	20	1.2	0.0	0.1	0.0	0.1	1.4	5.8		0.1	5.0	-21	45	77	23	1.4	2.5	94	0.4	
14/05/2013	10	25	0.3	0.0	6	4	0.0	21	91	0.0	0.0	0.0	521	0.0	2.4	0.1	34	0.0	17	0.9	0.0	0.1	0.0	0.1	1.4	5.7		0.4	5.0	45	44	72	21	1.3	2.6	215	0.3	
6/08/2013	18	49	0.1	0.0	11	3	0.0	18	91	0.0	0.0	0.0	573	0.0	2.0	0.1	235	0.0	20	1.4	0.0	0.1	0.0	0.1	1.1	5.6		0.4	5.0	106	45	84	19	1.0	2.2	143	0.4	
12/11/2013	41	71	0.3	0.0	25	5	0.0	17	102	0.1	0.1	0.0	565	0.0	4.6	0.2	84	0.0	21	1.4	0.0	0.2	0.0	0.2	1.3	5.8		0.8	5.0	-2	49	64	21	1.1	1.5	59	0.3	
11/02/2014	48	35	0.3	0.0	29	3	0.0	16	101	0.0	0.0	0.0	548	0.0	2.6	0.2	49	0.0	21	1.1	0.0	0.1	0.0	0.1	1.0	6.1		0.2	5.0	-10	46	52	22	0.9	1.6	213	0.2	
13/05/2014	45	69	0.3	0.0	27	3	0.0	15	107	0.0	0.0	0.0	567	0.0	3.0	0.2	84	0.0	19	1.0	0.0	0.1	0.0	0.1	0.9	6.0		0.3	5.0	35	49	44	22	0.8	1.5	74	0.2	
12/08/2014	19	47	0.1	0.0	12	1	0.0	16	106	0.0	0.0	0.0	522	0.0	3.2	0.1	129	0.0	20	1.3	0.0	0.1	0.0	0.1	1.2	5.9		0.5	5.0	77	48	58	19	1.1	0.8	150	0.3	
10/11/2014	55	37	0.3	0.0	34	6	0.0	15	115	0.0	0.0	0.0	544	0.0	3.2	0.2	59	0.0	20	1.0	0.0	0.2	0.0	0.2	1.4	6.2		0.4	5.0	10	49	41	21	1.2	1.5	190	0.2	
9/02/2015	89	40	3.1	0.0	54	15	0.0	19	120	0.0	0.0	0.0	643	0.0	2.0	0.2	64	0.0	22	1.2	0.0	0.0	0.0	0.1	6.6	6.3		0.7	7.0	-25	55	38	24	6.5	6.8	134	1.3	
11/05/2015	62	47	0.5	0.0	38	17	0.0	18	105	0.0	0.0	0.0	532	0.0	2.3	0.2	59	0.0	20	1.1	0.0	0.0	0.0	0.0	1.9	6.2		0.7	6.0	11	53	35	21	1.9	1.9	97	2.9	
11/08/2015	34	27	0.3	0.0	34	5	0.0	17	100	0.0	0.0	0.0	533	0.0	2.7	0.1	68	0.0	20	1.0	0.0	0.0	0.0	0.0	1.4	6.0		0.7	5.5	87	48	46	19	1.4	1.5	114	1.0	
10/11/2015	30	33	0.2	0.0	30	6	0.0	31	34	0.0	0.0	0.0	753	0.0	1.9	0.2	94	0.0	24	1.4	0.0	0.0	0.0	0.0	1.3	5.7		0.6	5.0	2	61	93	21	1.2	2.2	106	1.0	
8/02/2016	64	49	0.2	0.0	64	6	0.0	17	111	0.1	0.1	0.0	564	0.0	2.6	0.1	75	0.0	20	1.2	0.1	0.0	0.0	0.0	1.4	6.0		0.7	5.8	37	49	40	23	1.4	1.8	154	1.3	
9/05/2016	61	92	0.3	0.0	61	10	0.0	16	112	0.1	0.1	0.0	571	0.1	2.4	0.2	104	0.0	20	1.6	0.1	0.1	0.0	0.1	1.6	6.1		0.8	7.2	31	49	33	22	1.6	4.0	120	3.3	
9/08/2016	31		0.1		31	3		20	120				609		2.6	0.2			21			0.0	0.0	0.0	0.7	5.5		0.5	5.3	118	56	60	19	0.6	1.1	152		
7/11/2016	62		0.2		62	3		15	125				550		2.6	0.2			19			0.0	0.0	0.0	1.0	6.0		0.9	5.4	155	49	29	21	1.0	0.9	133		
7/02/2017	59		0.3		59	4		14	85				557		3.0	0.2			18			0.0	0.0	0.0	1.1	6.0		0.3	5.4	101	47	21	23	1.1	1.7	128		
8/05/2017	69	25	1.4	0.0	69	17	0.0	21	141	0.0	0.0	0.0	694	0.0	1.9	0.2	39	0.0	23	1.1	0.0	0.1	0.0	0.1	2.5	5.9		0.4	5.9	71	59	53	21	2.4	3.2	118	2.2	
8/08/2017	30		0.3		30	5		16	100				587		2.6	0.2			19			0.0	0.0	0.0	1.3	5.8		0.4	5.0	217	51	45	19	1.3	1.6	86		1.6
7/11/2017	72		0.3		72	4		18	115				610		2.5	0.2			22			0.0	0.0	0.0	1.5	6.0		0.6	6.2	66	55	38	20	1.4	1.5	113		1.5
13/02/2018	78		1.0		78	11		15	115				590		2.3	0.2			20			0.0	0.0	0.0	2.2	6.1		0.4	5.5	-59	50	26	24	2.2	4.1	110		1.4
8/05/2018	71	19	0.6	0.0	71	11	0.0	16	122	0.0	0.0	0.0	573	0.0	2.3	0.2	30	0.0	19	0.9	0.0	0.2	0.0	0.2	2.0	6.0		0.7	5.7	38	48	34	22	1.8	3.2	92	0.7	1.4
14/08/2018	64		0.7		64	20		16	115				557		2.4	0.2			19			0.1	0.0	0.1	2.9	6.0		0.7	5.6	100	53	27	19	2.8	26.0	100		1.7
13/11/2018	72		0.6		72	13		15	117				554		2.3	0.2			19			0.0	0.0	0.1	2.1	6.2		0.7	5.4	3	49	24	20	2.1	3.3	91		1.6
12/02/2019	76		0.5		76	9		15	118				569		2.3	0.2			19			0.0	0.0	0.0	1.7	6.2		0.3	5.8	16	52	18	23	1.7	4.2	84		2.2
14/05/2019	24	31	0.8	0.0	24	8	0.0	36	180	0.0	0.0	0.0	930	0.0	2.2	0.2	40	0.0	32	1.7	0.1	0.1	0.0	0.1	1.9	5.5		0.5	5.9	90	96	166	21	1.9	6.2	54	1.9	1.5
13/08/2019	17		0.5		17	8		27	130				734		2.8	0.2			26			0.0	0.0	0.0	1.9	5.0		0.6	5.4	386	72	139	18	1.9	7.2	58		1.5
12/11/2019	59		1.0		59	35		22	130				738		2.2	0.2			26			0.0	0.0	0.0	2.3	5.9		0.5	5.6	9	59	105	20	2.3	6.8	110		2.0
25/02/2020	1		0.4			10		30	93				690		3.2	0.2			18			1.7	0.0	1.7	3.6	4.4		0.4	3.7	283	63	164	24	1.9	5.5	86		1.2
12/05/2020	20	19	0.2	0.0	20	4	0.0	19	140	0.0	0.0	0.0	612	0.0	3.1	0.2	42	0.0	20	1.1	0.0	0.1	0.0	0.1	1.3	5.6		0.2	4.8	112	51	85	21	1.2	2.6	71	0.4	1.8
11/08/2020	1		0.0			2		26	92				657		3.5	0.2			22			3.0	0.0	3.0	3.9	4.4		0.3	3.8	324	60	141	18	0.9	3.0	64		1.4
10/11/2020	8		0.3		8	2		19	98				581		3.4	0.1			19			0.6	0.0	0.6	2.0	5.0		0.5	4.5	204	50	109	20	1.4	3.5	69		1.7
9/02/2021	47		0.6		47	3		16	78				544		3.2	0.2			16			1.1	0.0	1.1	2.9	6.1	0.0	0.2	3.9	64	45	90	22	1.8	5.1	96		1.5
11/05/2021	1	7	0.0	0.0		2	0.0	20	82	0.0	0.0	0.0	533	0.0	2.8	0.1	16	0.0	18	1.0	0.0	0.3	0.0	0.3	1.0	4.6	0.0	0.2	3.7	309	49	106	21	0.7	3.4	75	0.3	1.4
10/08/2021	3		0.0		3	2		18	92				523		3.1	0.2			17			0.1	0.0	0.1	1.2	4.8	0.0	0.4	3.9	235	45	81	18	1.1	3.0	60		1.7
8/11/2021	9		0.1		9	5		17	94				513		2.9	0.2			17			0.4	0.0	0.4	1.3	5.1	0.0	0.2	4.2	187	45	81	20	0.9	3.5	82		1.6
8/02/2022	165		8.7		165	106		14	81				610		1.7	0.2			15			0.0	0.1	0.1	10.8	6.2	0.0	1.1	5.6	-68	39	8	21	10.7	33.0	200		1.3
10/05/2022	29	6	0.9	0.0	29	7	0.0	17	87	0.0	0.0	0.0	538	0.0	3.0	0.1	26	0.0	15	0.8	0.0	0.1	0.0	0.1	2.1	5.5	0.0	0.2	3.1	65	42	89	21	2.0	3.4	130	0.4	1.2
9/08/2022	20		0.6		20	3		15	100				536		2.9	0.1			17			0.0	0.0	0.0	2.1	5.6	0.0	0.8	4.1	110	45	68	18	2.1	3.0	110		1.8
8/11/2022	44		0.6		44	3		14	84				560		2.7	0.2			17			0.1	0.0	0.1	1.6	5.8	0.0	1.3	4.4	64	44	49	19	1.6	3.3	120		1.6
13/02/2023	55		0.5		55	3		14	120				524		2.4	0.2			18			0.0	0.0	0.0	1.8	5.8		0.5	4.8	28	43	48	21	1.8	2.5	91		1.7
8/05/2023	42	31	0.8	0.0	42	3	0.0	14	85	0.0	0.0	0.0	512	0.0	2.8	0.2	41	0.0	17	0.9	0.0	0.0	0.0	0.0	2.2	5.8	0.0	0.7	4.3	-8	41	60	20	2.2	2.6	97	0.5	1.8
15/08/2023	9		0.1		9	4		14	98				456		3.4	0.2			15			0.1	0.0	0.1	0.7	5.1		0.6	4.5	176	40	59	18	0.6	1.5	51		1.8
13/11/2023	5		0.2		5	2		13	64				409		4.0	0.2			12			0.9	0.0	0.9	2.0	4.8		0.3	2.9	132	35	81	21	1.1	3.9	58		1.7
2023 Min	**5**	**31**	**0**	**0**	**5**	**2**	**0**	**13**	**64**	**0**	**0**	**0**	**409**	**0**	**2**	**0**	**41**	**0**	**12**	**1**	**0**	**0**	**0**	**0**	**1**	**5**	**0**	**0**	**3**	**-8**	**35**	**48**	**18**	**1**	**2**	**51**	**1**	**2**
2023 Max	**55**	**31**	**1**	**0**	**55**	**4**	**0**	**14**	**120**	**0**	**0**	**0**	**524**	**0**	**4**	**0**	**41**	**0**	**18**	**1**	**0**	**1**	**0**	**1**	**2**	**6**	**0**	**1**	**5**	**176**	**43**	**81**	**21**	**2**	**4**	**97**	**1**	**2**
2023 Mean	**28**	**31**	**0**	**0**	**28**	**3**	**0**	**14**	**92**	**0**	**0**	**0**	**475**	**0**	**3**	**0**	**41**	**0**	**16**	**1**	**0**	**0**	**0**	**0**	**2**	**5**	**0**	**0**	**4**	**82**	**40**	**62**	**20**	**1**	**3**	**74**	**1**	**2**
Long-term Average	**41**	**40**	**1**	**0**	**38**	**10**	**0**	**19**	**113**	**0**	**0**	**0**	**577**	**0**	**3**	**0**	**75**	**0**	**20**	**1**	**0**	**0**	**0**	**0**	**2**	**6**	**0**	**0**	**5**	**92**	**48**	**72**	**21**	**2**	**4**	**108**	**1**	**2**

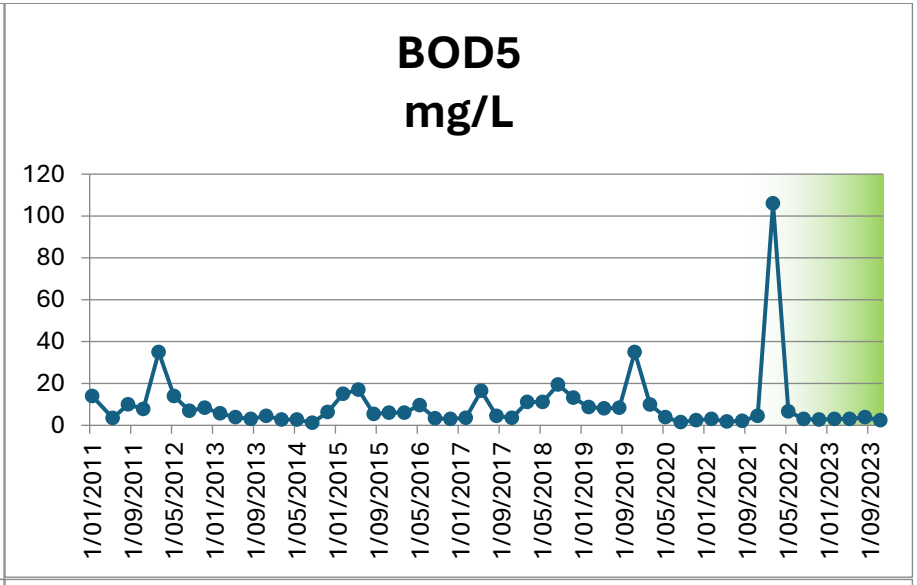

Alkalinity
mg/L as CaCO3
180
160
140
120
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

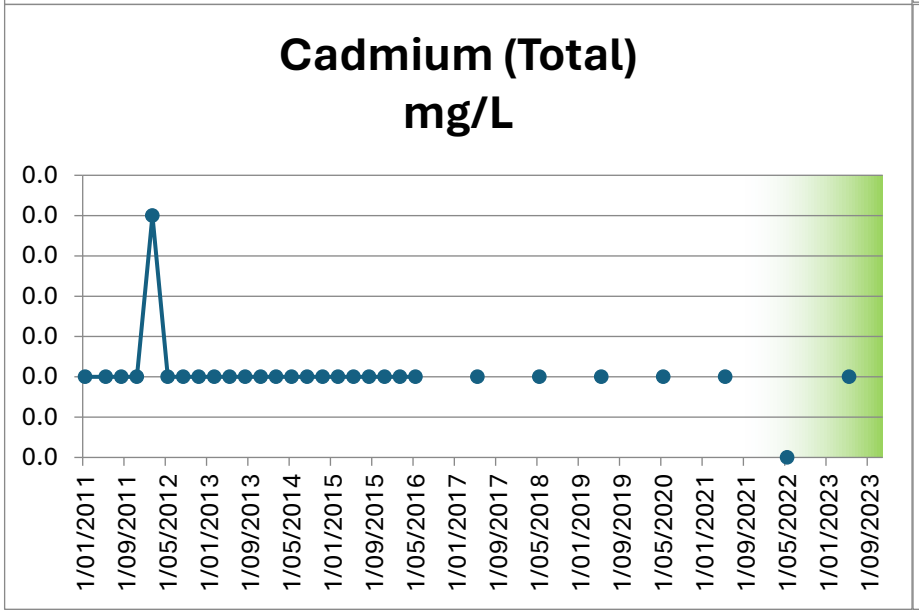

Aluminium (Total)
mg/L
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

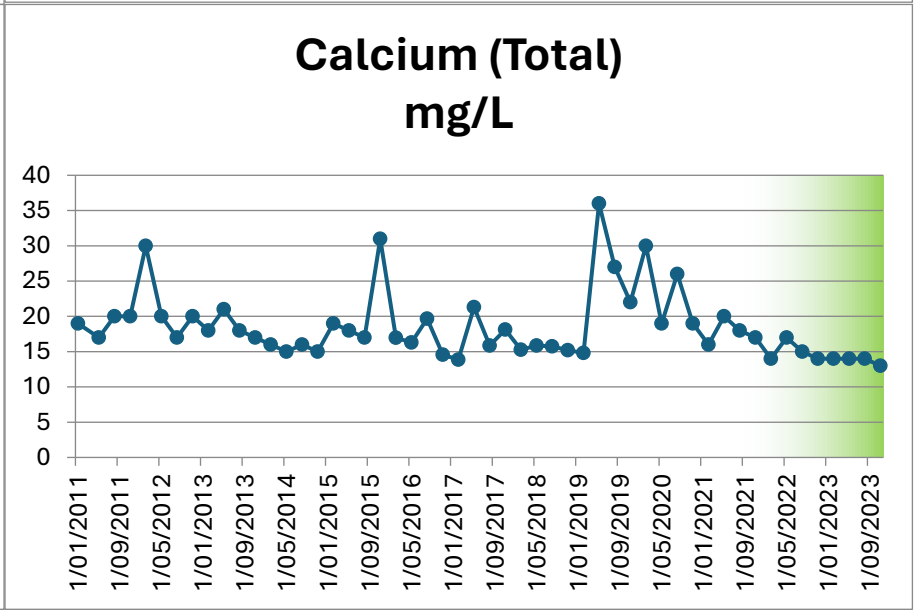

Ammonia
mg/L
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

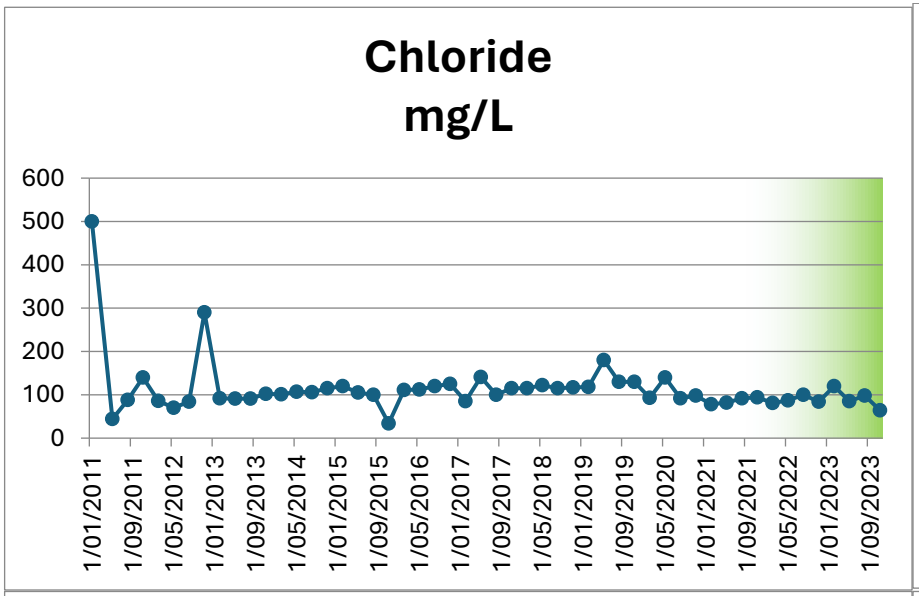

Arsenic (Total)
mg/L
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

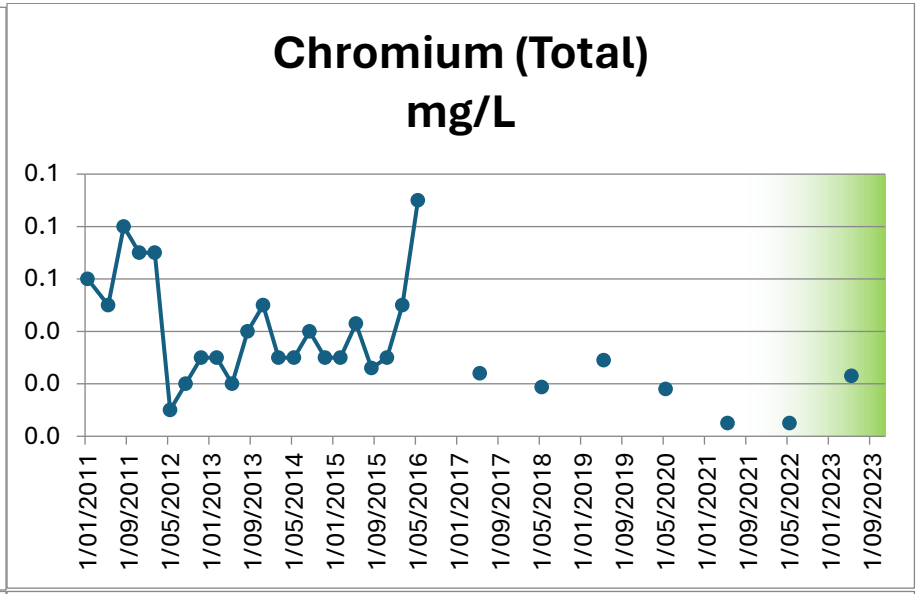

Bicarbonate HCO3
mg/L
180
160
140
120
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

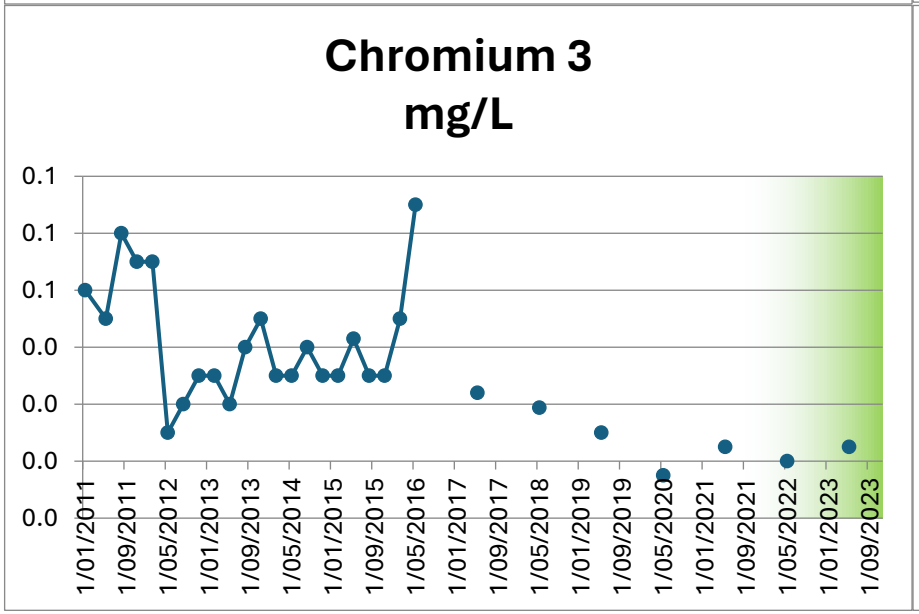

BOD5
mg/L
120
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

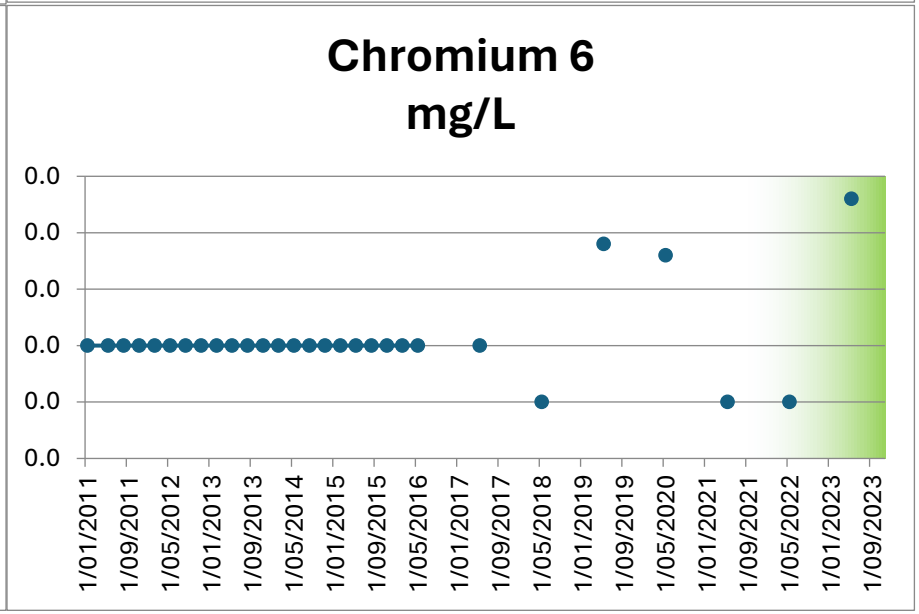

Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

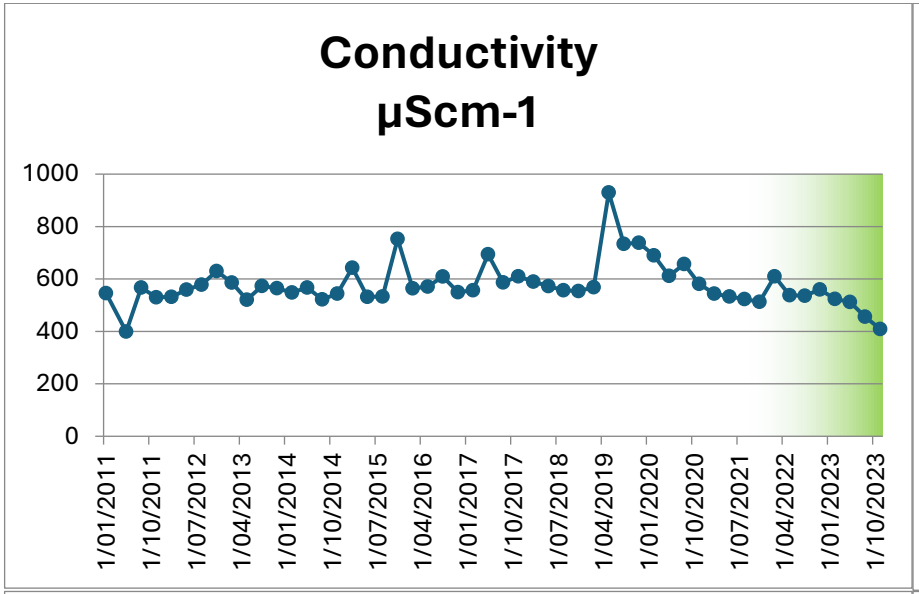

Calcium (Total)
mg/L
40
35
30
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

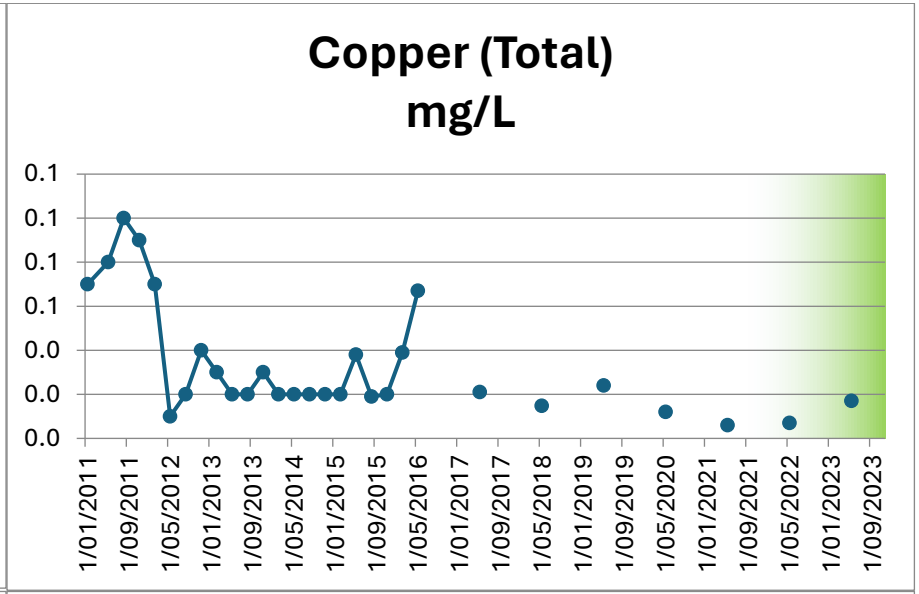

Chloride
mg/L
600
500
400
300
200
100
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

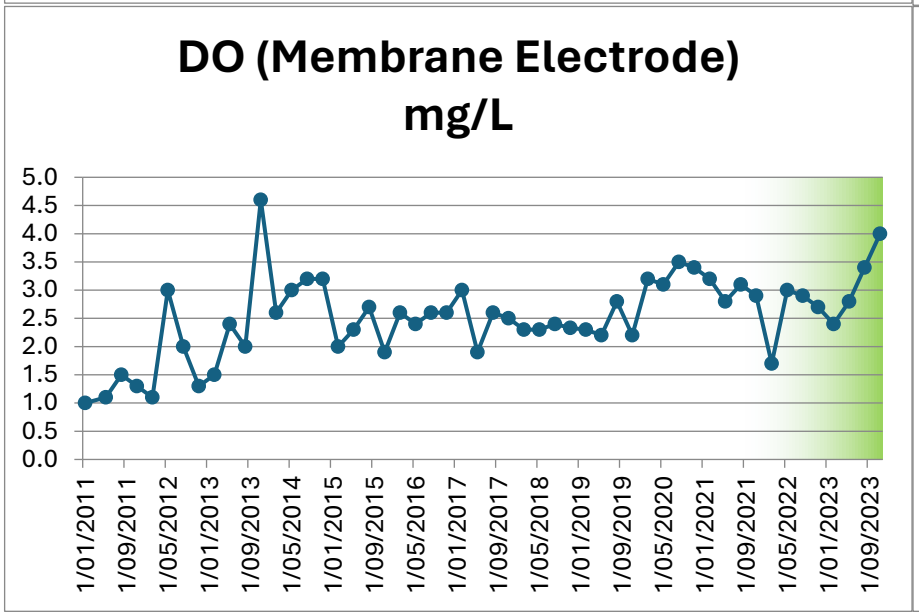

Chromium (Total)
mg/L
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

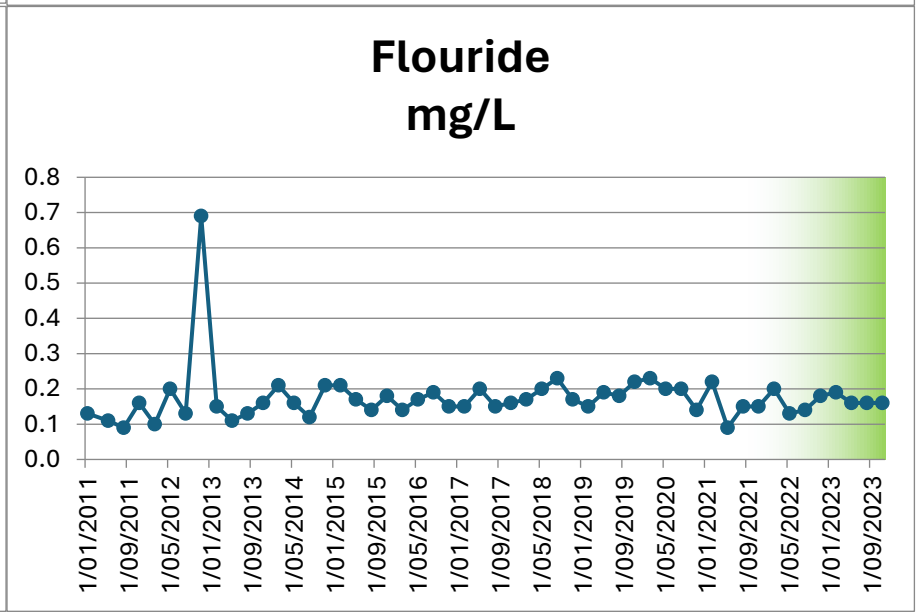

Chromium 3
mg/L
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

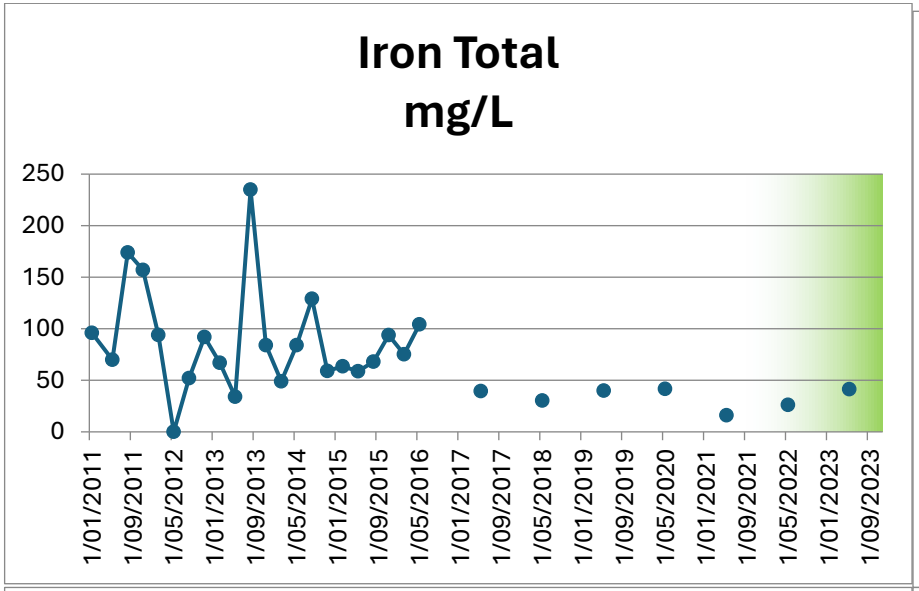

Chromium 6
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

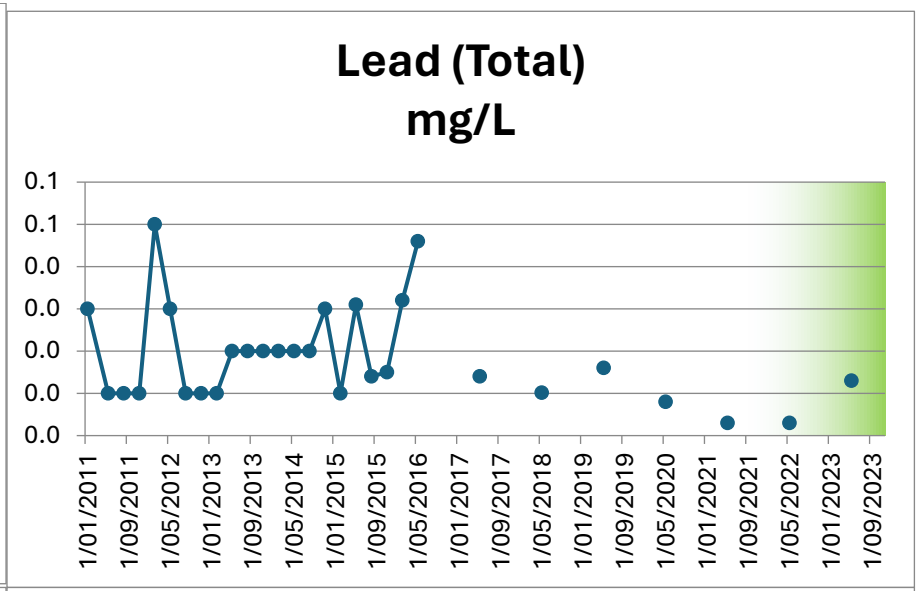

Conductivity
µScm-1
1000
800
600
400
200
0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

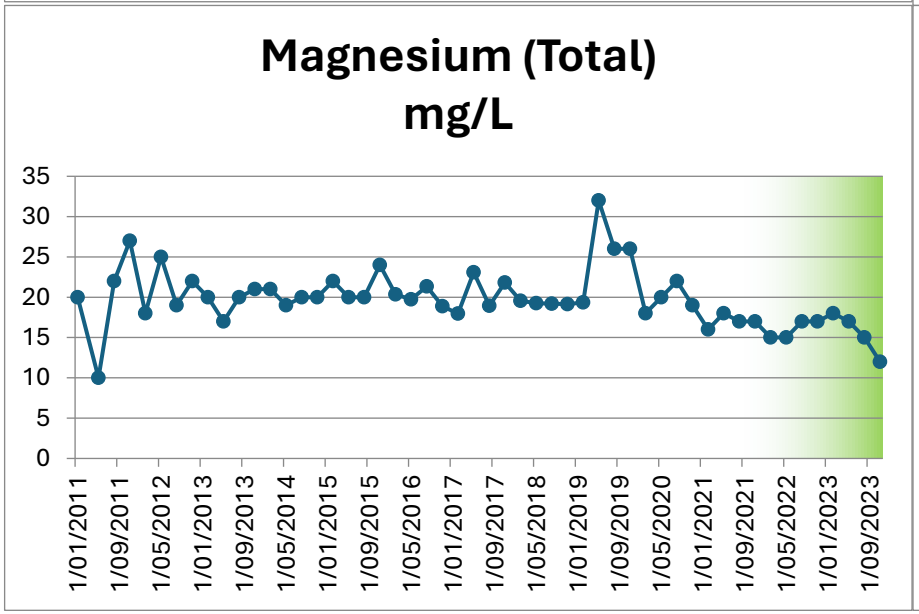

Copper (Total)
mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

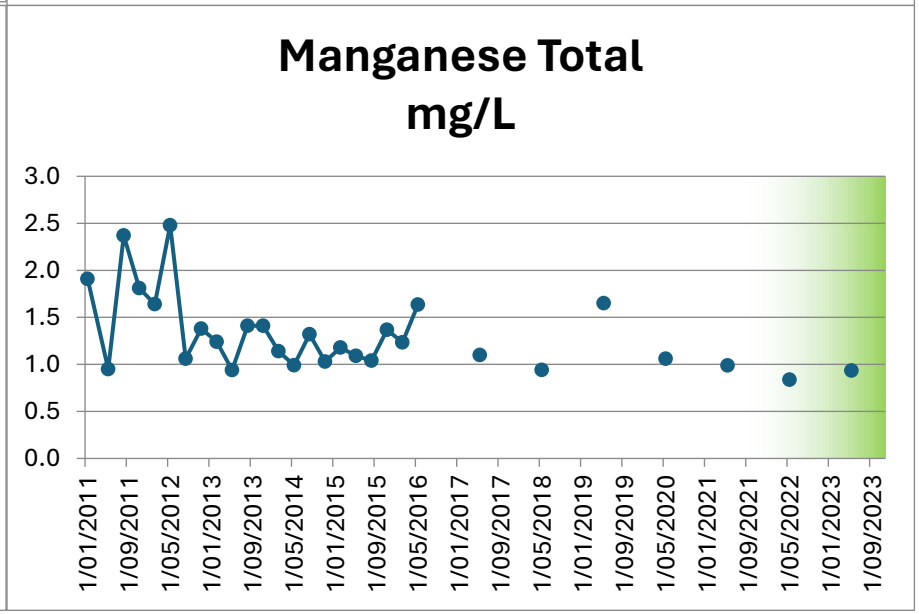

DO (Membrane Electrode)
mg/L
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

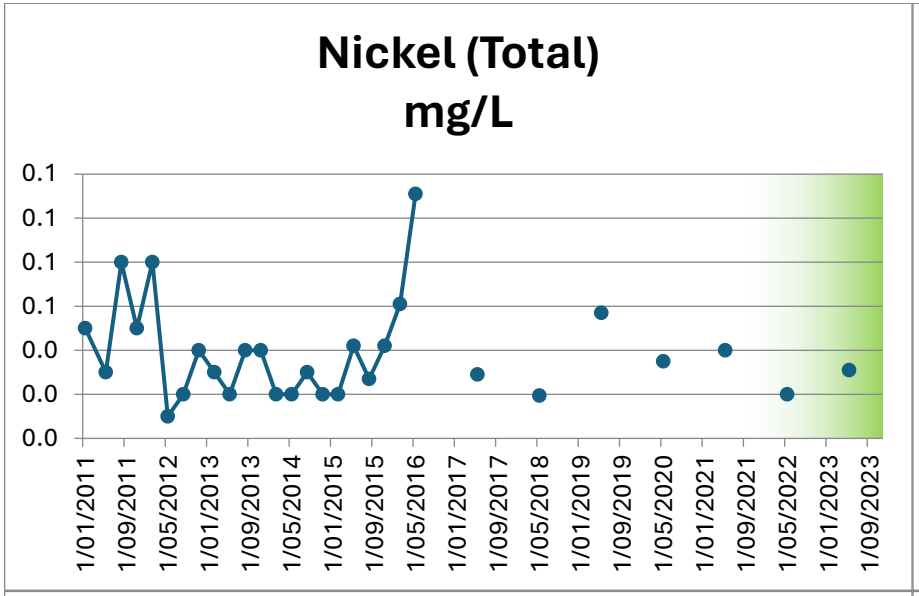

Flouride
mg/L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

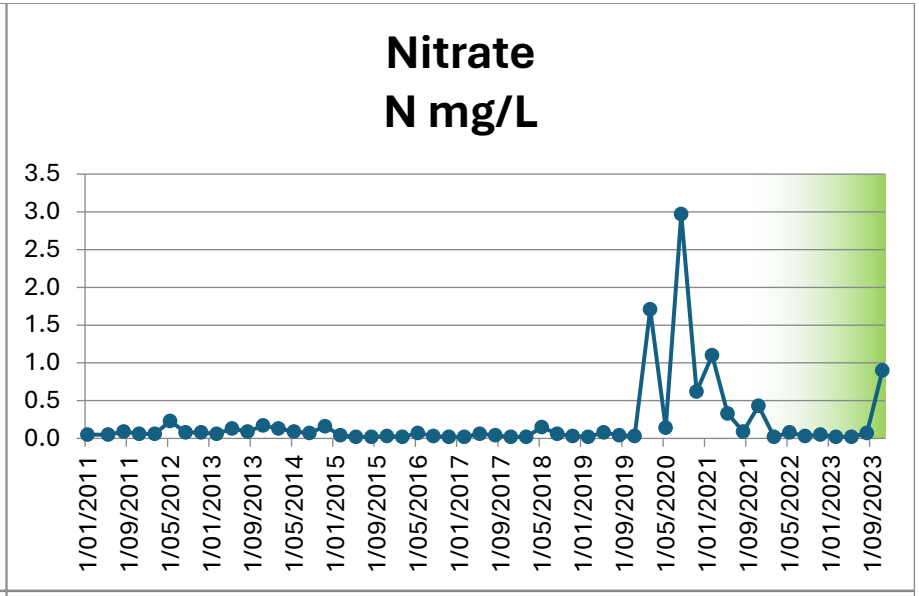

Iron Total
mg/L
250
200
150
100
50
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

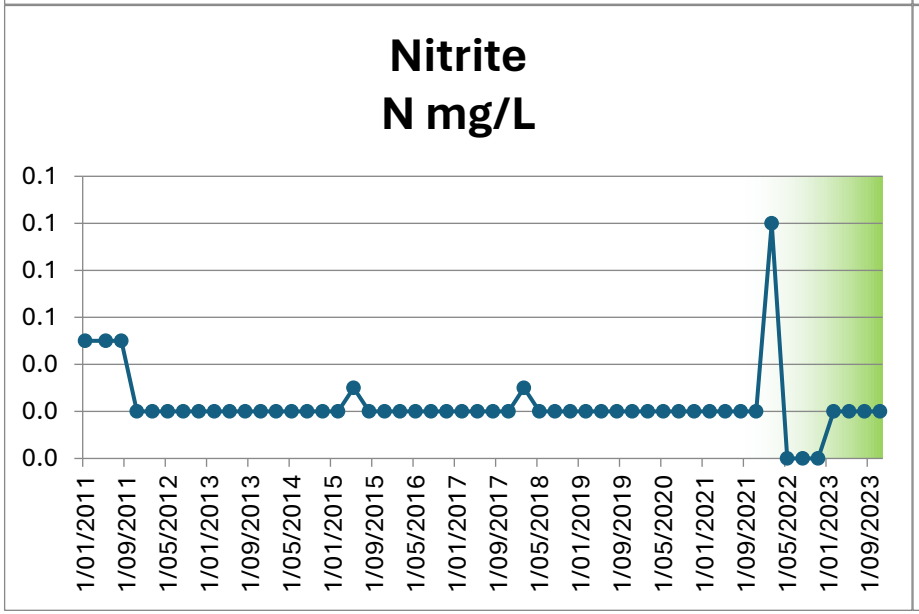

Lead (Total)
mg/L
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

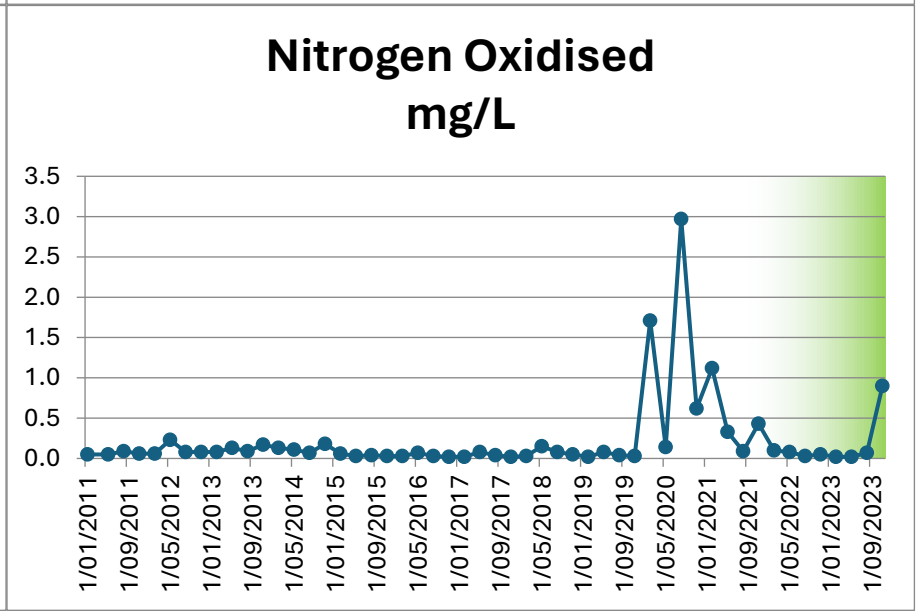

Magnesium (Total)
mg/L
35
30
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

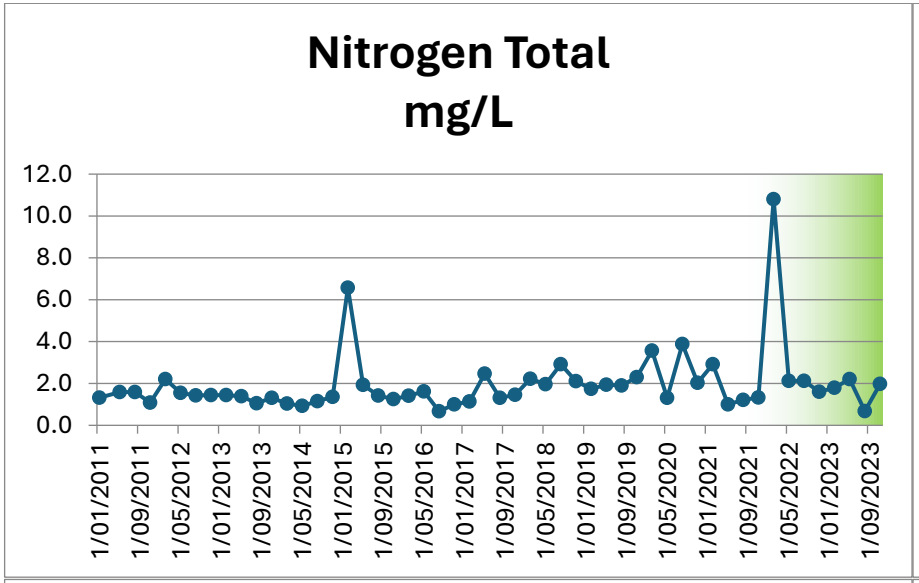

Manganese Total
mg/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

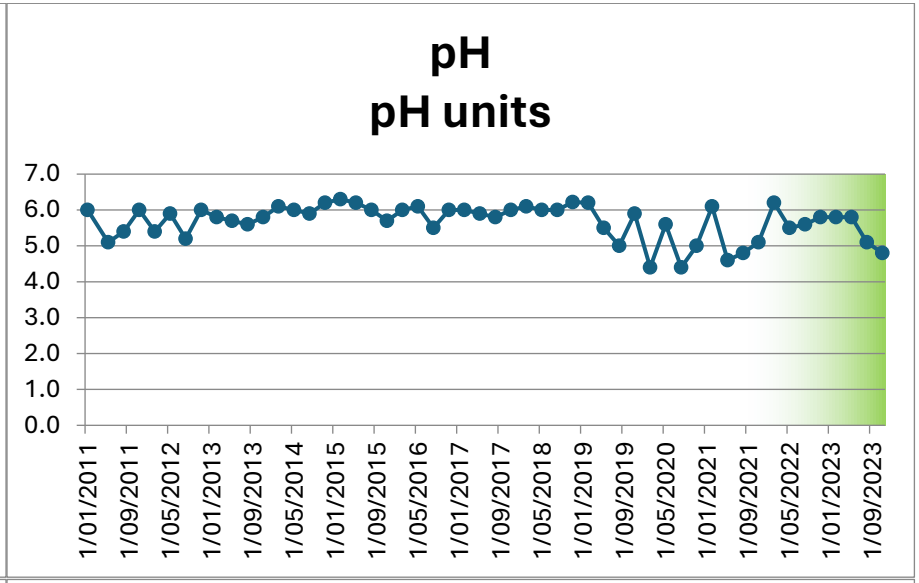

Nickel (Total)
mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

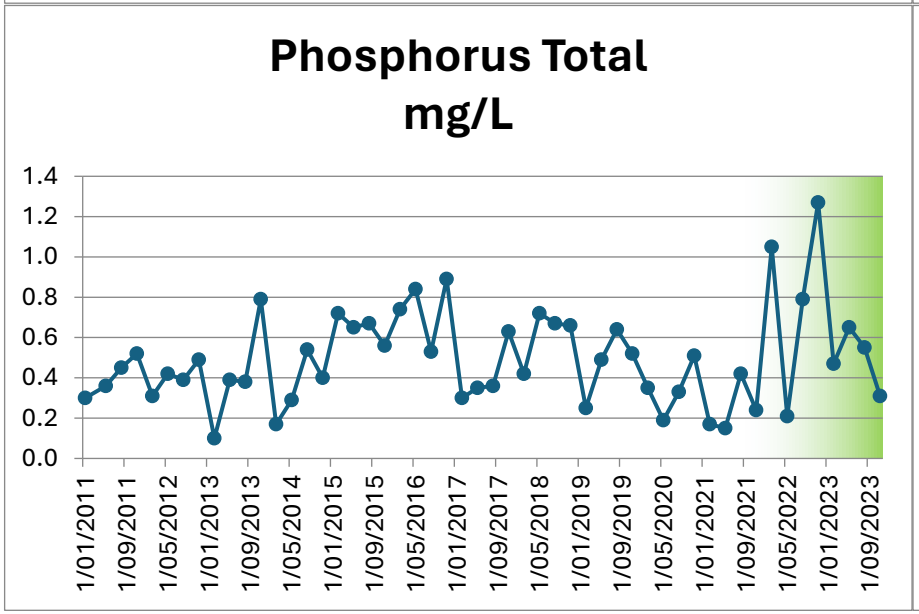

Nitrate
N mg/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

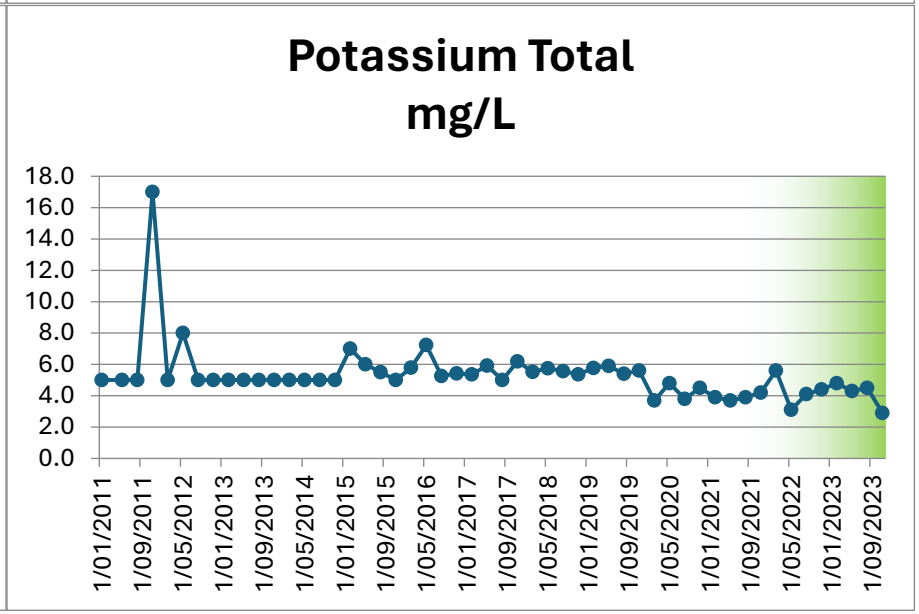

Nitrite
N mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

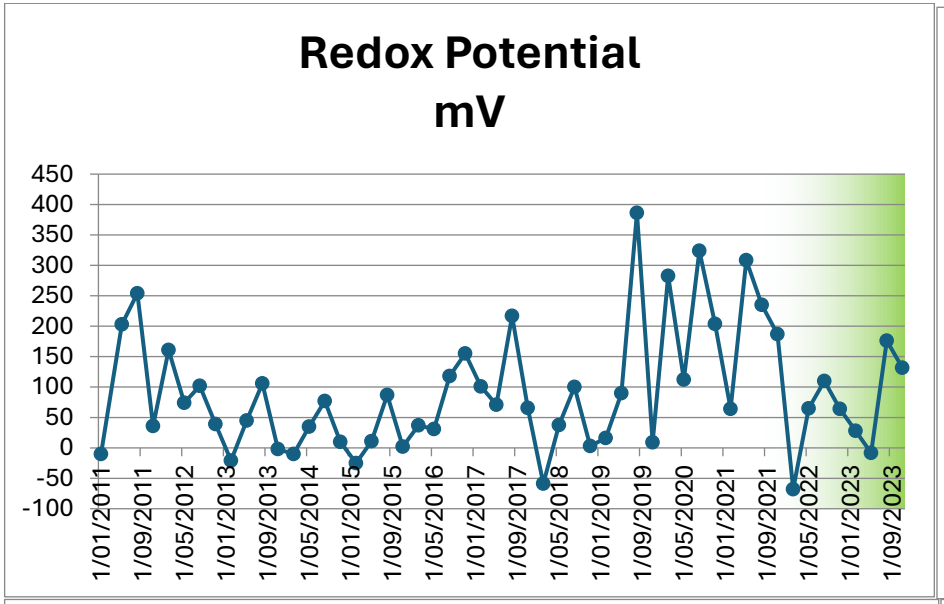

Nitrogen Oxidised
mg/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

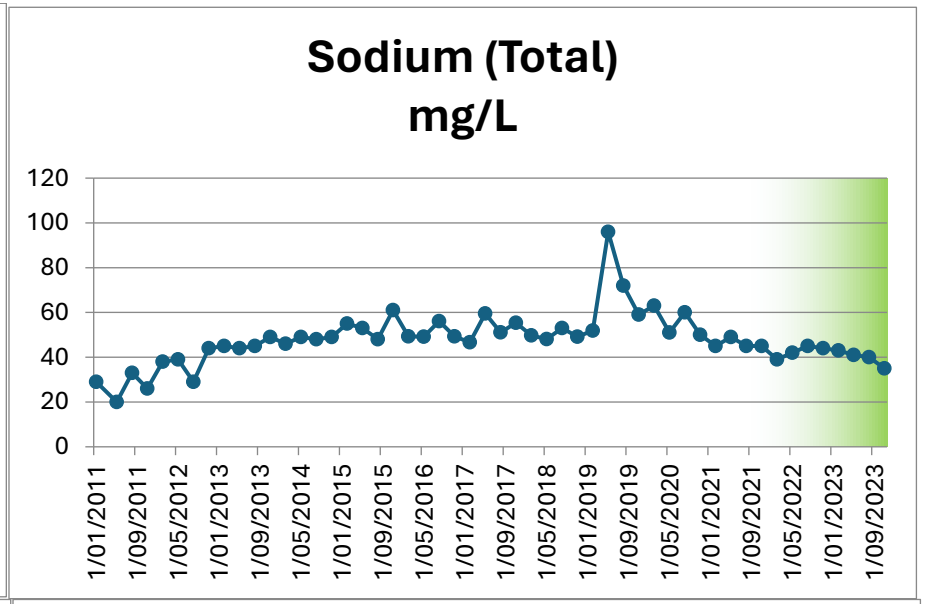

Nitrogen Total
mg/L
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

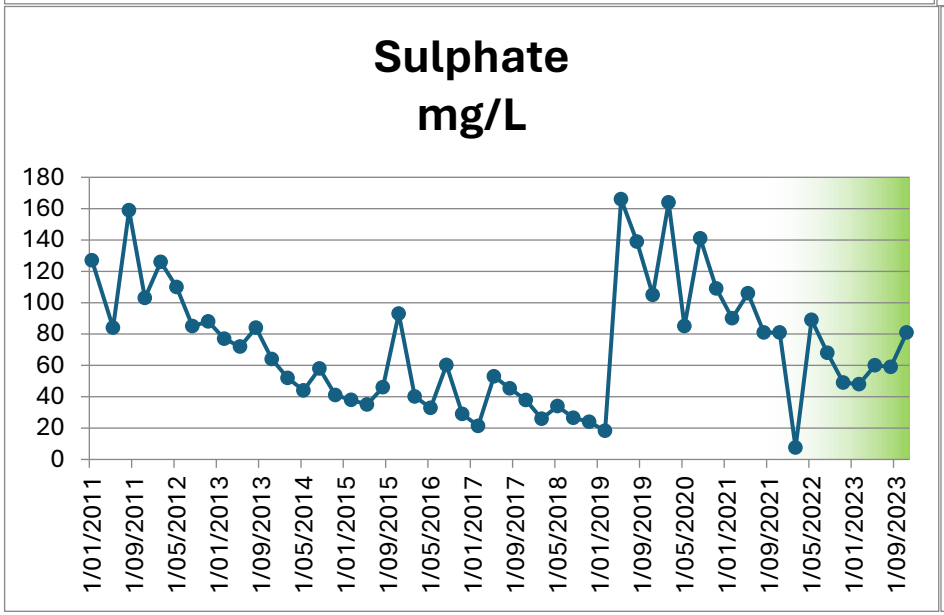

pH
pH units
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

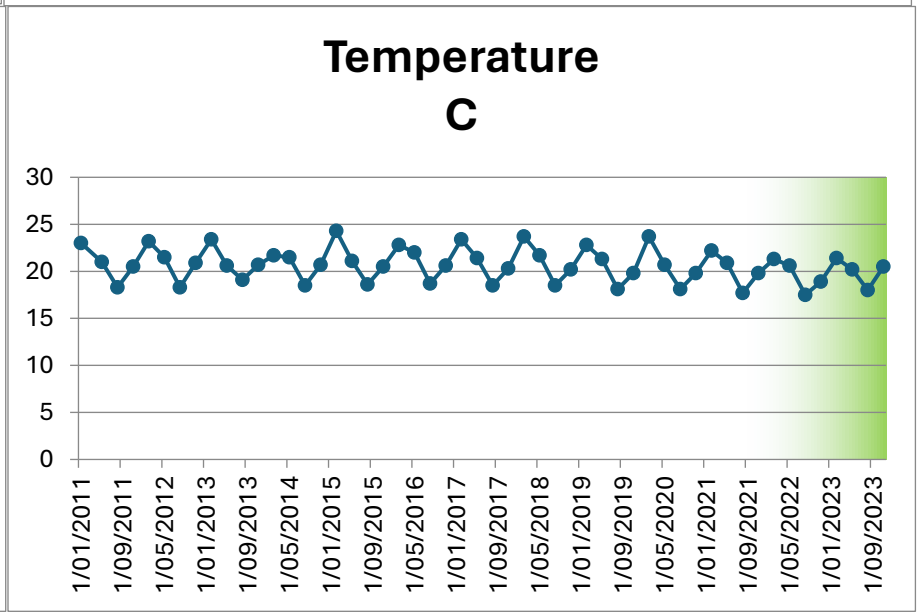

Phosphorus Total
mg/L
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

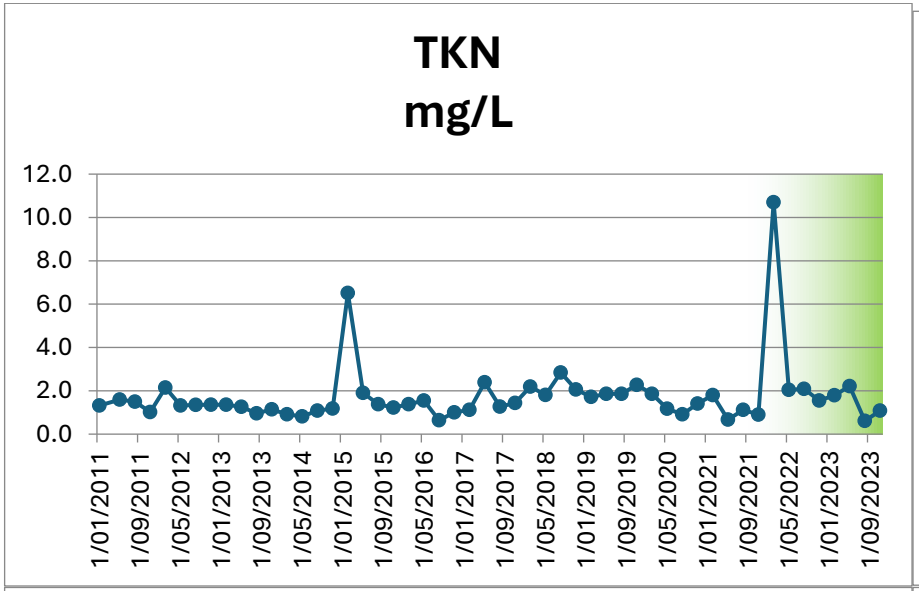

Potassium Total
mg/L
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

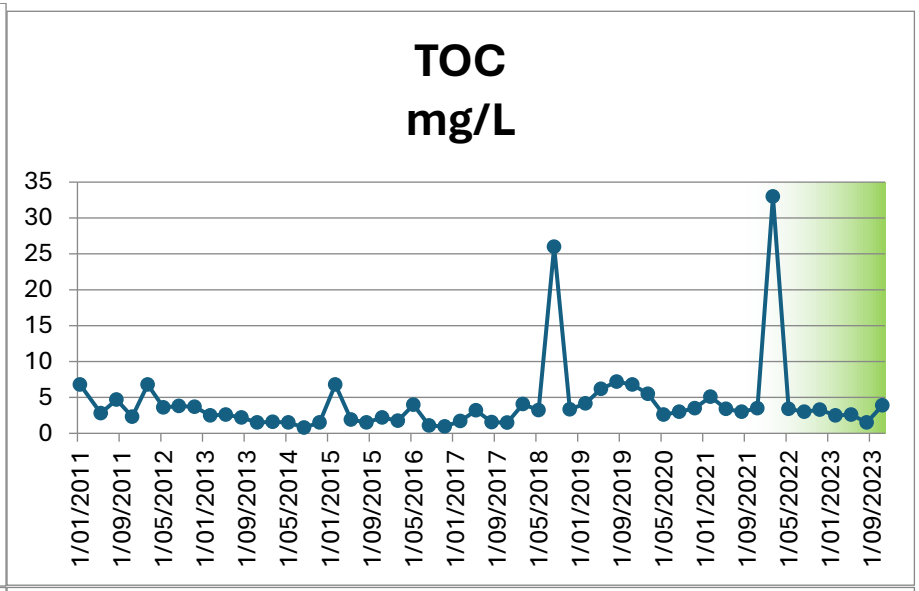

Redox Potential
mV
450
400
350
300
250
200
150
100
50
0
-50
-100
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

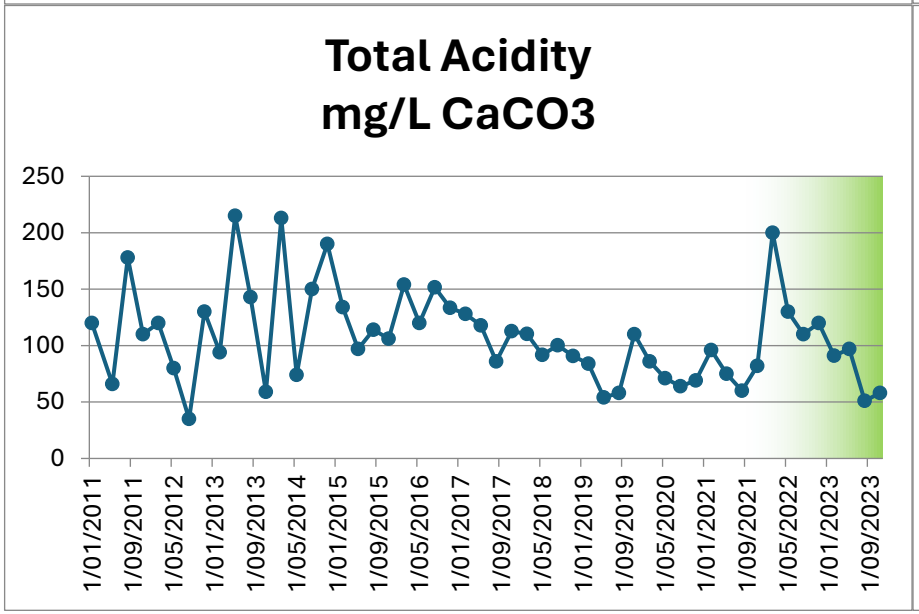

Sodium (Total)
mg/L
120
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

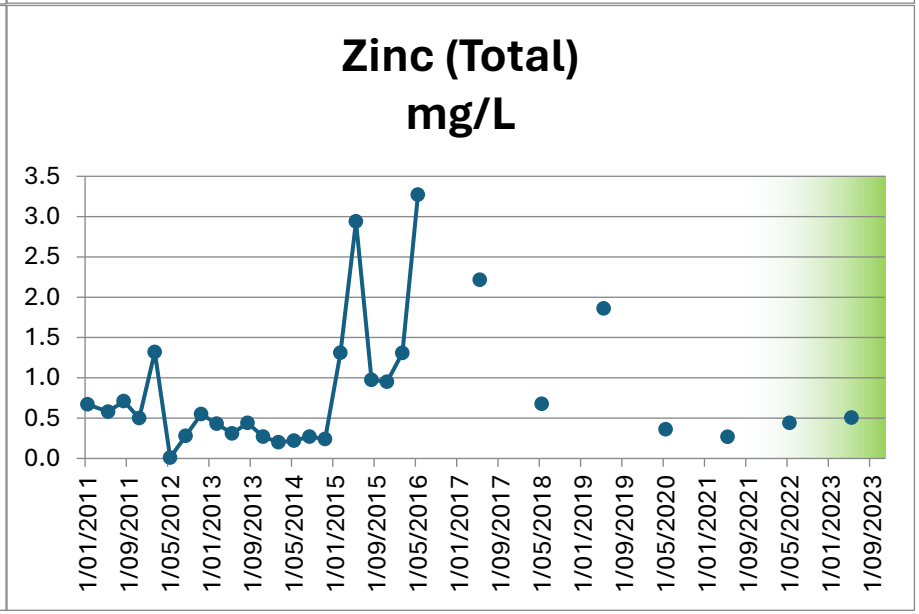

Sulphate
mg/L
180
160
140
120
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Temperature
C
30
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TKN
mg/L
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TOC
mg/L
35
30
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Total Acidity
mg/L CaCO3
250
200
150
100
50
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Zinc (Total)
mg/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

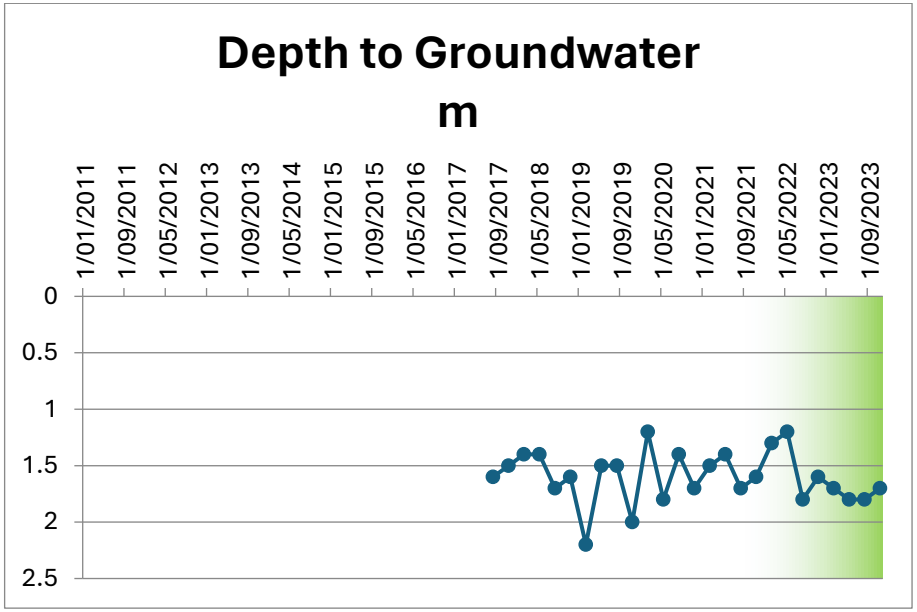
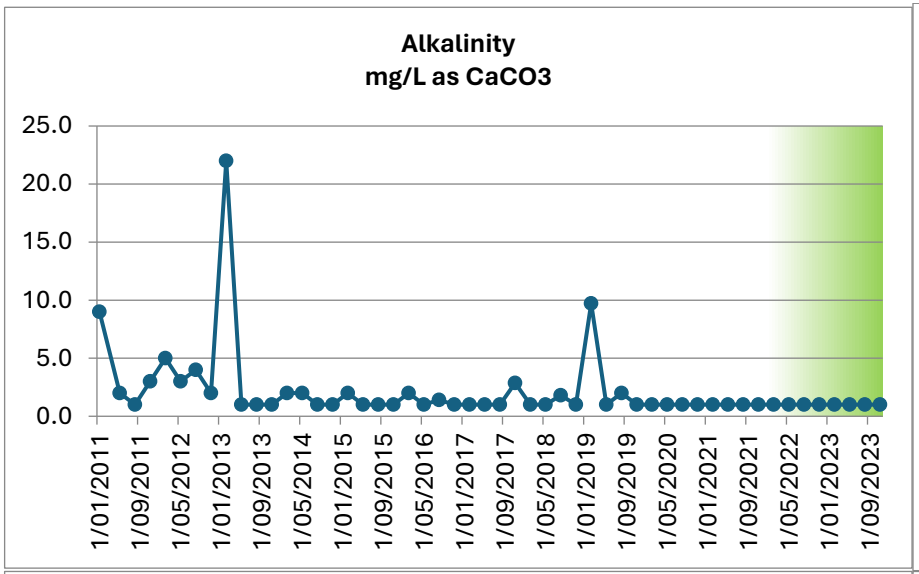

Depth to Groundwater
m
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023
0
0.5
1
1.5
2
2.5

Table 15: Ground Water 7

GW7	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µScm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride mg/L	Iron Total mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	Nitrate N mg/L	Nitrite N mg/L	Nitrogen Oxidised mg/L	Nitrogen Total mg/L	pH pH units	Phenol Alkalinity mg/L as CaCO3	Phosphorus Total mg/L	Potassium Total mg/L	Redox Potential mV	Sodium (Total) mg/L	Sulphate mg/L	Temperature C	TKN mg/L	TOC mg/L	Total Acidity mg/L CaCO3	Zinc (Total) mg/L	Depth to Groundwater m
31/01/2011	9.0	40	0.5	0.0	5.0	6.0	0.0	1.7	112	0.1	0.1	0.0	379	0.1	0.8	0.0	59	0.1	3.6	0.2	0.0	0.1	0.1	0.1	2.2	5.5		0.5	5.0	46	51	4	22	2.2	10.0	99	0.2	
10/05/2011	2.0	14	0.1	0.0	1.0	1.5	0.0	2.6	118	0.0	0.0	0.0	458	0.0	1.9	0.0	17	0.0	4.3	0.1	0.0	0.1	0.1	0.1	0.8	4.2		0.2	5.0	210	64	4	21	0.8	1.4	68	0.1	
9/08/2011	1.0	27	0.1	0.0	1.0	2.1	0.0	2.2	120	0.0	0.0	0.0	428	0.0	2.1	0.1	56	0.0	4.1	0.2	0.0	0.1	0.1	0.1	1.5	4.6		0.3	5.0	229	55	4	18	1.4	1.6	108	0.2	
8/11/2011	3.0	43	0.1	0.0	2.0	1.5	0.0	2.6	140	0.0	0.0	0.0	387	0.1	2.7	0.1	96	0.0	5.9	0.2	0.0	0.1	0.0	0.1	1.3	5.0		0.3	7.0	173	44	5	20	1.3	0.8	92	0.2	
6/02/2012	5.0	53	0.4	0.0	3.0	5.7	0.0	2.2	108	0.1	0.1	0.0	420	0.1	1.0	0.0	76	0.0	5.3	0.2	0.0	0.2	0.0	0.2	2.1	5.2		0.4	5.0	135	66	4	23	2.0	1.0	110	0.2	
8/05/2012	3.0	0	0.1	0.0	2.0	1.0	0.0	2.9	110	0.0	0.0	0.0	411	0.0	3.8	0.1	20	0.0	5.2	1.1	0.0	0.1	0.0	0.1	0.4	4.9		0.2	5.0	302	63	4	21	0.4	0.9	70	0.0	
6/08/2012	4.0	3	0.0	0.0	2.0	3.0	0.0	3.2	114	0.0	0.0	0.0	449	0.0	1.4	0.0	18	0.0	4.7	0.1	0.0	0.1	0.0	0.1	0.4	4.6		0.2	5.0	246	46	4	18	0.3	0.4	64	0.1	
13/11/2012	2.0	8	0.1	0.0	1.0	1.8	0.0	2.9	96	0.0	0.0	0.0	394	0.0	2.8	0.1	15	0.0	5.1	0.1	0.0	3.0	0.0	3.0	3.3	4.7		0.2	5.0	198	48	5	21	0.3	0.7	86	0.1	
13/02/2013	22.0	20	1.3	0.0	13.0	15.0	0.0	1.9	110	0.0	0.0	0.0	483	0.0	1.4	0.0	38	0.0	4.6	0.1	0.0	0.1	0.0	0.1	3.1	5.4		0.4	5.0	-12	59	8	22	3.0	20.0	97	0.3	
14/05/2013	1.0	30	0.1	0.0	1.0	2.7	0.0	2.1	120	0.0	0.0	0.0	432	0.0	2.4	0.0	32	0.0	4.3	0.1	0.0	0.1	0.0	0.1	1.9	4.8		0.4	5.0	140	59	4	21	1.9	0.7	160	0.2	
6/08/2013	1.0	33	0.0	0.0	1.0	1.0	0.0	2.2	110	0.0	0.0	0.0	445	0.0	1.7	0.0	73	0.0	5.2	0.1	0.0	0.1	0.0	0.1	1.0	4.7		0.3	5.0	128	61	4	18	1.0	0.7	162	0.1	
12/11/2013	1.0	39	0.1	0.0	1.0	1.0	0.0	2.3	119	0.0	0.0	0.0	42	0.0	3.0	0.0	102	0.0	5.1	0.1	0.0	0.1	0.0	0.1	1.1	4.7		0.3	5.0	155	69	6	20	1.0	0.4	51	0.1	
11/02/2014	2.0	87	0.1	0.0	1.0	2.4	0.0	2.1	111	0.1	0.1	0.0	405	0.1	3.1	0.0	249	0.1	5.6	0.2	0.0	0.1	0.0	0.1	0.8	4.8		0.5	5.0	143	65	5	22	0.7	0.5	251	0.2	
13/05/2014	2.0	18	0.0	0.0	1.0	1.0	0.0	2.0	117	0.0	0.0	0.0	425	0.0	2.8	0.0	27	0.0	4.9	0.1	0.0	0.1	0.0	0.1	0.5	4.5		0.2	5.0	118	62	4	21	0.4	0.3	77	0.1	
12/08/2014	1.0	25	0.1	0.0	1.0	1.0	0.0	2.6	118	0.0	0.0	0.0	409	0.0	4.9	0.0	62	0.0	5.4	0.1	0.0	0.1	0.0	0.1	0.8	5.2		0.1	5.0	119	63	5	17	0.7	0.4	124	0.1	
10/11/2014	1.0	25	0.1	0.0	1.0	1.2	0.0	2.2	114	0.0	0.0	0.0	402	0.0	2.9	0.0	44	0.0	5.5	0.1	0.0	0.1	0.0	0.1	1.3	4.8		0.2	5.0	138	64	6	20	1.2	0.4	198	0.1	
9/02/2015	2.0	27	0.0	0.0	1.0	1.2	0.0	2.3	110	0.0	0.0	0.0	395	0.0	2.2	0.0	50	0.0	5.3	0.1	0.0	0.5	0.0	0.5	1.6	5.0		0.1	5.0	135	58	5	23	1.1	1.4	100	0.1	
11/05/2015	1.0	37	0.0	0.0	1.0	1.5	0.0	2.6	116	0.0	0.0	0.0	423	0.0	2.9	0.1	60	0.0	6.2	0.1	0.0	0.1	0.0	0.1	1.2	4.7		0.2	5.0	146	68	3	21	1.2	0.3	86	0.1	
11/08/2015	1.0	22	0.0	0.0	1.0	1.0	0.0	2.9	110	0.0	0.0	0.0	389	0.0	2.9	0.0	48	0.0	5.9	0.1	0.0	0.1	0.0	0.1	1.1	4.7		0.2	5.0	185	62	6	18	1.0	0.4	116	0.1	
10/11/2015	1.0	20	0.0	0.0	1.0	1.0	0.0	2.3	100	0.0	0.0	0.0	301	0.0	2.8	0.1	58	0.0	4.9	0.1	0.0	0.7	0.0	0.7	1.2	4.6		0.1	5.0	101	50	6	20	0.5	0.6	79	0.1	
8/02/2016	2.0	55	0.0	0.0	2.0	1.0	0.0	2.3	107	0.1	0.1	0.0	391	0.0	3.2	0.0	144	0.0	5.6	0.2	0.0	0.4	0.0	0.4	1.8	4.7		0.3	5.0	194	60	4	22	1.4	0.6	134	0.1	
9/05/2016	1.0	35	0.0	0.0	1.0	1.5	0.0	2.0	114	0.0	0.0	0.0	406	0.0	2.6	0.0	68	0.0	4.9	0.1	0.0	0.0	0.0	0.0	1.1	4.8		0.2	5.0	196	60	3	22	1.1	0.4	120	0.1	
9/08/2016	1.4		0.0			1.0		2.3	92				354		2.6	0.1			4.9			0.2	0.0	0.2	1.5	4.4		0.2	5.0	238	55	10	19	1.3	0.5	194		
7/11/2016	1.0		0.0			1.8		2.3	120				405		2.7	0.0			5.6			0.0	0.0	0.0	1.6	4.6		0.3	5.0	318	67	5	19	1.5	1.5	132		
7/02/2017	1.0		0.0			1.0		1.8	92				407		2.7	0.0			4.7			0.0	0.0	0.0	1.5	4.6		0.3	5.0	273	58	3	22	1.4	0.7	176		
8/05/2017	1.0	12	0.0	0.0		1.0	0.0	2.1	113	0.0	0.0	0.0	398	0.0	2.8	0.0	16	0.0	5.3	0.1	0.0	0.1	0.0	0.1	1.1	4.4		0.3	5.0	372	60	4	21	1.0	1.0	101	0.1	
8/08/2017	1.0		0.0			1.0		2.6	95				401		4.3	0.0			5.2			0.1	0.0	0.1	0.7	4.4		0.2	5.0	463	56	6	19	0.7	0.5	84		1.6
7/11/2017	2.9		0.0		3.0	1.8		2.5	113				408		2.5	0.0			5.7			0.1	0.0	0.1	1.5	4.3		0.3	5.0	345	67	7	20	1.4	0.5	101		1.6
13/02/2018	1.0		0.0			1.8		2.3	107				412		2.9	0.0			5.8			0.1	0.0	0.1	0.4	4.5		0.1	5.0	293	60	3	22	0.3	1.3	81		1.9
8/05/2018	1.0	14	0.0	0.0		1.0	0.0	2.2	123	0.0	0.0	0.0	407	0.0	3.0	0.0	29	0.0	5.5	0.1	0.0	0.0	0.1	0.1	0.6	4.5		0.1	1.9	333	61	3	22	0.6	0.4	83	0.0	1.4
14/08/2018	1.8		0.0		2.0	1.5		2.5	103				395		4.1	0.1			5.6			0.1	0.0	0.1	1.0	4.4		0.2	1.8	429	62	5	18	0.9	18.0	81		1.8
13/11/2018	1.0		0.0			1.2		2.5	113				404		3.4	0.0			5.8			0.1	0.0	0.1	0.5	4.6		0.1	1.8	223	60	4	20	0.4	0.4	87		1.8
12/02/2019	9.7		0.0		10.0	1.5		2.5	117				412		3.0	0.0			5.8			0.0	0.0	0.0	0.9	4.6	0.0	0.2	2.0	338	60	4	24	0.9	0.8	75		2.2
14/05/2019	1.0	27	0.0	0.0		2.4	0.0	2.8	110	0.0	0.0	0.0	395	0.0	3.2	0.1	47	0.0	5.9	0.1	0.0	0.4	0.0	0.4	1.1	4.5	0.0	0.5	2.0	245	61	6	21	0.7	0.7	83	0.1	1.7
13/08/2019	2.0		0.0		2.0	2.4		3.1	93				369		4.2	0.0			5.9			1.3	0.0	1.3	2.0	4.5	0.0	0.3	1.7	392	54	11	18	0.8	1.5	68		1.7
12/11/2019	1.0		0.0		1.0	1.5		2.7	120				422		2.9	0.1			7.5			0.1	0.0	0.1	1.5	4.6	0.0	0.2	2.1	268	57	4	20	1.5	1.0	90		2.3
25/02/2020	1.0		0.0			1.2		2.5	97				377		3.5	0.1			5.1			1.4	0.0	1.4	2.0	4.4	0.0	0.4	1.8	270	48	10	24	0.6	1.2	74		1.5
12/05/2020	1.0	27	0.0	0.0		3.0	0.0	2.2	120	0.0	0.0	0.0	424	0.0	3.0	0.1	81	0.0	5.6	0.2	0.0	0.1	0.0	0.1	0.9	4.4	0.0	0.2	1.7	292	59	4	21	0.8	0.5	80	0.1	1.8
11/08/2020	1.0		0.0		1.0	1.0		2.5	90				349		3.4	0.1			4.7			0.6	0.0	0.6	1.8	4.5	0.0	0.2	1.5	283	52	23	18	1.2	1.3	86		1.7
10/11/2020	1.0		0.0		1.0	1.5		2.3	110				418		3.3	0.1			5.7			0.1	0.0	0.1	0.5	4.4	0.0	0.1	1.8	293	58	5	20	0.4	0.9	70		1.9
9/02/2021	1.0		0.0			1.0		2.3	120				415		3.0	0.1			5.6			0.1	0.0	0.1	0.7	4.1	0.0	0.2	1.9	314	57	6	22	0.7	0.9	90		1.8
11/05/2021	1.0	16	0.0	0.0		1.2	0.0	2.6	110	0.0	0.0	0.0	408	0.0	2.4	0.1	36	0.0	6.2	0.1	0.0	0.1	0.0	0.1	0.5	4.3	0.0	0.1	2.0	318	59	4	21	0.4	0.5	94	0.1	1.6
10/08/2021	1.0		0.0			1.0		2.6	100				396		3.1	0.1			6.3			0.1	0.0	0.1	0.7	4.4	0.0	0.1	2.1	293	54	10	18	0.6	0.9	85		1.7
8/11/2021	1.0		0.0			1.0		2.6	120				409		2.7	0.0			6.3			0.1	0.0	0.1	0.9	4.4	0.0	0.2	2.0	280	56	8	20	0.9	0.9	91		1.6
8/02/2022	1.0		0.0			1.0		2.5	100				410		3.0	0.0			6.1			0.1	0.0	0.1	0.3	4.4	0.0	0.1	1.9	301	56	5	22	0.2	0.5	100		1.6
10/05/2022	1.0	4	0.0	0.0		1.0	0.0	2.7	96	0.0	0.0	0.0	384	0.0	2.9	0.0	9	0.0	5.6	0.1	0.0	0.0	0.0	0.0	0.4	4.4	0.0	0.1	1.6	312	53	19	21	0.3	1.6	110	0.1	1.4
9/08/2022	1.0		0.0			1.2		2.6	100				406		3.2	0.0			6.3			0.1	0.0	0.1	0.6	4.4	0.0	0.3	1.8	314	57	10	18	0.5	0.7	100		1.7
8/11/2022	1.0		0.0			1.0		2.5	120				419		3.1	0.0			6.2			0.1	0.0	0.1	0.8	4.4	0.0	0.5	2.0	277	55	5	19	0.8	1.0	87		1.6
13/02/2023	1.0		0.0		1.0	1.0		2.5	130				406		2.8	0.0			6.6			0.1	0.0	0.1	0.5	4.4	0.0	0.1	2.2	282	56	4	22	0.4	0.6	81		1.9
8/05/2023	1.0	17	0.0	0.0	1.0	1.0	0.0	2.6	120	0.0	0.0	0.0	399	0.0	2.9	0.0	36	0.0	6.1	0.1	0.0	0.0	0.0	0.0	0.6	4.5	0.0	0.2	2.2	240	59	4	21	0.6	1.0	75	0.1	2.0
8/08/2023	1.0		0.0		0.0	1.0		2.3	95				364		3.5	0.0			5.8			0.1	0.0	0.1	0.9	4.4	0.0	0.2	2.1	287	50	6	18	0.9	0.7	67		2.0
13/11/2023	1.0		0.3		1.0	1.0		2.8	91				365		3.0	0.0			5.5			0.0	0.0	0.0	1.2	4.5	0.0	0.3	1.8	254	49	22	20	1.1	1.5	69		2.0
2023 Min	**1.00**	**17.00**	**0.02**	**0.01**	**0.00**	**1.00**	**0.00**	**2.30**	**91.00**	**0.01**	**0.01**	**0.01**	**364.00**	**0.01**	**2.80**	**0.02**	**36.10**	**0.01**	**5.50**	**0.13**	**0.01**	**0.04**	**0.02**	**0.04**	**0.47**	**4.40**	**0.00**	**0.08**	**1.80**	**240.20**	**49.00**	**3.90**	**17.90**	**0.41**	**0.60**	**67.00**	**0.14**	**1.90**
2023 Max	**1.00**	**17.00**	**0.28**	**0.01**	**1.00**	**1.00**	**0.00**	**2.80**	**130.00**	**0.01**	**0.01**	**0.01**	**406.00**	**0.01**	**3.50**	**0.04**	**36.10**	**0.01**	**6.60**	**0.13**	**0.01**	**0.06**	**0.02**	**0.06**	**1.18**	**4.50**	**0.00**	**0.27**	**2.20**	**287.00**	**59.00**	**22.00**	**21.70**	**1.14**	**1.50**	**81.00**	**0.14**	**2.00**
2023 Mean	**1.00**	**17.00**	**0.09**	**0.01**	**0.75**	**1.00**	**0.00**	**2.55**	**109.00**	**0.01**	**0.01**	**0.01**	**383.50**	**0.01**	**3.05**	**0.03**	**36.10**	**0.01**	**6.00**	**0.13**	**0.01**	**0.05**	**0.02**	**0.05**	**0.81**	**4.45**	**0.00**	**0.17**	**2.08**	**265.83**	**53.50**	**8.93**	**20.03**	**0.76**	**0.95**	**73.00**	**0.14**	**1.98**
Long-term Average	**2.13**	**26.86**	**0.07**	**0.01**	**2.03**	**1.83**	**0.00**	**2.43**	**110.07**	**0.03**	**0.02**	**0.01**	**396.37**	**0.03**	**2.85**	**0.04**	**57.49**	**0.02**	**5.47**	**0.16**	**0.01**	**0.22**	**0.02**	**0.22**	**1.14**	**4.60**	**0.00**	**0.23**	**3.67**	**241.62**	**57.93**	**6.20**	**20.35**	**0.93**	**1.68**	**100.89**	**0.12**	**1.76**


Alkalinity
mg/L as CaCO3
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20.0
15.0
10.0
5.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
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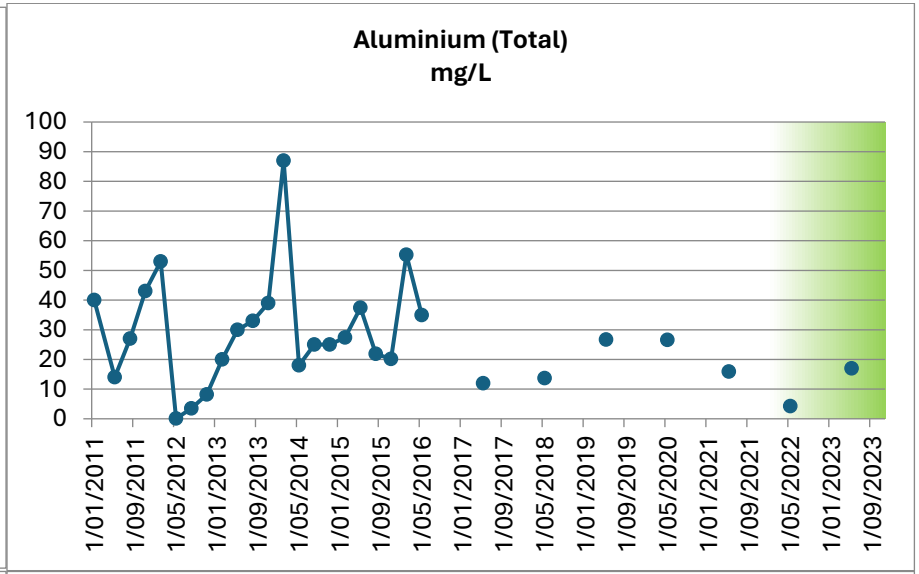
1/01/2023
1/09/2023


Aluminium (Total)
mg/L
100
90
80
70
60
50
40
30
20
10
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
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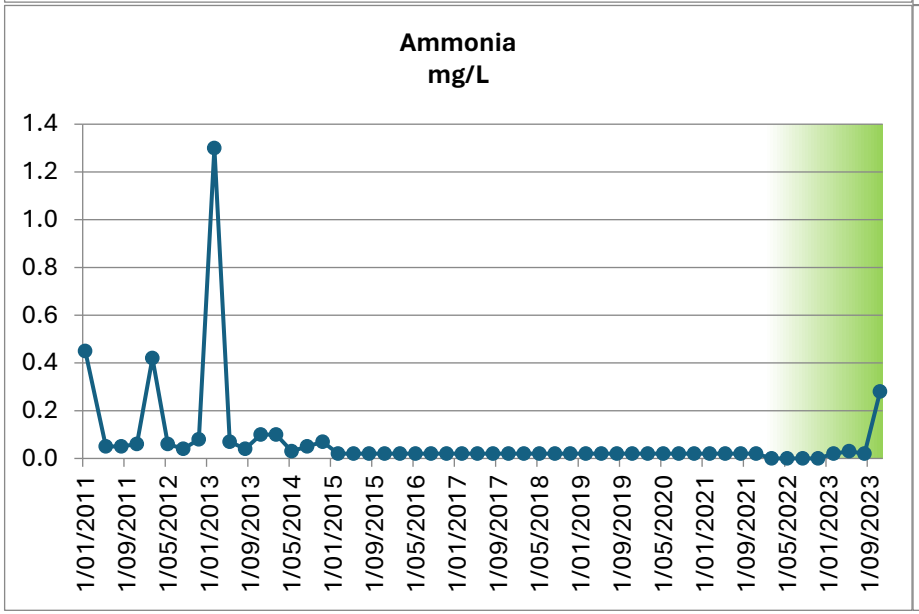
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Ammonia
mg/L
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1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/01/2011
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1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
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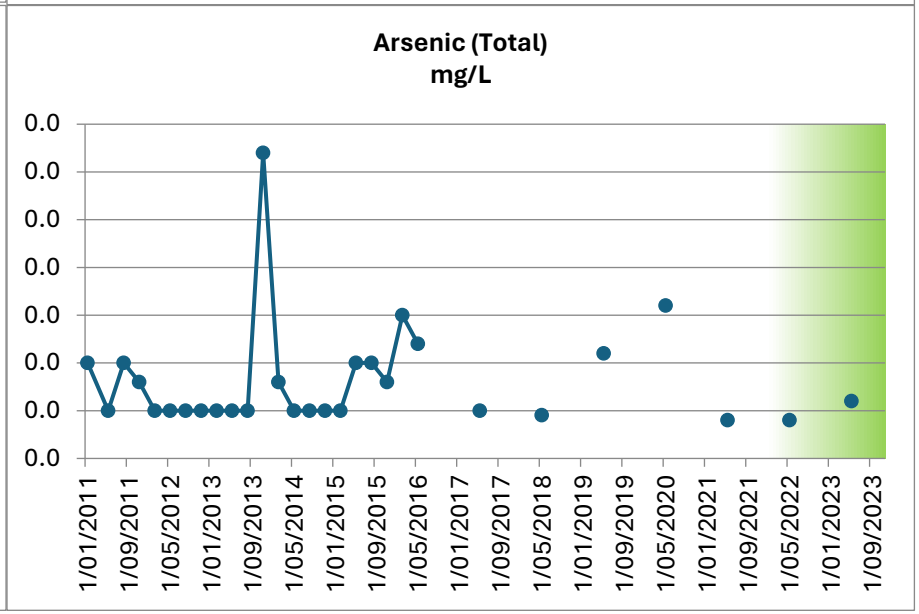
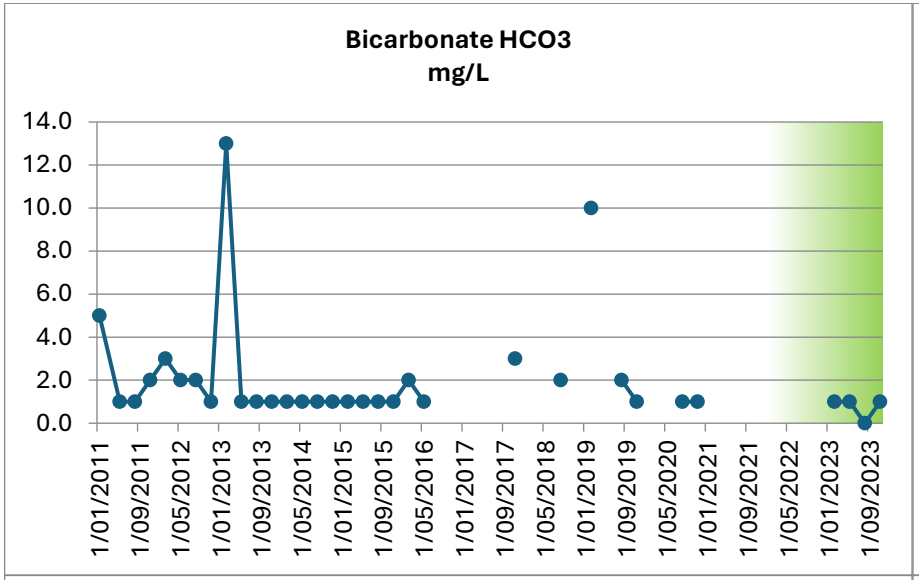
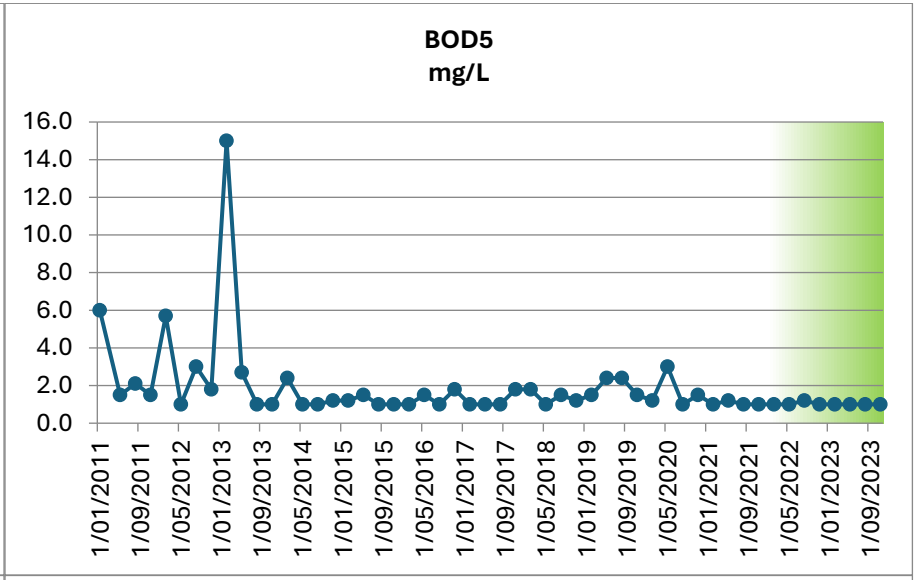
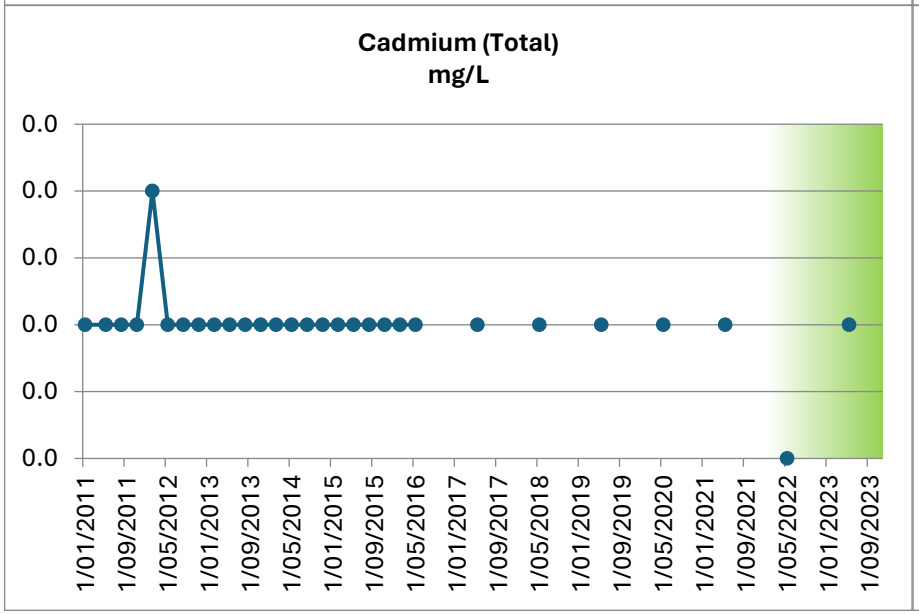
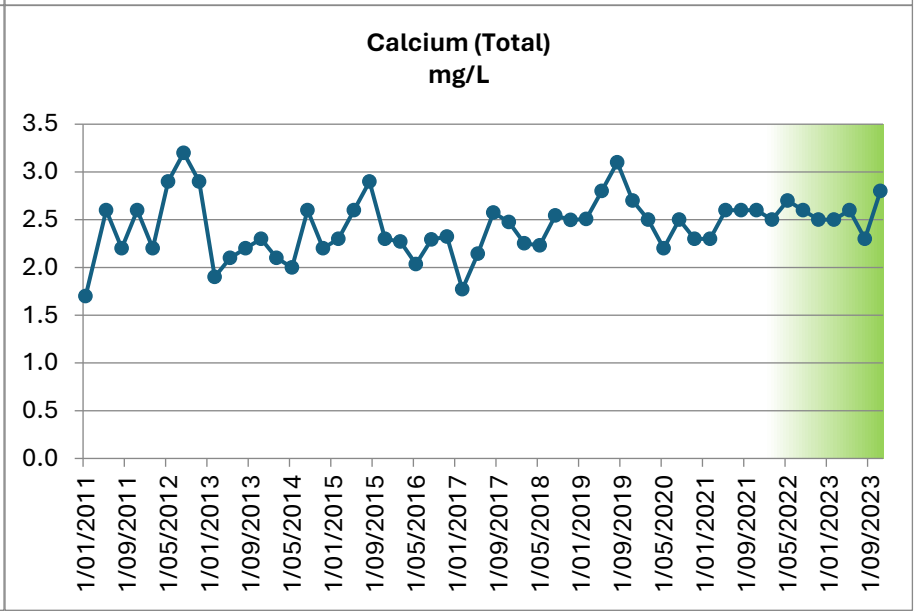
1/01/2023
1/09/2023

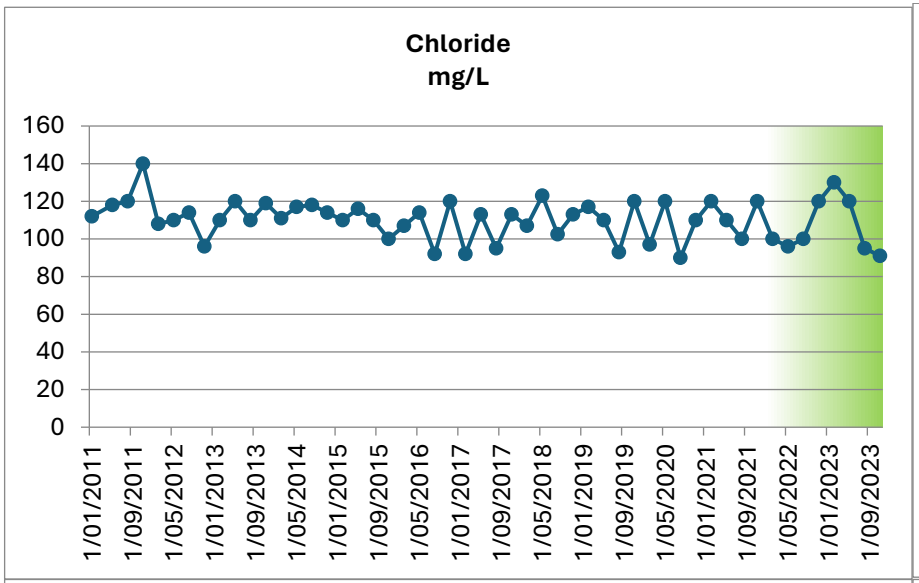

Arsenic (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

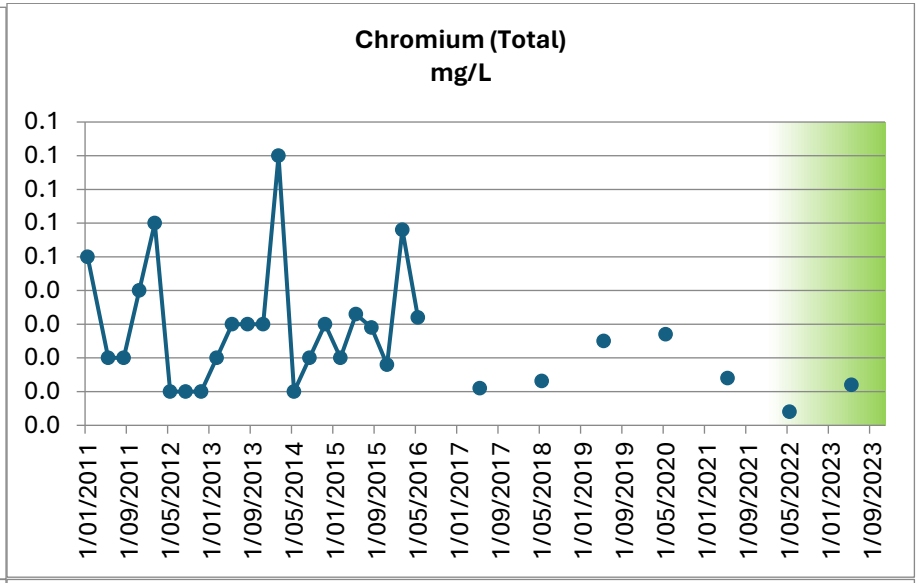

Bicarbonate HCO3
mg/L
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

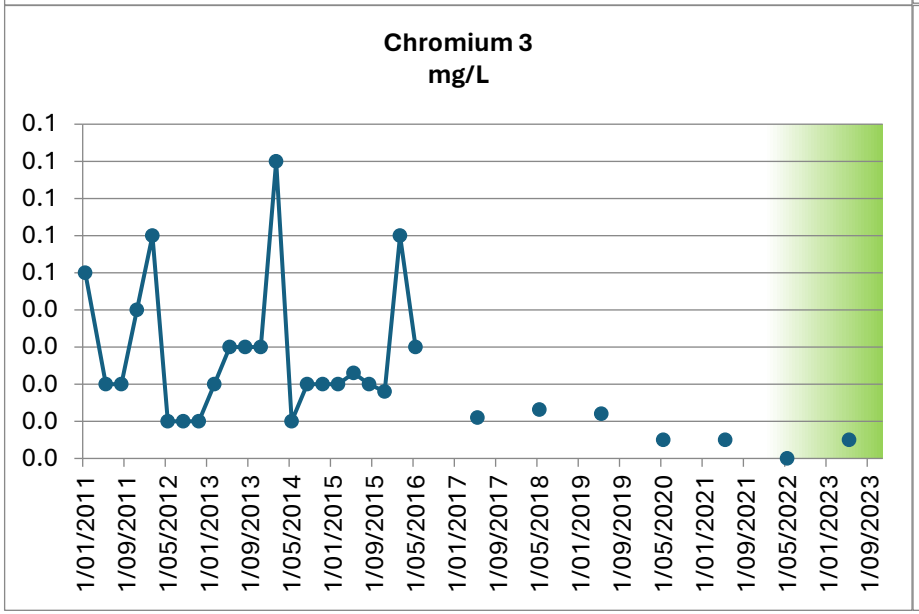

BOD5
mg/L
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

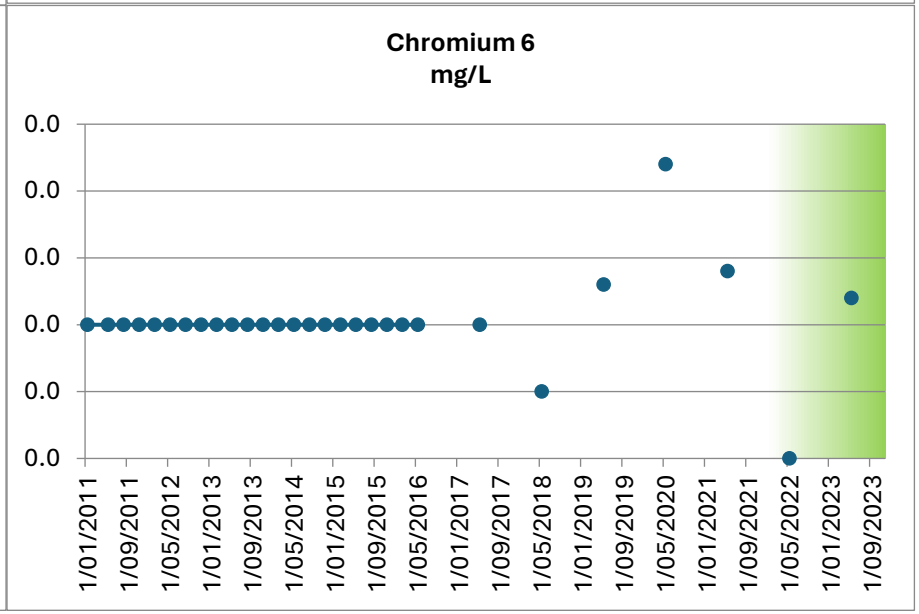

Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

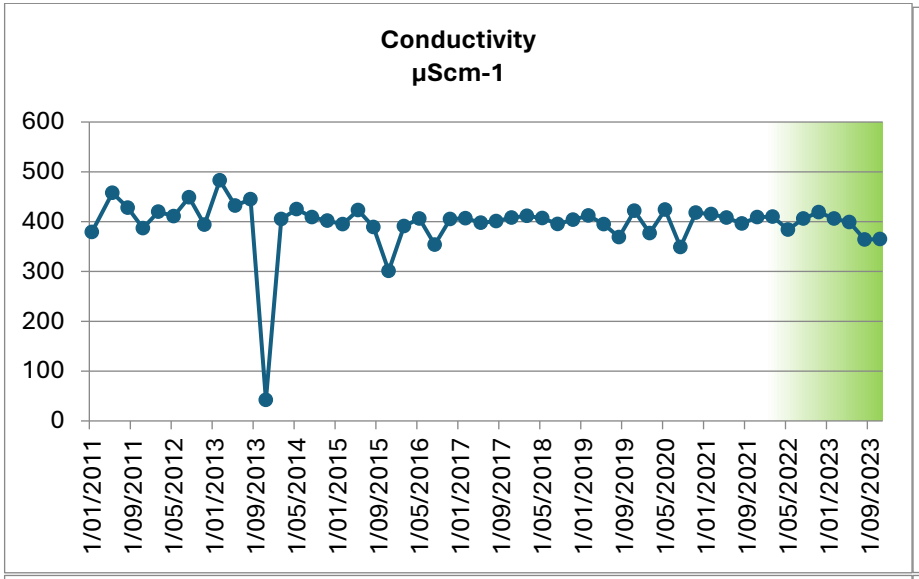

Calcium (Total)
mg/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

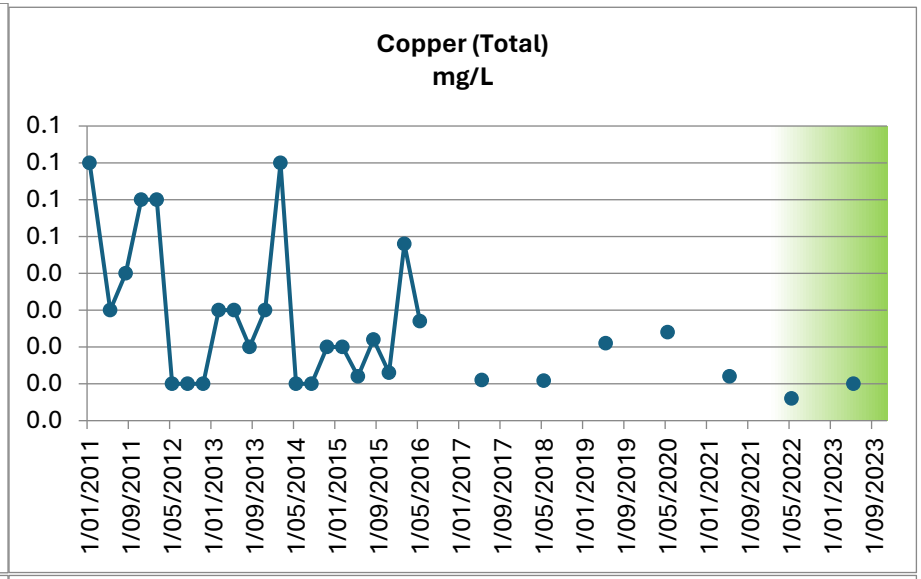

Chloride
mg/L
160
140
120
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

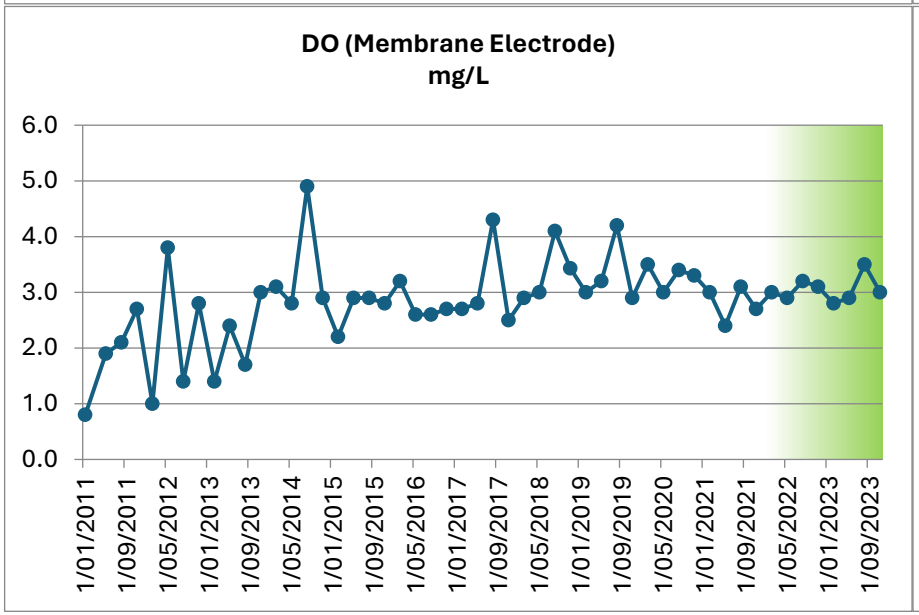

Chromium (Total)
mg/L
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

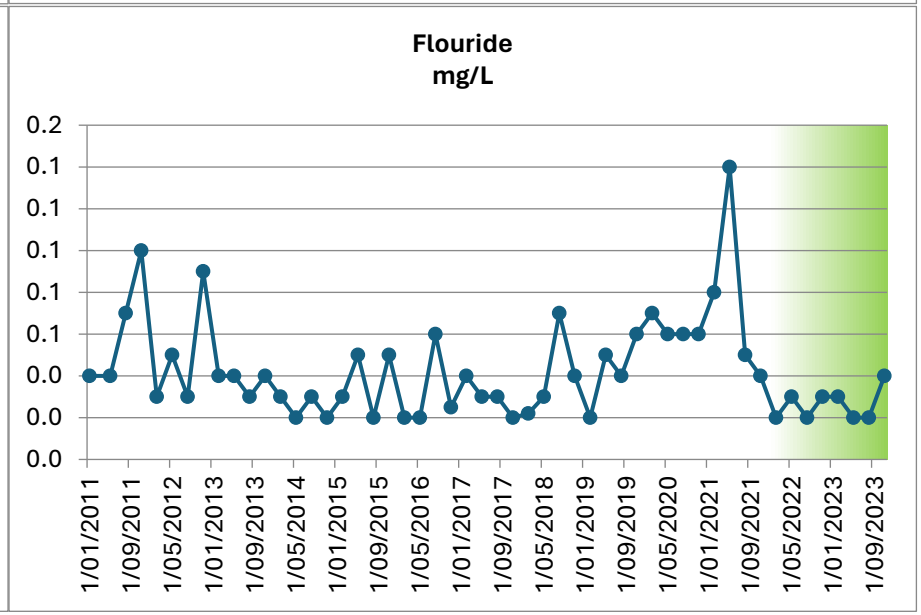

Chromium 3
mg/L
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

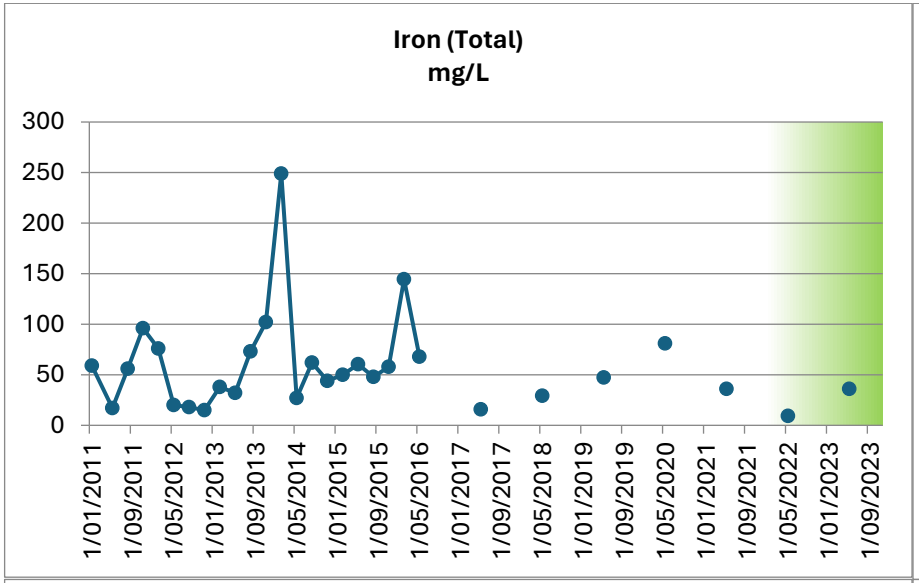

Chromium 6
mg/L
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

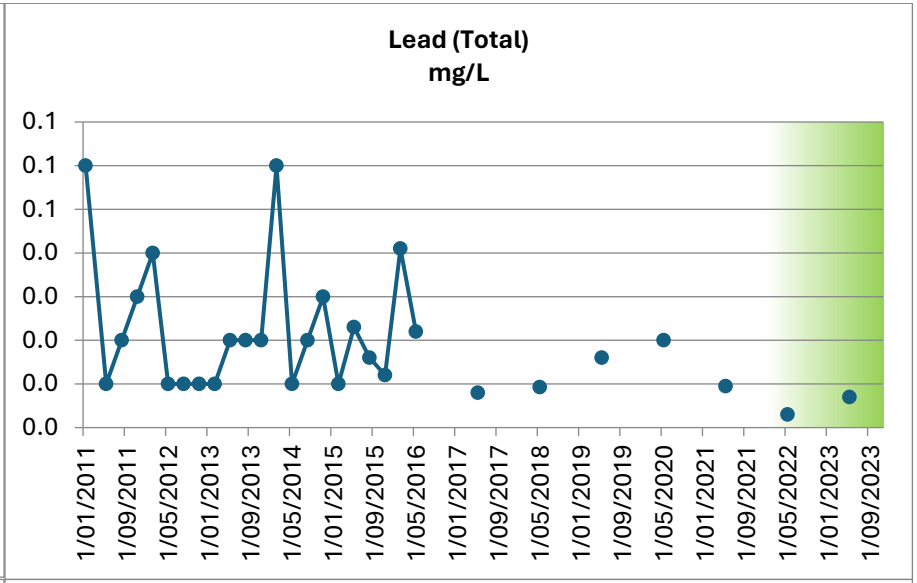

Conductivity
µScm-1
600
500
400
300
200
100
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

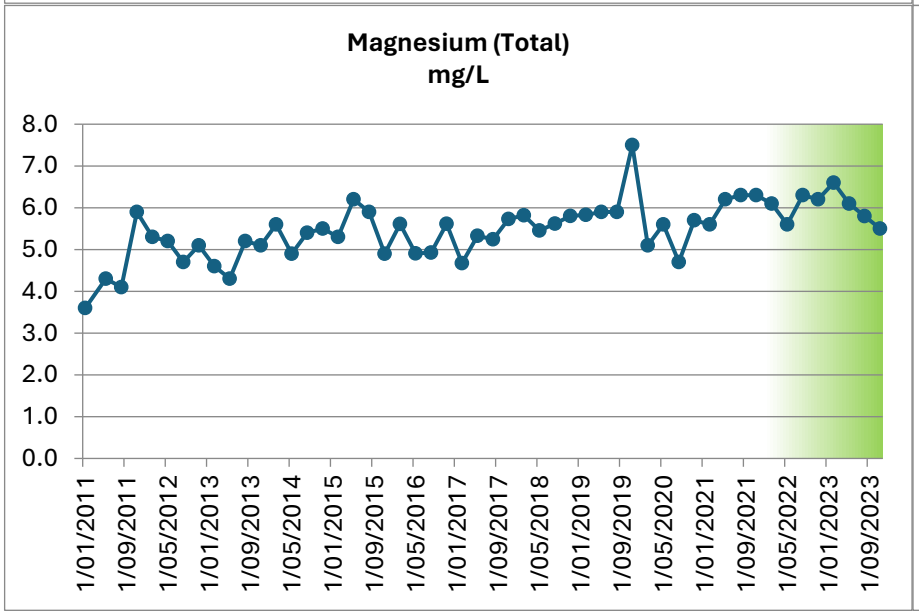

Copper (Total)
mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

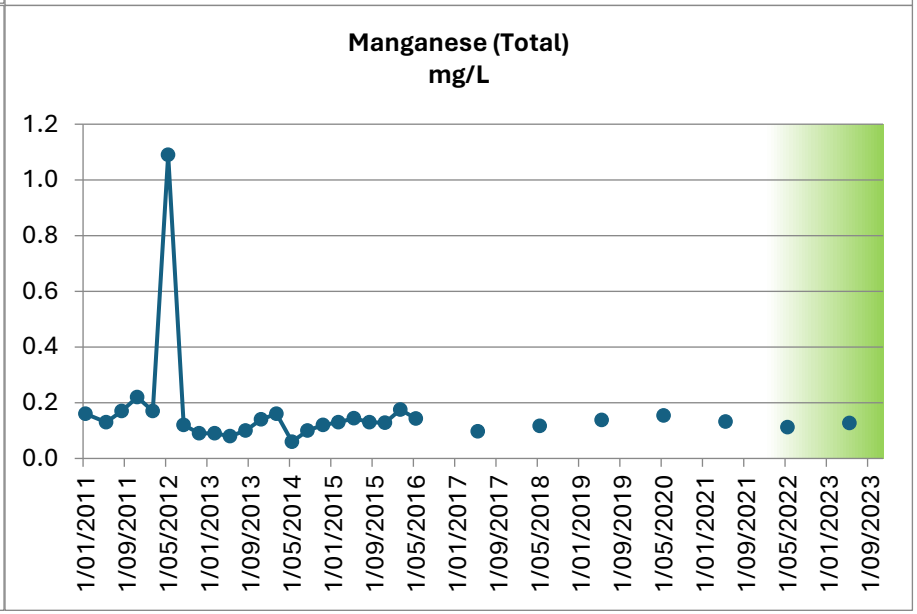

DO (Membrane Electrode)
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

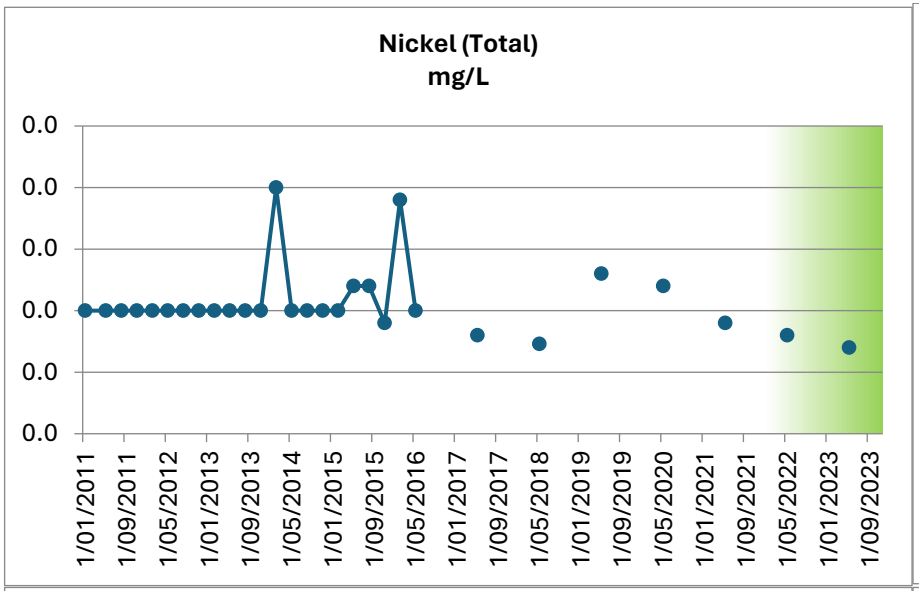

Flouride
mg/L
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

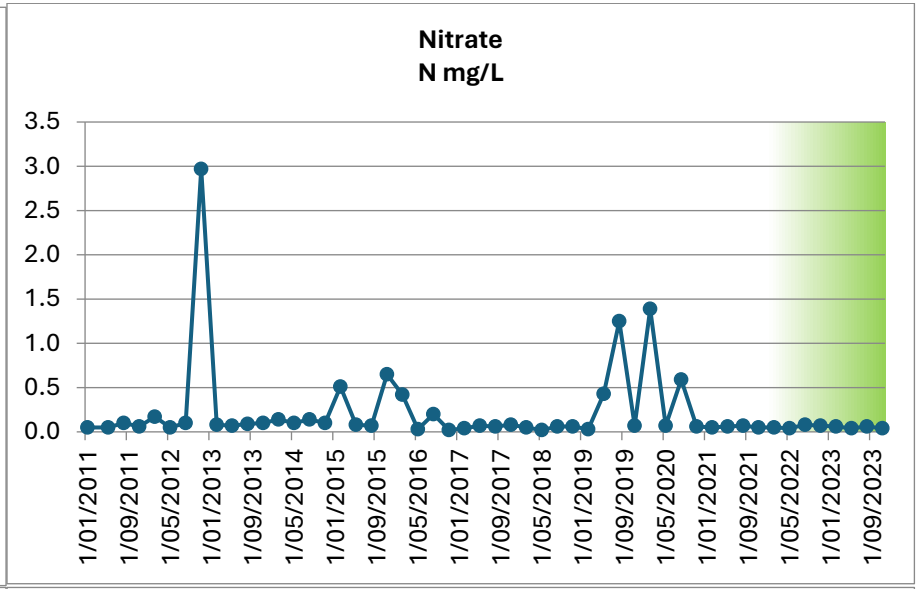

Iron (Total)
mg/L
300
250
200
150
100
50
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

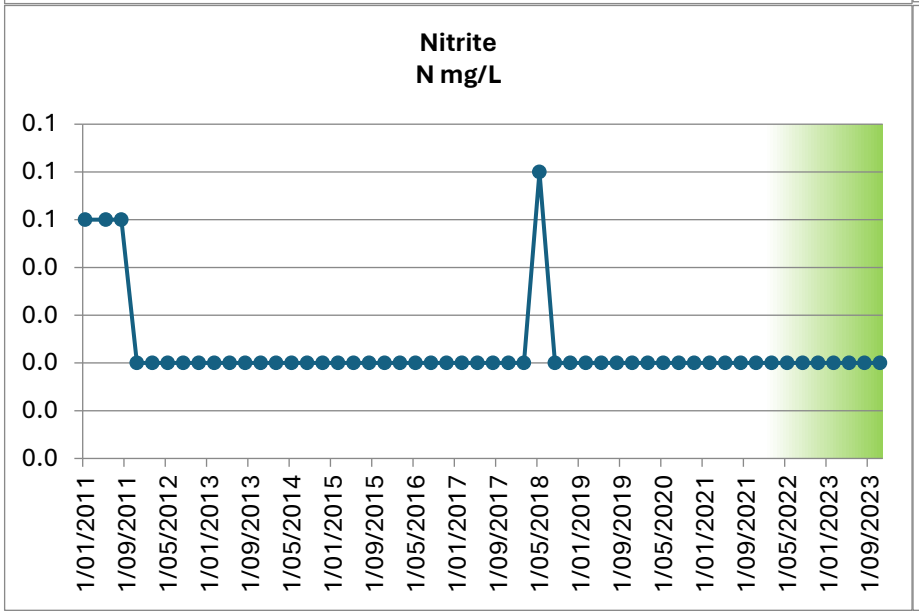

Lead (Total)
mg/L
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

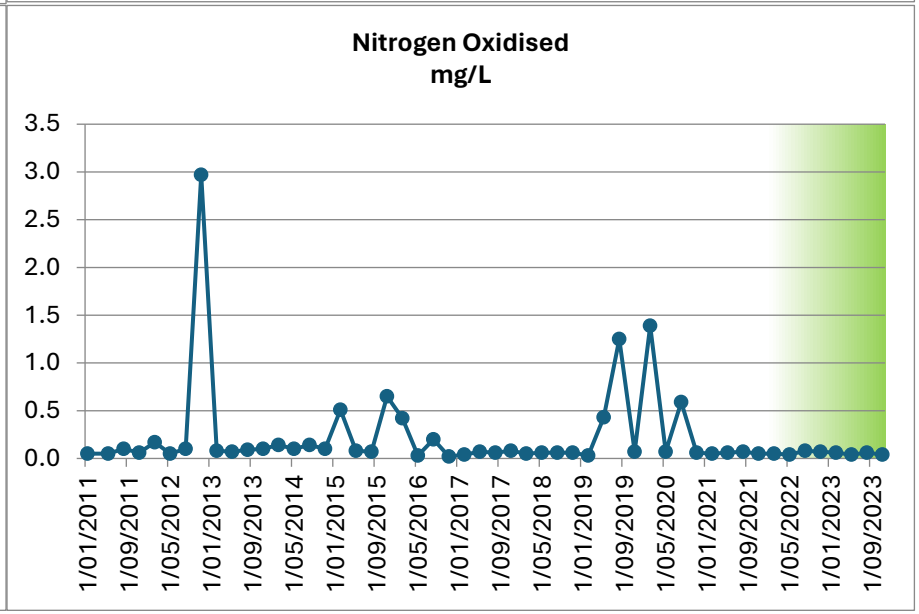

Magnesium (Total)
mg/L
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

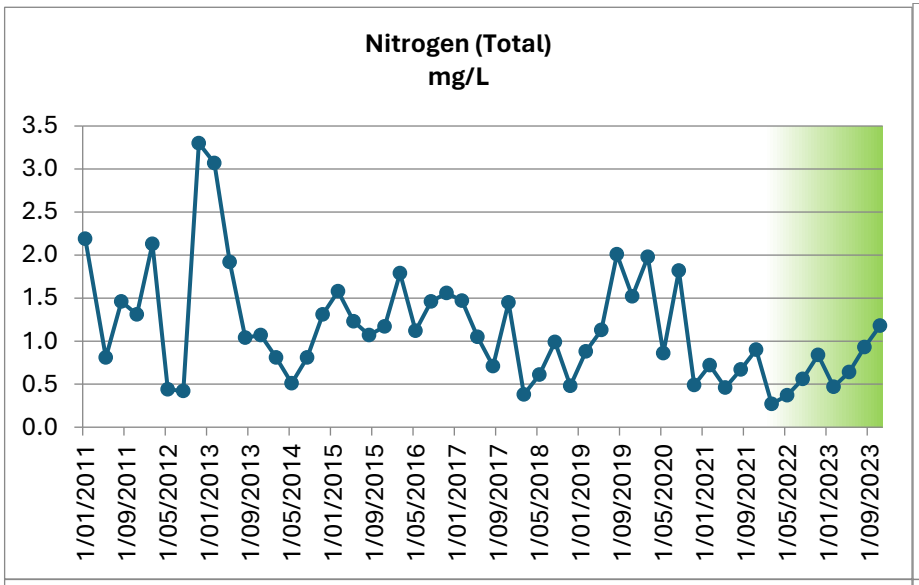

Manganese (Total)
mg/L
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

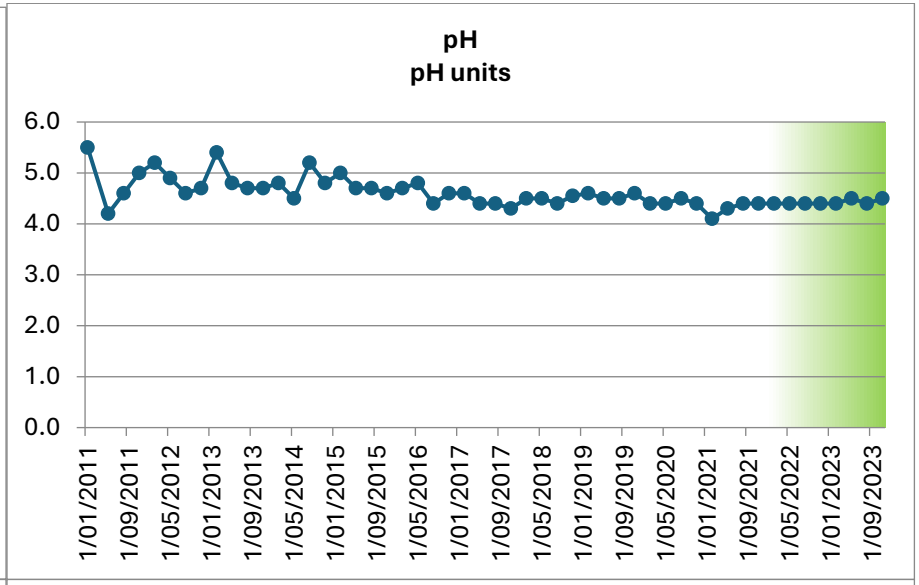

Nickel (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

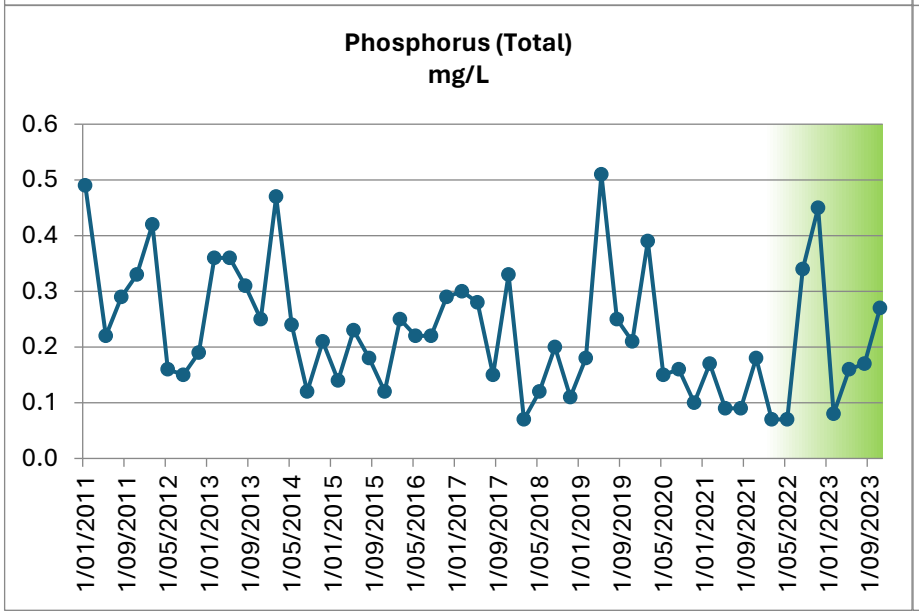

Nitrate
N mg/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

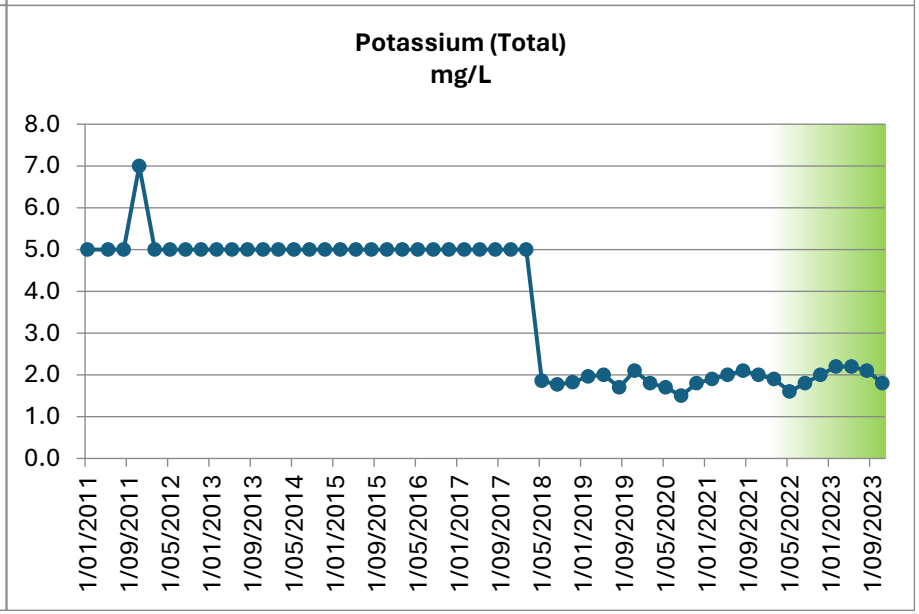

Nitrite
N mg/L
0.1
0.1
0.1
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

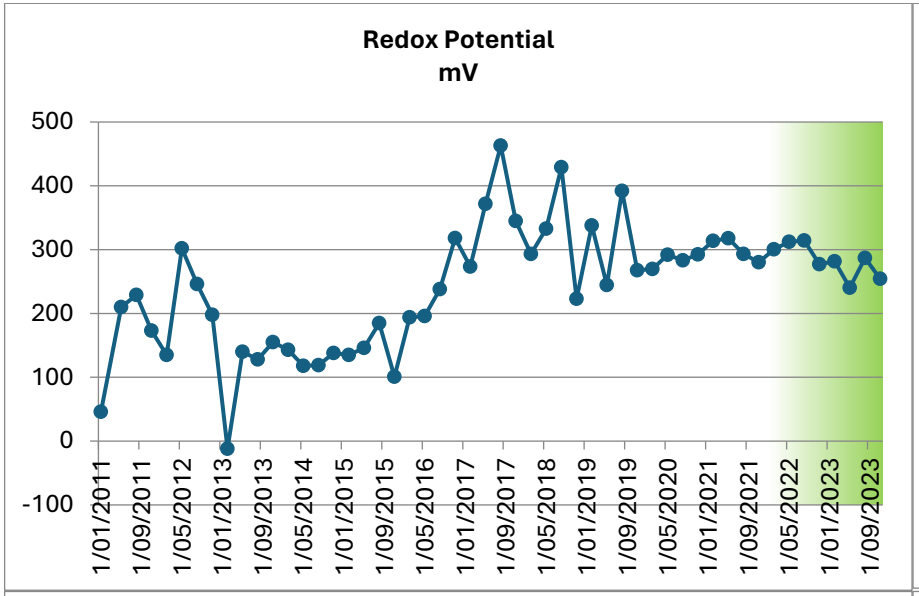

Nitrogen Oxidised
mg/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

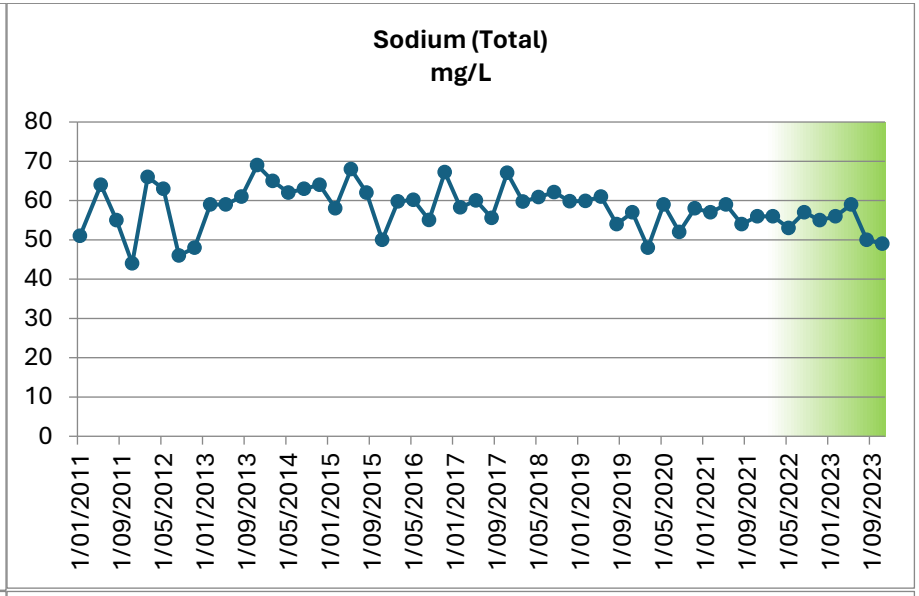

Nitrogen (Total)
mg/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

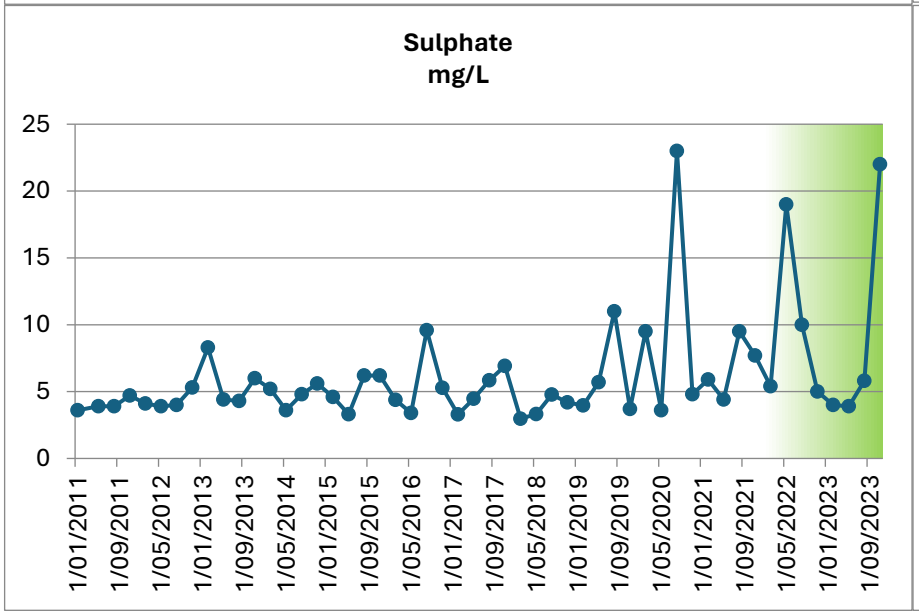

pH
pH units
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

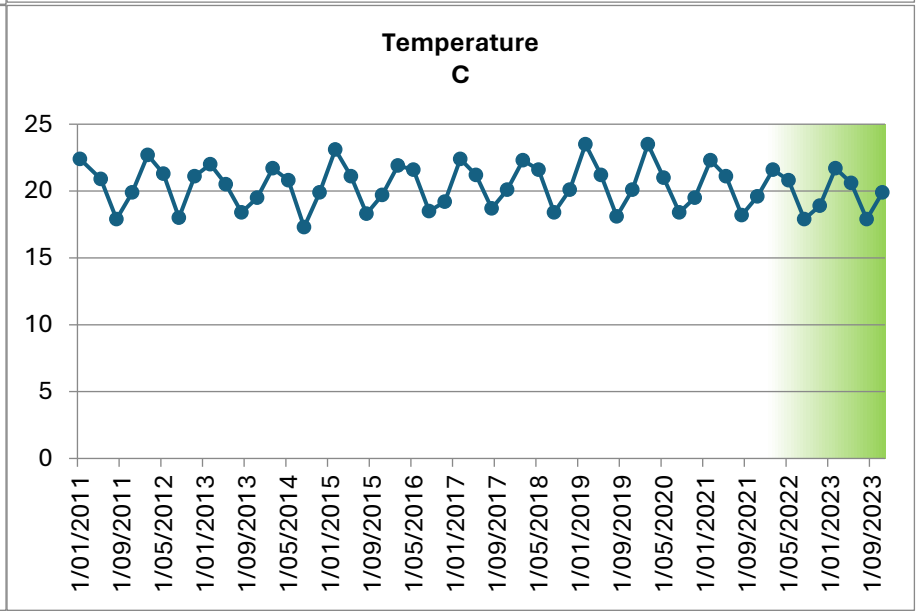

Phosphorus (Total)
mg/L
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

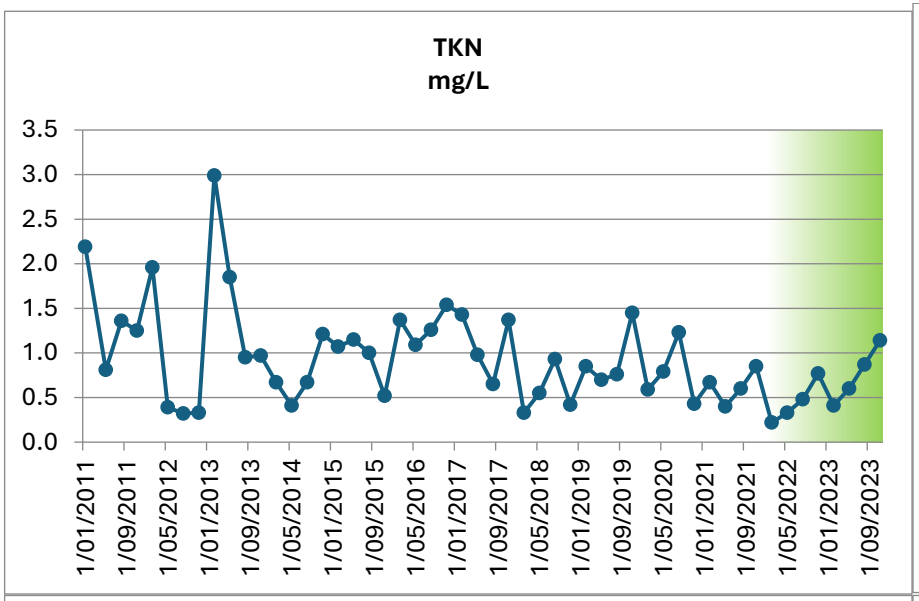

Potassium (Total)
mg/L
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

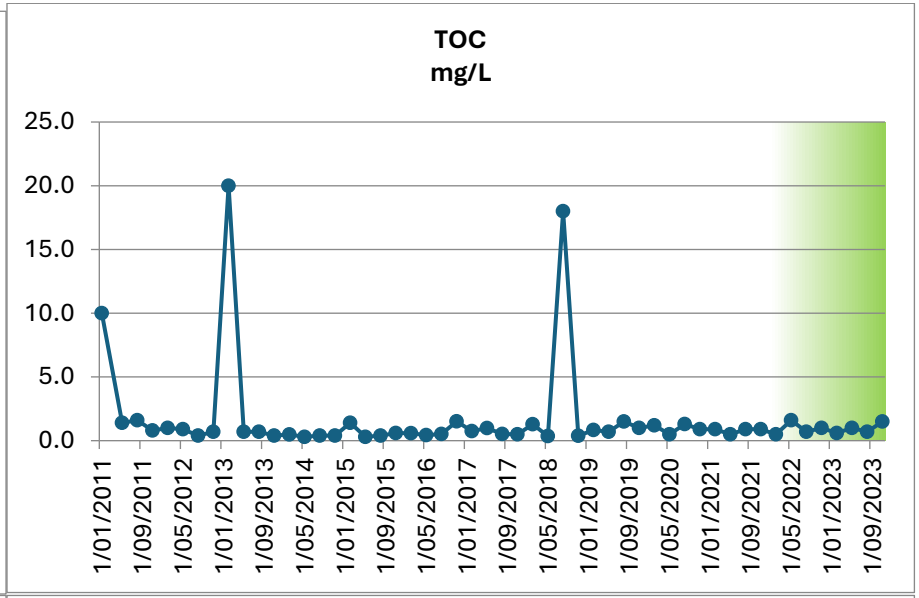

Redox Potential
mV
500
400
300
200
100
0
-100
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

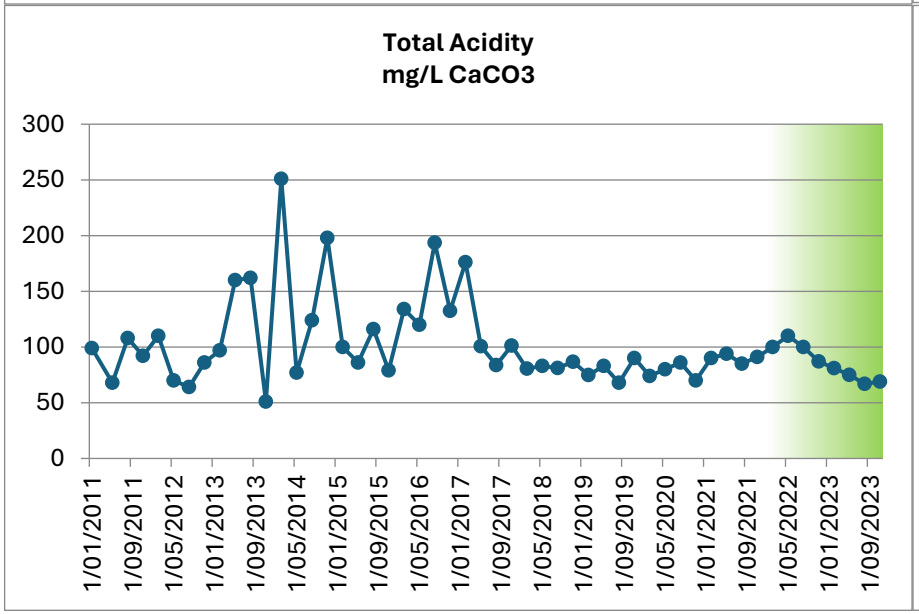

Sodium (Total)
mg/L
80
70
60
50
40
30
20
10
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

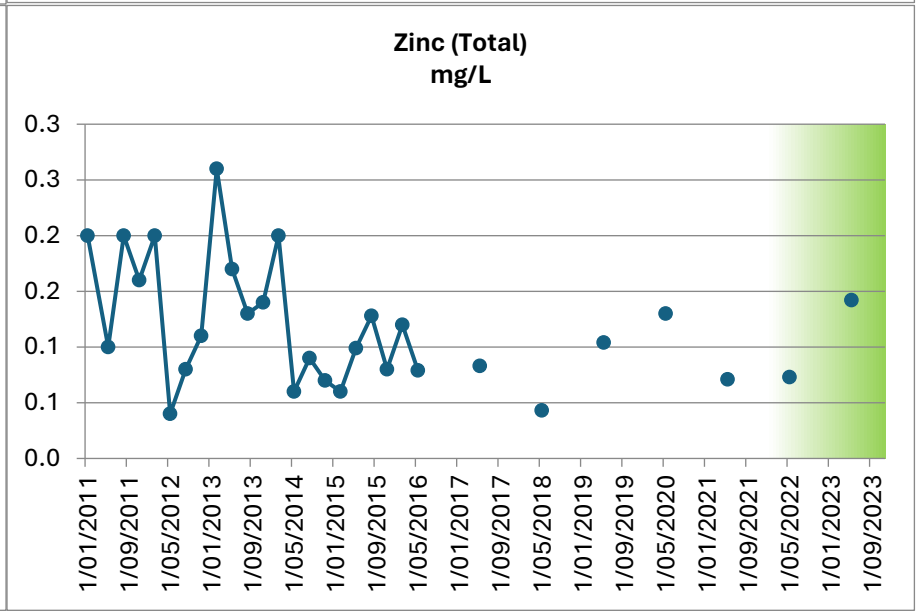

Sulphate
mg/L
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Temperature
C
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TKN
mg/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TOC
mg/L
25.0
20.0
15.0
10.0
5.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Total Acidity
mg/L CaCO3
300
250
200
150
100
50
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Zinc (Total)
mg/L
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

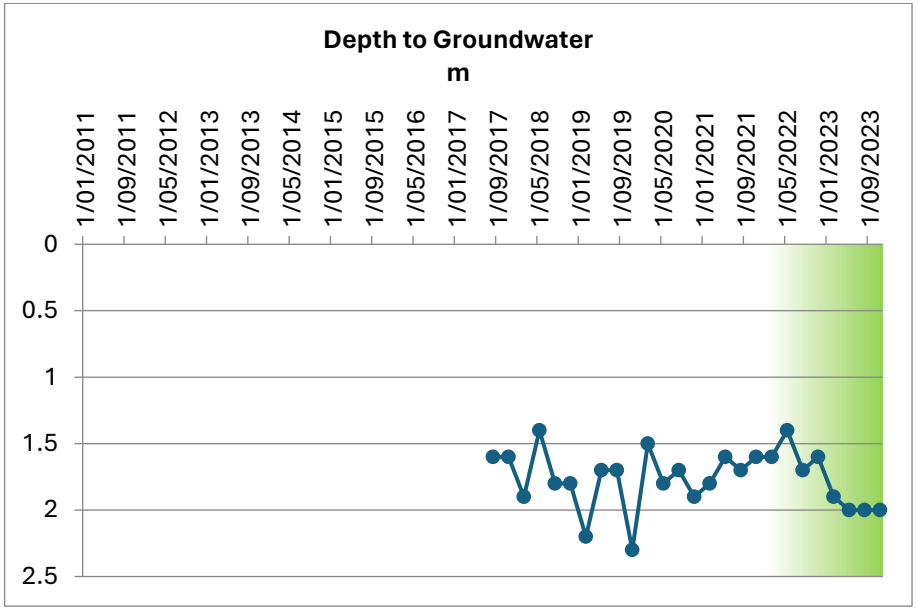
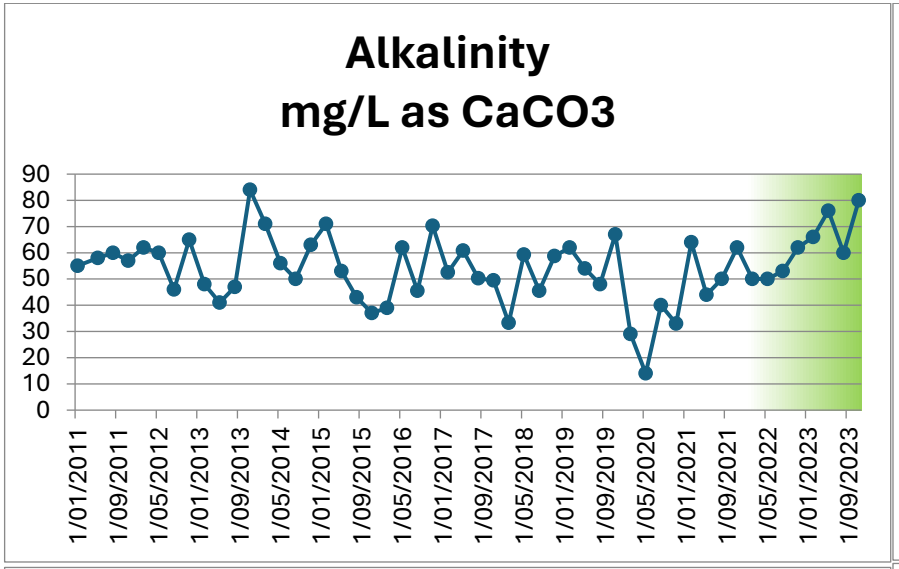
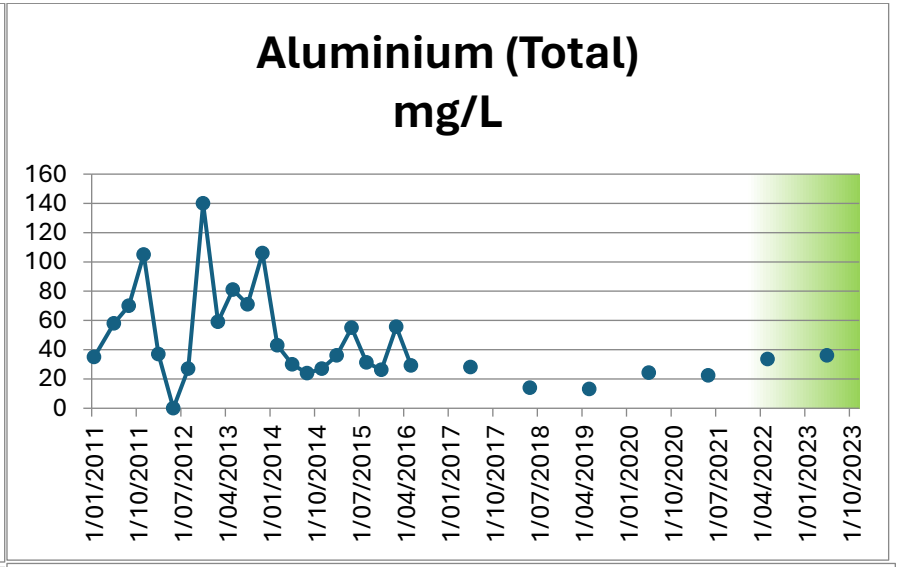
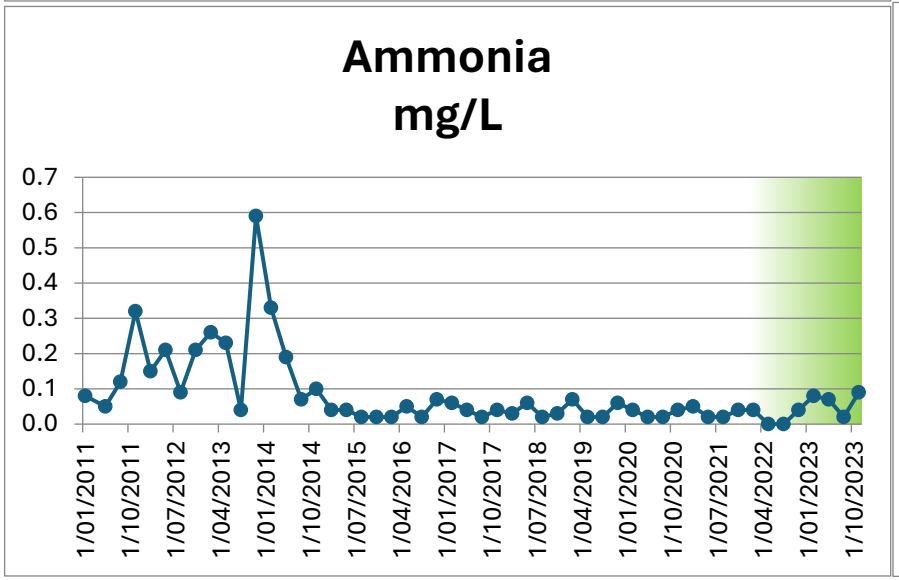

Depth to Groundwater
m
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023
0
0.5
1
1.5
2
2.5

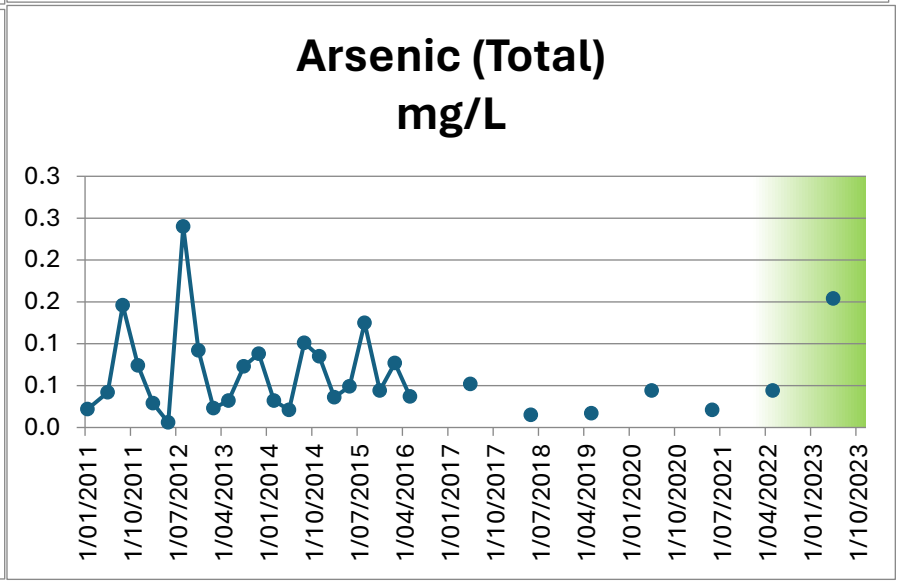
Table 16: Ground Water 8

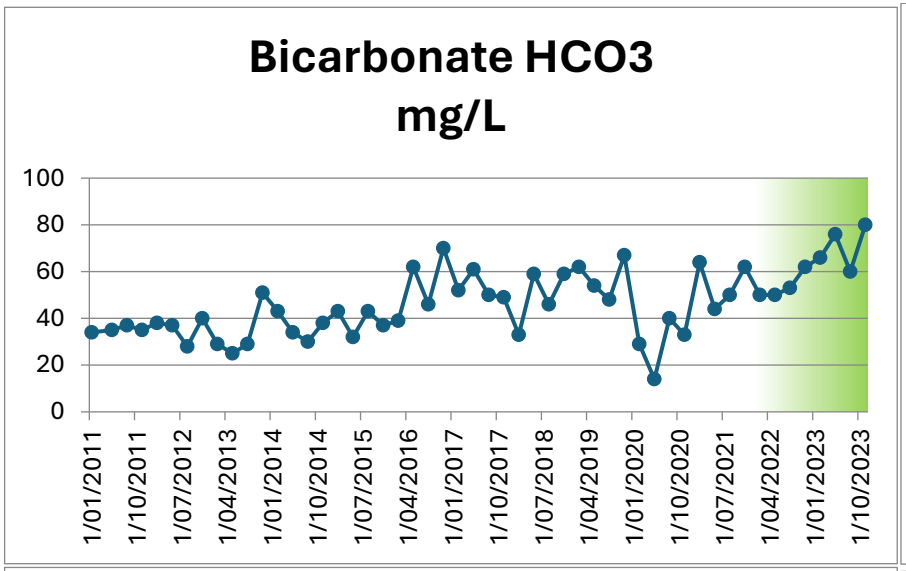
GW8	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µScm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride mg/L	Iron Total mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	Nitrate N mg/L	Nitrite N mg/L	Nitrogen Oxidised mg/L	Nitrogen Total mg/L	pH pH units	Phenol Alkalinity mg/L as CaCO3	Phosphorus Total mg/L	Potassium Total mg/L	Redox Potential mV	Sodium (Total) mg/L	Sulphate mg/L	Temperature C	TKN mg/L	TOC mg/L	Total Acidity mg/L CaCO3	Zinc (Total) mg/L	Depth to Groundwater m
31/01/2011	55	35	0.1	0.0	34	1.6	0.0	5.7	99	0.0	0.0	0.0	438	0.1	2.1	0.2	80	0.0	5	0.6	0.0	0.1	0.1	0.1	0.7	6.4		0.2	5.0	-17	62	18	23	0.7	5.3	44	0.1	
10/05/2011	58	58	0.1	0.0	35	1.2	0.0	5.6	106	0.1	0.1	0.0	539	0.1	0.9	0.2	108	0.0	6	0.8	0.0	0.1	0.1	0.1	1.1	5.7		0.3	5.0	101	77	15	20	1.1	1.9	76	0.2	
9/08/2011	60	70	0.1	0.1	37	2.7	0.0	6.0	120	0.1	0.1	0.0	543	0.1	1.0	0.1	163	0.0	6	1.0	0.0	0.1	0.1	0.1	1.2	6.2		0.3	5.0	211	72	11	19	1.1	2.0	101	0.3	
8/11/2011	57	105	0.3	0.1	35	4.8	0.0	7.6	132	0.1	0.1	0.0	546	0.1	0.9	0.2	203	0.0	8	1.4	0.1	0.2	0.0	0.2	1.4	6.4		0.5	9.0	-35	57	16	21	1.1	1.5	95	0.4	
6/02/2012	62	37	0.2	0.0	38	1.8	0.0	6.7	109	0.0	0.0	0.0	520	0.0	1.9	0.2	70	0.0	7	0.7	0.0	0.1	0.0	0.1	0.9	6.3		0.2	5.0	102	87	12	23	0.7	1.3	65	0.3	
8/05/2012	60	0	0.2	0.0	37	3.3	0.0	11.0	110	0.0	0.0	0.0	541	0.0	3.3	0.1	0	0.0	13	0.1	0.0	0.2	0.0	0.2	0.8	6.3		0.2	7.0	219	86	26	21	0.6	1.1	60	0.1	
6/08/2012	46	27	0.1	0.2	28	1.0	0.0	6.3	109	0.0	0.0	0.0	544	0.0	3.4	0.2	46	0.0	6	0.5	0.0	0.1	0.0	0.1	0.6	6.0		0.3	5.0	70	61	13	18	0.5	0.5	44	0.1	
13/11/2012	65	140	0.2	0.1	40	3.3	0.0	6.4	93	0.2	0.2	0.0	557	0.2	0.8	0.1	368	0.1	7	2.3	0.1	0.5	0.0	0.5	1.5	6.2		0.3	5.0	4	72	15	21	1.0	1.4	94	0.9	
13/02/2013	48	59	0.3	0.0	29	1.2	0.0	7.0	100	0.1	0.1	0.0	529	0.1	3.6	0.1	92	0.0	7	0.7	0.0	0.2	0.0	0.2	3.1	6.3		0.4	5.0	-30	77	12	22	2.9	0.7	50	0.2	
14/05/2013	41	81	0.2	0.0	25	1.8	0.0	5.2	88	0.1	0.1	0.0	463	0.1	2.7	0.1	106	0.1	5	0.7	0.0	0.2	0.0	0.2	1.3	6.1		0.2	5.0	17	69	19	20	1.0	1.2	140	0.2	
6/08/2013	47	71	0.0	0.1	29	1.2	0.0	6.2	110	0.1	0.1	0.0	552	0.0	3.4	0.2	155	0.0	6	0.7	0.0	0.0	0.0	0.0	1.0	6.2		0.2	5.0	21	83	16	19	1.0	0.5	110	0.2	
12/11/2013	84	106	0.6	0.1	51	5.4	0.0	8.7	113	0.1	0.1	0.0	587	0.1	2.1	0.2	163	0.0	9	0.9	0.0	0.2	0.0	0.2	1.7	6.3		0.3	5.0	44	92	14	20	1.6	1.3	52	0.3	
11/02/2014	71	43	0.3	0.0	43	3.9	0.0	7.3	106	0.0	0.0	0.0	545	0.0	2.6	0.2	0	0.0	8	0.0	0.0	0.1	0.0	0.1	1.3	6.5		0.1	5.0	-68	84	13	21	1.2	1.6	175	0.2	
13/05/2014	56	30	0.2	0.0	34	3.6	0.0	5.5	107	0.0	0.0	0.0	547	0.0	3.0	0.2	77	0.0	6	0.4	0.0	0.1	0.0	0.1	0.9	6.3		0.2	5.0	-77	70	12	21	0.8	1.0	64	0.1	
12/08/2014	50	24	0.1	0.1	30	1.8	0.0	6.2	105	0.0	0.0	0.0	490	0.0	3.8	0.2	107	0.0	7	0.6	0.0	0.1	0.0	0.1	0.6	6.5		0.2	5.0	-7	77	15	18	0.5	0.5	101	0.1	
10/11/2014	63	27	0.1	0.1	38	1.5	0.0	6.9	106	0.0	0.0	0.0	512	0.0	3.0	0.2	95	0.0	7	0.5	0.0	0.0	0.0	0.1	1.2	6.5		0.2	5.0	-18	83	14	20	1.1	0.4	147	0.1	
9/02/2015	71	36	0.0	0.0	43	2.1	0.0	7.9	110	0.0	0.0	0.0	533	0.0	1.9	0.2	55	0.0	7	0.5	0.0	0.0	0.0	0.0	0.9	6.6		0.2	5.0	-31	84	10	22	0.9	0.6	64	0.1	
11/05/2015	53	55	0.0	0.0	32	1.5	0.0	7.8	104	0.1	0.1	0.0	522	0.0	3.2	0.2	66	0.0	8	0.6	0.0	0.0	0.0	0.0	0.8	6.5		0.2	5.0	19	88	12	21	0.8	0.7	73	0.2	
11/08/2015	43	31	0.0	0.1	43	1.0	0.0	6.7	110	0.0	0.0	0.0	476	0.0	4.7	0.2	98	0.0	7	0.7	0.0	0.0	0.0	0.0	0.9	6.2		0.1	5.0	48	78	15	19	0.8	0.7	72	0.1	
10/11/2015	37	26	0.0	0.0	37	1.0	0.0	4.8	79	0.0	0.0	0.0	303	0.0	2.4	0.0	47	0.0	5	0.4	0.0	0.4	0.0	0.4	1.2	6.0		0.1	5.0	-10	52	17	20	0.8	1.4	71	0.1	
8/02/2016	39	56	0.0	0.1	39	2.1	0.0	5.7	73	0.1	0.1	0.0	377	0.0	3.6	0.1	92	0.0	5	0.6	0.0	0.3	0.0	0.3	1.6	6.3		0.3	5.0	38	63	15	22	1.4	2.5	88	0.3	
9/05/2016	62	29	0.1	0.0	62	1.5	0.0	6.8	92	0.0	0.0	0.0	490	0.0	3.8	0.2	47	0.0	7	0.5	0.0	0.0	0.0	0.0	0.7	6.3		0.2	5.0	22	77	11	22	0.7	0.8	74	0.1	
9/08/2016	46		0.0		46	1.2		5.6	85				425		3.5	0.2			6			0.1	0.0	0.1	0.9	6.0		0.2	5.0	103	67	16	19	0.8	0.6	104		
7/11/2016	70		0.1		70	2.1		6.9	110				514		2.6	0.2			7			0.0	0.0	0.0	1.2	6.2		0.2	5.0	128	80	12	20	1.2	1.9	94		
7/02/2017	53		0.1		52	1.8		5.5	78				435		2.6	0.2			5			0.0	0.0	0.0	1.1	6.1		0.2	5.0	110	66	17	23	1.1	1.6	110		
8/05/2017	61	28	0.0	0.1	61	2.1	0.0	6.3	93	0.0	0.0	0.0	459	0.0	3.0	0.1	54	0.0	6	0.5	0.0	0.0	0.0	0.0	0.7	6.1		0.2	5.0	154	73	14	21	0.7	0.7	66	0.1	
8/08/2017	50		0.0		50	1.5		5.8	90				482		3.8	0.2			6			0.0	0.0	0.0	0.9	5.8		0.2	5.0	217	73	13	19	0.9	0.6	48		1.3
7/11/2017	49		0.0		49	1.5		6.7	86				442		2.9	0.2			6			1.4	0.0	1.4	2.1	6.0		0.1	5.0	116	71	15	20	0.7	1.5	59		1.3
13/02/2018	33		0.0		33	2.4		4.7	80				386		2.7	0.1			5			0.1	0.0	0.1	0.7	6.0		0.1	5.0	101	60	25	22	0.6	2.9	73		1.8
8/05/2018	59	14	0.1	0.0	59	2.4	0.0	6.2	97	0.0	0.0	0.0	471	0.0	3.3	0.2	26	0.0	6	0.4	0.0	0.3	0.0	0.3	0.3	6.2		0.0	2.2	63	71	15	21	0.1	1.0	52	0.1	1.2
14/08/2018	46		0.0		46	1.0		5.6	88				431		5.2	0.1			6			0.0	0.0	0.0	0.5	6.1		0.1	2.2	224	71	17	19	0.5	5.9	45		1.7
13/11/2018	59		0.0		59	1.0		6.3	100				472		3.1	0.2			6			0.0	0.0	0.0	0.6	6.2		0.1	2.2	57	74	14	20	0.5	0.8	65		1.7
12/02/2019	62		0.1		62	2.4		6.0	89				459		2.4	0.2			6			0.0	0.0	0.0	1.2	6.3	0.0	0.2	2.4	59	73	16	22	1.1	1.1	73		2.2
14/05/2019	54	13	0.0	0.0	54	1.2	0.0	5.9	85	0.0	0.0	0.0	434	0.0	3.5	0.2	35	0.0	6	0.3	0.0	0.0	0.0	0.0	0.4	6.2	0.0	0.3	2.3	49	74	18	21	0.4	0.8	48	0.2	1.4
13/08/2019	48		0.0		48	1.0		5.4	86				413		4.7	0.2			6			0.0	0.0	0.0	0.8	6.3	0.0	0.3	2.1	297	69	18	18	0.8	1.1	38		1.6
12/11/2019	67		0.1		67	2.1		5.6	73				430		2.7	0.1			6			0.0	0.0	0.0	0.9	6.3	0.0	0.2	2.1	50	68	19	20	0.9	1.0	59		2.5
25/02/2020	29		0.0		29	1.0		6.1	62				410		3.2	0.1			6			0.5	0.0	0.5	1.1	5.9	0.0	0.2	2.4	57	55	57	23	0.6	1.6	58		1.4
12/05/2020	14	24	0.0	0.0	14	2.4	0.0	4.3	40	0.0	0.0	0.0	355	0.0	3.2	0.1	63	0.0	5	0.5	0.0	0.0	0.0	0.0	0.7	5.3	0.0	0.1	2.3	192	54	85	20	0.7	1.8	72	0.1	1.8
11/08/2020	40		0.0		40	1.5		5.0	65				392		3.5	0.1			5			0.0	0.0	0.0	0.8	5.9	0.0	0.2	2.3	129	61	38	19	0.8	1.2	42		1.4
10/11/2020	33		0.0		33	1.0		4.5	56				370		3.1	0.1			5			0.0	0.0	0.0	0.8	5.6	0.0	0.2	2.4	124	56	51	19	0.7	1.7	55		2.0
9/02/2021	64		0.1		64	1.0		5.4	70				436		2.9	0.2			6			0.0	0.0	0.0	0.7	6.0	0.0	0.1	2.3	46	65	21	21	0.7	1.1	72		1.7
11/05/2021	44	22	0.0	0.0	44	1.0	0.0	5.3	82	0.0	0.0	0.0	404	0.0	3.1	0.2	35	0.0	6	0.4	0.0	0.0	0.0	0.0	0.8	6.0	0.0	0.1	2.4	138	66	22	21	0.8	1.4	56	0.1	1.3
10/08/2021	50		0.0		50	1.0		5.2	77				417		3.9	0.1			6			0.0	0.0	0.0	0.4	6.1	0.0	0.1	2.4	138	63	18	18	0.4	0.9	45		1.5
8/11/2021	62		0.0		62	1.2		5.8	94				446		3.1	0.2			6			0.0	0.0	0.0	0.8	6.2	0.0	0.2	2.3	33	66	17	19	0.8	1.3	63		1.4
8/02/2022	50		0.0		50	1.5		4.8	73				372		3.5	0.1			5			0.0	0.1	0.0	1.0	6.1	0.0	0.2	2.0	64	52	13	21	1.0	2.0	69		1.1
10/05/2022	50	34	0.0	0.0	50	2.4	0.0	6.0	97	0.0	0.0	0.0	453	0.0	2.8	0.2	57	0.0	6	0.5	0.0	0.0	0.0	0.0	1.2	6.1	0.0	0.2	2.3	65	67	17	20	1.2	1.5	59	0.2	1.0
9/08/2022	53		0.0		53	<1.0		6.0	100				484		3.7	0.2			6			0.0	0.0	0.0	1.1	6.2	0.0	0.4	2.3	80	74	13	18	1.1	0.9	55		1.4
8/11/2022	62		0.0		62	2.1		6.4	110				513		3.0	0.2			7			0.0	0.0	0.0	0.9	6.2	0.0	0.3	2.5	50	72	13	18	0.9	1.2	62		1.3
13/02/2023	66		0.1		66	4.5		5.5	68				422		2.0	0.2			6			0.0	0.0	0.0	2.6	6.2	0.0	0.5	2.3	15	64	16	20	2.6	2.2	69		2.1
8/05/2023	76	36	0.1	0.2	76	2.4	0.0	5.9	72	0.0	0.0	0.0	436	0.0	2.4	0.2	117	0.0	6	0.5	0.0	0.0	0.0	0.0	0.9	6.3	0.0	0.3	2.3	-14	66	16	20	0.9	1.5	59	0.1	2.2
8/08/2023	60		0.0		60	1.0		5.0	62				398		4.6	0.2			5			0.0	0.0	0.0	0.3	6.2	0.0	0.3	2.4	77	63	16	18	0.3	0.7	40		2.1
13/11/2023	80		0.1		80	1.0		4.2	44				335		3.3	0.2			5			0.0	0.0	0.0	0.8	6.2	0.0	0.2	2.3	4	51	12	19	0.8	2.2	63		2.3
2023 Min	**60.00**	**33.60**	**0.00**	**0.04**	**50.00**	**1.50**	**0.00**	**4.80**	**73.00**	**0.03**	**0.00**	**0.03**	**372.00**	**0.02**	**2.80**	**0.13**	**57.10**	**0.02**	**5.00**	**0.53**	**0.02**	**0.00**	**0.00**	**0.00**	**0.87**	**6.10**	**0.00**	**0.17**	**2.00**	**50.10**	**52.00**	**13.00**	**18.00**	**0.87**	**0.90**	**55.00**	**0.23**	**1.00**
2023 Max	**80.00**	**33.60**	**0.04**	**0.04**	**62.00**	**2.40**	**0.00**	**6.40**	**110.00**	**0.03**	**0.00**	**0.03**	**513.00**	**0.02**	**3.70**	**0.19**	**57.10**	**0.02**	**6.60**	**0.53**	**0.02**	**0.02**	**0.05**	**0.02**	**1.23**	**6.20**	**0.00**	**0.43**	**2.50**	**79.60**	**74.00**	**17.00**	**20.90**	**1.21**	**2.00**	**69.00**	**0.23**	**1.40**
2023 Mean	**70.50**	**33.60**	**0.02**	**0.04**	**53.75**	**2.00**	**0.00**	**5.80**	**95.00**	**0.03**	**0.00**	**0.03**	**455.50**	**0.02**	**3.25**	**0.17**	**57.10**	**0.02**	**6.08**	**0.53**	**0.02**	**0.01**	**0.01**	**0.02**	**1.06**	**6.15**	**0.00**	**0.29**	**2.28**	**64.63**	**66.25**	**14.00**	**19.33**	**1.05**	**1.40**	**61.25**	**0.23**	**1.20**
Long-term Average	**54.19**	**45.79**	**0.09**	**0.06**	**44.29**	**1.90**	**0.00**	**6.15**	**92.64**	**0.05**	**0.04**	**0.01**	**467.90**	**0.04**	**2.98**	**0.16**	**89.56**	**0.02**	**6.24**	**0.64**	**0.02**	**0.12**	**0.02**	**0.12**	**1.00**	**6.16**	**0.00**	**0.20**	**4.05**	**72.19**	**70.65**	**19.07**	**20.32**	**0.88**	**1.39**	**72.93**	**0.19**	**1.55**

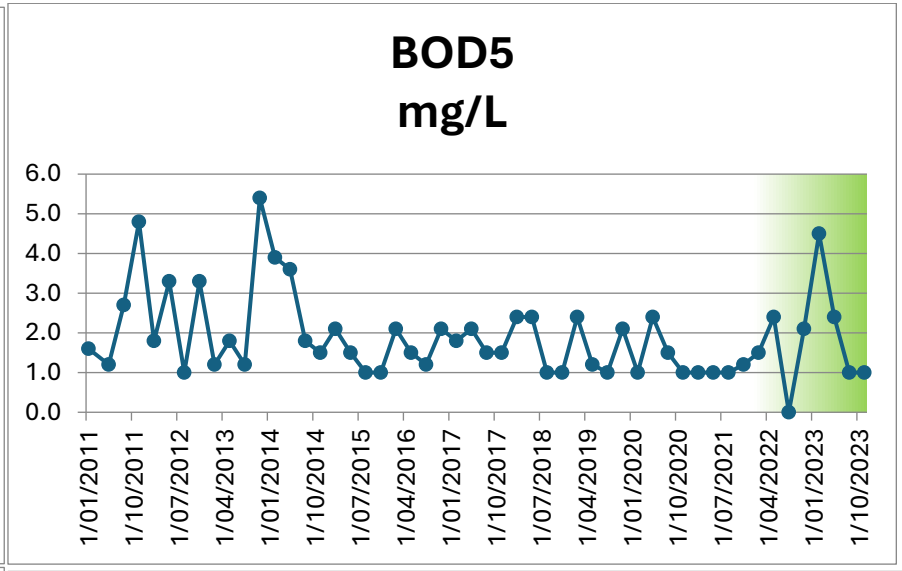

Alkalinity
mg/L as CaCO3
90
80
70
60
50
40
30
20
10
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

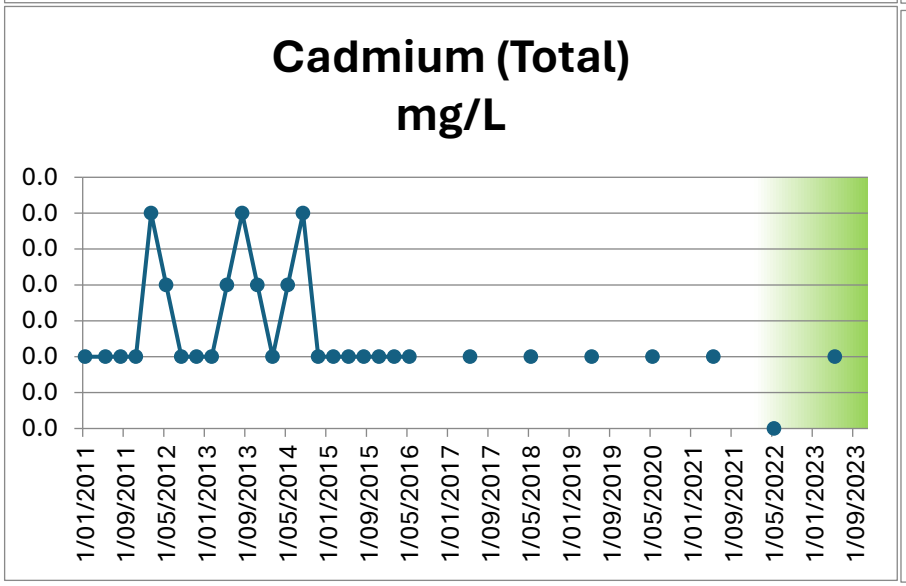

Aluminium (Total)
mg/L
160
140
120
100
80
60
40
20
0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

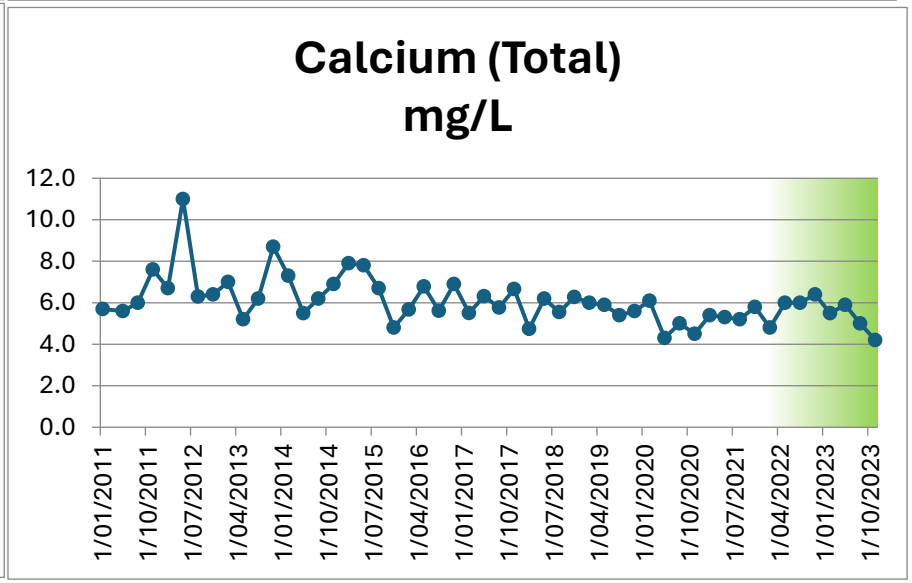

Ammonia
mg/L
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

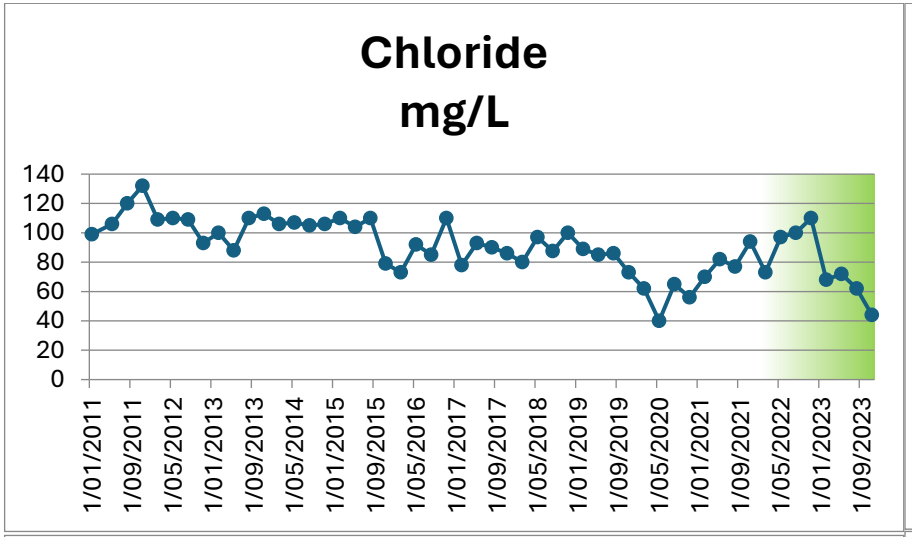

Arsenic (Total)
mg/L
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

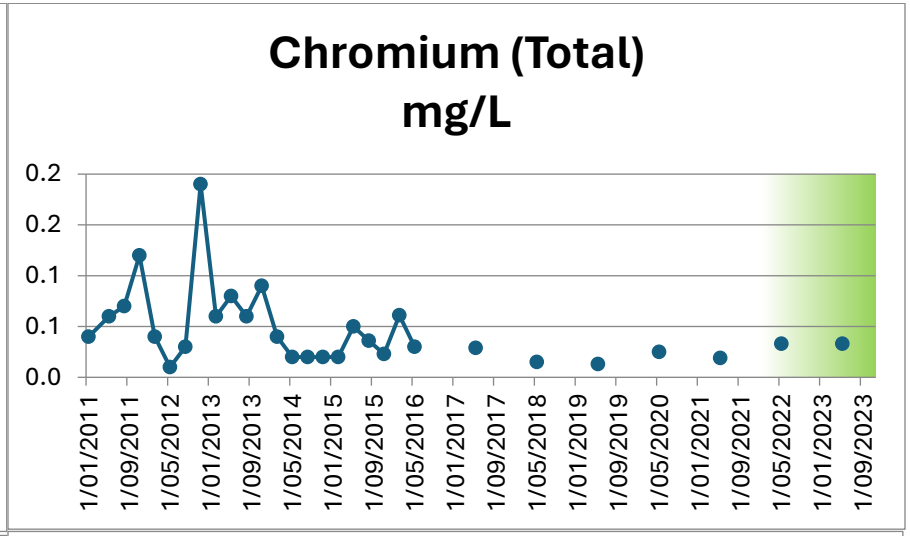

Bicarbonate HCO3
mg/L
100
80
60
40
20
0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

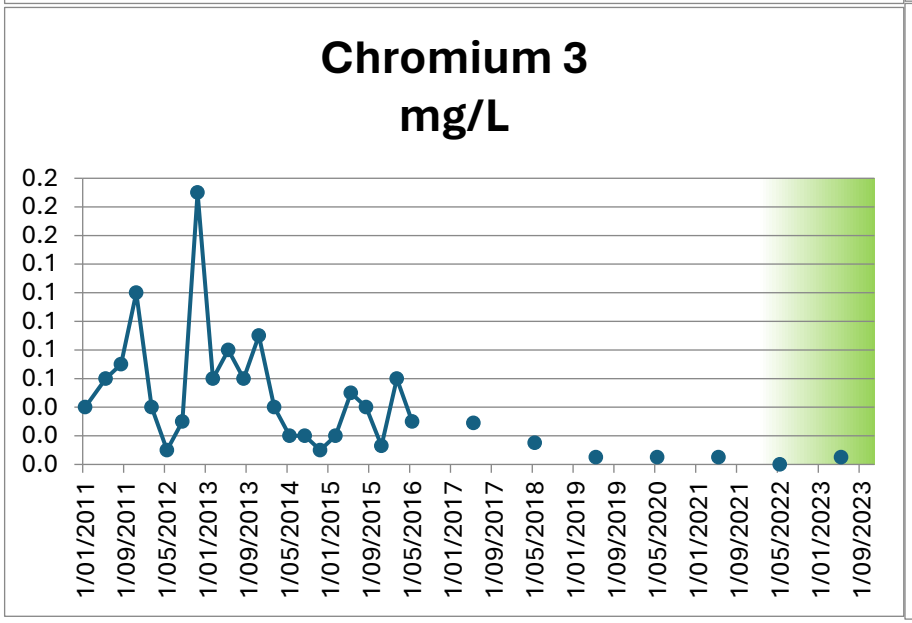

BOD5
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

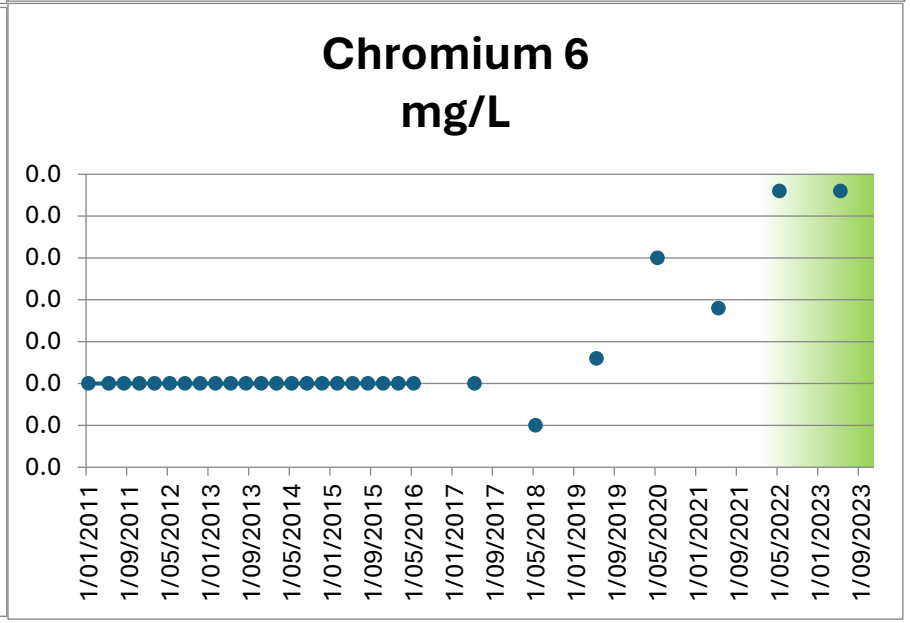

Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

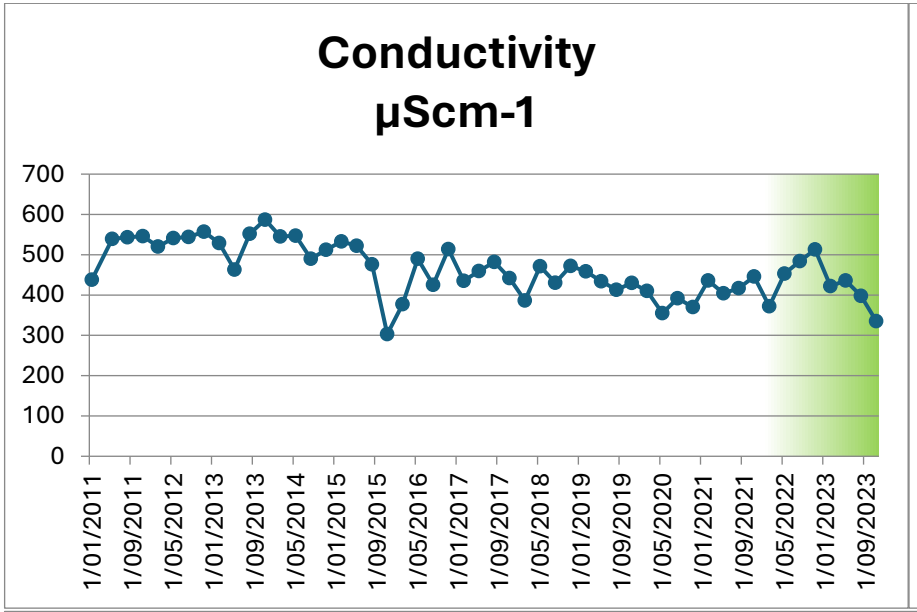

Calcium (Total)
mg/L
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

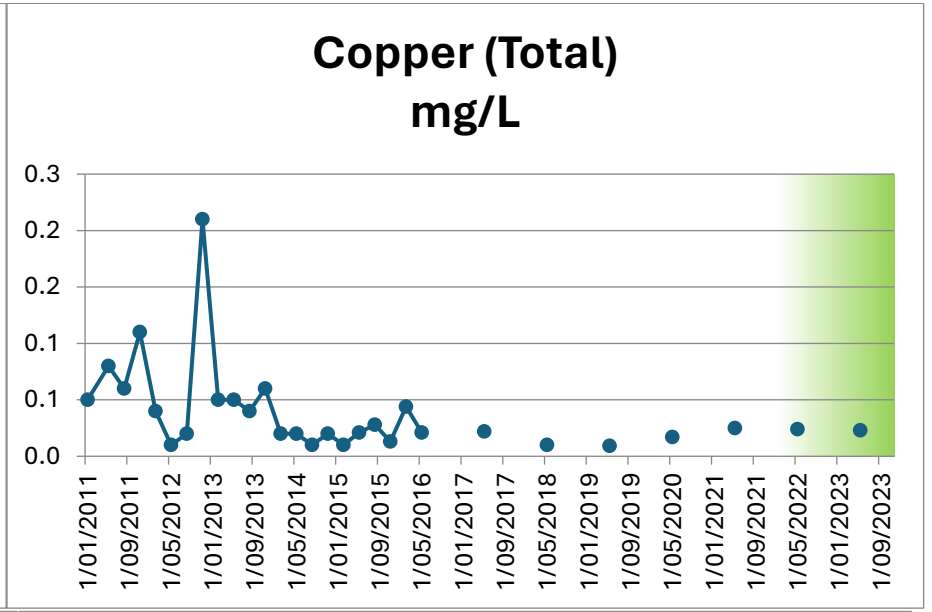

Chloride
mg/L
140
120
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

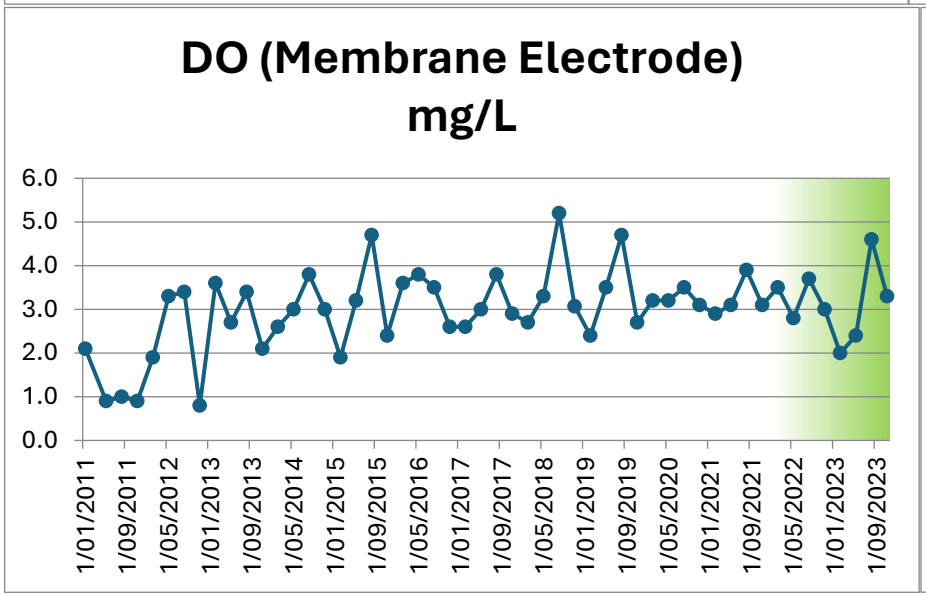

Chromium (Total)
mg/L
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

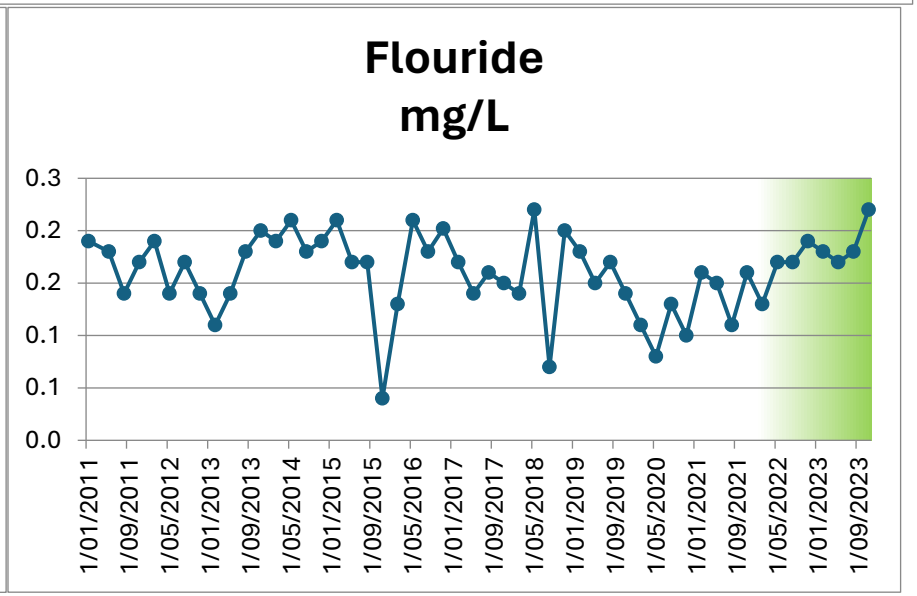

Chromium 3
mg/L
0.2
0.2
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

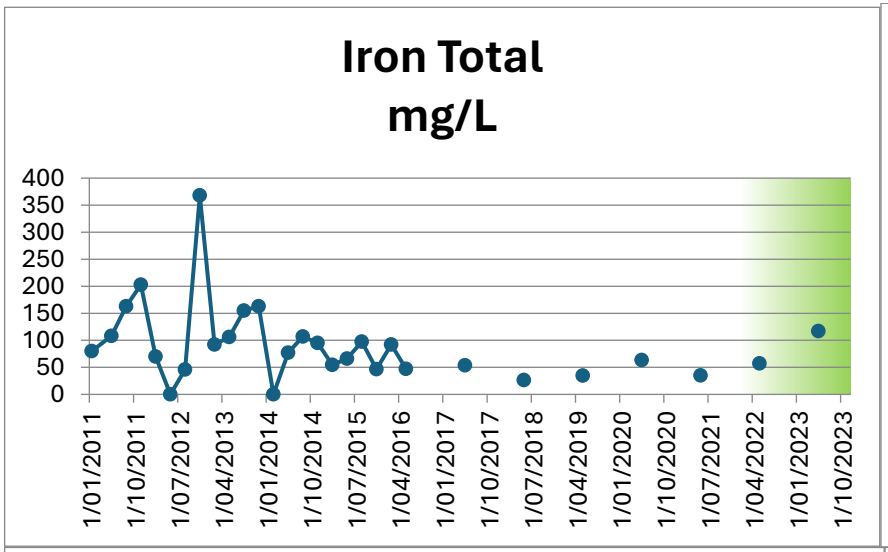

Chromium 6
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

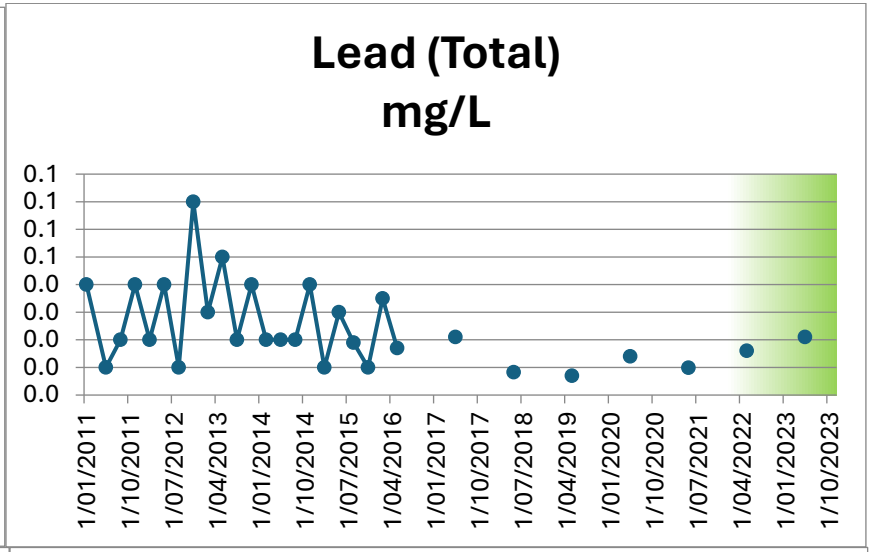

Conductivity
µScm-1
700
600
500
400
300
200
100
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

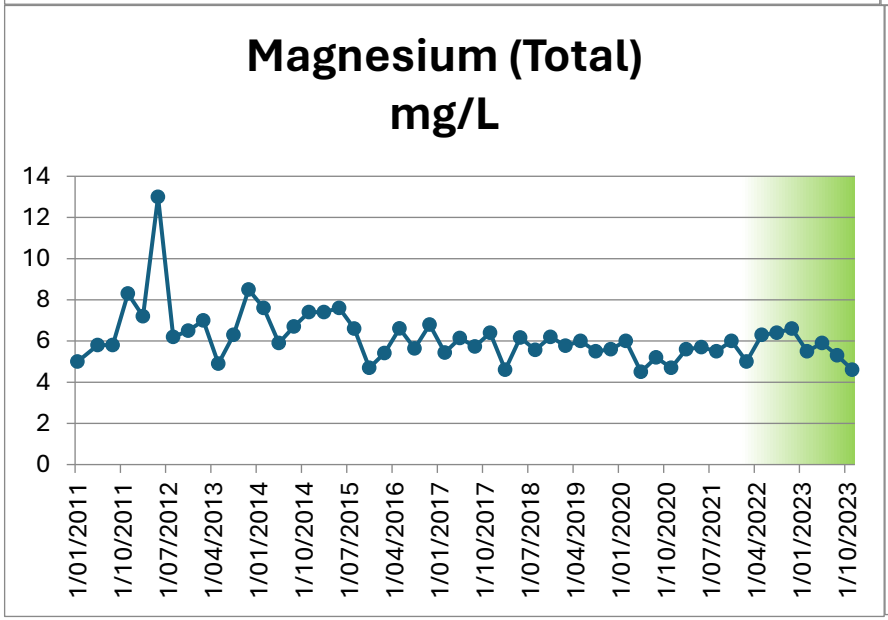

Copper (Total)
mg/L
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

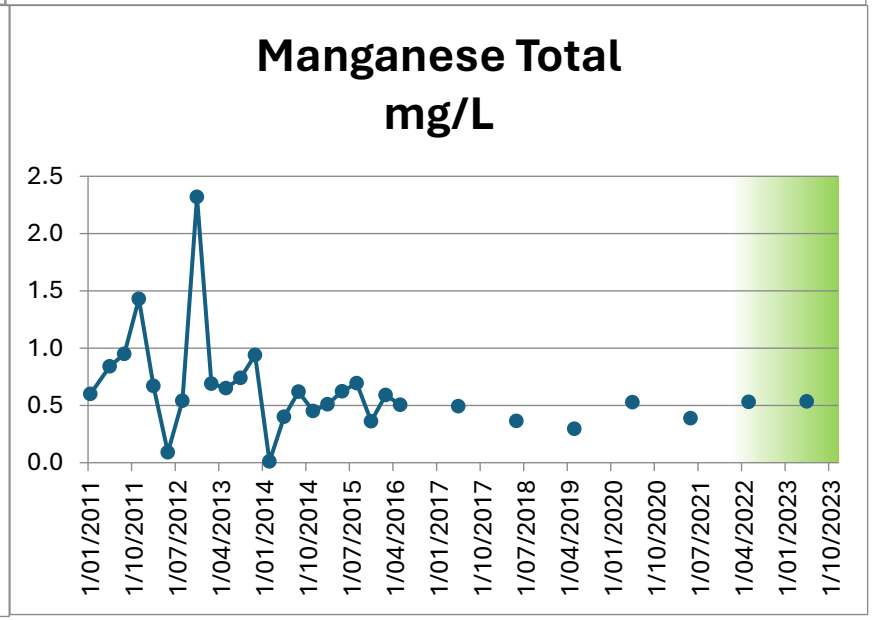

DO (Membrane Electrode)
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

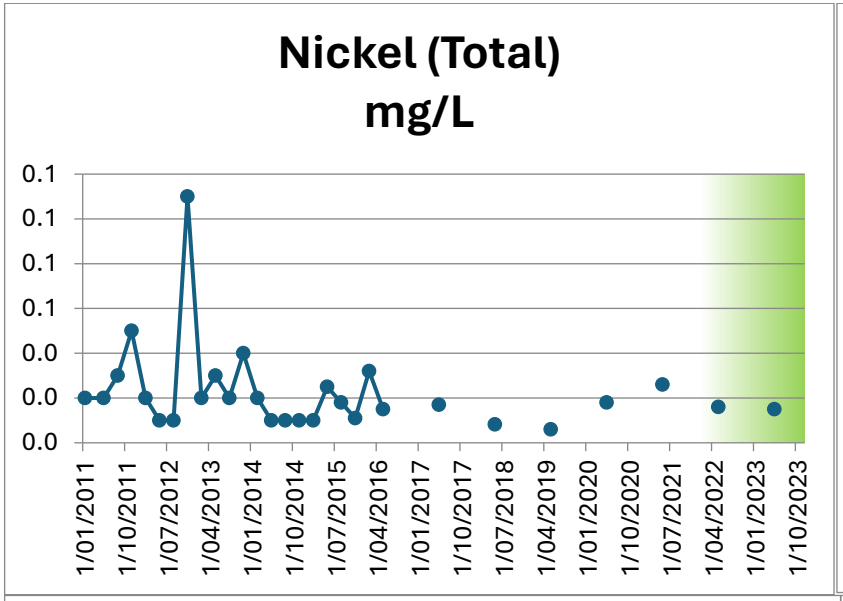

Flouride
mg/L
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

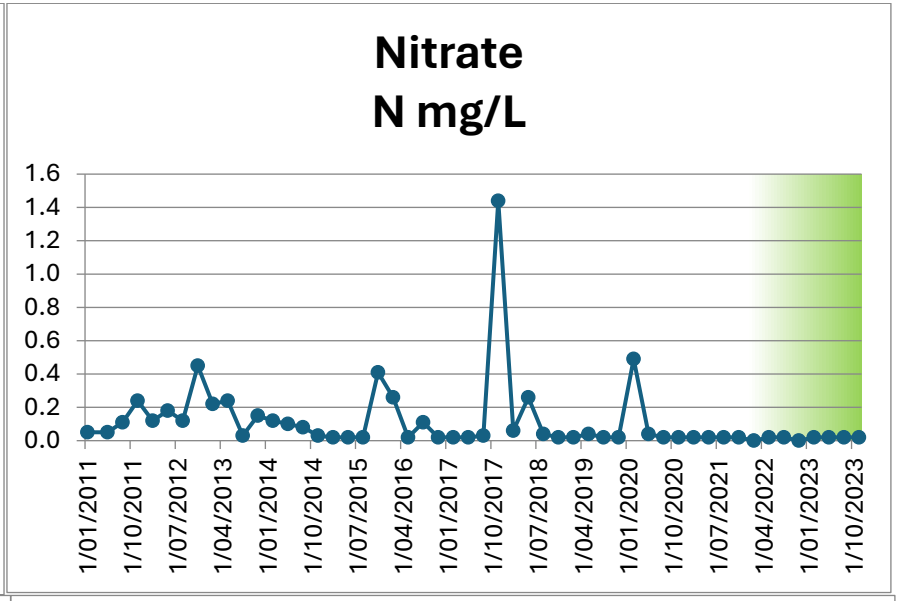

Iron Total
mg/L
400
350
300
250
200
150
100
50
0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

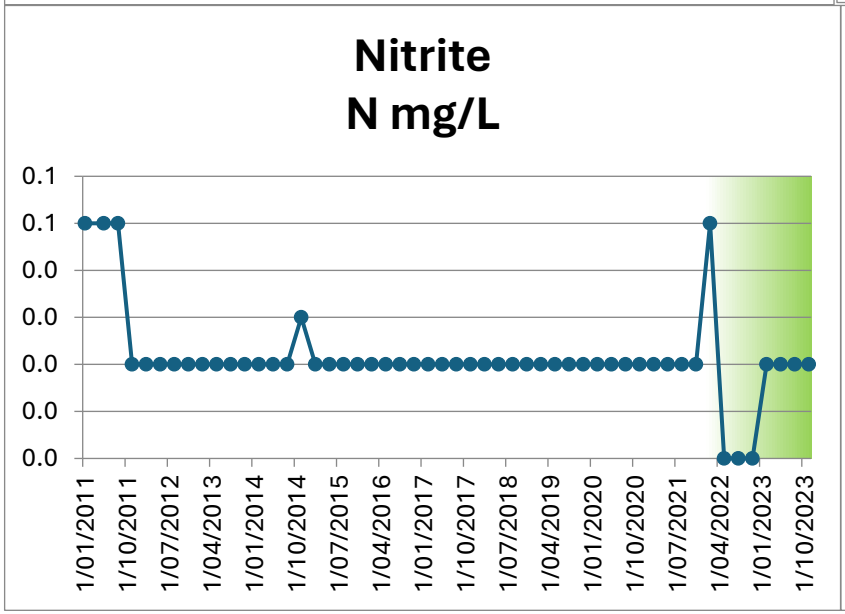

Lead (Total)
mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

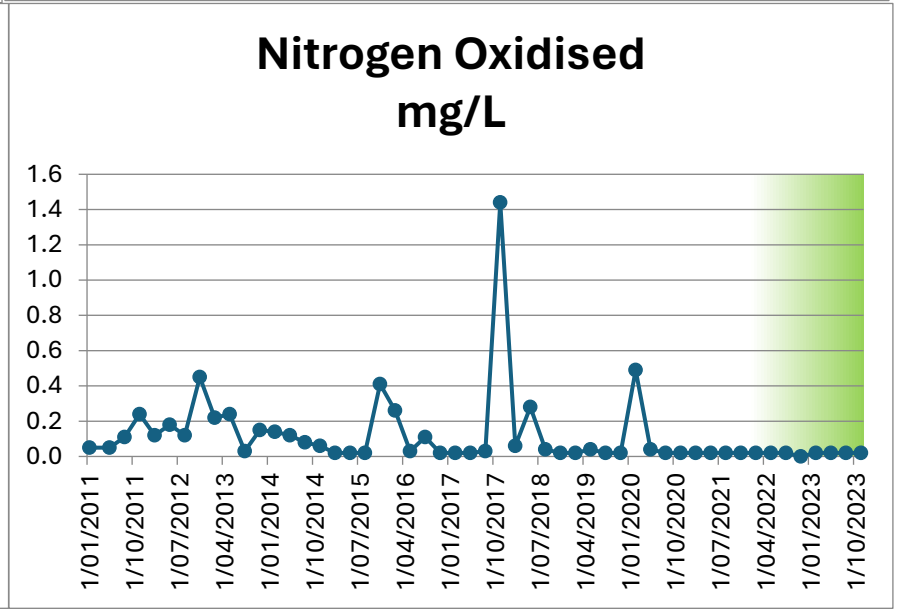

Magnesium (Total)
mg/L
14
12
10
8
6
4
2
0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

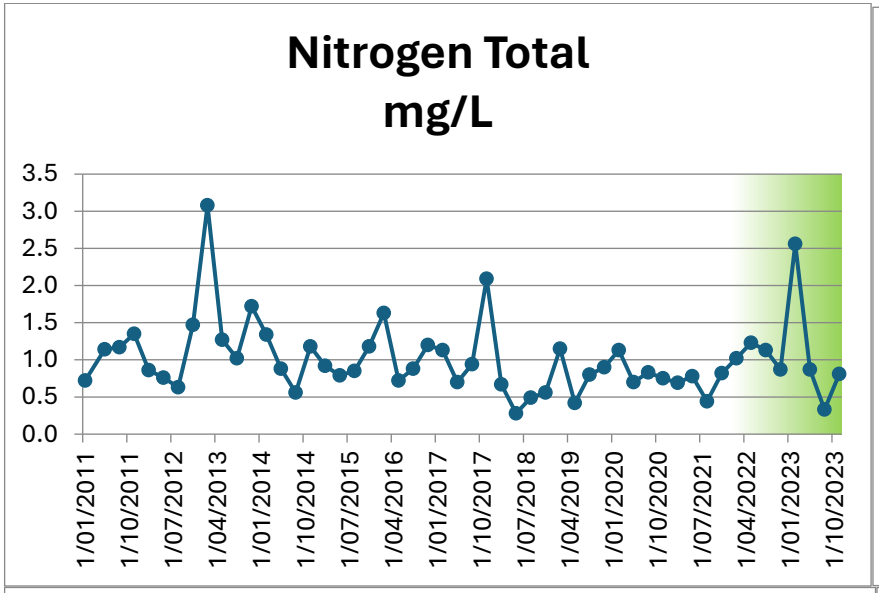

Manganese Total
mg/L
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

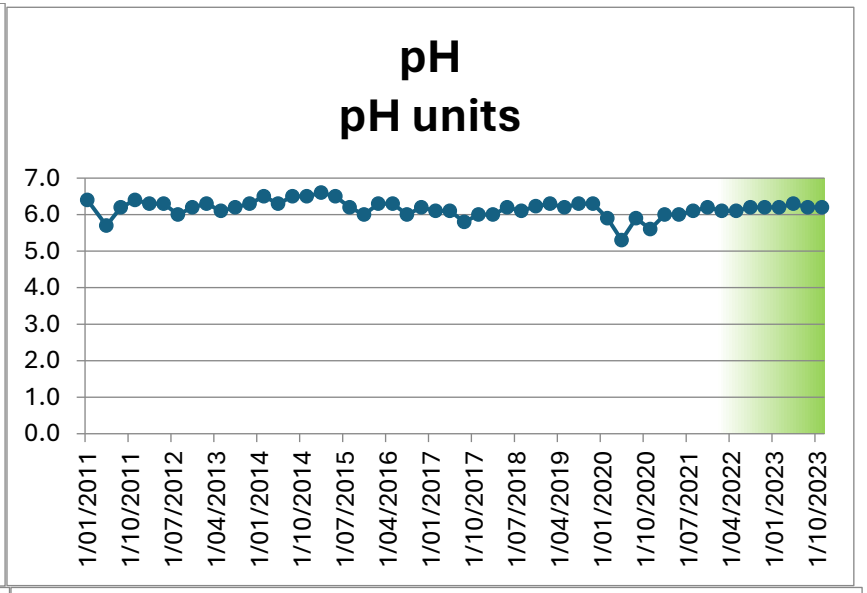

Nickel (Total)
mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

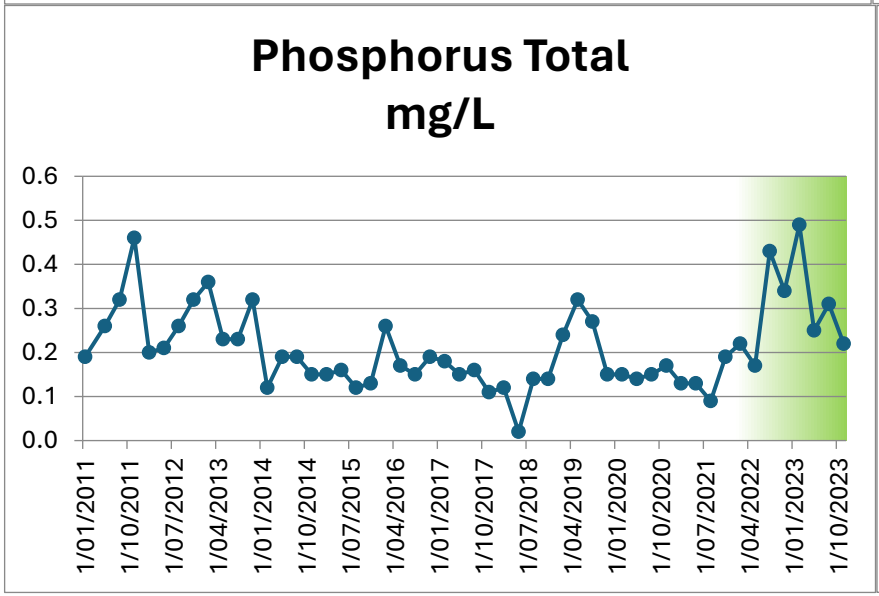

Nitrate
N mg/L
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

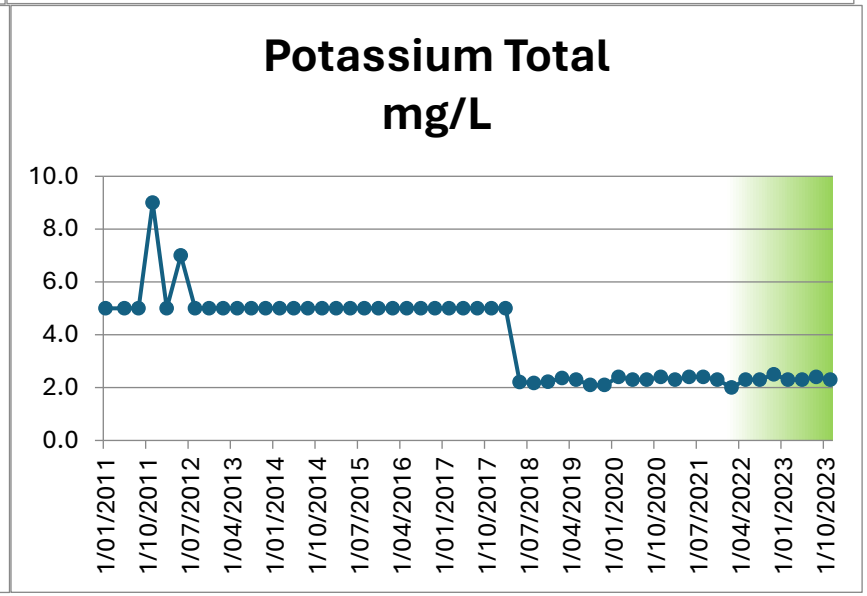

Nitrite
N mg/L
0.1
0.1
0.0
0.0
0.0
0.0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

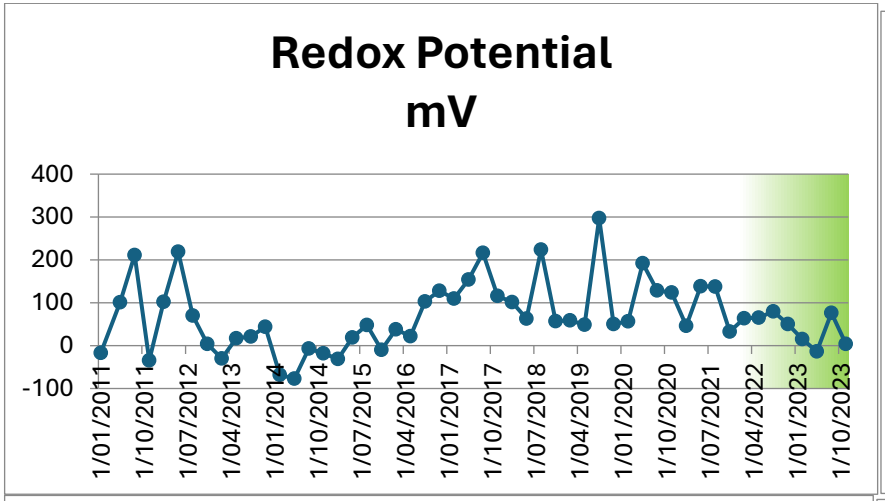

Nitrogen Oxidised
mg/L
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

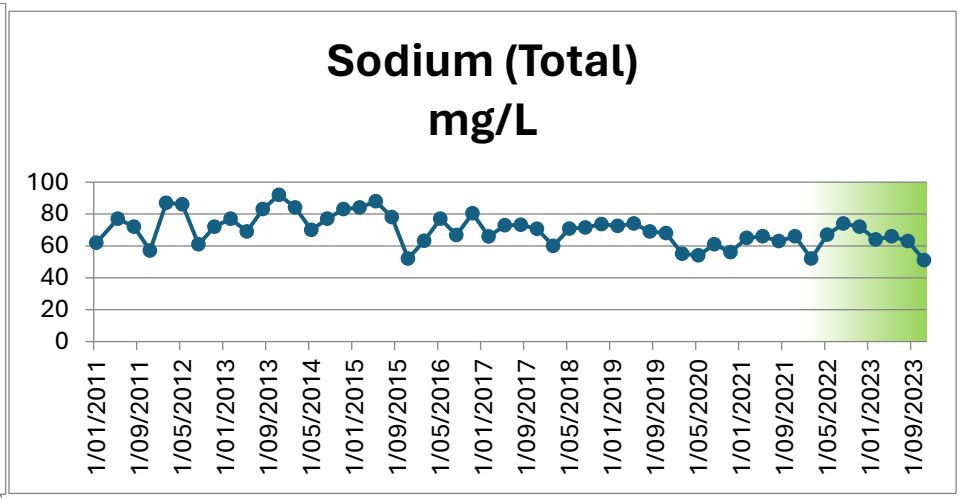

Nitrogen Total
mg/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

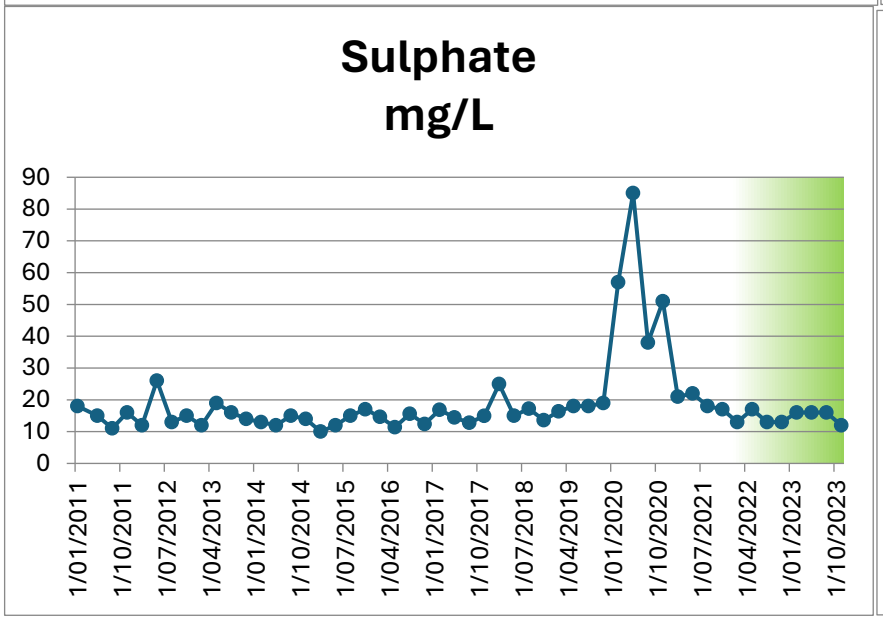

pH
pH units
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

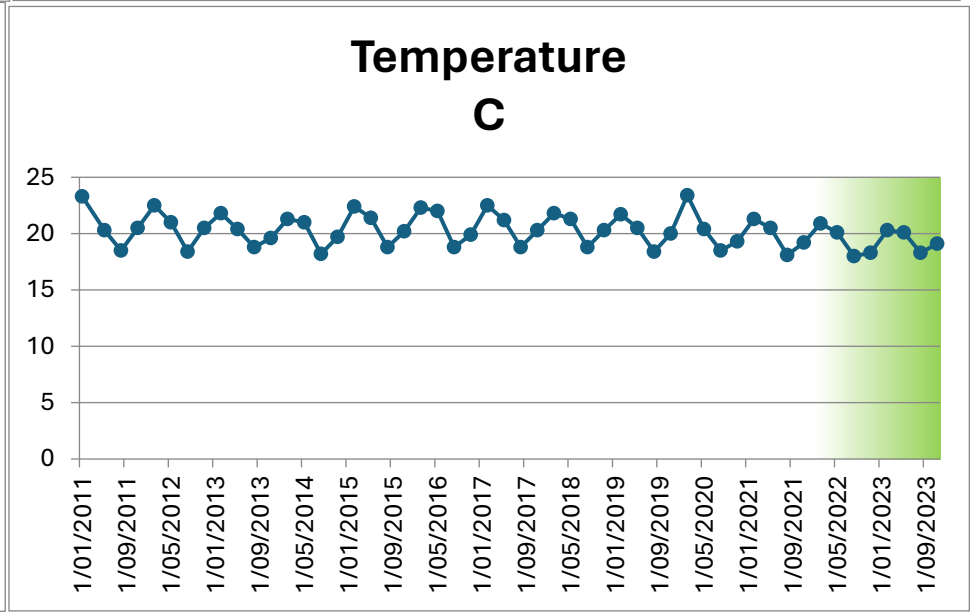

Phosphorus Total
mg/L
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

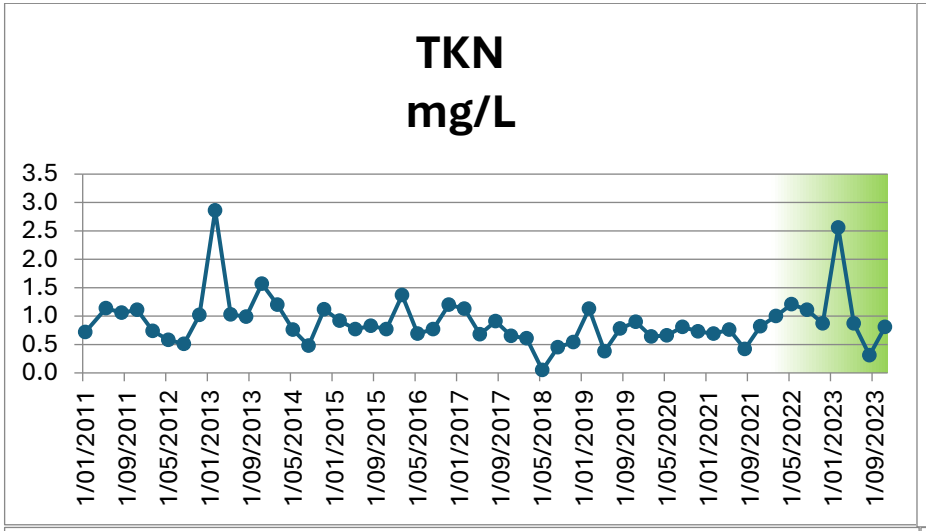

Potassium Total
mg/L
10.0
8.0
6.0
4.0
2.0
0.0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

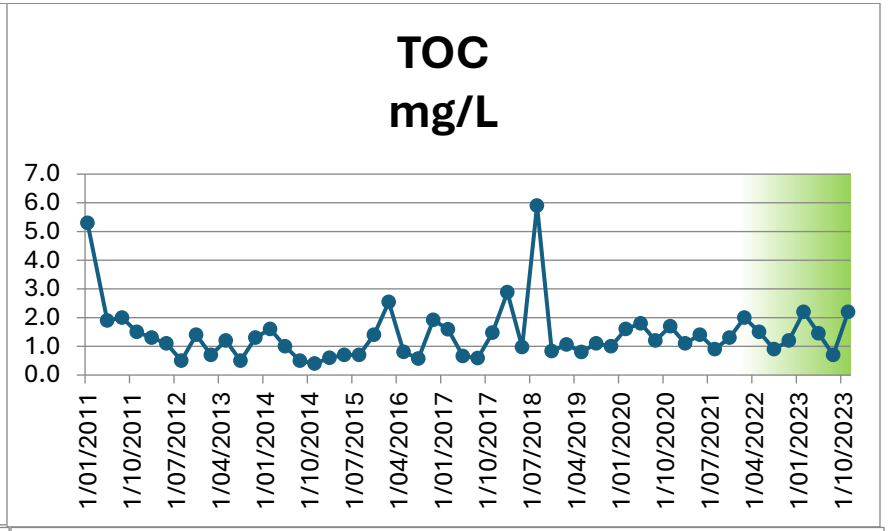

Redox Potential
mV
400
300
200
100
0
-100
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

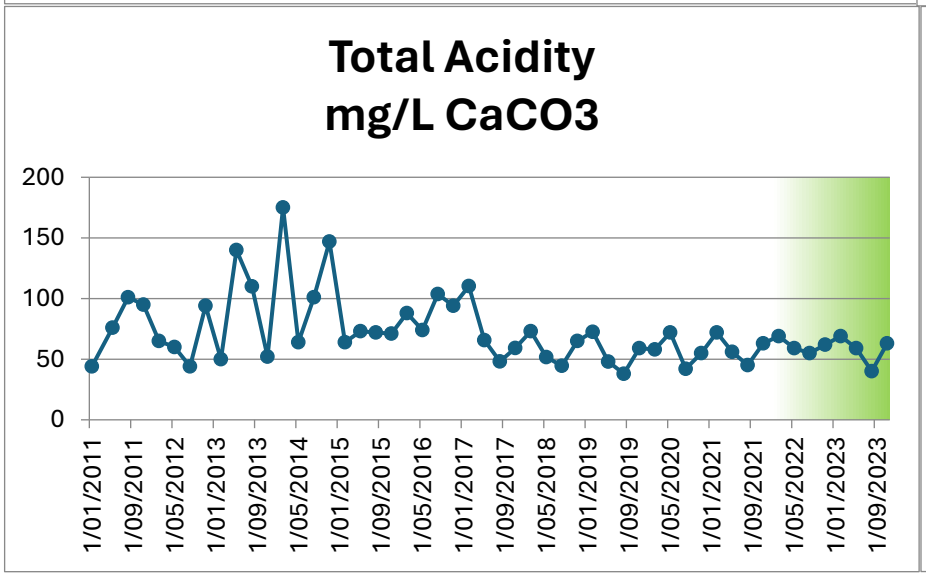

Sodium (Total)
mg/L
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

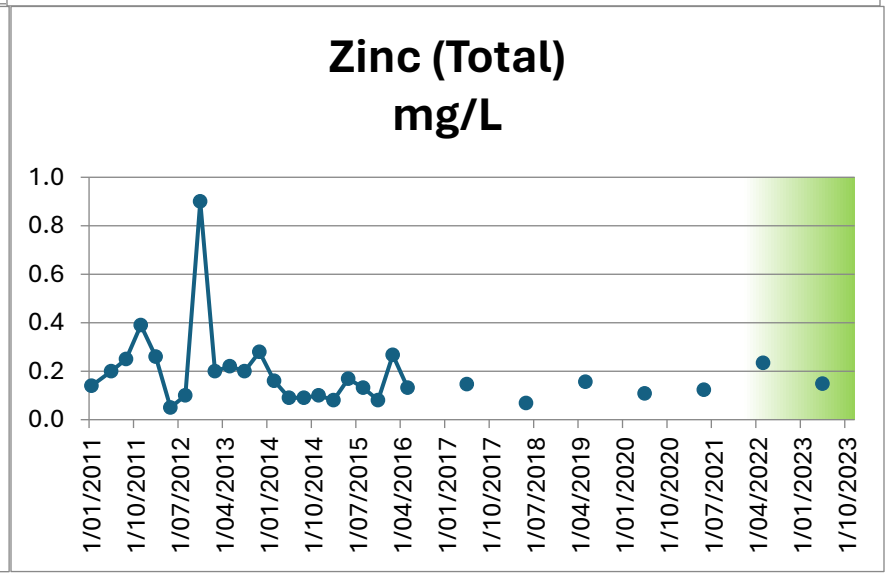

Sulphate
mg/L
90
80
70
60
50
40
30
20
10
0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023


Temperature
C
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TKN
mg/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TOC
mg/L
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023


Total Acidity
mg/L CaCO3
200
150
100
50
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Zinc (Total)
mg/L
1.0
0.8
0.6
0.4
0.2
0.0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

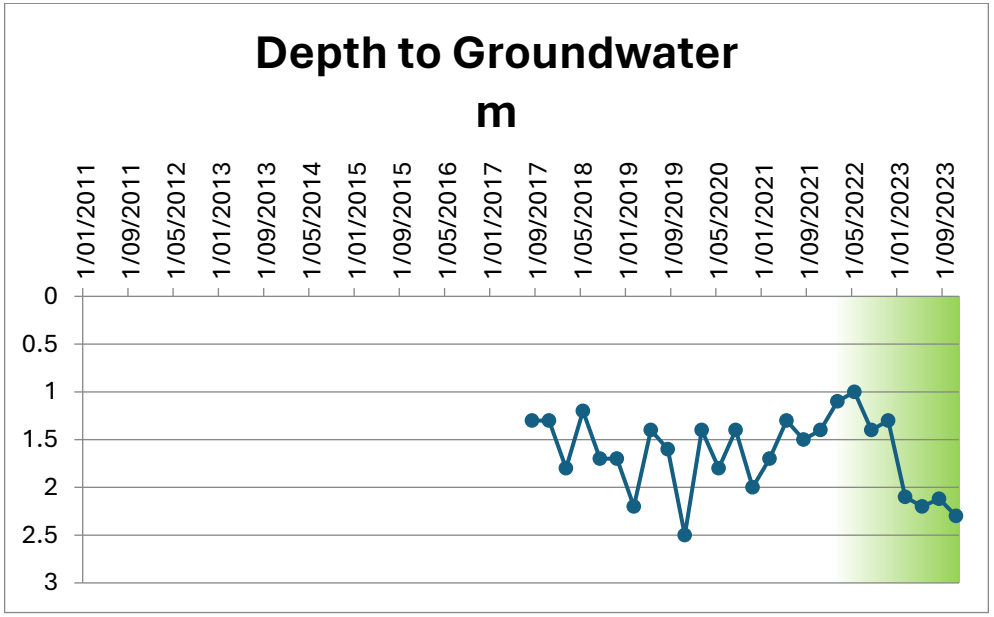
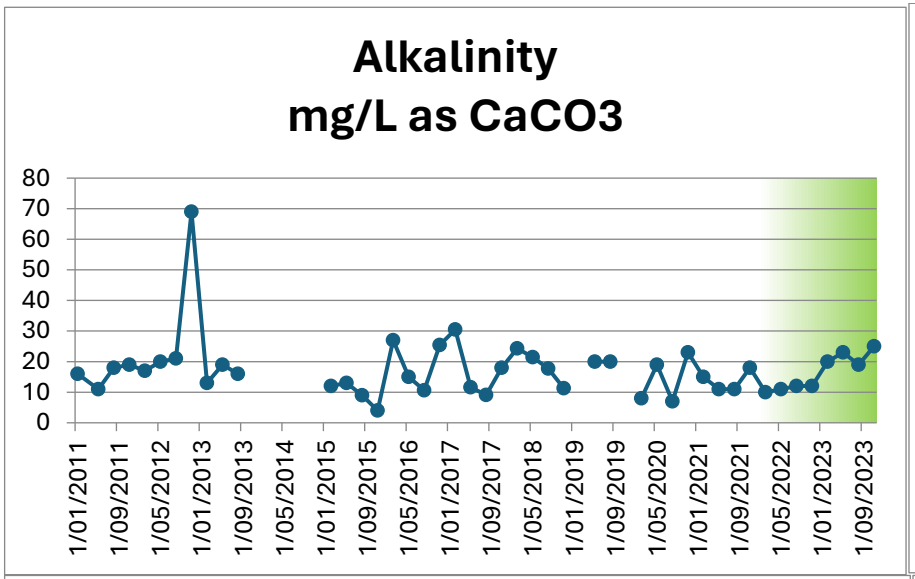
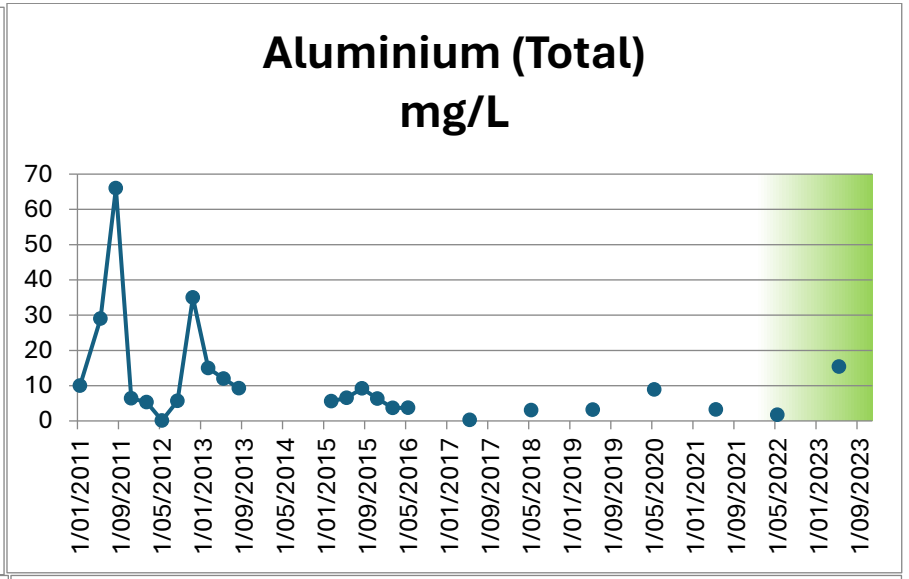
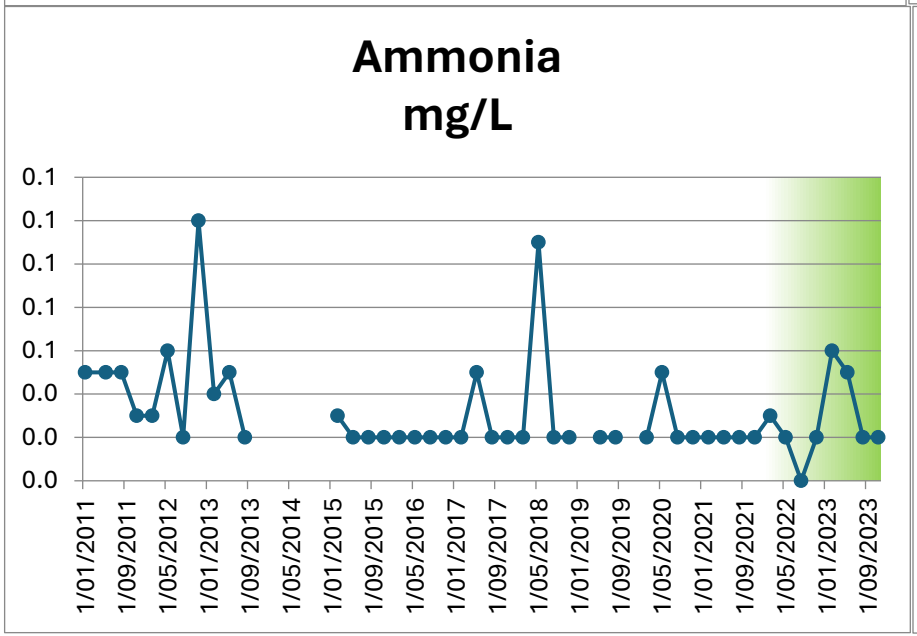

Depth to Groundwater
m
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023
0
0.5
1
1.5
2
2.5
3

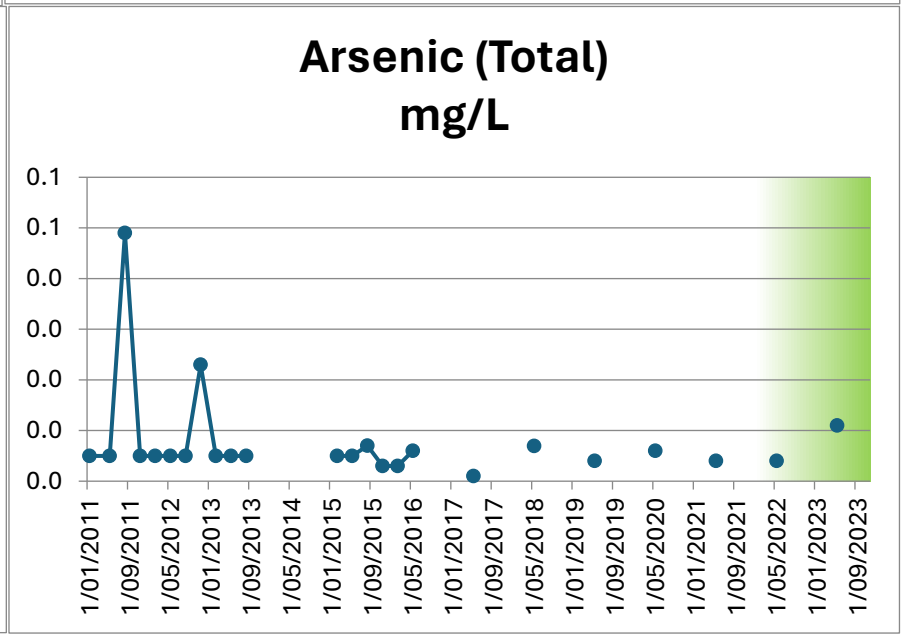
Table 17: Ground Water 9

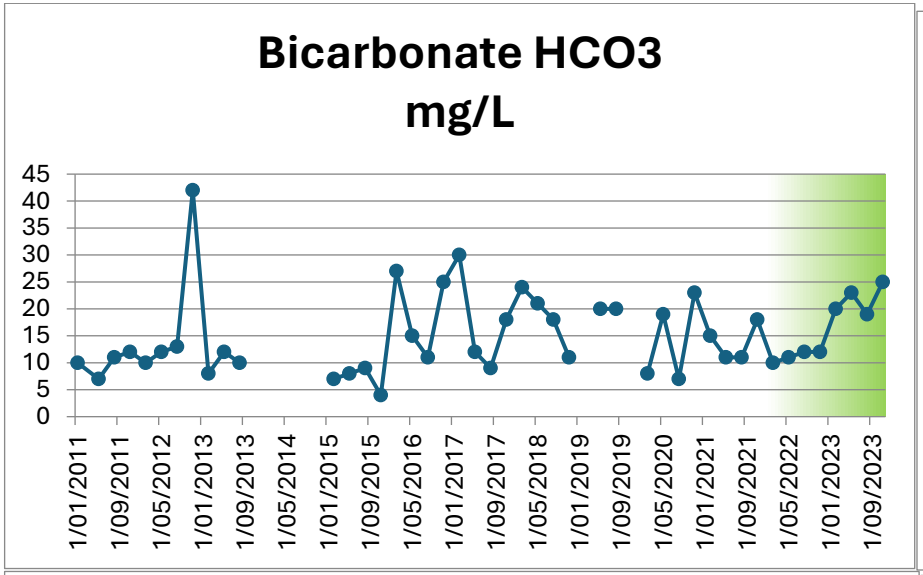
GW9	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µScm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride mg/L	Iron Total mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	Nitrate N mg/L	Nitrite N mg/L	Nitrogen Oxidised mg/L	Nitrogen Total mg/L	pH pH units	Phenol Alkalinity mg/L as CaCO3	Phosphorus Total mg/L	Potassium Total mg/L	Redox Potential mV	Sodium (Total) mg/L	Sulphate mg/L	Temperature C	TKN mg/L	TOC mg/L	Total Acidity mg/L CaCO3	Zinc (Total) mg/L	Depth to Groundwater m
31/01/2011	16	10	0.1	0.0	10	6.6	0.0	11	185	0.0	0.0	0.0	639	0.0	2.4	0.0	13	0.0	9	0.4	0.0	0.1	0.1	0.1	0.4	5.5		0.2	5.0	103	67	38	23	0.4	6	56	0.1	
10/05/2011	11	29	0.1	0.0	7	2.1	0.0	20	324	0.0	0.0	0.0	1216	0.1	3.0	0.0	25	0.1	21	0.8	0.0	0.1	0.1	0.1	1.0	5.0		0.2	5.0	100	155	42	21	1.0	4	52	0.1	
9/08/2011	18	66	0.1	0.0	11	3.3	0.0	11	140	0.0	0.0	0.0	680	0.1	3.0	0.1	51	0.1	10	0.4	0.0	0.1	0.1	0.1	0.9	5.8		0.2	5.0	240	82	50	19	0.9	8	108	0.1	
8/11/2011	19	6	0.0	0.0	12	5.7	0.0	13	150	0.0	0.0	0.0	576	0.0	2.7	0.1	13	0.0	11	0.3	0.0	0.0	0.0	0.0	0.2	5.6		0.1	7.0	95	59	65	22	0.2	4	81	0.1	
6/02/2012	17	5	0.0	0.0	10	3.0	0.0	13	159	0.0	0.0	0.0	679	0.0	2.2	0.0	6	0.0	12	0.4	0.0	0.0	0.0	0.1	0.3	5.3		0.1	5.0	146	98	54	22	0.3	3	68	0.1	
8/05/2012	20	0	0.1	0.0	12	2.7	0.0	20	270	0.0	0.0	0.0	1101	0.0	3.8	0.1	4	0.0	23	0.4	0.0	0.1	0.0	0.1	0.6	6.0		0.1	5.0	256	154	45	21	0.5	6	68	0.0	
6/08/2012	21	6	0.0	0.0	13	2.1	0.0	18	252	0.0	0.0	0.0	990	0.0	2.6	0.0	14	0.0	18	0.7	0.0	0.0	0.0	0.0	0.4	5.4		0.2	5.0	186	108	49	20	0.4	4	64	0.0	
13/11/2012	69	35	0.1	0.0	42	2.1	0.0	11	160	0.0	0.0	0.0	854	0.1	4.0	0.1	37	0.1	16	0.9	0.0	0.1	0.0	0.1	0.9	6.2		0.4	5.0	19	112	48	21	0.8	4	94	0.2	
13/02/2013	13	15	0.0	0.0	8	1.2	0.0	35	450	0.0	0.0	0.0	1705	0.0	2.9	0.1	14	0.0	34	1.7	0.0	0.3	0.0	0.3	0.8	5.3		0.1	5.0	65	206	60	22	0.5	6	71	0.1	
14/05/2013	19	12	0.1	0.0	12	3.0	0.0	26	320	0.0	0.0	0.0	1218	0.0	2.8	0.0	11	0.0	23	1.1	0.0	0.1	0.0	0.1	0.6	5.5		0.0	5.0	4	159	60	21	0.5	4	149	0.1	
6/08/2013	16	9	0.0	0.0	10	2.1	0.0	28	340	0.0	0.0	0.0	1226	0.0	3.4	0.0	14	0.0	25	1.0	0.0	0.0	0.0	0.0	0.5	5.4		0.2	5.0	59	171	74	19	0.5	4	143	0.0	
12/11/2013																																						
11/02/2014																																						
13/05/2014																																						
12/08/2014																																						
10/11/2014																																						
9/02/2015	12	6	0.0	0.0	7	3.3	0.0	30	520	0.0	0.0	0.0	1754	0.0	1.7	0.0	7	0.0	30	1.3	0.0	0.0	0.0	0.0	1.0	5.4		0.1	5.0	46	216	64	23	1.0	5	94	0.1	
11/05/2015	13	7	0.0	0.0	8	4.5	0.0	28	375	0.0	0.0	0.0	1363	0.0	3.5	0.1	6	0.0	27	1.1	0.0	0.0	0.0	0.0	0.7	5.3		0.1	5.0	66	203	62	22	0.7	6	91	0.1	
11/08/2015	9	9	0.0	0.0	9	3.0	0.0	45	610	0.0	0.0	0.0	2090	0.0	3.7	0.0	12	0.0	43	1.7	0.0	0.1	0.0	0.1	1.1	5.2		0.1	5.0	124	296	94	19	1.0	7	128	0.1	
10/11/2015	4	6	0.0	0.0	4	1.0	0.0	57	820	0.0	0.0	0.0	2620	0.0	4.1	0.1	4	0.0	58	0.9	0.0	0.0	0.0	0.0	0.6	4.8		0.1	5.0	132	346	83	20	0.6	9	72	0.1	
8/02/2016	27	4	0.0	0.0	27	1.0	0.0	14	190	0.0	0.0	0.0	826	0.0	3.3	0.0	5	0.0	13	0.6	0.0	0.1	0.0	0.1	0.6	5.7		0.2	5.0	98	120	63	22	0.5	5	128	0.1	
9/05/2016	15	4	0.0	0.0	15	7.8	0.0	38	530	0.0	0.0	0.0	1868	0.0	3.1	0.0	7	0.0	38	1.6	0.0	0.1	0.0	0.1	0.8	5.4		0.1	5.0	102	256	72	23	0.8	10	120	0.1	
9/08/2016	11		0.0		11	1.2		48	660				2325		3.3	0.1			49			0.1	0.0	0.1	0.5	5.0		0.0	5.0	43	315	91	19	0.4	5	168		
7/11/2016	25		0.0		25	1.8		14	194				827		3.2	0.0			13			0.0	0.0	0.0	0.5	5.5		0.1	5.0	335	131	69	20	0.5	4	108		
7/02/2017	31		0.0		30	1.0		6	80				493		3.5	0.0			6			0.0	0.0	0.0	0.4	5.6		0.1	5.0	193	77	63	22	0.3	2	143		
8/05/2017	12	0	0.1	0.0	12	1.2	0.0	61	860	0.0	0.0	0.0	2886	0.0	3.4	0.0	1	0.0	62	0.3	0.0	0.0	0.0	0.0	0.7	5.0		0.0	5.0	194	362	101	22	0.7	8	101	0.0	
8/08/2017	9		0.0		9	1.5		50	675				2447		3.4	0.0			49			0.1	0.0	0.1	1.0	5.0		0.1	5.0	270	323	79	19	0.9	8	91		2.2
7/11/2017	18		0.0		18	4.2		28	425				1524		3.9	0.0			26			0.1	0.0	0.1	0.6	5.3		0.1	5.0	290	203	68	21	0.5	4	78		2.5
13/02/2018	24		0.0		24	2.1		13	198				884		3.8	0.0			13			0.0	0.0	0.0	0.4	5.6		0.1	5.0	138	133	73	22	0.4	4	95		3.2
8/05/2018	21	3	0.1	0.0	21	2.1	0.0	75	1070	0.0	0.0	0.0	3513	0.0	3.3	0.1	13	0.0	77	3.1	0.0	0.0	0.0	0.0	0.1	5.3		0.0	2.7	94	478	109	22	0.1	11	132	0.1	2.2
14/08/2018	18		0.0		18	1.8		33	450				1671		4.3	0.1			31			0.1	0.0	0.1	0.6	5.3		0.1	2.3	406	267	82	20	0.6	10	83		3.1
13/11/2018	11		0.0		11	1.2		123	910				3080		3.2	0.1			118			0.0	0.0	0.0	0.5	5.2		0.0	4.4	177	721	222	20	0.5	8	89		2.6
12/02/2019																																						
14/05/2019	20	3	0.0	0.0	20	4.5	0.0	28	370	0.0	0.0	0.0	1406	0.0	3.0	0.0	4	0.0	27	0.9	0.0	0.0	0.0	0.0	0.5	5.4		0.1	2.1	156	228	90	21	0.5	5	88	0.1	2.7
13/08/2019	20		0.0		20	5.1		33	420				1574		4.0	0.0			31			0.0	0.0	0.0	0.3	5.4		0.1	2.1	383	234	93	19	0.3	6	80		2.8
12/11/2019																																						
25/02/2020	8		0.0		8	5.1		58	870				2930		2.7	0.1			59			0.0	0.0	0.0	0.7	4.9	0.0	0.1	3.3	95	382	84	23	0.7	8	95		1.6
12/05/2020	19	9	0.1	0.0	19	3.9	0.0	31	560	0.0	0.0	0.0	1876	0.0	2.9	0.1	10	0.0	32	1.7	0.0	0.0	0.0	0.0	0.9	5.3	0.0	0.1	2.3	91	260	65	21	0.9	6	86	0.1	2.7
11/08/2020	7		0.0		7	1.0		93	1220				4068		3.4	0.1			91			0.0	0.0	0.0	0.8	4.9	0.0	0.1	3.1	185	569	157	19	0.8	11	70		2.0
10/11/2020	23		0.0		23	1.0		11	220				871		3.2	0.1			11			0.0	0.0	0.0	0.4	5.5	0.0	0.1	1.6	219	131	58	20	0.4	3	64		2.9
9/02/2021	15		0.0		15	1.2		76	1150				3864		2.9	0.1			80			0.0	0.0	0.0	0.6	5.0	0.0	0.0	3.1	-11	515	117	22	0.6	12	140		2.1
11/05/2021	11	3	0.0	0.0	11	2.4	0.0	30	460	0.0	0.0	0.0	1644	0.0	3.0	0.1	5	0.0	31	1.3	0.0	0.0	0.0	0.0	0.4	5.2	0.0	0.0	2.4	86	225	77	21	0.4	5	97	0.0	1.6
10/08/2021	11		0.0		11	1.0		46	710				2473		2.9	0.0			48			0.0	0.0	0.0	0.8	5.0	0.0	0.1	3.6	200	306	83	19	0.8	8	99		2.1
8/11/2021	18		0.0		18	4.8		31	520				1735		3.8	0.0			32			0.0	0.0	0.0	0.6	5.3	0.0	0.1	2.6	153	228	79	20	0.6	6	90		2.2
8/02/2022	10		0.0		10	1.0		70	1140				3725		2.6	0.1			73			0.0	0.0	0.0	0.8	5.0	0.0	0.0	2.7	145	445	119	22	0.8	13	110		1.7
10/05/2022	11	2	0.0	0.0	11	1.2	0.0	45	730	0.0	0.0	0.0	2445	0.0	3.4	0.0	6	0.0	46	2.3	0.0	0.0	0.0	0.0	0.5	5.2	0.0	0.0	2.2	111	299	83	21	0.5	6	86	0.1	1.3
9/08/2022	12		0.0		12	1.0		35	440				1819		3.2	0.0			36			0.0	0.0	0.0	0.7	5.1	0.0	0.3	2.9	181	243	80	19	0.7	6	110		1.7
8/11/2022	12		0.0		12	1.0		54	1120				3799		3.3	0.1			56			0.0	0.0	0.0	0.6	5.1	0.0	0.1	2.9	108	348	88	19	0.6	10	110		2.0
13/02/2023	20		0.1		20	1.0		28	450				1568		3.0	0.0			28			0.0	0.0	0.0	1.5	5.5	0.0	0.1	2.0	118	218	77	21	1.5	7	72		2.8
8/05/2023	23	15	0.1	0.0	23	2.7	0.0	37	600	0.0	0.0	0.0	2019	0.0	3.7	0.0	17	0.1	38	1.8	0.0	0.0	0.0	0.0	1.0	5.4	0.0	0.2	2.8	69	262	83	21	1.0	7	73	0.1	3.1
8/08/2023	19		0.0		19	1.0		20	360				1327		4.3	0.0			20			0.0	0.0	0.0	0.6	5.4	0.0	0.2	2.3	210	175	62	19	0.6	4	63		3.2
13/11/2023	25		0.0		25	1.0		11	240				819		3.5	0.0			11			0.0	0.0	0.0	0.3	5.4		0.1	1.3	198	122	53	20	0.3	3	74		3.2
2023 Min	**19.0**	**15.4**	**0.0**	**0.0**	**19.0**	**1.0**	**0.0**	**11.0**	**240.0**	**0.0**	**0.0**	**0.0**	**819.0**	**0.0**	**3.0**	**0.0**	**16.7**	**0.1**	**11.0**	**1.8**	**0.0**	**0.0**	**0.0**	**0.0**	**0.3**	**5.4**	**0.0**	**0.1**	**1.3**	**68.7**	**122.0**	**53.0**	**19.3**	**0.3**	**2.7**	**63.0**	**0.1**	**2.8**
2023 Max	**25.0**	**15.4**	**0.1**	**0.0**	**25.0**	**2.7**	**0.0**	**37.0**	**600.0**	**0.0**	**0.0**	**0.0**	**2019.0**	**0.0**	**4.3**	**0.0**	**16.7**	**0.1**	**38.0**	**1.8**	**0.0**	**0.0**	**0.0**	**0.0**	**1.5**	**5.5**	**0.0**	**0.2**	**2.8**	**210.3**	**262.0**	**83.0**	**21.1**	**1.5**	**6.6**	**74.0**	**0.1**	**3.2**
2023 Mean	**21.8**	**15.4**	**0.0**	**0.0**	**21.8**	**1.4**	**0.0**	**24.0**	**412.5**	**0.0**	**0.0**	**0.0**	**1433.3**	**0.0**	**3.6**	**0.0**	**16.7**	**0.1**	**24.3**	**1.8**	**0.0**	**0.0**	**0.0**	**0.0**	**0.9**	**5.4**	**0.0**	**0.1**	**2.1**	**148.7**	**194.3**	**68.8**	**20.3**	**0.9**	**4.8**	**70.5**	**0.1**	**3.1**
Long-term Average	**17.4**	**11.0**	**0.0**	**0.0**	**15.1**	**2.5**	**0.0**	**35.8**	**508.8**	**0.0**	**0.0**	**0.0**	**1800.4**	**0.0**	**3.3**	**0.0**	**12.5**	**0.0**	**35.7**	**1.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.6**	**5.3**	**0.0**	**0.1**	**3.9**	**148.4**	**244.6**	**78.4**	**20.7**	**0.6**	**6.2**	**95.2**	**0.1**	**2.4**

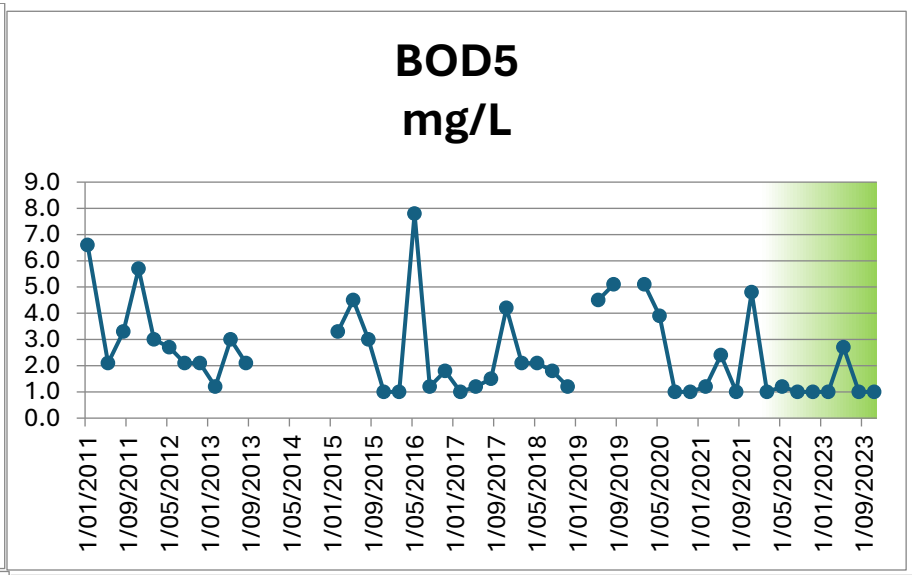

Alkalinity
mg/L as CaCO3
80
70
60
50
40
30
20
10
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

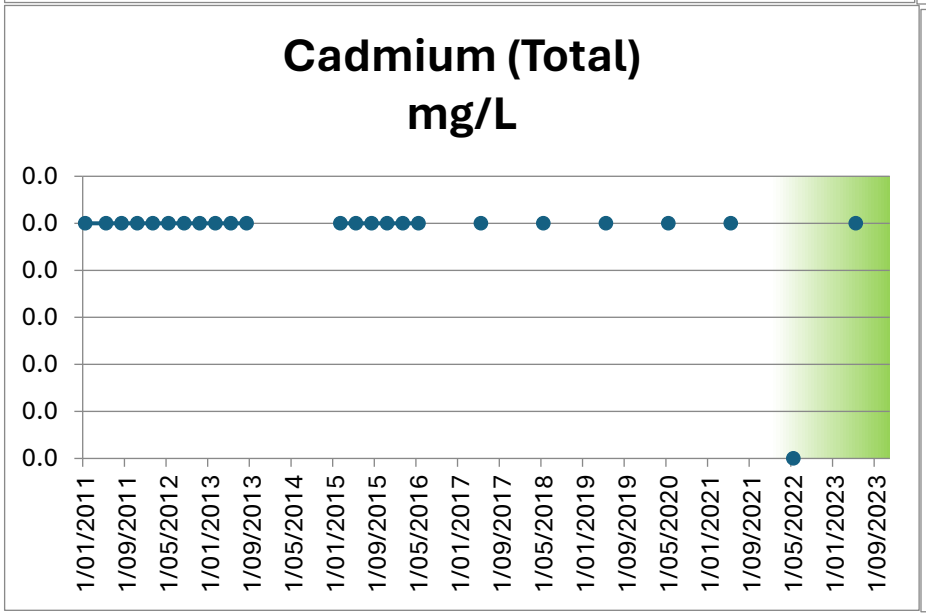

Aluminium (Total)
mg/L
70
60
50
40
30
20
10
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

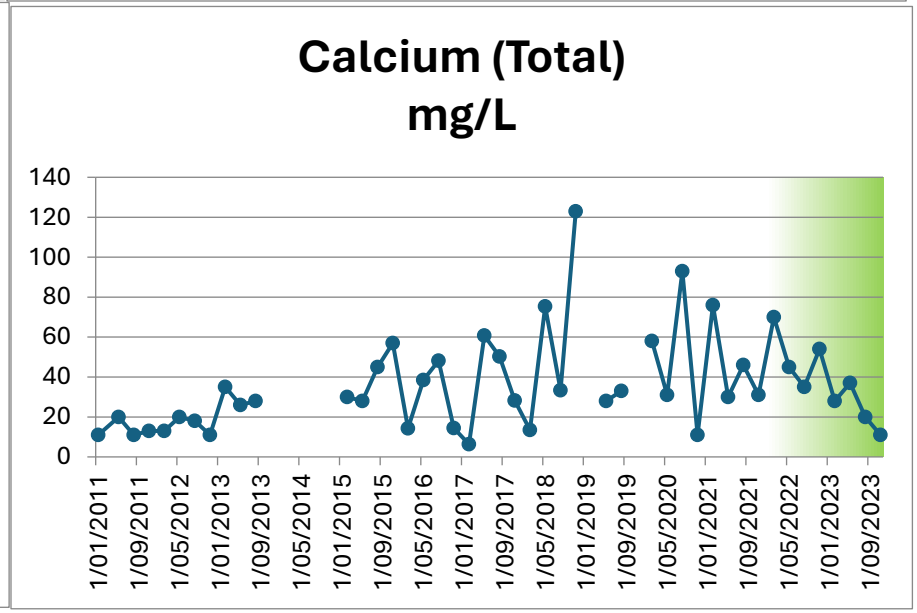

Ammonia
mg/L
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

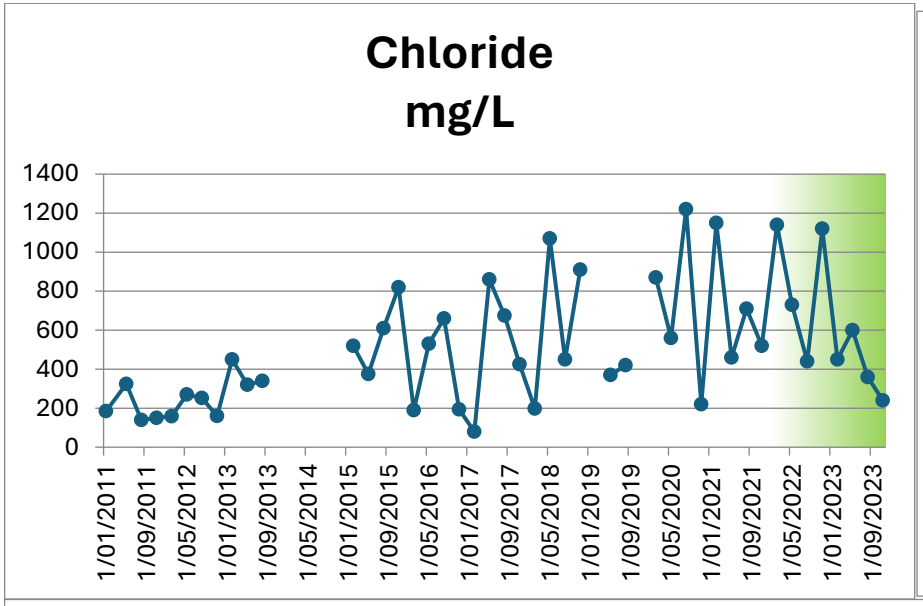

Arsenic (Total)
mg/L
0.1
0.1
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

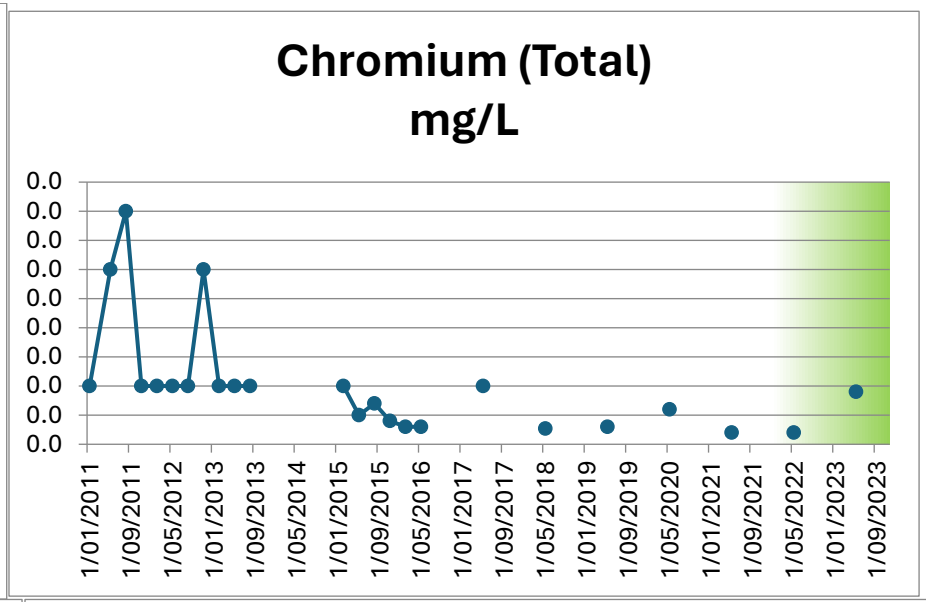

Bicarbonate HCO3
mg/L
45
40
35
30
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

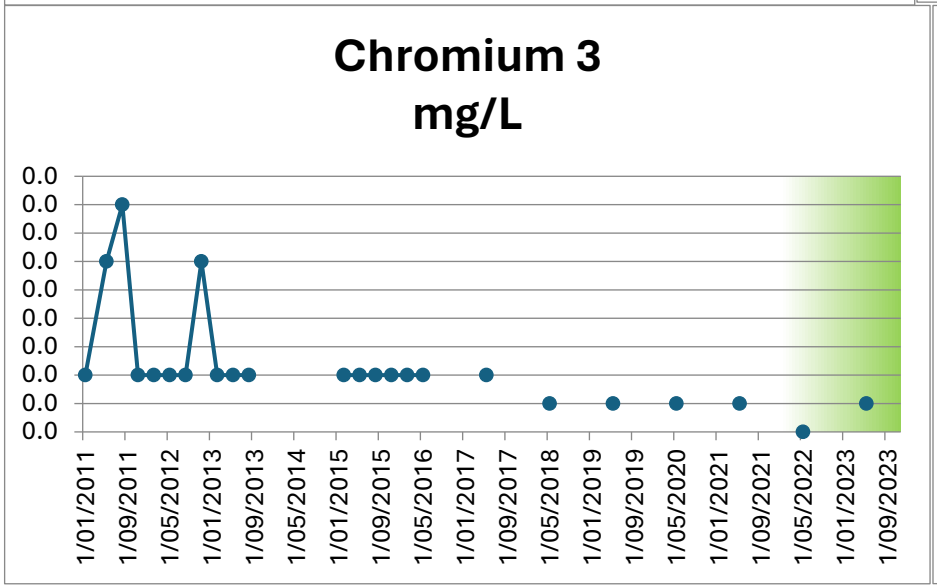

BOD5
mg/L
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

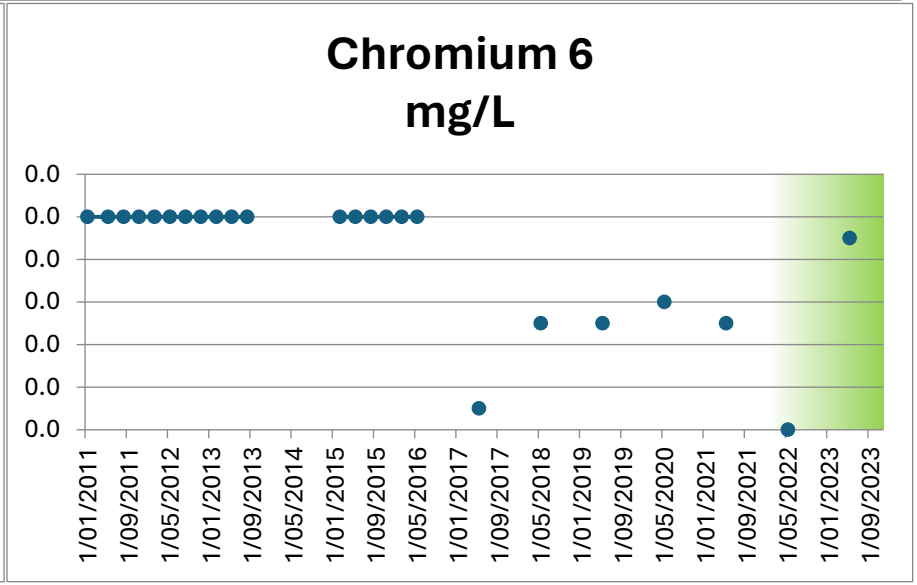

Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

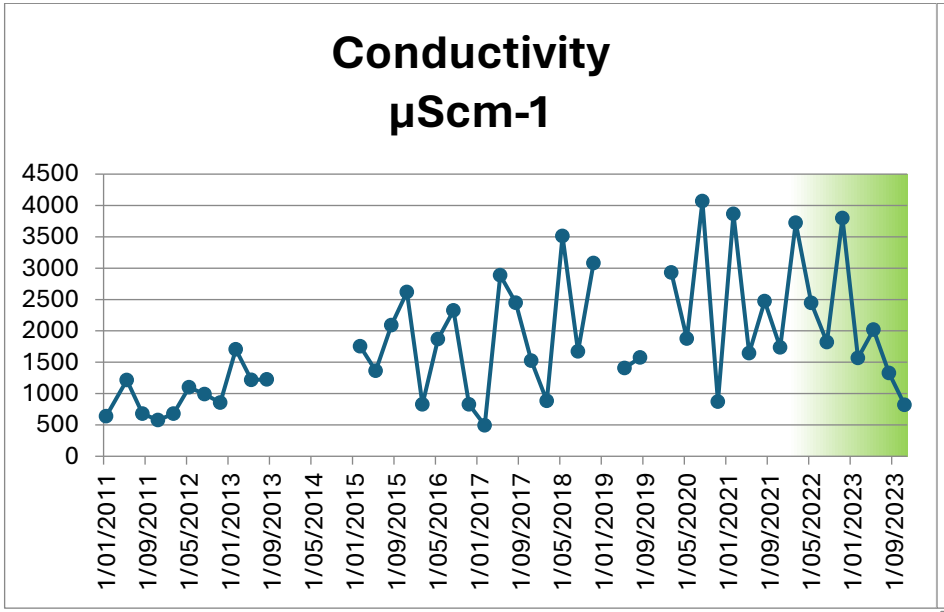

Calcium (Total)
mg/L
140
120
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

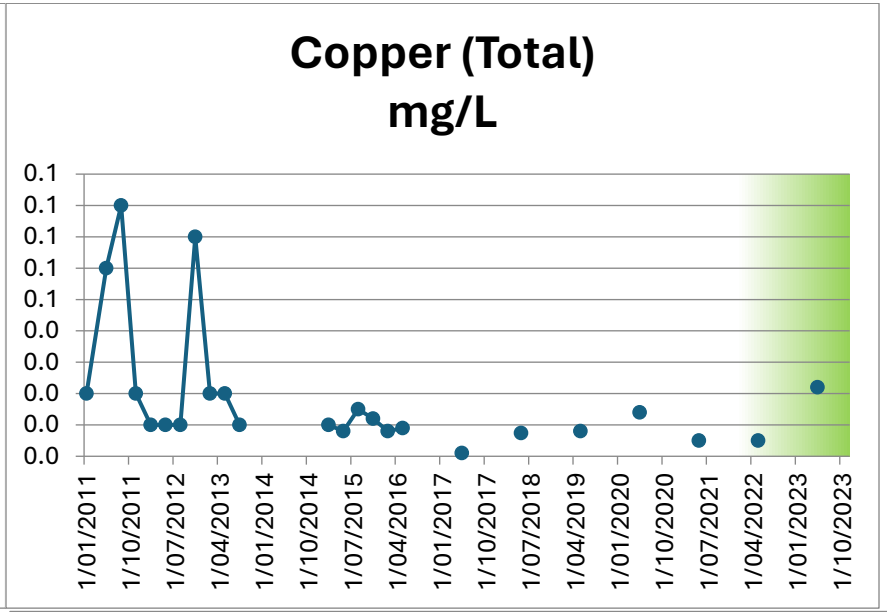

Chloride
mg/L
1400
1200
1000
800
600
400
200
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

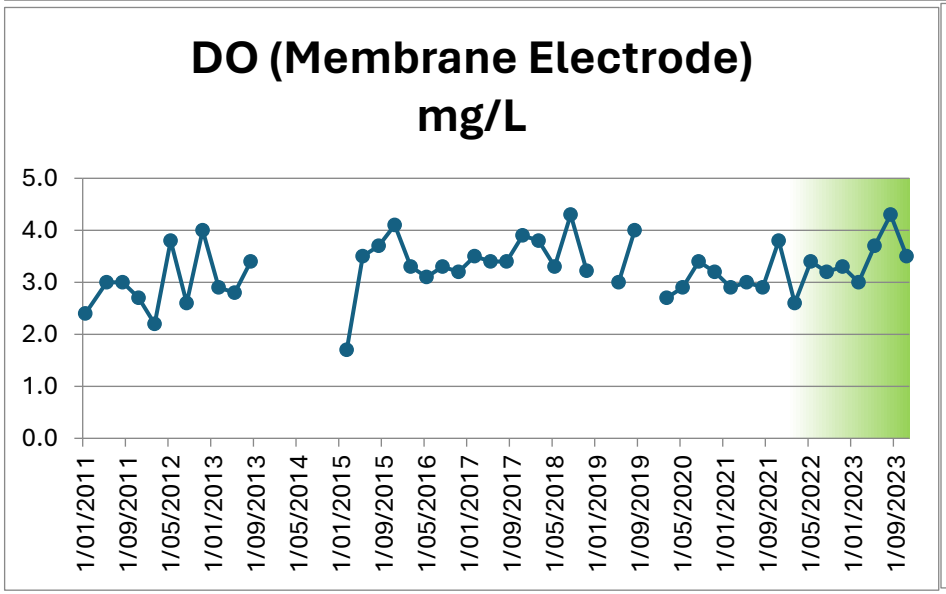

Chromium (Total)
mg/L
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

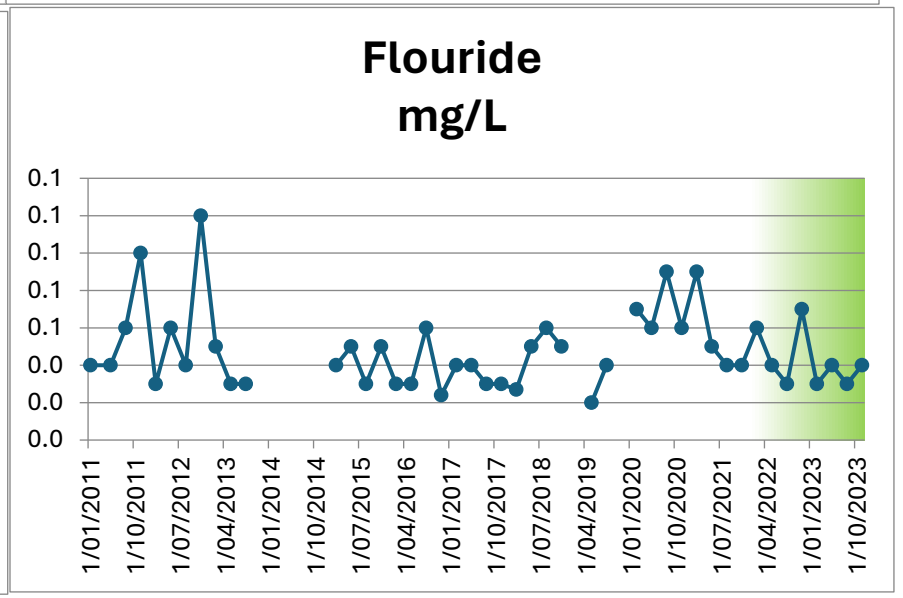

Chromium 3
mg/L
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

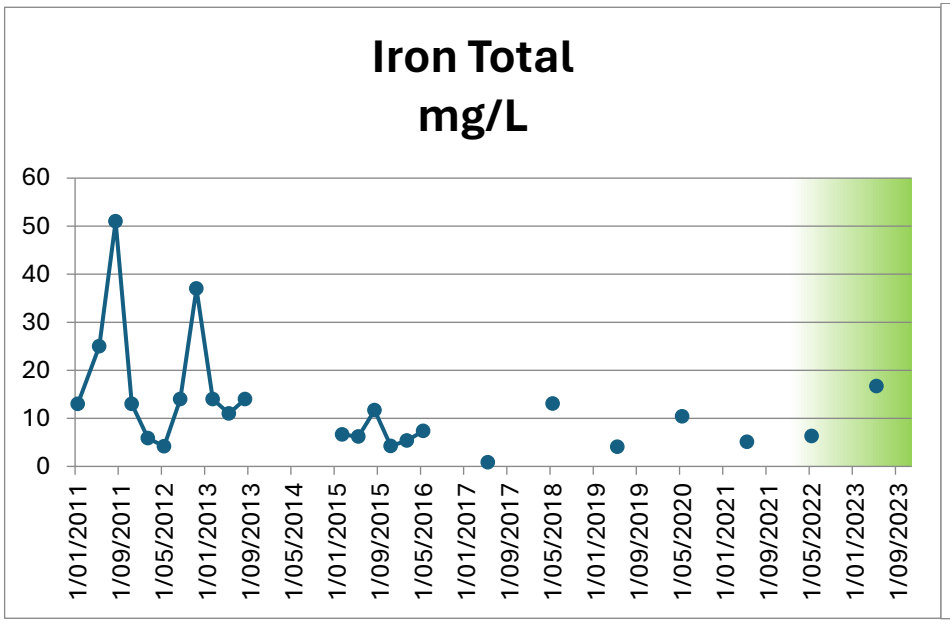

Chromium 6
mg/L
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

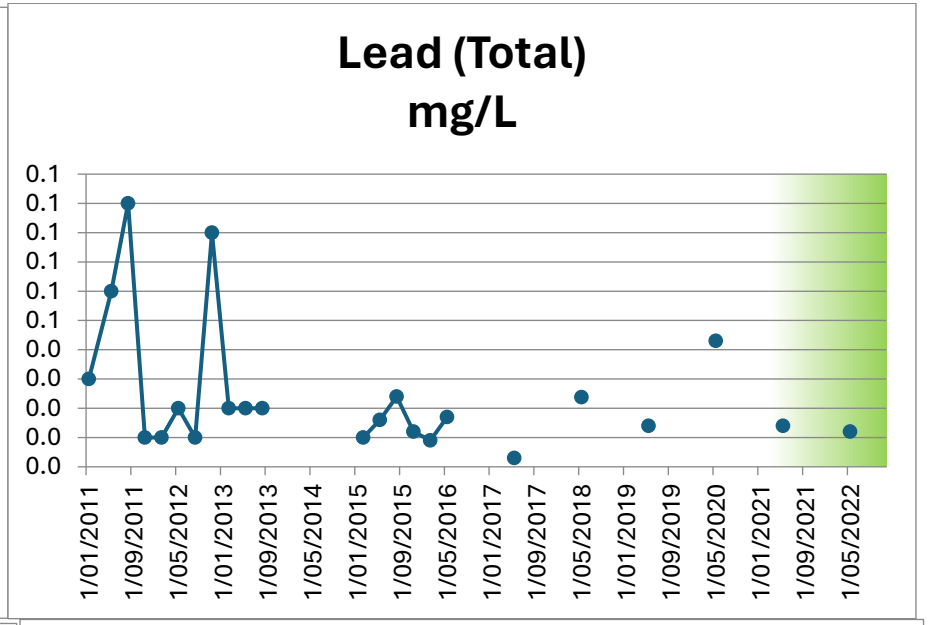

Conductivity
µScm-1
4500
4000
3500
3000
2500
2000
1500
1000
500
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

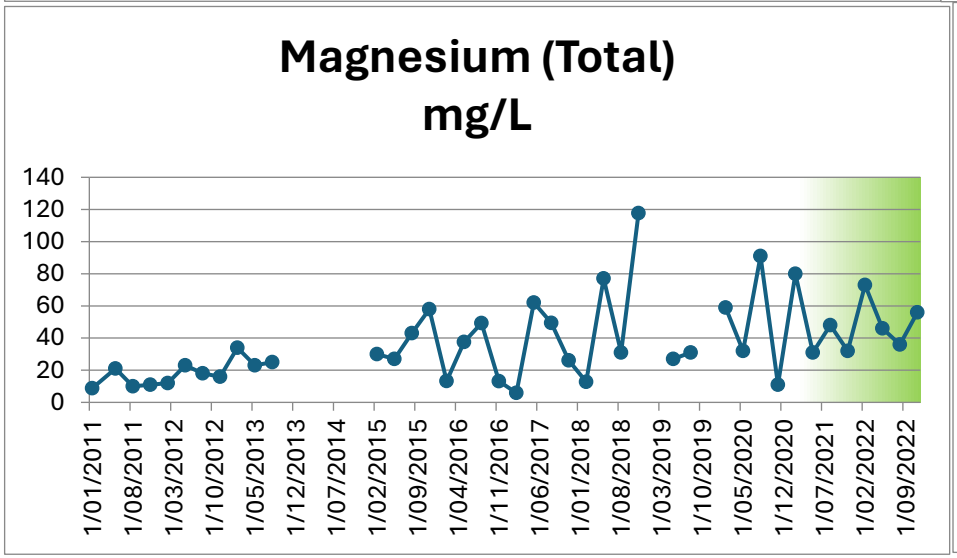

Copper (Total)
mg/L
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

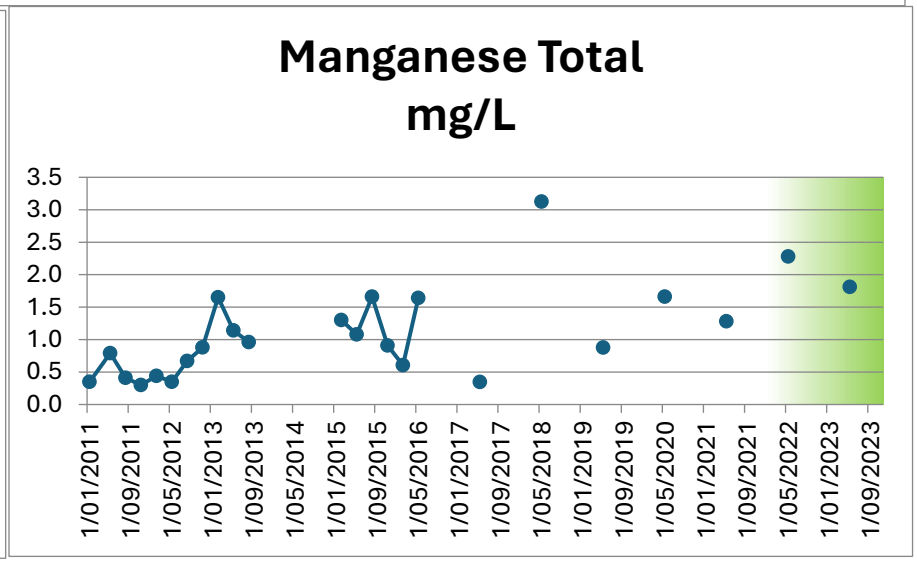

DO (Membrane Electrode)
mg/L
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

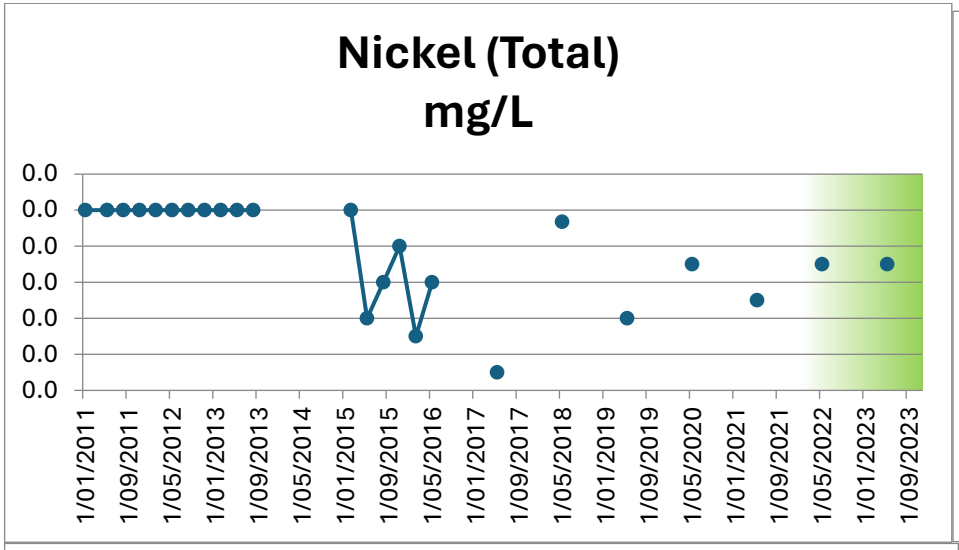

Flouride
mg/L
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

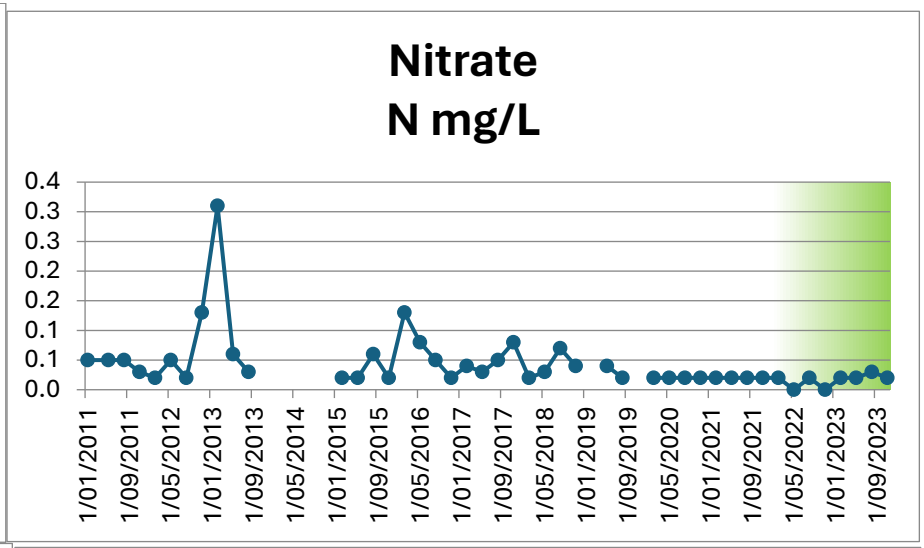

Iron Total
mg/L
60
50
40
30
20
10
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

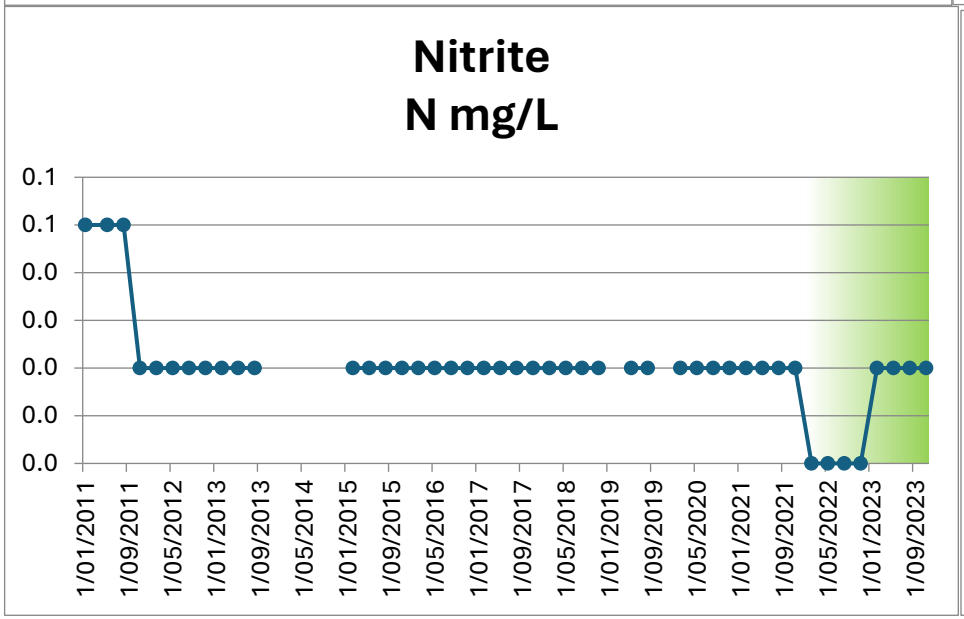

Lead (Total)
mg/L
0.1
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022

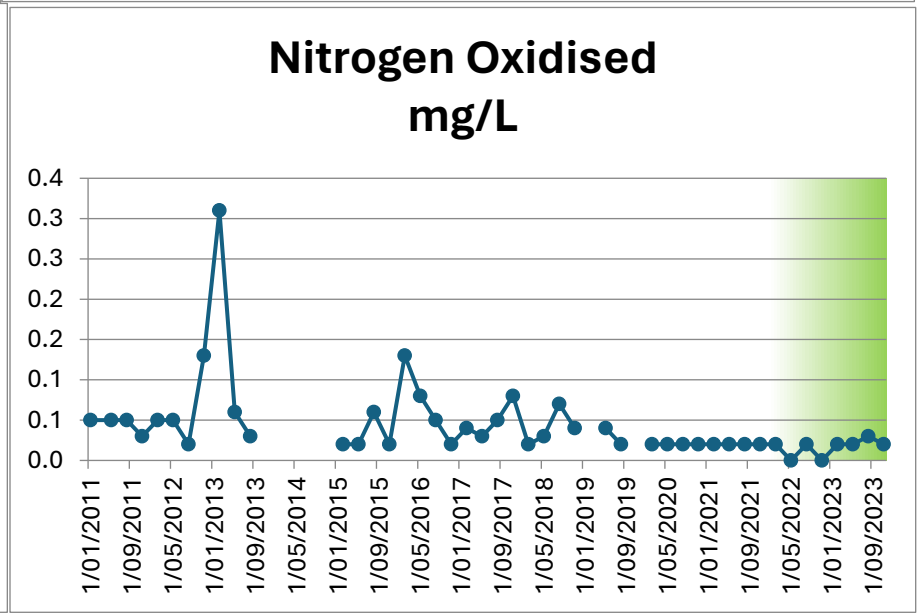

Magnesium (Total)
mg/L
140
120
100
80
60
40
20
0
1/01/2011
1/08/2011
1/03/2012
1/10/2012
1/05/2013
1/12/2013
1/07/2014
1/02/2015
1/09/2015
1/04/2016
1/11/2016
1/06/2017
1/01/2018
1/08/2018
1/03/2019
1/10/2019
1/05/2020
1/12/2020
1/07/2021
1/02/2022
1/09/2022

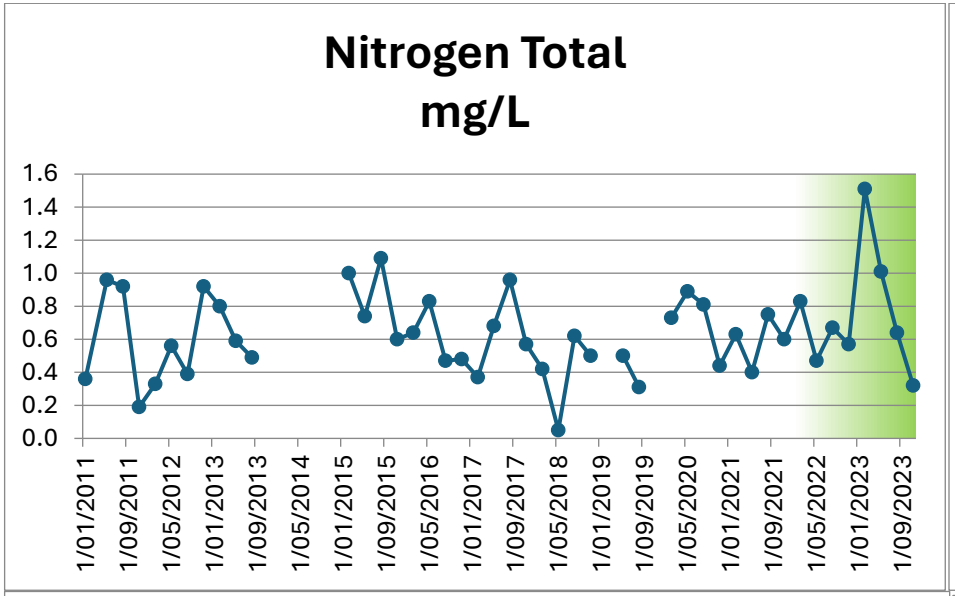

Manganese Total
mg/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

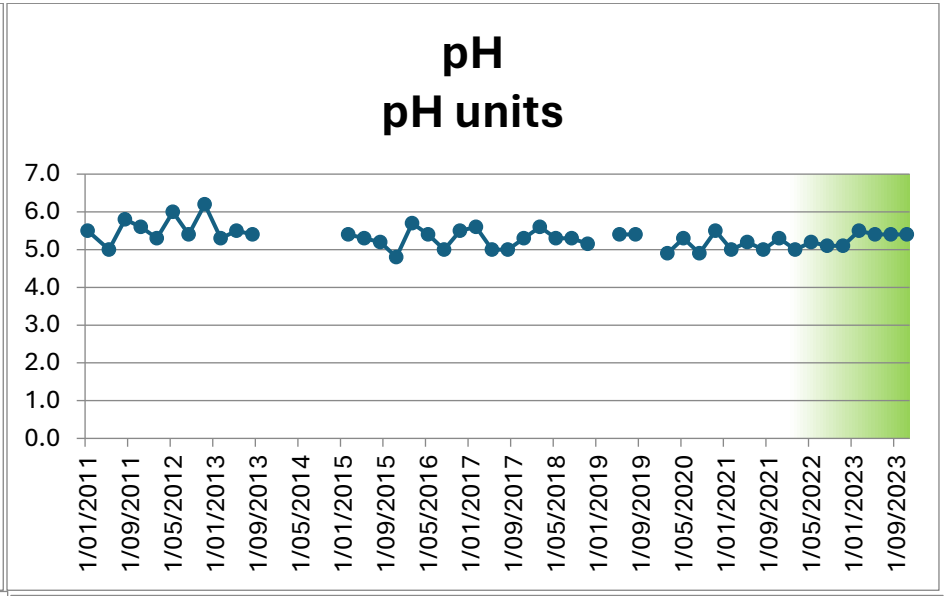

Nickel (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

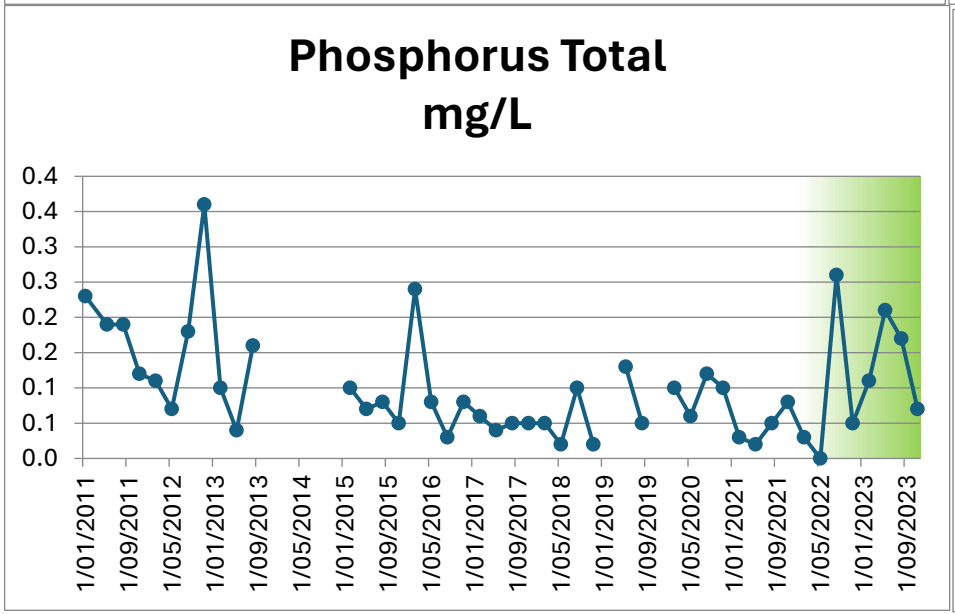

Nitrate
N mg/L
0.4
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

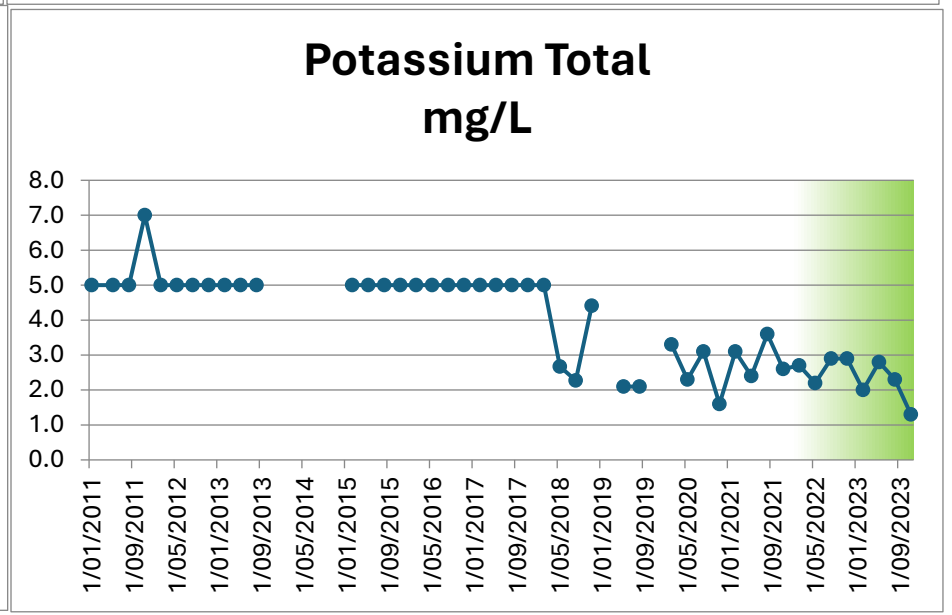

Nitrite
N mg/L
0.1
0.1
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

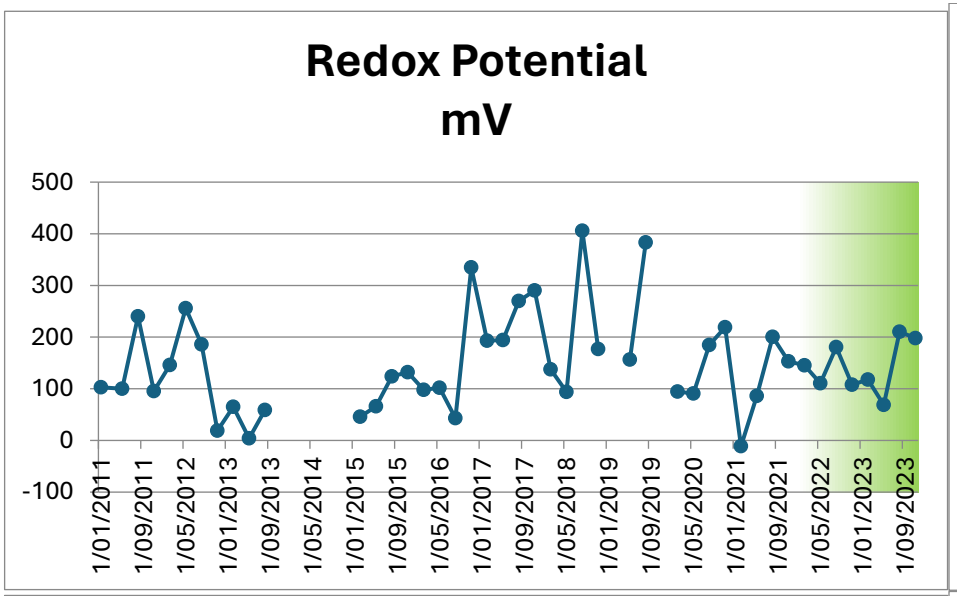

Nitrogen Oxidised
mg/L
0.4
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

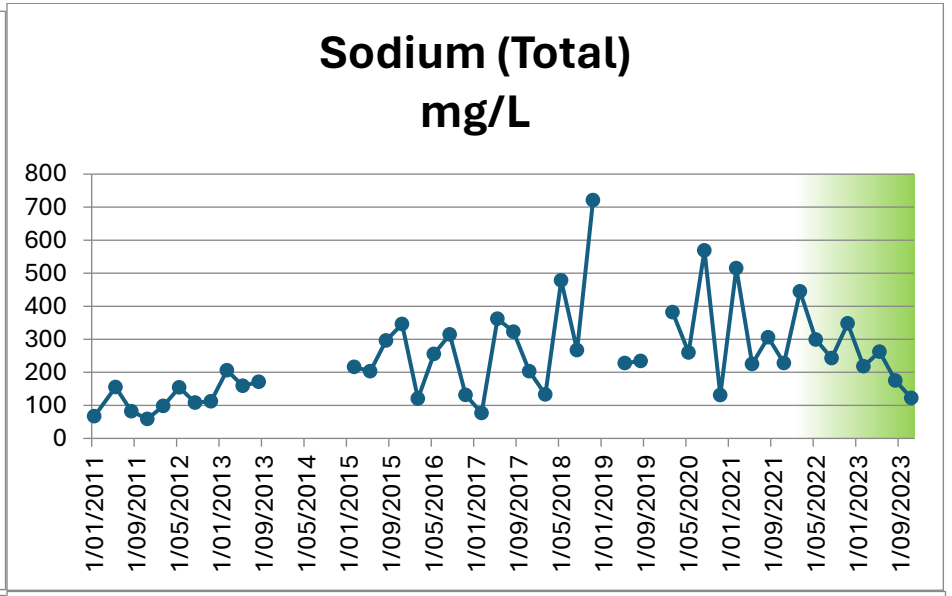

Nitrogen Total
mg/L
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

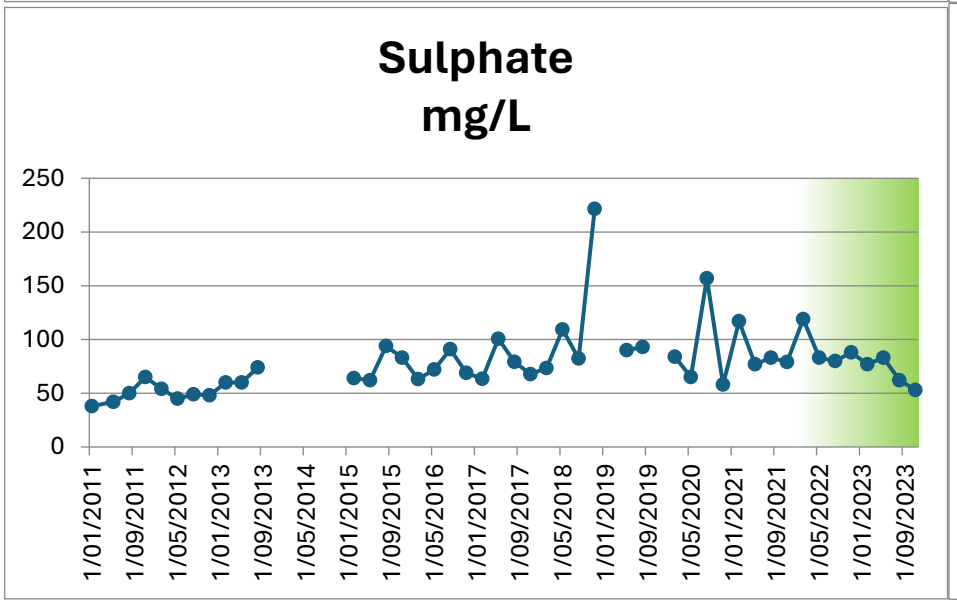

pH
pH units
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

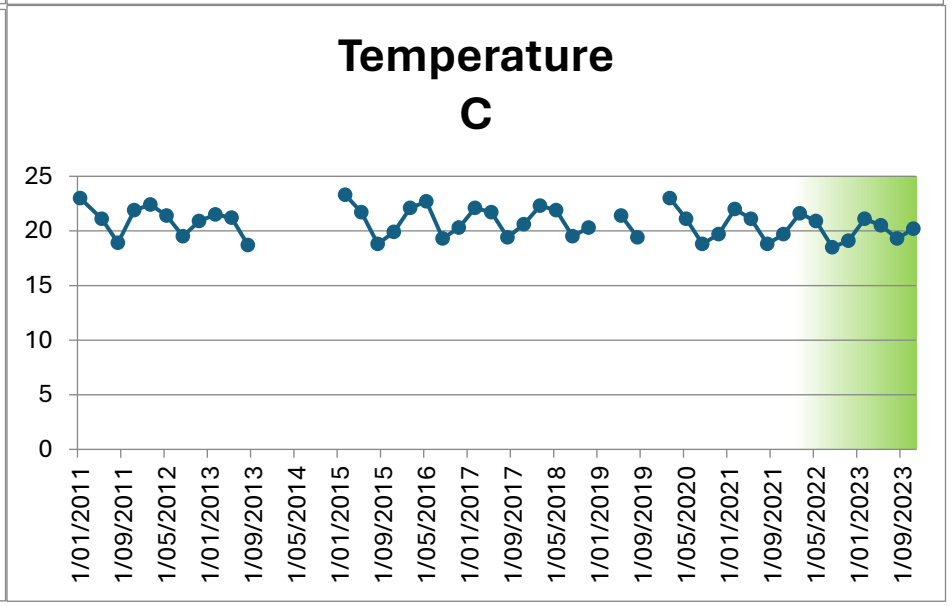

Phosphorus Total
mg/L
0.4
0.4
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

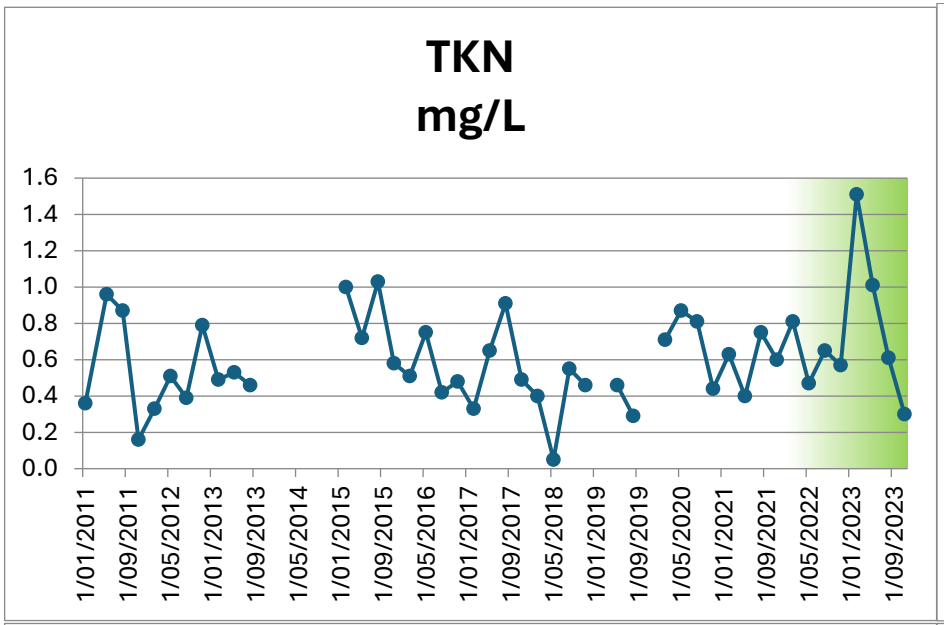

Potassium Total
mg/L
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

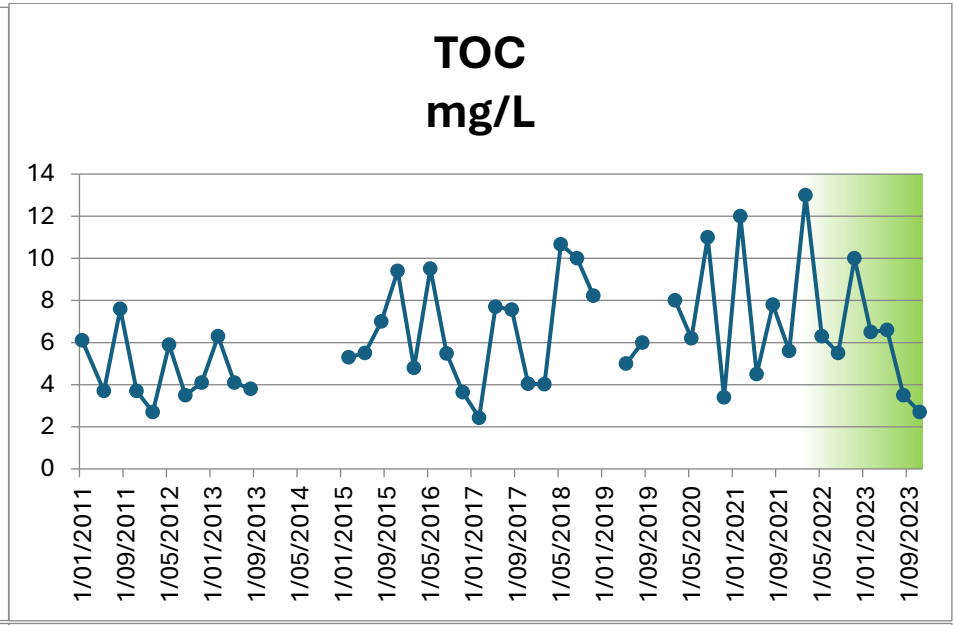

Redox Potential
mV
500
400
300
200
100
0
-100
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

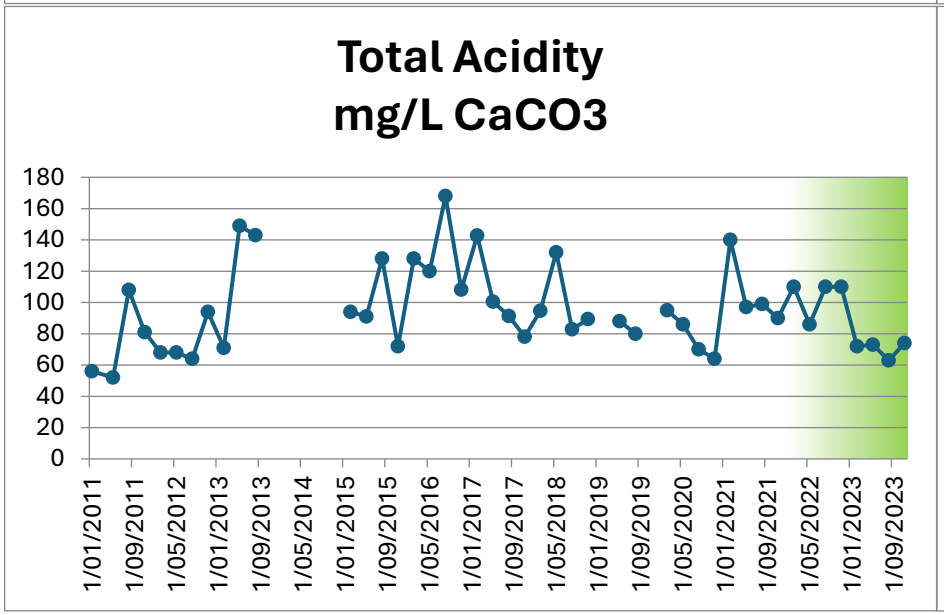

Sodium (Total)
mg/L
800
700
600
500
400
300
200
100
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

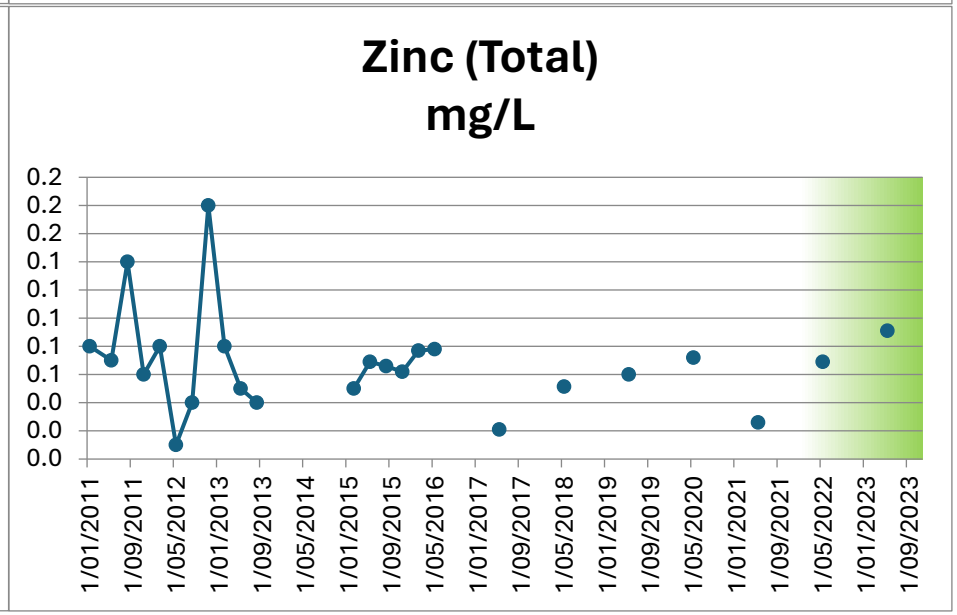

Sulphate
mg/L
250
200
150
100
50
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Temperature
C
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TKN
mg/L
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TOC
mg/L
14
12
10
8
6
4
2
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Total Acidity
mg/L CaCO3
180
160
140
120
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Zinc (Total)
mg/L
0.2
0.2
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

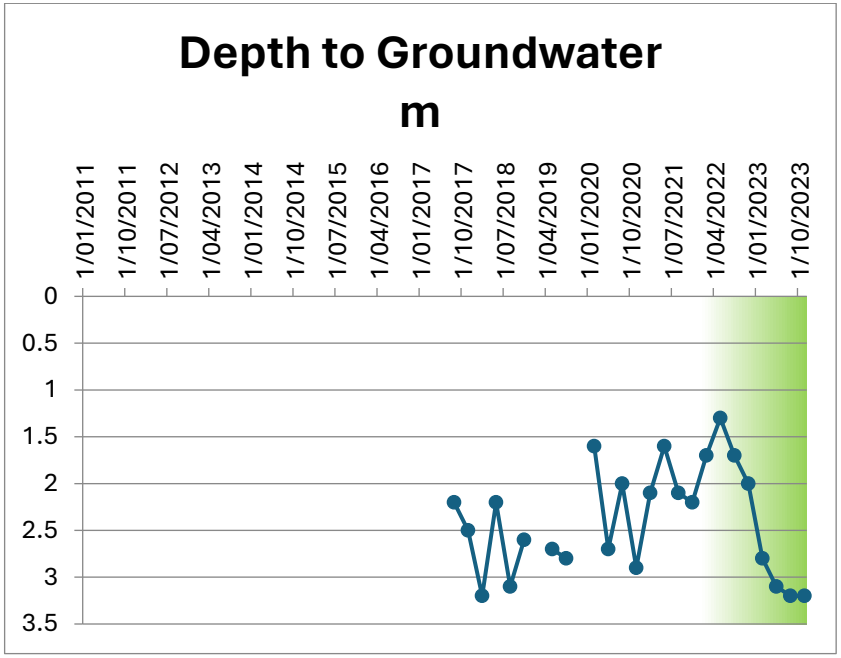
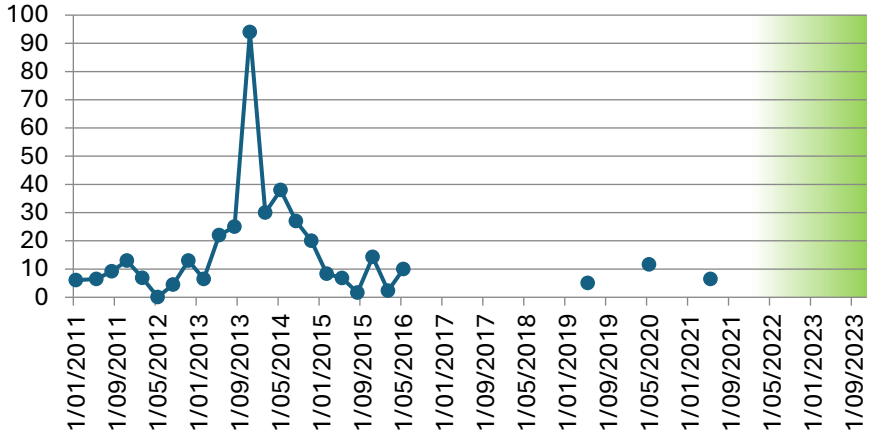

Depth to Groundwater
m
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023
0
0.5
1
1.5
2
2.5
3
3.5

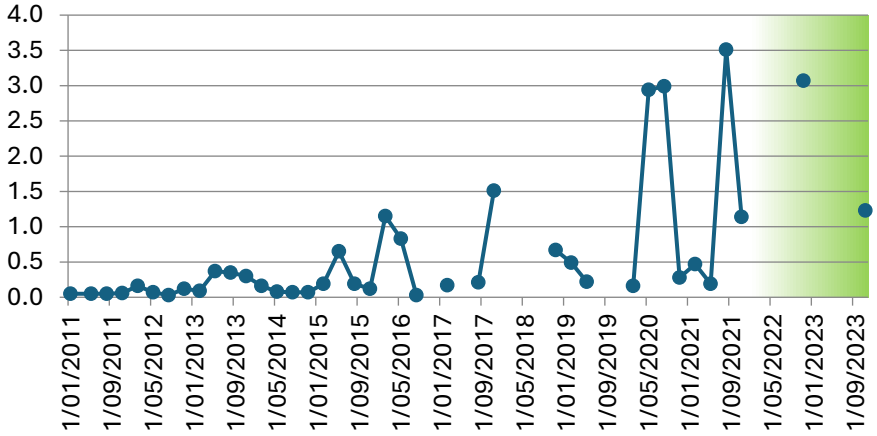
Table 18: Ground Water 10

GW10	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µScm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride mg/L	Iron Total mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	Nitrate N mg/L	Nitrite N mg/L	Nitrogen Oxidised mg/L	Nitrogen Total mg/L	pH pH units	Phenol Alkalinity mg/L as CaCO3	Phosphorus Total mg/L	Potassium Total mg/L	Redox Potential mV	Sodium (Total) mg/L	Sulphate mg/L	Temperature C	TKN mg/L	TOC mg/L	Total Acidity mg/L CaCO3	Zinc (Total) mg/L	Depth to Groundwater m
31/01/2011	17	6	0.1	0.0	10	1	0.0	4.7	33	0.0	0.0	0.0	212	0.0	2.3	0.0	13	0.0	3.2	0.6	0.0	0.6	0.1	0.6	1.4	5.8		0.2	5.0	72	21	8.2	21	0.8	3	52	0.0	
10/05/2011	17	6	0.1	0.0	10	1	0.0	8.6	97	0.0	0.0	0.0	419	0.0	1.0	0.0	17	0.0	6.4	0.8	0.0	0.1	0.1	0.1	1.1	5.1		0.2	5.0	118	47	12.0	21	1.1	4	10	0.0	
9/08/2011	11	9	0.1	0.0	7	6	0.0	4.2	50	0.0	0.0	0.0	261	0.0	3.3	0.1	23	0.0	4.3	0.7	0.0	1.4	0.1	1.4	2.3	5.5		0.2	5.0	258	27	8.1	18	0.9	5	74	0.1	
8/11/2011	9	13	0.1	0.0	5	1	0.0	4.9	54	0.0	0.0	0.0	182	0.1	2.8	0.1	23	0.0	5.8	0.6	0.0	1.6	0.0	1.6	2.8	5.4		0.3	7.0	172	19	9.5	20	1.3	3	60	0.1	
6/02/2012	17	7	0.2	0.0	10	9	0.0	4.3	38	0.0	0.0	0.0	181	0.0	1.3	0.0	9	0.0	3.4	0.6	0.0	0.0	0.0	0.1	2.2	5.7		0.4	5.0	86	25	5.8	21	2.2	7	55	0.0	
8/05/2012	16	0	0.1	0.0	10	3	0.0	4.6	38	0.0	0.0	0.0	185	0.0	2.9	0.1	0	0.0	3.9	0.6	0.0	0.0	0.0	0.0	0.2	6.0		0.1	5.0	262	23	6.5	21	0.1	11	52	0.0	
6/08/2012	15	4	0.0	0.0	9	3	0.0	4.4	50	0.0	0.0	0.0	241	0.0	2.0	0.0	17	0.0	4.7	0.4	0.0	0.1	0.0	0.1	0.8	5.3		0.2	5.0	200	20	9.5	19	0.7	4	52	0.0	
13/11/2012	10	13	0.1	0.0	6	5	0.0	5.5	47	0.0	0.0	0.0	228	0.1	5.5	0.1	26	0.0	3.5	0.4	0.0	0.1	0.0	0.1	1.9	5.9		0.5	5.0	68	23	8.9	20	1.8	8	36	0.1	
13/02/2013	14	6	0.1	0.0	8	7	0.0	8.6	70	0.0	0.0	0.0	292	0.0	6.2	0.0	13	0.0	3.9	0.4	0.0	0.1	0.0	0.1	1.9	5.9		0.3	5.0	13	29	9.3	21	1.8	17	43	0.1	
14/05/2013	25	22	0.4	0.0	15	10	0.0	6.1	40	0.0	0.0	0.0	229	0.1	3.7	0.1	32	0.0	4.0	0.8	0.0	0.1	0.0	0.1	2.9	6.0		0.3	5.0	-35	21	5.7	21	2.8	10	105	0.1	
6/08/2013	26	25	0.4	0.0	16	6	0.0	5.8	39	0.0	0.0	0.0	251	0.1	3.0	0.0	42	0.0	4.9	0.9	0.0	0.0	0.0	0.1	2.7	6.1		0.4	5.0	-17	25	8.2	19	2.7	11	100	0.1	
12/11/2013	10	94	0.3	0.0	6	7	0.0	4.7	47	0.1	0.1	0.0	216	0.2	3.3	0.0	131	0.1	3.7	1.0	0.0	0.2	0.0	0.2	4.4	6.3		0.8	5.0	45	29	8.9	20	4.2	4	51	0.3	
11/02/2014	10	30	0.2	0.0	6	6	0.0	4.1	42	0.0	0.0	0.0	195	0.1	3.4	0.0	46	0.0	3.5	0.4	0.0	0.2	0.0	0.2	2.3	5.7		0.4	5.0	49	25	8.0	22	2.1	7	132	0.1	
13/05/2014	8	38	0.1	0.0	5	3	0.0	3.2	48	0.0	0.0	0.0	219	0.1	4.2	0.0	70	0.0	3.5	0.5	0.0	1.5	0.0	1.5	3.4	5.3		0.7	5.0	71	25	5.5	21	1.9	3	63	0.1	
12/08/2014	7	27	0.1	0.0	4	4	0.0	3.8	60	0.0	0.0	0.0	262	0.1	4.6	0.0	39	0.0	5.3	0.5	0.0	1.9	0.0	1.9	3.8	5.4		0.5	5.0	59	34	9.4	19	1.9	3	112	0.1	
10/11/2014	8	20	0.1	0.0	5	4	0.0	3.8	60	0.0	0.0	0.0	253	0.1	3.8	0.0	32	0.0	5.4	0.5	0.0	2.5	0.0	2.5	4.2	5.3		0.3	5.0	99	34	9.0	20	1.7	3	144	0.1	
9/02/2015	22	8	0.2	0.0	13	4	0.0	7.0	60	0.0	0.0	0.0	275	0.0	1.7	0.0	14	0.0	4.9	0.6	0.0	0.0	0.0	0.1	2.4	6.2		0.3	5.0	2	28	7.2	22	2.4	16	60	0.0	
11/05/2015	12	7	0.7	0.0	7	8	0.0	10.0	148	0.0	0.0	0.0	551	0.0	1.9	0.0	13	0.0	10.0	1.0	0.0	0.0	0.0	0.0	1.7	5.5		0.2	5.0	62	66	12.0	21	1.7	6	100	0.0	
11/08/2015	1	2	0.2	0.0	1	5	0.0	23.0	410	0.0	0.0	0.0	1438	0.0	2.2	0.0	21	0.0	29.0	2.5	0.1	0.1	0.0	0.1	1.6	4.8		0.2	5.0	147	192	24.0	19	1.6	5	147	0.1	
10/11/2015	8	14	0.1	0.0	8	3	0.0	3.6	51	0.0	0.0	0.0	164	0.0	3.4	0.0	48	0.0	3.5	0.3	0.0	0.1	0.0	0.1	2.0	5.6		0.4	5.0	10	26	5.9	19	1.9	6	57	0.1	
8/02/2016	12	2	1.2	0.0	12	4	0.0	2.2	21	0.0	0.0	0.0	106	0.0	5.4	0.0	4	0.0	1.8	0.1	0.0	0.1	0.0	0.1	2.2	5.9		0.3	5.0	153	11	3.7	24	2.0	5	25	0.0	
9/05/2016	22	10	0.8	0.0	22	13	0.0	3.6	52	0.0	0.0	0.0	248	0.0	3.7	0.0	20	0.0	4.7	0.5	0.0	0.1	0.0	0.1	2.9	5.9		0.4	5.0	38	29	6.6	22	2.8	5	75	0.1	
9/08/2016	6		0.0		6	1		3.1	30				129		2.3	0.0			2.3			0.1	0.0	0.1	1.5	5.3		0.3	5.0	139	15	4.9	19	1.4	6	58		
7/11/2016																																					
7/02/2017	8		0.2		8	3		2.7	44				194		3.2	0.0			3.5			0.4	0.0	0.4	3.1	5.3		0.6	5.0	188	22	6.3	21	2.7	3	116		
8/05/2017																																					
8/08/2017	19		0.2		19	4		3.7	45				231		4.2	0.0			4.3			0.1	0.0	0.1	2.8	5.4		0.5	5.0	161	25	8.8	19	2.7	6	60		3.1
7/11/2017	28		1.5		28	6		3.2	42				231		2.5	0.0			3.9			0.0	0.0	0.0	2.4	5.4		0.2	5.0	51	23	8.1	20	2.4	6	66		3.1
13/02/2018																																					
8/05/2018																																					
14/08/2018																																					
13/11/2018	26		0.7		26	3		4.5	49				256		3.7	0.0			4.5			0.0	0.0	0.0	1.5	6.0		0.2	1.4	42	29	9.7	20	1.5	11	74		2.6
12/02/2019	34		0.5		34	7		3.9	31				224		3.2	0.0			3.9			0.1	0.0	0.1	2.8	6.1		0.3	1.5	2	24	3.8	21	2.7	1	67		4.2
14/05/2019	15	5	0.2	0.0	15	6	0.0	3.4	40	0.0	0.0	0.0	199	0.0	3.0	0.1	11	0.0	4.0	0.4	0.0	0.1	0.0	0.1	1.7	5.7		0.5	1.4	40	26	9.8	21	1.7	5	67	0.1	3.3
14/08/2019																																					
12/11/2019																																					
25/02/2020	9		0.2		9	8		2.9	29				132		4.6	0.0			2.2			0.1	0.0	0.1	2.1	5.5		0.5	1.6	111	16	5.7	22	2.1	15	40		2.6
12/05/2020	52	12	2.9	0.0	52	8	0.0	6.8	80	0.0	0.0	0.0	424	0.0	3.1	0.0	27	0.0	7.6	0.7	0.0	0.5	0.0	0.5	5.4	6.0		0.2	3.5	-28	43	8.7	21	4.9	8	96	0.1	3.4
11/08/2020	18		3.0		18	5		4.3	49				246		2.5	0.0			4.5			0.0	0.0	0.0	4.9	5.7		0.6	1.8	93	32	7.2	19	4.9	7	42		2.8
10/11/2020	15		0.3		15	7		2.8	45				204		3.1	0.0			4.0			0.1	0.0	0.1	1.9	5.4		0.6	1.4	99	26	8.0	19	1.9	3	48		3.4
9/02/2021	25		0.5		25	4		3.5	44				216		2.7	0.1			3.8			0.0	0.0	0.0	1.8	5.2	0.0	0.2	1.3	4	25	5.8	21	1.8	9	76		3.0
11/05/2021	12	6	0.2	0.0	12	2	0.0	2.6	24	0.0	0.0	0.0	120	0.0	2.0	0.0	11	0.0	2.7	0.4	0.0	0.0	0.0	0.0	1.4	5.6	0.0	0.2	1.2	117	14	4.8	21	1.4	6	42	0.0	2.8
10/08/2021	26		3.5		26	3		2.8	29				194		3.1	0.0			3.7			0.0	0.0	0.0	4.6	5.8	0.0	0.5	1.5	104	20	7.6	19	4.6	4	48		3.1
8/11/2021	26		1.1		26	5		3.3	43				218		2.6	0.0			4.0			0.1	0.0	0.1	3.3	5.8	0.0	0.4	1.5	16	22	6.9	19	3.2	6	71		2.4
9/02/2022																																					
11/05/2022																																					
10/08/2022																																					
8/11/2022	42		3.1		42	18		7.1	37				259		3.3	0.0			4.8			0.1	0.0	0.2	6.4	6.2	0.0	1.1	1.7	-18	19	2.7	18	6.3	10	68		3.0
13/02/2023																																					
8/05/2023																																					
8/08/2023																																					
13/11/2023	60		1.2		60	16		7.6	49				285		2.0	0.0			5.1			0.0	0.0	0.0	4.6	6.0		1.8	1.7	-85	23	8.1	19	4.5	15	100		3.6
2023 Min	**60.0**	**0.0**	**1.2**	**0.0**	**60.0**	**16.0**	**0.0**	**7.6**	**49.0**	**0.0**	**0.0**	**0.0**	**285.0**	**0.0**	**2.0**	**0.0**	**0.0**	**0.0**	**5.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**4.6**	**6.0**	**0.0**	**1.8**	**1.7**	**-85.4**	**23.0**	**8.1**	**19.4**	**4.5**	**15.0**	**100.0**	**0.0**	**3.6**
2023 Max	**60.0**	**0.0**	**1.2**	**0.0**	**60.0**	**16.0**	**0.0**	**7.6**	**49.0**	**0.0**	**0.0**	**0.0**	**285.0**	**0.0**	**2.0**	**0.0**	**0.0**	**0.0**	**5.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**4.6**	**6.0**	**0.0**	**1.8**	**1.7**	**-85.4**	**23.0**	**8.1**	**19.4**	**4.5**	**15.0**	**100.0**	**0.0**	**3.6**
2023 Mean	**60.0**	**#DIV/0!**	**1.2**	**#DIV/0!**	**60.0**	**16.0**	**#####**	**7.6**	**49.0**	**#####**	**#####**	**#####**	**285.0**	**#####**	**2.0**	**0.0**	**#DIV/0!**	**#DIV/0!**	**5.1**	**#####**	**#####**	**0.0**	**0.0**	**0.0**	**4.6**	**6.0**	**#####**	**1.8**	**1.7**	**-85.4**	**23.0**	**8.1**	**19.4**	**4.5**	**15.0**	**100.0**	**#####**	**3.6**
Long-term Average	**18.4**	**15.5**	**0.6**	**0.0**	**15.8**	**5.6**	**0.0**	**5.1**	**58.1**	**0.0**	**0.0**	**0.0**	**265.9**	**0.0**	**3.1**	**0.0**	**28.1**	**0.0**	**4.9**	**0.6**	**0.0**	**0.3**	**0.0**	**0.3**	**2.6**	**5.7**	**0.0**	**0.4**	**3.9**	**76.1**	**30.3**	**7.9**	**20.3**	**2.3**	**6.8**	**70.3**	**0.1**	**3.1**

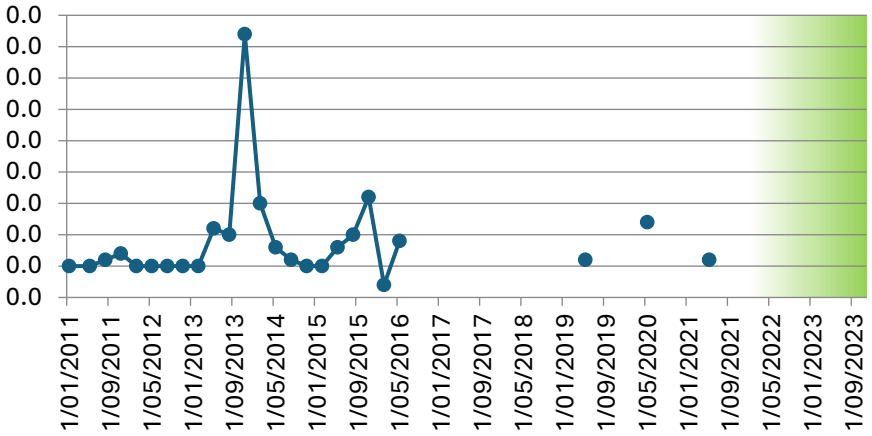
Aluminium (Total)
mg/L



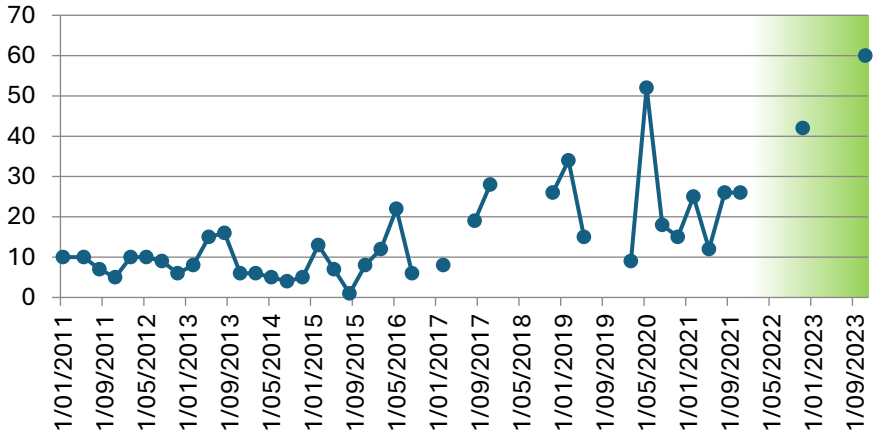
Ammonia
mg/L

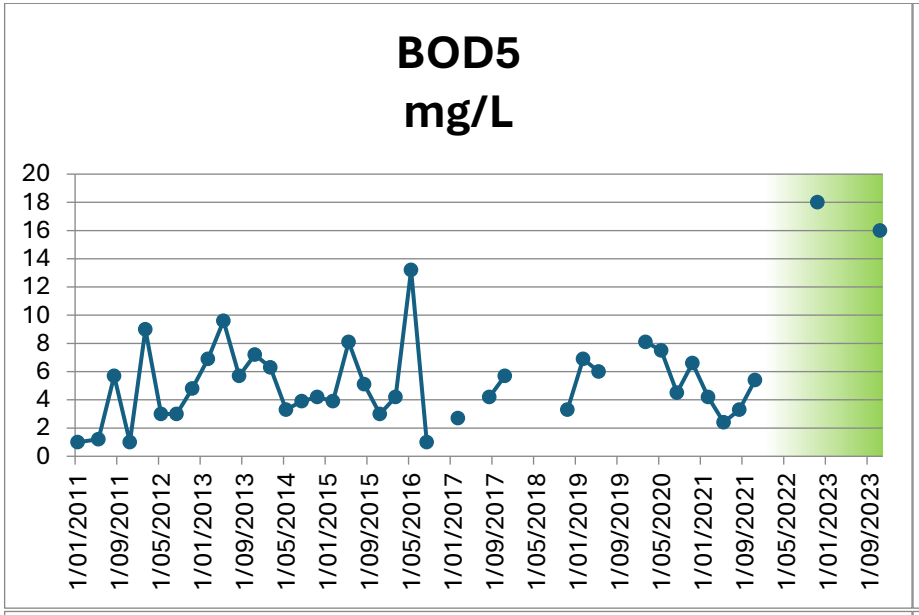


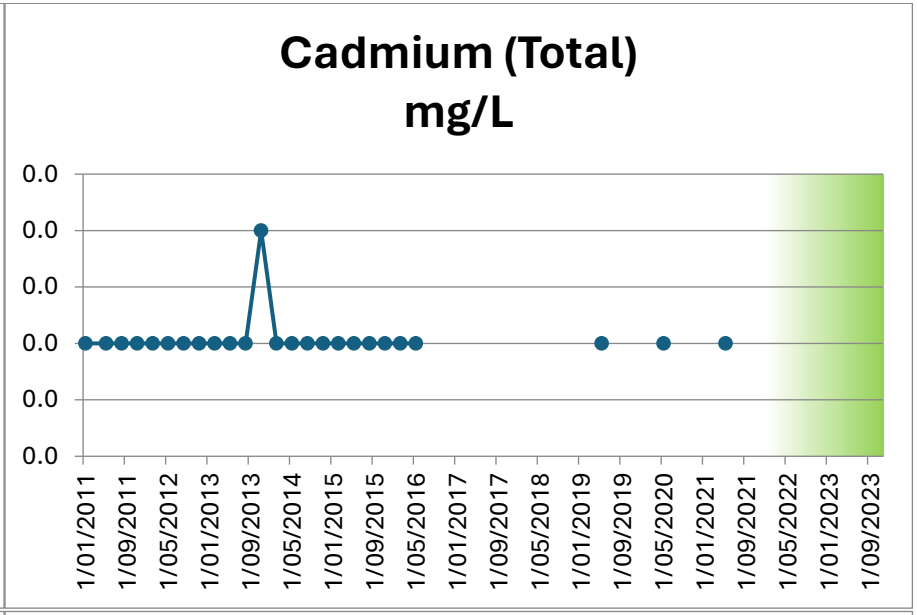
Arsenic (Total)
mg/L



Bicarbonate HCO3
mg/L




BOD5
mg/L
20
18
16
14
12
10
8
6
4
2
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
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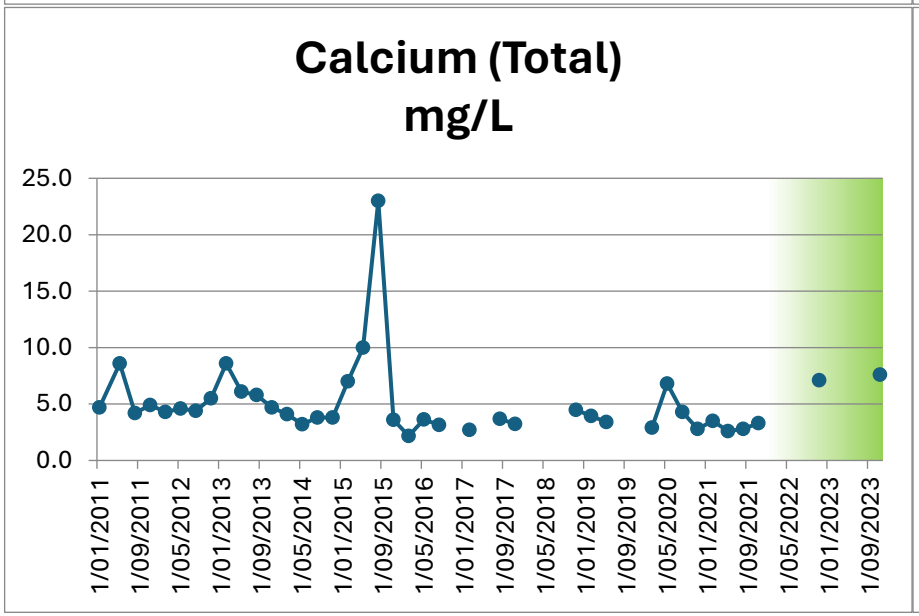
1/01/2023
1/09/2023


Calcium (Total)
mg/L
25.0
20.0
15.0
10.0
5.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
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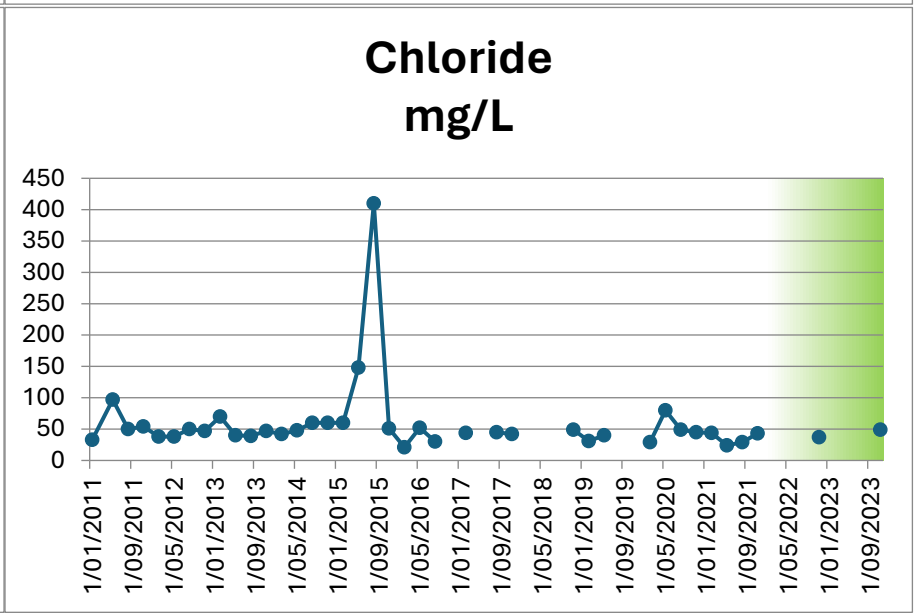
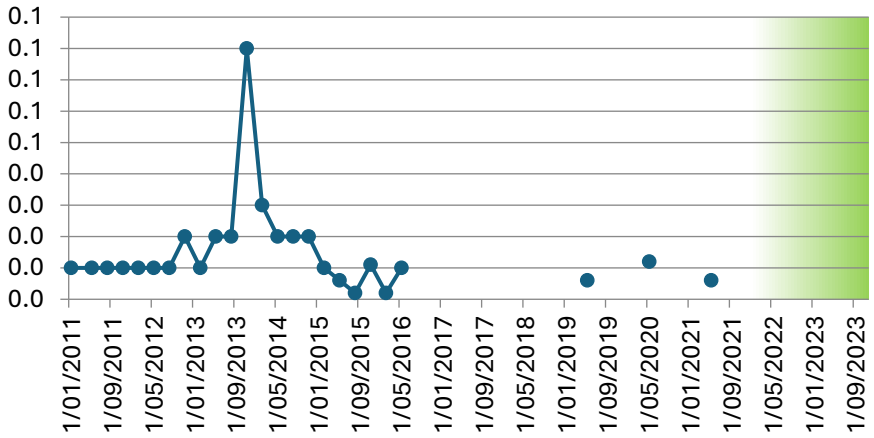
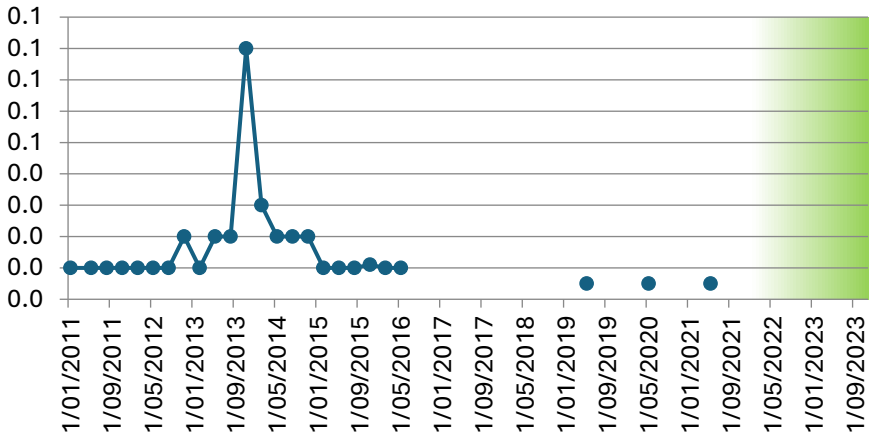
1/05/2022
1/01/2023
1/09/2023


Chloride
mg/L
450
400
350
300
250
200
150
100
50
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

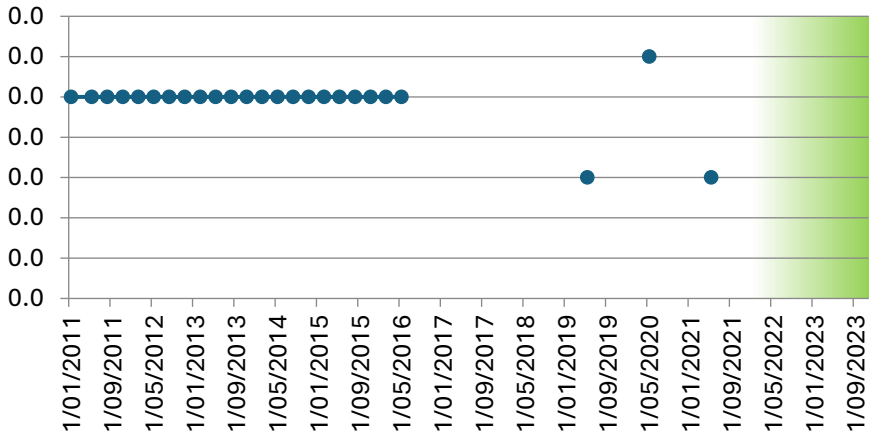
Chromium (Total)
mg/L



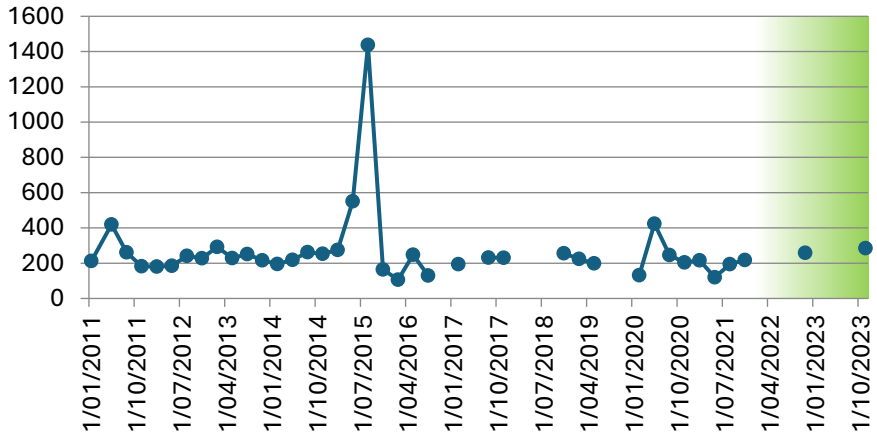
Chromium 3
mg/L

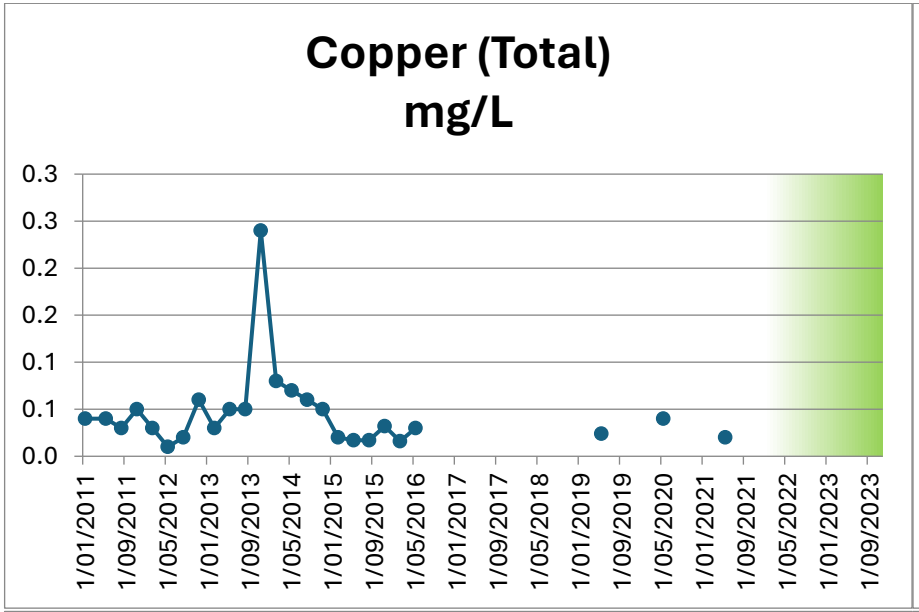


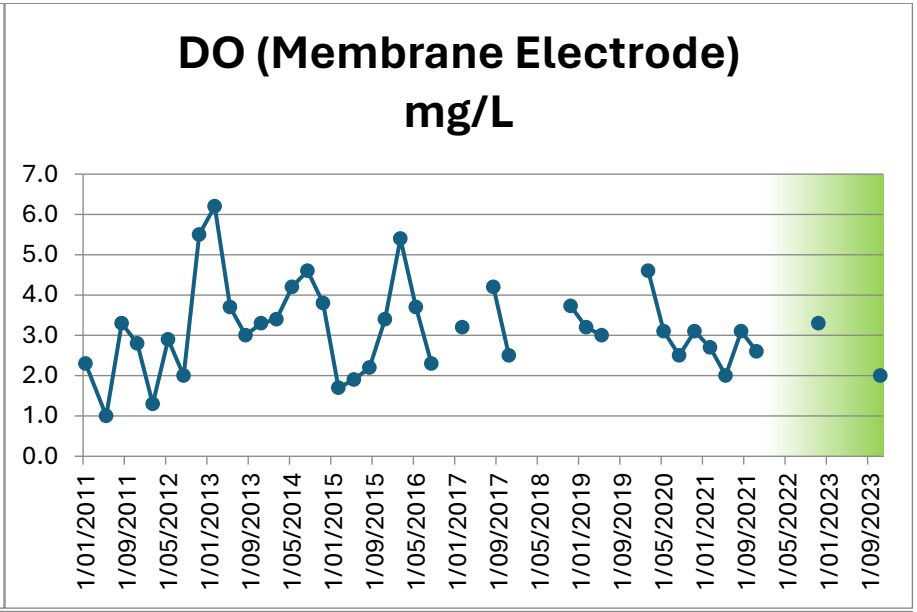
Chromium 6
mg/L

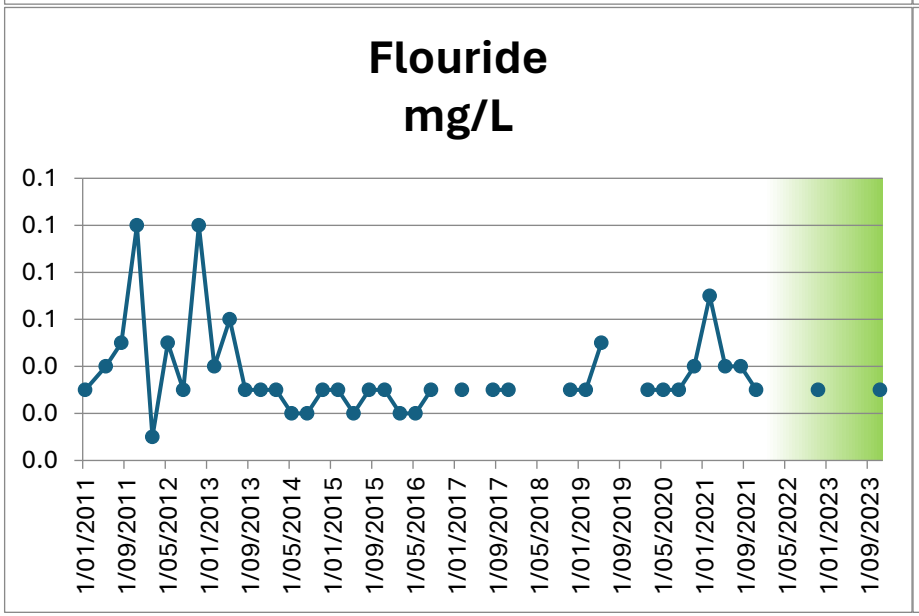


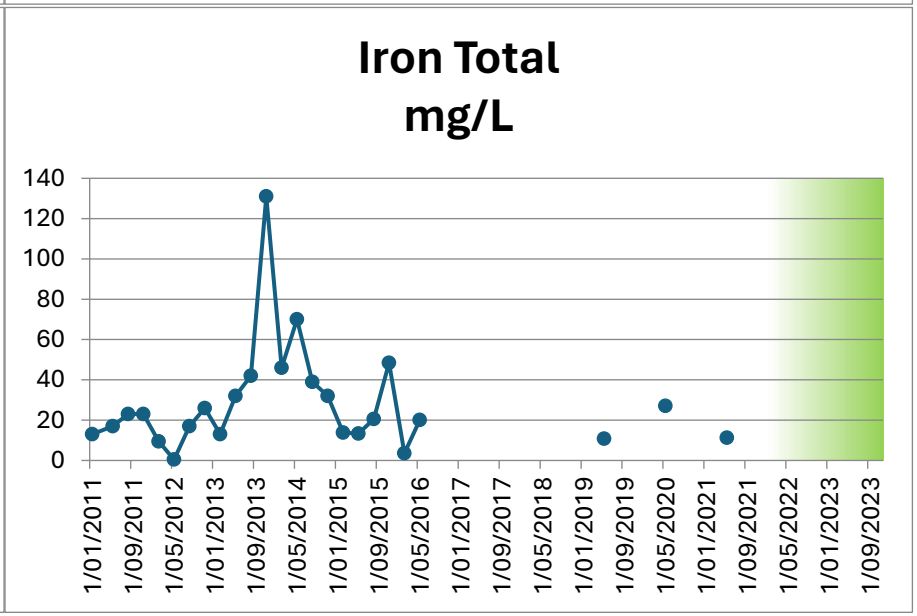
Conductivity
µScm-1

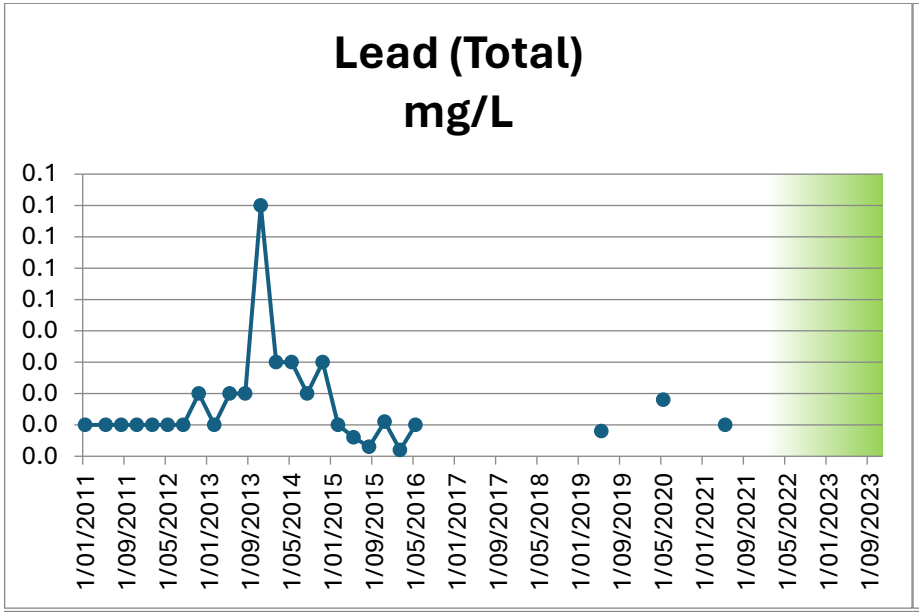


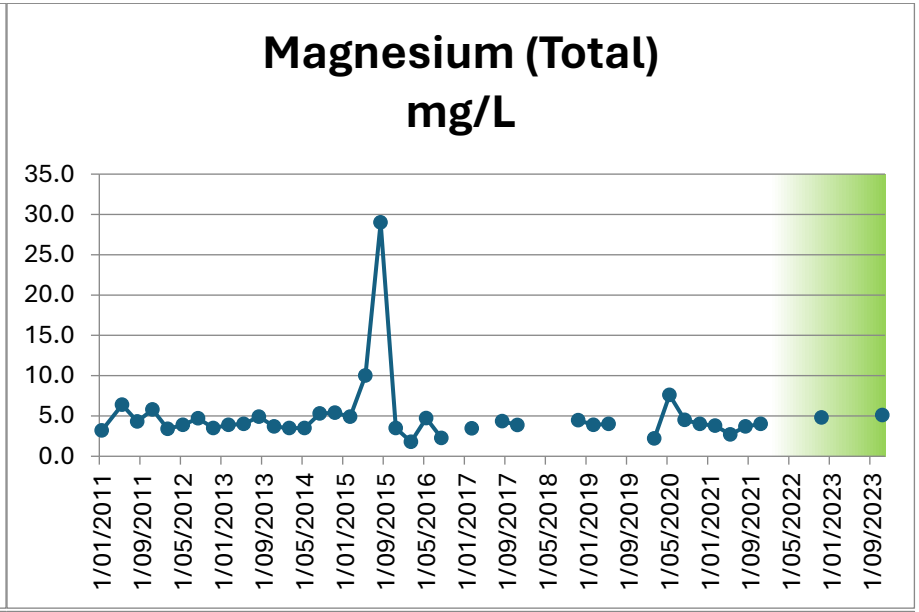

Copper (Total)
mg/L
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

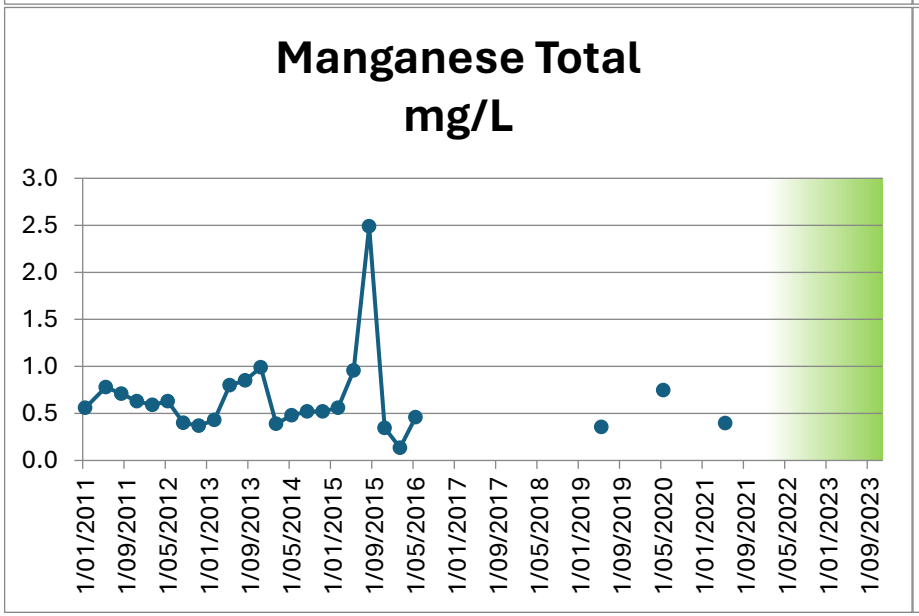

DO (Membrane Electrode)
mg/L
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

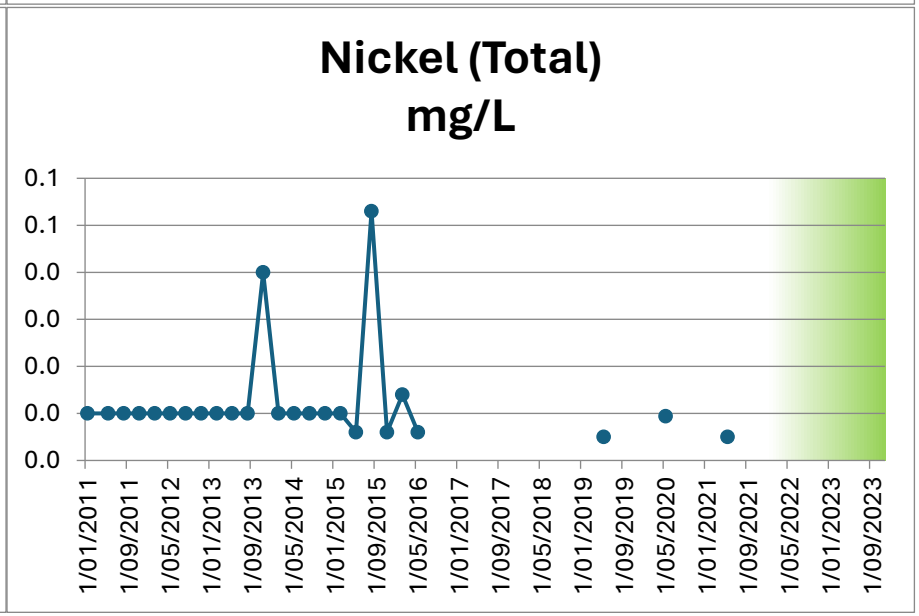

Flouride
mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

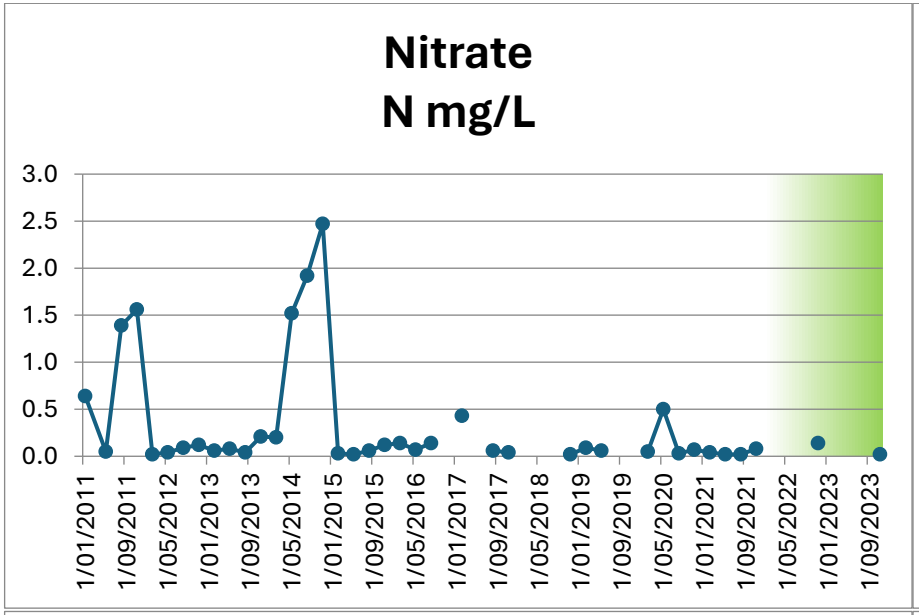

Iron Total
mg/L
140
120
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

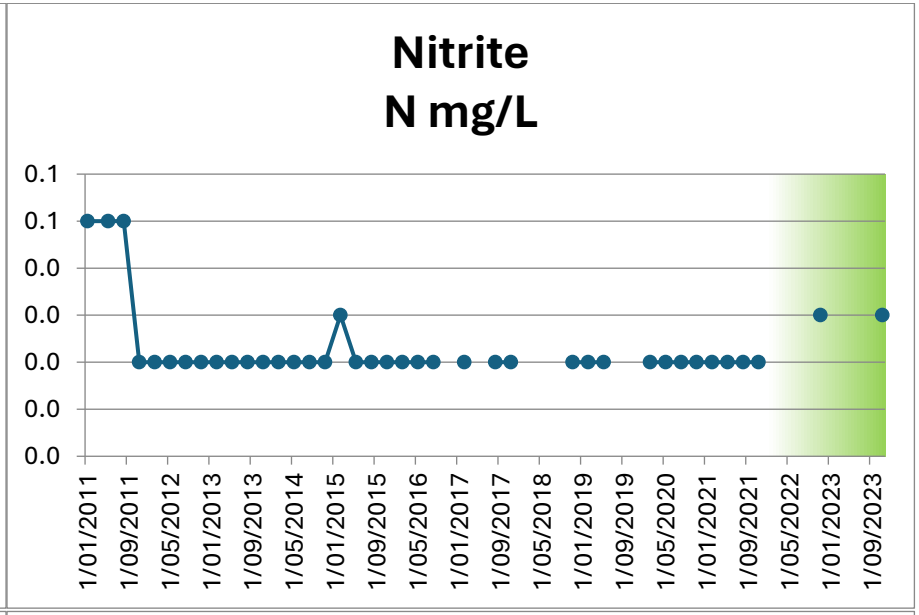

Lead (Total)
mg/L
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

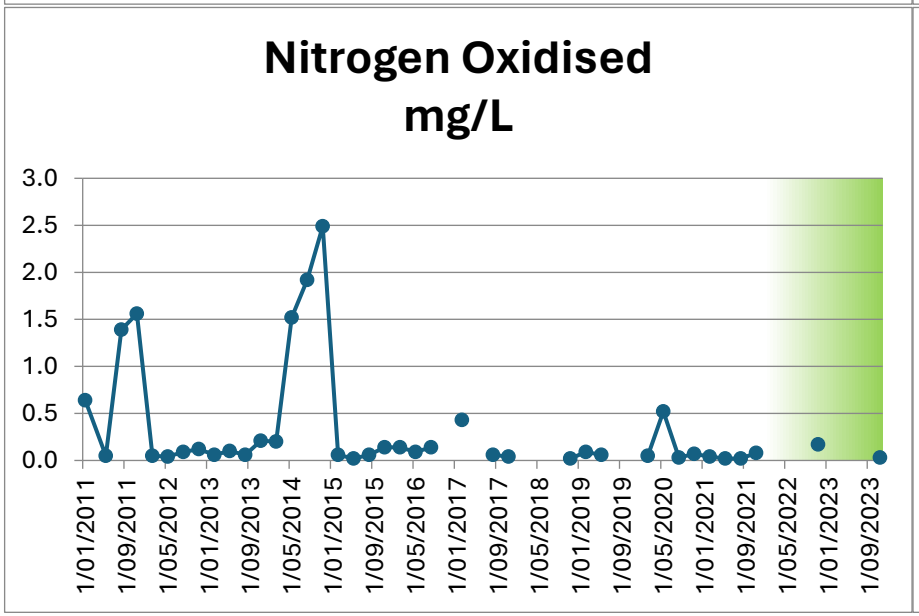

Magnesium (Total)
mg/L
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

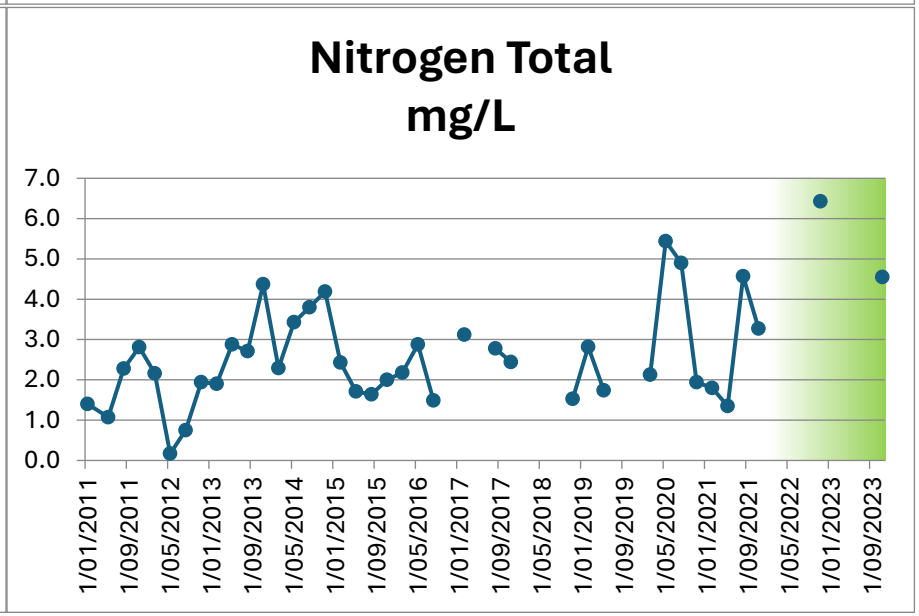

Manganese Total
mg/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

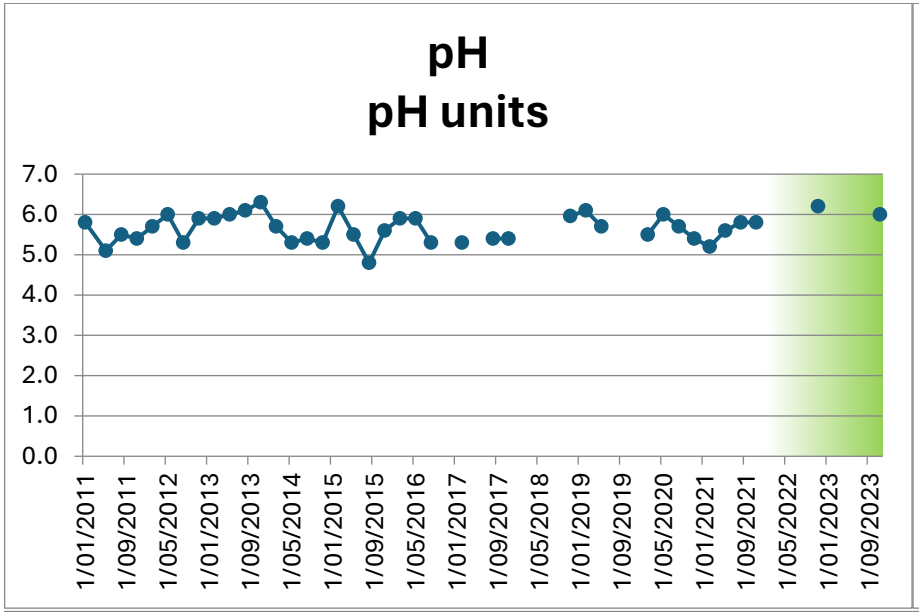

Nickel (Total)
mg/L
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

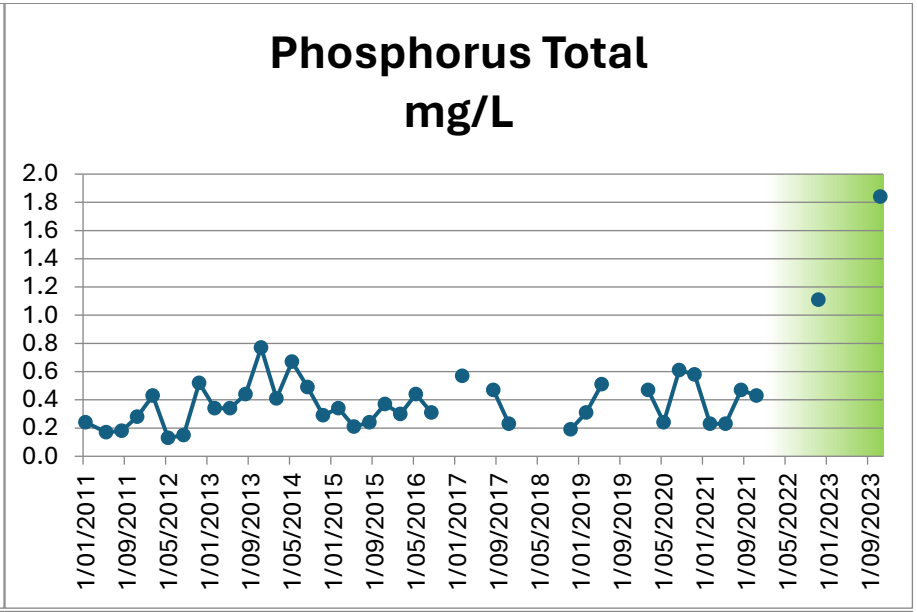

Nitrate
N mg/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

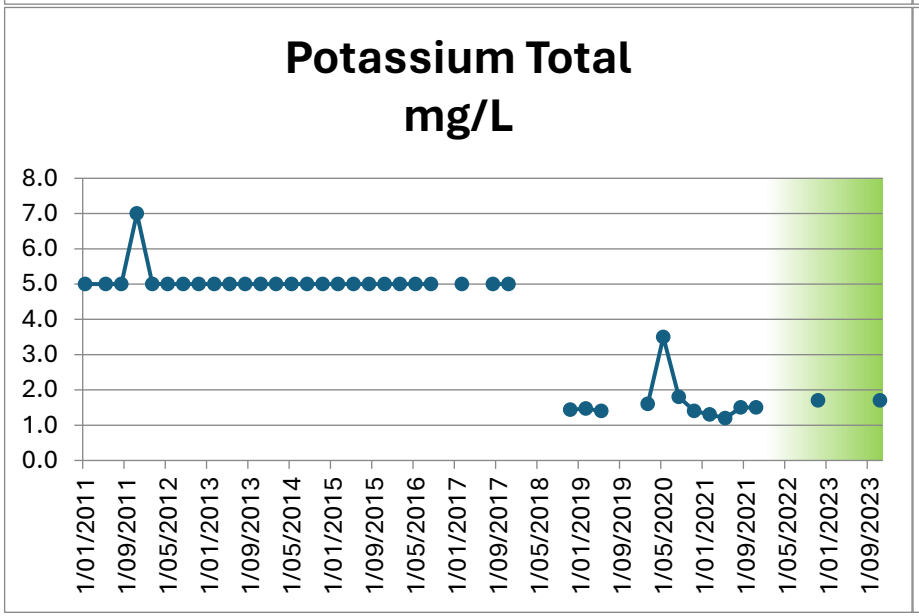

Nitrite
N mg/L
0.1
0.1
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

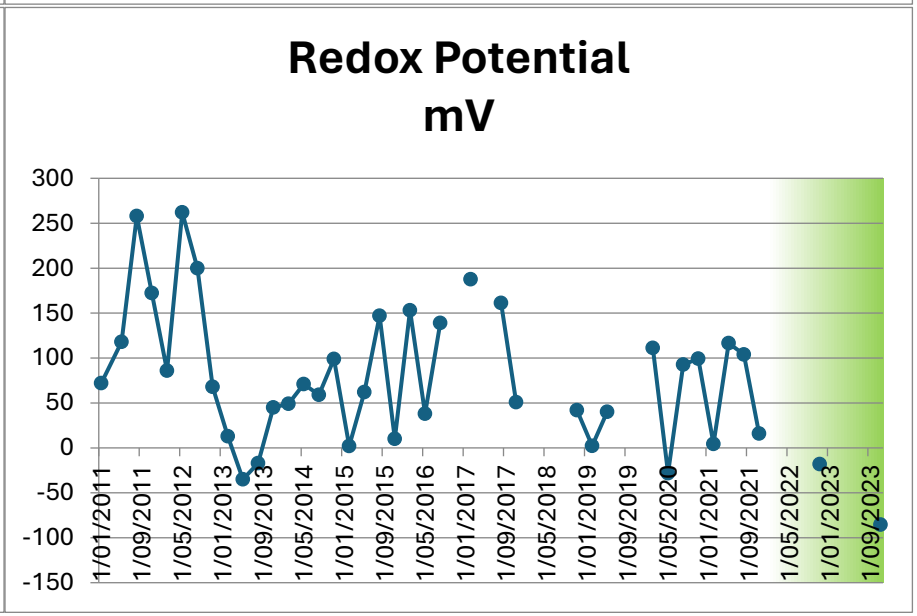

Nitrogen Oxidised
mg/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

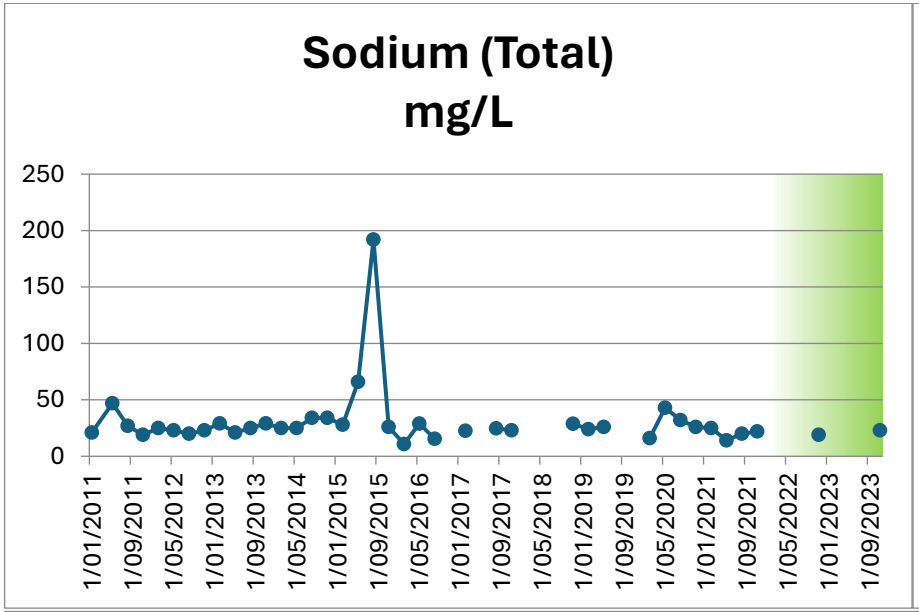

Nitrogen Total
mg/L
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

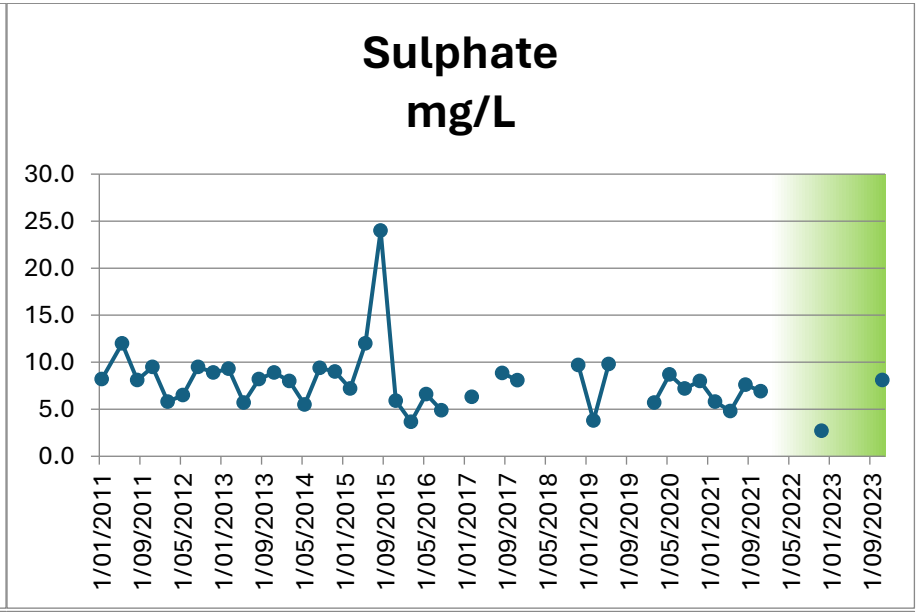

pH
pH units
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

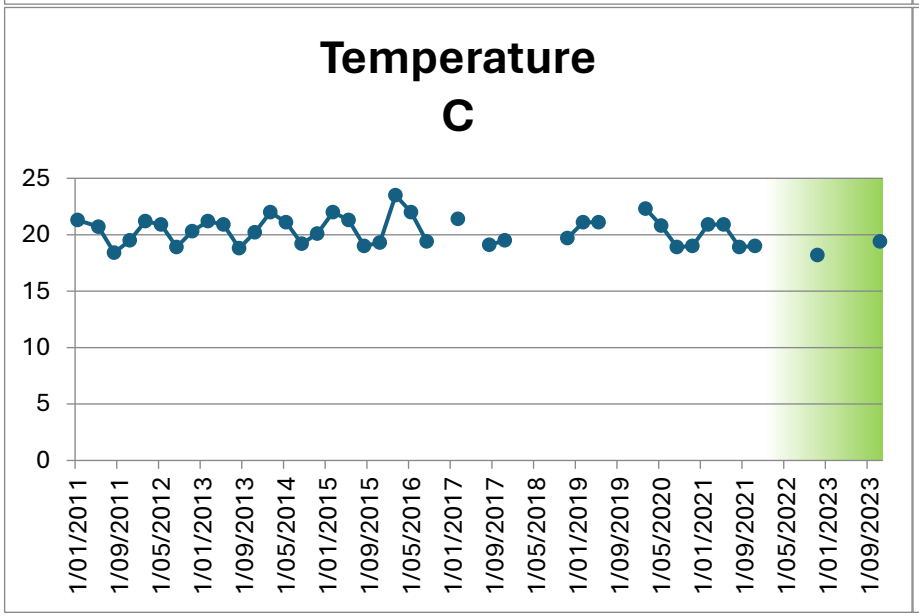

Phosphorus Total
mg/L
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

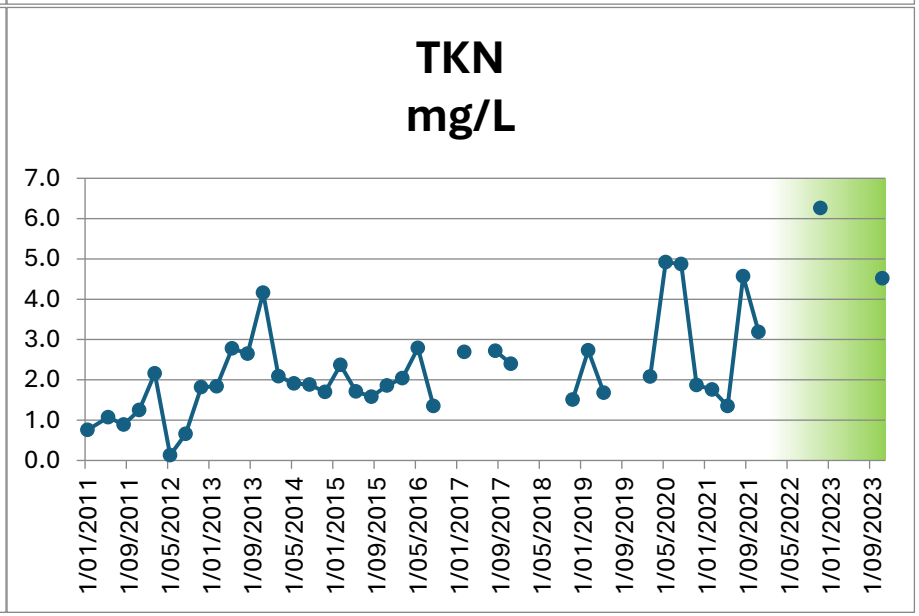

Potassium Total
mg/L
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

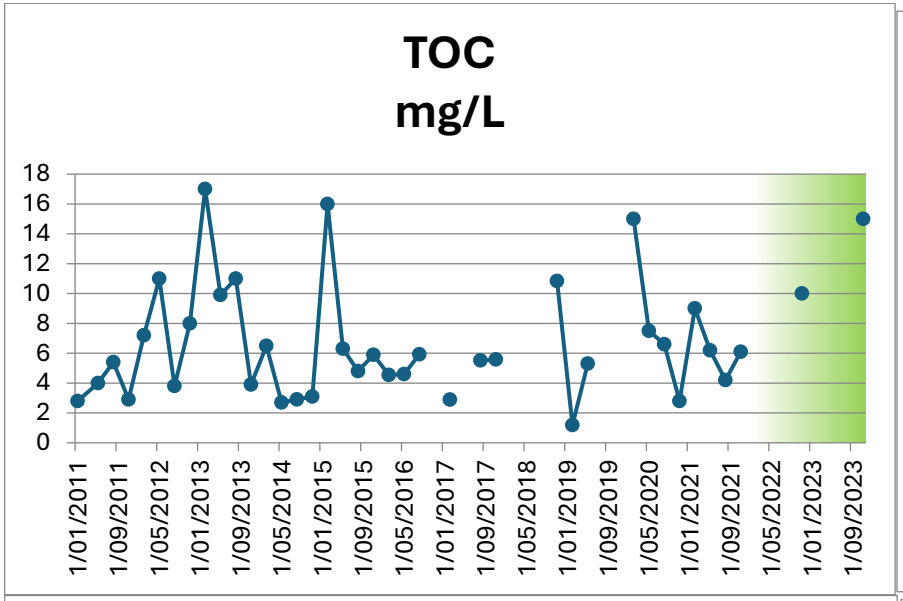

Redox Potential
mV
300
250
200
150
100
50
0
-50
-100
-150
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

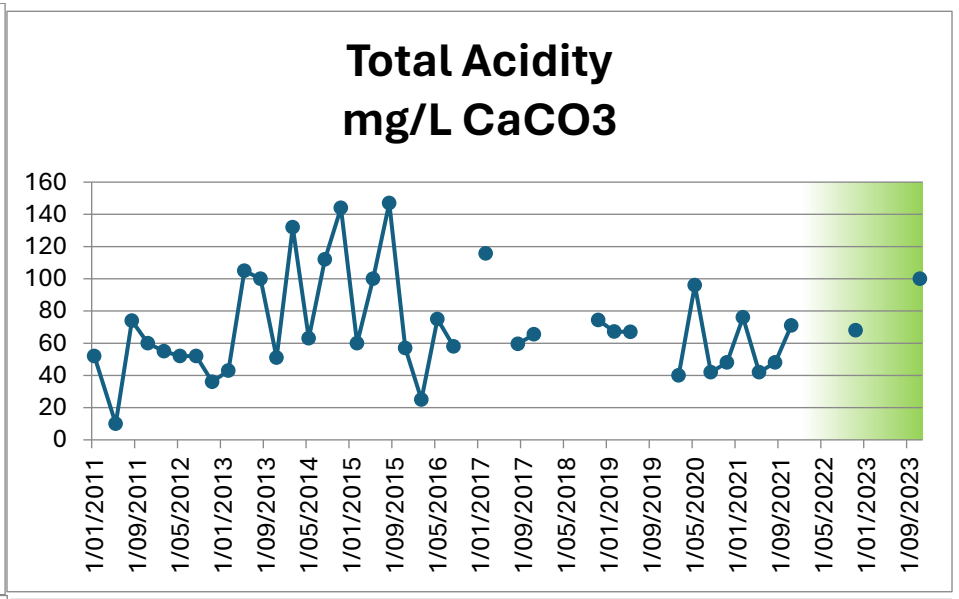

Sodium (Total)
mg/L
250
200
150
100
50
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

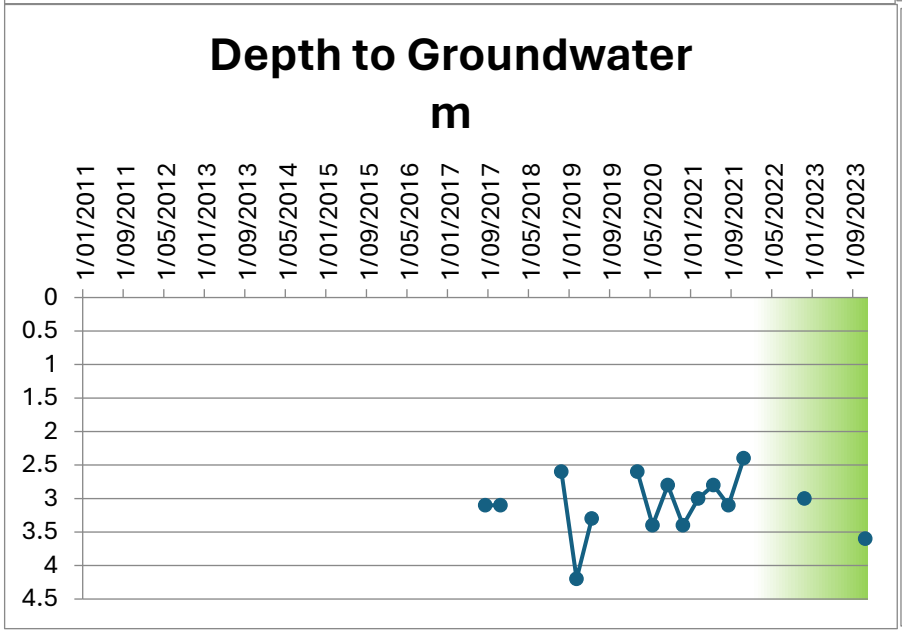

Sulphate
mg/L
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

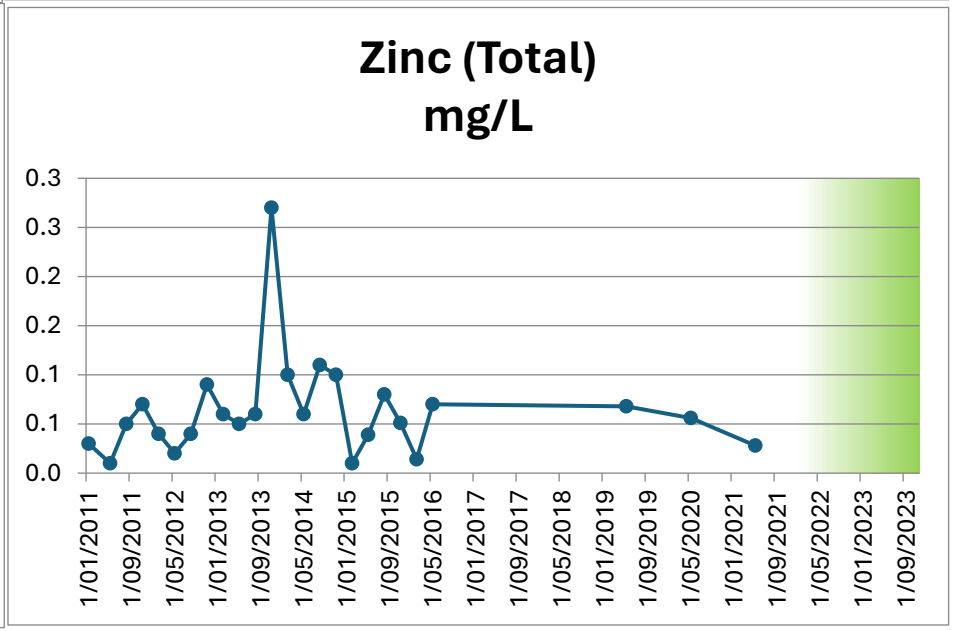

Temperature
C
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TKN
mg/L
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TOC
mg/L
18
16
14
12
10
8
6
4
2
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Total Acidity
mg/L CaCO3
160
140
120
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Depth to Groundwater
m
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5


Zinc (Total)
mg/L
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

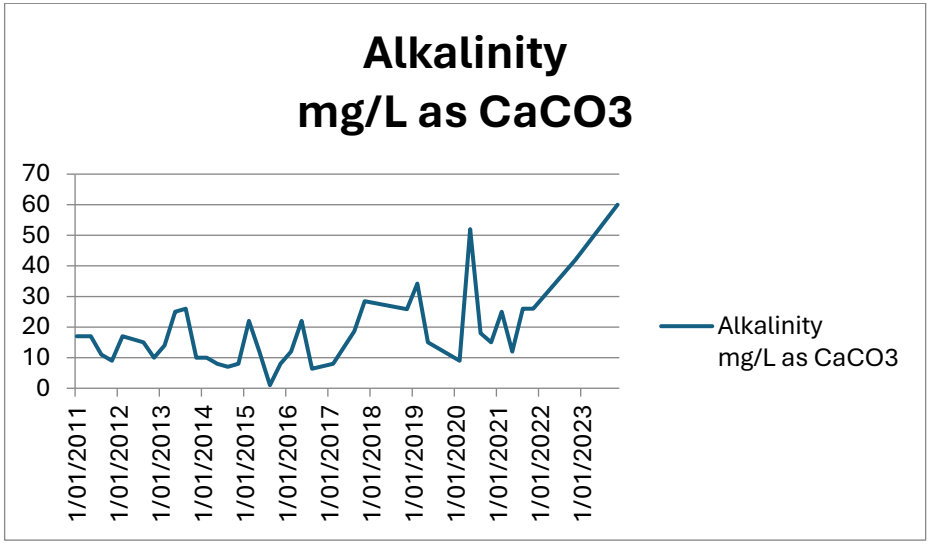
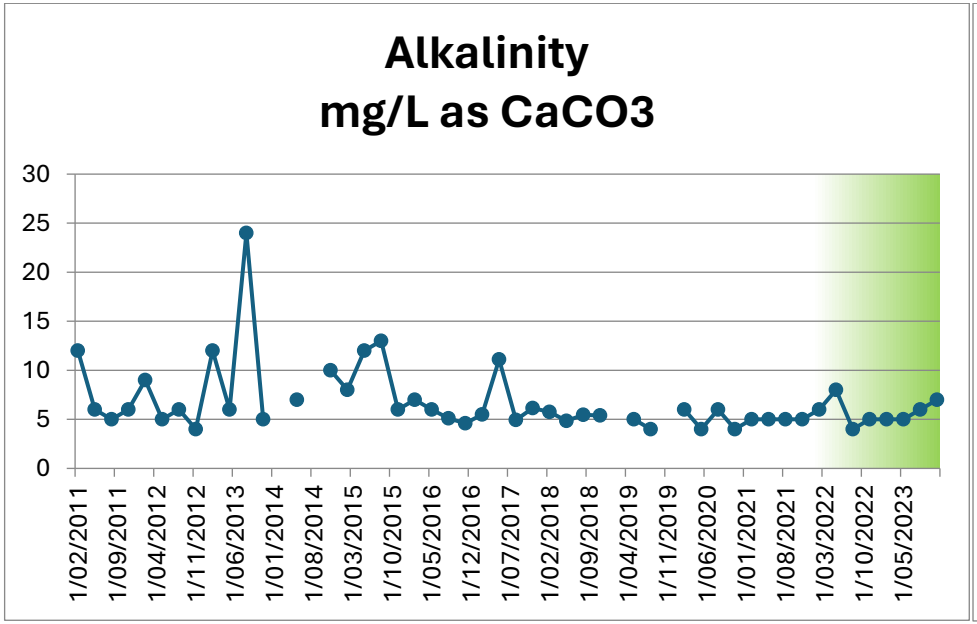

Alkalinity
mg/L as CaCO3
70
60
50
40
30
20
10
0
1/01/2011
1/01/2012
1/01/2013
1/01/2014
1/01/2015
1/01/2016
1/01/2017
1/01/2018
1/01/2019
1/01/2020
1/01/2021
1/01/2022
1/01/2023
Alkalinity
mg/L as CaCO3

Table 19: Ground Water 11

GW11	Alkalinity mgL as caCO3	Aluminium (Total) mgL	Ammonia mgL	Arsenic (Total) mgL	Bicarbonate HCO3 mgL	BOD5 mgL	Cadmium (Total) mgL	Calcium (Total) mgL	Chloride mgL	Chromium (Total) mgL	Chromium 3 mgL	Chromium 6 mgL	Conductivity µScm-1	Copper (Total) mgL	DO (Membrane Electrode) mgL	Flouride mgL	Iron Total mgL	Lead (Total) mgL	Magnesium (Total) mgL	Manganese Total mgL	Nickel (Total) mgL	Nitrate N mgL	Nitrite N mgL	Nitrogen Oxidised mgL	Nitrogen Total mgL	pH pH units	Phenol Alkalinity mgL as caCO3	Phosphorus Total mgL	Potassium Total mgL	Redox Potential mV	Sodium (Total) mgL	Sulphate mgL	Temperature C	TKN mgL	TOC mgL	Total Acidity mgL CaCO3	Zinc (Total) mgL	Depth to Groundwater m
1/02/2011	12	8	0.2	0.0	7	1.8	0.0	1.7	18	0.0	0.0	0.0	109	0.0	1.3	0.0	8	0.0	1.5	0.6	0.0	0.7	0.1	0.7	1.1	5.4		0.1	5.0	173	10	8	23	0.4	1.9	55	0.0	
11/05/2011	6	12	0.1	0.0	4	1.0	0.0	1.0	21	0.0	0.0	0.0	131	0.0	1.8	0.0	11	0.0	2.0	0.4	0.0	1.3	0.1	1.3	1.7	4.1		0.1	5.0	314	12	8	22	0.3	1.2	54	0.0	
10/08/2011	5	24	0.1	0.0	3	1.8	0.0	0.6	20	0.0	0.0	0.0	114	0.0	3.3	0.0	19	0.0	1.7	0.6	0.0	0.5	0.1	0.5	0.8	4.9		0.1	5.0	328	14	7	21	0.3	1.3	52	0.1	
9/11/2011	6	23	0.1	0.1	4	2.4	0.0	0.7	19	0.0	0.0	0.0	101	0.0	1.8	0.1	18	0.0	2.5	0.5	0.0	0.6	0.0	0.6	0.9	5.1		0.2	5.0	345	9	12	22	0.3	0.8	62	0.1	
7/02/2012	9	11	0.0	0.0	5	1.8	0.0	1.3	13	0.0	0.0	0.0	97	0.0	2.2	0.0	10	0.0	1.9	0.6	0.0	0.7	0.0	0.7	1.0	5.1		0.5	5.0	323	14	10	24	0.3	1.4	66	0.0	
9/05/2012	5	11	0.1	0.0	3	1.0	0.0	0.7	16	0.0	0.0	0.0	104	0.0	3.0	0.0	10	0.0	1.4	0.3	0.0	0.6	0.0	0.6	0.8	5.4		0.0	5.0	221	11	9	23	0.2	1.2	52	0.0	
7/08/2012	6	29	0.0	0.0	4	1.0	0.0	0.8	15	0.0	0.0	0.0	98	0.1	1.6	0.0	24	0.0	1.7	0.7	0.0	0.1	0.0	0.1	0.6	4.9		0.1	5.0	279	10	10	21	0.5	0.4	49	0.1	
14/11/2012	4	21	0.0	0.0	2	1.2	0.0	2.2	20	0.0	0.0	0.0	135	0.0	5.7	0.1	15	0.0	3.6	0.6	0.0	2.7	0.0	2.7	3.1	4.9		0.1	5.0	247	12	7	22	0.3	1.3	40	0.1	
14/02/2013	12	15	0.1	0.0	7	1.0	0.0	1.4	20	0.0	0.0	0.0	111	0.0	2.1	0.0	13	0.0	1.9	1.1	0.0	0.1	0.0	0.1	0.4	5.4		0.1	5.0	100	12	7	24	0.4	1.4	70	0.1	
15/05/2013	6	11	0.1	0.0	4	1.5	0.0	0.8	12	0.0	0.0	0.0	68	0.0	4.3	0.0	9	0.0	0.8	0.4	0.0	0.1	0.0	0.1	0.4	5.1		0.0	5.0	146	9	6	22	0.3	1.1	87	0.0	
7/08/2013	24	18	0.0	0.0	15	1.0	0.0	0.6	14	0.0	0.0	0.0	88	0.0	3.0	0.0	13	0.0	1.3	0.7	0.0	0.2	0.0	0.2	0.5	5.1		0.1	5.0	203	14	11	20	0.3	0.7	100	0.1	
13/11/2013	5	28	0.1	0.0	3	1.8	0.0	0.6	11	0.0	0.0	0.0	74	0.0	3.8	0.0	21	0.0	1.2	0.6	0.0	0.2	0.0	0.2	0.6	5.1		0.1	5.0	187	9	7	23	0.4	0.9	53	0.1	
11/02/2014																																						
14/05/2014	7	150	0.1	0.0	4	1.5	0.0	0.4	9	0.0	0.0	0.0	100	0.2	3.4	0.0	160	0.1	1.1	3.0	0.0	0.4	0.0	0.4	2.0	5.1		0.3	5.0	117	15	8	22	1.7	1.4	80	0.3	
12/08/2014																																						
11/11/2014	10	16	0.1	0.0	6	3.6	0.0	0.3	13	0.0	0.0	0.0	100	0.0	3.4	0.0	11	0.0	1.7	1.5	0.0	0.1	0.0	0.1	1.1	5.7		0.1	5.0	136	15	9	22	1.0	1.0	77	0.1	
10/02/2015	8	20	0.0	0.0	5	3.9	0.0	0.7	18	0.0	0.0	0.0	94	0.0	2.0	0.0	9	0.0	1.5	1.0	0.0	0.1	0.0	0.1	1.0	5.3		0.1	5.0	119	12	7	24	0.9	1.5	84	0.0	
12/05/2015	12	21	0.0	0.0	7	3.6	0.0	0.8	14	0.0	0.0	0.0	93	0.0	3.1	0.0	16	0.0	1.8	1.8	0.0	0.0	0.0	0.0	1.0	5.4		0.3	5.0	104	13	6	23	1.0	1.1	66	0.1	
12/08/2015	13	13	0.0	0.0	13	3.3	0.0	0.3	15	0.0	0.0	0.0	101	0.0	2.6	0.0	21	0.0	2.0	1.8	0.0	0.0	0.0	0.0	1.3	5.7		0.1	5.0	141	15	5	21	1.3	0.9	69	0.1	
11/11/2015	6	14	0.0	0.0	6	1.0	0.0	1.1	14	0.0	0.0	0.0	82	0.0	3.8	0.0	17	0.0	1.8	0.7	0.0	0.0	0.0	0.0	0.9	5.1		0.1	5.0	201	11	6	22	0.8	1.6	65	0.1	
9/02/2016	7	40	0.0	0.0	7	1.0	0.0	0.4	16	0.0	0.0	0.0	98	0.1	2.4	0.0	26	0.0	1.7	1.5	0.0	0.0	0.0	0.0	1.0	5.5		0.1	5.0	187	13	8	23	1.0	1.4	103	0.1	
10/05/2016	6	14	0.0	0.0	6	1.5	0.0	0.3	18	0.0	0.0	0.0	96	0.0	1.5	0.0	8	0.0	1.7	0.9	0.0	0.0	0.0	0.0	0.4	5.1		0.1	5.0	195	14	7	24	0.4	1.2	86	0.0	
10/08/2016	5		0.0		5	1.0		0.6	16				91		3.5	0.0			1.8			0.0	0.0	0.0	0.8	4.9		0.1	5.0	228	14	7	21	0.8	1.0	63		
8/11/2016	5		0.0		5	1.0		0.3	22				87		2.7	0.0			1.5			0.0	0.0	0.0	1.1	4.8		0.2	5.0	342	15	8	22	1.1	0.8	93		
8/02/2017	6		0.0		6	1.0		0.3	17				89		3.2	0.0			1.3			0.1	0.0	0.1	1.4	4.9		0.2	5.0	299	12	7	23	1.3	1.3	120		
9/05/2017	11	10	0.0	0.0	11	1.5	0.0	0.9	18	0.0	0.0	0.0	82	0.0	4.1	0.1	6	0.0	1.6	0.8	0.0	0.1	0.0	0.1	0.7	5.0		0.1	5.0	352	10	6	23	0.6	1.7	49	0.1	
9/08/2017	5		0.0		5	1.5		0.4	30				90		3.1	0.0			1.6			0.0	0.0	0.0	0.6	4.6		0.1	5.0	360	12	7	21	0.6	1.0	58		3.3
8/11/2017	6		0.0		6	1.5		0.7	18				99		3.3	0.0			1.9			0.9	0.0	0.9	1.4	4.9		0.1	5.0	393	13	7	22	0.5	1.3	63		2.2
14/02/2018	6		0.0		6	2.1		0.3	16				92		3.5	0.0			1.4			0.2	0.0	0.2	2.1	5.1		0.3	5.0	261	13	8	24	1.9	1.9	71		3.8
9/05/2018	5	15	0.0	0.0	5	1.0	0.0	0.8	29	0.0	0.0	0.0	97	0.0	3.5	0.0	8	0.0	1.9	0.8	0.0	0.7	0.0	0.7	1.2	5.1		0.1	0.5	292	13	6	23	0.5	1.2	60	0.0	2.1
15/08/2018	5		0.0		5	2.7		0.3	16				90		4.1	0.0			1.6			0.3	0.0	0.3	1.9	5.1		0.3	0.5	377	14	9	21	1.5	31.0	53		5.1
14/11/2018	5		0.0		5	1.8		0.5	12				86		2.6	0.0			1.8			0.1	0.0	0.1	0.8	5.0		0.1	0.5	178	12	8	21	0.8	1.5	69		3.9
12/02/2019																																						
15/05/2019	5	41	0.0	0.0	5	1.2	0.0	0.9	18	0.0	0.0	0.0	87	0.0	3.6	0.2	20	0.0	1.9	0.6	0.0	0.6	0.0	0.6	1.6	5.0		0.4	0.6	246	12	7	23	1.0	0.9	54	0.1	2.6
14/08/2019	4		0.0		4	1.0		0.6	14				86		3.6	0.0			1.9			0.7	0.0	0.7	1.4	5.0		0.2	0.5	400	12	8	20	0.8	1.4	47		3.1
12/11/2019																																						
26/02/2020	6		0.0		6	1.0		2.8	10				78		3.1	0.0			1.6			2.7	0.0	2.7	3.2	5.4	0.0	0.1	1.1	164	7	4	25	0.5	2.1	29		1.5
13/05/2020	4	23	0.0	0.0	4	1.0	0.0	0.4	18	0.0	0.0	0.0	83	0.0	2.9	0.1	12	0.0	1.4	0.5	0.0	0.2	0.0	0.2	0.9	4.9	0.0	0.1	0.5	233	11	8	23	0.7	1.0	52	0.1	3.0
12/08/2020	6		0.0		6	1.0		0.6	12				66		3.1	0.0			1.3			0.1	0.0	0.1	0.6	4.9	0.0	0.1	0.5	281	9	7	20	0.6	1.3	46		2.0
11/11/2020	4		0.0		4	1.0		1.0	14				87		3.8	0.1			1.9			1.7	0.0	1.7	2.5	4.8	0.0	0.1	0.5	350	11	6	21	0.8	1.0	43		3.3
10/02/2021	5		0.0		5	1.0		1.1	12				78		2.8	0.1			1.5			0.7	0.0	0.7	1.1	4.8	0.0	0.1	0.6	346	9	6	23	0.4	1.6	48		2.7
12/05/2021	5	8	0.0	0.0	5	1.0	0.0	1.7	12	0.0	0.0	0.0	78	0.0	3.3	0.0	4	0.0	1.9	0.2	0.0	1.5	0.0	1.5	1.9	5.1	0.0	0.1	0.7	366	9	6	22	0.3	1.3	51	0.0	2.0
11/08/2021	5		0.0		5	1.0		0.8	14				91		3.2	0.0			2.0			1.2	0.0	1.2	1.8	4.9	0.0	0.1	0.5	322	11	7	20	0.6	1.0	51		2.7
9/11/2021	5		0.0		5	1.0		0.8	23				83		2.7	0.0			1.8			1.1	0.0	1.1	2.0	4.9	0.0	0.2	0.5	366	10	7	21	0.9	1.1	54		2.6
9/02/2022	6		0.0		6	1.8		1.3	12				68		3.0	0.0			1.5			0.5	0.0	0.5	1.4	5.0	0.0	0.1	0.6	243	8	5	23	0.9	1.7	70		1.9
11/05/2022	8	17	0.0	0.0	8	2.4	0.0	2.0	12	0.0	0.0	0.0	74	0.0	4.0	0.0	8	0.0	1.7	0.3	0.0	0.3	0.0	0.3	1.0	5.2	0.0	0.1	0.7	279	8	6	22	0.8	1.8	57	0.1	1.5
10/08/2022	4		0.0		4	1.0		0.8	11				84		3.8	0.0			1.9			1.0	0.0	1.0	1.7	5.0	0.0	0.1	0.5	257	10	6	20	0.6	1.0	57		2.7
9/11/2022	5		0.0		5	1.0		0.9	12				86		2.9	0.0			1.9			1.2	0.0	1.2	1.9	4.9	0.0	0.3	0.5	245	10	6	20	0.7	0.8	63		2.7
14/02/2023	5		0.0		5	1.0		0.5	20				73		3.4	0.0			1.3			0.7	0.0	0.7	2.8	4.6	0.0	0.3	0.5	204	10	7	22	2.1	1.2	66		3.6
10/05/2023	5	110	0.1	0.0	5	1.0	0.0	0.5	18	0.0	0.0	0.0	89	0.1	3.1	0.0	68	0.1	1.5	1.2	0.0	0.6	0.0	0.6	3.0	5.2	0.0	0.4	0.5	129	11	7	22	2.4	2.4	62	0.3	3.9
9/08/2023	6		0.0		6	1.0		0.5	18				89		4.6	0.0			1.6			0.7	0.0	0.7	3.5	5.0		0.5	0.5	190	12	7	21	2.8	0.9	64		4.3
13/11/2023	7		0.0		7	1.0		0.9	20				63		4.6	0.0			1.3			0.2	0.0	0.2	0.6	5.0		0.2	0.5	132	8	6	22	0.5	1.2	65		3.2
2023 Min	**5.0**	**110.0**	**0.0**	**0.0**	**5.0**	**1.0**	**0.0**	**0.5**	**18.0**	**0.0**	**0.0**	**0.0**	**63.0**	**0.1**	**3.1**	**0.0**	**67.9**	**0.1**	**1.3**	**1.2**	**0.0**	**0.2**	**0.0**	**0.2**	**0.6**	**4.6**	**0.0**	**0.2**	**0.5**	**129.4**	**7.7**	**5.6**	**20.5**	**0.5**	**0.9**	**62.0**	**0.3**	**3.2**
2023 Max	**7.0**	**110.0**	**0.1**	**0.0**	**7.0**	**1.0**	**0.0**	**0.9**	**20.0**	**0.0**	**0.0**	**0.0**	**89.0**	**0.1**	**4.6**	**0.0**	**67.9**	**0.1**	**1.6**	**1.2**	**0.0**	**0.7**	**0.0**	**0.7**	**3.5**	**5.2**	**0.0**	**0.5**	**0.5**	**203.7**	**12.0**	**7.4**	**22.2**	**2.8**	**2.4**	**66.0**	**0.3**	**4.3**
2023 Mean	**5.8**	**110.0**	**0.0**	**0.0**	**5.8**	**1.0**	**0.0**	**0.6**	**19.0**	**0.0**	**0.0**	**0.0**	**78.5**	**0.1**	**3.9**	**0.0**	**67.9**	**0.1**	**1.4**	**1.2**	**0.0**	**0.5**	**0.0**	**0.5**	**2.5**	**5.0**	**0.0**	**0.3**	**0.5**	**164.0**	**10.1**	**6.6**	**21.6**	**1.9**	**1.4**	**64.3**	**0.3**	**3.8**
Long-term Average	**6.7**	**26.7**	**0.0**	**0.0**	**5.6**	**1.5**	**0.0**	**0.8**	**16.2**	**0.0**	**0.0**	**0.0**	**90.4**	**0.0**	**3.2**	**0.0**	**20.9**	**0.0**	**1.7**	**0.9**	**0.0**	**0.6**	**0.0**	**0.6**	**1.4**	**5.1**	**0.0**	**0.2**	**3.1**	**247.9**	**11.4**	**7.3**	**22.0**	**0.8**	**1.9**	**63.5**	**0.1**	**2.9**


Alkalinity
mg/L as CaCO3
30
25
20
15
10
5
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
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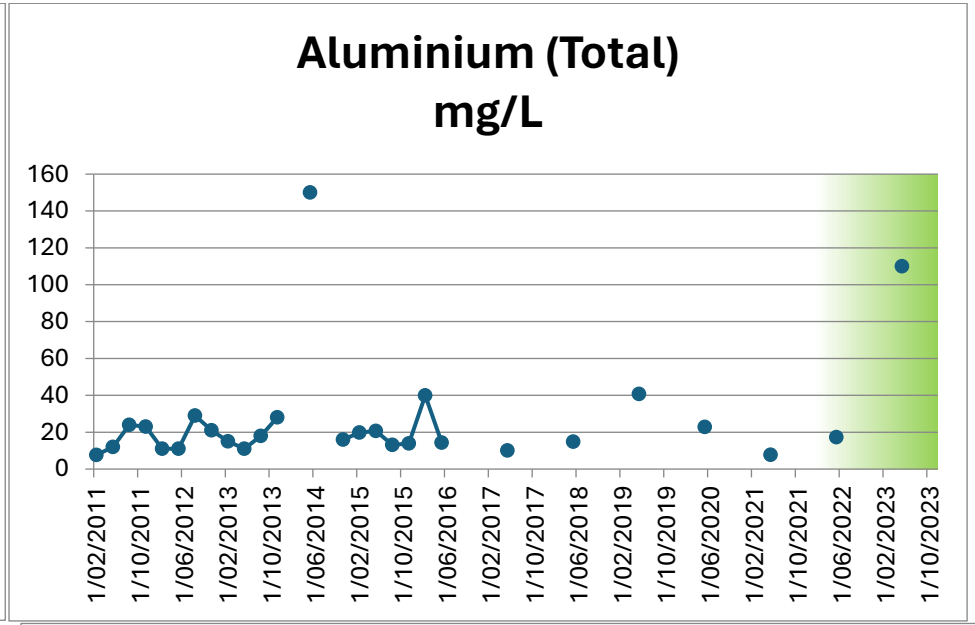
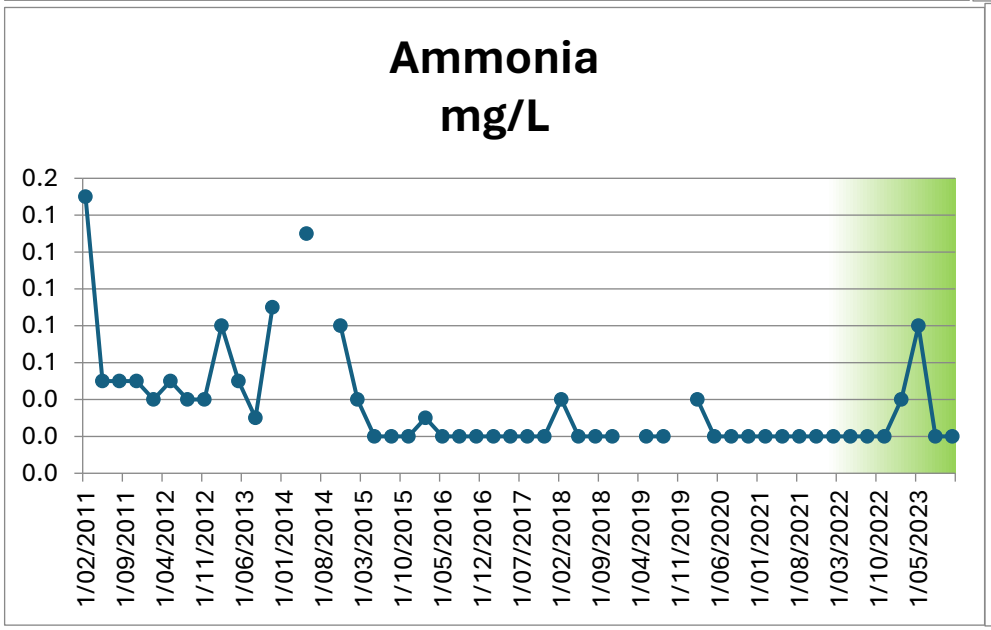
1/10/2022
1/05/2023


Aluminium (Total)
mg/L
160
140
120
100
80
60
40
20
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Ammonia
mg/L
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
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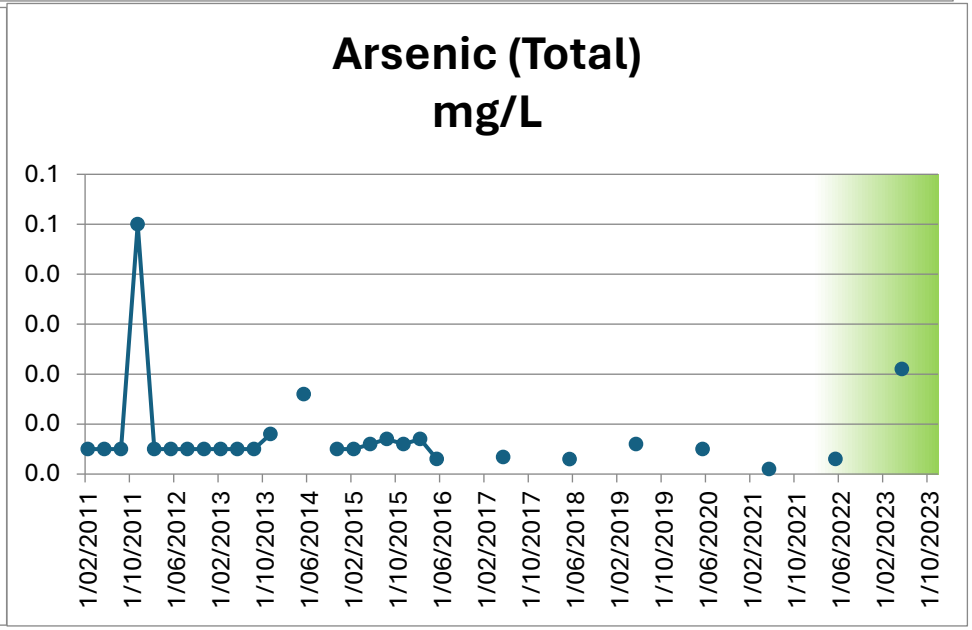
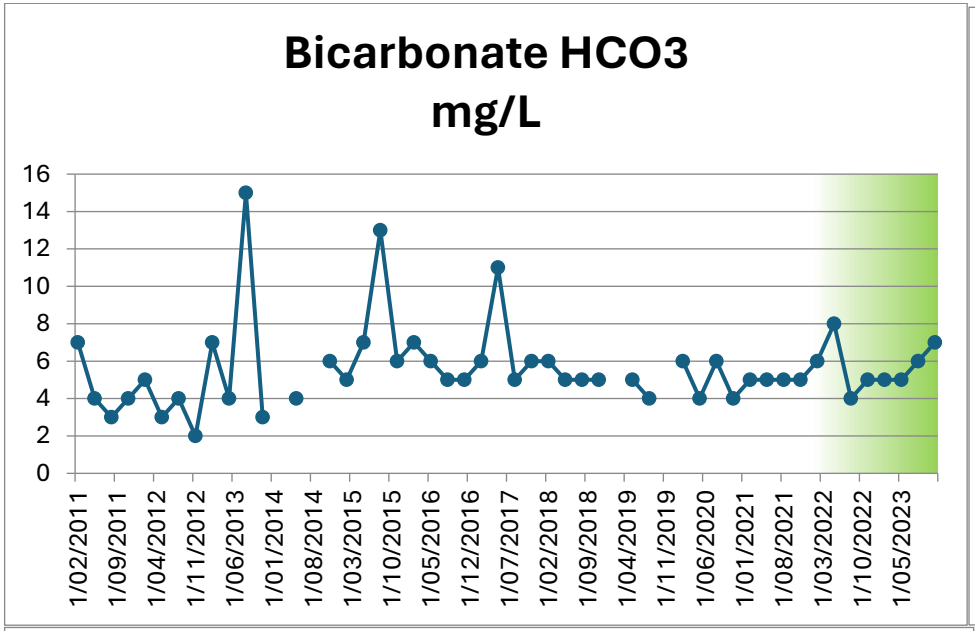
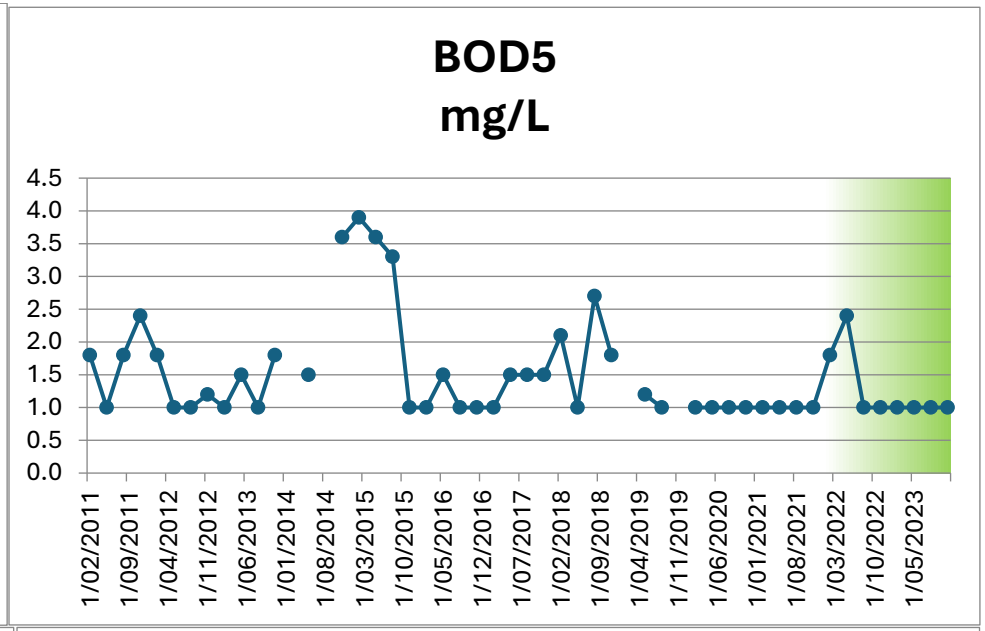
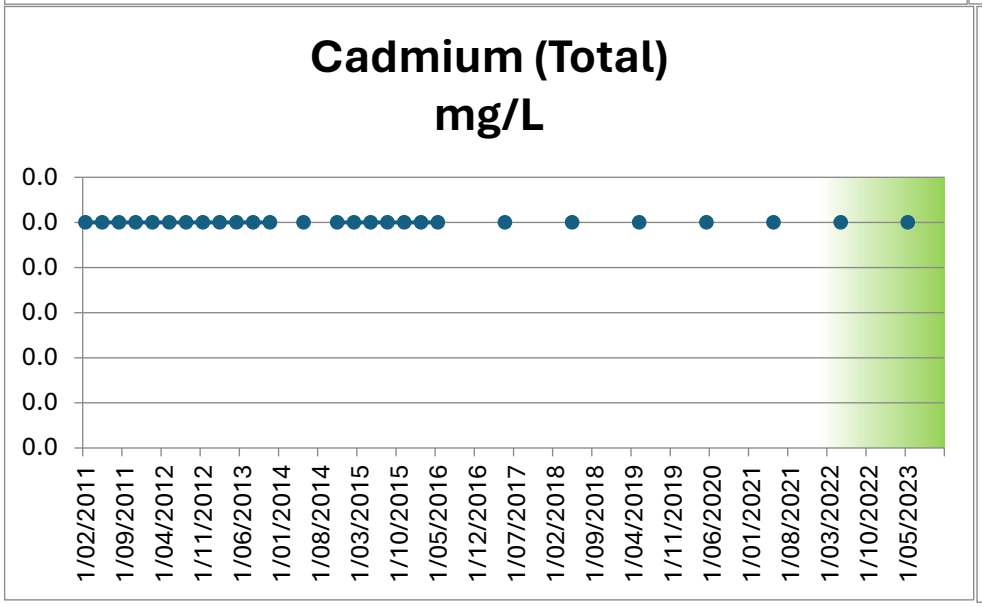
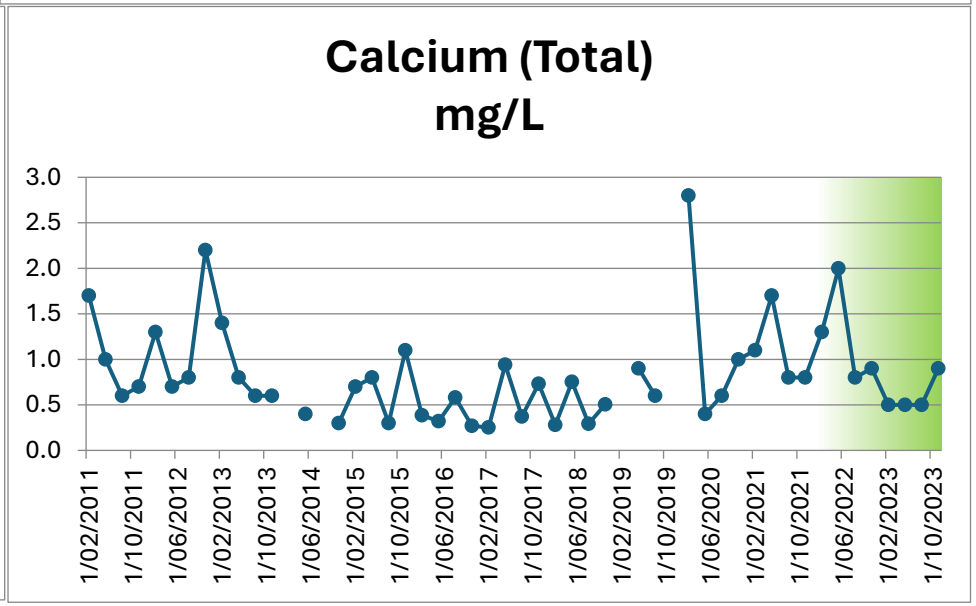
1/10/2022
1/05/2023

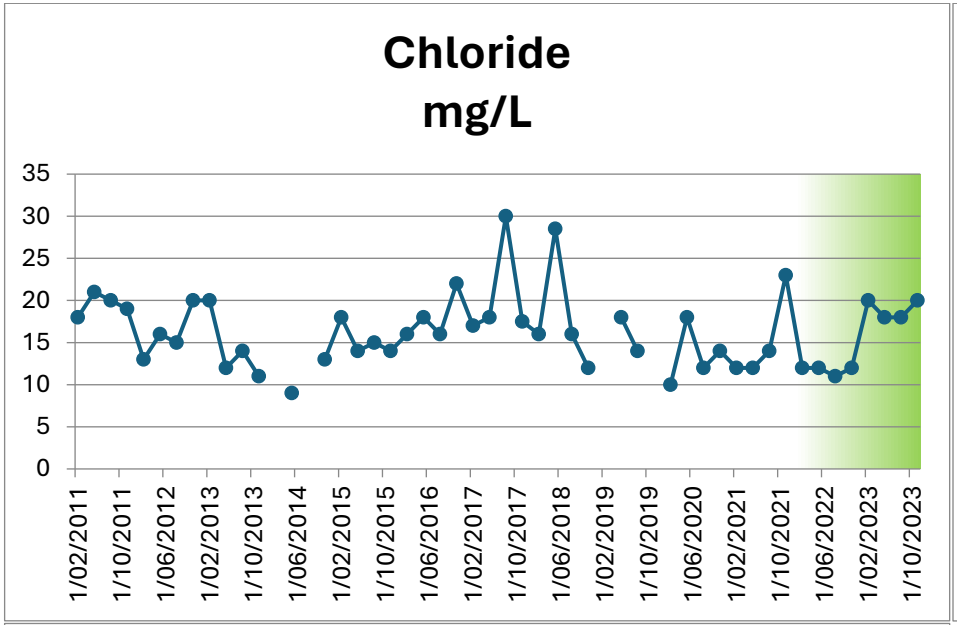

Arsenic (Total)
mg/L
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

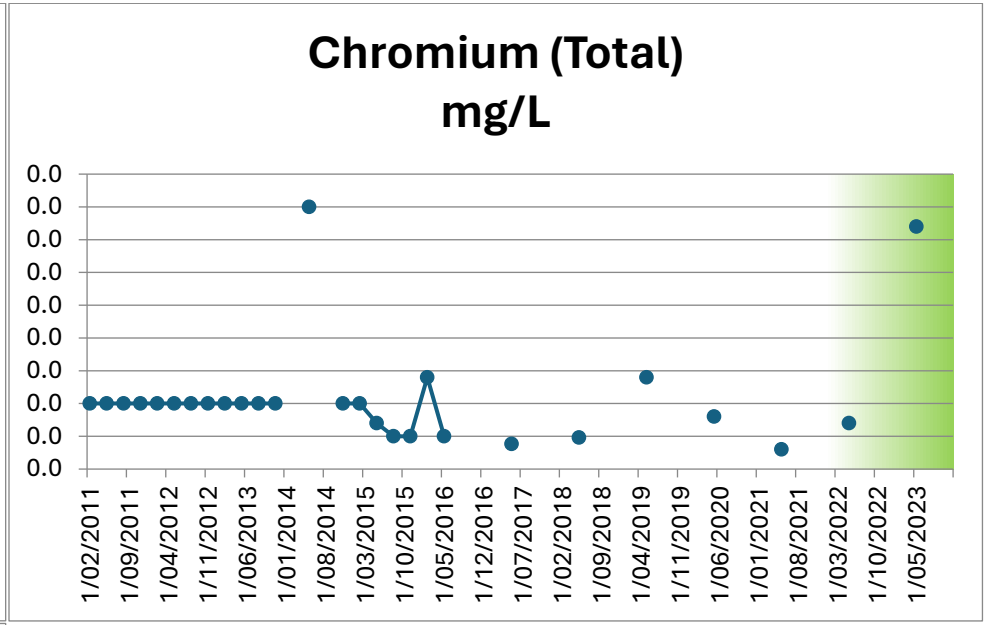

Bicarbonate HCO3
mg/L
16
14
12
10
8
6
4
2
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

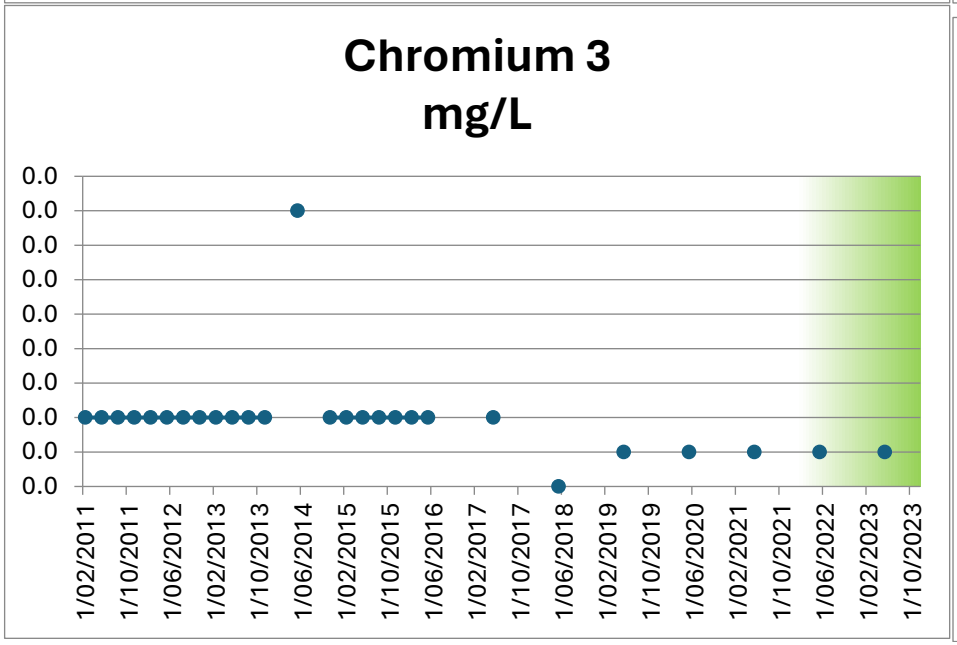

BOD5
mg/L
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

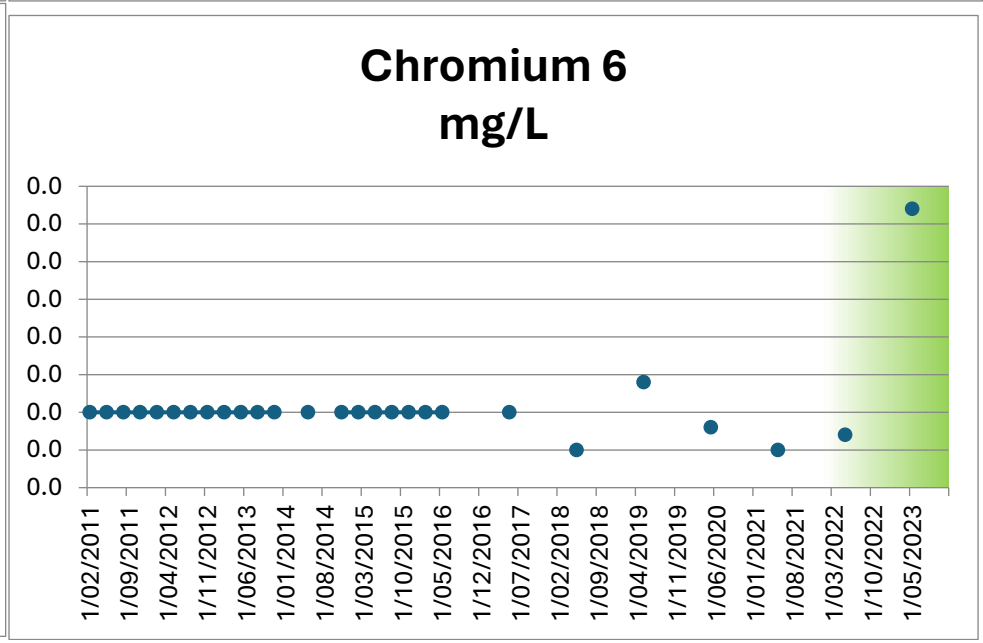

Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

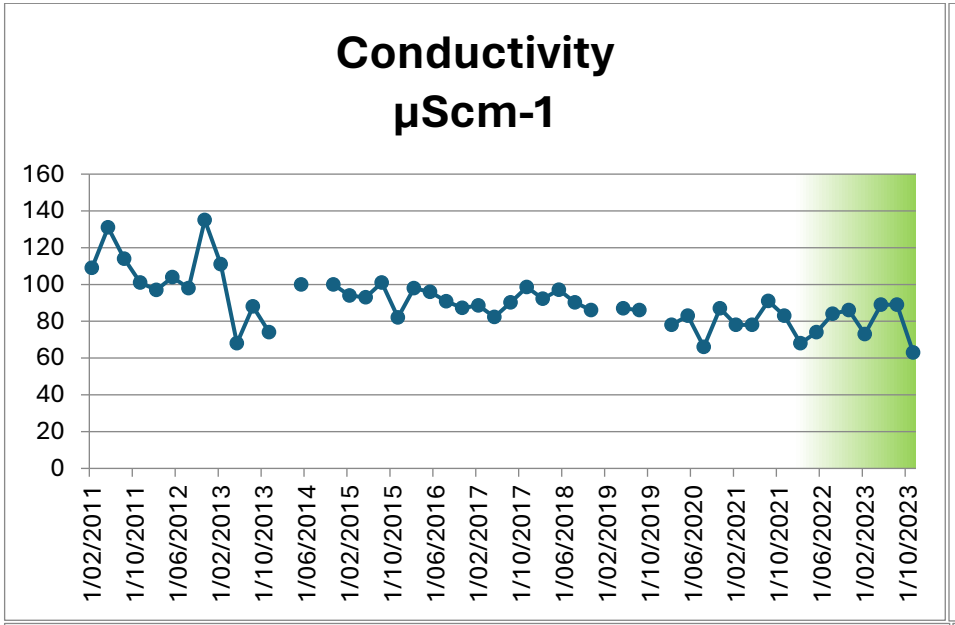

Calcium (Total)
mg/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

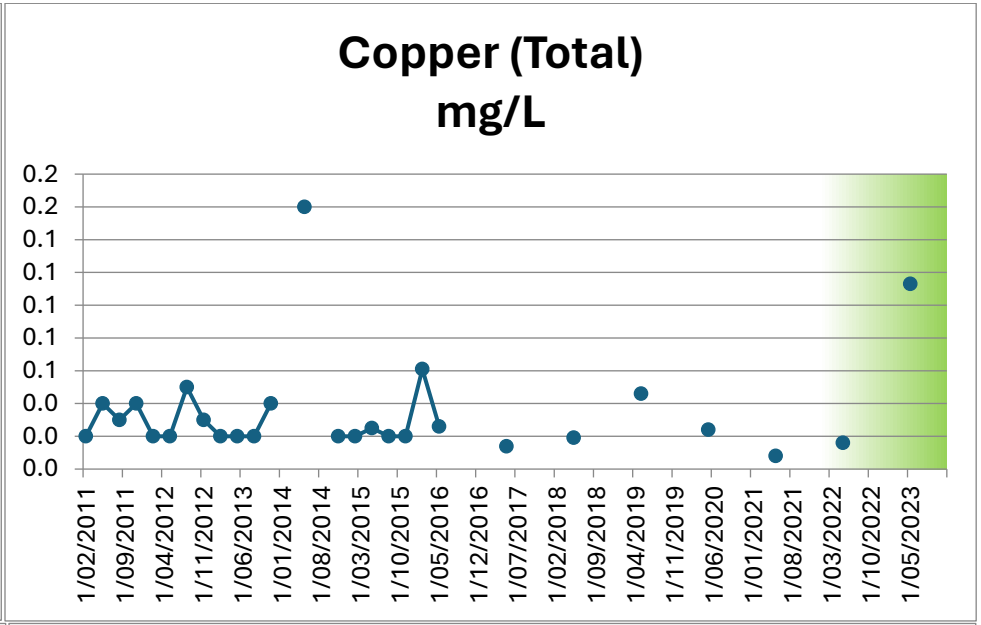

Chloride
mg/L
35
30
25
20
15
10
5
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

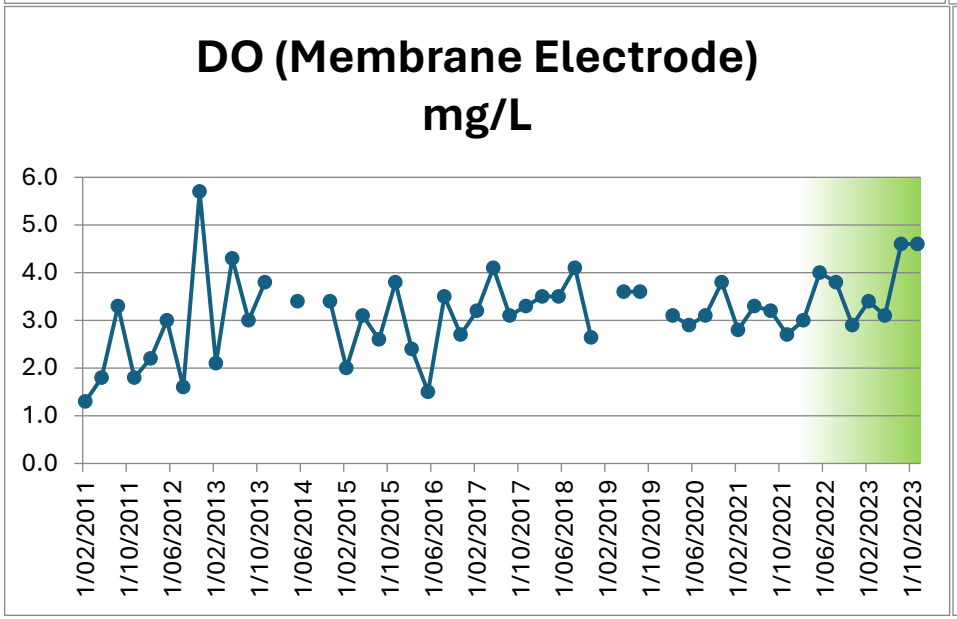

Chromium (Total)
mg/L
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

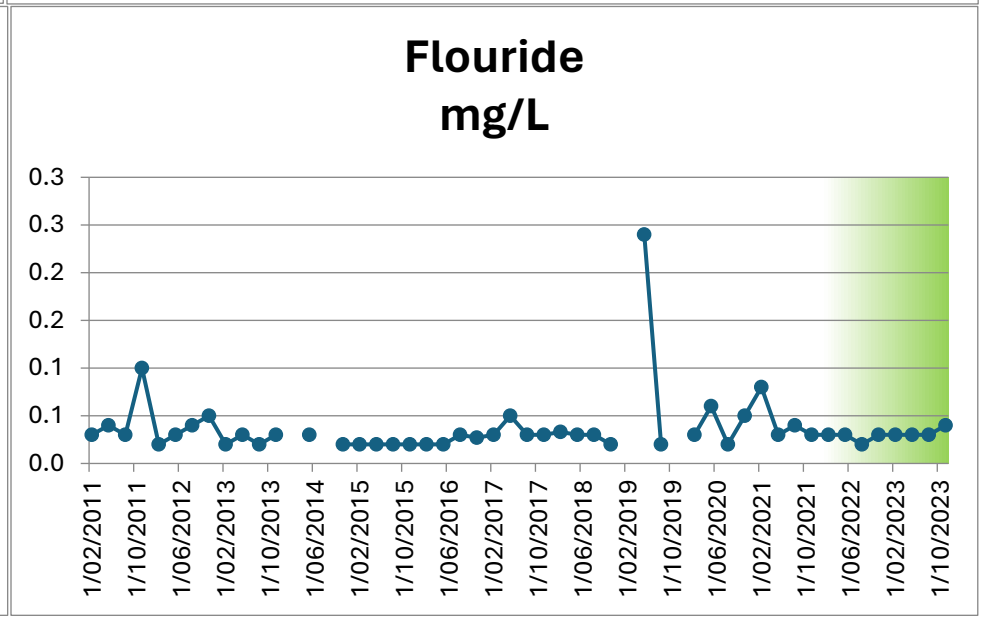

Chromium 3
mg/L
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

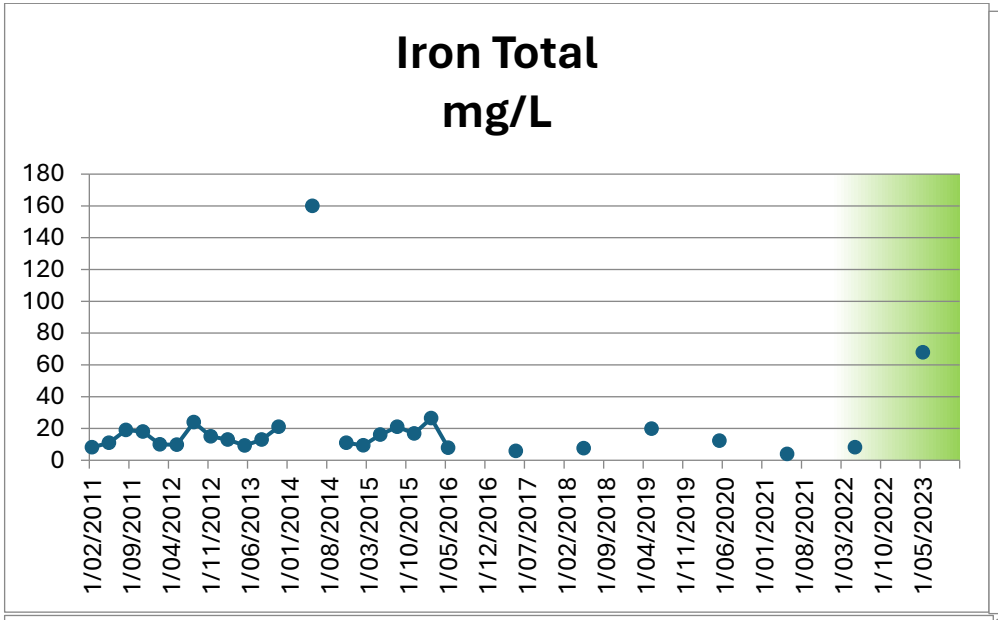

Chromium 6
mg/L
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

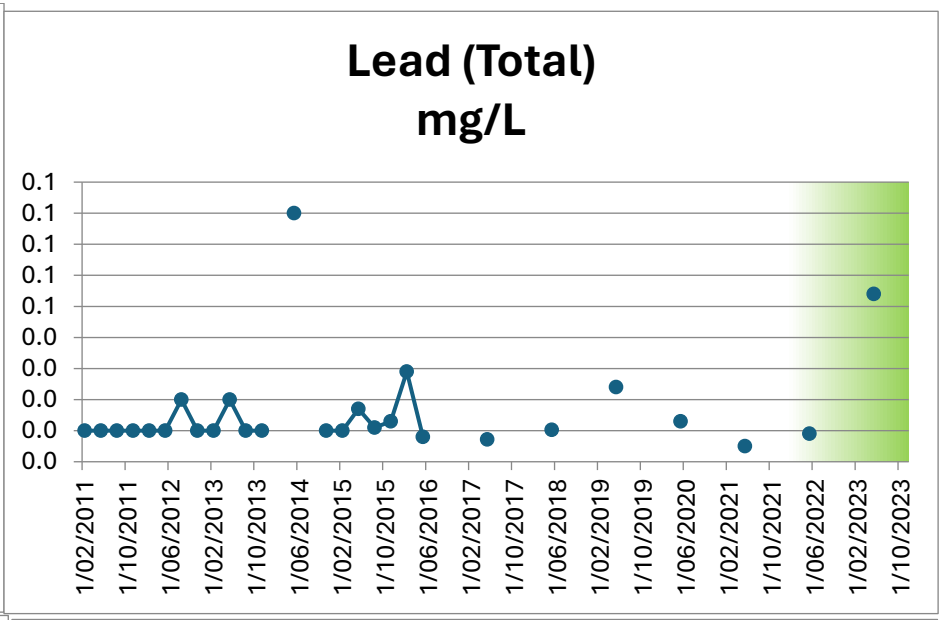

Conductivity
µScm-1
160
140
120
100
80
60
40
20
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

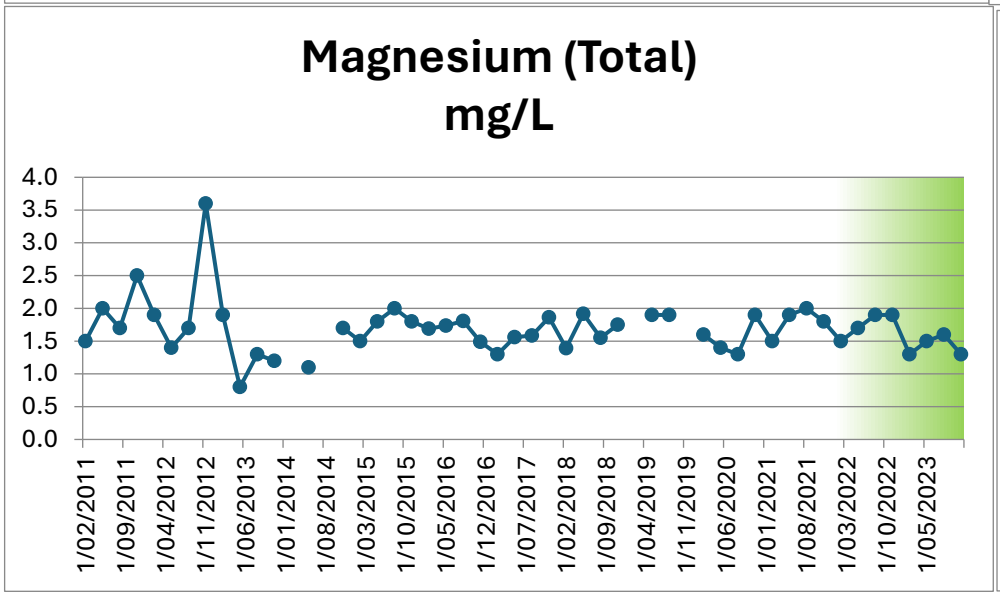

Copper (Total)
mg/L
0.2
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

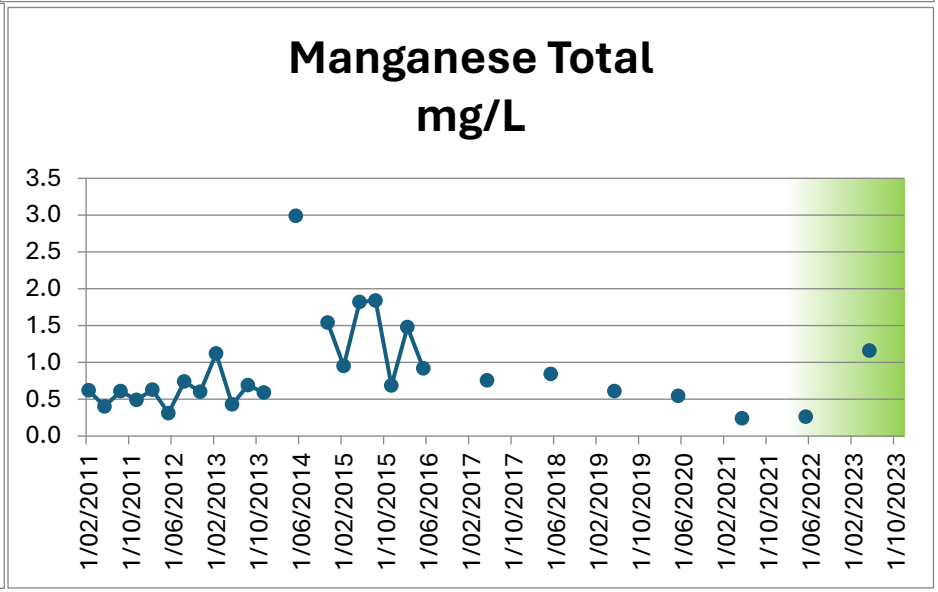

DO (Membrane Electrode)
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

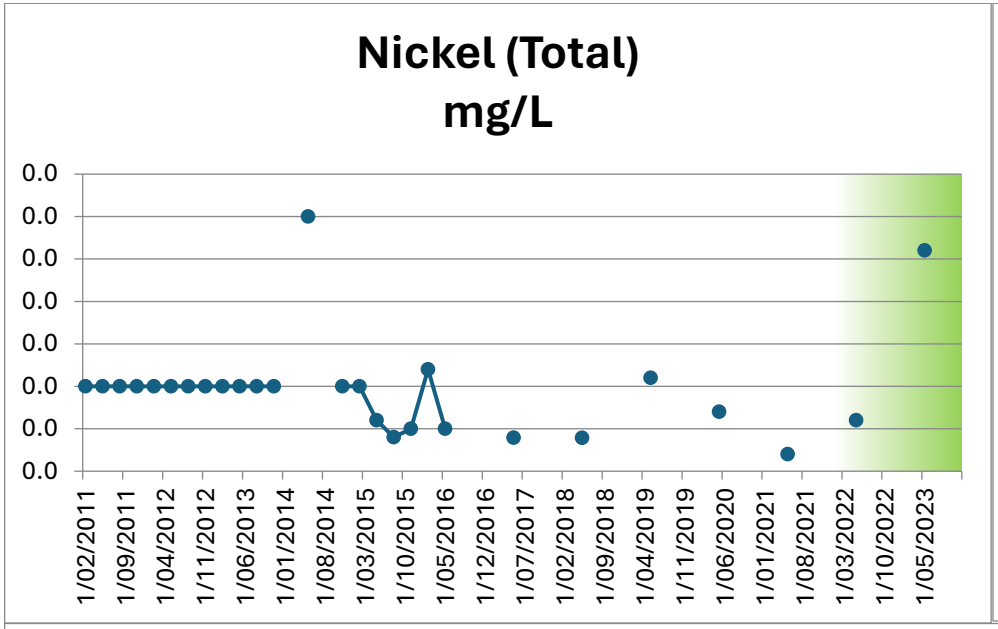

Flouride
mg/L
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

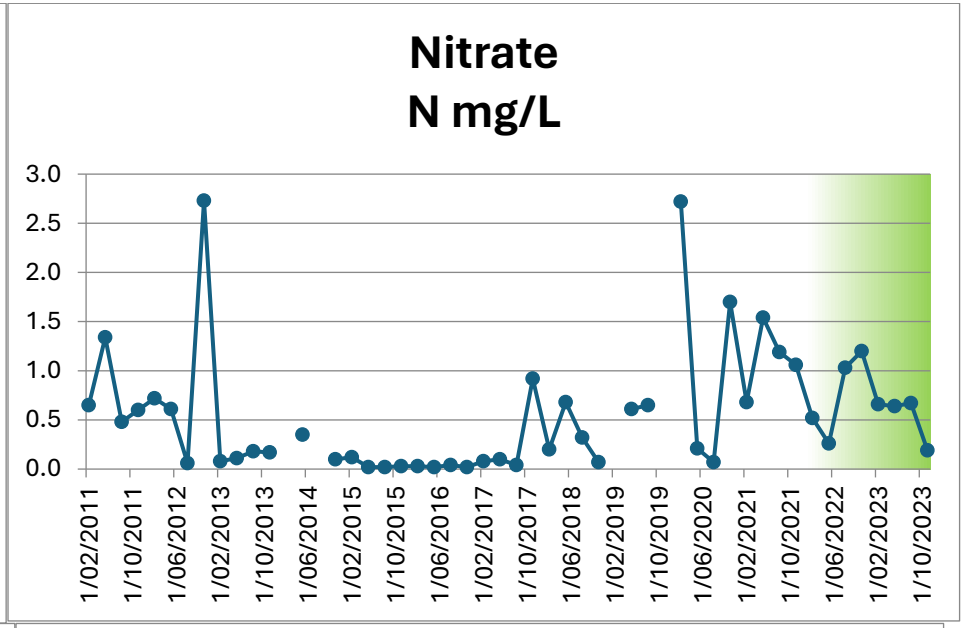

Iron Total
mg/L
180
160
140
120
100
80
60
40
20
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

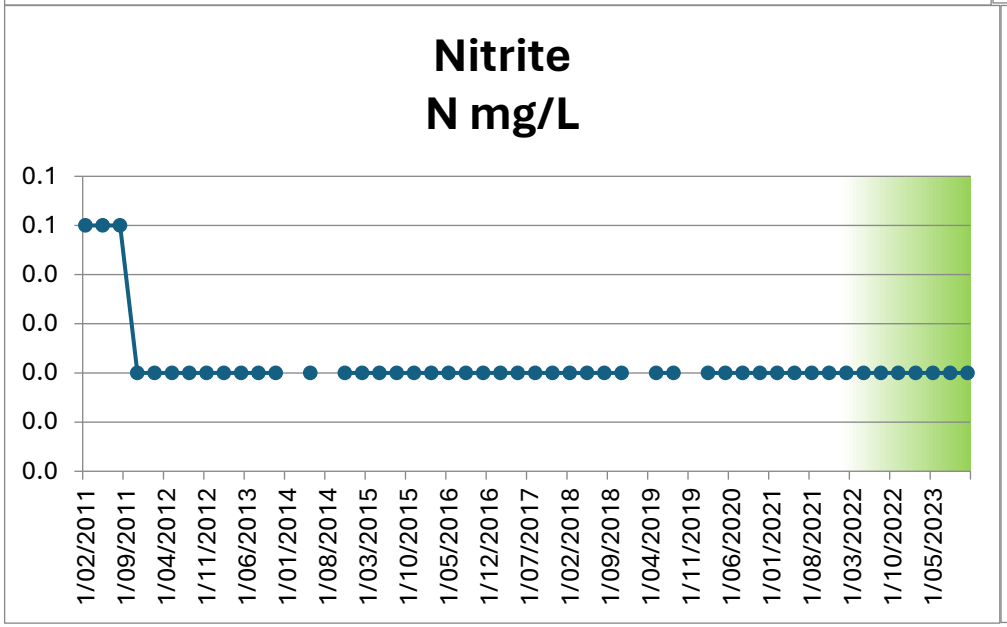

Lead (Total)
mg/L
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

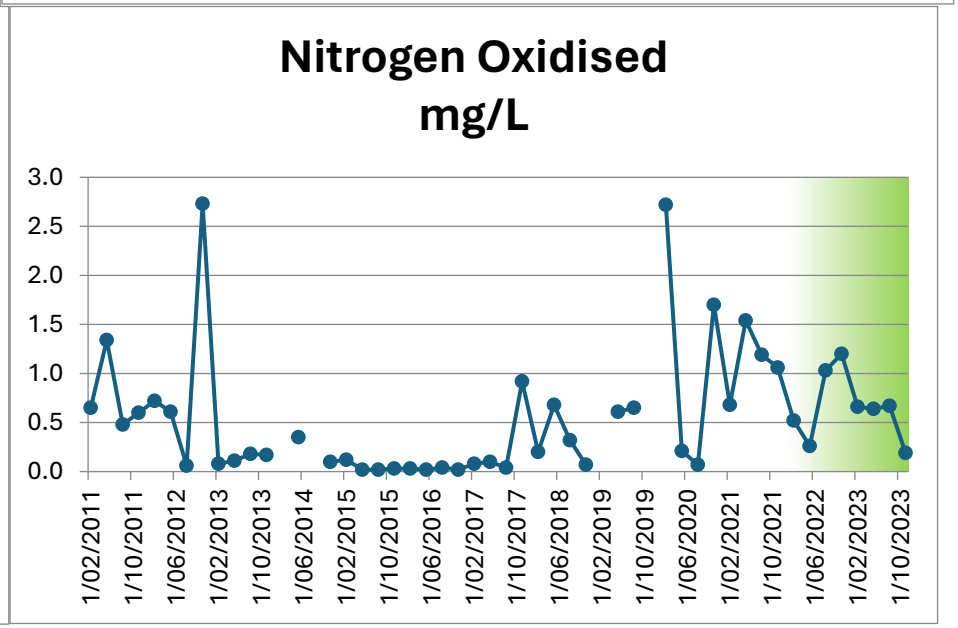

Magnesium (Total)
mg/L
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

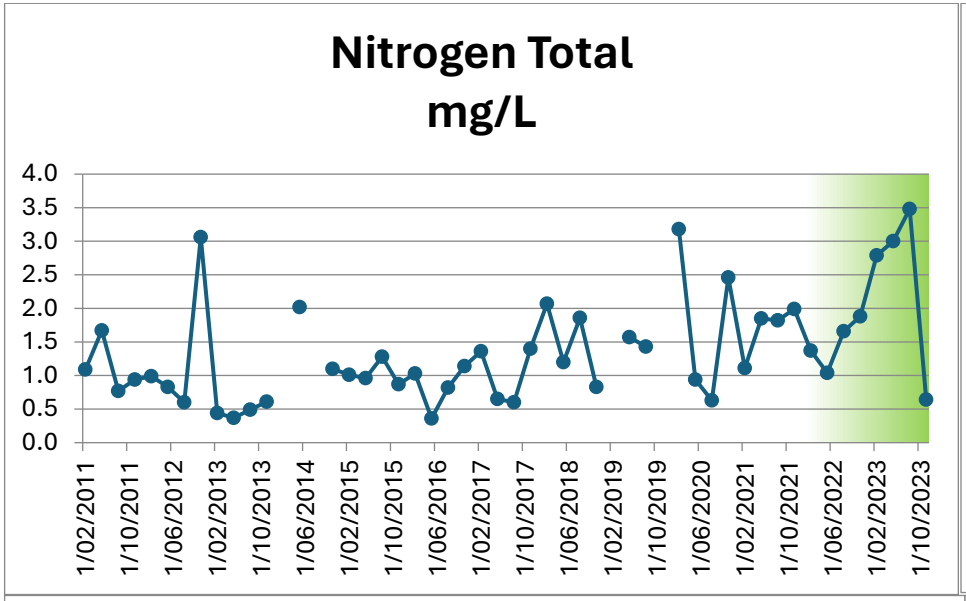

Manganese Total
mg/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

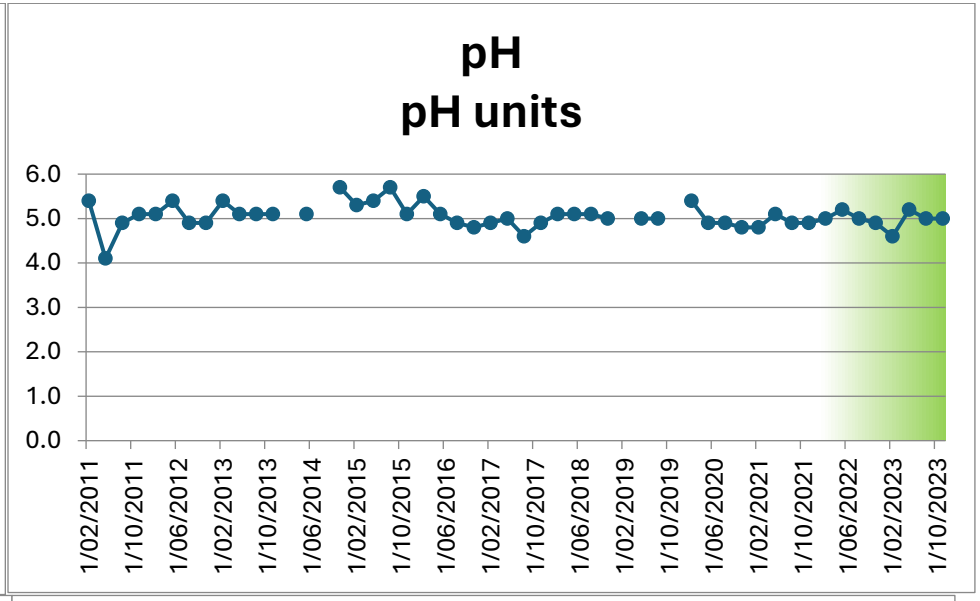

Nickel (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

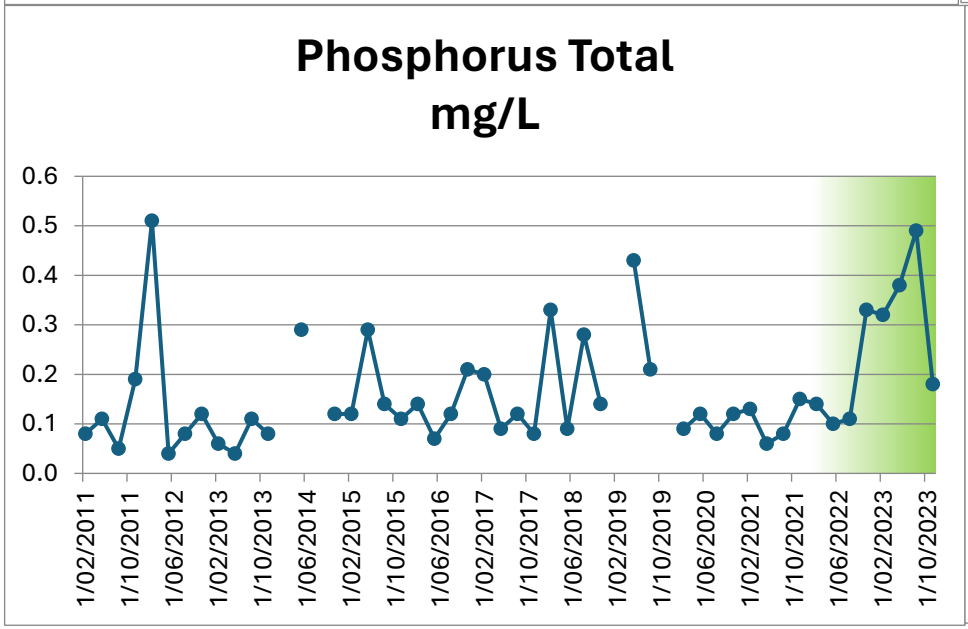

Nitrate
N mg/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

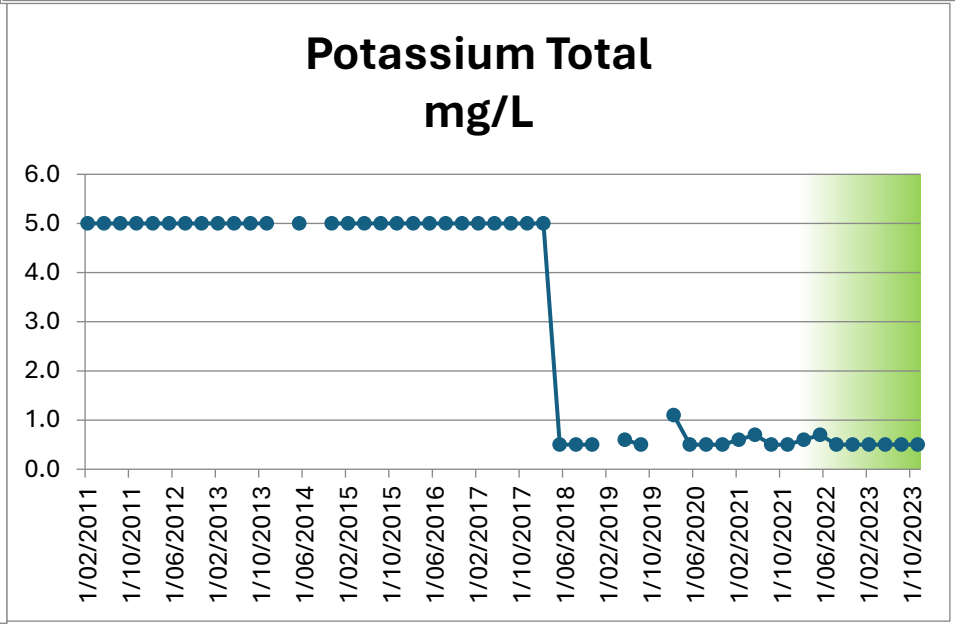

Nitrite
N mg/L
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

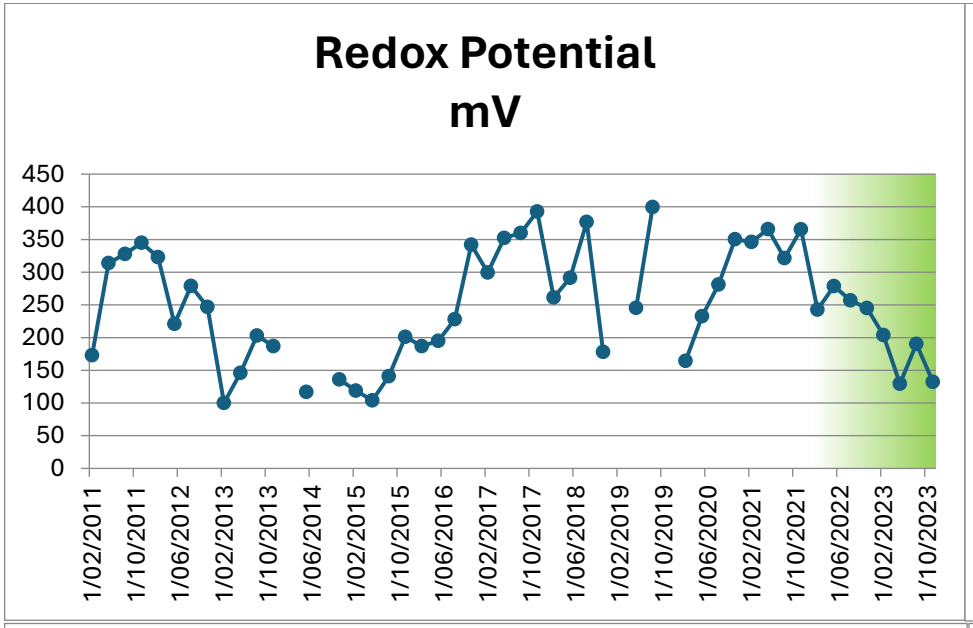

Nitrogen Oxidised
mg/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

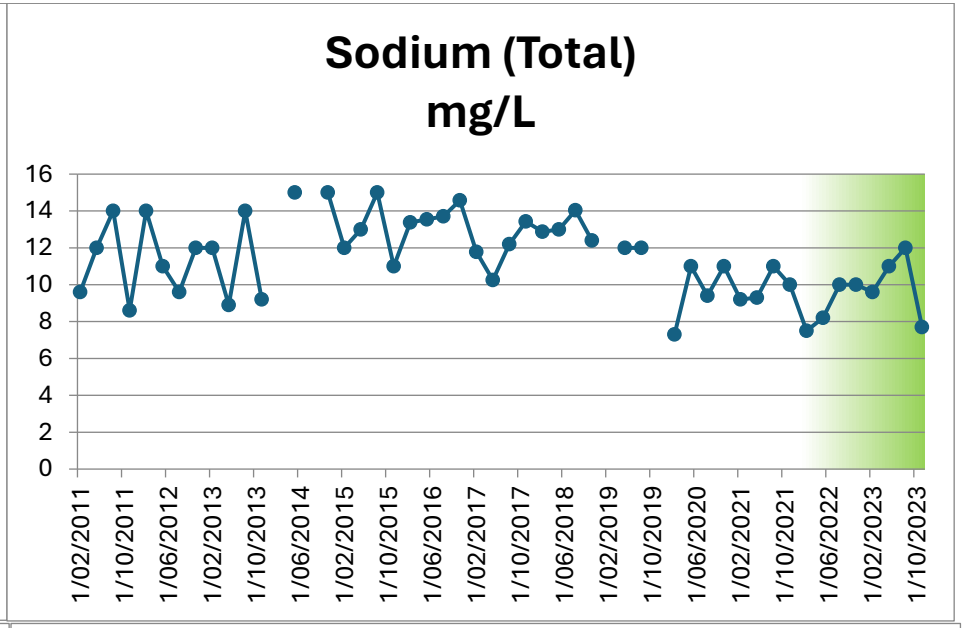

Nitrogen Total
mg/L
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

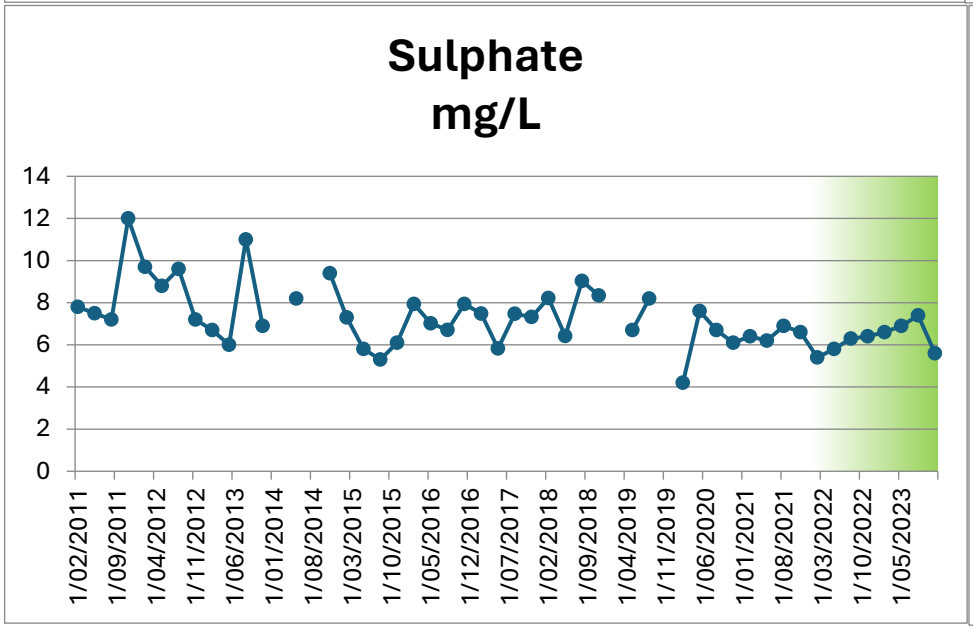

pH
pH units
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

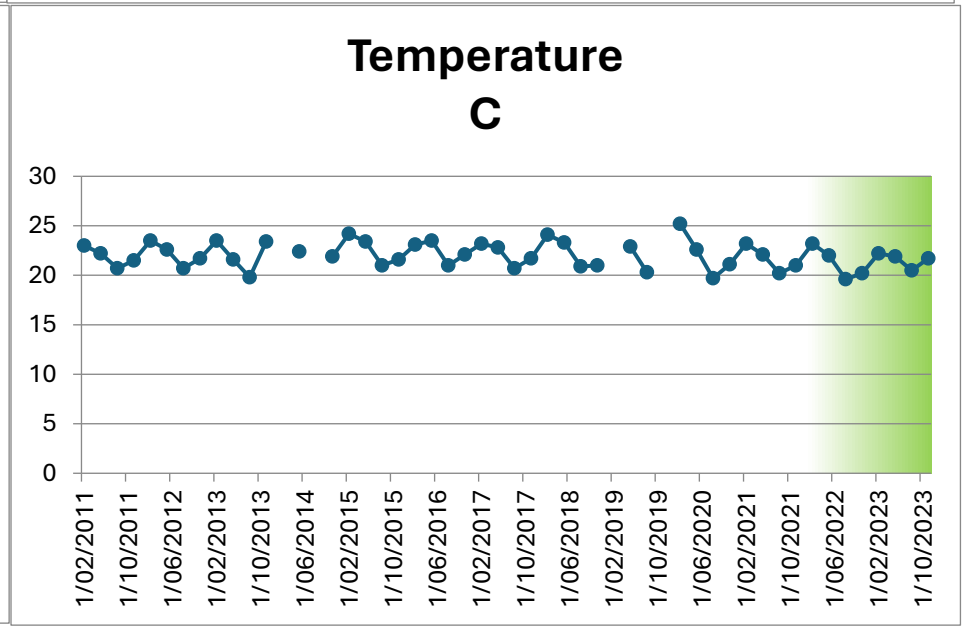

Phosphorus Total
mg/L
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

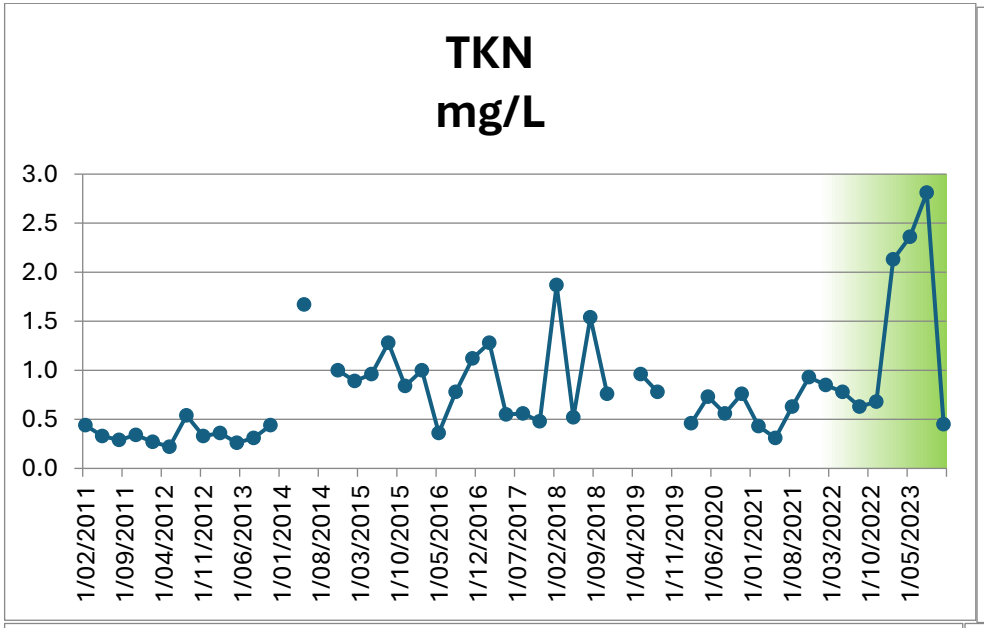

Potassium Total
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

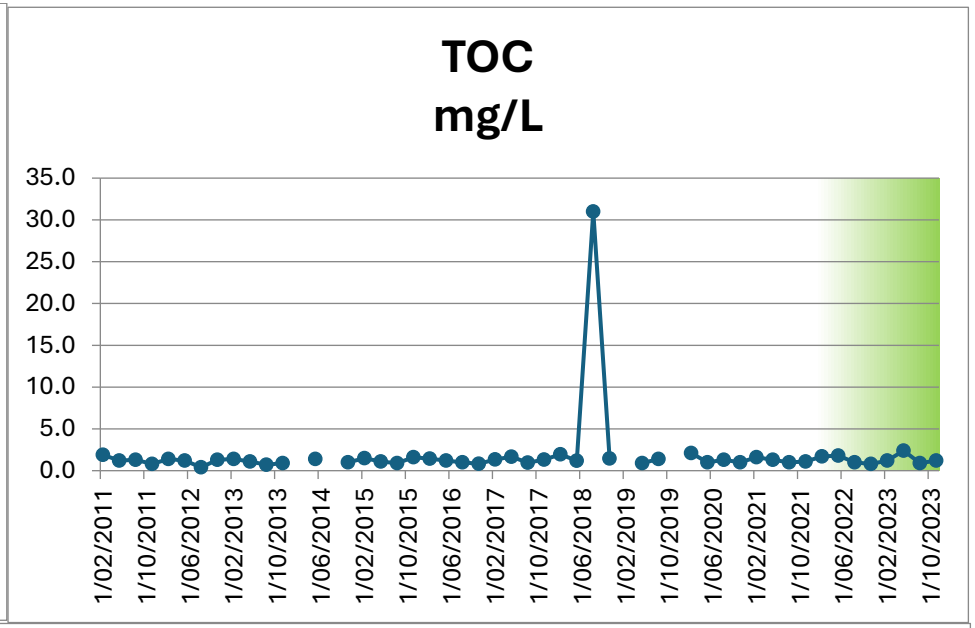

Redox Potential
mV
450
400
350
300
250
200
150
100
50
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

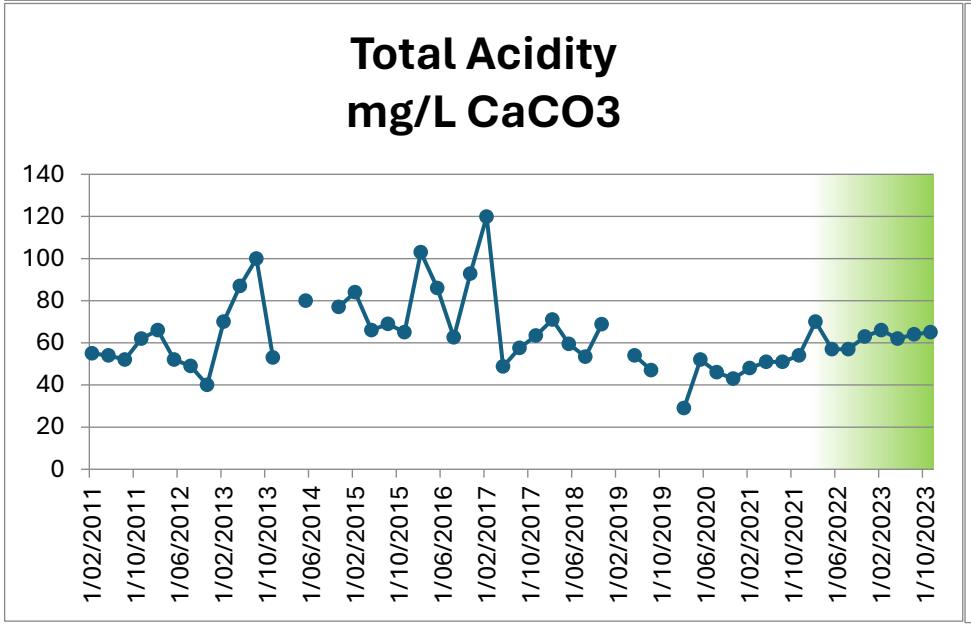

Sodium (Total)
mg/L
16
14
12
10
8
6
4
2
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

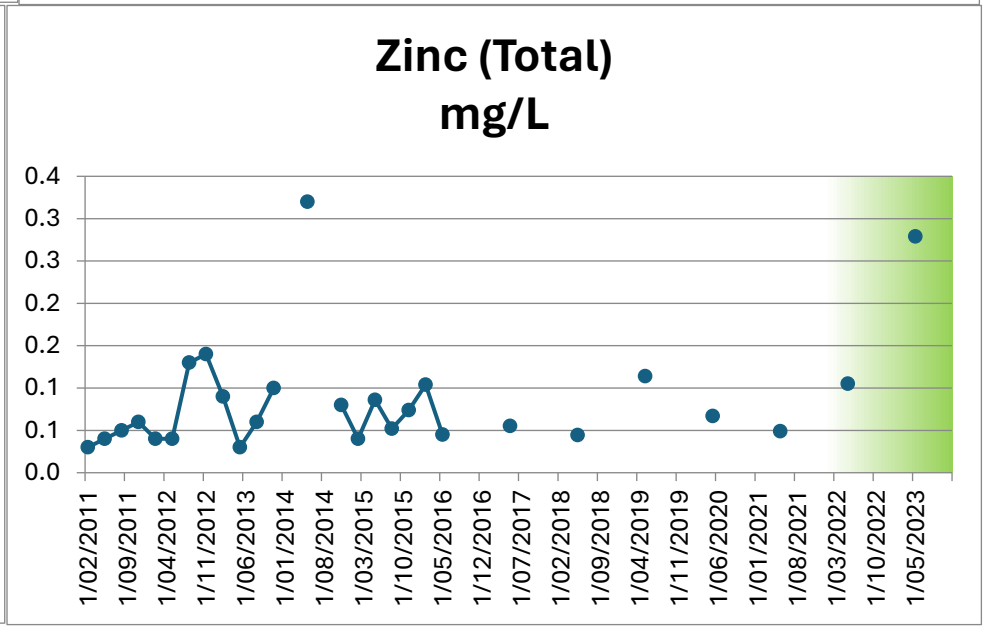

Sulphate
mg/L
14
12
10
8
6
4
2
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023


Temperature
C
30
25
20
15
10
5
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


TKN
mg/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023


TOC
mg/L
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Total Acidity
mg/L CaCO3
140
120
100
80
60
40
20
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Zinc (Total)
mg/L
0.4
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

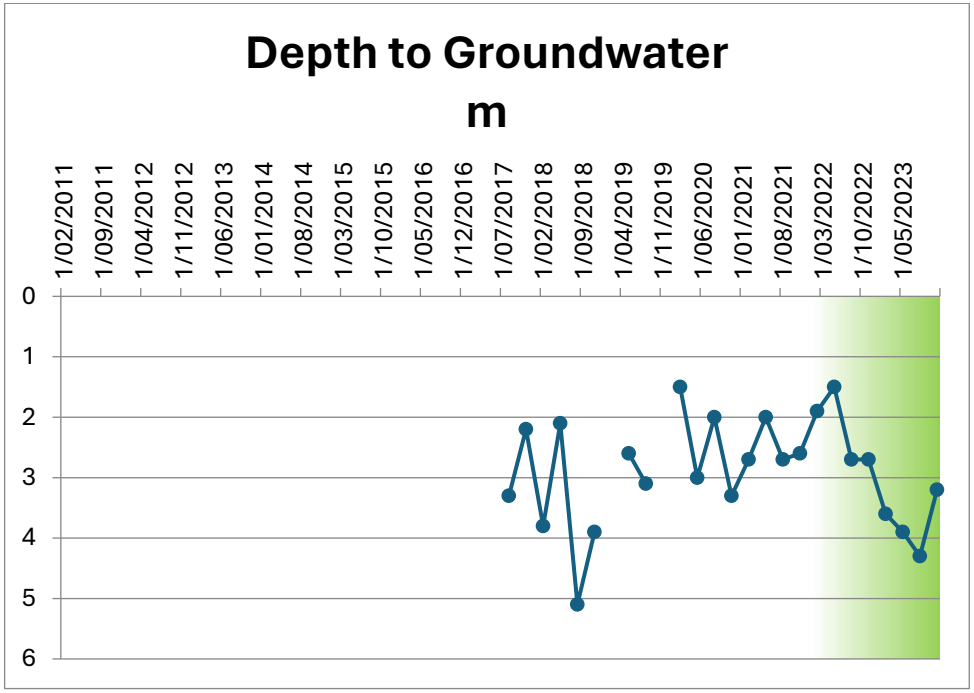
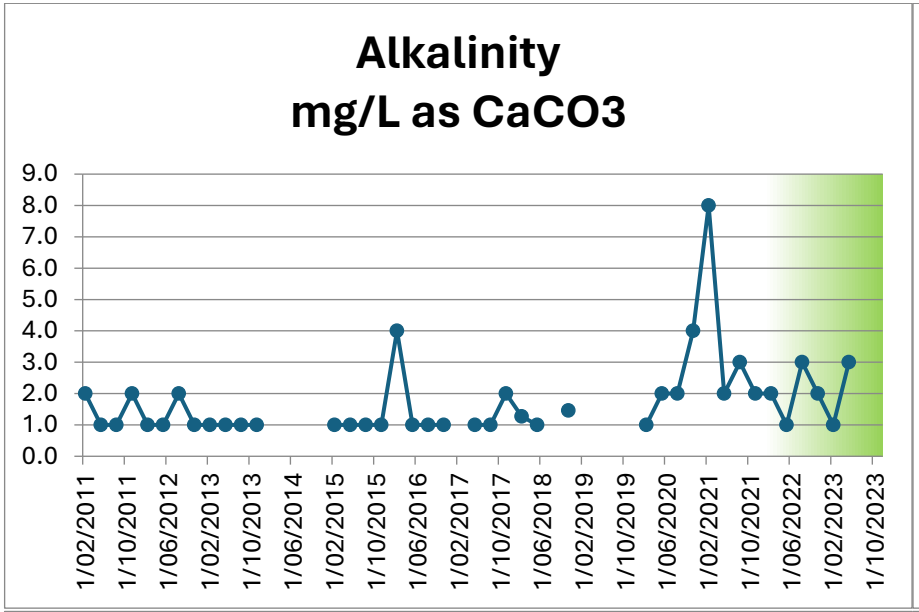
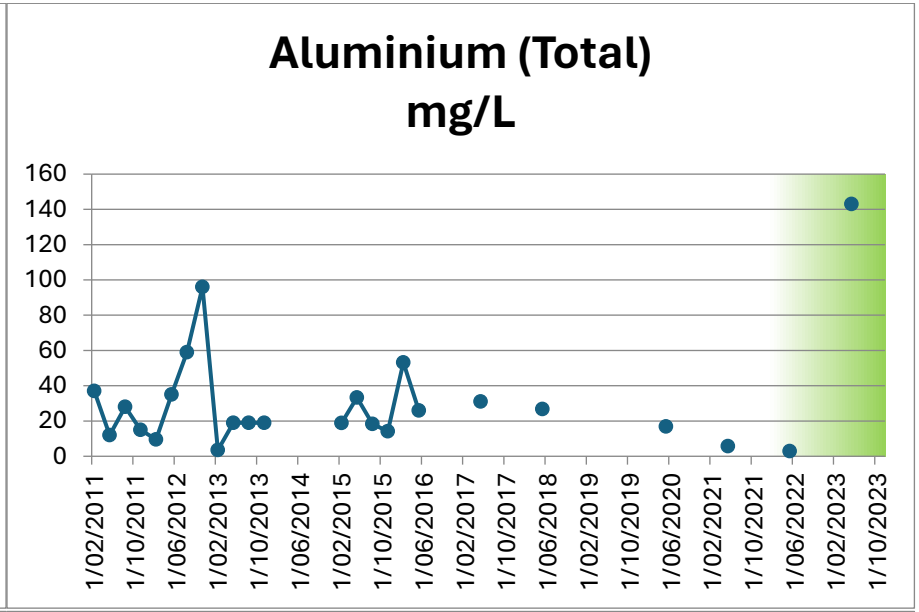
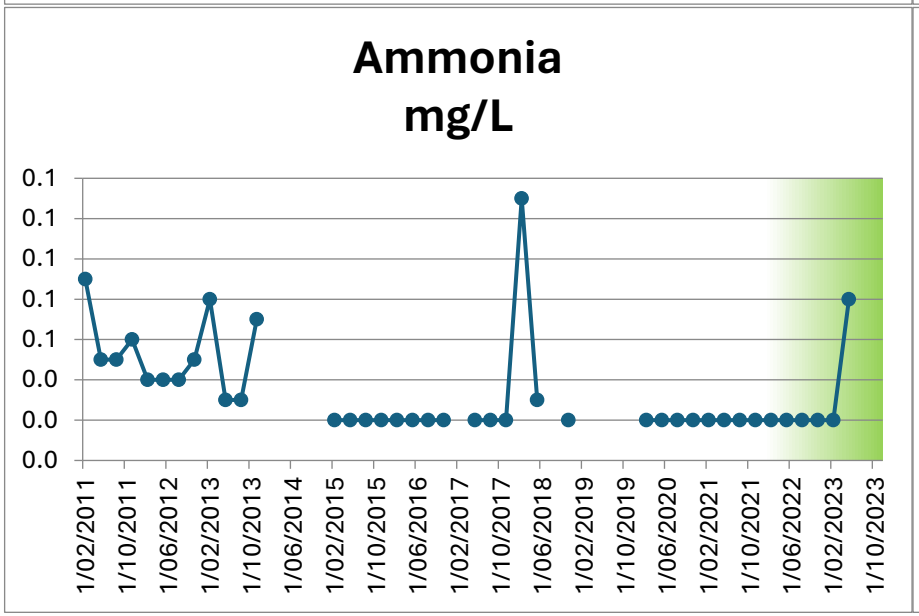

Depth to Groundwater
m
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023
0
1
2
3
4
5
6

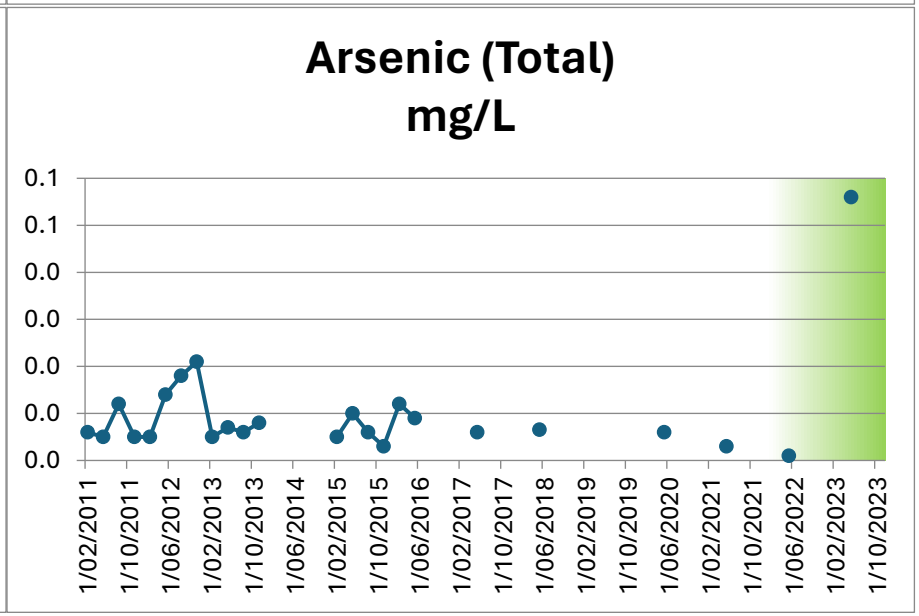
Table 20: Ground Water 14

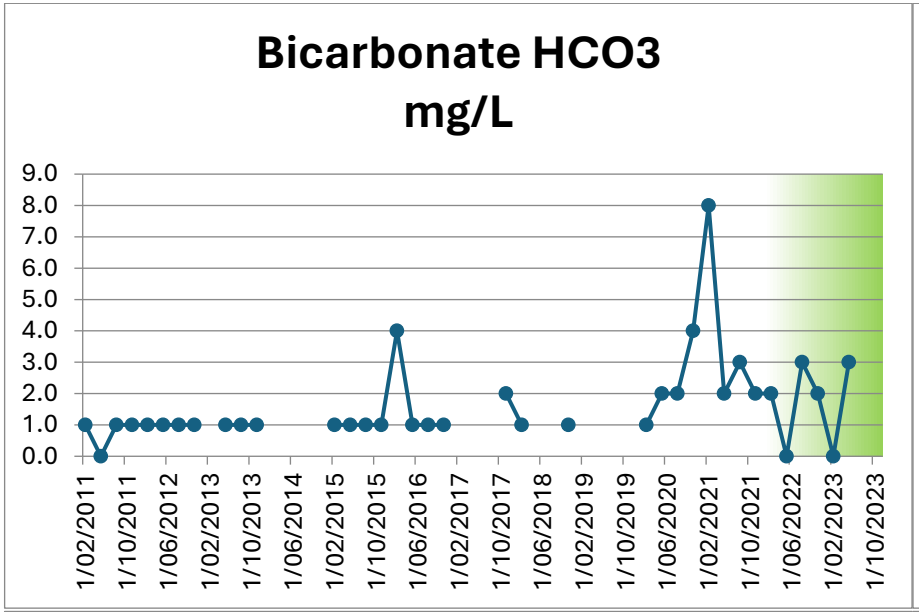
GW14	Alkalinity mgL as CaCO3	Aluminium (Total) mgL	Ammonia mgL	Arsenic (Total) mgL	Bicarbonate HCO3 mgL	BOD5 mgL	Cadmium (Total) mgL	Calcium (Total) mgL	Chloride mgL	Chromium (Total) mgL	Chromium 3 mgL	Chromium 6 mgL	Conductivity µScm-1	Copper (Total) mgL	DO (Membane Electrode) mgL	Flouride mgL	Iron Total mgL	Lead (Total) mgL	Magnesium (Total) mgL	Manganese Total mgL	Nickel (Total) mgL	Nitrate N mg/L	Nitrite N mg/L	Nitrogen Oxidised mgL	Nitrogen Total mgL	pH pH units	Phenol Alkalinity mgL as CaCO3	Phosphorus Total mgL	Potassium Total mgL	Redox Potential mV	Sodium (Total) mgL	Sulphate mgL	Temperature C	TKN mgL	TOC mgL	Total Acidity mgL CaCO3	Zinc (Total) mgL	Depth to Groundwater m
1/02/2011	2.0	37	0.1	0.0	1.0	1.0	0.0	0.8	35	0.0	0.0	0.0	137	0.0	3.9	0.0	45	0.1	0.9	0.1	0.0	0.3	0.1	0.3	0.5	4.9		0.2	5.0	202	13	7	24	0.2	2.7	45	0.0	
11/05/2011	1.0	12	0.1	0.0	NT	1.0	0.0	0.6	36	0.0	0.0	0.0	171	0.0	3.1	0.0	14	0.0	1.6	0.0	0.0	0.5	0.1	0.5	0.8	3.7		0.2	5.0	341	19	7	22	0.3	1.0	73	0.0	
10/08/2011	1.0	28	0.1	0.0	1.0	2.7	0.0	0.5	32	0.0	0.0	0.0	156	0.0	3.3	0.0	29	0.0	1.4	0.0	0.0	0.5	0.1	0.5	0.6	4.4		0.1	5.0	357	20	6	20	0.2	1.6	77	0.0	
9/11/2011	2.0	15	0.1	0.0	1.0	5.4	0.0	21.0	34	0.0	0.0	0.0	133	0.0	3.0	0.1	19	0.0	20.0	0.1	0.0	0.4	0.0	0.4	0.8	4.6		0.3	8.0	380	96	44	22	0.4	0.7	72	0.0	
7/02/2012	1.0	10	0.0	0.0	1.0	1.8	0.0	0.7	33	0.0	0.0	0.0	144	0.0	3.8	0.0	11	0.0	1.7	0.1	0.0	0.5	0.0	0.5	0.7	4.5		0.6	5.0	347	23	9	23	0.3	0.1	58	0.0	
9/05/2012	1.0	35	0.0	0.0	1.0	1.0	0.0	0.6	30	0.0	0.0	0.0	153	0.0	4.5	0.0	40	0.0	1.5	0.1	0.0	0.5	0.0	0.5	0.7	4.5		0.1	5.0	328	17	7	22	0.3	1.1	71	0.1	
7/08/2012	2.0	59	0.0	0.0	1.0	1.0	0.0	1.0	30	0.0	0.0	0.0	146	0.1	3.0	0.1	70	0.1	1.8	0.2	0.0	0.5	0.0	0.5	0.7	4.3		0.1	5.0	304	15	7	20	0.2	0.6	76	0.1	
14/11/2012	1.0	96	0.1	0.0	1.0	1.0	0.0	0.6	28	0.0	0.0	0.0	131	0.1	3.2	0.1	94	0.1	1.4	0.2	0.0	0.2	0.0	0.2	0.8	4.5		0.3	5.0	280	14	6	22	0.5	0.5	269	0.1	
14/02/2013	1.0	4	0.1	0.0		1.0	0.0	0.6	25	0.0	0.0	0.0	140	0.0	3.6	0.0	3	0.0	1.3	0.0	0.0	0.9	0.0	0.9	1.1	4.4		0.2	5.0	278	19	8	24	0.2	1.1	58	0.0	
15/05/2013	1.0	19	0.0	0.0	1.0	1.0	0.0	0.6	30	0.0	0.0	0.0	139	0.0	4.6	0.0	19	0.0	1.1	0.1	0.0	0.5	0.0	0.5	0.7	4.5		0.1	5.0	192	19	7	22	0.3	0.4	111	0.0	
7/08/2013	1.0	19	0.0	0.0	1.0	1.0	0.0	0.6	38	0.0	0.0	0.0	139	0.0	4.5	0.0	16	0.0	1.3	0.0	0.0	0.5	0.0	0.5	0.7	4.5		0.3	5.0	250	21	8	20	0.2	0.6	120	0.0	
13/11/2013	1.0	19	0.1	0.0	1.0	1.8	0.0	0.5	30	0.0	0.0	0.0	145	0.0	4.0	0.0	20	0.0	1.5	0.1	0.0	0.4	0.0	0.4	1.0	4.6		0.1	5.0	243	20	8	21	0.5	0.9	67	0.1	
11/02/2014																																						
13/05/2014																																						
12/08/2014																																						
10/11/2014																																						
10/02/2015	1.0	19	0.0	0.0	1.0	1.2	0.0	0.6	31	0.0	0.0	0.0	130	0.0	4.3	0.0	17	0.0	1.3	0.1	0.0	0.6	0.0	0.6	1.4	4.6		0.1	5.0	213	17	8	23	0.8	0.7	66	0.1	
12/05/2015	1.0	33	0.0	0.0	1.0	2.1	0.0	0.6	29	0.0	0.0	0.0	129	0.0	5.3	0.0	25	0.0	1.5	0.1	0.0	0.5	0.0	0.5	1.2	4.5		0.1	5.0	226	21	6	22	0.7	0.3	68	0.1	
12/08/2015	1.0	18	0.0	0.0	1.0	1.0	0.0	0.6	30	0.0	0.0	0.0	129	0.0	4.9	0.0	15	0.0	1.5	0.1	0.0	0.4	0.0	0.4	0.8	4.6		0.1	5.0	232	20	6	20	0.4	0.4	74	0.0	
11/11/2015	1.0	14	0.0	0.0	1.0	1.0	0.0	0.8	23	0.0	0.0	0.0	121	0.0	4.8	0.0	10	0.0	1.4	0.1	0.0	1.4	0.0	1.4	1.6	4.5		0.1	5.0	222	16	6	21	0.3	0.6	64	0.0	
9/02/2016	4.0	53	0.0	0.0	4.0	1.0	0.0	0.5	26	0.0	0.0	0.0	122	0.0	3.9	0.0	44	0.0	1.4	0.1	0.0	0.7	0.0	0.7	1.7	4.5		0.1	5.0	245	18	6	22	1.0	0.7	145	0.0	
10/05/2016	1.0	26	0.0	0.0	1.0	1.0	0.0	0.5	28	0.0	0.0	0.0	127	0.0	2.0	0.0	25	0.0	1.3	0.1	0.0	0.5	0.0	0.5	0.8	4.5		0.1	5.0	242	17	6	23	0.3	0.4	86	0.0	
10/08/2016	1.0		0.0		1.0	1.0		0.6	26				126		4.2	0.0			1.3			0.7	0.0	0.7	1.6	4.4		0.1	5.0	250	19	6	20	0.9	0.5	103		
8/11/2016	1.0		0.0		1.0	1.0		0.6	13				124		2.8	0.0			1.6			0.4	0.0	0.4	1.0	4.4		0.1	5.0	445	19	6	21	0.6	1.0	119		
7/02/2017																																						
9/05/2017	1.0	31	0.0	0.0		1.0	0.0	1.6	17	0.0	0.0	0.0	109	0.0	6.8	0.0	32	0.0	1.7	0.1	0.0	3.0	0.0	3.0	3.6	4.4		0.1	5.0	435	13	5	22	0.6	1.0	54	0.0	
9/08/2017	1.0		0.0			1.0		0.6	80				126		4.2	0.0			1.2			0.5	0.0	0.5	1.2	4.3		0.2	5.0	345	17	7	20	0.8	0.9	89		
8/11/2017	2.0		0.0		2.0	1.0		0.5	28				125		4.0	0.0			1.5			0.6	0.0	0.6	1.0	4.3		0.1	5.0	468	19	6	21	0.4	1.2	82		
14/02/2018	1.3		0.1		1.0	3.3		0.2	26				122		4.6	0.0			0.6			0.5	0.0	0.5	2.7	5.0		0.3	5.0	242	17	8	24	2.2	0.8	229		
9/05/2018	1.0	27	0.0	0.0		1.2	0.0	0.5	29	0.0	0.0	0.0	121	0.0	3.9	0.0	24	0.0	1.3	0.1	0.0	0.8	0.0	0.8	1.4	4.6		0.1	0.5	322	17	7	23	0.6	1.1	72	0.0	
15/08/2018																																						
14/11/2018	1.5		0.0		1.0	1.2		0.9	20				118		5.7	0.0			1.5			0.9	0.0	0.9	1.8	4.8		0.3	0.5	121	18	7	21	0.9	1.1	69		
13/02/2019																																						
15/05/2019																																						
14/08/2019																																						
12/11/2019																																						
26/02/2020	1.0		0.0		1.0	1.0		1.1	17				81		3.9	0.0			1.0			0.3	0.0	0.3	0.5	4.7	0.0	0.1	0.5	313	9	5	25	0.2	1.2	43		1.4
13/05/2020	2.0	17	0.0	0.0	2.0	1.0	0.0	0.6	27	0.0	0.0	0.0	118	0.0	3.2	0.0	13	0.0	1.4	0.1	0.0	0.2	0.0	0.2	0.6	4.6	0.0	0.1	0.5	286	16	8	22	0.4	0.7	64	0.0	1.9
12/08/2020	2.0		0.0		2.0	1.0		0.5	23				113		3.6	0.0			1.4			0.5	0.0	0.5	0.9	4.6	0.0	0.1	0.5	256	17	7	20	0.4	0.7	74		1.7
11/11/2020	4.0		0.0		4.0	1.0		0.5	26				121		3.5	0.0			1.4			0.6	0.0	0.6	1.4	4.3	0.0	0.1	0.6	305	17	7	21	0.8	0.9	68		4.2
10/02/2021	8.0		0.0		8.0	1.0		0.4	22				120		2.7	0.1			1.2			0.1	0.0	0.1	0.4	4.7	0.0	0.2	0.5	160	15	9	23	0.3	1.0	68		2.0
12/05/2021	2.0	6	0.0	0.0	2.0	1.0	0.0	0.5	26	0.0	0.0	0.0	120	0.0	3.7	0.0	20	0.0	1.4	0.1	0.0	0.4	0.0	0.4	0.6	4.7	0.0	0.0	0.5	276	17	8	22	0.2	0.7	57	0.0	1.0
11/08/2021	3.0		0.0		3.0	1.2		0.8	26				121		3.6	0.0			1.4			0.3	0.0	0.3	0.5	4.9	0.0	0.0	0.6	219	16	7	20	0.2	0.7	62		2.1
9/11/2021	2.0		0.0		2.0	1.0		0.5	26				115		2.7	0.0			1.3			0.3	0.0	0.3	0.6	4.7	0.0	0.1	0.5	262	16	8	21	0.3	1.0	53		2.7
9/02/2022	2.0		0.0		2.0	2.4		0.9	22				112		4.3	0.0			1.3			0.8	0.0	0.8	1.3	4.7	0.0	0.1	0.5	276	14	6	24	0.4	1.5	54		1.4
11/05/2022	1.0	3	0.0	0.0	0.0	1.0	0.0	0.5	25	0.0	0.0	0.0	119	0.0	4.2	0.0	3	0.0	1.4	0.0	0.0	0.3	0.0	0.3	0.5	4.6	0.0	0.0	0.5	379	16	7	22	0.2	0.7	55	0.0	0.8
10/08/2022	3.0		0.0		3.0	1.0		0.7	20				124		4.1	0.0			1.4			0.4	0.0	0.4	0.9	4.8	0.0	0.2	0.5	247	17	6	20	0.5	0.7	70		1.5
9/11/2022	2.0		0.0		2.0	1.5		0.9	23				116		4.0	0.0			1.3			0.4	0.0	0.4	0.9	4.8	0.0	0.4	0.6	286	16	6	21	0.5	1.5	58		1.6
14/02/2023	1.0		0.0		0.0	1.0		0.3	21				110		2.9	0.0			0.9			0.2	0.0	0.2	1.3	4.6		0.2	0.5	237	15	7	22	1.2	0.9	64		3.0
10/05/2023	3.0	143	0.1	0.1	3.0	1.5	0.0	0.2	37	0.1	0.0	0.1	119	0.1	3.4	0.0	216	0.1	0.7	0.3	0.0	0.3	0.0	0.3	2.0	4.6	1.0	0.3	0.5	152	16	7	22	1.7	0.9	130	0.1	3.9
8/08/2023																																						
13/11/2023																																						
2023 Min	**1.00**	**143.00**	**0.02**	**0.06**	**0.00**	**1.00**	**0.00**	**0.20**	**21.00**	**0.05**	**0.01**	**0.05**	**110.00**	**0.12**	**2.90**	**0.02**	**216.00**	**0.13**	**0.70**	**0.27**	**0.01**	**0.16**	**0.02**	**0.16**	**1.33**	**4.60**	**1.00**	**0.16**	**0.50**	**151.60**	**15.00**	**6.80**	**22.00**	**1.17**	**0.90**	**64.00**	**0.08**	**3.00**
2023 Max	**3.00**	**143.00**	**0.08**	**0.06**	**3.00**	**1.50**	**0.00**	**0.30**	**37.00**	**0.05**	**0.01**	**0.05**	**119.00**	**0.12**	**3.40**	**0.02**	**216.00**	**0.13**	**0.90**	**0.27**	**0.01**	**0.30**	**0.02**	**0.30**	**2.03**	**4.60**	**1.00**	**0.30**	**0.50**	**237.10**	**16.00**	**7.10**	**22.20**	**1.73**	**0.90**	**130.00**	**0.08**	**3.90**
2023 Mean	**2.00**	**143.00**	**0.05**	**0.06**	**1.50**	**1.25**	**0.00**	**0.25**	**29.00**	**0.05**	**0.01**	**0.05**	**114.50**	**0.12**	**3.15**	**0.02**	**216.00**	**0.13**	**0.80**	**0.27**	**0.01**	**0.23**	**0.02**	**0.23**	**1.68**	**4.60**	**1.00**	**0.23**	**0.50**	**194.35**	**15.50**	**6.95**	**22.10**	**1.45**	**0.90**	**97.00**	**0.08**	**3.45**
Long-term Average	**1.74**	**30.92**	**0.03**	**0.01**	**1.69**	**1.36**	**0.00**	**1.14**	**28.18**	**0.01**	**0.01**	**0.01**	**126.81**	**0.03**	**3.89**	**0.03**	**34.38**	**0.03**	**1.80**	**0.10**	**0.01**	**0.55**	**0.02**	**0.55**	**1.08**	**4.55**	**0.08**	**0.15**	**3.29**	**279.09**	**19.01**	**7.76**	**21.78**	**0.54**	**0.87**	**83.39**	**0.04**	**2.09**

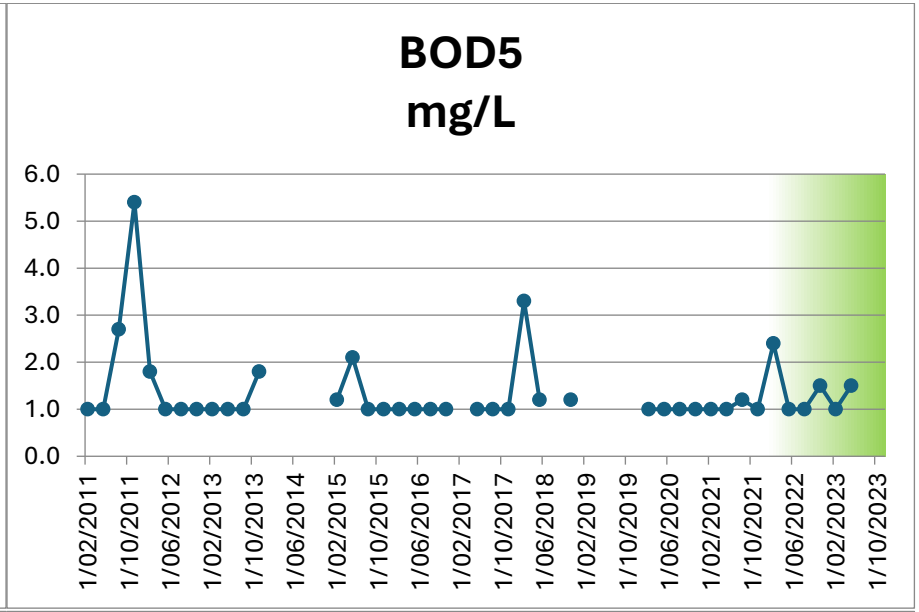

Alkalinity
mg/L as CaCO3
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

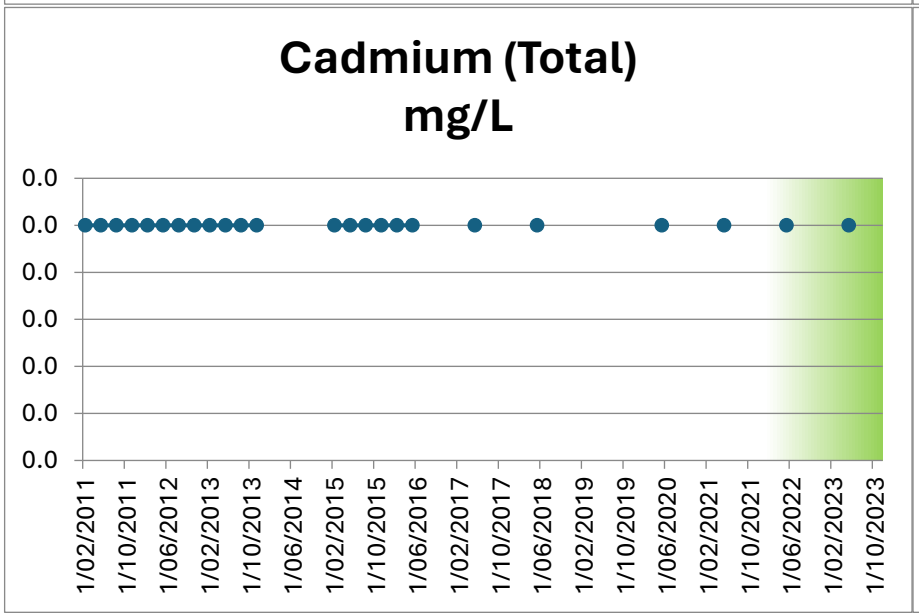

Aluminium (Total)
mg/L
160
140
120
100
80
60
40
20
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

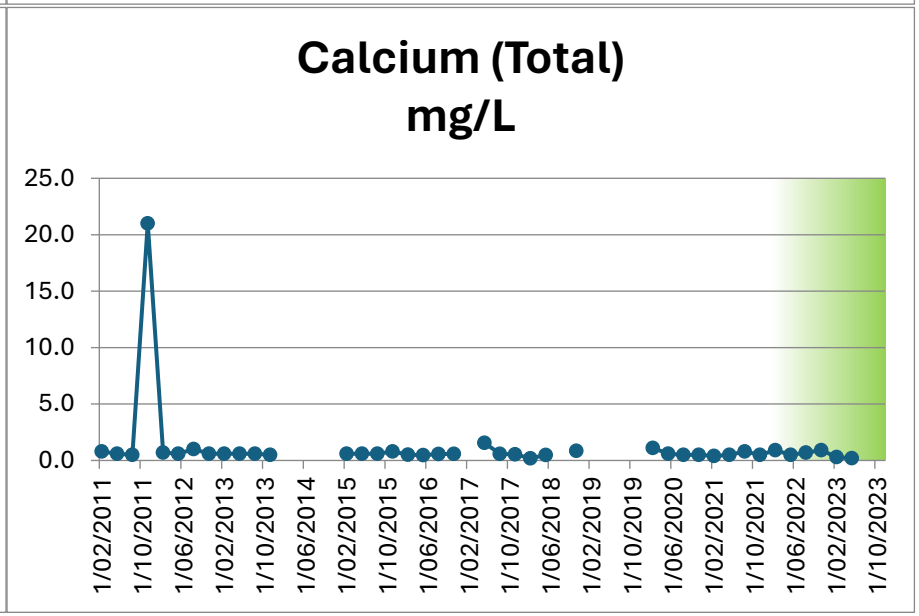

Ammonia
mg/L
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

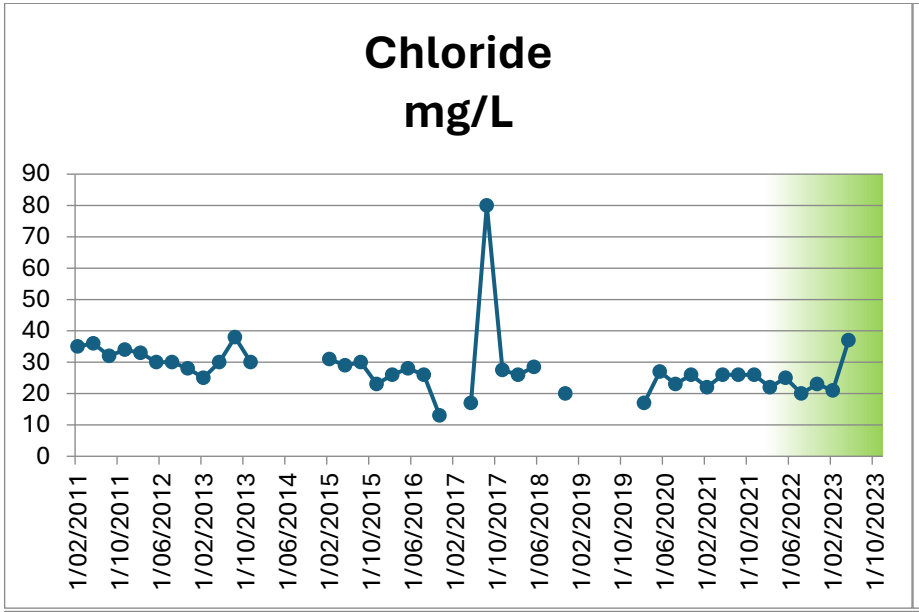

Arsenic (Total)
mg/L
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

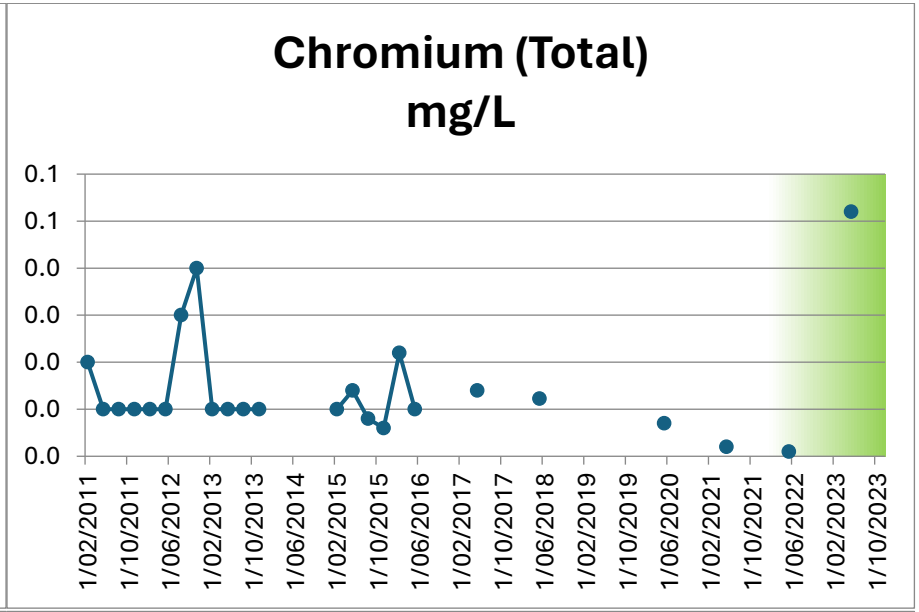

Bicarbonate HCO3
mg/L
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

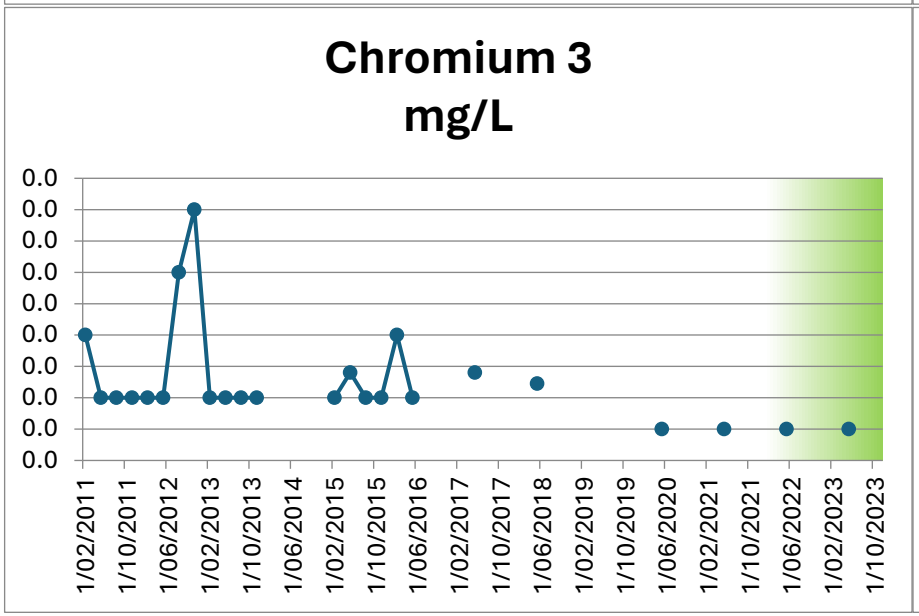

BOD5
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

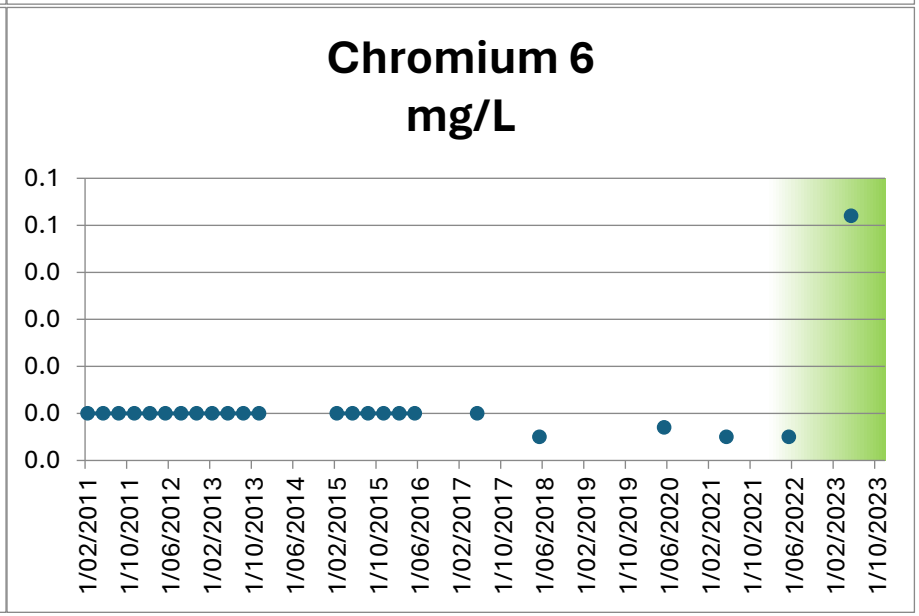

Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

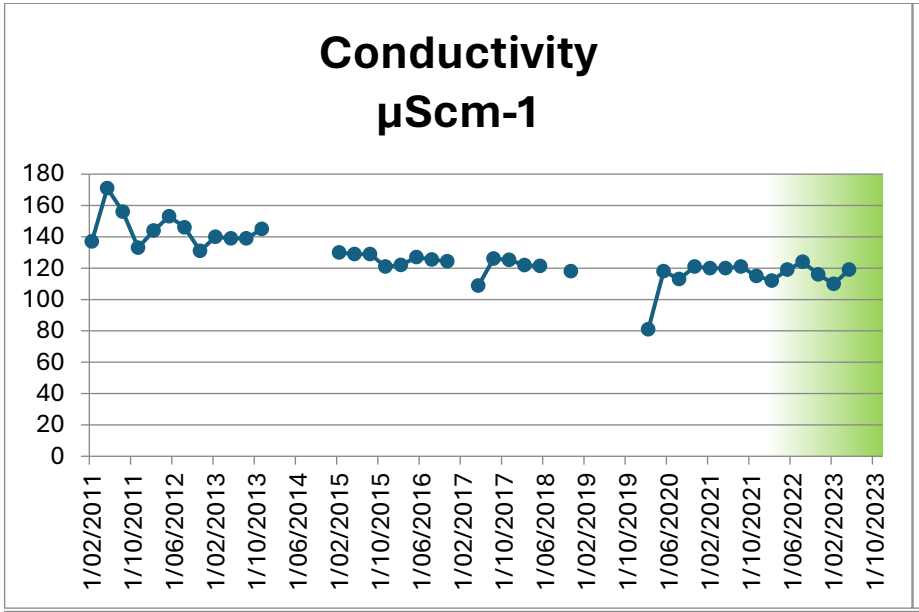

Calcium (Total)
mg/L
25.0
20.0
15.0
10.0
5.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

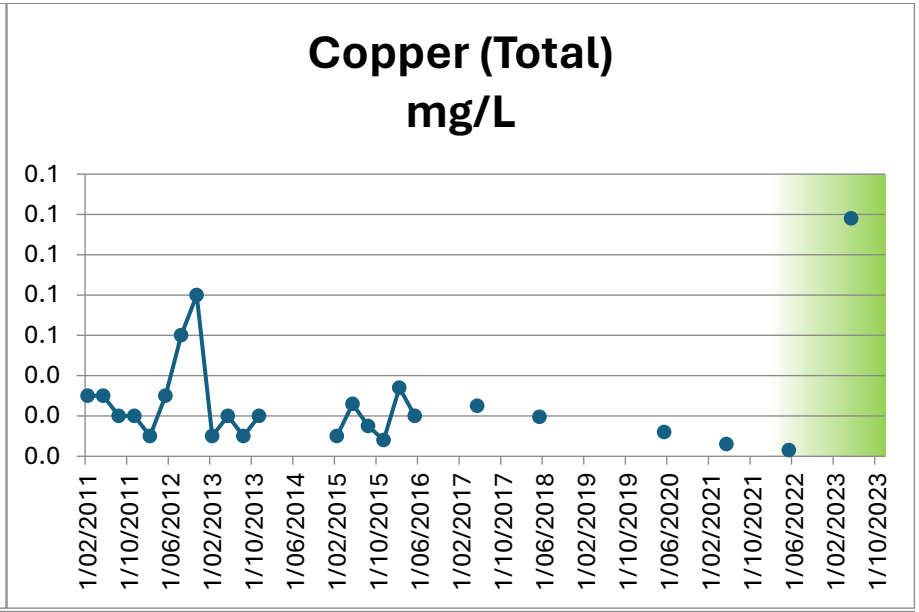

Chloride
mg/L
90
80
70
60
50
40
30
20
10
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

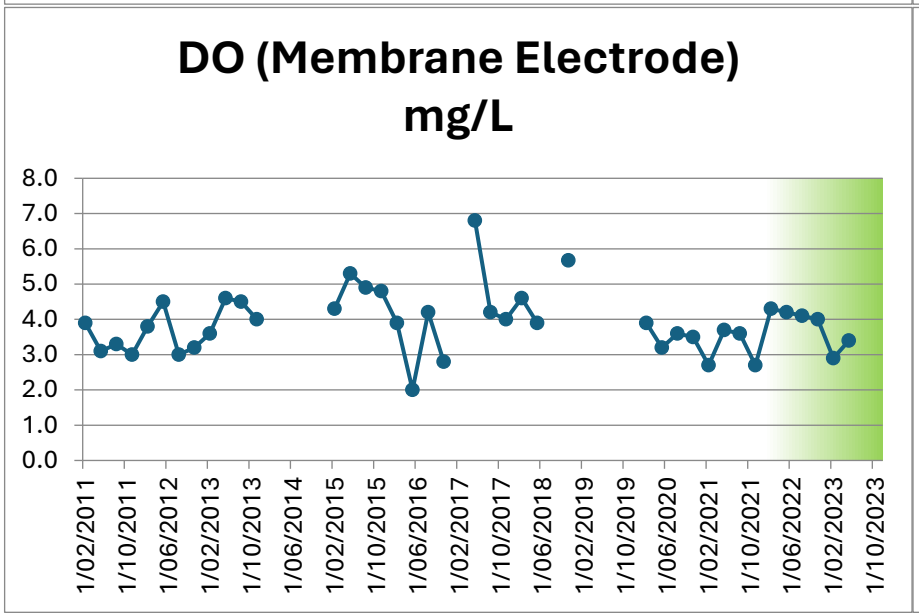

Chromium (Total)
mg/L
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

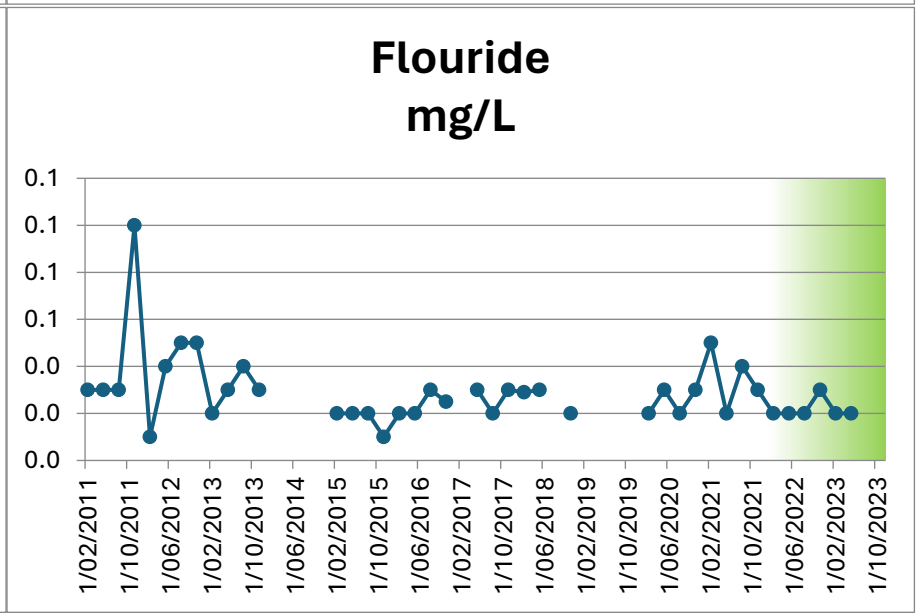

Chromium 3
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

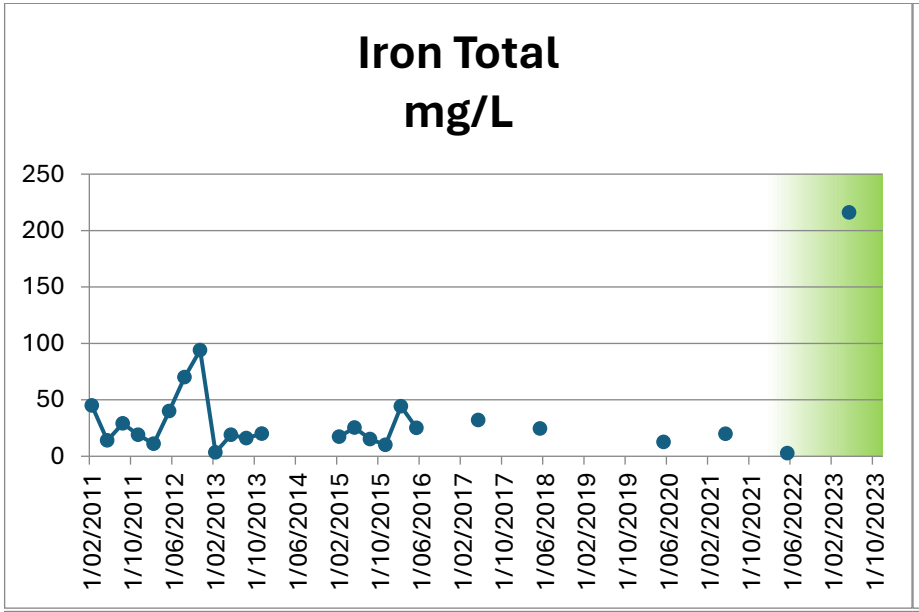

Chromium 6
mg/L
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

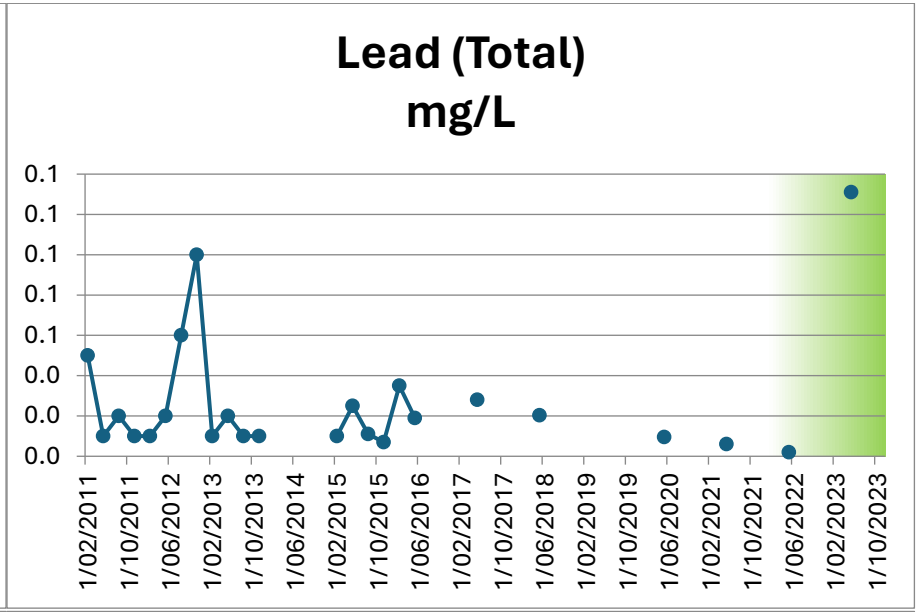

Conductivity
µScm-1
180
160
140
120
100
80
60
40
20
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

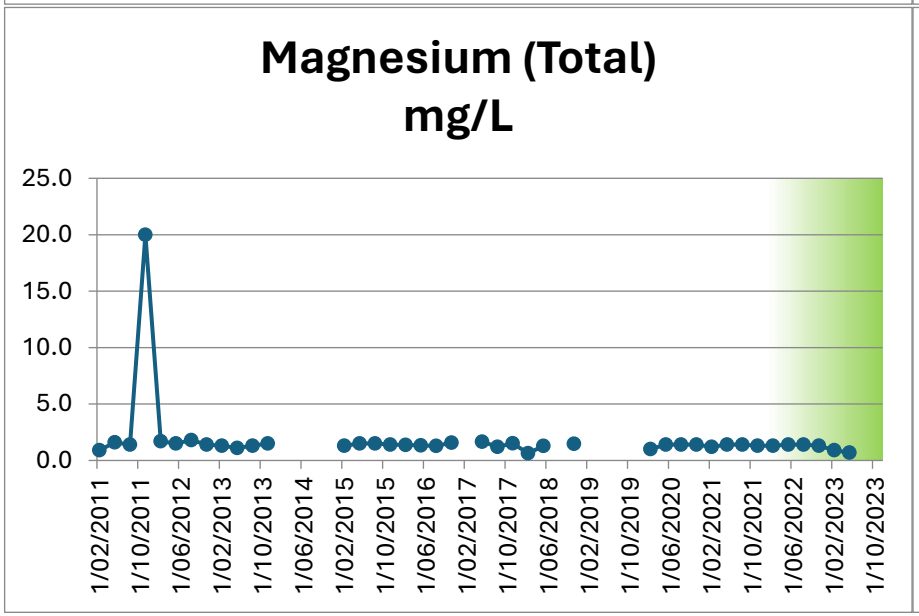

Copper (Total)
mg/L
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

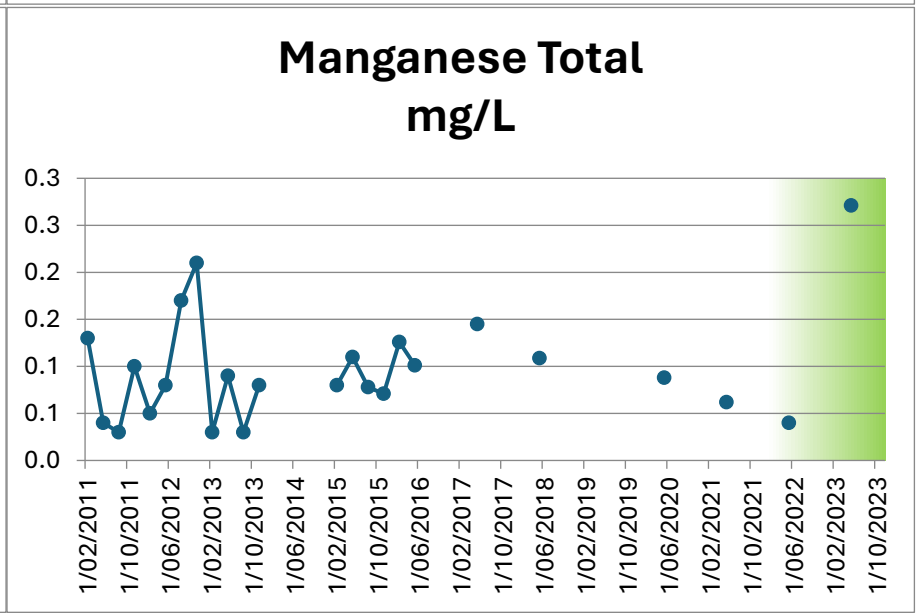

DO (Membrane Electrode)
mg/L
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Flouride
mg/L
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Iron Total
mg/L
250
200
150
100
50
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Lead (Total)
mg/L
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Magnesium (Total)
mg/L
25.0
20.0
15.0
10.0
5.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Manganese Total
mg/L
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
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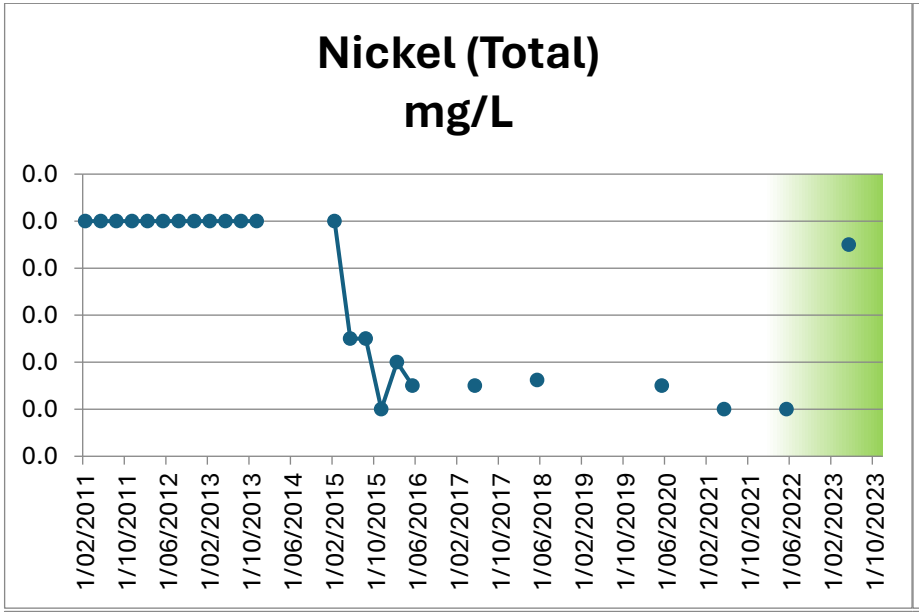
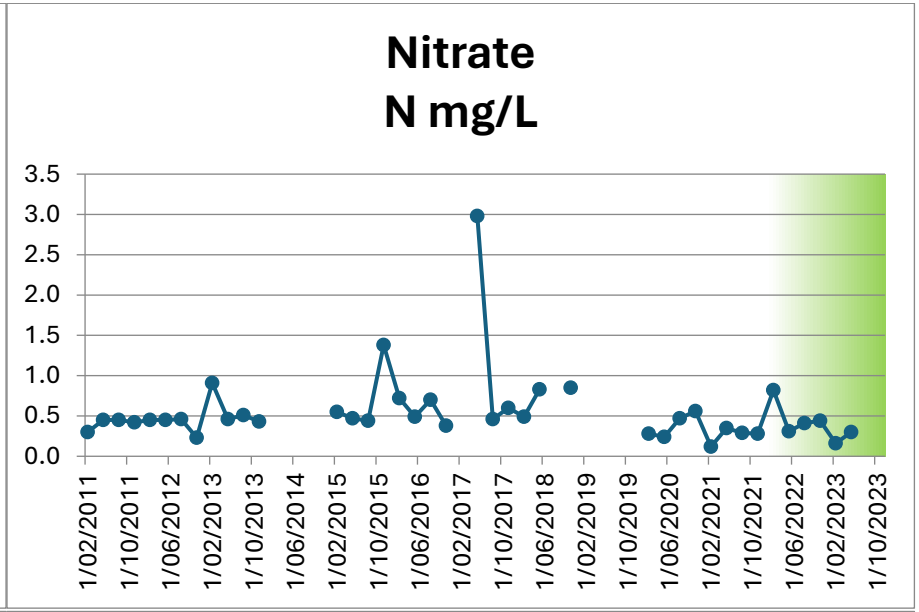
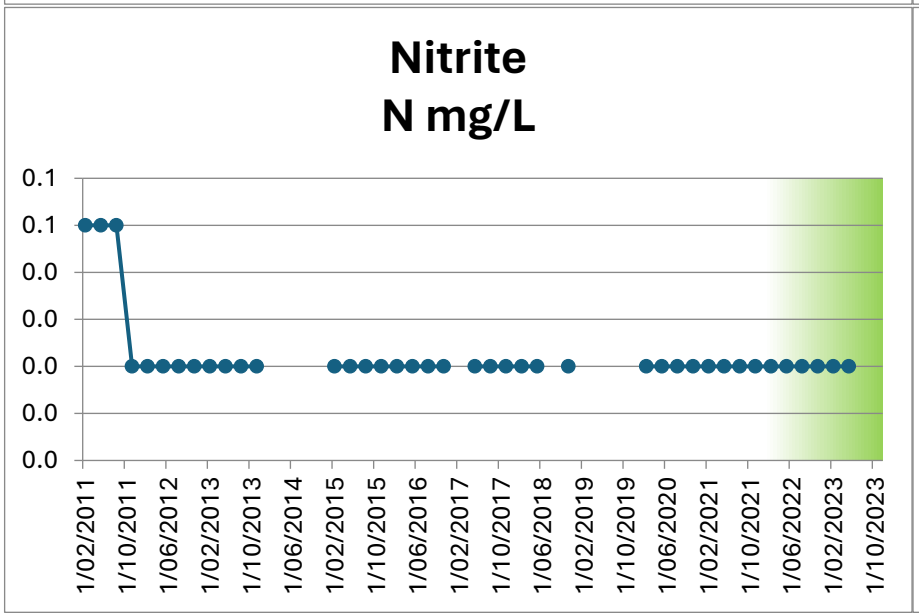
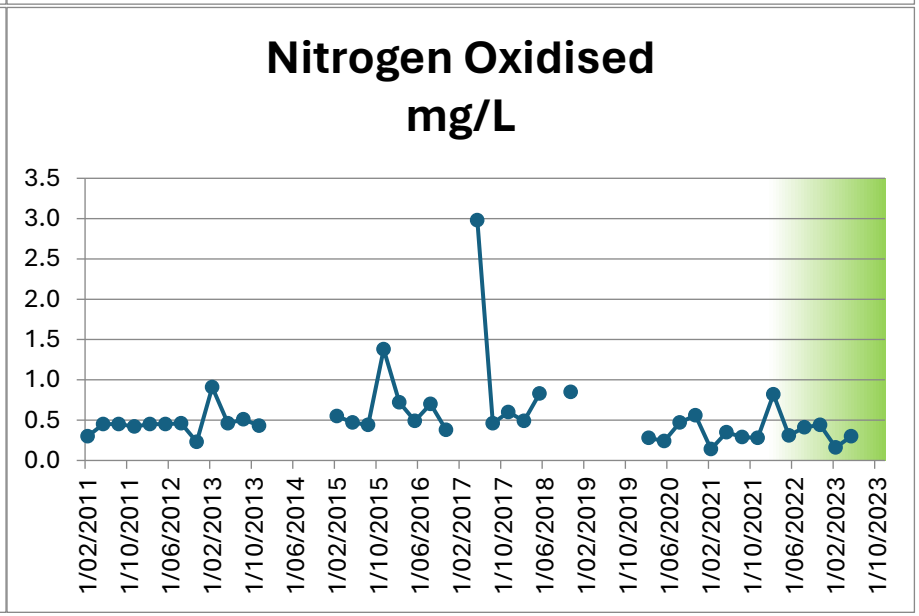
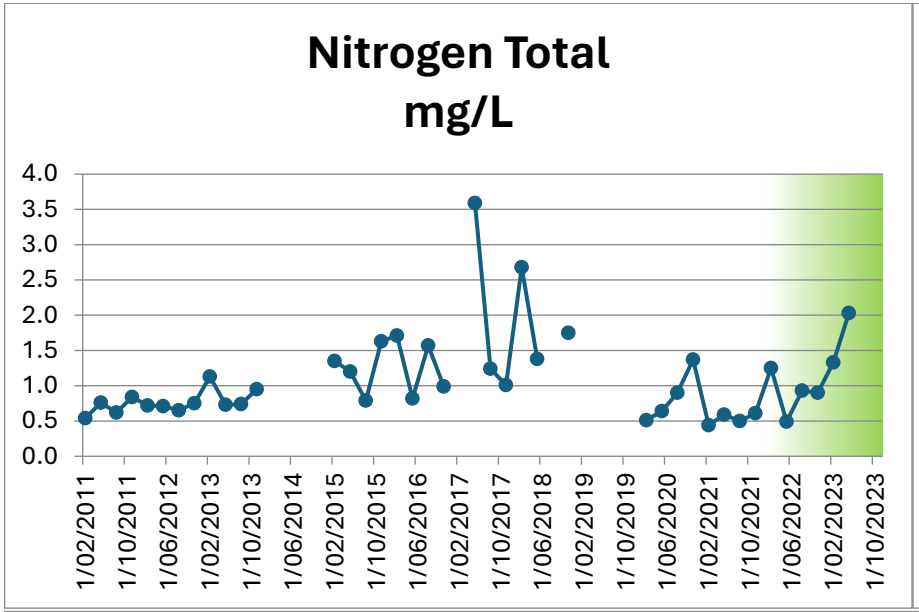
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

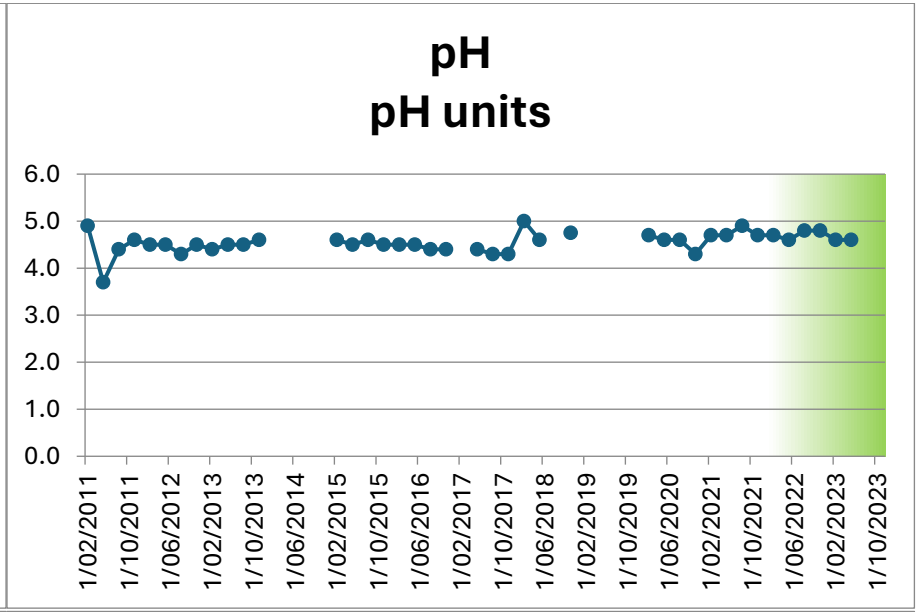

Nickel (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

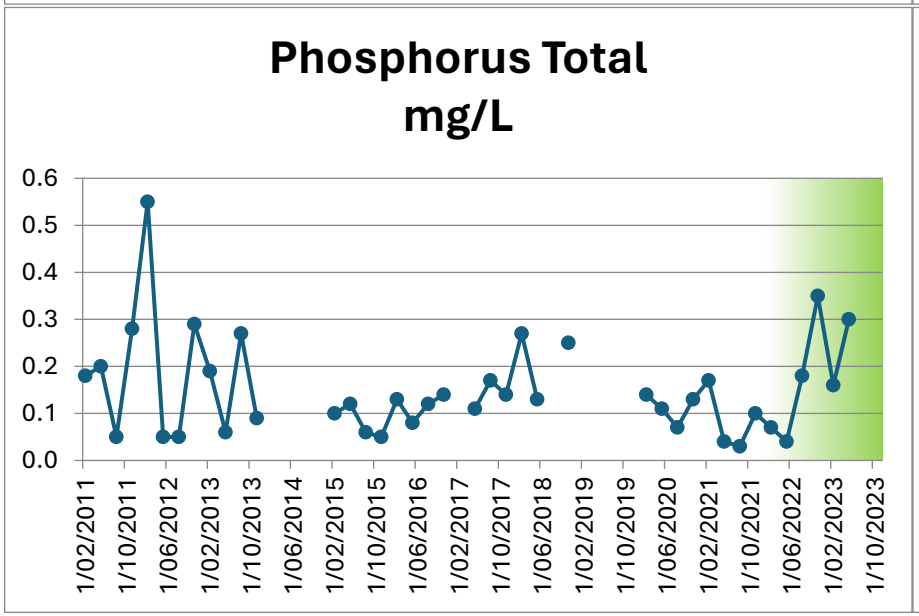

Nitrate
N mg/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

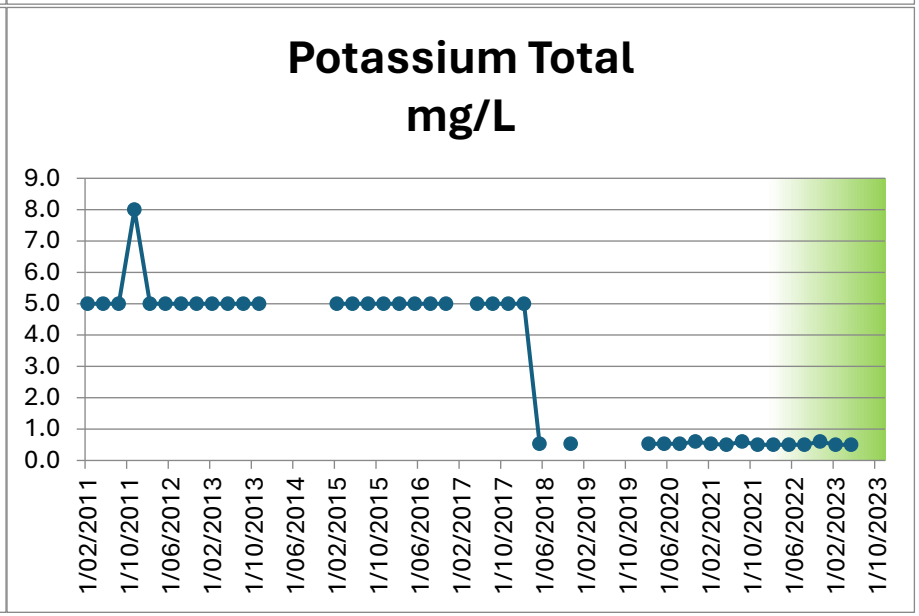

Nitrite
N mg/L
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

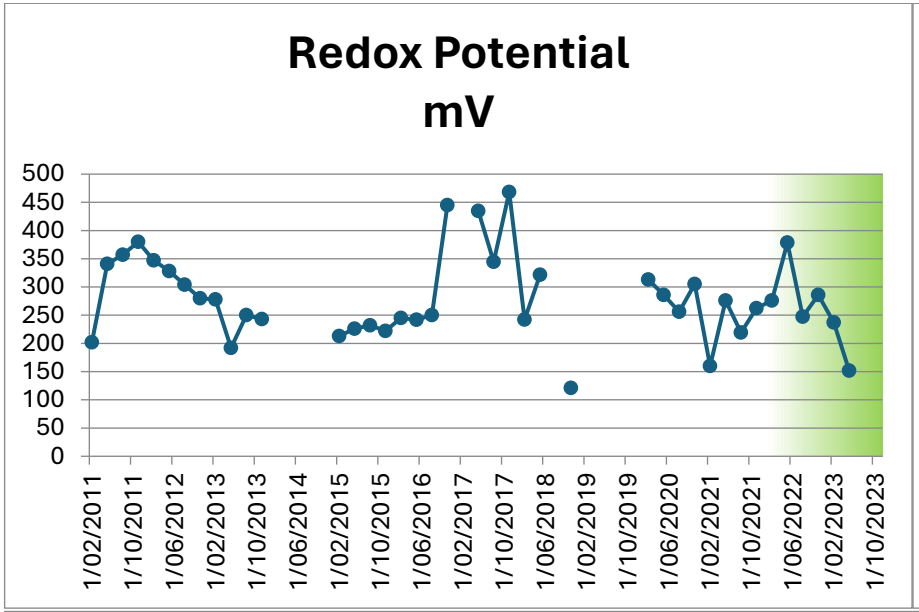

Nitrogen Oxidised
mg/L
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

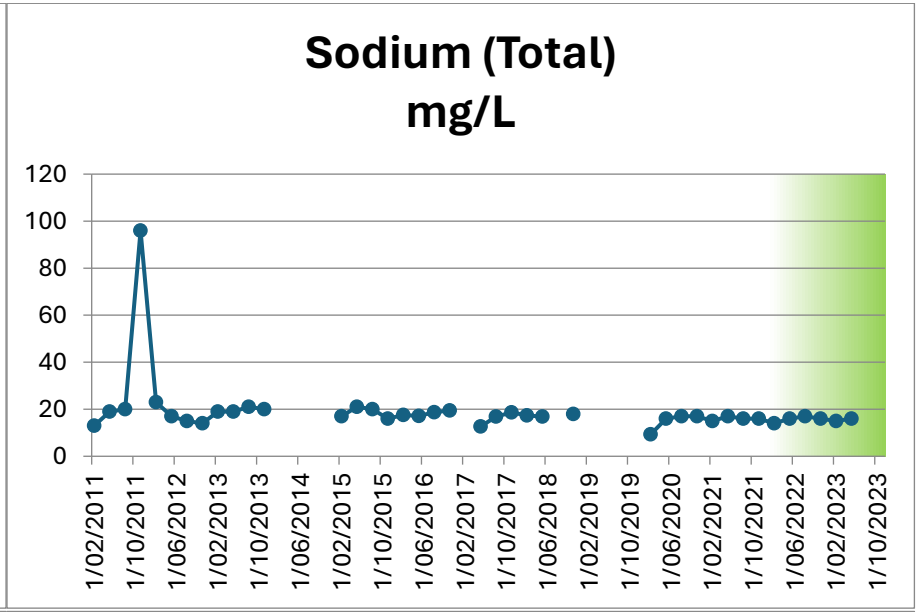

Nitrogen Total
mg/L
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

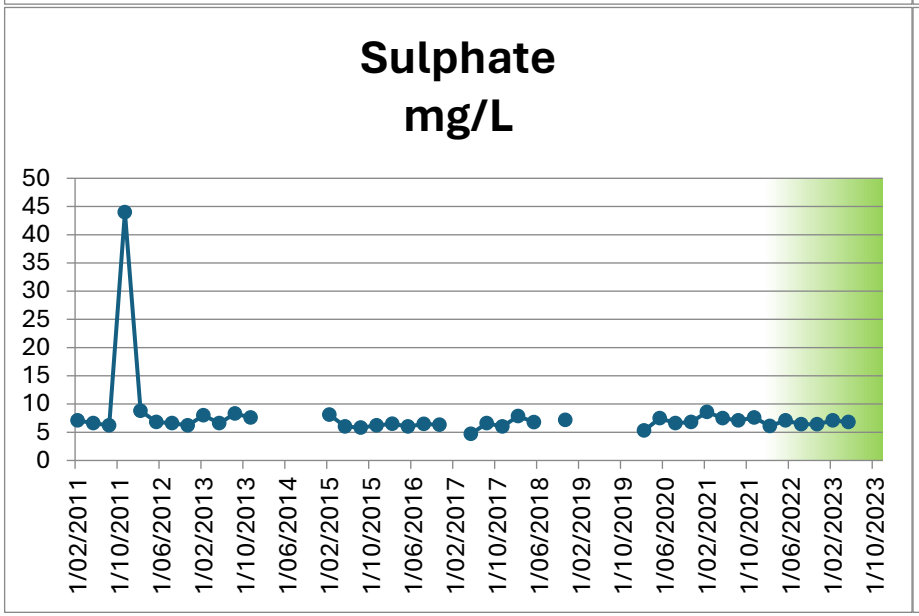

pH
pH units
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

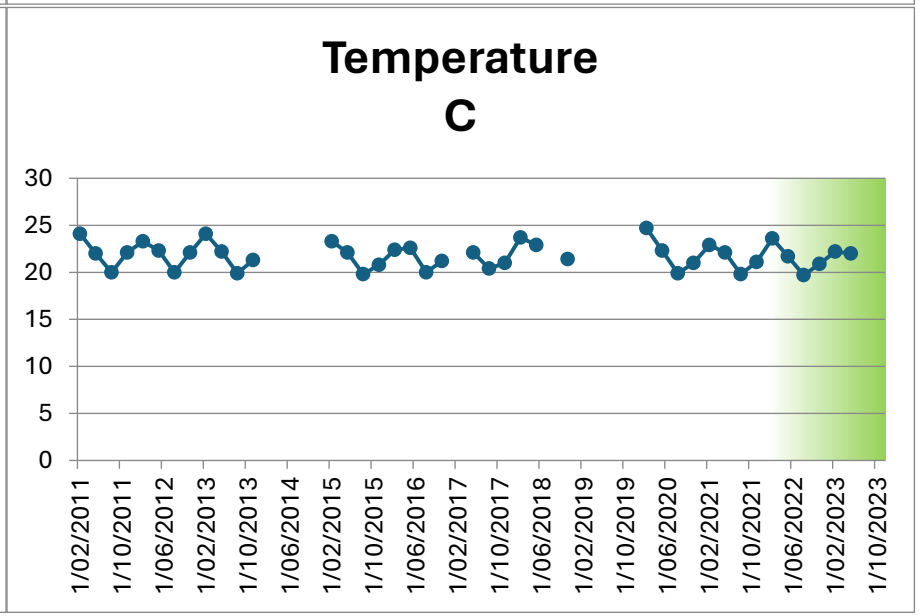

Phosphorus Total
mg/L
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

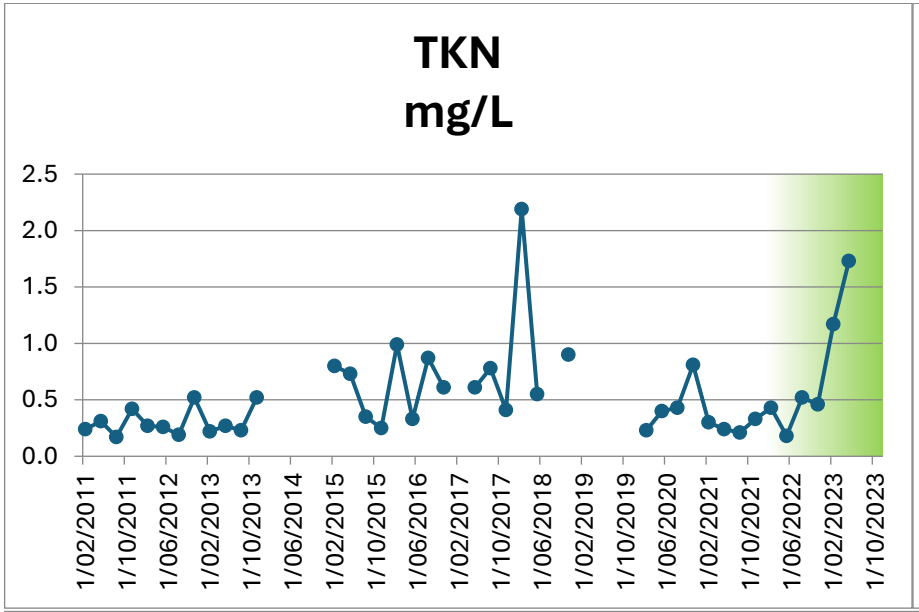

Potassium Total
mg/L
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

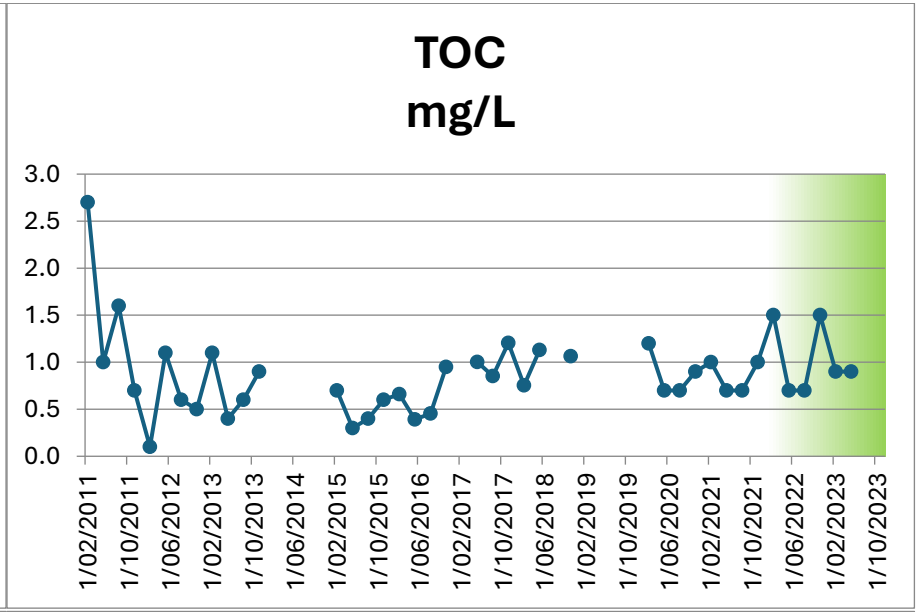

Redox Potential
mV
500
450
400
350
300
250
200
150
100
50
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

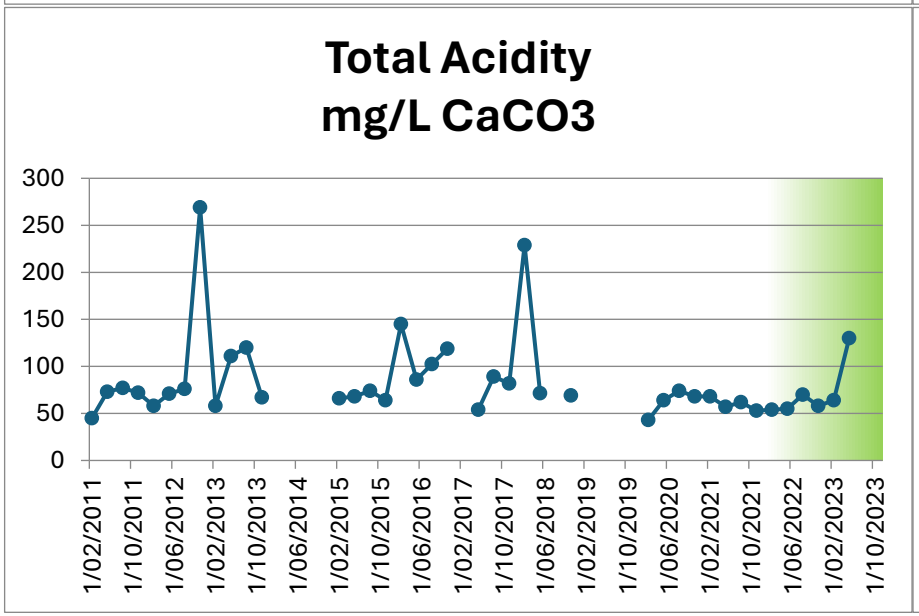

Sodium (Total)
mg/L
120
100
80
60
40
20
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

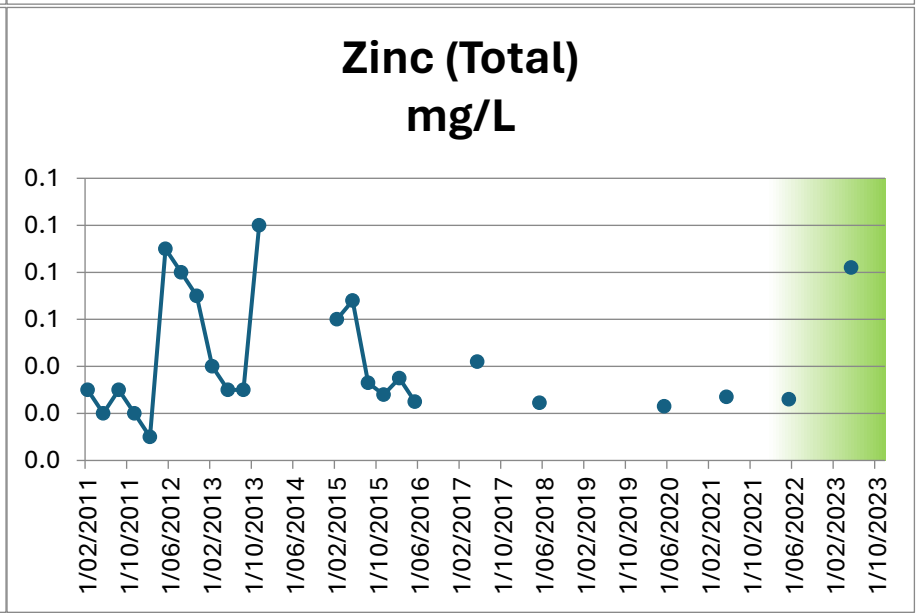

Sulphate
mg/L
50
45
40
35
30
25
20
15
10
5
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Temperature
C
30
25
20
15
10
5
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


TKN
mg/L
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


TOC
mg/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Total Acidity
mg/L CaCO3
300
250
200
150
100
50
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Zinc (Total)
mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

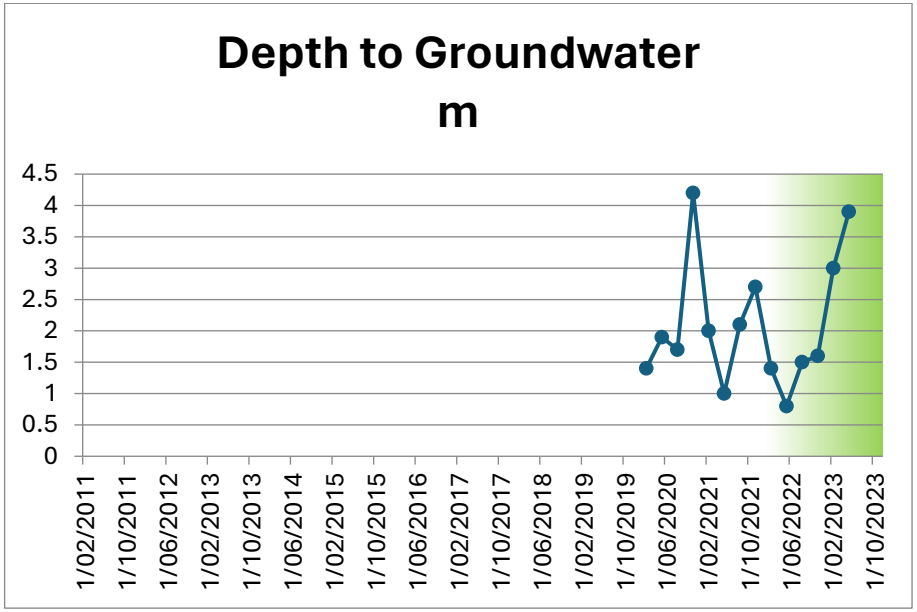
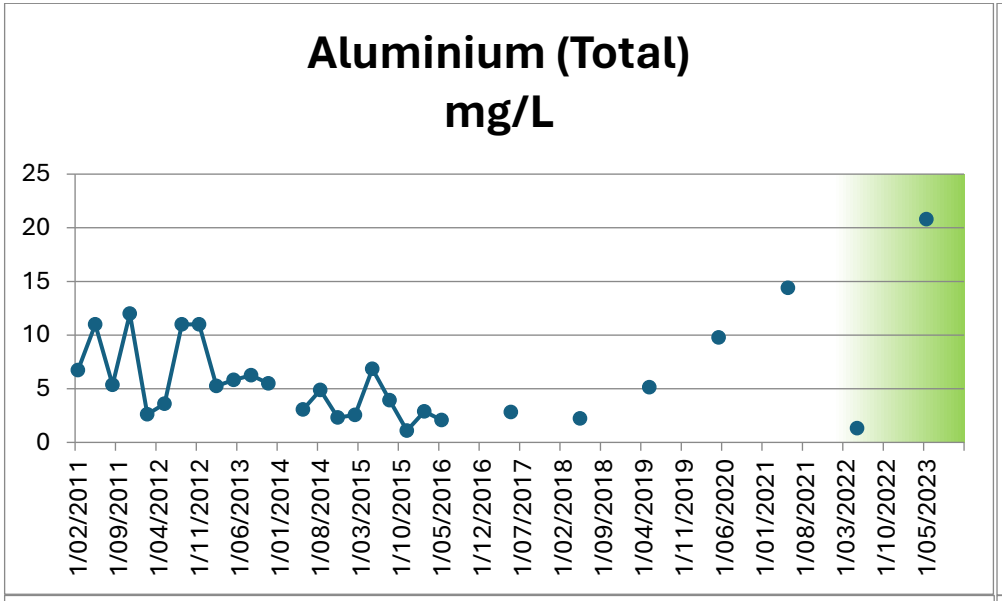
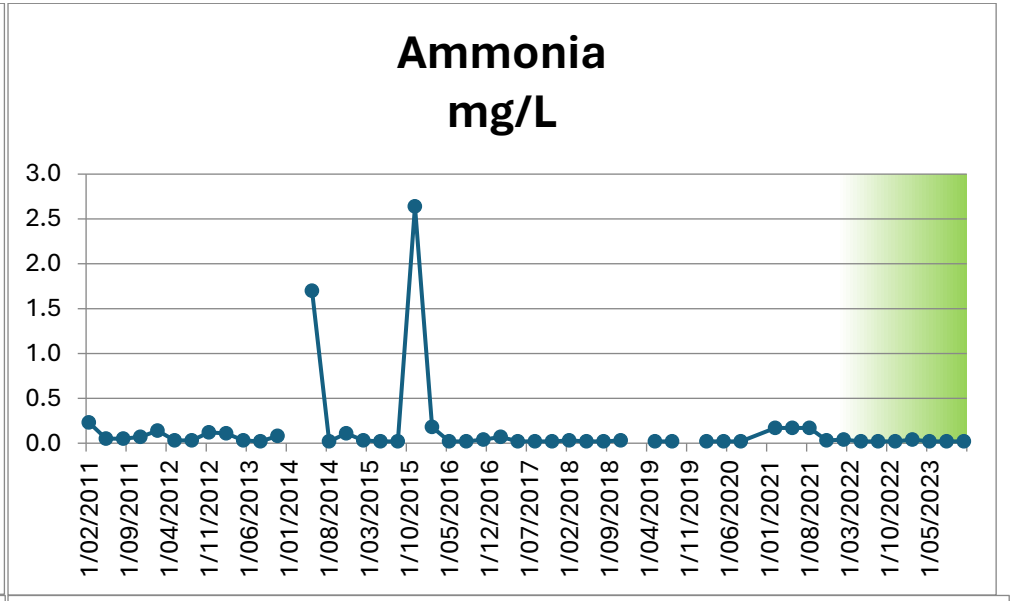
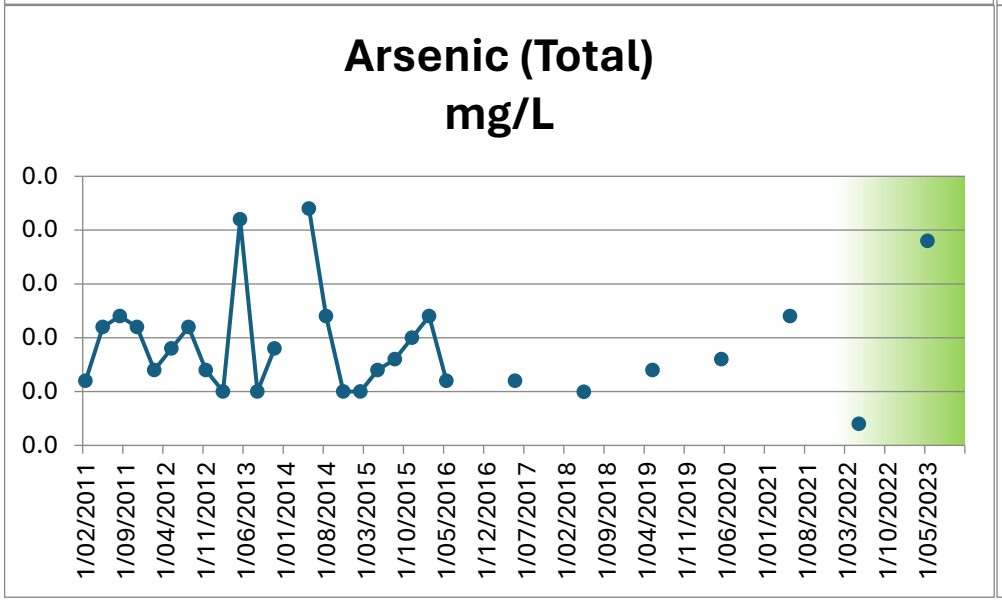

Depth to Groundwater
m
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

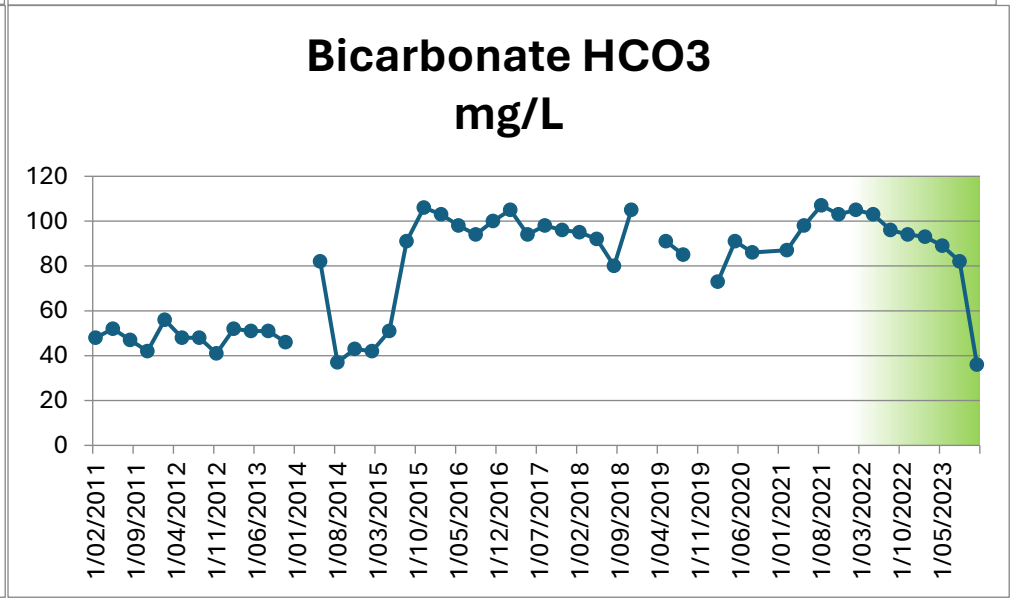
Table 21: Ground Water 15

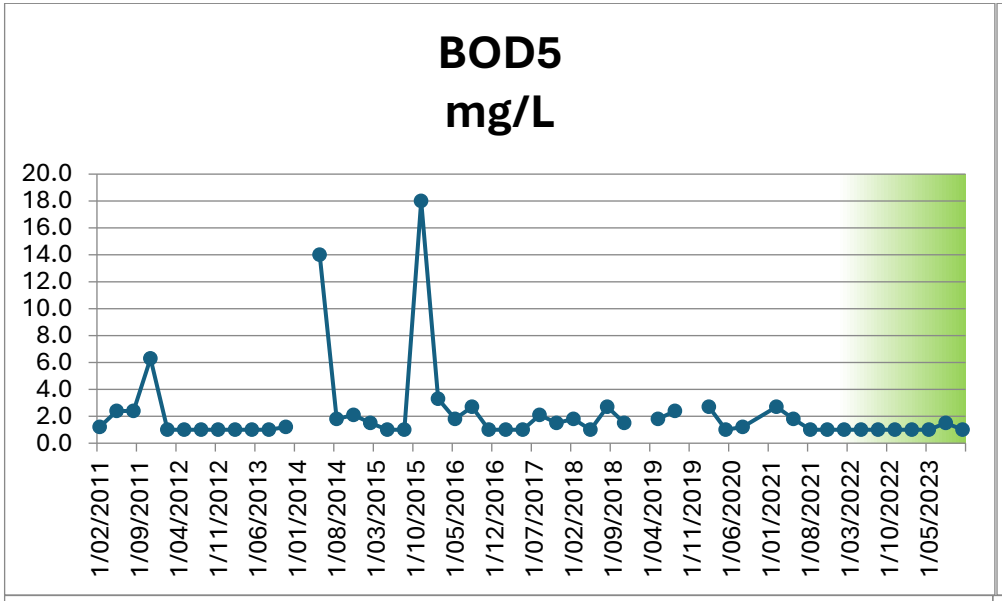
GW15	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µScm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flounde mg/L	Iron Total mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	Nitrate N mg/L	Nitrite N mg/L	Nitrogen Oxidised mg/L	Nitrogen Total mg/L	pH pH units	Phenol Alkalinity mg/L as CaCO3	Phosphorus Total mg/L	Potassium Total mg/L	Redox Potential mV	Sodium (Total) mg/L	Sulphate mg/L	Temperature C	TKN mg/L	TOC mg/L	Total Acidity mg/L CaCO3	Zinc (Total) mg/L	Depth to groundwater m
1/02/2011	79	7	0.2	0.0	48	1.2	0.0	24	270	0.0	0.0	0.0	958	0.0	3.5	0.2	12	0.0	16	0.3	0.0	0.1	0.1	0.1	0.7	6.1		0.1	5.0	45	95	54	23	0.6	2.0	85	0.1	
11/05/2011	86	11	0.1	0.0	52	2.4	0.0	24	258	0.0	0.0	0.0	1086	0.0	4.0	0.2	23	0.0	19	0.5	0.0	0.1	0.1	0.1	0.6	5.6		0.1	5.0	260	128	42	20	0.6	2.2	30	0.1	
10/08/2011	77	5	0.1	0.0	47	2.4	0.0	21	23	0.0	0.0	0.0	975	0.0	4.7	0.2	15	0.0	18	0.4	0.0	0.1	0.1	0.1	0.4	6.0		0.1	5.0	270	138	38	17	0.3	3.6	76	0.0	
9/11/2011	69	12	0.1	0.0	42	6.3	0.0	1	208	0.0	0.0	0.0	837	0.0	3.0	0.2	22	0.0	2	0.9	0.0	0.1	0.0	0.1	0.2	5.9		0.2	5.0	240	22	31	22	0.2	1.7	92	0.0	
7/02/2012	91	3	0.1	0.0	56	1.0	0.0	21	187	0.0	0.0	0.0	867	0.0	2.2	0.2	13	0.0	17	0.3	0.0	0.1	0.0	0.1	0.5	5.9		0.1	5.0	242	147	40	23	0.4	2.2	100	0.0	
9/05/2012	78	4	0.0	0.0	48	1.0	0.0	20	200	0.0	0.0	0.0	953	0.0	4.5	0.2	22	0.0	16	0.4	0.0	0.1	0.0	0.1	0.3	5.8		0.2	5.0	249	110	35	21	0.2	1.2	68	0.1	
7/08/2012	79	11	0.0	0.0	48	1.0	0.0	19	205	0.0	0.0	0.0	923	0.0	5.8	0.2	24	0.0	15	0.5	0.0	0.1	0.0	0.1	0.5	6.1		0.0	5.0	222	102	35	16	0.5	1.3	59	0.1	
14/11/2012	68	11	0.1	0.0	41	1.0	0.0	26	178	0.0	0.0	0.0	838	0.0	3.6	0.2	22	0.0	18	0.4	0.0	0.1	0.0	0.1	0.8	5.7		0.3	5.0	93	92	47	21	0.7	7.4	96	0.1	
14/02/2013	86	5	0.1	0.0	52	1.0	0.0	21	150	0.0	0.0	0.0	769	0.0	4.2	0.1	14	0.0	15	0.3	0.0	0.1	0.0	0.1	0.6	6.1		0.0	5.0	15	107	40	23	0.5	6.7	73	0.1	
15/05/2013	83	6	0.0	0.0	51	1.0	0.0	21	196	0.0	0.0	0.0	880	0.0	5.2	0.2	26	0.0	15	0.4	0.0	0.1	0.0	0.1	0.5	6.1		0.0	5.0	134	115	36	20	0.4	2.2	89	0.0	
7/08/2013	83	6	0.0	0.0	51	1.0	0.0	23	208	0.0	0.0	0.0	926	0.0	4.4	0.2	16	0.0	19	0.5	0.0	0.1	0.0	0.1	0.4	6.0		0.1	5.0	160	131	46	17	0.3	2.3	189	0.0	
13/11/2013	76	6	0.1	0.0	46	1.2	0.0	26	185	0.0	0.0	0.0	919	0.0	2.9	0.3	16	0.0	18	0.4	0.0	1.2	0.0	1.2	1.5	6.0		0.1	5.0	89	125	55	22	0.3	5.0	105	0.1	
11/02/2014																																						
14/05/2014	135	3	1.7	0.0	82	14.0	0.0	20	112	0.0	0.0	0.0	687	0.0	2.6	0.3	27	0.0	12	0.3	0.0	0.2	0.0	0.2	4.2	6.3		0.2	5.0	-27	76	23	21	3.9	16.3	112	0.1	
13/08/2014	61	5	0.0	0.0	37	1.8	0.0	18	125	0.0	0.0	0.0	634	0.0	5.5	0.2	13	0.0	13	0.2	0.0	0.1	0.0	0.1	1.1	6.9		0.1	5.0	156	92	46	18	1.0	8.8	84	0.1	
11/11/2014	70	2	0.1	0.0	43	2.1	0.0	17	137	0.0	0.0	0.0	671	0.0	3.1	0.2	6	0.0	13	0.5	0.0	0.1	0.0	0.1	0.7	6.1		0.1	5.0	83	98	52	21	0.6	6.7	117	0.1	
10/02/2015	69	3	0.0	0.0	42	1.5	0.0	17	120	0.0	0.0	0.0	651	0.0	4.0	0.2	7	0.0	11	0.2	0.0	0.6	0.0	0.6	1.5	6.2		0.1	5.0	48	81	58	24	0.9	9.2	87	0.0	
12/05/2015	84	7	0.0	0.0	51	1.0	0.0	21	160	0.0	0.0	0.0	762	0.0	4.7	0.2	9	0.0	16	0.2	0.0	0.1	0.0	0.1	0.5	6.0		0.1	5.0	155	110	44	20	0.4	4.0	115	0.0	
12/08/2015	91	4	0.0	0.0	91	1.0	0.0	25	178	0.0	0.0	0.0	829	0.0	5.0	0.2	11	0.0	18	0.5	0.0	0.1	0.0	0.1	0.4	6.1		0.0	5.0	203	124	36	17	0.3	3.6	122	0.0	
11/11/2015	106	1	2.6	0.0	106	18.0	0.0	19	142	0.0	0.0	0.0	754	0.0	1.8	0.2	11	0.0	14	1.2	0.0	0.0	0.0	0.0	6.4	6.1		0.4	5.0	29	96	39	21	6.4	31.0	147	0.0	
9/02/2016	103	3	0.2	0.0	103	3.3	0.0	18	118	0.0	0.0	0.0	651	0.0	3.7	0.2	9	0.0	13	0.3	0.0	0.2	0.0	0.2	1.5	6.2		0.3	5.0	21	93	28	23	1.3	13.1	125	0.0	
10/05/2016	98	2	0.0	0.0	98	1.8	0.0	19	145	0.0	0.0	0.0	759	0.0	3.6	0.3	5	0.0	14	0.1	0.0	0.1	0.0	0.1	0.6	6.2		0.2	5.0	173	106	33	22	0.5	7.7	98	0.0	
10/08/2016	94		0.0		94	2.7		21	168				810		6.0	0.2			15			0.0	0.0	0.0	0.4	6.1		0.1	5.0	246	118	41	17	0.4	4.9	86		
8/11/2016	100		0.0		100	1.0		21	176				816		2.8	0.2			16			0.0	0.0	0.0	0.4	5.9		0.1	5.0	334	119	41	21	0.4	4.5	143		
8/02/2017	105		0.1		105	1.0		19	160				804		3.6	0.2			15			0.1	0.0	0.1	0.8	5.9		0.1	5.0	261	110	38	24	0.7	9.0	189		
9/05/2017	94	3	0.0	0.0	94	1.0	0.0	19	155	0.0	0.0	0.0	755	0.0	5.2	0.2	6	0.0	14	0.1	0.0	0.1	0.0	0.1	0.7	6.1		0.1	5.0	409	109	43	21	0.6	9.6	96	0.0	
9/08/2017	98		0.0		98	2.1		19	150				787		6.1	0.2			14			0.0	0.0	0.0	0.6	6.2		0.1	5.0	402	110	39	17	0.5	5.9	69		0.9
8/11/2017	96		0.0		96	1.5		19	23				786		4.6	0.2			14			0.5	0.0	0.5	1.1	5.7		0.1	5.0	358	109	39	21	0.6	6.8	105		0.9
14/02/2018	95		0.0		95	1.8		17	122				710		3.7	0.3			12			0.1	0.0	0.1	0.6	6.0		0.1	5.0	182	102	50	24	0.5	8.6	101		1.5
9/05/2018	92	2	0.0	0.0	92	1.0	0.0	17	149	0.0	0.0	0.0	764	0.0	5.6	0.3	5	0.0	13	0.1	0.0	0.0	0.0	0.0	0.4	6.3		0.1	1.6	339	109	44	21	0.4	6.2	59	0.0	0.7
15/08/2018	80		0.0		80	2.7		18	160				748		6.2	0.2			13			0.0	0.0	0.0	0.4	6.4		0.1	1.6	389	117	46	18	0.4	11.0	38		1.5
14/11/2018	105		0.0		105	1.5		18	143				744		4.3	0.3			13			0.0	0.0	0.0	0.5	6.2		0.1	1.6	73	111	44	20	0.5	7.9	69		1.2
12/02/2019																																						
15/05/2019	91	5	0.0	0.0	91	1.8	0.0	15	110	0.0	0.0	0.0	637	0.0	5.7	0.3	8	0.0	11	0.1	0.0	0.1	0.0	0.1	0.6	6.3		0.1	1.9	150	107	54	21	0.5	11.0	53	0.0	1.0
14/08/2019	85		0.0		85	2.4		15	100				639		5.9	0.3			11			0.0	0.0	0.0	0.6	6.4		0.2	1.6	397	101	49	17	0.6	10.0	45		1.1
12/11/2019																																						
26/02/2020	73		0.0		73	2.7		15	26				638		3.4	0.1			11			0.4	0.0	0.4	1.2	6.0	0.0	0.1	2.2	176	88	79	24	0.8	6.1	84		0.4
13/05/2020	91	10	0.0	0.0	91	1.0	0.0	15	120	0.0	0.0	0.0	701	0.0	5.2	0.3	13	0.0	11	0.2	0.0	0.1	0.0	0.1	0.4	6.2	0.0	0.1	1.9	286	102	51	21	0.4	3.7	54	0.0	1.1
12/08/2020	86		0.0		86	1.2		16	100				647		5.4	0.2			12			0.1	0.0	0.1	0.4	6.1	0.0	0.0	2.0	364	103	52	17	0.4	4.3	79		0.6
10/02/2021	87		0.2		87	2.7		15	100				686		4.3	0.1			11			3.7	0.0	3.7	4.2	5.7	0.0	0.0	6.9	182	94	54	22	0.4	4.7	73		0.5
12/05/2021	98	14	0.2	0.0	98	1.8	0.0	16	160	0.0	0.0	0.0	703	0.0	4.8	0.3	18	0.0	13	0.3	0.0	0.0	0.0	0.0	0.5	6.2	0.0	0.1	2.1	313	109	47	20	0.4	4.2	79	0.0	0.3
11/08/2021	107		0.2		107	1.0		17	130				722		4.4	0.2			13			0.1	0.0	0.1	0.4	5.9	0.0	0.0	2.0	341	105	41	17	0.3	4.0	130		0.6
9/11/2021	103		0.0		103	1.0		17	140				733		4.2	0.3			13			0.0	0.0	0.0	0.4	5.9	0.0	0.1	1.9	240	105	43	20	0.4	4.1	91		0.6
9/02/2022	105		0.0		105	1.0		17	130				745		4.3	0.2			13			0.1	0.0	0.1	0.3	6.0	0.0	0.0	1.9	164	103	38	22	0.2	4.3	110		0.3
11/05/2022	103	1	0.0	0.0	103	1.0	0.0	18	150	0.0	0.0	0.0	765	0.0	4.8	0.3	2	0.0	14	0.1	0.0	0.0	0.0	0.0	0.2	6.0	0.0	0.1	1.8	189	107	40	20	0.1	3.1	100	0.0	0.2
10/08/2022	96		0.0		96	1.0		18	150				770		4.8	0.3			14			0.0	0.0	0.0	0.1	6.0	0.0	0.0	1.8	237	110	40	17	0.1	4.3	110		0.4
9/11/2022	94		0.0		94	1.0		18	160				790		4.1	0.3			14			0.0	0.0	0.0	0.3	6.1	0.0	0.2	2.0	263	104	39	19	0.2	3.1	84		0.6
14/02/2023	93		0.0		93	1.0		18	160				774		3.4	0.3			14			0.2	0.0	0.2	0.5	5.9		0.1	3.0	141	112	44	23	0.4	3.1	87		1.2
8/05/2023	89	21	0.0	0.0	89	1.0	0.0	17	180	0.0	0.0	0.0	742	0.0	5.4	0.3	30	0.0	13	0.3	0.0	0.0	0.0	0.0	0.5	6.1	1.0	0.2	1.8	116	105	42	20	0.5	4.1	62	0.1	1.3
9/08/2023	82		0.0		82	1.5		17	150				740		5.9	0.3			13			0.0	0.0	0.0	0.4	6.2		0.1	2.0	126	105	41	18	0.3	3.2	52		1.5
13/11/2023	36		0.0		36	1.0		11	90				550		3.4	0.2			9			10.4	0.1	10.5	10.7	5.5		0.2	1.6	238	78	51	21	0.2	7.9	76		1.0
2023 Min	**36.0**	**20.8**	**0.0**	**0.0**	**36.0**	**1.0**	**0.0**	**11.0**	**90.0**	**0.0**	**0.0**	**0.0**	**550.0**	**0.0**	**3.4**	**0.2**	**29.9**	**0.0**	**8.8**	**0.3**	**0.0**	**0.0**	**0.0**	**0.0**	**0.4**	**5.5**	**1.0**	**0.1**	**1.6**	**116.3**	**78.0**	**41.0**	**17.7**	**0.2**	**3.1**	**52.0**	**0.1**	**1.0**
2023 Max	**93.0**	**20.8**	**0.0**	**0.0**	**93.0**	**1.5**	**0.0**	**18.0**	**180.0**	**0.0**	**0.0**	**0.0**	**774.0**	**0.0**	**5.9**	**0.3**	**29.9**	**0.0**	**14.0**	**0.3**	**0.0**	**10.4**	**0.1**	**10.5**	**10.7**	**6.2**	**1.0**	**0.2**	**3.0**	**238.0**	**112.0**	**51.0**	**23.1**	**0.5**	**7.9**	**87.0**	**0.1**	**1.5**
2023 Mean	**75.0**	**20.8**	**0.0**	**0.0**	**75.0**	**1.1**	**0.0**	**15.8**	**145.0**	**0.0**	**0.0**	**0.0**	**701.5**	**0.0**	**4.5**	**0.3**	**29.9**	**0.0**	**12.2**	**0.3**	**0.0**	**2.7**	**0.0**	**2.7**	**3.0**	**5.9**	**1.0**	**0.1**	**2.1**	**155.3**	**100.0**	**44.5**	**20.4**	**0.3**	**4.6**	**69.3**	**0.1**	**1.3**
Long-term Average	**88.6**	**6.2**	**0.1**	**0.0**	**77.4**	**2.2**	**0.0**	**18.4**	**147.2**	**0.0**	**0.0**	**0.0**	**771.6**	**0.0**	**4.4**	**0.2**	**14.5**	**0.0**	**13.8**	**0.4**	**0.0**	**0.4**	**0.0**	**0.4**	**1.1**	**6.1**	**0.1**	**0.1**	**3.8**	**203.6**	**105.0**	**43.5**	**20.3**	**0.7**	**6.2**	**91.5**	**0.0**	**0.8**

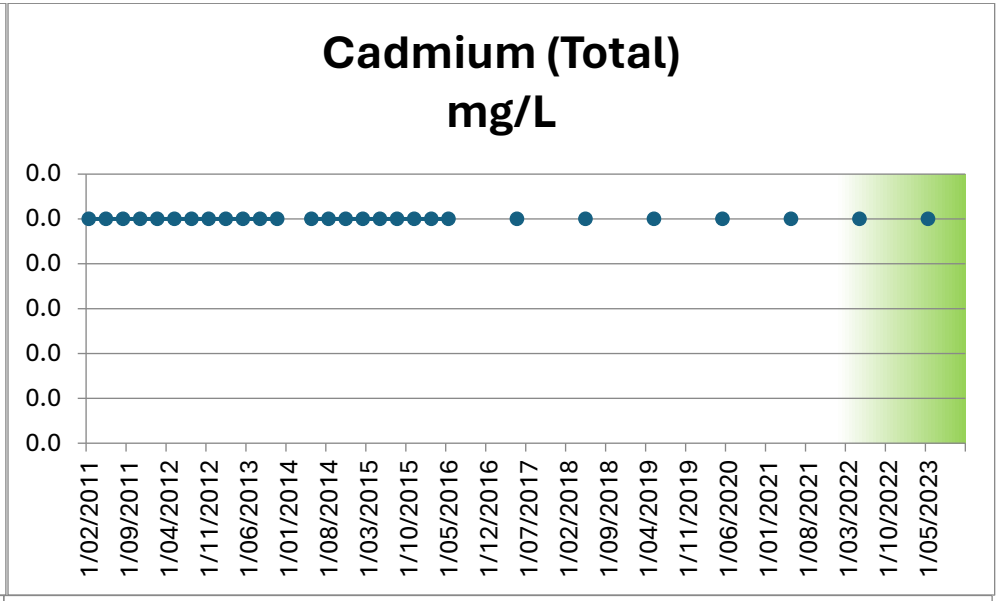

Aluminium (Total)
mg/L
25
20
15
10
5
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

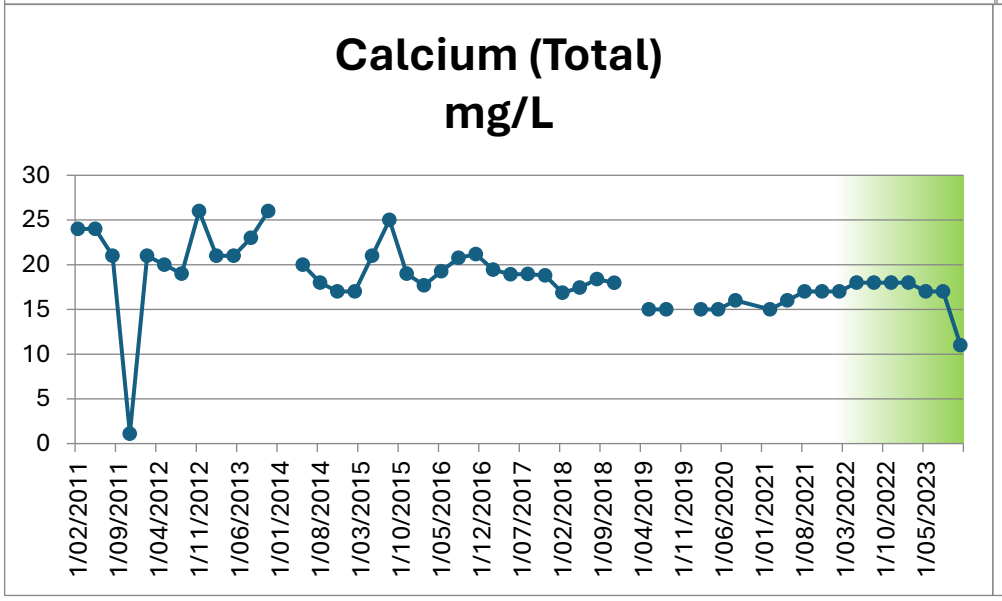

Ammonia
mg/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

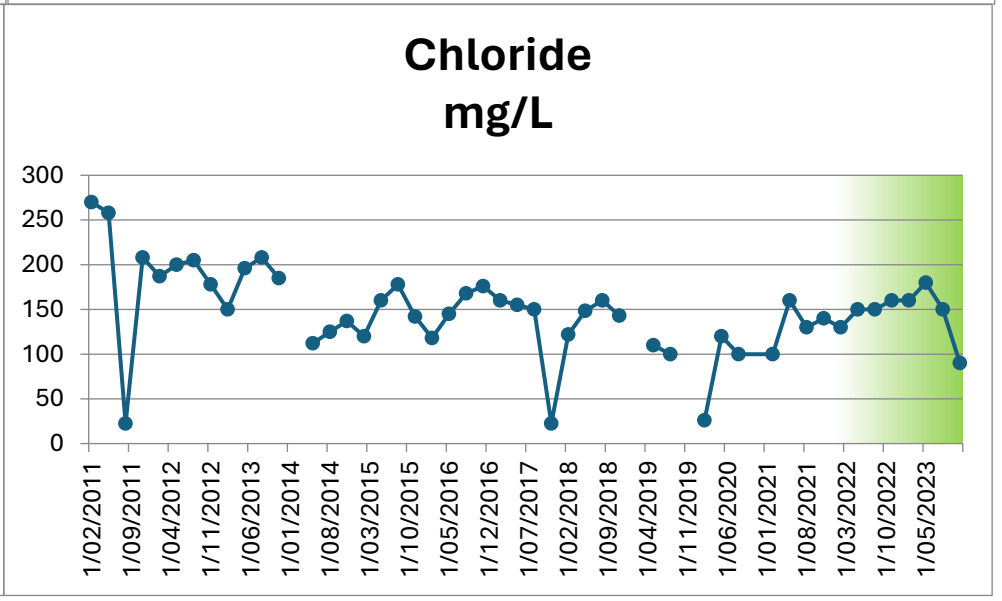

Arsenic (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

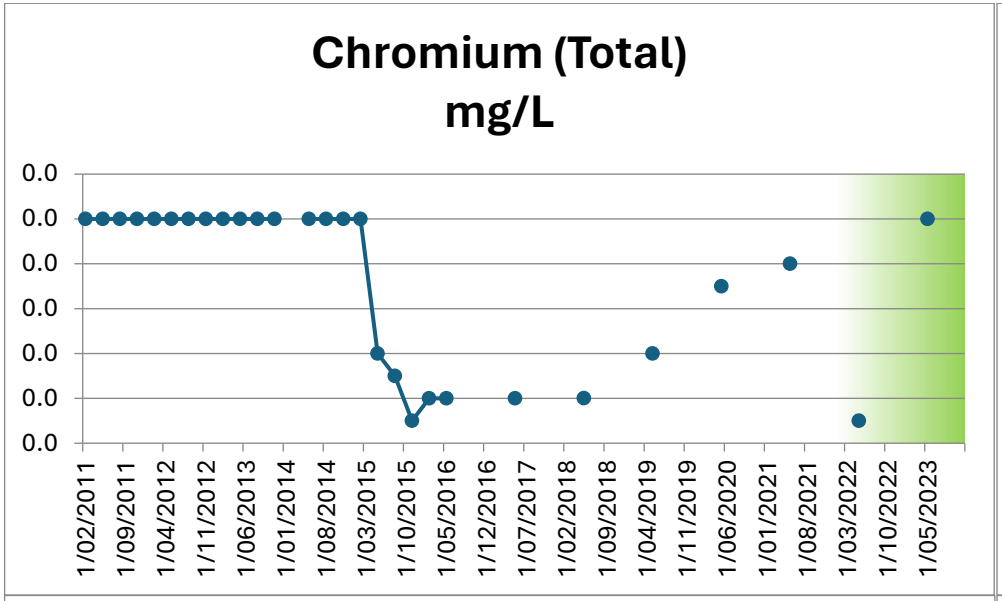

Bicarbonate HCO3
mg/L
120
100
80
60
40
20
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

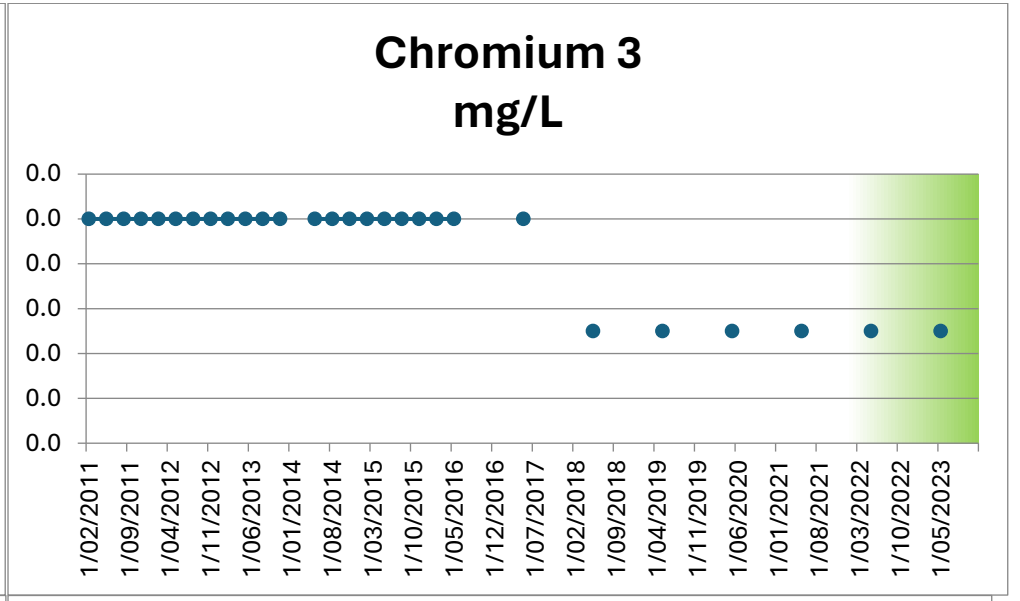

BOD5
mg/L
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

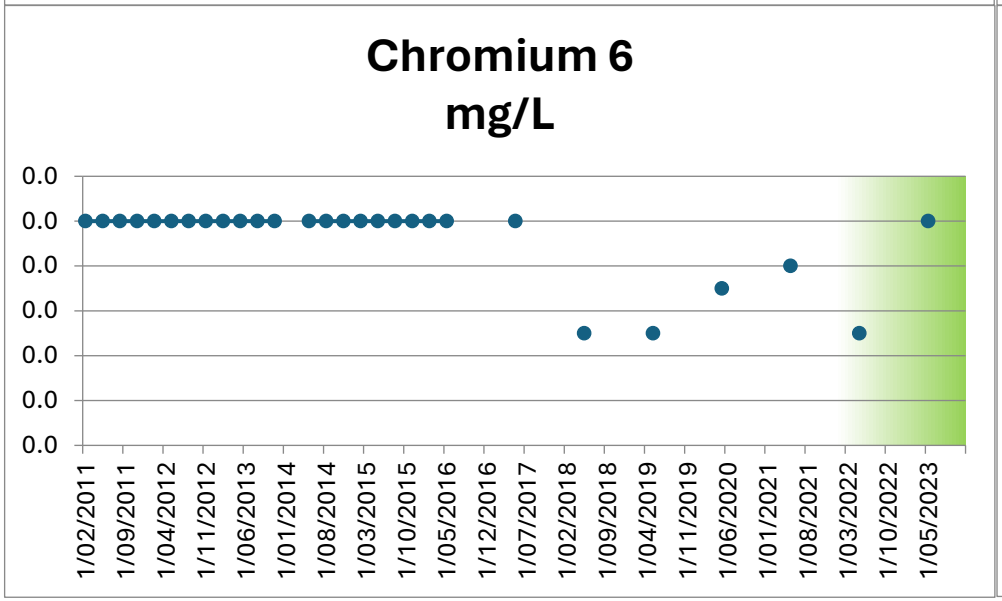

Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

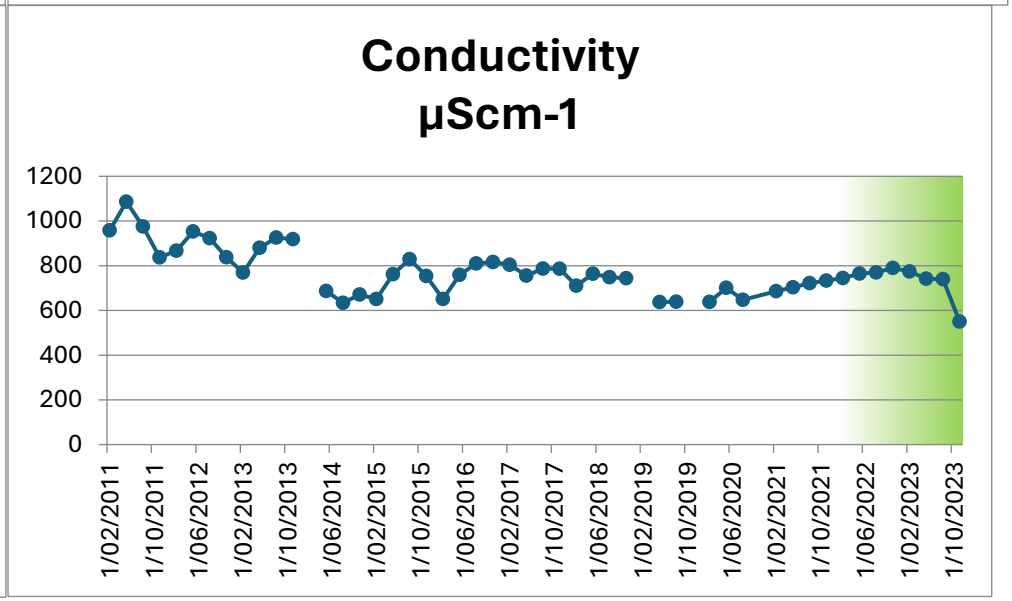

Calcium (Total)
mg/L
30
25
20
15
10
5
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

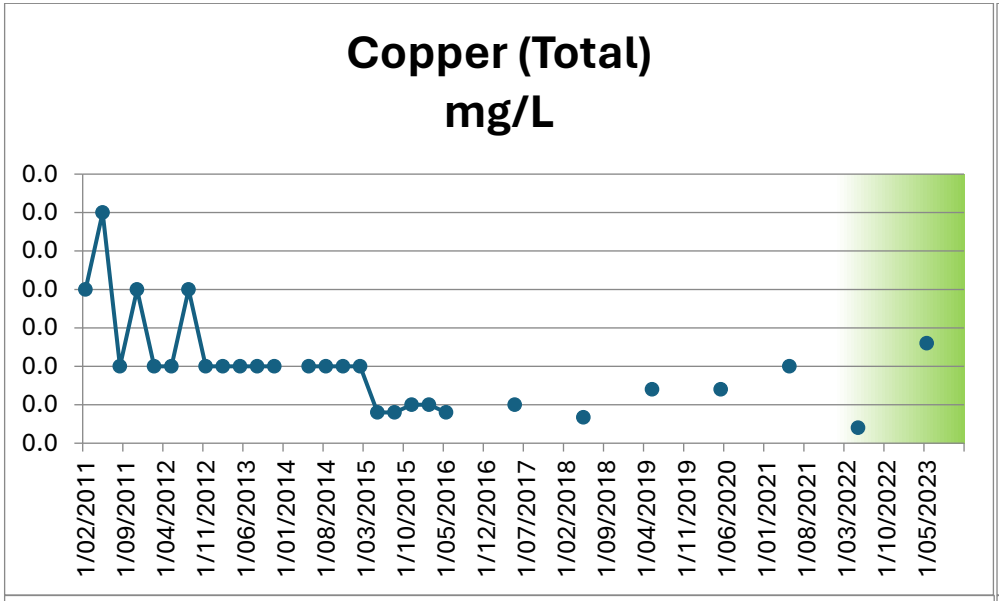

Chloride
mg/L
300
250
200
150
100
50
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

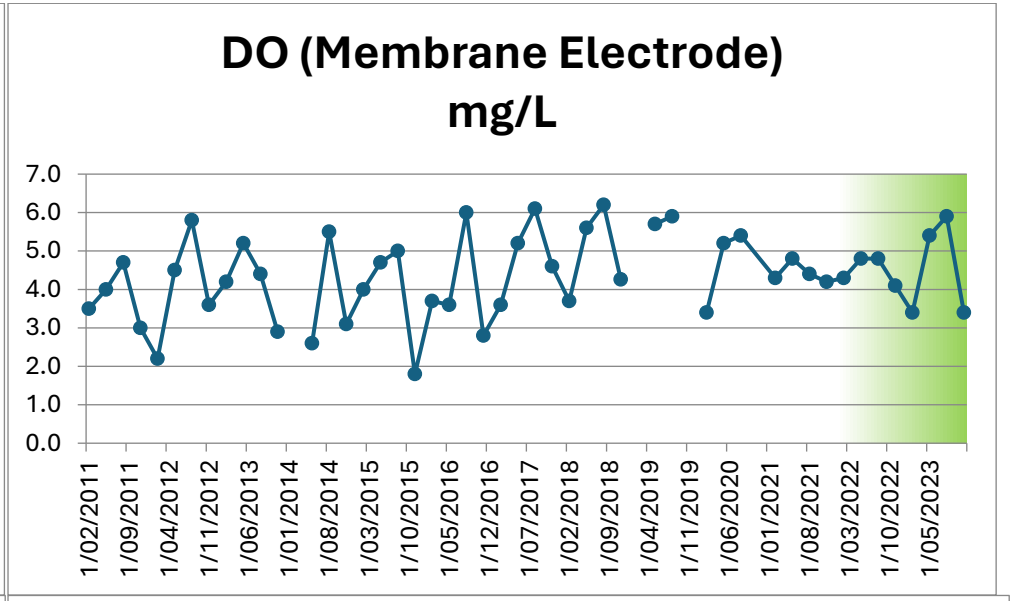

Chromium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

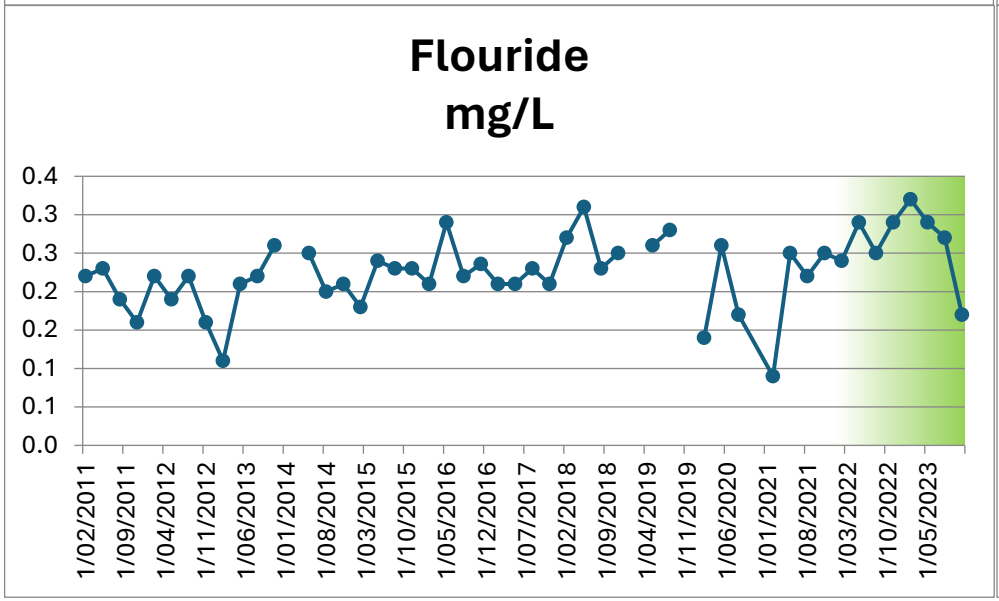

Chromium 3
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

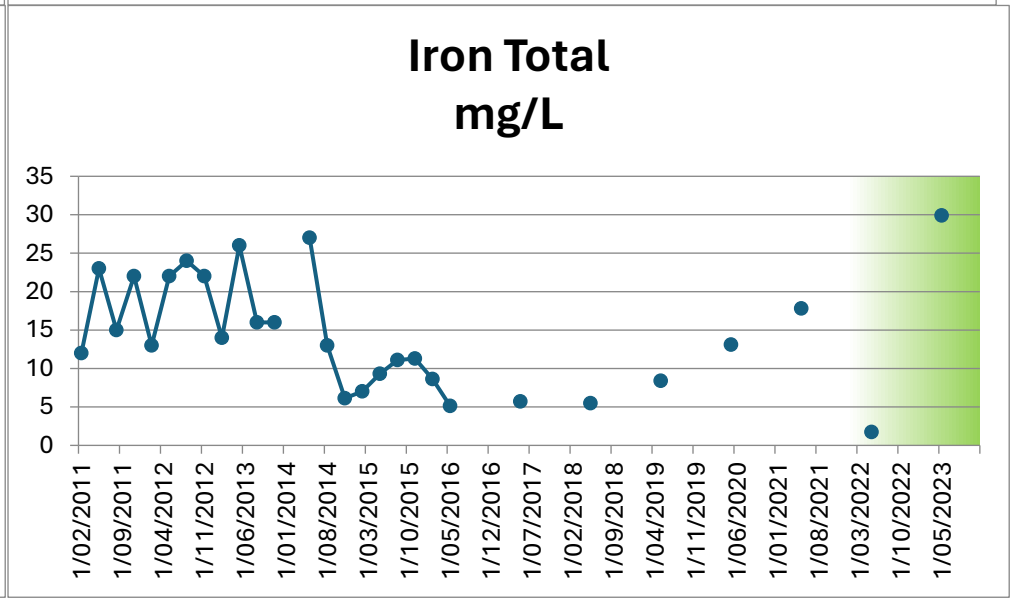

Chromium 6
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

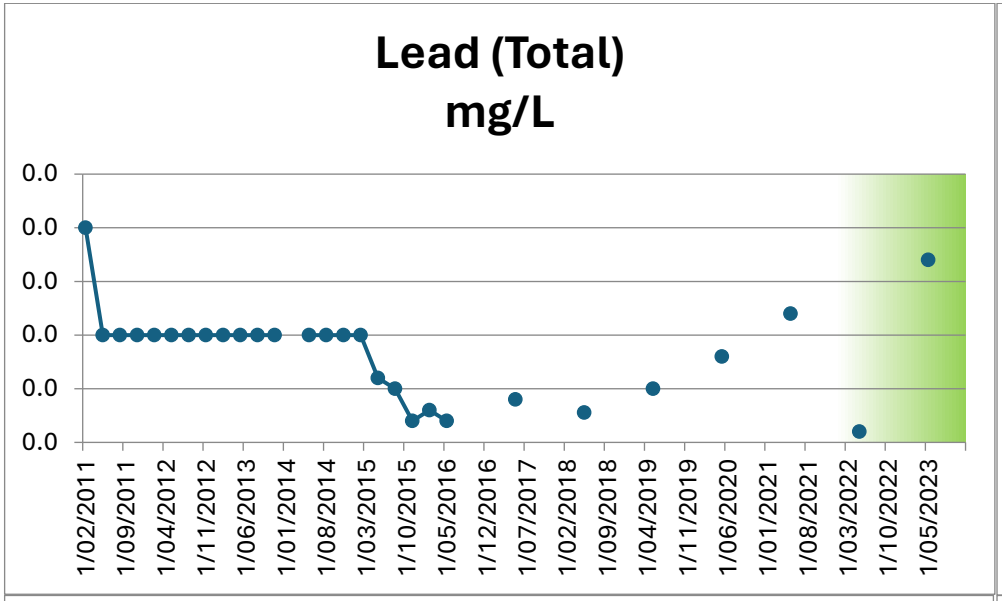

Conductivity
µScm-1
1200
1000
800
600
400
200
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

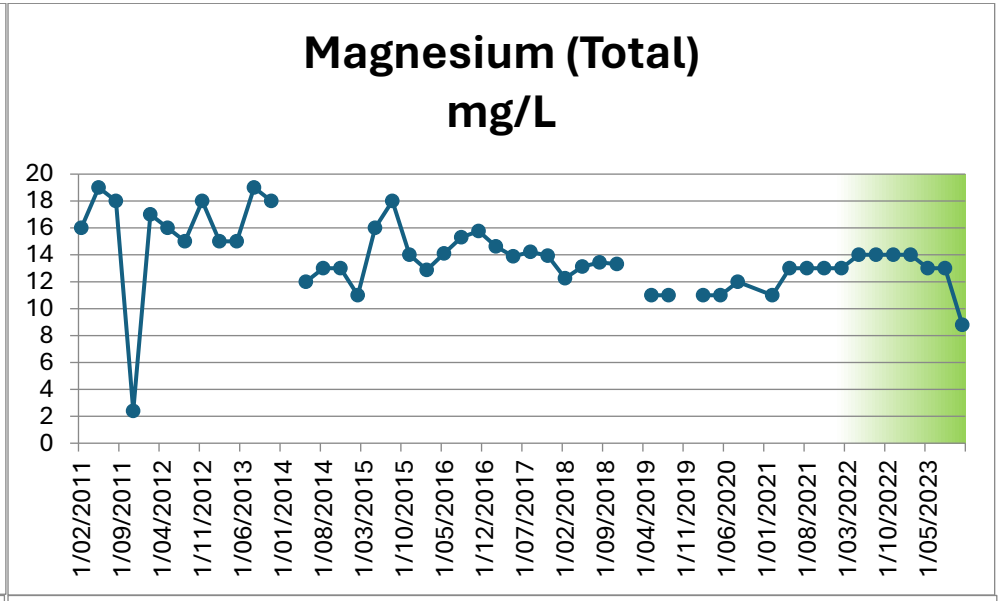

Copper (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

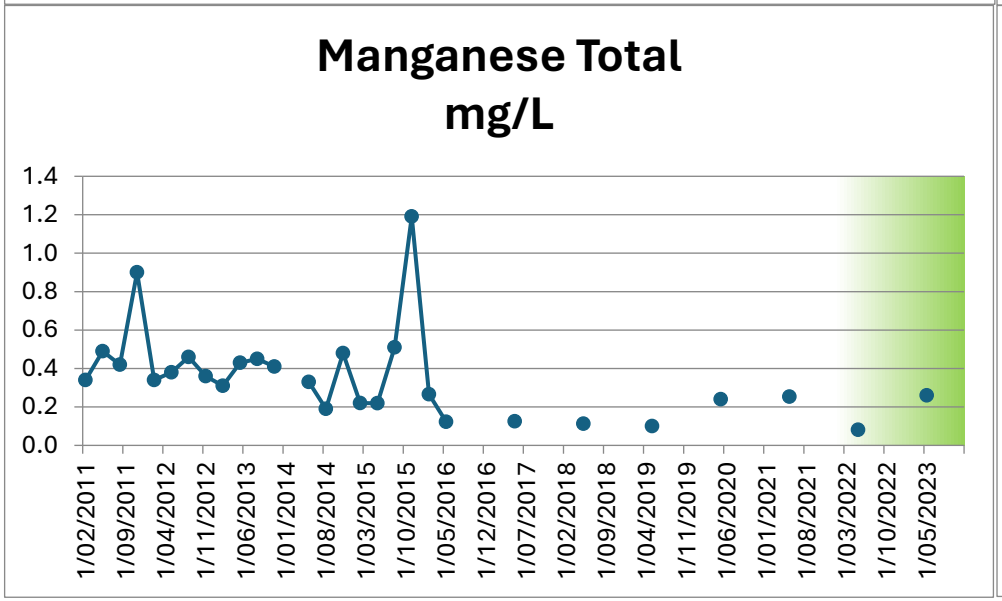

DO (Membrane Electrode)
mg/L
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

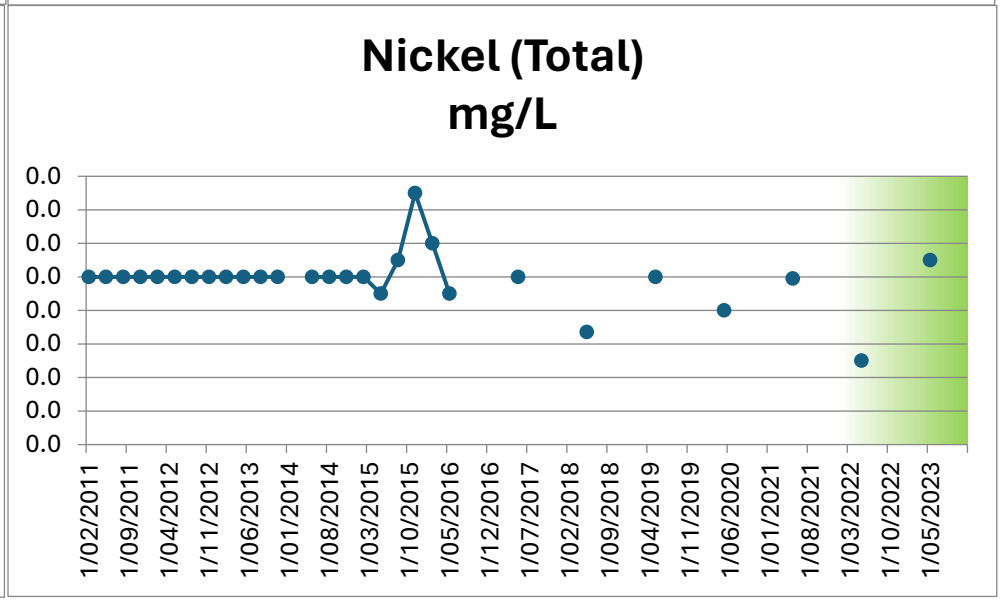

Flouride
mg/L
0.4
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

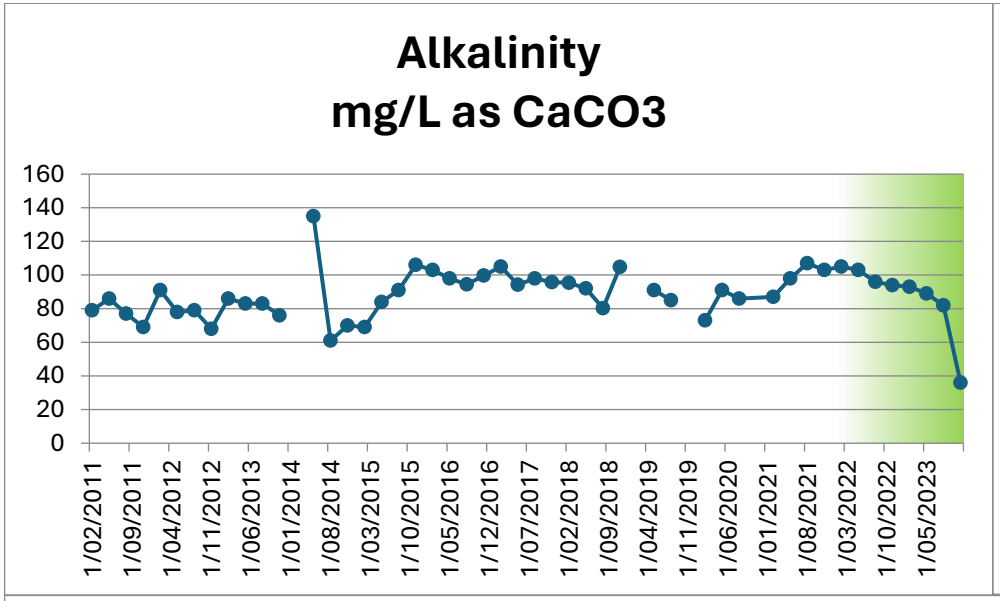

Iron Total
mg/L
35
30
25
20
15
10
5
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

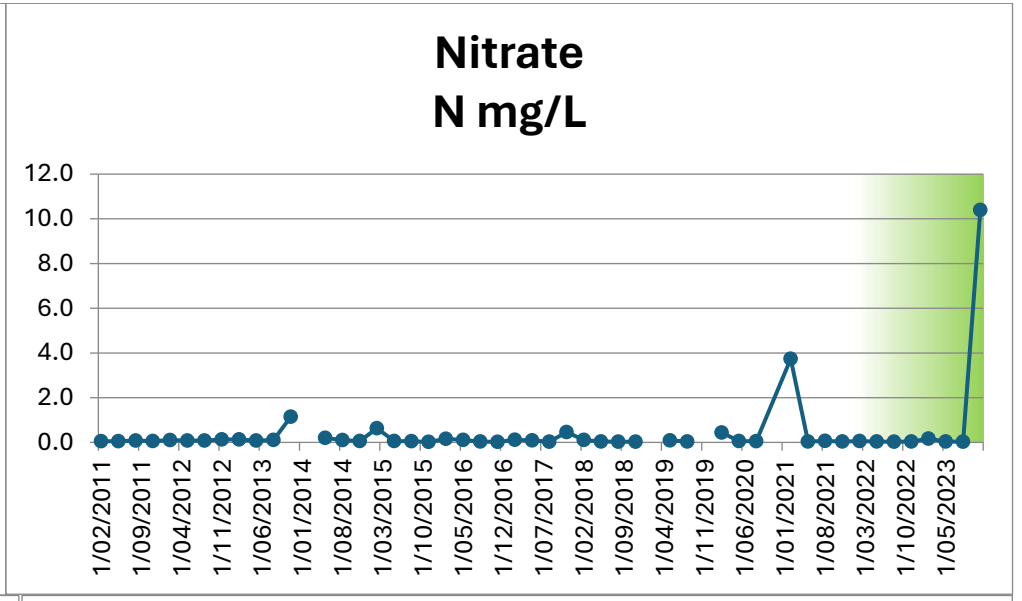

Lead (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

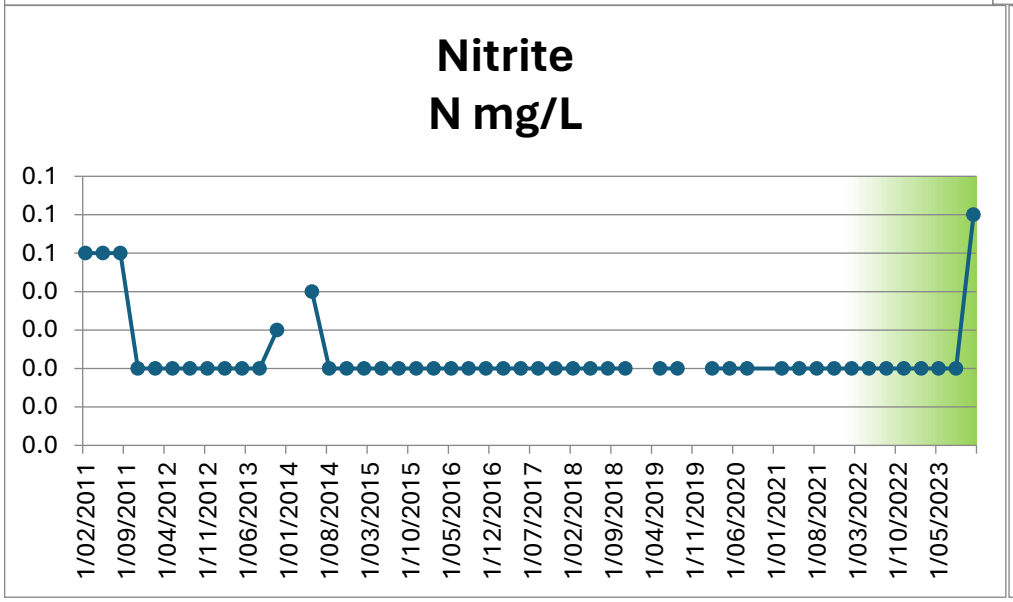

Magnesium (Total)
mg/L
20
18
16
14
12
10
8
6
4
2
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

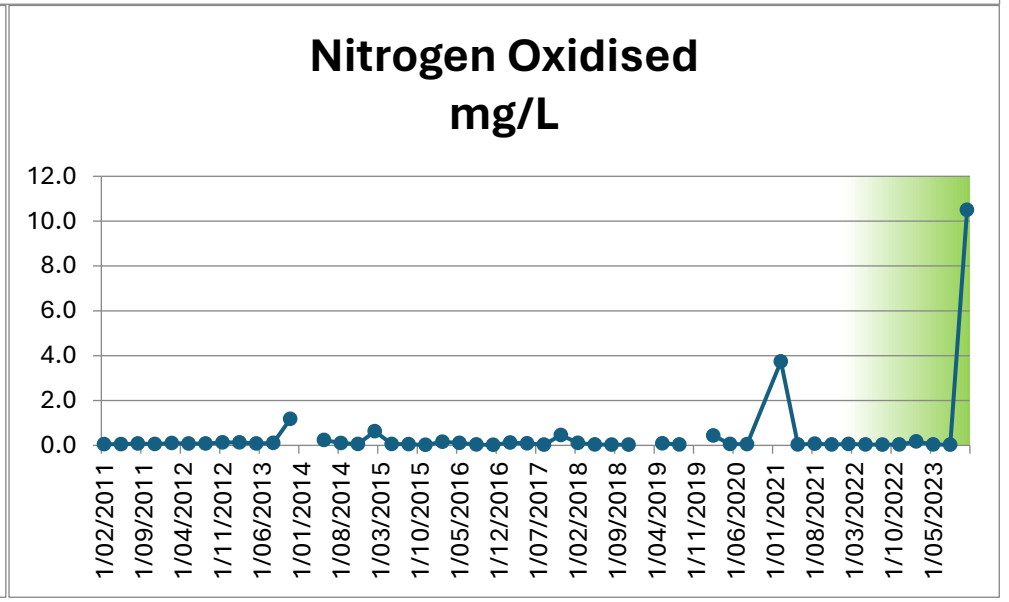

Manganese Total
mg/L
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

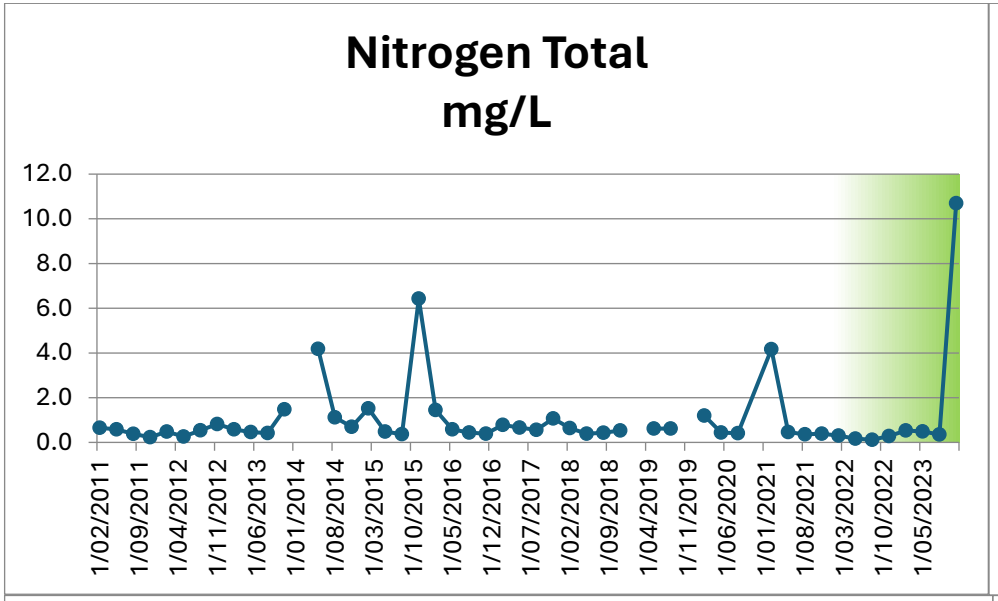

Nickel (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

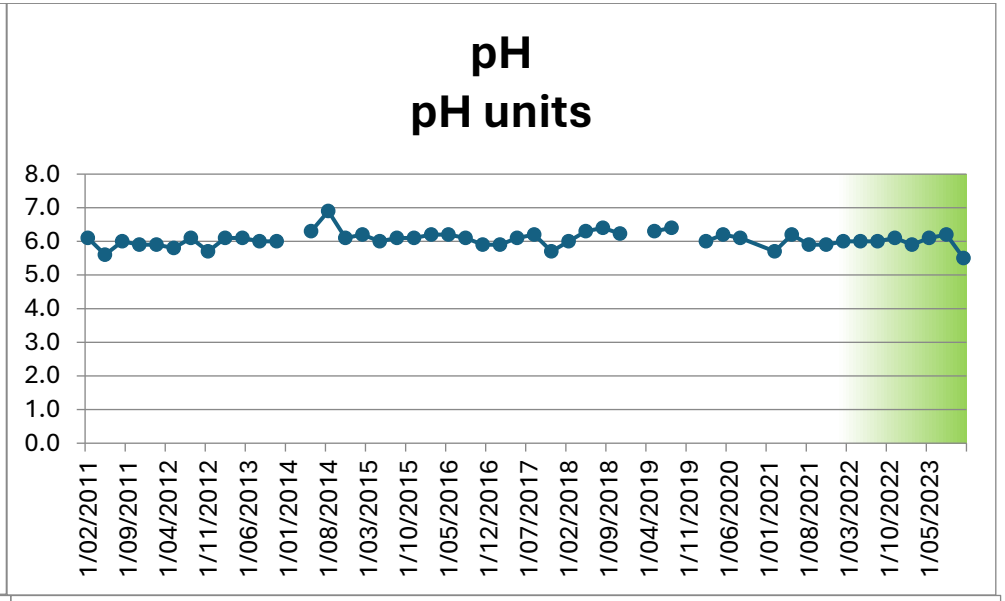

Alkalinity
mg/L as CaCO3
160
140
120
100
80
60
40
20
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

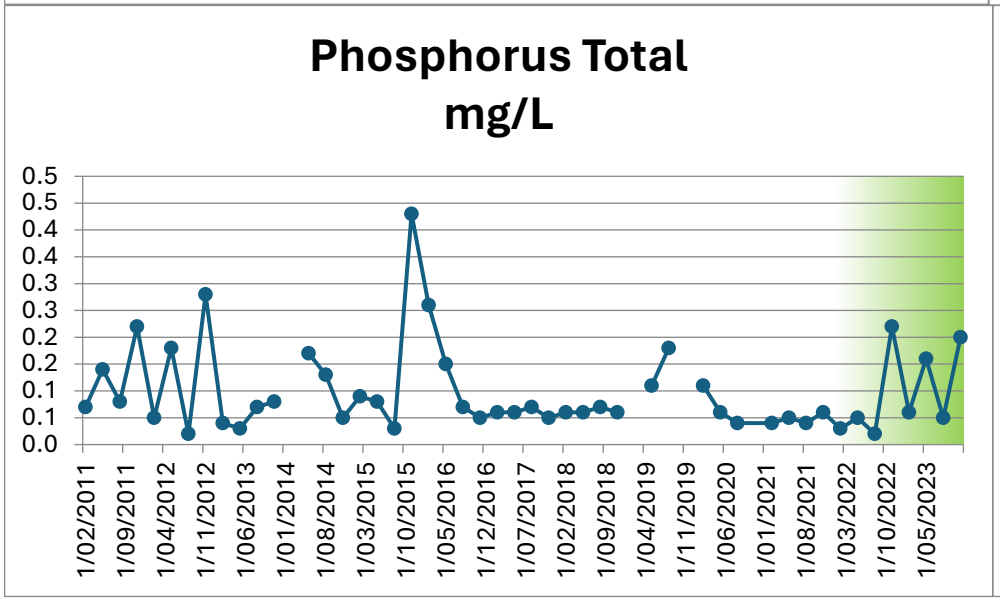

Nitrate
N mg/L
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

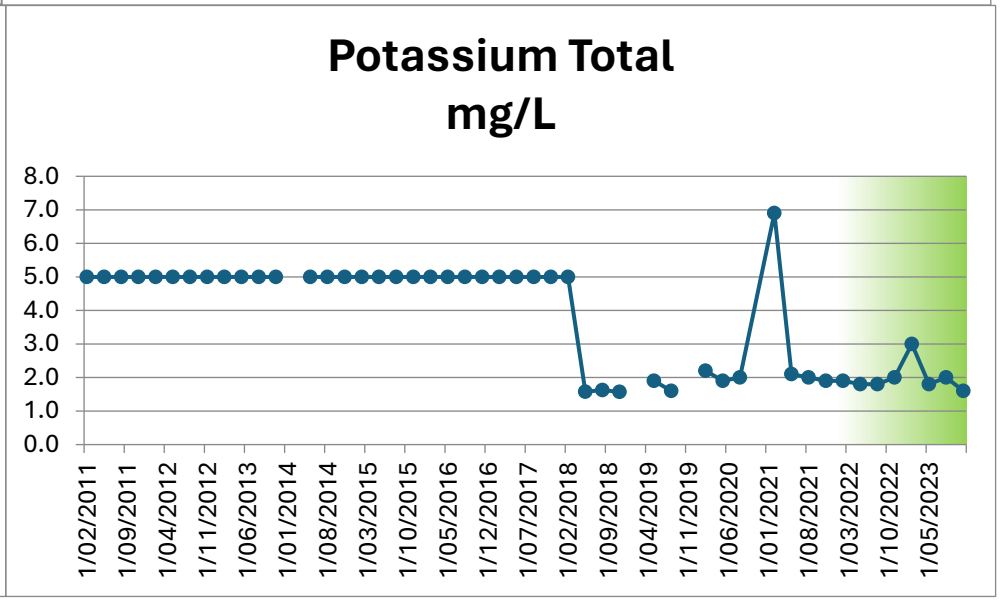

Nitrite
N mg/L
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023


Nitrogen Oxidised
mg/L
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

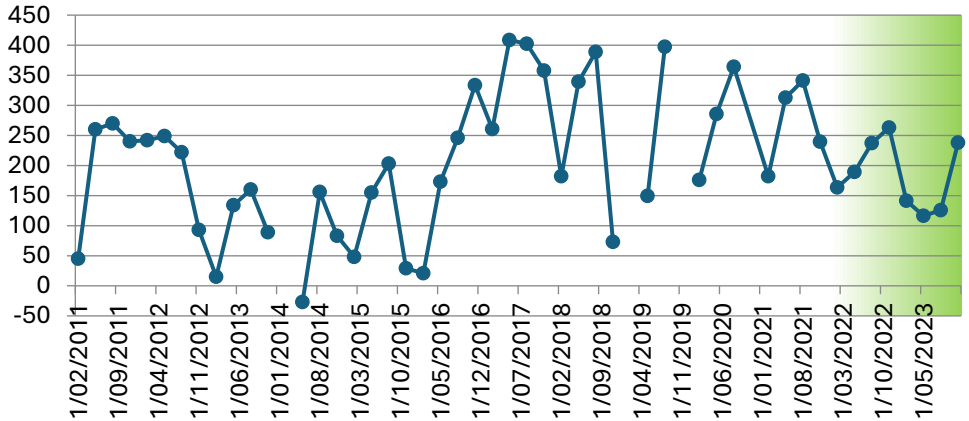

Nitrogen Total
mg/L
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023


pH
pH units
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

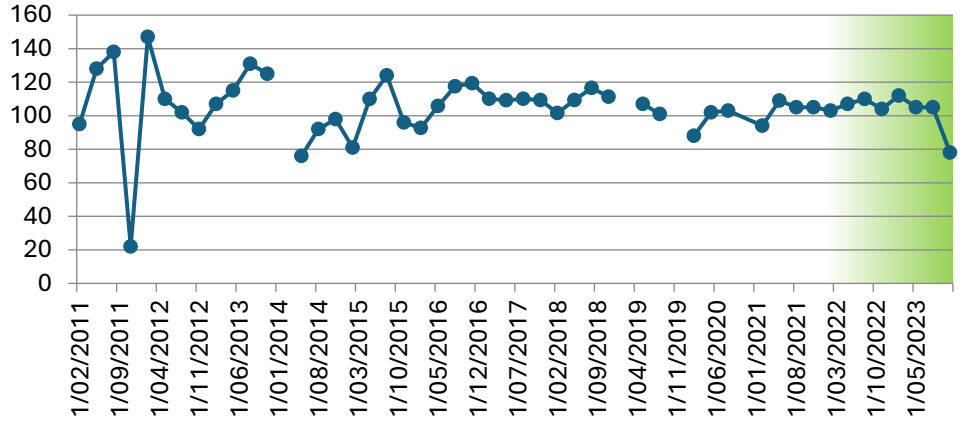

Phosphorus Total
mg/L
0.5
0.5
0.4
0.4
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023


Potassium Total
mg/L
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

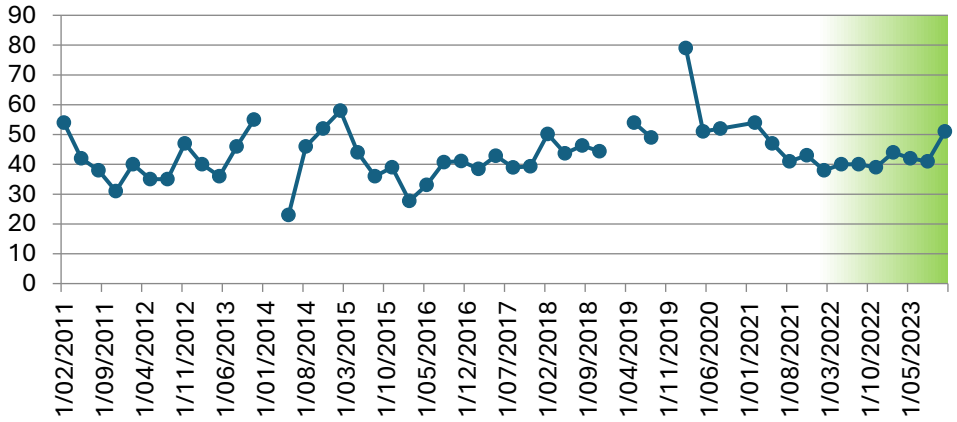
Redox Potential
mV



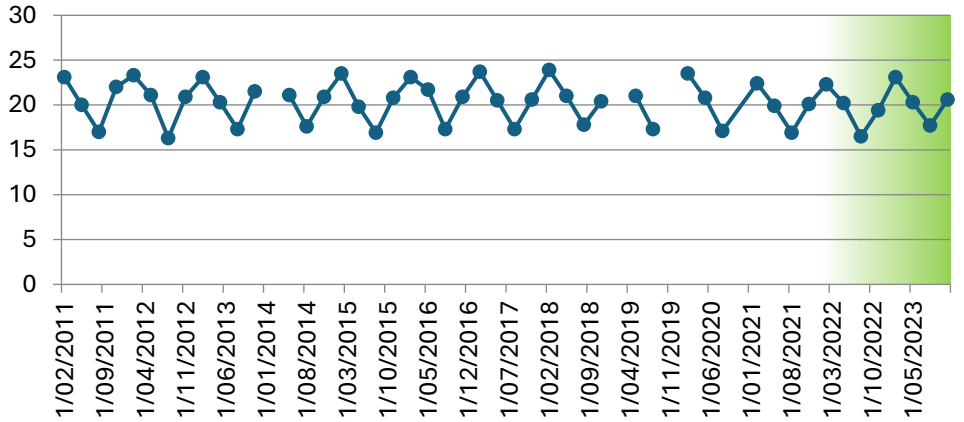
Sodium (Total)
mg/L

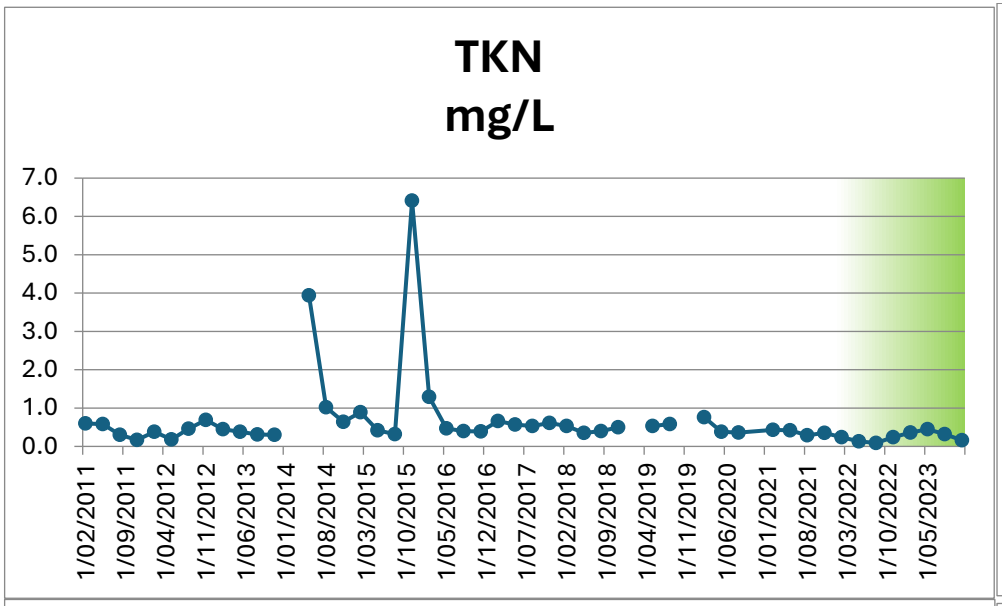


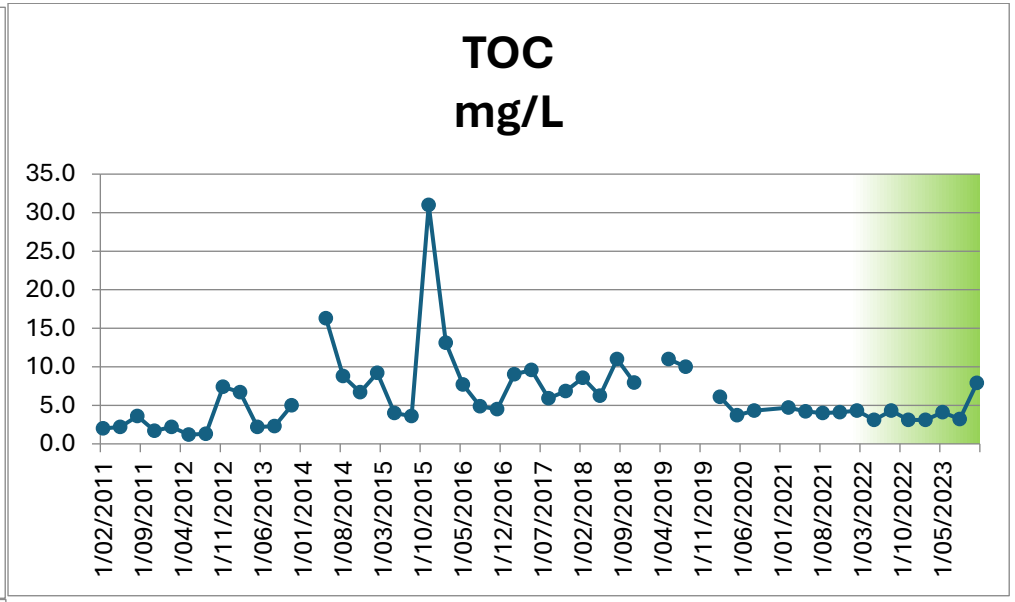
Sulphate
mg/L

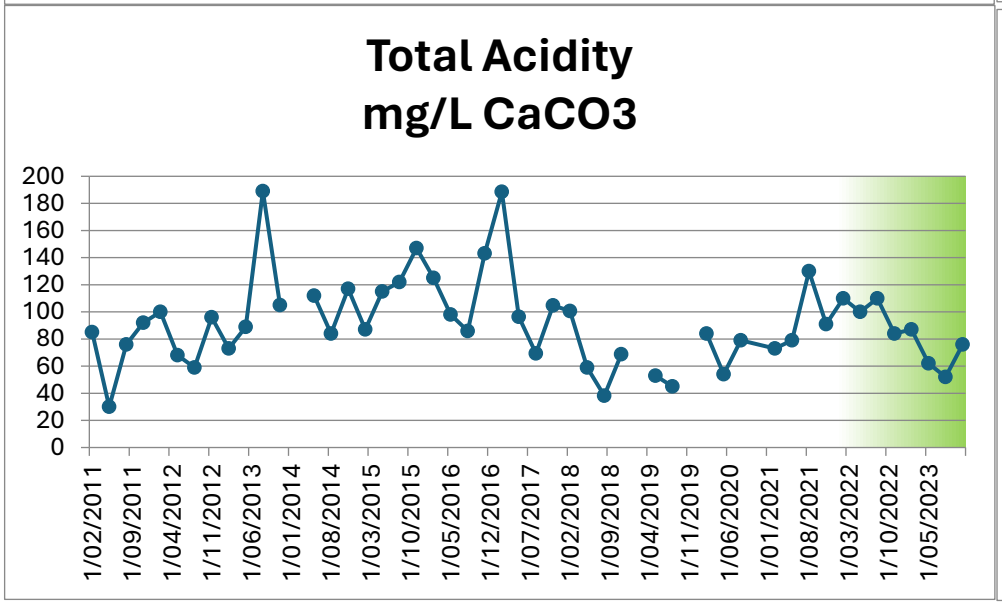


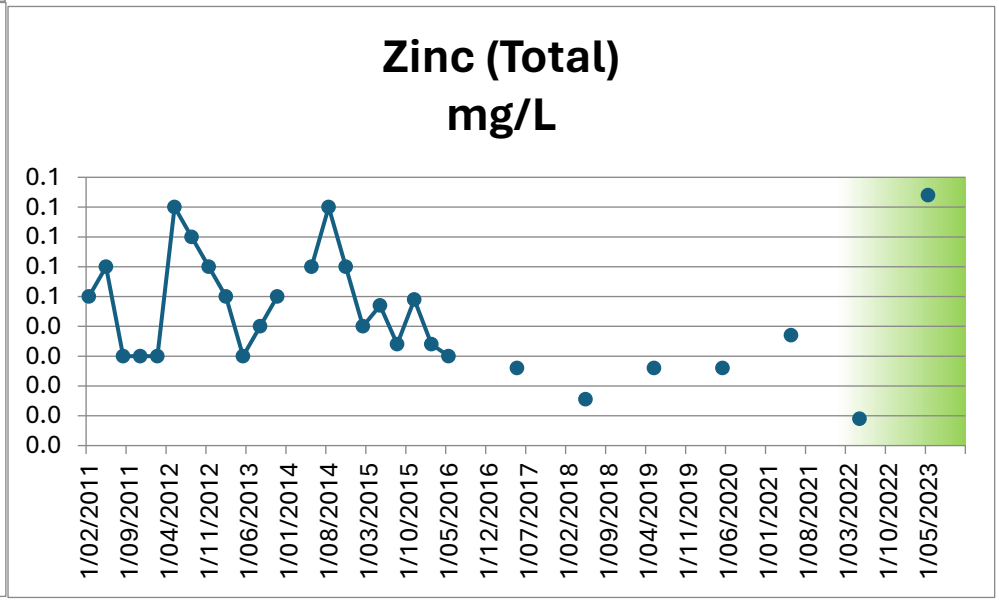
Temperature
C




TKN
mg/L
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023


TOC
mg/L
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023


Total Acidity
mg/L CaCO3
200
180
160
140
120
100
80
60
40
20
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023


Zinc (Total)
mg/L
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

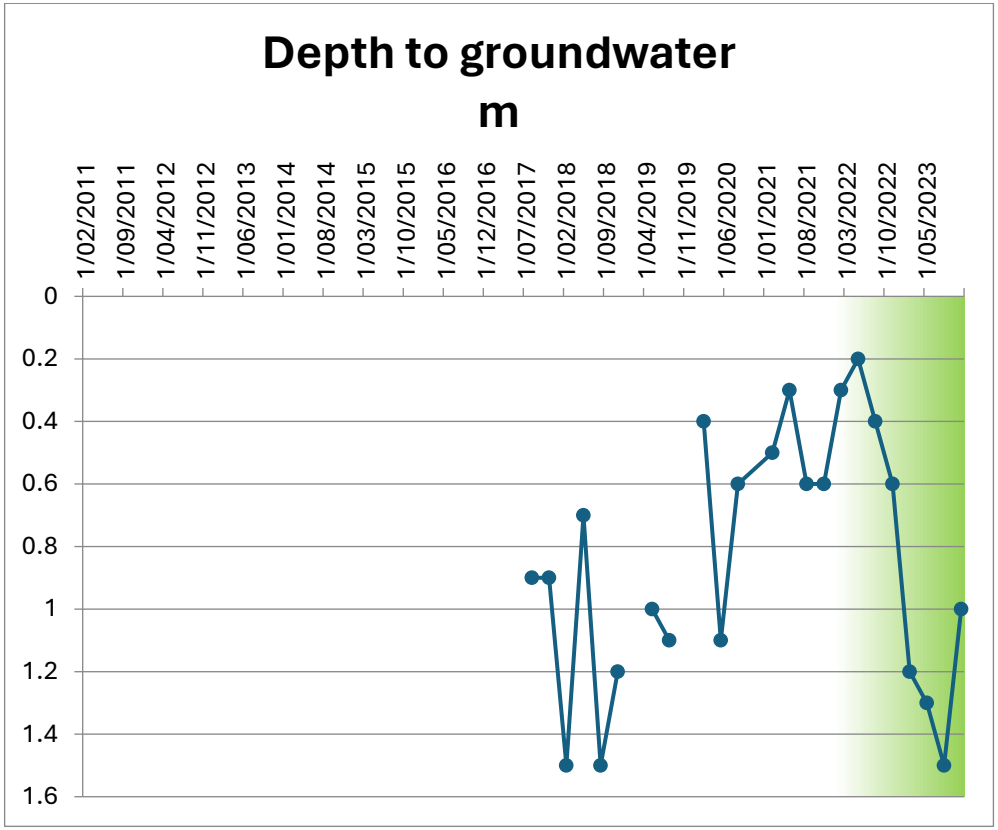
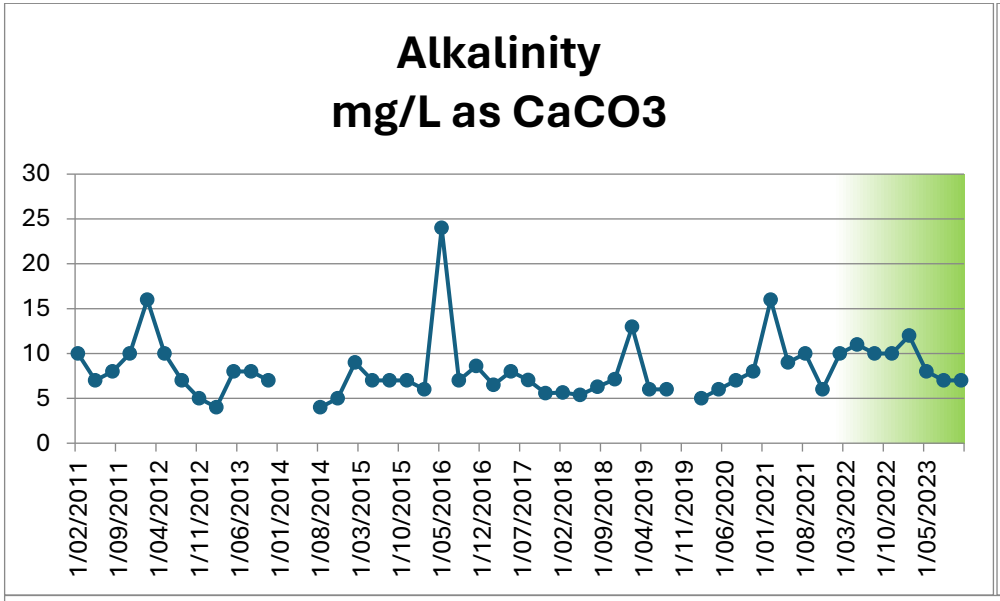
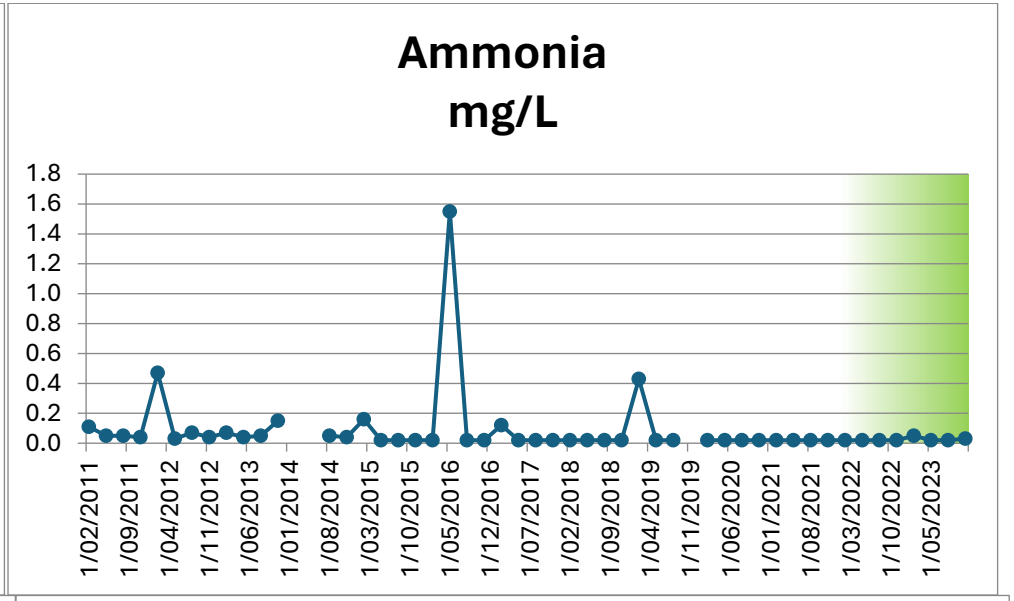
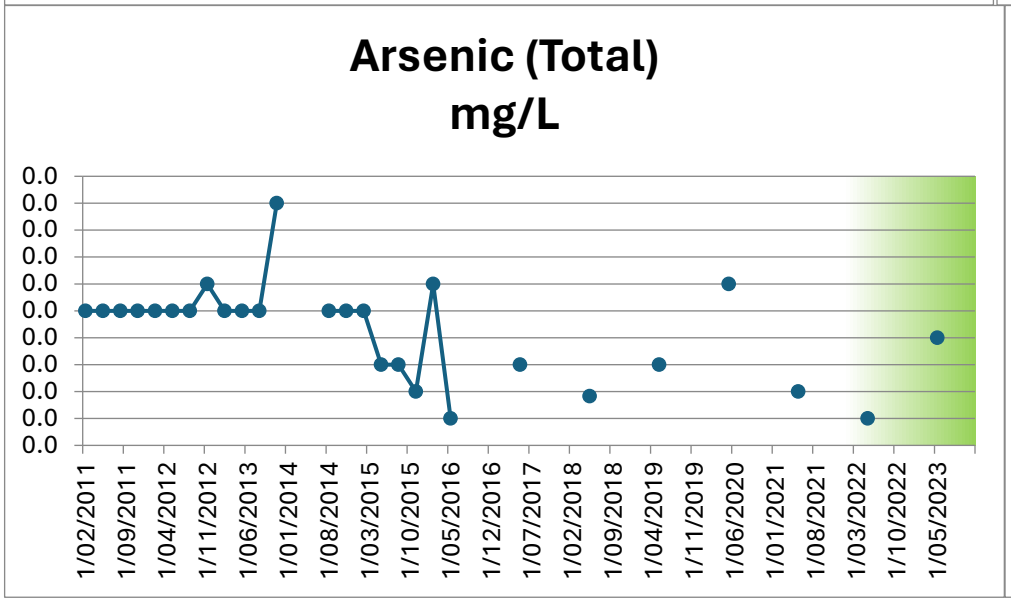

Depth to groundwater
m
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6

Table 22: Ground Water 16

GW16	Alkalinity mgL as caCO3	Aluminium (Total) mgL	Ammonia mgL	Arsenic (Total) mgL	Bicarbonate HCO3 mgL	BOD5 mgL	Cadmium (Total) mgL	Calcium (Total) mgL	Chloride mgL	Chromium (Total) mgL	Chromium 3 mgL	Chromium 6 mgL	Conductivity µScm-1	Copper (Total) mgL	DO (Membrane Electrode) mgL	Flouride mgL	Iron Total mgL	Lead (Total) mgL	Magnesium (Total) mgL	Manganese Total mgL	Nickel (Total) mgL	Nitrate N mgL	Nitrite N mgL	Nitrogen Oxidised mgL	Nitrogen Total mgL	pH pH units	Phenol Alkalinity mgL as caCO3	Phosphorus Total mgL	Potassium Total mgL	Redox Potential mV	Sodium (Total) mgL	Sulphate mgL	Temperature C	TKN mgL	TOC mgL	Total Acidity mgL CaCO3	Zinc (Total) mgL	Depth to Groundwater m
1/02/2011	10	11	0.1	0.0	6.0	1.0	0.0	0.5	27	0.0	0.0	0.0	165	0.0	2.3	0.0	7	0.0	0.6	0.1	0.0	0.1	0.1	0.1	0.5	5.6		0.1	5.0	109	20	22	23	0.5	4.9	31	0.0	
11/05/2011	7	6	0.1	0.0	4.0	1.0	0.0	0.1	31	0.0	0.0	0.0	212	0.0	3.4	0.0	3	0.0	1.2	0.0	0.0	0.4	0.1	0.4	0.8	4.6		0.1	5.0	282	27	22	22	0.3	1.6	54	0.0	
10/08/2011	8	10	0.1	0.0	5.0	1.0	0.0	0.2	23	0.0	0.0	0.0	205	0.0	3.4	0.1	6	0.0	1.1	0.1	0.0	0.2	0.1	0.2	0.4	5.2		0.1	5.0	317	32	24	19	0.2	1.7	54	0.0	
9/11/2011	10	9	0.0	0.0	6.0	1.0	0.0	119.0	36	0.0	0.0	0.0	196	0.0	2.3	0.1	6	0.0	21.0	0.1	0.0	0.1	0.0	0.1	0.3	5.3		0.1	15.0	310	100	101	21	0.2	1.2	62	0.0	
7/02/2012	16	34	0.5	0.0	10.0	3.9	0.0	0.5	30	0.0	0.0	0.0	185	0.0	1.7	0.0	27	0.0	1.6	0.2	0.0	0.2	0.0	0.2	1.3	5.3		0.2	5.0	119	37	29	23	1.2	2.6	84	0.0	
9/05/2012	10	4	0.0	0.0	6.0	1.0	0.0	0.5	26	0.0	0.0	0.0	191	0.0	4.8	0.1	2	0.0	1.4	0.0	0.0	0.0	0.0	0.1	0.2	5.4		0.1	5.0	277	25	25	22	0.2	0.9	50	0.0	
7/08/2012	7	20	0.1	0.0	4.0	1.0	0.0	0.5	24	0.0	0.0	0.0	192	0.0	4.3	0.0	15	0.0	1.3	0.1	0.0	0.1	0.0	0.1	0.5	5.1		0.1	5.0	197	22	26	19	0.4	0.9	42	0.1	
14/11/2012	5	41	0.0	0.0	3.0	1.0	0.0	0.4	29	0.0	0.0	0.0	200	0.0	5.8	0.1	26	0.0	1.1	0.2	0.0	0.3	0.0	0.3	1.0	5.1		0.2	5.0	193	29	22	22	0.7	2.7	48	0.1	
14/02/2013	4	19	0.1	0.0	2.0	1.0	0.0	0.7	26	0.0	0.0	0.0	183	0.0	3.3	0.1	11	0.0	2.0	0.1	0.0	3.2	0.0	3.2	3.2	5.0		0.1	5.0	211	27	16	25	0.1	1.2	46	0.0	
15/05/2013	8	12	0.0	0.0	5.0	1.2	0.0	0.7	25	0.0	0.0	0.0	162	0.0	3.9	0.0	7	0.0	1.3	0.1	0.0	1.8	0.0	1.8	2.0	5.3		0.0	5.0	159	24	20	22	0.2	1.0	62	0.0	
7/08/2013	8	17	0.1	0.0	5.0	1.0	0.0	0.4	24	0.0	0.0	0.0	144	0.0	5.0	0.0	10	0.0	1.1	0.1	0.0	0.4	0.0	0.4	0.8	5.5		0.2	5.0	162	26	23	19	0.4	1.0	65	0.0	
13/11/2013	7	42	0.2	0.0	4.0	1.0	0.0	0.3	28	0.0	0.0	0.0	198	0.0	2.8	0.0	28	0.0	1.1	0.3	0.0	0.7	0.0	0.7	1.7	5.2		0.1	5.0	147	37	30	21	1.1	1.1	68	0.1	
11/02/2014																																						
13/05/2014																																						
13/08/2014	4	20	0.1	0.0	2.0	3.0	0.0	0.2	29	0.0	0.0	0.0	191	0.0	5.4	0.0	9	0.0	1.4	0.1	0.0	4.7	0.0	4.7	5.5	6.8		0.2	5.0	158	35	19	19	0.8	1.0	56	0.1	
11/11/2014	5	8	0.0	0.0	3.0	1.8	0.0	0.3	31	0.0	0.0	0.0	187	0.0	3.8	0.0	4	0.0	1.4	0.1	0.0	3.0	0.0	3.0	3.4	6.0		0.2	5.0	147	33	21	21	0.4	0.8	51	0.0	
10/02/2015	9	9	0.2	0.0	5.0	3.6	0.0	0.9	28	0.0	0.0	0.0	168	0.0	2.8	0.2	3	0.0	1.8	0.1	0.0	4.2	0.0	4.2	5.0	5.9		0.2	5.0	107	25	14	24	0.8	1.3	44	0.0	
12/05/2015	7	22	0.0	0.0	4.0	3.9	0.0	0.7	34	0.0	0.0	0.0	179	0.0	4.5	0.0	10	0.0	1.6	0.1	0.0	1.3	0.0	1.3	2.3	5.2		0.2	5.0	159	32	16	22	1.1	0.9	47	0.0	
12/08/2015	7	16	0.0	0.0	7.0	3.0	0.0	0.3	34	0.0	0.0	0.0	189	0.0	4.7	0.0	9	0.0	1.5	0.1	0.0	0.5	0.0	0.5	1.4	5.4		0.1	5.0	210	34	18	19	0.8	1.1	47	0.0	
11/11/2015	7	6	0.0	0.0	7.0	2.4	0.0	0.7	20	0.0	0.0	0.0	156	0.0	5.4	0.0	3	0.0	2.1	0.1	0.0	5.1	0.0	5.1	5.2	5.2		0.1	5.0	147	24	12	21	0.1	0.9	37	0.0	
9/02/2016	6	31	0.0	0.0	6.0	2.1	0.0	0.4	27	0.0	0.0	0.0	176	0.0	4.1	0.0	16	0.0	1.6	0.1	0.0	3.4	0.0	3.4	4.4	5.3		0.2	5.0	195	31	15	23	1.0	1.7	81	0.1	
10/05/2016	24	6	1.6	0.0	24.0	10.5	0.0	0.7	28	0.0	0.0	0.0	193	0.0	1.5	0.0	3	0.0	1.8	0.1	0.0	0.2	0.0	0.2	4.1	5.7		0.6	5.0	109	31	37	23	3.9	4.6	77	0.0	
10/08/2016	7		0.0		7.0	4.2		0.5	24				179		4.2	0.0			1.7			3.8	0.0	3.8	4.3	5.2		0.2	5.0	233	30	18	19	0.5	0.8	54		
8/11/2016	9		0.0		9.0	1.0		0.3	33				189		2.1	0.0			1.5			0.5	0.0	0.5	0.8	5.1		0.1	5.0	411	35	24	21	0.3	0.9	93		
8/02/2017	7		0.1		6.0	1.2		0.2	33				202		3.8	0.0			1.0			1.9	0.0	1.9	3.1	5.0		0.3	5.0	297	33	21	23	1.1	1.3	96		
9/05/2017	8	12	0.0	0.0	8.0	1.8	0.0	0.4	24	0.0	0.0	0.0	136	0.0	4.0	0.0	6	0.0	1.2	0.1	0.0	1.7	0.0	1.7	2.3	5.3		0.1	5.0	402	23	15	22	0.6	1.7	40	0.0	
9/08/2017	7		0.0		7.0	1.5		0.3	45				159		4.9	0.0			1.0			0.7	0.0	0.7	1.4	5.3		0.2	5.0	392	27	16	19	0.7	1.2	37		1.7
8/11/2017	6		0.0		6.0	1.0		0.5	24				142		4.2	0.0			1.5			2.3	0.0	2.3	2.7	4.6		0.1	5.0	436	23	12	21	0.4	1.0	33		1.3
14/02/2018	6		0.0		6.0	1.0		0.2	28				166		3.9	0.0			1.2			1.6	0.0	1.6	1.7	5.1		0.1	5.0	371	29	18	24	0.1	1.0	38		2.2
9/05/2018	5	11	0.0	0.0	5.0	1.0	0.0	0.8	28	0.0	0.0	0.0	183	0.0	4.6	0.0	4	0.0	1.9	0.1	0.0	5.2	0.0	5.2	5.5	5.2		0.1	0.5	385	30	16	22	0.3	0.9	40	0.0	1.2
15/08/2018	6		0.0		6.0	1.5		0.3	29				178		4.3	0.0			1.5			1.8	0.0	1.8	2.2	5.2		0.1	0.5	438	32	21	19	0.4	5.3	39		2.1
14/11/2018	7		0.0		7.0	1.5		0.4	27				173		3.5	0.0			1.7			1.8	0.0	1.8	2.4	5.3		0.2	0.5	155	30	21	20	0.7	2.0	106		1.9
13/02/2019	13		0.4		13.0	3.9		0.3	32				198		3.5	0.0			1.2			0.8	0.0	0.8	3.2	5.5	0.0	0.4	0.5	183	35	26	23	2.4	1.7	62		3.4
15/05/2019	6	20	0.0	0.0	6.0	1.0	0.0	0.4	22	0.0	0.0	0.0	143	0.0	5.7	0.0	7	0.0	1.4	0.1	0.0	1.8	0.0	1.8	2.3	5.3	0.0	0.1	0.5	227	27	19	21	0.5	1.3	32	0.0	1.6
14/08/2019	6		0.0		6.0	1.2		0.3	24				152		4.9	0.0			1.3			0.5	0.0	0.5	1.2	5.3	0.0	0.2	0.5	410	29	23	18	0.7	1.8	37		1.8
13/11/2019																																						
26/02/2020	5		0.0		5.0	1.0		0.6	18				113		4.4	0.0			1.0			1.3	0.0	1.3	1.9	5.3	0.0	0.2	0.5	254	17	12	24	0.6	1.4	28		1.0
13/05/2020	6	21	0.0	0.0	6.0	1.0	0.0	0.3	28	0.0	0.0	0.0	132	0.0	4.6	0.1	10	0.0	0.9	0.1	0.0	0.6	0.0	0.6	1.1	5.3	0.0	0.1	0.5	305	22	19	21	0.5	1.1	31	0.0	1.8
12/08/2020	7		0.0		7.0	1.0		0.3	22				137		4.7	0.0			1.0			0.3	0.0	0.3	0.8	5.2	0.0	0.1	0.5	231	26	18	18	0.5	1.2	44		1.2
11/11/2020	8		0.0		8.0	1.0		0.2	23				134		3.6	0.1			0.9			0.3	0.0	0.3	0.9	5.2	0.0	0.1	0.5	229	24	16	20	0.6	1.3	35		1.8
10/02/2021	16		0.0		16.0	1.0		0.2	18				139		3.6	0.0			0.8			0.2	0.0	0.2	0.9	5.3	0.0	0.1	5.6	191	21	16	22	0.7	1.6	36		1.6
12/05/2021	9	10	0.0	0.0	9.0	1.0	0.0	0.4	10	0.0	0.0	0.0	124	0.0	4.0	0.1	4	0.0	1.1	0.1	0.0	0.1	0.0	0.1	0.4	5.4	0.0	0.1	0.5	246	22	16	21	0.3	1.5	37	0.0	1.1
11/08/2021	10		0.0		10.0	1.2		0.4	20				140		4.9	0.0			1.1			0.9	0.0	0.9	1.5	5.2	0.0	0.1	0.5	340	24	17	18	0.6	1.7	43		1.6
9/11/2021	6		0.0		6.0	1.0		0.7	22				141		3.7	0.0			1.8			4.7	0.0	4.7	4.8	5.1	0.0	0.1	0.5	346	22	11	20	0.1	1.0	27		1.4
9/02/2022	10		0.0		10.0	1.2		0.5	17				121		3.6	0.0			1.0			0.7	0.0	0.7	1.0	5.1	0.0	0.1	0.5	321	19	13	23	0.3	1.4	59		1.3
11/05/2022	11	5	0.0	0.0	11.0	1.0	0.0	0.6	17	0.0	0.0	0.0	113	0.0	5.1	0.0	1	0.0	1.2	0.1	0.0	0.0	0.0	0.0	0.2	5.5	0.0	0.0	0.5	232	19	14	21	0.2	1.5	49	0.0	0.9
10/08/2022	10		0.0		10.0	1.0		0.3	22				142		4.7	0.0			0.9			0.2	0.0	0.2	0.4	5.4	0.0	0.1	0.5	300	25	17	18	0.3	1.7	44		1.7
9/11/2022	10		0.0		10.0	1.2		0.4	22				139		3.7	0.0			1.1			0.1	0.0	0.1	0.7	5.4	0.0	0.2	0.5	252	22	15	19	0.6	1.8	56		1.6
14/02/2023	12		0.1		12.0	1.0		0.2	24				153		3.0	0.0			0.8			0.1	0.0	0.1	1.3	5.2	0.0	0.2	0.5	137	27	19	22	1.2	1.6	57		2.3
10/05/2023	8	26	0.0	0.0	8.0	1.0	0.0	0.2	24	0.0	0.0	0.0	160	0.0	4.5	0.0	12	0.0	1.1	0.2	0.0	0.3	0.0	0.3	0.8	5.3	1.0	0.1	0.5	160	28	20	21	0.6	1.1	40	0.0	2.2
9/08/2023	7		0.0		7.0	1.5		0.2	24				160		5.8	0.0			1.1			0.4	0.0	0.4	0.9	5.2		0.2	0.5	183	27	21	18	0.5	1.0	34		2.3
15/11/2023	7		0.0		7.0	1.0		0.2	24				140		4.7	0.0			1.0			0.0	0.0	0.0	0.4	5.0		0.1	0.5	297	23	17	20	0.4	1.4	42		1.7
2023 Min	**7.0**	**26.2**	**0.0**	**0.0**	**7.0**	**1.0**	**0.0**	**0.2**	**24.0**	**0.0**	**0.0**	**0.0**	**140.0**	**0.0**	**3.0**	**0.0**	**11.6**	**0.0**	**0.8**	**0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.4**	**5.0**	**0.0**	**0.1**	**0.5**	**136.8**	**23.0**	**17.0**	**18.1**	**0.4**	**1.0**	**34.0**	**0.0**	**1.7**
2023 Max	**12.0**	**26.2**	**0.1**	**0.0**	**12.0**	**1.5**	**0.0**	**0.2**	**24.0**	**0.0**	**0.0**	**0.0**	**160.0**	**0.0**	**5.8**	**0.0**	**11.6**	**0.0**	**1.1**	**0.2**	**0.0**	**0.4**	**0.0**	**0.4**	**1.3**	**5.3**	**1.0**	**0.2**	**0.5**	**297.2**	**28.0**	**21.0**	**22.0**	**1.2**	**1.6**	**57.0**	**0.0**	**2.3**
2023 Mean	**8.5**	**26.2**	**0.0**	**0.0**	**8.5**	**1.1**	**0.0**	**0.2**	**24.0**	**0.0**	**0.0**	**0.0**	**153.3**	**0.0**	**4.5**	**0.0**	**11.6**	**0.0**	**1.0**	**0.2**	**0.0**	**0.2**	**0.0**	**0.2**	**0.9**	**5.2**	**0.5**	**0.2**	**0.5**	**194.4**	**26.3**	**19.3**	**20.3**	**0.7**	**1.3**	**43.3**	**0.0**	**2.1**
Long-term Average	**8.2**	**16.6**	**0.1**	**0.0**	**7.2**	**1.7**	**0.0**	**2.8**	**25.8**	**0.0**	**0.0**	**0.0**	**164.5**	**0.0**	**4.0**	**0.0**	**9.3**	**0.0**	**1.7**	**0.1**	**0.0**	**1.3**	**0.0**	**1.3**	**1.9**	**5.3**	**0.1**	**0.1**	**3.3**	**246.5**	**28.6**	**20.9**	**20.9**	**0.6**	**1.6**	**50.5**	**0.0**	**1.7**


Alkalinity
mg/L as CaCO3
30
25
20
15
10
5
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023


Ammonia
mg/L
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023


Arsenic (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
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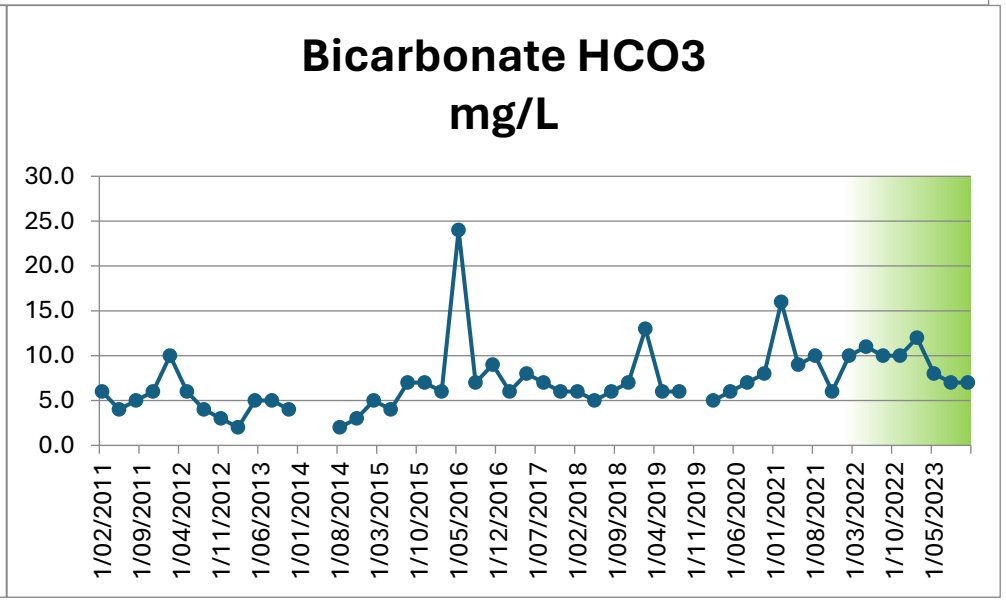
1/08/2021
1/03/2022
1/10/2022
1/05/2023


Bicarbonate HCO3
mg/L
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
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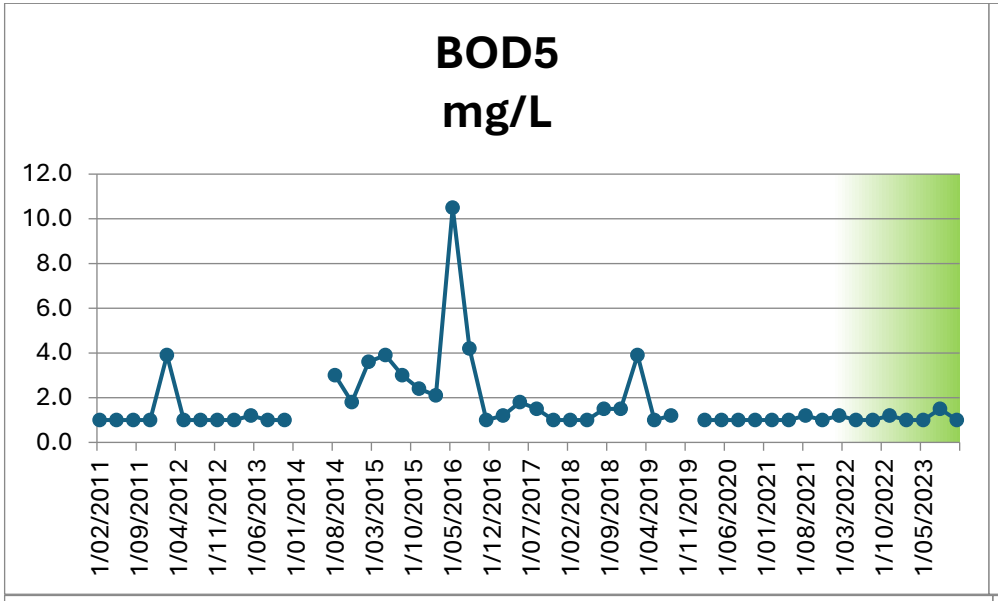
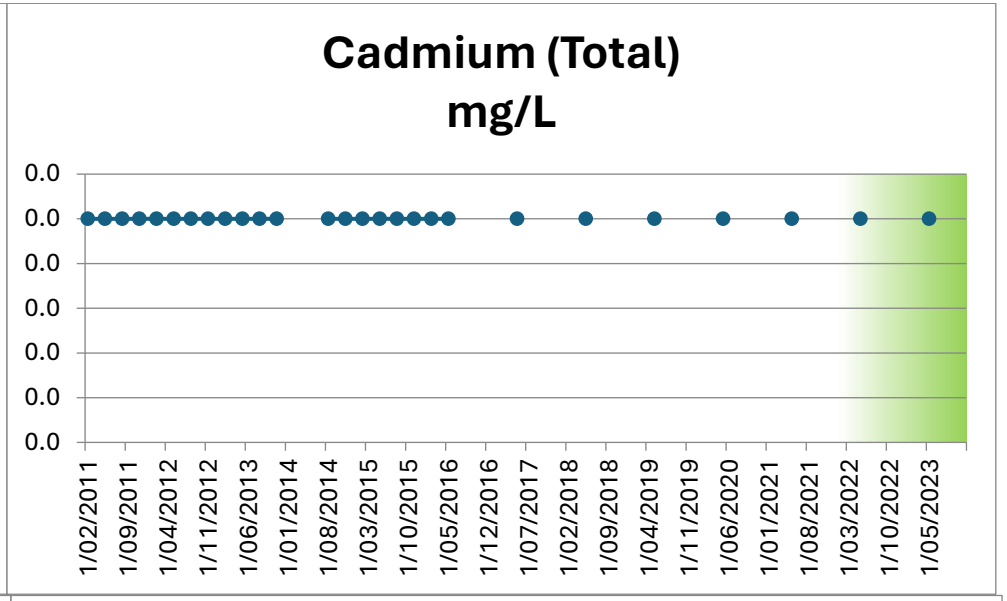
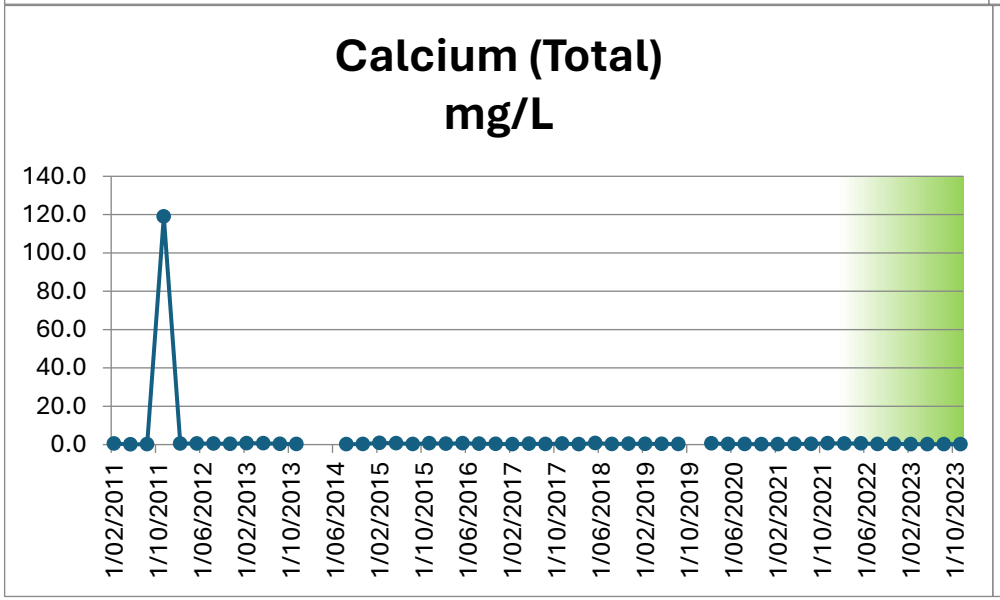
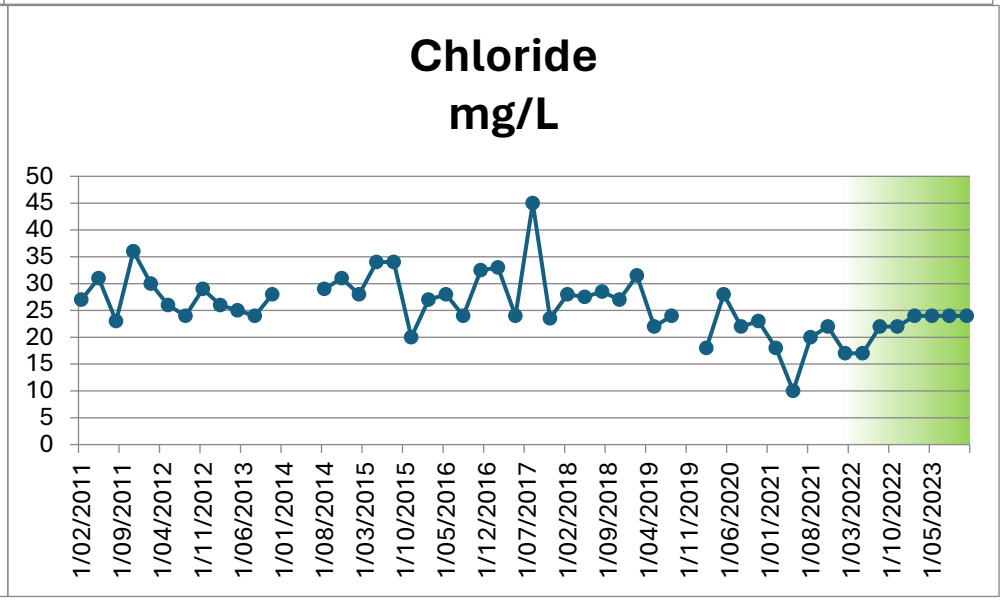
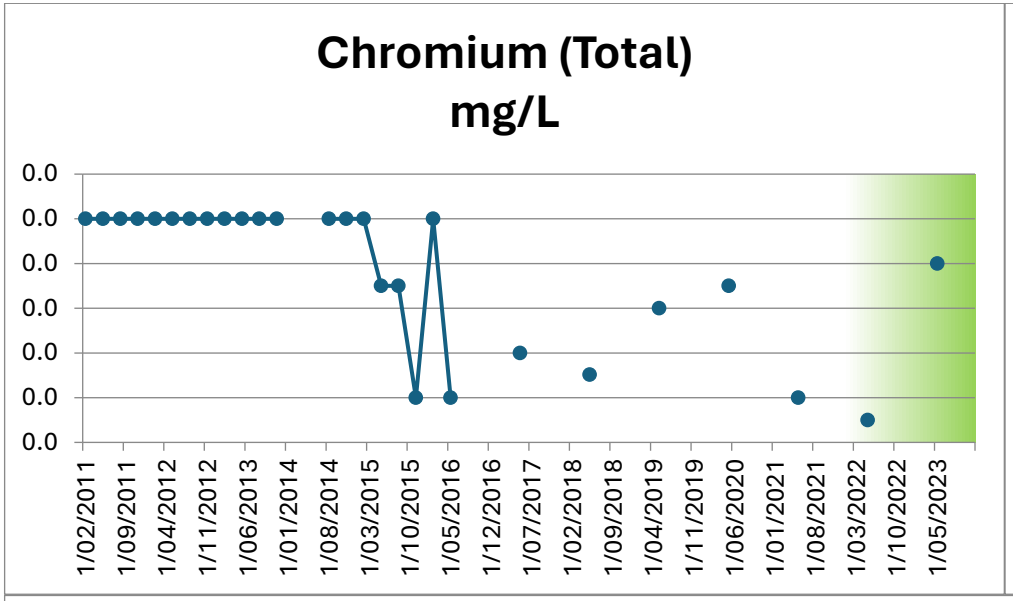
1/08/2021
1/03/2022
1/10/2022
1/05/2023

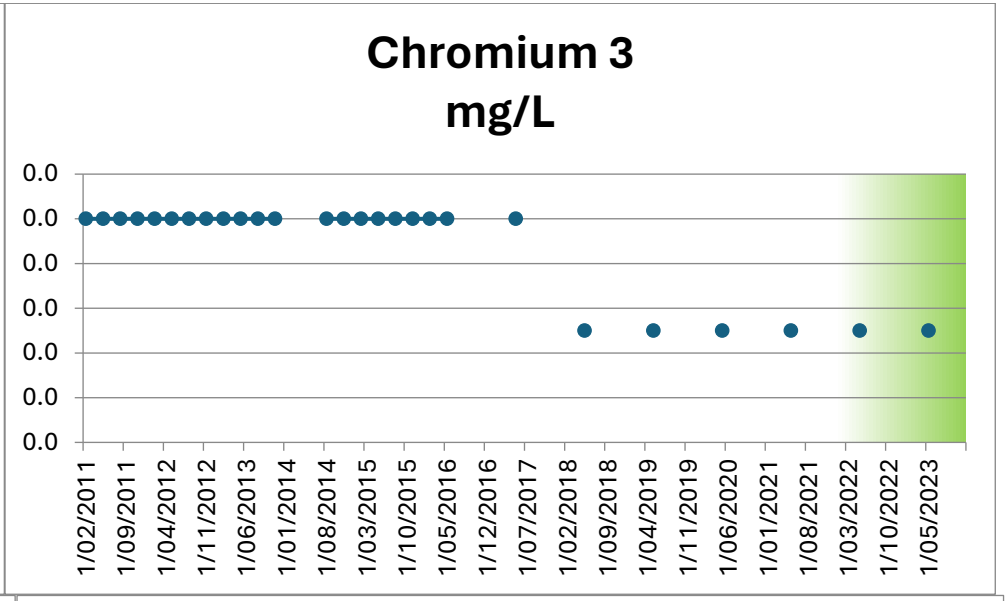

BOD5
mg/L
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

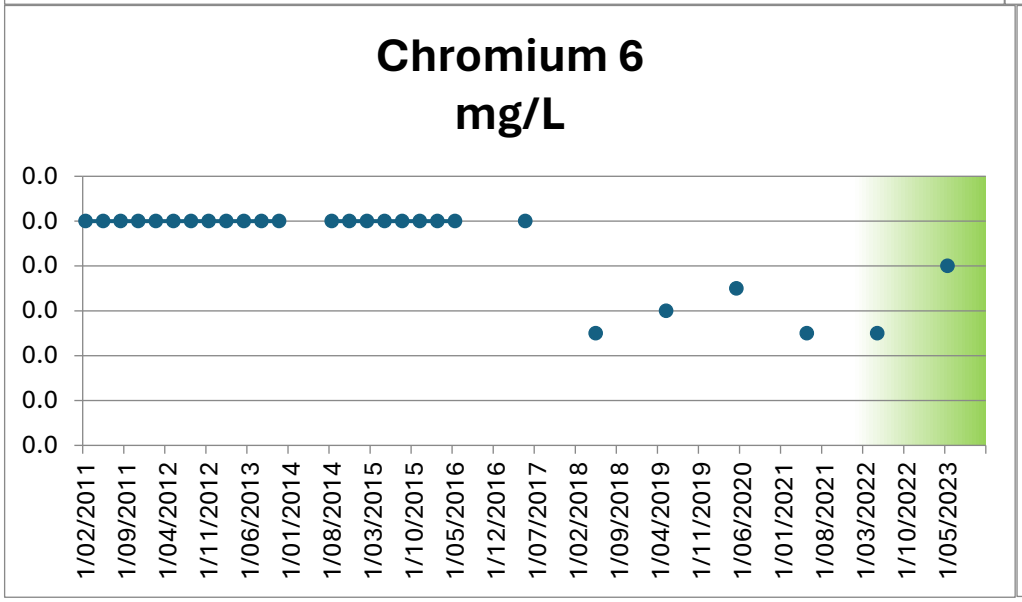

Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

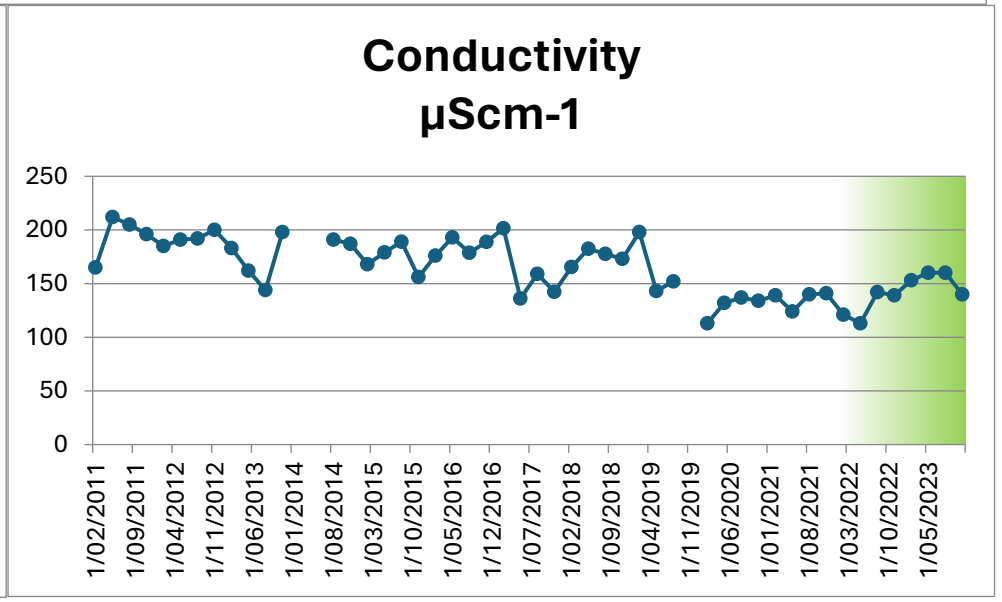

Calcium (Total)
mg/L
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

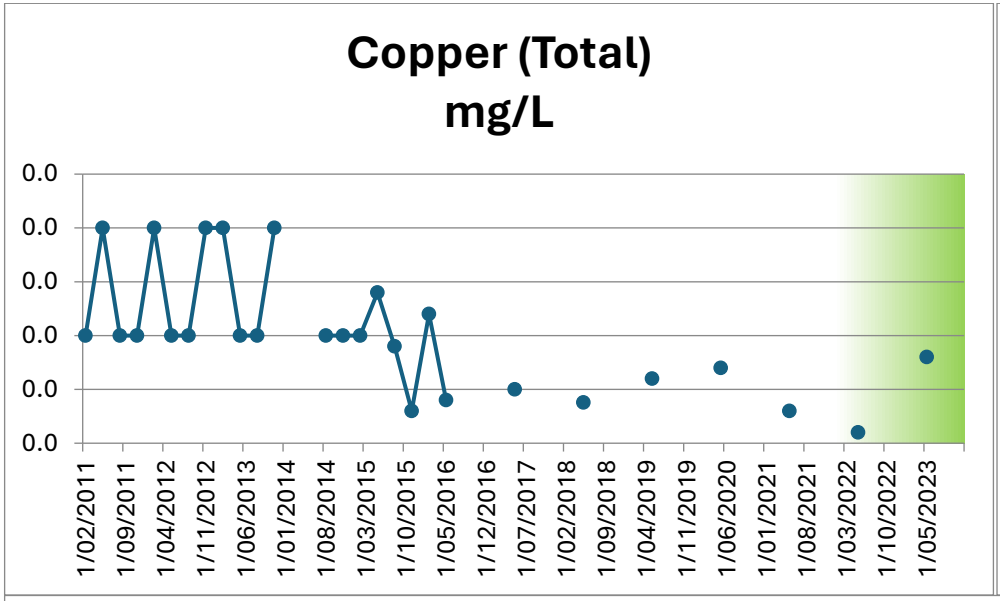

Chloride
mg/L
50
45
40
35
30
25
20
15
10
5
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

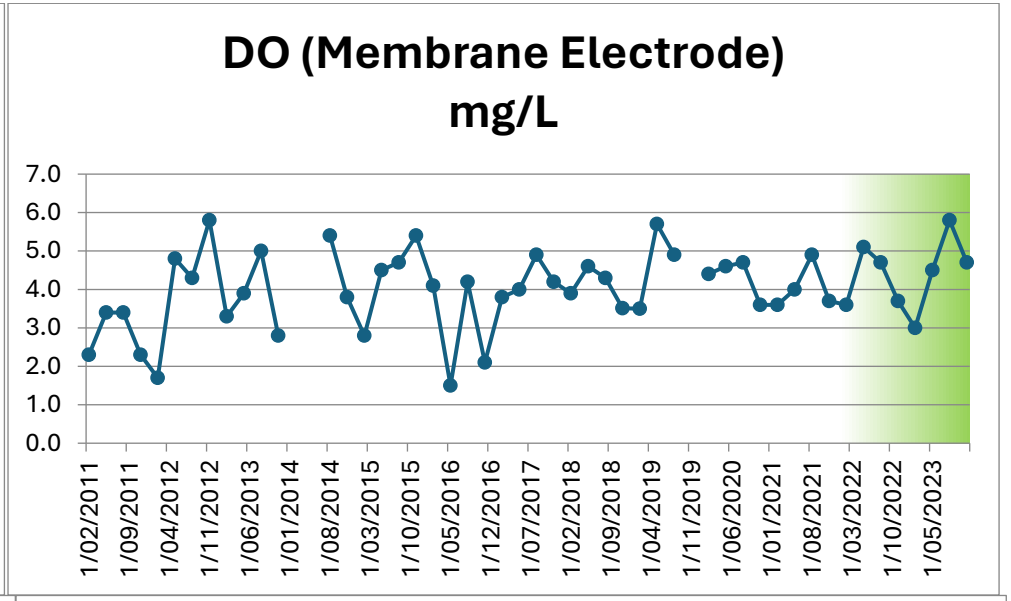

Chromium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

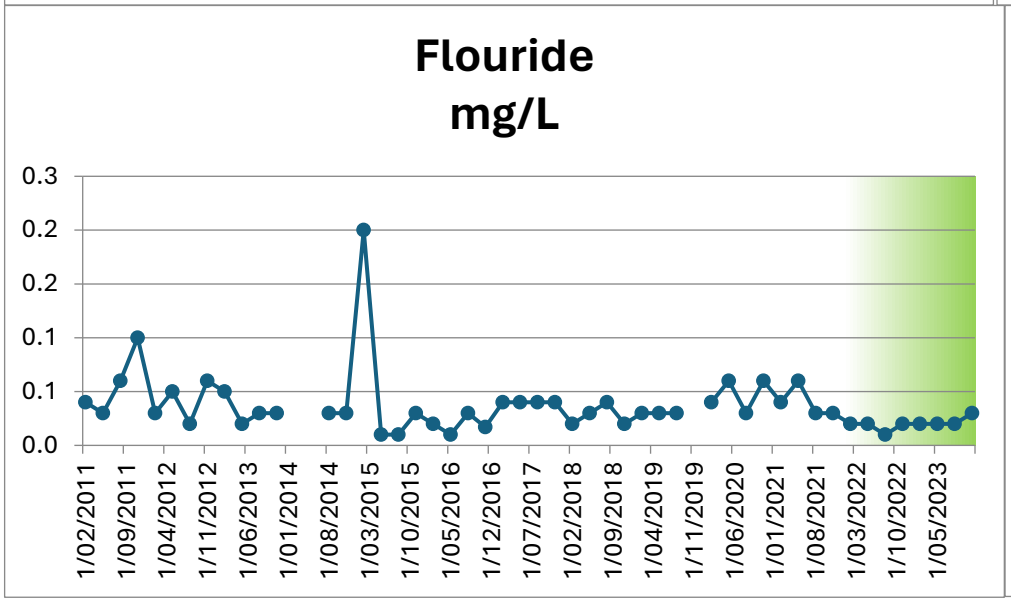

Chromium 3
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

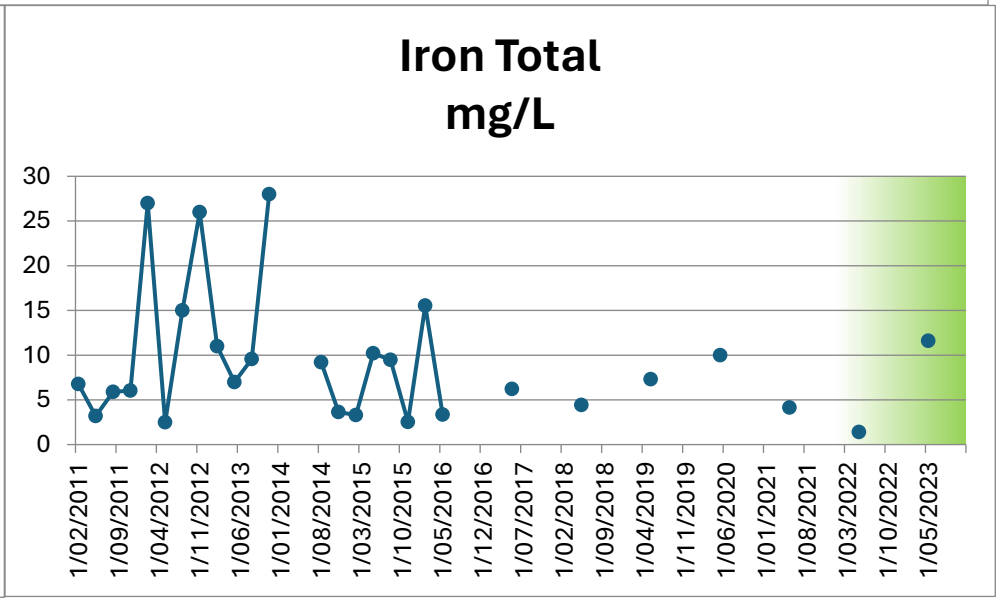

Chromium 6
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

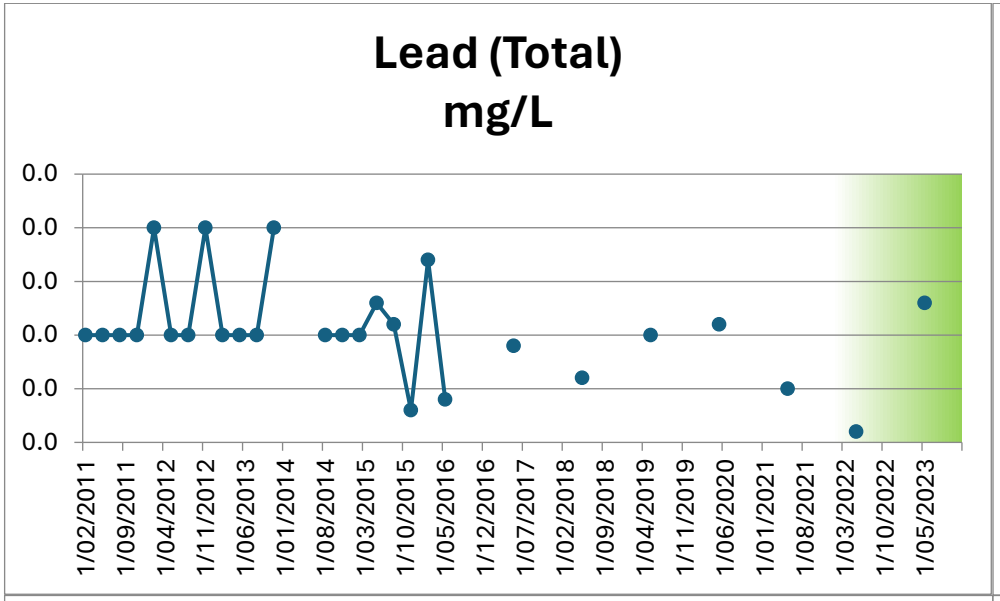

Conductivity
µScm-1
250
200
150
100
50
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

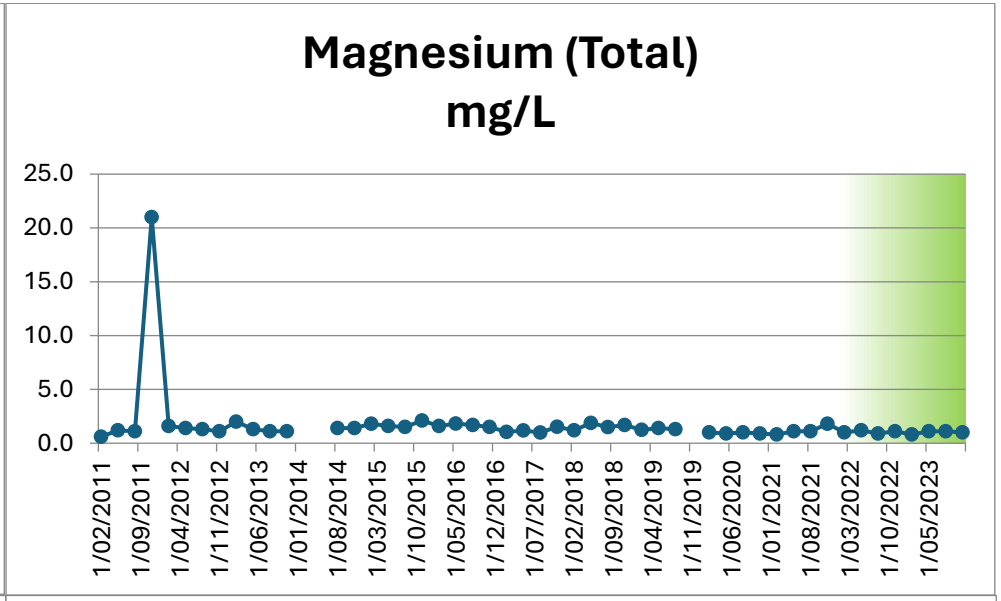

Copper (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

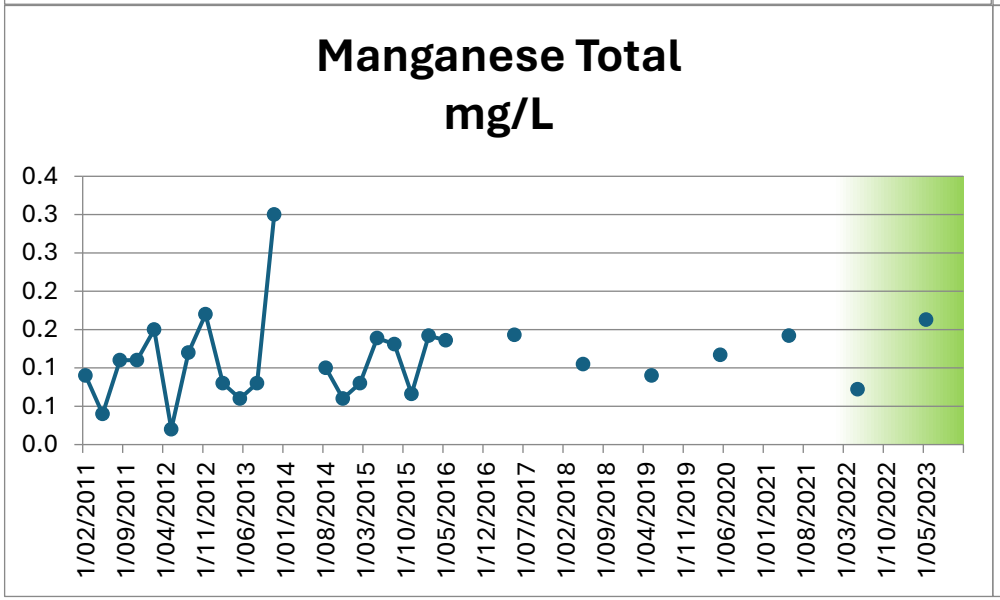

DO (Membrane Electrode)
mg/L
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

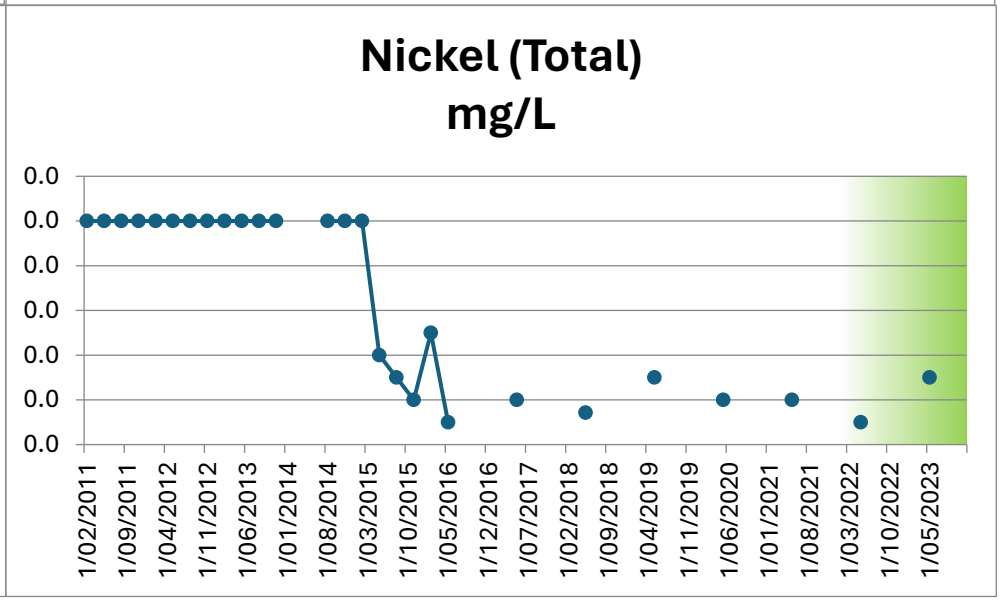

Flouride
mg/L
0.3
0.2
0.2
0.1
0.1
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

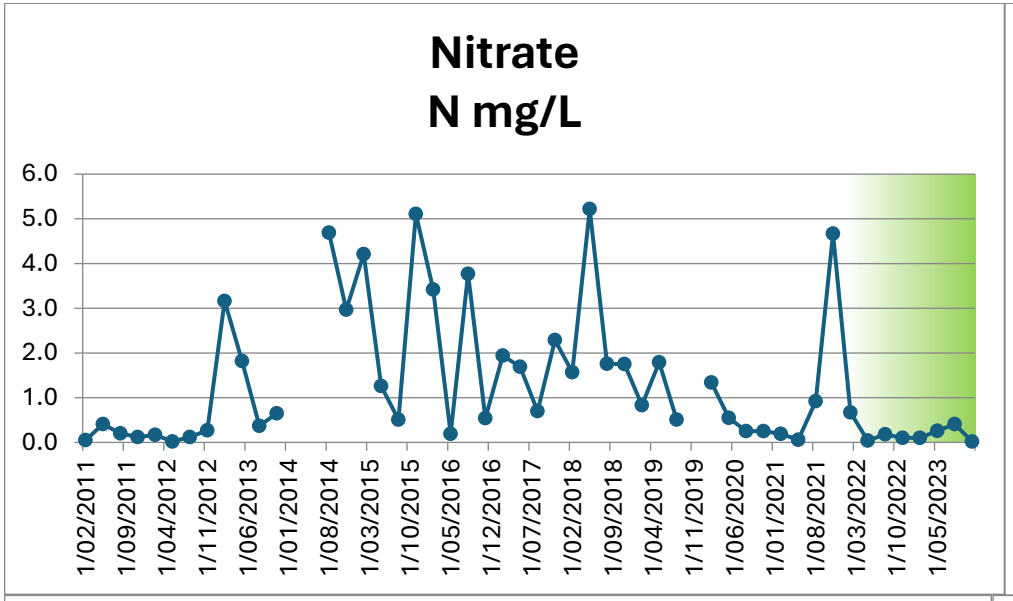

Iron Total
mg/L
30
25
20
15
10
5
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

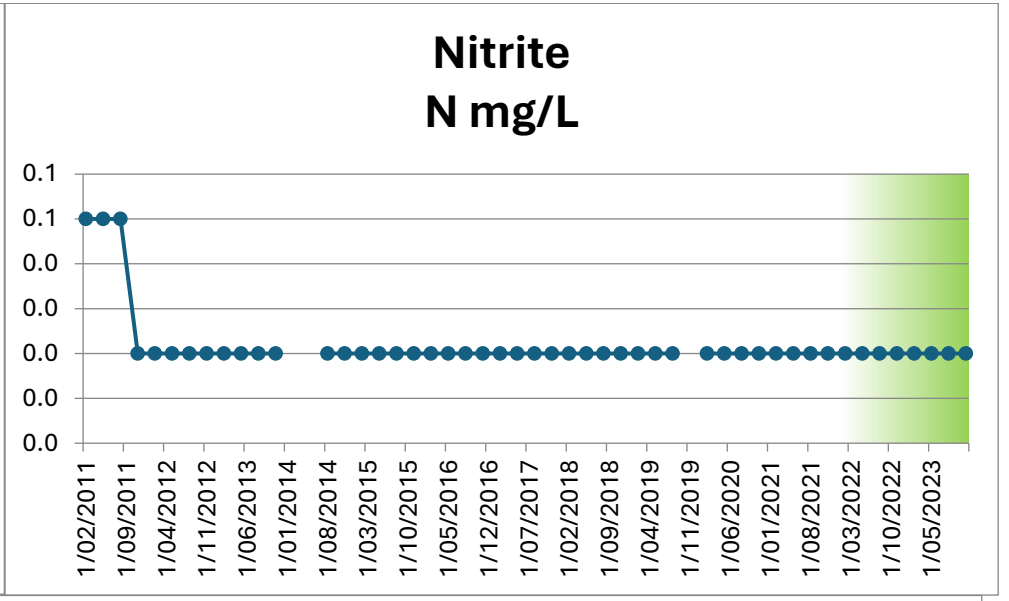

Lead (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

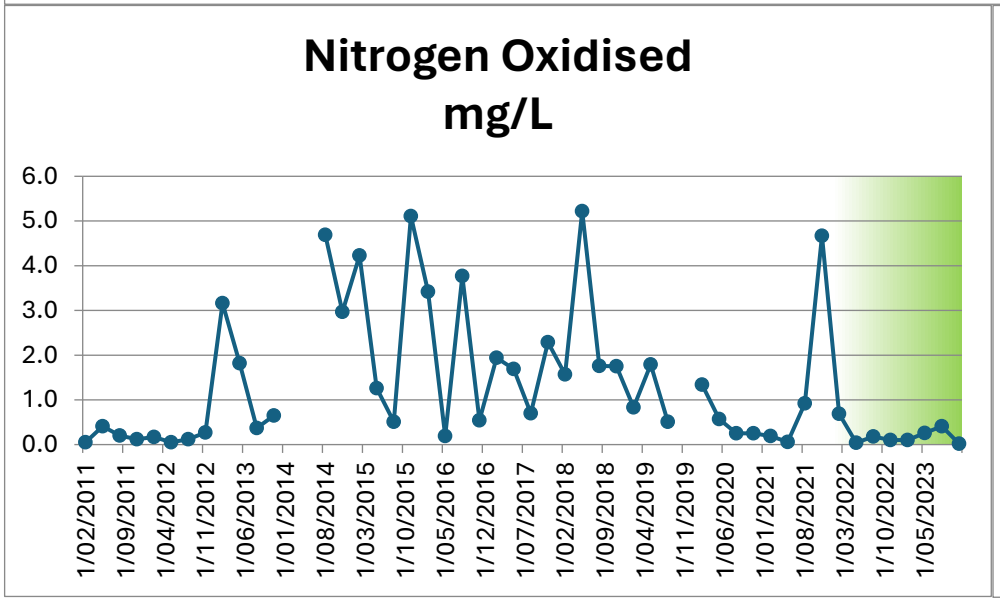

Magnesium (Total)
mg/L
25.0
20.0
15.0
10.0
5.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

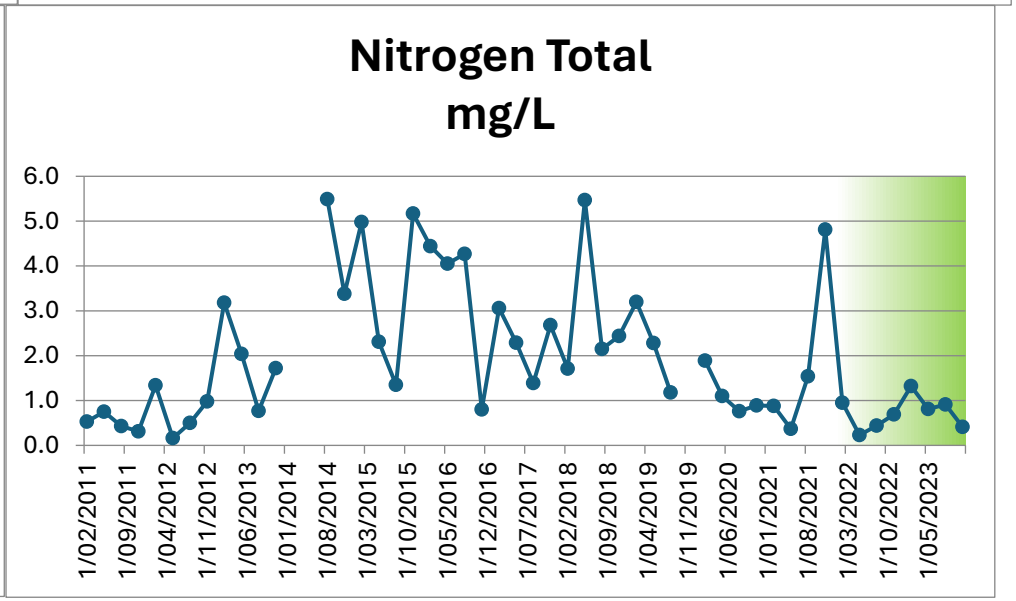

Manganese Total
mg/L
0.4
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

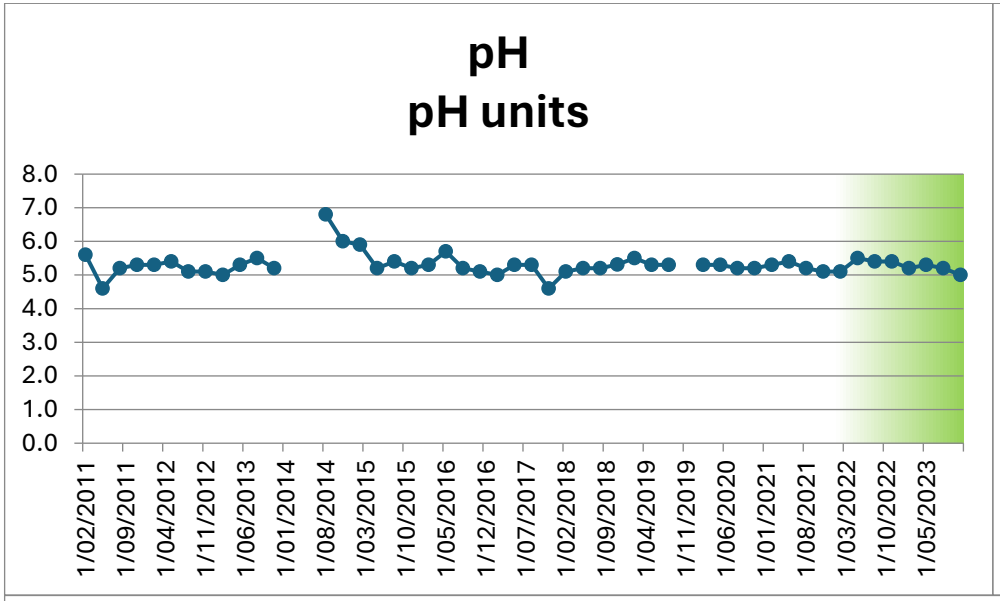

Nickel (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

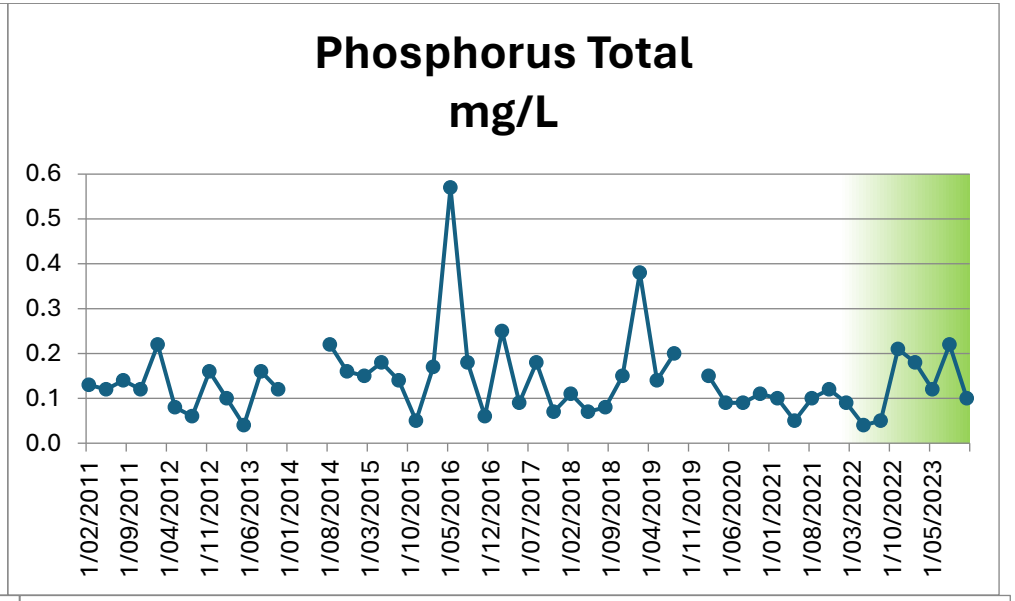

Nitrate
N mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

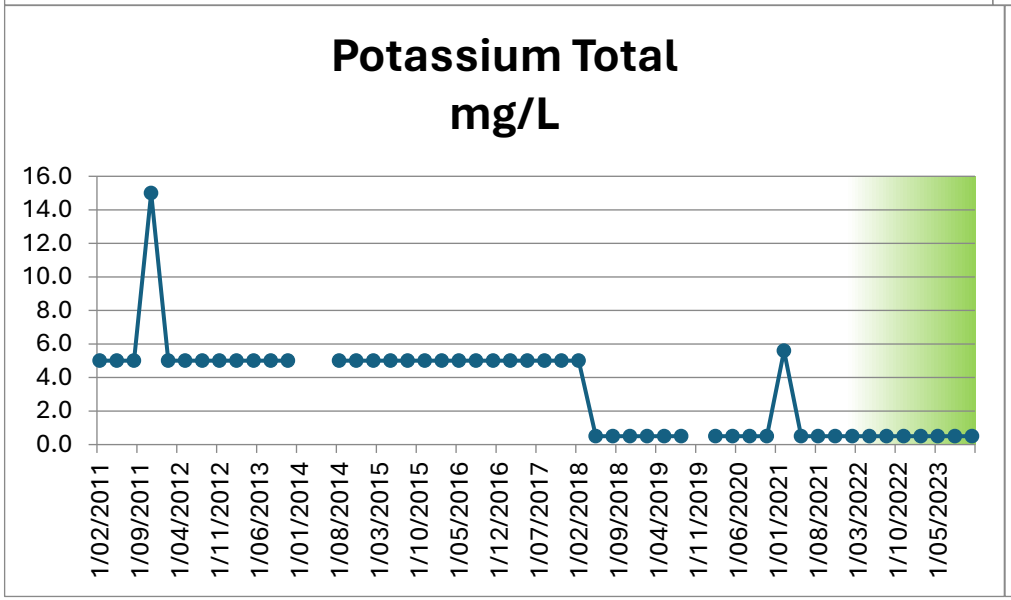

Nitrite
N mg/L
0.1
0.1
0.0
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

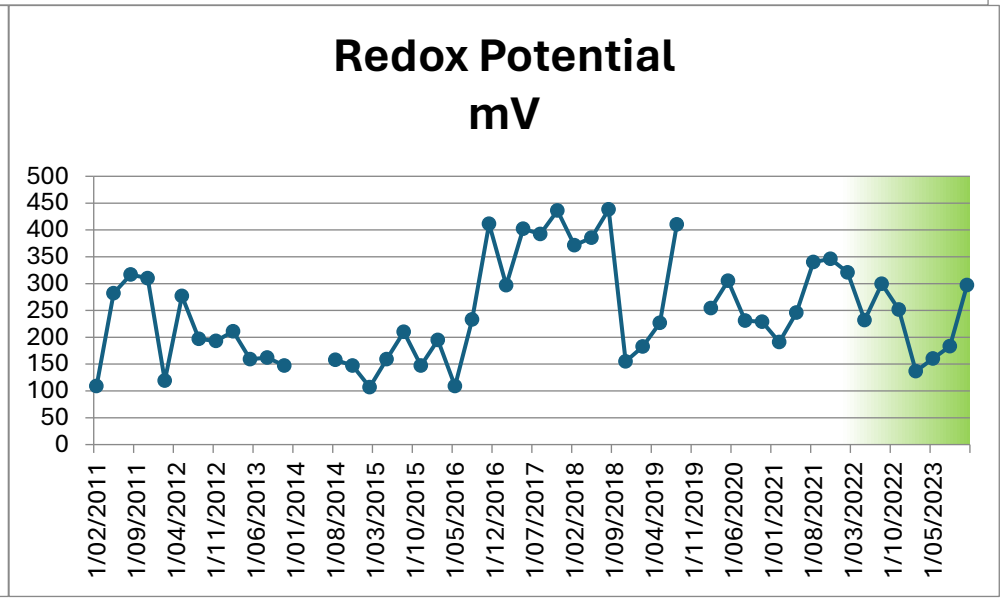

Nitrogen Oxidised
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

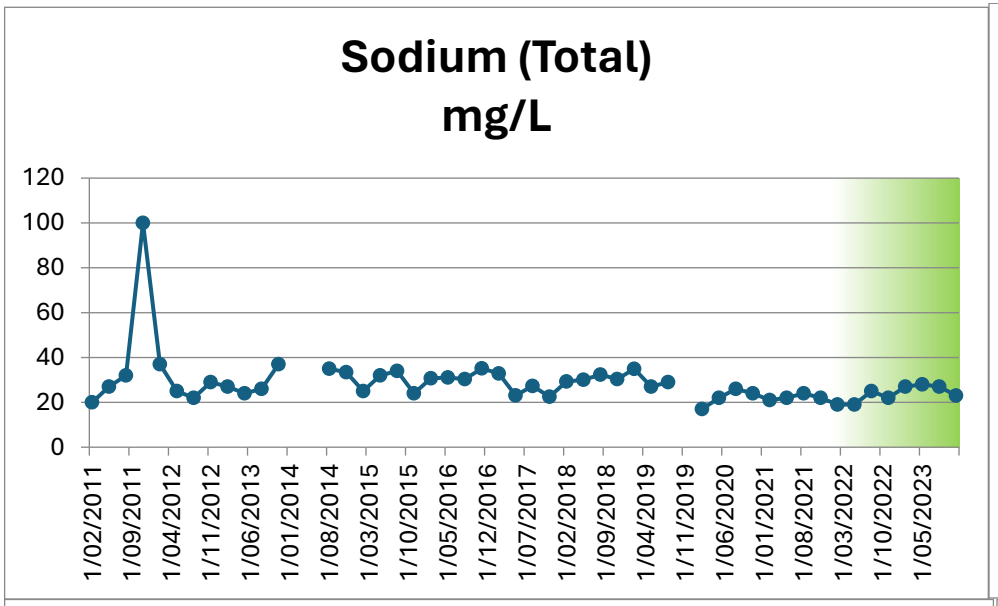

Nitrogen Total
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

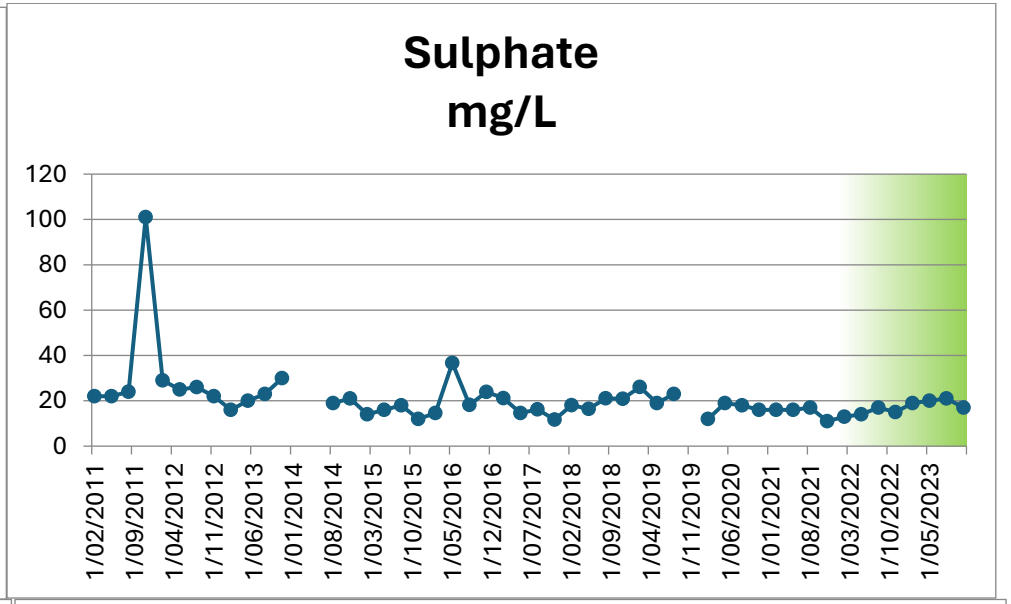

pH
pH units
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

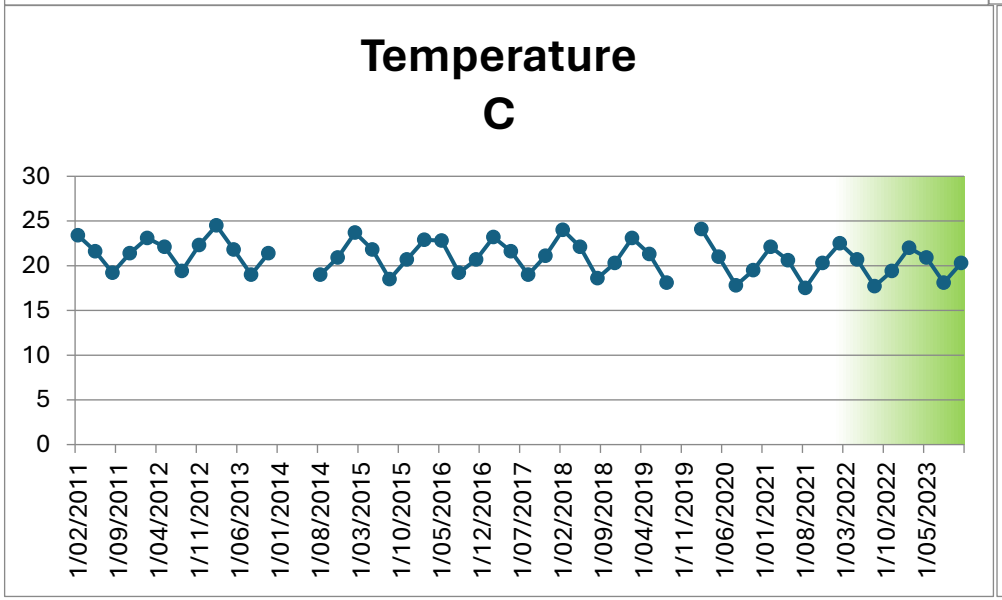

Phosphorus Total
mg/L
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

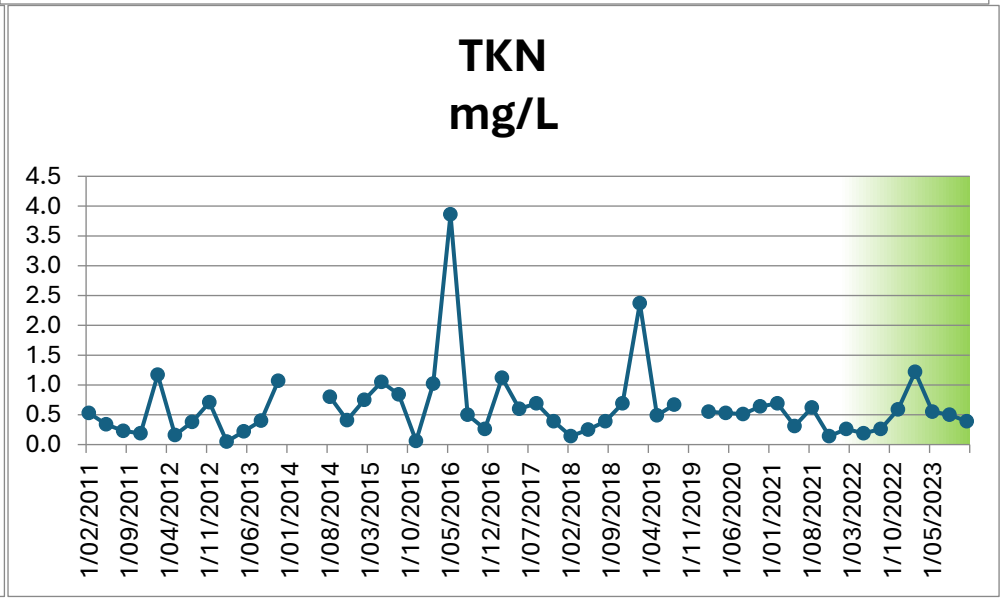

Potassium Total
mg/L
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

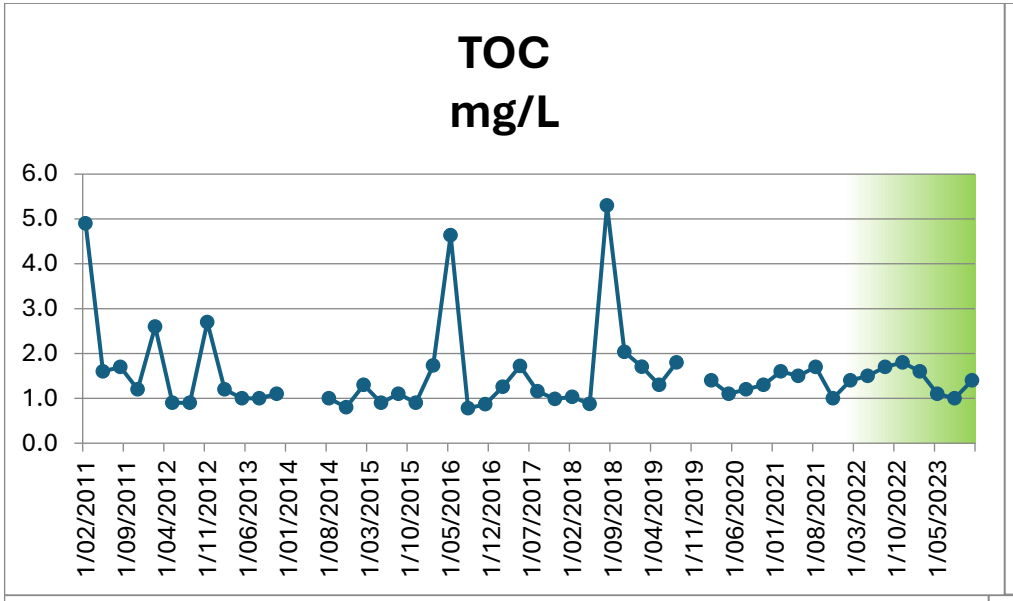

Redox Potential
mV
500
450
400
350
300
250
200
150
100
50
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

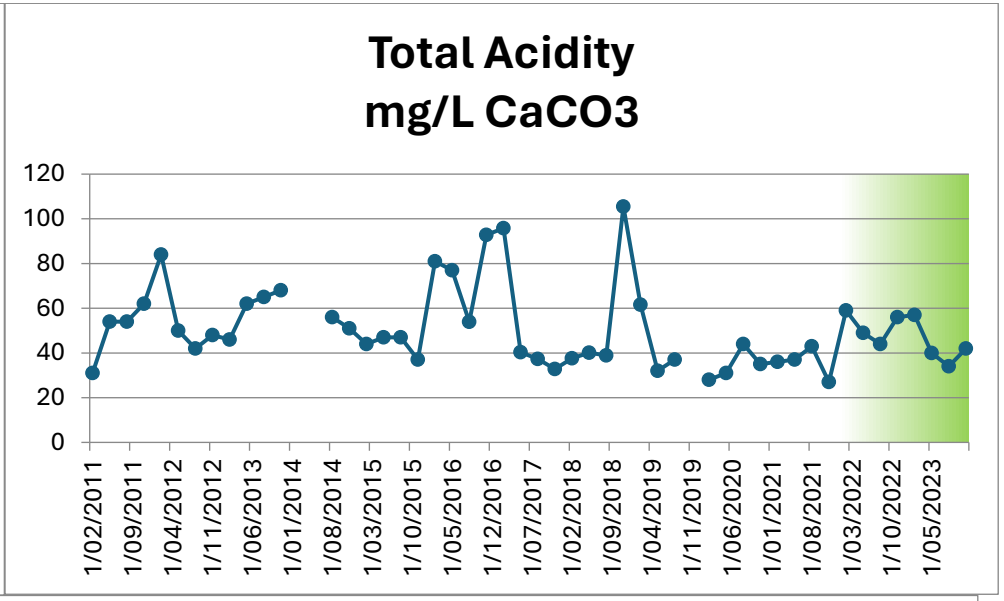

Sodium (Total)
mg/L
120
100
80
60
40
20
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

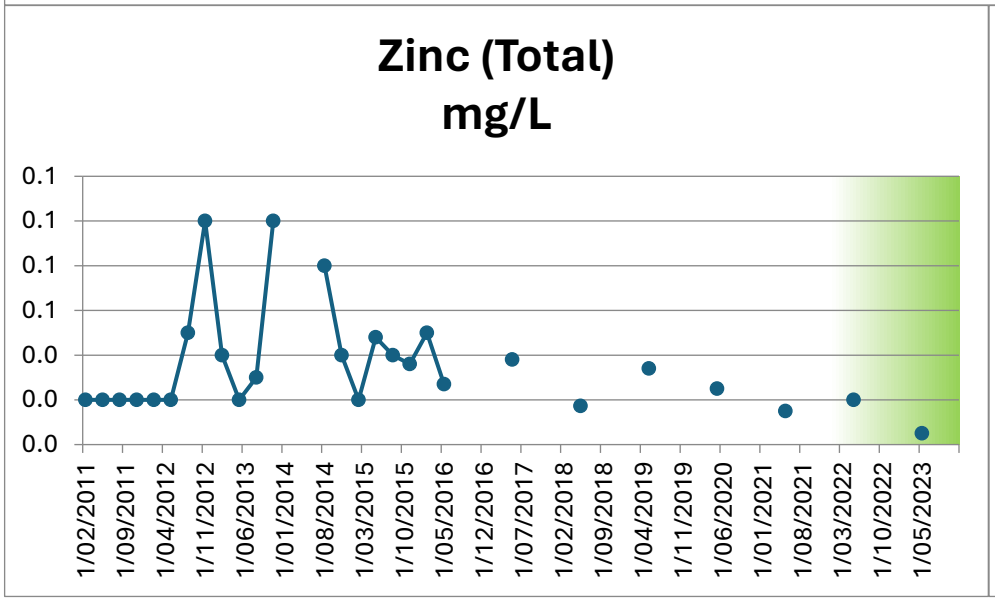

Sulphate
mg/L
120
100
80
60
40
20
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023

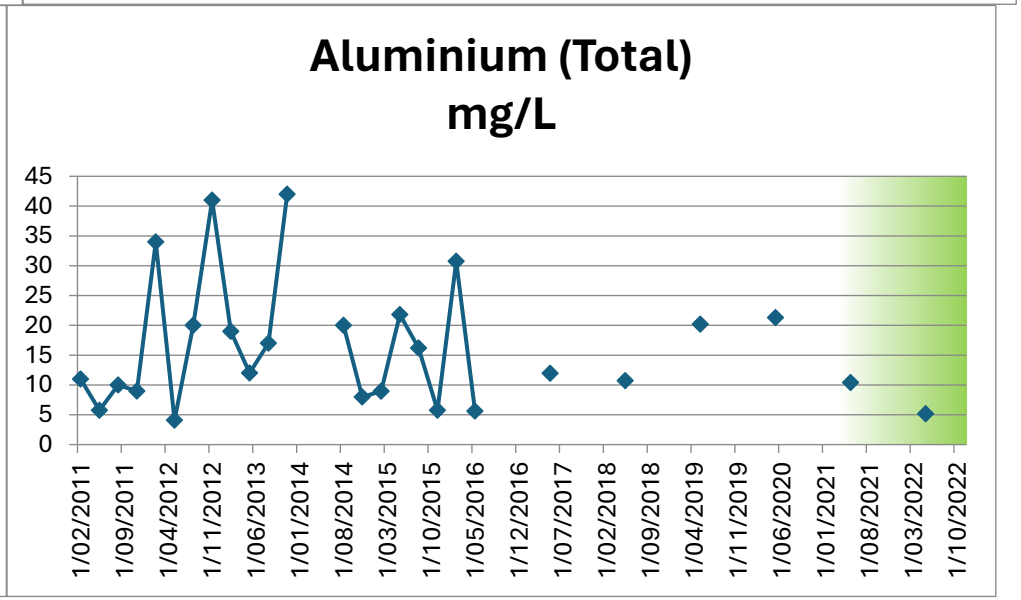

Temperature
C
30
25
20
15
10
5
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023


TKN
mg/L
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023


TOC
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023


Total Acidity
mg/L CaCO3
120
100
80
60
40
20
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023


Zinc (Total)
mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023


Aluminium (Total)
mg/L
45
40
35
30
25
20
15
10
5
0
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022

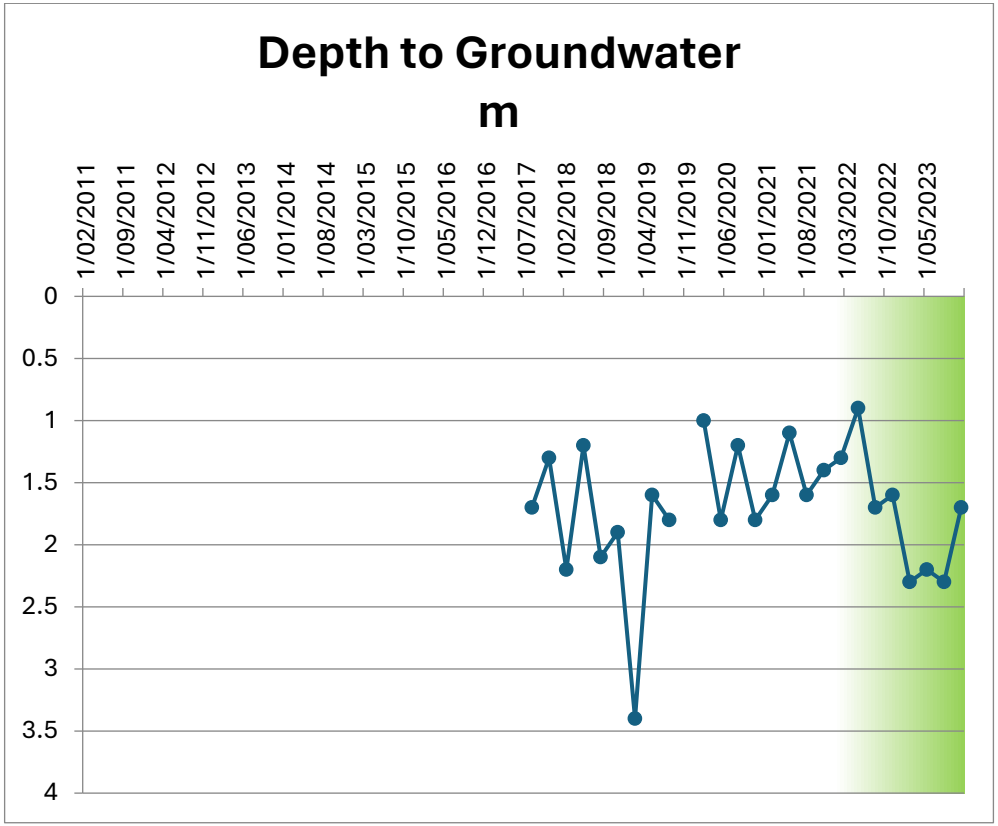
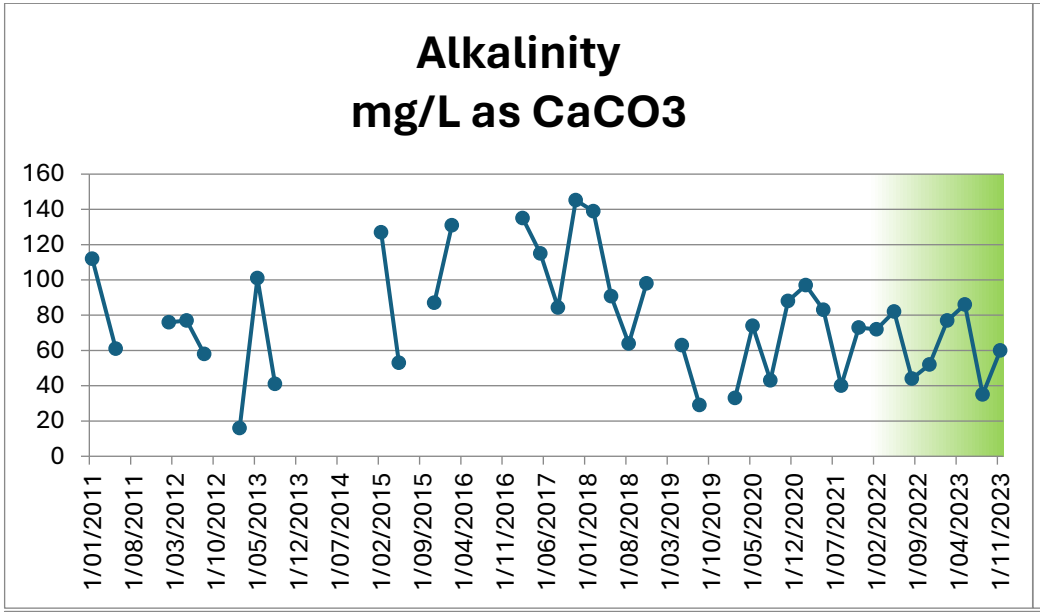
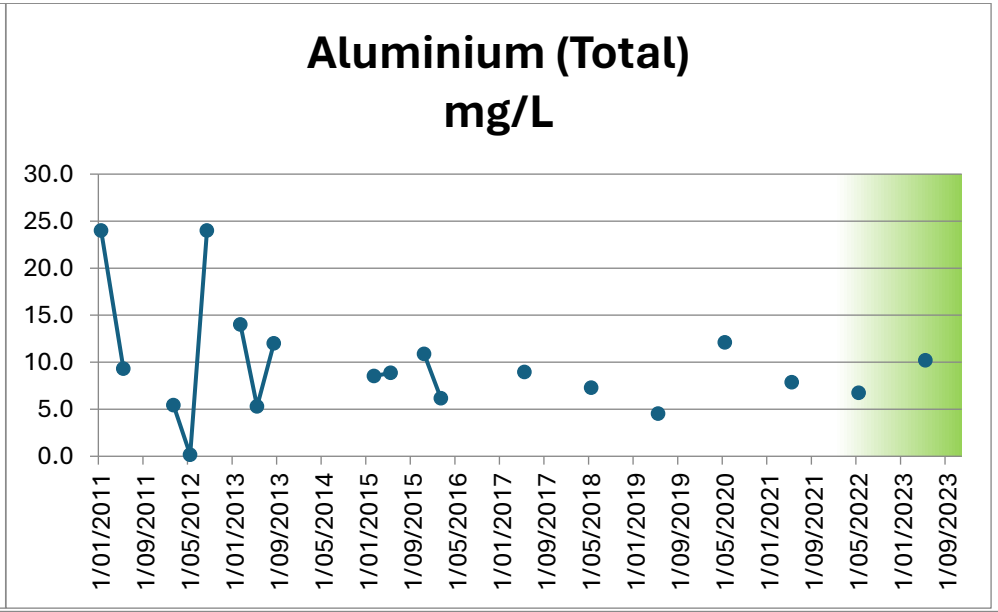
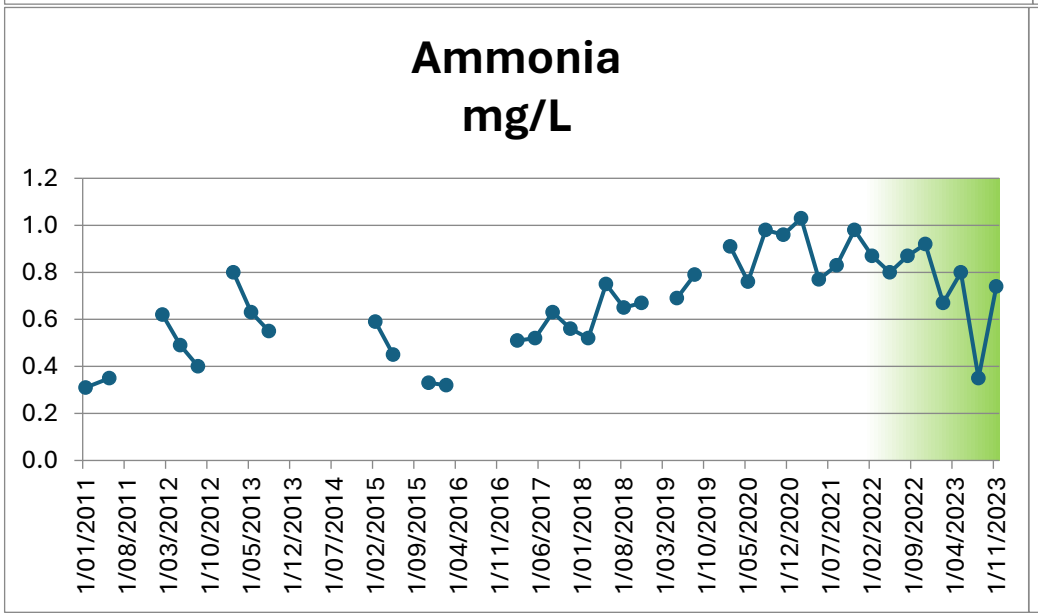

Depth to Groundwater
m
1/02/2011
1/09/2011
1/04/2012
1/11/2012
1/06/2013
1/01/2014
1/08/2014
1/03/2015
1/10/2015
1/05/2016
1/12/2016
1/07/2017
1/02/2018
1/09/2018
1/04/2019
1/11/2019
1/06/2020
1/01/2021
1/08/2021
1/03/2022
1/10/2022
1/05/2023
0
0.5
1
1.5
2
2.5
3
3.5
4

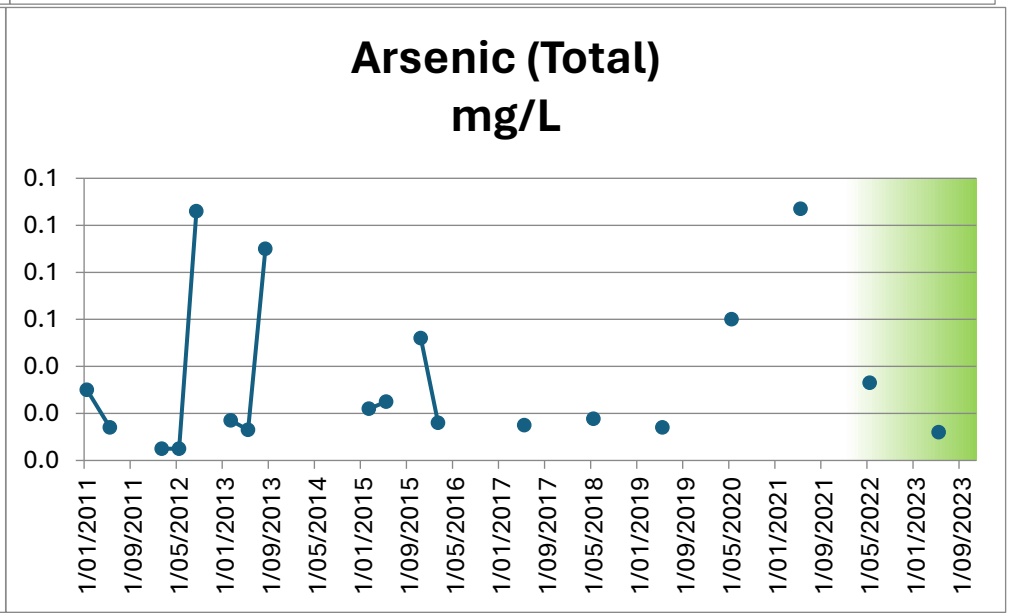
Table 23: Ground Water 17

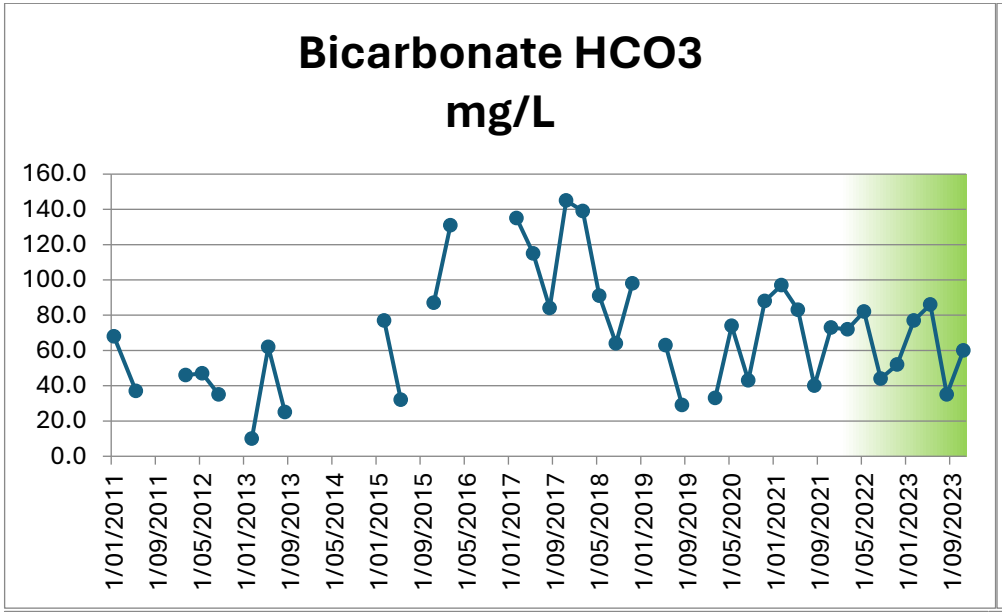
GW17	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µScm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride mg/L	Iron Total mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	Nitrate N mg/L	Nitrite N mg/L	Nitrogen Oxidised mg/L	Nitrogen Total mg/L	pH pH units	Phenol Alkalinity mg/L as CaCO3	Phosphorus Total mg/L	Potassium Total mg/L	Redox Potential mV	Sodium (Total) mg/L	Sulphate mg/L	Temperature C	TKN mg/L	TOC mg/L	Total Acidity mg/L CaCO3	Zinc (Total) mg/L	Depth to Groundwater m
31/01/2011	112	24.0	0.3	0.0	68.0	3.4	0.0	51.0	45.0	0.0	0.0	0.0	677	0.1	3.4	0.4	52.0	0.0	17.0	0.8	0.0	0.1	0.1	0.1	1.1	6.2		0.8	5.0	-30	45.0	174	25.6	1.1	3.1	85	0.1	
10/05/2011	61	9.3	0.4	0.0	37.0	5.4	0.0	26.0	36.0	0.0	0.0	0.0	514	0.0	3.6	0.2	26.0	0.0	9.3	0.3	0.0	0.1	0.1	0.1	1.2	5.3		0.3	5.0	118	35.0	96	21.3	1.2	6.3	37	0.0	
9/08/2011																																						
8/11/2011																																						
6/02/2012	76	5.4	0.6	0.0	46.0	10.0	0.0	30.0	36.0	0.0	0.0	0.0	481	0.0	3.1	0.1	21.0	0.0	9.7	0.2	0.0	0.1	0.0	0.1	2.1	5.5		0.4	5.0	31	45.0	99	24.9	2.1	25.0	208	0.0	
8/05/2012	77	0.2	0.5	0.0	47.0	14.0	0.0	14.0	35.0	0.0	0.0	0.0	406	0.0	4.7	0.1	1.4	0.0	4.9	0.3	0.0	0.0	0.1	0.1	2.0	6.0		0.1	5.0	127	24.0	43	22.0	1.9	38.0	338	0.0	
6/08/2012	58	24.0	0.4	0.1	35.0	11.0	0.0	19.0	41.0	0.1	0.1	0.0	504	0.2	3.4	0.1	80.0	0.0	6.0	0.4	0.0	0.1	0.1	0.2	2.3	5.6		0.4	5.0	29	22.0	19	19.3	2.2	19.0	260	0.2	
13/11/2012																																						
13/02/2013	16	14.0	0.8	0.0	10.0	6.6	0.0	26.0	35.0	0.0	0.0	0.0	462	0.0	4.4	0.0	28.0	0.0	7.6	0.3	0.0	0.0	0.0	0.1	2.1	5.6		0.2	5.0	-21	30.0	69	25.0	2.1	14.0	223	0.1	
14/05/2013	101	5.3	0.6	0.0	62.0	8.7	0.0	19.0	50.0	0.0	0.0	0.0	469	0.0	3.0	0.1	51.0	0.0	5.5	0.2	0.0	0.1	0.0	0.1	2.1	5.8		0.1	5.0	-35	26.0	44	21.5	2.0	28.0	182	0.1	
6/08/2013	41	12.0	0.6	0.1	25.0	12.0	0.0	16.0	90.0	0.0	0.0	0.0	430	0.0	4.2	0.1	77.0	0.0	4.3	0.2	0.0	0.0	0.0	0.1	2.0	5.8		0.2	5.0	6	28.0	44	18.9	1.9	22.0	395	0.1	
12/11/2013																																						
11/02/2014																																						
13/05/2014																																						
12/08/2014																																						
10/11/2014																																						
9/02/2015	127	8.5	0.6	0.0	77.0	4.8	0.0	39.0	40.0	0.0	0.0	0.0	510	0.0	3.6	0.3	23.2	0.0	9.4	0.3	0.0	0.1	0.0	0.1	2.3	6.2		0.8	5.0	-22	32.0	64	24.7	2.2	12.0	147	0.1	
11/05/2015	53	8.9	0.5	0.0	32.0	6.6	0.0	20.0	30.0	0.0	0.0	0.0	320	0.0	3.9	0.1	24.2	0.0	4.8	0.2	0.0	0.0	0.0	0.0	1.7	5.8		0.4	5.0	37	25.0	39	21.9	1.7	15.0	212	0.1	
11/08/2015																																						
10/11/2015	87	10.9	0.3	0.1	87.0	3.3	0.0	24.0	33.0	0.0	0.0	0.0	334	0.0	2.8	0.2	35.9	0.0	7.4	0.3	0.0	0.0	0.0	0.0	1.7	5.9		0.4	5.0	-15	28.0	48	22.0	1.7	10.5	191	0.1	
8/02/2016	131	6.2	0.3	0.0	131.0	2.1	0.0	43.4	34.0	0.0	0.0	0.0	470	0.0	3.2	0.2	17.2	0.0	8.7	0.3	0.0	0.0	0.0	0.0	1.5	6.1		0.7	5.0	24	30.0	44	24.8	1.5	12.2	240	0.0	
9/05/2016																																						
9/08/2016																																						
7/11/2016																																						
7/02/2017	135		0.5		135.0	3.6		44.4	35.0				519		4.6	0.3			9.5			0.0	0.0	0.0	1.5	6.2		0.3	5.0	49	33.7	51	26.9	1.5	9.8	212		
8/05/2017	115	8.9	0.5	0.0	115.0	3.6	0.0	35.7	36.0	0.0	0.0	0.0	455	0.0	3.8	0.2	24.4	0.0	8.2	0.3	0.0	0.0	0.0	0.1	1.4	5.9		0.3	5.0	84	34.8	59	22.5	1.4	11.2	156	0.0	
8/08/2017	84		0.6		84.0	3.0		27.1	42.5				373		3.6	0.1			5.7			0.0	0.0	0.0	1.8	5.8		0.4	5.0	170	28.8	33	19.8	1.7	16.6	200		2.2
7/11/2017	145		0.6		145.0	2.7		50.1	40.0				580		2.9	0.2			12.4			0.0	0.0	0.0	1.3	6.0		0.3	5.0	60	45.9	71	22.2	1.3	10.0	163		2.2
13/02/2018	139		0.5		139.0	1.2		49.2	41.0				548		3.9	0.3			10.8			0.0	0.0	0.0	1.2	6.2		0.3	5.0	5	40.6	68	25.8	1.2	10.6	138		2.5
8/05/2018	91	7.3	0.8	0.0	91.0	3.0	0.0	33.1	37.0	0.0	0.0	0.0	430	0.0	3.4	0.2	24.2	0.0	7.5	0.3	0.0	0.0	0.0	0.0	1.8	5.9		0.4	3.4	76	34.8	59	22.5	1.7	15.8	167	0.0	2.1
14/08/2018	64		0.7		64.0	7.8		39.6	34.0				431		3.8	0.1			7.5			0.0	0.0	0.0	1.8	5.8		0.5	3.6	236	33.5	92	20.0	1.8	34.0	131		2.4
13/11/2018	98		0.7		98.0	3.6		48.5	31.0				558		3.7	0.2			9.4			0.0	0.0	0.0	1.6	5.8		0.5	3.7	54	35.0	132	22.1	1.6	12.7	219		2.3
13/02/2019																																						
14/05/2019	63	4.5	0.7	0.0	63.0	4.8	0.0	55.0	18.0	0.0	0.0	0.0	584	0.0	3.7	0.2	35.5	0.0	11.0	0.5	0.0	0.0	0.0	0.0	1.4	5.8		0.6	4.5	53	40.0	184	22.7	1.4	14.0	200	0.0	2.1
13/08/2019	29		0.8		29.0	4.8		41.0	28.0				473		3.8	0.2			8.5			0.0	0.0	0.0	2.1	5.6		0.5	3.3	274	31.0	147	20.6	2.1	18.0	150		2.2
12/11/2019																																						
25/02/2020	33.0		0.9		33.0	7.5		44.0	21.0				562.0		3.5	0.2			8.5			0.0	0.0	0.0	1.8	5.5	0.0	0.2	3.8	17.7	26.0	196.0	24.7	1.8	12.0	190.0		1.8
12/05/2020	74.0	12.1	0.8	0.1	74.0	7.8	0.0	56.0	30.0	0.0	0.0	0.0	672.0	0.0	3.0	0.1	60.8	0.0	12.0	0.6	0.0	0.0	0.0	0.0	2.1	5.8	0.0	0.3	4.2	42.6	38.0	220.0	22.5	2.1	16.0	190.0	0.1	2.3
11/08/2020	43.0		1.0		43.0	6.0		46.0	26.0				510.0		3.6	0.1			10.0			0.0	0.0	0.0	2.2	5.5	0.0	0.2	3.9	102.9	32.0	147.0	20.3	2.1	16.0	170.0		2.0
10/11/2020	88.0		1.0		88.0	3.6		52.0	25.0				651.0		3.4	0.2			13.0			0.0	0.0	0.0	1.9	5.7	0.0	0.7	4.1	49.0	35.0	196.0	21.6	1.8	14.0	180.0		2.3
9/02/2021	97.0		1.0		97.0	6.3		48.0	28.0				600.0		3.1	0.2			12.0			0.0	0.0	0.0	2.1	5.6	0.0	0.3	4.1	33.3	34.0	154.0	23.7	2.1	18.0	190.0		2.1
11/05/2021	83.0	7.9	0.8	0.1	83.0	4.2	0.0	37.0	33.0	0.0	0.0	0.0	468.0	0.0	2.7	0.2	68.3	0.0	8.3	0.4	0.0	0.0	0.0	0.0	2.0	5.8	0.0	0.4	3.3	46.6	30.0	104.0	22.2	2.0	15.0	190.0	0.0	1.9
10/08/2021	40.0		0.8		40.0	3.0		46.0	30.0				490.0		3.0	0.1			9.1			0.0	0.0	0.0	1.8	5.6	0.0	0.9	3.4	87.8	27.0	136.0	19.1	1.8	10.0	130.0		2.2
8/11/2021	73.0		1.0		73.0	6.3		49.0	33.0				599.0		2.7	0.2			11.0			0.0	0.0	0.0	1.7	5.7	0.0	0.3	3.6	33.5	27.0	170.0	21.5	1.7	15.0	230.0		2.1
8/02/2022	72.0		0.9		72.0	5.1		39.0	39.0				489.0		2.6	0.2			7.9			0.0	0.0	0.0	1.6	5.7	0.0	0.3	3.1	47.2	23.0	121.0	23.2	1.6	15.0	210.0		1.8
10/05/2022	82.0	6.7	0.8	0.0	82.0	3.3	0.0	34.0	30.0	0.0	0.0	0.0	436.0	0.0	3.2	0.2	34.4	0.0	7.4	0.3	0.0	0.0	0.0	0.0	1.9	5.8	0.0	0.2	2.8	31.4	25.0	79.0	21.3	1.9	13.0	180.0	0.0	1.7
9/08/2022	44.0		0.9		44.0	3.6		25.0	25.0				363.0		3.4	0.1			4.8			0.0	0.0	0.0	2.5	5.7	0.0	0.5	2.3	69.9	22.0	71.0	18.9	2.5	17.0	190.0		2.0
8/11/2022	52.0		0.9		52.0	4.2		39.0	20.0				485.0		3.3	0.2			6.6			0.0	0.0	0.0	1.9	5.7	0.0	0.8	2.8	39.6	22.0	124.0	20.7	1.9	15.0	170.0		2.0
13/02/2023	77.0		0.7		77.0	1.2		55.0	31.0				544.0		3.4	0.2			9.9			0.0	0.0	0.0	1.8	5.7		0.2	3.7	26.0	25.0	151.0	24.5	1.8	10.0	130.0		2.3
8/05/2023	86.0	10.2	0.8	0.0	86.0	2.4	0.0	51.0	25.0	0.0	0.0	0.0	520.0	0.0	4.5	0.2	31.2	0.0	9.5	0.5	0.0	0.0	0.0	0.0	1.6	6.0		0.3	3.5	-9.6	24.0	130.0	21.5	1.6	11.0	110.0	0.1	2.4
8/08/2023	35.0		0.4		35.0	5.7		45.0	22.0				420.0		5.2	0.2			7.0			0.1	0.0	0.1	1.7	5.7		0.2	3.0	98.0	19.0	120.0	19.2	157.0	10.0	78.0		2.5
13/11/2023	60.0		0.7		60.0	5.7		62.0	25.0				586.0		3.6	0.2			9.2			0.1	0.0	0.1	1.6	5.7		0.3	3.6	2.8	22.0	196.0	22.2	1.5	13.0	130.0		2.4
2023 Min	**35.00**	**10.20**	**0.35**	**0.01**	**35.00**	**1.20**	**0.00**	**45.00**	**22.00**	**0.01**	**0.01**	**0.01**	**420.00**	**0.02**	**3.40**	**0.18**	**31.20**	**0.01**	**7.00**	**0.46**	**0.01**	**0.02**	**0.02**	**0.02**	**1.59**	**5.70**	**0.00**	**0.16**	**3.00**	**-9.60**	**19.00**	**120.00**	**19.20**	**1.52**	**10.00**	**78.00**	**0.08**	**2.30**
2023 Max	**86.00**	**10.20**	**0.80**	**0.01**	**86.00**	**5.70**	**0.00**	**62.00**	**31.00**	**0.01**	**0.01**	**0.01**	**586.00**	**0.02**	**5.20**	**0.23**	**31.20**	**0.01**	**9.90**	**0.46**	**0.01**	**0.08**	**0.02**	**0.08**	**1.83**	**6.00**	**0.00**	**0.31**	**3.70**	**98.00**	**25.00**	**196.00**	**24.50**	**157.00**	**13.00**	**130.00**	**0.08**	**2.50**
2023 Mean	**64.50**	**10.20**	**0.64**	**0.01**	**64.50**	**3.75**	**0.00**	**53.25**	**25.75**	**0.01**	**0.01**	**0.01**	**517.50**	**0.02**	**4.18**	**0.21**	**31.20**	**0.01**	**8.90**	**0.46**	**0.01**	**0.05**	**0.02**	**0.05**	**1.67**	**5.78**	**#DIV/0!**	**0.25**	**3.45**	**29.30**	**22.50**	**149.25**	**21.85**	**40.49**	**11.00**	**112.00**	**0.08**	**2.40**
Long-term Average	**77.43**	**9.80**	**0.67**	**0.03**	**69.97**	**5.31**	**0.00**	**38.92**	**33.96**	**0.02**	**0.02**	**0.01**	**497.94**	**0.04**	**3.55**	**0.17**	**37.67**	**0.01**	**8.72**	**0.34**	**0.01**	**0.03**	**0.03**	**0.04**	**1.79**	**5.79**	**0.00**	**0.39**	**4.18**	**53.36**	**30.50**	**105.11**	**22.21**	**5.85**	**15.21**	**182.14**	**0.07**	**2.16**

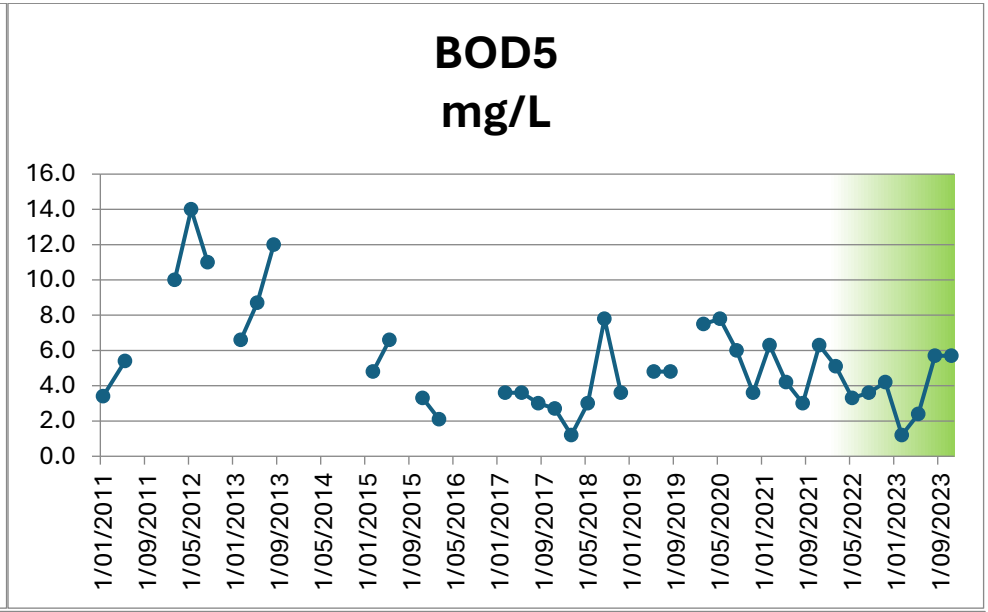

Alkalinity
mg/L as CaCO3
160
140
120
100
80
60
40
20
0
1/01/2011
1/08/2011
1/03/2012
1/10/2012
1/05/2013
1/12/2013
1/07/2014
1/02/2015
1/09/2015
1/04/2016
1/11/2016
1/06/2017
1/01/2018
1/08/2018
1/03/2019
1/10/2019
1/05/2020
1/12/2020
1/07/2021
1/02/2022
1/09/2022
1/04/2023
1/11/2023

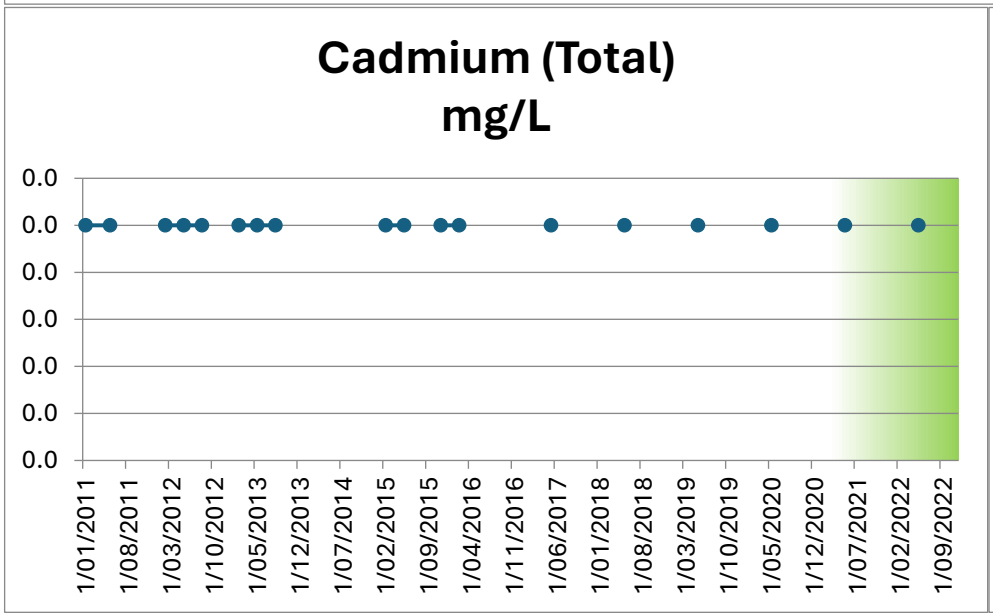

Aluminium (Total)
mg/L
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

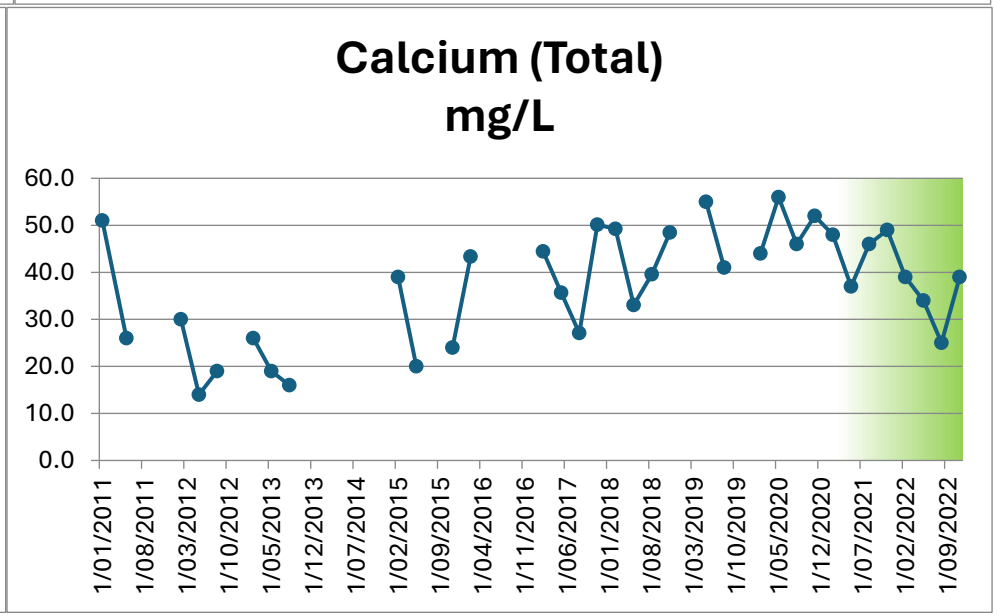

Ammonia
mg/L
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/01/2011
1/08/2011
1/03/2012
1/10/2012
1/05/2013
1/12/2013
1/07/2014
1/02/2015
1/09/2015
1/04/2016
1/11/2016
1/06/2017
1/01/2018
1/08/2018
1/03/2019
1/10/2019
1/05/2020
1/12/2020
1/07/2021
1/02/2022
1/09/2022
1/04/2023
1/11/2023

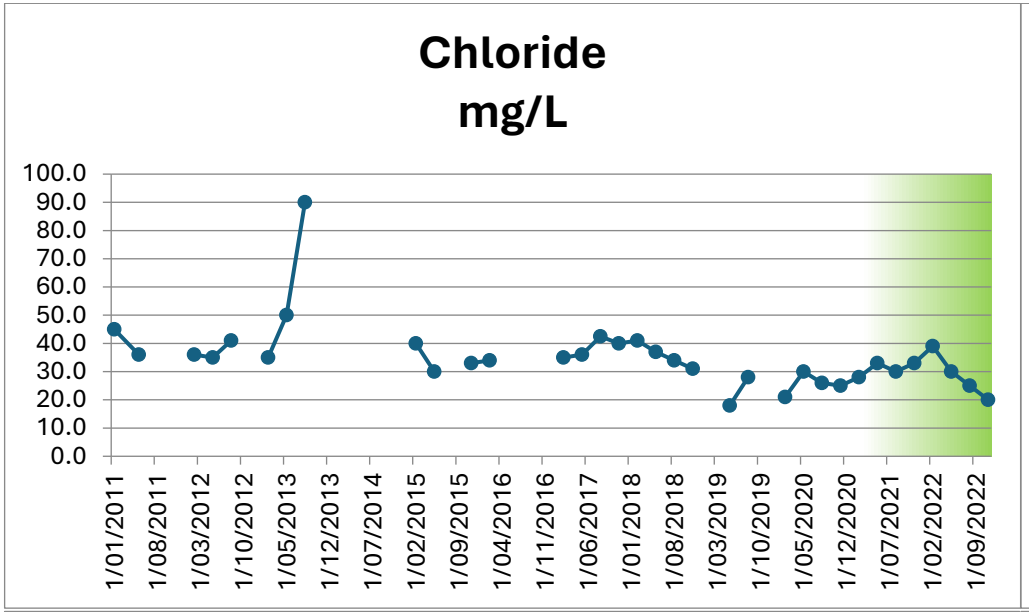

Arsenic (Total)
mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

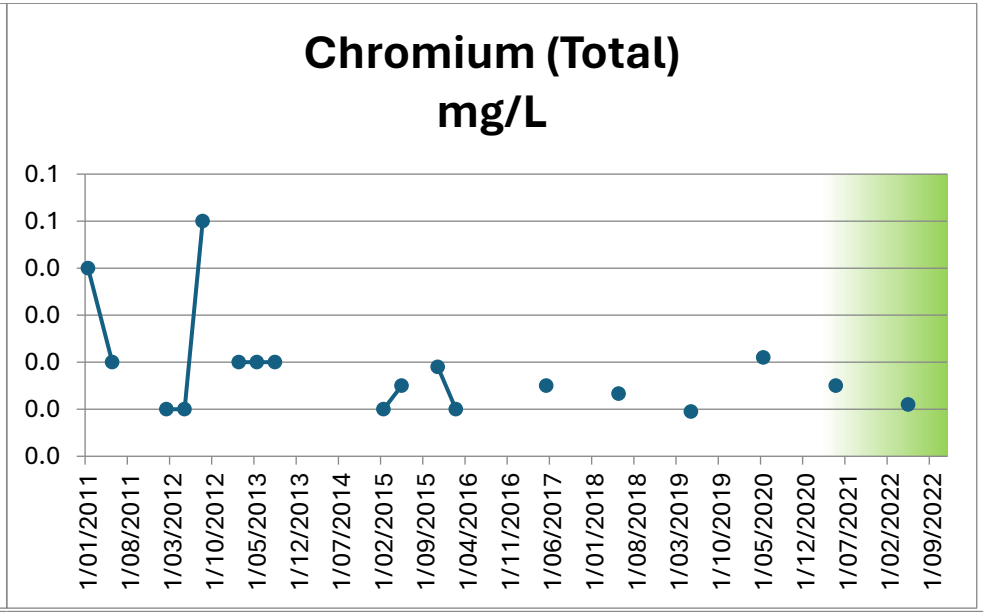

Bicarbonate HCO3
mg/L
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

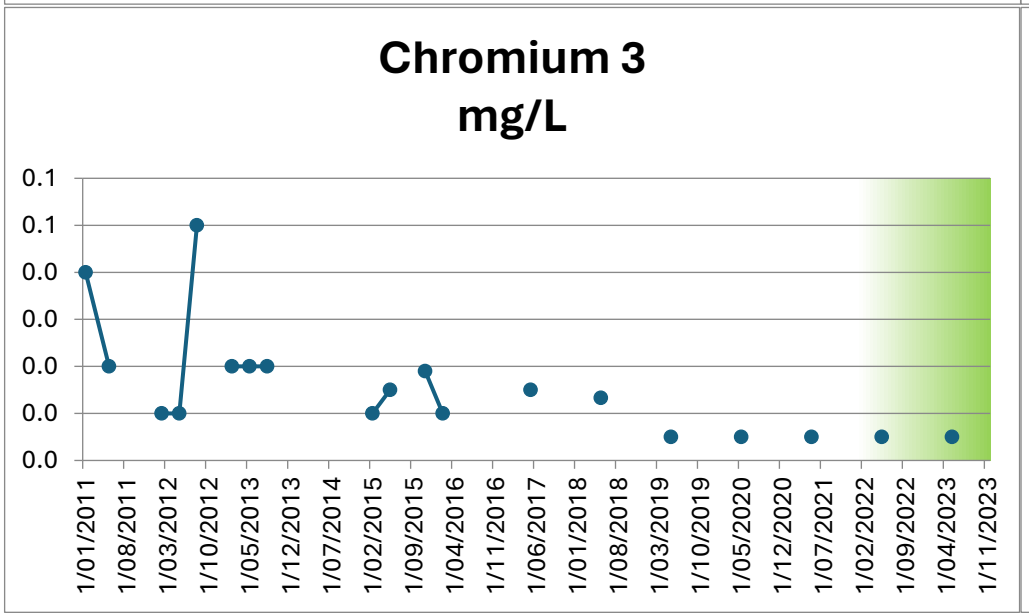

BOD5
mg/L
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

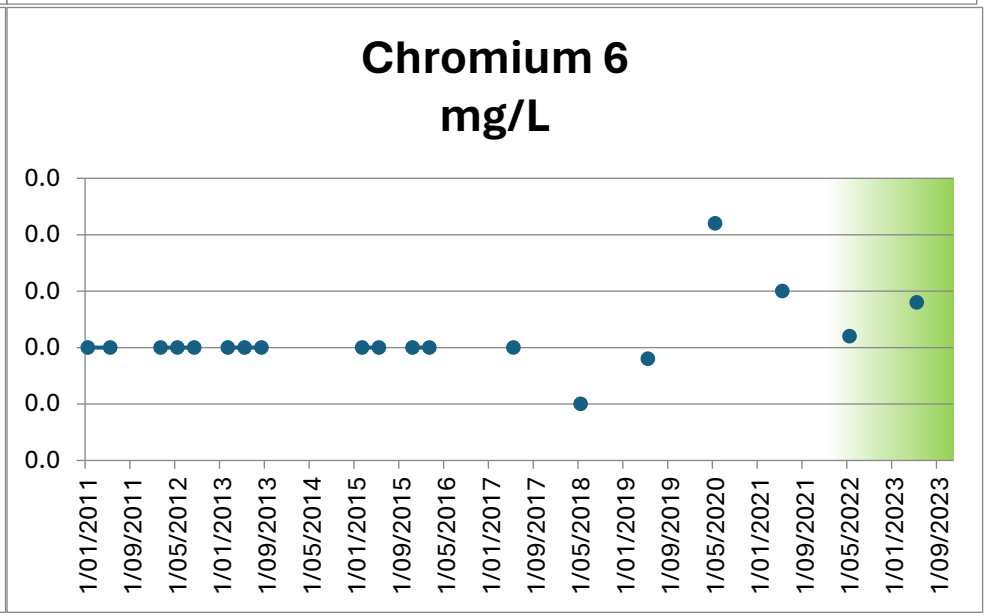

Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/08/2011
1/03/2012
1/10/2012
1/05/2013
1/12/2013
1/07/2014
1/02/2015
1/09/2015
1/04/2016
1/11/2016
1/06/2017
1/01/2018
1/08/2018
1/03/2019
1/10/2019
1/05/2020
1/12/2020
1/07/2021
1/02/2022
1/09/2022

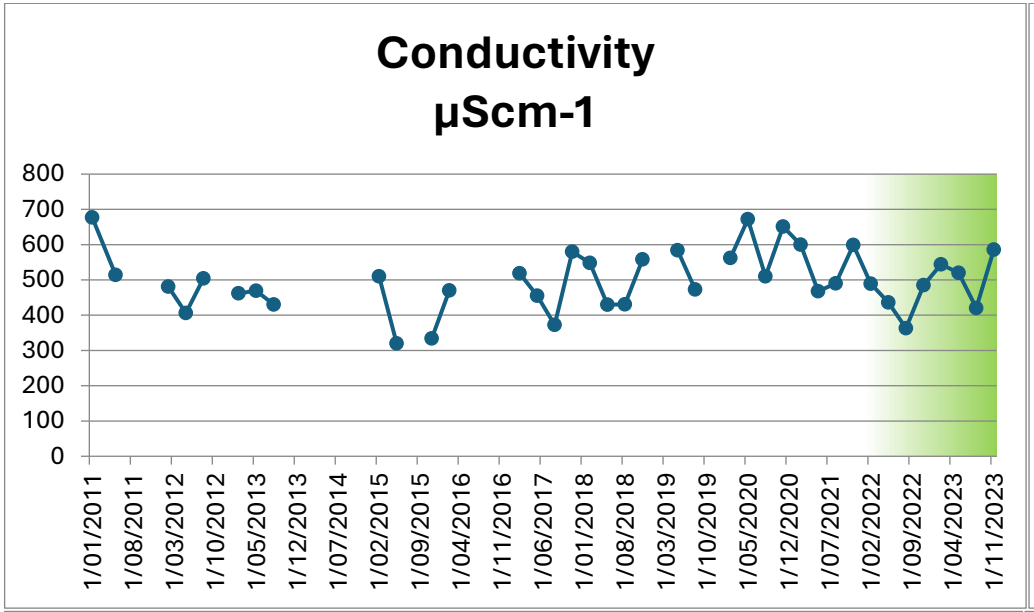

Calcium (Total)
mg/L
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1/01/2011
1/08/2011
1/03/2012
1/10/2012
1/05/2013
1/12/2013
1/07/2014
1/02/2015
1/09/2015
1/04/2016
1/11/2016
1/06/2017
1/01/2018
1/08/2018
1/03/2019
1/10/2019
1/05/2020
1/12/2020
1/07/2021
1/02/2022
1/09/2022

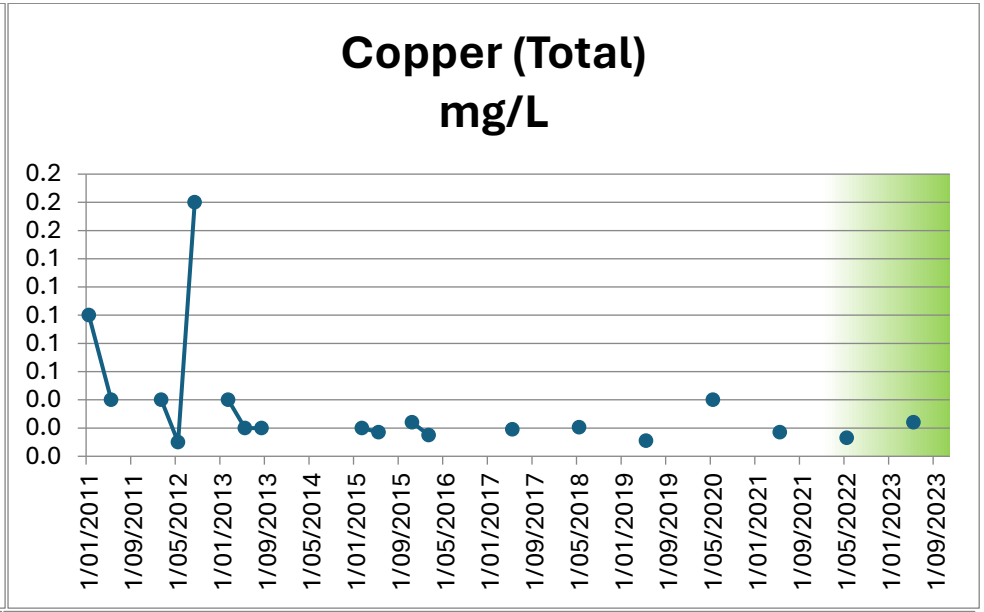

Chloride
mg/L
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1/01/2011
1/08/2011
1/03/2012
1/10/2012
1/05/2013
1/12/2013
1/07/2014
1/02/2015
1/09/2015
1/04/2016
1/11/2016
1/06/2017
1/01/2018
1/08/2018
1/03/2019
1/10/2019
1/05/2020
1/12/2020
1/07/2021
1/02/2022
1/09/2022

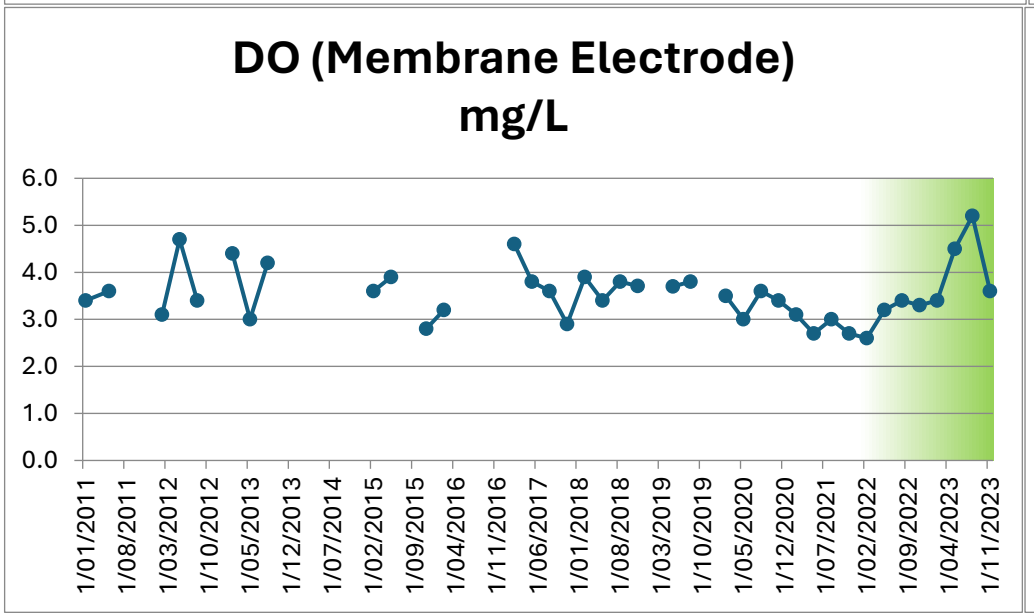

Chromium (Total)
mg/L
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/08/2011
1/03/2012
1/10/2012
1/05/2013
1/12/2013
1/07/2014
1/02/2015
1/09/2015
1/04/2016
1/11/2016
1/06/2017
1/01/2018
1/08/2018
1/03/2019
1/10/2019
1/05/2020
1/12/2020
1/07/2021
1/02/2022
1/09/2022

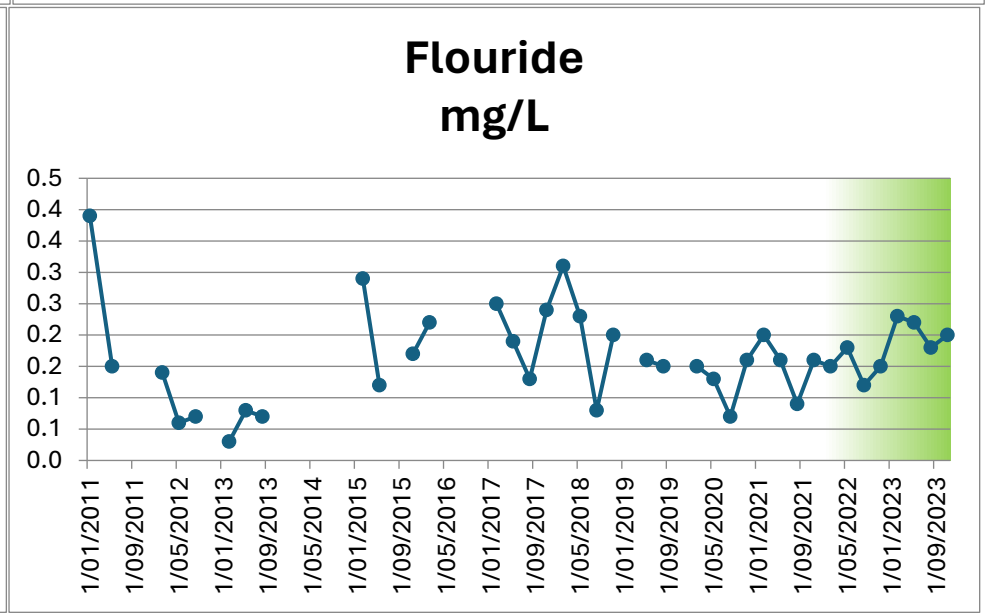

Chromium 3
mg/L
0.1
0.1
0.0
0.0
0.0
0.0
1/01/2011
1/08/2011
1/03/2012
1/10/2012
1/05/2013
1/12/2013
1/07/2014
1/02/2015
1/09/2015
1/04/2016
1/11/2016
1/06/2017
1/01/2018
1/08/2018
1/03/2019
1/10/2019
1/05/2020
1/12/2020
1/07/2021
1/02/2022
1/09/2022
1/04/2023
1/11/2023

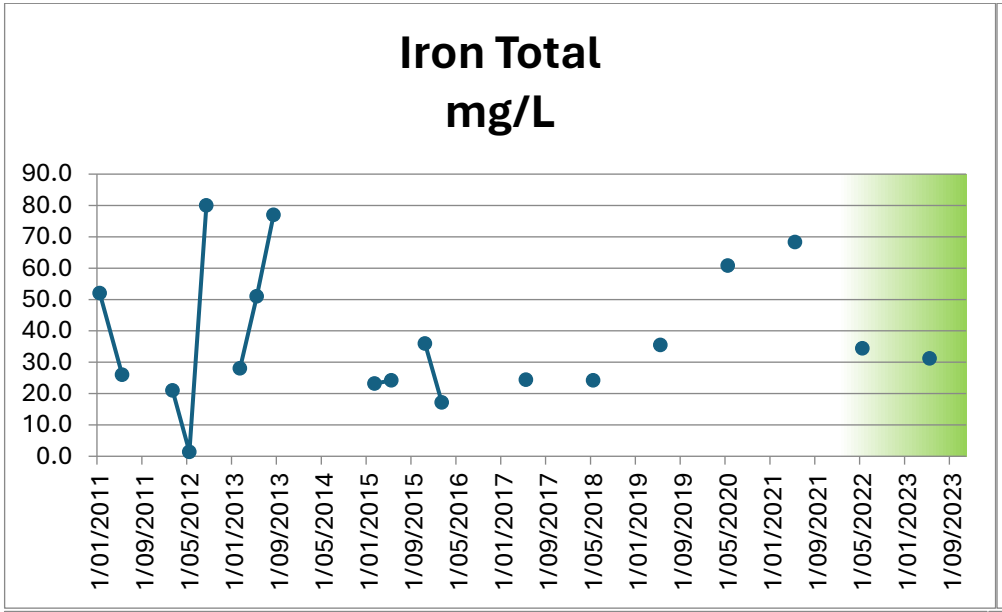

Chromium 6
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

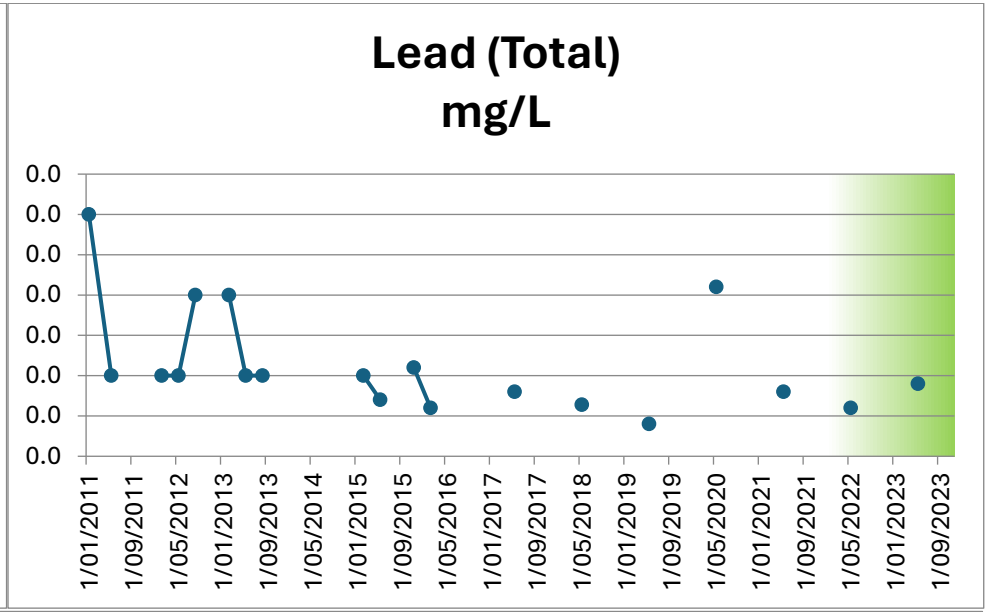

Conductivity
µScm-1
800
700
600
500
400
300
200
100
0
1/01/2011
1/08/2011
1/03/2012
1/10/2012
1/05/2013
1/12/2013
1/07/2014
1/02/2015
1/09/2015
1/04/2016
1/11/2016
1/06/2017
1/01/2018
1/08/2018
1/03/2019
1/10/2019
1/05/2020
1/12/2020
1/07/2021
1/02/2022
1/09/2022
1/04/2023
1/11/2023

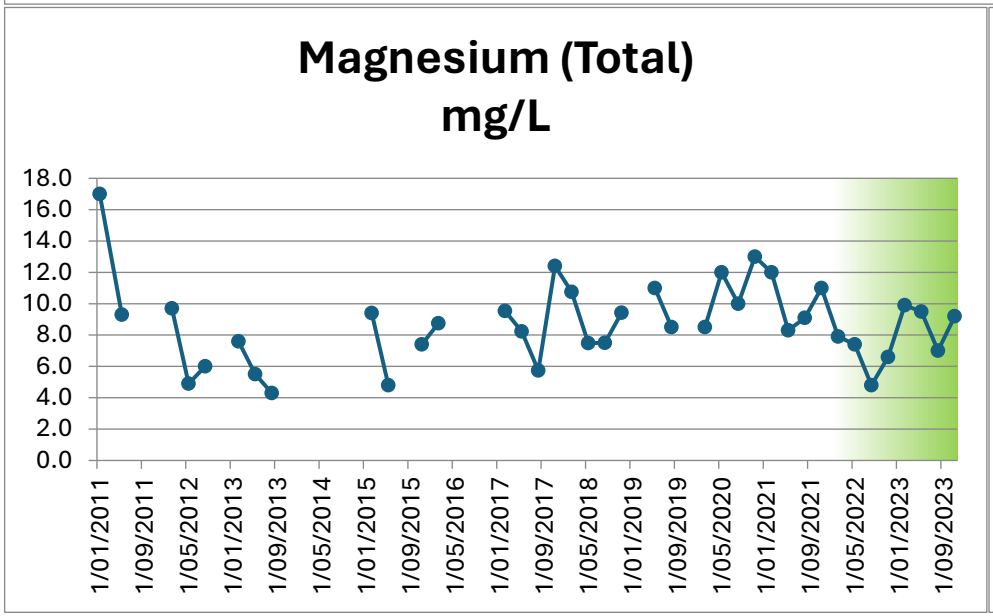

Copper (Total)
mg/L
0.2
0.2
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

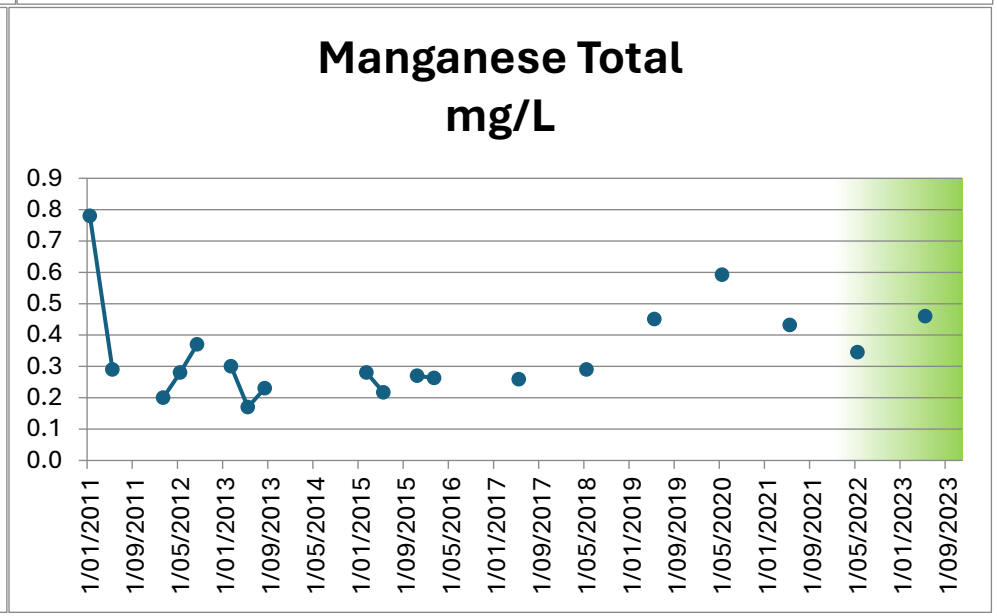

DO (Membrane Electrode)
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/08/2011
1/03/2012
1/10/2012
1/05/2013
1/12/2013
1/07/2014
1/02/2015
1/09/2015
1/04/2016
1/11/2016
1/06/2017
1/01/2018
1/08/2018
1/03/2019
1/10/2019
1/05/2020
1/12/2020
1/07/2021
1/02/2022
1/09/2022
1/04/2023
1/11/2023

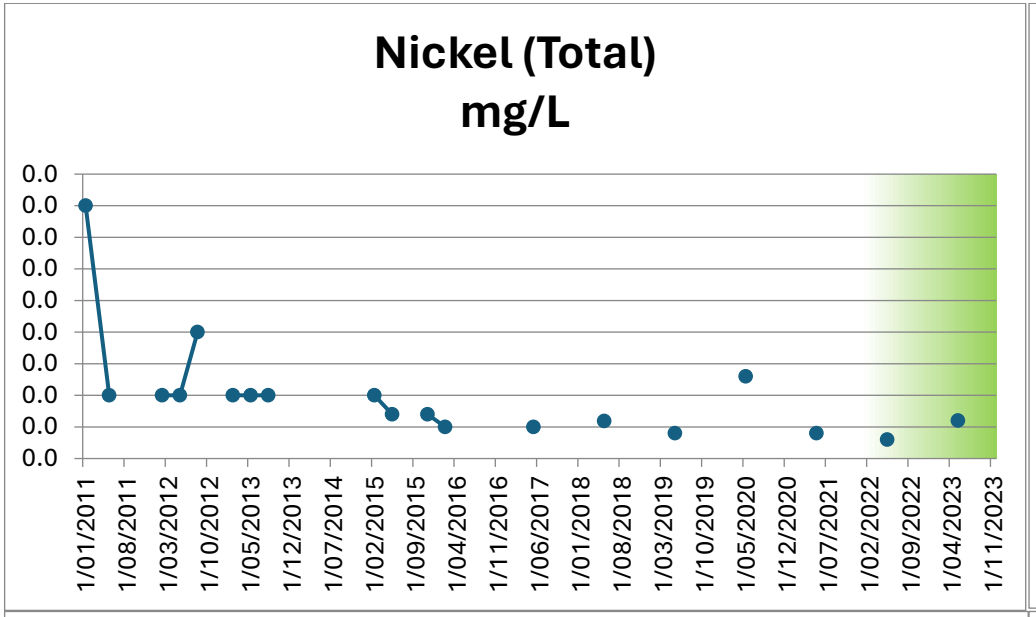

Flouride
mg/L
0.5
0.4
0.4
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

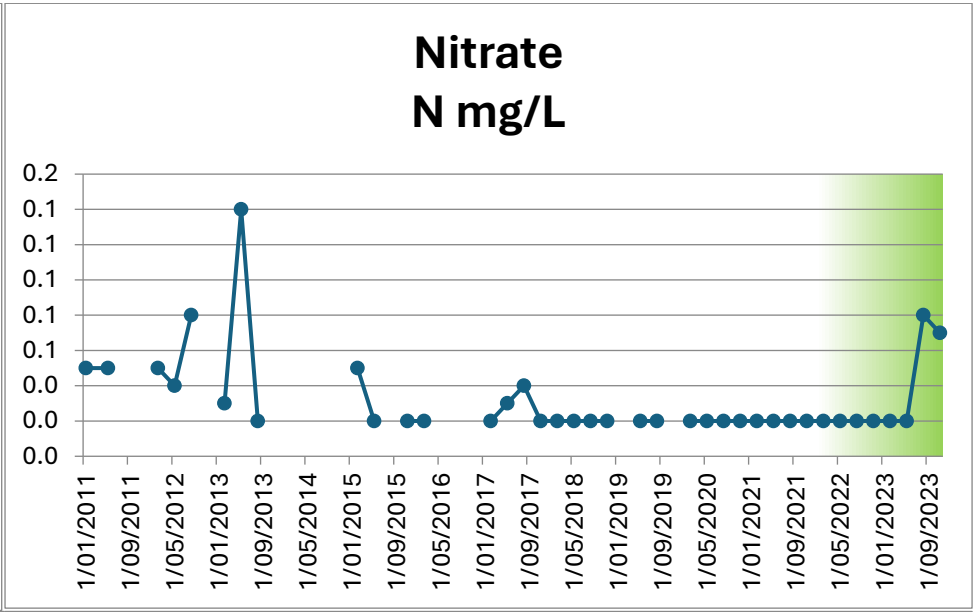

Iron Total
mg/L
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

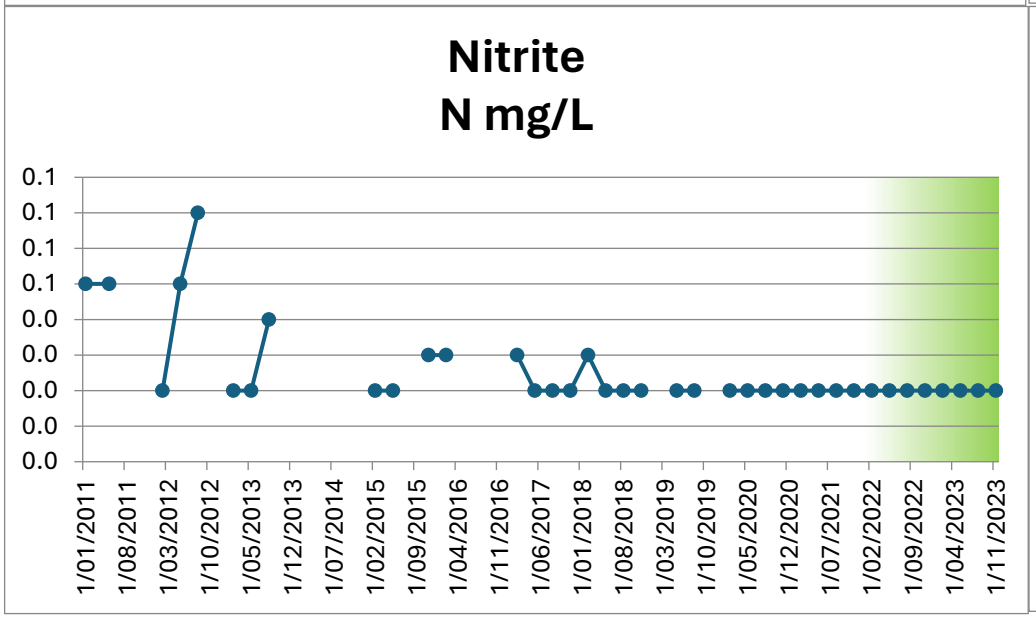

Lead (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

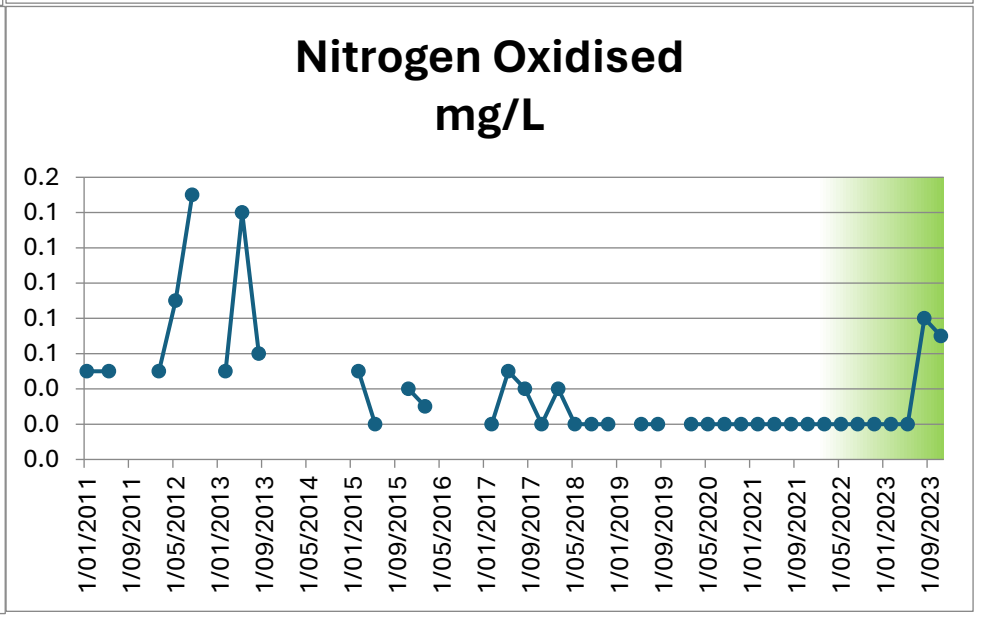

Magnesium (Total)
mg/L
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

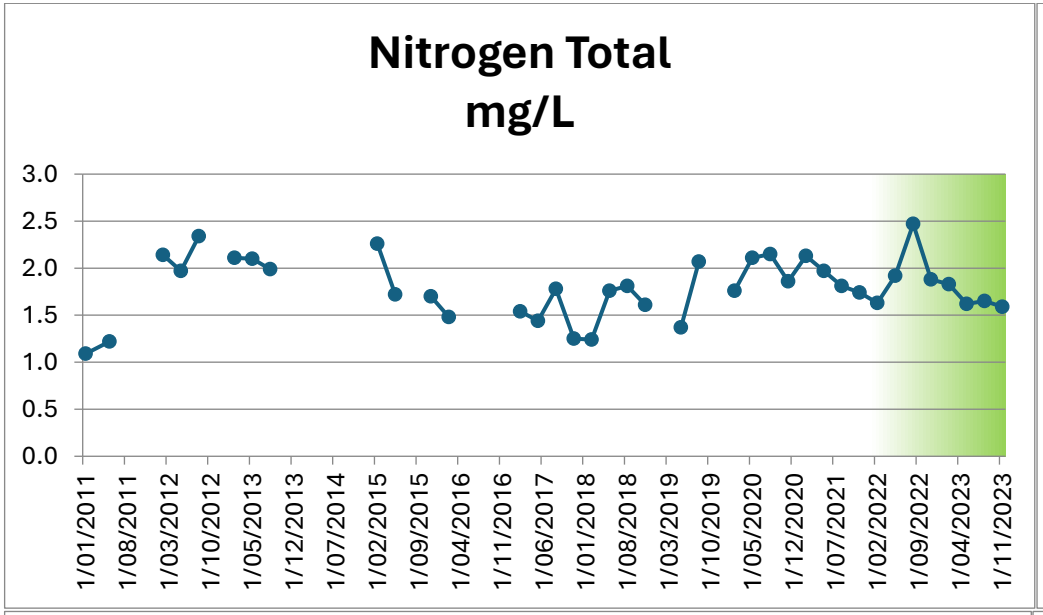

Manganese Total
mg/L
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

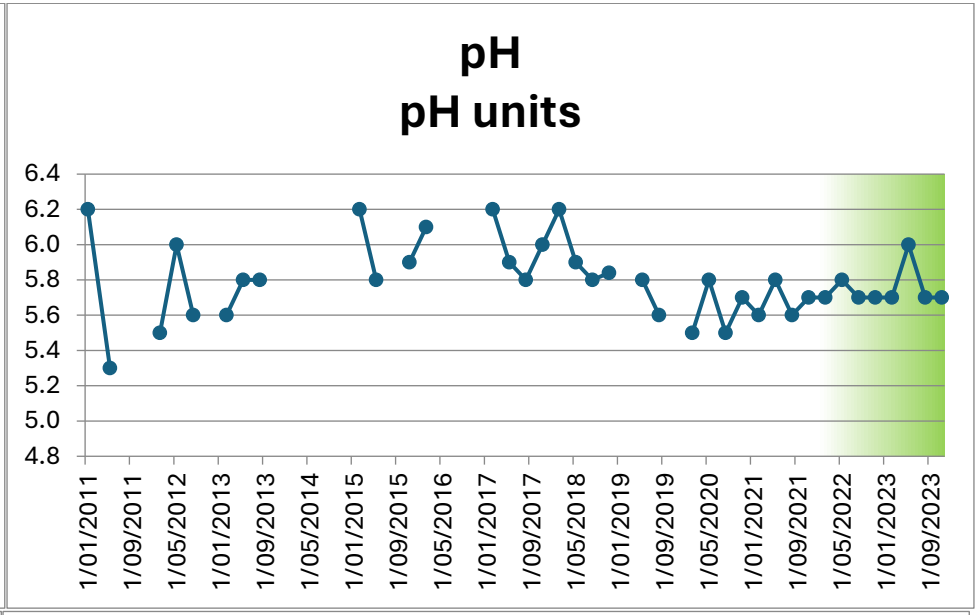

Nickel (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/08/2011
1/03/2012
1/10/2012
1/05/2013
1/12/2013
1/07/2014
1/02/2015
1/09/2015
1/04/2016
1/11/2016
1/06/2017
1/01/2018
1/08/2018
1/03/2019
1/10/2019
1/05/2020
1/12/2020
1/07/2021
1/02/2022
1/09/2022
1/04/2023
1/11/2023

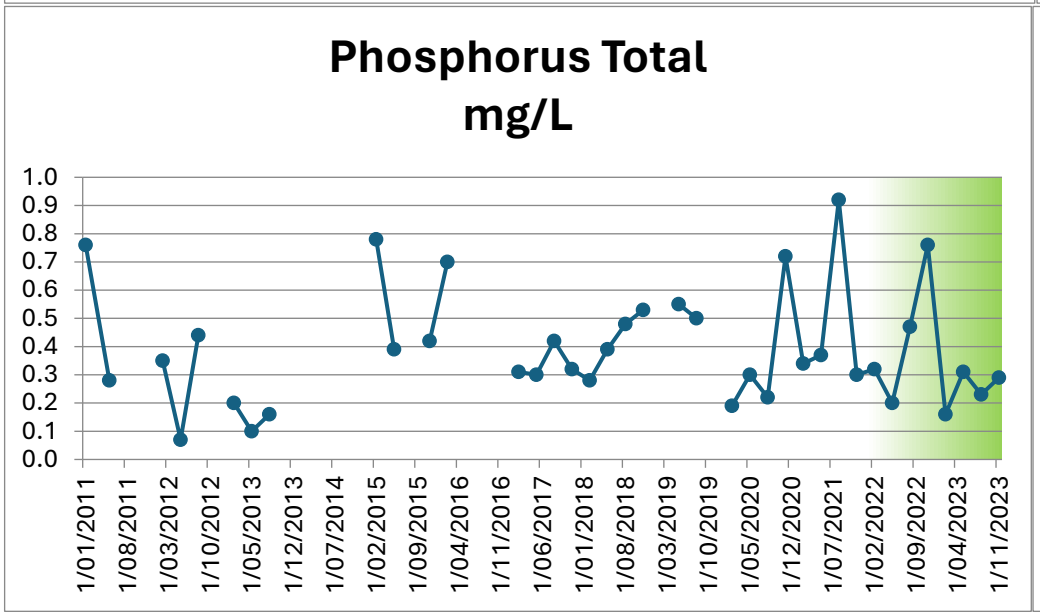

Nitrate
N mg/L
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

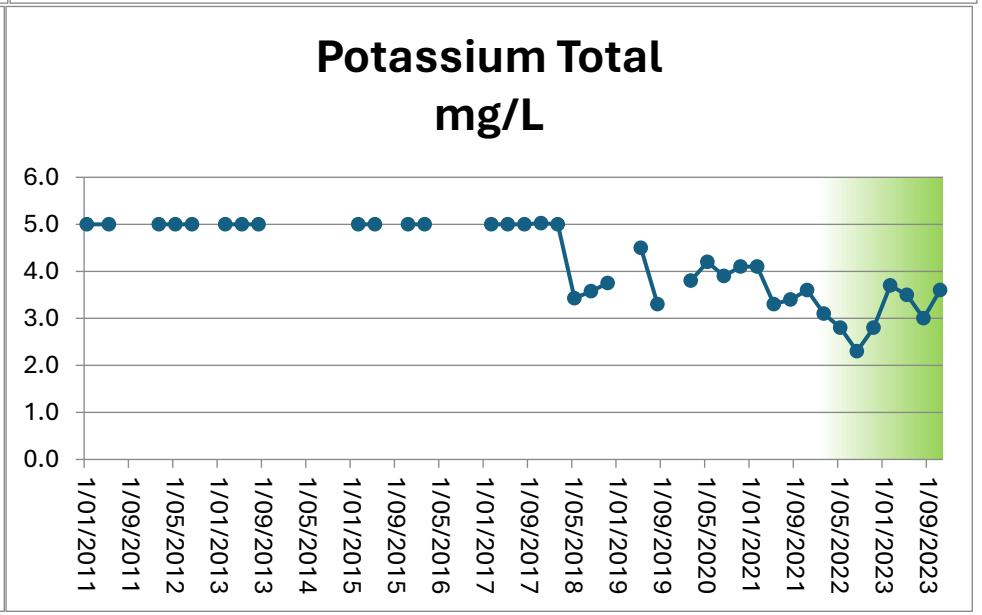

Nitrite
N mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/08/2011
1/03/2012
1/10/2012
1/05/2013
1/12/2013
1/07/2014
1/02/2015
1/09/2015
1/04/2016
1/11/2016
1/06/2017
1/01/2018
1/08/2018
1/03/2019
1/10/2019
1/05/2020
1/12/2020
1/07/2021
1/02/2022
1/09/2022
1/04/2023
1/11/2023

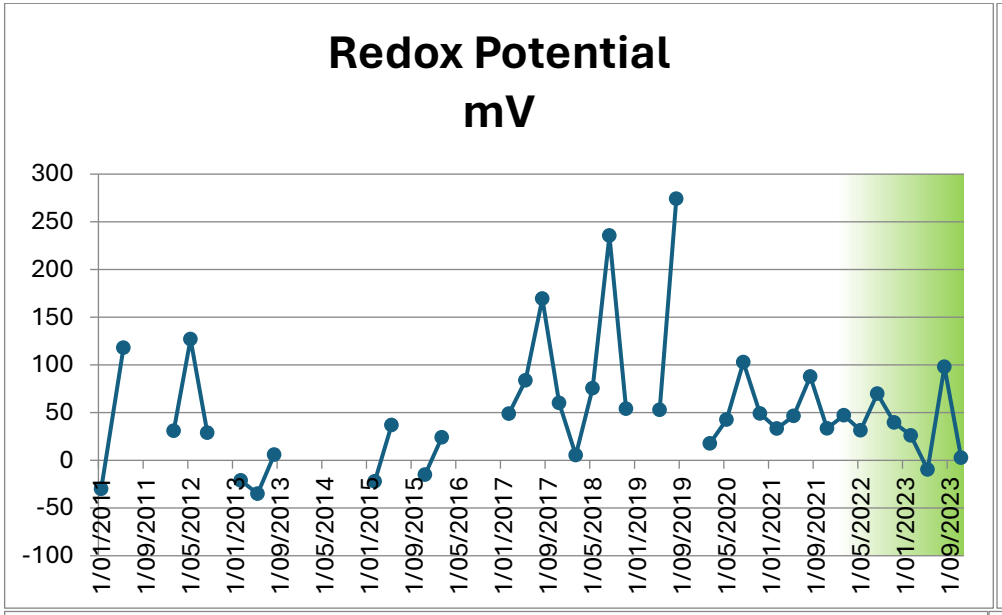

Nitrogen Oxidised
mg/L
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

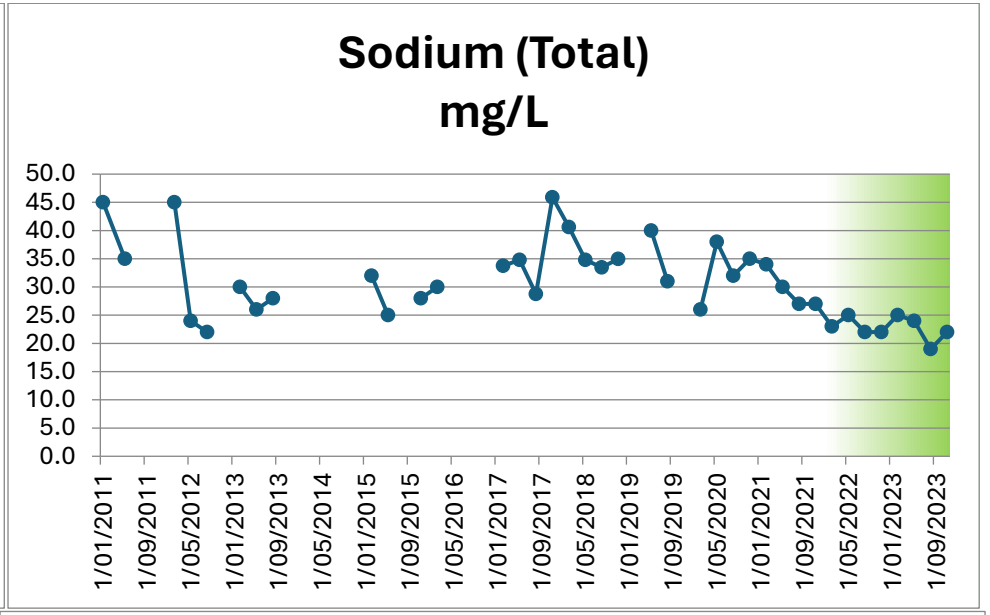

Nitrogen Total
mg/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/08/2011
1/03/2012
1/10/2012
1/05/2013
1/12/2013
1/07/2014
1/02/2015
1/09/2015
1/04/2016
1/11/2016
1/06/2017
1/01/2018
1/08/2018
1/03/2019
1/10/2019
1/05/2020
1/12/2020
1/07/2021
1/02/2022
1/09/2022
1/04/2023
1/11/2023

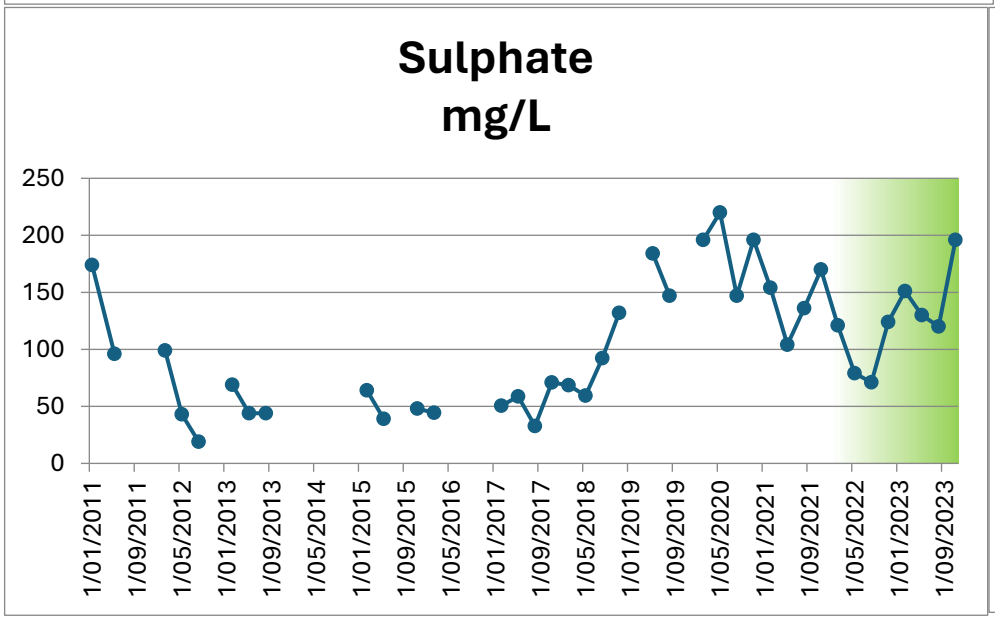

pH
pH units
6.4
6.2
6.0
5.8
5.6
5.4
5.2
5.0
4.8
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

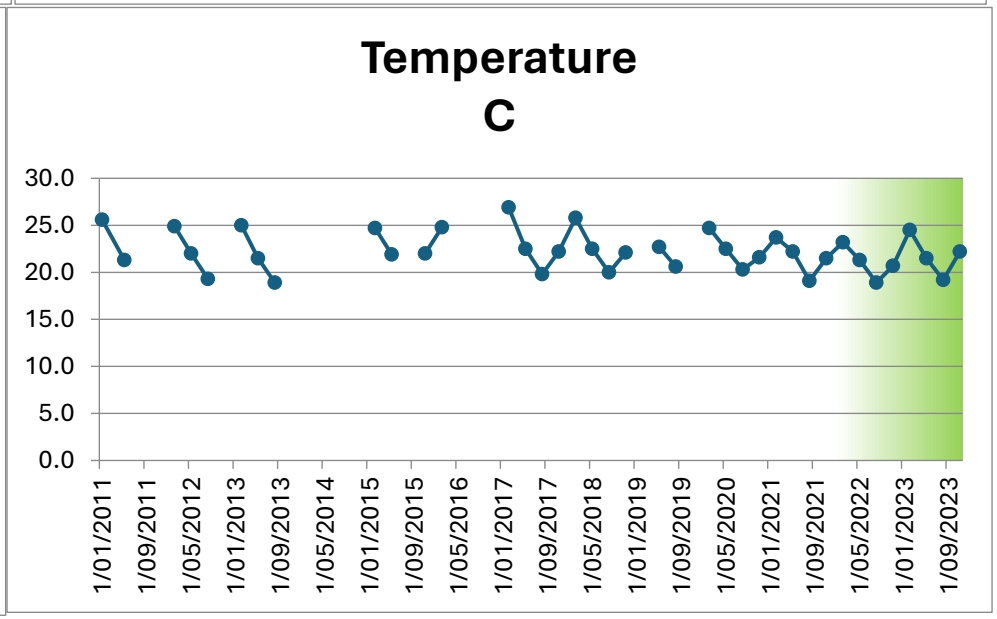

Phosphorus Total
mg/L
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/01/2011
1/08/2011
1/03/2012
1/10/2012
1/05/2013
1/12/2013
1/07/2014
1/02/2015
1/09/2015
1/04/2016
1/11/2016
1/06/2017
1/01/2018
1/08/2018
1/03/2019
1/10/2019
1/05/2020
1/12/2020
1/07/2021
1/02/2022
1/09/2022
1/04/2023
1/11/2023

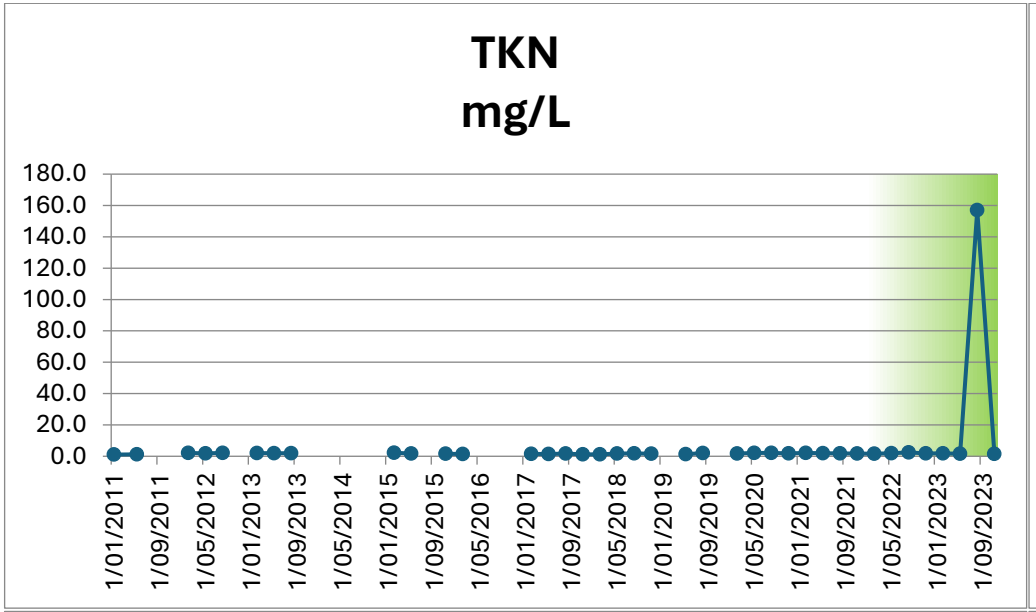

Potassium Total
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

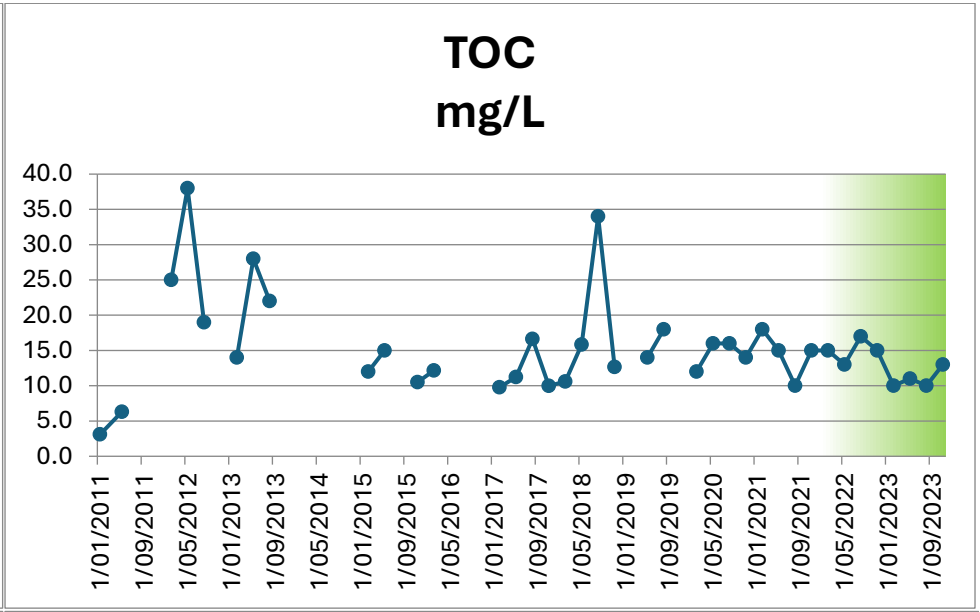

Redox Potential
mV
300
250
200
150
100
50
0
-50
-100
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

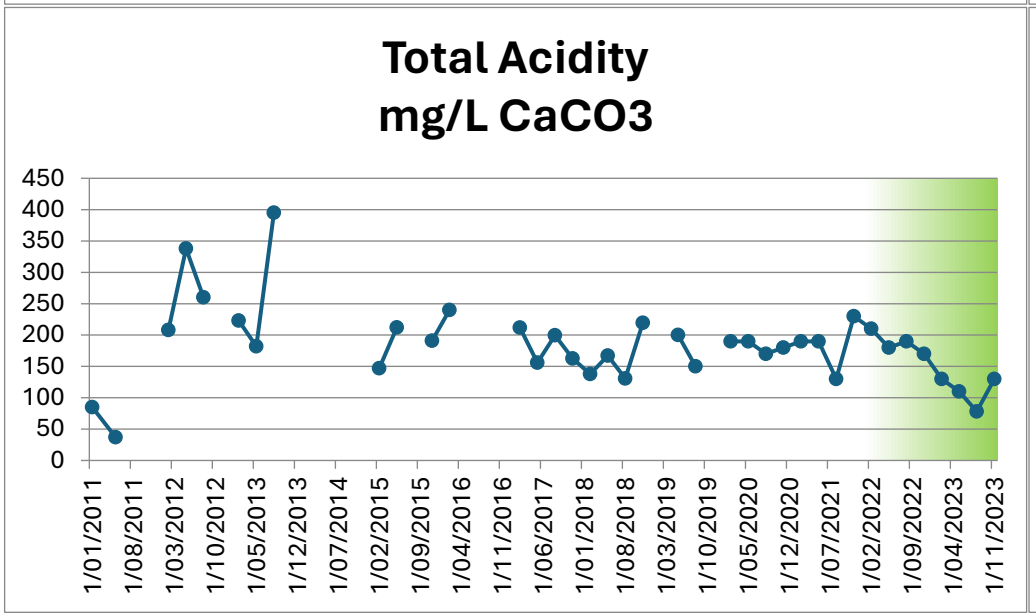

Sodium (Total)
mg/L
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

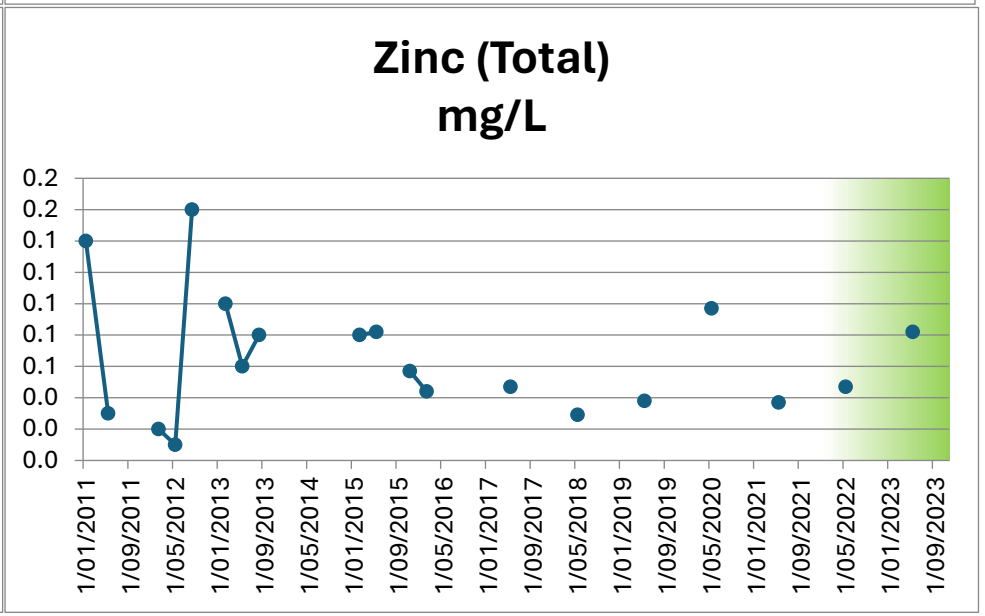

Sulphate
mg/L
250
200
150
100
50
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Temperature
C
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TKN
mg/L
180.0
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TOC
mg/L
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Total Acidity
mg/L CaCO3
450
400
350
300
250
200
150
100
50
0
1/01/2011
1/08/2011
1/03/2012
1/10/2012
1/05/2013
1/12/2013
1/07/2014
1/02/2015
1/09/2015
1/04/2016
1/11/2016
1/06/2017
1/01/2018
1/08/2018
1/03/2019
1/10/2019
1/05/2020
1/12/2020
1/07/2021
1/02/2022
1/09/2022
1/04/2023
1/11/2023


Zinc (Total)
mg/L
0.2
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

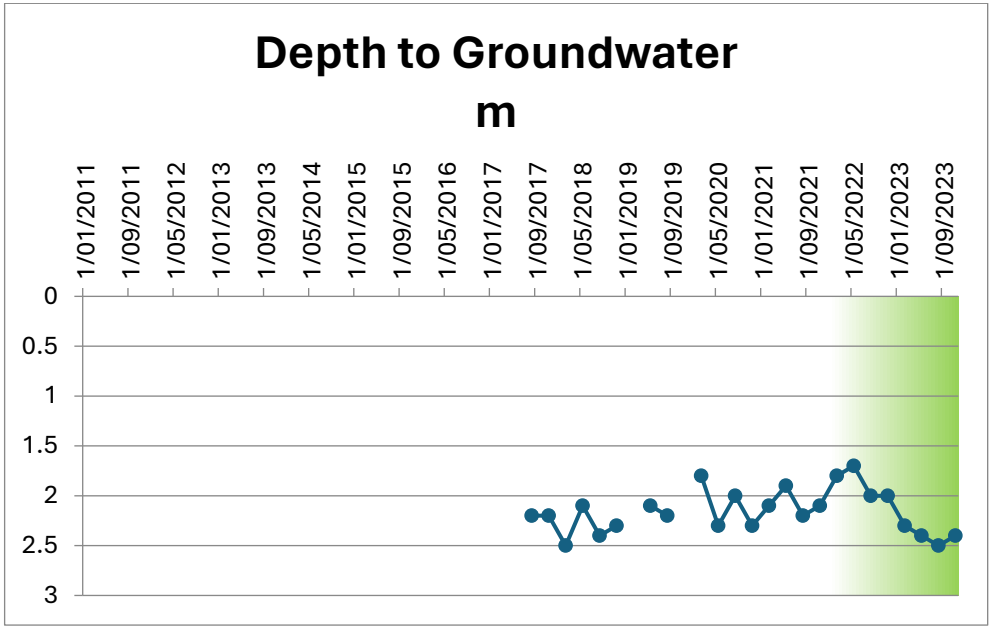
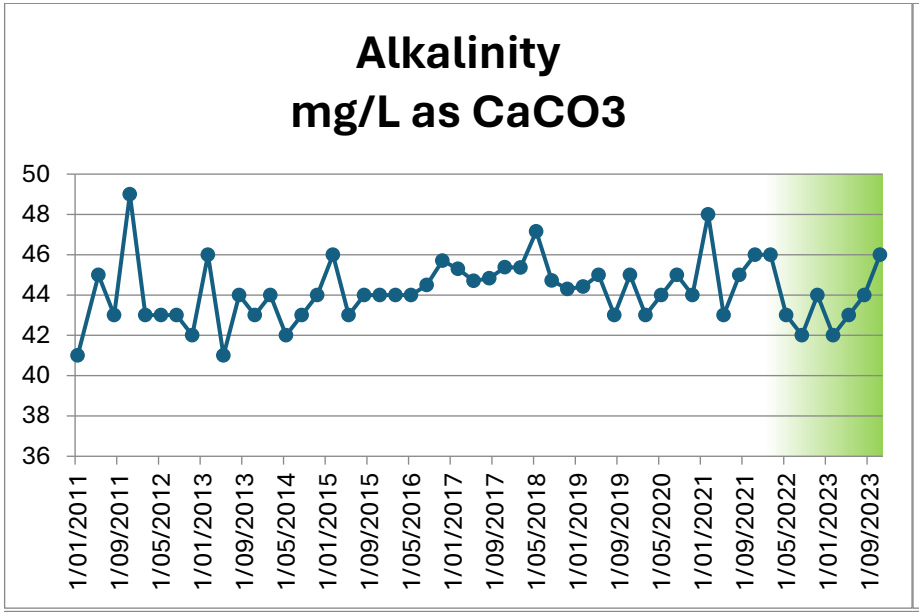
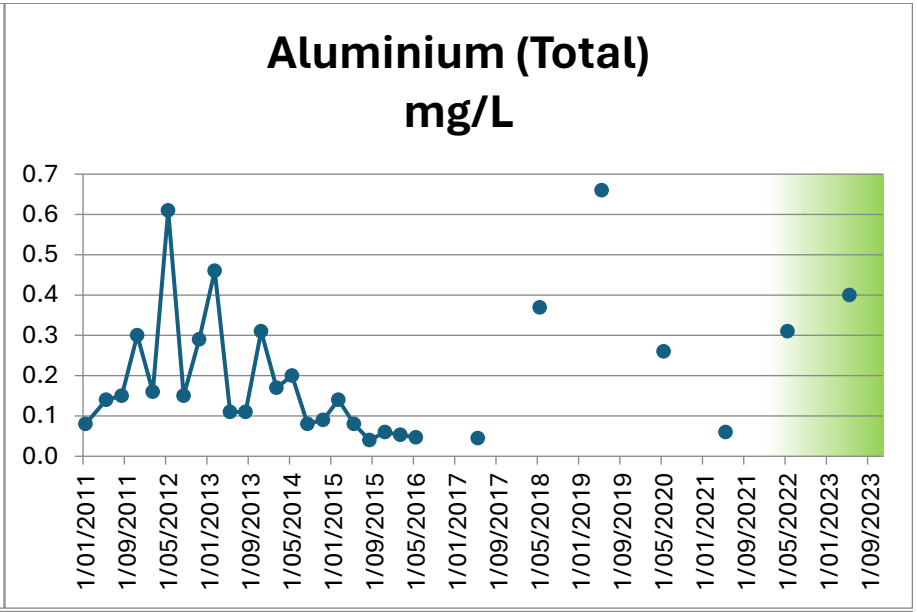
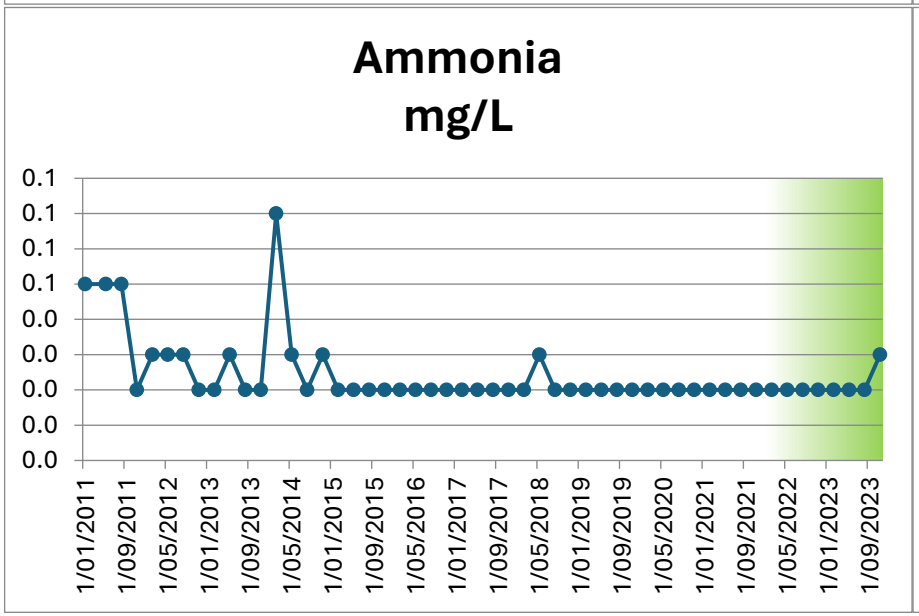

Depth to Groundwater
m
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023
0
0.5
1
1.5
2
2.5
3

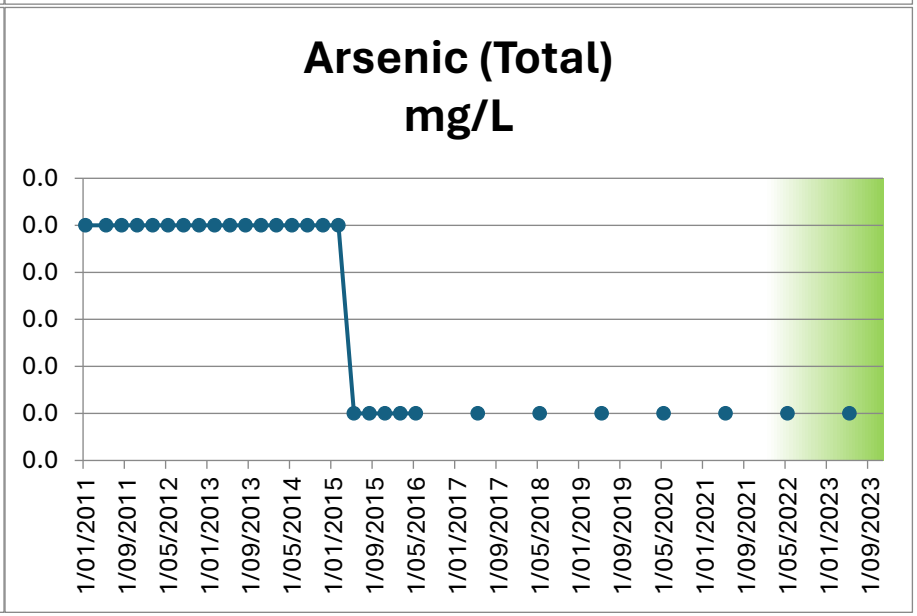
Table 24: Ground Water 19

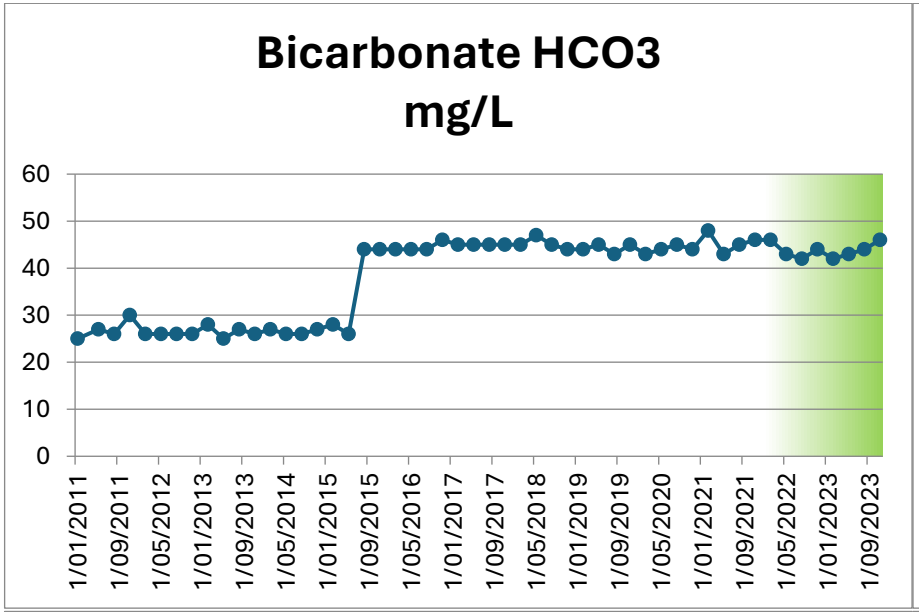
GW19	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µScm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride mg/L	Iron Total mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	Nitrate N mg/L	Nitrite N mg/L	Nitrogen Oxidised mg/L	Nitrogen Total mg/L	pH pH units	Phenol Alkalinity mg/L as CaCO3	Phosphorus Total mg/L	Potassium Total mg/L	Redox Potential mV	Sodium (Total) mg/L	Sulphate mg/L	Temperature C	TKN mg/L	TOC mg/L	Total Acidity mg/L CaCO3	Zinc (Total) mg/L	Depth to Groundwater m
31/01/2011	41	0.1	0.1	0.0	25	1.0	0.0	1.0	42	0.0	0.0	0.0	292	0.0	2.0	0.2	0.3	0.0	0.7	0.0	0.0	0.4	0.1	0.4	0.4	6.5		0.1	5.0	69	46	29	22	0.1	8.4	29	0.0	
10/05/2011	45	0.1	0.1	0.0	27	1.2	0.0	1.1	65	0.0	0.0	0.0	365	0.0	2.4	0.2	0.2	0.0	1.1	0.0	0.0	0.5	0.1	0.5	0.5	6.0		0.1	5.0	126	60	31	21	0.1	1.0	27	0.0	
9/08/2011	43	0.2	0.1	0.0	26	1.0	0.0	1.3	42	0.0	0.0	0.0	350	0.0	3.7	0.2	0.2	0.0	1.2	0.0	0.0	0.5	0.1	0.5	0.5	6.5		0.1	5.0	164	57	30	21	0.1	1.0	35	0.0	
8/11/2011	49	0.3	0.0	0.0	30	1.0	0.0	1.6	50	0.0	0.0	0.0	311	0.0	4.9	0.2	0.4	0.0	1.4	0.0	0.0	0.5	0.0	0.5	0.5	6.4		0.1	6.0	111	45	39	21	0.1	1.2	26	0.0	
6/02/2012	43	0.2	0.0	0.0	26	1.0	0.0	1.3	42	0.0	0.0	0.0	311	0.0	1.8	0.1	0.2	0.0	1.1	0.0	0.0	0.5	0.0	0.5	0.5	6.1		0.1	5.0	138	71	38	22	0.1	0.1	36	0.0	
8/05/2012	43	0.6	0.0	0.0	26	1.8	0.0	1.3	42	0.0	0.0	0.0	325	0.0	4.9	0.1	48.0	0.0	1.1	0.1	0.0	0.5	0.0	0.5	0.5	7.5		0.1	5.0	102	62	30	22	0.1	0.8	30	0.0	
6/08/2012	43	0.2	0.0	0.0	26	2.1	0.0	1.4	40	0.0	0.0	0.0	339	0.0	4.3	0.1	0.4	0.0	1.0	0.1	0.0	0.5	0.0	0.5	0.5	6.0		0.1	5.0	84	46	29	21	0.1	0.7	34	0.0	
13/11/2012	42	0.3	0.0	0.0	26	1.0	0.0	1.2	42	0.0	0.0	0.0	324	0.0	2.6	0.2	0.4	0.0	1.0	0.0	0.0	0.5	0.0	0.5	0.5	6.3		0.1	5.0	88	54	27	21	0.1	0.2	36	0.0	
13/02/2013	46	0.5	0.0	0.0	28	1.0	0.0	1.3	44	0.0	0.0	0.0	353	0.0	1.5	0.1	0.6	0.0	1.0	0.0	0.0	0.4	0.0	0.4	0.4	6.1		0.1	5.0	78	59	31	23	0.1	0.2	27	0.0	
14/05/2013	41	0.1	0.0	0.0	25	1.0	0.0	1.0	40	0.0	0.0	0.0	321	0.0	3.5	0.1	0.3	0.0	0.6	0.0	0.0	0.5	0.0	0.5	0.4	6.3		0.1	5.0	28	56	30	22	0.1	0.4	46	0.0	
6/08/2013	44	0.1	0.0	0.0	27	1.0	0.0	1.0	42	0.0	0.0	0.0	331	0.0	3.6	0.2	0.3	0.0	0.6	0.0	0.0	0.5	0.0	0.5	0.5	6.3		0.1	5.0	43	61	34	21	0.1	0.4	57	0.0	
12/11/2013	43	0.3	0.0	0.0	26	1.0	0.0	1.2	44	0.0	0.0	0.0	325	0.0	3.9	0.2	0.5	0.0	0.8	0.0	0.0	0.5	0.0	0.5	0.5	6.6		0.1	5.0	68	65	34	21	0.1	0.3	17	0.1	
11/02/2014	44	0.2	0.1	0.0	27	1.0	0.0	1.0	43	0.0	0.0	0.0	309	0.0	1.3	0.1	0.2	0.0	0.7	0.0	0.0	0.5	0.0	0.5	0.7	6.5		0.1	5.0	48	61	33	22	0.2	0.5	105	0.0	
13/05/2014	42	0.2	0.0	0.0	26	1.0	0.0	0.9	45	0.0	0.0	0.0	326	0.0	2.3	0.2	0.3	0.0	0.6	0.0	0.0	0.6	0.0	0.6	0.6	6.2		0.1	5.0	18	59	30	22	0.1	0.4	35	0.0	
12/08/2014	43	0.1	0.0	0.0	26	1.8	0.0	1.1	43	0.0	0.0	0.0	316	0.0	5.8	0.2	0.1	0.0	0.7	0.0	0.0	0.4	0.0	0.4	0.4	7.0		0.1	5.0	26	63	32	21	0.1	0.2	42	0.0	
10/11/2014	44	0.1	0.0	0.0	27	1.0	0.0	1.0	45	0.0	0.0	0.0	314	0.0	3.8	0.2	0.1	0.0	0.8	0.0	0.0	0.4	0.0	0.4	0.4	6.8		0.1	5.0	38	64	35	22	0.1	0.2	76	0.0	
9/02/2015	46	0.1	0.0	0.0	28	1.0	0.0	1.0	44	0.0	0.0	0.0	321	0.0	2.1	0.2	0.2	0.0	0.8	0.0	0.0	0.4	0.0	0.4	0.4	6.6		0.1	5.0	31	59	34	24	0.1	0.2	39	0.0	
11/05/2015	43	0.1	0.0	0.0	26	1.0	0.0	1.1	41	0.0	0.0	0.0	315	0.0	3.1	0.2	0.2	0.0	0.9	0.0	0.0	0.4	0.0	0.4	0.4	6.4		0.1	5.0	47	61	30	22	0.1	0.9	42	0.0	
11/08/2015	44	0.0	0.0	0.0	44	1.0	0.0	1.1	40	0.0	0.0	0.0	304	0.0	7.5	0.2	0.1	0.0	0.8	0.0	0.0	0.5	0.0	0.5	0.5	6.7		0.1	5.0	64	61	29	21	0.1	0.6	21	0.0	
10/11/2015	44	0.1	0.0	0.0	44	1.0	0.0	1.0	44	0.0	0.0	0.0	252	0.0	4.8	0.2	0.1	0.0	0.8	0.0	0.0	0.5	0.0	0.5	0.4	6.5		0.1	5.0	-11	58	31	21	0.1	0.2	31	0.0	
8/02/2016	44	0.1	0.0	0.0	44	1.0	0.0	1.1	41	0.0	0.0	0.0	306	0.0	3.0	0.3	0.1	0.0	0.8	0.0	0.0	0.5	0.0	0.5	0.5	6.7		0.1	5.0	99	60	30	23	0.1	0.6	50	0.0	
9/05/2016	44	0.0	0.0	0.0	44	1.0	0.0	1.0	42	0.0	0.0	0.0	311	0.0	3.4	0.2	0.1	0.0	0.7	0.0	0.0	0.5	0.0	0.5	0.5	6.3		0.1	5.0	69	57	29	22	0.1	1.0	44	0.0	
9/08/2016	45		0.0		44	1.0		1.1	41				304		7.0	0.2			0.8			0.5	0.0	0.5	0.6	6.4		0.1	5.0	139	60	32	21	0.1	0.2	32		
7/11/2016	46		0.0		46	1.0		1.1	42				302		5.1	0.2			0.8			0.4	0.0	0.4	0.5	6.4		0.1	5.0	285	63	31	22	0.1	0.4	32		
7/02/2017	45		0.0		45	1.0		1.0	42				305		3.3	0.3			0.7			0.4	0.0	0.4	0.4	6.1		0.1	5.0	267	57	29	23	0.1	0.4	60		
8/05/2017	45	0.0	0.0	0.0	45	1.0	0.0	1.2	42	0.0	0.0	0.0	308	0.0	3.6	0.2	0.1	0.0	0.9	0.0	0.0	0.4	0.0	0.4	0.4	6.2		0.1	5.0	321	58	33	22	0.1	0.4	31	0.0	
8/08/2017	45		0.0		45	1.0		1.0	35				306		6.6	0.2			0.8			0.5	0.0	0.5	0.5	6.2		0.1	5.0	331	57	30	21	0.1	0.8	24		1.3
7/11/2017	45		0.0		45	1.0		1.1	42				312		5.1	0.2			0.8			0.5	0.0	0.5	0.7	5.9		0.1	5.0	355	59	31	21	0.2	0.6	24		1.5
13/02/2018	45		0.0		45	1.0		1.3	42				313		4.0	0.2			0.8			0.7	0.0	0.7	0.9	6.4		0.1	5.0	123	60	34	25	0.2	1.6	21		2.2
8/05/2018	47	0.4	0.0	0.0	47	1.5	0.0	1.0	1050	0.0	0.0	0.0	306	0.0	5.2	0.2	0.7	0.0	0.7	0.0	0.0	0.6	0.0	0.6	0.8	6.5		0.1	1.1	307	60	33	23	0.2	0.6	20	0.0	1.4
14/08/2018	45		0.0		45	3.3		1.2	45				303		7.8	0.1			0.8			0.7	0.0	0.7	1.0	6.7		0.2	1.2	293	63	35	20	0.3	2.6	12		2.0
13/11/2018	44		0.0		44	6.9		1.0	42				300		6.3	0.2			0.7			0.6	0.0	0.6	0.7	6.5		0.1	1.0	79	60	35	21	0.1	0.5	19		1.6
12/02/2019	44		0.0		44	1.0		1.1	41				308		4.9	0.2			0.8			0.6	0.0	0.6	0.7	6.4		0.1	1.2	360	63	37	24	0.1	0.8	16		2.6
14/05/2019	45	0.7	0.0	0.0	45	1.8	0.0	1.2	42	0.0	0.0	0.0	307	0.0	6.4	0.2	1.2	0.0	0.9	0.0	0.0	0.7	0.0	0.7	1.0	6.7		0.2	1.4	211	65	38	23	0.3	1.0	10	0.1	1.4
13/08/2019	43		0.0		43	1.5		1.2	38				304		7.9	0.2			0.8			0.6	0.0	0.6	0.9	6.7		0.2	1.1	307	61	36	21	0.3	4.1	13		1.6
12/11/2019	45		0.0		45	1.2		1.2	42				320		6.3	0.2			0.9			0.6	0.0	0.6	0.9	6.6		0.1	1.2	314	62	36	22	0.3	1.4	14		2.9
25/02/2020	43		0.0		43	1.0		1.0	42				311		4.6	0.1			0.8			0.4	0.0	0.4	0.5	6.2	0.0	0.1	1.0	166	57	33	25	0.1	0.7	29		0.8
12/05/2020	44	0.3	0.0	0.0	44	1.0	0.0	1.1	44	0.0	0.0	0.0	309	0.0	4.7	0.2	0.8	0.0	0.8	0.0	0.0	0.4	0.0	0.4	0.5	6.3	0.0	0.1	1.0	128	57	35	22	0.1	0.8	25	0.0	1.4
11/08/2020	45		0.0		45	1.0		1.1	40				299		7.9	0.2			0.8			0.5	0.0	0.5	0.6	6.5	0.0	0.1	1.1	258	59	33	21	0.1	0.6	11		0.8
10/11/2020	44		0.0		44	1.0		1.1	43				309		6.1	0.2			0.8			0.5	0.0	0.5	0.7	6.5	0.0	0.1	1.2	265	59	35	22	0.1	0.8	10		1.5
9/02/2021	48		0.0		48	1.0		0.9	39				305		5.6	0.2			0.7			0.4	0.0	0.4	0.5	6.0	0.0	0.1	1.0	112	58	33	24	0.1	0.7	20		1.0
11/05/2021	43	0.1	0.0	0.0	43	1.0	0.0	1.1	42	0.0	0.0	0.0	294	0.0	7.7	0.2	0.2	0.0	0.9	0.0	0.0	0.4	0.0	0.4	0.5	6.5	0.0	0.1	1.2	138	57	35	23	0.1	0.7	14	0.0	0.5
10/08/2021	45		0.0		45	1.0		1.0	40				293		8.0	0.1			0.8			0.4	0.0	0.4	0.5	6.6	0.0	0.2	1.3	283	54	31	19	0.1	0.7	10		1.2
8/11/2021	46		0.0		46	1.0		1.2	42				302		6.6	0.2			0.9			0.4	0.0	0.4	0.5	6.5	0.0	0.1	1.2	82	57	31	22	0.1	1.2	15		1.2
8/02/2022	46		0.0		46	1.0		1.1	38				302		6.0	0.2			0.9			0.5	0.0	0.5	0.5	6.6	0.0	0.1	1.2	268	57	31	23	0.1	0.6	15		0.5
10/05/2022	43	0.3	0.0	0.0	43	1.0	0.0	1.0	38	0.0	0.0	0.0	292	0.0	7.7	0.2	0.6	0.0	0.8	0.0	0.0	0.4	0.0	0.4	0.5	6.7	0.0	0.1	1.0	66	54	31	21	0.2	0.7	10	0.0	0.2
9/08/2022	42		0.0		42	1.0		1.0	38				294		8.2	0.2			0.9			0.4	0.0	0.4	0.5	6.7	0.0	0.1	1.2	204	56	32	20	0.1	0.6	10		0.7
8/11/2022	44		0.0		44	3.0		1.1	43				304		6.7	0.2			0.9			0.5	0.0	0.5	0.5	6.6	0.0	0.1	1.3	100	54	31	21	0.1	0.7	14		0.7
13/02/2023	42		0.0		42	1.5		1.3	43				302		5.4	0.2			1.0			0.5	0.0	0.5	0.7	6.4	0.0	0.1	1.4	232	57	33	23	0.1	0.7	12		1.6
8/05/2023	43	0.4	0.0	0.0	43	1.0	0.0	1.4	39	0.0	0.0	0.0	301	0.0	5.0	0.2	1.2	0.0	1.0	0.0	0.0	0.6	0.0	0.6	0.7	6.6	0.0	0.1	1.3	95	57	32	22	0.1	0.6	12	0.0	2.0
8/08/2023	44		0.0		44	1.0		1.3	42				298		7.8	0.2			0.9			0.6	0.0	0.6	0.6	6.8		0.1	1.4	130	55	30	20	0.1	0.5	8		2.1
13/11/2023	46		0.0		46	1.0		1.3	46				308		6.2	0.2			1.0			0.5	0.0	0.5	0.8	6.5		0.1	1.1	131	56	32	22	0.3	1.1	14		2.2
2023 Min	**42.0**	**0.4**	**0.0**	**0.0**	**42.0**	**1.0**	**0.0**	**1.3**	**39.0**	**0.0**	**0.0**	**0.0**	**298.0**	**0.0**	**5.0**	**0.2**	**1.2**	**0.0**	**0.9**	**0.0**	**0.0**	**0.5**	**0.0**	**0.5**	**0.6**	**6.4**	**0.0**	**0.1**	**1.1**	**95.4**	**55.0**	**30.0**	**20.2**	**0.1**	**0.5**	**8.0**	**0.0**	**1.6**
2023 Max	**46.0**	**0.4**	**0.0**	**0.0**	**46.0**	**1.5**	**0.0**	**1.4**	**46.0**	**0.0**	**0.0**	**0.0**	**308.0**	**0.0**	**7.8**	**0.2**	**1.2**	**0.0**	**1.0**	**0.0**	**0.0**	**0.6**	**0.0**	**0.6**	**0.8**	**6.8**	**0.0**	**0.1**	**1.4**	**232.4**	**57.0**	**33.0**	**23.1**	**0.3**	**1.1**	**14.0**	**0.0**	**2.2**
2023 Mean	**43.8**	**0.4**	**0.0**	**0.0**	**43.8**	**1.1**	**0.0**	**1.3**	**42.5**	**0.0**	**0.0**	**0.0**	**302.3**	**0.0**	**6.1**	**0.2**	**1.2**	**0.0**	**1.0**	**0.0**	**0.0**	**0.6**	**0.0**	**0.6**	**0.7**	**6.6**	**0.0**	**0.1**	**1.3**	**147.2**	**56.3**	**31.8**	**21.9**	**0.1**	**0.7**	**11.5**	**0.0**	**2.0**
Long-term Average	**44.2**	**0.2**	**0.0**	**0.0**	**38.3**	**1.3**	**0.0**	**1.1**	**61.7**	**0.0**	**0.0**	**0.0**	**310.4**	**0.0**	**5.0**	**0.2**	**2.0**	**0.0**	**0.8**	**0.0**	**0.0**	**0.5**	**0.0**	**0.5**	**0.6**	**6.5**	**0.0**	**0.1**	**3.3**	**151.5**	**58.4**	**32.4**	**21.9**	**0.1**	**0.9**	**27.7**	**0.0**	**1.4**

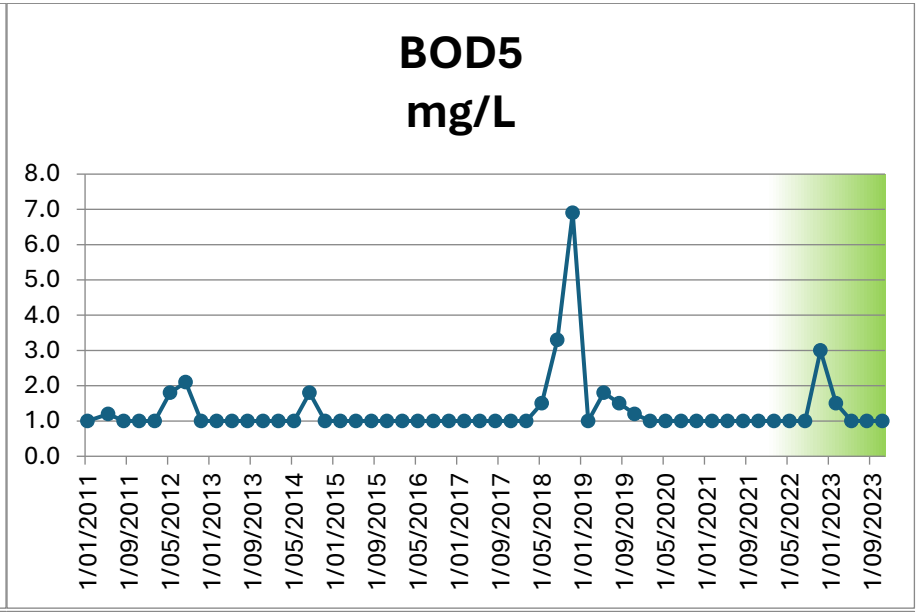

Alkalinity
mg/L as CaCO3
50
48
46
44
42
40
38
36
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

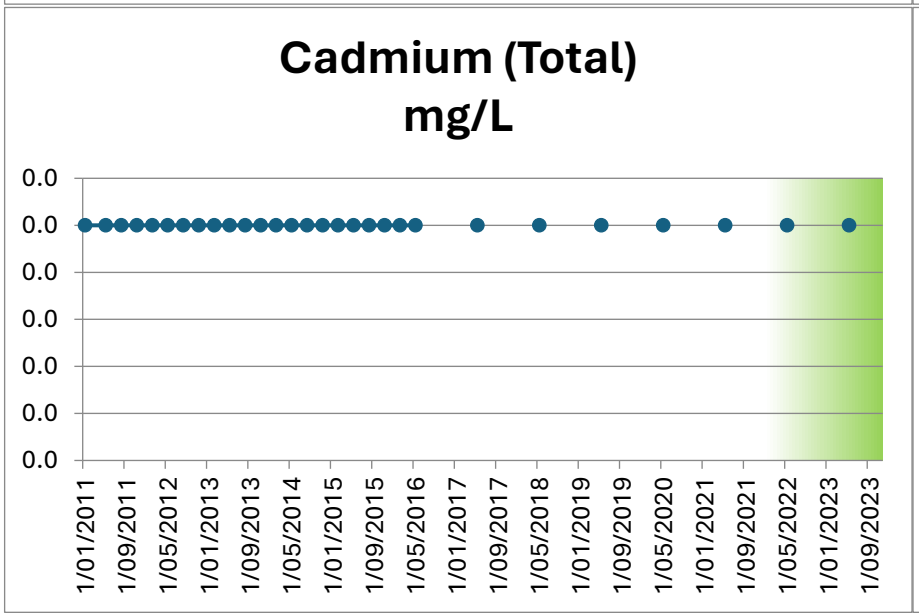

Aluminium (Total)
mg/L
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

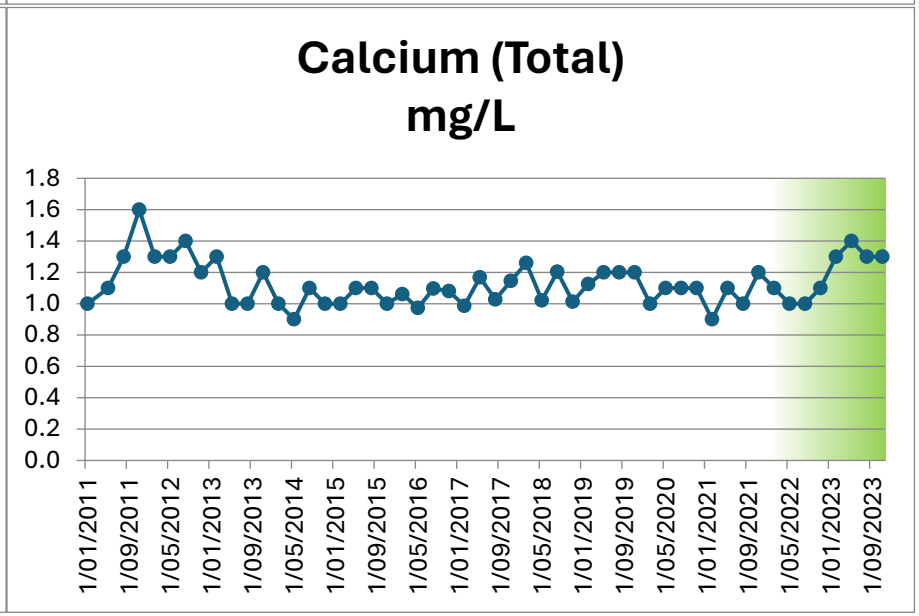

Ammonia
mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

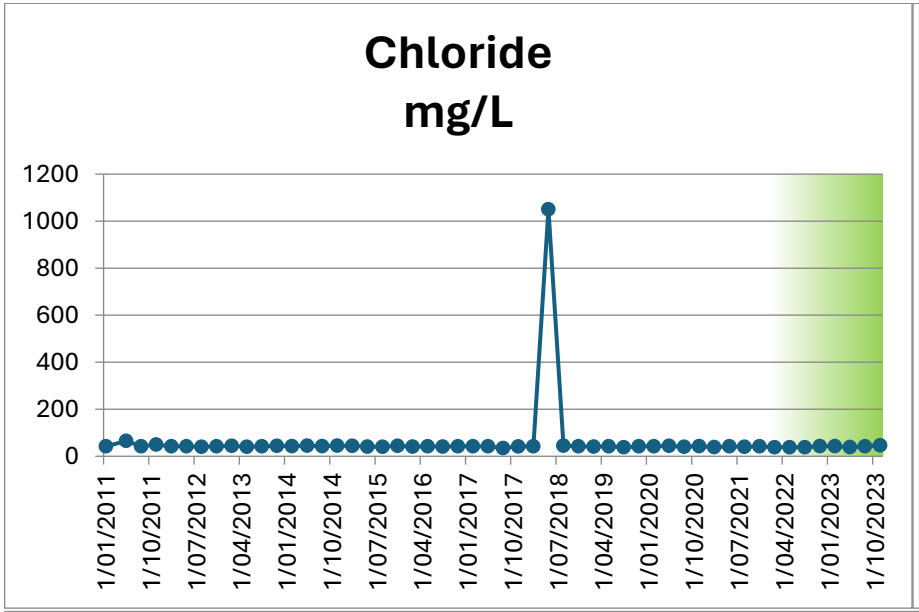

Arsenic (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

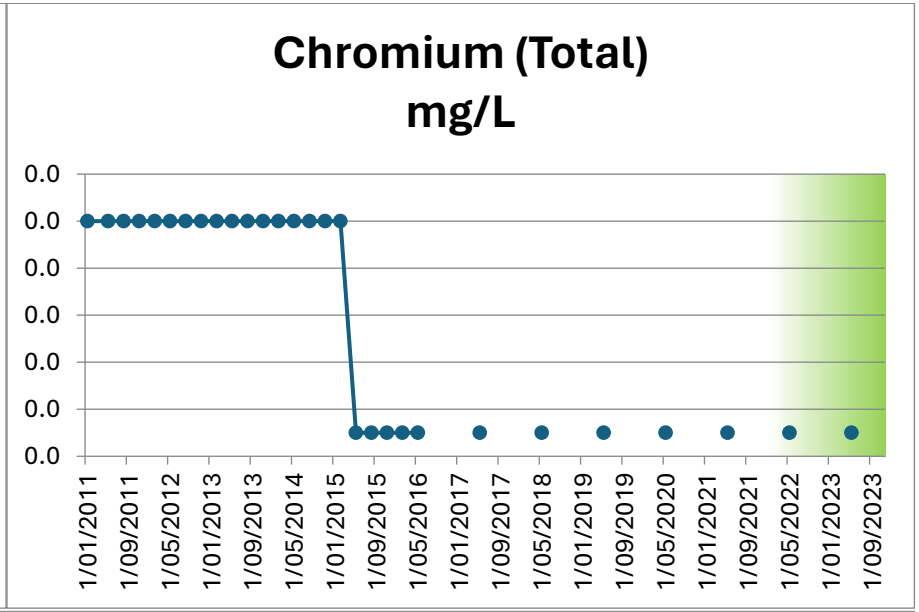

Bicarbonate HCO3
mg/L
60
50
40
30
20
10
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

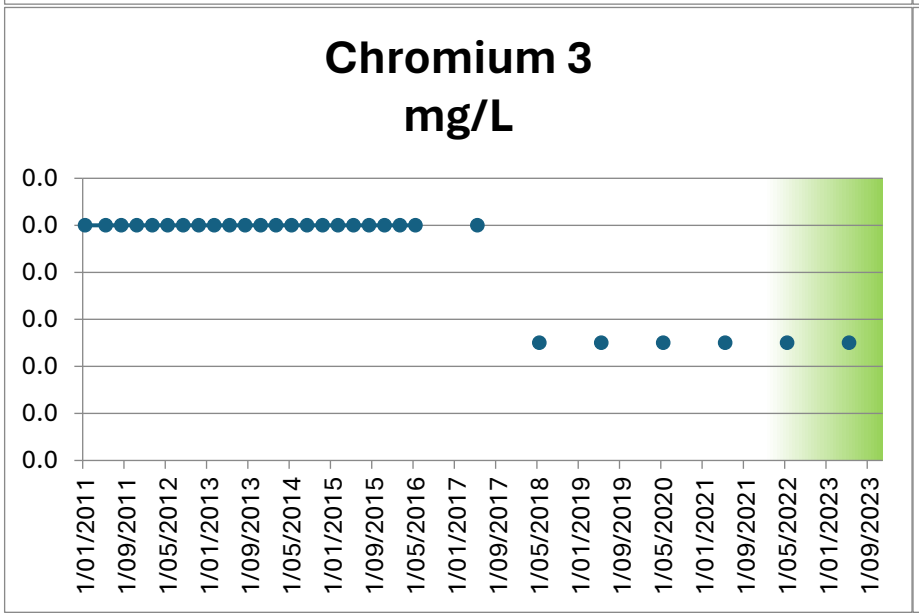

BOD5
mg/L
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

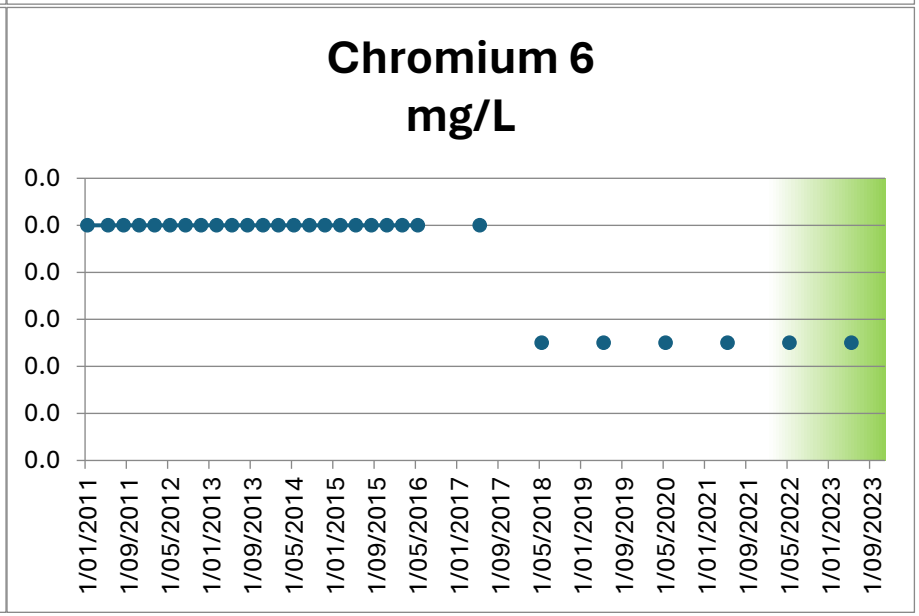

Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

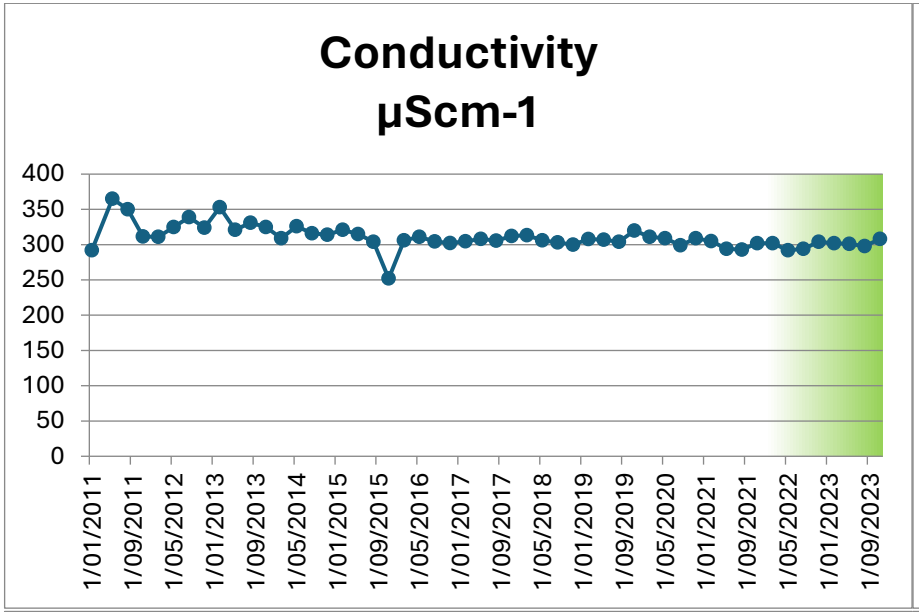

Calcium (Total)
mg/L
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

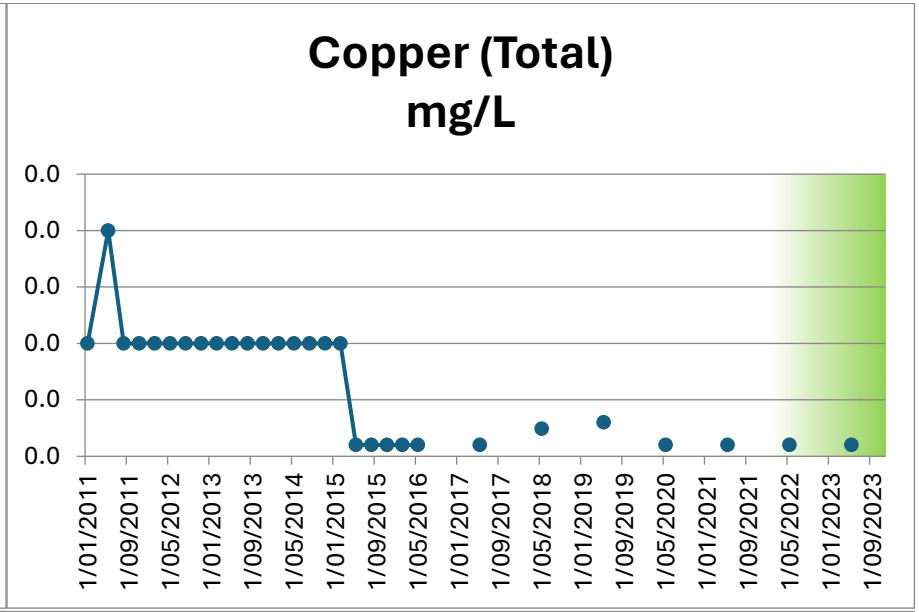

Chloride
mg/L
1200
1000
800
600
400
200
0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

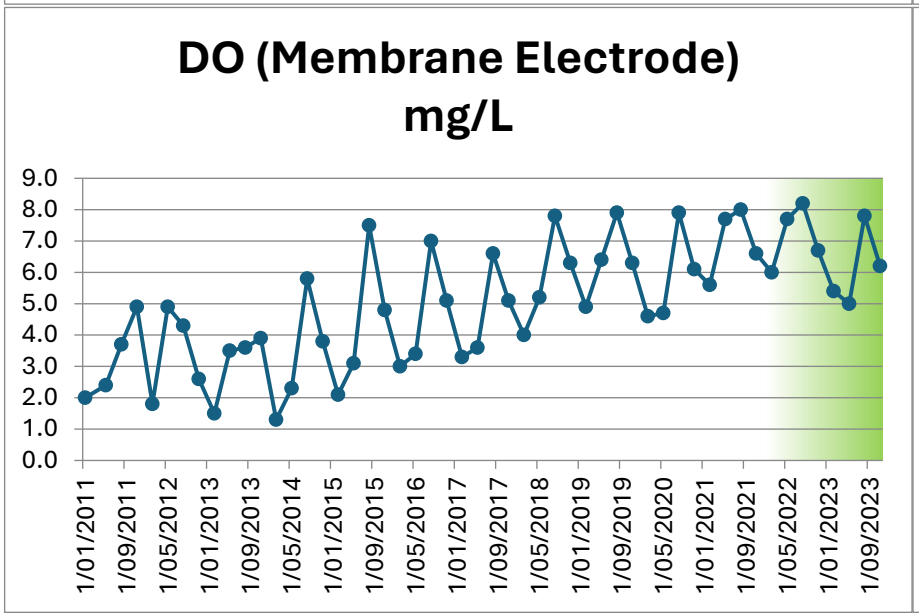

Chromium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

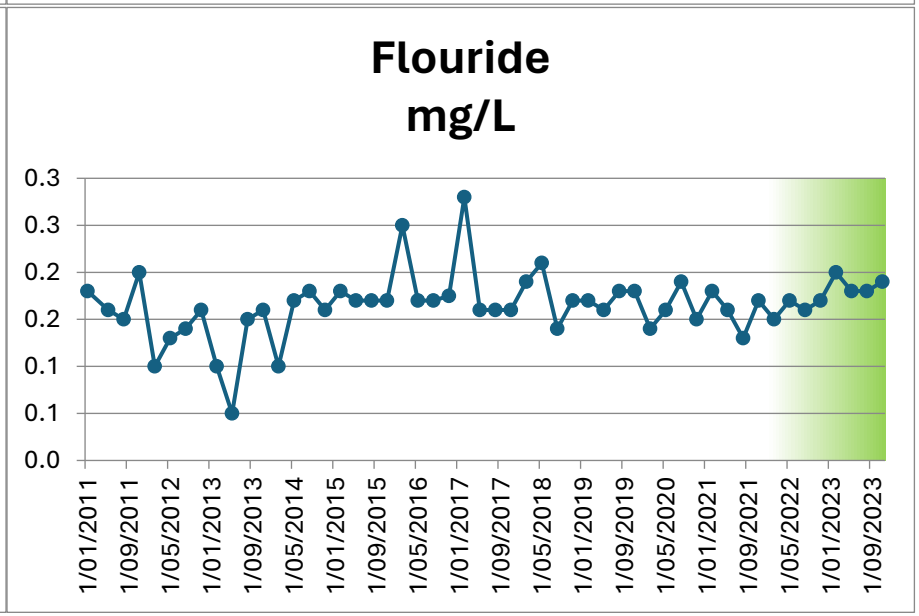

Chromium 3
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

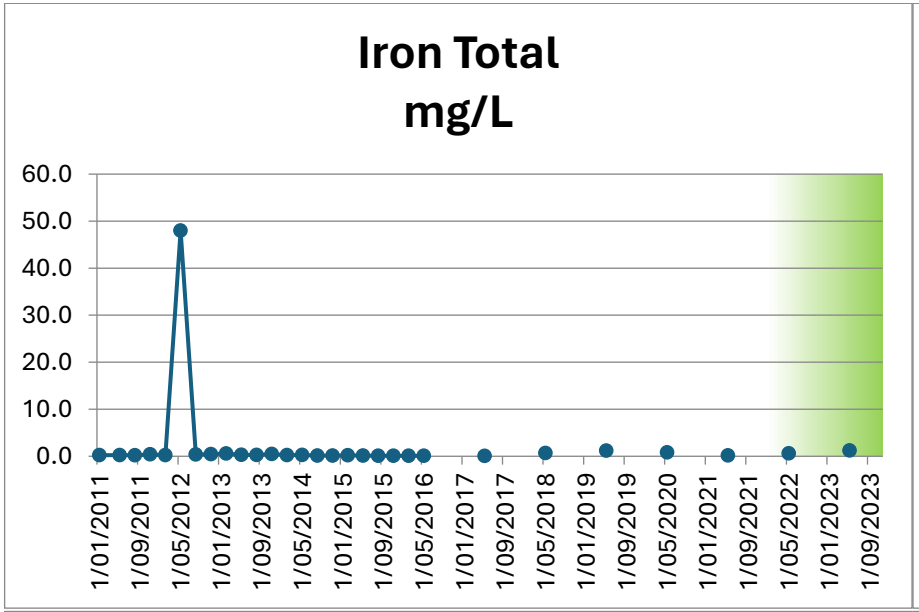

Chromium 6
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

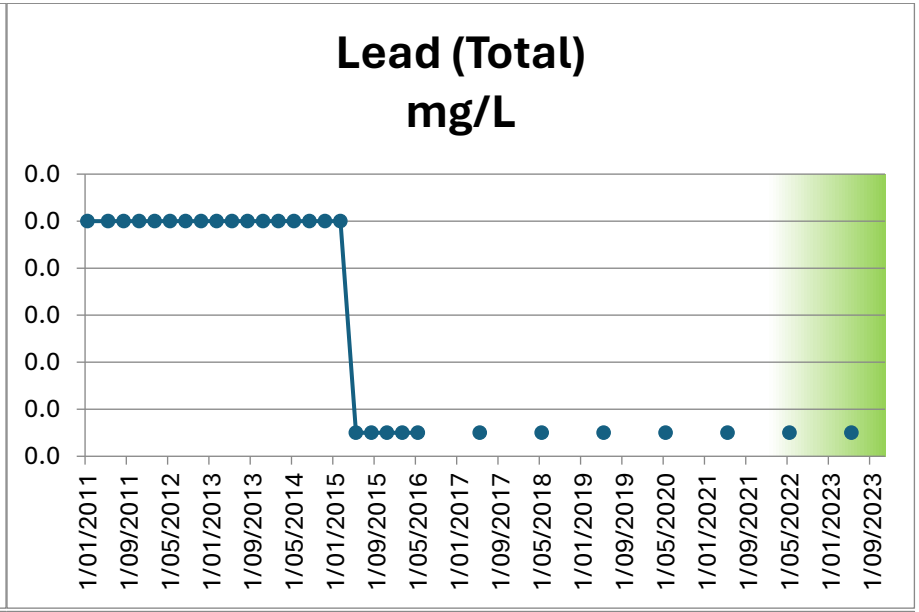

Conductivity
µScm-1
400
350
300
250
200
150
100
50
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

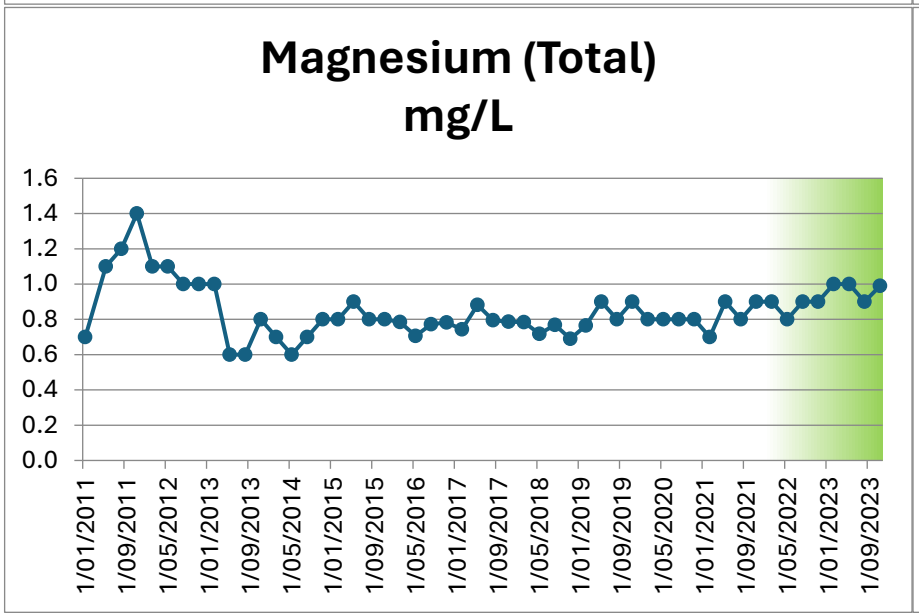

Copper (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

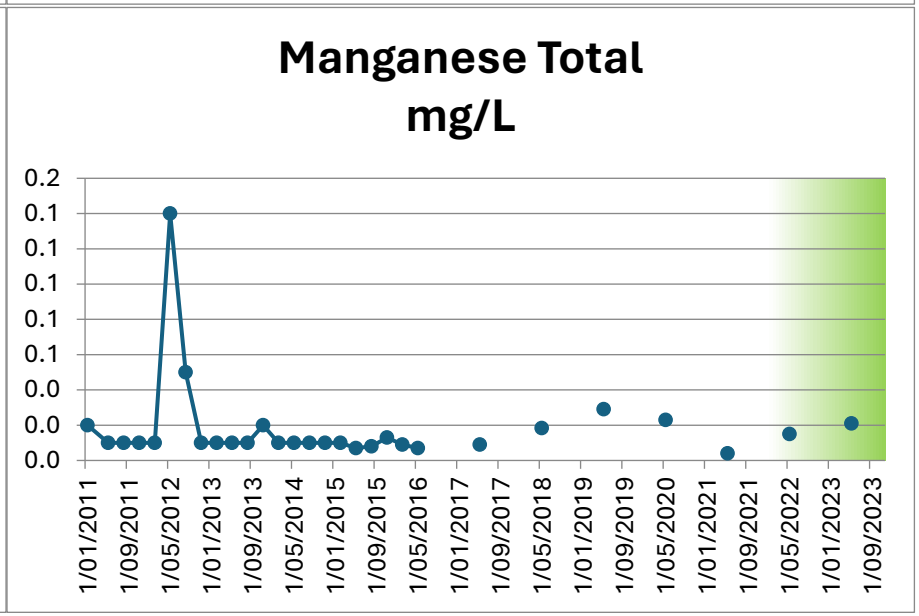

DO (Membrane Electrode)
mg/L
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

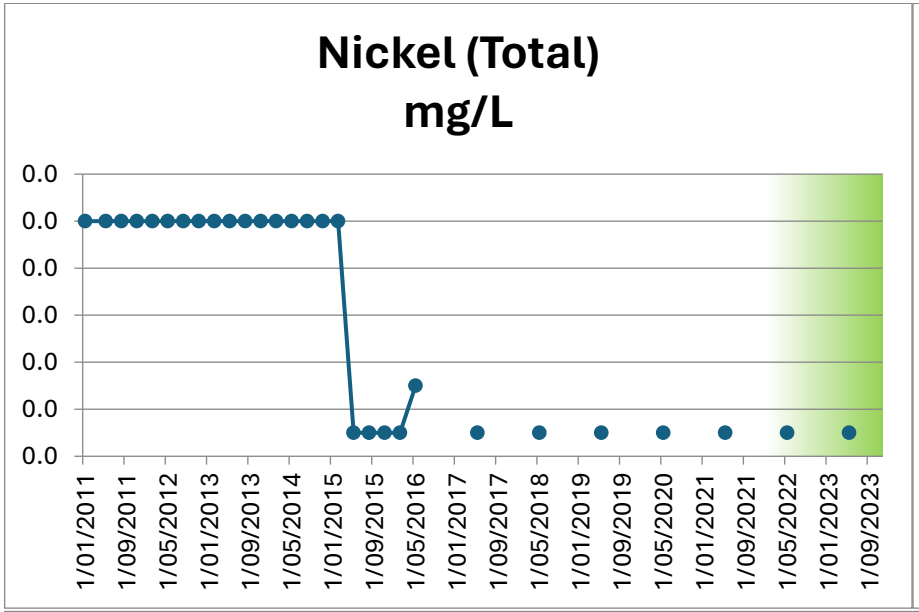

Flouride
mg/L
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

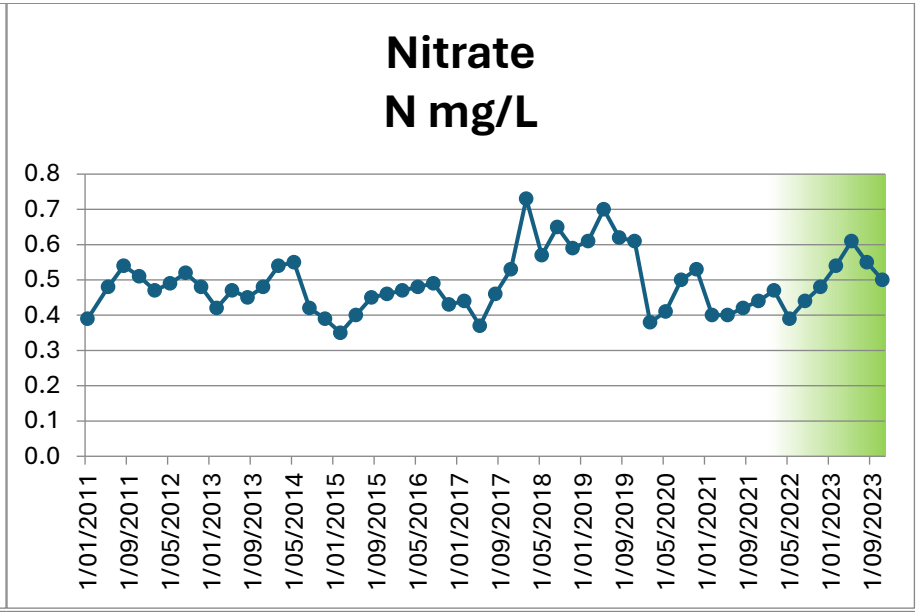

Iron Total
mg/L
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

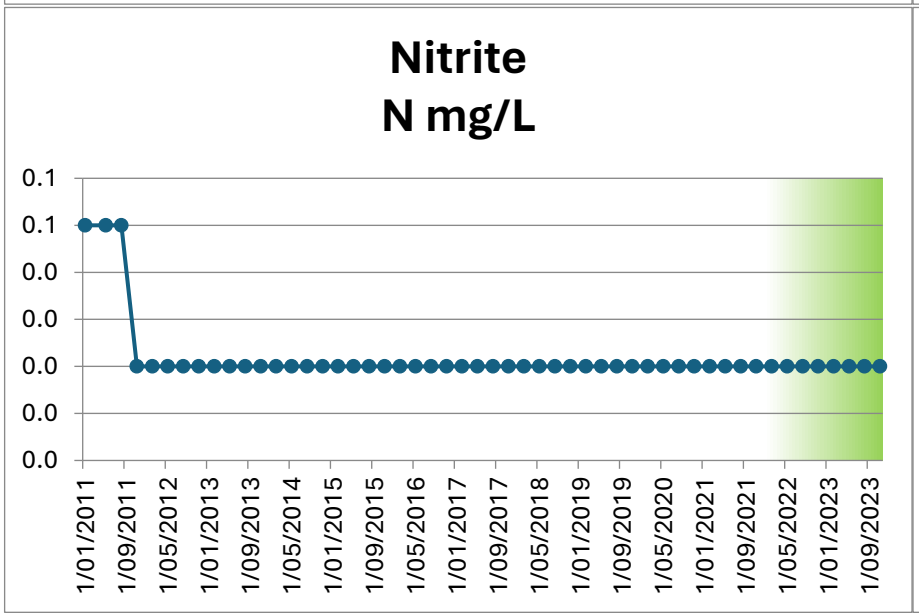

Lead (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

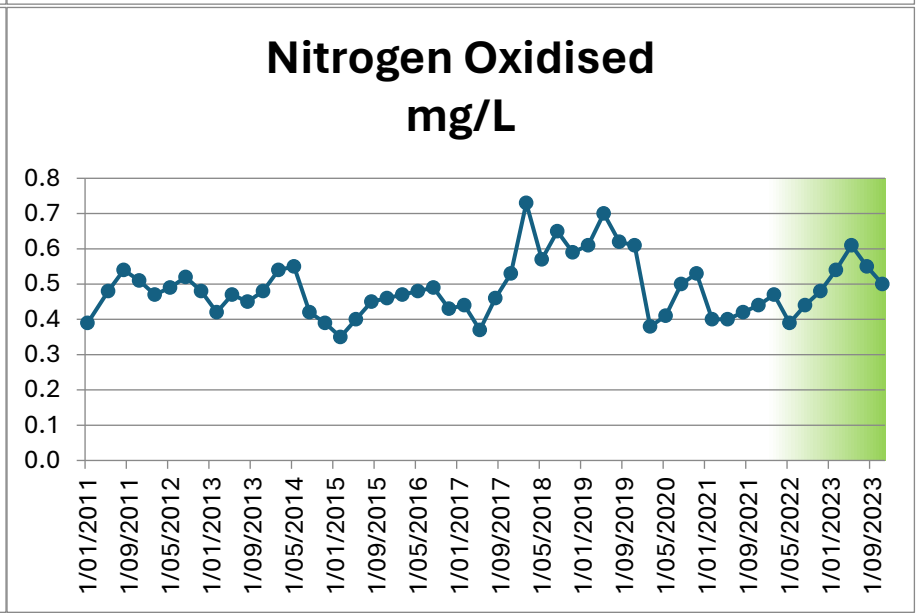

Magnesium (Total)
mg/L
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

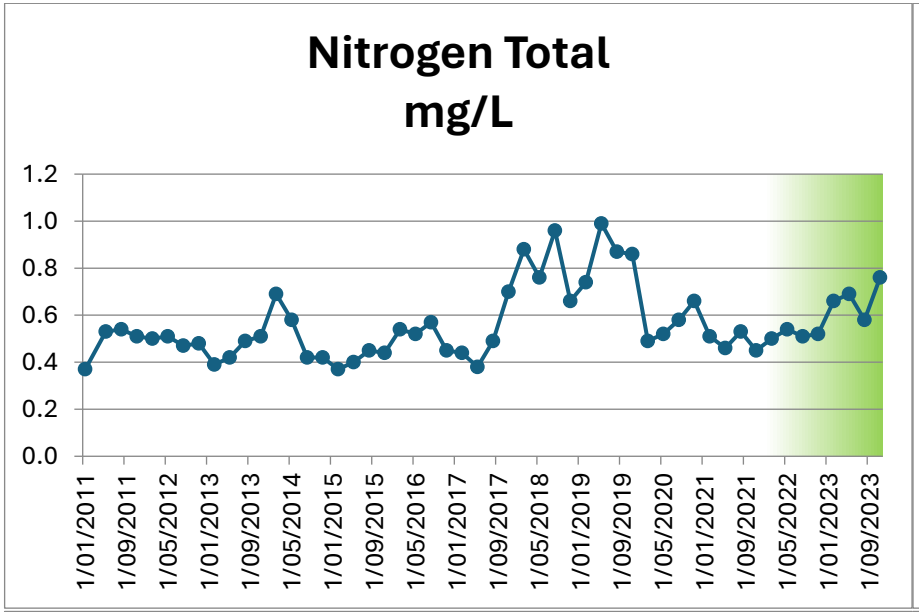

Manganese Total
mg/L
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

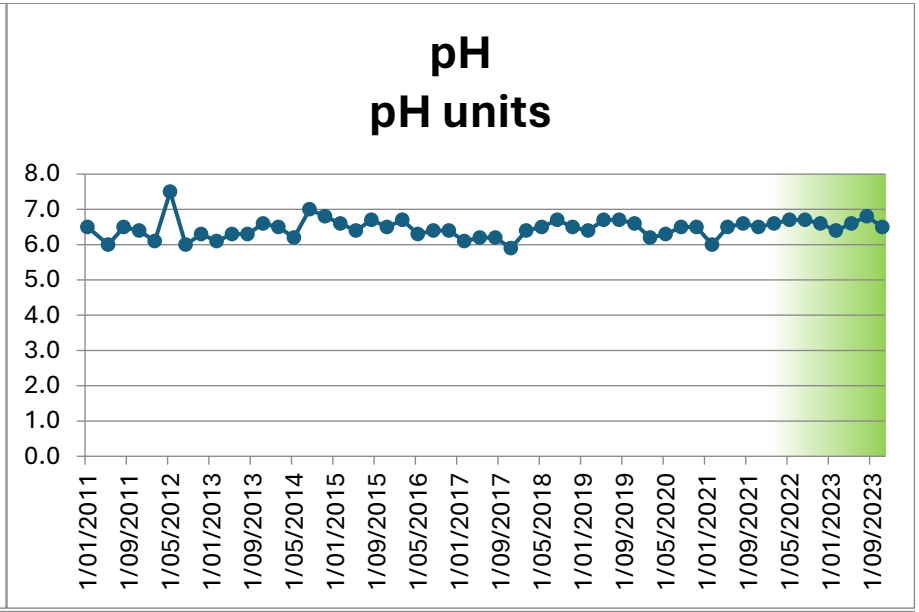

Nickel (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

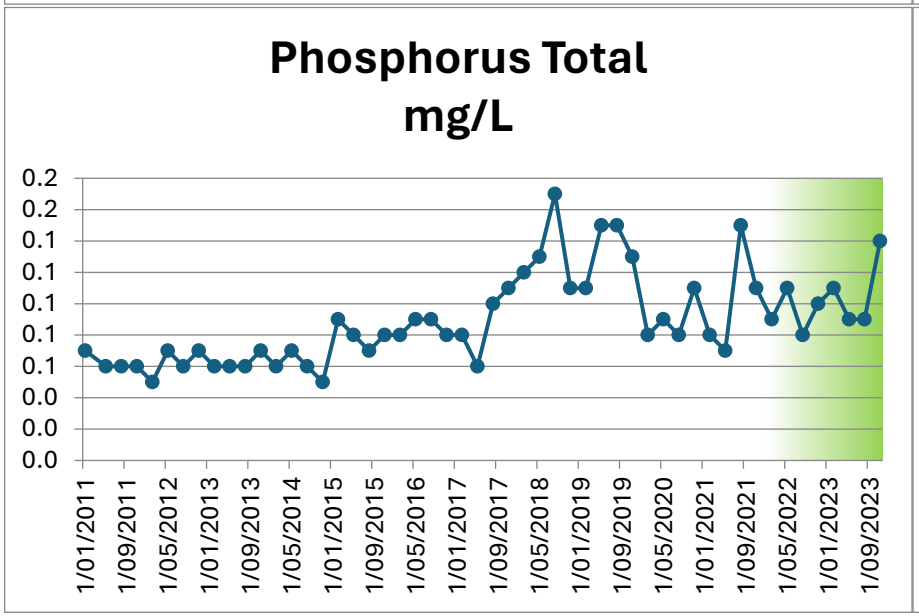

Nitrate
N mg/L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

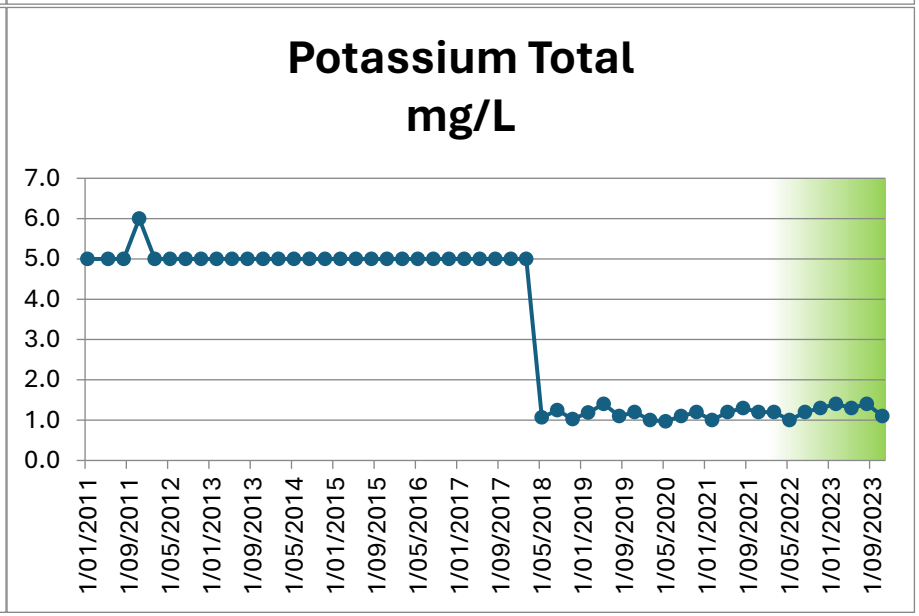

Nitrite
N mg/L
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

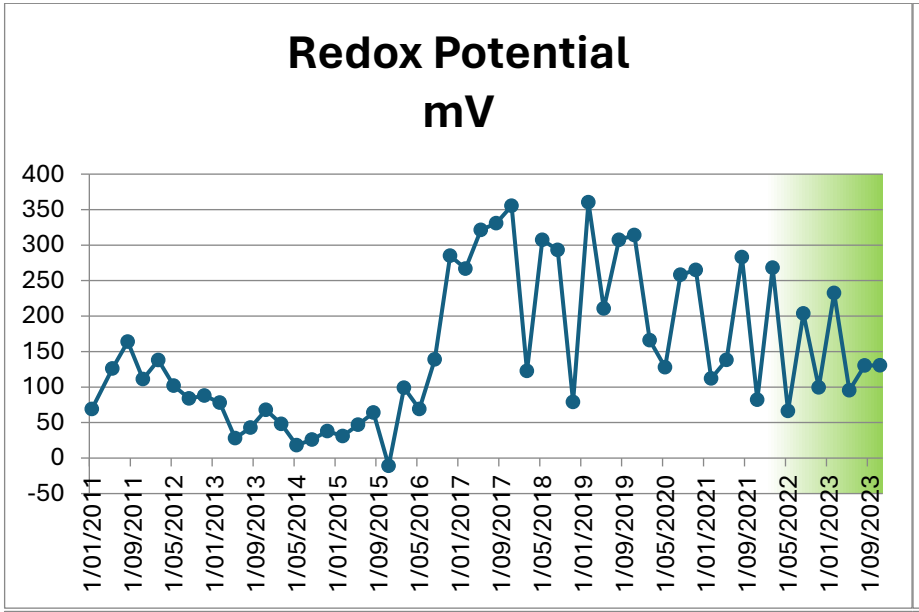

Nitrogen Oxidised
mg/L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

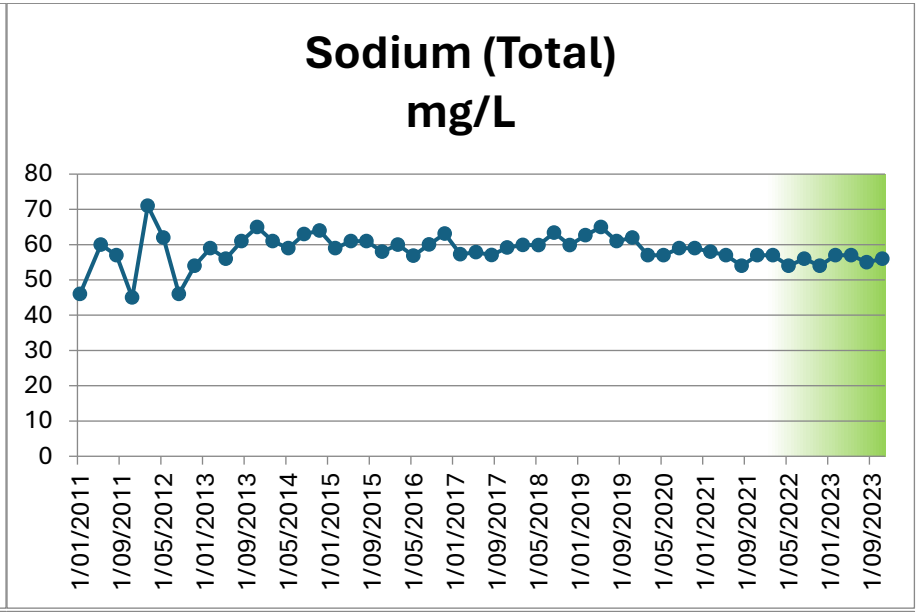

Nitrogen Total
mg/L
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

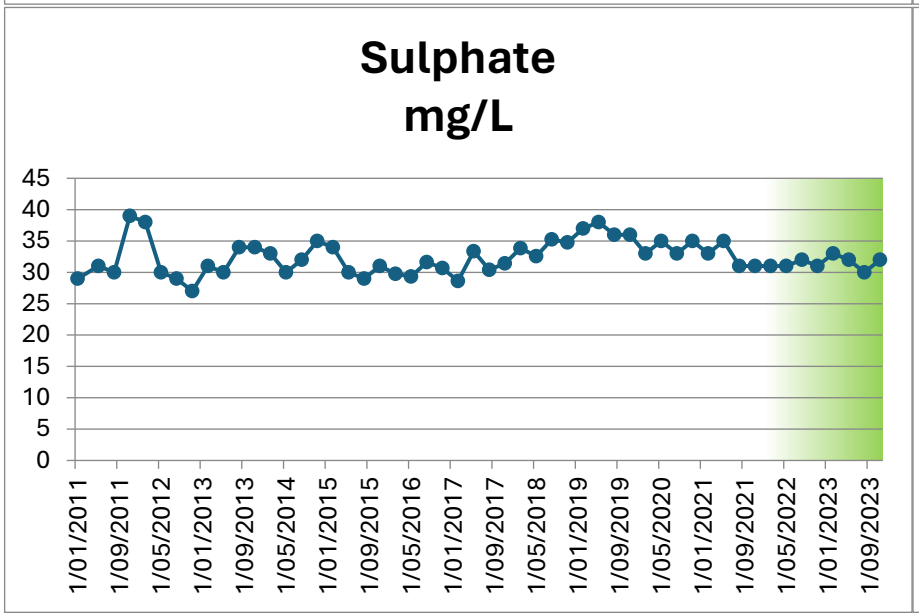

pH
pH units
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

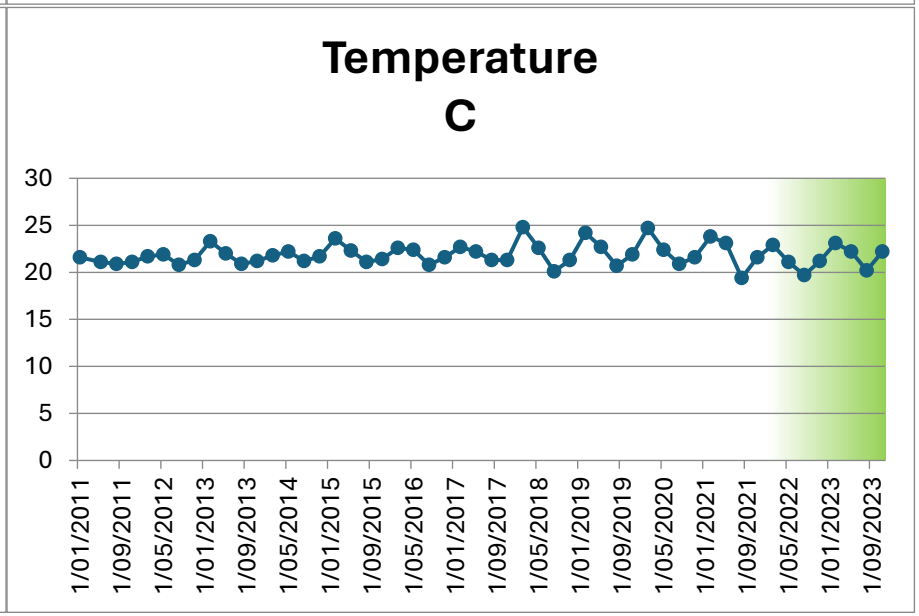

Phosphorus Total
mg/L
0.2
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

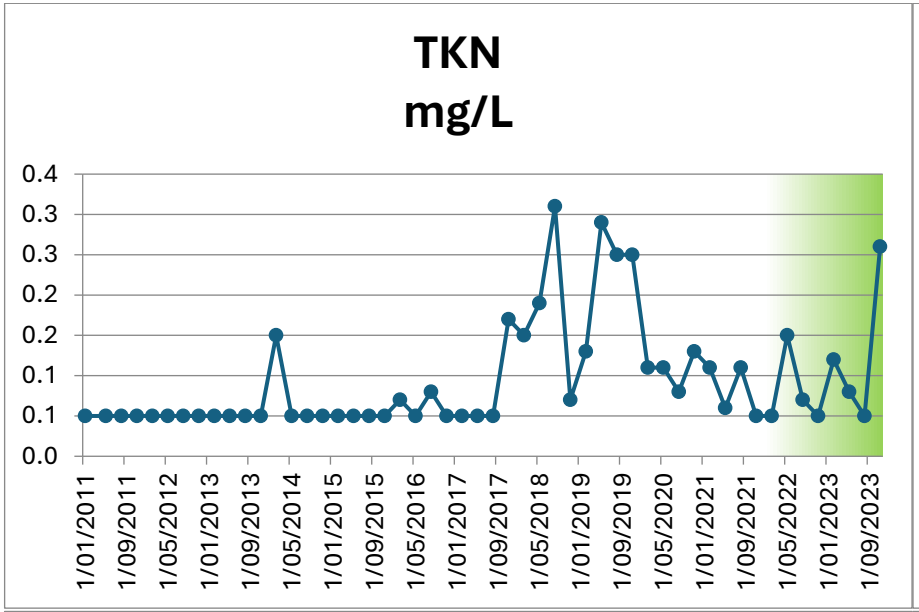

Potassium Total
mg/L
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

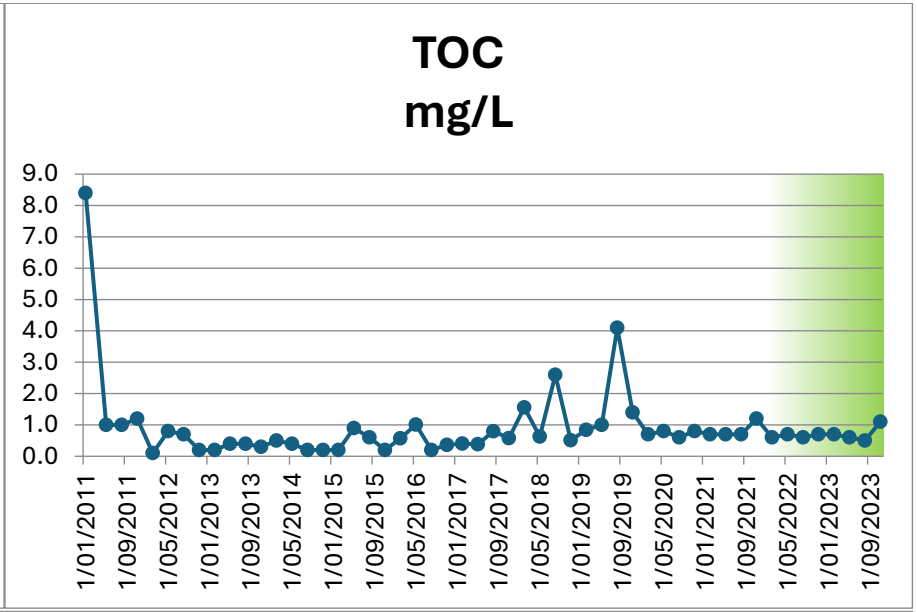

Redox Potential
mV
400
350
300
250
200
150
100
50
0
-50
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

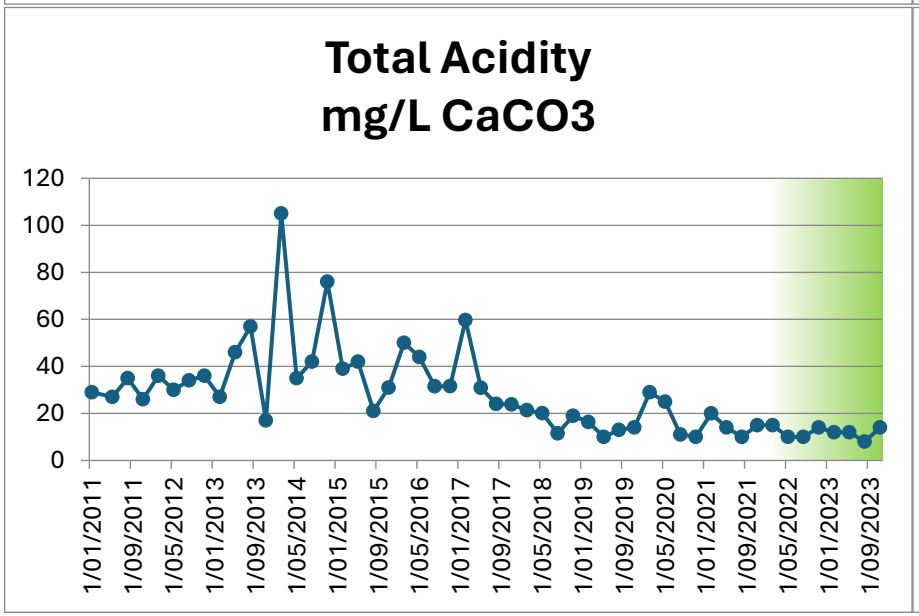

Sodium (Total)
mg/L
80
70
60
50
40
30
20
10
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

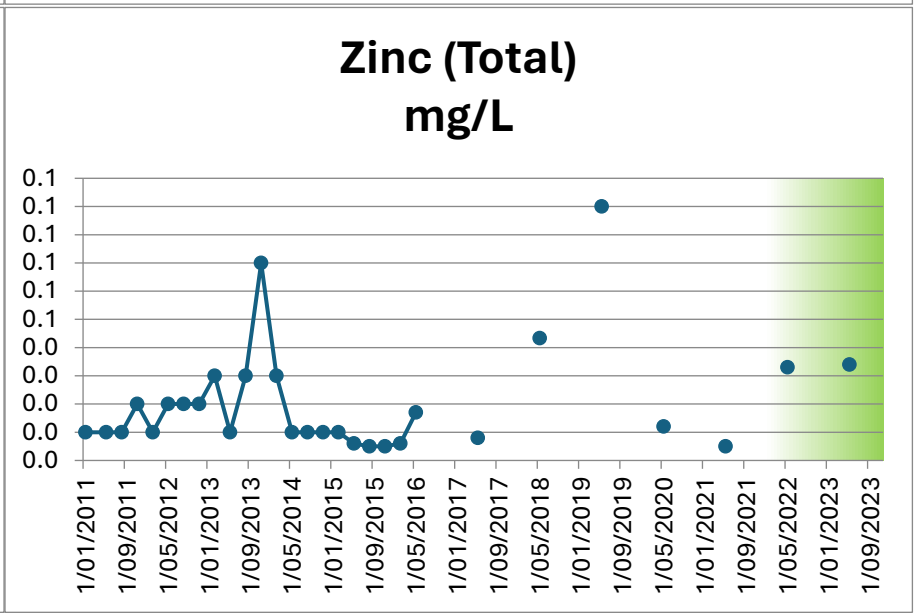

Sulphate
mg/L
45
40
35
30
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Temperature
C
30
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TKN
mg/L
0.4
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TOC
mg/L
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Total Acidity
mg/L CaCO3
120
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Zinc (Total)
mg/L
0.1
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

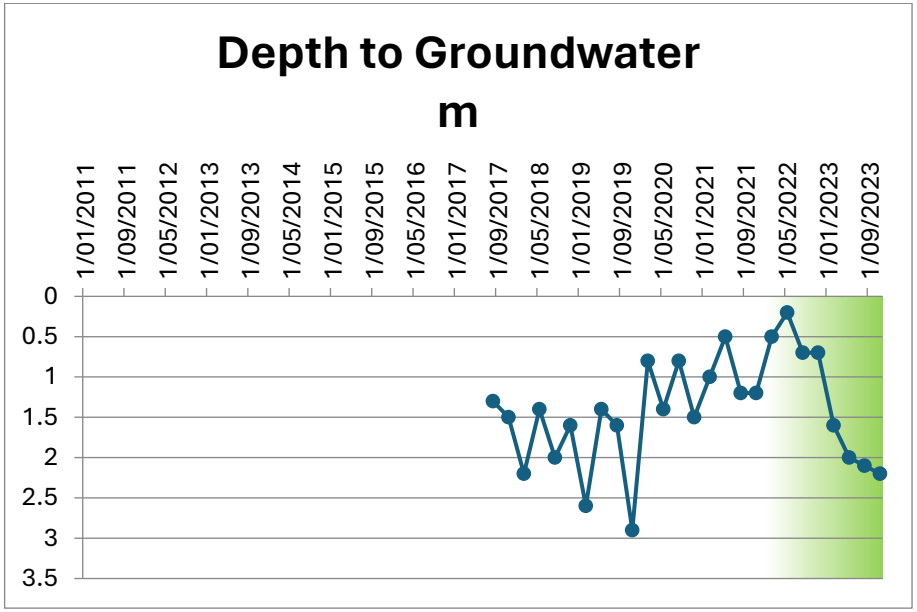
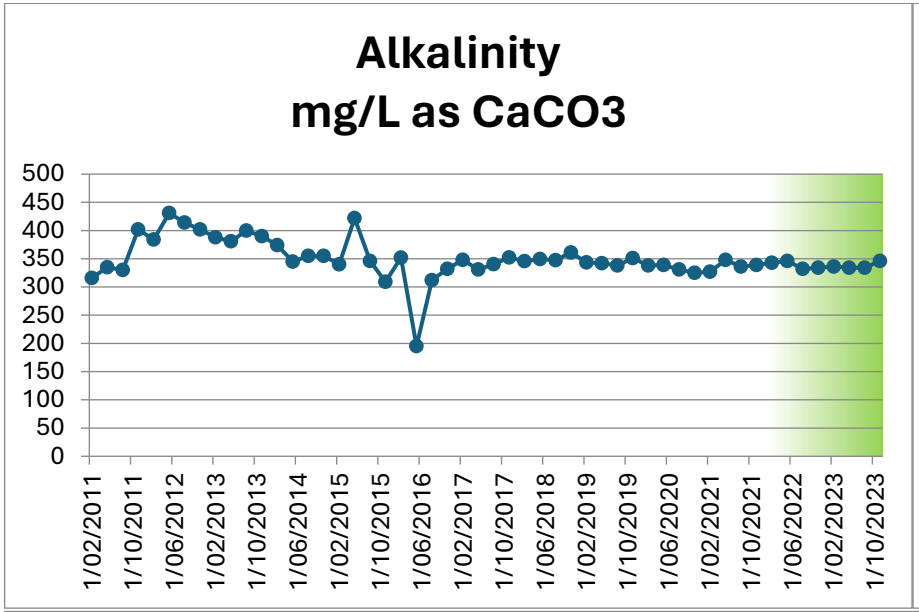
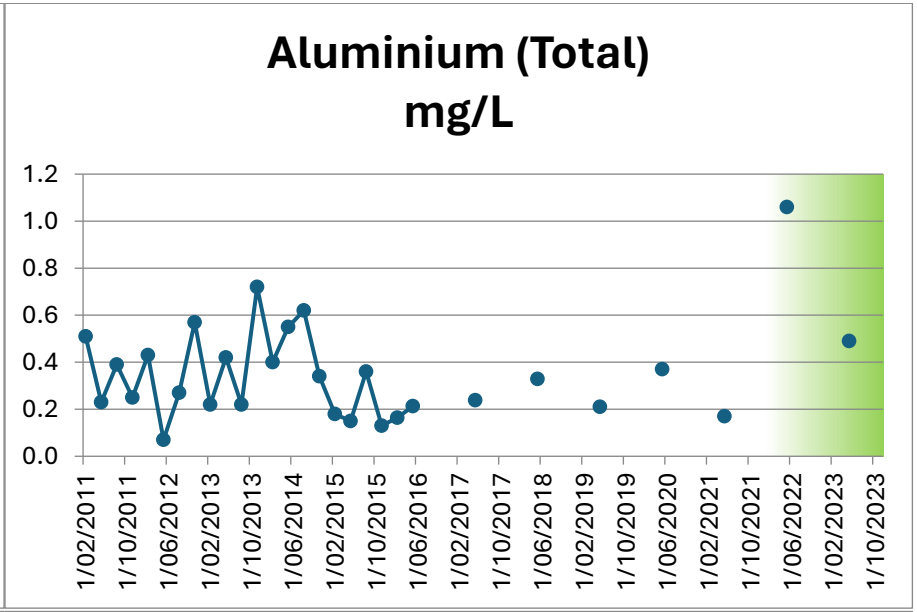
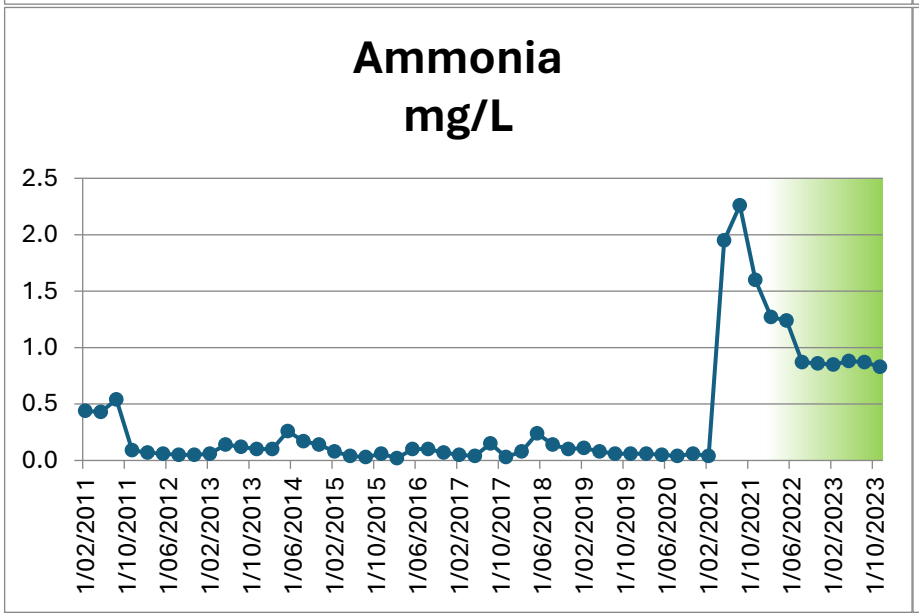

Depth to Groundwater
m
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023
0
0.5
1
1.5
2
2.5
3
3.5

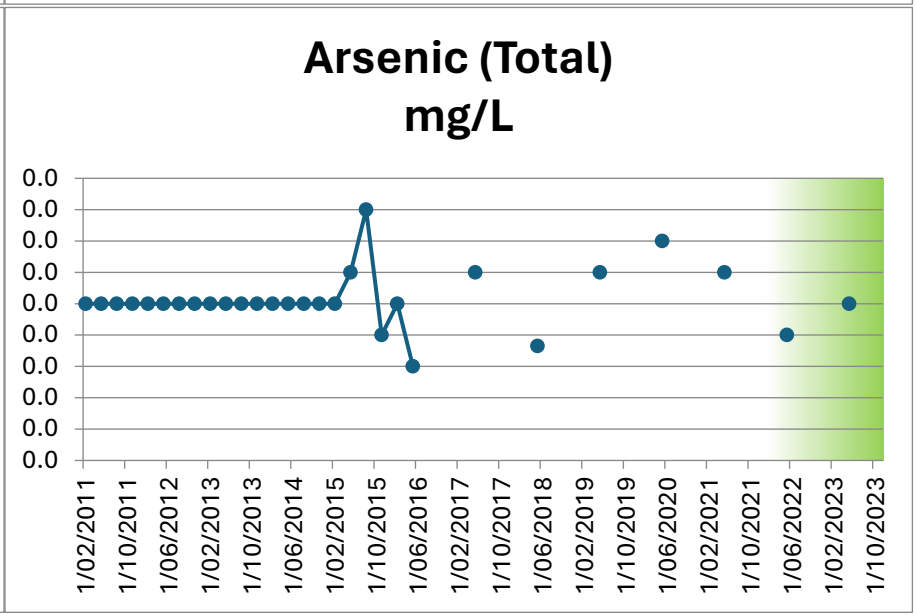
Table 25: Ground Water 20

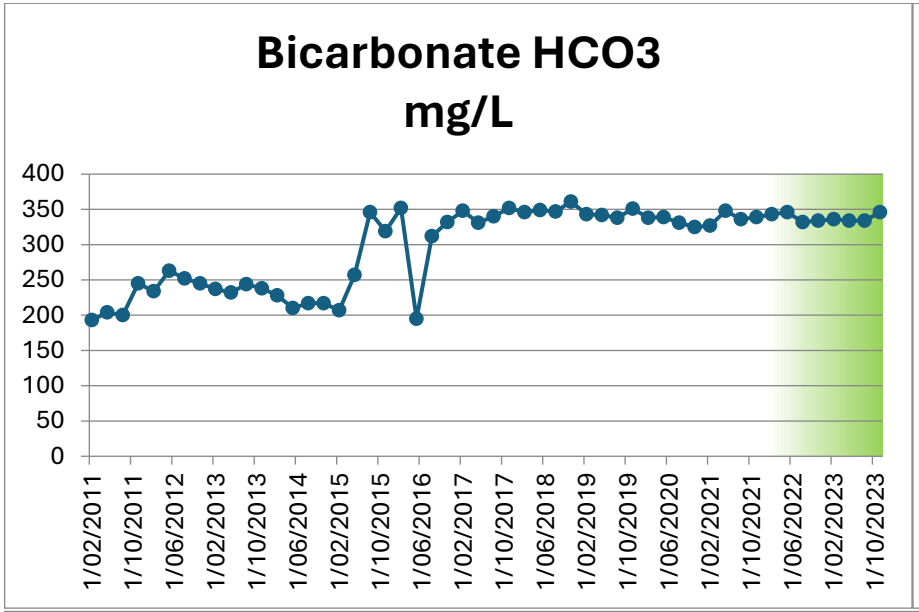
GW20	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µScm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride mg/L	Iron Total mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	Nitrate N mg/L	Nitrite N mg/L	Nitrogen Oxidised mg/L	Nitrogen Total mg/L	pH pH units	Phenol Alkalinity mg/L as CaCO3	Phosphorus Total mg/L	Potassium Total mg/L	Redox Potential mV	Sodium (Total) mg/L	Sulphate mg/L	Temperature C	TKN mg/L	TOC mg/L	Total Acidity mg/L CaCO3	Zinc (Total) mg/L	Depth to Groundwater m
1/02/2011	316	0.5	0.4	0.0	193	2	0.0	86	100	0.0	0.0	0.0	1045	0.0	2.4	0.1	1.0	0.0	13	0.6	0.0	0.1	0.1	0.1	0.6	7.6		0.1	5.0	-95	74	91	22	0.6	6.8	89	0.0	
11/05/2011	335	0.2	0.4	0.0	204	2	0.0	103	100	0.0	0.0	0.0	1201	0.0	2.6	0.1	0.9	0.0	18	0.7	0.0	0.1	0.1	0.1	0.7	7.2		0.1	10.0	52	99	102	20	0.7	3.6	23	0.0	
10/08/2011	330	0.4	0.5	0.0	200	5	0.0	94	125	0.0	0.0	0.0	1123	0.0	2.6	0.1	1.0	0.0	17	0.6	0.0	0.1	0.1	0.1	0.9	7.2		0.1	6.0	48	110	92	20	0.9	8.1	22	0.0	
9/11/2011	402	0.3	0.1	0.0	245	1	0.0	152	101	0.0	0.0	0.0	1092	0.0	0.9	0.2	1.1	0.0	18	1.1	0.0	0.0	0.0	0.0	0.2	7.0		0.0	34.0	-10	154	102	22	0.1	5.9	42	0.0	
7/02/2012	384	0.4	0.1	0.0	234	1	0.0	95	70	0.0	0.0	0.0	1038	0.0	1.6	0.2	1.1	0.0	14	0.9	0.0	0.0	0.0	0.1	0.1	7.0		0.0	5.0	59	147	75	22	0.1	4.7	45	0.0	
9/05/2012	431	0.1	0.1	0.0	263	1	0.0	79	60	0.0	0.0	0.0	1040	0.0	3.2	0.2	0.8	0.0	12	0.9	0.0	0.0	0.0	0.1	0.1	6.8		0.0	5.0	227	100	48	21	0.1	1.9	34	0.0	
7/08/2012	414	0.3	0.1	0.0	252	2	0.0	76	62	0.0	0.0	0.0	981	0.0	2.3	0.3	1.1	0.0	11	0.9	0.0	0.0	0.0	0.0	0.2	7.0		0.0	5.0	-83	95	36	20	0.2	4.6	38	0.1	
14/11/2012	402	0.6	0.1	0.0	245	1	0.0	79	64	0.0	0.0	0.0	934	0.0	3.2	0.2	1.5	0.0	13	0.8	0.0	0.0	0.0	0.0	0.3	7.1		0.0	5.0	-109	95	24	21	0.3	3.7	33	0.1	
14/02/2013	388	0.2	0.1	0.0	237	1	0.0	84	60	0.0	0.0	0.0	919	0.0	3.3	0.2	1.4	0.0	12	0.9	0.0	0.0	0.0	0.0	0.2	7.0		0.0	5.0	-60	107	22	21	0.1	3.4	28	0.0	
15/05/2013	381	0.4	0.1	0.0	232	2	0.0	79	63	0.0	0.0	0.0	902	0.0	2.6	0.3	1.7	0.0	11	0.9	0.0	0.1	0.0	0.1	0.6	6.9		0.1	5.0	-81	96	17	21	0.5	3.6	66	0.1	
7/08/2013	400	0.2	0.1	0.0	244	1	0.0	86	62	0.0	0.0	0.0	884	0.0	3.1	0.3	1.4	0.0	12	1.0	0.0	0.1	0.0	0.1	0.3	7.1		0.0	5.0	-89	102	18	20	0.3	3.2	70	0.1	
13/11/2013	390	0.7	0.1	0.0	238	2	0.0	88	62	0.0	0.0	0.0	924	0.0	2.9	0.4	2.2	0.0	13	1.1	0.0	0.0	0.0	0.0	0.4	7.5		0.1	5.0	-72	108	14	21	0.3	3.2	34	0.1	
12/02/2014	374	0.4	0.1	0.0	228	2	0.0	78	66	0.0	0.0	0.0	825	0.0	3.2	0.4	1.7	0.0	11	1.0	0.0	0.1	0.0	0.1	0.5	7.0		0.0	5.0	-73	92	13	21	0.5	3.0	85	0.1	
14/05/2014	345	0.6	0.3	0.0	210	4	0.0	76	67	0.0	0.0	0.0	882	0.0	2.6	0.4	2.1	0.0	11	0.9	0.0	0.1	0.0	0.1	0.7	7.0		0.1	5.0	-48	87	13	20	0.5	3.0	40	0.1	
13/08/2014	355	0.6	0.2	0.0	217	2	0.0	89	75	0.0	0.0	0.0	899	0.0	3.3	0.4	1.8	0.0	13	1.0	0.0	0.1	0.0	0.1	0.5	7.2		0.1	5.0	-34	97	14	20	0.4	2.7	75	0.1	
11/11/2014	355	0.3	0.1	0.0	217	2	0.0	87	81	0.0	0.0	0.0	887	0.0	3.1	0.4	1.7	0.0	13	0.9	0.0	0.0	0.0	0.0	0.4	7.2		0.1	5.0	-68	92	12	21	0.3	2.2	44	0.0	
10/02/2015	340	0.2	0.1	0.0	207	1	0.0	74	72	0.0	0.0	0.0	886	0.0	1.3	0.4	1.5	0.0	11	1.0	0.0	0.1	0.0	0.1	0.3	7.1		0.0	5.0	-38	78	9	22	0.2	2.1	49	0.0	
12/05/2015	422	0.2	0.0	0.0	257	1	0.0	92	77	0.0	0.0	0.0	869	0.0	1.2	0.4	1.3	0.0	13	0.9	0.0	0.0	0.0	0.0	0.1	6.8		0.0	5.0	-20	85	11	21	0.1	1.7	50	0.0	
12/08/2015	346	0.4	0.0	0.0	346	1	0.0	92	74	0.0	0.0	0.0	875	0.0	1.9	0.5	1.6	0.0	13	0.9	0.0	0.0	0.0	0.0	0.1	7.1		0.1	5.0	-28	80	10	20	0.1	1.9	40	0.1	
11/11/2015	309	0.1	0.1	0.0	319	1	0.0	82	73	0.0	0.0	0.0	838	0.0	1.8	0.5	0.9	0.0	12	0.7	0.0	0.0	0.0	0.0	0.2	7.1		0.0	5.0	4	75	10	21	0.2	1.5	42	0.0	
9/02/2016	352	0.2	0.0	0.0	352	1	0.0	88	78	0.0	0.0	0.0	869	0.0	1.1	0.4	1.3	0.0	12	0.9	0.0	0.0	0.0	0.0	0.1	7.1		0.0	5.0	-43	79	10	21	0.1	1.5	55	0.0	
10/05/2016	195	0.2	0.1	0.0	195	1	0.0	52	38	0.0	0.0	0.0	521	0.0	2.3	0.3	0.8	0.0	7	0.5	0.0	0.1	0.0	0.1	0.3	7.2		0.1	5.0	34	44	6	21	0.2	1.0	22	0.0	
10/08/2016	312		0.1		312	3		77	65				791		1.9	0.4			11			0.0	0.0	0.0	0.3	7.0		0.1	5.0	-40	71	11	21	0.2	1.3	40		
8/11/2016	332		0.1		332	1		88	76				844		1.7	0.4			12			0.1	0.0	0.1	0.3	7.1		0.0	5.0	40	80	13	22	0.2	2.2	49		
8/02/2017	348		0.1		348	1		86	75				883		1.3	0.4			13			0.0	0.0	0.0	0.2	7.0		0.0	5.0	83	78	11	23	0.2	2.1	68		
9/05/2017	331	0.2	0.0	0.0	331	1	0.0	90	85	0.0	0.0	0.0	862	0.0	1.0	0.4	1.4	0.0	13	0.7	0.0	0.0	0.0	0.0	0.1	7.0		0.0	5.0	-20	77	14	20	0.1	1.6	53	0.0	
9/08/2017	340		0.2		340	2		86	90				867		0.8	0.5			12			0.0	0.0	0.0	0.3	6.9		0.0	5.0	-27	76	5	20	0.3	2.3	49		15.0
8/11/2017	352		0.0		352	1		91	72				884		1.2	0.5			13			0.0	0.0	0.0	0.1	6.8		0.0	5.0	-27	76	6	20	0.1	1.6	54		16.0
14/02/2018	346		0.1		346	1		85	70				868		3.2	0.5			12			0.0	0.0	0.0	0.2	7.2		0.0	5.0	-63	75	5	25	0.2	2.2	18		16.2
9/05/2018	349	0.3	0.2	0.0	349	2	0.0	85	71	0.0	0.0	0.0	856	0.0	3.1	0.5	1.5	0.0	12	0.9	0.0	0.0	0.0	0.0	0.5	7.2		0.1	2.2	-67	77	4	21	0.5	2.1	25	0.0	15.3
15/08/2018	347		0.1		347	4		93	63				854		3.2	0.5			13			0.1	0.0	0.1	0.5	7.2		0.1	2.3	-22	82	5	21	0.4	0.2	20		15.9
14/11/2018	361		0.1		361	2		88	63				833		3.3	0.6			12			0.0	0.0	0.0	0.3	7.3		0.1	2.0	-38	75	5	21	0.3	2.1	32		16.6
13/02/2019	343		0.1		343	1		94	74				856		2.7	0.5			13			0.0	0.0	0.0	0.3	7.1		0.1	2.1	-80	78	5	22	0.3	2.6	27		15.7
15/05/2019	342	0.2	0.1	0.0	342	2	0.0	92	67	0.0	0.0	0.0	834	0.0	2.9	0.5	2.1	0.0	13	0.7	0.0	0.0	0.0	0.0	0.2	7.2		0.1	2.0	-77	80	4	21	0.2	1.8	27	0.0	16.0
14/08/2019	338		0.1		338	2		90	60				817		3.0	0.6			12			0.0	0.0	0.0	0.3	7.2		0.1	2.1	48	74	5	20	0.2	2.2	22		16.0
13/11/2019	351		0.1		351	3		88	55				836		3.0	0.6			12			0.0	0.0	0.0	0.4	7.1		0.1	2.0	-42	76	4	21	0.3	2.5	27		16.0
26/02/2020	338		0.1		338	2		81	58				800		3.0	0.5			11			0.0	0.0	0.0	0.3	7.2	0.0	0.1	1.8	-75	68	3	21	0.3	1.9	25		16.0
13/05/2020	339	0.4	0.1	0.0	339	2	0.0	81	50	0.0	0.0	0.0	797	0.0	2.9	0.6	2.3	0.0	11	0.7	0.0	0.0	0.0	0.0	0.3	7.1	0.0	0.0	1.8	-65	67	4	20	0.2	1.9	28	0.0	15.2
12/08/2020	331		0.0		331	3		85	50				760		3.0	0.6			12			0.0	0.0	0.0	0.2	7.1	0.0	0.0	1.8	-57	67	5	20	0.1	1.7	25		15.4
11/11/2020	325		0.1		325	3		79	51				769		3.2	0.6			11			0.0	0.0	0.0	0.2	7.1	0.0	0.1	1.8	-65	65	6	21	0.2	2.5	20		15.8
10/02/2021	327		0.0		327	1		81	48				770		2.8	0.6			11			0.0	0.0	0.0	0.1	6.9	0.0	0.0	1.7	-70	62	7	21	0.1	1.6	22		15.6
12/05/2021	348	0.2	2.0	0.0	348	76	0.0	84	30	0.0	0.0	0.0	780	0.0	2.3	0.6	2.0	0.0	12	0.7	0.0	0.0	0.0	0.0	4.9	7.0	0.0	0.6	2.5	-63	65	2	21	4.9	26.0	36	0.0	15.0
11/08/2021	336		2.3		336	14		82	52				779		2.6	0.6			12			0.0	0.0	0.0	3.1	7.0	0.0	0.4	2.3	-69	61	3	20	3.1	3.6	36		15.2
9/11/2021	339		1.6		339	8		83	58				784		2.5	0.6			12			0.0	0.0	0.0	2.1	7.0	0.0	0.3	2.2	-76	62	4	21	2.1	3.4	26		15.4
9/02/2022	343		1.3		343	4		81	50				780		2.7	0.6			12			0.0	0.0	0.0	1.4	7.0	0.0	0.2	2.0	-63	60	2	21	1.4	2.1	46		15.3
11/05/2022	346	1.1	1.2	0.0	346	7	0.0	83	60	0.0	0.0	0.0	799	0.0	3.5	0.7	2.2	0.0	12	0.7	0.0	0.0	0.0	0.0	1.9	7.1	0.0	0.1	2.3	-93	65	3	20	1.9	5.0	26	0.1	14.8
10/08/2022	332		0.9		332	4		83	56				789		2.6	0.7			12			0.0	0.0	0.0	1.2	7.1	0.0	0.2	2.1	-82	62	3	20	1.2	2.4	30		14.7
9/11/2022	334		0.9		334	4		83	70				801		3.0	0.7			12			0.0	0.0	<0.02	1.0	7.1	0.0	0.1	2.2	-79	62	2	21	1.0	2.1	25		15.0
14/02/2023	336		0.9		336	4		88	58				781		2.9	0.7			12			0.0	0.0	0.0	1.0	7.0	0.0	0.1	2.3	-79	65	3	21	1.0	2.1	26		15.3
10/05/2023	334	0.5	0.9	0.0	334	8	0.0	86	58	0.0	0.0	0.0	784	0.0	3.0	0.7	1.9	0.0	12	0.7	0.0	0.0	0.0	0.0	1.2	7.1	1.0	0.2	2.5	-105	65	2	20	1.2	3.9	27	0.1	15.7
9/08/2023	334		0.9		334	4		83	57				775		3.2	0.7			12			2.0	0.0	0.0	1.1	7.1		0.1	2.5	-119	63	1	20	1.1	2.5	27		16.3
15/11/2023	346		0.8		346	1		83	59				784		3.2	0.6			12			0.0	0.0	0.0	1.0	7.0		0.2	2.2	-115	63	1	21	1.0	2.4	32		16.7
2023 Min	**334.0**	**0.5**	**0.8**	**0.0**	**334.0**	**1.2**	**0.0**	**83.0**	**57.0**	**0.0**	**0.0**	**0.0**	**775.0**	**0.0**	**2.9**	**0.6**	**1.9**	**0.0**	**12.0**	**0.7**	**0.0**	**0.0**	**0.0**	**0.0**	**1.0**	**7.0**	**0.0**	**0.1**	**2.2**	**-118.9**	**63.0**	**1.3**	**20.1**	**1.0**	**2.1**	**26.0**	**0.1**	**15.3**
2023 Max	**346.0**	**0.5**	**0.9**	**0.0**	**346.0**	**7.5**	**0.0**	**88.0**	**59.0**	**0.0**	**0.0**	**0.0**	**784.0**	**0.0**	**3.2**	**0.7**	**1.9**	**0.0**	**12.0**	**0.7**	**0.0**	**2.0**	**0.0**	**0.0**	**1.2**	**7.1**	**1.0**	**0.2**	**2.5**	**-79.4**	**65.0**	**2.5**	**21.4**	**1.2**	**3.9**	**32.0**	**0.1**	**16.7**
2023 Mean	**337.5**	**0.5**	**0.9**	**0.0**	**337.5**	**4.1**	**0.0**	**85.0**	**58.0**	**0.0**	**0.0**	**0.0**	**781.0**	**0.0**	**3.1**	**0.7**	**1.9**	**0.0**	**12.0**	**0.7**	**0.0**	**0.5**	**0.0**	**0.0**	**1.1**	**7.1**	**0.5**	**0.1**	**2.4**	**-104.3**	**64.0**	**1.7**	**20.7**	**1.1**	**2.7**	**28.0**	**0.1**	**16.0**
Long-term Average	**349.0**	**0.4**	**0.3**	**0.0**	**298.4**	**3.9**	**0.0**	**86.0**	**66.9**	**0.0**	**0.0**	**0.0**	**862.5**	**0.0**	**2.5**	**0.5**	**1.5**	**0.0**	**12.4**	**0.8**	**0.0**	**0.1**	**0.0**	**0.0**	**0.6**	**7.1**	**0.1**	**0.1**	**4.4**	**-41.0**	**80.6**	**17.2**	**20.9**	**0.6**	**3.2**	**38.4**	**0.0**	**15.6**

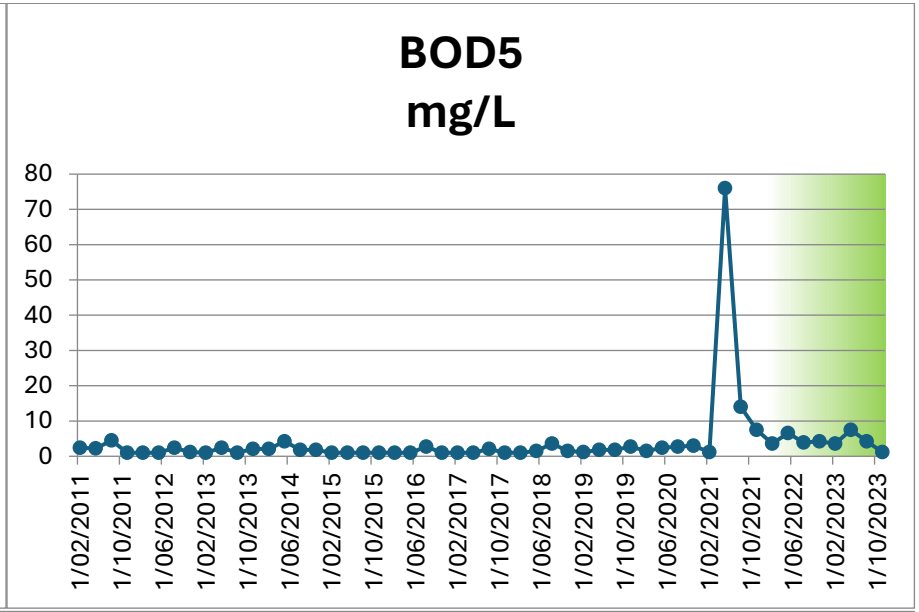

Alkalinity
mg/L as CaCO3
500
450
400
350
300
250
200
150
100
50
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

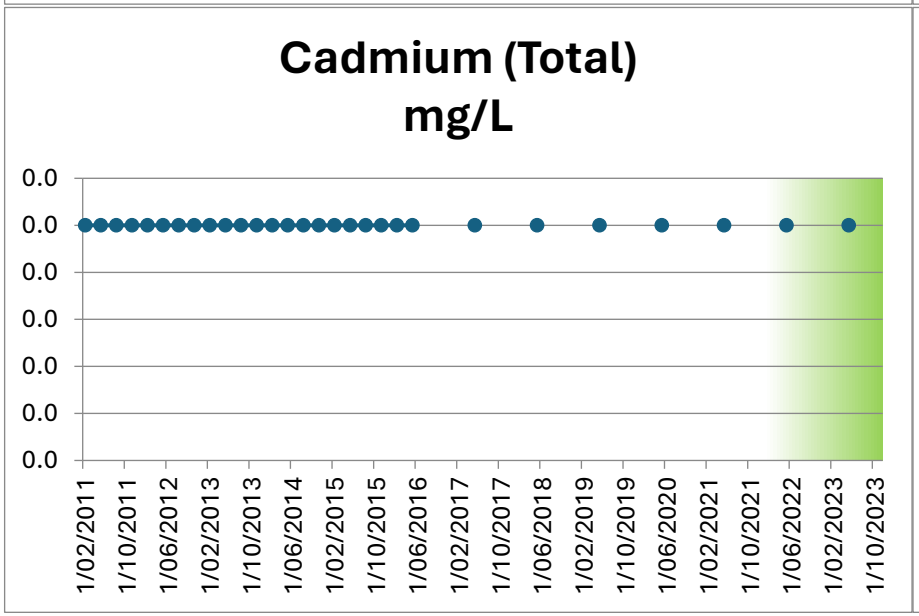

Aluminium (Total)
mg/L
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

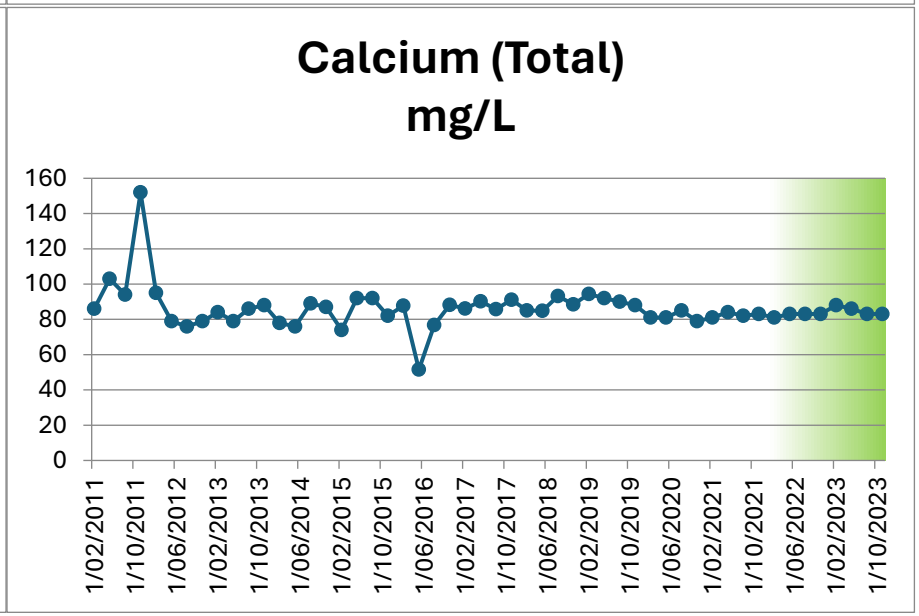

Ammonia
mg/L
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

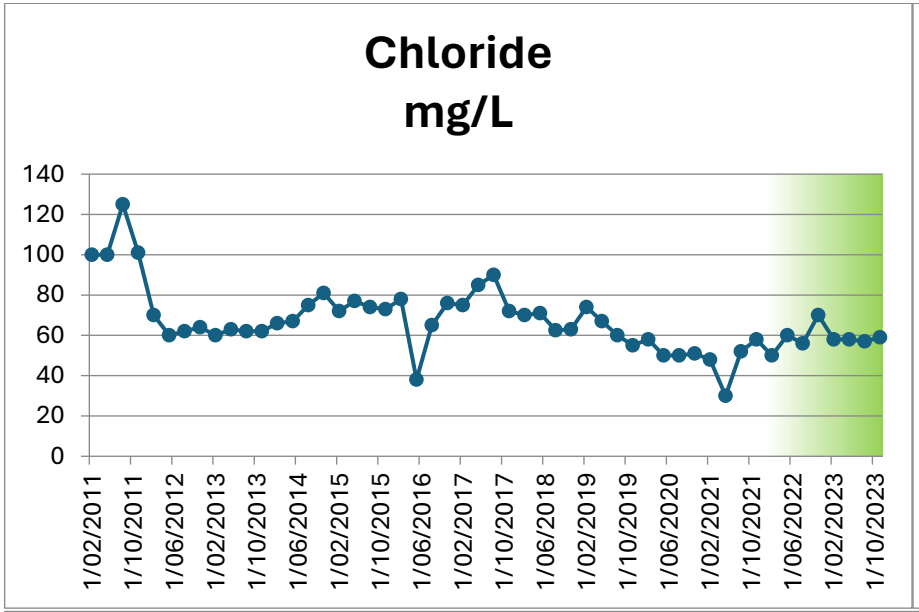

Arsenic (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

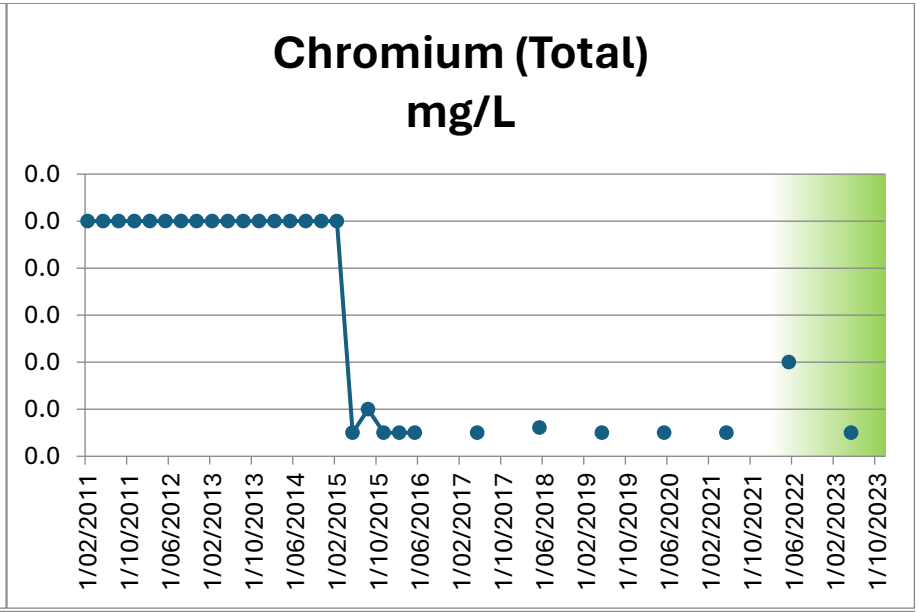

Bicarbonate HCO3
mg/L
400
350
300
250
200
150
100
50
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

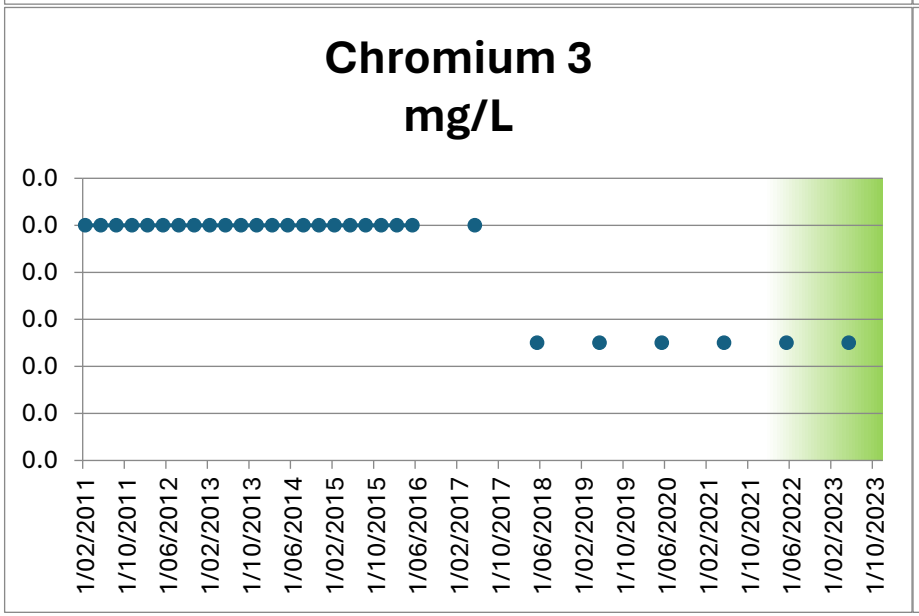

BOD5
mg/L
80
70
60
50
40
30
20
10
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

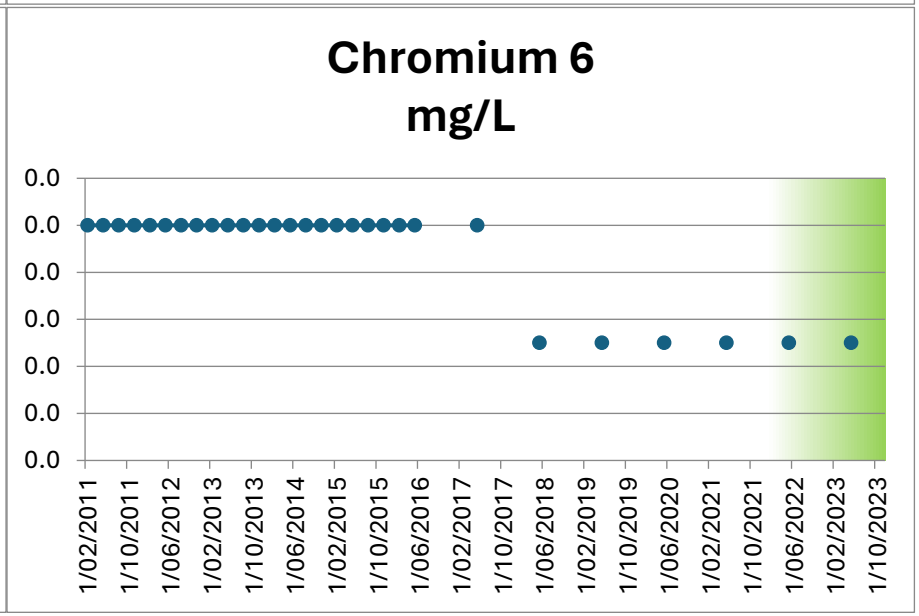

Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

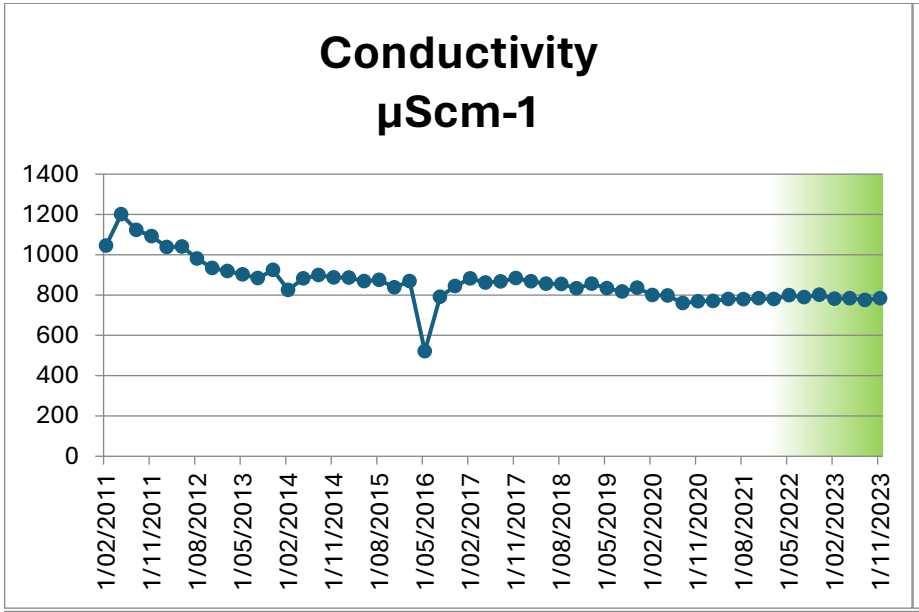

Calcium (Total)
mg/L
160
140
120
100
80
60
40
20
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

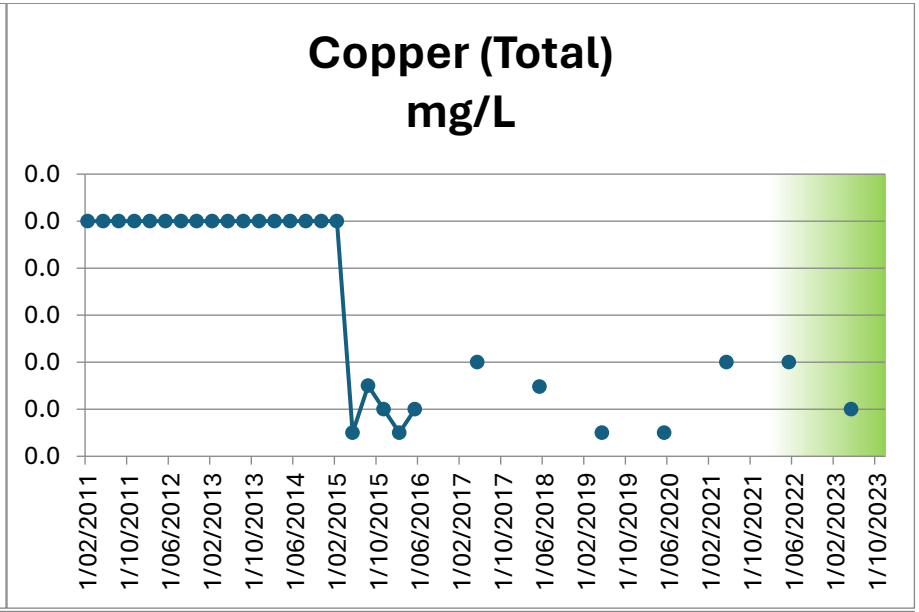

Chloride
mg/L
140
120
100
80
60
40
20
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

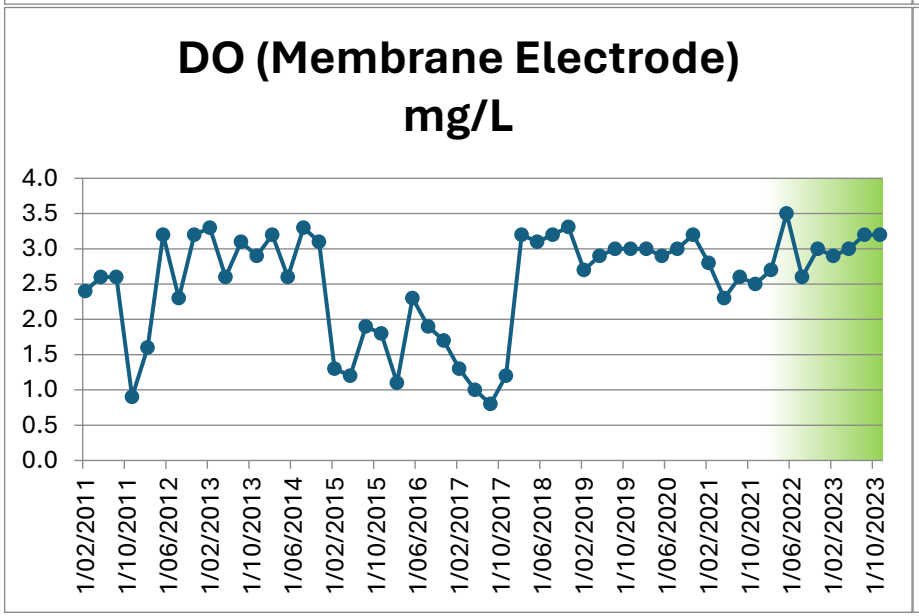

Chromium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

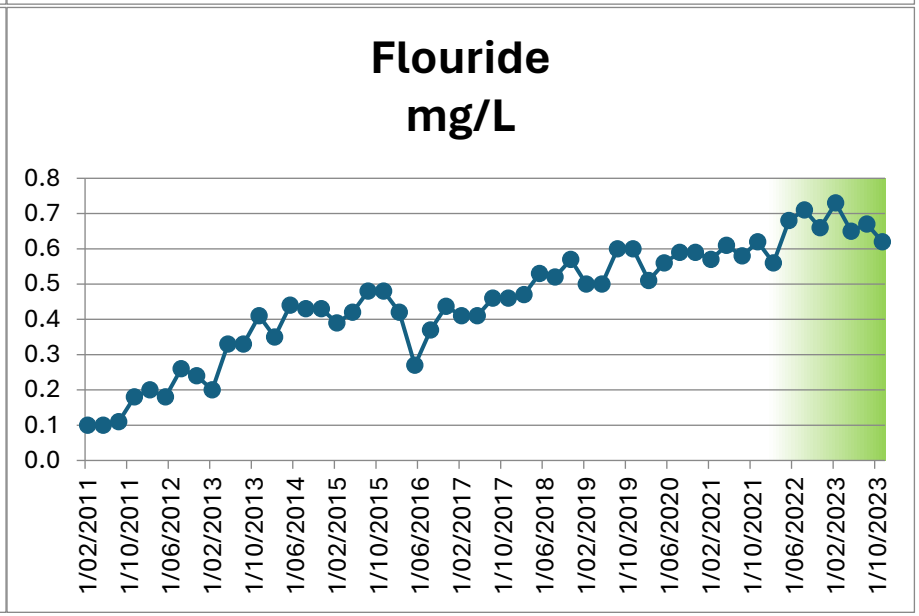

Chromium 3
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

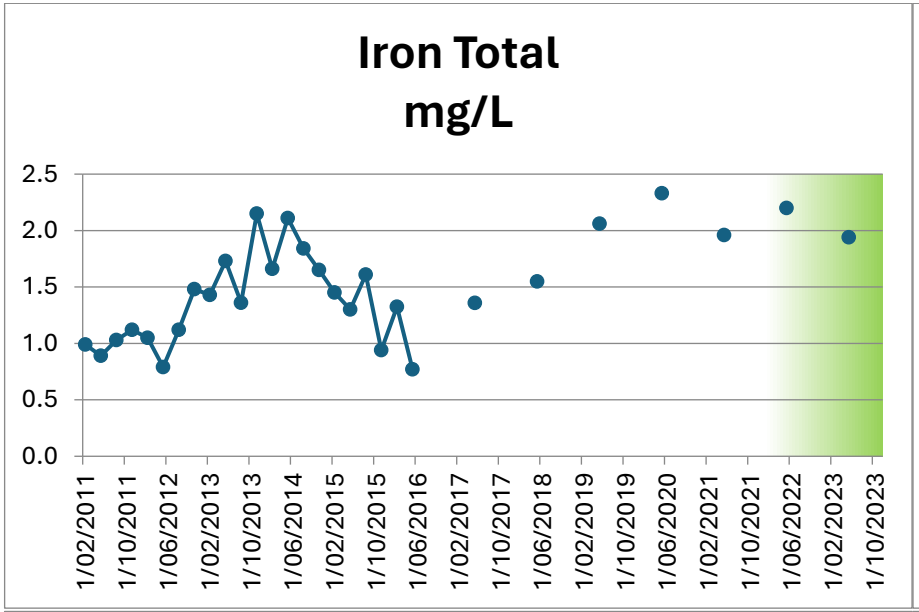

Chromium 6
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

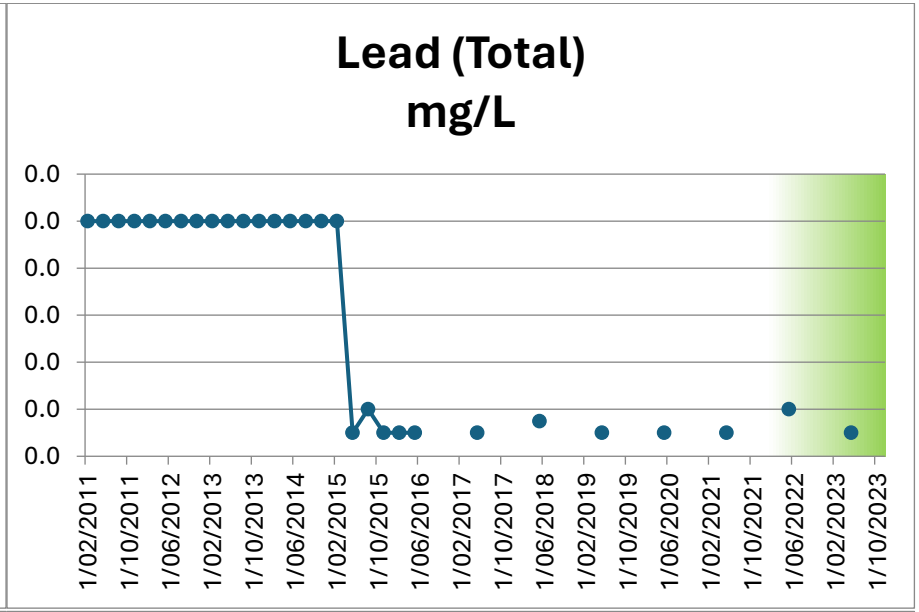

Conductivity
µScm-1
1400
1200
1000
800
600
400
200
0
1/02/2011
1/11/2011
1/08/2012
1/05/2013
1/02/2014
1/11/2014
1/08/2015
1/05/2016
1/02/2017
1/11/2017
1/08/2018
1/05/2019
1/02/2020
1/11/2020
1/08/2021
1/05/2022
1/02/2023
1/11/2023

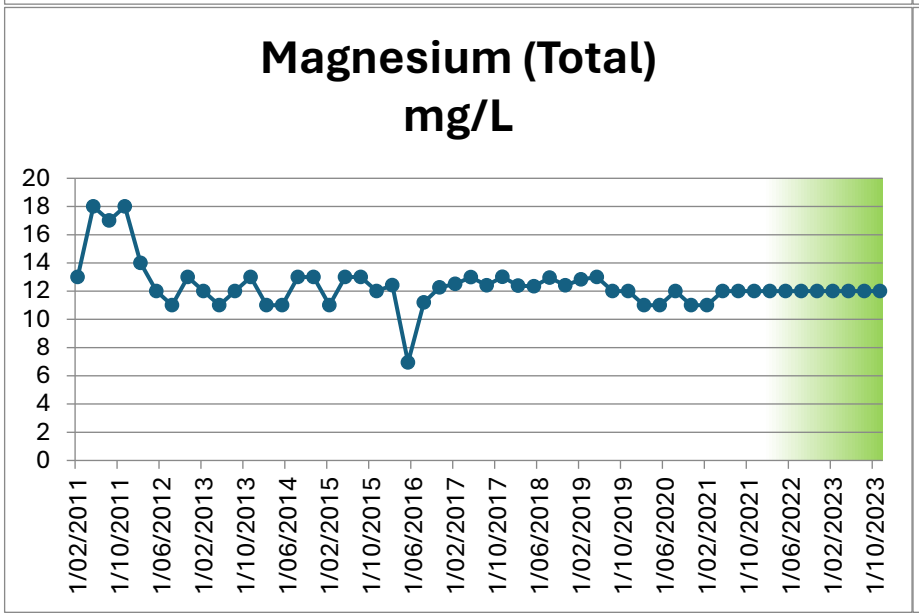

Copper (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

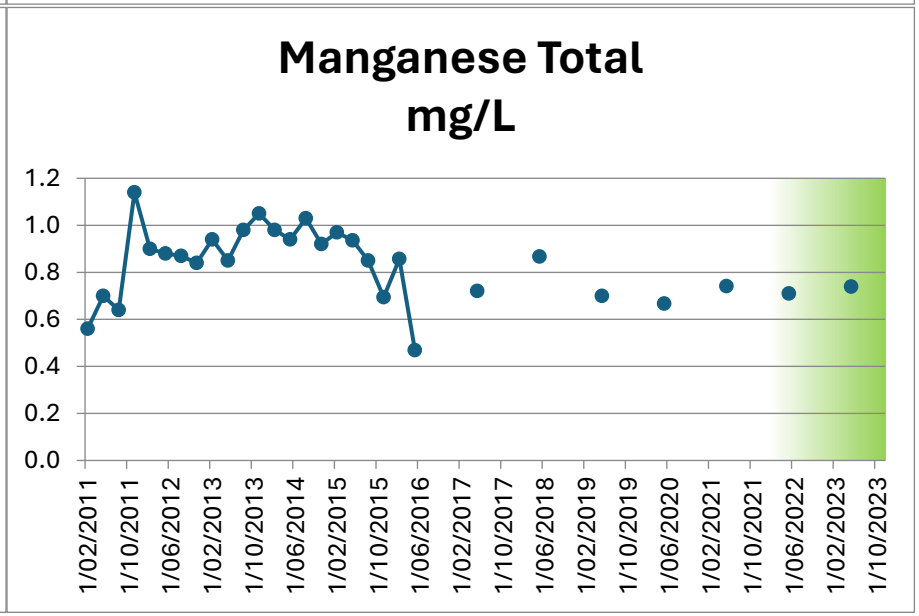

DO (Membrane Electrode)
mg/L
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

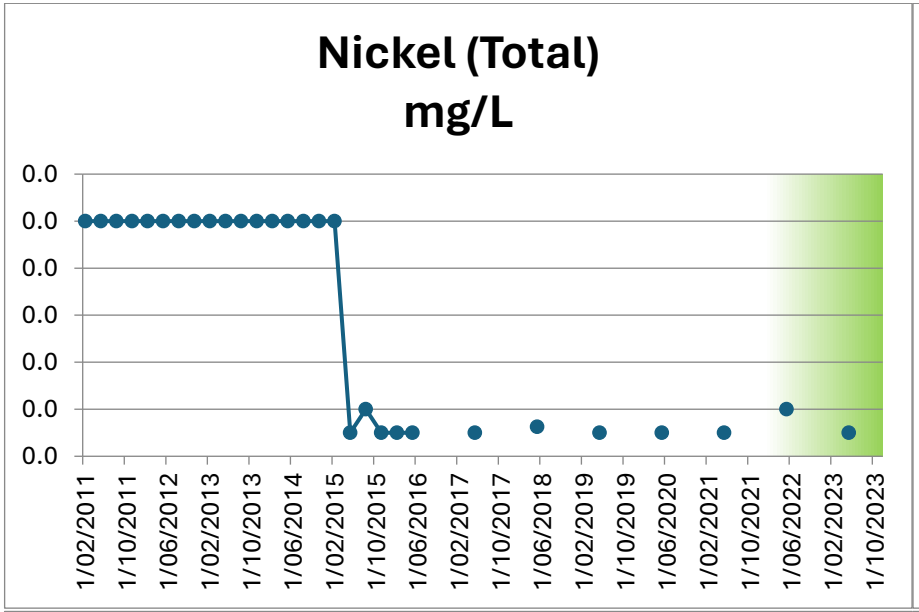

Flouride
mg/L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

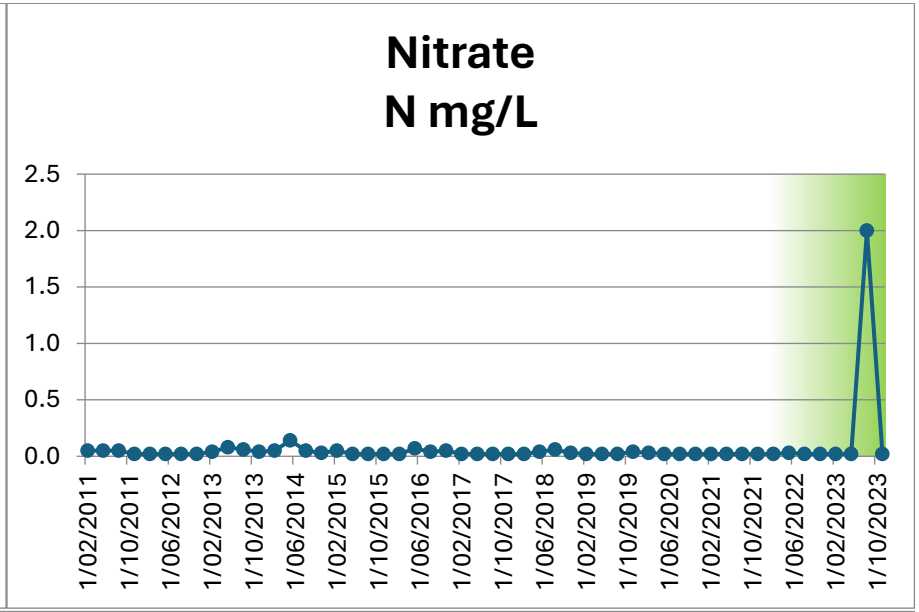

Iron Total
mg/L
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

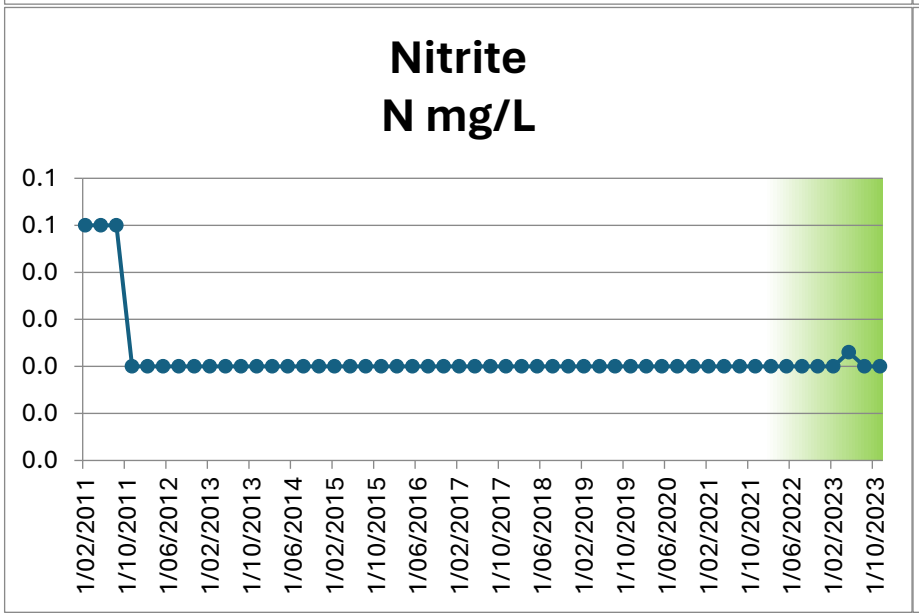

Lead (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

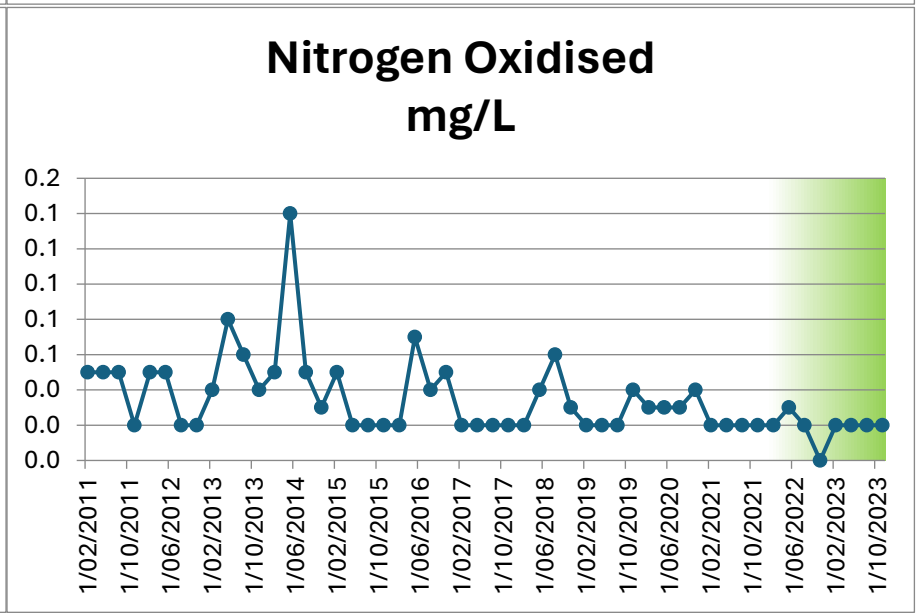

Magnesium (Total)
mg/L
20
18
16
14
12
10
8
6
4
2
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

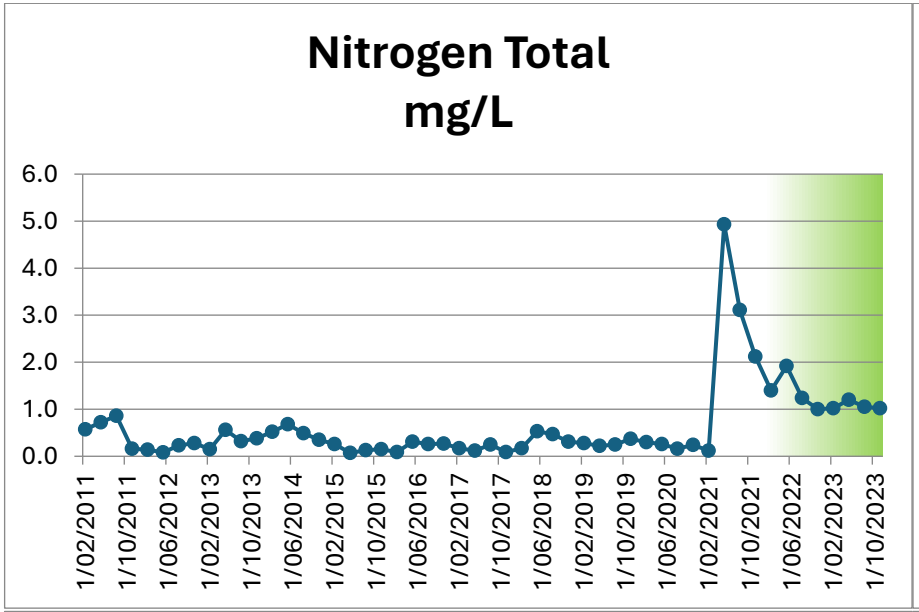

Manganese Total
mg/L
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

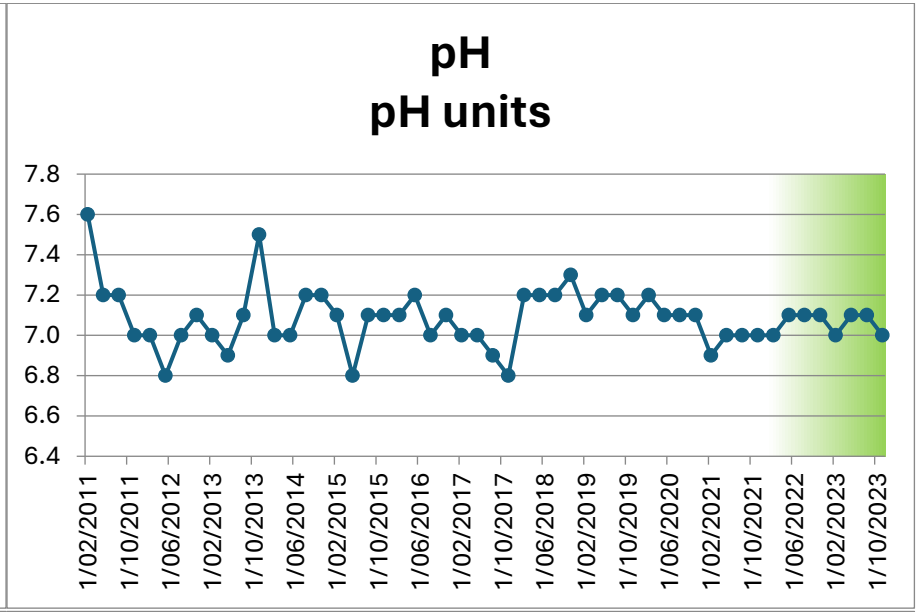

Nickel (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

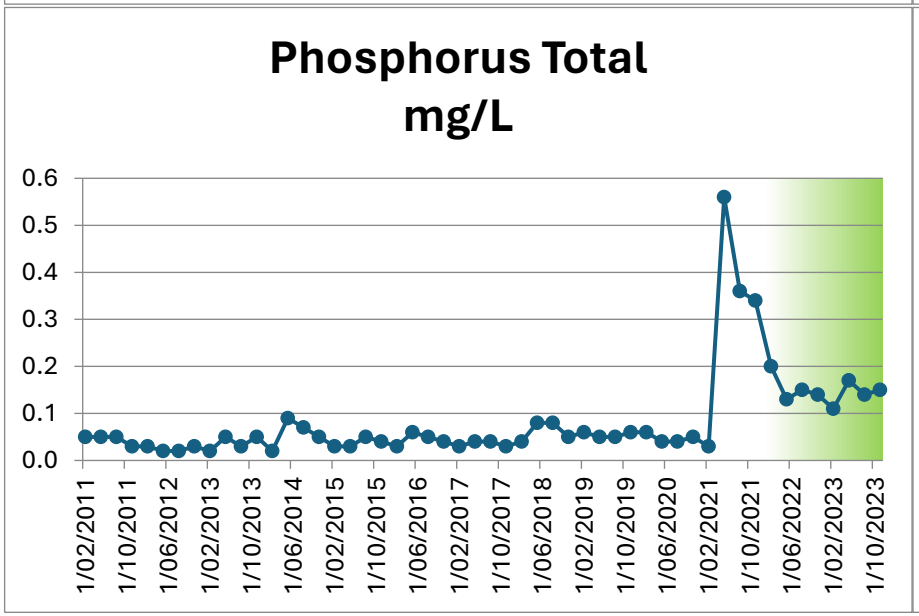

Nitrate
N mg/L
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

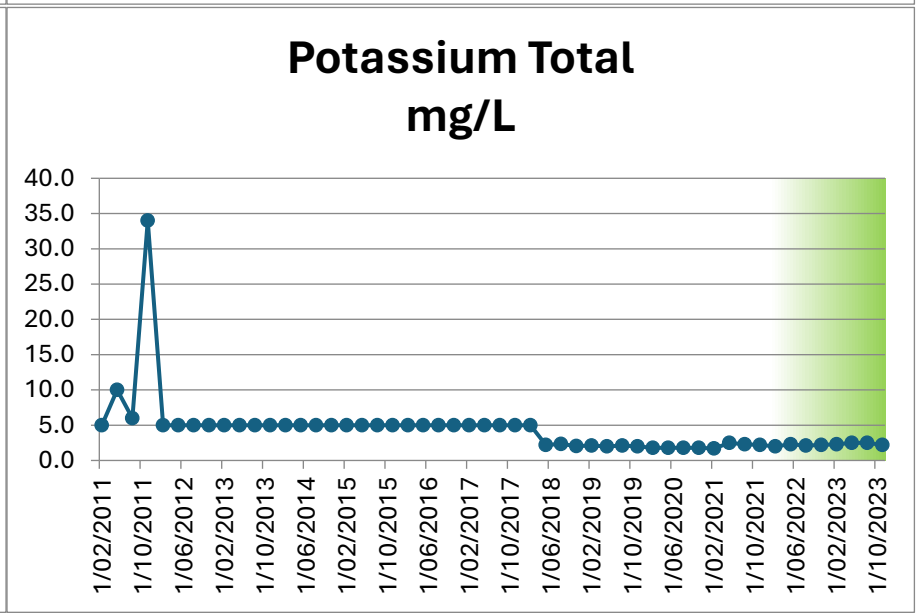

Nitrite
N mg/L
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

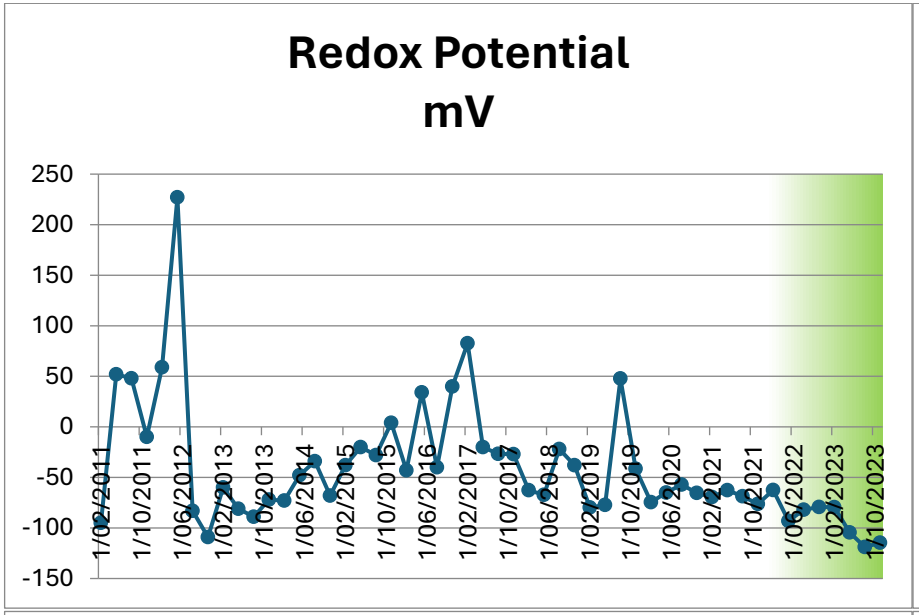

Nitrogen Oxidised
mg/L
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

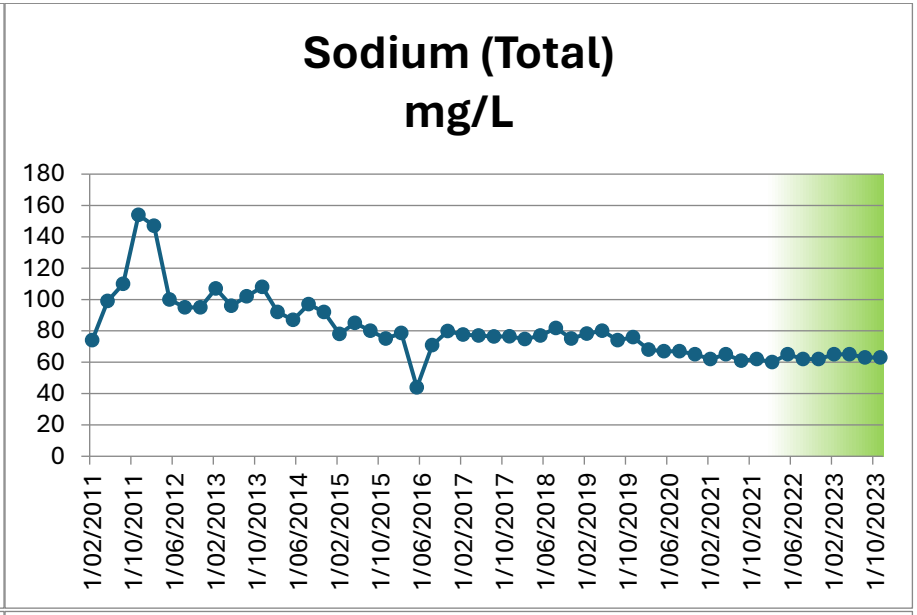

Nitrogen Total
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

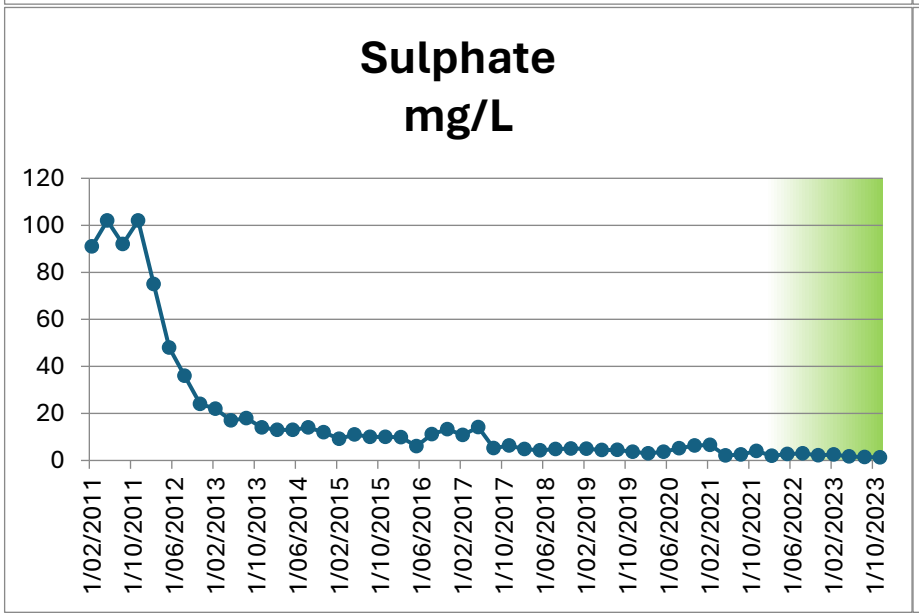

pH
pH units
7.8
7.6
7.4
7.2
7.0
6.8
6.6
6.4
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

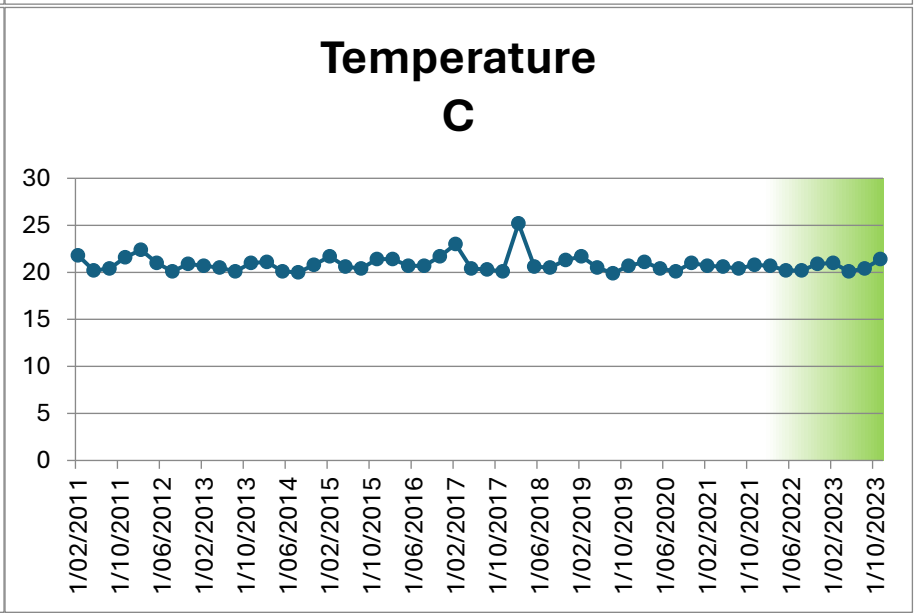

Phosphorus Total
mg/L
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

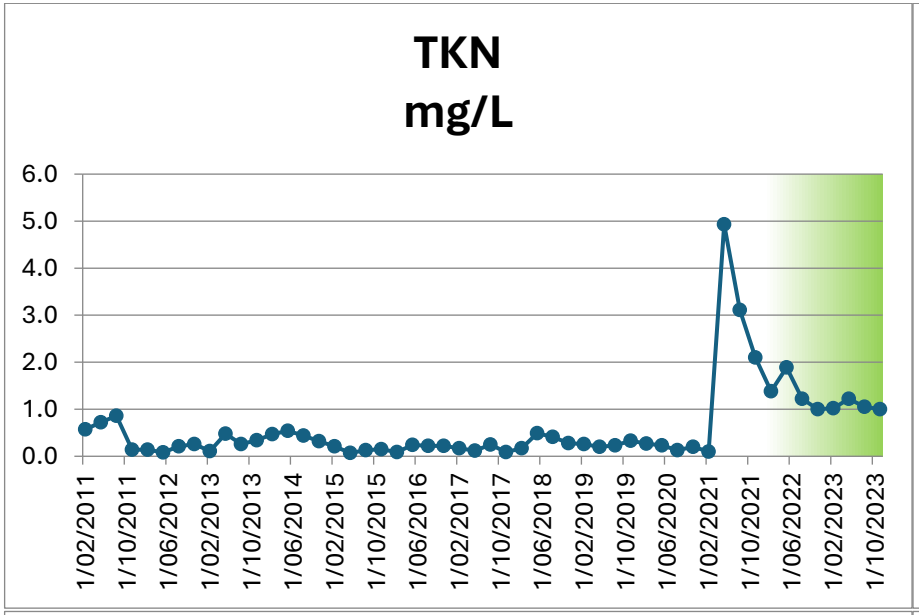

Potassium Total
mg/L
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

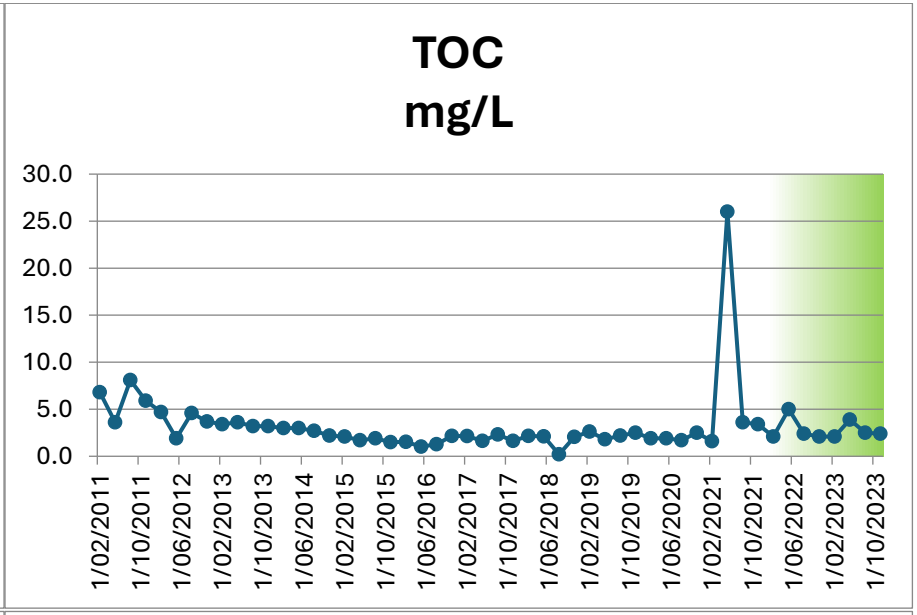

Redox Potential
mV
250
200
150
100
50
0
-50
-100
-150
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

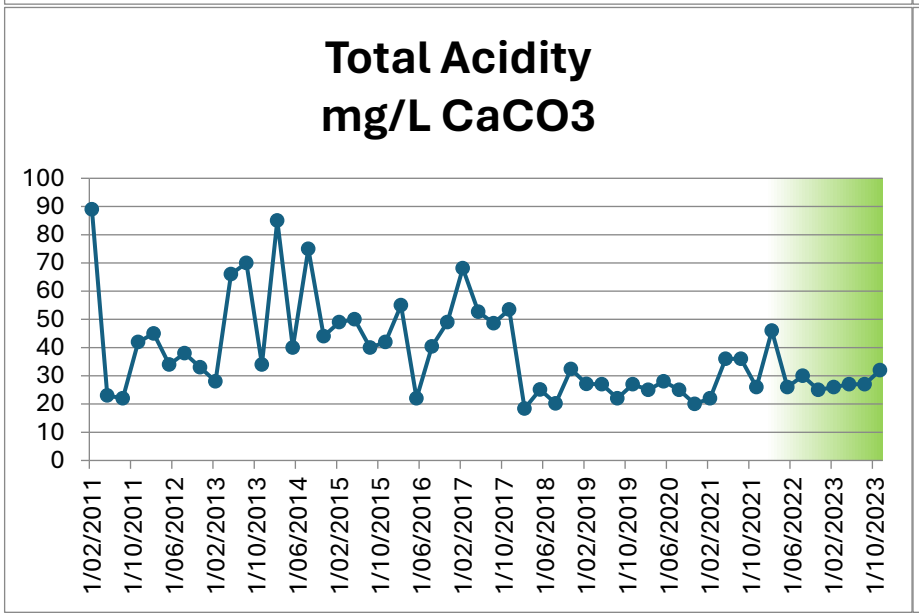

Sodium (Total)
mg/L
180
160
140
120
100
80
60
40
20
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

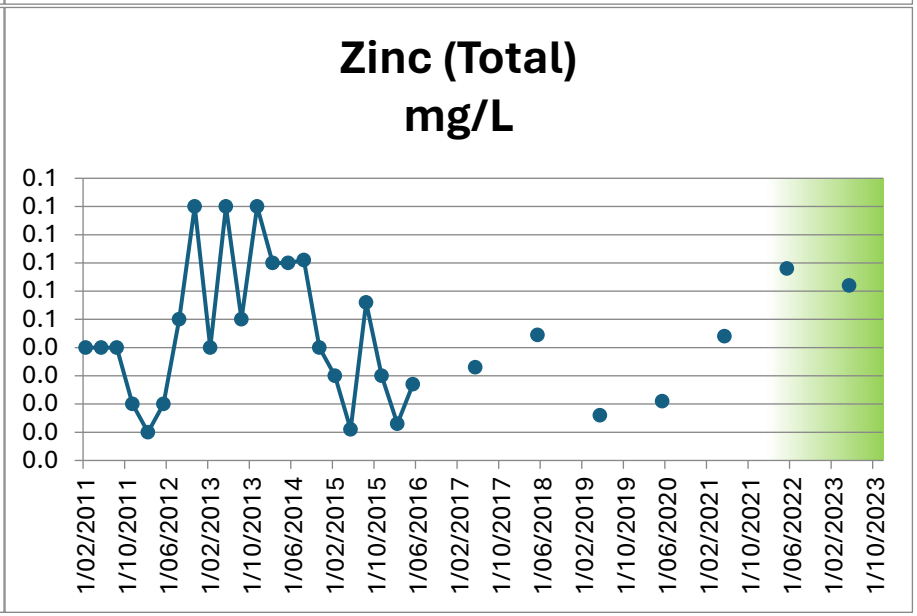

Sulphate
mg/L
120
100
80
60
40
20
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Temperature
C
30
25
20
15
10
5
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


TKN
mg/L
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


TOC
mg/L
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Total Acidity
mg/L CaCO3
100
90
80
70
60
50
40
30
20
10
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Zinc (Total)
mg/L
0.1
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

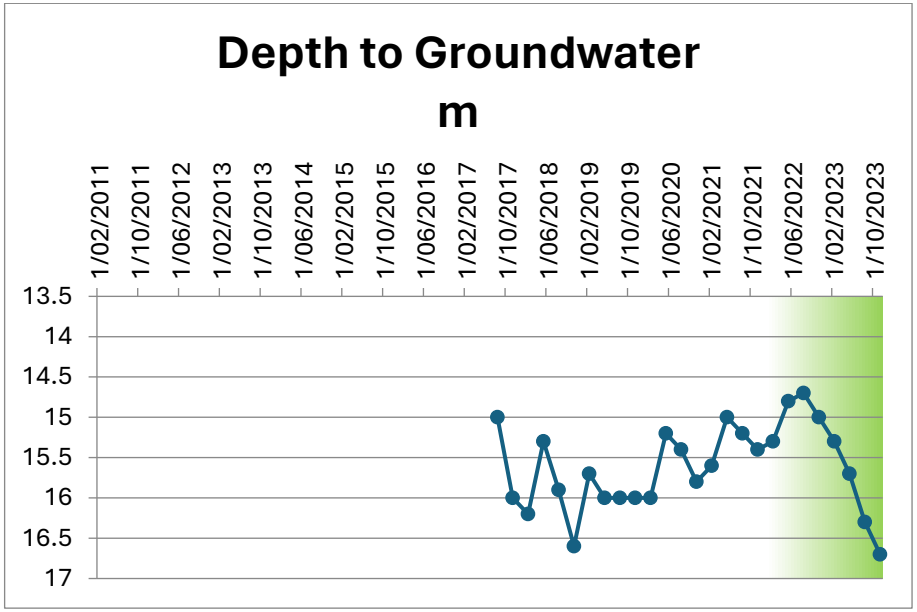
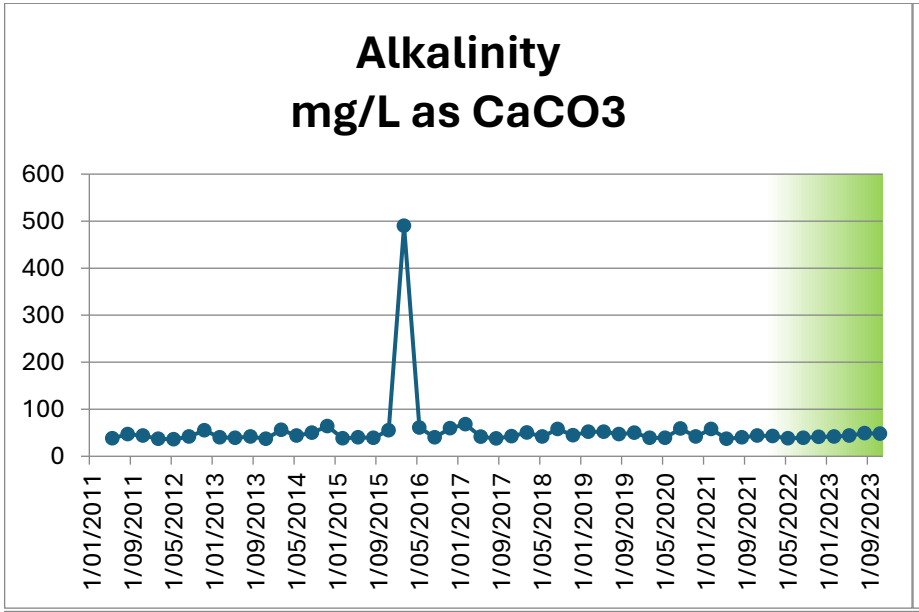
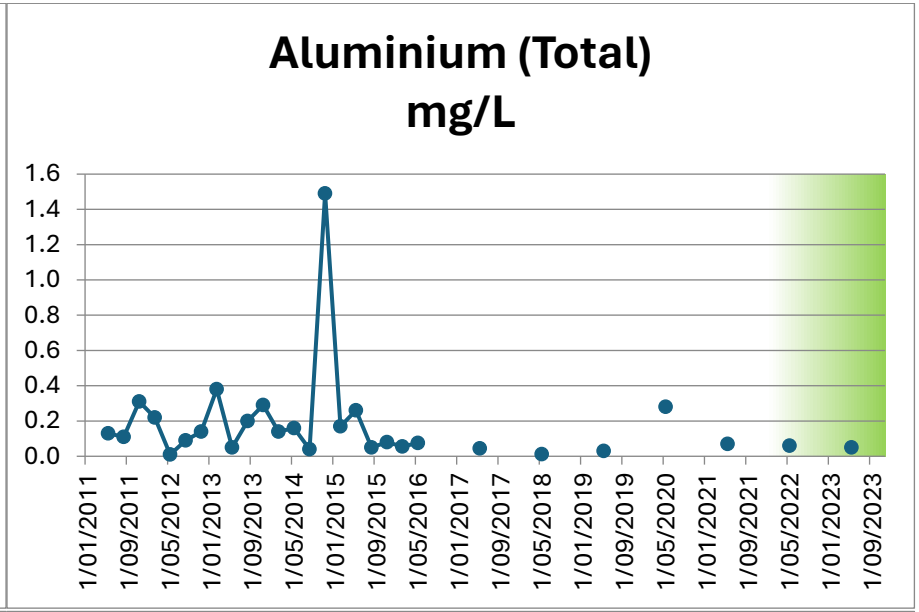
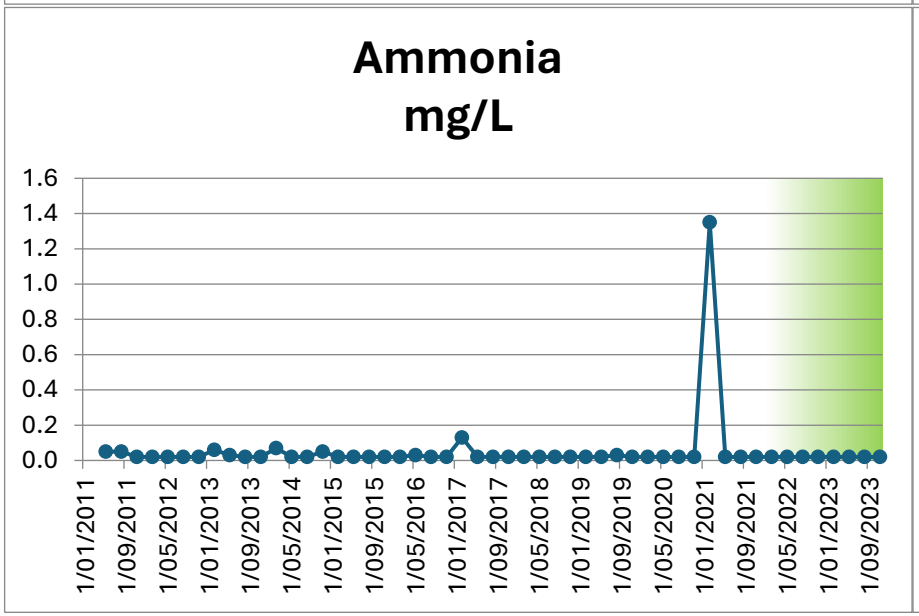

Depth to Groundwater
m
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023
13.5
14
14.5
15
15.5
16
16.5
17

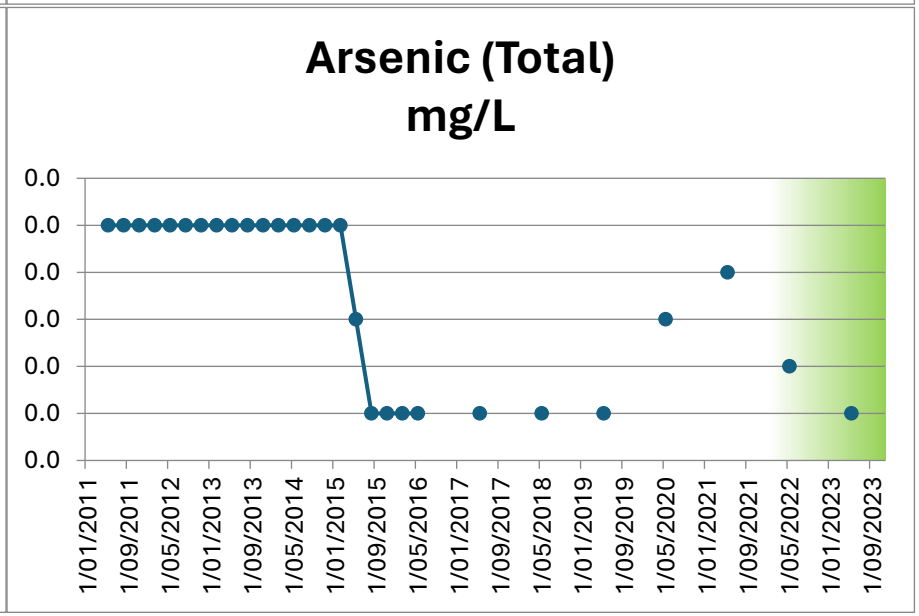
Table 26: Ground Water 21

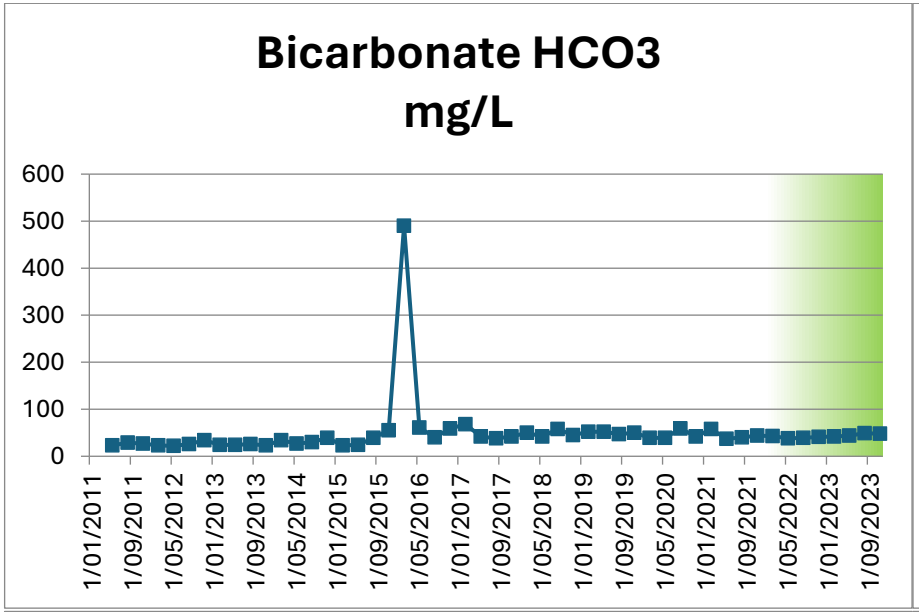
GW21	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µScm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride mg/L	Iron Total mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	Nitrate N mg/L	Nitrite N mg/L	Nitrogen Oxidised mg/L	Nitrogen Total mg/L	pH pH units	Phenol Alkalinity mg/L as CaCO3	Phosphorus Total mg/L	Potassium Total mg/L	Redox Potential mV	Sodium (Total) mg/L	Sulphate mg/L	Temperature C	TKN mg/L	TOC mg/L	Total Acidity mg/L CaCO3	Zinc (Total) mg/L	Depth to Groundwater m
31/01/2011																																						
10/05/2011	38	0.1	0.1	0.0	23	1.8	0.0	12	273	0.0	0.0	0.0	556	0.0	1.3	0.1	2.7	0.0	12	0.0	0.0	0.1	0.1	0.1	0.2	5.3		0.1	5.0	178	57	8	20	0.1	1.0	23	0.0	
9/08/2011	47	0.1	0.1	0.0	29	1.0	0.0	12	120	0.0	0.0	0.0	524	0.0	6.7	0.1	1.8	0.0	12	0.0	0.0	0.1	0.1	0.1	0.1	6.5		0.1	5.0	237	54	8	19	0.1	1.0	20	0.0	
8/11/2011	44	0.3	0.0	0.0	27	2.1	0.0	15	146	0.0	0.0	0.0	487	0.0	2.1	0.1	11.0	0.0	16	0.0	0.0	0.0	0.0	0.0	0.1	6.0		0.1	8.0	96	43	9	21	0.1	1.8	64	0.0	
6/02/2012	37	0.2	0.0	0.0	23	1.5	0.0	13	122	0.0	0.0	0.0	527	0.0	2.3	0.1	3.5	0.0	12	0.0	0.0	0.1	0.0	0.1	0.1	5.8		0.1	5.0	160	65	8	21	0.1	0.1	66	0.0	
8/05/2012	36	0.0	0.0	0.0	22	1.0	0.0	13	120	0.0	0.0	0.0	511	0.0	3.2	0.1	0.1	0.0	13	1.6	0.0	0.1	0.0	0.1	0.1	5.9		0.2	5.0	193	62	10	20	0.1	0.5	63	0.0	
6/08/2012	42	0.1	0.0	0.0	26	1.8	0.0	12	128	0.0	0.0	0.0	580	0.0	2.9	0.1	9.1	0.0	12	0.1	0.0	0.0	0.0	0.0	0.1	5.8		0.2	5.0	86	44	7	20	0.1	0.2	39	0.0	
13/11/2012	55	0.1	0.0	0.0	34	2.8	0.0	13	120	0.0	0.0	0.0	533	0.0	1.9	0.1	6.7	0.0	13	0.1	0.0	0.0	0.0	0.0	0.1	6.1		0.0	5.0	39	53	6	20	0.1	0.3	69	0.0	
13/02/2013	40	0.4	0.1	0.0	24	1.5	0.0	14	130	0.0	0.0	0.0	582	0.0	0.5	0.1	1.3	0.0	13	0.0	0.0	0.1	0.0	0.1	0.1	5.7		0.0	5.0	83	58	8	20	0.1	0.2	46	0.0	
14/05/2013	39	0.1	0.0	0.0	24	1.0	0.0	14	130	0.0	0.0	0.0	551	0.0	3.1	0.1	1.2	0.0	12	0.0	0.0	0.1	0.0	0.1	0.1	5.9		0.0	5.0	68	55	7	21	0.1	0.2	78	0.0	
6/08/2013	42	0.2	0.0	0.0	26	4.5	0.0	16	120	0.0	0.0	0.0	578	0.0	0.6	0.1	3.6	0.0	15	0.0	0.0	0.0	0.0	0.0	0.1	5.8		0.0	5.0	98	63	9	20	0.1	0.2	130	0.0	
12/11/2013	37	0.3	0.0	0.0	23	1.0	0.0	15	132	0.0	0.0	0.0	543	0.0	5.2	0.1	1.9	0.0	15	0.0	0.0	0.1	0.0	0.1	0.2	6.0		0.1	5.0	787	64	9	20	0.1	0.2	21	0.1	
11/02/2014	56	0.1	0.1	0.0	34	2.7	0.0	19	128	0.0	0.0	0.0	536	0.0	1.0	0.1	6.8	0.0	15	0.1	0.0	0.1	0.0	0.1	0.2	6.1		0.0	5.0	11	75	13	21	0.1	0.2	193	0.0	
13/05/2014	44	0.2	0.0	0.0	27	1.2	0.0	12	132	0.0	0.0	0.0	561	0.0	2.2	0.1	2.8	0.0	13	0.0	0.0	0.1	0.0	0.1	0.1	5.9		0.1	5.0	52	55	7	21	0.1	0.2	64	0.0	
12/08/2014	50	0.0	0.0	0.0	30	1.5	0.0	16	130	0.0	0.0	0.0	548	0.0	3.2	0.1	2.9	0.0	15	0.0	0.0	0.1	0.0	0.1	0.1	6.2		0.0	5.0	48	63	7	20	0.1	0.2	120	0.0	
10/11/2014	64	1.5	0.1	0.0	39	3.0	0.0	16	132	0.0	0.0	0.0	562	0.0	1.8	0.1	8.8	0.0	16	0.1	0.0	0.1	0.0	0.1	0.2	6.3		0.0	5.0	3	64	6	21	0.1	0.2	148	0.0	
9/02/2015	38	0.2	0.0	0.0	23	1.0	0.0	13	130	0.0	0.0	0.0	526	0.0	1.8	0.1	2.2	0.0	12	0.0	0.0	0.0	0.0	0.0	0.2	6.0		0.1	5.0	56	56	8	21	0.2	0.2	75	0.0	
11/05/2015	40	0.3	0.0	0.0	24	1.0	0.0	15	132	0.0	0.0	0.0	568	0.0	2.4	0.1	6.6	0.0	14	0.0	0.0	0.0	0.0	0.0	0.1	6.0		0.2	5.0	61	62	8	21	0.1	0.2	79	0.0	
11/08/2015	39	0.1	0.0	0.0	39	1.0	0.0	15	38	0.0	0.0	0.0	528	0.0	8.2	0.1	1.7	0.0	14	0.0	0.0	0.1	0.0	0.1	0.1	6.6		0.1	5.0	83	60	8	20	0.1	0.2	22	0.0	
10/11/2015	55	0.1	0.0	0.0	55	1.0	0.0	16	128	0.0	0.0	0.0	471	0.0	1.5	0.1	4.0	0.0	14	0.1	0.0	0.0	0.0	0.0	0.1	6.1		0.0	5.0	-45	59	7	20	0.1	0.2	75	0.0	
8/02/2016	490	0.1	0.0	0.0	490	1.2	0.0	15	131	0.0	0.0	0.0	552	0.0	1.0	0.1	3.5	0.0	14	0.1	0.0	0.0	0.0	0.0	0.1	6.1		0.0	5.0	57	59	7	21	0.1	0.2	107	0.0	
9/05/2016	61	0.1	0.0	0.0	61	2.2	0.0	16	128	0.0	0.0	0.0	567	0.0	2.1	0.1	6.0	0.0	14	0.1	0.0	0.0	0.0	0.0	0.1	6.2		0.1	5.0	42	60	6	21	0.1	0.4	92	0.0	
9/08/2016	40		0.0		40	1.0		14	132				530		3.9	0.1			14			0.1	0.0	0.1	0.1	5.8		0.1	5.0	140	60	8	20	0.1	0.3	92		
7/11/2016	59		0.0		59	1.8		17	135				562		1.6	0.1			15			0.0	0.0	0.0	0.1	6.0		0.0	5.0	163	63	7	20	0.1	0.5	87		
7/02/2017	68		0.1		68	3.6		16	135				583		1.6	0.1			14			0.0	0.0	0.0	0.3	6.0		0.1	5.0	102	61	5	21	0.3	2.0	129		
8/05/2017	42	0.0	0.0	0.0	42	1.0	0.0	14	132	0.0	0.0	0.0	541	0.0	2.0	0.1	1.6	0.0	14	0.1	0.0	0.0	0.0	0.0	0.1	5.7		0.1	5.0	202	58	9	21	0.1	0.3	64	0.0	
8/08/2017	38		0.0		38	1.0		14	115				540		5.3	0.1			14			0.1	0.0	0.1	0.1	5.9		0.0	5.0	346	59	8	20	0.1	0.5	36		0.6
7/11/2017	42		0.0		42	1.0		16	136				558		4.0	0.1			14			0.2	0.0	0.2	0.3	5.9		0.1	5.0	325	61	7	21	0.1	0.5	32		0.8
13/02/2018	50		0.0		50	1.0		15	133				553		2.0	0.1			14			0.0	0.0	0.0	0.1	6.0		0.0	5.0	105	60	6	22	0.1	0.7	68		1.8
8/05/2018	42	0.0	0.0	0.0	42	1.8	0.0	15	158	0.0	0.0	0.0	551	0.0	2.4	0.1	1.3	0.0	14	0.1	0.0	0.0	0.0	0.0	0.1	5.8		0.0	2.1	161	63	7	21	0.1	0.2	70	0.0	0.5
14/08/2018	58		0.0		58	3.6		17	135				565		3.2	0.1			15			0.0	0.0	0.0	0.1	6.0		0.0	2.1	169	67	4	20	0.1	0.8	59		1.2
13/11/2018	45		0.0		45	1.0		16	142				553		5.0	0.1			14			0.1	0.0	0.1	0.1	6.3		0.1	2.1	93	61	6	21	0.1	0.5	34		0.9
12/02/2019	52		0.0		52	1.2		17	145				561		2.2	0.1			15			0.0	0.0	0.0	0.1	6.0		0.0	2.0	213	65	6	21	0.1	0.5	16		1.9
14/05/2019	52	0.0	0.0	0.0	52	1.8	0.0	17	140	0.0	0.0	0.0	559	0.0	2.6	0.1	2.0	0.0	16	0.1	0.0	0.1	0.0	0.1	0.2	6.0		0.0	2.2	84	68	5	21	0.1	0.5	60	0.0	0.8
13/08/2019	47		0.0		47	1.0		16	130				549		6.5	0.1			15			0.0	0.0	0.0	0.1	6.4		0.1	2.1	354	66	5	20	0.1	0.9	20		0.9
12/11/2019	50		0.0		50	1.0		16	130				574		3.5	0.1			15			0.0	0.0	0.0	0.1	6.2		0.0	2.1	185	65	5	21	0.1	0.8	40		2.1
25/02/2020	39		0.0		39	1.0		15	140				552		1.6	0.1			14			0.0	0.0	0.0	0.1	5.8	0.0	0.0	2.2	159	60	7	22	0.1	0.5	67		0.1
12/05/2020	39	0.3	0.0	0.0	39	1.0	0.0	14	140	0.0	0.0	0.0	560	0.0	5.7	0.1	3.5	0.0	14	0.0	0.0	0.0	0.0	0.0	0.2	6.1	0.0	0.1	2.1	196	61	7	20	0.2	0.4	26	0.0	0.6
11/08/2020	59		0.0		59	1.5		16	140				566		2.5	0.1			15			0.0	0.0	0.0	0.1	6.0	0.0	0.0	2.0	71	62	5	20	0.1	0.4	59		0.2
10/11/2020	42		0.0		42	1.0		15	140				554		4.6	0.1			14			0.1	0.0	0.1	0.2	6.0	0.0	0.1	2.1	244	63	6	20	0.1	0.4	26		0.9
9/02/2021	58		1.4		58	8.4		15	140				583		1.2	0.1			15			0.0	0.1	0.1	1.8	5.8	0.0	0.2	2.8	-4	62	5	23	1.6	1.5	55		0.8
11/05/2021	37	0.1	0.0	0.0	37	1.0	0.0	16	130	0.0	0.0	0.0	542	0.0	1.4	0.1	7.9	0.0	15	0.1	0.0	0.1	0.0	0.1	0.2	5.8	0.0	0.1	2.3	189	62	8	21	0.1	0.6	68	0.0	0.1
10/08/2021	40		0.0		40	1.0		14	140				547		5.1	0.1			14			0.0	0.0	0.0	0.1	5.9	0.0	0.2	2.2	193	59	7	19	0.1	0.4	43		0.5
8/11/2021	44		0.0		44	1.0		15	150				557		4.6	0.1			15			0.0	0.0	0.0	0.1	6.0	0.0	0.0	2.1	211	61	7	20	0.1	0.4	37		0.5
8/02/2022	43		0.0		43	1.0		16	140				579		3.9	0.1			15			0.0	0.0	0.0	0.1	5.8	0.0	0.1	2.3	116	61	7	20	0.1	0.5	61		0.1
10/05/2022	38	0.1	0.0	0.0	38	1.0	0.0	15	140	0.0	0.0	0.0	559	0.0	2.2	0.1	3.4	0.0	15	0.0	0.0	0.1	0.0	0.1	0.1	5.8	0.0	0.1	2.2	180	59	8	20	0.1	0.5	69	0.0	0.1
9/08/2022	39		0.0		39	1.0		16	140				564		3.0	0.0			15			0.0	0.0	<0.02	<0.05	5.8	0.0	0.1	2.3	202	62	7	19	0.1	0.5	67		0.2
8/11/2022	41		0.0		41	1.0		16	140				577		4.4	0.1			15			0.0	0.0	0.0	<0.05	5.9	0.0	0.0	2.4	174	60	7	20	0.1	0.6	48		0.4
13/02/2023	42		0.0		42	1.0		16	150				564		2.2	0.1			15			0.0	0.0	0.0	0.1	5.7	0.0	0.0	2.2	147	62	7	20	0.1	0.5	48		0.9
8/05/2023	44	0.1	0.0	0.0	44	1.0	0.0	16	150	0.0	0.0	0.0	563	0.0	4.6	0.1	2.1	0.0	15	0.1	0.0	0.1	0.0	0.1	0.1	6.0	1.0	0.1	2.2	63	63	7	20	0.1	0.5	37	0.0	1.2
8/08/2023	49		0.0		49	1.2		16	140				568		5.2	0.1			15			0.0	0.0	0.0	0.1	6.1	0.0	0.0	2.3	75	62	6	19	0.1	0.5	32		1.2
13/11/2023	48		0.0		48	1.0		16	140				567		4.6	0.1			15			0.0	0.0	0.0	0.1	6.0	0.0	0.0	2.0	141	62	6	20	0.1	0.5	31		1.3
2023 Min	**42.0**	**0.1**	**0.0**	**0.0**	**38.0**	**1.0**	**0.0**	**15.0**	**140.0**	**0.0**	**0.0**	**0.0**	**559.0**	**0.0**	**2.2**	**0.0**	**3.4**	**0.0**	**15.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**5.8**	**0.0**	**0.0**	**2.2**	**115.9**	**59.0**	**6.7**	**19.4**	**0.1**	**0.5**	**48.0**	**0.0**	**0.1**
2023 Max	**49.0**	**0.1**	**0.0**	**0.0**	**43.0**	**1.0**	**0.0**	**16.0**	**140.0**	**0.0**	**0.0**	**0.0**	**579.0**	**0.0**	**4.4**	**0.1**	**3.4**	**0.0**	**15.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.1**	**0.1**	**5.9**	**0.0**	**0.1**	**2.4**	**202.1**	**62.0**	**7.7**	**19.9**	**0.1**	**0.6**	**69.0**	**0.0**	**0.4**
2023 Mean	**45.8**	**0.1**	**0.0**	**0.0**	**40.3**	**1.0**	**0.0**	**15.8**	**140.0**	**0.0**	**0.0**	**0.0**	**569.8**	**0.0**	**3.4**	**0.1**	**3.4**	**0.0**	**15.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**5.8**	**0.0**	**0.1**	**2.3**	**167.8**	**60.5**	**7.2**	**19.7**	**0.1**	**0.5**	**61.3**	**0.0**	**0.2**
Long-term Average	**54.5**	**0.2**	**0.1**	**0.0**	**49.1**	**1.6**	**0.0**	**15.0**	**134.6**	**0.0**	**0.0**	**0.0**	**551.2**	**0.0**	**3.0**	**0.1**	**4.0**	**0.0**	**14.2**	**0.1**	**0.0**	**0.0**	**0.0**	**0.1**	**0.1**	**6.0**	**0.0**	**0.1**	**3.9**	**148.2**	**60.4**	**7.1**	**20.4**	**0.1**	**0.5**	**64.4**	**0.0**	**0.7**

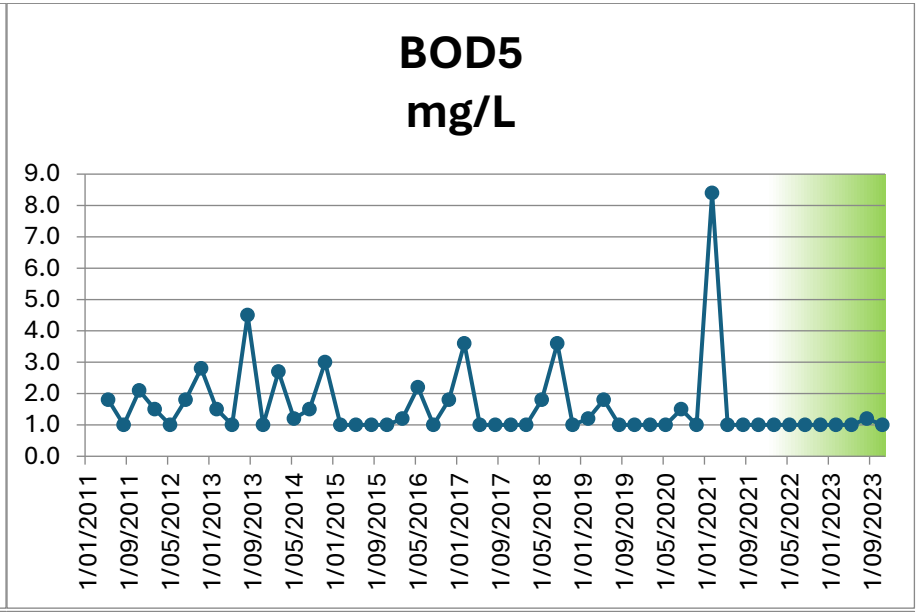

Alkalinity
mg/L as CaCO3
600
500
400
300
200
100
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

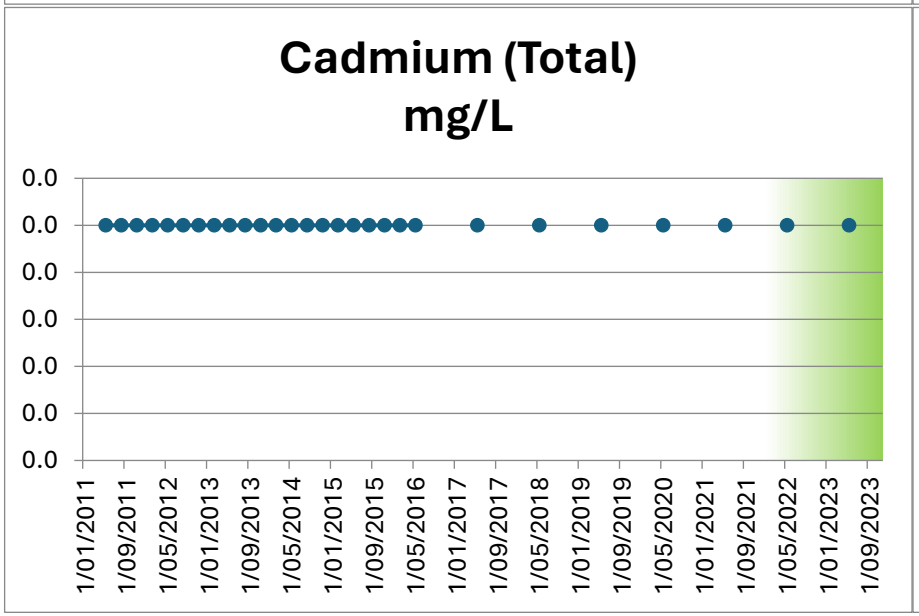

Aluminium (Total)
mg/L
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

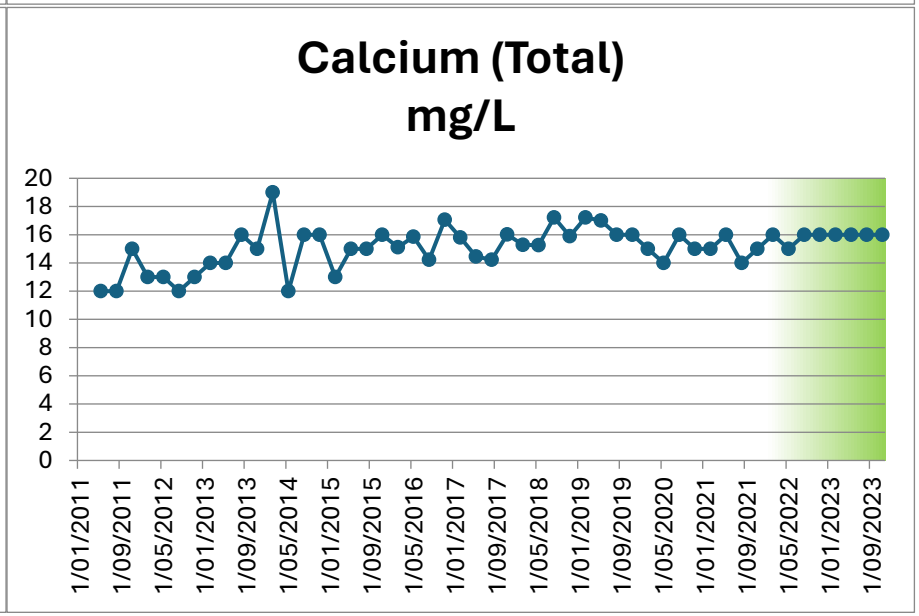

Ammonia
mg/L
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

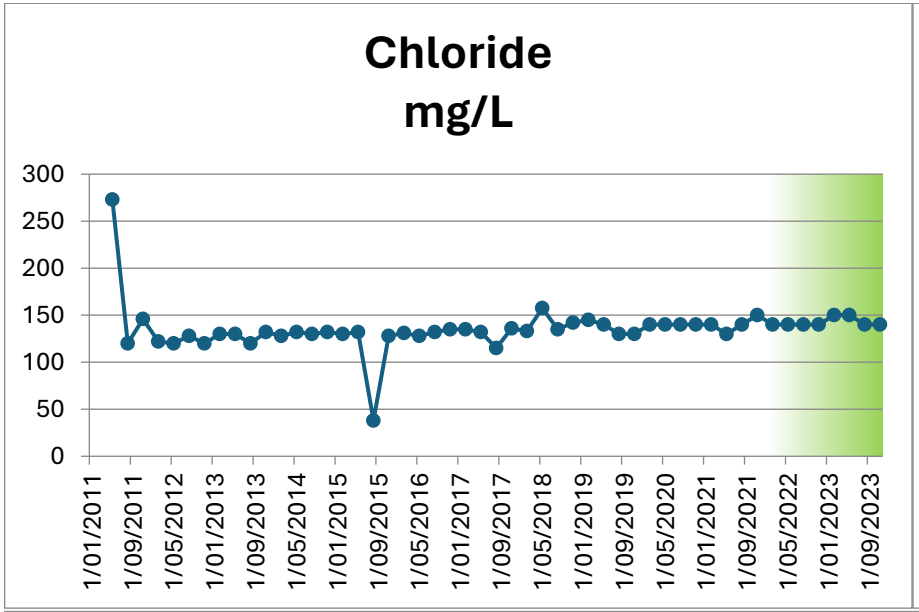

Arsenic (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

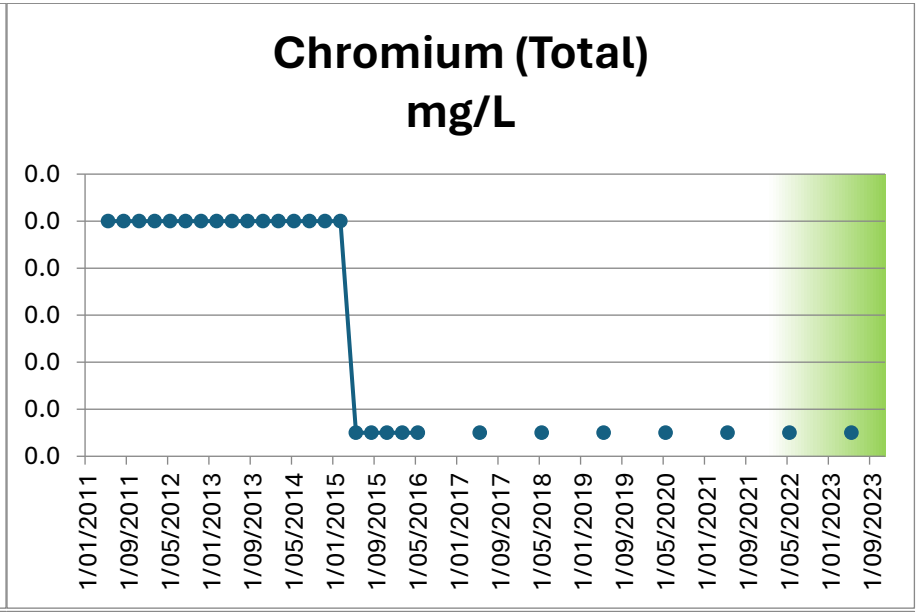

Bicarbonate HCO3
mg/L
600
500
400
300
200
100
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

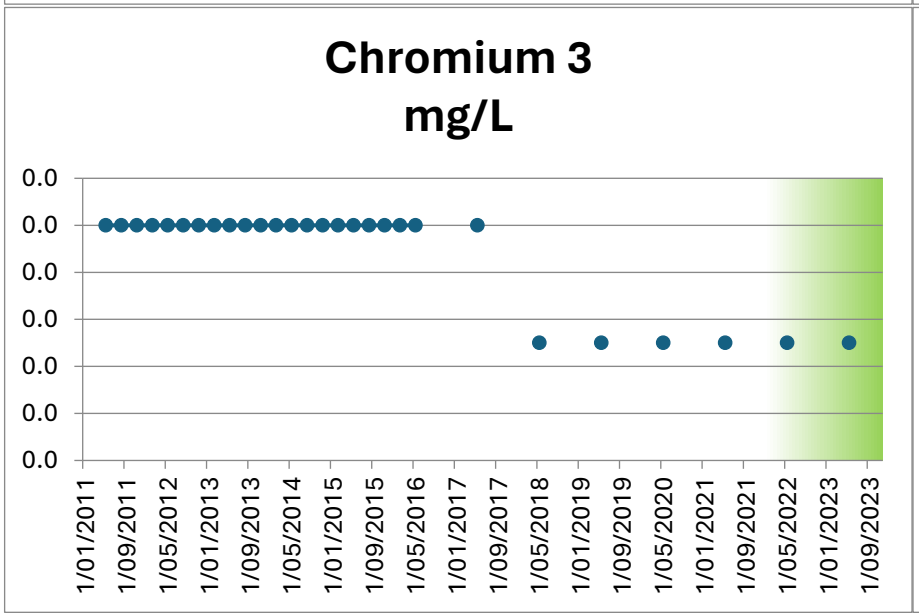

BOD5
mg/L
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

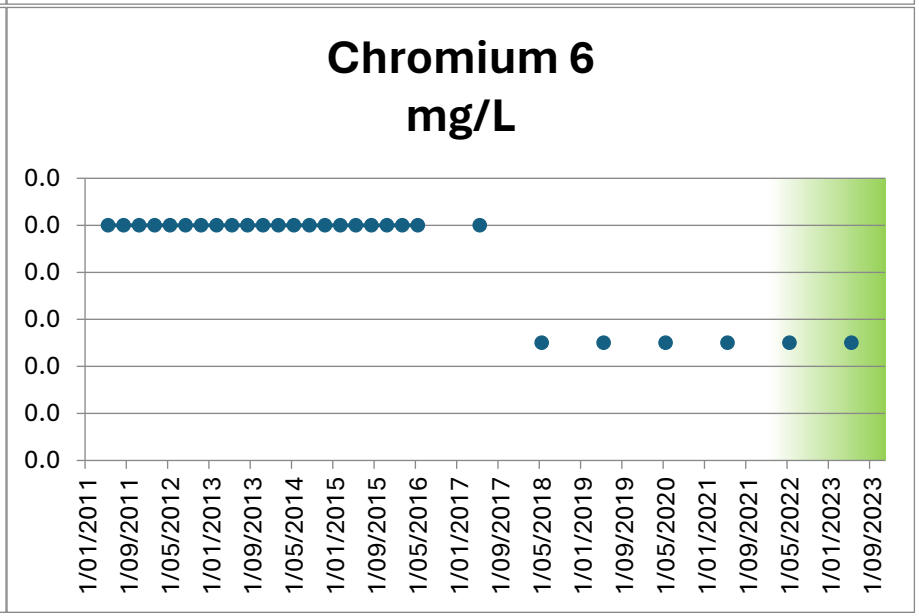

Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

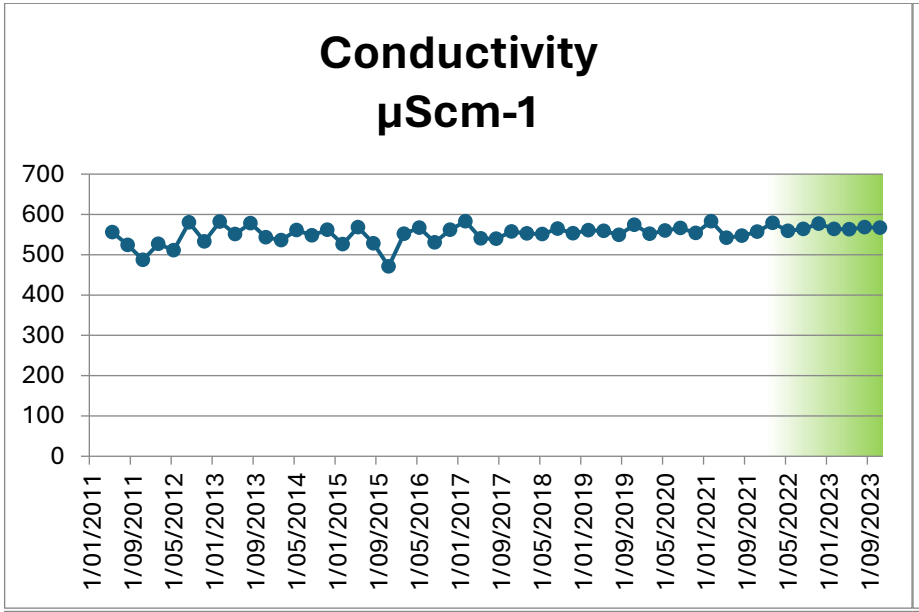

Calcium (Total)
mg/L
20
18
16
14
12
10
8
6
4
2
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

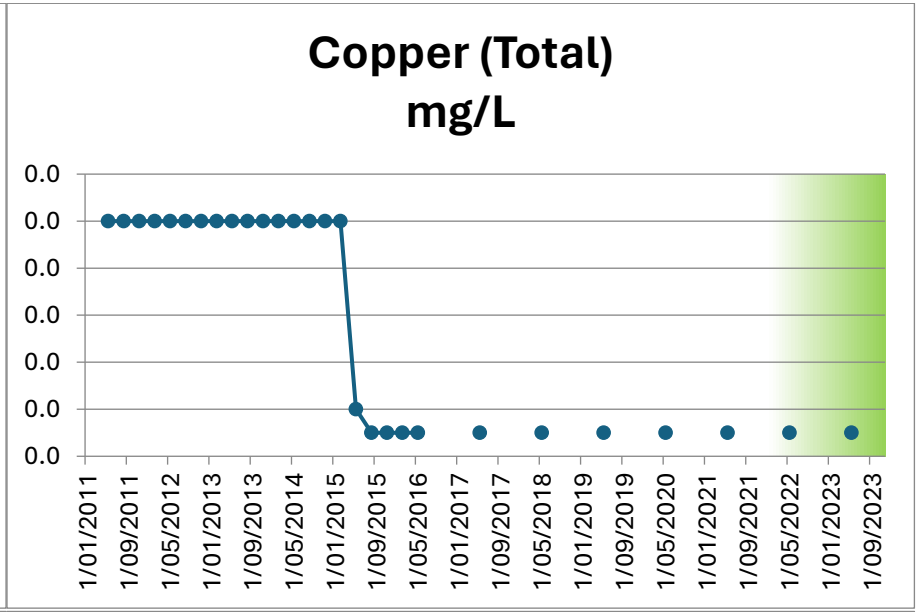

Chloride
mg/L
300
250
200
150
100
50
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

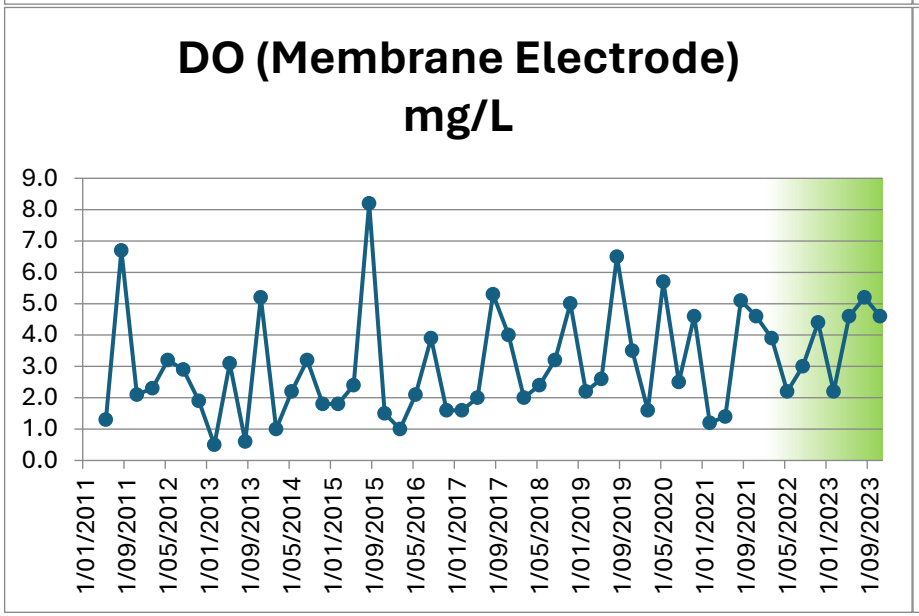

Chromium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

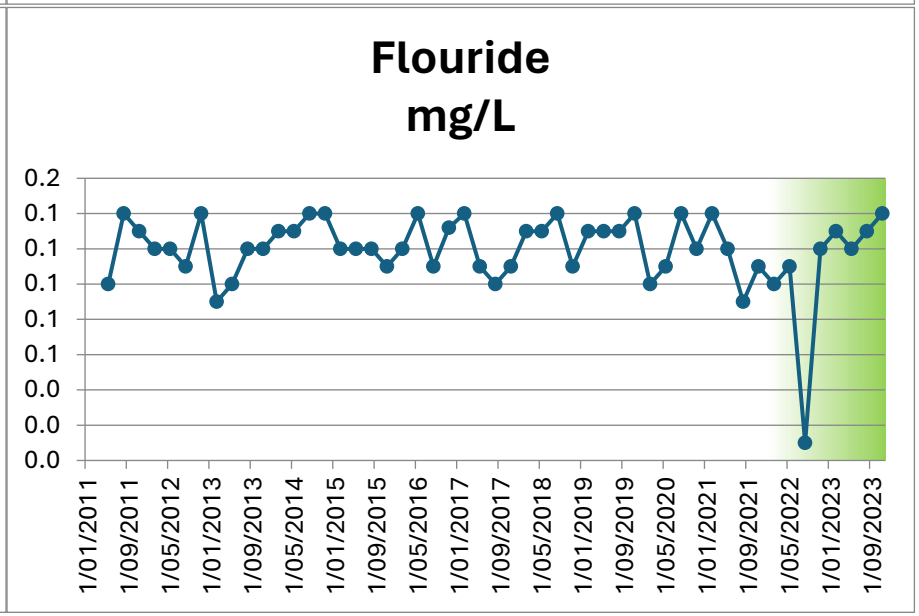

Chromium 3
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

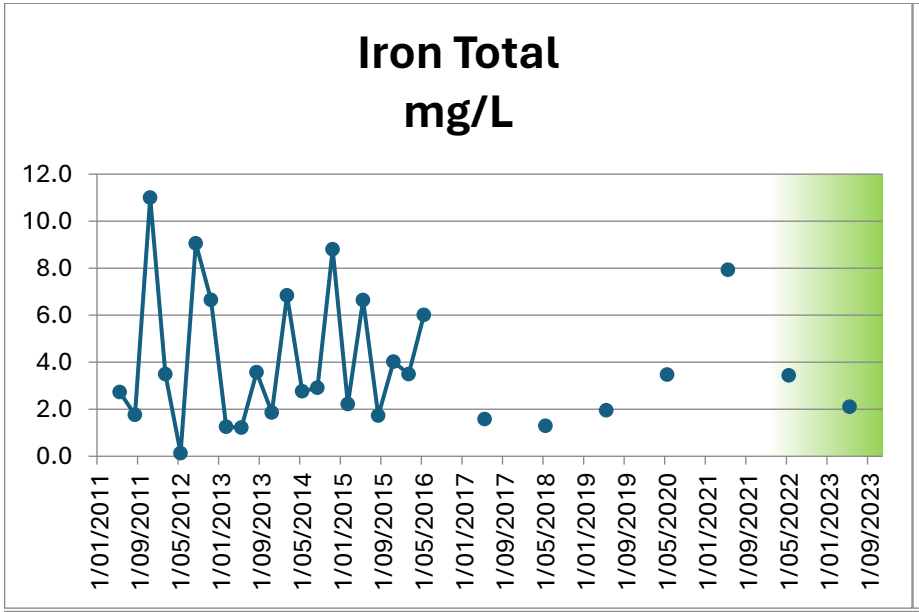

Chromium 6
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

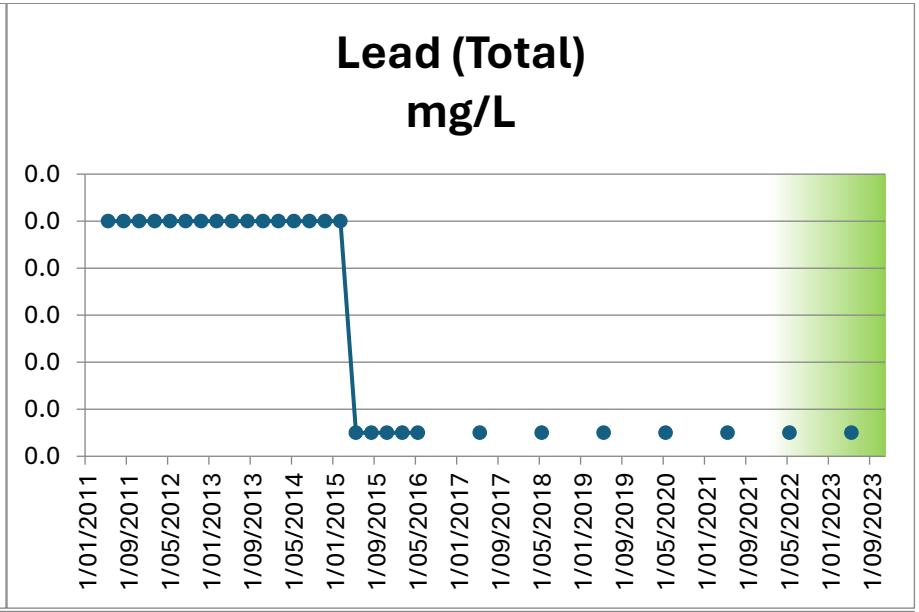

Conductivity
µScm-1
700
600
500
400
300
200
100
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

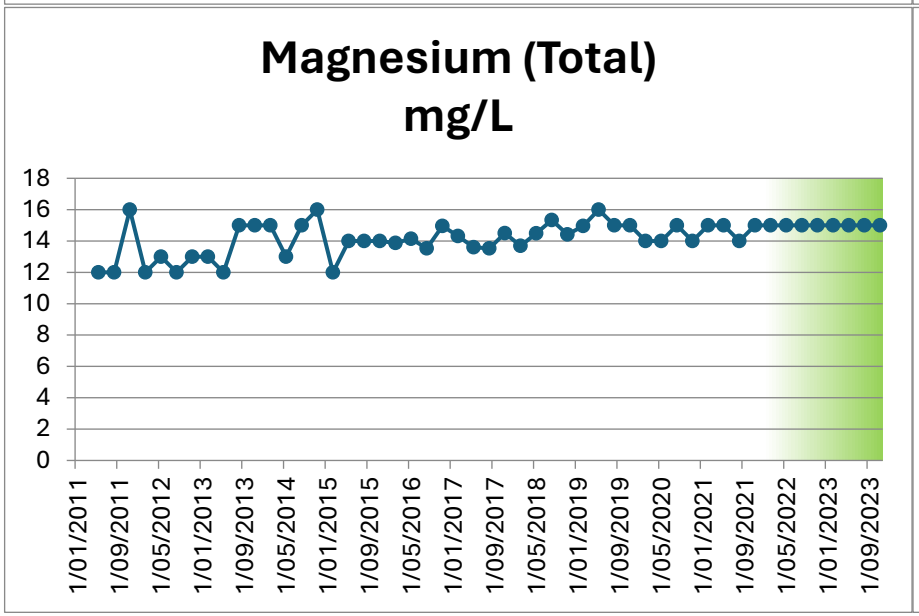

Copper (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

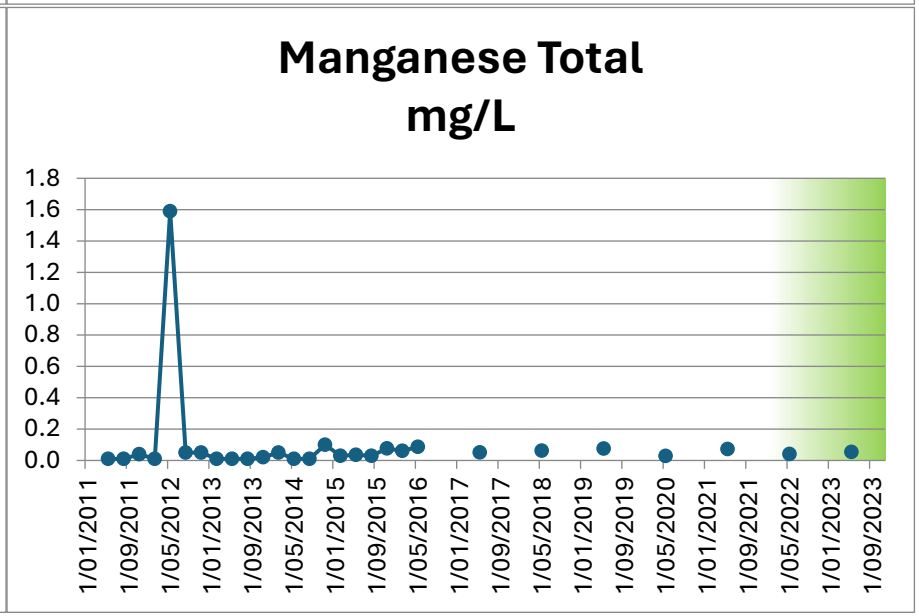

DO (Membrane Electrode)
mg/L
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

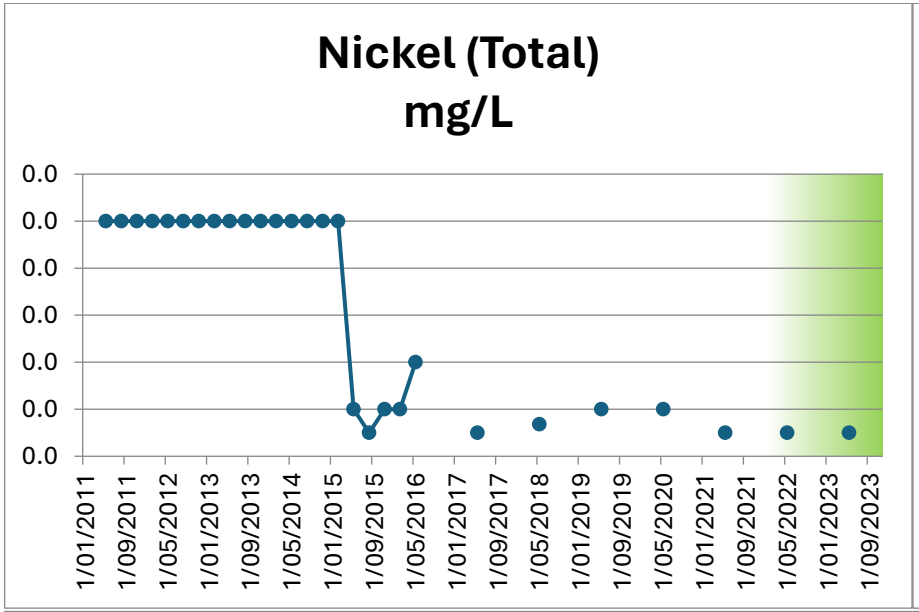

Flouride
mg/L
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

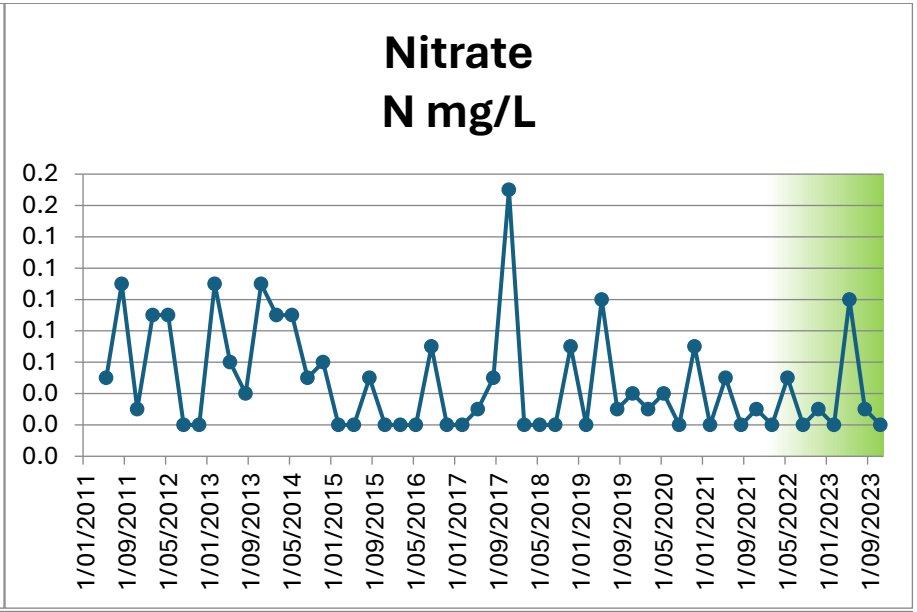

Iron Total
mg/L
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

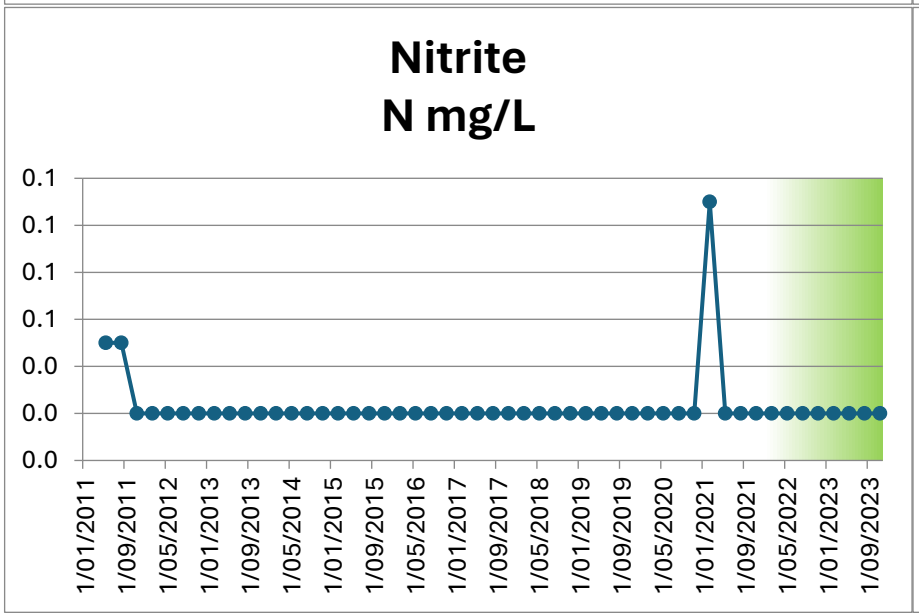

Lead (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

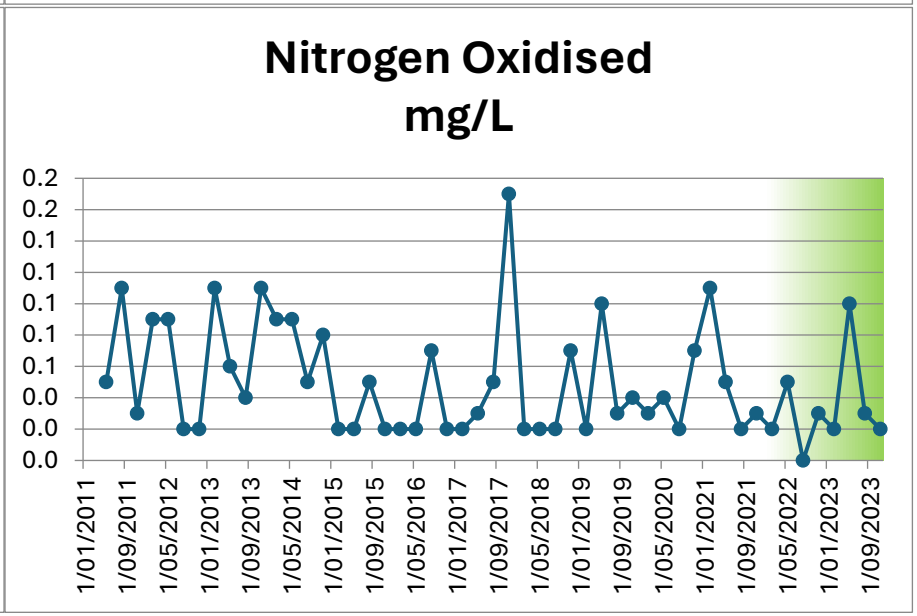

Magnesium (Total)
mg/L
18
16
14
12
10
8
6
4
2
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

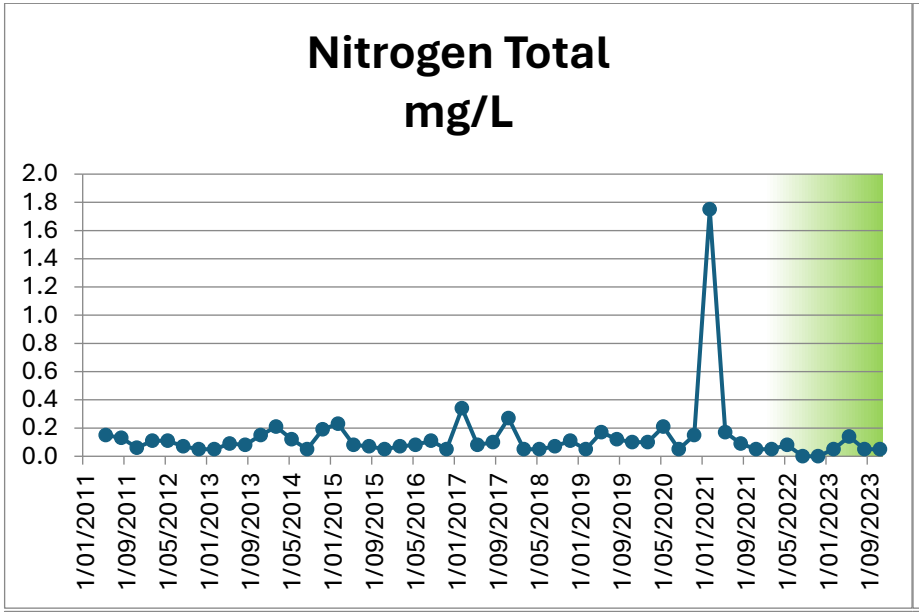

Manganese Total
mg/L
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

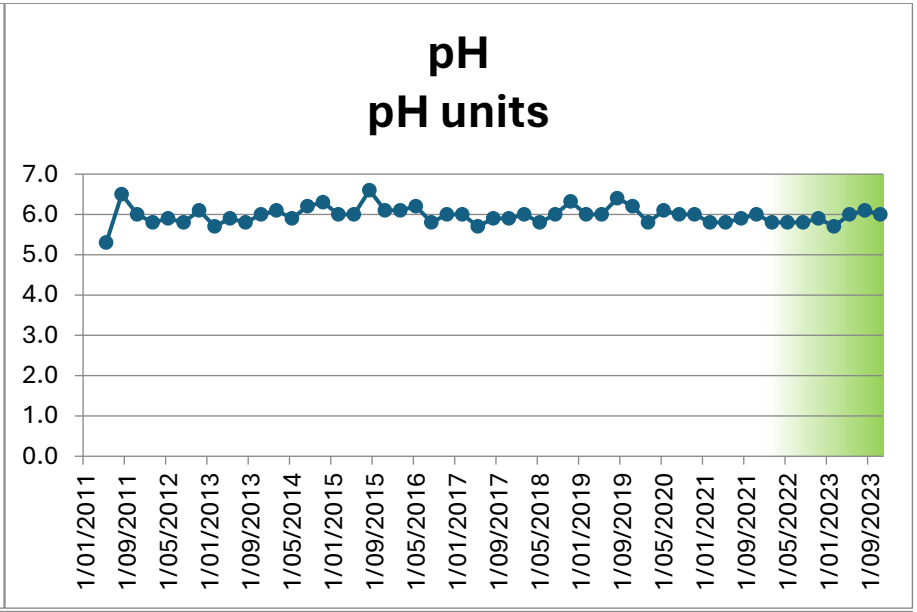

Nickel (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

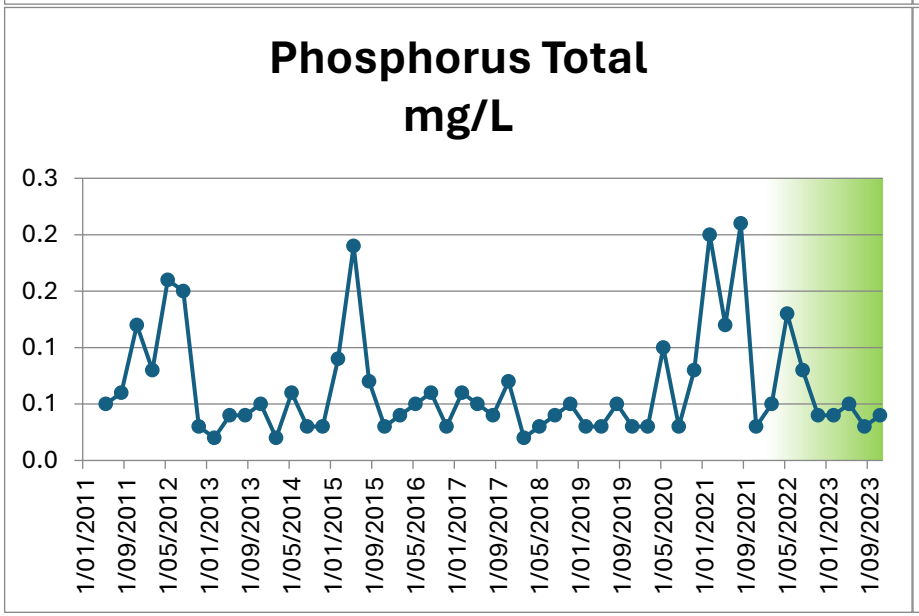

Nitrate
N mg/L
0.2
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

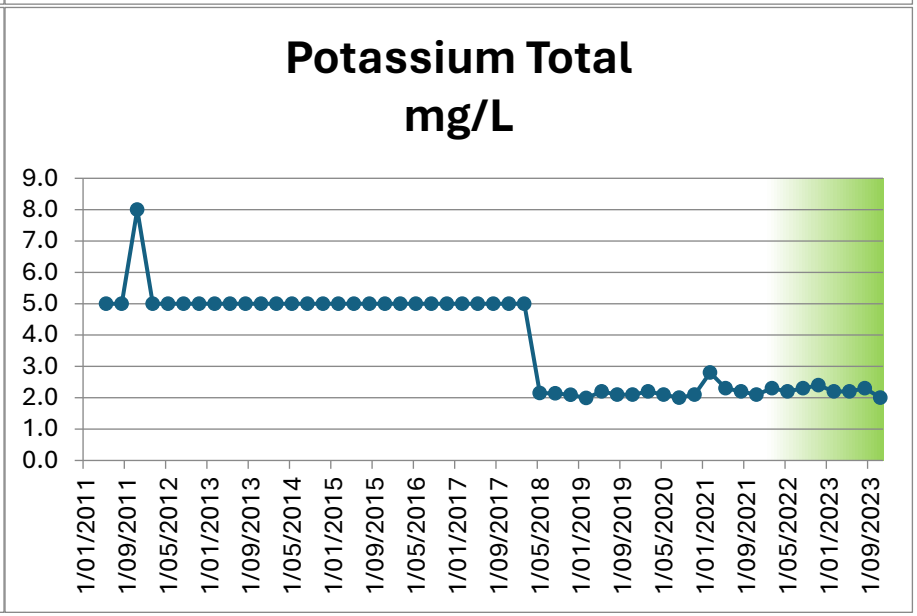

Nitrite
N mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

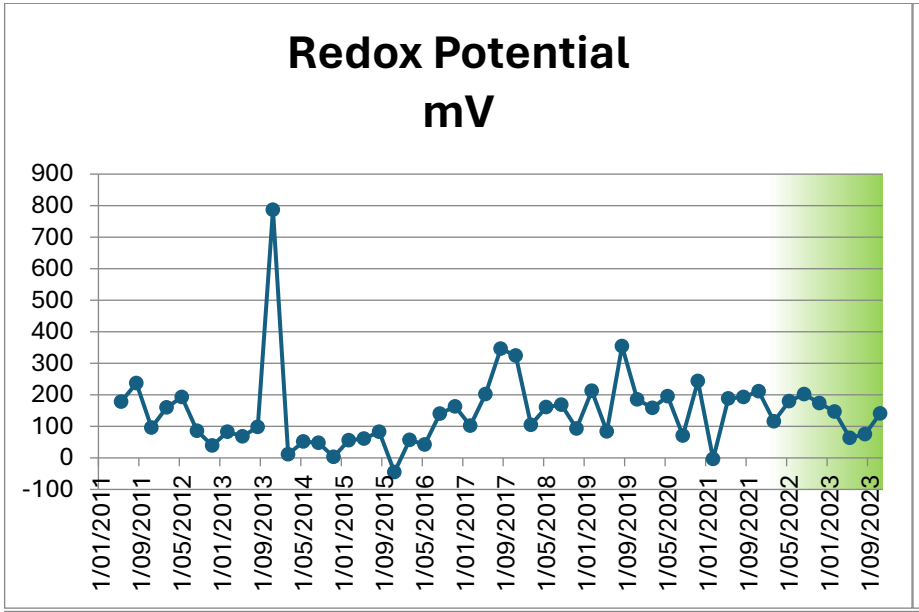

Nitrogen Oxidised
mg/L
0.2
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

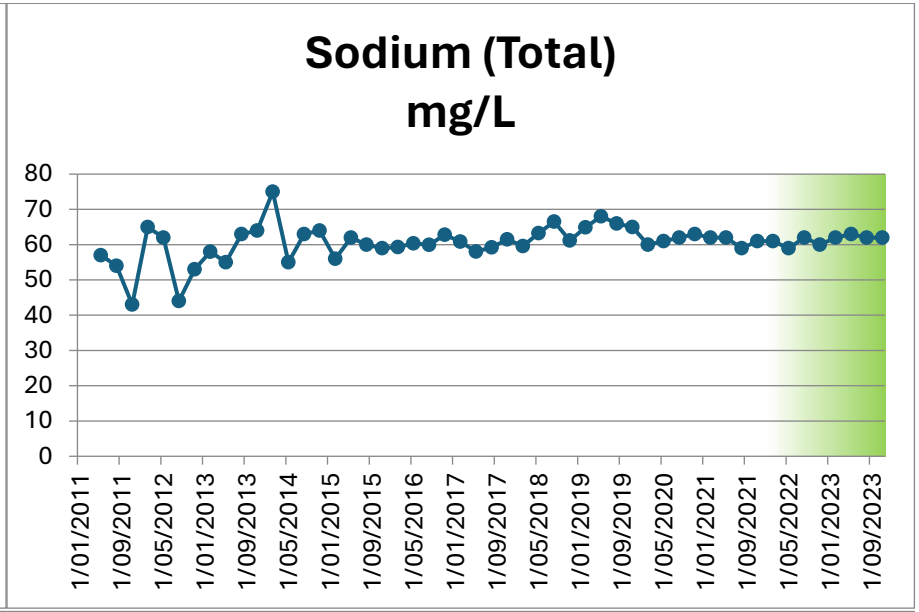

Nitrogen Total
mg/L
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

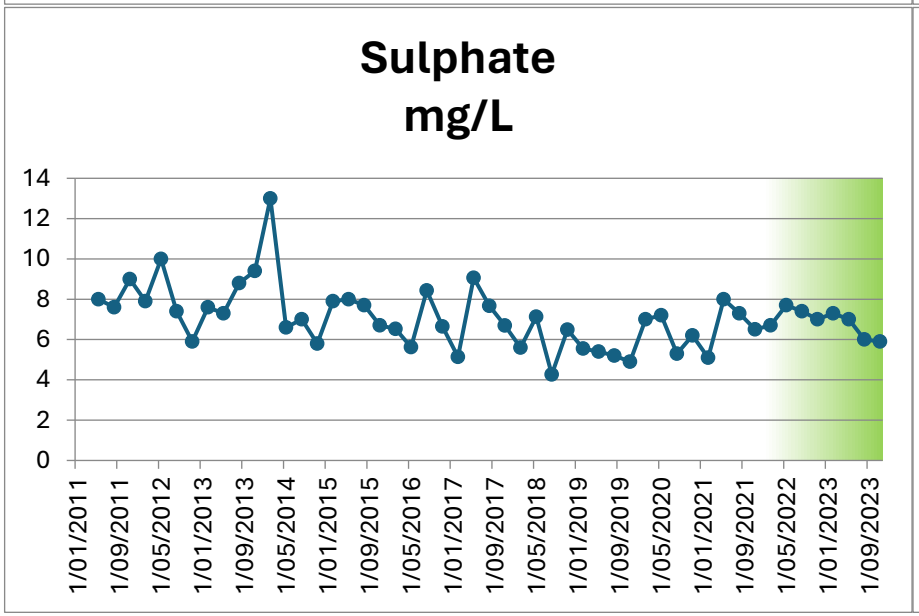

pH
pH units
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

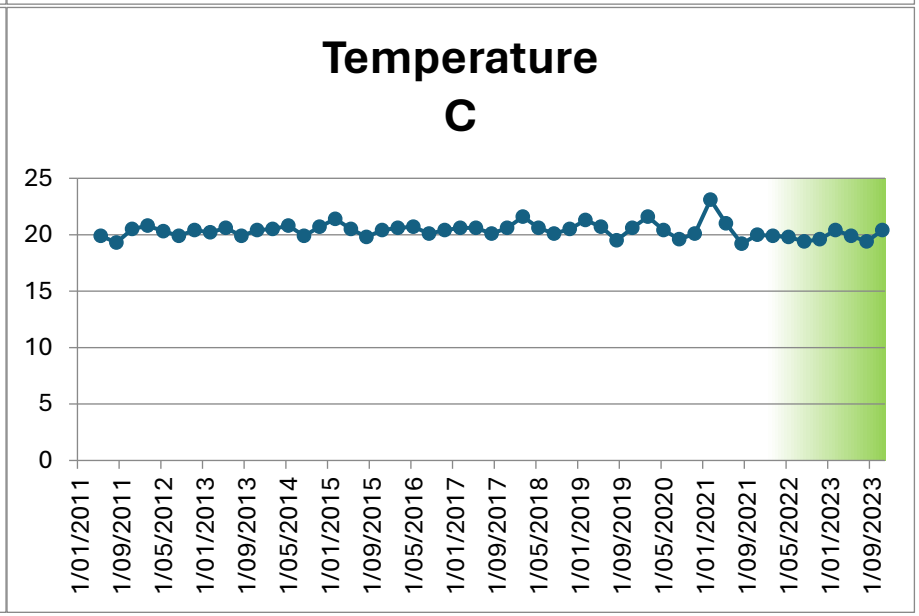

Phosphorus Total
mg/L
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

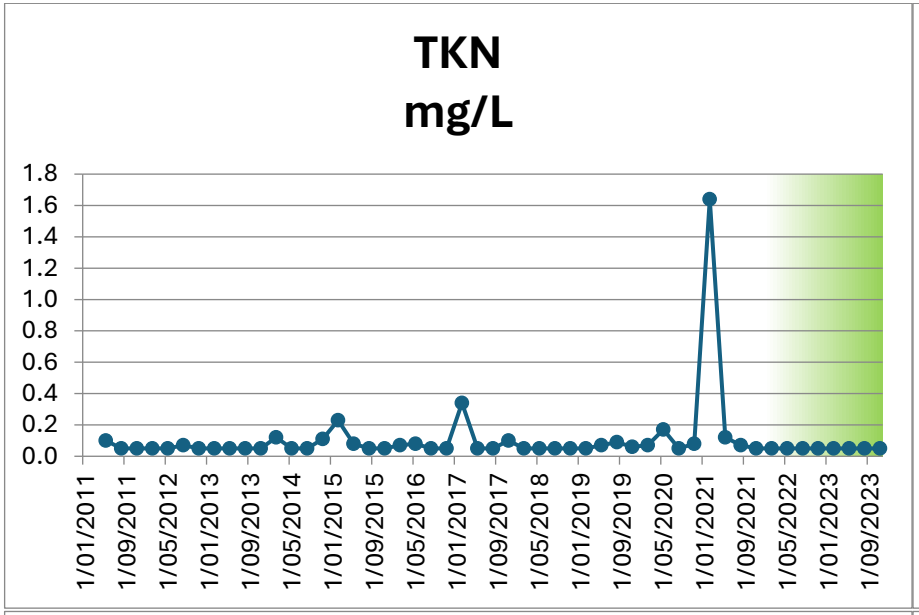

Potassium Total
mg/L
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

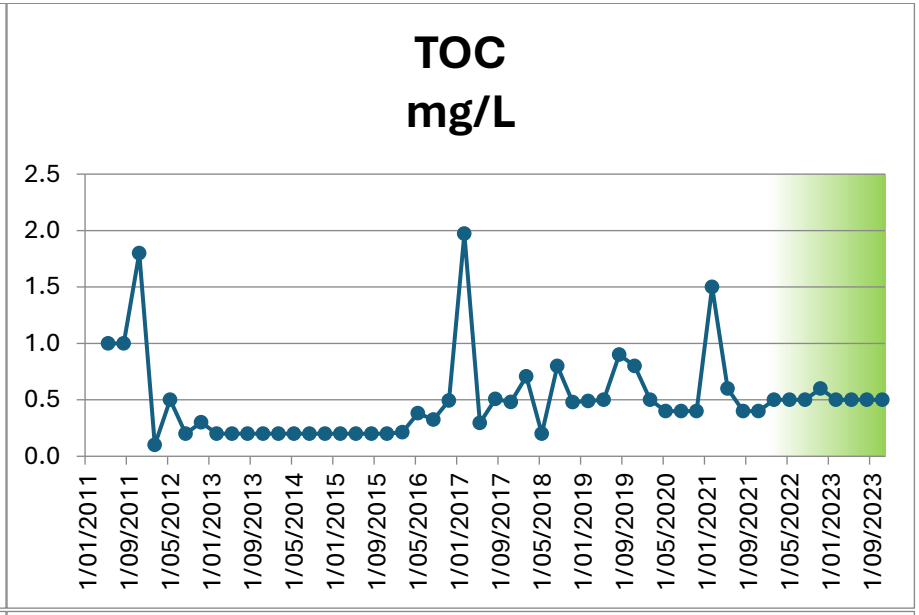

Redox Potential
mV
900
800
700
600
500
400
300
200
100
0
-100
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

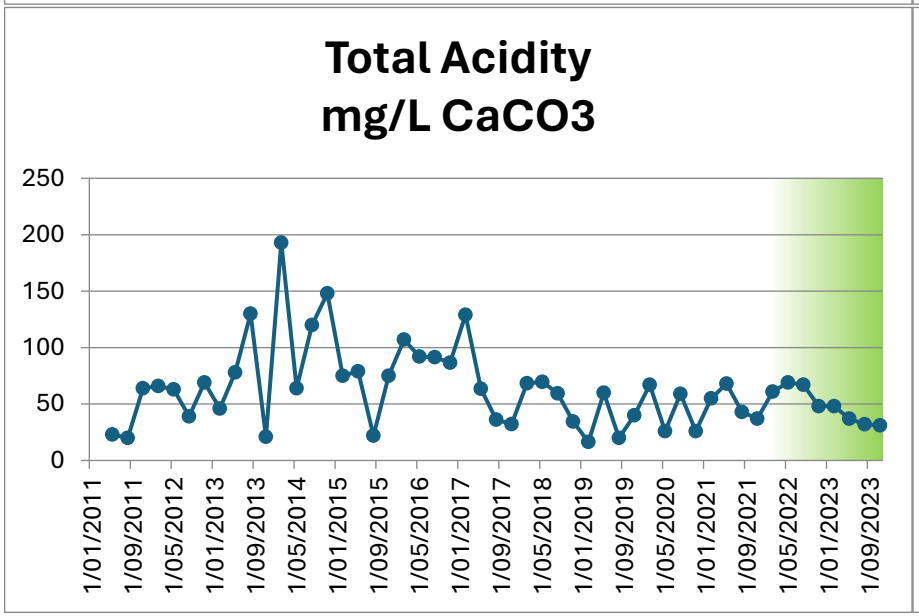

Sodium (Total)
mg/L
80
70
60
50
40
30
20
10
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

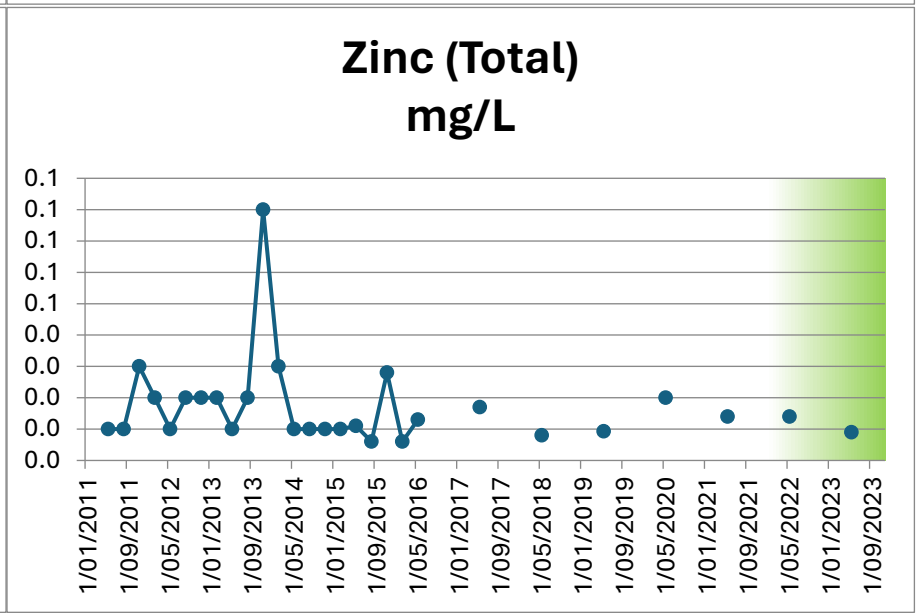

Sulphate
mg/L
14
12
10
8
6
4
2
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Temperature
C
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TKN
mg/L
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TOC
mg/L
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Total Acidity
mg/L CaCO3
250
200
150
100
50
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Zinc (Total)
mg/L
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

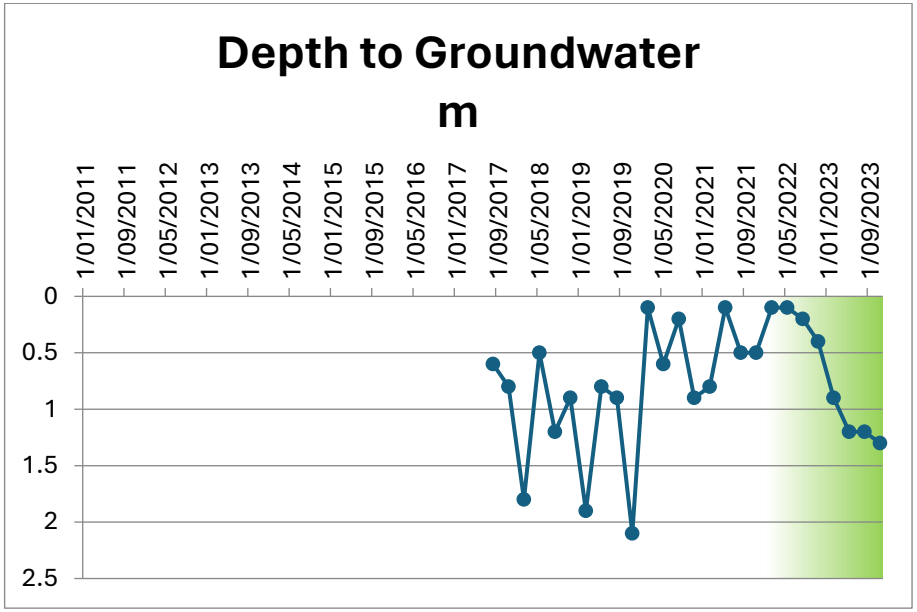
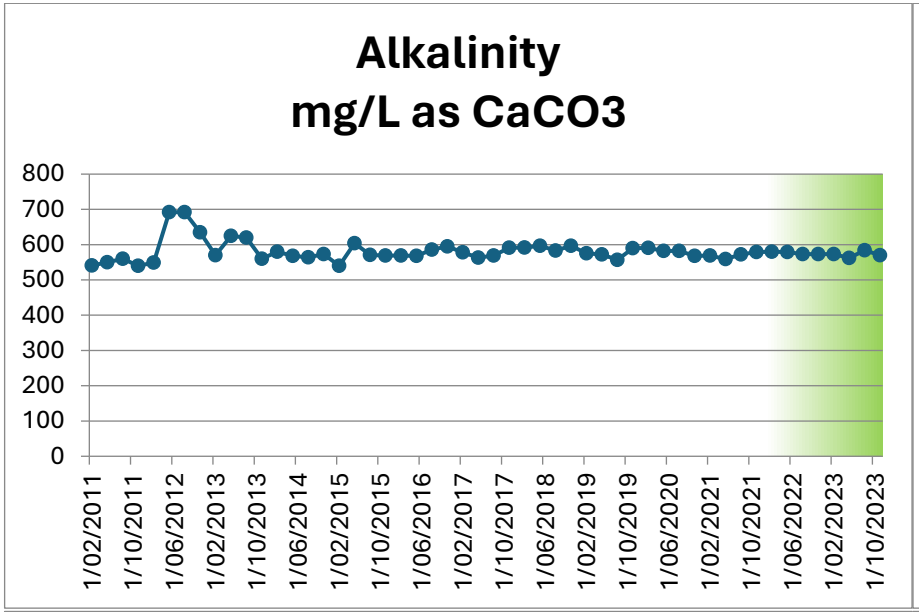

Depth to Groundwater
m
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023
0
0.5
1
1.5
2
2.5

Table 27: Ground Water 22

GW22	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µScm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride mg/L	Iron Total mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	Nitrate N mg/L	Nitrite N mg/L	Nitrogen Oxidised mg/L	Nitrogen Total mg/L	pH pH units	Phenol Alkalinity mg/L as CaCO3	Phosphorus Total mg/L	Potassium Total mg/L	Redox Potential mV	Sodium (Total) mg/L	Sulphate mg/L	Temperature C	TKN mg/L	TOC mg/L	Total Acidity mg/L CaCO3	Zinc (Total) mg/L	Depth to Groundwater m
1/02/2011	541	0.5	0.2	0.0	330	1.0	0.0	118	105	0.0	0.0	0.0	1346	0.0	3.0	0.1	1.0	0.0	11	0.9	0.0	0.1	0.1	0.1	0.2	6.9		0.1	5.0	-12	123	80	22	0.2	1.9	124	0.0	
11/05/2011	550	0.2	0.1	0.0	336	1.0	0.0	136	98	0.0	0.0	0.0	1498	0.0	1.0	0.1	1.1	0.0	14	1.2	0.0	0.1	0.1	0.1	0.2	6.8		0.1	11.0	103	159	91	20	0.2	1.9	74	0.0	
10/08/2011	560	0.2	0.1	0.0	340	1.5	0.0	127	98	0.0	0.0	0.0	1343	0.0	1.1	0.1	1.1	0.0	13	1.0	0.0	0.1	0.1	0.1	0.2	6.8		0.1	6.0	19	170	80	20	0.2	2.2	105	0.0	
9/11/2011	540	0.4	0.2	0.0	329	1.0	0.0	1	110	0.0	0.0	0.0	1416	0.0	1.0	0.2	1.1	0.0	2	1.2	0.0	0.1	0.0	0.1	0.3	6.9		0.0	25.0	20	12	8	22	0.2	1.7	70	0.0	
7/02/2012	549	0.2	0.1	0.0	335	1.2	0.0	138	91	0.0	0.0	0.0	1425	0.0	1.0	0.1	1.0	0.0	13	1.2	0.0	0.0	0.0	0.0	0.2	6.9		0.0	7.0	77	185	89	21	0.2	1.2	92	0.0	
9/05/2012	692	0.1	0.2	0.0	422	1.0	0.0	131	85	0.0	0.0	0.0	1488	0.0	2.7	0.2	1.2	0.0	12	1.1	0.0	0.1	0.0	0.1	0.3	6.7		0.0	6.0	218	146	78	21	0.2	1.5	42	0.0	
7/08/2012	692	0.4	0.2	0.0	422	1.5	0.0	126	68	0.0	0.0	0.0	1447	0.0	3.0	0.2	1.6	0.0	12	1.2	0.0	0.2	0.0	0.2	0.5	6.9		0.1	6.0	-88	141	76	20	0.4	1.6	51	0.1	
14/11/2012	635	0.7	0.3	0.0	387	1.0	0.0	131	96	0.0	0.0	0.0	1418	0.0	2.9	0.2	2.0	0.0	14	1.2	0.0	0.1	0.0	0.1	0.6	6.9		0.1	6.0	-110	144	68	21	0.5	1.4	74	0.1	
14/02/2013	570	0.3	0.5	0.0	348	1.2	0.0	142	95	0.0	0.0	0.0	1444	0.0	2.9	0.1	2.4	0.0	14	1.5	0.0	0.1	0.0	0.1	0.8	6.9		0.0	6.0	-81	173	81	21	0.7	1.5	60	0.1	
15/05/2013	625	0.3	0.5	0.0	381	1.2	0.0	137	110	0.0	0.0	0.0	1453	0.0	2.7	0.1	2.8	0.0	13	1.5	0.0	0.1	0.0	0.1	0.9	6.9		0.1	5.0	-80	160	80	20	0.8	1.7	104	0.0	
7/08/2013	620	0.5	0.4	0.0	378	1.0	0.0	141	96	0.0	0.0	0.0	1451	0.0	2.6	0.2	5.0	0.0	14	1.8	0.0	0.1	0.0	0.1	0.8	6.9		0.1	6.0	-94	175	95	20	0.6	2.0	176	0.1	
13/11/2013	560	0.6	0.3	0.0	342	1.2	0.0	145	97	0.0	0.0	0.0	1535	0.0	2.8	0.2	6.3	0.0	16	2.0	0.0	0.1	0.0	0.1	0.6	6.9		0.1	6.0	-76	190	100	21	0.5	2.0	99	0.1	
12/02/2014	580	0.4	0.3	0.0	354	1.2	0.0	127	99	0.0	0.0	0.0	1391	0.0	2.8	0.2	5.7	0.0	14	1.9	0.0	0.1	0.0	0.1	0.8	6.9		0.0	5.0	-85	171	90	21	0.7	2.4	196	0.1	
14/05/2014	568	0.3	0.3	0.0	346	1.0	0.0	122	110	0.0	0.0	0.0	1534	0.0	2.9	0.2	5.4	0.0	14	1.9	0.0	0.1	0.0	0.1	0.6	6.8		0.0	5.0	-69	169	87	20	0.5	2.4	103	0.0	
13/08/2014	564	0.8	0.3	0.0	344	1.8	0.0	146	115	0.0	0.0	0.0	1524	0.0	4.2	0.2	7.1	0.0	16	2.2	0.0	0.1	0.0	0.1	0.7	6.9		0.0	6.0	-70	193	105	20	0.6	144.0	203	0.1	
11/11/2014	573	0.5	0.3	0.0	350	1.8	0.0	138	120	0.0	0.0	0.0	1537	0.0	2.9	0.2	7.4	0.0	16	2.1	0.0	0.0	0.0	0.1	0.7	6.9		0.0	6.0	-48	196	18	21	0.6	1.4	141	0.1	
10/02/2015	540	0.2	0.4	0.0	329	1.0	0.0	115	130	0.0	0.0	0.0	1606	0.0	2.9	0.2	7.1	0.0	14	2.1	0.0	0.1	0.0	0.1	0.8	6.9		0.0	6.0	-48	183	115	21	0.7	2.8	122	0.1	
12/05/2015	604	0.4	0.3	0.0	368	1.5	0.0	144	121	0.0	0.0	0.0	1588	0.0	2.8	0.2	10.0	0.0	16	2.6	0.0	0.0	0.1	0.1	0.7	6.8		0.1	6.0	-63	210	127	20	0.7	2.8	128	0.1	
12/08/2015	571	0.4	0.5	0.0	571	1.8	0.0	139	132	0.0	0.0	0.0	1643	0.0	3.0	0.2	8.3	0.0	16	2.3	0.0	0.0	0.0	0.1	1.1	7.0		0.1	6.4	-63	207	115	20	1.0	2.5	102	0.1	
11/11/2015	569	0.1	0.5	0.0	569	1.0	0.0	133	142	0.0	0.0	0.0	1653	0.0	2.1	0.2	4.5	0.0	17	2.1	0.0	0.0	0.0	0.1	0.9	6.9		0.0	6.3	-45	201	120	21	0.8	3.0	103	0.0	
9/02/2016	569	0.3	0.3	0.0	569	1.2	0.0	135	120	0.0	0.0	0.0	1606	0.0	2.7	0.2	10.8	0.0	14	2.6	0.0	0.0	0.0	0.1	0.8	6.9		0.1	5.4	-75	195	127	21	0.7	2.0	134	0.0	
10/05/2016	568	0.5	0.3	0.0	568	2.4	0.0	141	115	0.0	0.0	0.0	1607	0.0	1.5	0.2	10.9	0.0	14	2.6	0.0	0.1	0.0	0.1	0.8	6.8		0.1	5.3	-45	198	115	21	0.7	2.9	159	0.1	
10/08/2016	586		0.3		586	2.4		137	105				1638		2.7	0.2			13			0.0	0.1	0.1	0.7	6.7		0.0	5.2	-45	200	147	20	0.6	10.7	143		
8/11/2016	595		0.3		595	1.2		140	105				1583		1.7	0.2			13			0.0	0.1	0.1	0.6	6.7		0.0	5.0	-15	203	135	22	0.5	2.9	193		
8/02/2017	578		0.2		578	1.0		136	110				1591		2.3	0.1			12			0.0	0.1	0.1	0.5	6.5		0.0	5.0	40	196	129	21	0.4	2.6	234		
9/05/2017	563	0.5	0.2	0.0	563	1.2	0.0	136	115	0.0	0.0	0.0	1555	0.0	3.0	0.2	8.1	0.0	12	2.2	0.0	0.0	0.1	0.1	0.5	6.6		0.0	5.0	-39	194	146	20	0.4	2.3	152	0.0	
9/08/2017	569		0.1		569	2.4		138	325				1565		3.0	0.2			12			0.1	0.1	0.2	0.4	6.5		0.0	5.0	4	201	118	20	0.2	3.5	161		12.1
8/11/2017	591		0.1		591	1.2		138	96				1561		2.8	0.2			12			0.0	0.1	0.1	0.5	6.6		0.1	5.0	-28	194	118	20	0.4	2.1	175		12.9
14/02/2018	592		0.1		592	3.0		135	95				1537		2.7	0.2			11			0.1	0.1	0.2	0.5	6.7		0.0	<5	-5	192	120	21	0.3	3.4	119		13.0
9/05/2018	597	0.3	0.1	0.0	597	1.5	0.0	135	88	0.0	0.0	0.0	1510	0.0	2.2	0.2	8.1	0.0	11	1.8	0.0	0.0	0.1	0.0	0.3	6.6		0.0	3.9	-44	194	114	21	0.3	2.2	165	0.0	13.0
15/08/2018	583		0.1		583	3.3		143	88				1496		2.5	0.2			12			0.0	0.1	0.0	0.4	6.7		0.0	4.2	-7	206	118	20	0.4	3.8	127		12.2
14/11/2018	597		0.2		597	1.2		139	90				1477		3.4	0.2			11			0.0	0.1	0.1	0.5	6.8		0.1	4.2	-52	197	116	21	0.5	2.3	136		13.4
13/02/2019	575		0.2		575	1.0		146	110				1504		2.6	0.2			11			0.0	0.1	0.0	0.5	6.7		0.0	4.2	-49	199	111	21	0.4	2.3	142		13.5
15/05/2019	572	0.5	0.3	0.0	572	1.5	0.0	142	92	0.0	0.0	0.0	1478	0.0	3.0	0.2	8.4	0.0	12	1.9	0.0	0.0	0.1	0.1	0.6	6.7		0.0	4.7	-47	205	116	21	0.5	2.2	140	0.0	14.0
14/08/2019	557		0.2		557	1.0		141	84				1468		3.2	0.2			12			0.1	0.0	0.2	0.5	6.8		0.0	4.7	78	196	110	20	0.3	2.5	120		14.0
13/11/2019	590		0.1		590	1.0		138	89				1518		2.8	0.2			12			0.0	0.1	0.1	0.4	6.7		0.0	4.4	-20	191	106	21	0.3	2.1	140		14.0
26/02/2020	591		0.1		591	1.0		129	95				1484		3.1	0.2			11			0.0	0.1	0.1	0.5	6.7	0.0	0.0	3.9	-32	176	88	21	0.4	2.1	120		13.0
13/05/2020	582	0.4	0.1	0.0	582	1.2	0.0	131	90	0.0	0.0	0.0	1502	0.0	2.7	0.3	7.1	0.0	11	1.8	0.0	0.1	0.1	0.1	0.5	6.6	0.0	0.0	3.7	-56	180	97	20	0.3	1.9	130	0.0	12.8
12/08/2020	582		0.1		582	1.8		132	80				1432		3.2	0.3			11			0.0	0.1	0.1	0.5	6.7	0.0	0.1	3.8	-40	179	92	20	0.4	2.0	130		11.0
11/11/2020	568		0.2		568	2.4		126	90				1444		3.1	0.3			11			0.2	0.0	0.2	0.6	6.6	0.0	0.0	4.0	-38	181	90	21	0.4	2.2	85		13.6
10/02/2021	569		0.1		569	1.0		130	82				1441		3.2	0.3			11			0.0	0.1	0.1	0.3	6.4	0.0	0.0	3.7	-23	179	89	21	0.3	2.0	99		13.0
12/05/2021	559	0.2	0.1	0.0	559	2.1	0.0	129	120	0.0	0.0	0.0	1404	0.0	2.4	0.3	2.6	0.0	12	1.8	0.0	0.3	0.1	0.3	0.6	6.7	0.0	0.0	4.5	2	181	95	21	0.3	2.7	100	0.0	11.5
11/08/2021	572		0.1		572	4.2		134	90				1435		2.9	0.3			12			0.0	0.0	0.0	0.4	6.7	0.0	0.0	4.6	-34	179	86	20	0.4	4.0	120		12.4
9/11/2021	579		0.1		579	1.0		134	94				1441		2.5	0.3			12			0.1	0.1	0.2	0.5	6.6	0.0	0.1	4.2	-27	179	83	21	0.3	2.3	110		12.5
9/02/2022	580		0.1		580	1.8		128	120				1433		3.0	0.2			11			0.3	0.1	0.3	0.7	6.6	0.0	0.0	4.1	-23	170	79	21	0.4	2.4	160		12.1
11/05/2022	579	0.8	0.1	0.0	579	1.8	0.0	129	110	0.0	0.0	0.0	1429	0.0	3.5	0.3	4.5	0.0	12	1.3	0.0	0.6	0.0	0.6	1.1	6.7	0.0	0.0	4.1	-34	173	81	20	0.5	2.9	120	0.1	11.0
10/08/2022	573		0.1		573	1.0		134	92				1414		2.8	0.3			12			0.0	0.0	0.1	0.3	6.7	0.0	0.0	4.3	-27	177	80	20	0.3	1.9	150		11.0
9/11/2022	573		0.1		573	1.8		129	100				1453		2.6	0.3			11			0.0	0.1	0.1	0.3	6.6	0.0	0.1	4.4	-33	169	77	21	0.2	2.3	140		14.4
14/02/2023	573		0.1		573	2.7		136	92				1410		3.0	0.3			12			0.0	0.0	0.0	0.4	6.6	0.0	0.0	4.3	-61	178	79	21	0.4	1.9	120		12.0
10/05/2023	562	0.7	0.3	0.0	562	3.6	0.0	131	95	0.0	0.0	0.0	1384	0.0	2.9	0.3	5.2	0.0	11	1.6	0.0	0.0	0.0	0.0	0.5	6.7	0.0	0.1	4.5	-94	173	73	20	0.5	2.5	88	0.1	12.3
9/08/2023	584		0.3		584	2.7		129	88				1390		3.0	0.3			11			0.0	0.0	0.0	0.5	6.7	0.0	0.1	4.5	-91	172	74	20	0.5	2.6	110		12.7
15/11/2023	570		0.3		570	1.0		127	91				1391		2.9	0.3			11			0.1	0.0	0.1	0.6	6.6	0.0	0.1	3.9	-92	171	75	21	0.5	2.5	110		13.0
2023 Min	**562.0**	**0.7**	**0.1**	**0.0**	**562.0**	**1.0**	**0.0**	**127.0**	**88.0**	**0.0**	**0.0**	**0.0**	**1384.0**	**0.0**	**2.9**	**0.3**	**5.2**	**0.0**	**11.0**	**1.6**	**0.0**	**0.0**	**0.0**	**0.0**	**0.4**	**6.6**	**0.0**	**0.0**	**3.9**	**-94.3**	**171.0**	**73.0**	**20.3**	**0.4**	**1.9**	**88.0**	**0.1**	**12.0**
2023 Max	**584.0**	**0.7**	**0.3**	**0.0**	**584.0**	**3.6**	**0.0**	**136.0**	**95.0**	**0.0**	**0.0**	**0.0**	**1410.0**	**0.0**	**3.0**	**0.3**	**5.2**	**0.0**	**12.0**	**1.6**	**0.0**	**0.1**	**0.0**	**0.1**	**0.6**	**6.7**	**0.0**	**0.1**	**4.5**	**-60.9**	**178.0**	**79.0**	**21.2**	**0.5**	**2.6**	**120.0**	**0.1**	**13.0**
2023 Mean	**572.3**	**0.7**	**0.2**	**0.0**	**572.3**	**2.5**	**0.0**	**130.8**	**91.5**	**0.0**	**0.0**	**0.0**	**1393.8**	**0.0**	**3.0**	**0.3**	**5.2**	**0.0**	**11.3**	**1.6**	**0.0**	**0.0**	**0.0**	**0.1**	**0.5**	**6.7**	**0.0**	**0.1**	**4.3**	**-84.5**	**173.5**	**75.3**	**20.7**	**0.4**	**2.4**	**107.0**	**0.1**	**12.5**
Long-term Average	**580.4**	**0.4**	**0.2**	**0.0**	**501.1**	**1.6**	**0.0**	**131.6**	**105.3**	**0.0**	**0.0**	**0.0**	**1486.9**	**0.0**	**2.7**	**0.2**	**5.1**	**0.0**	**12.5**	**1.7**	**0.0**	**0.1**	**0.0**	**0.1**	**0.5**	**6.7**	**0.0**	**0.0**	**5.5**	**-31.7**	**178.6**	**95.9**	**20.6**	**0.4**	**5.2**	**125.0**	**0.0**	**12.7**


Alkalinity
mg/L as CaCO3
800
700
600
500
400
300
200
100
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
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1/06/2020
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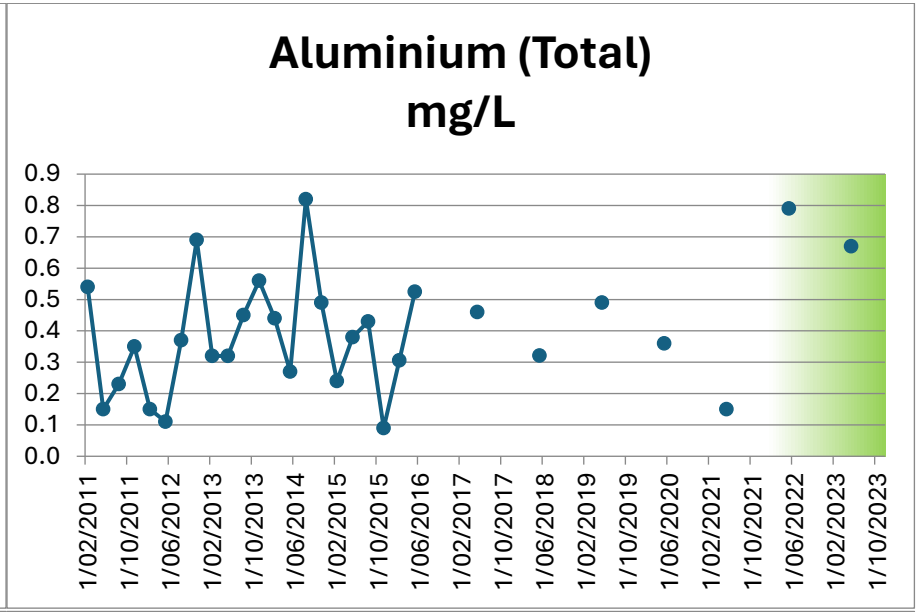
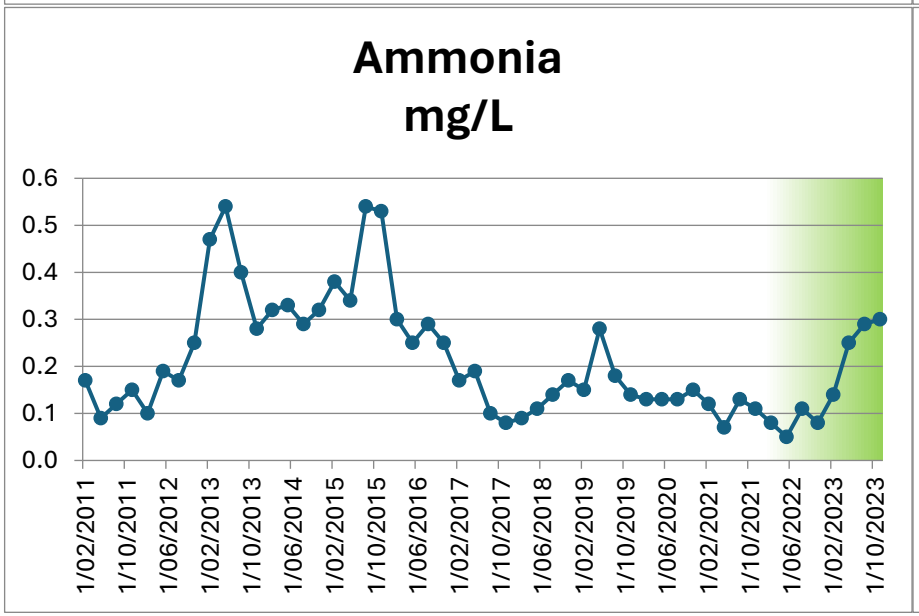
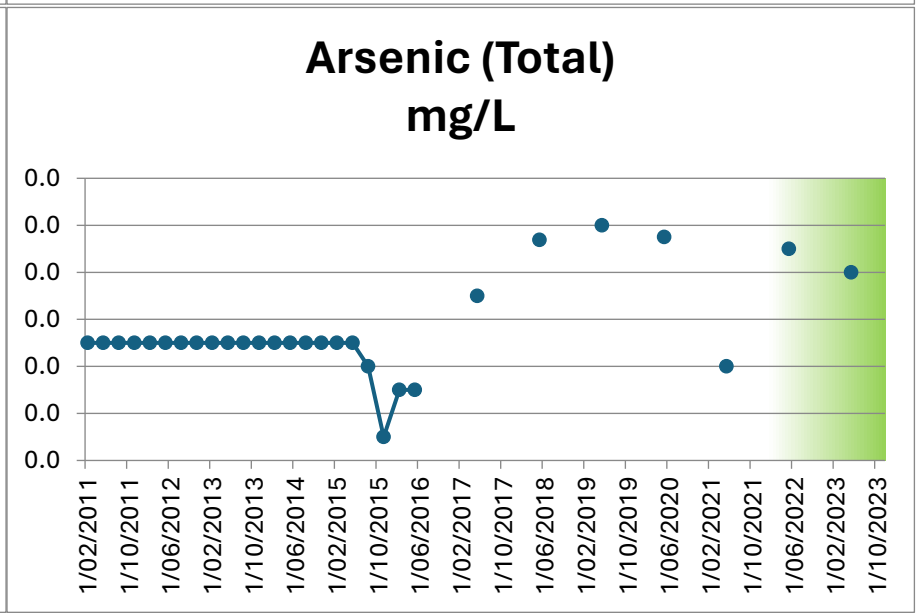
1/06/2022
1/02/2023
1/10/2023


Aluminium (Total)
mg/L
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Ammonia
mg/L
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Arsenic (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
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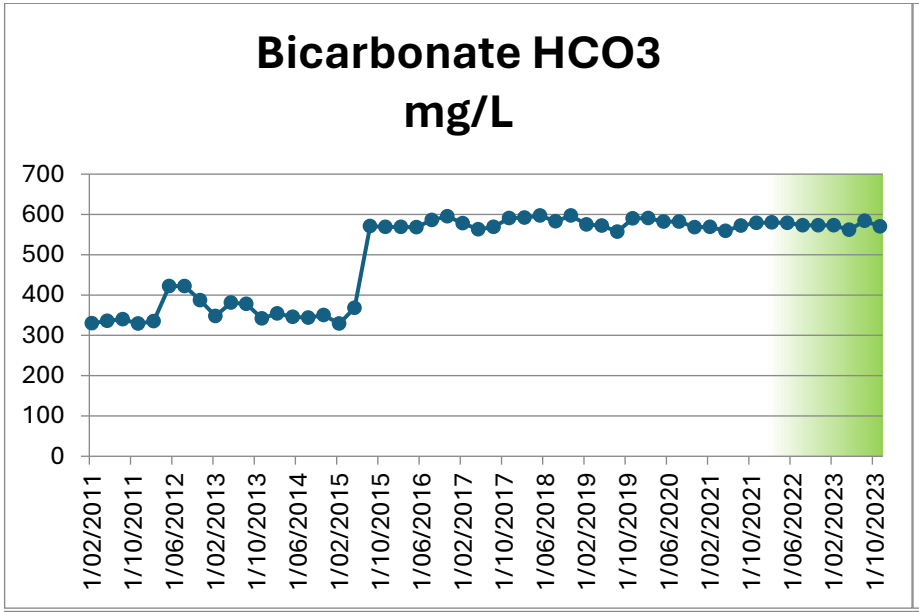
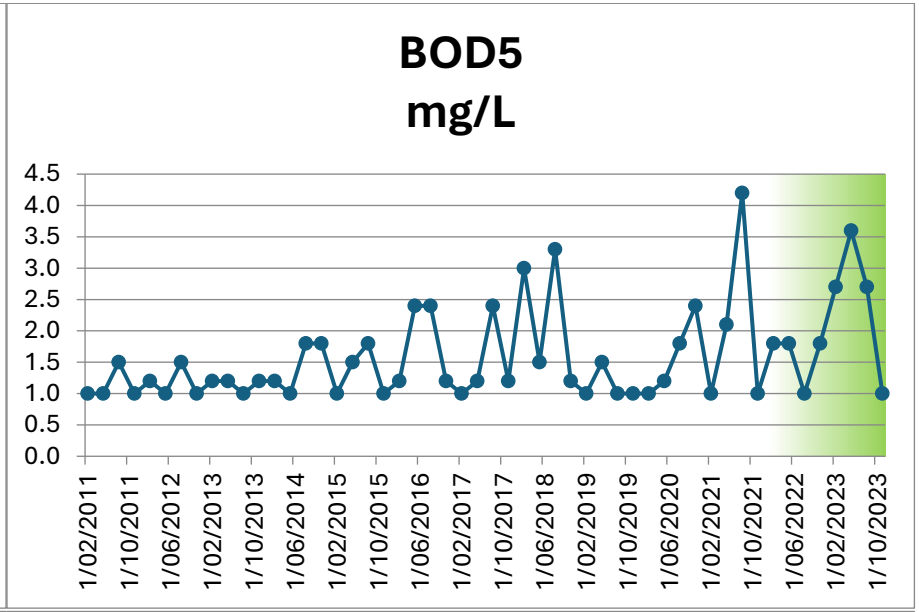
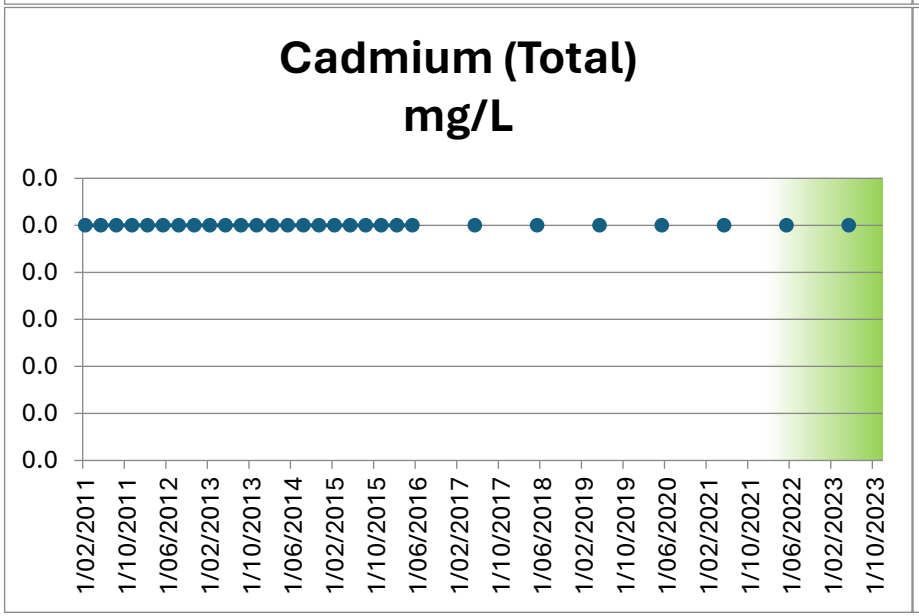
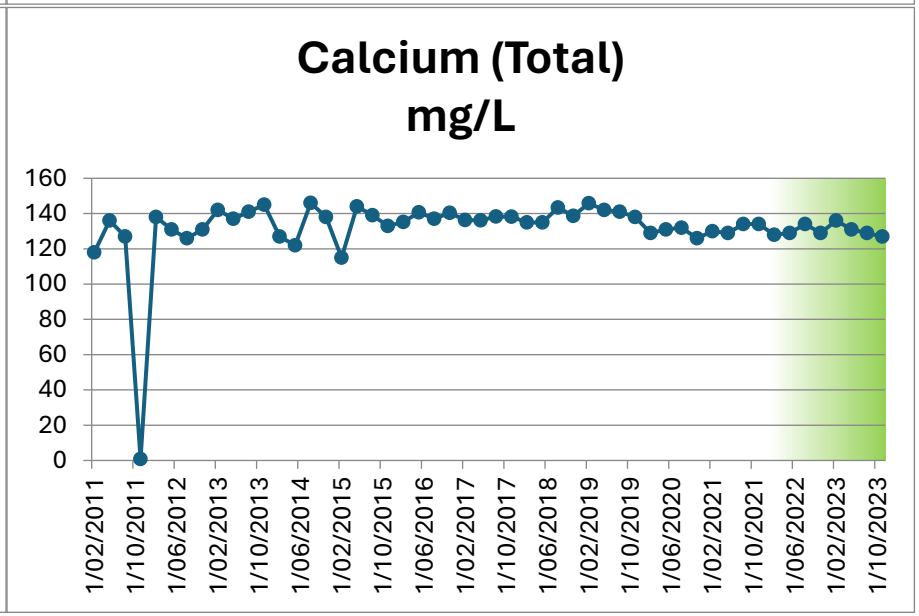
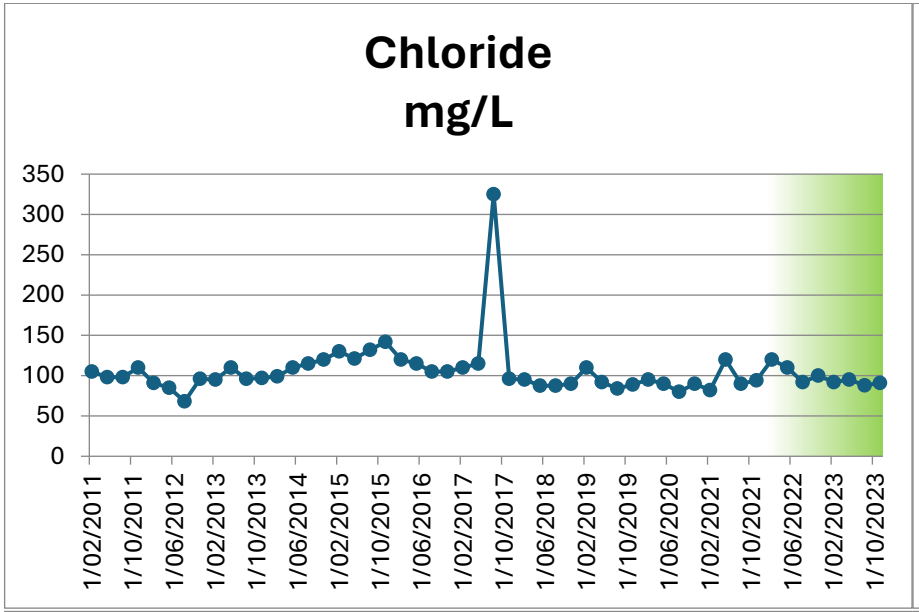
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

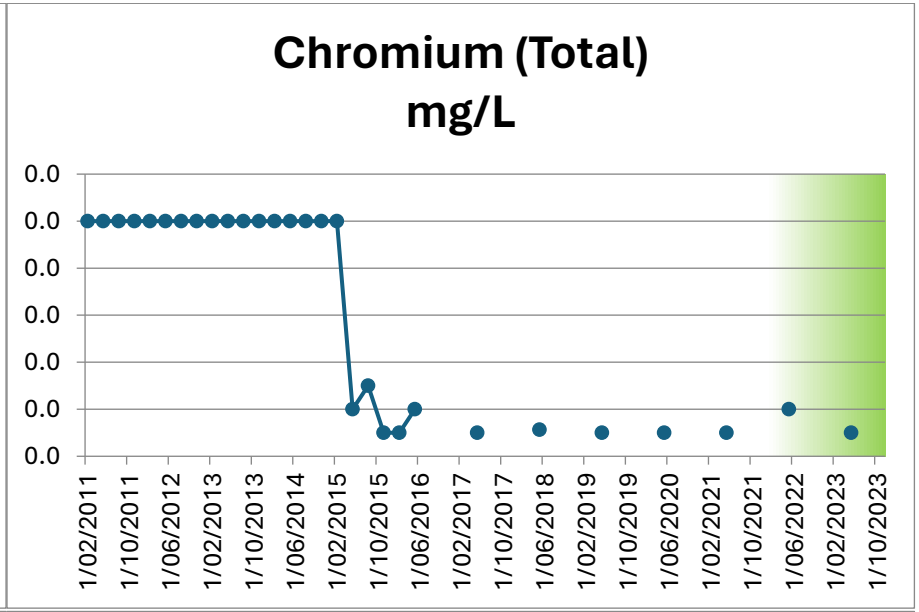

Bicarbonate HCO3
mg/L
700
600
500
400
300
200
100
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

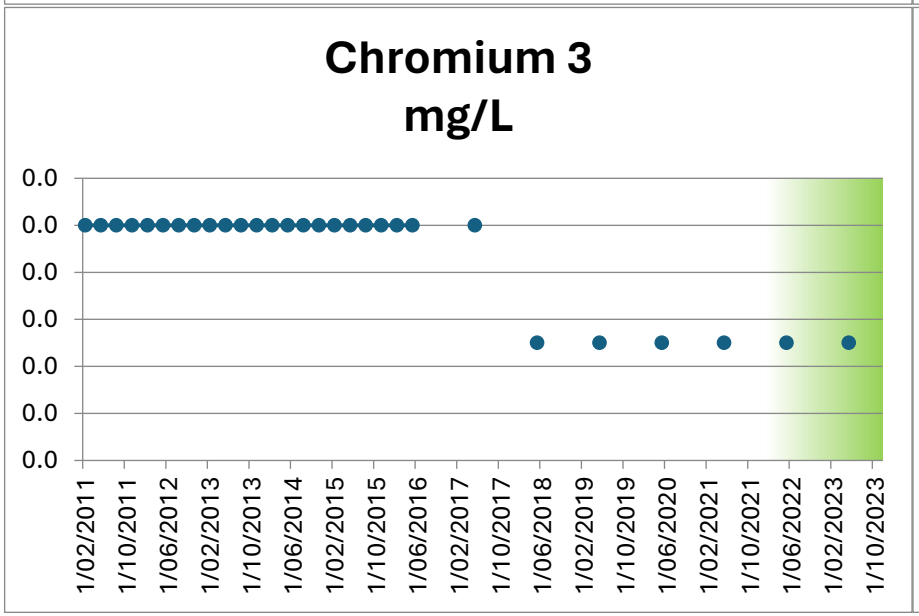

BOD5
mg/L
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

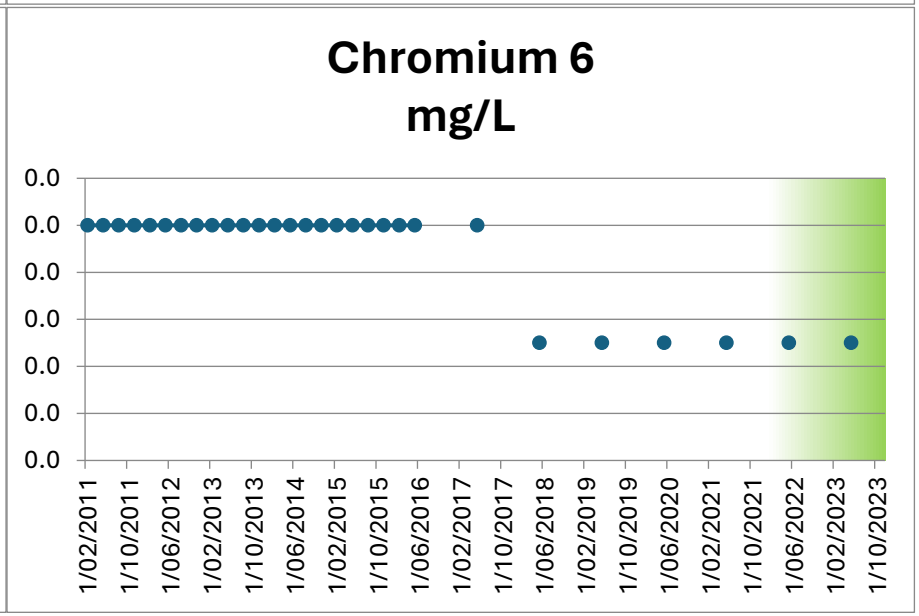

Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

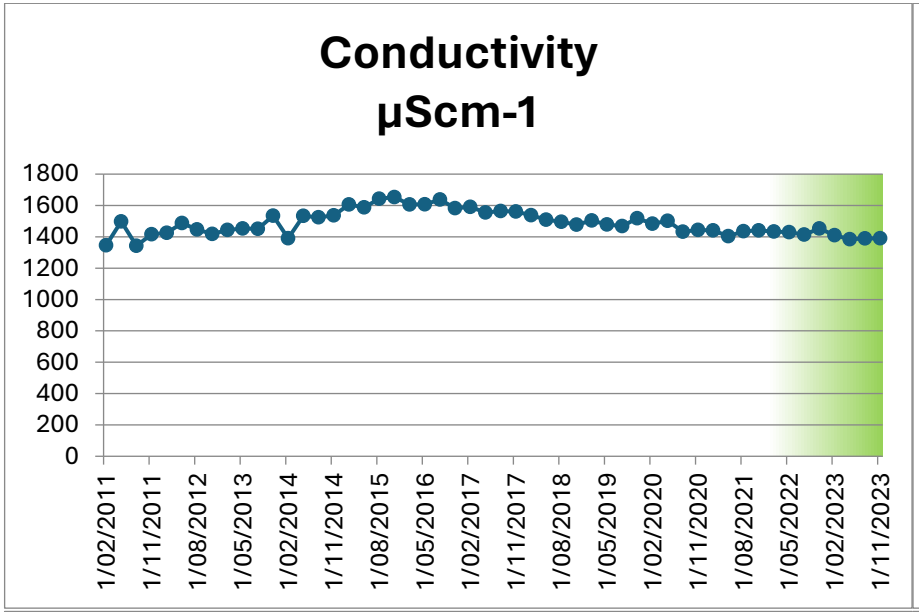

Calcium (Total)
mg/L
160
140
120
100
80
60
40
20
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

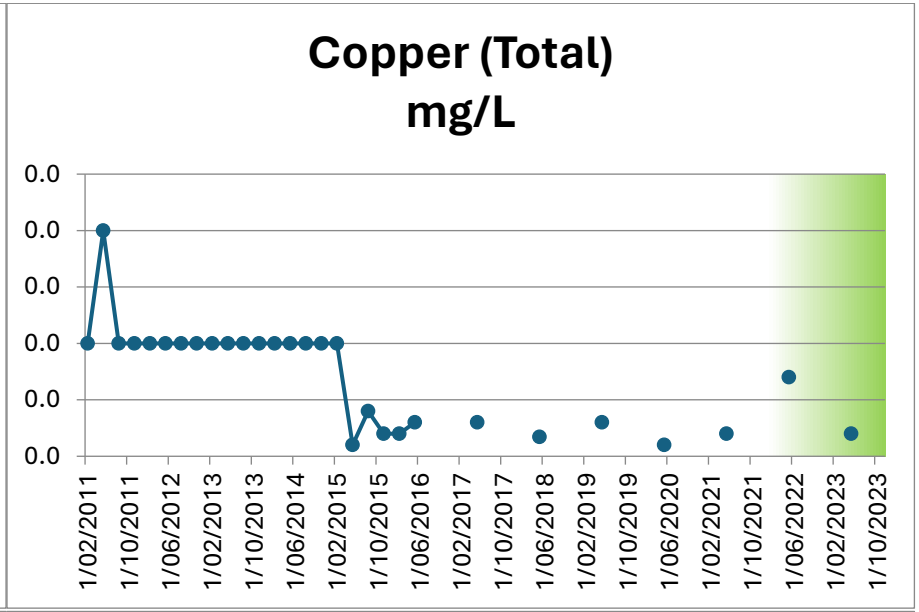

Chloride
mg/L
350
300
250
200
150
100
50
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

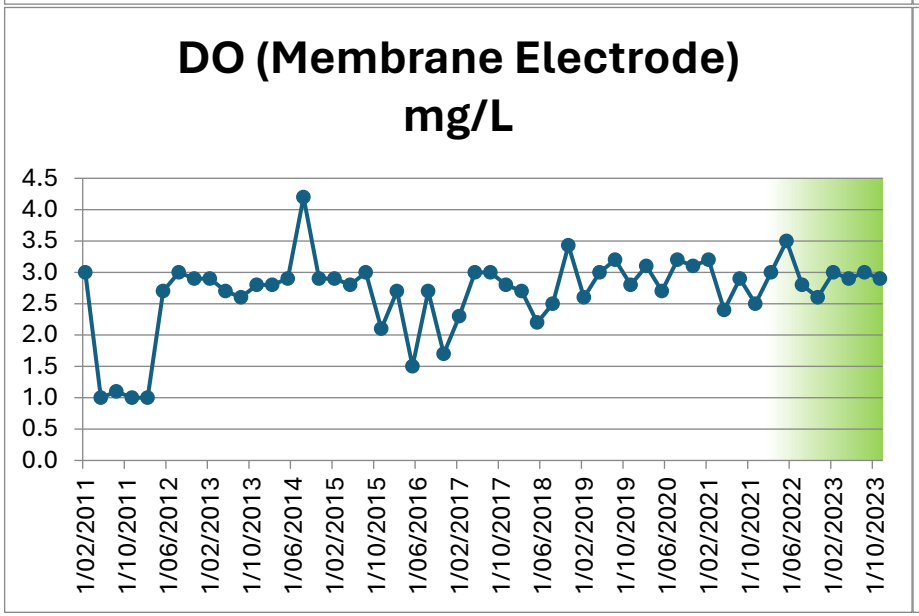

Chromium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

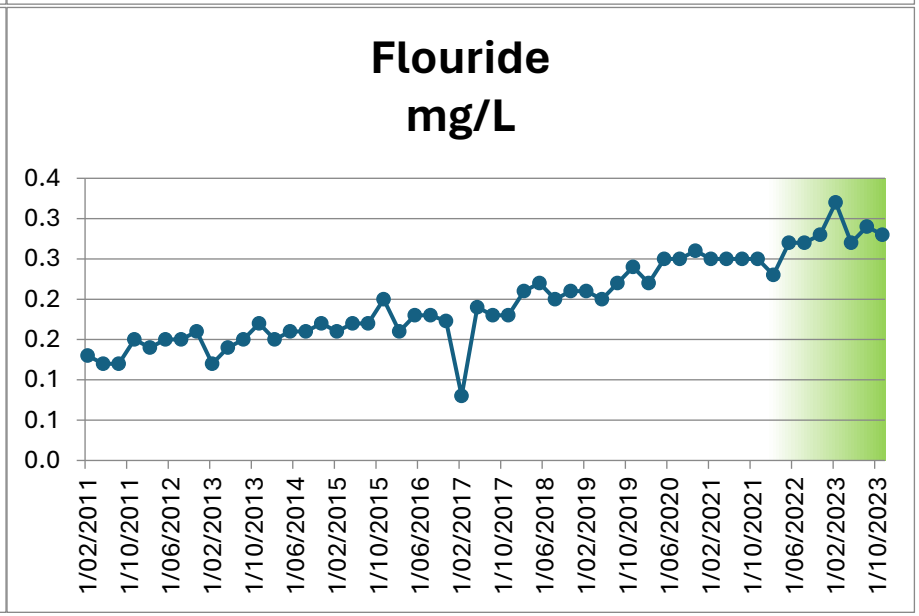

Chromium 3
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

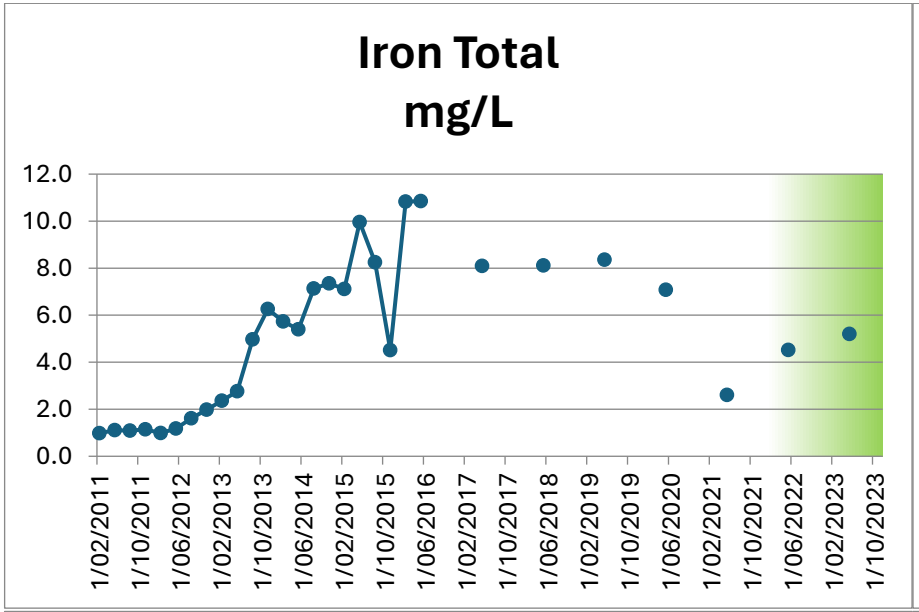

Chromium 6
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

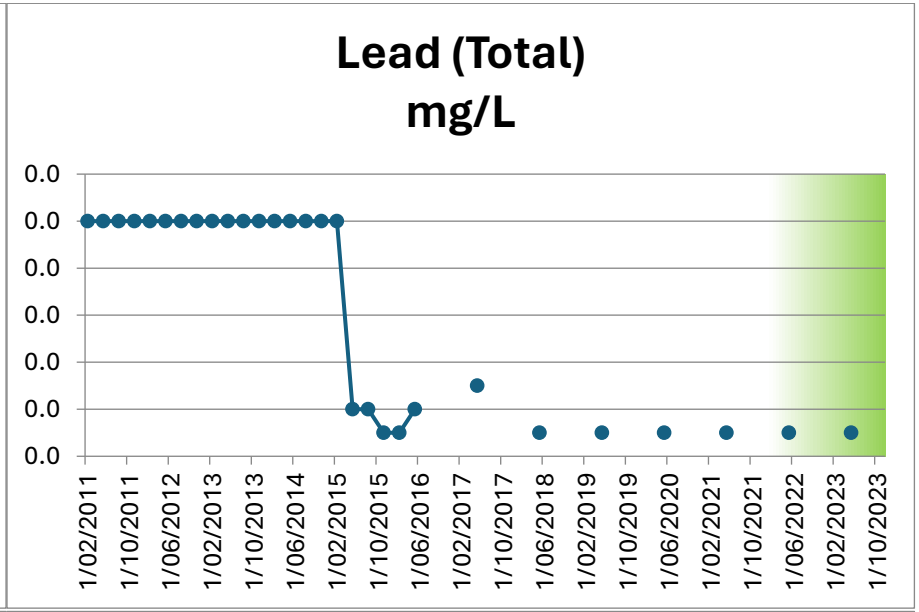

Conductivity
µScm-1
1800
1600
1400
1200
1000
800
600
400
200
0
1/02/2011
1/11/2011
1/08/2012
1/05/2013
1/02/2014
1/11/2014
1/08/2015
1/05/2016
1/02/2017
1/11/2017
1/08/2018
1/05/2019
1/02/2020
1/11/2020
1/08/2021
1/05/2022
1/02/2023
1/11/2023

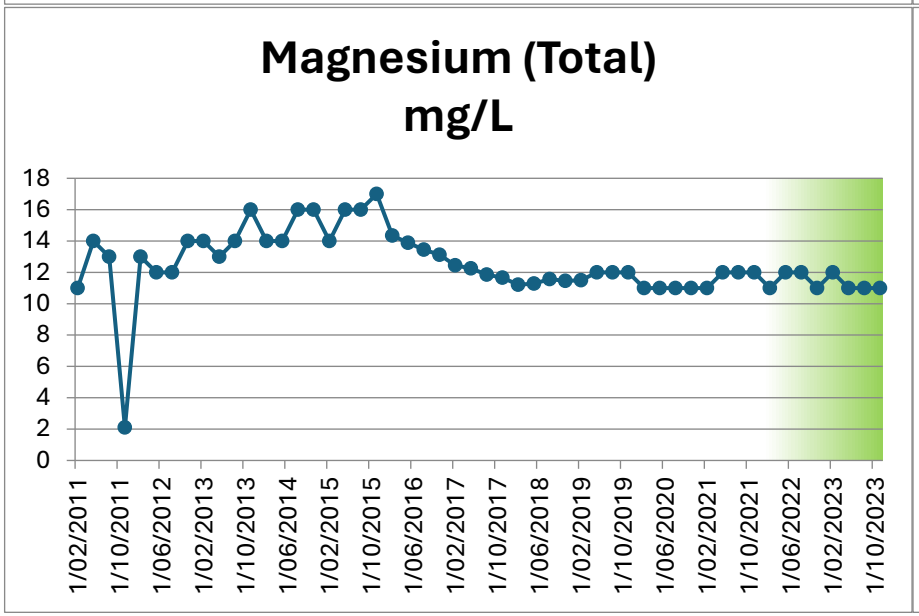

Copper (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

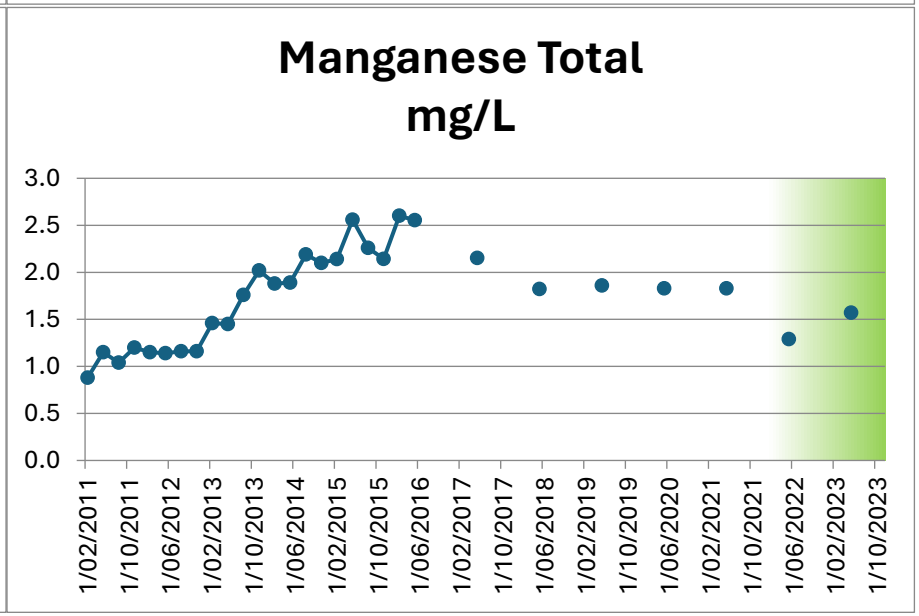

DO (Membrane Electrode)
mg/L
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

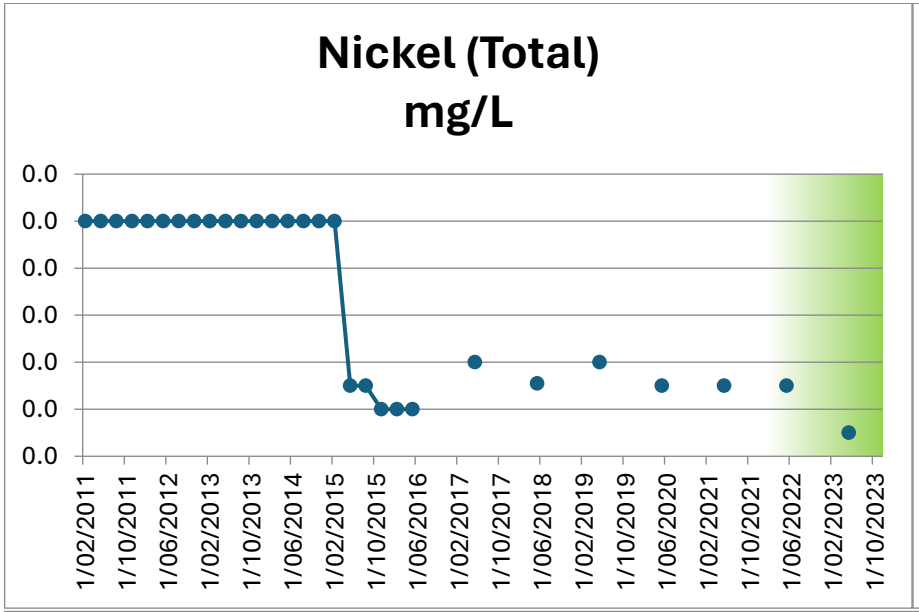

Flouride
mg/L
0.4
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

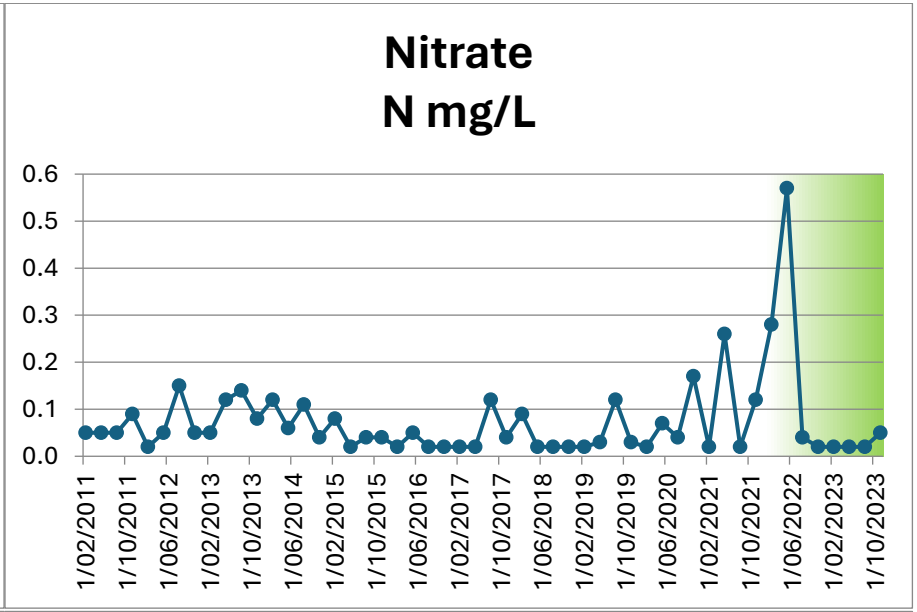

Iron Total
mg/L
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

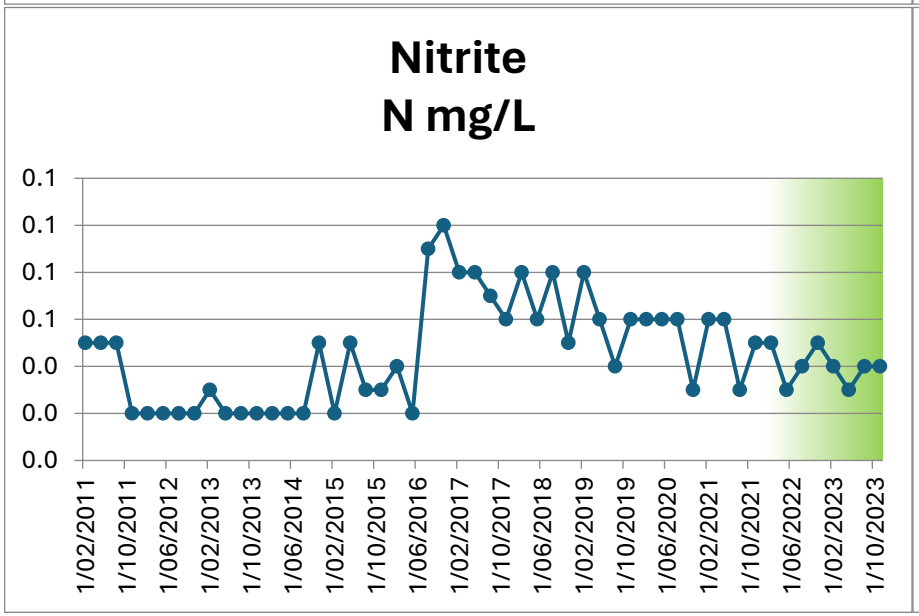

Lead (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

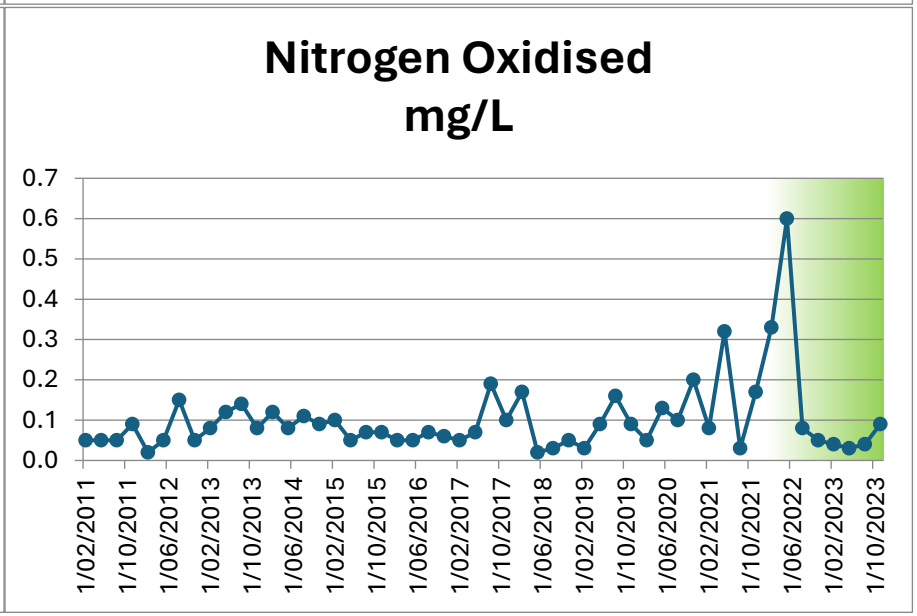

Magnesium (Total)
mg/L
18
16
14
12
10
8
6
4
2
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

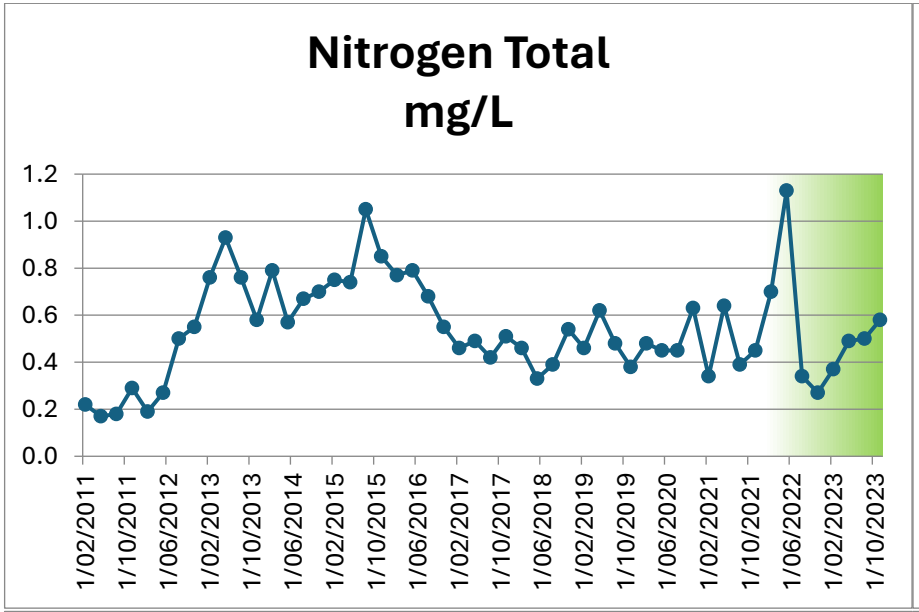

Manganese Total
mg/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

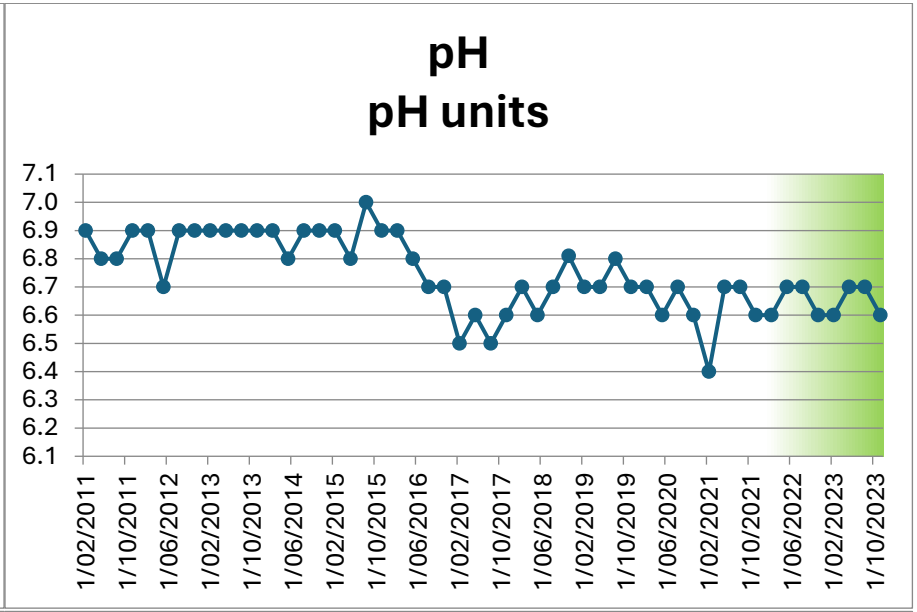

Nickel (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

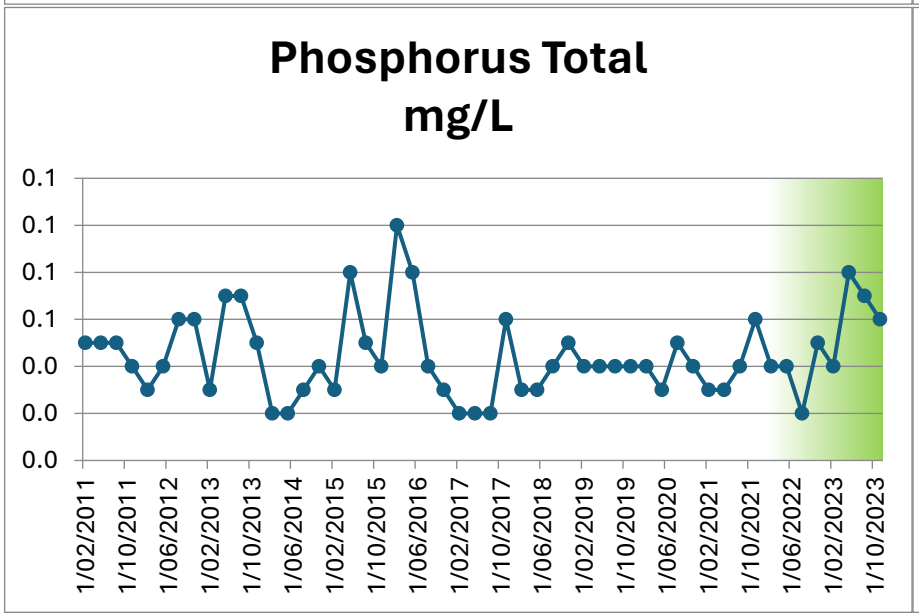

Nitrate
N mg/L
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

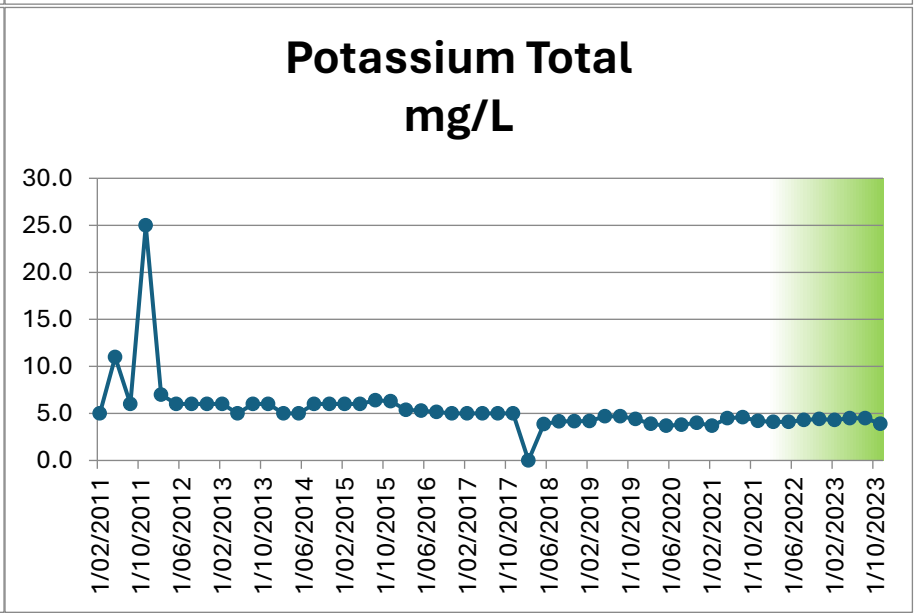

Nitrite
N mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

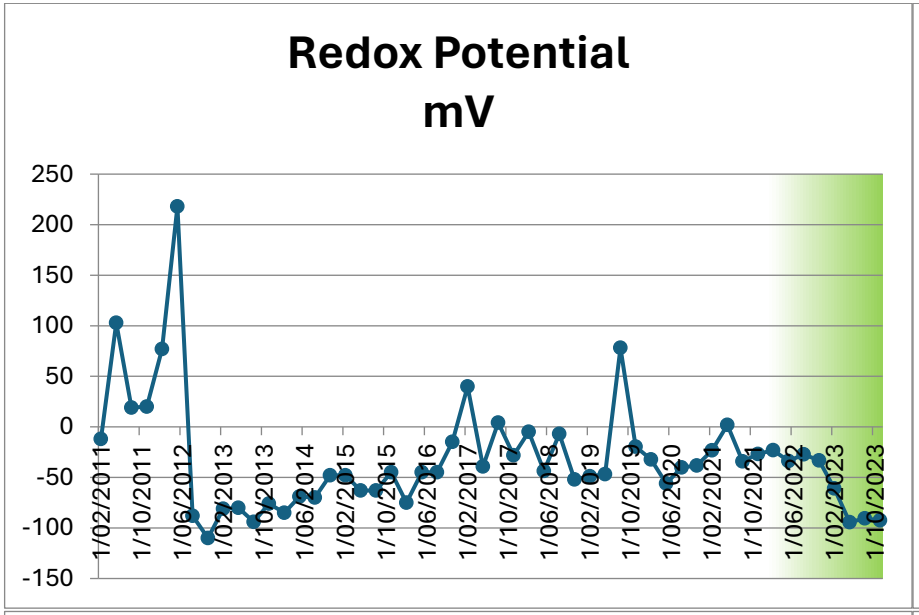

Nitrogen Oxidised
mg/L
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

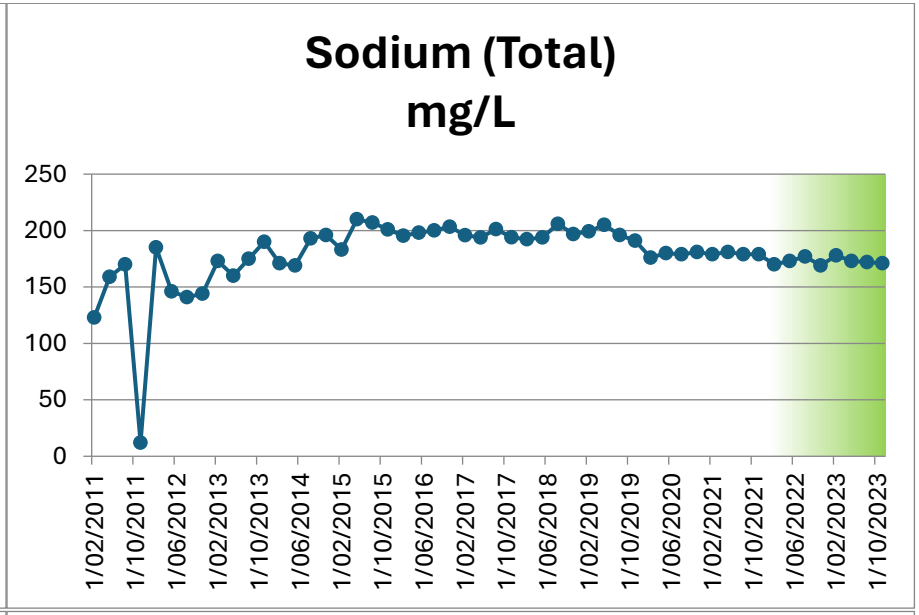

Nitrogen Total
mg/L
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

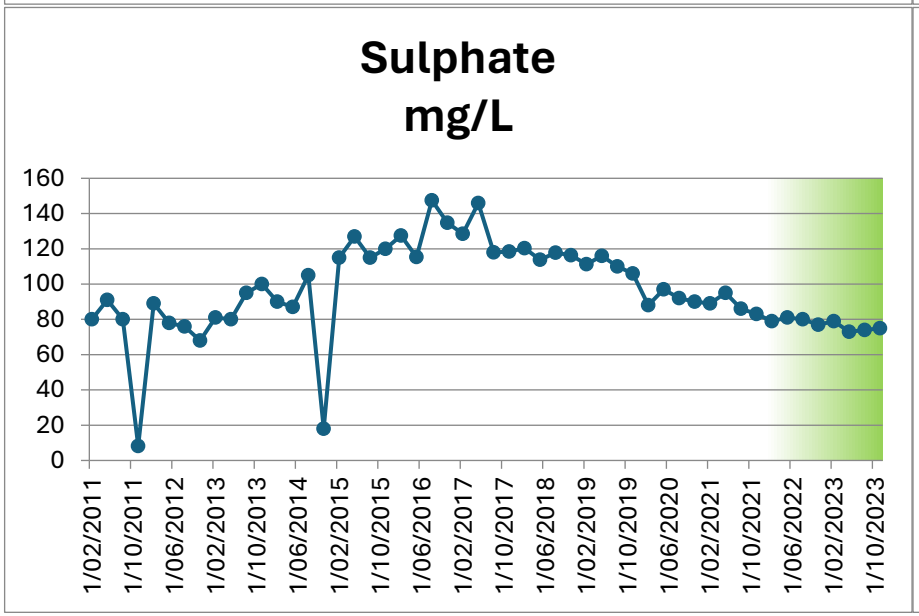

pH
pH units
7.1
7.0
6.9
6.8
6.7
6.6
6.5
6.4
6.3
6.2
6.1
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Phosphorus Total
mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Potassium Total
mg/L
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Redox Potential
mV
250
200
150
100
50
0
-50
-100
-150
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Sodium (Total)
mg/L
250
200
150
100
50
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Sulphate
mg/L
160
140
120
100
80
60
40
20
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
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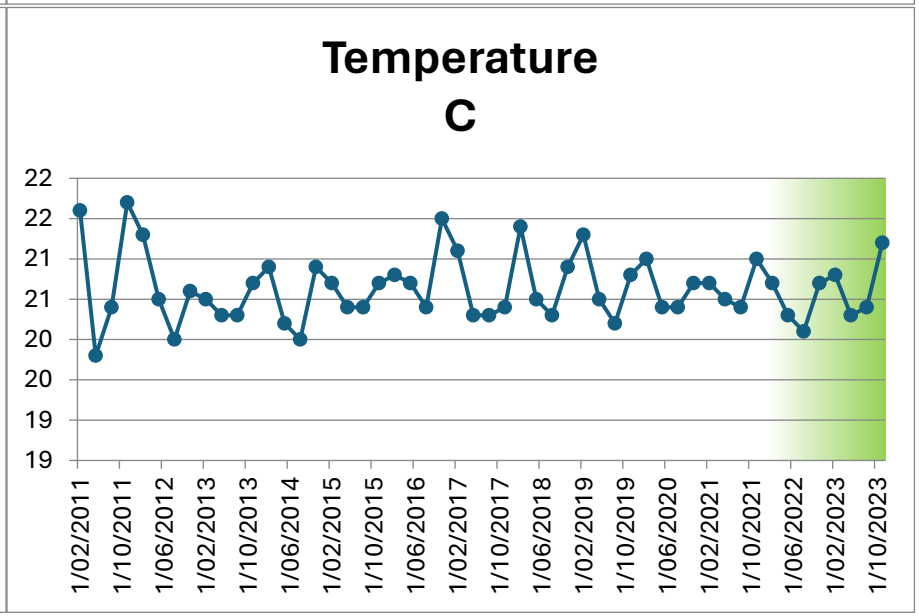
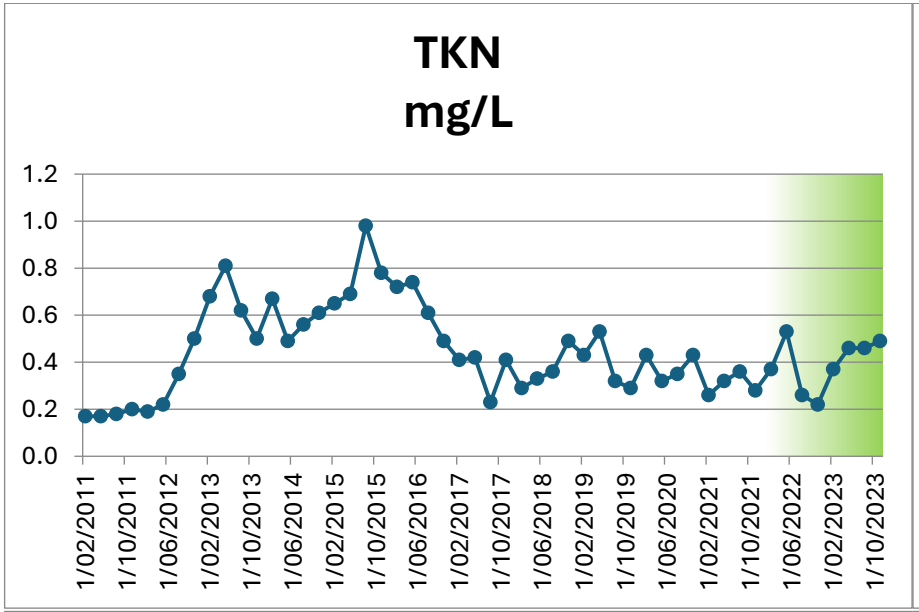
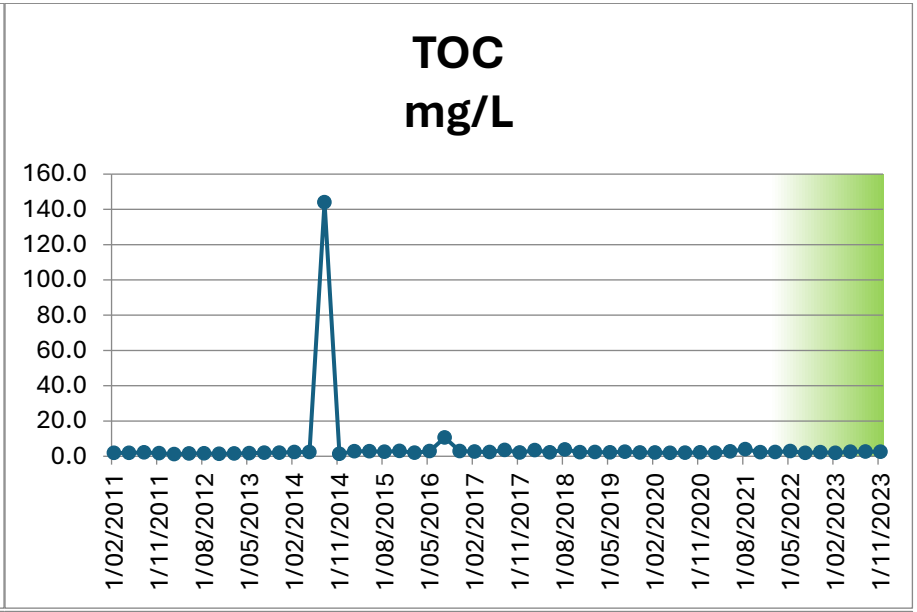
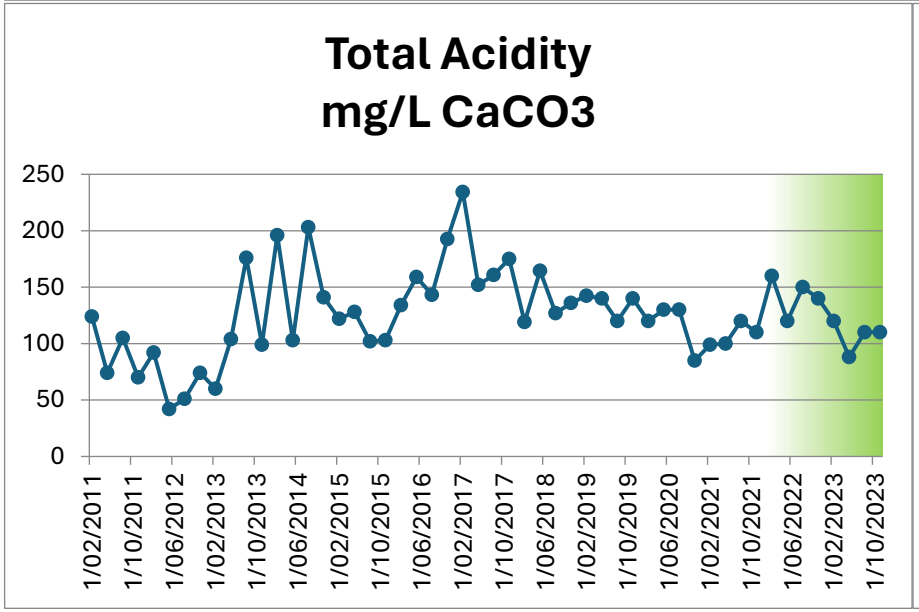
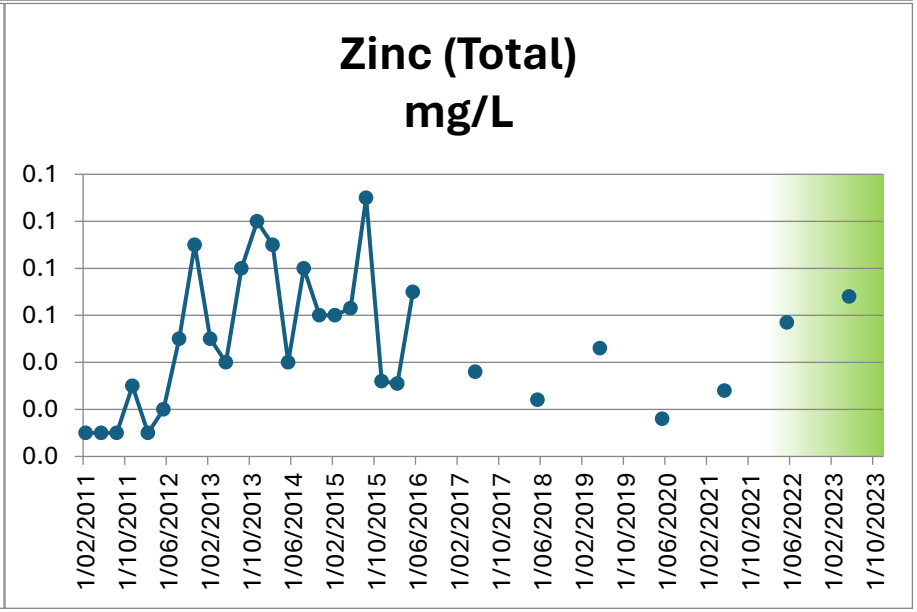
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Temperature
C
22
22
21
21
20
20
19
19
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


TKN
mg/L
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


TOC
mg/L
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
1/02/2011
1/11/2011
1/08/2012
1/05/2013
1/02/2014
1/11/2014
1/08/2015
1/05/2016
1/02/2017
1/11/2017
1/08/2018
1/05/2019
1/02/2020
1/11/2020
1/08/2021
1/05/2022
1/02/2023
1/11/2023


Total Acidity
mg/L CaCO3
250
200
150
100
50
0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023


Zinc (Total)
mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023

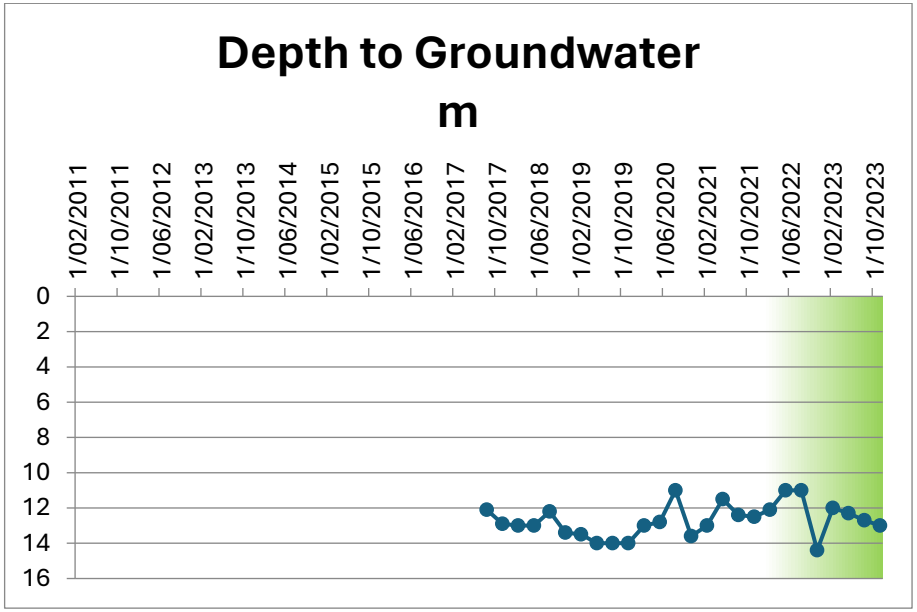
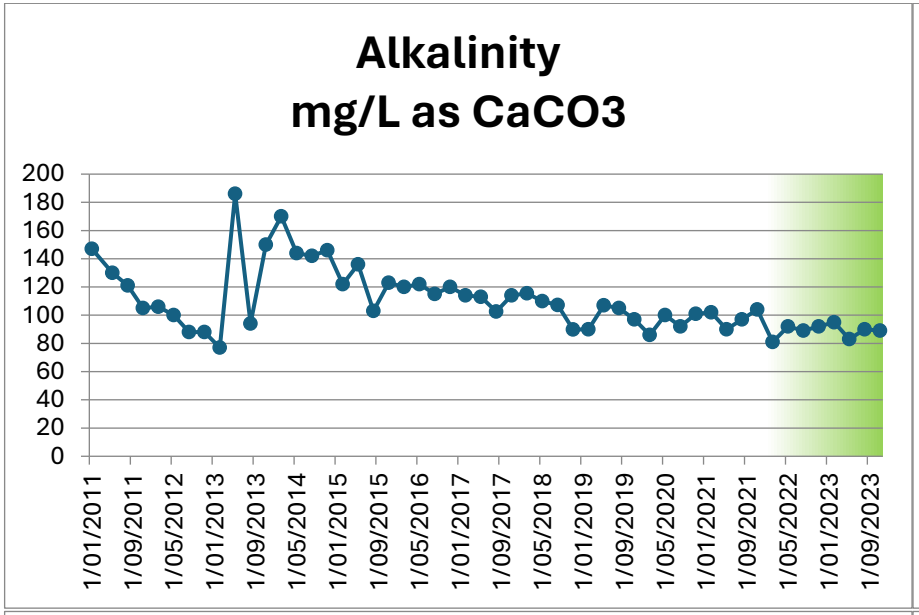
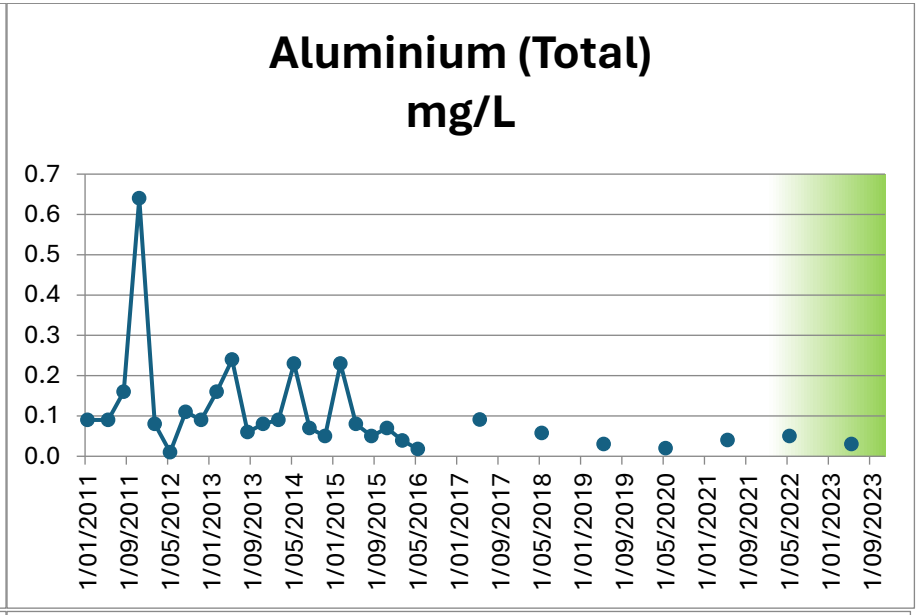
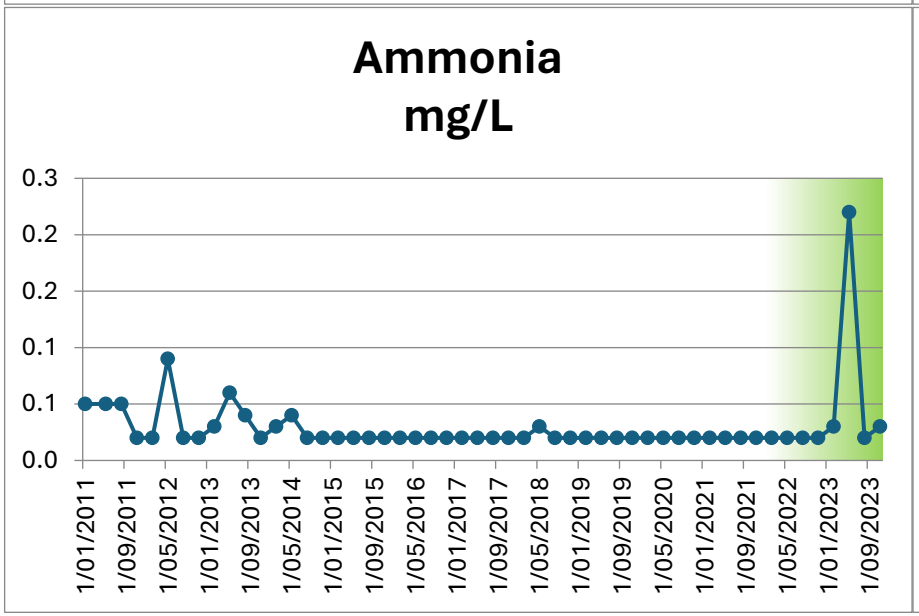

Depth to Groundwater
m
1/02/2011
1/10/2011
1/06/2012
1/02/2013
1/10/2013
1/06/2014
1/02/2015
1/10/2015
1/06/2016
1/02/2017
1/10/2017
1/06/2018
1/02/2019
1/10/2019
1/06/2020
1/02/2021
1/10/2021
1/06/2022
1/02/2023
1/10/2023
0
2
4
6
8
10
12
14
16

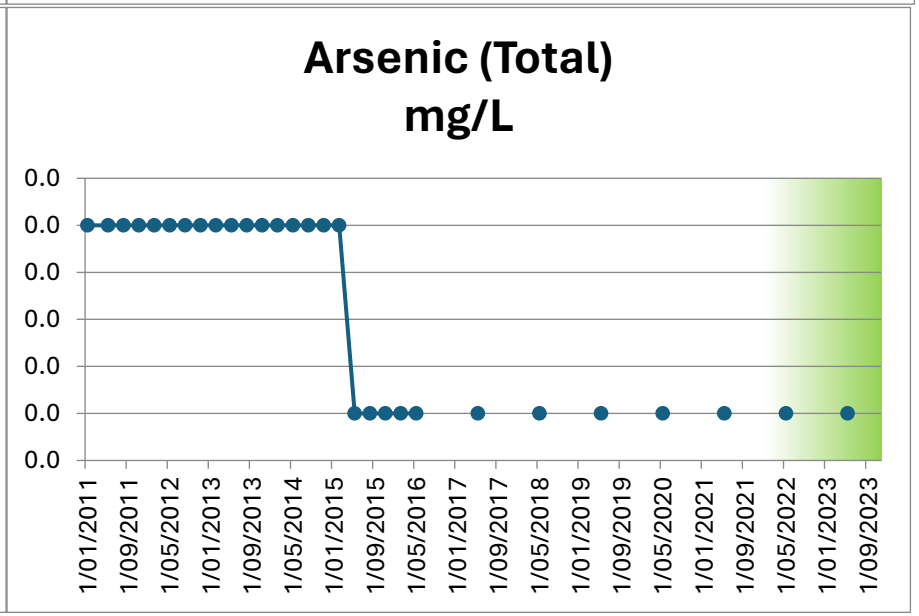
Table 28: Ground Water 23

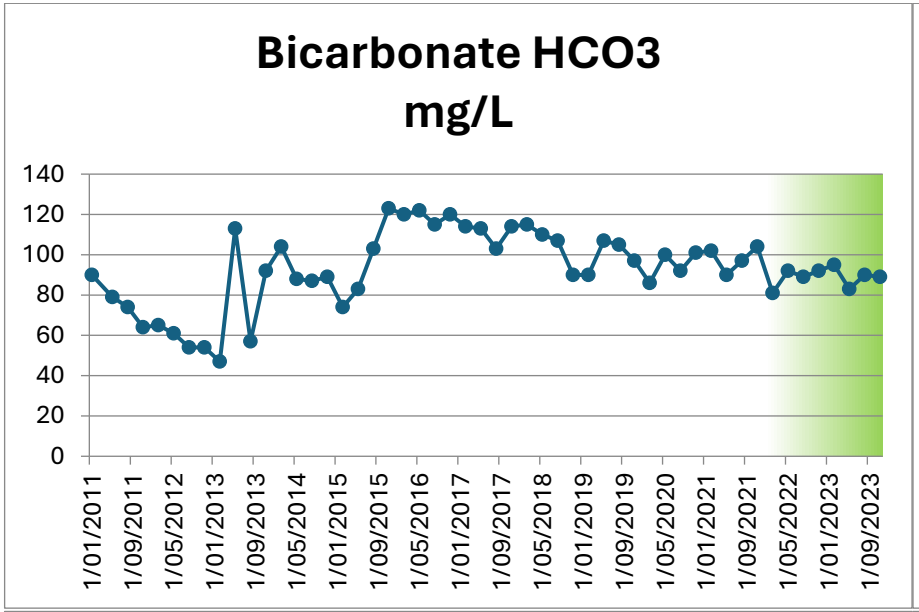
GW23	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µScm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride mg/L	Iron Total mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	Nitrate N mg/L	Nitrite N mg/L	Nitrogen Oxidised mg/L	Nitrogen Total mg/L	pH pH units	Phenol Alkalinity mg/L as CaCO3	Phosphorus Total mg/L	Potassium Total mg/L	Redox Potential mV	Sodium (Total) mg/L	Sulphate mg/L	Temperature C	TKN mg/L	TOC mg/L	Total Acidity mg/L CaCO3	Zinc (Total) mg/L	Depth to Groundwater m
31/01/2011	147	0.1	0.1	0.0	90	9	0.0	19	120	0.0	0.0	0.0	732	0.0	3.2	0.2	1.7	0.0	11	1.6	0.0	0.1	0.1	0.1	0.1	6.6		0.1	5.0	-41	99	36	21	0.1	6.3	38	0.1	
10/05/2011	130	0.1	0.1	0.0	79	11	0.0	20	140	0.0	0.0	0.0	872	0.0	1.8	0.1	3.0	0.0	14	1.6	0.0	0.1	0.1	0.1	0.2	6.0		0.1	5.0	104	120	37	20	0.2	3.9	79	0.0	
9/08/2011	121	0.2	0.1	0.0	74	5	0.0	19	160	0.0	0.0	0.0	822	0.0	1.3	0.1	2.6	0.0	13	1.0	0.0	0.1	0.1	0.1	0.2	6.5		0.1	5.0	214	109	34	20	0.2	3.8	70	0.0	
8/11/2011	105	0.6	0.0	0.0	64	4	0.0	26	210	0.0	0.0	0.0	803	0.0	1.4	0.1	15.0	0.0	19	1.9	0.0	0.0	0.0	0.0	0.2	6.5		0.1	14.0	94	95	49	20	0.2	3.6	56	0.3	
6/02/2012	106	0.1	0.0	0.0	65	5	0.0	22	154	0.0	0.0	0.0	777	0.0	1.0	0.1	3.4	0.0	14	1.6	0.0	0.0	0.0	0.1	0.1	6.3		0.0	5.0	68	130	42	21	0.1	2.9	58	0.1	
8/05/2012	100	0.0	0.1	0.0	61	3	0.0	23	185	0.0	0.0	0.0	911	0.0	2.7	0.1	3.4	0.0	16	1.6	0.0	0.1	0.0	0.1	0.2	6.6		0.1	5.0	137	133	40	21	0.1	2.2	72	0.0	
6/08/2012	88	0.1	0.0	0.0	54	1	0.0	21	3	0.0	0.0	0.0	841	0.0	1.0	0.1	2.9	0.0	14	0.9	0.0	0.0	0.0	0.0	0.1	6.2		0.1	5.0	192	92	38	20	0.1	0.8	55	0.1	
13/11/2012	88	0.1	0.0	0.0	54	1	0.0	19	140	0.0	0.0	0.0	757	0.0	1.4	0.1	3.8	0.0	13	0.9	0.0	0.0	0.0	0.0	0.1	6.4		0.0	5.0	100	91	32	20	0.1	0.7	50	0.0	
13/02/2013	77	0.2	0.0	0.0	47	2	0.0	30	320	0.0	0.0	0.0	1233	0.0	0.6	0.1	7.7	0.0	20	2.4	0.0	0.0	0.0	0.0	0.1	6.1		0.0	5.0	-13	158	63	20	0.1	1.0	61	0.1	
14/05/2013	186	0.2	0.1	0.0	113	12	0.0	24	150	0.0	0.0	0.0	824	0.0	1.7	0.2	4.2	0.0	14	1.5	0.0	0.0	0.0	0.0	0.2	6.6		0.0	5.0	-74	118	22	20	0.1	5.1	73	0.0	
6/08/2013	94	0.1	0.0	0.0	57	2	0.0	37	320	0.0	0.0	0.0	1344	0.0	0.7	0.2	7.9	0.0	24	2.4	0.0	0.0	0.0	0.0	0.1	6.2		0.1	5.0	3	190	75	20	0.1	1.2	133	0.0	
12/11/2013	150	0.1	0.0	0.0	92	1	0.0	26	155	0.0	0.0	0.0	847	0.0	2.0	0.2	1.1	0.0	16	1.3	0.0	0.0	0.0	0.0	0.1	6.5		0.0	5.0	3	122	30	20	0.1	1.3	18	0.1	
11/02/2014	170	0.1	0.0	0.0	104	4	0.0	24	127	0.0	0.0	0.0	718	0.0	1.0	0.2	2.8	0.0	14	1.5	0.0	0.0	0.0	0.0	0.3	6.6		0.0	5.0	-41	101	23	21	0.3	1.8	154	0.0	
13/05/2014	144	0.2	0.0	0.0	88	4	0.0	27	118	0.0	0.0	0.0	692	0.0	2.0	0.2	2.2	0.0	14	1.2	0.0	0.0	0.0	0.0	0.1	6.6		0.0	5.0	-61	95	22	21	0.1	1.4	59	0.0	
12/08/2014	142	0.1	0.0	0.0	87	2	0.0	27	111	0.0	0.0	0.0	668	0.0	3.4	0.2	1.3	0.0	14	0.6	0.0	0.0	0.0	0.0	0.1	6.7		0.0	5.0	-21	89	18	20	0.1	0.9	84	0.0	
10/11/2014	146	0.1	0.0	0.0	89	1	0.0	26	106	0.0	0.0	0.0	647	0.0	1.1	0.2	1.2	0.0	14	0.5	0.0	0.0	0.0	0.0	0.1	6.7		0.0	5.0	1	88	20	21	0.1	0.8	93	0.0	
9/02/2015	122	0.2	0.0	0.0	74	2	0.0	23	140	0.0	0.0	0.0	753	0.0	1.4	0.2	4.6	0.0	13	1.9	0.0	0.0	0.0	0.0	0.8	6.5		0.1	5.0	-27	88	28	22	0.8	1.2	80	0.0	
11/05/2015	136	0.1	0.0	0.0	83	2	0.0	26	121	0.0	0.0	0.0	681	0.0	2.2	0.2	3.2	0.0	14	1.6	0.0	0.0	0.0	0.0	0.1	6.7		0.1	5.0	-30	90	22	21	0.1	1.3	57	0.0	
11/08/2015	103	0.1	0.0	0.0	103	17	0.0	23	98	0.0	0.0	0.0	569	0.0	5.6	0.1	1.9	0.0	12	0.2	0.0	0.0	0.0	0.0	0.2	6.8		0.1	5.0	25	73	19	20	0.2	2.9	35	0.0	
10/11/2015	123	0.1	0.0	0.0	123	3	0.0	24	110	0.0	0.0	0.0	542	0.0	1.3	0.2	2.5	0.0	13	0.9	0.0	0.0	0.0	0.0	0.1	6.6		0.1	5.0	-12	78	21	20	0.1	2.6	49	0.0	
8/02/2016	120	0.0	0.0	0.0	120	7	0.0	22	100	0.0	0.0	0.0	616	0.0	1.8	0.1	3.2	0.0	12	1.3	0.0	0.0	0.0	0.0	0.1	6.6		0.1	5.0	-18	75	20	21	0.1	3.6	72	0.0	
9/05/2016	122	0.0	0.0	0.0	122	4	0.0	24	115	0.0	0.0	0.0	663	0.0	1.5	0.1	3.0	0.0	13	1.4	0.0	0.0	0.0	0.0	0.1	6.5		0.1	5.0	-20	81	22	21	0.1	1.1	85	0.0	
9/08/2016	115		0.0		115	1		24	115				655		4.4	0.1			13			0.0	0.0	0.0	0.1	6.5		0.1	5.0	64	83	26	20	0.1	2.1	58		
7/11/2016	120		0.0		120	1		25	110				632		1.2	0.1			13			0.0	0.0	0.0	0.1	6.4		0.0	5.0	211	81	24	21	0.1	2.5	51		
7/02/2017	114		0.0		114	2		23	110				641		1.2	0.2			13			0.0	0.0	0.0	0.1	6.2		0.1	5.0	96	76	23	21	0.1	1.7	105		
8/05/2017	113	0.1	0.0	0.0	113	10	0.0	25	98	0.0	0.0	0.0	579	0.0	1.0	0.2	3.2	0.0	12	1.3	0.0	0.0	0.0	0.0	0.1	6.2		0.1	5.0	53	68	24	21	0.1	4.3	55	0.0	
8/08/2017	103		0.0		103	2		23	95				619		4.8	0.1			12			0.0	0.0	0.0	0.1	6.2		0.1	5.0	173	75	23	20	0.1	2.5	46		2.9
7/11/2017	114		0.0		114	2		25	115				646		1.4	0.1			13			0.0	0.0	0.0	0.1	6.3		0.0	5.0	173	75	23	20	0.1	1.4	50		3.1
13/02/2018	115		0.0		115	3		23	109				625		1.5	0.1			13			0.0	0.0	0.0	0.1	6.4		0.1	5.0	36	76	23	22	0.1	2.0	60		3.6
8/05/2018	110	0.1	0.0	0.0	110	17	0.0	23	99	0.0	0.0	0.0	555	0.0	2.0	0.1	3.8	0.0	12	1.2	0.0	0.0	0.0	0.0	0.1	6.4		0.1	2.4	22	67	19	21	0.1	9.5	53	0.0	3.0
14/08/2018	107		0.0		107	1		24	103				567		1.6	0.1			13			0.0	0.0	0.0	0.2	6.5		0.1	2.9	325	73	20	20	0.2	1.5	39		3.6
13/11/2018	90		0.0		90	24		22	82				488		2.4	0.1			11			0.0	0.0	0.0	0.2	6.5		0.1	2.5	49	61	18	21	0.2	14.2	38		2.3
12/02/2019	90		0.0		90	6		19	82				479		1.5	0.1			11			0.0	0.0	0.0	0.1	6.4	0.0	0.1	2.3	26	61	19	23	0.1	3.5	49		4.1
14/05/2019	107	0.0	0.0	0.0	107	4	0.0	24	95	0.0	0.0	0.0	557	0.0	2.5	0.1	2.8	0.0	13	1.1	0.0	0.0	0.0	0.0	0.1	6.4	0.0	0.0	3.0	-3	72	22	21	0.1	1.4	51	0.0	3.2
13/08/2019	105		0.0		105	2		23	94				562		3.0	0.1			13			0.0	0.0	0.0	0.1	6.5	0.0	0.0	2.9	186	69	22	20	0.1	1.3	41		3.3
12/11/2019	97		0.0		97	1		24	120				659		2.7	0.1			14			0.0	0.0	0.0	0.2	6.4	0.0	0.1	3.0	267	81	28	21	0.2	1.6	42		4.6
25/02/2020	86		0.0		86	2		21	100				568		2.4	0.1			11			0.0	0.0	0.0	0.1	6.3	0.0	0.1	2.7	23	67	23	22	0.1	2.0	51		2.7
12/05/2020	100	0.0	0.0	0.0	100	3	0.0	21	100	0.0	0.0	0.0	605	0.0	1.4	0.1	3.5	0.0	12	1.4	0.0	0.0	0.0	0.0	0.1	6.2	0.0	0.1	2.8	22	69	24	20	0.1	0.9	60	0.0	3.3
11/08/2020	92		0.0		92	1		22	120				618		4.3	0.1			13			0.0	0.0	0.0	0.1	6.3	0.0	0.0	2.9	121	77	26	19	0.1	1.3	39		2.7
10/11/2020	101		0.0		101	1		21	110				605		4.1	0.1			13			0.0	0.0	0.0	0.2	6.4	0.0	0.1	2.9	90	71	23	20	0.2	3.2	32		3.2
9/02/2021	102		0.0		102	3		21	120				626		2.6	0.1			13			0.0	0.0	0.0	0.1	6.1	0.0	0.0	2.8	34	73	24	21	0.1	1.7	51		2.9
11/05/2021	90	0.0	0.0	0.0	90	8	0.0	20	110	0.0	0.0	0.0	600	0.0	4.6	0.1	4.1	0.0	13	0.4	0.0	0.0	0.0	0.0	0.2	6.6	0.0	0.1	3.0	39	76	26	21	0.2	6.0	28	0.1	2.5
10/08/2021	97		0.0		97	1		21	100				595		2.8	0.1			13			0.0	0.0	0.0	0.1	6.2	0.0	0.0	3.1	128	72	23	20	0.1	1.1	44		2.8
8/11/2021	104		0.0		104	1		21	130				626		6.3	0.1			13			0.0	0.0	0.0	0.1	6.4	0.0	0.1	3.1	58	75	23	20	0.1	1.3	35		2.9
8/02/2022	81		0.0		81	5		21	150				676		2.3	0.1			14			0.0	0.0	0.0	0.1	6.2	0.0	0.1	2.8	34	79	28	21	0.1	1.6	59		2.6
10/05/2022	92	0.1	0.0	0.0	92	2	0.0	23	160	0.0	0.0	0.0	750	0.0	4.4	0.1	3.6	0.0	16	1.3	0.0	0.0	0.0	0.0	0.1	6.4	0.0	0.1	3.2	-7	89	32	21	0.1	1.0	42	0.0	2.4
9/08/2022	89		0.0		89	1		23	150				720		4.3	0.1			15			0.0	0.0	0.0	0.1	6.5	0.0	0.0	3.3	62	88	31	20	0.1	1.2	33		2.7
8/11/2022	92		0.0		92	3		24	160				759		2.1	0.1			15			0.0	0.0	0.0	0.2	6.4	0.0	0.1	3.5	72	88	31	19	0.2	2.1	46		2.8
13/02/2023	95		0.0		95	4		24	140				700		3.8	0.1			15			0.0	0.0	0.0	0.1	6.4	0.0	0.1	3.4	-10	87	32	21	0.1	1.0	37		3.2
8/05/2023	83	0.0	0.2	0.0	83	16	0.0	21	120	0.0	0.0	0.0	618	0.0	3.7	0.1	3.5	0.0	13	1.2	0.0	0.0	0.0	0.0	0.5	6.3	1.0	0.3	3.2	-88	73	25	20	0.5	8.2	41	0.0	3.5
8/08/2023	90		0.0		90	4		22	130				646		3.4	0.1			14			0.0	0.0	0.0	0.2	6.4	0.0	0.1	3.4	50	78	27	20	0.2	1.6	38		3.6
13/11/2023	89		0.0		89	1		21	120				604		2.0	0.1			13			0.0	0.0	0.0	0.2	6.2	0.0	0.1	2.9	45	72	26	21	0.2	1.8	38		3.5
2023 Min	**83.0**	**0.0**	**0.0**	**0.0**	**83.0**	**1.0**	**0.0**	**21.0**	**120.0**	**0.0**	**0.0**	**0.0**	**604.0**	**0.0**	**2.0**	**0.1**	**3.5**	**0.0**	**13.0**	**1.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**6.2**	**0.0**	**0.1**	**2.9**	**-88.0**	**72.0**	**25.0**	**19.6**	**0.1**	**1.0**	**37.0**	**0.0**	**3.2**
2023 Max	**95.0**	**0.0**	**0.2**	**0.0**	**95.0**	**16.0**	**0.0**	**24.0**	**140.0**	**0.0**	**0.0**	**0.0**	**700.0**	**0.0**	**3.8**	**0.1**	**3.5**	**0.0**	**15.0**	**1.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.5**	**6.4**	**1.0**	**0.3**	**3.4**	**49.5**	**87.0**	**32.0**	**20.6**	**0.5**	**8.2**	**41.0**	**0.0**	**3.6**
2023 Mean	**89.3**	**0.0**	**0.1**	**0.0**	**89.3**	**6.3**	**0.0**	**22.0**	**127.5**	**0.0**	**0.0**	**0.0**	**642.0**	**0.0**	**3.2**	**0.1**	**3.5**	**0.0**	**13.8**	**1.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.3**	**6.3**	**0.3**	**0.1**	**3.2**	**-0.9**	**77.5**	**27.5**	**20.1**	**0.3**	**3.2**	**38.5**	**0.0**	**3.5**
Long-term Average	**109.7**	**0.1**	**0.0**	**0.0**	**92.8**	**4.5**	**0.0**	**23.2**	**127.9**	**0.0**	**0.0**	**0.0**	**690.2**	**0.0**	**2.4**	**0.1**	**3.7**	**0.0**	**13.7**	**1.3**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**6.4**	**0.1**	**0.1**	**4.3**	**56.4**	**87.9**	**27.9**	**20.5**	**0.1**	**2.6**	**56.6**	**0.0**	**3.1**

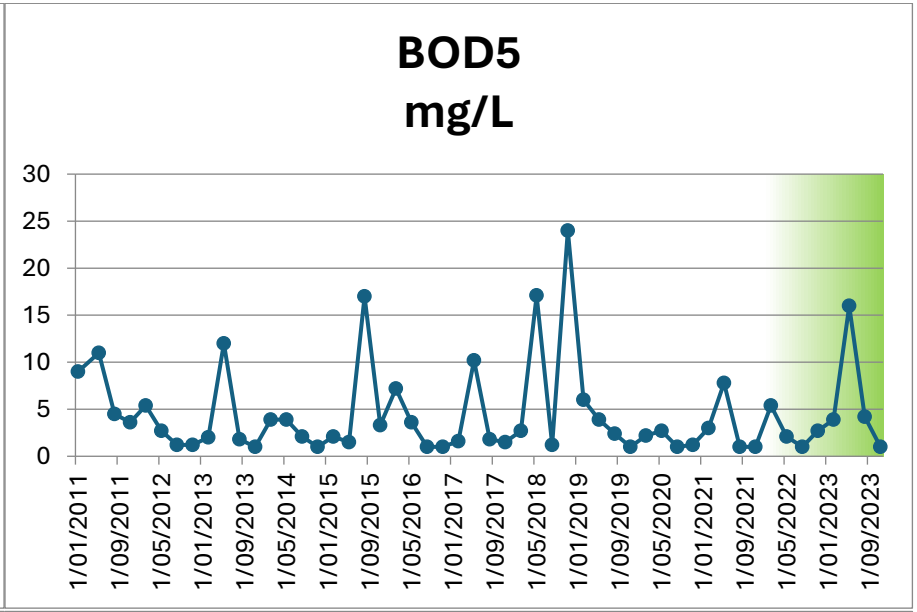

Alkalinity
mg/L as CaCO3
200
180
160
140
120
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

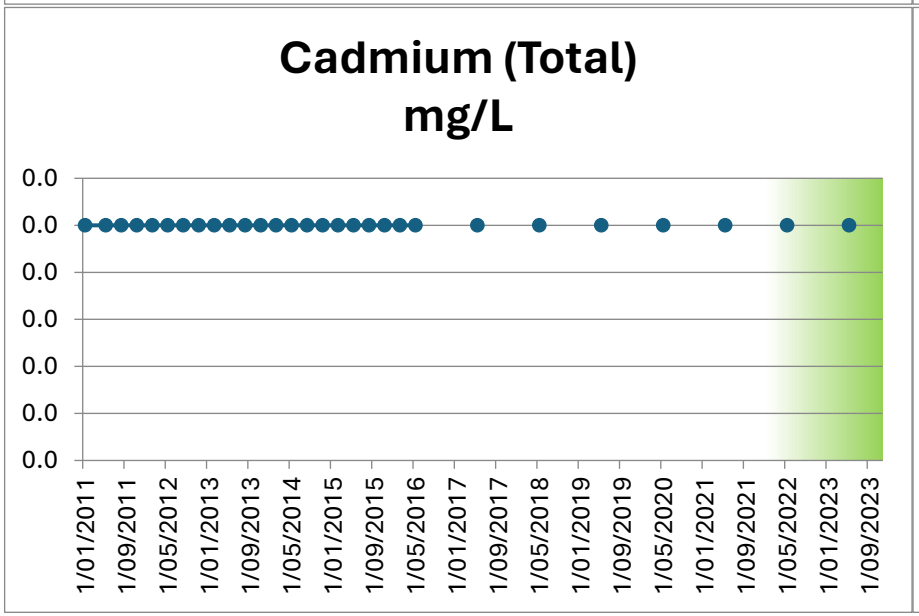

Aluminium (Total)
mg/L
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

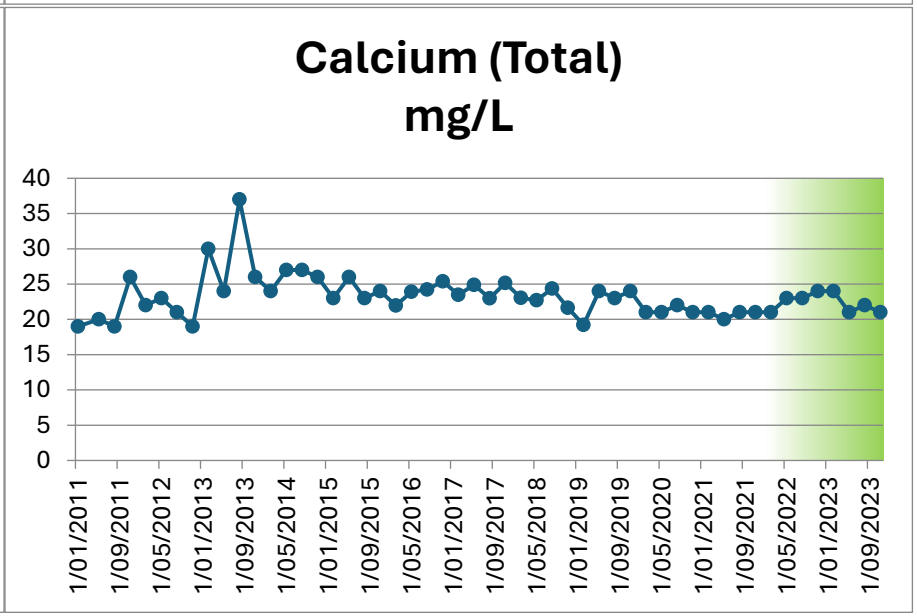

Ammonia
mg/L
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

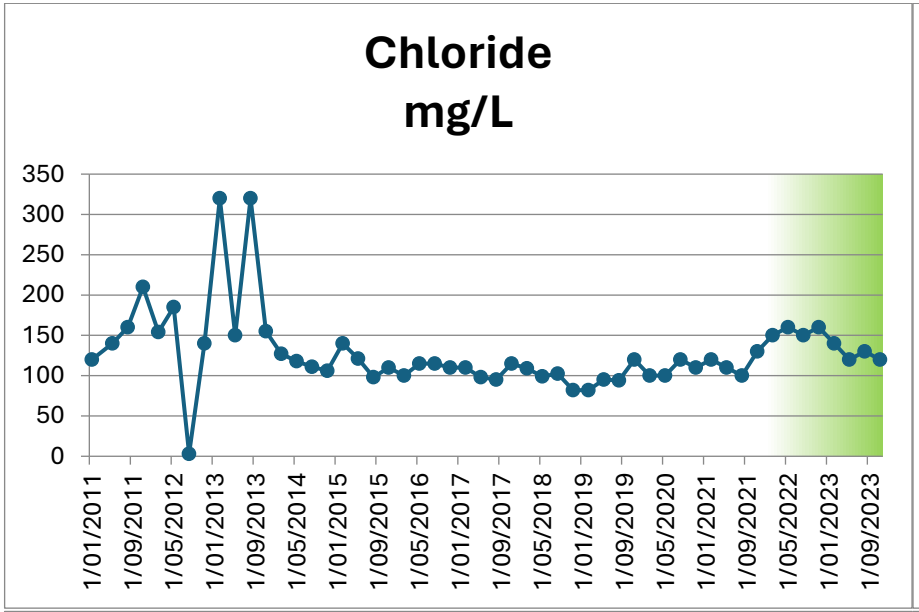

Arsenic (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

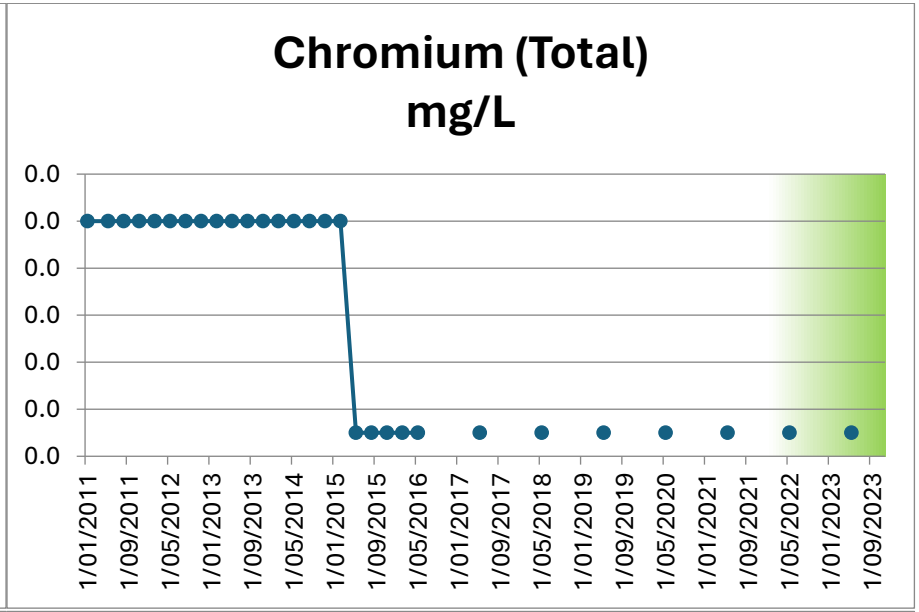

Bicarbonate HCO3
mg/L
140
120
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

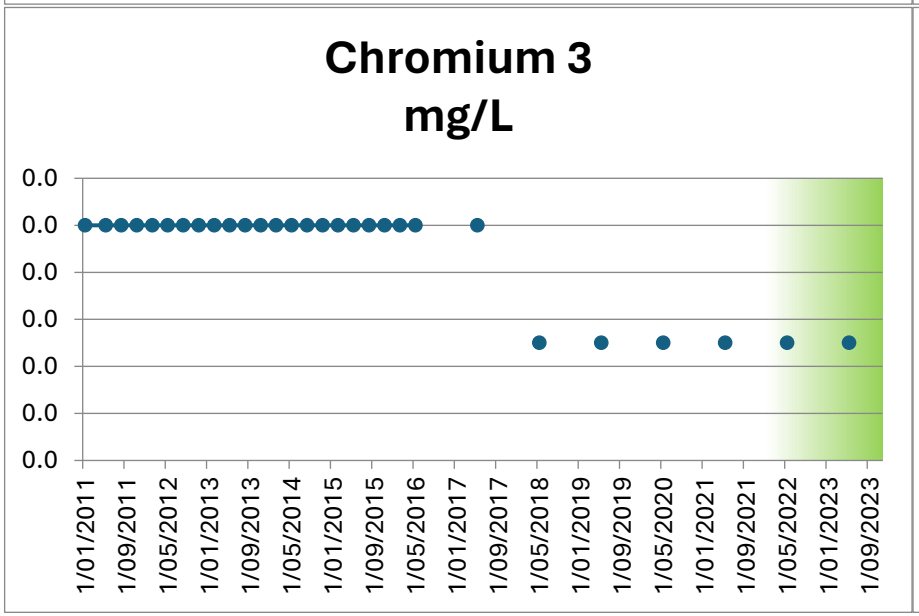

BOD5
mg/L
30
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

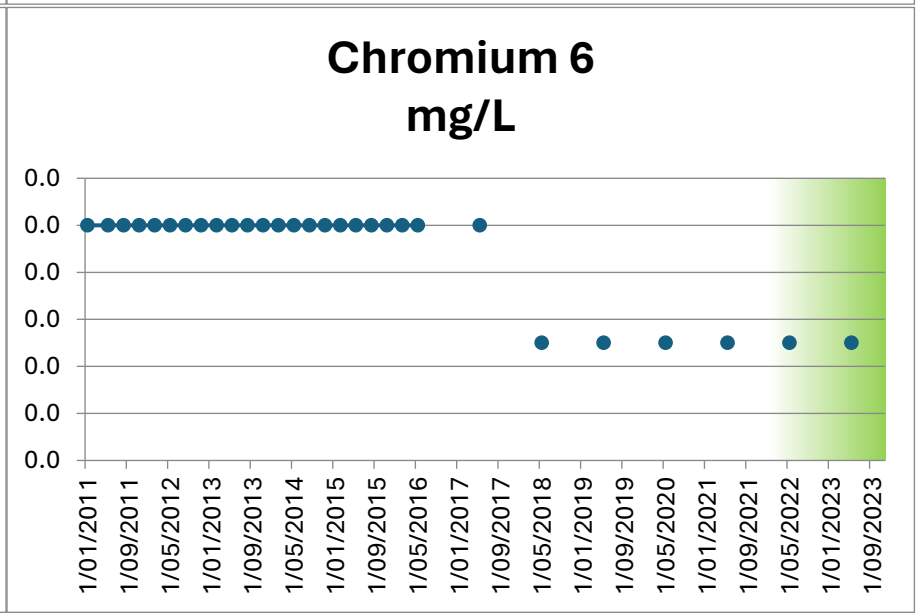

Cadmium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

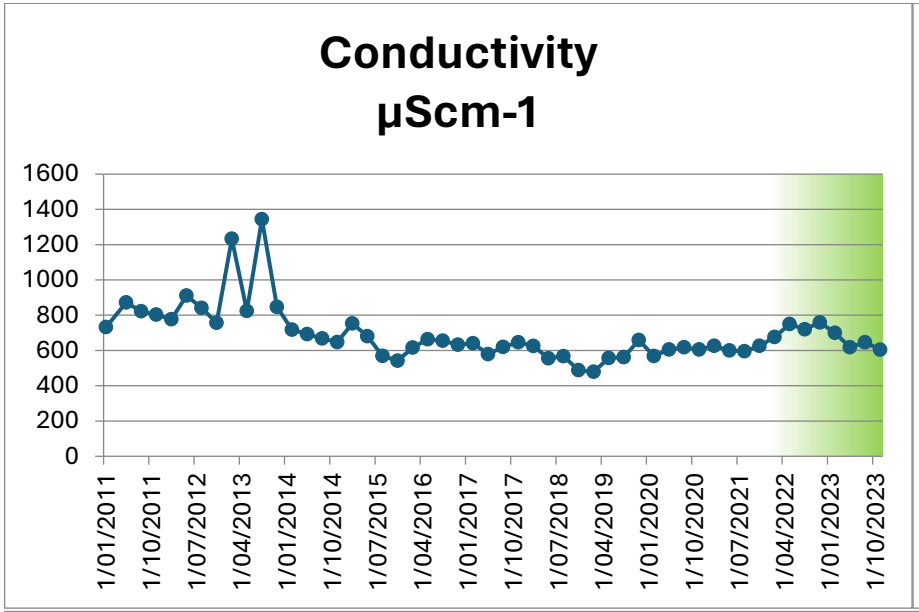

Calcium (Total)
mg/L
40
35
30
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

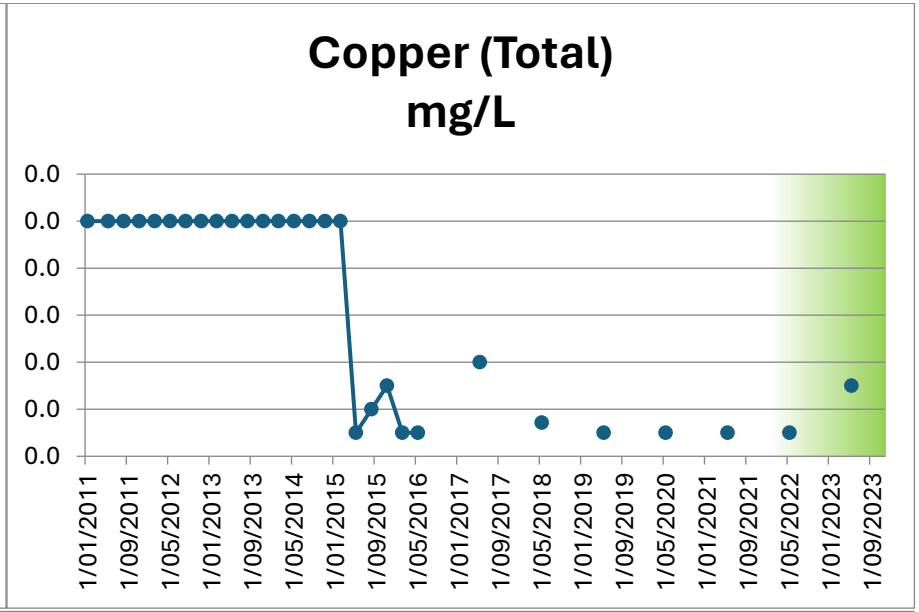

Chloride
mg/L
350
300
250
200
150
100
50
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

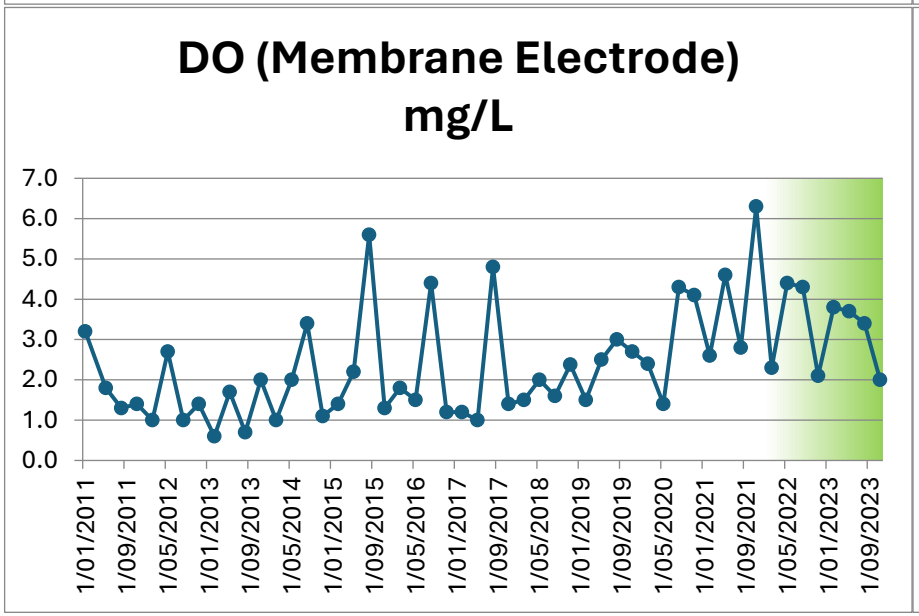

Chromium (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

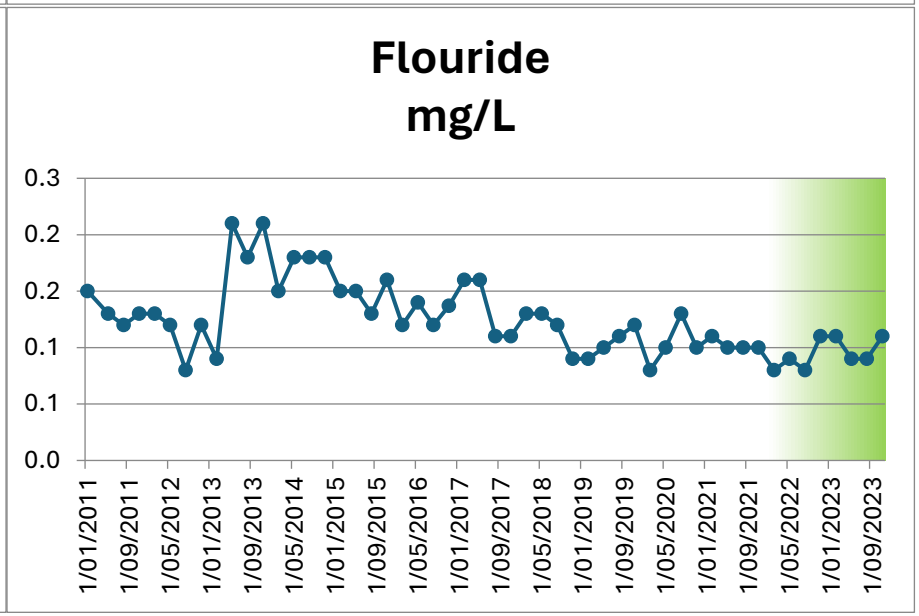

Chromium 3
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

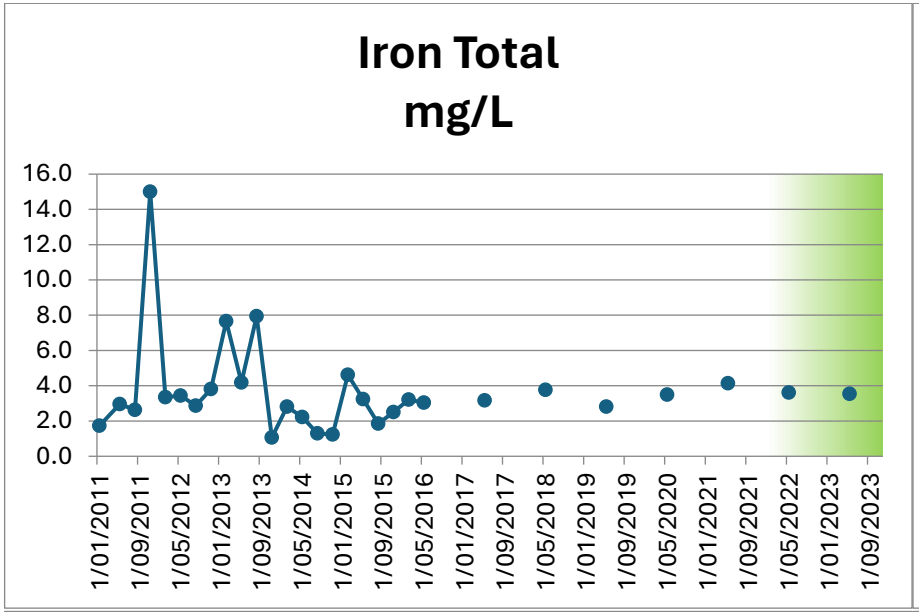

Chromium 6
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

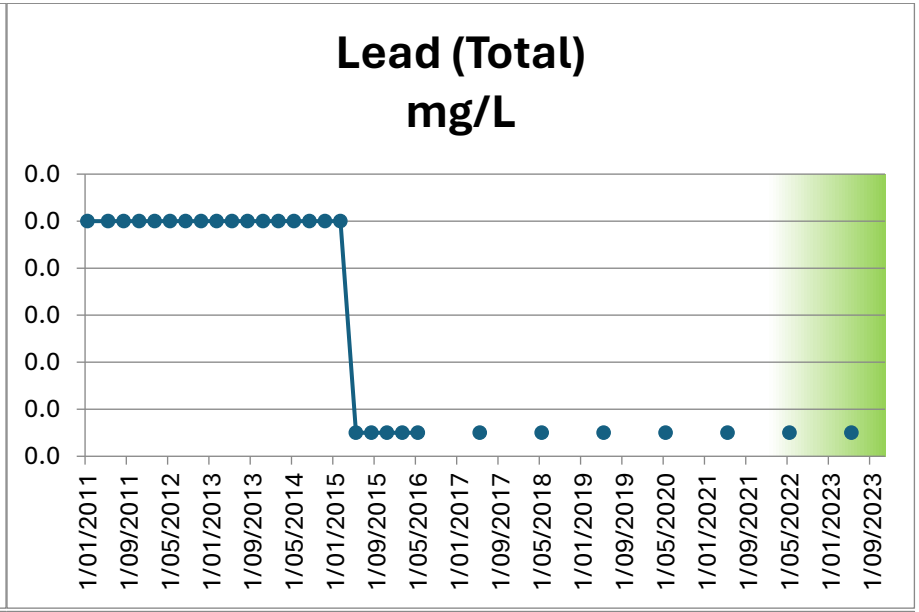

Conductivity
µScm-1
1600
1400
1200
1000
800
600
400
200
0
1/01/2011
1/10/2011
1/07/2012
1/04/2013
1/01/2014
1/10/2014
1/07/2015
1/04/2016
1/01/2017
1/10/2017
1/07/2018
1/04/2019
1/01/2020
1/10/2020
1/07/2021
1/04/2022
1/01/2023
1/10/2023

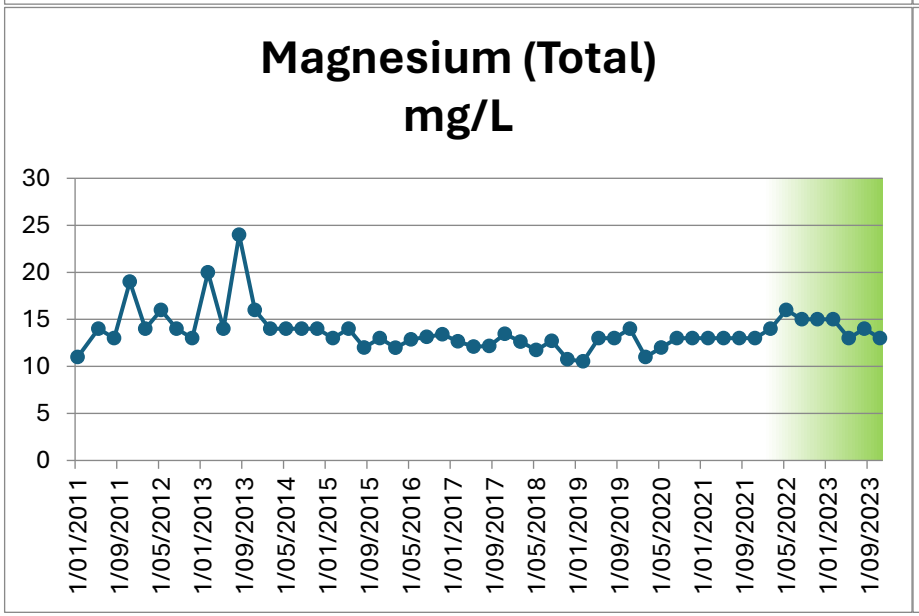

Copper (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

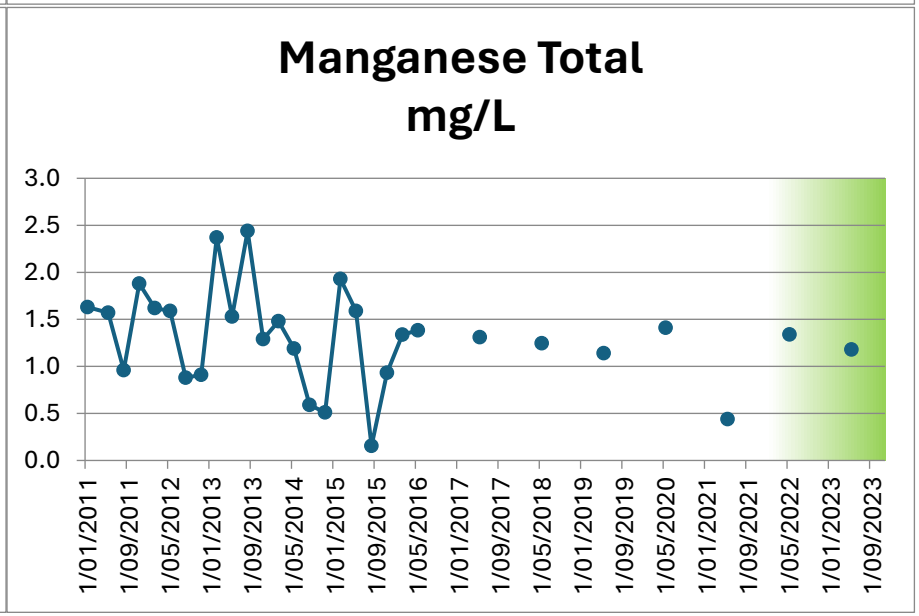

DO (Membrane Electrode)
mg/L
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

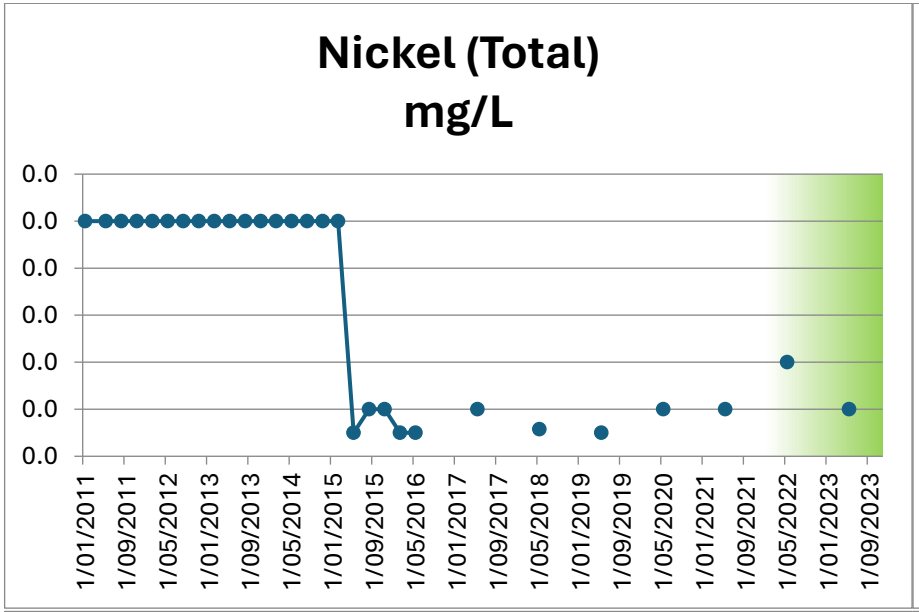

Flouride
mg/L
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

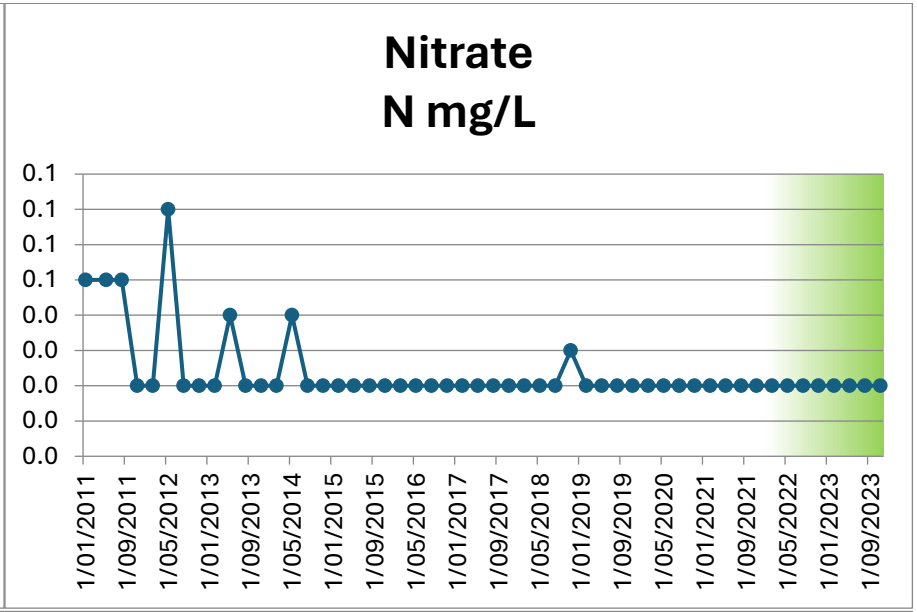

Iron Total
mg/L
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

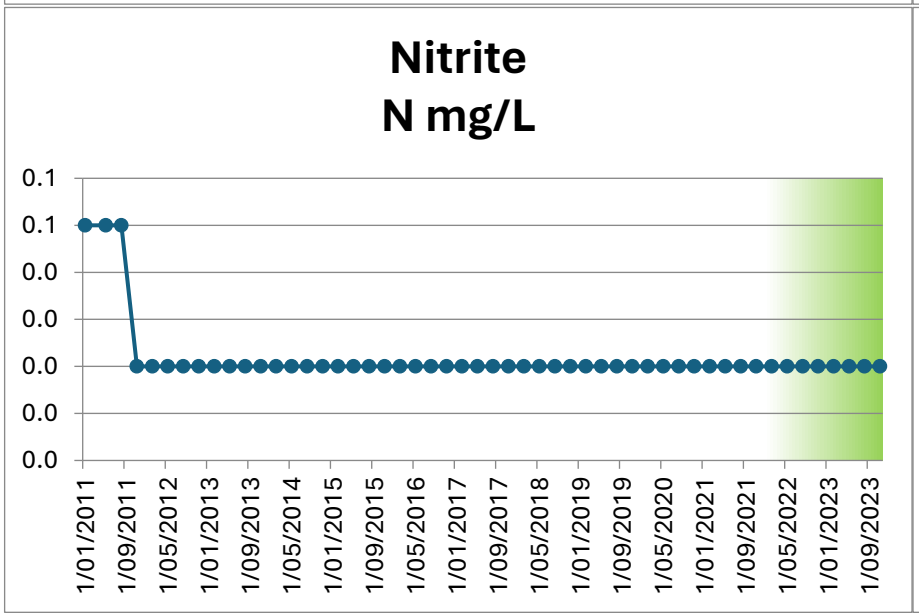

Lead (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

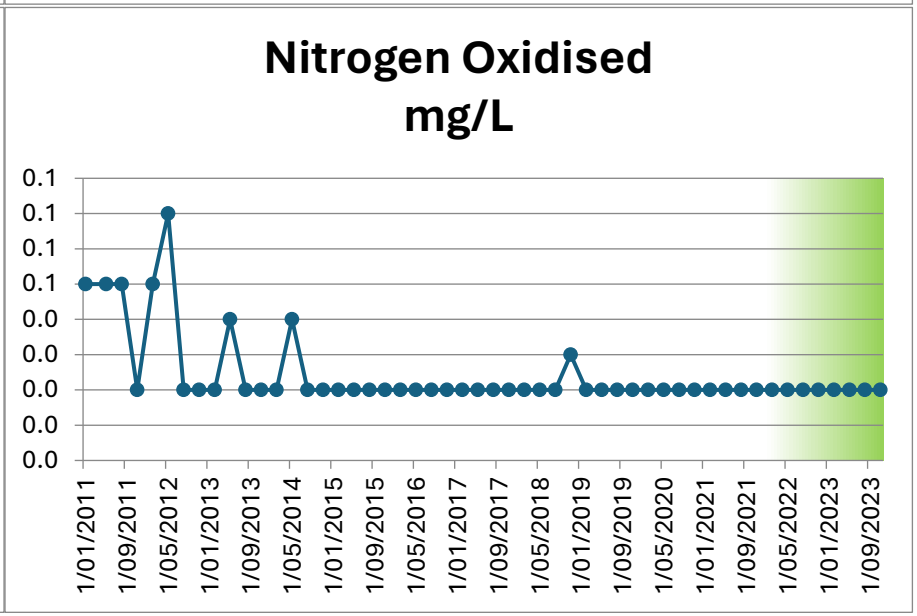

Magnesium (Total)
mg/L
30
25
20
15
10
5
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

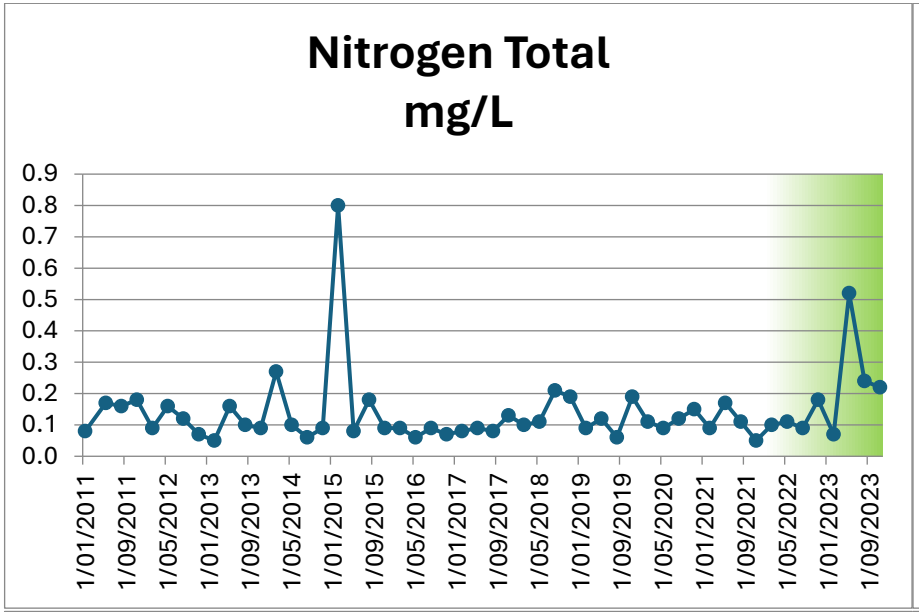

Manganese Total
mg/L
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

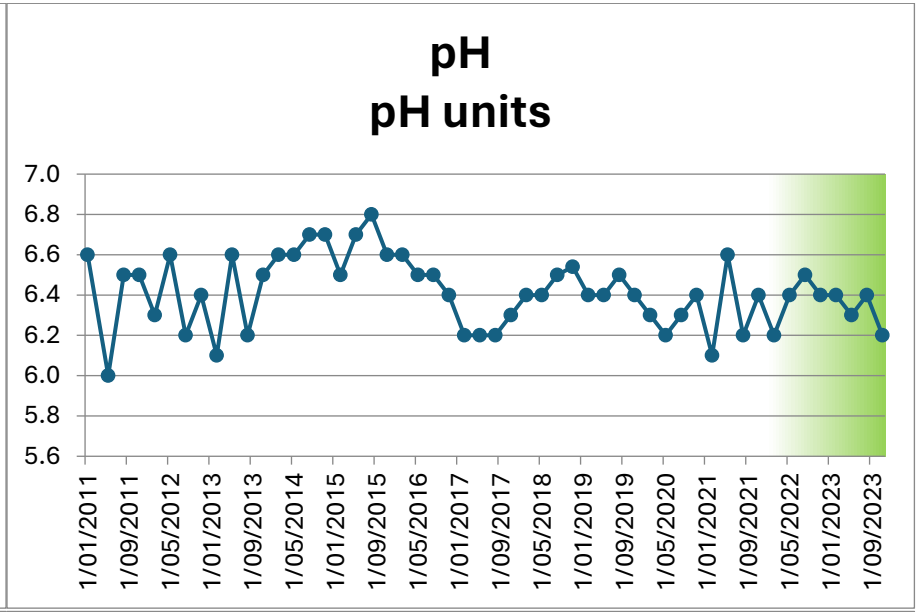

Nickel (Total)
mg/L
0.0
0.0
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

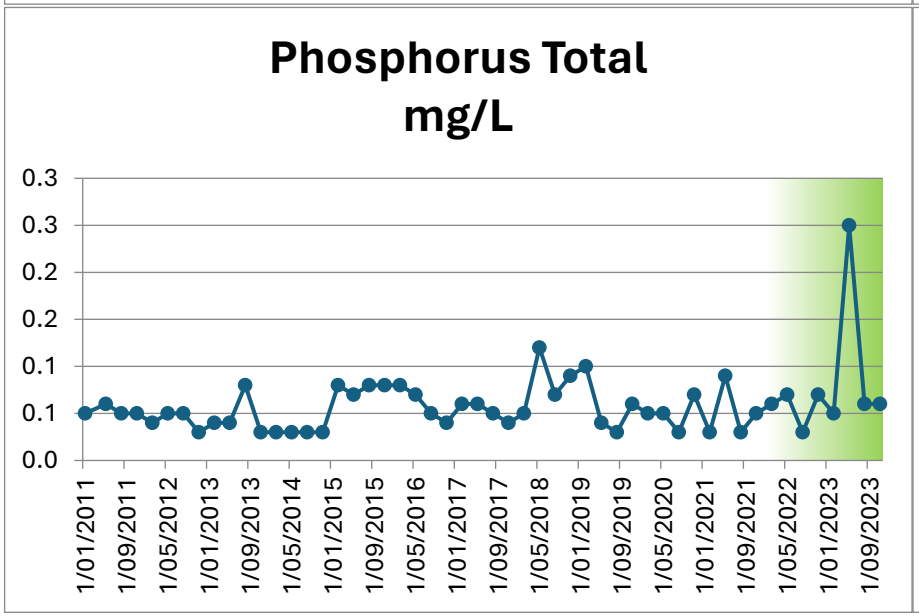

Nitrate
N mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

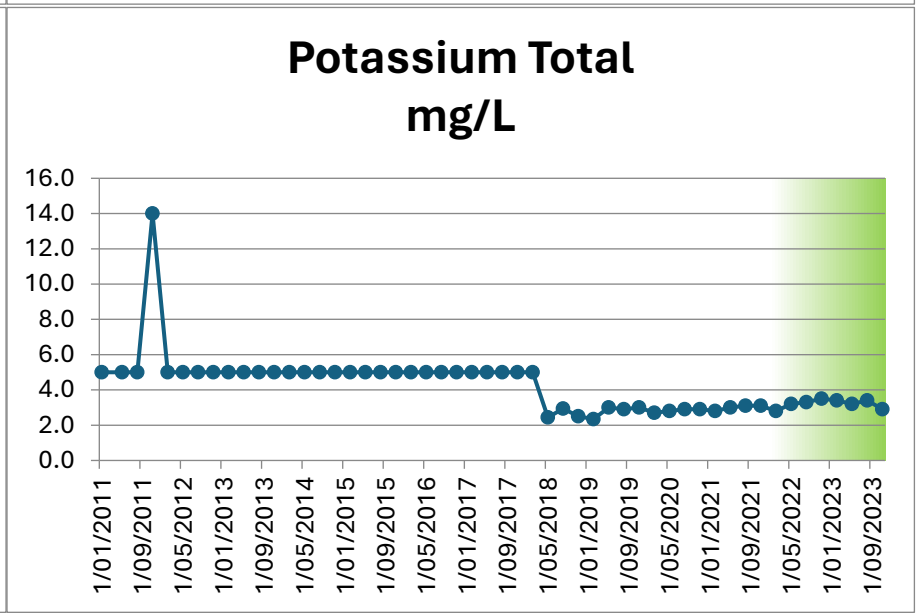

Nitrite
N mg/L
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Nitrogen Oxidised
mg/L
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

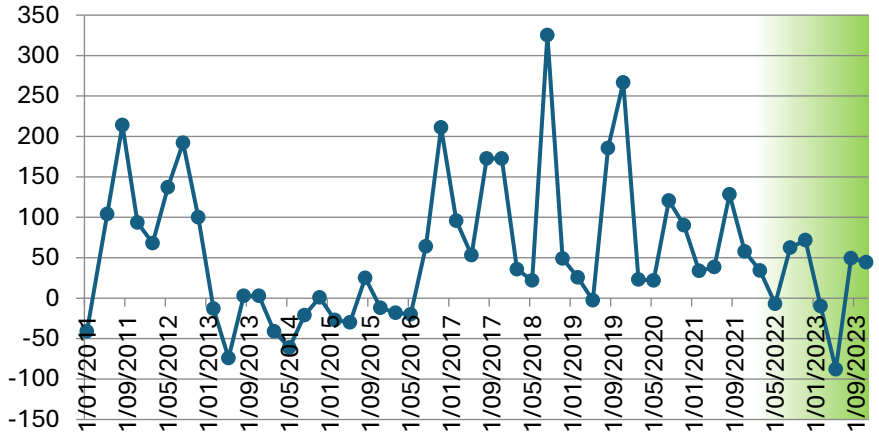

Nitrogen Total
mg/L
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


pH
pH units
7.0
6.8
6.6
6.4
6.2
6.0
5.8
5.6
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

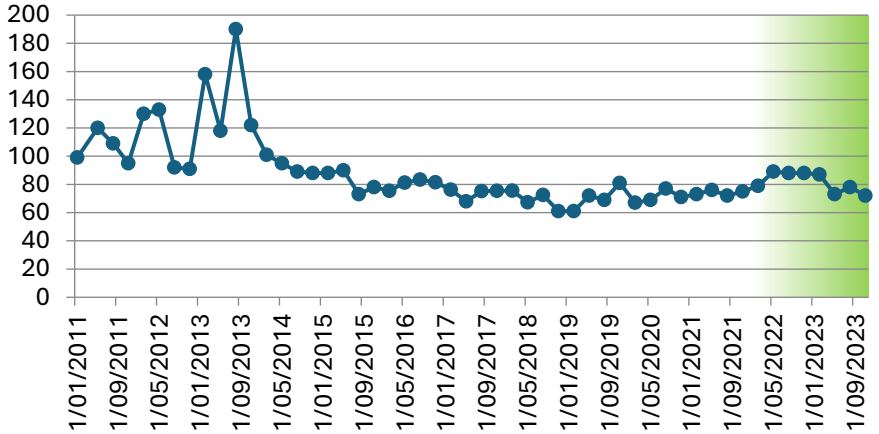

Phosphorus Total
mg/L
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Potassium Total
mg/L
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023

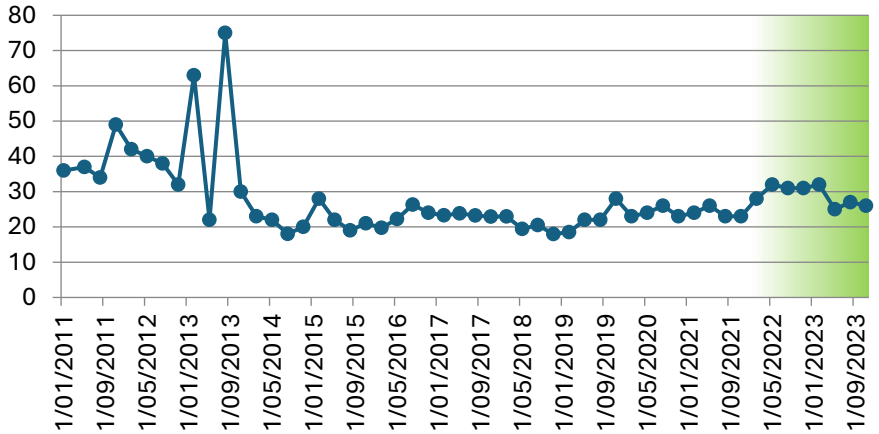
Redox Potential
mV



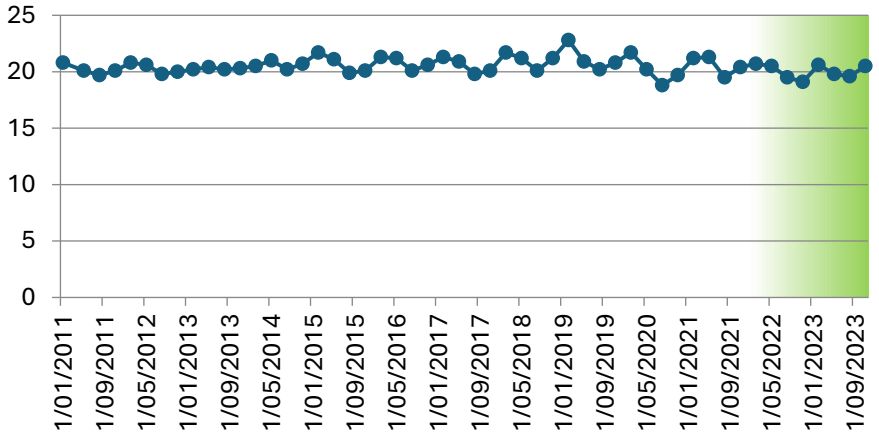
Sodium (Total)
mg/L

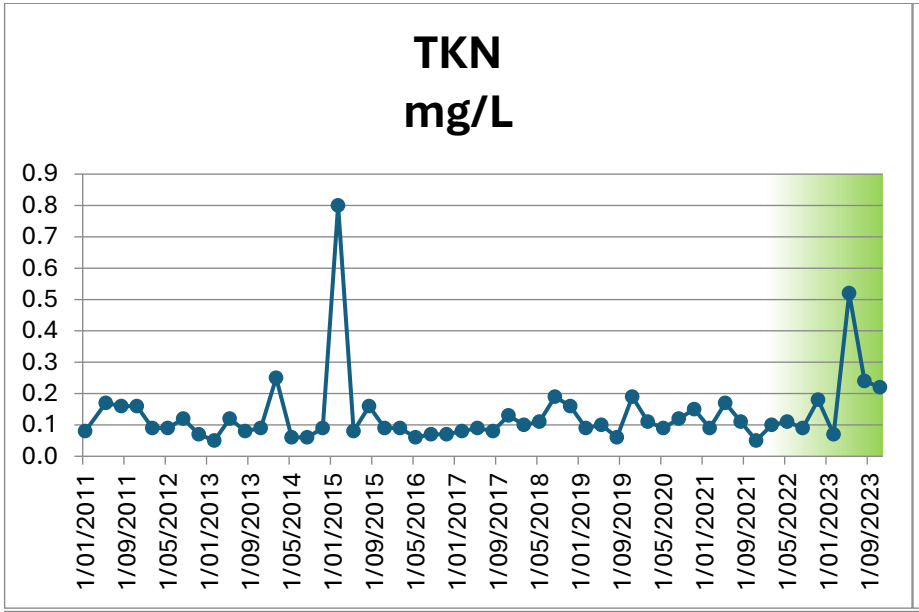


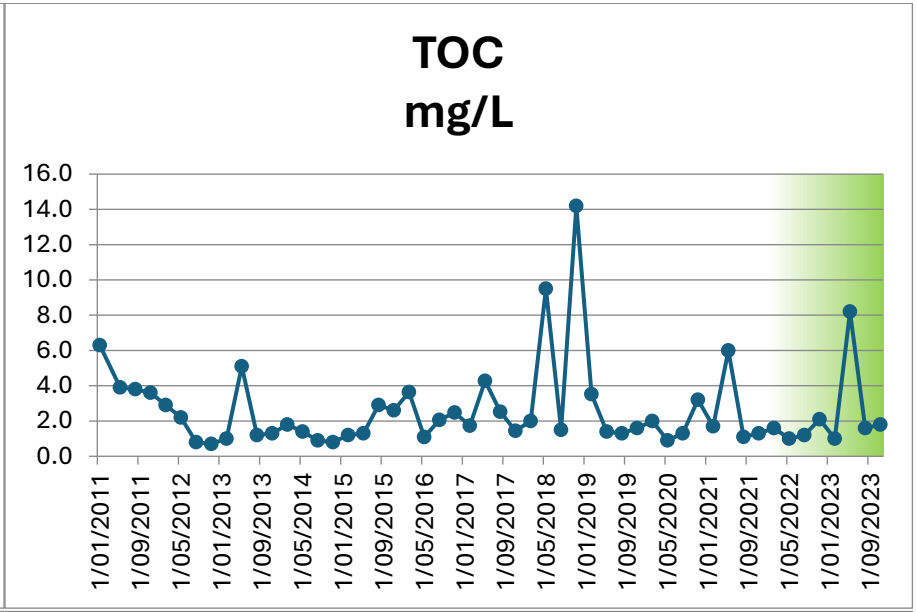
Sulphate
mg/L

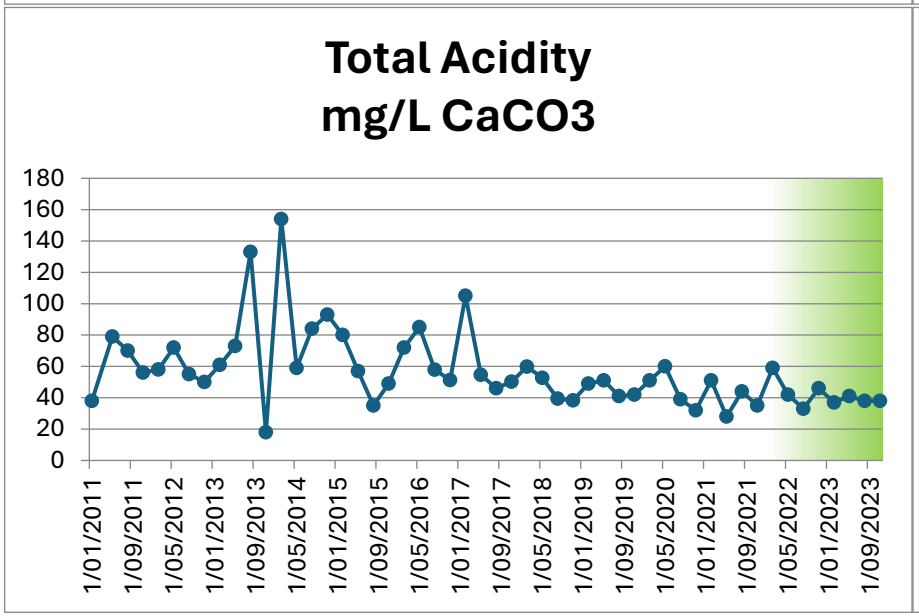


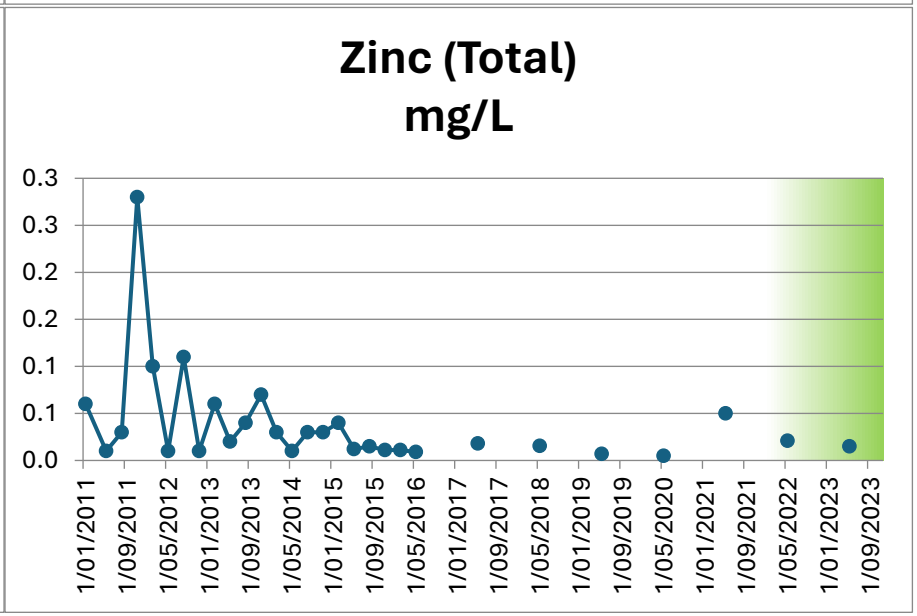
Temperature
C

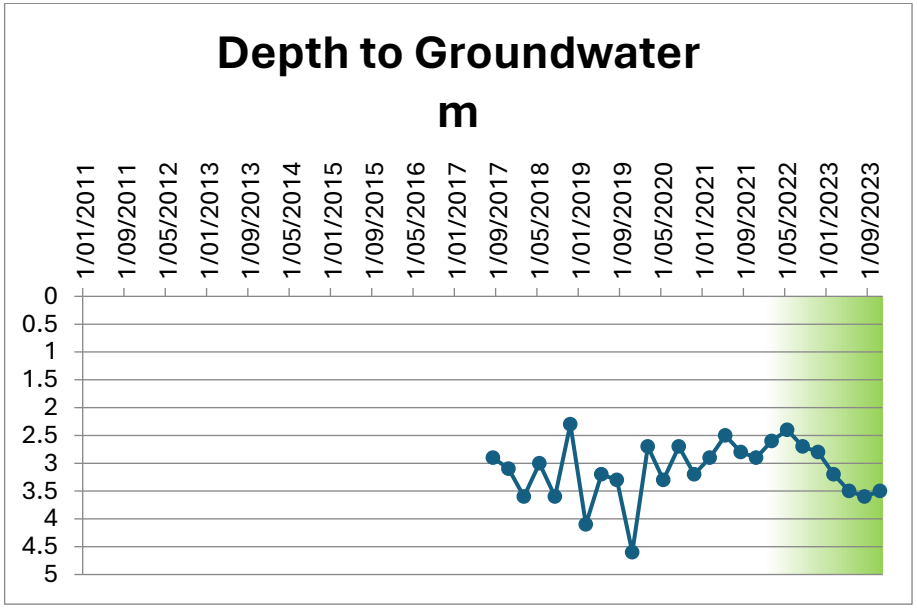



TKN
mg/L
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


TOC
mg/L
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Total Acidity
mg/L CaCO3
180
160
140
120
100
80
60
40
20
0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Zinc (Total)
mg/L
0.3
0.3
0.2
0.2
0.1
0.1
0.0
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023


Depth to Groundwater
m
1/01/2011
1/09/2011
1/05/2012
1/01/2013
1/09/2013
1/05/2014
1/01/2015
1/09/2015
1/05/2016
1/01/2017
1/09/2017
1/05/2018
1/01/2019
1/09/2019
1/05/2020
1/01/2021
1/09/2021
1/05/2022
1/01/2023
1/09/2023
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5

14. Appendix D – Meteorological Data 2023

Figure 15:Daily Max and Min air temperatures 2023

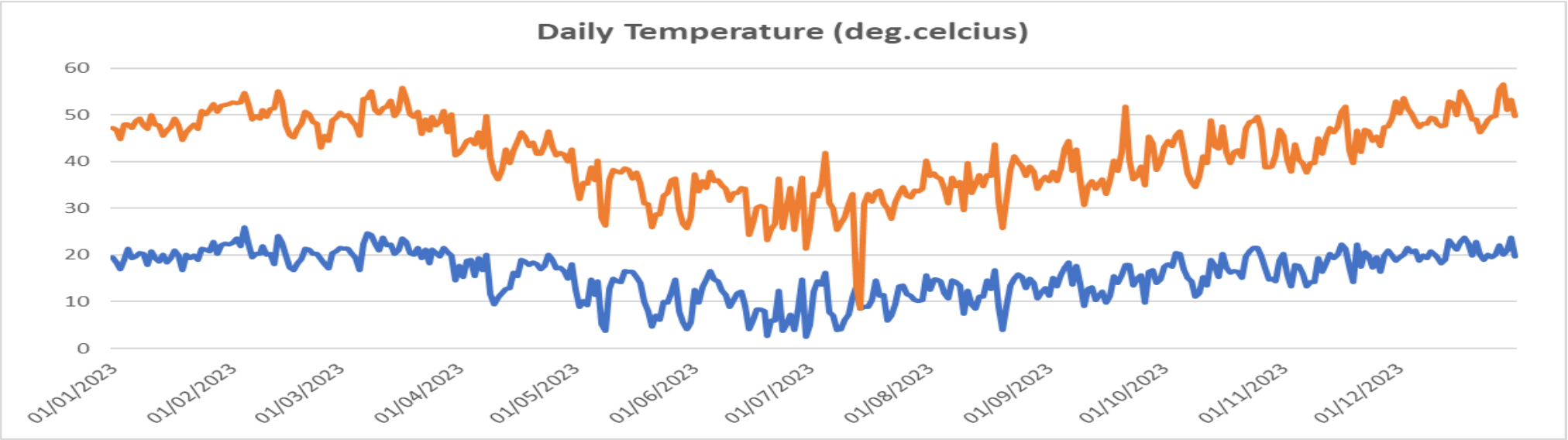


Figure 16:Yearly Rainfall (mm)

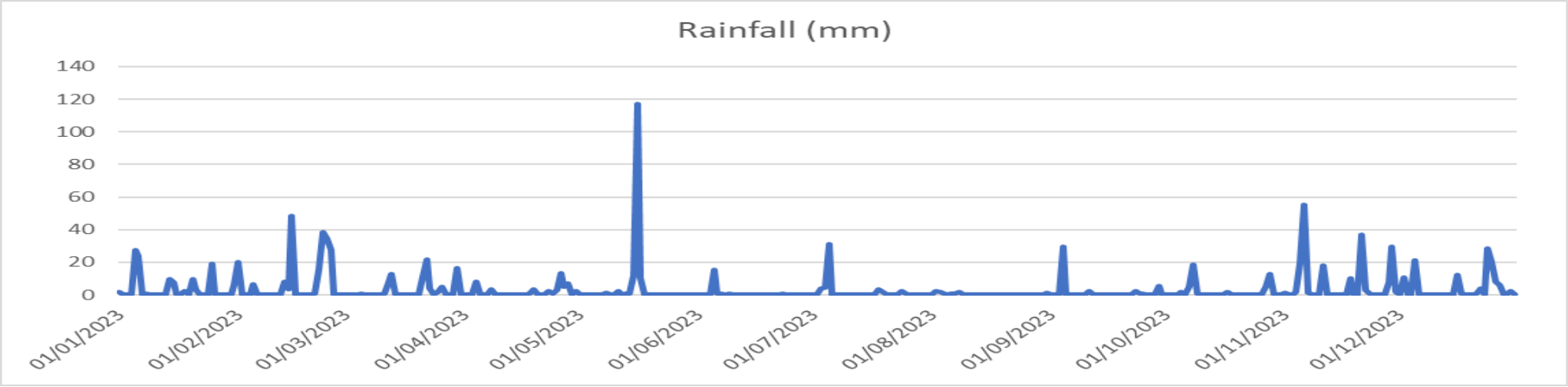


Figure 17:Relative Humidity at 3pm (%)

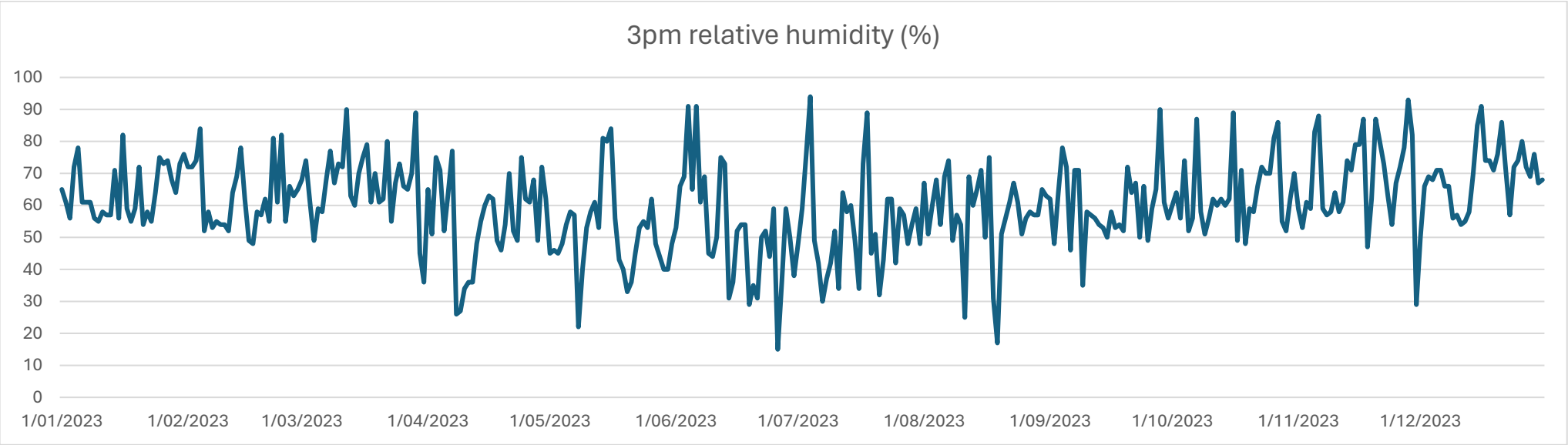
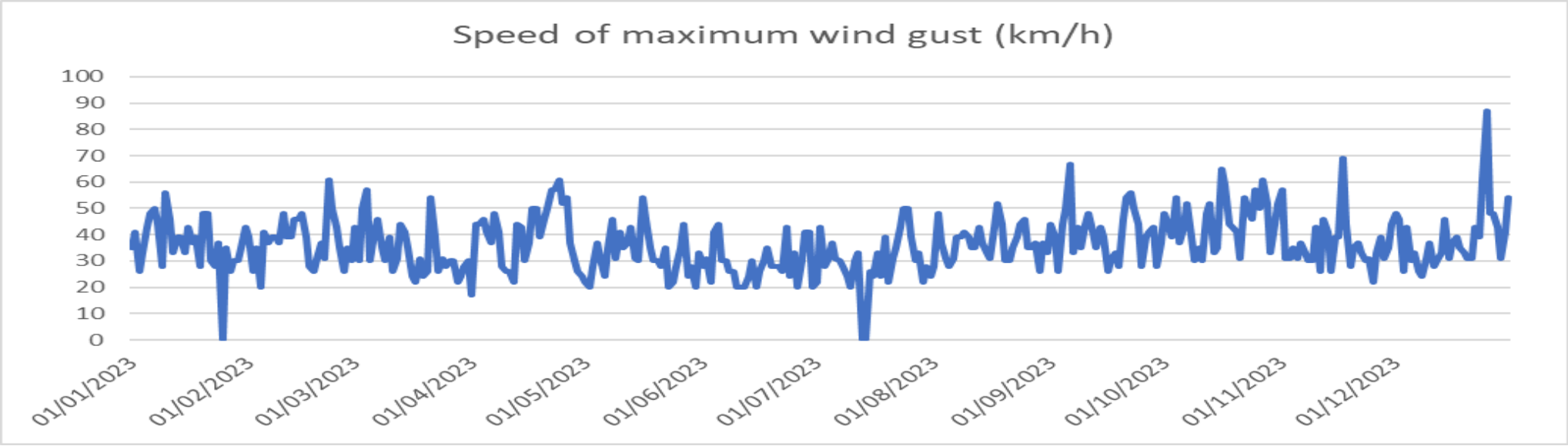


Figure 18:Speed of Maximum Wind Gust onsite (km/h)



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