

Eviron Road Quarry Landfill  
Annual Environmental Management Review 2019  
**Stage 1 (Application No.08\_0068)**

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## Executive Summary

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.

Construction works under this approval have commenced for Stage 1 of the project which includes:

- Construction of a Haul Road from the existing Stott's Creek Resource Recovery Centre to the new landfill at Quirks Quarry; and
- Construction of a new landfill in the void of the existing Quirks Quarry; and
- Construction of a new quarry at the site known as the West Valley.

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 2019 to 31 December 2019. The works carried out during this period are summarised as follows:

### **Management Plans**

In the 2019 reporting period no new management plans were prepared, however, amendments to the White Lace Flower Translocation Plan (WLFTP) were approved which enables Council to source seed for the translocation plan from non-local sources.

Additionally, during 2019 Council continued negotiations with the NSW Department of Planning, Industry and Environment to obtain outstanding approvals for both the Biodiversity Offset Plan and the Landscape Management Plan.

### **General Activities**

During the 2019 reporting period, the following general works activities were carried out at the site:

- Ongoing environmental baseline monitoring of groundwater and surface 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.



## **Construction Activities**

Construction activities undertaken during the 2019 reporting period comprised of further works associated with the construction of the haul road. Specifically, these works included:

- Importation, placement and compaction of approximately 9,211m<sup>3</sup> of imported fill material, including excavated public road material under Council's Resource Recovery Order and Exemption, June 2018. Imported fill material was placed along the length of the alignment however was concentrated in the soft soil areas between approximately CH600 and CH1000 and CH100 and CH300.
- Installation of cross road culverts at approximately CH650.
- Management and maintenance of the fob activated boom gate at the entry to the site to manage, control and monitor all material coming into the site during construction.
- Installation, monitoring and maintenance of permanent and temporary erosion and sediment controls in current active areas of disturbance.

## **Biodiversity Offsets**

During the 2019 reporting period ongoing maintenance and weed control within the offset planting areas was undertaken in accordance with the maintenance program for the site.

## **Nest Box**

During the 2019 reporting period Council engaged an independent ecologist (Lewis Ecological Consultants) to undertake the second follow-up and maintenance inspection of the installed nest boxes. The inspection recorded evidence of occupation in all but one of the nest boxes. In regards to the condition and functionality of nest boxes, all boxes were in good condition and functioning as designed.

## **Complaints**

During the 2019 reporting period no complaints were received relating to the project.

## Statement of Compliance

**Table 1: Statement of compliance**

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

**Table 2: Non compliances**

Approval condition	Condition Description	Compliance Status	Comment
Schedule 4, Condition 29	By 31 December 2013, unless the Director-General agrees otherwise, the Proponent shall: (a) implement the biodiversity offset strategy as described in the EA, summarised in Table 9, and described and depicted in the figure in Appendix 4; and (b) make suitable arrangements, in consultation with OEH, to provide appropriate long term conservation security for Area 1, to the satisfaction of the Director-General.	Administrative non-compliance.	The Biodiversity Offset Strategy was completed and submitted to NSW DoPE in 2013. An approval for the plan is still yet to be given, however, negotiations have progressed in 2019 and it is anticipated that the BOP will be approved in 2020.

## Introduction

### Project Overview

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 Stott's Creek Resource Recovery Centre, however, this facility is nearing its design capacity. In planning for the shires 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). Approval was granted 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.

Construction works under this approval have commenced for Stage 1 of the project which includes:

- Construction of a Haul Road from the existing Stott’s Creek Resource Recovery Centre to the new landfill at Quirks Quarry; and
- Construction of a new landfill in the void of the existing Quirks Quarry; and
- Construction of a new quarry at the site known as the West Valley.

Works carried out at the site to date have been minimal and comprise only of early works for the construction of the haul road. Works are yet to commence on the landfilling or quarrying components of Stage 1 of the project. A number of management plans have also been prepared for the project along with necessary site investigations and monitoring works. Environmental controls have also been installed as part of construction works for the haul road.

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 2019 to 31 December 2019.

The requirements of Condition 6 are provided in Table 3 below, with specific section references for each relevant section addressed in this document.

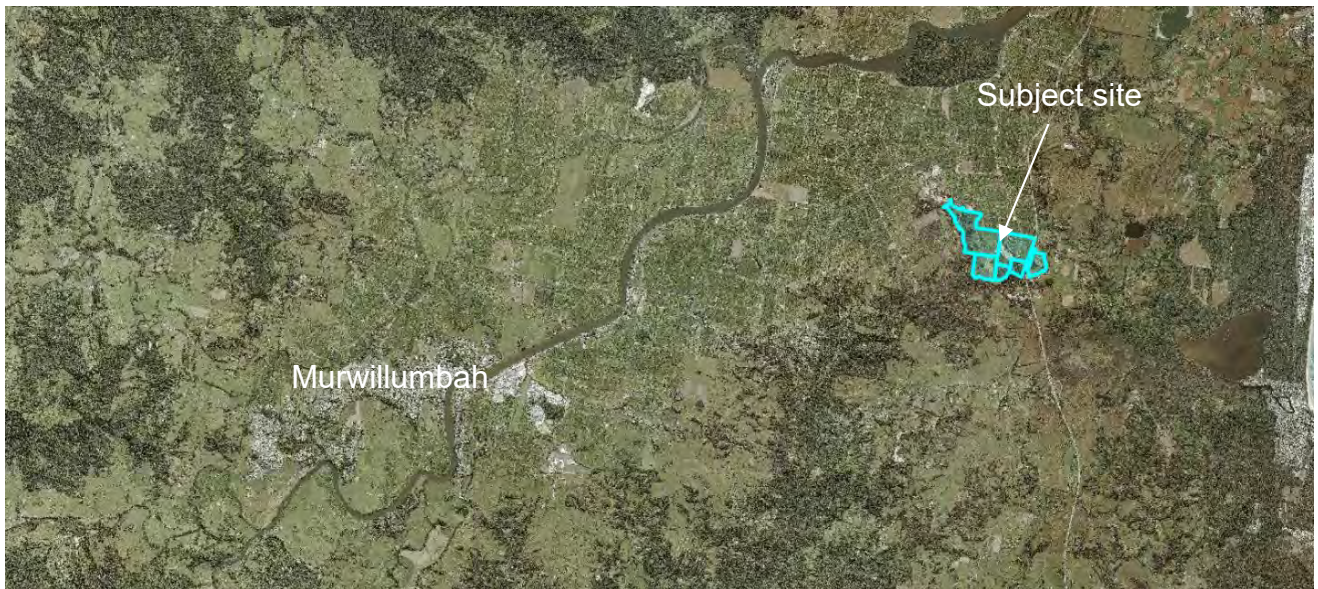
**Table 3: Annual Review requirements (Condition 6 of Schedule 6 of Project Approval 08\_0068)**

Annual Review Requirement	
(a)	Describe the development (including rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year
(b)	Include a comprehensive review of the monitoring results and complaints records of the project over the previous calendar year, which includes a comparison of these results against: <ul style="list-style-type: none"> <li>• The relevant statutory requirements, limits or performance measures/criteria;</li> <li>• The monitoring results of previous years; and</li> <li>• The relevant predictions in the EA;</li> </ul>
(c)	Identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance
(d)	Identify any trends in the monitoring data over the life of the project
(e)	Identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies
(f)	Describe what measures will be implemented over the current calendar year to improve the environmental performance of the project

### Project Location

The subject site is located at Eviron Road, Eviron, within the Tweed LGA. The site is approximately 16km north east of Murwillumbah and adjoins the existing Stott’s Creek Resource Recovery Centre which is located to the north west of the site.

The Council owned site has an area of 136 hectares (excluding Stott’s 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 Lot 1 DP 1159352, Lot 2 DP 1170442, Lot 1 DP 1170442, Lot 30 DP 820048, Lot 1 DP 34555, Lot 1 DP 783802 and Lot 25 DP 615931 (refer Figure 1 below and Appendix A).



**Figure 1: Aerial view showing locality of the site.**

## Key Personnel

Name	Position	Role	Phone No.	Email
Tracey Stinson	Director Sustainable Communities and Environment	Project Client	02 6670 2430	<a href="mailto:tstinson@tweed.nsw.gov.au">tstinson@tweed.nsw.gov.au</a>
Rodney Dawson	Unit Coordinator – Resource Recovery	Project Client	02 6670 2659	<a href="mailto:rdawson@tweed.nsw.gov.au">rdawson@tweed.nsw.gov.au</a>
Wes Knight	Coordinator – Resource Recovery	Project Client	02 6670 2595	<a href="mailto:wknight@tweed.nsw.gov.au">wknight@tweed.nsw.gov.au</a>
Athol Kiem	Technical Officer – Quarry Operations and Quality	Site Supervisor	02 6670 2716	<a href="mailto:atholk@tweed.nsw.gov.au">atholk@tweed.nsw.gov.au</a>
Shane Visser	Construction Engineer	Project Manager	02 6670 2629	<a href="mailto:svisser@tweed.nsw.gov.au">svisser@tweed.nsw.gov.au</a>
Jim Rosolen	Ganger - Construction	Project Ganger	02 6670 2258	<a href="mailto:jrosolen@tweed.nsw.gov.au">jrosolen@tweed.nsw.gov.au</a>

## Approvals

### Project Approvals

**Table 4: Project approvals applicable to the development**

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

### Management Plans

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 5 below.

In the 2019 reporting period no new management plans were prepared, however, amendments to the White Lace Flower Translocation Plan (WLFTP) were approved which enables Council to source seed for the translocation plan from non-local sources.

Additionally, during 2019 Council continued negotiations with the NSW Department of Planning, Industry and Environment to obtain outstanding approvals for both the Biodiversity Offset Plan and the Landscape Management Plan.

**Table 5: Status summary of management plans submitted under Project Approval 08\_0068.**

Management Plan	Summary	Status
Environmental Management Strategy	<p>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.</p> <p>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.</p> <p>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.</p>	<p>✓ Completed - 27 May 2014</p> <p>✓ Approved - 4 June 2014</p>
Heritage Management Plan	<p>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.</p> <p>The Heritage Management Plan was submitted to the Director General on 8 January 2014 and approved by the NSW DoPE on 4 June 2014.</p>	<p>✓ Completed - 8 January 2014</p> <p>✓ Approved - 4 June 2014</p>
Biodiversity Offset Plan	<p>The Biodiversity Offset Plan is a requirement of Schedule 4, Condition 29 of Project Approval 08_0068.</p> <p>A number of key commitments within the submitted plan have been undertaken which include:</p> <ul style="list-style-type: none"> <li>(i) Delineation of Vegetation Protection Areas on the site with bunting and signage that restricts access from site operations (refer Figure 1).</li> <li>(ii) Vegetation planting in the Northern Riparian Corridor and Southern Ridgeline Corridor in accordance with the Biodiversity Offset Restoration Plan.</li> </ul>	<p>✓ Completed - 18 December 2013</p> <p>X Awaiting Approval – Negotiations have progressed in 2019 and it is anticipated that the BOP will be approved in 2020.</p>
White Laceflower	<p>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.</p>	<p>✓ Completed - 28 August 2013</p>



Management Plan	Summary	Status
Translocation Plan	<p>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.</p> <p>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.</p>	<p>✓ Approved - 4 June 2014</p> <p>✓ Amendment approved – September 2019</p>
Landscape Management Plan	<p>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.</p> <p>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.</p>	<p>✓ Completed - 4 April 2014</p> <p>X Awaiting Approval - The LMP will be finalised following approval of the BOP</p>

## Operations Summary

### Summary of Works Undertaken in 2019

#### General Activities

During the 2019 reporting period, the following general works activities were carried out at the site:

- Ongoing environmental baseline monitoring of groundwater and surface 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.



**Figure 2 – Erosion and sediment controls adjacent exposed areas.**



**Figure 3: Vegetation protection flagging installed at the site.**

### Construction Activities

Construction activities undertaken during the 2019 reporting period comprised of further works associated with the construction of the haul road. Specifically, these works included:

- Importation, placement and compaction of approximately 9,211m<sup>3</sup> of imported fill material, including excavated public road material under Council's Resource Recovery Order and Exemption, June 2018. Imported fill material was placed along the length of the alignment however was concentrated in the soft soil areas between approximately CH600 and CH1000 and CH100 and CH300.
- Installation of cross road culverts at approximately CH650.
- Management and maintenance of the fob activated boom gate at the entry to the site to manage, control and monitor all material coming into the site during construction.



- Installation, monitoring and maintenance of permanent and temporary erosion and sediment controls in current active areas of disturbance.



**Figure 4 – Material placed within haul road alignment looking north between approximately CH800 and CH1000.**



**Figure 5 – Material placed within haul road alignment looking south between approximately CH800 and CH700.**





**Figure 6 – Material placed within haul road alignment looking south between approximately CH700 and CH500.**



**Figure 7 – Material placed within haul road alignment looking south between approximately CH300 and CH150.**

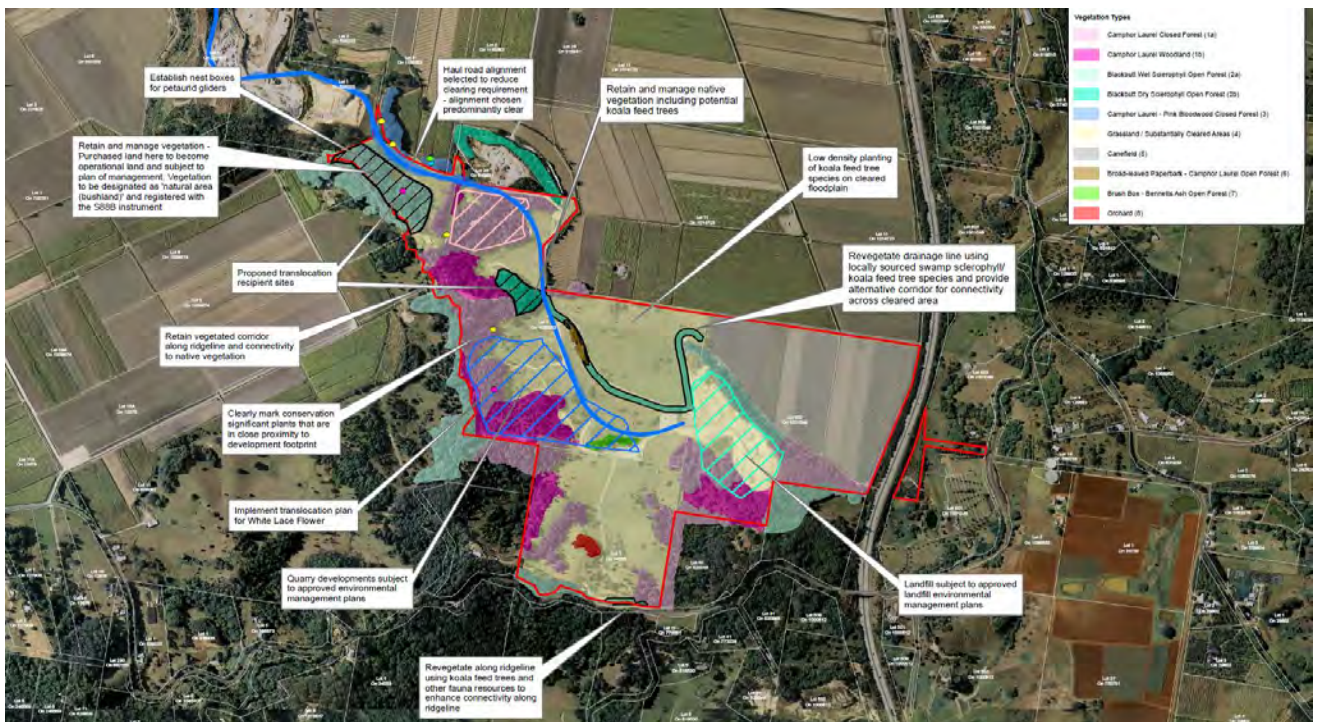




**Figure 8 – Material placed within haul road alignment and drainage infrastructure in place ready for installation at approximately CH90.**

### Biodiversity Offsets

A total of 13,700 tube stock were planted at the site in 2017 in accordance with the submitted Biodiversity Offset Plan. 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 Figure 6). During the 2019 reporting period ongoing maintenance and weed control within the planting areas was undertaken in accordance with the maintenance program for the site (refer Appendix C for annual report).



**Figure 9 – Biodiversity offset plan.**





**Figure 10 – Vegetation growth and weed management within the SRC.**



**Figure 11 – Vegetation growth and Camphor laurel management within the SRC.**





**Figure 12 – Vegetation growth and weed management within the NRC.**

In addition to the vegetation planting, seven nest boxes have also been installed at the site in accordance with the Eviron Road Quarry and Landfill Nest Box Plan (refer Figure 7). Nest boxes were installed on the 29<sup>th</sup> July 2016. During the 2019 reporting period Council engaged an independent ecologist (Lewis Ecological Consultants) to undertake the second follow-up and maintenance inspection on the 29<sup>th</sup> October 2019 (refer Appendix D). In accordance with the nest box management plan, the engaged ecologist inspected each box looking for evidence of fauna occupation or pest activity.



**Figure 12: Nest box locations within the subject site.**

The inspection recorded evidence of occupation in all but one of the nest boxes as shown in Table 6 below.

In regards to the condition and functionality of nest boxes, all boxes were in good condition and functioning as designed. Consequently, no maintenance is required on boxes at this stage. The third and final follow-up inspection of the nest boxes will take place in 2021 as per the approved plan.



During the 2019 reporting period Council engaged an independent ecologist (Lewis Ecological Consultants) to undertake the second follow-up and maintenance inspection of the installed nest boxes. The inspection recorded evidence of occupation in all but one of the nest boxes. In regards to the condition and functionality of nest boxes, all boxes were in good condition and functioning as designed.



**Figure 13: Sugar glider occupying a nest box in Tree 11.**



**Figure 14: Nest boxes installed at the site.**

**Table 6: Location, details and occupancy status of nest boxes installed at the site**

Tree ID	Box Type	Height above Ground	Aspect	Tree Species	GPS Coordinate	Fauna use	Condition
Tree 7	Small Owl	6.0	NE	Blackbutt	28.29693, 153.49693	Recent short-eared mountain possum nest	Good
Tree 7	Small Glider Wedge	6.0	W	Blackbutt	28.29693, 153.49693	Old feathertail glider nest	Good
Tree 8	Possum	6.0	N	Blackbutt	28.29698, 153.49707	Fresh sugar glider nest	Good
Tree 9	Bat Box	6.0	N	Blackbutt	28.29701, 153.49719	No sign of mammal occupancy. Spider inside	Good
Tree 10	Small Owl	8.0	NNE	Blackbutt	28.29710, 153.49731	Old sugar glider nest	Good
Tree 11	Parrot	6.0	SSE	Blackbutt	28.29671, 153.49678	One sugar glider inside	Good
Tree 12	Possum	6.0	NNE	Blackbutt	28.29680, 153.49670	Recent short-eared mountain possum nest	Good

## Actions Required From Previous Annual Review

Given the limited extent of works that have been undertaken at the site to date there were no required actions to be completed as a result of the previous annual review.

Notwithstanding, in 2018 Council engaged Geolink Pty Lid to undertake an environmental audit of the site which identified a number of 'administrative non-compliances' and general observations. These items and the actions taken to address each item are listed in Table 7 below.

**Table 7: Recommended actions from 2018 environmental audit.**

Recommendation from Environmental Audit	Action Taken during 2019
<p><i>Section 3.1.1:</i> In light of TSC commencement of works as set out in the BOS which are technically unapproved, it is recommended TSC engage with DPE with the aim of obtaining approval from DPE for the BOS to ensure consistency.</p>	<p>During the 2019 reporting period, Council continued ongoing negotiations with the NSW Department of Planning, Industry and Environment in relation to obtaining approvals for both the Biodiversity Offset Plan and the Landscape Management Plan.</p>
<p><i>Section 3.1.2:</i> The WLFTC was prepared by the TSC ecologist in the best interest of ensuring maintaining localised WLF genetics. Given the attempts that have been made to source seed without success, it is recommended that the WLFTP be amended to discuss and justify the opportunity to source seed other than local seed.</p>	<p>In the 2019 reporting period the White Lace Flower Translocation Plan (WLFTP) was amended to enable Council to source seed for the translocation plan from non-local sources. The amended plan was submitted to the NSW Department of Planning, Industry and Environment and was approved in September 2019.</p>
<p><i>Section 3.1.3:</i> The works on-site 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 negligible. It is recommended this be annually.</p>	<p>The EMS was been internally reviewed during the 2019 reporting period and given the limited extent of works that have been undertaken at the site, the strategy is still considered relevant and does not need amending at this stage.</p>
<p><i>Section 3.1.4:</i> Ensure these documents are uploaded to the website.</p> <ul style="list-style-type: none"> <li>- Restoration Plan (Preliminary)</li> <li>- Haul Road S&amp;WMP</li> <li>- Nest Box Plan.</li> </ul>	<p>Each of the outstanding documents was loaded onto the project website during the 2019 reporting period. In addition, the updated White Lace Flower Translocation Plan has also been uploaded onto the project website.</p>
<p><i>Section 3.1.5:</i> Fencing off sensitive areas is important to ensure compliance with the above requirements. Ensure that the flicker tape is in good working order and the fencing is in place.</p>	<p>The flicker tape on the vegetation exclusion fencing was replaced in June 2019 where it was damaged or deteriorated.</p>
<p><i>Section 3.1.6:</i> Although technically the site establishment has commenced, major works have not. Works include placing settlement material on Stage 1 of Haul Road plus environmental</p>	<p>Works undertaken during the 2019 reporting period were only minor and were not considered to warrant the commencement of community consultation at this stage.</p>



works. It is recommended that before significant works commence on the Haul Road, community consultation occurs.	
<i>Section 3.1.7:</i> It is recommended that the nest box monitoring requirements be re-assessed based on the timing of the first monitoring round.	The nest box monitoring program was modified as per the recommendation from the internal audit. The original monitoring program proposed to undertake follow-up monitoring in the 1 <sup>st</sup> , 2 <sup>nd</sup> and 5 <sup>th</sup> years after installation. Given the first years monitoring event was missed, the monitoring plan was modified so that monitoring occurred on the 2 <sup>nd</sup> , 3 <sup>rd</sup> and 5 <sup>th</sup> years after installation. During the 2019 reporting period the second monitoring event was completed being the third year after installation. The next monitoring event is scheduled to occur in 2021, being the 5 <sup>th</sup> year after installation.
<i>Section 3.1.8:</i> Recommend that periodic weed inspections are carried out and that the EMS is updated to reflect more accurate plant species.	Council has engaged the services of a bush regeneration contractor to undertake regular weed management within the SRF and NRF revegetation zones.
<i>Section 3.1.9:</i> On the basis of the small amount of truck movement (<50 per annum) and the ease of access, it appears unnecessary to prepare a TMP at this stage of the construction. Recommend revisiting this requirement when more intense construction commences.	A total of 766 vehicle movements were recorded at the site throughout the 12 month monitoring period, which is the equivalent to just over two vehicle movements per day. These volumes are still considered low at this stage of the development and it is still considered unnecessary to prepare a TMP for the moment.
<i>Section 3.1.10:</i> Given the Project Restoration Plan (PRP) is quite specific regarding the need to source local seed, propagate and include details of propagation, it is recommended that the PRP is amended (with justification) and re-issued.	Yet to be actioned.
<i>Section 3.1.11 and 3.1.12:</i> Ensure erosion and sediment controls are repaired and installed and inspected from time to time.	Inspection and maintenance of erosion and sediment controls is undertaken at least quarterly and reported on by the Site Supervisor in a Quarterly Environmental Report.
<i>Section 3.1.13:</i> Although construction is minimal, it is recommended that inspection of erosion and sediment controls are undertaken, perhaps quarterly.	Inspection and maintenance of erosion and sediment controls is undertaken at least quarterly and reported on by the Site Supervisor in a Quarterly Environmental Report.

## 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 in 2018 determined that for the works completed so far, *“The level of awareness among staff of good environmental practice was generally satisfactory. Several examples of good environmental practices were observed during the site inspection. The findings obtained during this Audit shows that Eviron Road Quarry and Landfill is generally compliant with the Conditions of Approval, Statement of Commitments, and with relevant environmental legislation.”*



## Water Management

### Surface Water Quality

In 2008 Council implemented a baseline surface water monitoring program which occurs in the main drainage channel on the northern boundary of the site, adjacent to Quirks Quarry. This monitoring program comprises three (3) monitoring sites (SW1, SW2 and SW4) (refer Figure 15) which are sampled on a quarterly basis. A suite of parameters are tested during each monitoring event which are outlined in Table 9-7 of the Environmental Assessment. This suite of parameters is generally consistent with the requirements of the Environmental Guidelines: Solid Waste Landfills (EPA 1996).

For the suite of parameters that are monitored, there are currently no specific trigger values, however, the ANZECC/ARMCANZ freshwater guidelines continue to be used as a point of reference. 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 Plan. 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 E and F. 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 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.

#### **SW1**

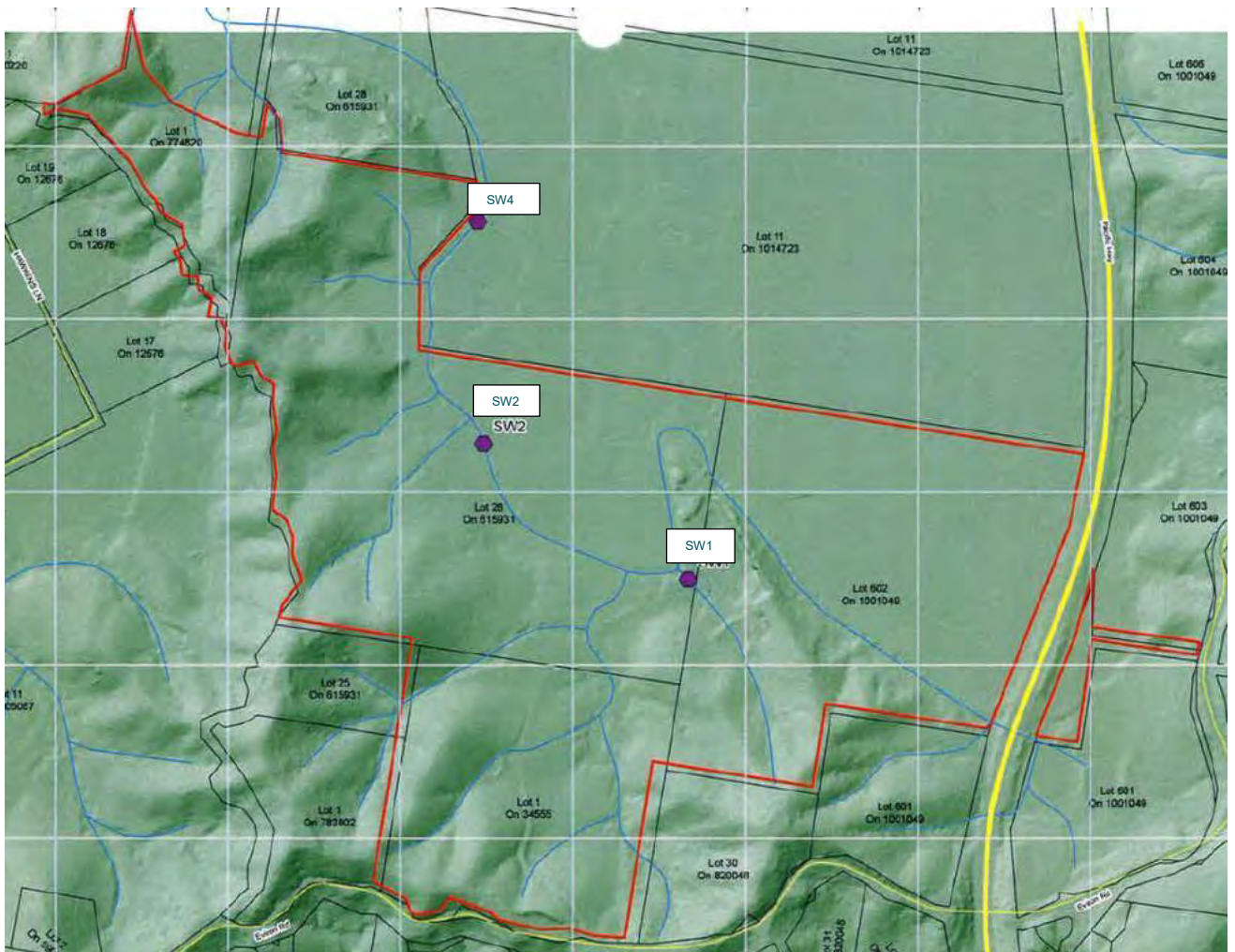
SW1 is a surface water monitoring site with baseline data indicating that surface water in this location is fresh. The pH of surface water at this site varies between moderately acidic and neutral ranging between 5.6 and 6.7. Nutrient values at the site are typically low, however, a spike in BOD, total nitrogen and total phosphorus has been previously recorded in the past which extended over three monitoring periods between 09/08/2011 and 06/02/2012. This period coincides with a similar spike in suspended solids which is likely the result of significant rainfall during this period. The concentration of metals at the site are generally low, however, similar to that described above, a spike in total arsenic, total cadmium, total copper, total manganese and total nickel were all recorded the same rain event period. It is also noted that a spike in total phosphorus was recorded on the 9<sup>th</sup> August 2017, however, this value had returned to background by the following monitoring event.

#### **SW2**

SW2 is a surface water monitoring site with baseline data indicating that surface water in this location is fresh. The pH of surface water at this site varies between strongly acidic and neutral ranging between 5.4 and 7.1. Nutrient values at the site are generally low with total nitrogen ranging between 0.3 and 2.7mg/L throughout the monitoring period. The concentration of metals at the site are also generally low and consistent with baseline monitoring data in the other surface water monitoring sites.

#### **SW4**

SW4 is a surface water monitoring site with baseline data indicating that surface water in this location is fresh. The pH of surface water at this site varies between moderately acidic and neutral ranging between 6.0 and 7.0. Nutrient values at the site are generally low with total nitrogen ranging between 0.2 and 2.8mg/L throughout the monitoring period. The concentration of metals at the site are generally low and consistent with baseline monitoring data in the other surface water monitoring sites. It is noted, however, that concentrations of manganese and calcium are slightly elevated at this site.



**Figure 15 – Eviron surface water monitoring bores.**

### Groundwater Water Quality

There are currently nineteen (19) groundwater monitoring bores located on the site which are monitored on a quarterly basis, measuring both groundwater levels and groundwater quality (refer Figure 16).

Similar to the surface water monitoring program, there are currently no specific trigger values for groundwater at the site, however, the ANZECC/ARMCANZ freshwater guidelines continue to be used as a point of reference. 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 Plan. 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 E and F. 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.





**Figure 16 – Eviron Groundwater Monitoring Bore locations.**

### **GW1**

GW1 is a bedrock monitoring site with baseline data indicating that groundwater at this site is fresh. This is reflected in the low conductivity and alkalinity values which are recorded at the site. The pH of groundwater varies from very strongly acidic to slightly acidic ranging between 4.9 and 6.4. Nutrient values at the site are typically low with total nitrogen concentrations ranging between 0.1 and 1.8mg/L. The concentration of metals at this site are also considered to be generally low and stable. Notwithstanding, one monitoring event on the 14/11/2012 recorded a significant short-term spike in in the concentration of total chromium, total copper, total iron, total lead, total aluminium, total calcium, total manganese, total nickel and total zinc.

### **GW2**

GW2 is an alluvial monitoring site with baseline monitoring data indicating that groundwater in this location is brackish. This is reflected in the relatively high concentration of conductivity, alkalinity, bicarbonate, total sodium, total chloride, and total calcium recorded at the site. Given the brackish nature of the groundwater, pH values at this site are generally neutral and stable, ranging between 6.7 and 7.1 throughout the monitoring period. Nutrient values at the site are generally low and stable, however, one moderate spike in concentration was recorded on the 09/02/2015 which is reflected in the results for ammonia, BOD, TKN and total nitrogen. The concentrations of metals at the site are generally characteristic of soils in this location and are consistent with the surrounding baseline monitoring data.

**GW4**

GW4 is an alluvial monitoring site with baseline monitoring data indicating that groundwater in this location is brackish. This is reflected in the relatively high concentration of conductivity, alkalinity, bicarbonate, total sodium, total chloride, and total calcium recorded at the site. Given the brackish nature of the groundwater, pH values at this site are generally neutral to slightly alkaline, ranging between 6.9 and 7.5 throughout the monitoring period. Nutrient values at the site are generally low and stable, however, one significant spike in concentration was recorded on the 09/02/2015 which is shown in the results for ammonia, BOD, TKN, total nitrogen and total phosphorus. An additional moderate spike in nutrient values was also recorded at this site during the 2016 monitoring period. The concentrations of metals at the site are generally characteristic of soils in this location and are consistent with the surrounding baseline monitoring data.

**GW5**

GW5 is a bedrock monitoring site with baseline data indicating that groundwater at this site is fresh. This is reflected in the low conductivity, alkalinity and bicarbonate values which are recorded at the site. The pH of groundwater is strongly to extremely acidic ranging between 3.8 and 5.4. Nutrient values at the site are typically low with Total Nitrogen concentrations ranging between 0.3 and 4.1mg/L. With the exception of manganese which is considered to be high in this location, the concentration of metals at the site are generally characteristic of soils in this location and are consistent with the surrounding baseline monitoring data.

**GW6**

GW6 is an alluvial monitoring site with baseline data indicating that groundwater at this site is fresh. This is reflected in the low conductivity, alkalinity and bicarbonate values which are recorded at the site. The pH of groundwater varies between strongly acidic to slightly acidic ranging between 5.1 and 6.3. Nutrient values at the site are generally low and stable, however, one moderate spike in concentration was recorded on the 09/02/2015 which is reflected in the results for ammonia, BOD, TOC, TKN and total nitrogen. With the exception of nickel and zinc which appear to occur in high concentrations at the site relative to background levels, the concentrations of metals at the site are generally characteristic of soils in this location and are consistent with the surrounding baseline monitoring data.

**GW7**

GW7 is an alluvial monitoring site with baseline data indicating that groundwater at this site is fresh. This is reflected in the low conductivity, alkalinity and bicarbonate values which are recorded at the site. The pH of groundwater varies from extremely acidic to strongly acidic ranging between 4.2 and 5.5. Nutrient values at the site are generally low and stable, however, one moderate spike in concentration was recorded on the 13/02/2013 which is reflected in the results for BOD, nitrate, oxidised nitrogen, TOC, TKN and total nitrogen. The concentrations of metals at the site are generally characteristic of soils in this location and are consistent with the surrounding baseline monitoring data.

**GW8**

GW8 is an alluvial monitoring site with baseline data indicating that groundwater at this site is fresh. This is reflected in the low conductivity, alkalinity and bicarbonate values which are recorded at the site. The pH of groundwater varies between moderately acidic and neutral ranging between 5.7 and 6.6. Nutrient values at the site are generally low and stable, with total nitrogen ranging between 0.6 and 3.1mg/L throughout the monitoring period. The concentrations of metals at the site are generally characteristic of soils in this location and are consistent with the surrounding baseline monitoring data. Notwithstanding, a significant spike in the concentration of nickel was recorded on the 13/11/2012 at this location which was high relative to background levels.

## **GW9**

GW9 is an alluvial monitoring site with baseline data indicating that groundwater at this site ranges between fresh and brackish. This is reflected in the elevated conductivity, sodium and chloride levels, however, it is noted that the alkalinity and bicarbonate values are generally low. The pH of groundwater varies between very strongly acidic and slightly acidic ranging between 4.8 and 6.2. Nutrient values at the site are generally low and stable, with total nitrogen ranging between 0.2 and 1.1mg/L throughout the monitoring period. The concentration of metals at the site are generally consistent with baseline monitoring data in the surrounding area, however, it is noted that total lead concentrations were slightly elevated at this site.

## **GW10**

GW10 is an alluvial monitoring site with baseline data indicating that groundwater at this site is fresh. This is reflected in the low conductivity levels recorded during the monitoring period. The pH of groundwater varies between very strongly acidic and slightly acidic ranging between 4.8 and 6.3. Nutrient values at the site are generally low although slightly elevated against other surrounding baseline monitoring sites with total nitrogen ranging between 0.2 and 4.4mg/L throughout the monitoring period. The concentration of metals at the site are generally low and consistent with baseline monitoring data in the surrounding area, however, a spike was recorded at the site which occurred on the 12/11/2013 and saw temporary elevated levels of chromium, aluminium, arsenic, copper, iron, lead, nickel and zinc. In addition, it is also noted that a significant spike in conductivity occurred on the 11/08/2015 which also coincided with spikes in chloride, sulfate, calcium, magnesium, manganese, nickel and sodium, and a drop in pH.

## **GW11**

GW11 is an alluvial monitoring site with baseline data indicating that groundwater at this site is fresh. This is reflected in the low conductivity and alkalinity levels recorded during the monitoring period. The pH of groundwater varies between extremely acidic and moderately acidic ranging between 4.1 and 5.7. Nutrient values at the site are generally low although slightly elevated against other surrounding baseline monitoring sites with total nitrogen ranging between 0.4 and 3.06mg/L throughout the monitoring period. The concentration of metals at the site are generally low and consistent with baseline monitoring data in the surrounding area, however, a low level spike was recorded at the site on the 14/05/2014 which saw a short-term spike in the level of total aluminium, total chromium, total copper, total iron, total lead, total manganese, total nickel and zinc.

## **GW14**

GW14 is a bedrock monitoring site with baseline data indicating that groundwater at this site is fresh. This is reflected in the low conductivity and alkalinity levels recorded during the monitoring period. The pH of groundwater at this site is the lowest of all monitoring sites varying between extremely acidic and very strongly acidic ranging between 3.7 and 4.9. Nutrient values at the site are generally low with total nitrogen ranging between 0.5 and 3.5mg/L throughout the monitoring period. The concentration of metals at the site are generally low and consistent with baseline monitoring data in the surrounding area, however, slightly elevated levels of total aluminium, total chromium, total lead, total iron and total copper were recorded at the site during a low level spike that occurred on the 14/11/2012.

## **GW15**

GW15 is a bedrock monitoring site with baseline data indicating that groundwater at this site is fresh. This is reflected in the low conductivity and alkalinity levels recorded during the monitoring period. The pH of groundwater at this site varies between moderately acidic and neutral ranging between 5.6 and 6.9. Nutrient values at the site are generally low although two slightly elevated spikes were recorded on the 14/05/2014 and 11/11/2015. Total nitrogen concentrations at the site ranged between 0.2 and 6.4mg/L throughout the monitoring period. The concentration of metals at the site are generally low and consistent with baseline monitoring data in the surrounding area.

**GW16**

GW16 is a bedrock monitoring site with baseline data indicating that groundwater at this site is fresh. This is reflected in the low conductivity and alkalinity levels recorded during the monitoring period. The pH of groundwater at this site varies between very strongly acidic and neutral ranging between 4.6 and 6.8. Nutrient values at the site are generally low although slightly elevated against other surrounding baseline monitoring sites with total nitrogen ranging between 0.2 and 5.5mg/L throughout the monitoring period. The concentration of metals at the site are generally low and consistent with baseline monitoring data in the surrounding area. It is noted that the concentration of calcium is generally very low, although a very high spike in concentration was recorded on the 08/11/2011.

**GW17**

GW17 is an alluvial monitoring site with baseline data indicating that groundwater at this site is fresh. The pH of groundwater at this site varies between strongly acidic and slightly acidic ranging between 5.3 and 6.2. Nutrient values at the site are generally low with total nitrogen ranging between 1.1 and 2.4mg/L throughout the monitoring period. The concentration of metals at the site are generally low and consistent with baseline monitoring data in the surrounding area, however, it is noted that total arsenic, total chromium and calcium concentrations are slightly elevated.

**GW19**

GW19 is an alluvial monitoring site with baseline data indicating that groundwater at this site is fresh. The pH of groundwater at this site varies between moderately acidic and slightly alkaline ranging between 5.9 and 7.5. Nutrient values at the site are generally very low with total nitrogen ranging between 0.4 and 0.7mg/L throughout the monitoring period. The concentration of metals at the site are generally low and consistent with baseline monitoring data in the surrounding area.

**GW20**

GW20 is a bedrock monitoring site with baseline data indicating that groundwater at this site is fresh, although close to approaching brackish. This is reflected in the slightly elevated conductivity, alkalinity and bicarbonate levels recorded at the site. The pH of groundwater at this site varies between neutral and slightly alkaline ranging between 6.8 and 7.6. Nutrient values at the site are generally very low with total nitrogen ranging between 0.07 and 0.9mg/L throughout the monitoring period. The concentration of metals at the site are generally low and consistent with baseline monitoring data in the surrounding area. It is noted that the concentration of calcium and fluoride are slightly high in this location relative to surrounding monitoring sites.

**GW21**

GW21 is an alluvial monitoring site with baseline data indicating that groundwater at this site is fresh which is reflected in the low conductivity levels recorded at the site. The pH of groundwater at this site varies between strongly acidic and neutral ranging between 5.3 and 6.6. Nutrient values at the site are very low with total nitrogen ranging between 0.05 and 0.3mg/L throughout the monitoring period. The concentration of metals at the site are also generally low and consistent with baseline monitoring data in the surrounding area.

## **GW22**

GW22 is a bedrock monitoring site with baseline data indicating that groundwater at this site is slightly brackish as reflected in the elevated conductivity, alkalinity and bicarbonate levels recorded at the site. The pH of groundwater at this site is neutral, ranging between 6.5 and 7.0. Nutrient values at the site are generally very low with total nitrogen ranging between 0.2 and 1.05mg/L throughout the monitoring period. The concentration of metals at the site are also generally low and consistent with baseline monitoring data in the surrounding area. It is noted that elevated concentrations of anions and cations are present at site including calcium, fluoride, sodium and sulfate.

## **GW23**

GW23 is an alluvial monitoring site with baseline data indicating that groundwater at this site is fresh. The pH of groundwater at this site varies between moderately acidic and neutral ranging between 6.0 and 6.8. Nutrient values at the site are very low with total nitrogen ranging between 0.05 and 0.8mg/L throughout the monitoring period. The concentration of metals at the site are also generally low and consistent with baseline monitoring data in the surrounding area. It is noted that the concentration of some anions and cations at the site are slightly elevated above other baseline sites, including calcium, chloride, fluoride and sodium.

## 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 8: 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.

In relation to rehabilitation works, given the early stage of development to date, satisfying the rehabilitation objectives listed in the EA is currently not feasible. Notwithstanding, Council has commenced works under the Biodiversity Offset Strategy which in time will satisfy the rehabilitation requirement applying to 'Other land affected by the project', being to restore ecosystem function.

## Community

During the 2019 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.

## Independent Audit

Condition 10 of Schedule 6 of the project approval requires that within a year to the date of the approval, and every three years thereafter, unless the Director General directs otherwise, the proponent shall commission and pay the full cost of an Independent Environmental Audit for the project.

Given the delays in commencing the project and limited works that were undertaken initially, Council negotiated with the Department of Planning, Industry and Environment to postpone the commencement of the environmental audit until 2018 following a substantial commencement of works.

During August 2018 Council engaged GeoLINK Pty Ltd to carry out an environmental audit of the site. The environmental audit was completed on the 29<sup>th</sup> October 2018 and was provided to the NSW DoPE on the 2<sup>nd</sup> November 2018. As a summary, the outcome of the audit found that:

*The commitment of Eviron Road Quarry and Landfill and its staff to the quarry's environmental management was apparent, and site operations, work practices and documentary records were found to be generally in compliance with the Conditions of Approval, Statement of Commitments and relevant legislation, and consistent with good Environmental practices.*

*In total there were eight Administrative Non-compliances and five Observations made that may improve environmental management on this site.*



*The level of awareness among staff of good environmental practice was generally satisfactory. Several examples of good environmental practices were observed during the site inspection. The findings obtained during this Audit shows that Eviron Road Quarry and Landfill is generally compliant with the Conditions of Approval, Statement of Commitments, and with relevant environmental legislation.*

In accordance with the condition of approval, the next environmental audit will be undertaken in 2021.

## Incidents and non-compliances during the reporting period

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

## Activities to be completed in the next reporting period

### Construction Activities

Construction works planned for 2020 would focus on the further importation of fill material and ongoing pre-loading within the soft soil areas of the alignment. Continual monitoring of settlement plates within the pre-load areas would be carried out to calculate the settlement rates relative to the design levels.

Installation of stormwater and drainage infrastructure for the haul road will also be undertaken during 2020.

Specific timelines are yet to be finalised and are dependent on necessary compaction of pre-load areas as described above.

### Environmental Management

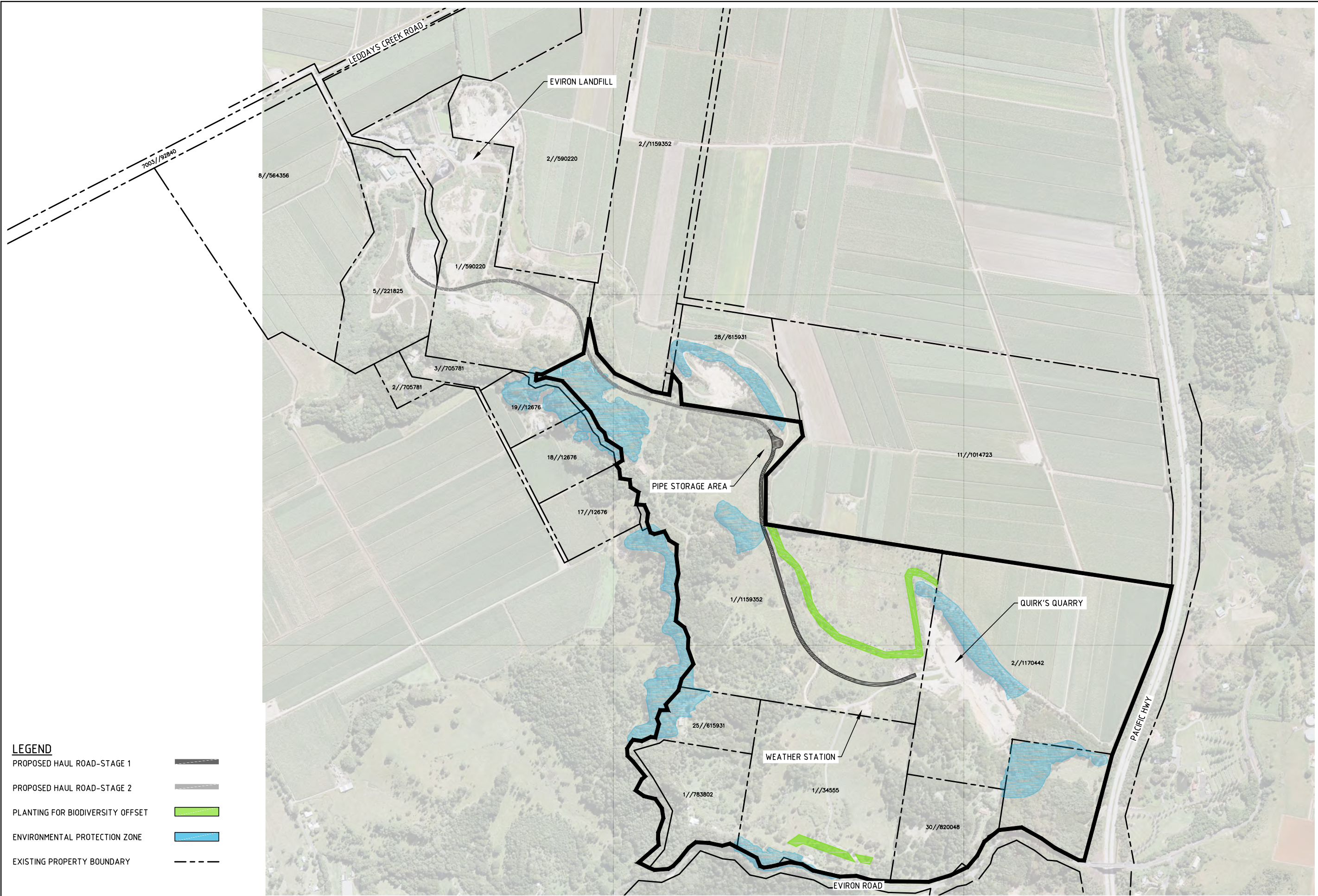
Environmental monitoring and recording will continue at the site in accordance with the approved Environmental Management Plans submitted to date.

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 2020 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.

## Appendix A – Site Plan

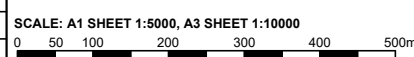




**LEGEND**

PROPOSED HAUL ROAD-STAGE 1	
PROPOSED HAUL ROAD-STAGE 2	
PLANTING FOR BIODIVERSITY OFFSET	
ENVIRONMENTAL PROTECTION ZONE	
EXISTING PROPERTY BOUNDARY	

**PRELIMINARY**  
NOT FOR CONSTRUCTION



**DESIGN UNIT**  
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DESIGNED	A.D.	22.03.17	COORDS ADOPTED	PM 124179
CHECKED	W.K.	22.03.17	EASTING	548869.775
HORIZONTAL DATUM	MGA	NORTHING	6869228.643	
VERTICAL DATUM	AHD	R.L.	1.252	

PROJECT: **EVIRON ROAD, EVIRON QUIRK'S QUARRY TO STOTTS LANDFILL HAUL ROAD**

PLAN TITLE: **SITE PLAN**

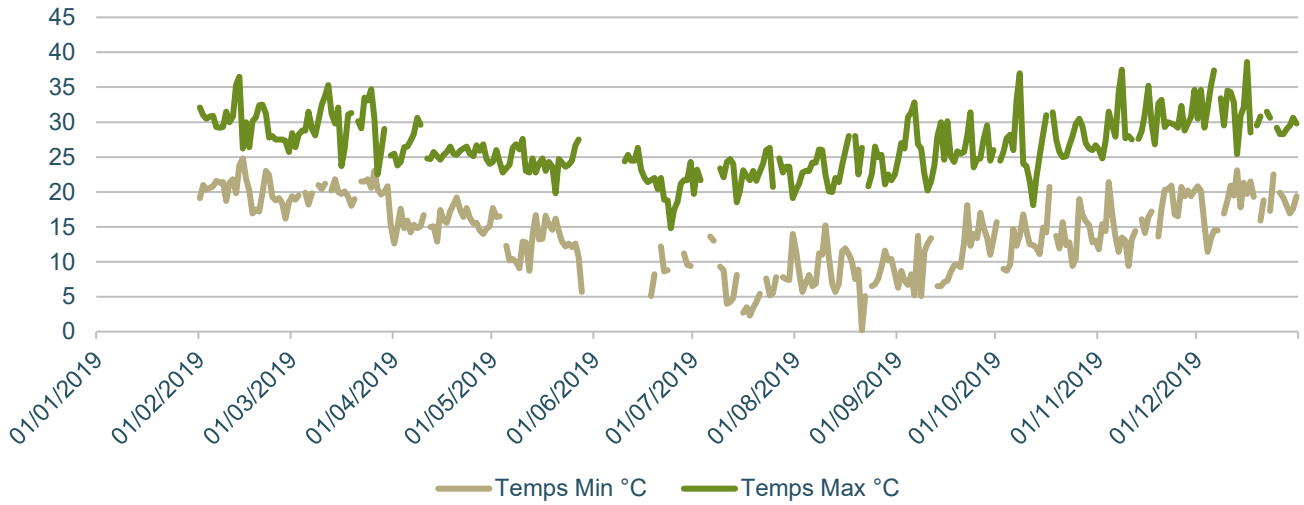
PROJECT NUMBER:	<b>INF7</b>
DRAWING NUMBER	<b>INF7-SK-10</b>
ISSUE	<b>A</b>

ACAD FILE No: G:\\_AAA DESIGN PROJECTS\INF7-STOTTS TO QUIRK'S HAUL ROAD\Drawings\ Misc Dwg\INF7-Overall Site Details.dwg



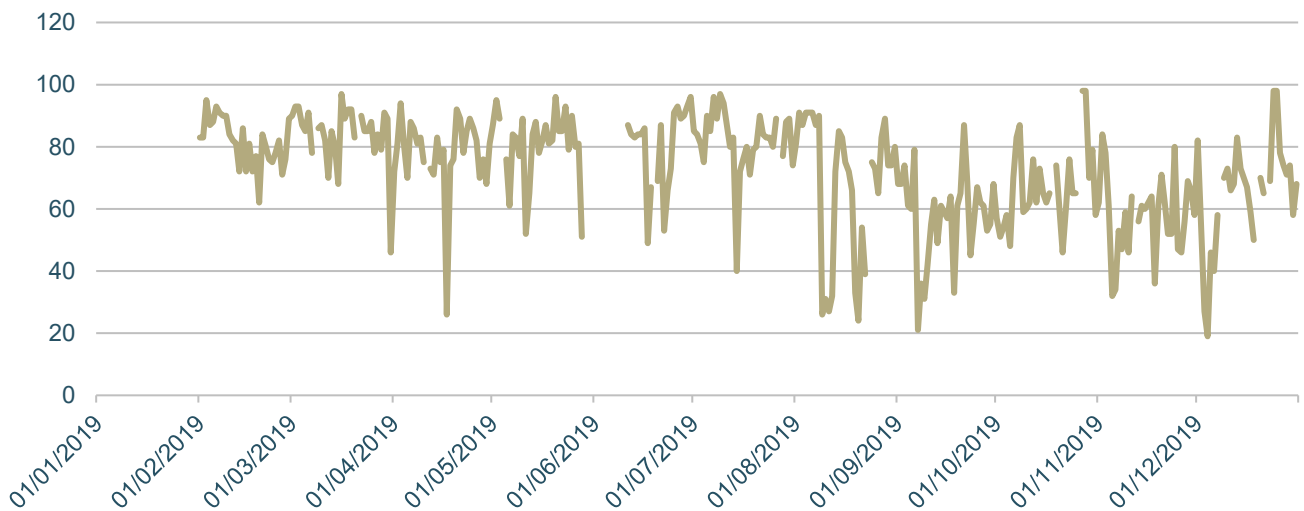
## Appendix B – 2019 Meteorological Data

### Daily Min and Max Temperature

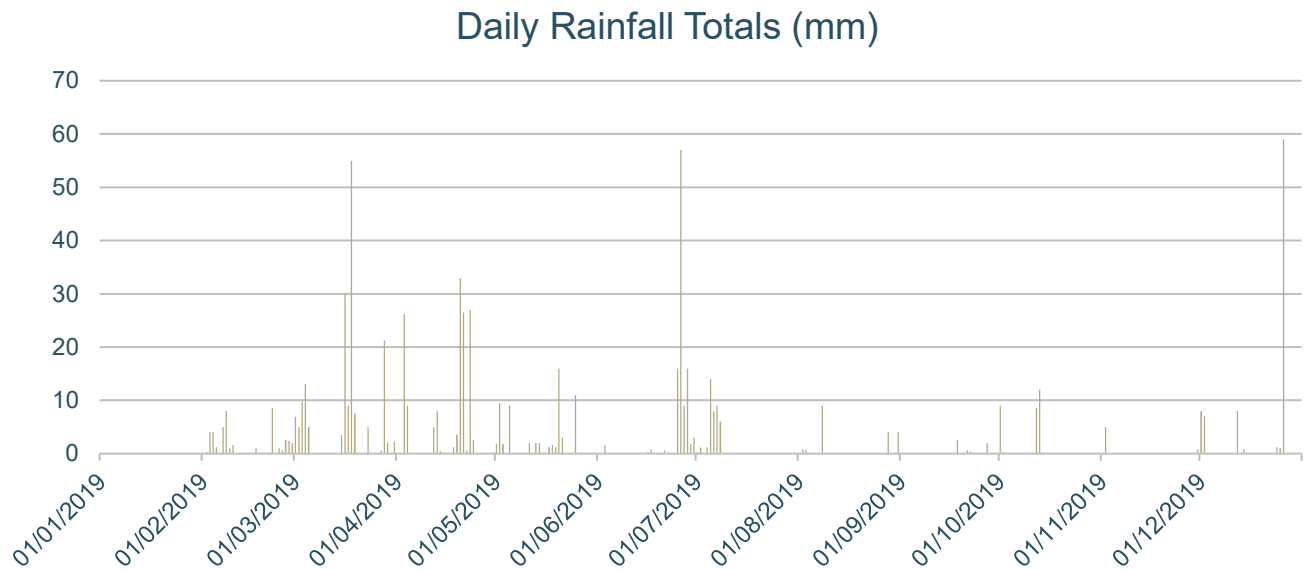


**Figure B.1 – Eviron daily maximum and minimum air temperatures from January 2019 to December 2019.**

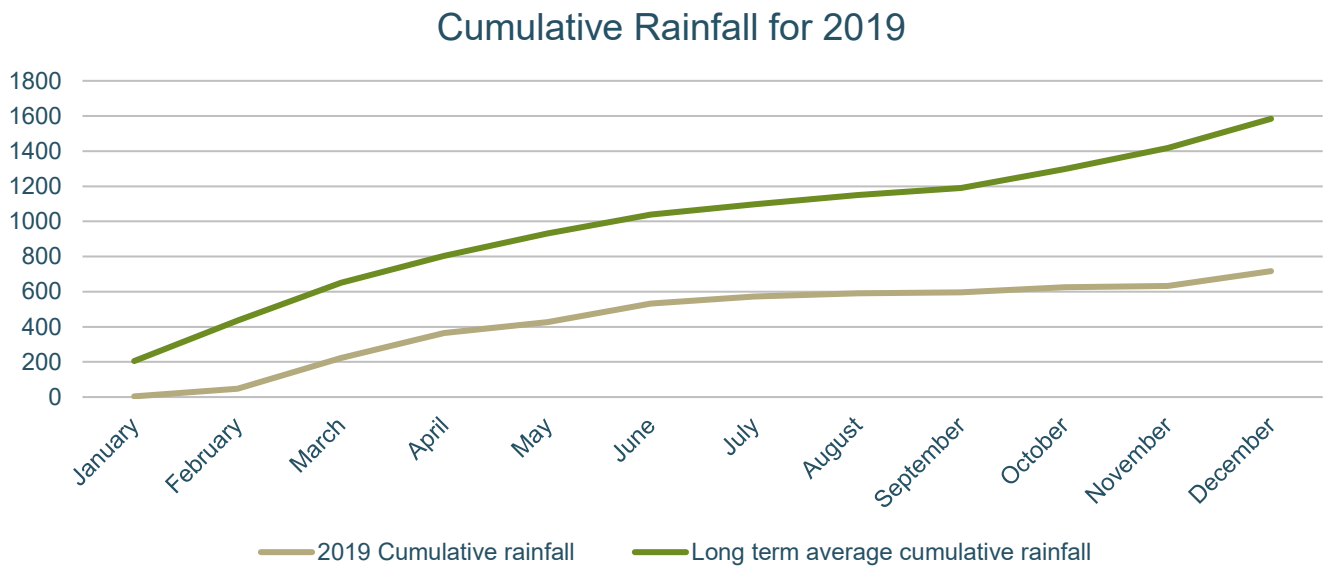
### Average Daily Humidity (%RH)



**Figure B.2 – Eviron average humidity readings from January 2019 to December 2019.**



**Figure B.3 – Eviron daily rainfall totals from January 2019 to December 2019.**



**Figure B.4 – Cumulative rainfall total for 2019 relative to the long-term average cumulative rainfall for the Murwillumbah weather station.**

## Appendix C – 2019 Restoration and Biodiversity Offset Annual Progress Report.



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**Report Year 1**

**February 2020**

**Tweed Shire Council Eviron Quarry Revegetation Maintenance**

Bushland Restoration Services (BRS) was contracted in January 2019 to undertake follow up weed control and restoration in two planted areas and adjoining vegetation at Eviron Quarry for a period of 24months.

**Work Program**

The work commenced in February 2019 following a site meeting and induction with Council officers and BRS manager and team leader. A total of 57.5 person days have been worked during Year 1. A total of approximately 65 days remain for Year 2.

The plantings were impacted by dense weeds and Camphor Laurel trees were established adjacent to the planting.

The following Table 1 is a schedule of days worked at the site in 2019 – 2020.

**Table 1 Days worked February 2019-2020**

Month	February 2019	April	May	July	September	October	November 2019	January 2020
Days Worked	19	7	3	3	4	5.5	6	10

Work commenced in February 2019 with hand working and clearing around planted native trees when practicable. This task was very time-consuming locating trees amongst overgrown weeds. The hand work to control weeds such as coastal morning glory and woody weeds by cut, scrape and paint was followed by a spray run to control all groundcover weeds. Weeds included tobacco bush, devils fig, groundsel bush, tobacco bush

and exotic grasses.

Adjacent to the plantings there was dense coastal morning glory requiring hand work prior to spray and camphor laurel requiring drill and inject. Weeds such as groundsel, giant devil’s fig and tall exotic grasses also present in adjacent areas.

Due to the density of groundcover and woody weeds in the two planting areas regular follow up weed control was required. The control of camphor laurel commenced in April.

The site required less days for follow up during the drier autumn and winter. The plantings improved in condition with the removal of impacting weeds and are increasing in height and density. Exotic grasses were controlled within and on edges of patches of kangaroo grass.

Large gaps remain within the plantings and infill planting could be undertaken.

During October annual groundcover weeds such as cotton bush, thistles, blackberry nightshade and exotic grasses were emerging and required control.

Follow up continued through to and including January 2020.

The whole of the site including the plantings and regeneration area has improved significantly in condition though weeds continue to persist. Fleabane could be showing signs of resistance to glyphosate as results have been limited.

Tracks leading to and within the site required regular slashing by Tweed Shire Council.

### **Recommendations Year 2**

- Continue regular follow up throughout the two plantings and adjacent areas worked in Year 1. Estimate 50 person days required in Year 2;
- Control groundsel and other invasive weeds in adjoining area;
- Consider infill plantings in large gaps; and
- Regular slashing of tracks by Tweed Shire Council to reduce seed source and ease of access to and within the site.



Photopoints February 2020



SRC T2 pp2



SRC T1 PP 2



SRC T1 PP1

## Appendix D – 2019 Nest Box Monitoring Report.

Nest box maintenance survey at Stotts Ck Resource  
Recovery Centre and Eviron. October 2019

**Tweed Shire Council Design Unit**

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## **Background**

Tweed Shire Council (TSC) has approval for the establishment of two quarries and landfill expansion at Eviron and Stotts Creek Resource Recovery Centre. Development of these sites involved and will involve clearing of hollow-bearing trees. For compensation of this habitat loss, two nest box management plans were written and 19 nest boxes were installed on TSC land on 29<sup>th</sup> July 2016 (Hannah 2016a; Hannah 2016b). The management plans stipulated that maintenance (follow-up) surveys need to occur at one, two and five years after installation. This is a report of the findings of the second follow-up survey.

## **Methods**

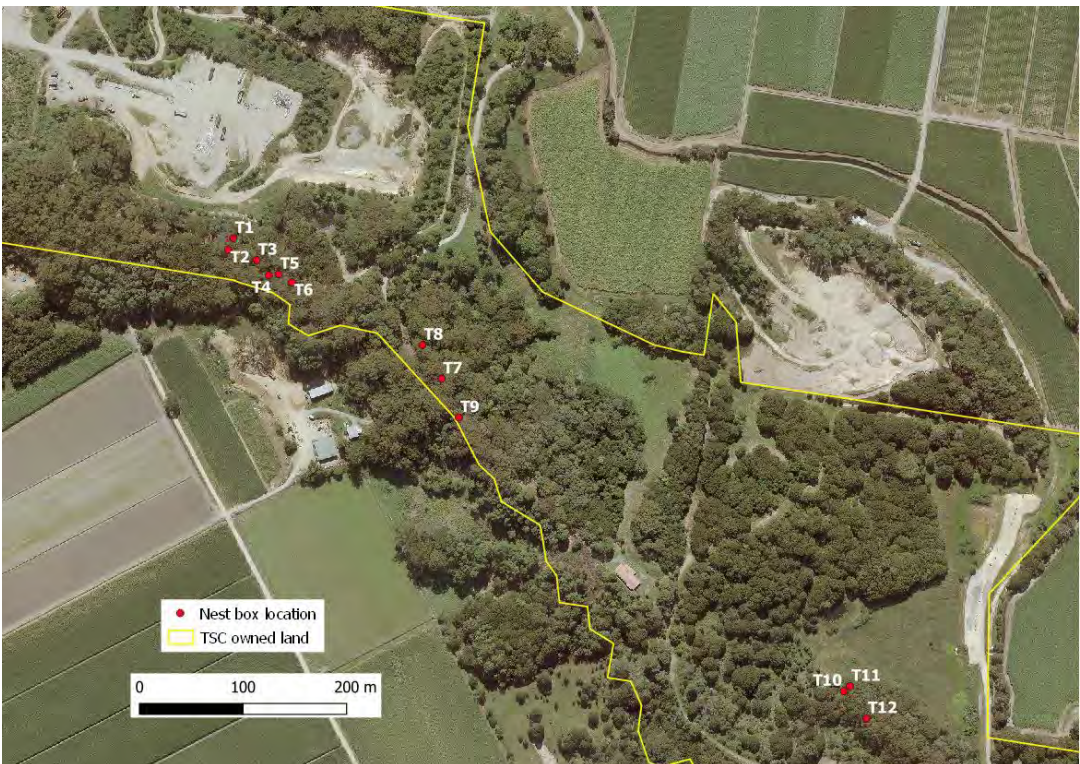
The contractor who installed the nest boxes – Ben Lewis – and an environmental scientist from TSC conducted a survey of all installed nest boxes on 29<sup>th</sup> October 2019. The contractor used a ladder to climb to a height and inspect outside and inside of all nest boxes with a headlamp. Occupancy within the nest boxes were recorded, nest box condition was noted and coordinates of nest boxes were retaken.

The location of trees bearing nest boxes is shown in Figure 1, Figure 2 and the details of nest boxes within trees is shown in Table 1.





**Figure 1.** Location of trees with nest boxes within the Stotts Creek Resource Recovery Centre and the Eviron site.



**Figure 2.** Location of trees with nest boxes within the Stotts Creek Resource Recovery Centre and the Eviron site. Tree labels are taken from Tree labels are taken from Hannah (2016a; 2016b).



**Table 1.** Location of trees with nest boxes within the Stotts Creek Resource Recovery Centre and the Eviron site. Tree labels are taken from Hannah (2016a; 2016b) and are shown in Figure 1 and 2. Eastings and northings are projected using Geocentric Datum of Australia 1994, zone 56. SCRRNBP = Stotts Creek Resource Recovery Centre nest box plan; ENBP = Eviron nest box plan.

Label	Easting	Northing	Box type	Tree species	Management Plan
T11	548705	6869827	Parrot	<i>Eucalyptus pilularis</i>	ENBP
T12	548700	6869816	Possum	<i>Eucalyptus pilularis</i>	ENBP
T7	548728	6869806	Bat/Owlet Nightjar	<i>Eucalyptus pilularis</i>	ENBP
T8	548739	6869791	Possum	<i>Eucalyptus pilularis</i>	ENBP
T9	548749	6869792	Bat	<i>Eucalyptus pilularis</i>	ENBP
T10	548762	6869784	Small Owl	<i>Eucalyptus pilularis</i>	ENBP
T5	548906	6869691	Bat & Parrot	<i>Corymbia intermedia</i>	SCRRNBP
T6	548888	6869724	Bat & Parrot	<i>Eucalyptus pilularis</i>	SCRRNBP
T4	548923	6869654	Bat & Parrot	<i>Lophostemon confertus</i>	SCRRNBP
T1	549294	6869390	Bat & glider	<i>Eucalyptus pilularis</i>	SCRRNBP
T2	549300	6869395	Bat & glider	<i>Eucalyptus pilularis</i>	SCRRNBP
T3	549316	6869364	Bat & glider	<i>Eucalyptus pilularis</i>	SCRRNBP

## Results

The occupancy status of each nest box is shown in Table 2. Overall, most nest boxes showed sign of occupancy, with sugar gliders (*Petaurus breviceps*) and their nests being the most common form of occupancy (67% of boxes with signs of occupancy). Other vertebrate species occupying boxes were feathertail glider (*Acrobates pygmaeus*) and short-eared mountain possums (*Trichosurus caninus*). Bat boxes often showed no sign of occupancy by a mammal. Currently occupied boxes or freshly occupied boxes comprised 32% of all boxes.

Box condition was good, with all boxes accounted for and there was no sign of damage. However, there was some sign of minor disintegration of the wire coating on some boxes.

**Table 2.** Occupancy status of nest boxes. Fresh = leaves picked less than two weeks ago; Recent = leaves picked two to six weeks ago; Old = leaves picked greater than six weeks ago.

<b>Tree label</b>	<b>Box type</b>	<b>Occupancy status</b>
T1	Bat	No sign of mammal occupancy.
T1	Glider	Fresh sugar glider nest.
T2	Bat	No sign of mammal occupancy.
T2	Glider	Black and gold ants.
T3	Bat	No sign of mammal occupancy.
T3	Glider	Fresh sugar glider nest.
T4	Bat	No sign of mammal occupancy.
T5	Bat	Old feathertail glider nest and black and gold ants.
T5	Parrot	Old sugar glider nest.
T6	Bat	No sign of mammal occupancy.
T6	Parrot	Two sugar gliders flushed from box when observers approached within six metres of tree.
T7	Bat	Old feathertail glider nest.
T7	Owlet nightjar	Recent short-eared mountain possum nest.
T8	Possum	Fresh sugar glider nest.
T9	Bat	No sign of mammal occupancy. Spider inside.
T10	Small owl	Old sugar glider nest.
T11	Parrot	One sugar glider inside.
T12	Possum	Recent short-eared mountain possum nest.



**Plate 1.** A sugar glider occupying a nest box.



**Plate 2.** Bat box occupied by black and gold ants.

## **Discussion**

As per the Stotts Creek Resource Recovery Centre nest box plan and the Eviron nest box plan, the second (out of three) maintenance check took place on 29<sup>th</sup> October 2019. Overall, 32% of boxes could be considered currently occupied, with feathertail glider, sugar glider, short-eared mountain possum and ants using the boxes. Only two out of seven bat boxes showed any sign of mammal occupation.

It is expected that boxes made out of CYPLAS ( $n = 10$ ) have greater longevity than boxes made of hardwood ( $n = 9$ ). While the physical condition for all boxes was good, it is likely that some boxes may need replacing during the 5-year maintenance survey. If replacement is needed, it is recommended that replacement boxes be made from CYPLAS or alternatively, create carved hollows by engaging the services of an organisation such as Habi-Tec. Considering that installation took place in mid-2016, the next and final check should take place in mid-2021.

## **References**

Hannah, D. (2016a). Eviron Road quarry and landfill nest box plan. Tweed Shire Council, Murwillumbah, NSW.

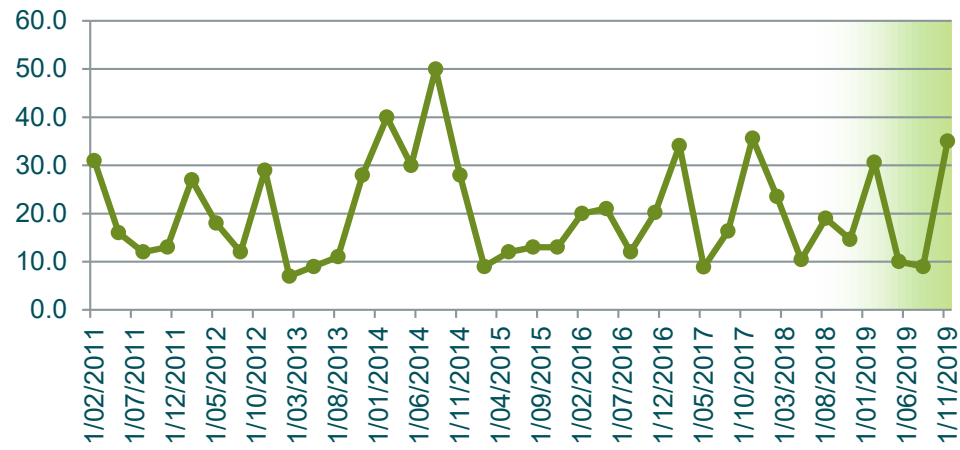
Hannah, D. (2016b). Stotts Creek Resource Recovery Centre cell expansion - nest box plan. Tweed Shire Council, Murwillumbah, NSW.



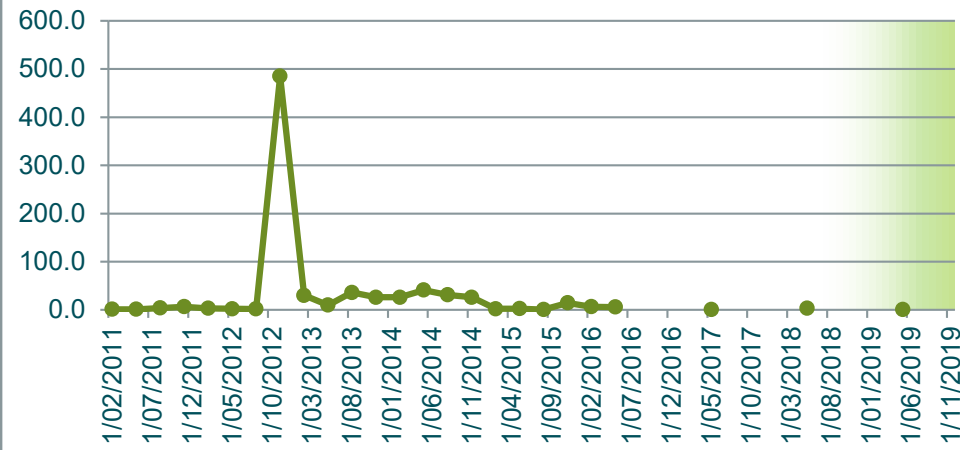
## Appendix E – Water Quality Monitoring Data



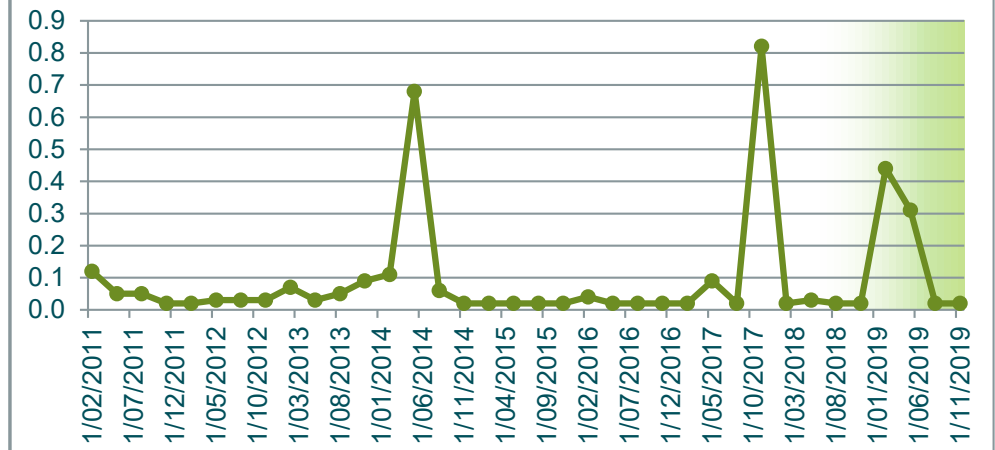
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mg/L as CaCO<sub>3</sub>



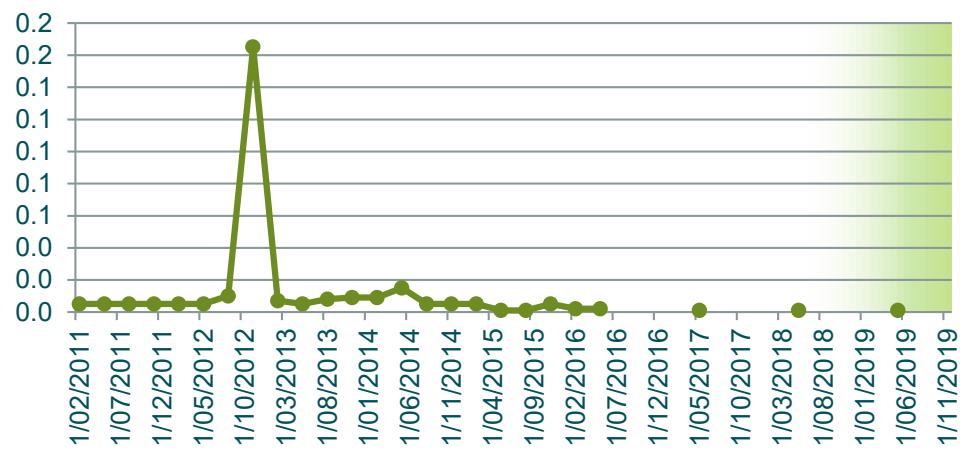
**Aluminium (Total)**  
mg/L



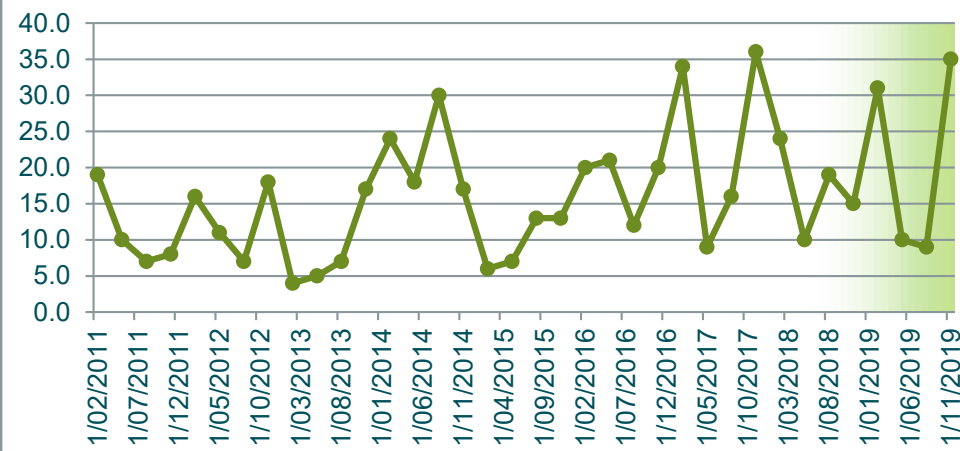
**Ammonia**  
mg/L



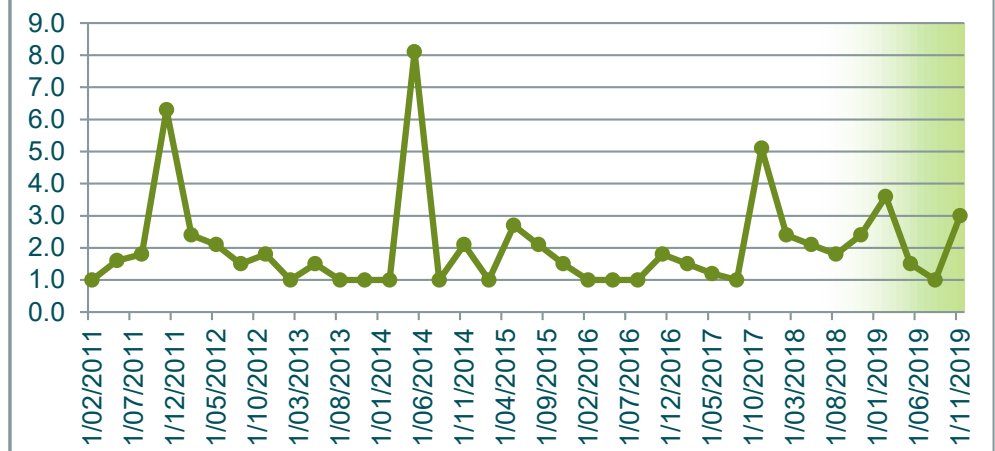
**Arsenic (Total)**  
mg/L



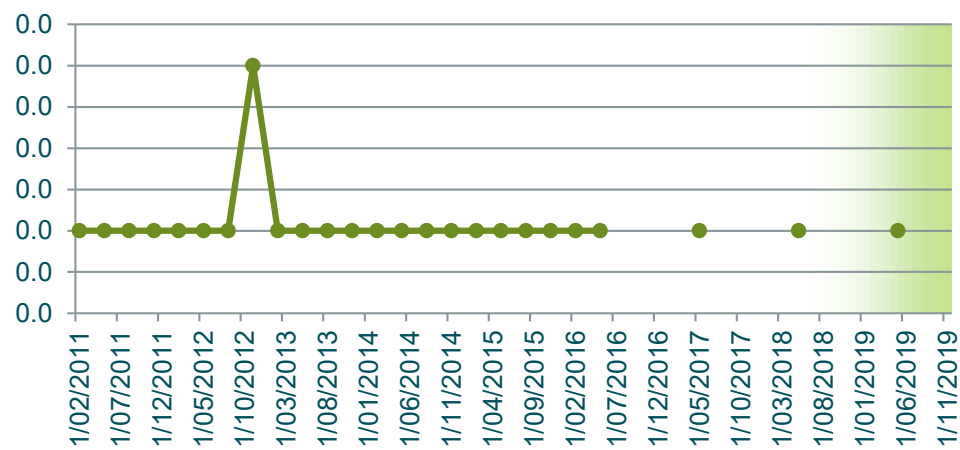
**Bicarbonate HCO<sub>3</sub>**  
mg/L



**BOD<sub>5</sub>**  
mg/L



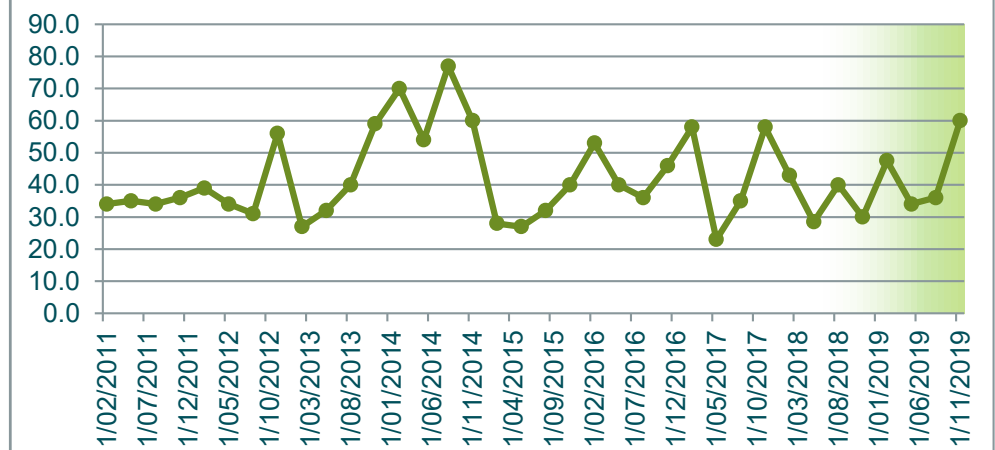
**Cadmium (Total)**  
mg/L



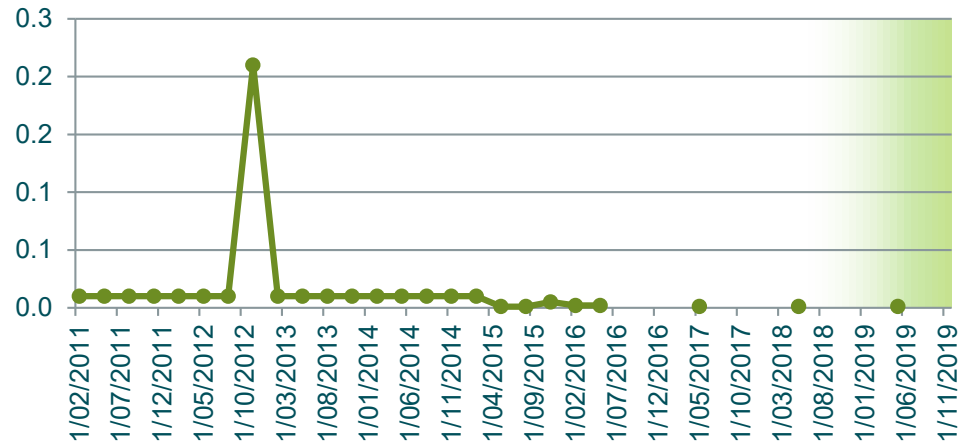
**Calcium (Total)**  
mg/L



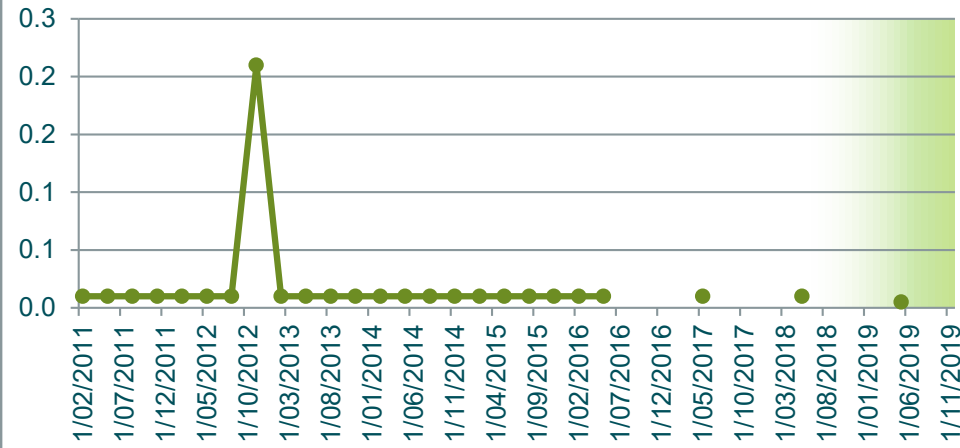
**Chloride**  
mg/L



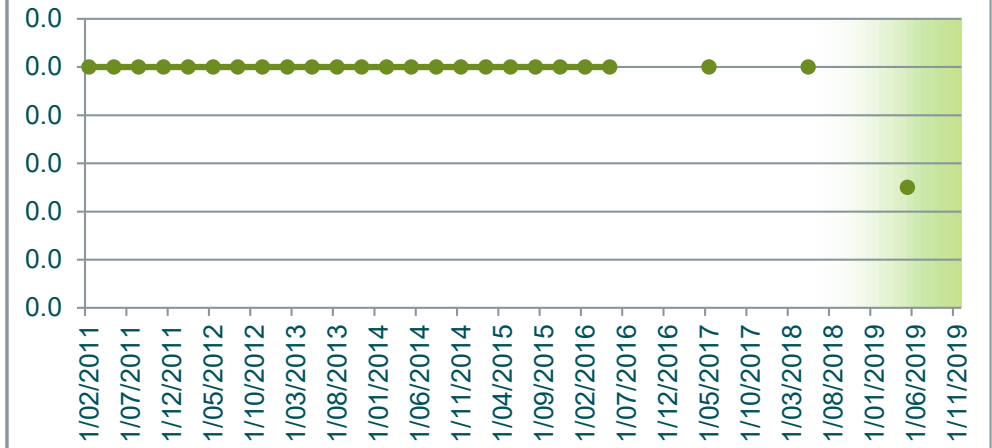
**Chromium (Total)  
mg/L**



**Chromium 3  
mg/L**



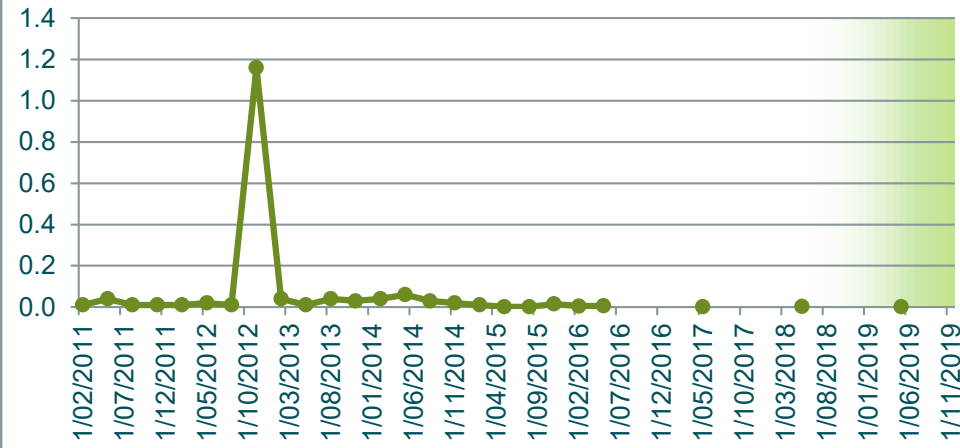
**Chromium 6  
mg/L**



**Conductivity  
µScm-1**



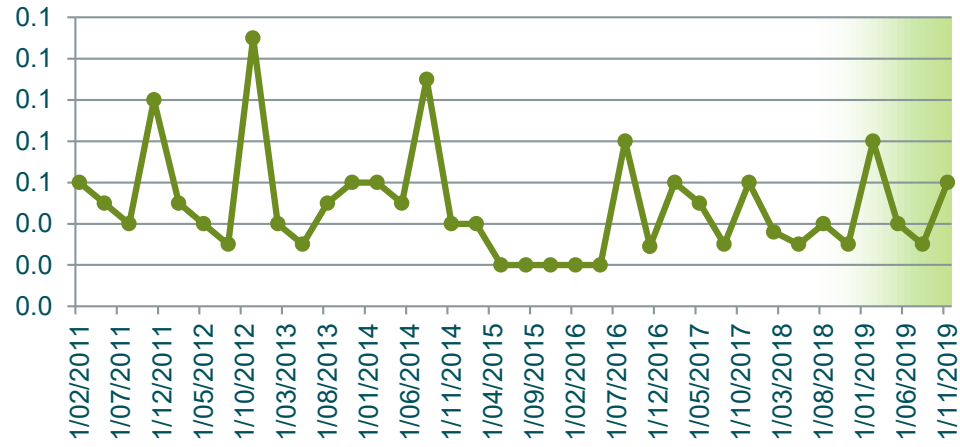
**Copper (Total)  
mg/L**



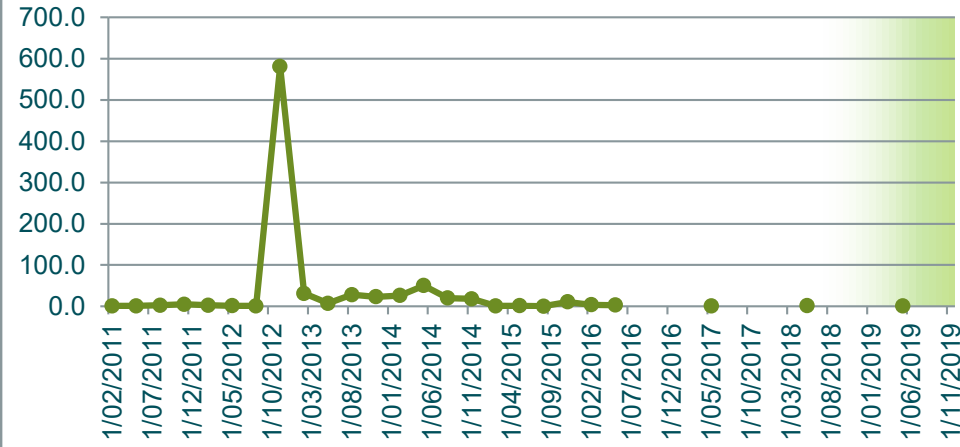
**DO (Membrane Electrode)  
mg/L**



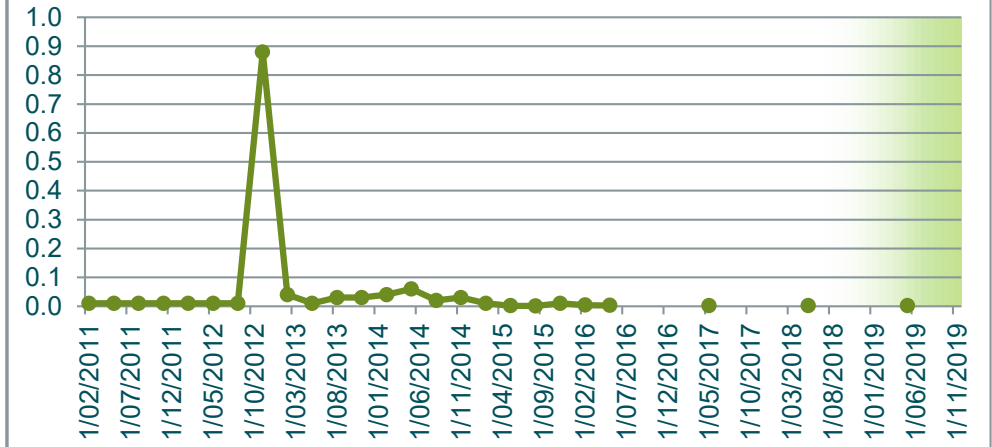
**Flouride  
mg/L**



**Iron Total  
mg/L**

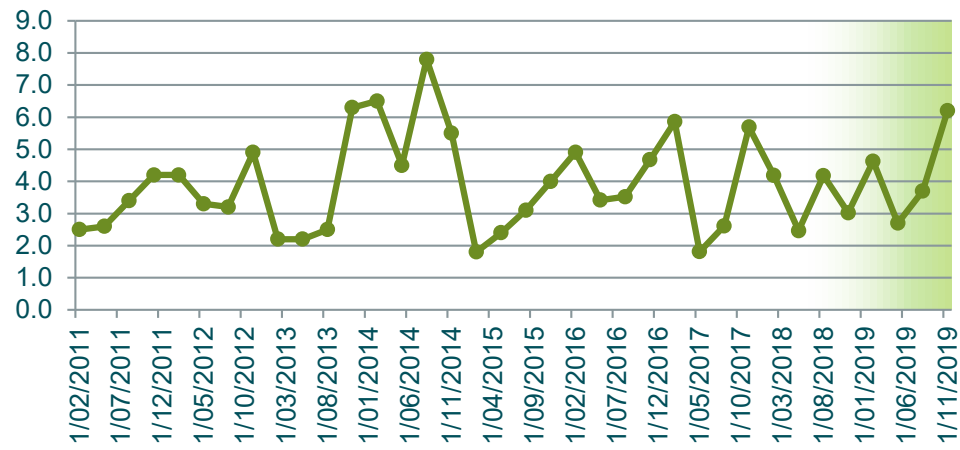


**Lead (Total)  
mg/L**

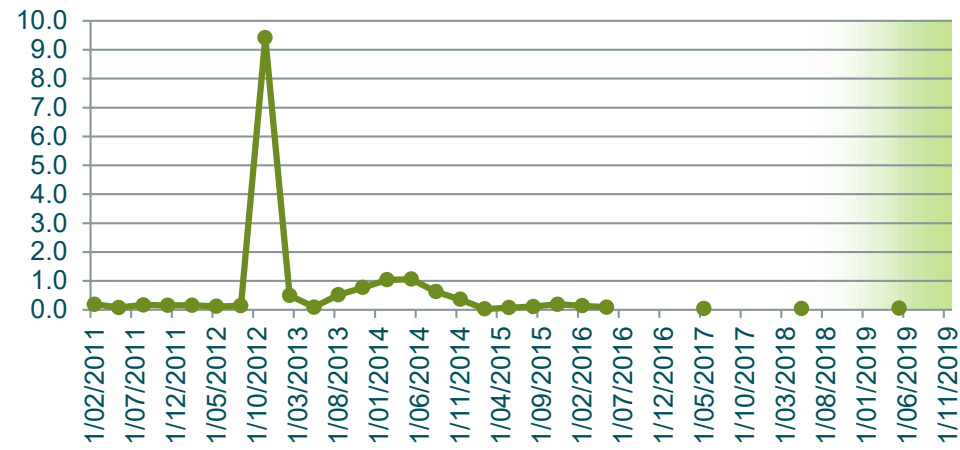




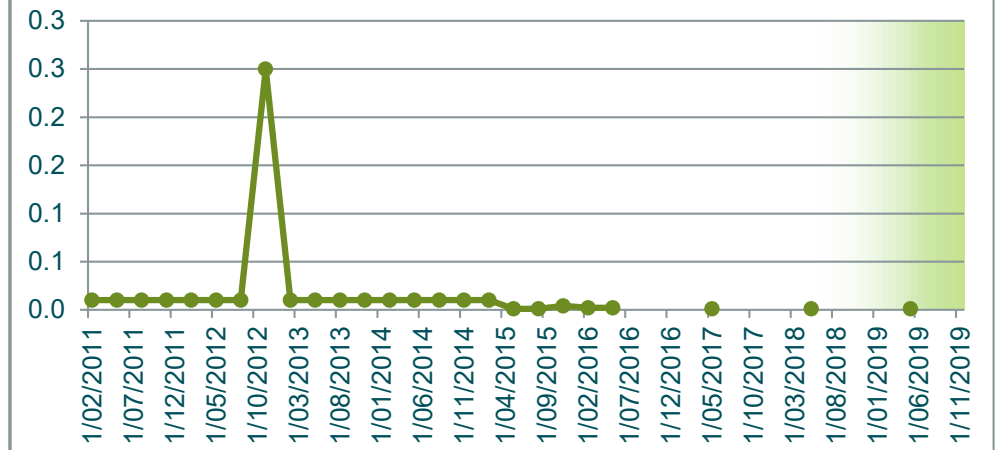
### Magnesium (Total) mg/L



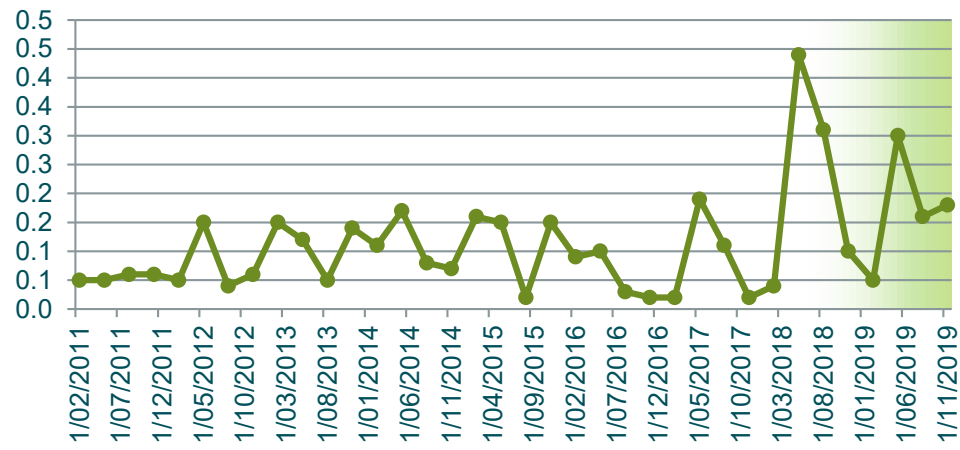
### Manganese Total mg/L



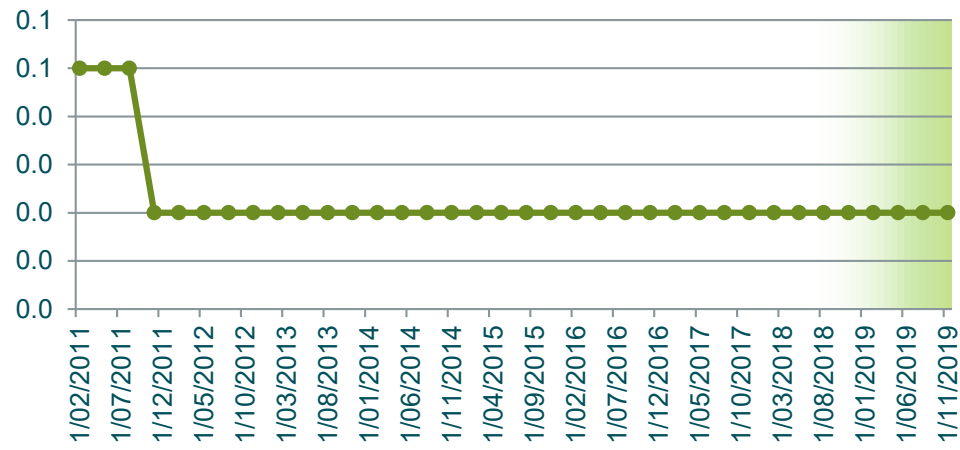
### Nickel (Total) mg/L



### Nitrate N mg/L



### Nitrite N mg/L



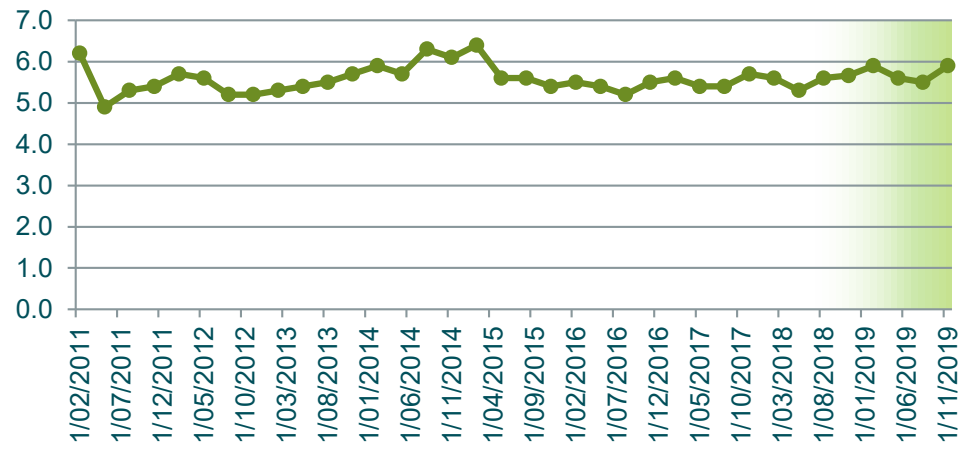
### Nitrogen Oxidised mg/L



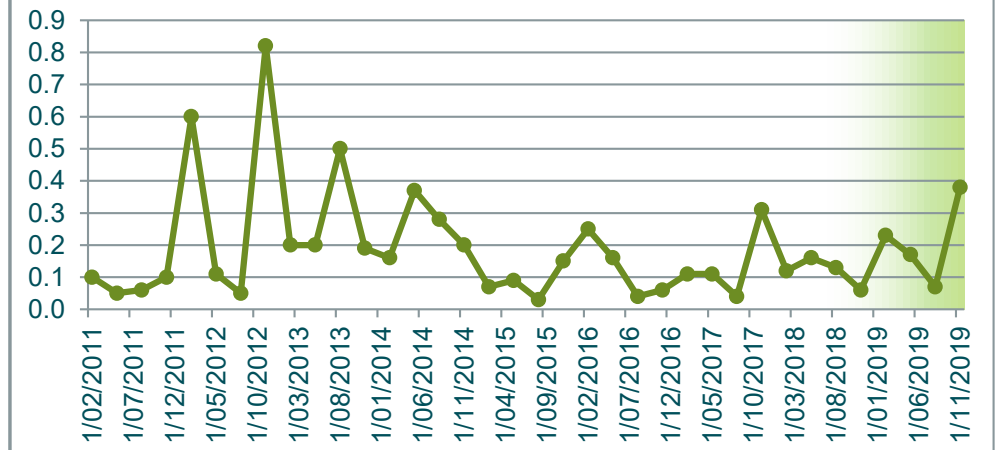
### Nitrogen Total mg/L



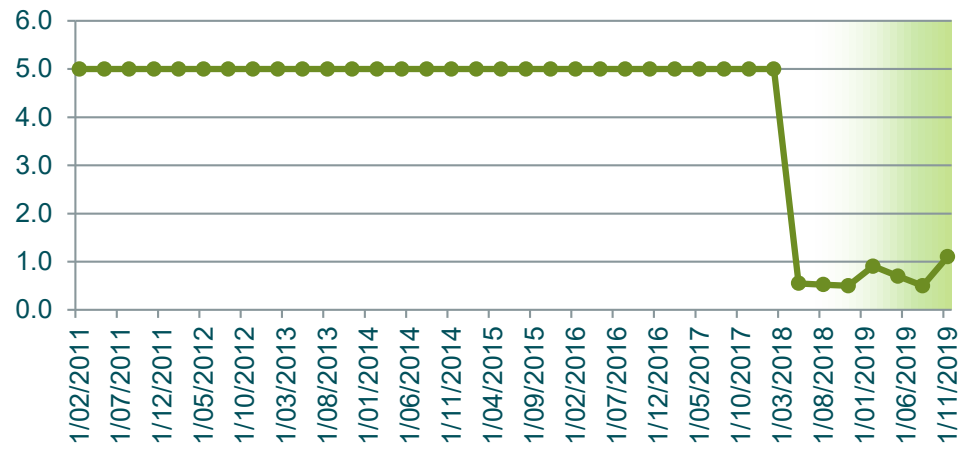
### pH pH units



### Phosphorus Total mg/L



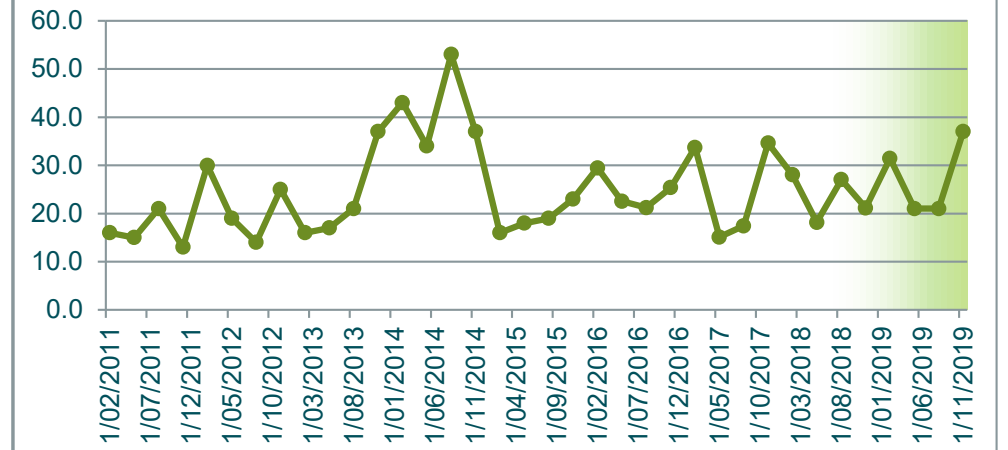
**Potassium Total  
mg/L**



**Redox Potential  
mV**



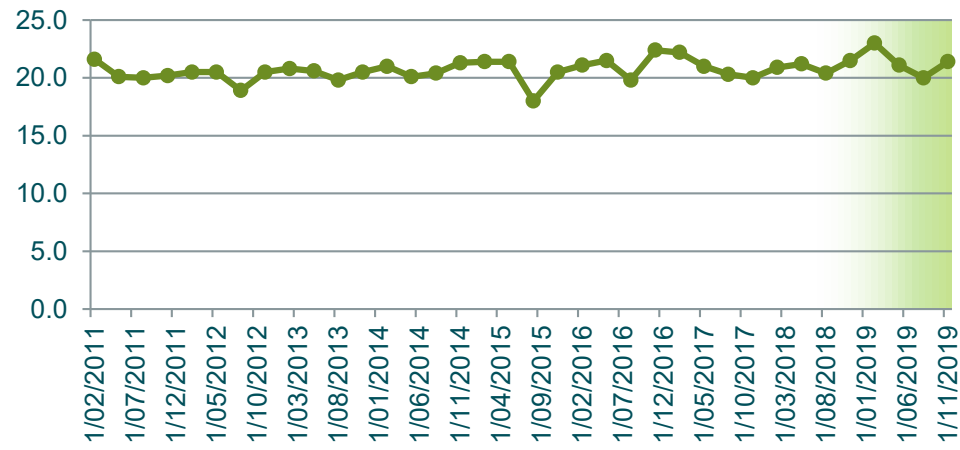
**Sodium (Total)  
mg/L**



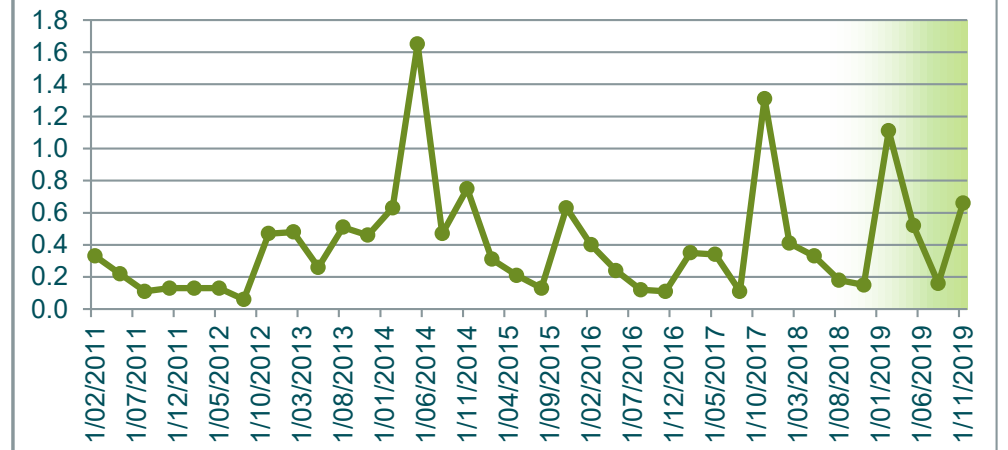
**Sulphate  
mg/L**



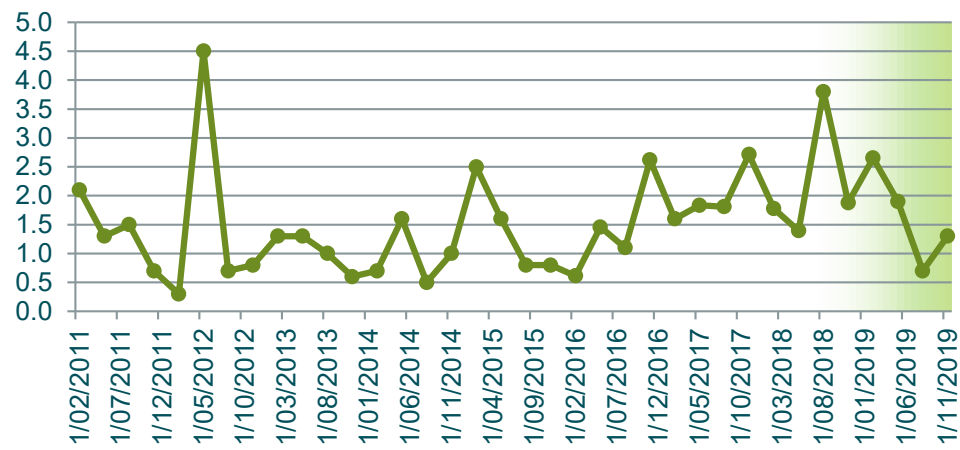
**Temperature  
C**



**TKN  
mg/L**



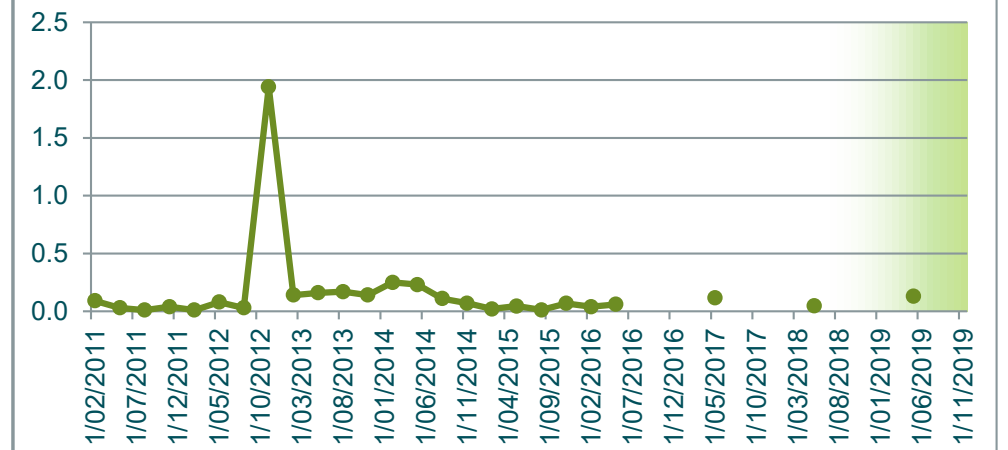
**TOC  
mg/L**



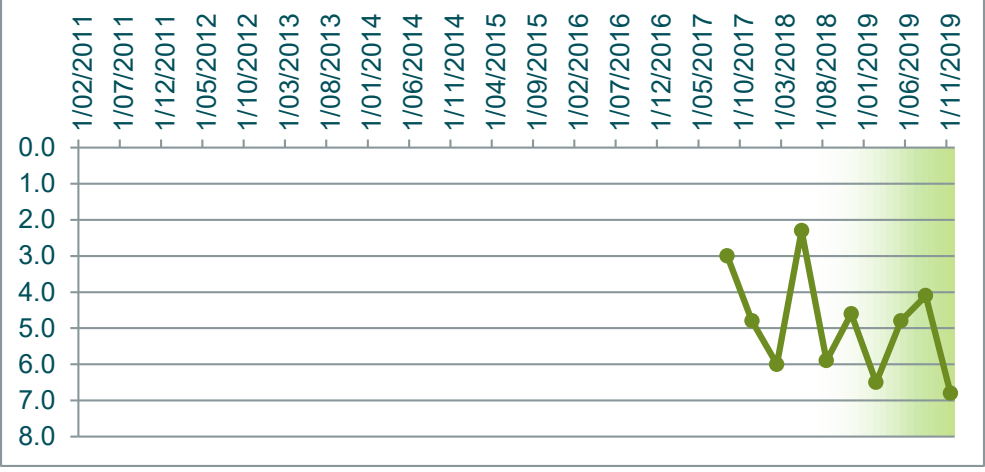
**Total Acidity  
mg/L CaCO3**



**Zinc (Total)  
mg/L**



# Depth to Groundwater m



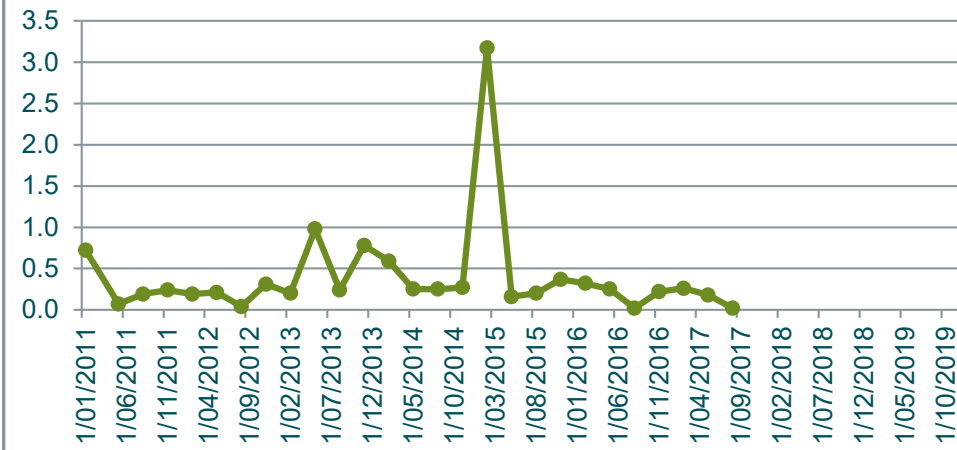
GW2	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µS/cm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride 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	TOC mg/L	TKN mg/L	Temperature C	Zinc (Total) mg/L	Depth to Groundwater m					
31/01/2011	400	32.0	0.7	0.0	244	8.0	0.0	156	560	0.0	0.0	0.0	3141	0.0	1.8	0.5	55.0	0.0	155	4.2	0.0	0.1	0.1	0.1	1.5	6.9		0.5	18.0	-120	376	709	22.3	1.5	9.8	40	0.2					
10/05/2011	360	15.0	0.1	0.0	220	10.0	0.0	125	437	0.0	0.0	0.0	2671	0.1	2.9	0.5	34.0	0.0	130	4.2	0.0	0.4	0.1	0.4	1.1	7.0		0.4	21.0	177	331	536	20.7	0.8	6.2	35	0.1					
9/08/2011	494	33.0	0.2	0.0	300	8.4	0.0	144	650	0.0	0.0	0.0	3410	0.0	1.4	0.5	49.0	0.0	136	3.8	0.0	0.3	0.1	0.3	1.0	7.0		0.7	15.0	158	405	622	19.3	0.7	5.4	54	0.1					
8/11/2011	480	65.0	0.2	0.0	293	8.1	0.0	198	705	0.1	0.1	0.0	3842	0.1	1.6	0.6	93.0	0.0	209	5.3	0.0	0.1	0.0	0.1	0.8	6.9		0.8	85.0	-14	426	800	20.5	0.7	4.6	71	0.2					
6/02/2012	426	54.0	0.2	0.1	260	11.0	0.0	160	715	0.0	0.0	0.0	3100	0.0	1.8	0.4	82.0	0.0	145	3.7	0.0	0.4	0.0	0.4	1.2	6.9		0.6	17.0	141	520	770	22.1	0.8	4.6	62	0.4					
8/05/2012	454	0.0	0.2	0.0	277	1.8	0.0	139	460	0.0	0.0	0.0	3225	0.0	3.8	0.6	0.0	0.0	144	0.0	0.0	0.2	0.0	0.2	0.8	6.7		0.3	19.0	209	375	560	21.4	0.6	5.9	46	0.0					
6/08/2012	455	9.7	0.0	0.0	278	1.2	0.0	135	530	0.0	0.0	0.0	3510	0.0	2.8	0.5	18.0	0.0	127	3.1	0.0	0.1	0.0	0.1	0.6	6.9		0.5	18.0	-22	336	559	19.7	0.5	5.4	36	0.1					
13/11/2012	470	19.0	0.3	0.0	287	2.7	0.0	140	600	0.0	0.0	0.0	3750	0.0	4.4	0.4	27.0	0.0	142	3.0	0.0	0.2	0.0	0.2	0.9	7.1		0.4	16.0	-47	384	529	21.1	0.7	4.0	54	0.1					
13/02/2013	474	22.0	0.2	0.0	289	1.0	0.0	144	550	0.0	0.0	0.0	3500	0.0	1.6	0.4	41.0	0.0	138	4.0	0.0	0.1	0.0	0.1	1.1	6.9		0.6	18.0	93	384	717	22.6	1.0	5.0	64	0.6					
14/05/2013	484	23.0	1.0	0.0	295	7.2	0.0	144	620	0.0	0.0	0.0	3510	0.0	1.9	0.5	29.0	0.0	127	2.7	0.0	0.2	0.0	0.2	1.9	7.0		1.0	15.0	-113	412	531	21.2	1.6	7.1	132	0.2					
6/08/2013	514	35.0	0.2	0.0	314	8.7	0.0	150	580	0.0	0.0	0.0	3400	0.0	2.8	0.5	50.0	0.0	138	3.5	0.0	0.1	0.0	0.1	1.2	7.0		1.0	16.0	-6	412	648	20.3	1.1	5.1	109	0.3					
12/11/2013	535	44.0	0.8	0.0	326	9.9	0.0	168	655	0.0	0.0	0.0	3858	0.0	2.2	0.5	49.0	0.0	156	3.9	0.0	0.1	0.0	0.1	1.6	6.8		0.8	18.0	-103	480	638	20.4	1.4	5.4	28	0.4					
11/02/2014	537	32.0	0.6	0.0	328	8.1	0.0	170	740	0.0	0.0	0.0	4052	0.0	2.6	0.4	44.0	0.0	156	3.4	0.0	0.2	0.0	0.2	1.6	6.9		0.0	17.0	-92	493	625	21.3	1.4	7.1	148	0.3					
13/05/2014	420	20.0	0.3	0.0	256	2.1	0.0	158	635	0.0	0.0	0.0	3790	0.0	3.1	0.5	28.0	0.0	147	3.6	0.0	0.2	0.0	0.2	1.2	7.0		0.1	17.0	-61	432	848	21.2	1.0	4.7	62	0.1					
12/08/2014	461	44.0	0.3	0.0	281	4.8	0.0	173	720	0.0	0.0	0.0	4080	0.0	3.2	0.5	76.0	0.0	159	4.1	0.0	0.2	0.0	0.2	1.3	7.1		0.6	16.0	-63	491	653	20.0	1.1	5.1	96	0.3					
10/11/2014	495	26.0	0.3	0.0	302	3.6	0.0	180	890	0.0	0.0	0.0	4520	0.0	2.8	0.4	38.0	0.0	170	3.1	0.0	0.1	0.0	0.1	1.4	7.0		0.7	17.0	-64	563	754	20.1	1.3	43.0	171	0.2					
9/02/2015	503	35.1	3.2	0.0	307	21.0	0.0	159	820	0.0	0.0	0.0	4360	0.0	1.6	0.5	48.1	0.0	155	3.5	0.0	0.1	0.0	0.1	5.8	7.0		0.7	16.0	-100	504	704	21.6	5.7	8.1	94	0.2					
11/05/2015	443	28.8	0.2	0.0	270	4.2	0.0	156	610	0.0	0.0	0.0	3590	0.0	4.0	0.5	45.6	0.0	148	4.1	0.0	0.2	0.0	0.2	1.3	7.1		0.6	16.0	-62	431	645	21.1	1.1	5.1	58	0.3					
11/08/2015	481	31.4	0.2	0.0	481	10.0	0.0	178	780	0.0	0.0	0.0	4140	0.0	3.6	0.5	45.3	0.0	164	3.2	0.0	0.1	0.0	0.1	1.1	7.1		0.7	16.0	-37	520	617	20.2	1.0	3.7	73	0.3					
10/11/2015	487	19.1	0.4	0.0	487	5.7	0.0	173	770	0.0	0.0	0.0	4020	0.0	1.5	0.5	37.0	0.0	161	3.8	0.0	0.0	0.0	0.0	1.2	7.0		0.7	16.0	-73	481	628	20.2	1.2	4.4	71	0.0					
8/02/2016	500	49.1	0.3	0.0	500	6.0	0.0	167	750	0.0	0.1	0.0	4000	0.0	2.5	0.5	86.2	0.0	155	4.4	0.0	0.0	0.0	0.0	1.2	7.0		0.7	16.0	-68	473	622	21.4	1.2	4.5	100	0.6					
9/05/2016	480	21.5	0.3	0.0	480	4.8	0.0	168	805	0.0	0.0	0.0	4190	0.0	2.3	0.5	38.2	0.0	151	3.3	0.0	0.0	0.0	0.0	1.0	6.9		0.6	15.9	-61	502	566	21.4	1.0	4.3	99	0.3					
9/08/2016	464		0.0		464	2.1		155	650				3744		3.7	0.5			143			0.1	0.0	0.1	0.8	7.0		0.2	15.7	28	437	599	19.9	0.7	3.8	106						
7/11/2016	507		0.2		507	4.2		192	965				4565		2.2	0.4			173			0.0	0.0	0.0	1.0	6.8		0.9	17.3	50	604	642	20.6	1.0	4.4	84						
7/02/2017	519		0.3		519	3.3		184	930				4624		2.0	0.4			171			0.0	0.1	0.0	1.0	6.8		0.5	16.8	12	553	648	21.6	1.0	4.3	136						
8/05/2017	474	19.5	0.2	0.0	474	1.8	0.0	174	930	0.0	0.0	0.0	4532	0.0	3.2	0.5	28.3	0.0	160	3.5	0.0	0.1	0.0	0.1	0.9	6.9		0.4	16.5	-30	511	723	21.2	0.8	4.1	74	0.2					
8/08/2017	456		0.0		456	2.1		169	1025				4255		4.3	0.4			150			0.2	0.0	0.2	0.7	7.0		0.1	15.8	290	491	578	19.5	0.5	3.4	61		1.4				
7/11/2017																																										
13/02/2018																																										
8/05/2018																																										
14/08/2018																																										
13/11/2018																																										
12/02/2019																																										
14/05/2019																																										
13/08/2019																																										
12/11/2019																																										
2019 Min																																										
2019 Max																																										
2019 Mean																																										
Long-term Average	473	29.5	0.4	0.0	352	6.0	0.0	161	707	0.0	0.0	0.0	3829	0.0	2.7	0.5	45.3	0.0	152	3.5	0.0	0.1	0.0	0.1	1.3	7.0		0.6	19.3	1	456	647	20.8	1.2	6.6	80	0.2	1.4				



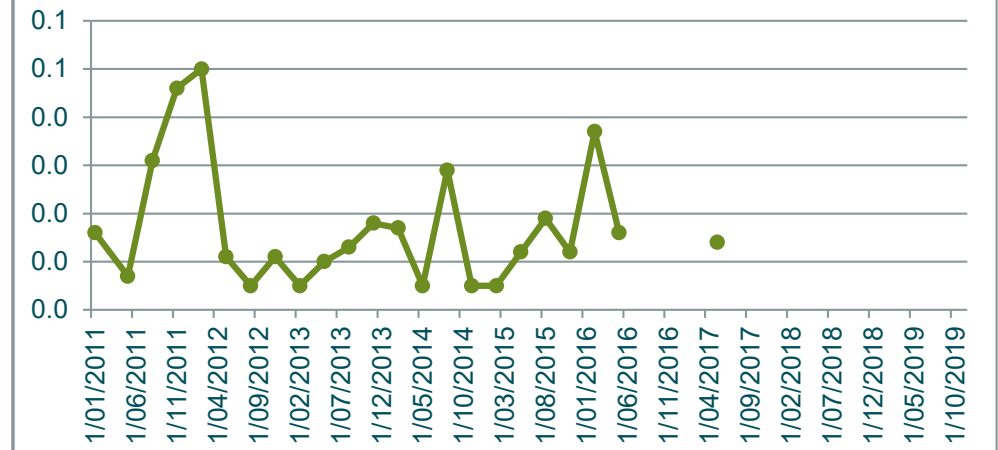
**Aluminium (Total)  
mg/L**



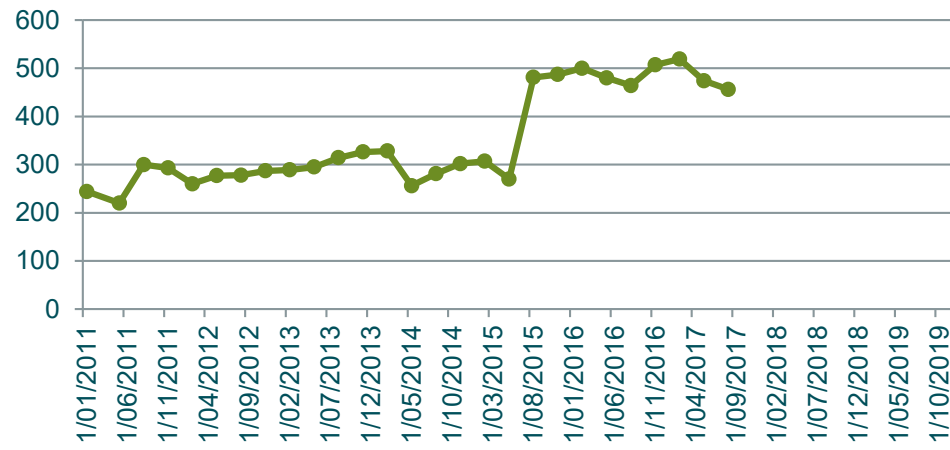
**Ammonia  
mg/L**



**Arsenic (Total)  
mg/L**



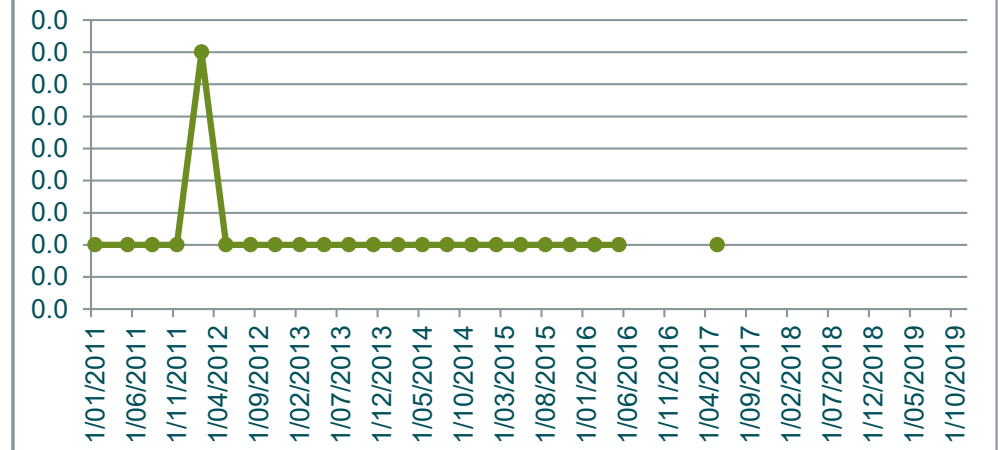
**Bicarbonate HCO3  
mg/L**



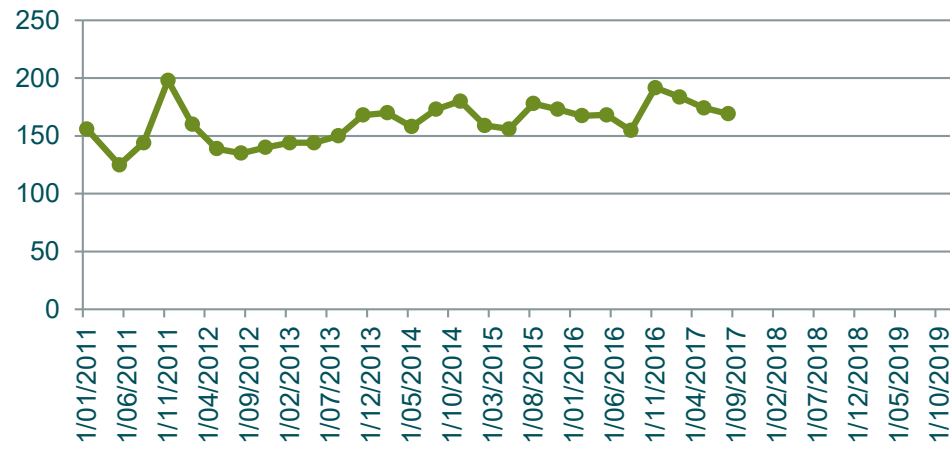
**BOD5  
mg/L**



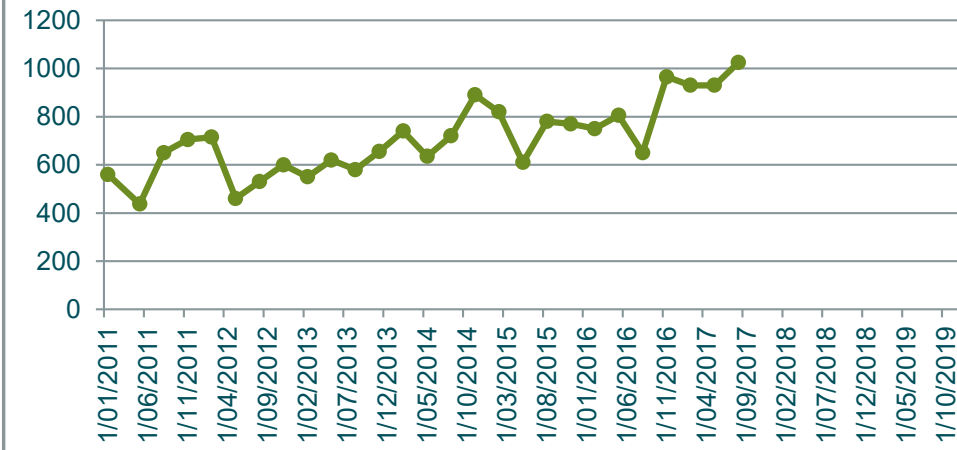
**Cadmium (Total)  
mg/L**



**Calcium (Total)  
mg/L**



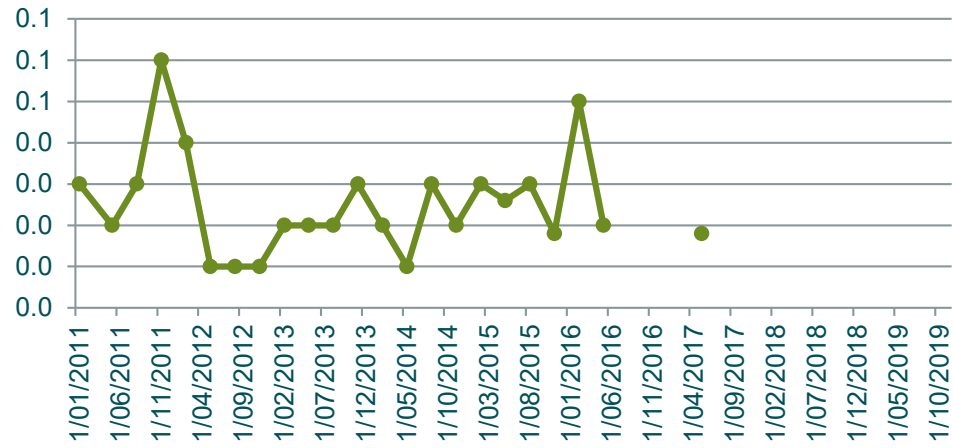
**Chloride  
mg/L**



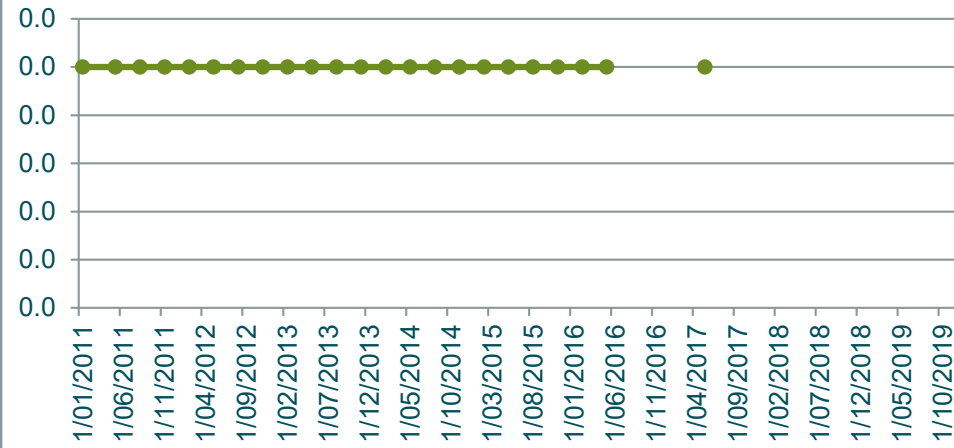
**Chromium (Total)  
mg/L**



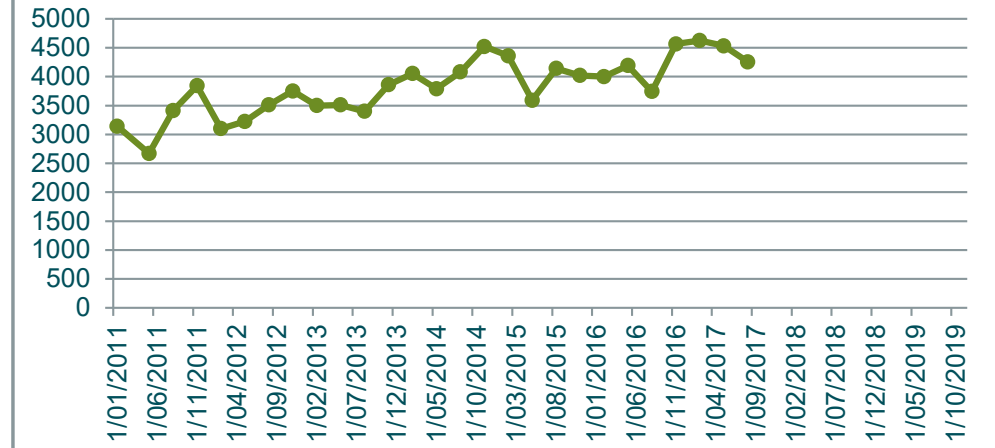
### Chromium 3 mg/L



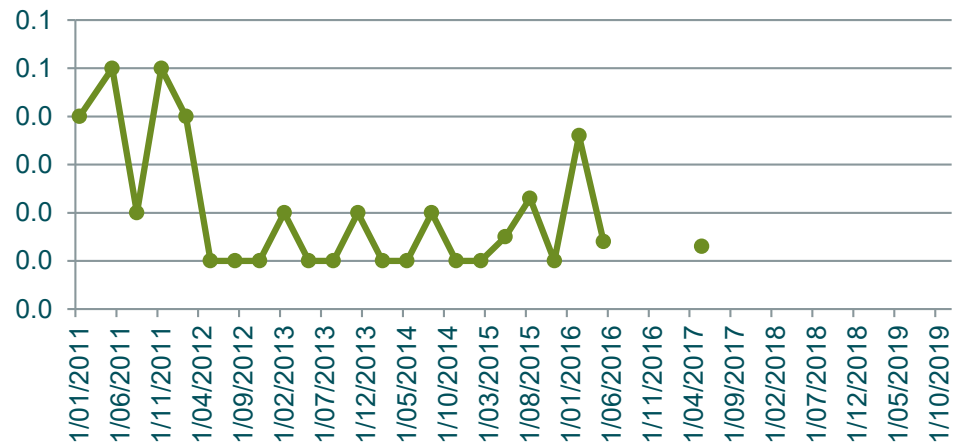
### Chromium 6 mg/L



### Conductivity µScm-1



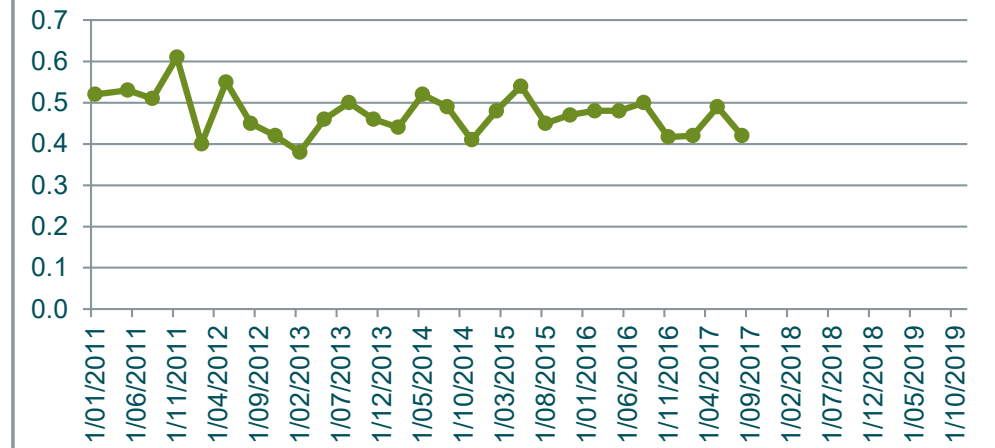
### Copper (Total) mg/L



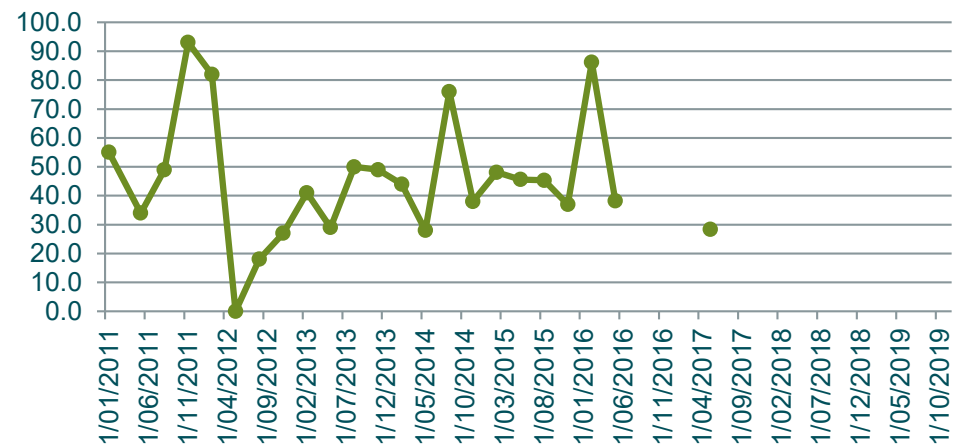
### DO (Membrane Electrode) mg/L



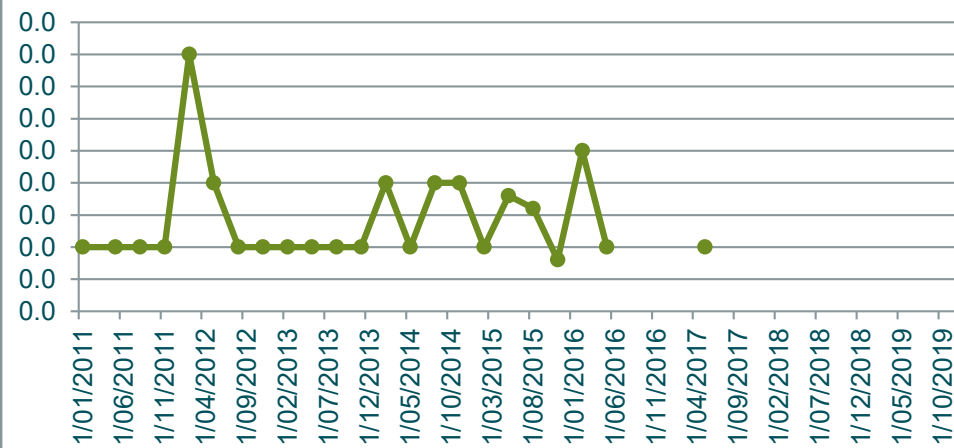
### Flouride mg/L



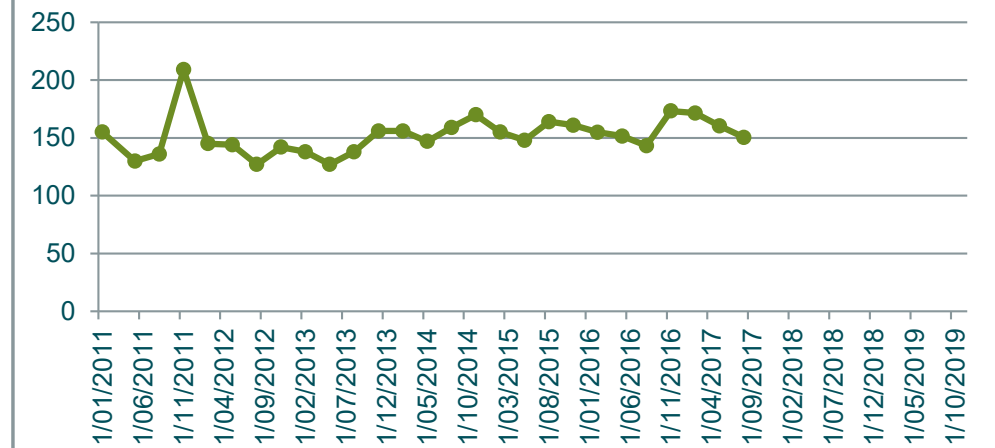
### Iron Total mg/L



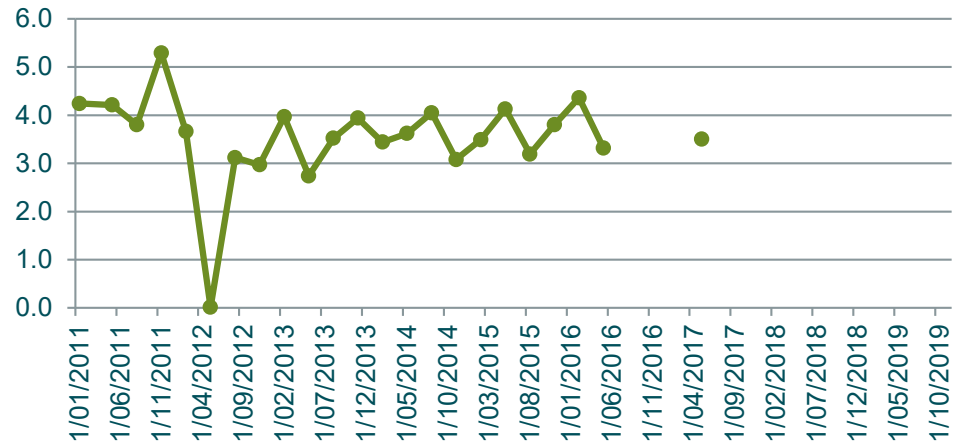
### Lead (Total) mg/L



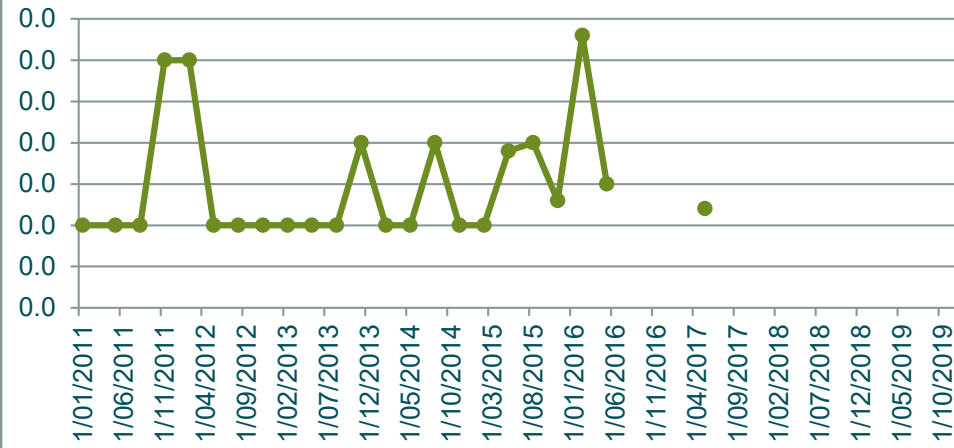
### Magnesium (Total) mg/L



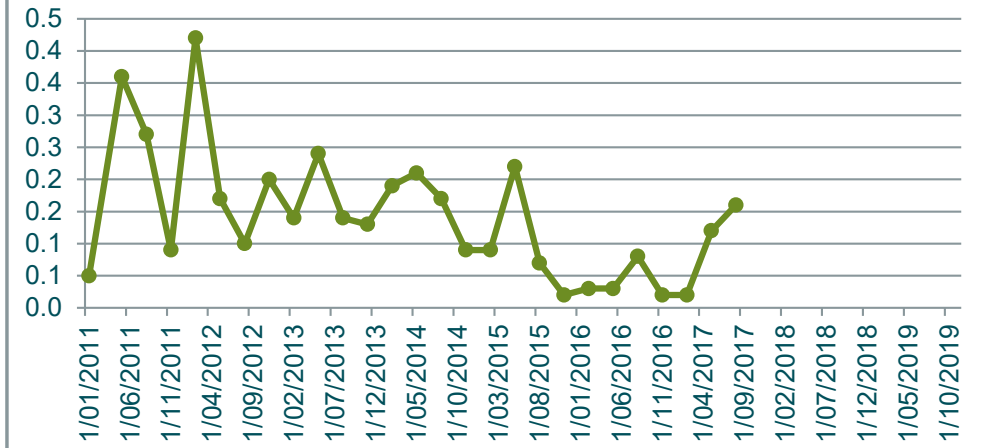
### Manganese Total mg/L



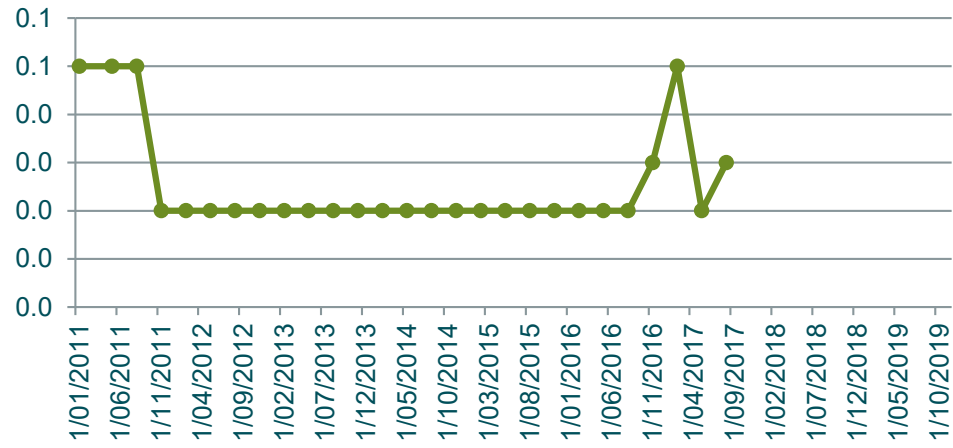
### Nickel (Total) mg/L



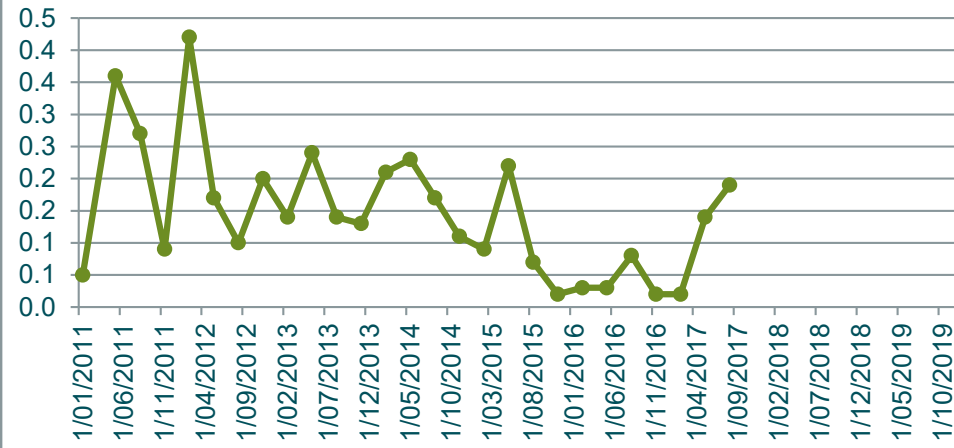
### Nitrate N mg/L



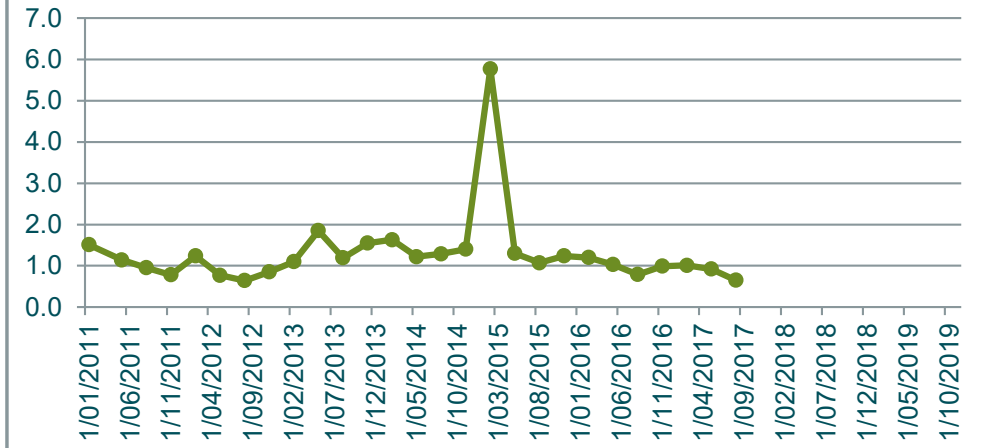
### Nitrite N mg/L



### Nitrogen Oxidised mg/L



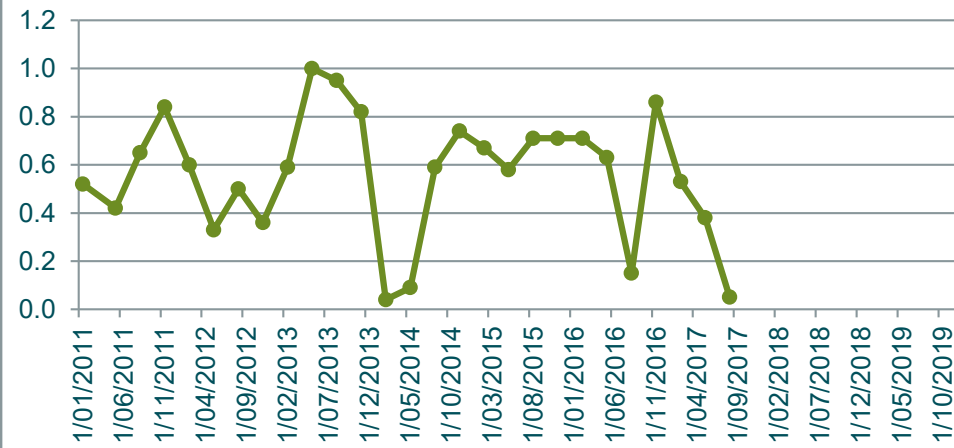
### Nitrogen Total mg/L



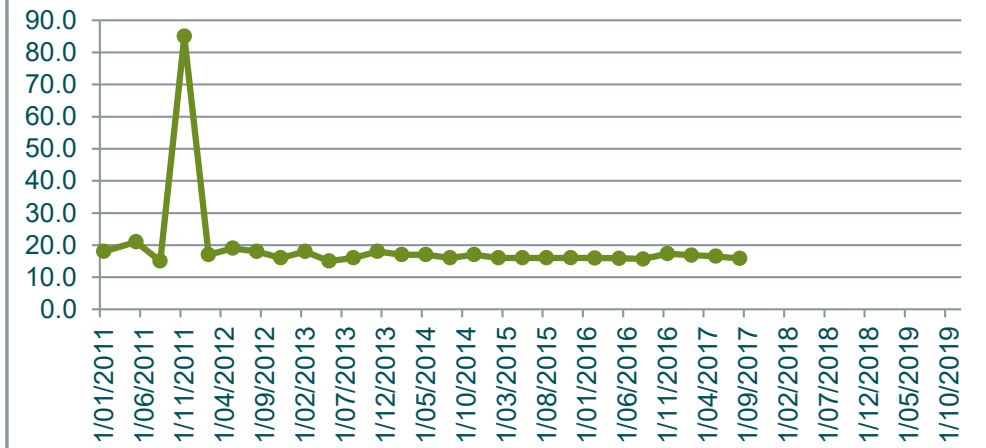
### pH pH units



### Phosphorus Total mg/L

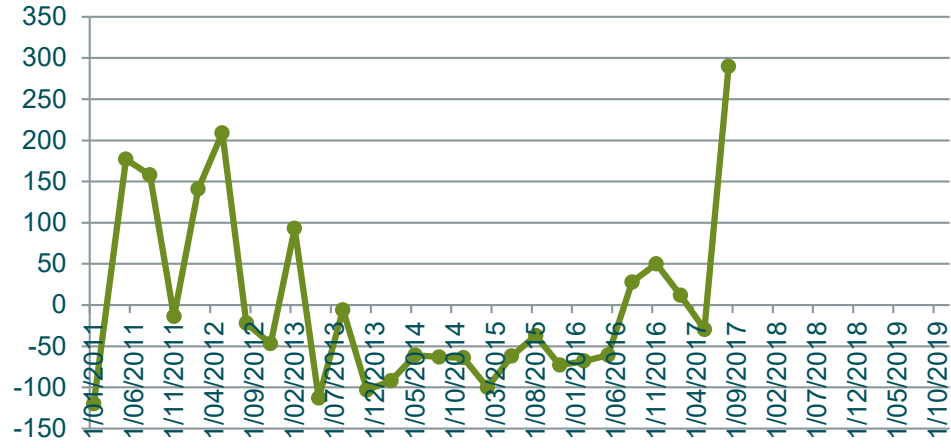


### Potassium Total mg/L

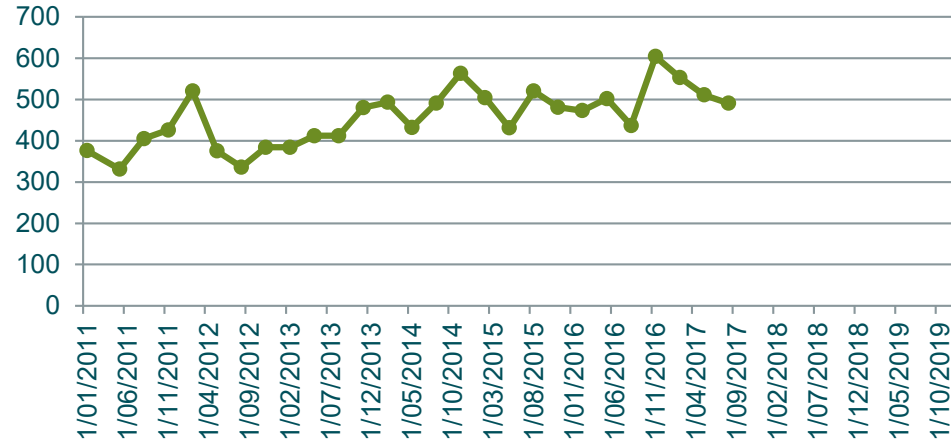




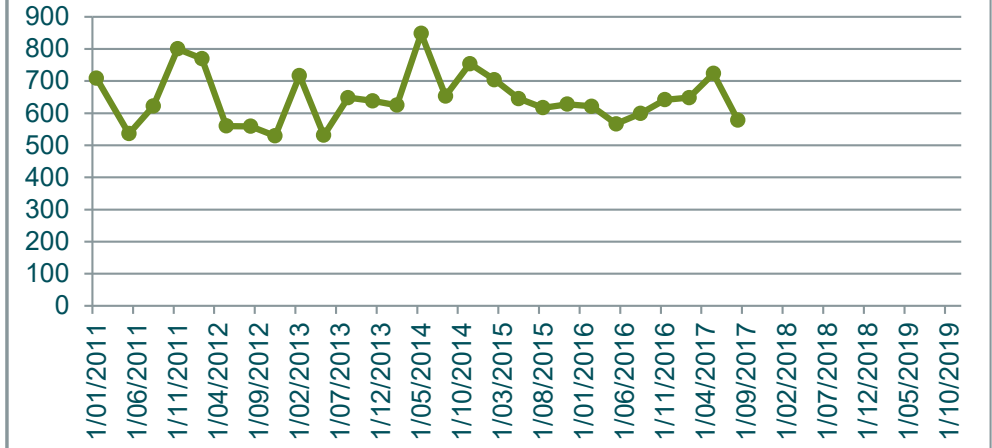
**Redox Potential  
mV**



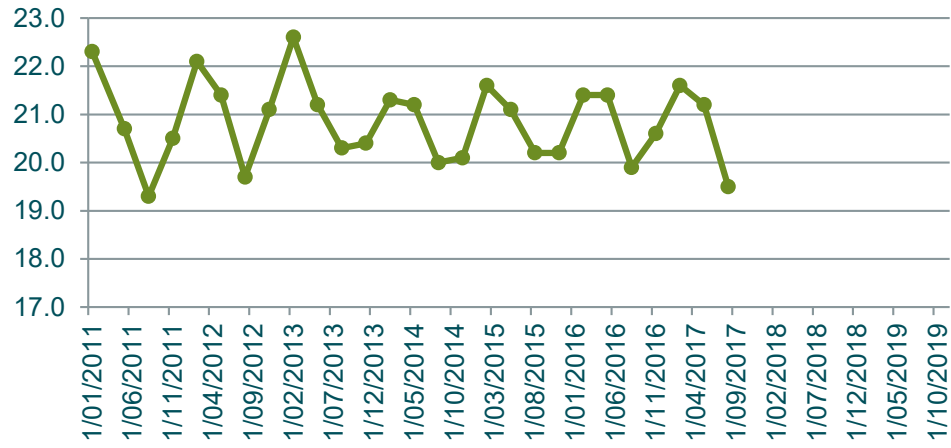
**Sodium (Total)  
mg/L**



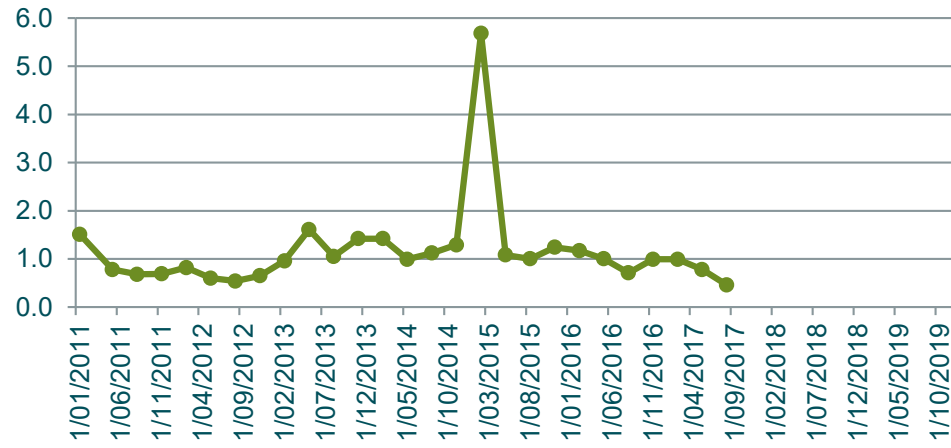
**Sulphate  
mg/L**



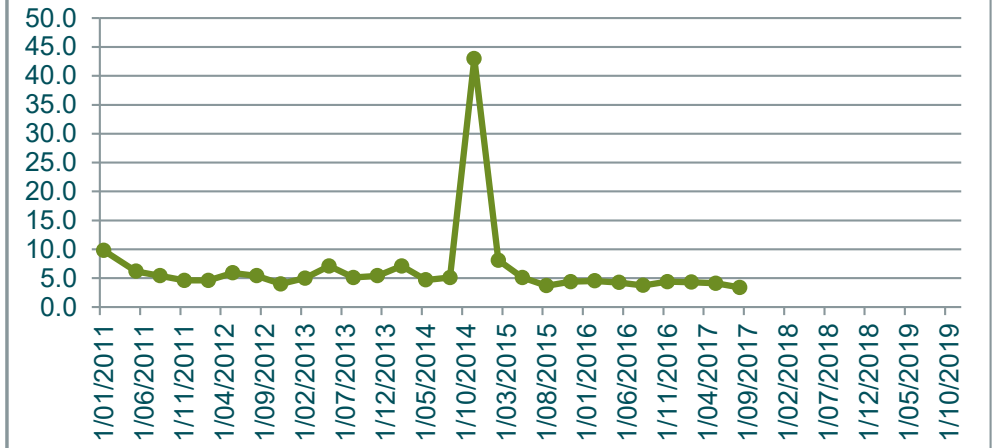
**Temperature  
C**



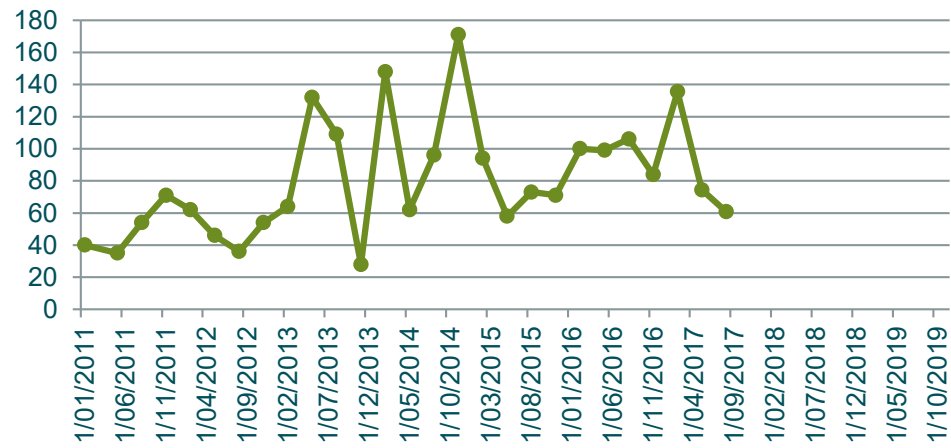
**TKN  
mg/L**



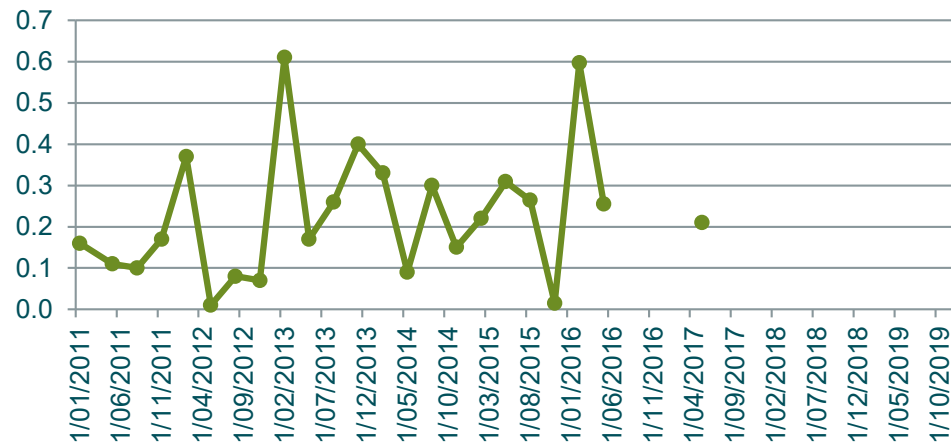
**TOC  
mg/L**



**Total Acidity  
mg/L CaCO3**



**Zinc (Total)  
mg/L**





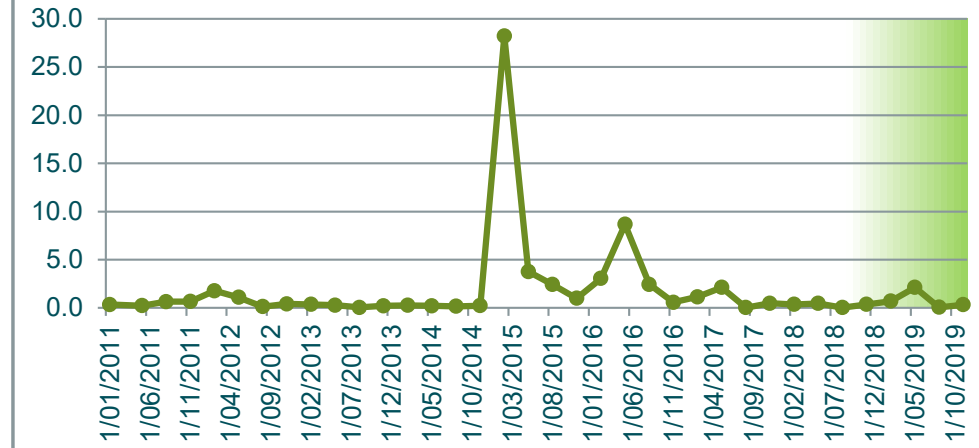
**Alkalinity**  
mg/L as CaCO<sub>3</sub>



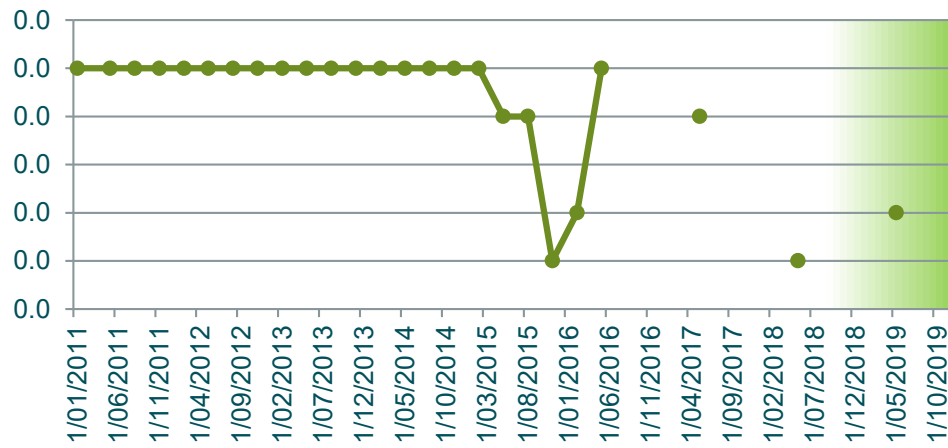
**Aluminium (Total)**  
mg/L



**Ammonia**  
mg/L



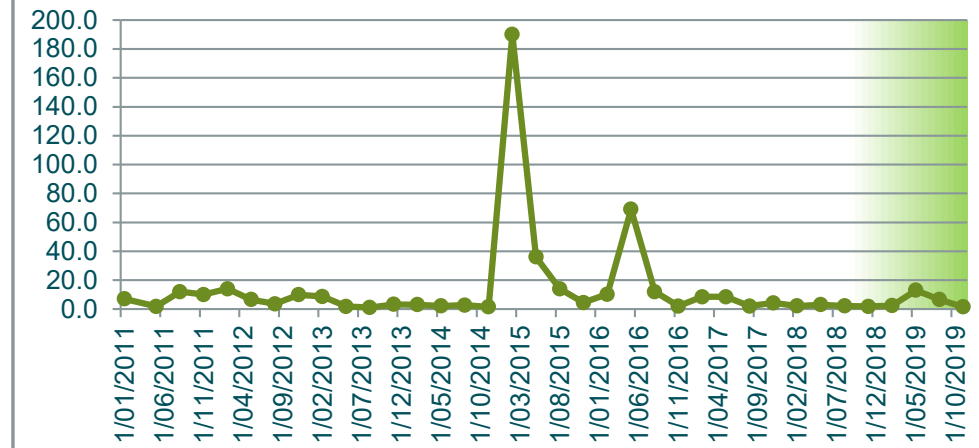
**Arsenic (Total)**  
mg/L



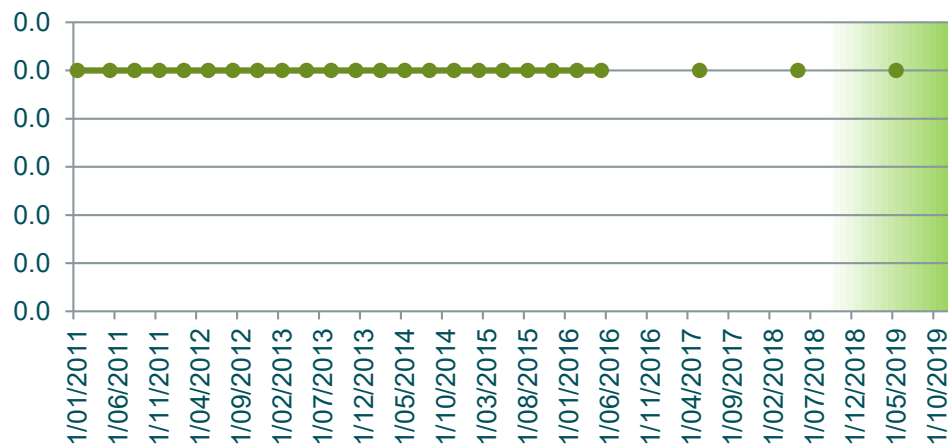
**Bicarbonate HCO<sub>3</sub>**  
mg/L



**BOD<sub>5</sub>**  
mg/L



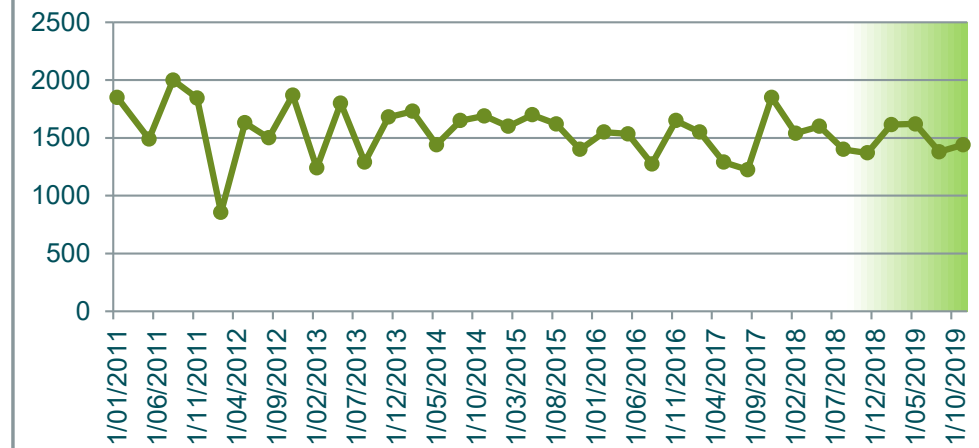
**Cadmium (Total)**  
mg/L



**Calcium (Total)**  
mg/L

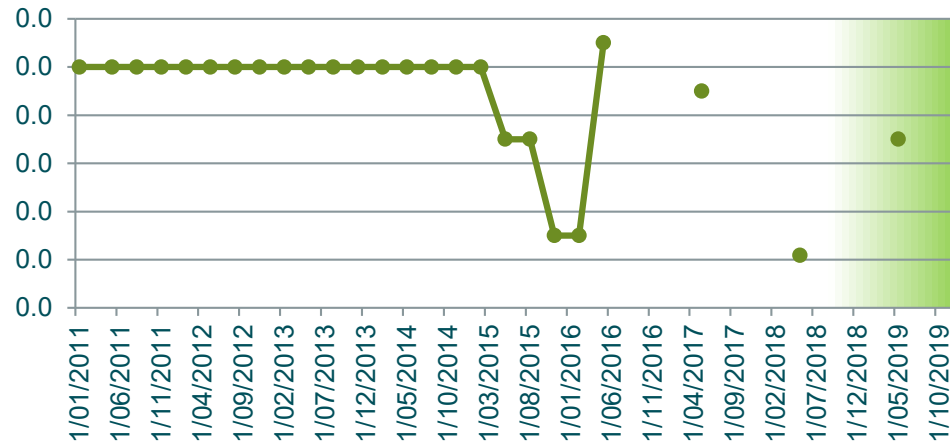


**Chloride**  
mg/L

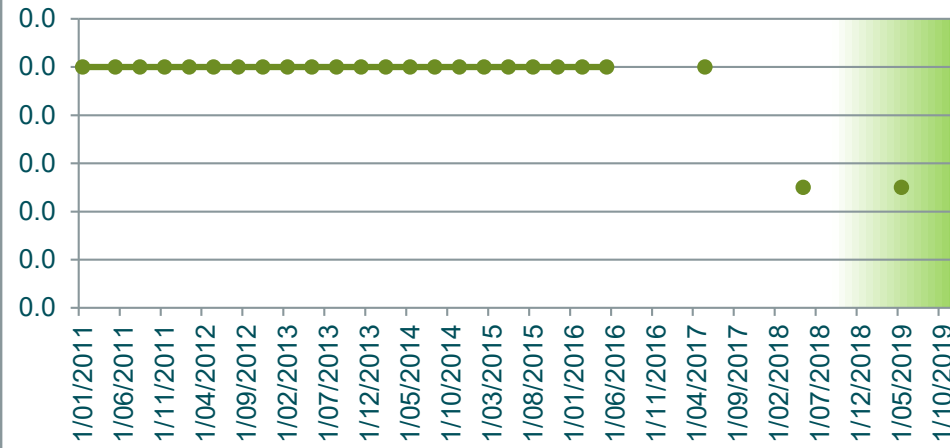




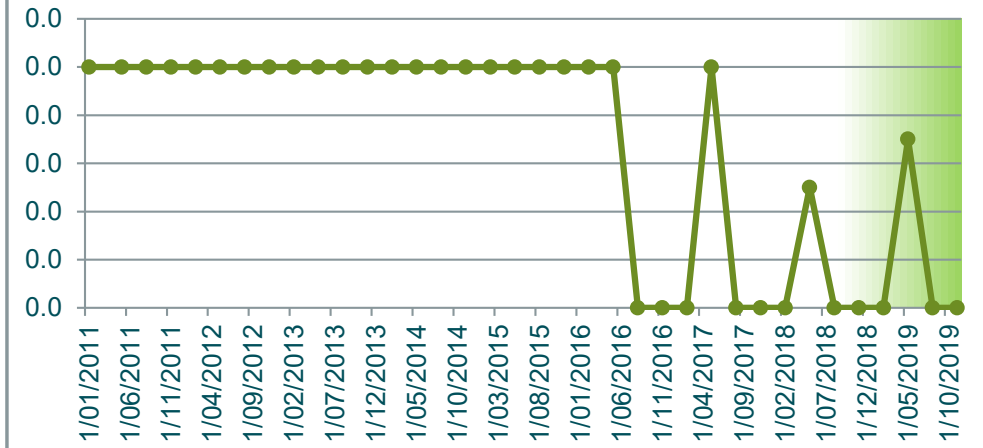
### Chromium (Total) mg/L



### Chromium 3 mg/L



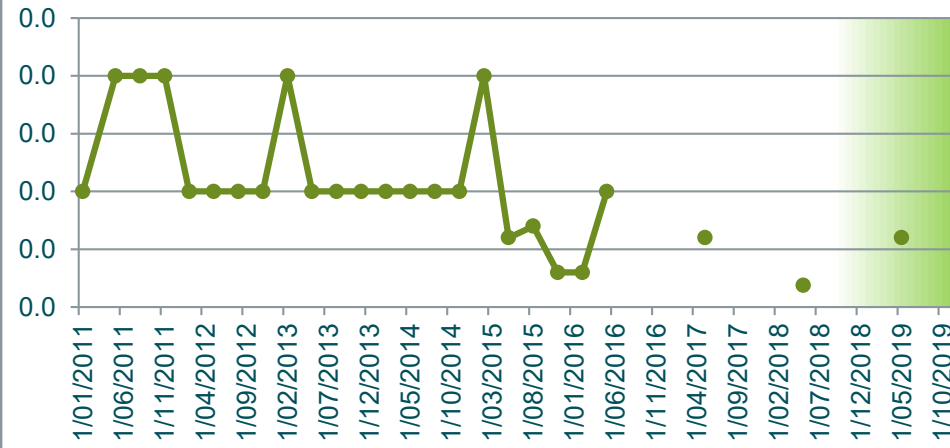
### Chromium 6 mg/L



### Conductivity µScm-1



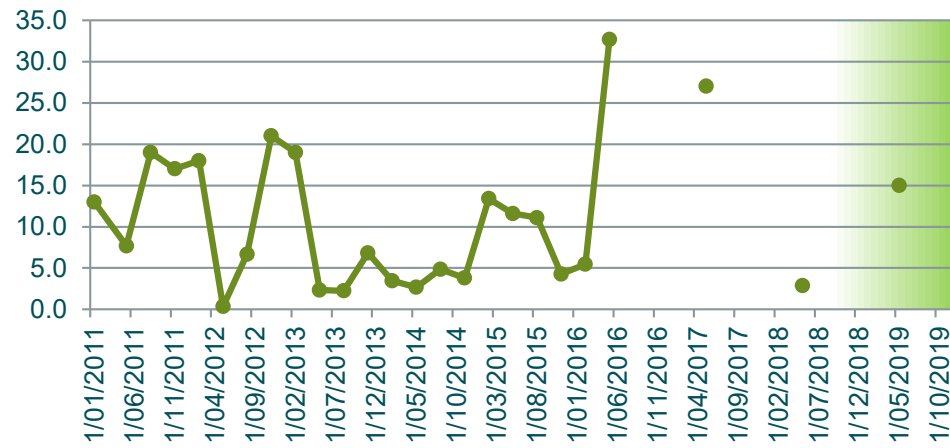
### Copper (Total) mg/L



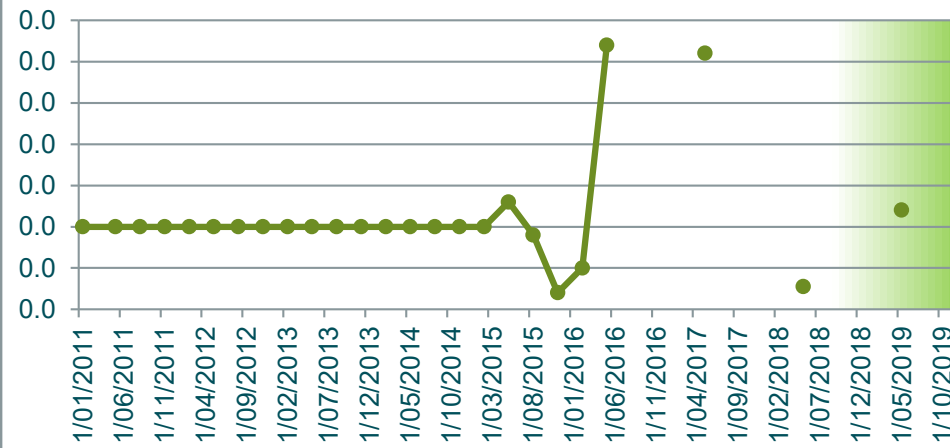
### Flouride mg/L



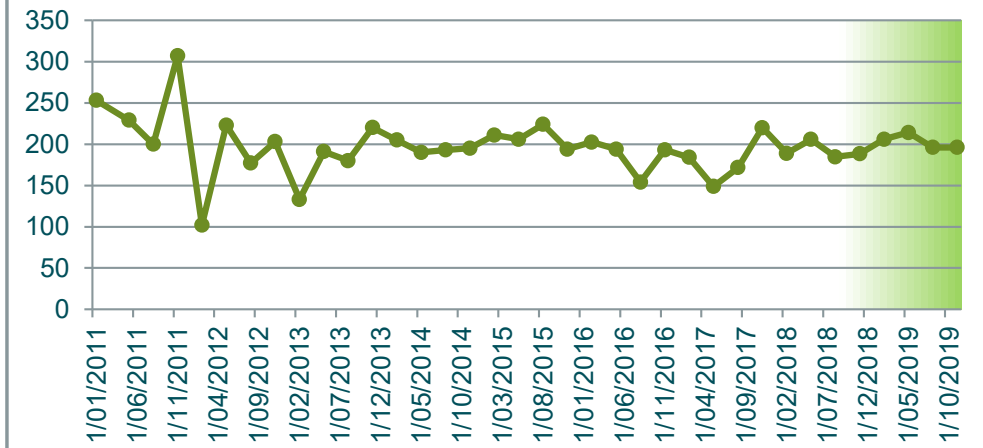
### Iron Total mg/L



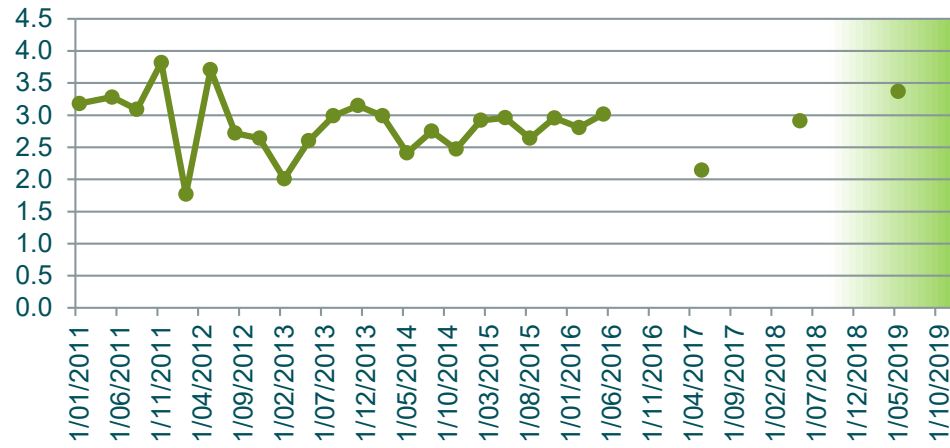
### Lead (Total) mg/L



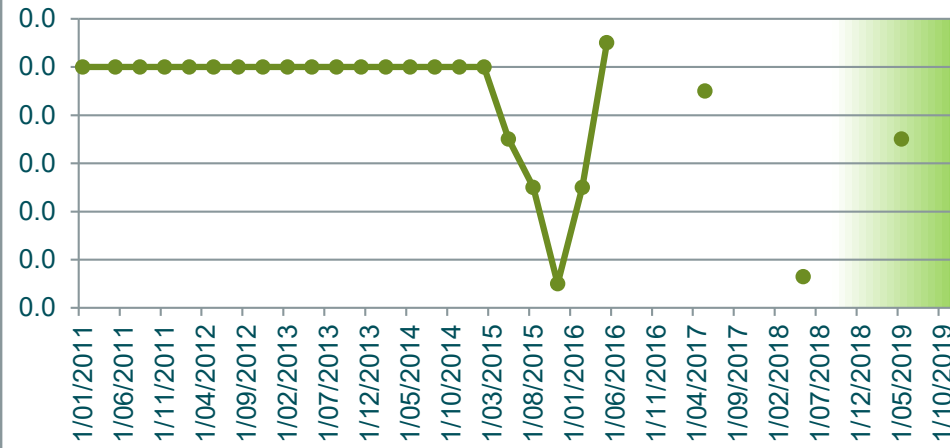
### Magnesium (Total) mg/L



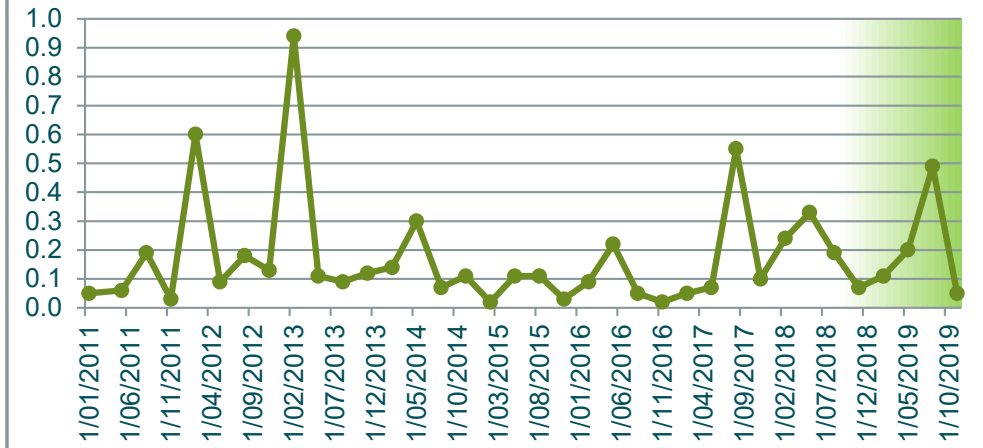
### Manganese Total mg/L



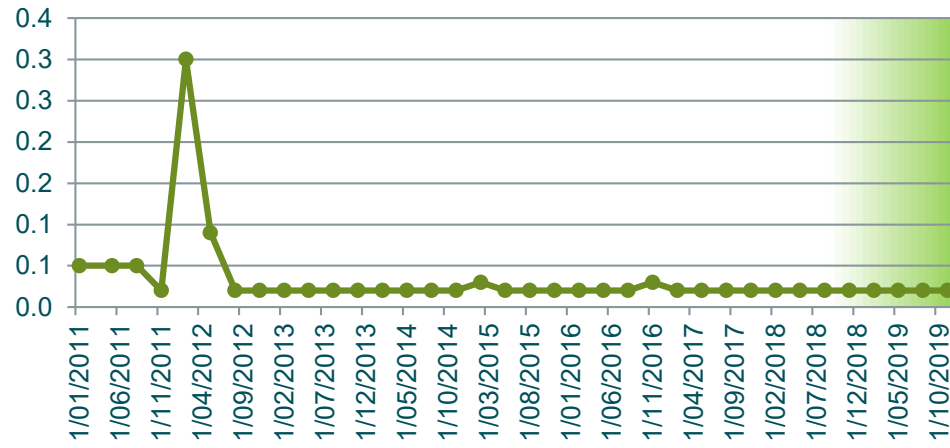
### Nickel (Total) mg/L



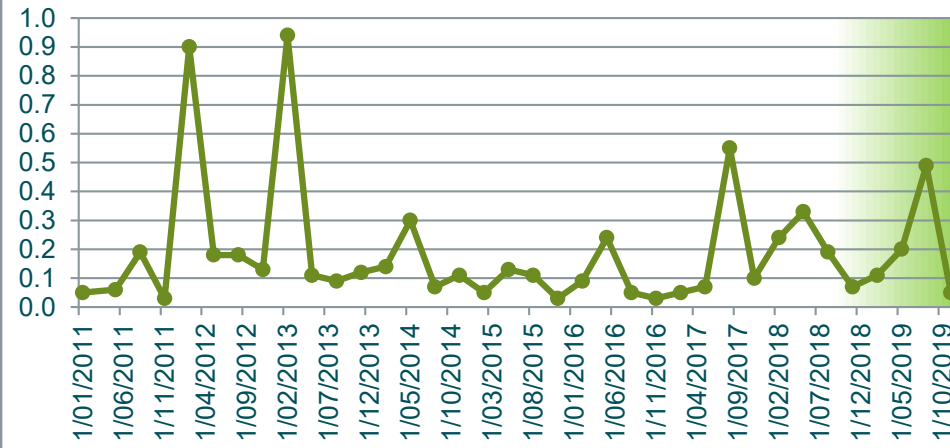
### Nitrate N mg/L



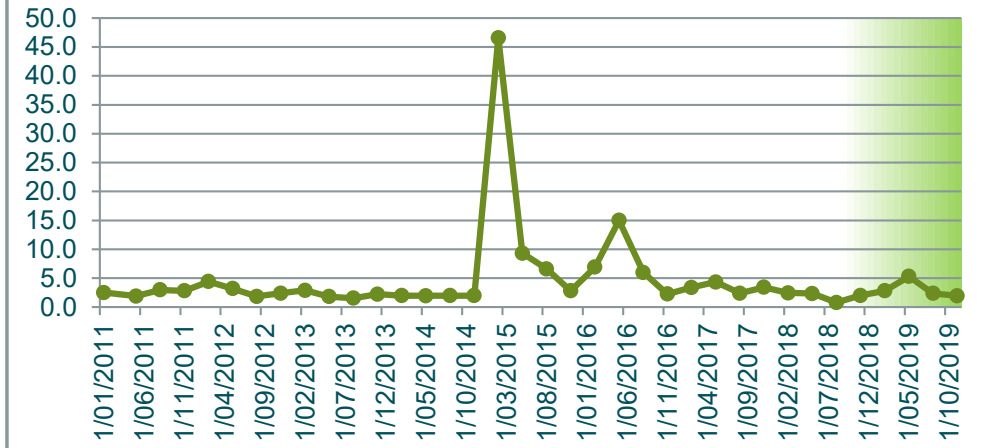
### Nitrite N mg/L



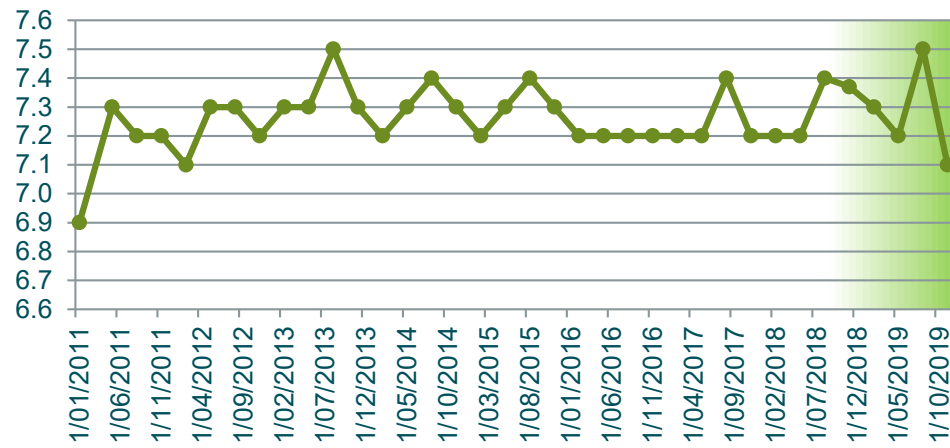
### Nitrogen Oxidised mg/L



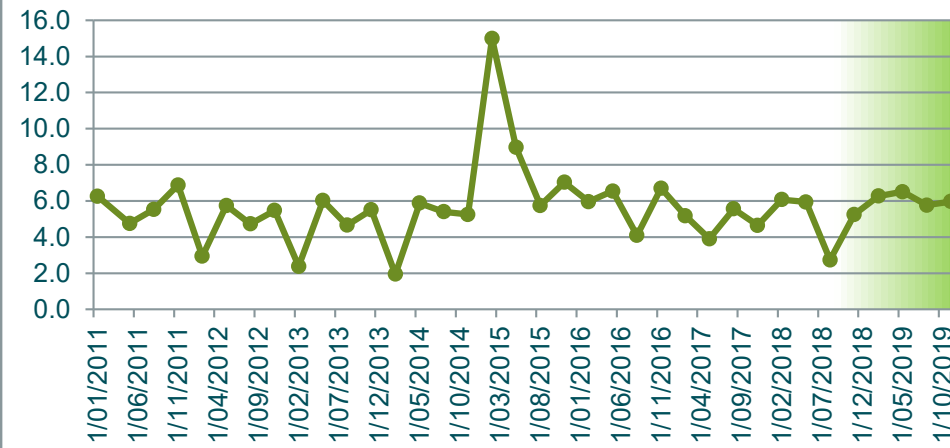
### Nitrogen Total mg/L



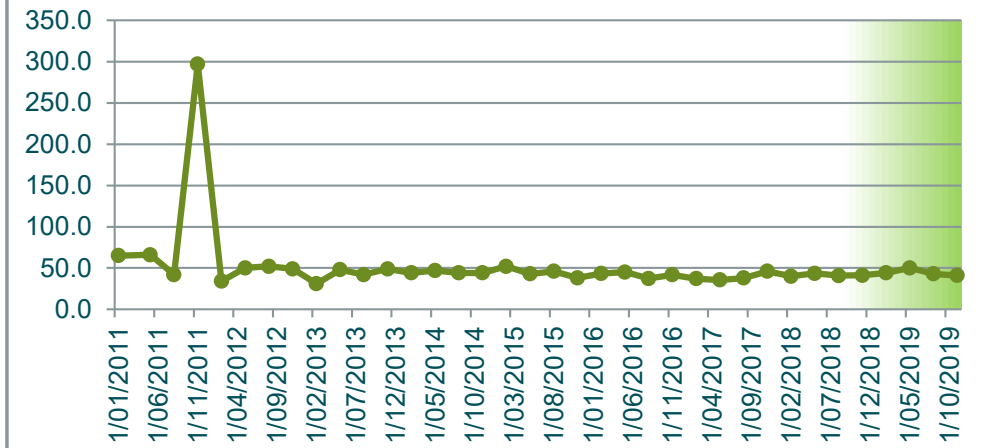
### pH pH units



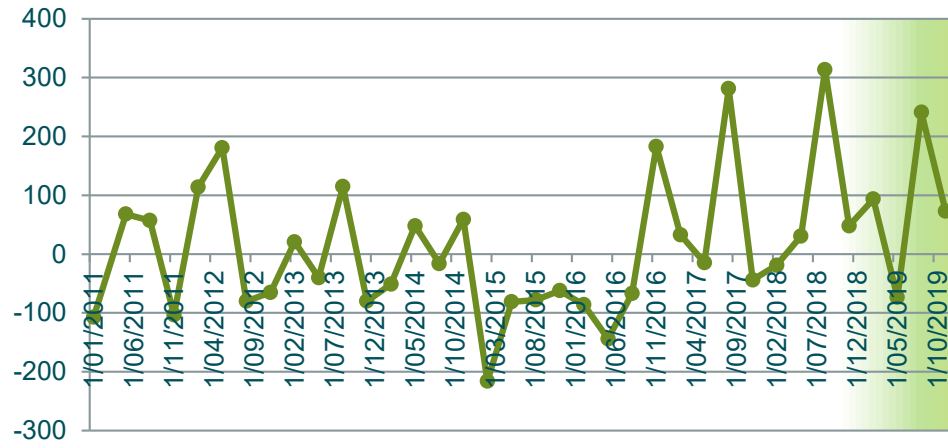
### Phosphorus Total mg/L



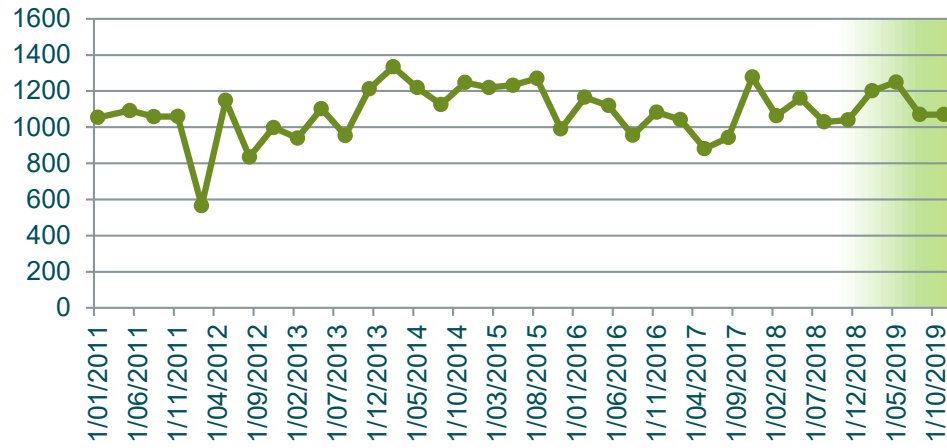
### Potassium Total mg/L



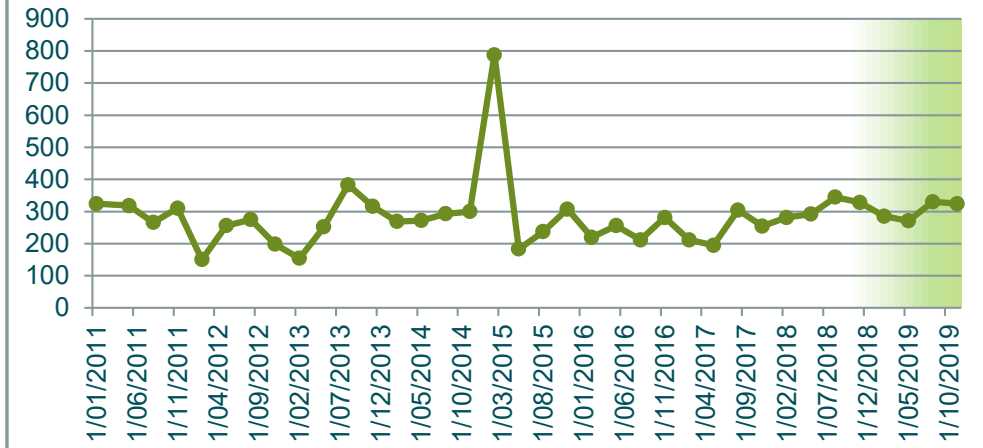
**Redox Potential  
mV**



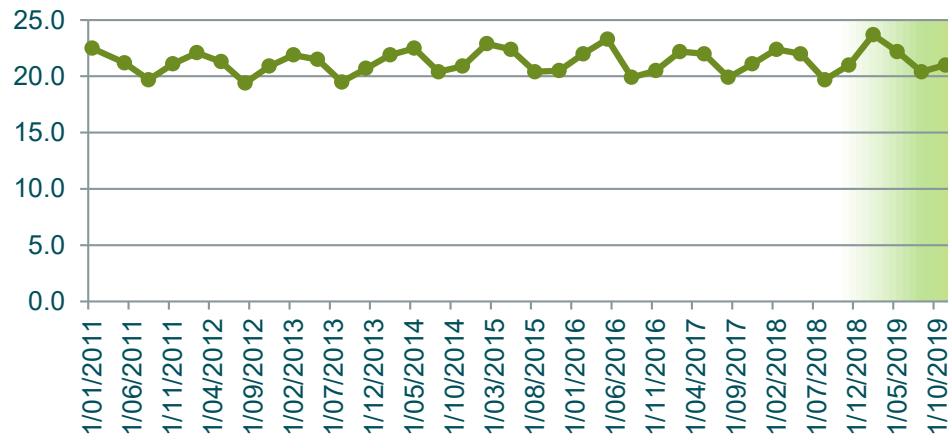
**Sodium (Total)  
mg/L**



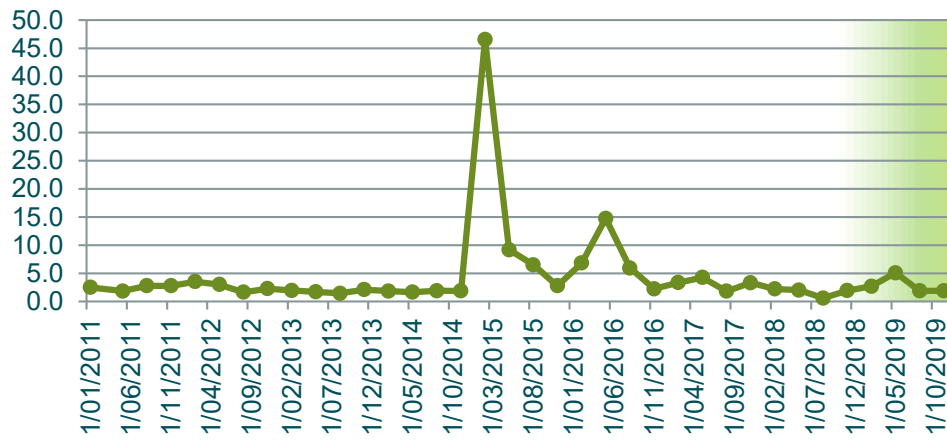
**Sulphate  
mg/L**



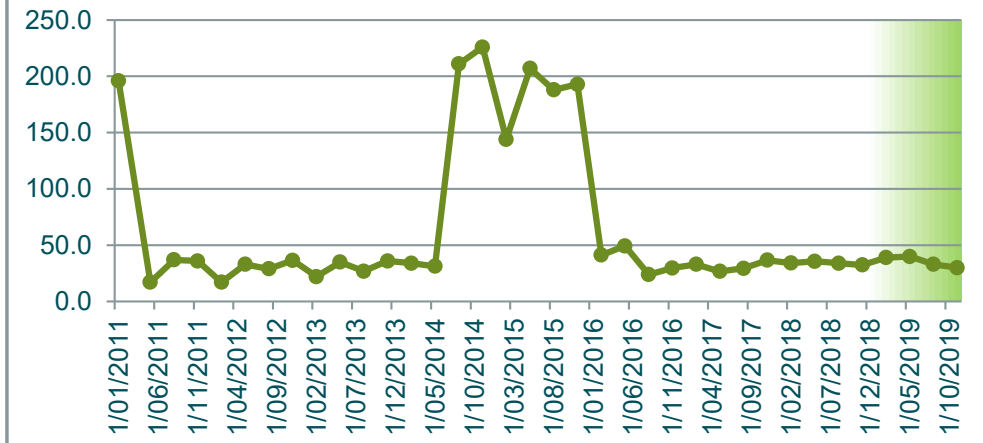
**Temperature  
C**



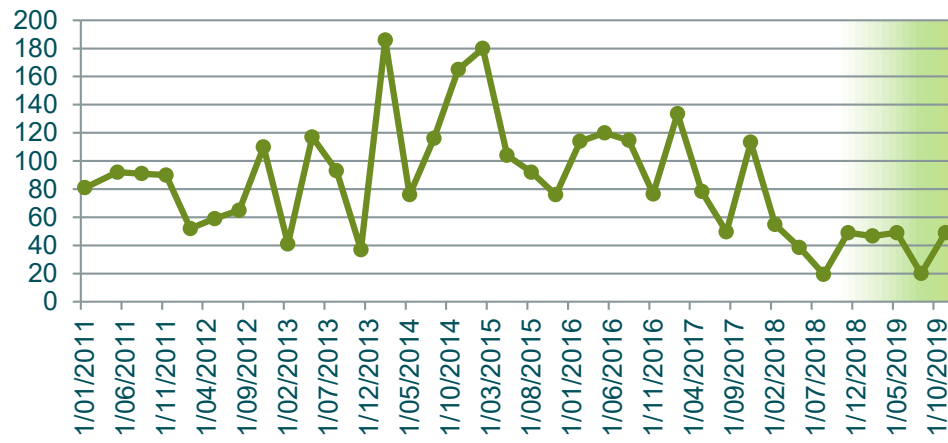
**TKN  
mg/L**



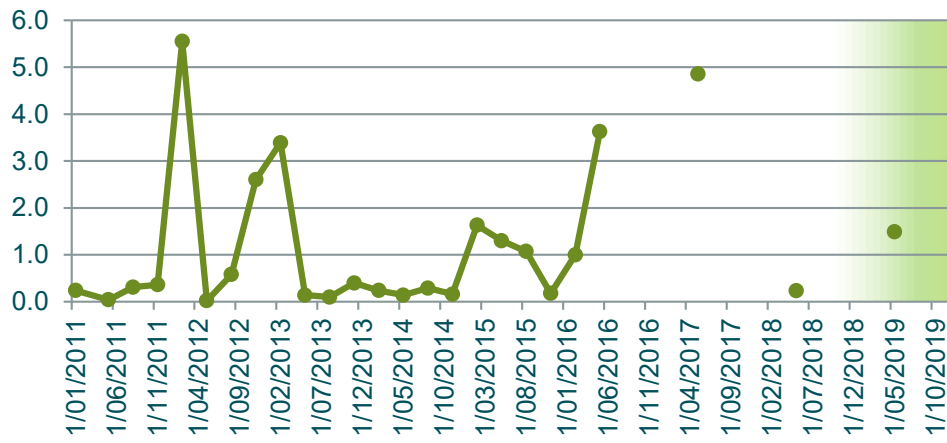
**TOC  
mg/L**



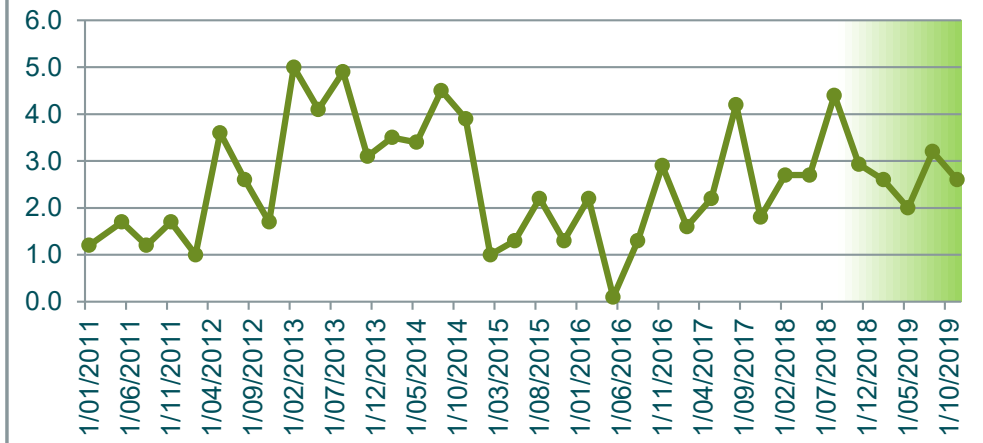
**Total Acidity  
mg/L CaCO3**



**Zinc (Total)  
mg/L**

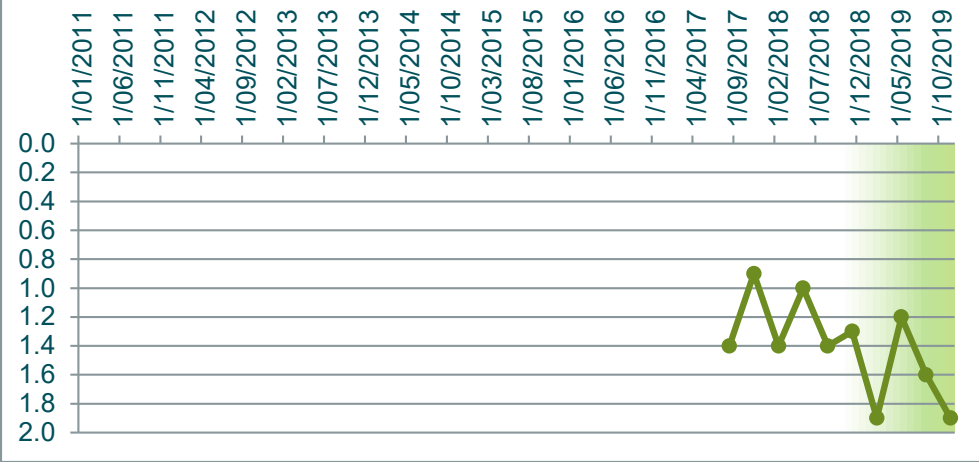


**DO (Membrane Electrode)  
mg/L**



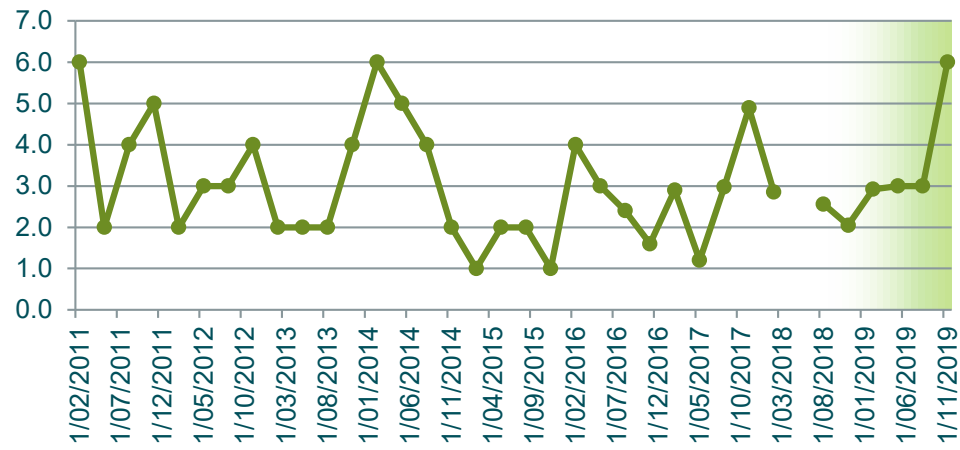


# Depth to Grounwater m

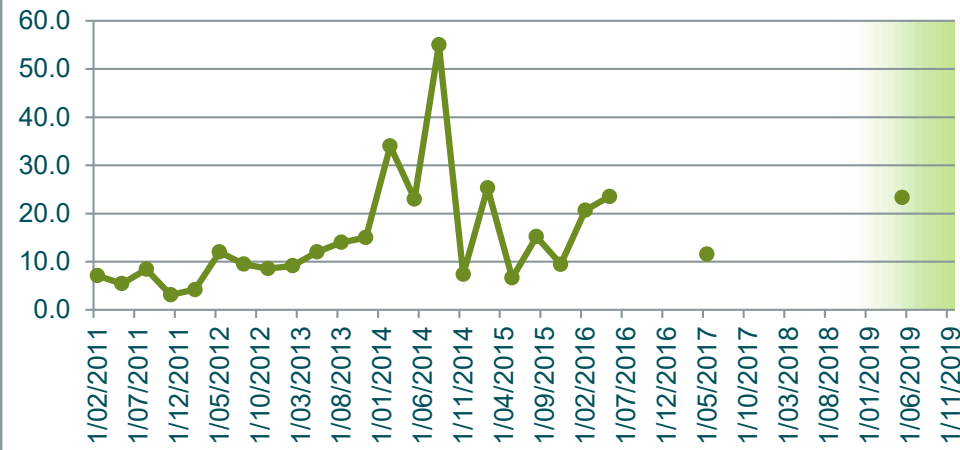


GW5	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µS/cm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride 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	7.1	0.1	0.0	4.0	1.0	0.0	1.2	22.0	0.0	0.0	0.0	99	0.0	4.9	0.1	12.0	0.0	1.0	3.1	0.0	0.2	0.1	0.2	0.3	5.4		0.2	5.0	216	9.4	7.5	22.3	0.1	3.4	50	0.0			
11/05/2011	2.0	5.4	0.1	0.0	1.0	1.0	0.0	2.2	19.0	0.0	0.0	0.0	111	0.0	5.8	0.0	8.1	0.0	1.4	2.8	0.0	0.5	0.1	0.5	0.7	3.8		0.3	5.0	317	11.0	6.8	21.0	0.1	1.0	47	0.1			
10/08/2011	4.0	8.4	0.1	0.0	2.0	2.4	0.0	0.7	19.0	0.0	0.0	0.0	106	0.0	4.7	0.0	12.0	0.0	1.2	2.7	0.0	0.3	0.1	0.3	0.5	4.8		0.2	5.0	303	13.0	5.2	20.6	0.2	1.0	48	0.0			
9/11/2011	5.0	3.1	0.0	0.0	3.0	6.0	0.0	0.7	18.0	0.0	0.0	0.0	90	0.0	4.7	0.1	3.7	0.0	2.2	0.9	0.0	0.3	0.0	0.3	0.4	5.1		0.2	5.0	310	7.3	7.4	21.8	0.1	0.6	48	0.0			
7/02/2012	2.0	4.2	0.0	0.0	1.0	2.1	0.0	0.5	20.0	0.0	0.0	0.0	97	0.0	4.4	0.0	7.5	0.0	1.3	2.2	0.0	0.3	0.0	0.3	0.4	4.7		0.1	5.0	282	14.0	7.5	21.6	0.1	0.1	46	0.0			
9/05/2012	3.0	12.0	0.0	0.0	2.0	1.0	0.0	0.4	21.0	0.0	0.0	0.0	96	0.0	5.4	0.0	19.0	0.0	1.2	5.3	0.0	0.3	0.0	0.3	0.4	4.9		0.1	5.0	298	11.0	6.5	21.3	0.1	0.7	56	0.3			
7/08/2012	3.0	9.5	0.0	0.0	2.0	1.0	0.0	1.2	16.0	0.0	0.0	0.0	91	0.0	5.1	0.0	8.3	0.0	1.5	1.7	0.0	0.4	0.0	0.4	0.4	4.6		0.1	5.0	289	8.7	6.3	20.7	0.1	0.2	37	0.2			
14/11/2012	4.0	8.6	0.1	0.0	2.0	1.0	0.0	0.6	18.0	0.0	0.0	0.0	95	0.0	4.9	0.1	10.0	0.0	0.8	3.1	0.0	0.3	0.0	0.3	0.7	5.0		0.7	5.0	226	10.0	5.3	22.5	0.5	7.3	56	0.4			
14/02/2013	2.0	9.2	0.0	0.0	1.0	1.0	0.0	0.4	20.0	0.0	0.0	0.0	95	0.0	4.9	0.1	8.6	0.0	1.2	1.0	0.0	0.3	0.0	0.3	0.3	4.6		0.1	5.0	256	12.0	6.0	21.5	0.1	0.6	43	0.1			
15/05/2013	2.0	12.0	0.2	0.0	1.0	1.8	0.0	0.5	15.0	0.0	0.0	0.0	88	0.0	5.1	0.0	13.0	0.0	1.0	2.7	0.0	0.3	0.0	0.3	0.5	4.5		0.1	5.0	209	11.0	6.1	21.4	0.2	0.6	113	0.1			
7/08/2013	2.0	14.0	0.1	0.0	1.0	1.0	0.0	0.4	16.0	0.0	0.0	0.0	84	0.0	5.2	0.0	17.0	0.0	1.0	4.1	0.0	0.3	0.0	0.3	0.6	4.7		0.5	5.0	236	12.0	7.4	21.1	0.3	0.3	107	0.1			
13/11/2013	4.0	15.0	0.1	0.0	2.0	1.5	0.0	0.5	18.0	0.0	0.0	0.0	101	0.0	4.1	0.0	21.0	0.0	1.0	6.1	0.0	0.3	0.0	0.3	0.7	4.8		0.4	5.0	196	13.0	7.3	22.5	0.4	0.3	67	0.1			
12/02/2014	6.0	34.0	0.1	0.0	4.0	2.7	0.0	0.5	17.0	0.0	0.0	0.0	83	0.1	5.3	0.0	61.0	0.1	0.7	20.0	0.1	0.3	0.0	0.3	0.9	5.2		0.6	5.0	148	11.0	6.0	22.2	0.7	0.4	108	0.7			
14/05/2014	5.0	23.0	0.0	0.0	3.0	1.5	0.0	0.5	25.0	0.0	0.0	0.0	100	0.1	6.1	0.0	50.0	0.0	0.8	9.4	0.0	1.0	0.0	1.0	1.1	4.8		0.2	5.0	139	12.0	5.3	20.5	0.1	0.5	58	0.4			
13/08/2014	4.0	55.0	0.0	0.0	2.0	2.4	0.0	0.4	20.0	0.0	0.0	0.0	109	0.1	6.1	0.0	68.2	0.1	1.2	14.0	0.1	0.7	0.0	0.7	0.9	5.3		0.4	5.0	147	15.0	7.4	20.9	0.2	0.5	101	0.7			
11/11/2014	2.0	7.4	0.0	0.0	1.0	3.0	0.0	0.5	17.0	0.0	0.0	0.0	109	0.0	5.7	0.0	10.0	0.0	1.5	1.9	0.0	0.5	0.0	0.5	0.8	4.8		0.2	5.0	178	15.0	7.6	21.4	0.3	0.4	70	0.2			
10/02/2015	1.0	25.3	0.0	0.0	1.0	1.8	0.0	0.8	18.0	0.0	0.0	0.0	86	0.0	6.2	0.0	10.5	0.0	1.1	1.8	0.0	0.7	0.0	0.7	1.1	4.8		0.1	5.0	191	9.9	6.6	21.6	0.4	0.5	65	0.0			
12/05/2015	2.0	6.6	0.0	0.0	1.0	3.0	0.0	0.9	16.0	0.0	0.0	0.0	85	0.0	6.3	0.0	6.3	0.0	1.4	1.3	0.0	0.9	0.0	0.9	1.3	4.9		0.1	5.0	219	11.0	5.5	21.5	0.4	2.4	50	0.1			
12/08/2015	2.0	15.2	0.0	0.0	2.0	1.8	0.0	0.9	16.0	0.0	0.0	0.0	89	0.0	6.3	0.0	20.9	0.0	1.6	4.1	0.0	0.6	0.0	0.6	1.2	4.7		0.2	5.0	235	12.0	5.3	21.0	0.6	0.9	65	0.1			
11/11/2015	1.0	9.5	0.0	0.0	1.0	1.0	0.0	1.3	13.0	0.0	0.0	0.0	85	0.0	6.0	0.0	12.1	0.0	1.6	2.7	0.0	1.5	0.0	1.5	1.8	4.6		0.1	5.0	227	9.7	4.7	21.4	0.3	1.0	63	0.1			
9/02/2016	4.0	20.7	0.3	0.0	4.0	1.8	0.0	1.4	26.0	0.0	0.0	0.0	120	0.1	4.8	0.0	27.0	0.0	2.0	5.8	0.0	0.3	0.0	0.3	1.3	5.1		0.2	5.0	234	15.8	6.2	22.6	1.0	1.3	94	0.1			
10/05/2016	3.0	23.5	0.0	0.0	3.0	1.0	0.0	0.5	20.0	0.0	0.0	0.0	94	0.1	4.8	0.0	32.1	0.0	1.2	5.7	0.0	0.3	0.0	0.3	1.1	4.8		0.4	5.0	247	12.0	5.9	21.5	0.8	0.4	83	0.1			
10/08/2016	2.4		0.0		2.0	2.1		1.0	16.0				92		4.7	0.0			1.5			0.4	0.0	0.4	0.7	4.6		0.1	5.0	329	12.8	5.5	21.0	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	12.9	6.6	21.7	0.3	0.6	88				
8/02/2017	2.9		0.0		3.0	1.0		0.5	20.0				96		5.2	0.0			1.3			0.5	0.0	0.5	1.0	4.4		0.4	5.0	418	12.3	6.2	21.6	0.6	0.5	123				
9/05/2017	1.2	11.6	0.0	0.0	1.0	1.2	0.0	2.0	17.0	0.0	0.0	0.0	104	0.0	5.5	0.0	15.6	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	4.9	20.9	0.5	1.0	85	0.1			
9/08/2017	3.0		0.0		3.0	1.2		1.0	20.0				102		5.6	0.0			1.5			1.2	0.0	1.2	1.9	4.5		0.3	5.0	459	12.4	6.5	20.7	0.7	1.0	70		8.0		
8/11/2017	4.9		0.0		5.0	1.5		1.1	16.0				74		4.9	0.0			1.3			0.6	0.0	0.6	1.1	4.7		0.3	5.0	424	9.0	4.4	21.1	0.5	1.3	71		9.5		
14/02/2018	2.9		0.0		3.0	3.9		0.7	17.0				94		5.1	0.0			1.4			0.7	0.0	0.7	1.1	4.7		0.3	5.0	454	12.3	6.5	21.7	0.4	2.8	69		10.0		
8/05/2018																																								
15/08/2018	2.6		0.0		3.0	1.5		0.6	19.0				94		5.6	0.0			1.5			0.6	0.0	0.6	1.0	4.7		0.3	0.5	456	13.4	6.9	20.9	0.5	7.5	60		10.1		
14/11/2018	2.1		0.0		2.0	1.8		0.6	15.0				94		5.6	0.0			1.4			0.6	0.0	0.6	1.1	4.7		0.3	0.5	341	12.8	7.1	21.6	0.5	0.7	70		9.0		
13/02/2019	2.9		0.0		3.0	1.2		0.5	22.5				96		5.6	0.0			1.4			0.4	0.0	0.4	1.1	4.6		0.4	0.6	419	13.9	7.6	22.3	0.7	0.8	63		10.4		
15/05/2019	3.0	23.3	0.0	0.0	3.0	1.0	0.0	0.6	18.0	0.0	0.0	0.0	92	0.1	5.9	0.0	36.2	0.0	1.3	6.5	0.0	0.6	0.0	0.6	1.1	4.7		0.5	0.6	316	13.0	7.1	21.0	0.4	0.4	63	0.3	8.7		
14/08/2019	3.0		0.0		3.0	1.0		0.8	17.0				94		6.2	0.0			1.5			0.7	0.0	0.7	1.1	4.8		0.4	0.5	365	13.0	6.9	20.4	0.4	1.0	54		8.6		
13/11/2019	6.0		0.0		6.0	1.0		0.3	32.0				100		5.6	0.1			1.0			0.4	0.0	0.4	1.3	5.0		0.5	0.6	322	14.0	7.3	21.3	0.8	0.5	64		11.0		
2019 Min	2.9		0.0		3.0	1.0		0.3	17.0				92		5.6	0.0			1.0			0.4	0.0	0.4	1.1	4.6		0.4	0.5	316	13.0	6.9	20.4	0.4	0.4	54	0.3	8.6		
2019 Max	6.0		0.0		6.0	1.2		0.8	32.0				100		6.2	0.1			1.5			0.7	0.0	0.7	1.3	5.0		0.5	0.6	419	14.0	7.6	22.3	0.8	1.0	64	0.3	11.0		
2019 Mean	3.7		0.0		3.8	1.1		0.6	22.4				96		5.8	0.0			1.3			0.5	0.0	0.5	1.1	4.8		0.4	0.6	355	13.5	7.2	21.3	0.6	0.7	61	0.3	9.7		
Long-term Average	3.1	15.1	0.0	0.0	2.4	1.7	0.0	0.8	18.8	0.0	0.0	0.0	95	0.0	5.3	0.0	20.4	0.0	1.3																					

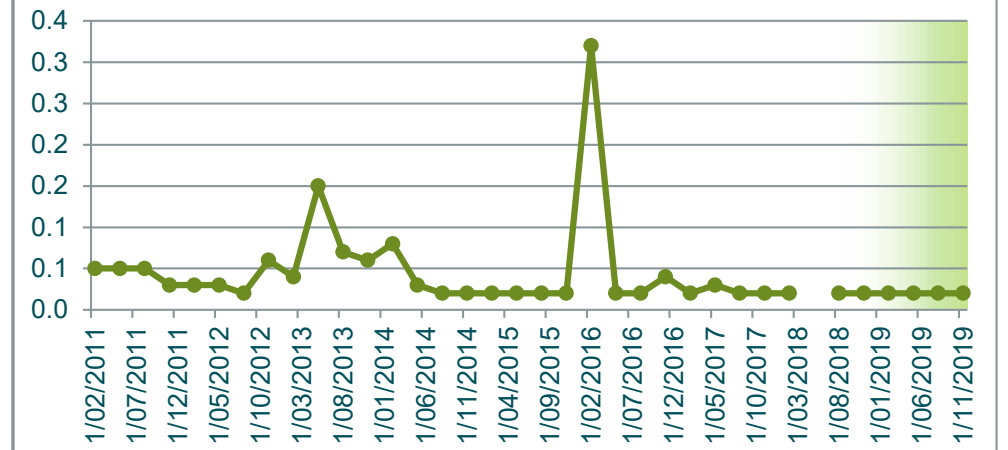
**Alkalinity**  
mg/L as CaCO<sub>3</sub>



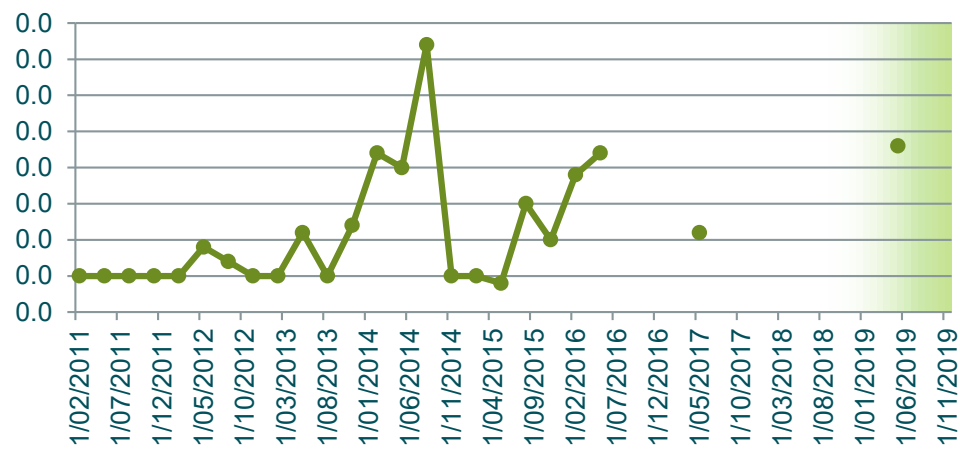
**Aluminium (Total)**  
mg/L



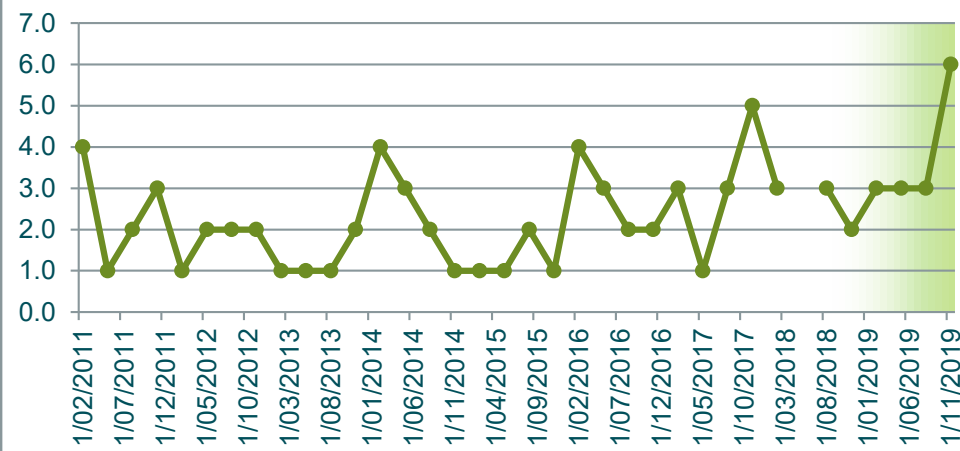
**Ammonia**  
mg/L



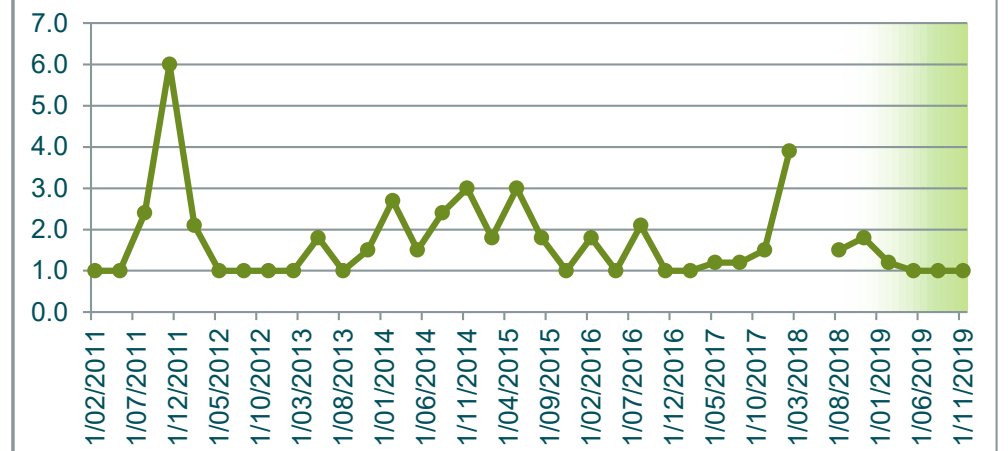
**Arsenic (Total)**  
mg/L



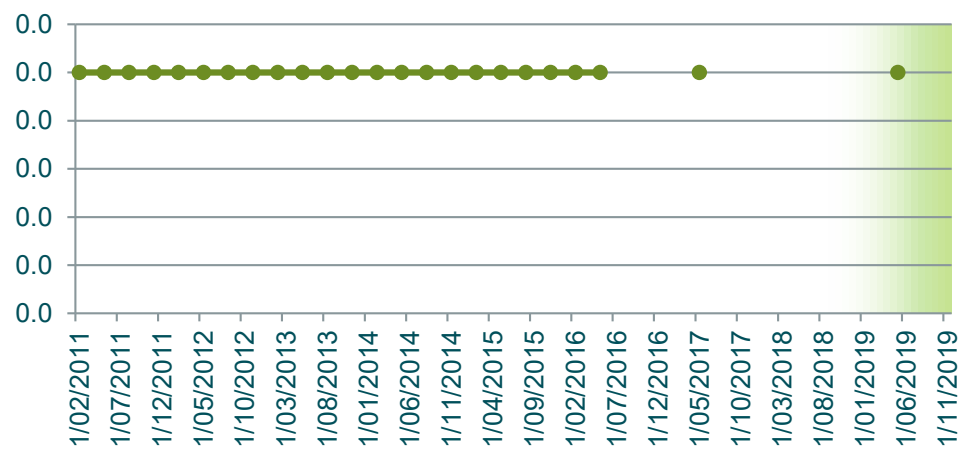
**Bicarbonate HCO<sub>3</sub>**  
mg/L



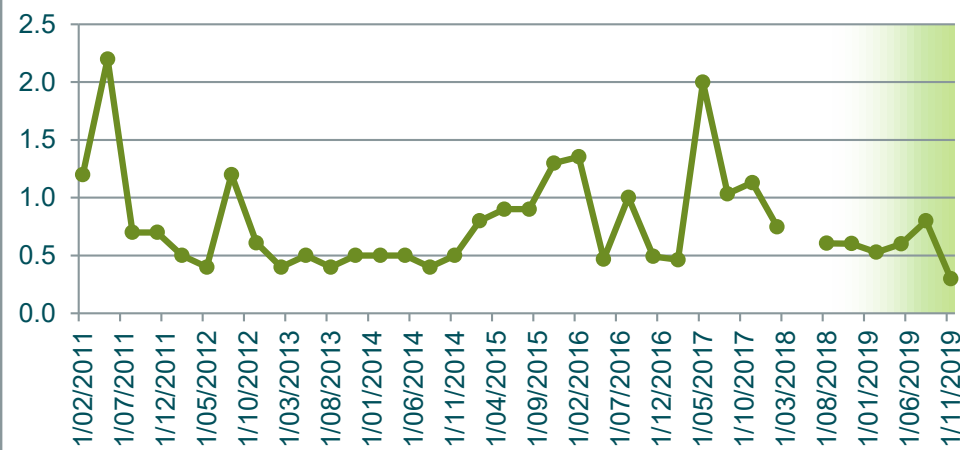
**BOD<sub>5</sub>**  
mg/L



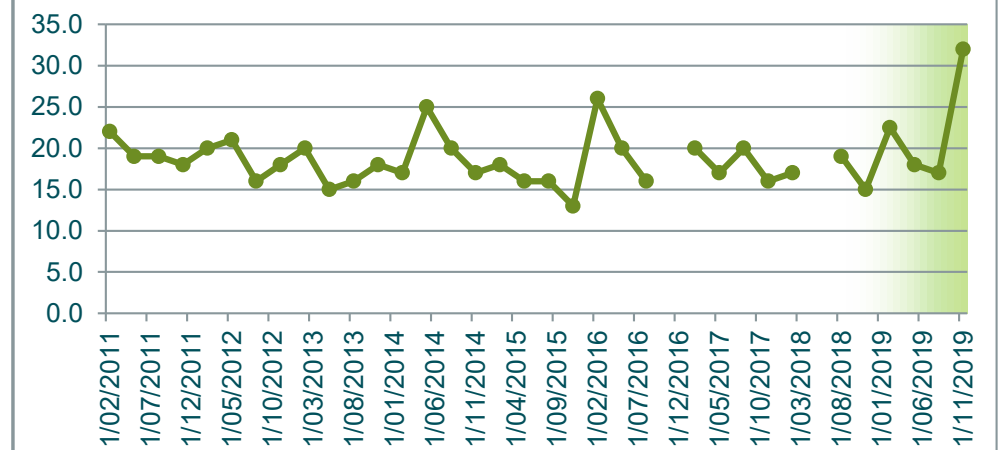
**Cadmium (Total)**  
mg/L



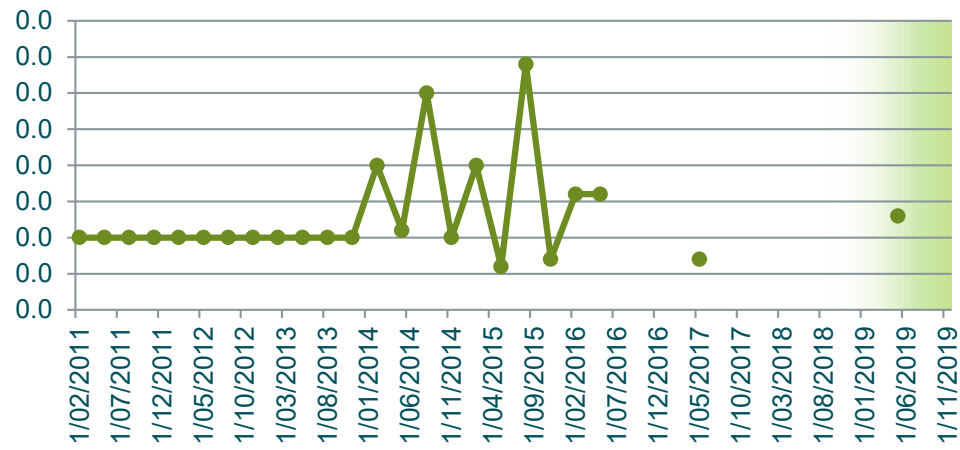
**Calcium (Total)**  
mg/L



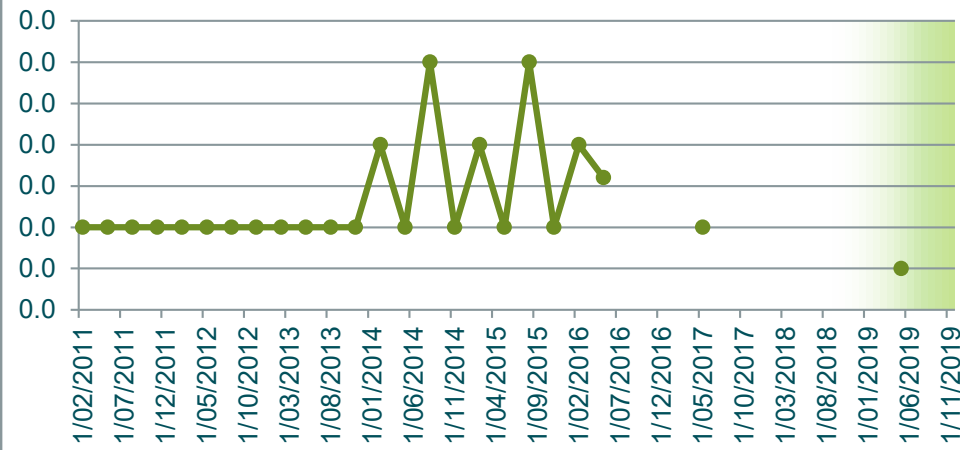
**Chloride**  
mg/L



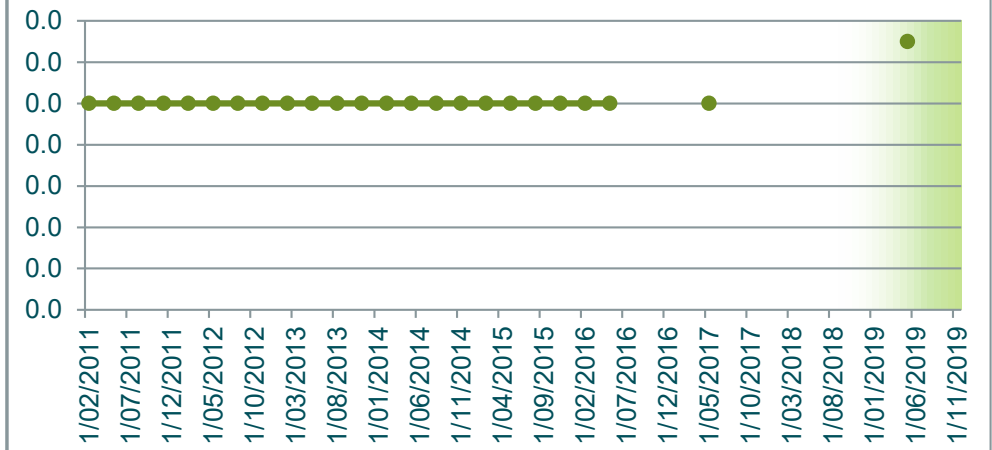
### Chromium (Total) mg/L



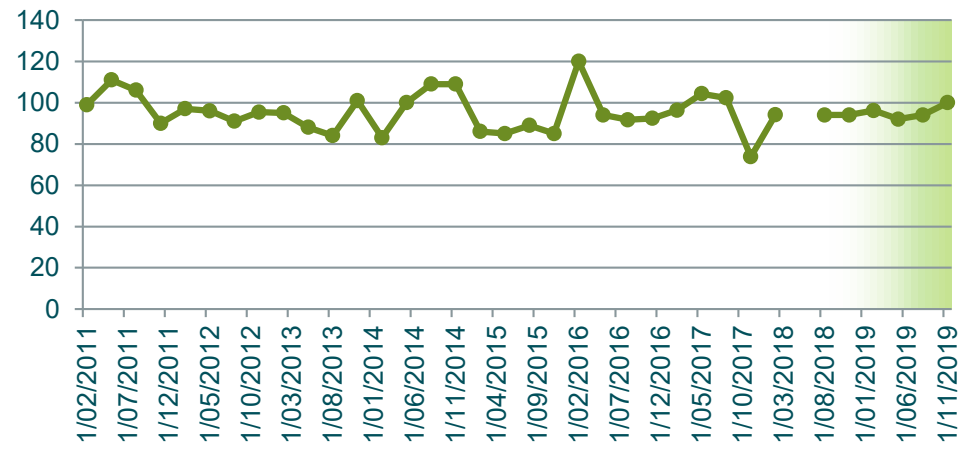
### Chromium 3 mg/L



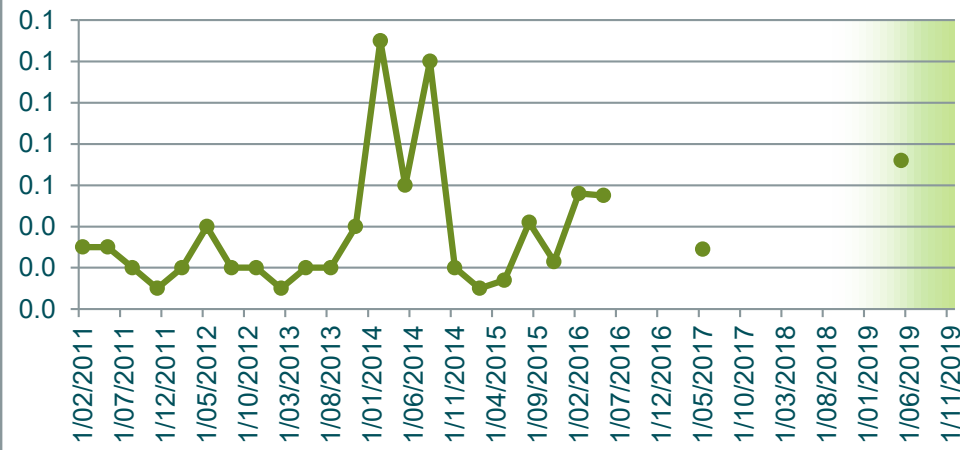
### Chromium 6 mg/L



### Conductivity µScm-1



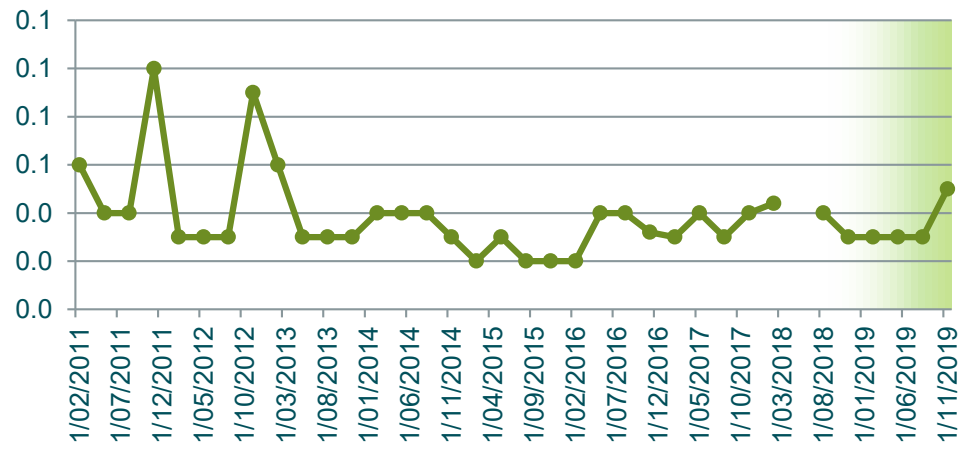
### Copper (Total) mg/L



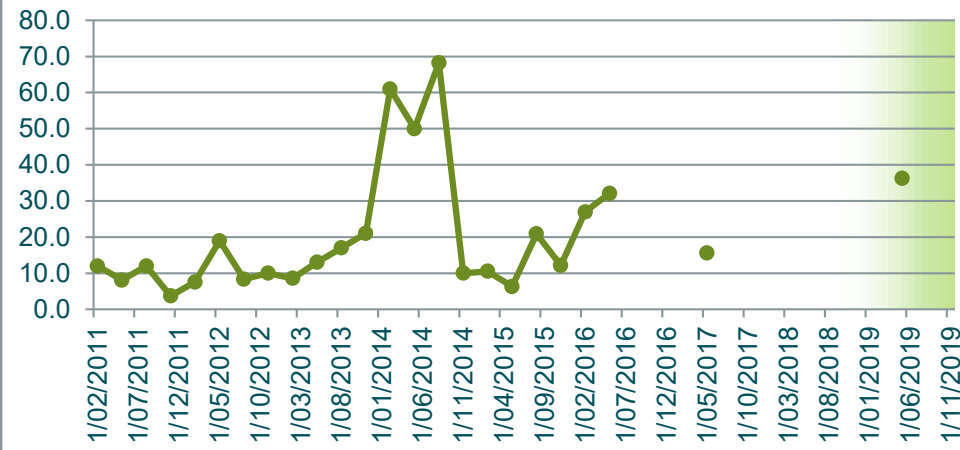
### DO (Membrane Electrode) mg/L



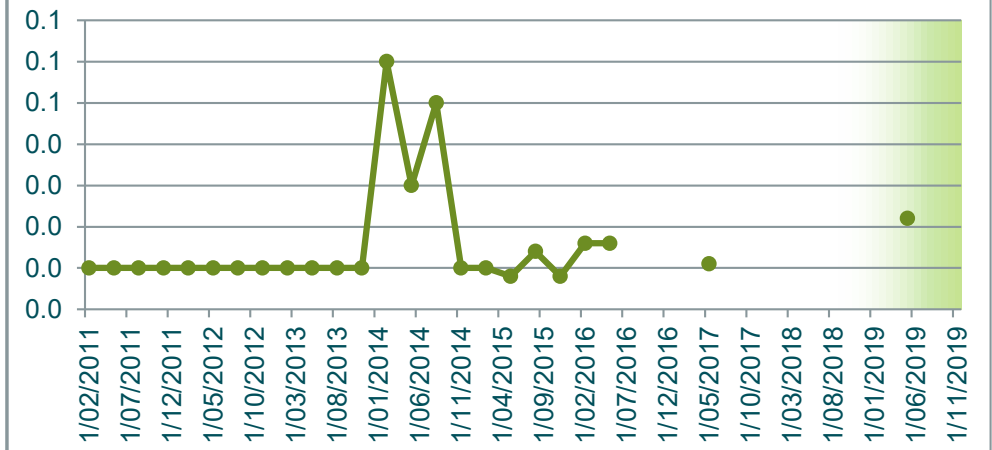
### Flouride mg/L



### Iron Total mg/L

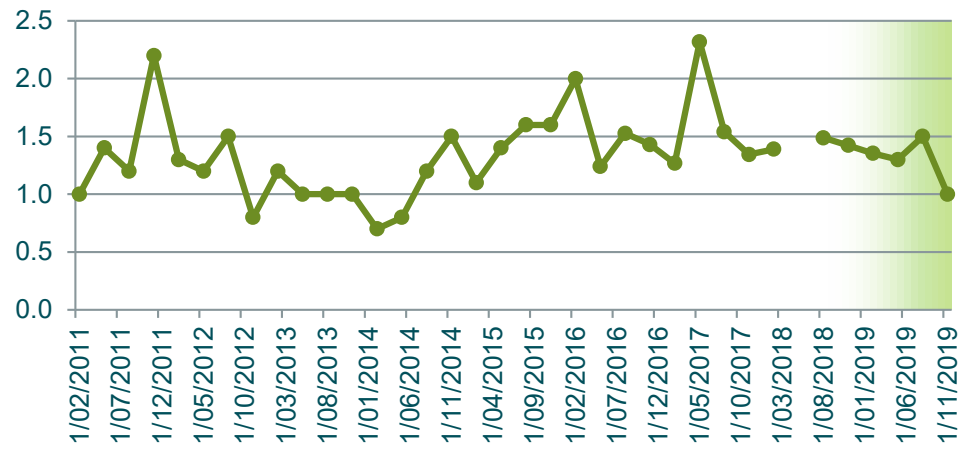


### Lead (Total) mg/L

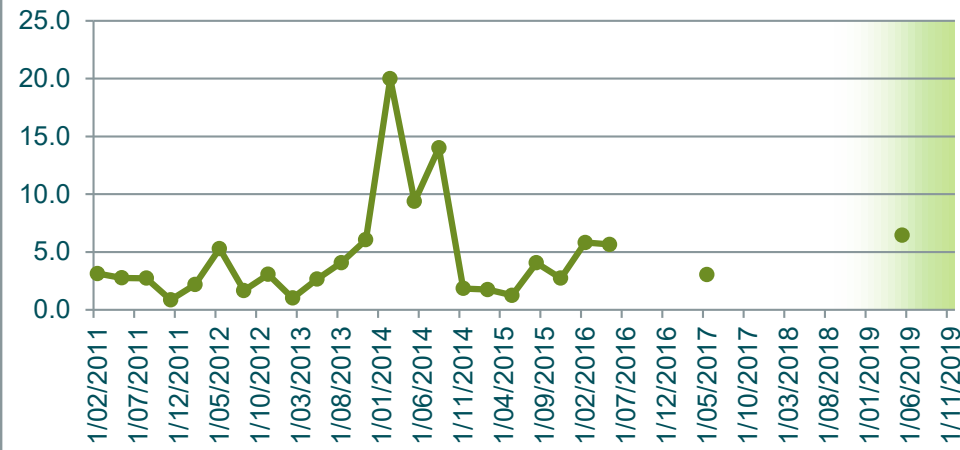




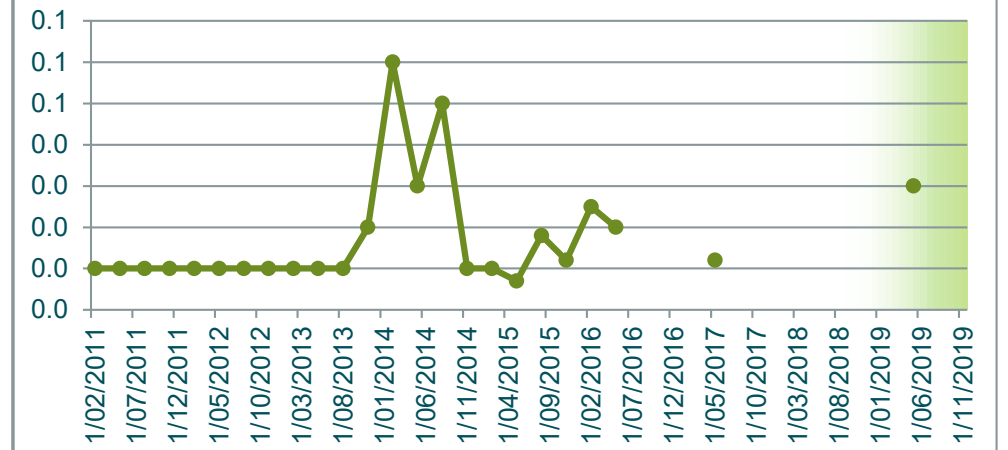
**Magnesium (Total)  
mg/L**



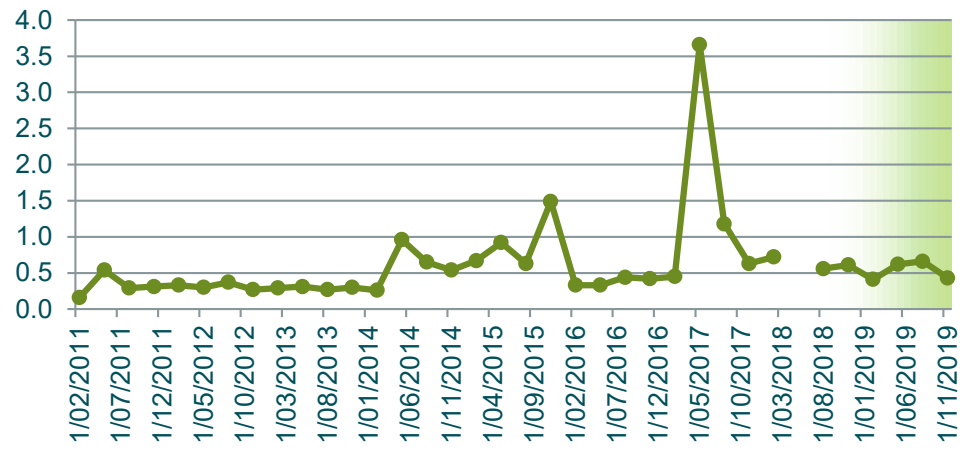
**Manganese Total  
mg/L**



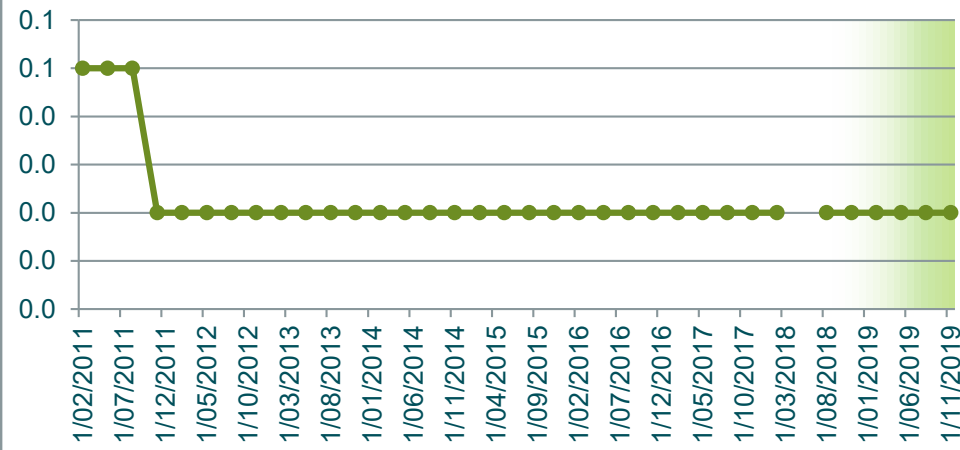
**Nickel (Total)  
mg/L**



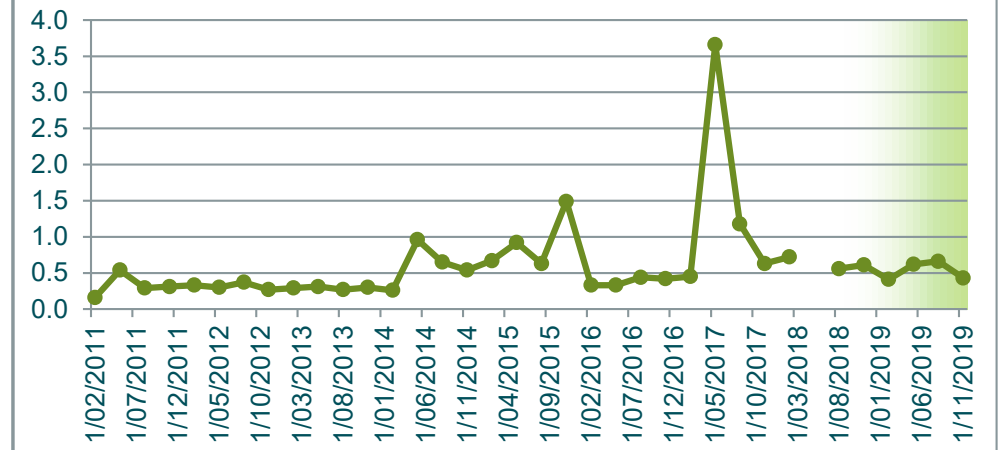
**Nitrate  
N mg/L**



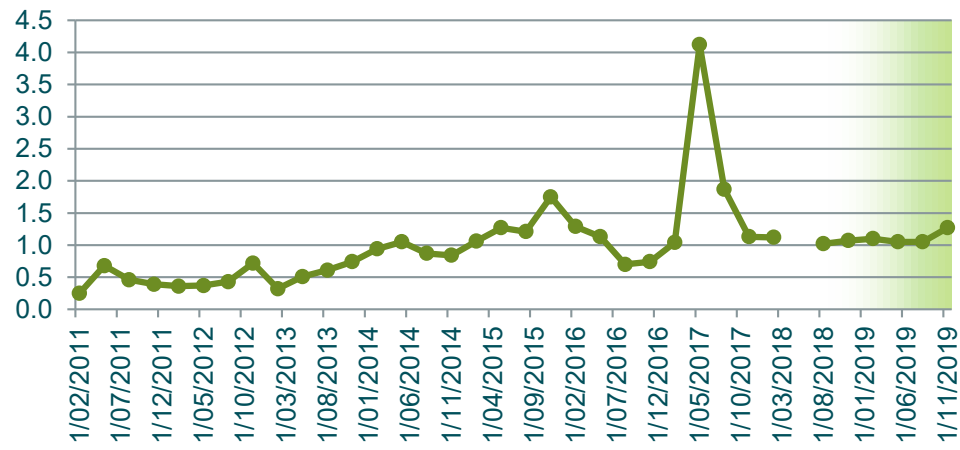
**Nitrite  
N mg/L**



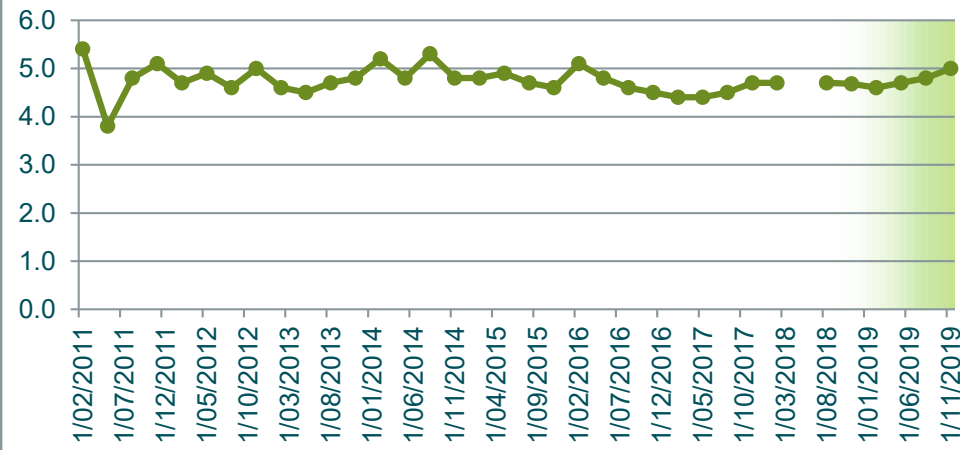
**Nitrogen Oxidised  
mg/L**



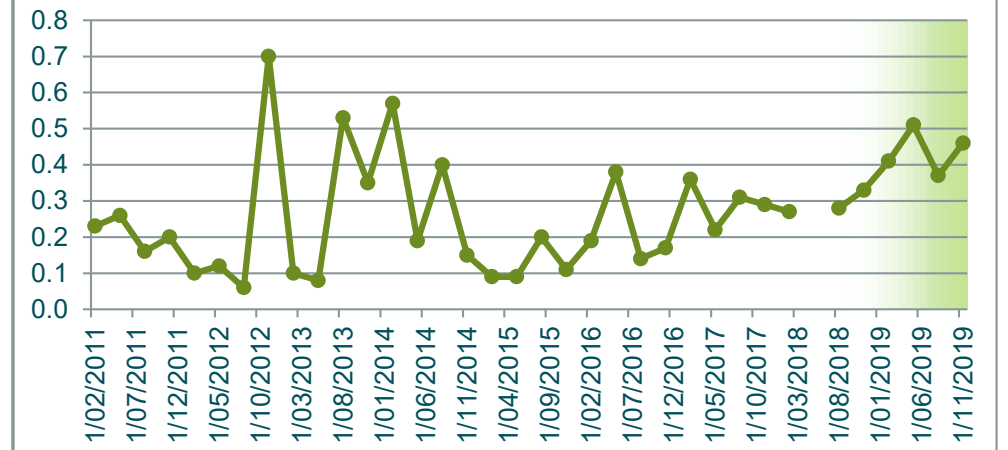
**Nitrogen Total  
mg/L**



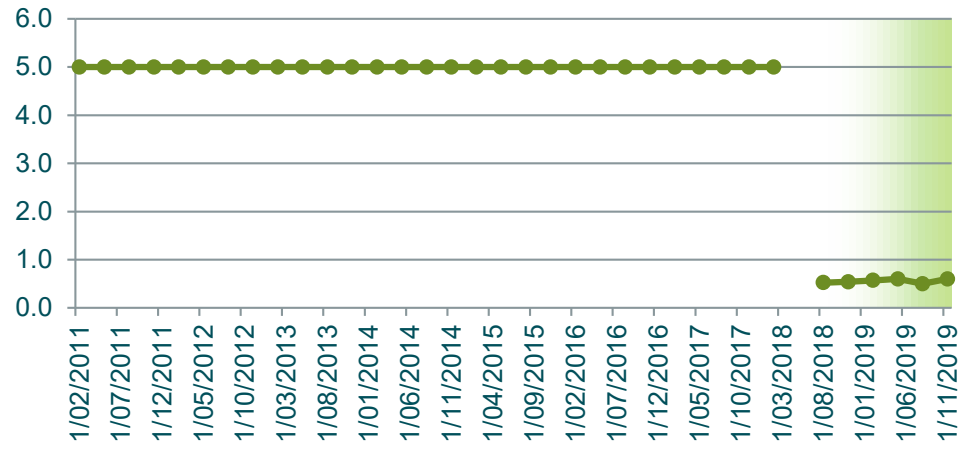
**pH  
pH units**



**Phosphorus Total  
mg/L**



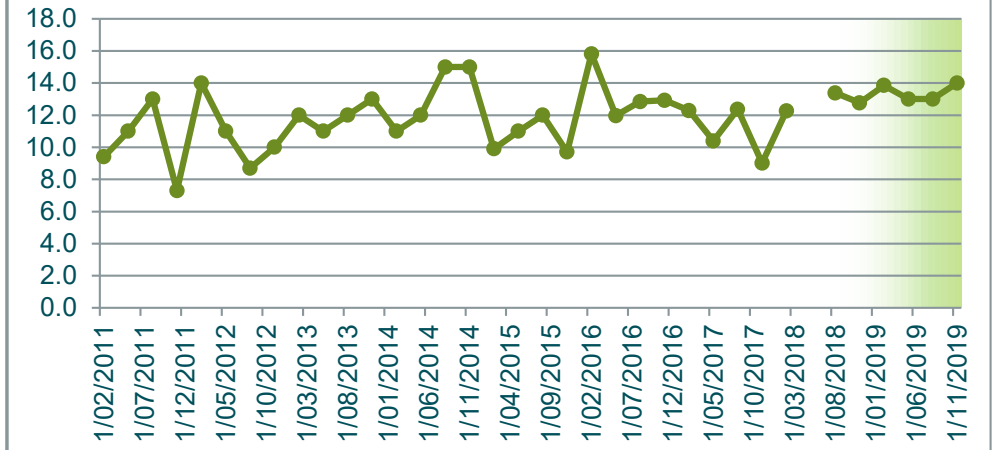
### Potassium Total mg/L



### Redox Potential mV



### Sodium (Total) mg/L



### Sulphate mg/L



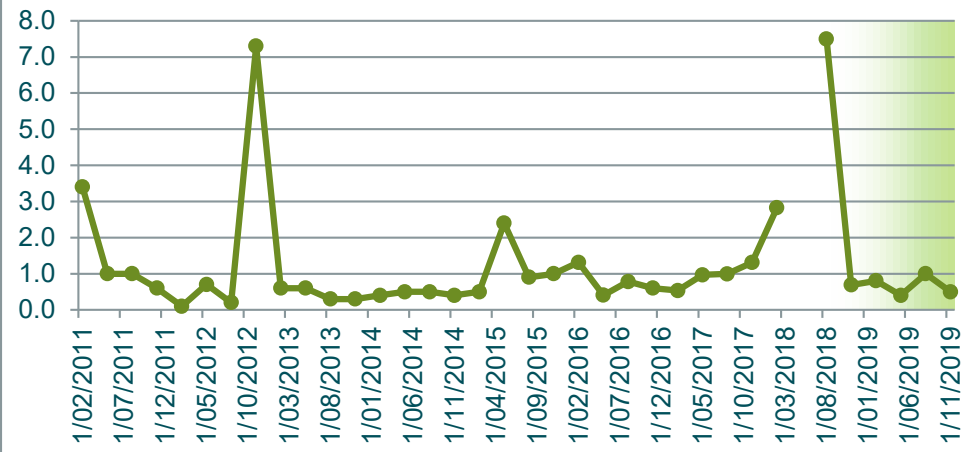
### Temperature C



### TKN mg/L



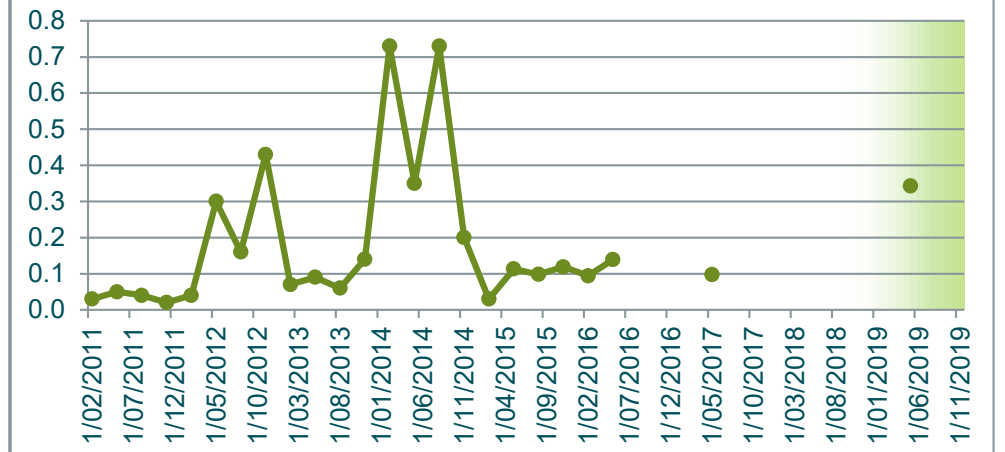
### TOC mg/L



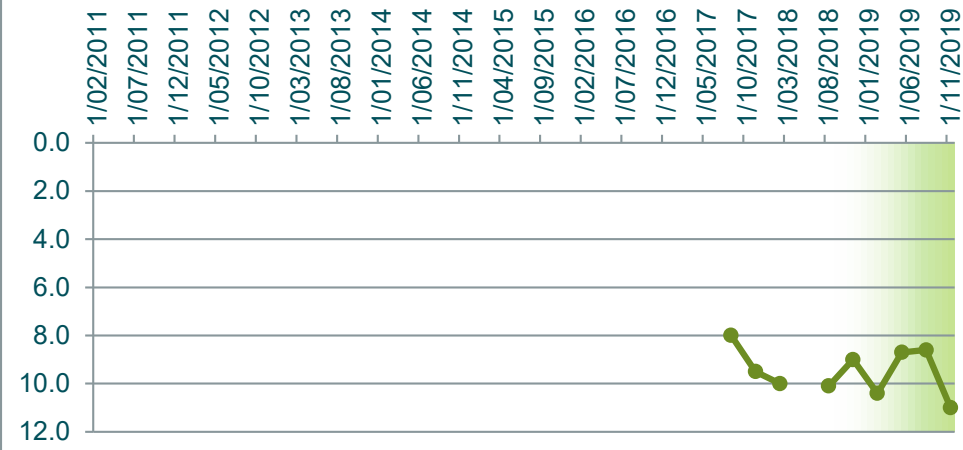
### Total Acidity mg/L CaCO3



### Zinc (Total) mg/L



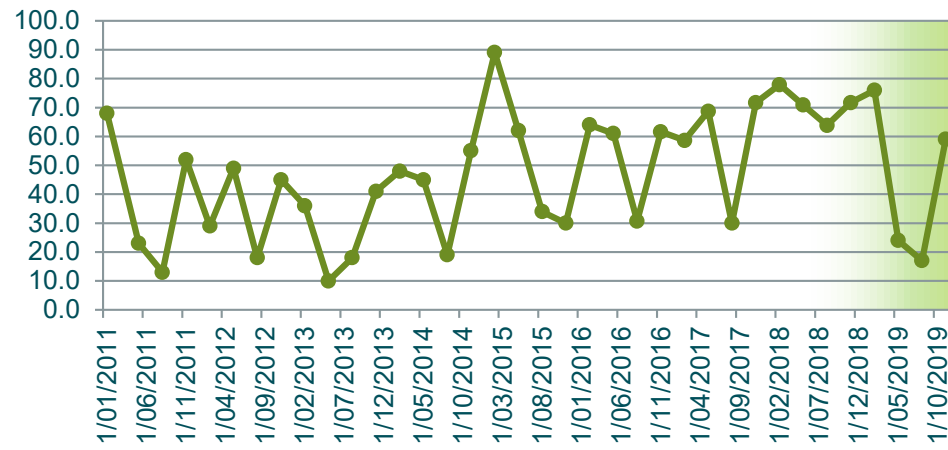
### Depth to Groundwater m



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 µS/cm-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	68.0	57.0	0.4	0.0	41.0	14.0	0.0	19.0	500	0.1	0.1	0.0	546	0.1	1.0	0.1	96	0.0	20.0	1.9	0.1	0.1	0.1	0.1	1.3	6.0		0.3	5.0	-10	29.0	127	23.0	1.3	6.8	120	0.7		
10/05/2011	23.0	44.0	0.2	0.0	14.0	3.5	0.0	17.0	44	0.1	0.1	0.0	399	0.1	1.1	0.1	70	0.0	10.0	1.0	0.0	0.1	0.1	0.1	1.6	5.1		0.4	5.0	203	20.0	84	21.0	1.6	2.8	66	0.6		
9/08/2011	13.0	82.0	0.3	0.1	8.0	10.0	0.0	20.0	88	0.1	0.1	0.0	567	0.1	1.5	0.1	174	0.0	22.0	2.4	0.1	0.1	0.1	0.1	1.6	5.4		0.5	5.0	254	33.0	159	18.3	1.5	4.7	178	0.7		
8/11/2011	52.0	70.0	0.3	0.0	32.0	7.8	0.0	20.0	140	0.1	0.1	0.0	530	0.1	1.3	0.2	157	0.0	27.0	1.8	0.1	0.1	0.0	0.1	1.1	6.0		0.5	17.0	36	26.0	103	20.5	1.0	2.3	110	0.5		
6/02/2012	29.0	64.0	0.8	0.0	18.0	35.0	0.0	30.0	86	0.1	0.1	0.0	532	0.1	1.1	0.1	94	0.1	18.0	1.6	0.1	0.1	0.0	0.1	2.2	5.4		0.3	5.0	161	38.0	126	23.2	2.2	6.8	120	1.3		
8/05/2012	49.0	0.0	0.8	0.0	30.0	14.0	0.0	20.0	70	0.0	0.0	0.0	559	0.0	3.0	0.2	0	0.0	25.0	2.5	0.0	0.2	0.0	0.2	1.6	5.9		0.4	8.0	74	39.0	110	21.5	1.3	3.6	80	0.0		
6/08/2012	18.0	17.0	0.5	0.0	11.0	6.9	0.0	17.0	84	0.0	0.0	0.0	578	0.0	2.0	0.1	52	0.0	19.0	1.1	0.0	0.1	0.0	0.1	1.4	5.2		0.4	5.0	102	29.0	85	18.3	1.4	3.8	35	0.3		
13/11/2012	45.0	32.0	0.5	0.0	27.0	8.4	0.0	20.0	290	0.0	0.0	0.0	630	0.0	1.3	0.7	92	0.0	22.0	1.4	0.0	0.1	0.0	0.1	1.4	6.0		0.5	5.0	39	44.0	88	20.9	1.4	3.7	130	0.6		
13/02/2013	36.0	32.0	0.5	0.0	22.0	5.7	0.0	18.0	92	0.0	0.0	0.0	586	0.0	1.5	0.2	67	0.0	20.0	1.2	0.0	0.1	0.0	0.1	1.4	5.8		0.1	5.0	-21	45.0	77	23.4	1.4	2.5	94	0.4		
14/05/2013	10.0	25.0	0.3	0.0	6.0	3.9	0.0	21.0	91	0.0	0.0	0.0	521	0.0	2.4	0.1	34	0.0	17.0	0.9	0.0	0.1	0.0	0.1	1.4	5.7		0.4	5.0	45	44.0	72	20.6	1.3	2.6	215	0.3		
6/08/2013	18.0	49.0	0.1	0.0	11.0	3.0	0.0	18.0	91	0.0	0.0	0.0	573	0.0	2.0	0.1	235	0.0	20.0	1.4	0.0	0.1	0.0	0.1	1.1	5.6		0.4	5.0	106	45.0	84	19.1	1.0	2.2	143	0.4		
12/11/2013	41.0	71.0	0.3	0.0	25.0	4.5	0.0	17.0	102	0.1	0.1	0.0	565	0.0	4.6	0.2	84	0.0	21.0	1.4	0.0	0.2	0.0	0.2	1.3	5.8		0.8	5.0	-2	49.0	64	20.7	1.1	1.5	59	0.3		
11/02/2014	48.0	35.0	0.3	0.0	29.0	2.7	0.0	16.0	101	0.0	0.0	0.0	548	0.0	2.6	0.2	49	0.0	21.0	1.1	0.0	0.1	0.0	0.1	1.0	6.1		0.2	5.0	-10	46.0	52	21.7	0.9	1.6	213	0.2		
13/05/2014	45.0	69.0	0.3	0.0	27.0	2.7	0.0	15.0	107	0.0	0.0	0.0	567	0.0	3.0	0.2	84	0.0	19.0	1.0	0.0	0.1	0.0	0.1	0.9	6.0		0.3	5.0	35	49.0	44	21.5	0.8	1.5	74	0.2		
12/08/2014	19.0	47.0	0.1	0.0	12.0	1.2	0.0	16.0	106	0.0	0.0	0.0	522	0.0	3.2	0.1	129	0.0	20.0	1.3	0.0	0.1	0.0	0.1	1.2	5.9		0.5	5.0	77	48.0	58	18.5	1.1	0.8	150	0.3		
10/11/2014	55.0	37.0	0.3	0.0	34.0	6.3	0.0	15.0	115	0.0	0.0	0.0	544	0.0	3.2	0.2	59	0.0	20.0	1.0	0.0	0.2	0.0	0.2	1.4	6.2		0.4	5.0	10	49.0	41	20.7	1.2	1.5	190	0.2		
9/02/2015	89.0	39.7	3.1	0.0	54.0	15.0	0.0	19.0	120	0.0	0.0	0.0	643	0.0	2.0	0.2	64	0.0	22.0	1.2	0.0	0.0	0.0	0.1	6.6	6.3		0.7	7.0	-25	55.0	38	24.3	6.5	6.8	134	1.3		
11/05/2015	62.0	47.0	0.5	0.0	38.0	17.0	0.0	18.0	105	0.0	0.0	0.0	532	0.0	2.3	0.2	59	0.0	20.0	1.1	0.0	0.0	0.0	0.0	1.9	6.2		0.7	6.0	11	53.0	35	21.1	1.9	1.9	97	2.9		
11/08/2015	34.0	26.9	0.3	0.0	34.0	5.4	0.0	17.0	100	0.0	0.0	0.0	533	0.0	2.7	0.1	68	0.0	20.0	1.0	0.0	0.0	0.0	0.0	1.4	6.0		0.7	5.5	87	48.0	46	18.6	1.4	1.5	114	1.0		
10/11/2015	30.0	33.2	0.2	0.0	30.0	6.0	0.0	31.0	34	0.0	0.0	0.0	753	0.0	1.9	0.2	94	0.0	24.0	1.4	0.0	0.0	0.0	0.0	1.3	5.7		0.6	5.0	2	61.0	93	20.5	1.2	2.2	106	1.0		
8/02/2016	64.0	48.7	0.2	0.0	64.0	6.0	0.0	17.0	111	0.1	0.1	0.0	564	0.0	2.6	0.1	75	0.0	20.3	1.2	0.1	0.0	0.0	0.0	1.4	6.0		0.7	5.8	37	49.3	40	22.8	1.4	1.8	154	1.3		
9/05/2016	61.0	92.2	0.3	0.0	61.0	9.6	0.0	16.3	112	0.1	0.1	0.0	571	0.1	2.4	0.2	104	0.0	19.7	1.6	0.1	0.1	0.0	0.1	1.6	6.1		0.8	7.2	31	49.2	33	22.0	1.6	4.0	120	3.3		
9/08/2016	30.7		0.1		31.0	3.3		19.7	120				609		2.6	0.2			21.3			0.0	0.0	0.0	0.7	5.5		0.5	5.3	118	56.1	60	18.7	0.6	1.1	152			
7/11/2016	61.6		0.2		62.0	3.0		14.6	125				550		2.6	0.2			18.9			0.0	0.0	0.0	1.0	6.0		0.9	5.4	155	49.3	29	20.6	1.0	0.9	133			
7/02/2017	58.6		0.3		59.0	3.6		13.9	85				557		3.0	0.2			18.0			0.0	0.0	0.0	1.1	6.0		0.3	5.4	101	46.7	21	23.4	1.1	1.7	128			
8/05/2017	68.7	24.7	1.4	0.0	69.0	16.5	0.0	21.3	141	0.0	0.0	0.0	694	0.0	1.9	0.2	39	0.0	23.1	1.1	0.0	0.1	0.0	0.1	2.5	5.9		0.4	5.9	71	59.5	53	21.4	2.4	3.2	118	2.2		
8/08/2017	30.0		0.3		30.0	4.5		15.9	100				587		2.6	0.2			18.9			0.0	0.0	0.0	1.3	5.8		0.4	5.0	217	51.1	45	18.5	1.3	1.6	86		1.6	
7/11/2017	71.7		0.3		72.0	3.6		18.1	115				610		2.5	0.2			21.8			0.0	0.0	0.0	1.5	6.0		0.6	6.2	66	55.4	38	20.3	1.4	1.5	113		1.5	
13/02/2018	77.9		1.0		78.0	11.1		15.3	115				590		2.3	0.2			19.6			0.0	0.0	0.0	2.2	6.1		0.4	5.5	-59	49.7	26	23.7	2.2	4.1	110		1.4	
8/05/2018	70.8	19.3	0.6	0.0	71.0	11.1	0.0	15.9	122	0.0	0.0	0.0	573	0.0	2.3	0.2	30	0.0	19.3	0.9	0.0	0.2	0.0	0.2	2.0	6.0		0.7	5.7	38	48.1	34	21.7	1.8	3.2	92	0.7	1.4	
14/08/2018	63.8		0.7		64.0	19.5		15.8	115				557		2.4	0.2			19.2			0.1	0.0	0.1	2.9	6.0		0.7	5.6	100	53.0	27	18.5	2.8	26.0	100		1.7	
13/11/2018	71.7		0.6		72.0	13.2		15.2	117				554		2.3	0.2			19.1			0.0	0.0	0.1	2.1	6.2		0.7	5.4	3	49.2	24	20.2	2.1	3.3	91		1.6	
12/02/2019	76.0		0.5		76.0	8.7		14.8	118				569		2.3	0.2			19.3			0.0	0.0	0.0	1.7	6.2		0.3	5.8	16	51.8	18	22.8	1.7	4.2	84		2.2	
14/05/2019	24.0	31.0	0.8	0.0	24.0	8.1	0.0	36.0	180	0.0	0.0	0.0	930	0.0	2.2	0.2	40	0.0	32.0	1.7	0.1	0.1	0.0	0.1	1.9	5.5		0.5	5.9	90	96.0	166	21.3	1.9	6.2	54	1.9	1.5	
13/08/2019	17.0		0.5		17.0	8.4		27.0	130				734		2.8	0.2			26.0			0.0	0.0	0.0	1.9	5.0		0.6	5.4	386	72.0	139	18.1	1.9	7.2	58		1.5	
12/11/2019	59.0		1.0		59.0	35.0		22.0	130				738		2.2	0.2			26.0			0.0	0.0	0.0	2.3	5.9		0.5	5.6	9	59.0	105	19.8	2.3	6.8	110		2.0	
<b>2019 Min</b>	<b>17.0</b>	<b>31.0</b>	<b>0.5</b>	<b>0.0</b>	<b>17.0</b>	<b>8.1</b>	<b>0.0</b>	<b>14.8</b>	<b>118</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>569</b>	<b>0.0</b>	<b>2.2</b>	<b>0.2</b>	<b>40</b>	<b>0.0</b>	<b>19.3</b>	<b>1.7</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>1.7</b>	<b>5.0</b>		<b>0.3</b>	<b>5.4</b>	<b>9</b>	<b>51.8</b>	<b>18</b>	<b>18.1</b>	<b>1.7</b>	<b>4.2</b>	<b>54</b>	<b>1.9</b>	<b>1.5</b>		
<b>2019 Max</b>	<b>76.0</b>	<b>31.0</b>	<b>1.0</b>	<b>0.0</b>	<b>76.0</b>	<b>35.0</b>	<b>0.0</b>	<b>36.0</b>	<b>180</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>930</b>	<b>0.0</b>	<b>2.8</b>	<b>0.2</b>	<b>40</b>	<b>0.0</b>	<b>32.0</b>	<b>1.7</b>	<b>0.1</b>	<b>0.1</b>	<b>0.0</b>	<b>0.1</b>															



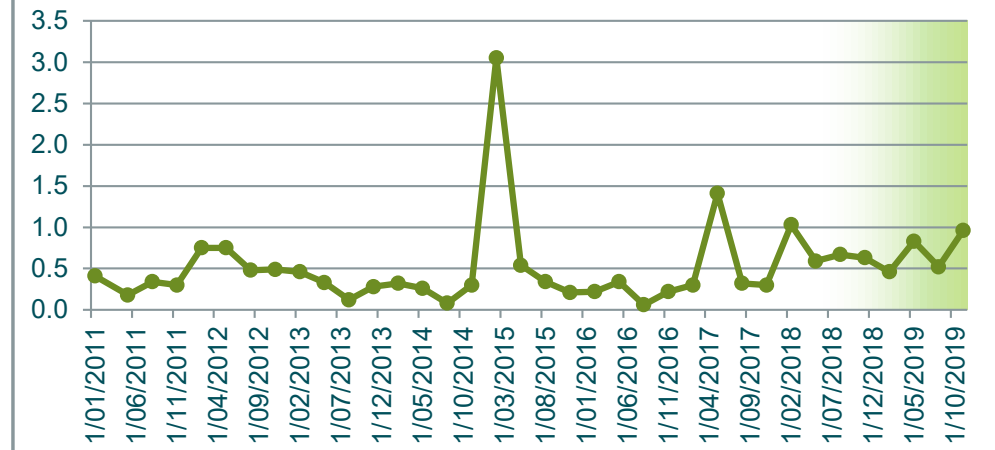
**Alkalinity**  
mg/L as CaCO<sub>3</sub>



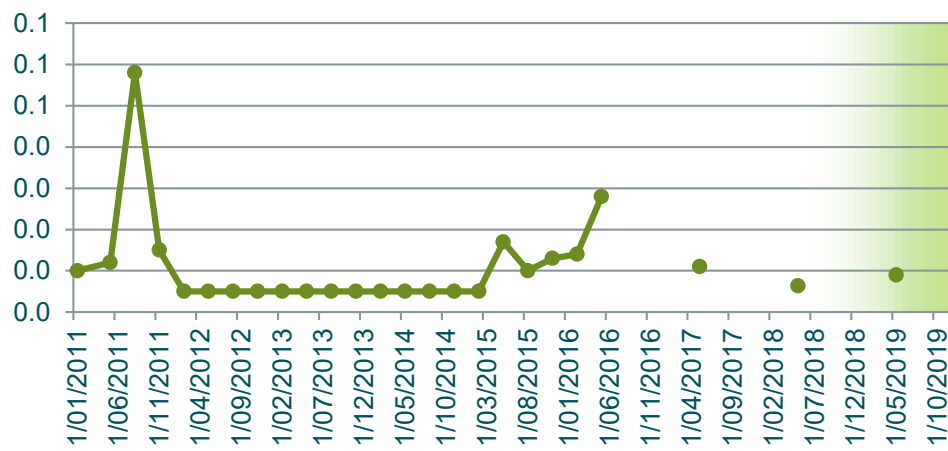
**Aluminium (Total)**  
mg/L



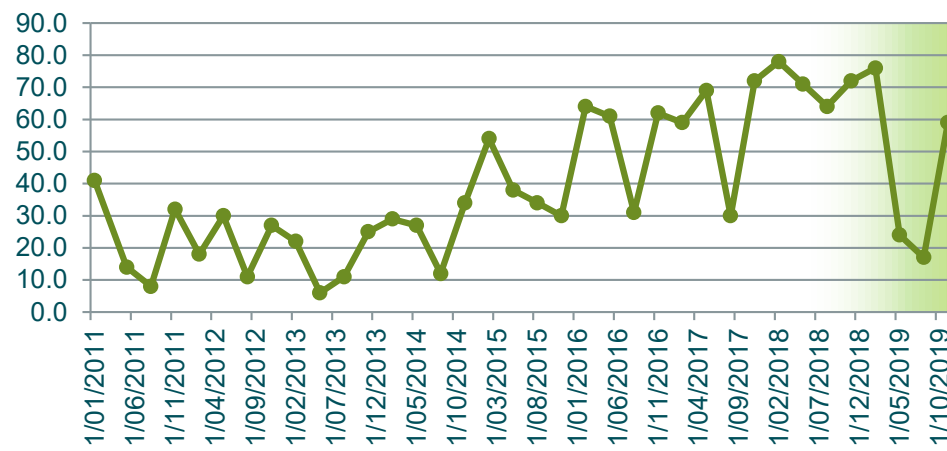
**Ammonia**  
mg/L



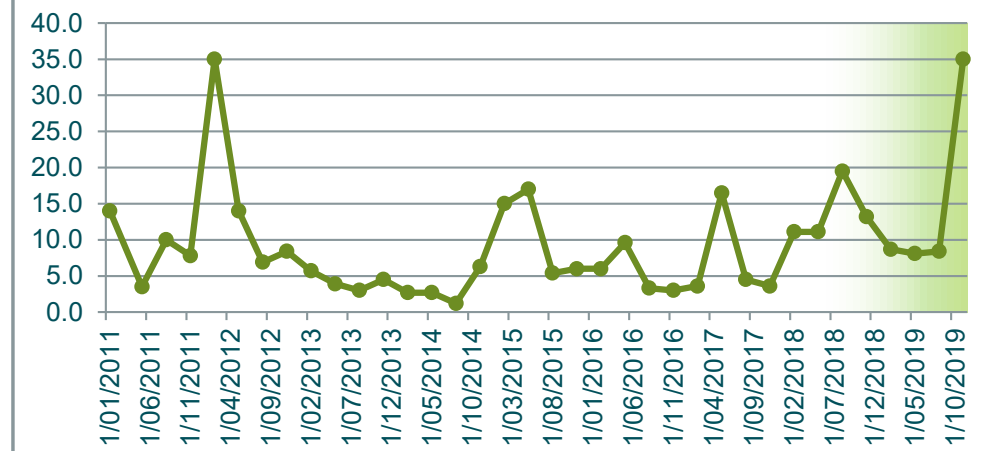
**Arsenic (Total)**  
mg/L



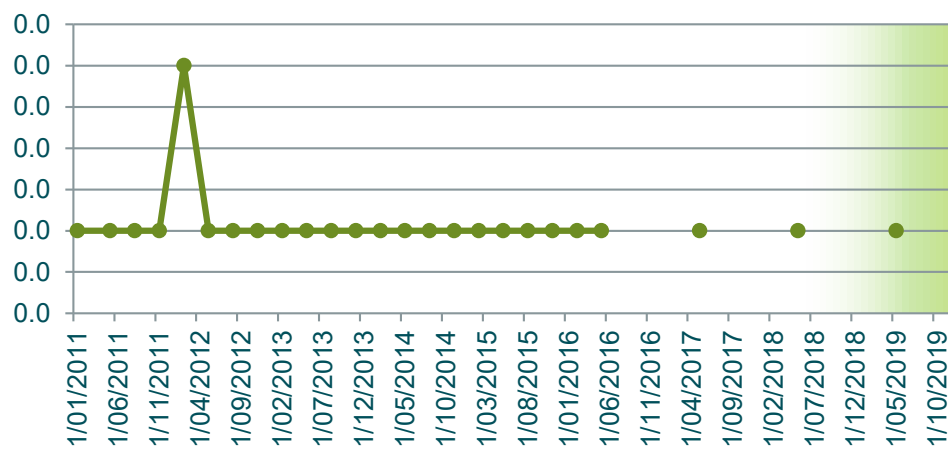
**Bicarbonate HCO<sub>3</sub>**  
mg/L



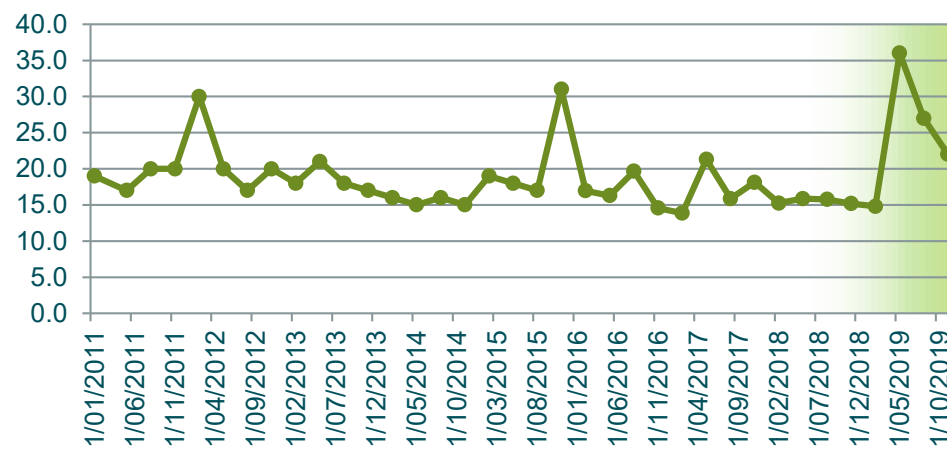
**BOD<sub>5</sub>**  
mg/L



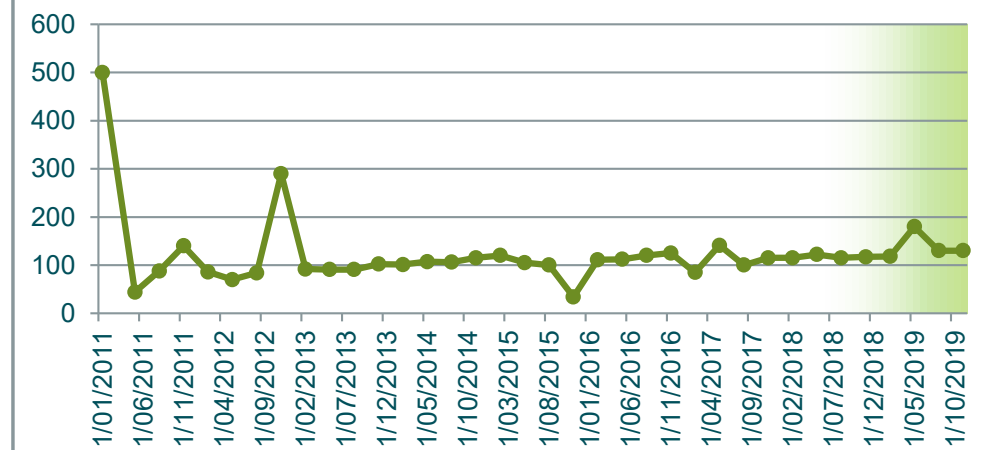
**Cadmium (Total)**  
mg/L



**Calcium (Total)**  
mg/L



**Chloride**  
mg/L



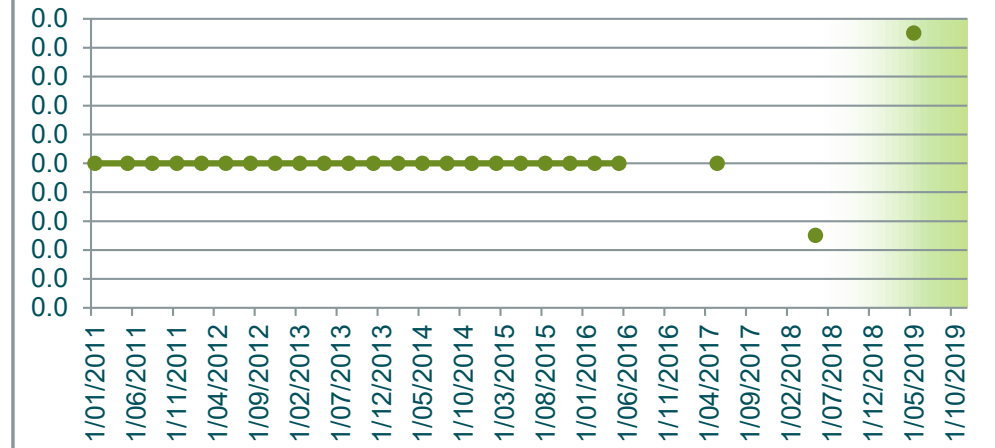
### Chromium (Total) mg/L



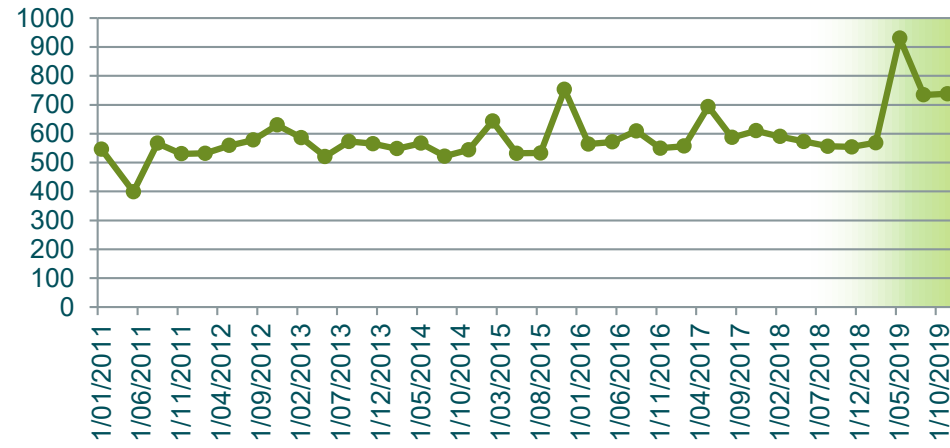
### Chromium 3 mg/L



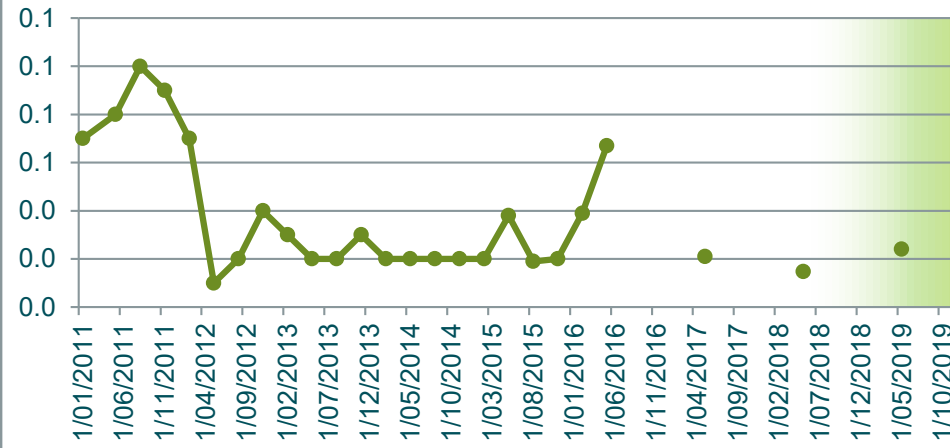
### Chromium 6 mg/L



### Conductivity µScm-1



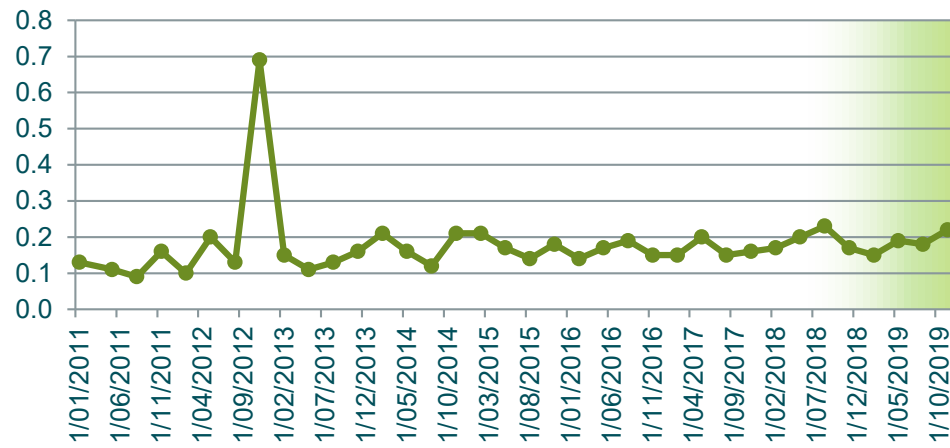
### Copper (Total) mg/L



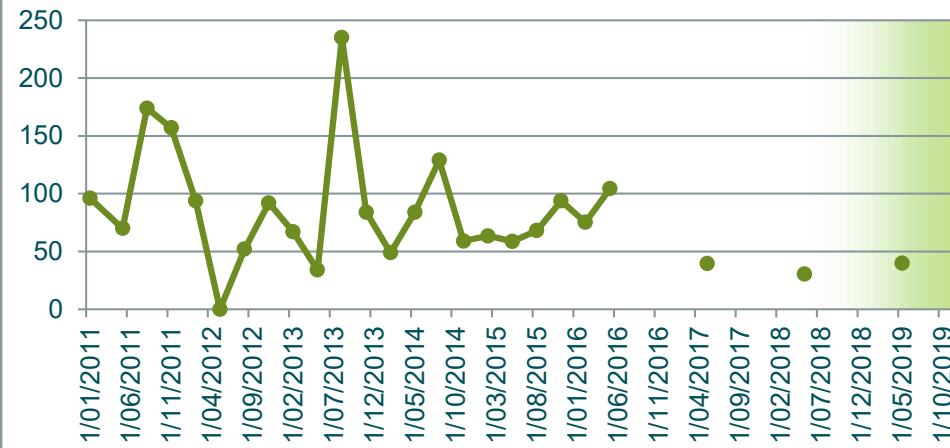
### DO (Membrane Electrode) mg/L



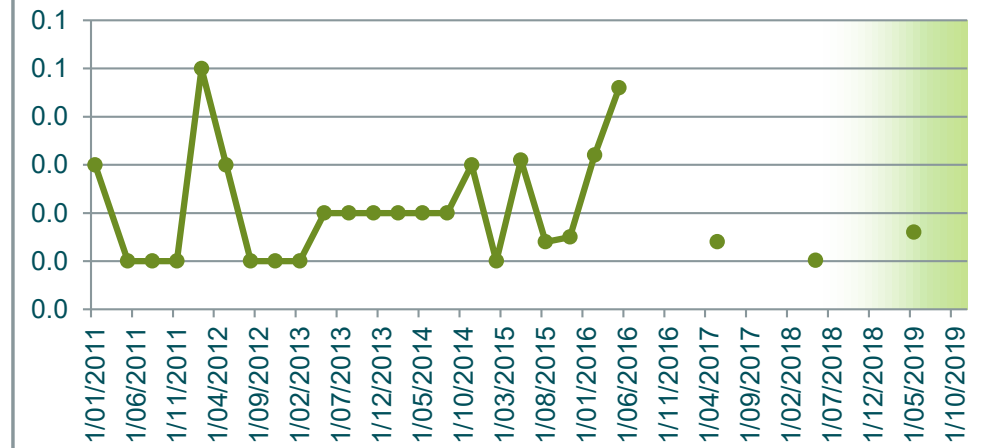
### Flouride mg/L



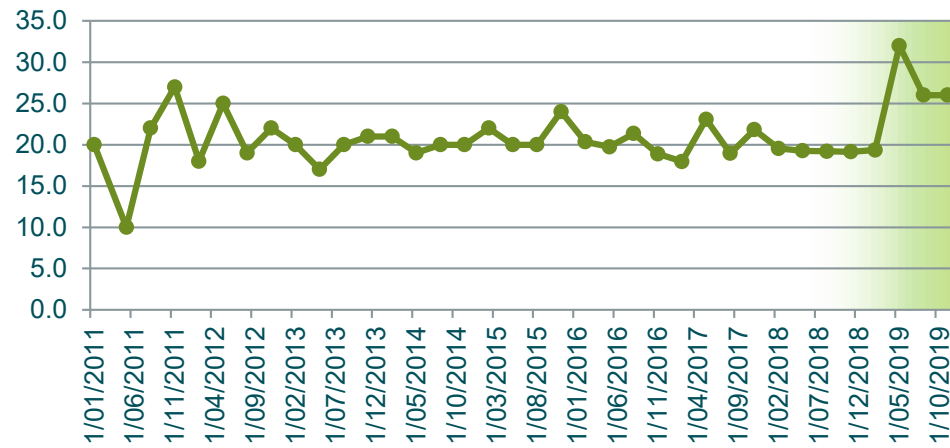
### Iron Total mg/L



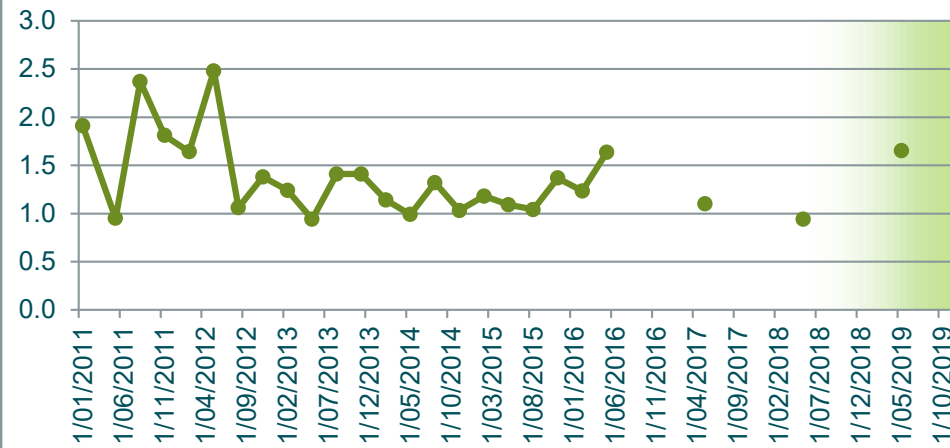
### Lead (Total) mg/L



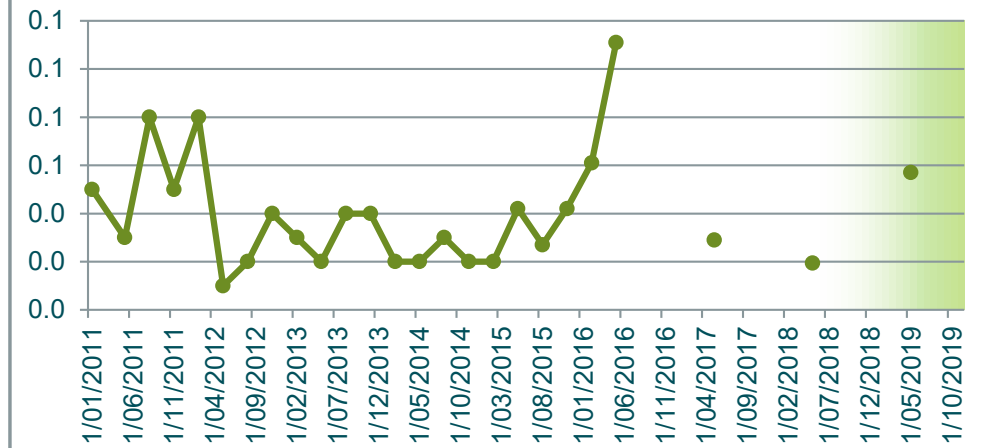
**Magnesium (Total)  
mg/L**



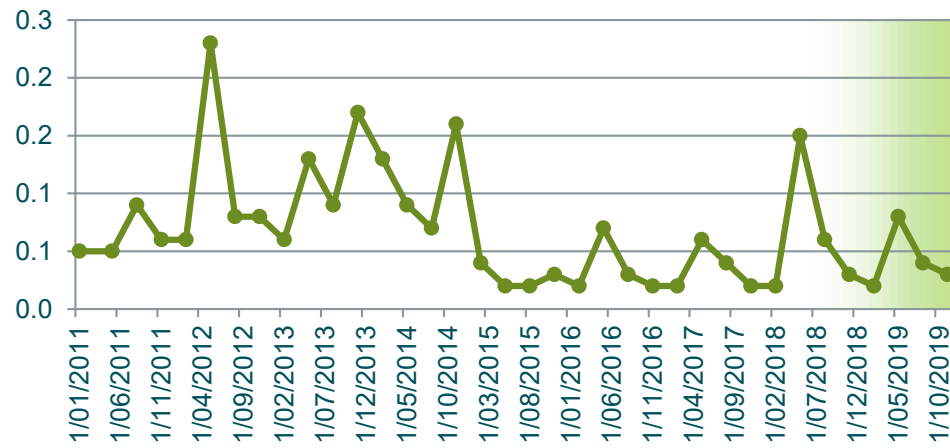
**Manganese Total  
mg/L**



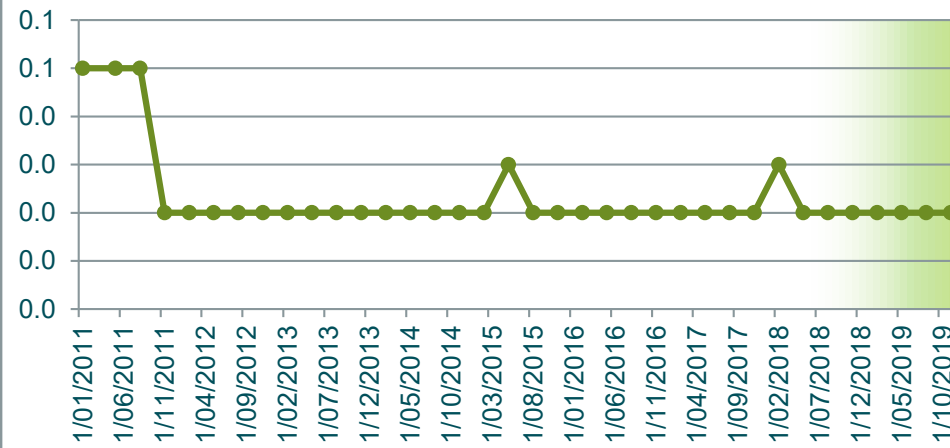
**Nickel (Total)  
mg/L**



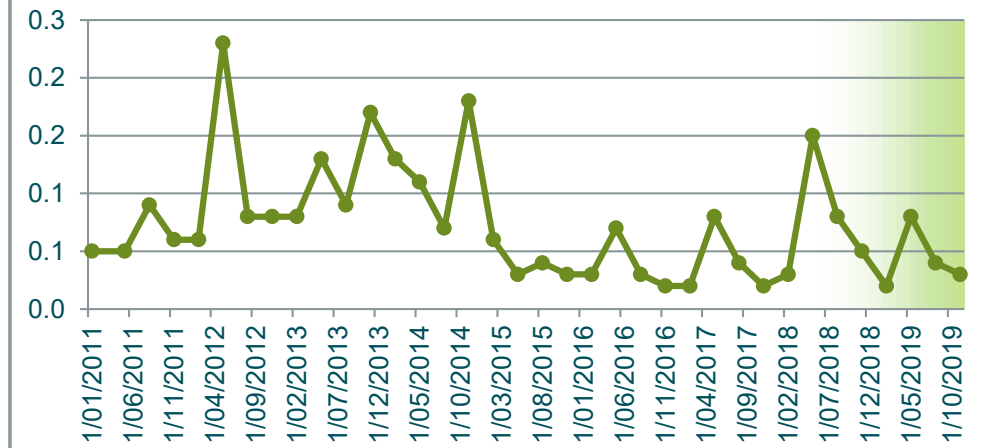
**Nitrate  
N mg/L**



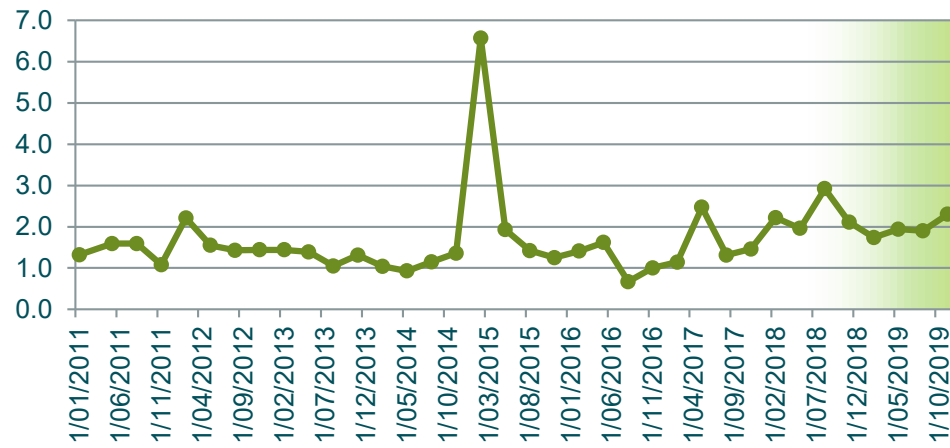
**Nitrite  
N mg/L**



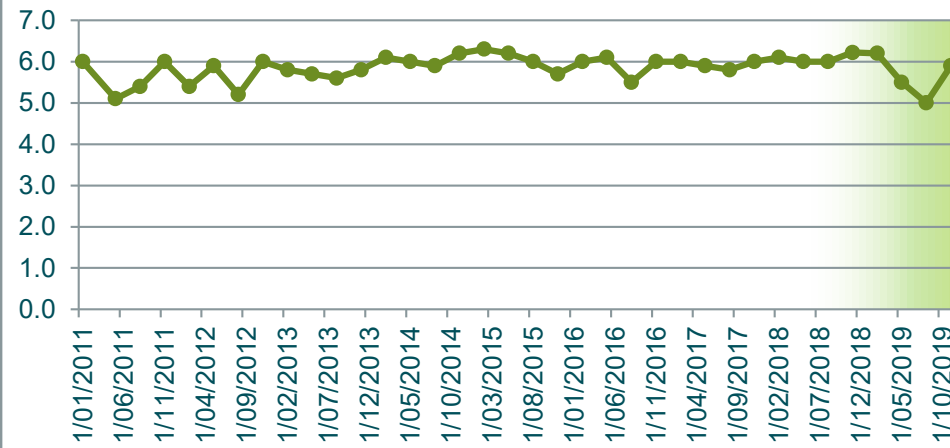
**Nitrogen Oxidised  
mg/L**



**Nitrogen Total  
mg/L**



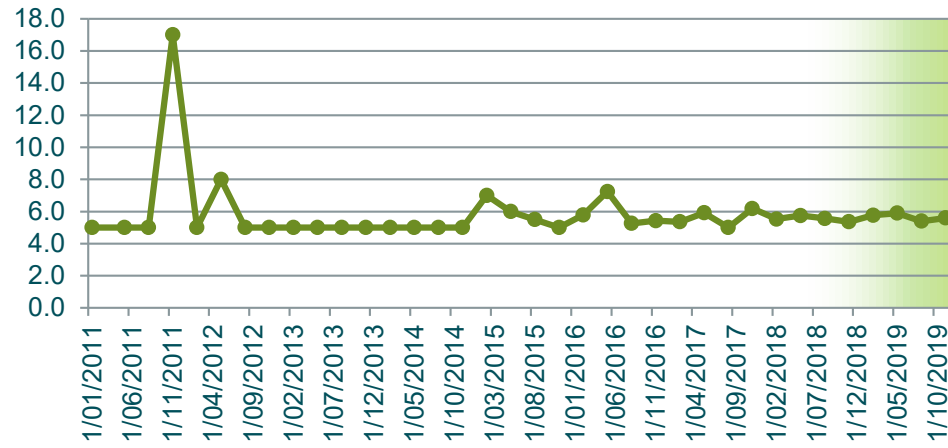
**pH  
pH units**



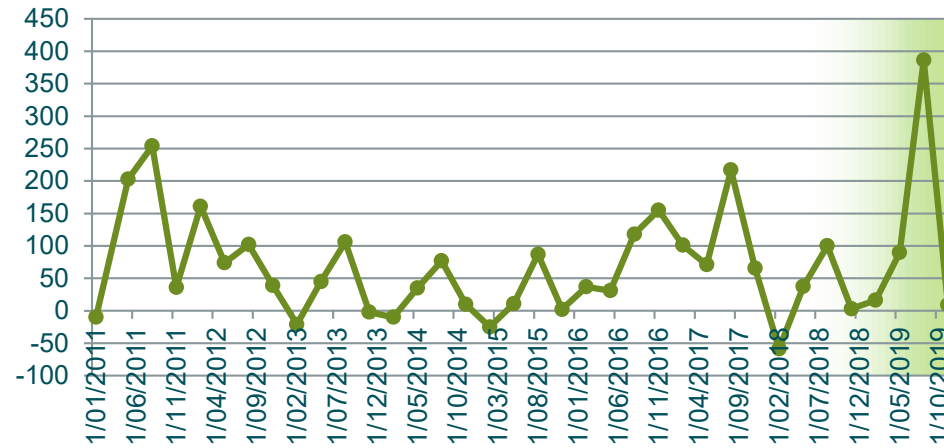
**Phosphorus Total  
mg/L**



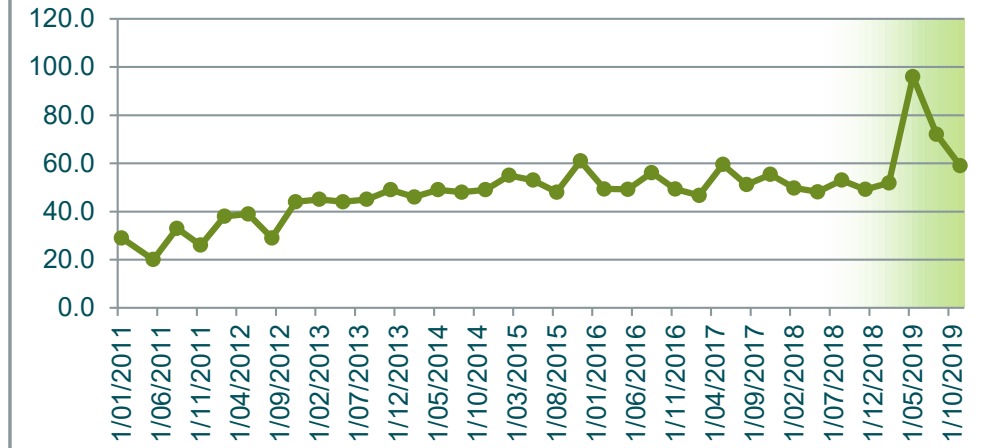
**Potassium Total  
mg/L**



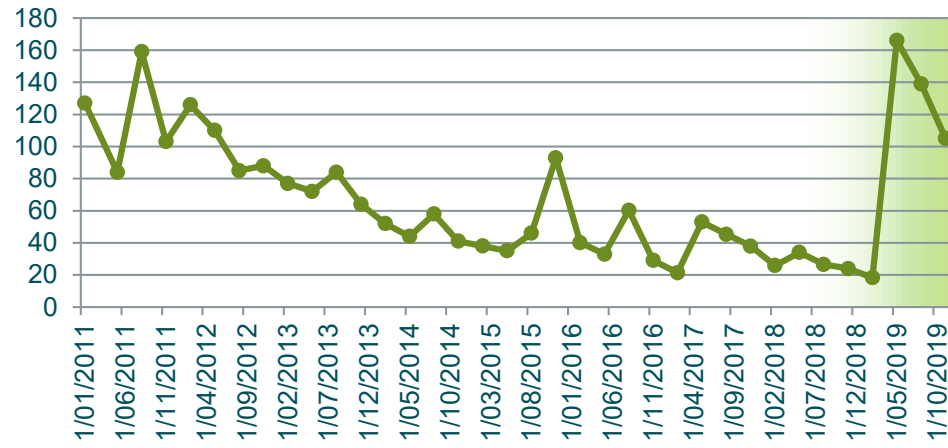
**Redox Potential  
mV**



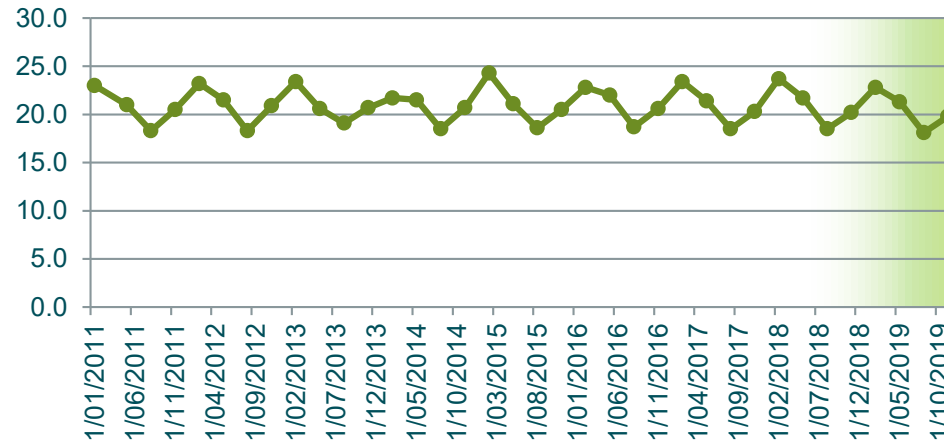
**Sodium (Total)  
mg/L**



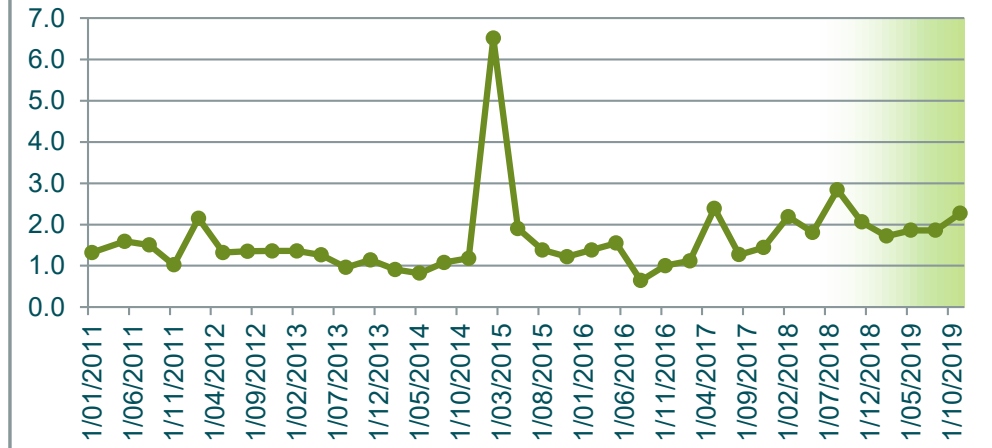
**Sulphate  
mg/L**



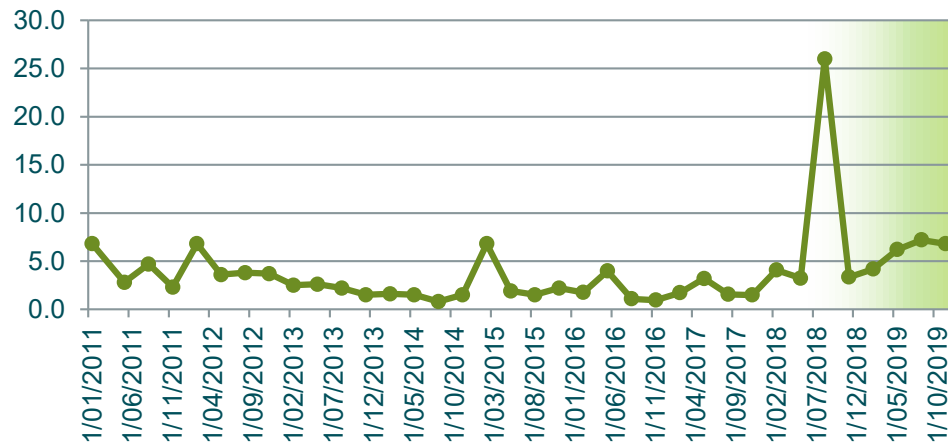
**Temperature  
C**



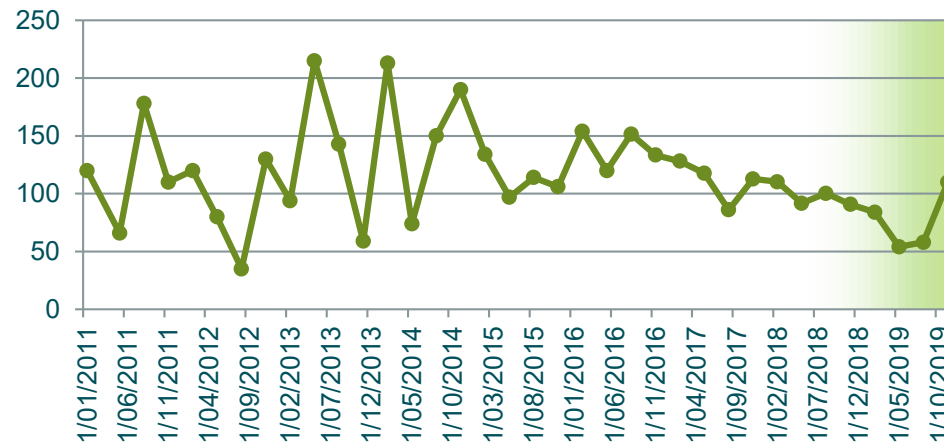
**TKN  
mg/L**



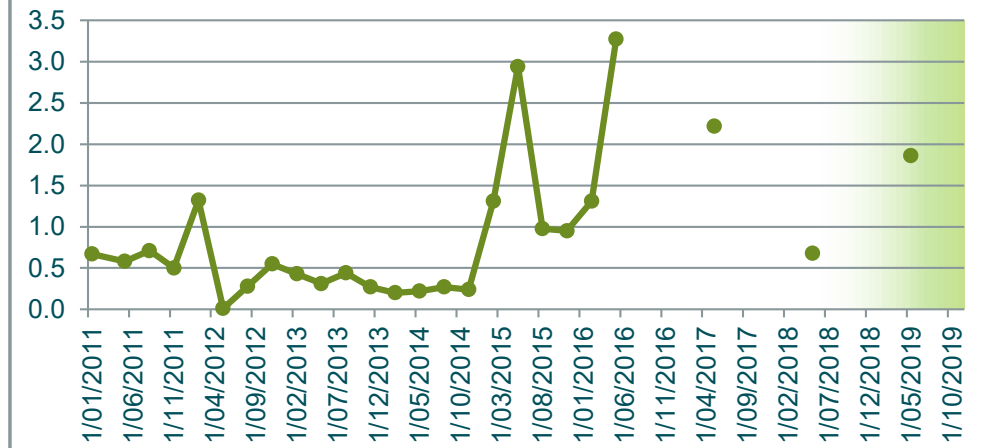
**TOC  
mg/L**



**Total Acidity  
mg/L CaCO3**

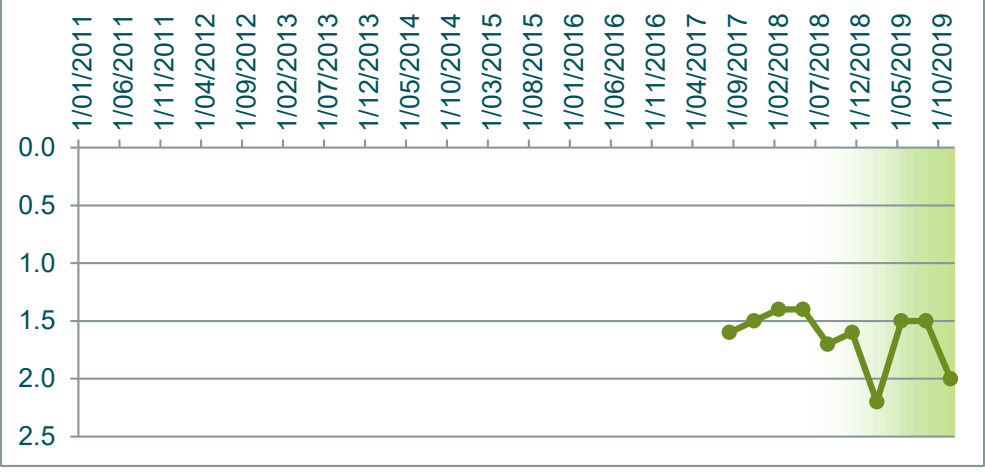


**Zinc (Total)  
mg/L**

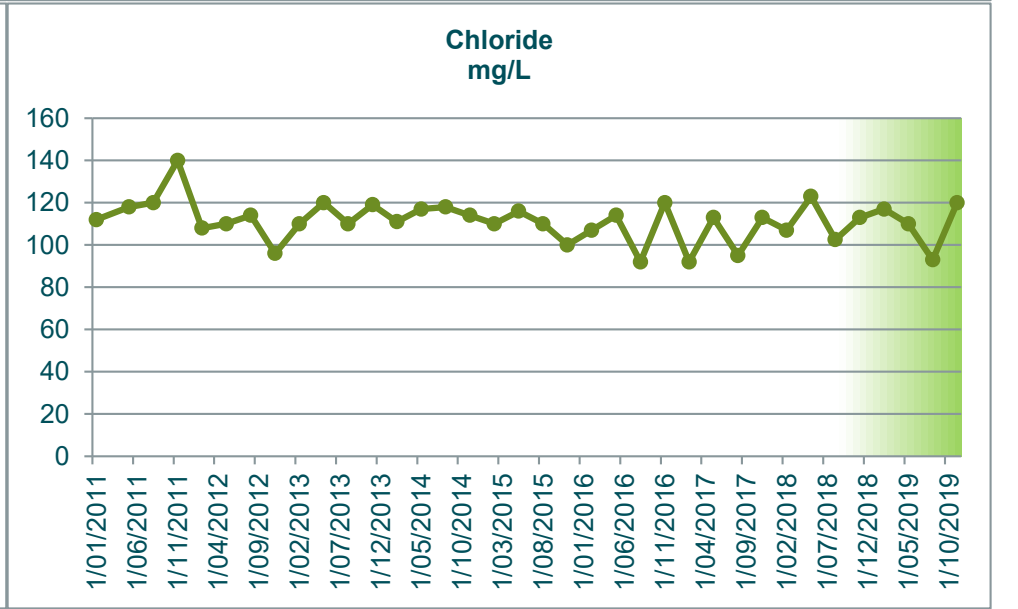
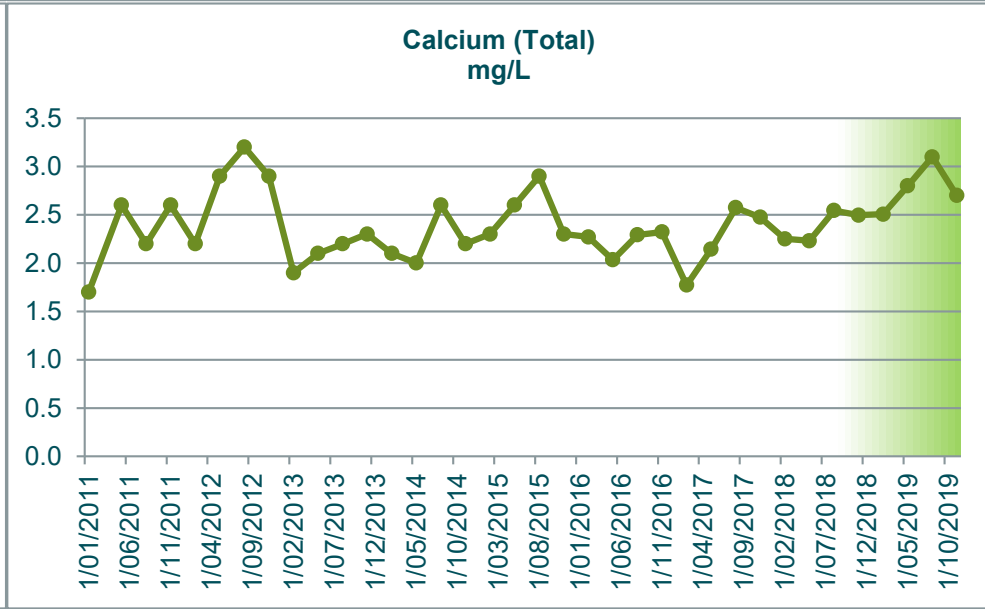
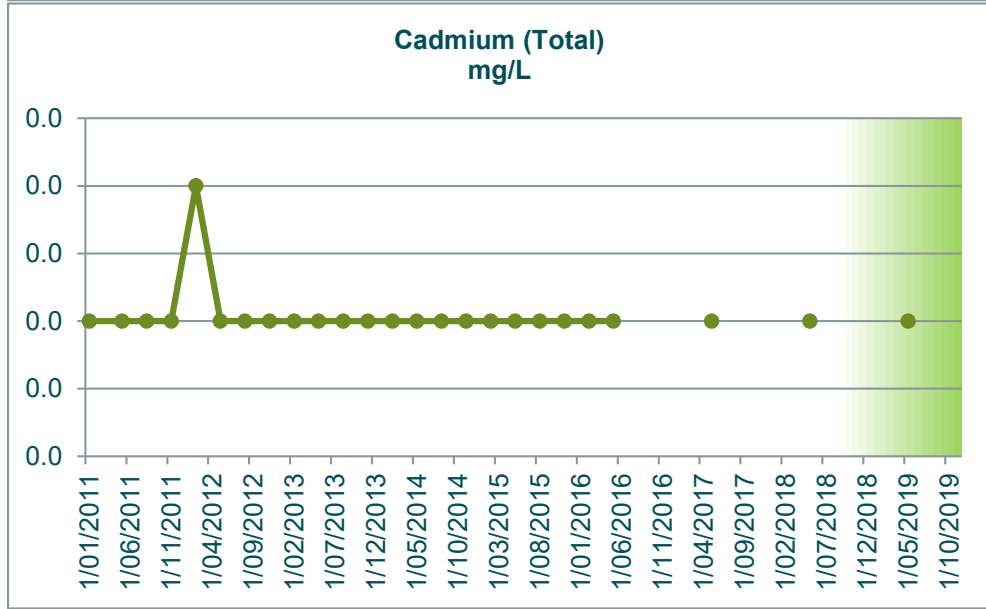
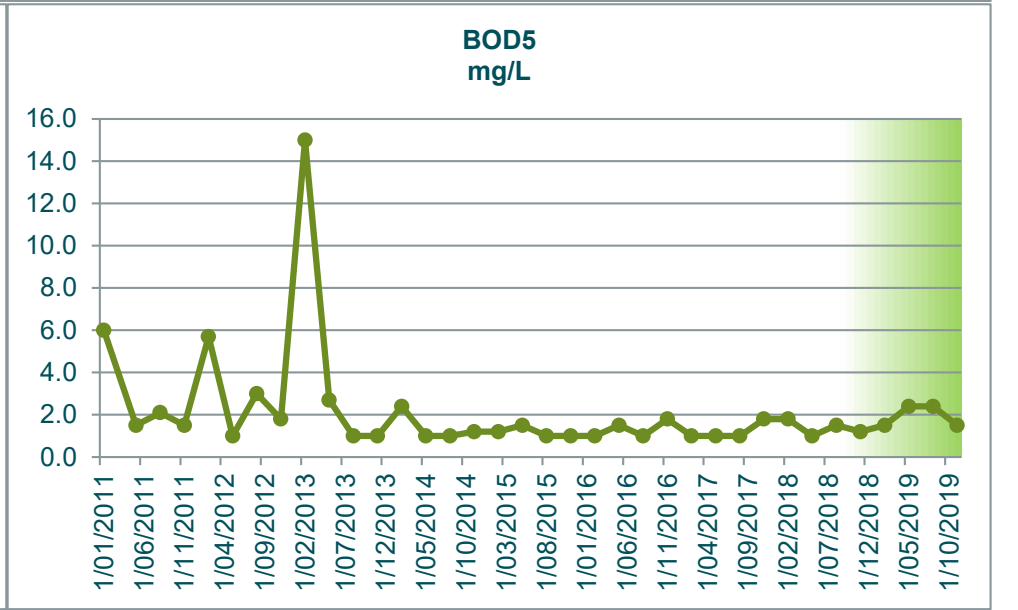
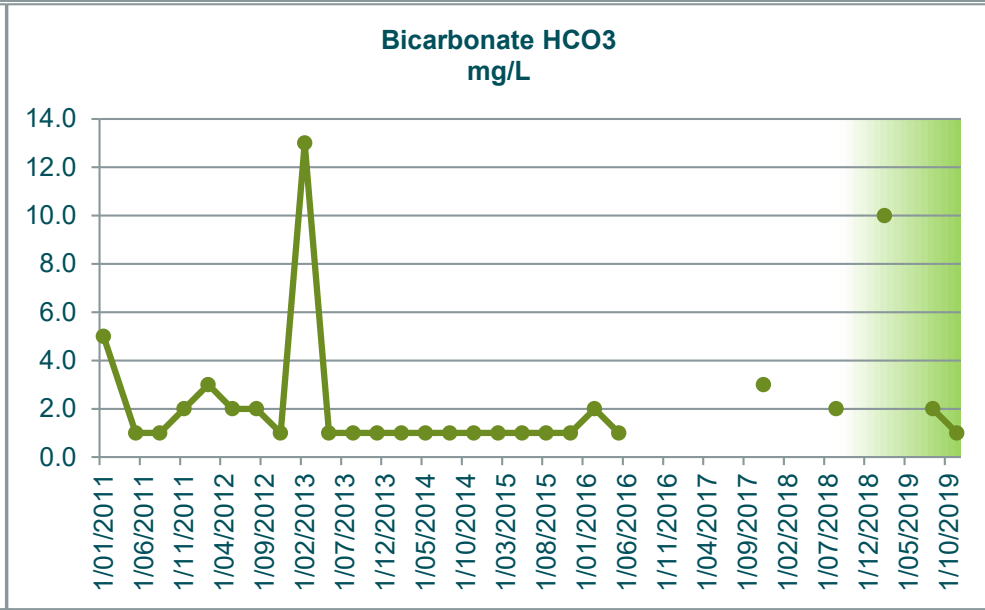
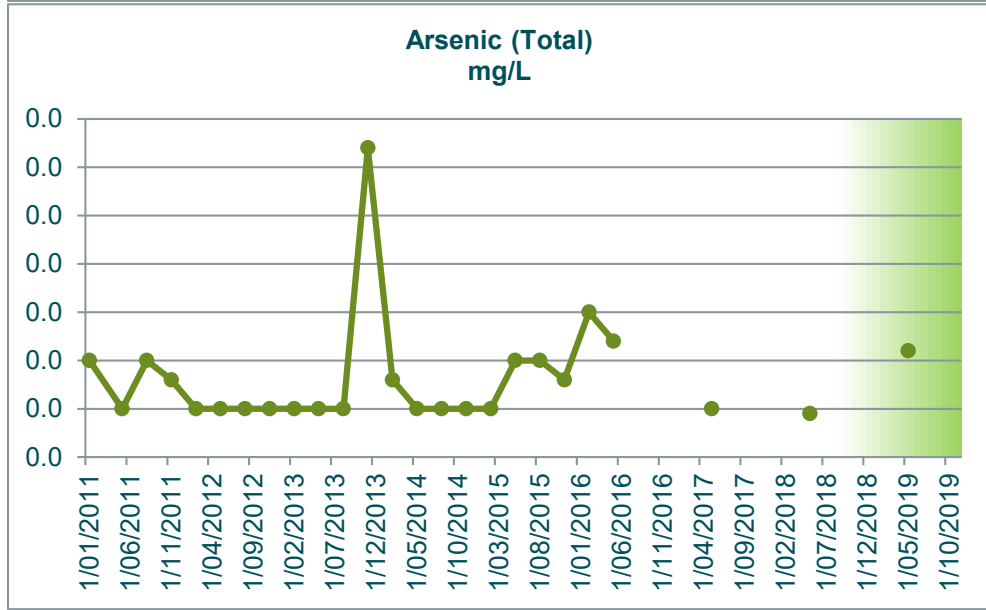
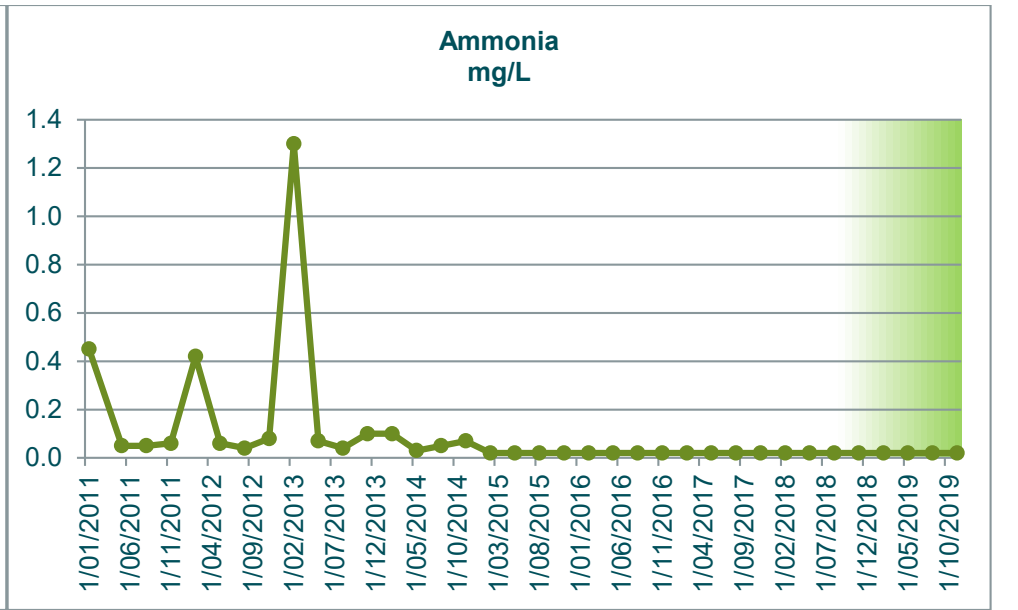
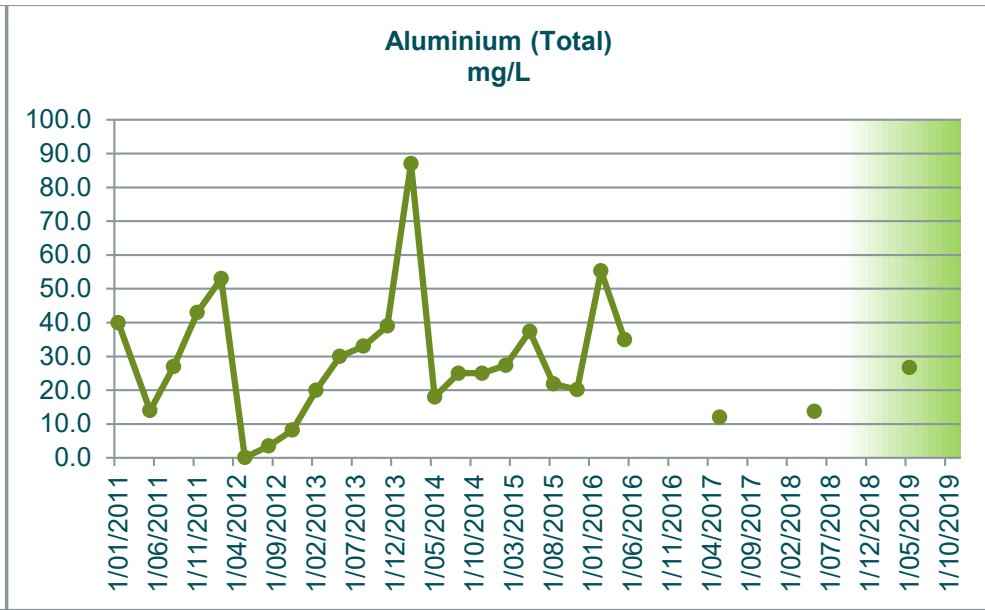
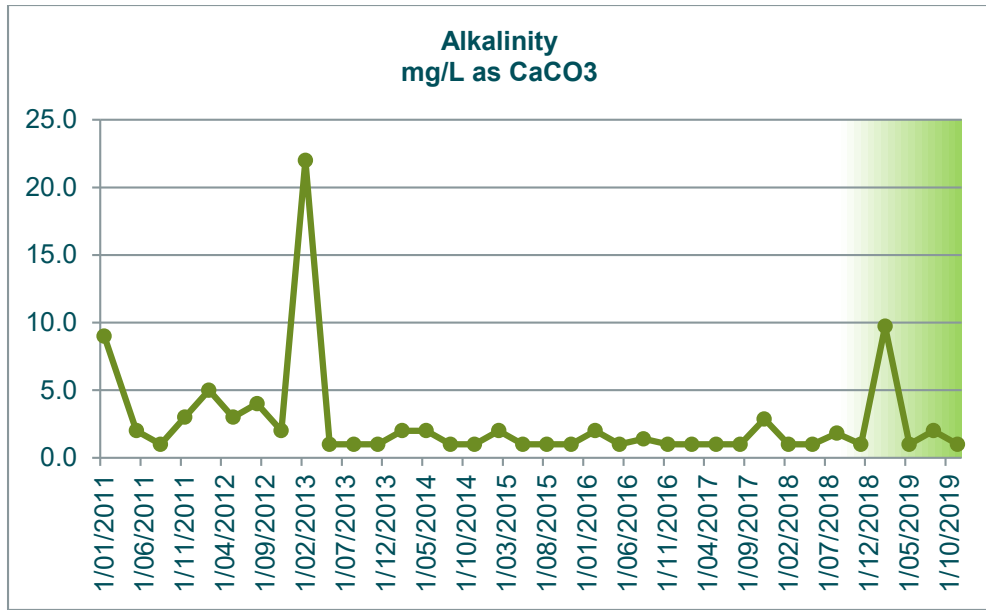


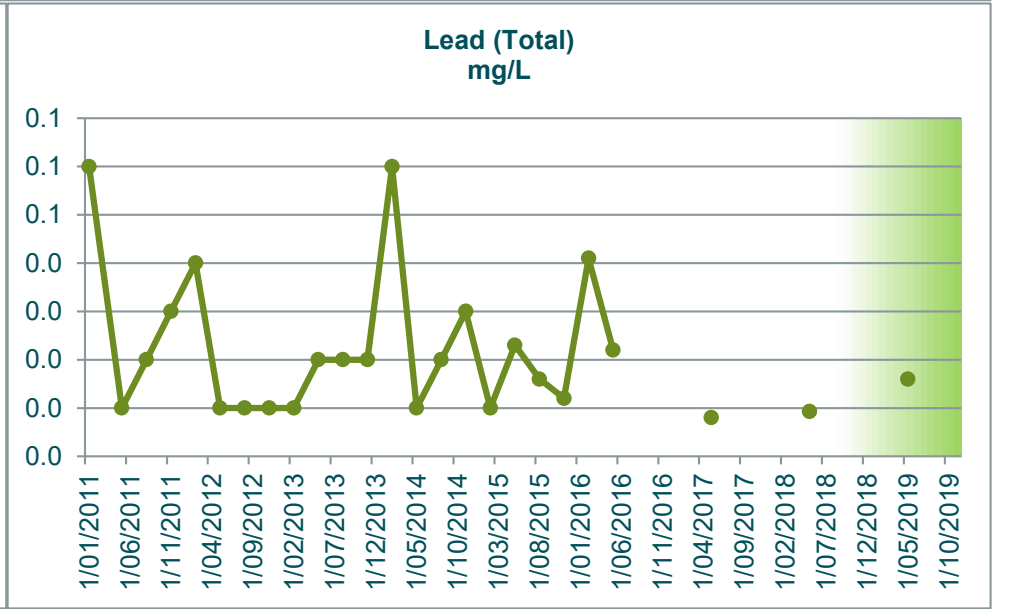
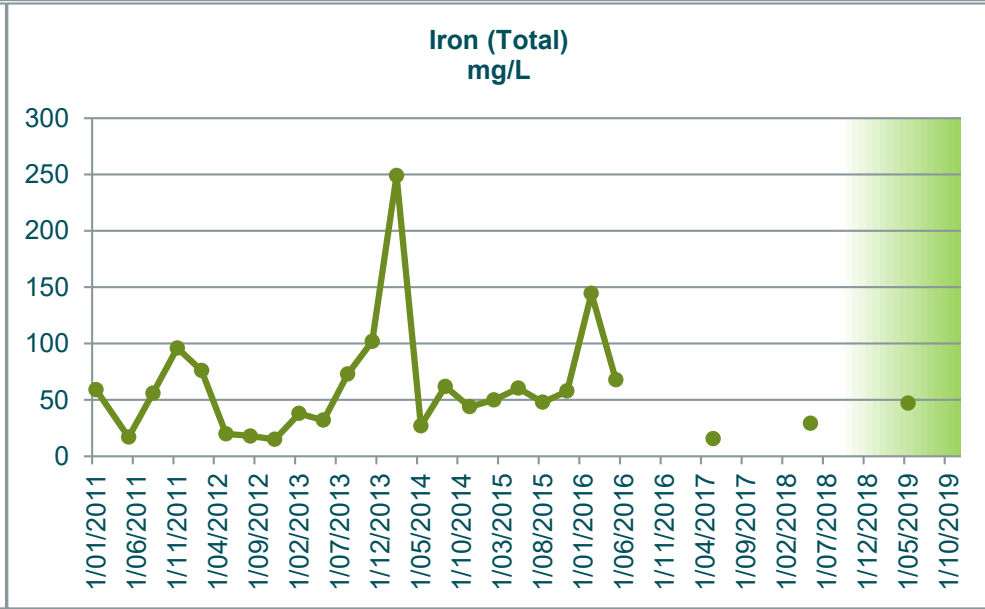
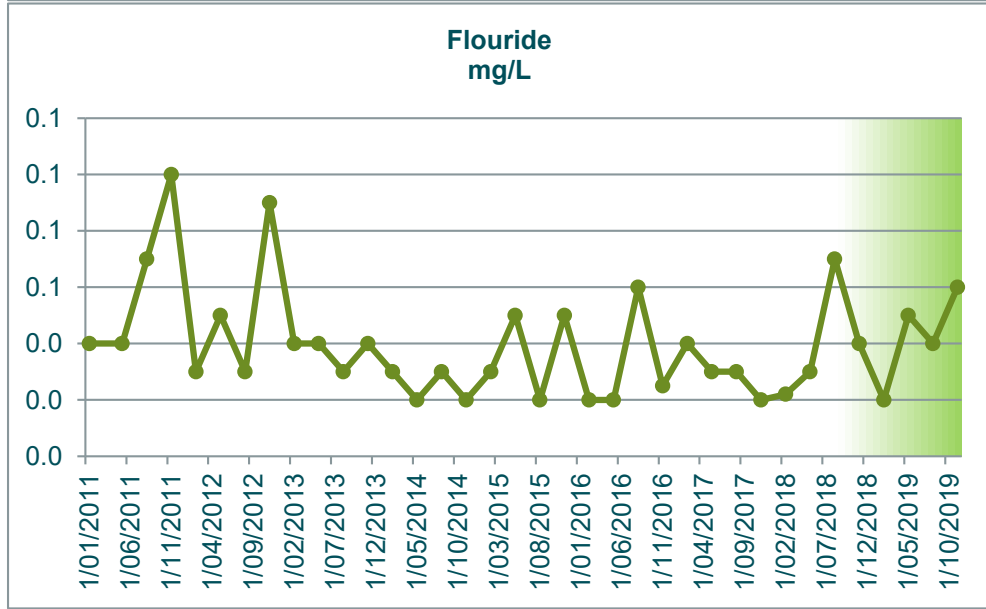
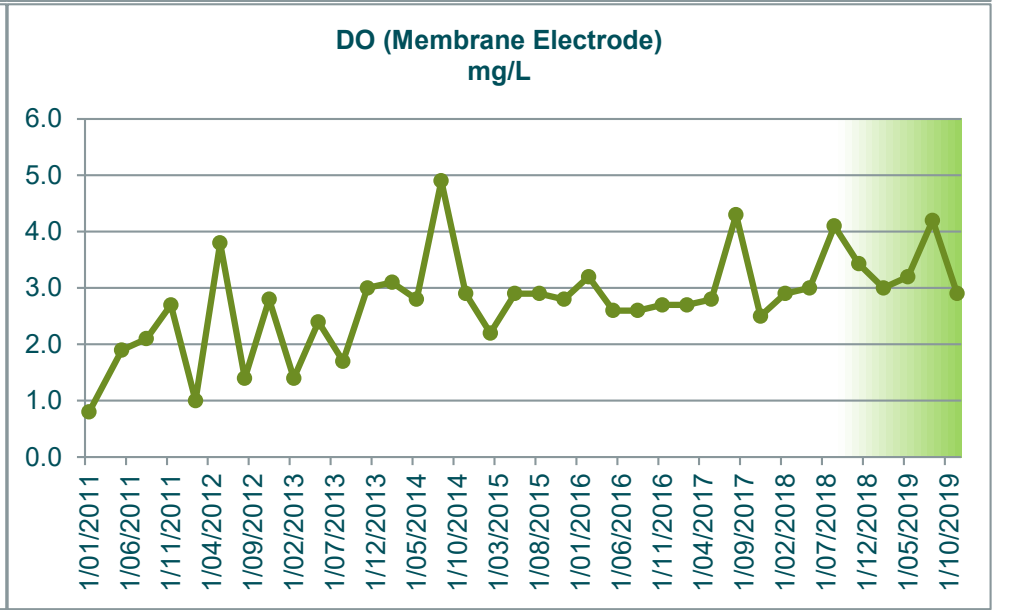
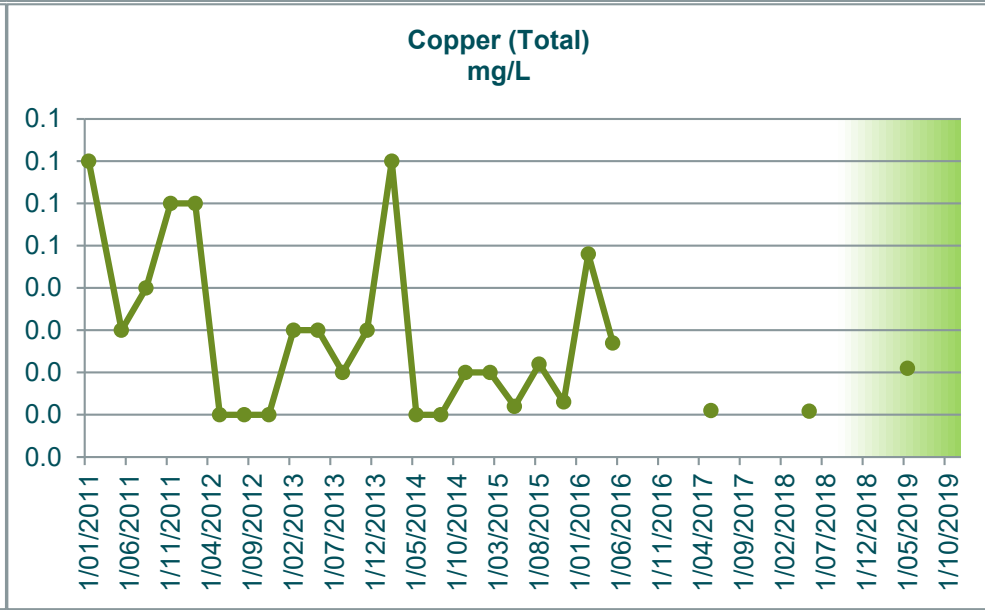
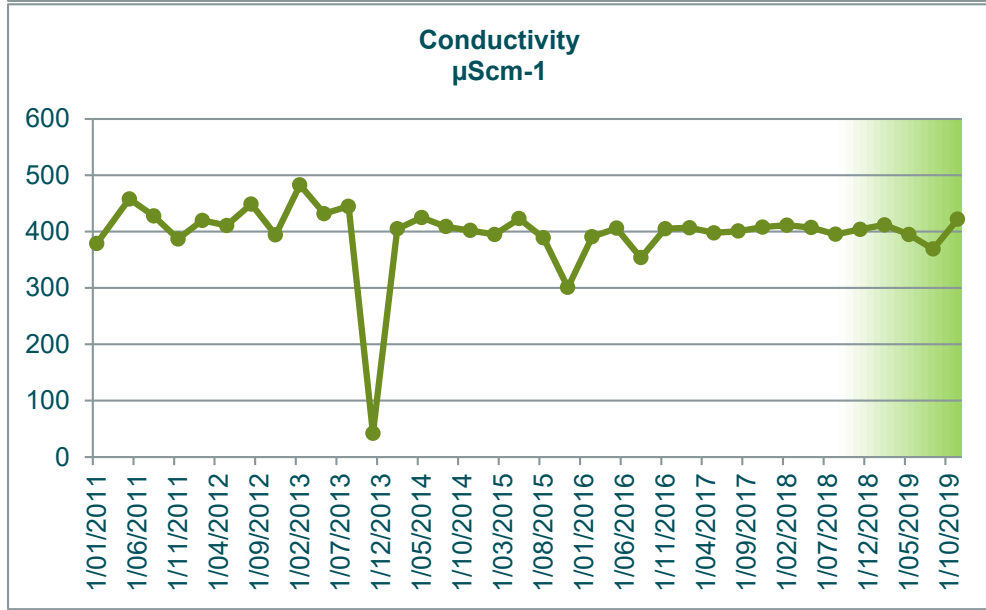
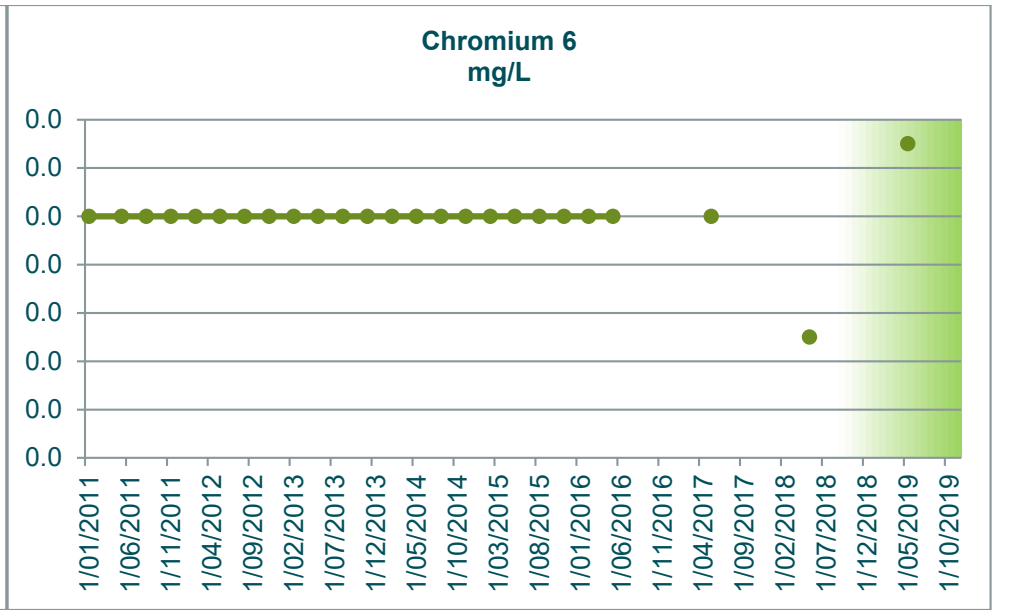
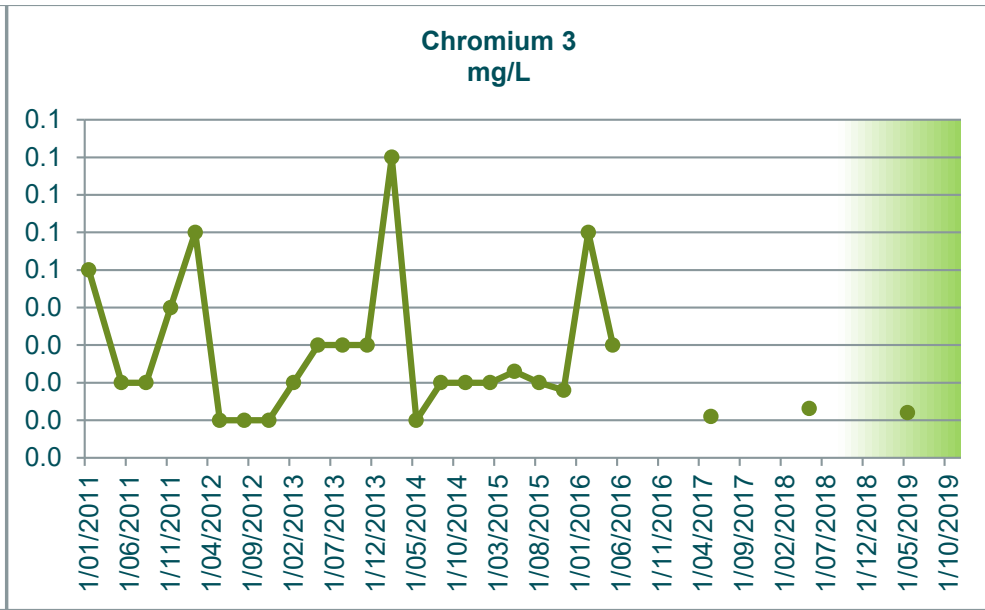
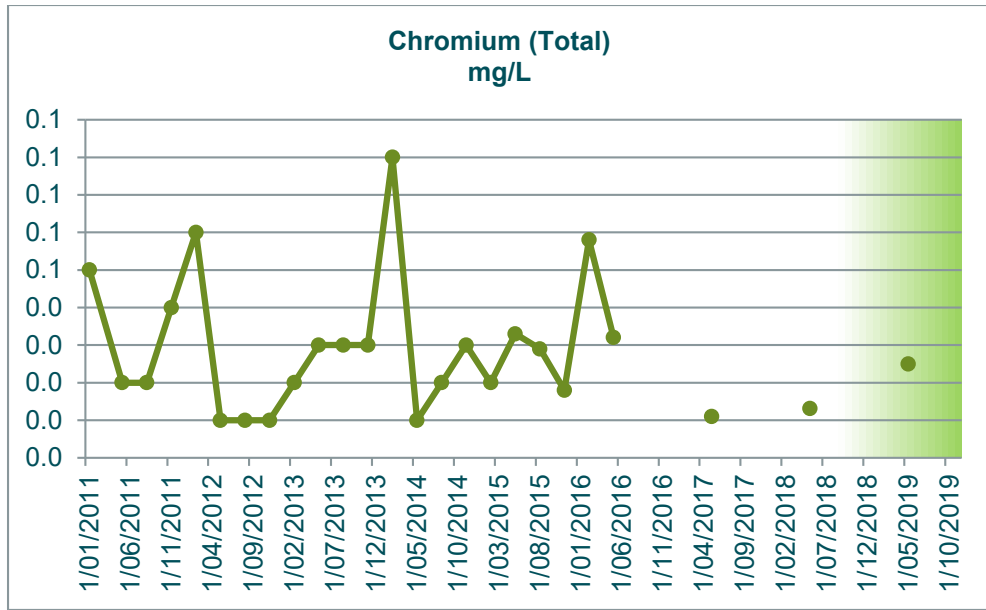


# Depth to Groundwater m

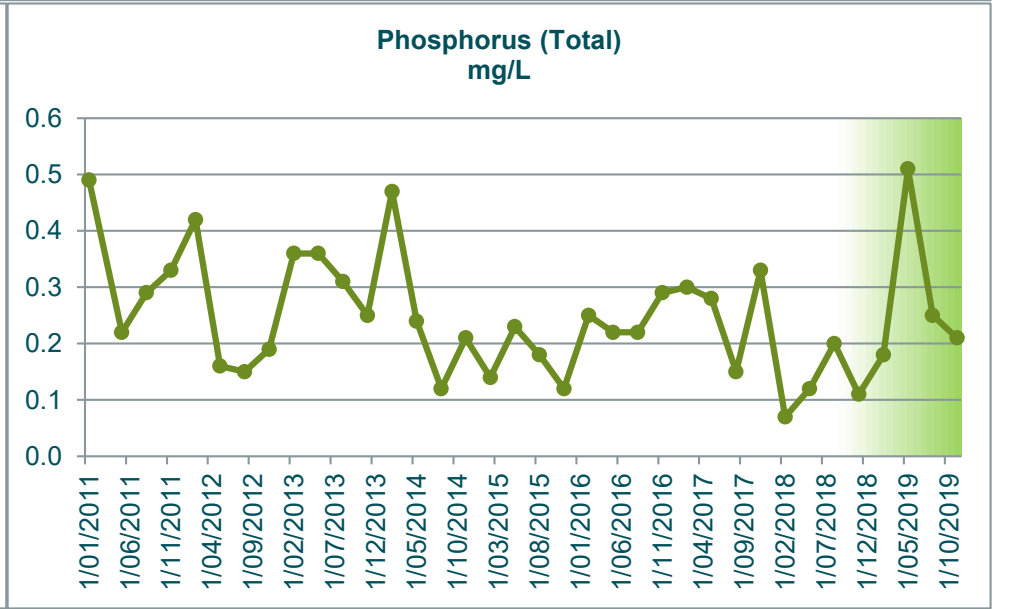
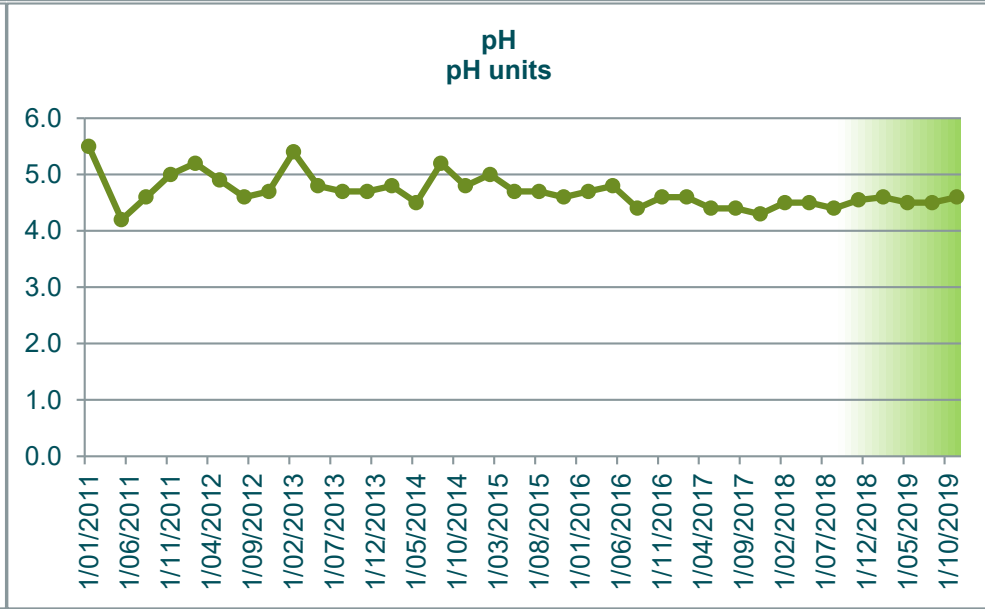
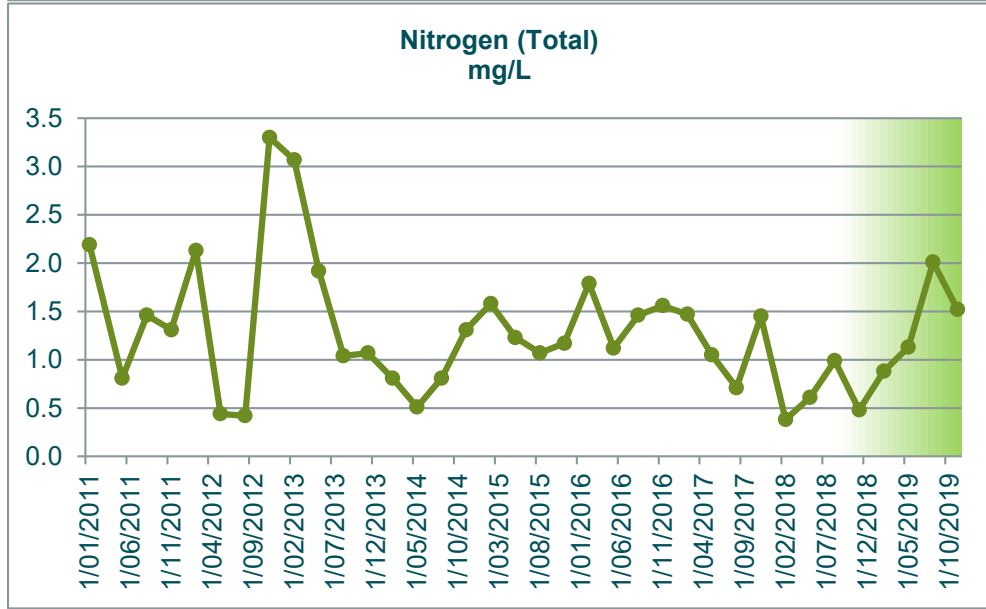
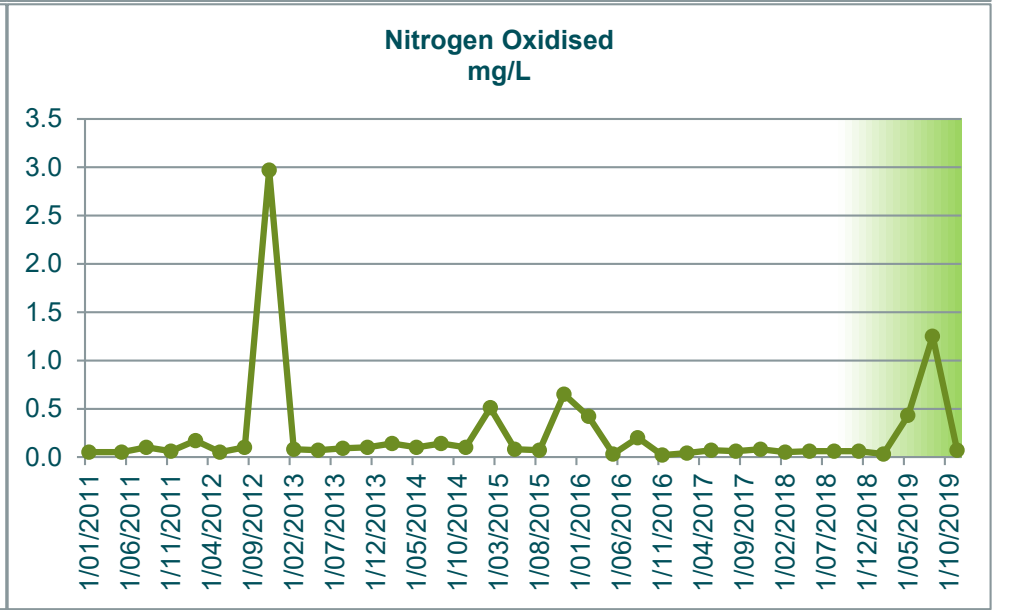
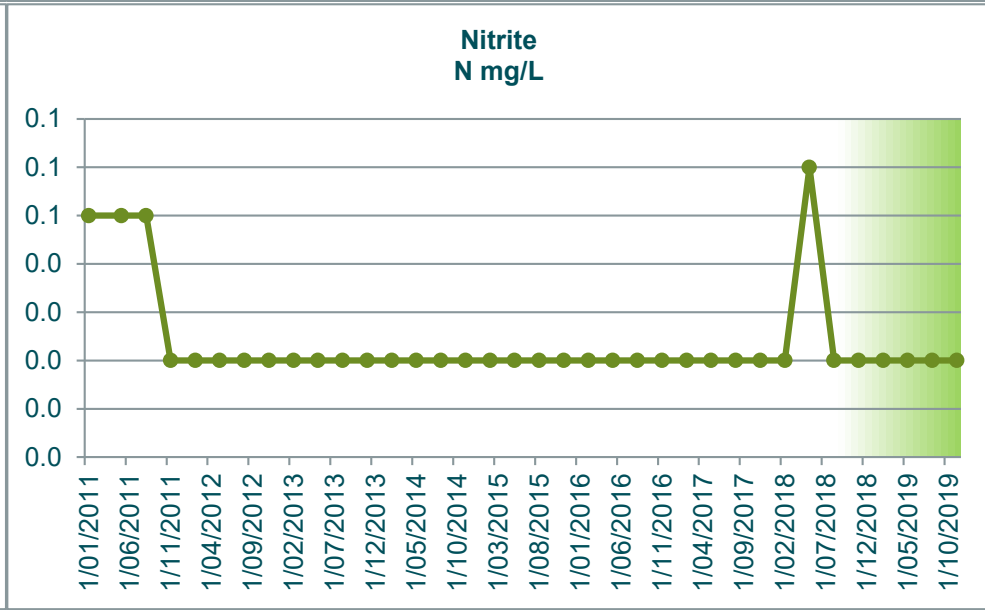
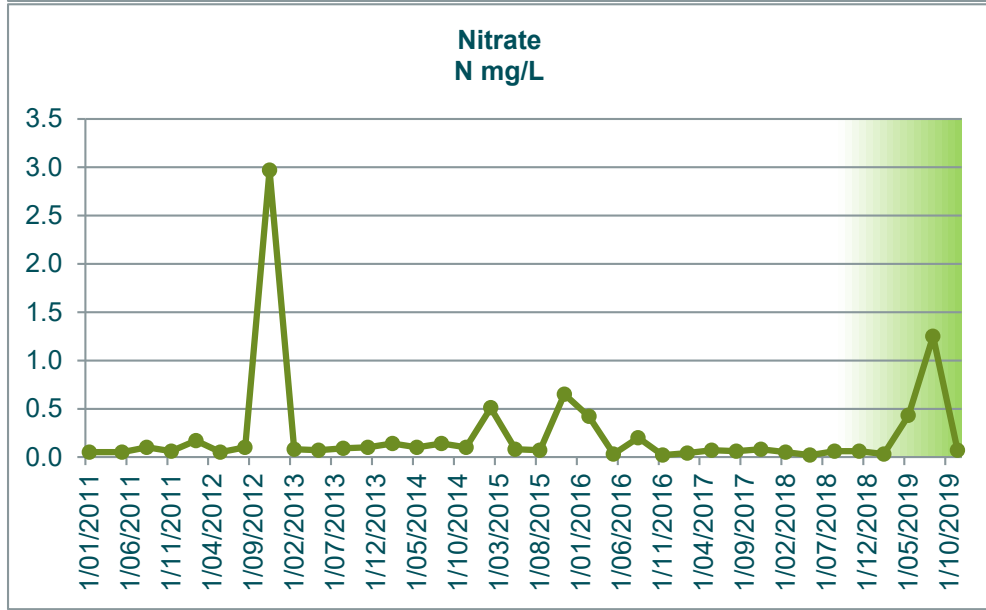
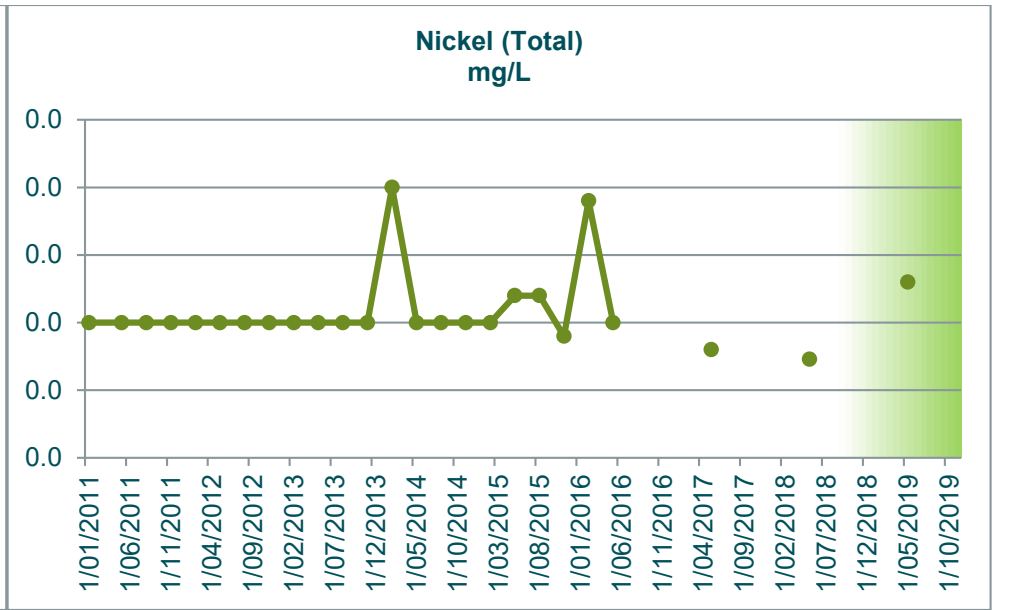
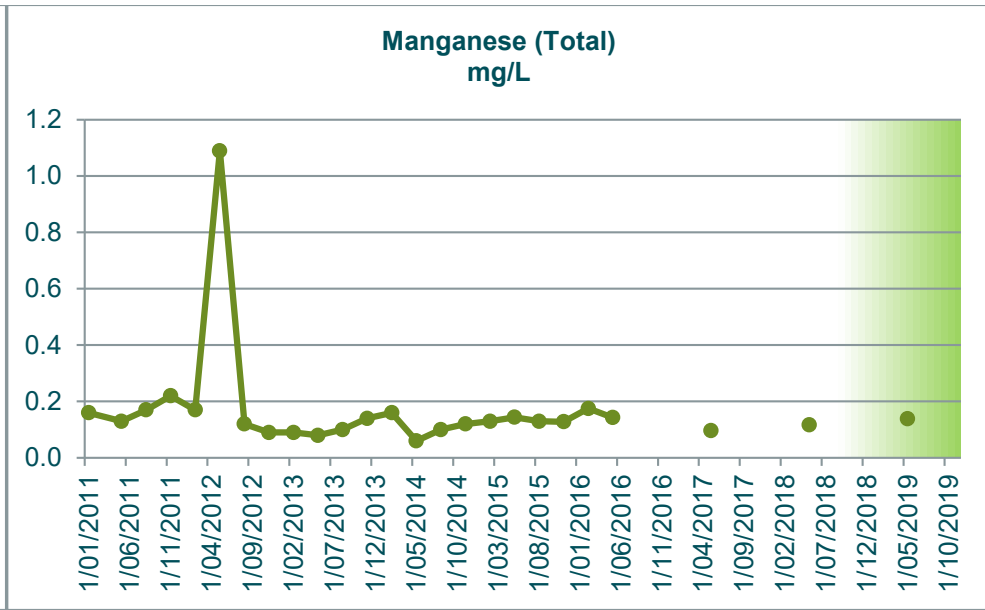
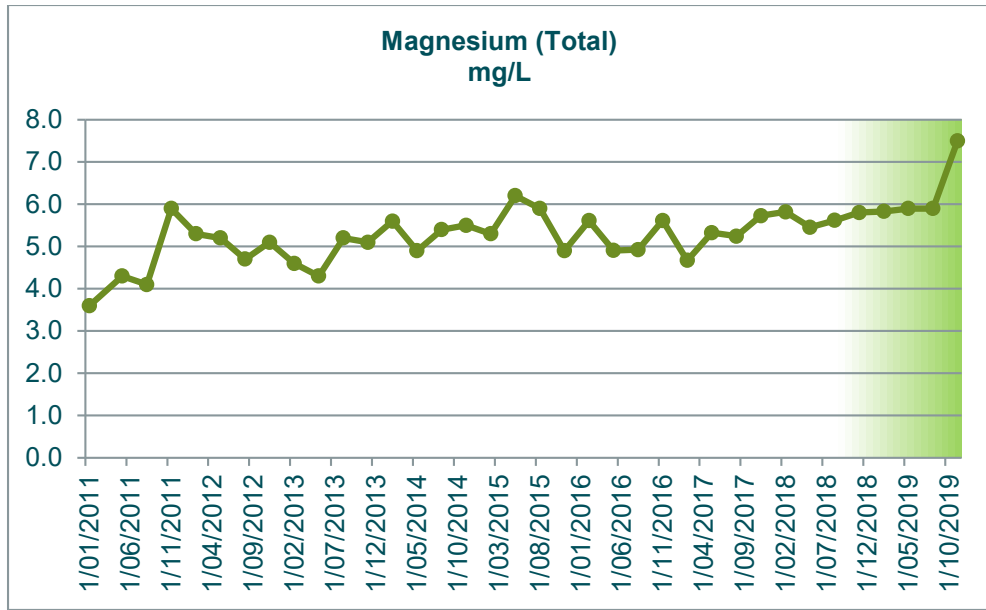


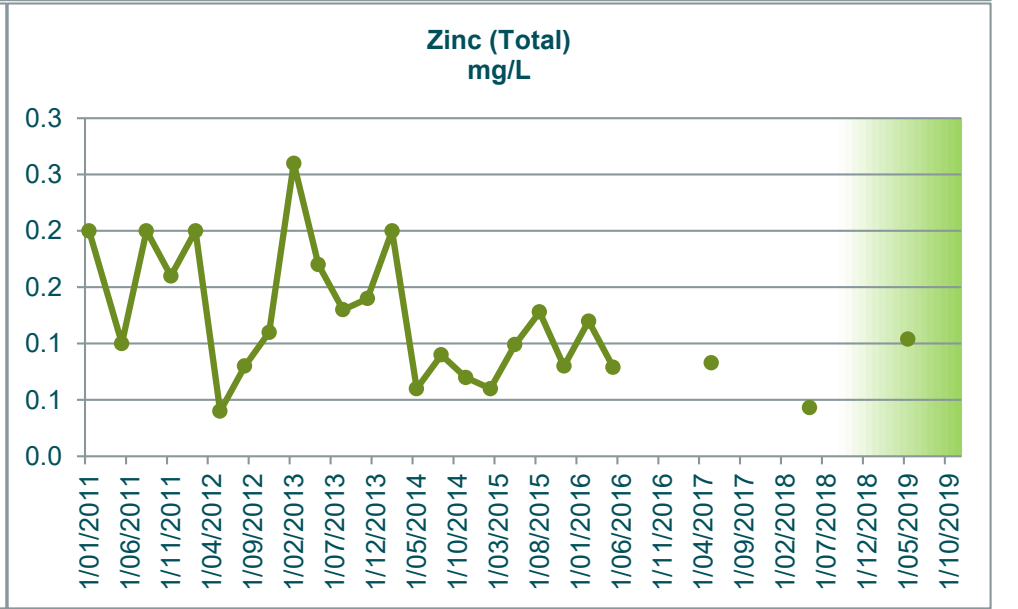
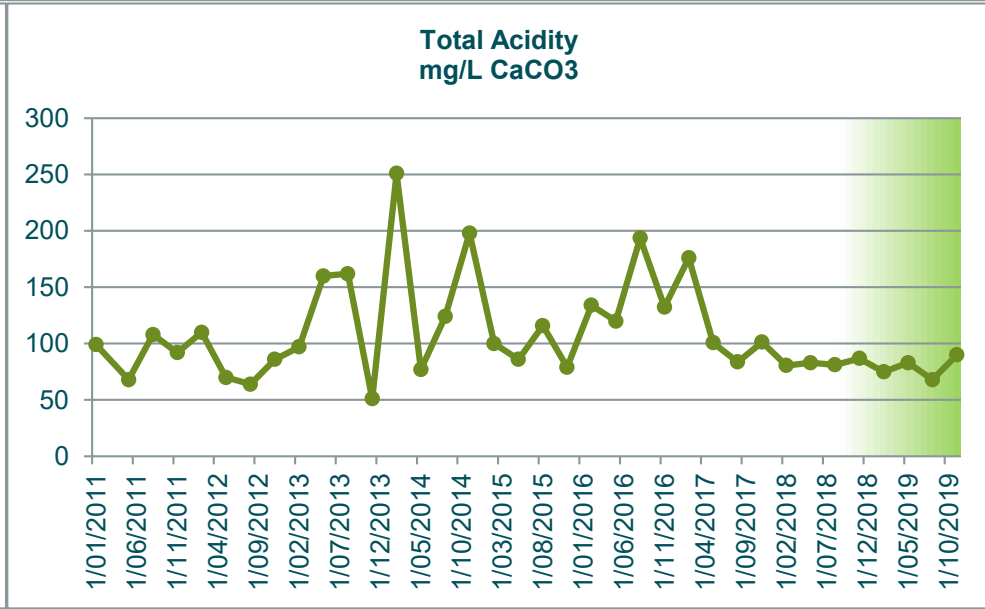
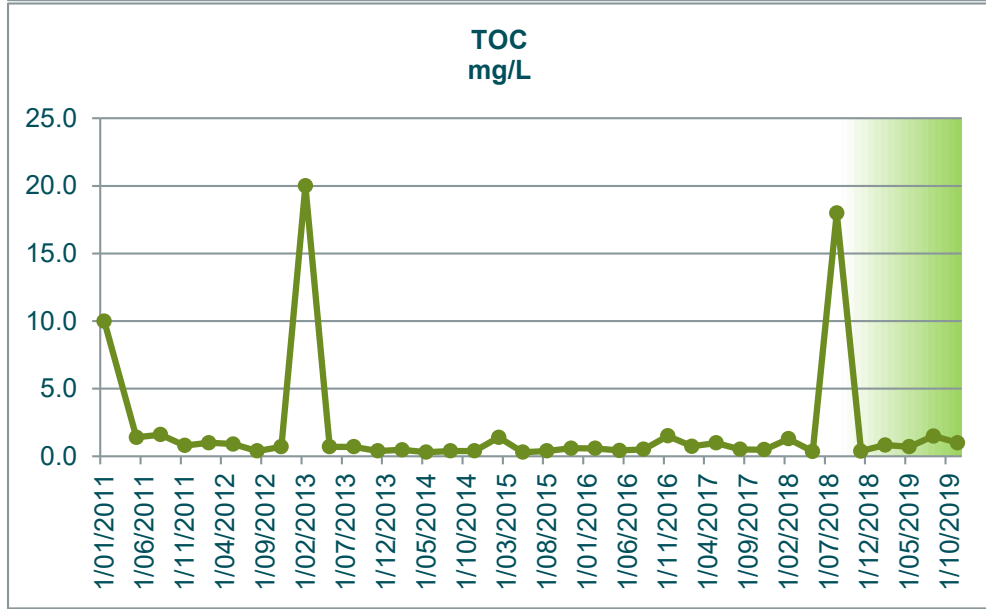
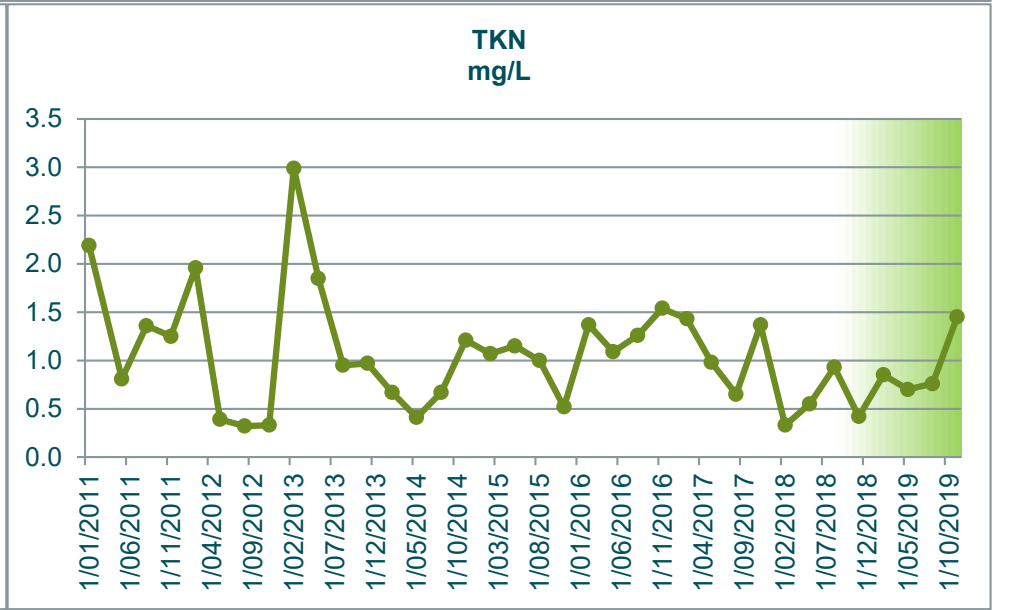
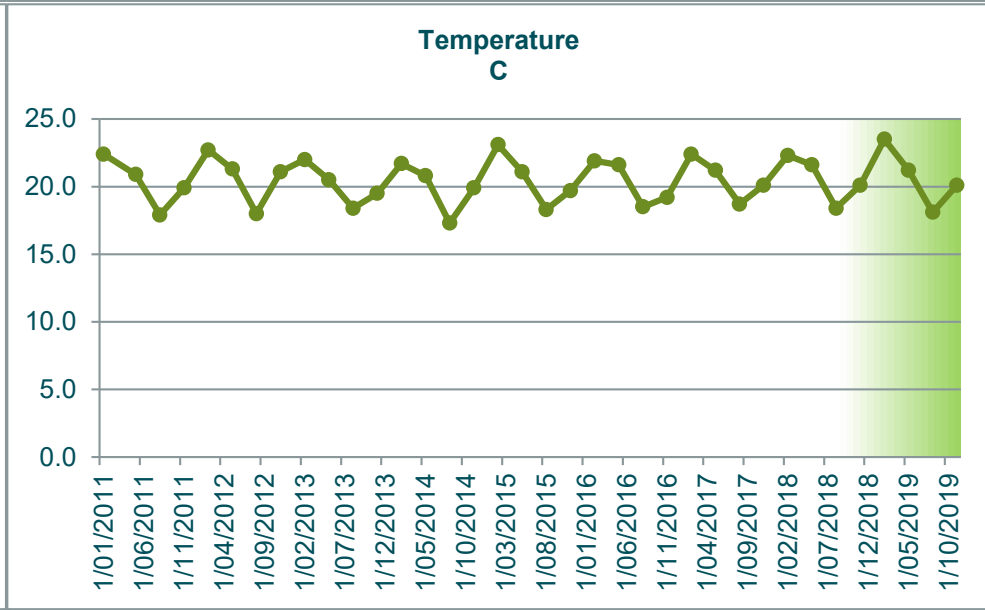
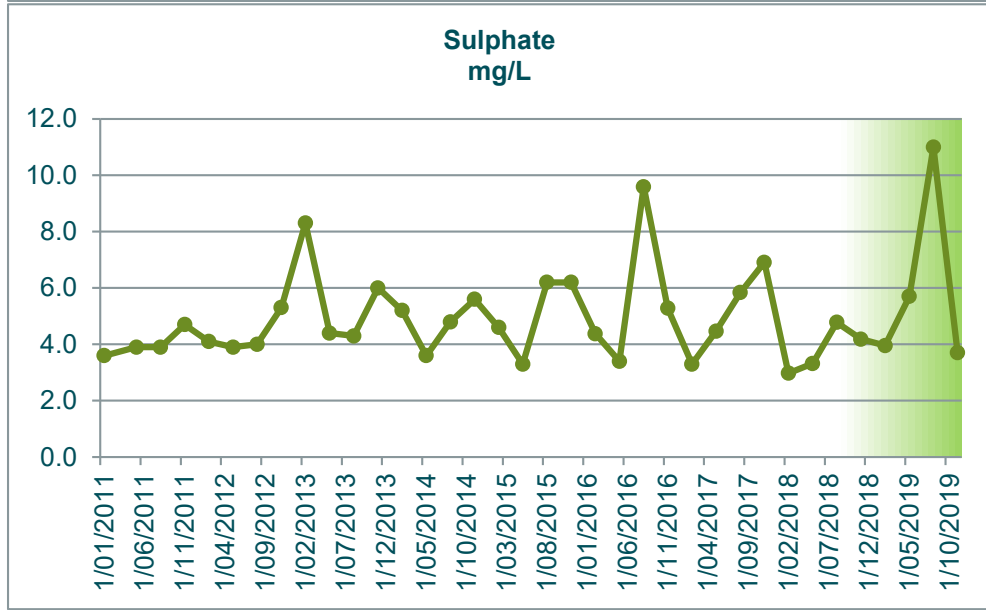
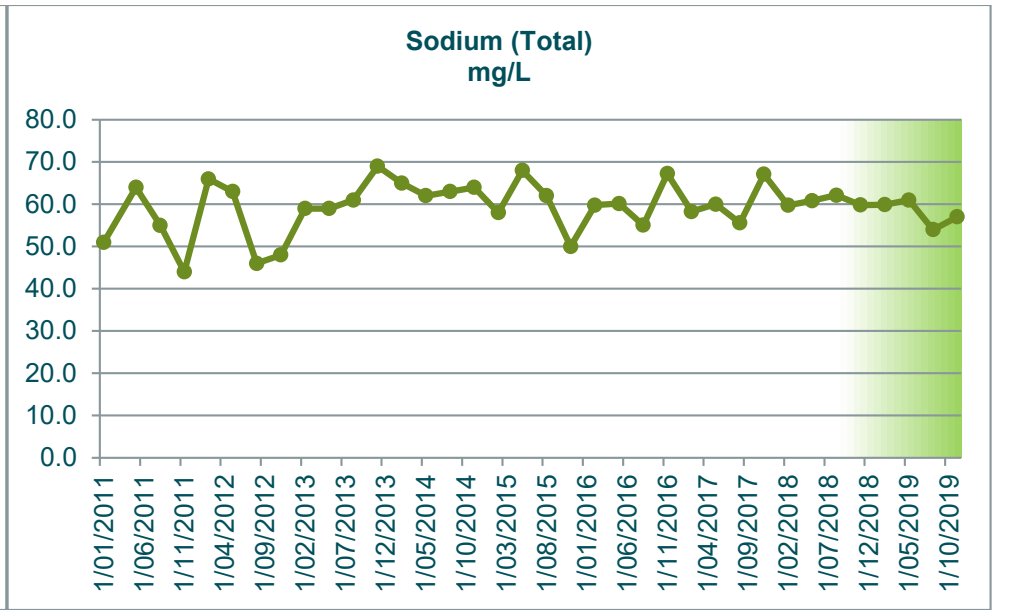
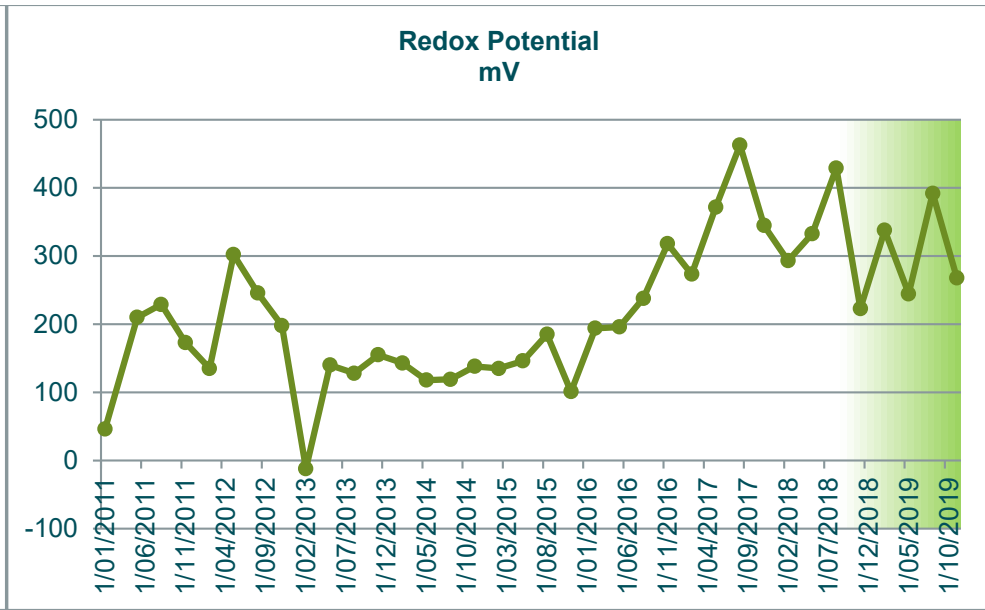
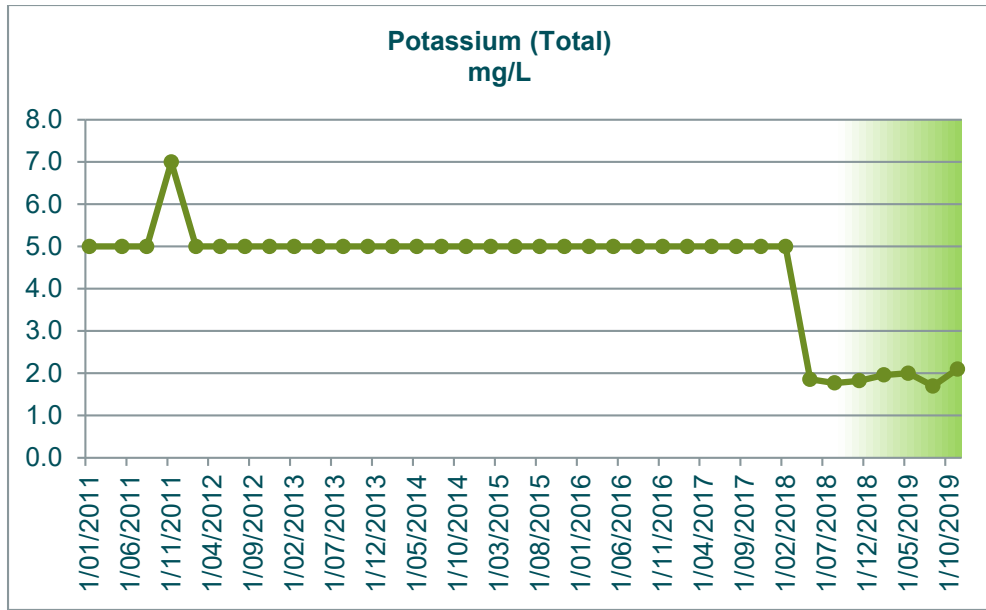
GW7	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µS/cm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride 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	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	51.0	3.6	22.4	2.2	10.0	99	0.2		
10/05/2011	2.0	14.0	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	64.0	3.9	20.9	0.8	1.4	68	0.1		
9/08/2011	1.0	27.0	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	55.0	3.9	17.9	1.4	1.6	108	0.2		
8/11/2011	3.0	43.0	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	44.0	4.7	19.9	1.3	0.8	92	0.2		
6/02/2012	5.0	53.0	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	66.0	4.1	22.7	2.0	1.0	110	0.2		
8/05/2012	3.0	0.1	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	63.0	3.9	21.3	0.4	0.9	70	0.0		
6/08/2012	4.0	3.5	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	46.0	4.0	18.0	0.3	0.4	64	0.1		
13/11/2012	2.0	8.2	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	48.0	5.3	21.1	0.3	0.7	86	0.1		
13/02/2013	22.0	20.0	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	59.0	8.3	22.0	3.0	20.0	97	0.3		
14/05/2013	1.0	30.0	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	59.0	4.4	20.5	1.9	0.7	160	0.2		
6/08/2013	1.0	33.0	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	61.0	4.3	18.4	1.0	0.7	162	0.1		
12/11/2013	1.0	39.0	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	69.0	6.0	19.5	1.0	0.4	51	0.1		
11/02/2014	2.0	87.0	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	65.0	5.2	21.7	0.7	0.5	251	0.2		
13/05/2014	2.0	18.0	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	62.0	3.6	20.8	0.4	0.3	77	0.1		
12/08/2014	1.0	25.0	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	63.0	4.8	17.3	0.7	0.4	124	0.1		
10/11/2014	1.0	25.0	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	64.0	5.6	19.9	1.2	0.4	198	0.1		
9/02/2015	2.0	27.4	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	58.0	4.6	23.1	1.1	1.4	100	0.1		
11/05/2015	1.0	37.4	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	68.0	3.3	21.1	1.2	0.3	86	0.1		
11/08/2015	1.0	21.9	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	62.0	6.2	18.3	1.0	0.4	116	0.1		
10/11/2015	1.0	20.1	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	50.0	6.2	19.7	0.5	0.6	79	0.1		
8/02/2016	2.0	55.3	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	59.8	4.4	21.9	1.4	0.6	134	0.1		
9/05/2016	1.0	34.9	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	60.2	3.4	21.6	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	55.0	9.6	18.5	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	67.2	5.3	19.2	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	3.3	22.4	1.4	0.7	176			
8/05/2017	1.0	12.0	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	60.0	4.5	21.2	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	55.6	5.8	18.7	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	67.1	6.9	20.1	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	59.7	3.0	22.3	0.3	1.3	81		1.9	
8/05/2018	1.0	13.7	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	60.9	3.3	21.6	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	62.1	4.8	18.4	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	59.8	4.2	20.1	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	2.0	338	59.9	4.0	23.5	0.9	0.8	75		2.2	
14/05/2019	1.0	26.7	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	2.0	245	61.0	5.7	21.2	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	3.0	392	54.0	11.0	18.1	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	2.1	268	57.0	3.7	20.1	1.5	1.0	90		2.3	
<b>2019 Min</b>	<b>1.0</b>	<b>26.7</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>1.5</b>	<b>0.0</b>	<b>2.5</b>	<b>93</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>369</b>	<b>0.0</b>	<b>2.9</b>	<b>0.0</b>	<b>47</b>	<b>0.0</b>	<b>5.8</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.9</b>	<b>4.5</b>	<b>0.0</b>	<b>2.0</b>	<b>245</b>	<b>54.0</b>	<b>3.7</b>	<b>18.1</b>	<b>0.7</b>	<b>0.7</b>	<b>68</b>	<b>0.1</b>	<b>1.7</b>		
<b>2019 Max</b>	<b>9.7</b>	<b>26.7</b>	<b>0.0</b>	<b>0.0</b>	<b>10.0</b>	<b>2.4</b>	<b>0.0</b>	<b>3.1</b>	<b>120</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>422</b>	<b>0.0</b>	<b>4.2</b>	<b>0.1</b>	<b>47</b>	<b>0.0</b>	<b>7.5</b>	<b>0.1</b>	<b>0.0</b>	<b>1.3</b>	<b>0.0</b>	<b>1.3</b>	<b>2.0</b>	<b>4.6</b>	<b>0.0</b>	<b>2.1</b>	<b>392</b>	<b>61.0</b>	<b>11.0</b>	<b>23.5</b>	<b>1.5</b>	<b>1.5</b>	<b>90</b>	<b>0.1</b>	<b>2.3</b>	
<b>2019 Mean</b>	<b>3.4</b>	<b>26.7</b>	<b>0.0</b>	<b>0.0</b>	<b>4.3</b>	<b>2.0</b>	<b>0.0</b>	<b>2.8</b>	<b>110</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>400</b>	<b>0.0</b>	<b>3.3</b>	<b>0.0</b>	<b>47</b>																					

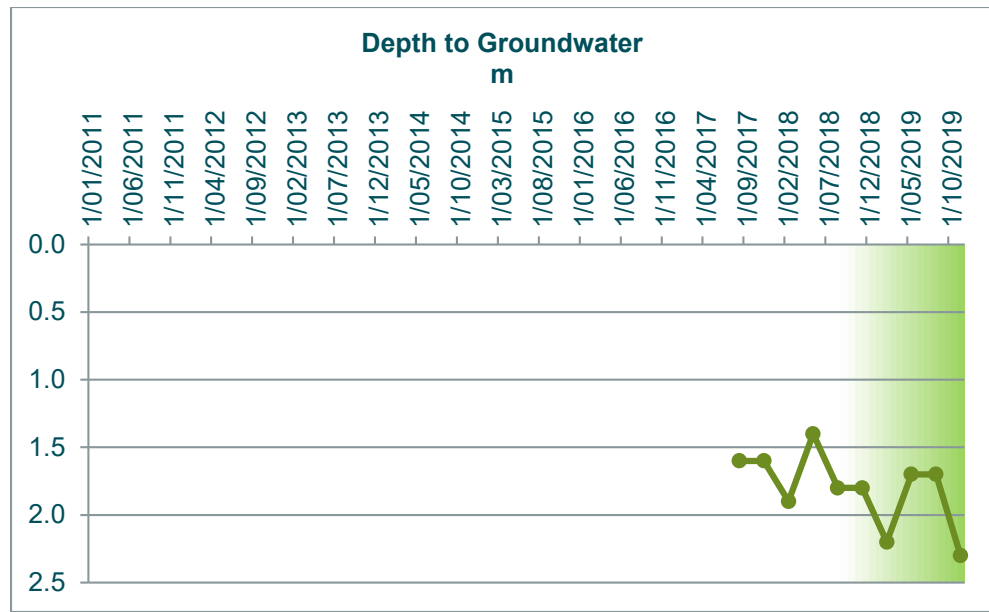








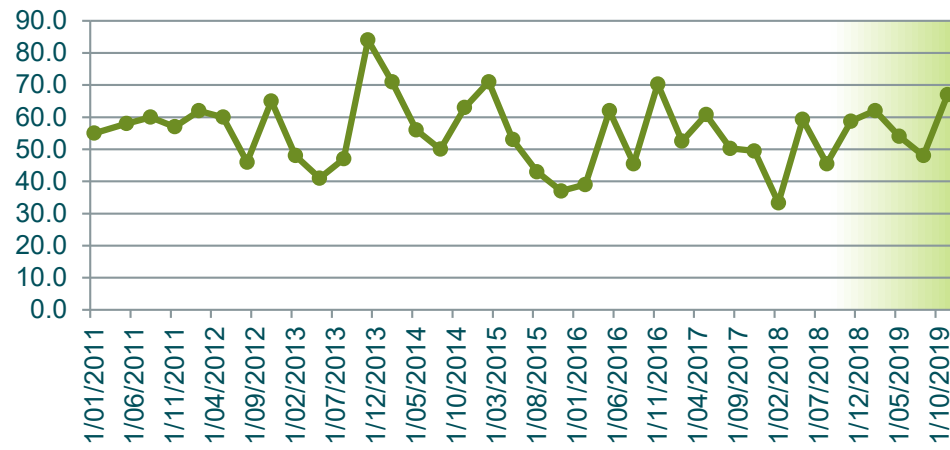




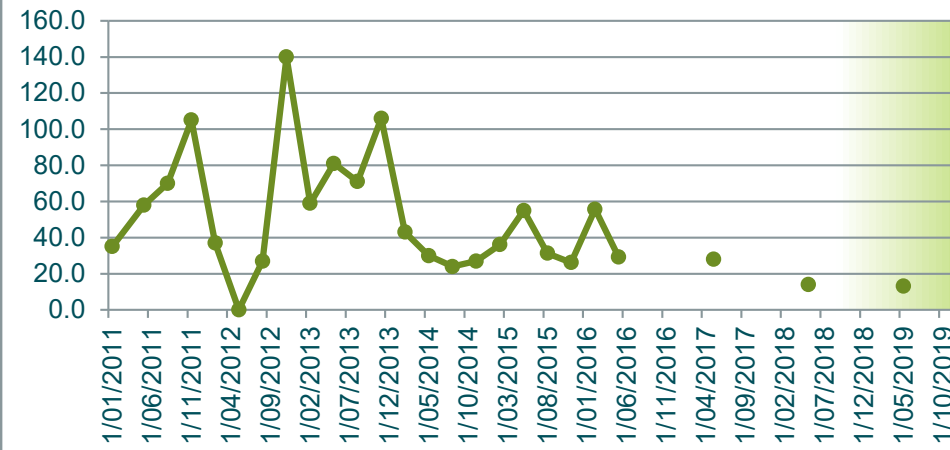
GW8	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µS/cm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride 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	55.0	35.0	0.1	0.0	34.0	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	0.6	0.0	0.1	0.1	0.1	0.7	6.4		0.2	5.0	-17	62.0	18.0	23.3	0.7	5.3	44	0.1	
10/05/2011	58.0	58.0	0.1	0.0	35.0	1.2	0.0	5.6	106	0.1	0.1	0.0	539	0.1	0.9	0.2	108	0.0	5.8	0.8	0.0	0.1	0.1	0.1	1.1	5.7		0.3	5.0	101	77.0	15.0	20.3	1.1	1.9	76	0.2	
9/08/2011	60.0	70.0	0.1	0.1	37.0	2.7	0.0	6.0	120	0.1	0.1	0.0	543	0.1	1.0	0.1	163	0.0	5.8	1.0	0.0	0.1	0.1	0.1	1.2	6.2		0.3	5.0	211	72.0	11.0	18.5	1.1	2.0	101	0.3	
8/11/2011	57.0	105.0	0.3	0.1	35.0	4.8	0.0	7.6	132	0.1	0.1	0.0	546	0.1	0.9	0.2	203	0.0	8.3	1.4	0.1	0.2	0.0	0.2	1.4	6.4		0.5	9.0	-35	57.0	16.0	20.5	1.1	1.5	95	0.4	
6/02/2012	62.0	37.0	0.2	0.0	38.0	1.8	0.0	6.7	109	0.0	0.0	0.0	520	0.0	1.9	0.2	70	0.0	7.2	0.7	0.0	0.1	0.0	0.1	0.9	6.3		0.2	5.0	102	87.0	12.0	22.5	0.7	1.3	65	0.3	
8/05/2012	60.0	0.0	0.2	0.0	37.0	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	0.1	0.0	0.2	0.0	0.2	0.8	6.3		0.2	7.0	219	86.0	26.0	21.0	0.6	1.1	60	0.1	
6/08/2012	46.0	27.0	0.1	0.2	28.0	1.0	0.0	6.3	109	0.0	0.0	0.0	544	0.0	3.4	0.2	46	0.0	6.2	0.5	0.0	0.1	0.0	0.1	0.6	6.0		0.3	5.0	70	61.0	13.0	18.4	0.5	0.5	44	0.1	
13/11/2012	65.0	140.0	0.2	0.1	40.0	3.3	0.0	6.4	93	0.2	0.2	0.0	557	0.2	0.8	0.1	368	0.1	6.5	2.3	0.1	0.5	0.0	0.5	1.5	6.2		0.3	5.0	4	72.0	15.0	20.5	1.0	1.4	94	0.9	
13/02/2013	48.0	59.0	0.3	0.0	29.0	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	0.7	0.0	0.2	0.0	0.2	3.1	6.3		0.4	5.0	-30	77.0	12.0	21.8	2.9	0.7	50	0.2	
14/05/2013	41.0	81.0	0.2	0.0	25.0	1.8	0.0	5.2	88	0.1	0.1	0.0	463	0.1	2.7	0.1	106	0.1	4.9	0.7	0.0	0.2	0.0	0.2	1.3	6.1		0.2	5.0	17	69.0	19.0	20.4	1.0	1.2	140	0.2	
6/08/2013	47.0	71.0	0.0	0.1	29.0	1.2	0.0	6.2	110	0.1	0.1	0.0	552	0.0	3.4	0.2	155	0.0	6.3	0.7	0.0	0.0	0.0	0.0	1.0	6.2		0.2	5.0	21	83.0	16.0	18.8	1.0	0.5	110	0.2	
12/11/2013	84.0	106.0	0.6	0.1	51.0	5.4	0.0	8.7	113	0.1	0.1	0.0	587	0.1	2.1	0.2	163	0.0	8.5	0.9	0.0	0.2	0.0	0.2	1.7	6.3		0.3	5.0	44	92.0	14.0	19.6	1.6	1.3	52	0.3	
11/02/2014	71.0	43.0	0.3	0.0	43.0	3.9	0.0	7.3	106	0.0	0.0	0.0	545	0.0	2.6	0.2	0	0.0	7.6	0.0	0.0	0.1	0.0	0.1	1.3	6.5		0.1	5.0	-68	84.0	13.0	21.3	1.2	1.6	175	0.2	
13/05/2014	56.0	30.0	0.2	0.0	34.0	3.6	0.0	5.5	107	0.0	0.0	0.0	547	0.0	3.0	0.2	77	0.0	5.9	0.4	0.0	0.1	0.0	0.1	0.9	6.3		0.2	5.0	-77	70.0	12.0	21.0	0.8	1.0	64	0.1	
12/08/2014	50.0	24.0	0.1	0.1	30.0	1.8	0.0	6.2	105	0.0	0.0	0.0	490	0.0	3.8	0.2	107	0.0	6.7	0.6	0.0	0.1	0.0	0.1	0.6	6.5		0.2	5.0	-7	77.0	15.0	18.2	0.5	0.5	101	0.1	
10/11/2014	63.0	27.0	0.1	0.1	38.0	1.5	0.0	6.9	106	0.0	0.0	0.0	512	0.0	3.0	0.2	95	0.0	7.4	0.5	0.0	0.0	0.0	0.1	1.2	6.5		0.2	5.0	-18	83.0	14.0	19.7	1.1	0.4	147	0.1	
9/02/2015	71.0	36.1	0.0	0.0	43.0	2.1	0.0	7.9	110	0.0	0.0	0.0	533	0.0	1.9	0.2	55	0.0	7.4	0.5	0.0	0.0	0.0	0.0	0.9	6.6		0.2	5.0	-31	84.0	10.0	22.4	0.9	0.6	64	0.1	
11/05/2015	53.0	55.0	0.0	0.0	32.0	1.5	0.0	7.8	104	0.1	0.1	0.0	522	0.0	3.2	0.2	66	0.0	7.6	0.6	0.0	0.0	0.0	0.0	0.8	6.5		0.2	5.0	19	88.0	12.0	21.4	0.8	0.7	73	0.2	
11/08/2015	43.0	31.3	0.0	0.1	43.0	1.0	0.0	6.7	110	0.0	0.0	0.0	476	0.0	4.7	0.2	98	0.0	6.6	0.7	0.0	0.0	0.0	0.0	0.9	6.2		0.1	5.0	48	78.0	15.0	18.8	0.8	0.7	72	0.1	
10/11/2015	37.0	26.2	0.0	0.0	37.0	1.0	0.0	4.8	79	0.0	0.0	0.0	303	0.0	2.4	0.0	47	0.0	4.7	0.4	0.0	0.4	0.0	0.4	1.2	6.0		0.1	5.0	-10	52.0	17.0	20.2	0.8	1.4	71	0.1	
8/02/2016	39.0	55.7	0.0	0.1	39.0	2.1	0.0	5.7	73	0.1	0.1	0.0	377	0.0	3.6	0.1	92	0.0	5.4	0.6	0.0	0.3	0.0	0.3	1.6	6.3		0.3	5.0	38	63.1	14.6	22.3	1.4	2.5	88	0.3	
9/05/2016	62.0	29.2	0.1	0.0	62.0	1.5	0.0	6.8	92	0.0	0.0	0.0	490	0.0	3.8	0.2	47	0.0	6.6	0.5	0.0	0.0	0.0	0.0	0.7	6.3		0.2	5.0	22	77.0	11.4	22.0	0.7	0.8	74	0.1	
9/08/2016	45.5		0.0		46.0	1.2		5.6	85				425		3.5	0.2			5.6			0.1	0.0	0.1	0.9	6.0		0.2	5.0	103	66.7	15.6	18.8	0.8	0.6	104		
7/11/2016	70.3		0.1		70.0	2.1		6.9	110				514		2.6	0.2			6.8			0.0	0.0	0.0	1.2	6.2		0.2	5.0	128	80.4	12.4	19.9	1.2	1.9	94		
7/02/2017	52.5		0.1		52.0	1.8		5.5	78				435		2.6	0.2			5.4			0.0	0.0	0.0	1.1	6.1		0.2	5.0	110	65.8	16.9	22.5	1.1	1.6	110		
8/05/2017	60.8	28.1	0.0	0.1	61.0	2.1	0.0	6.3	93	0.0	0.0	0.0	459	0.0	3.0	0.1	54	0.0	6.1	0.5	0.0	0.0	0.0	0.7	6.1		0.2	5.0	154	72.9	14.4	21.2	0.7	0.7	66	0.1		
8/08/2017	50.3		0.0		50.0	1.5		5.8	90				482		3.8	0.2			5.7			0.0	0.0	0.0	0.9	5.8		0.2	5.0	217	73.2	12.8	18.8	0.9	0.6	48		1.3
7/11/2017	49.5		0.0		49.0	1.5		6.7	86				442		2.9	0.2			6.4			1.4	0.0	1.4	2.1	6.0		0.1	5.0	116	70.7	14.9	20.3	0.7	1.5	59		1.3
13/02/2018	33.3		0.0		33.0	2.4		4.7	80				386		2.7	0.1			4.6			0.1	0.0	0.1	0.7	6.0		0.1	5.0	101	59.9	25.0	21.8	0.6	2.9	73		1.8
8/05/2018	59.3	14.0	0.1	0.0	59.0	2.4	0.0	6.2	97	0.0	0.0	0.0	471	0.0	3.3	0.2	26	0.0	6.2	0.4	0.0	0.3	0.0	0.3	0.3	6.2		0.0	2.2	63	70.8	15.0	21.3	0.1	1.0	52	0.1	1.2
14/08/2018	45.5		0.0		46.0	1.0		5.6	88				431		5.2	0.1			5.6			0.0	0.0	0.0	0.5	6.1		0.1	2.2	224	71.4	17.2	18.8	0.5	5.9	45		1.7
13/11/2018	58.7		0.0		59.0	1.0		6.3	100				472		3.1	0.2			6.2			0.0	0.0	0.0	0.6	6.2		0.1	2.2	57	73.6	13.6	20.3	0.5	0.8	65		1.7
12/02/2019	62.0		0.1		62.0	2.4		6.0	89				459		2.4	0.2			5.8			0.0	0.0	0.0	1.2	6.3	0.0	0.2	2.4	59	72.5	16.4	21.7	1.1	1.1	73		2.2
14/05/2019	54.0	13.1	0.0	0.0	54.0	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	0.3	0.0	0.0	0.0	0.4	6.2	0.0	0.3	2.3	49	74.0	18.0	20.5	0.4	0.8	48	0.2	1.4	
13/08/2019	48.0		0.0		48.0	1.0		5.4	86				413		4.7	0.2			5.5			0.0	0.0	0.0	0.8	6.3	0.0	0.3	2.1	297	69.0	18.0	18.4	0.8	1.1	38		1.6
12/11/2019	67.0		0.1		67.0	2.1		5.6	73				430		2.7	0.1			5.6			0.0	0.0	0.0	0.9	6.3	0.0	0.2	2.1	50	68.0	19.0	20.0	0.9	1.0	59		2.5
2019 Min	48.0	13.1	0.0	0.0	48.0	1.0	0.0	5.4	73	0.0	0.0	0.0	413	0.0	2.4	0.1	35	0.0	5.5	0.3	0.0	0.0	0.0	0.4	6.2	0.0	0.2	2.1	49	68.0	16.4	18.4	0.4	0.8	38	0.2	1.4	
2019 Max	67.0	13.1	0.1	0.0	67.0	2.4	0.0	6.0	89	0.0	0.0	0.0	459	0.0	4.7	0.2	35	0.0	6.0	0.3	0.0	0.0	0.0	1.2	6.3	0.0	0.3	2.4	297	74.0	19.0	21.7	1.1	1.1	73	0.2	2.5	
2019 Mean	57.8	13.1	0.0	0.0	57.8	1.7	0.0	5.7	83	0.0	0.0	0.0	434	0.0	3.3	0.2	35	0.0	5.7	0.3	0.																	



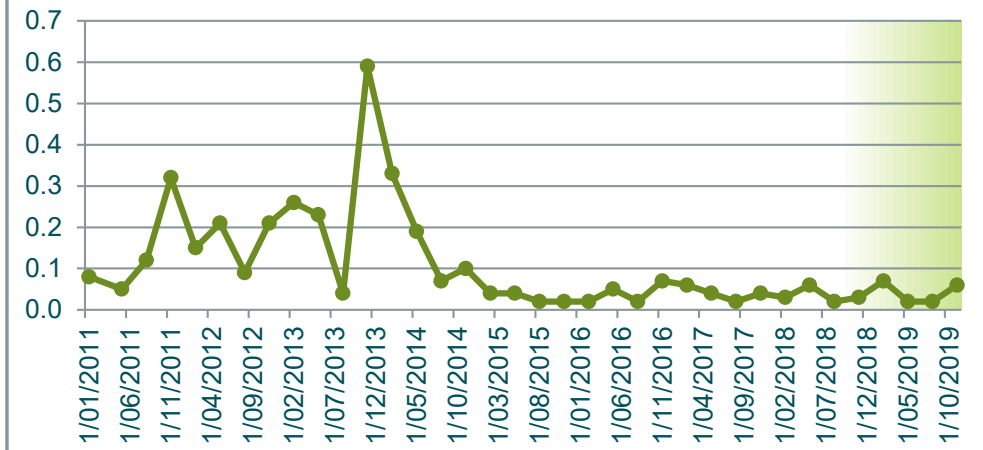
**Alkalinity**  
mg/L as CaCO<sub>3</sub>



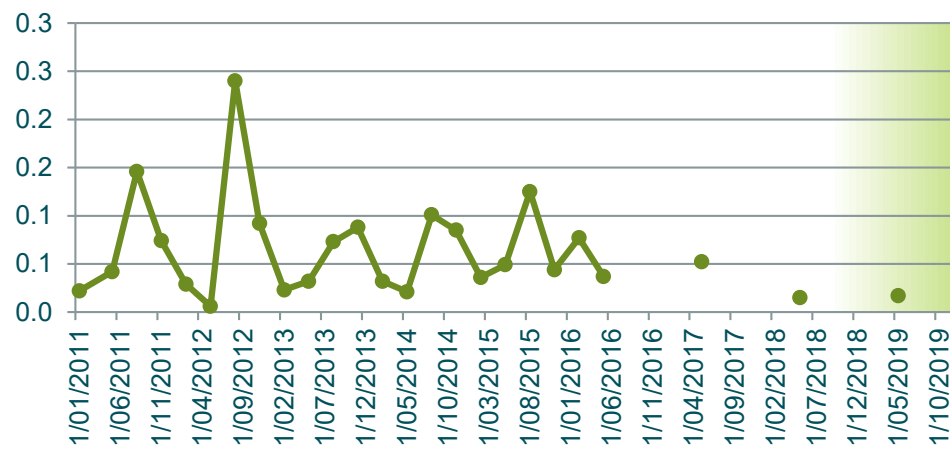
**Aluminium (Total)**  
mg/L



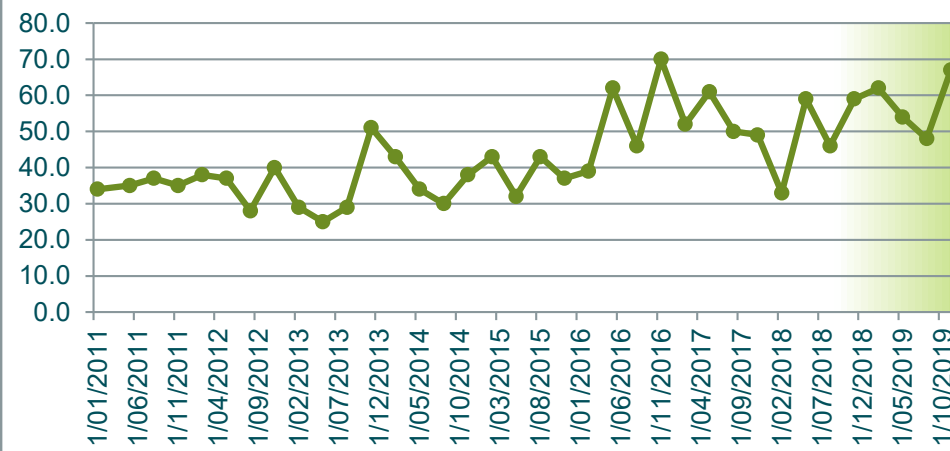
**Ammonia**  
mg/L



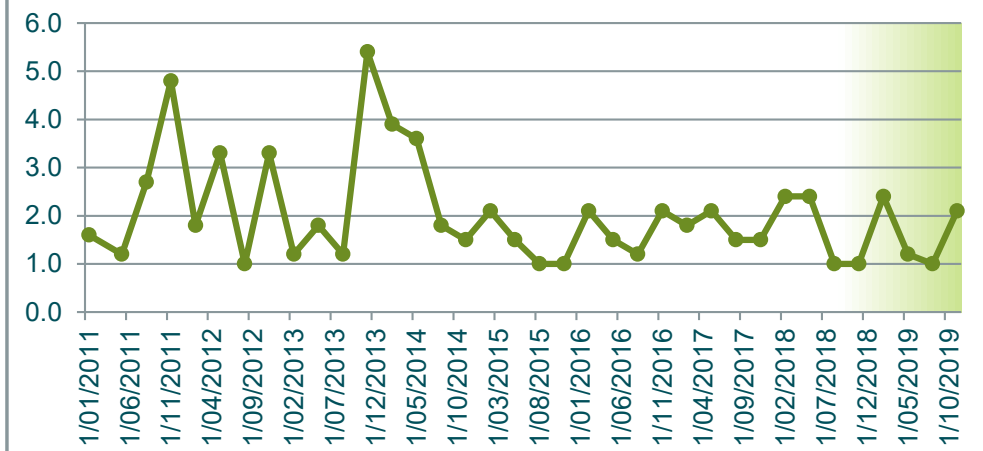
**Arsenic (Total)**  
mg/L



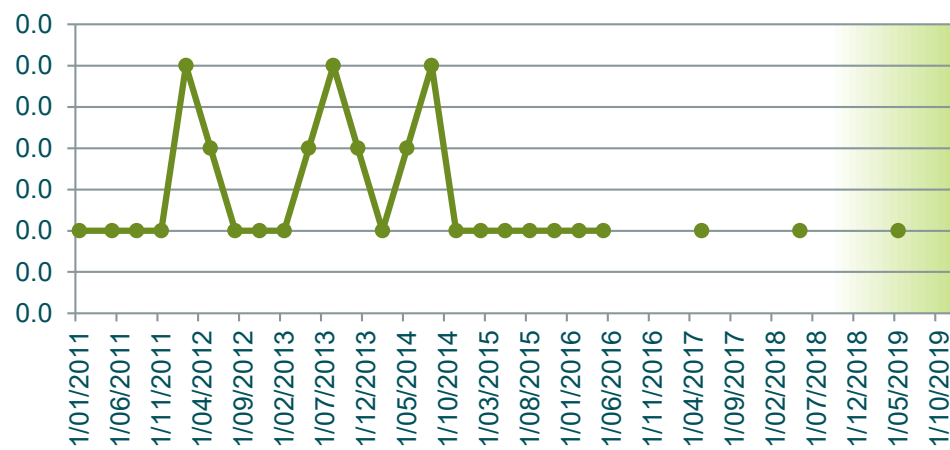
**Bicarbonate HCO<sub>3</sub>**  
mg/L



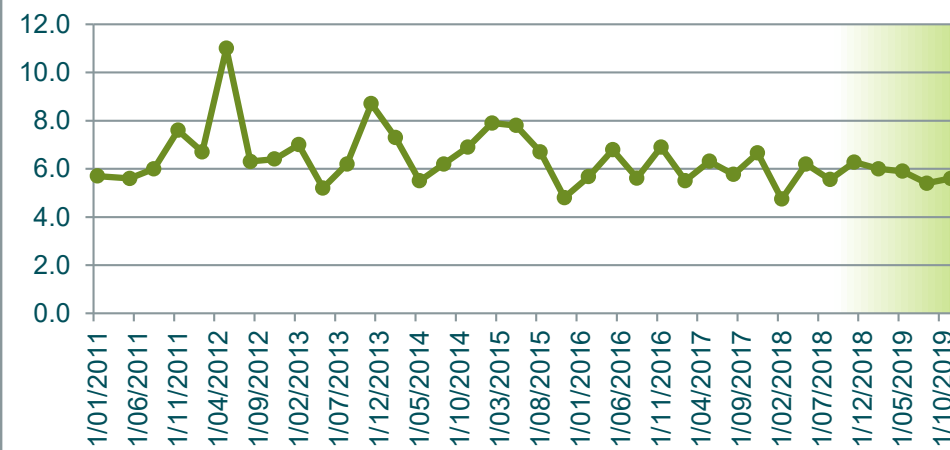
**BOD<sub>5</sub>**  
mg/L



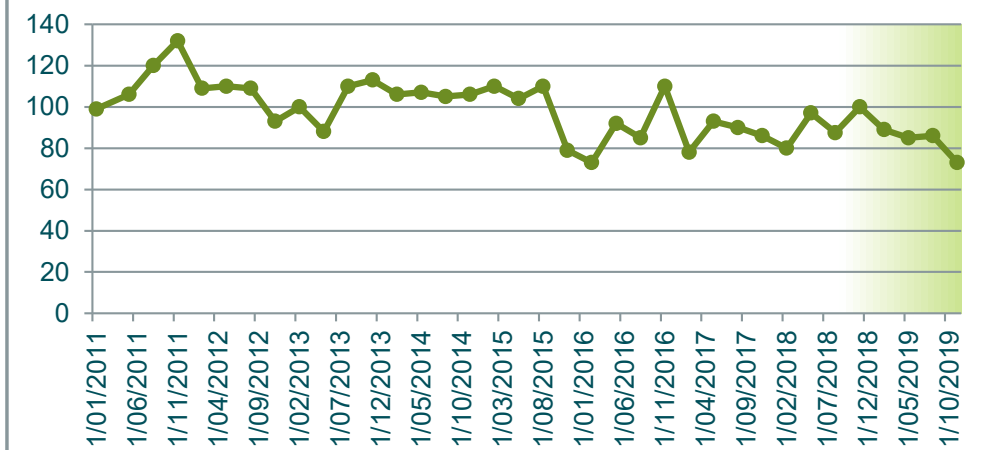
**Cadmium (Total)**  
mg/L



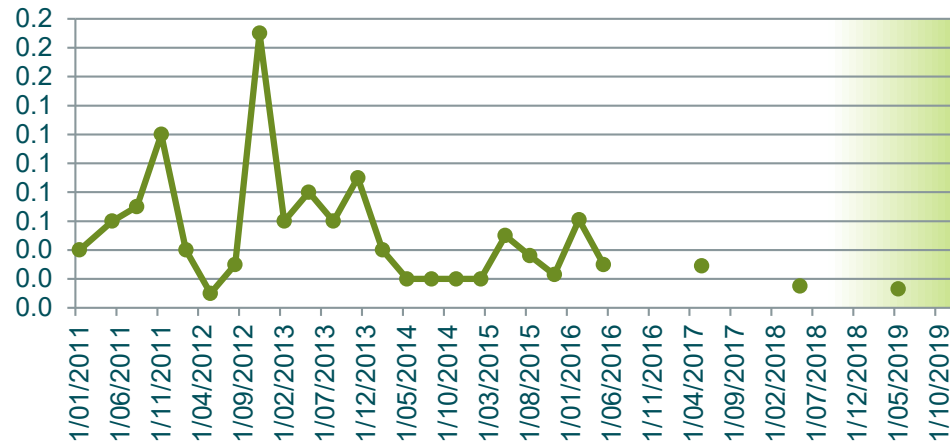
**Calcium (Total)**  
mg/L



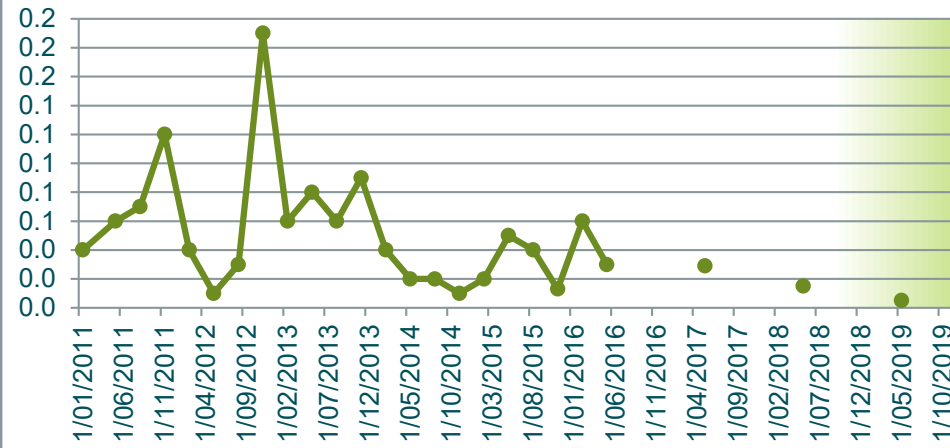
**Chloride**  
mg/L



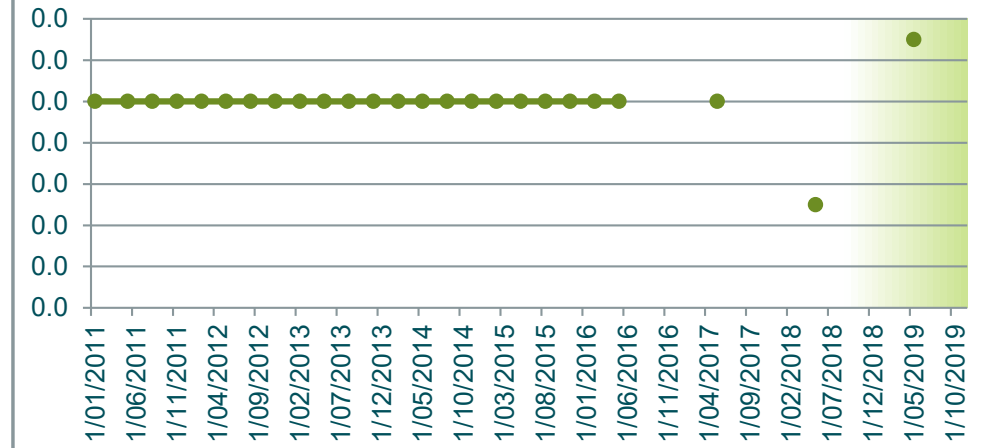
**Chromium (Total)  
mg/L**



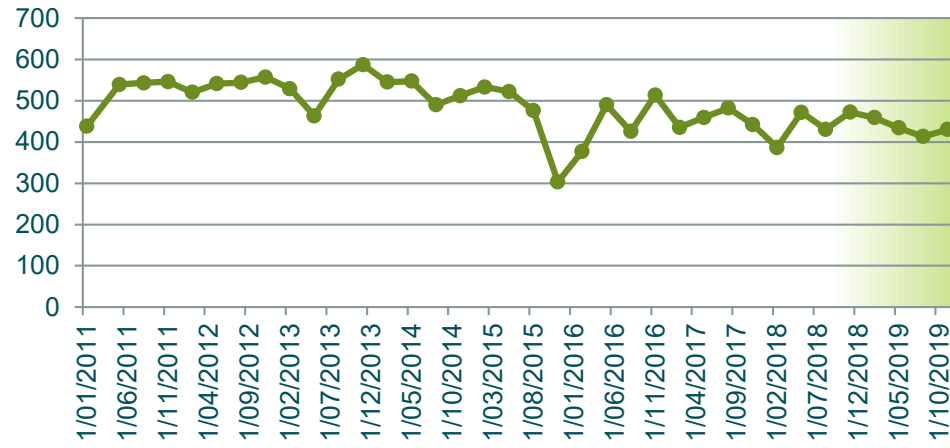
**Chromium 3  
mg/L**



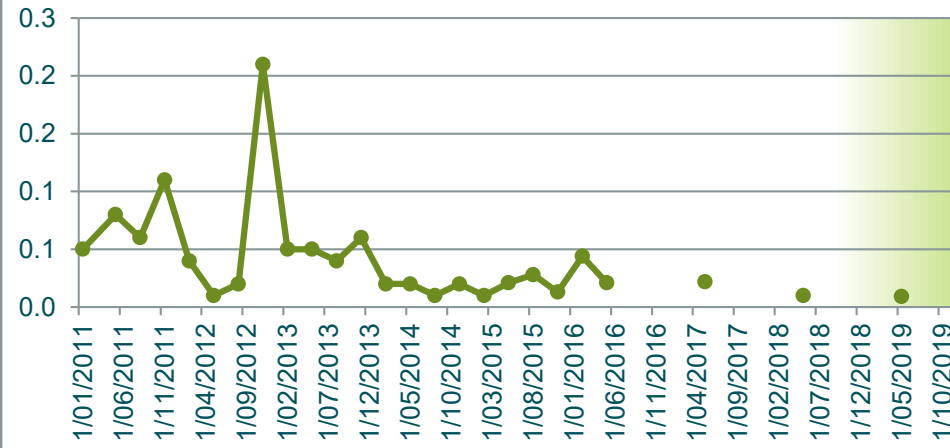
**Chromium 6  
mg/L**



**Conductivity  
µScm-1**



**Copper (Total)  
mg/L**



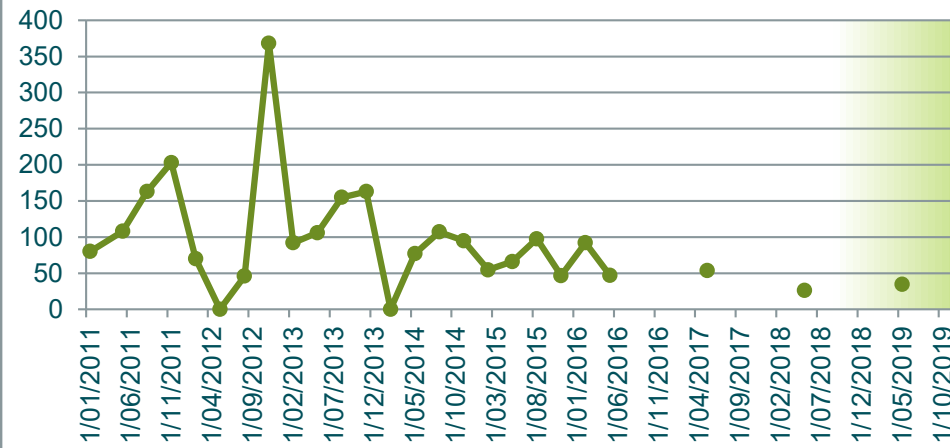
**DO (Membrane Electrode)  
mg/L**



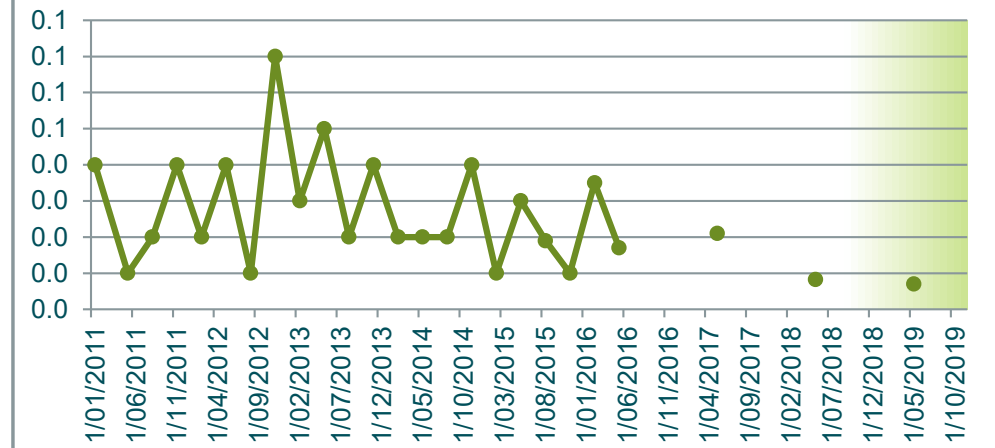
**Flouride  
mg/L**



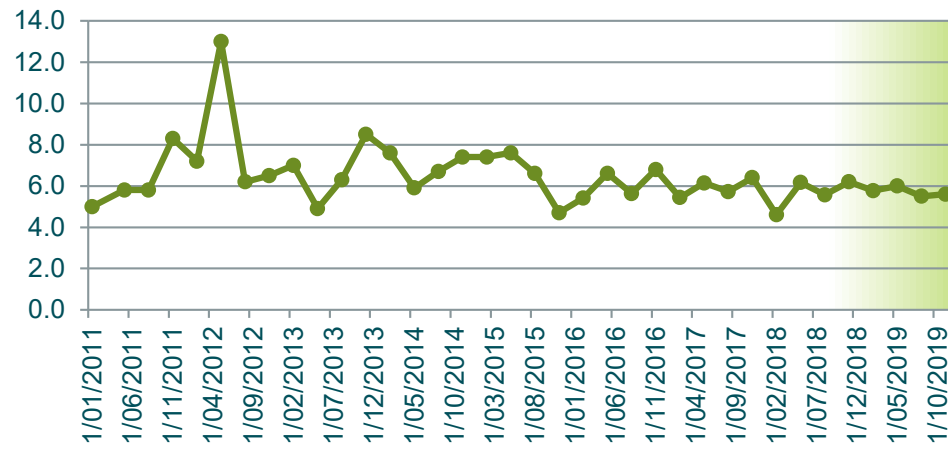
**Iron Total  
mg/L**



**Lead (Total)  
mg/L**



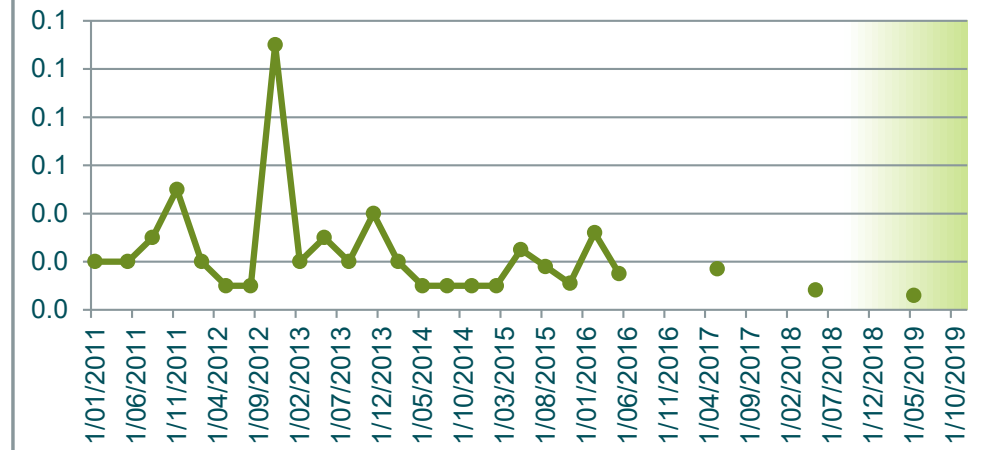
### Magnesium (Total) mg/L



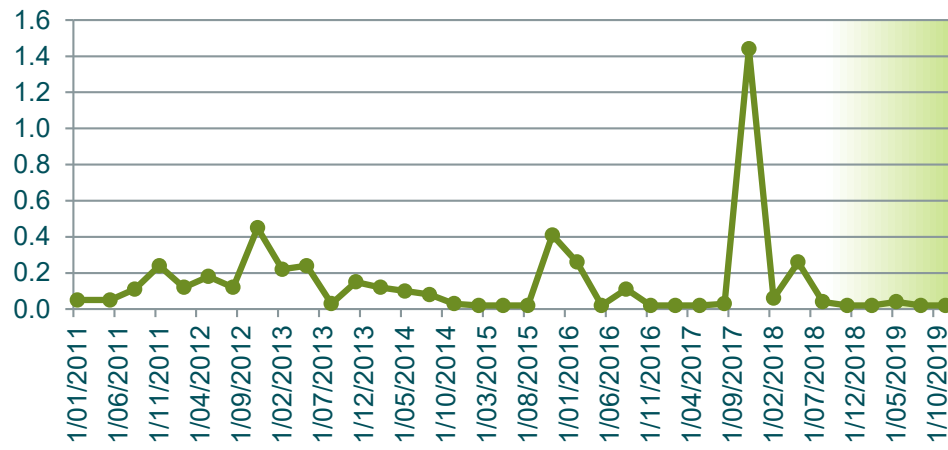
### Manganese Total mg/L



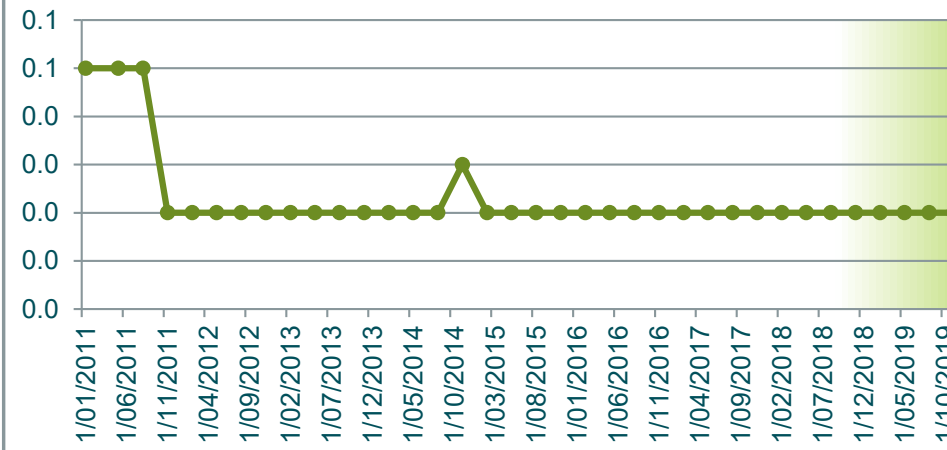
### Nickel (Total) mg/L



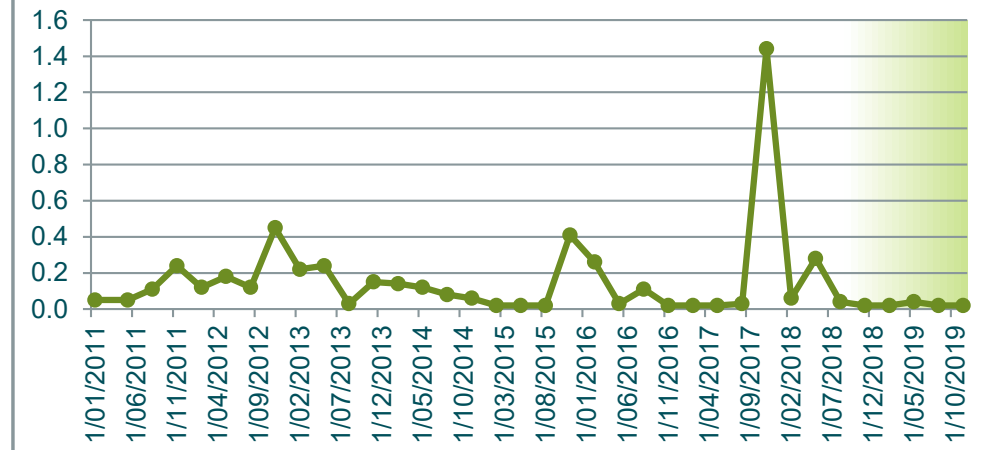
### Nitrate N mg/L



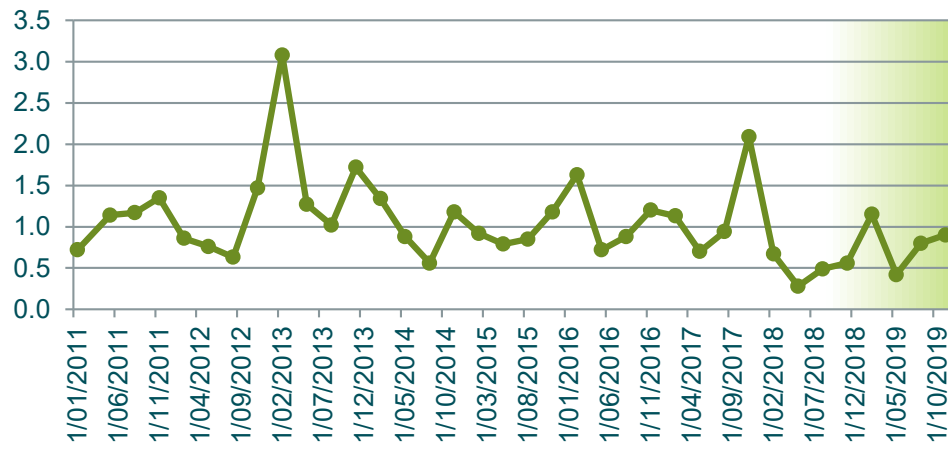
### Nitrite N mg/L



### Nitrogen Oxidised mg/L



### Nitrogen Total mg/L



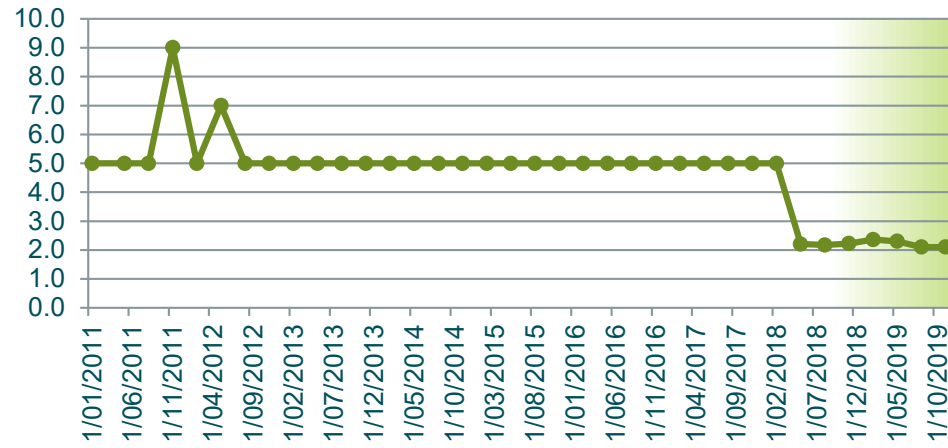
### pH pH units



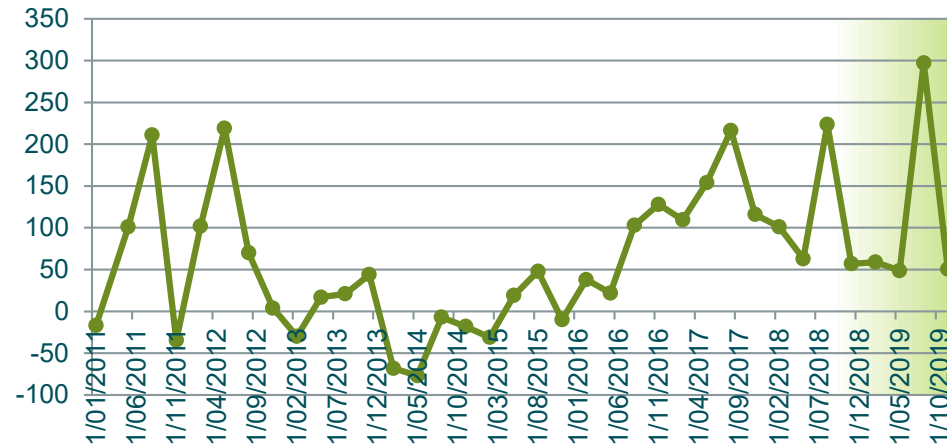
### Phosphorus Total mg/L



**Potassium Total**  
mg/L



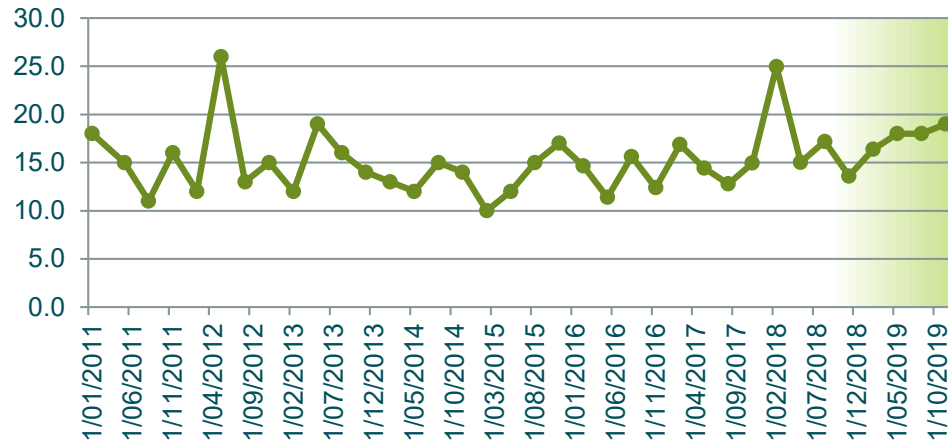
**Redox Potential**  
mV



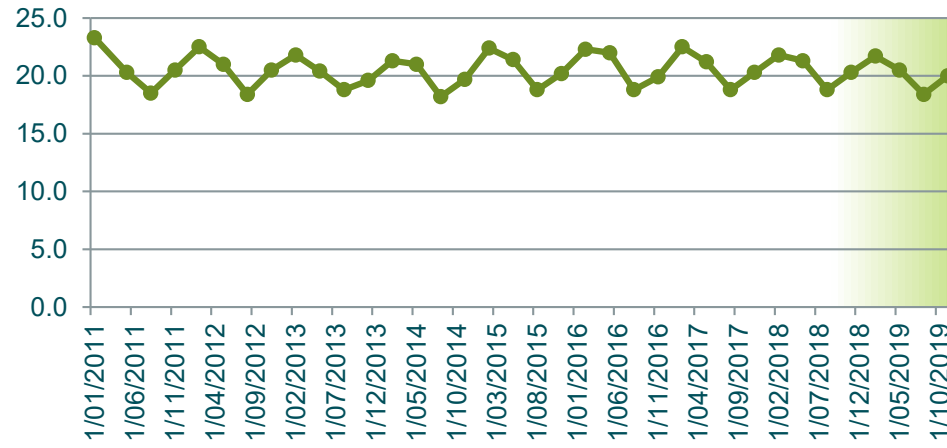
**Sodium (Total)**  
mg/L



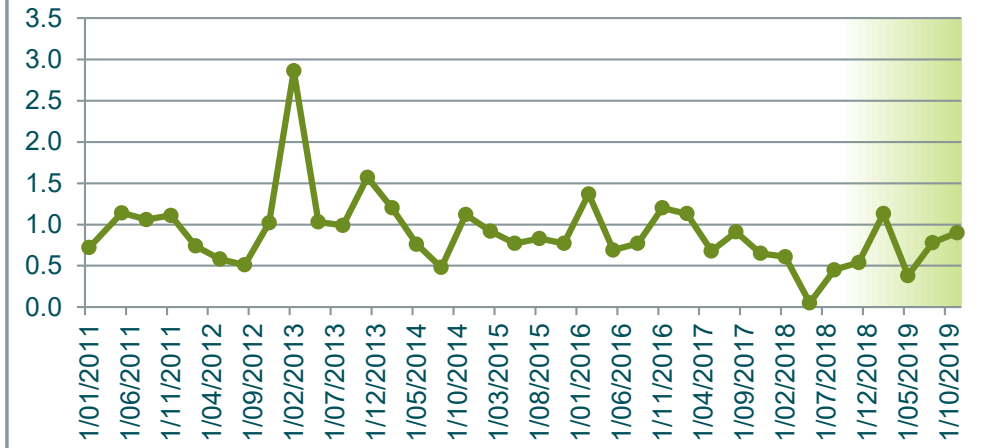
**Sulphate**  
mg/L



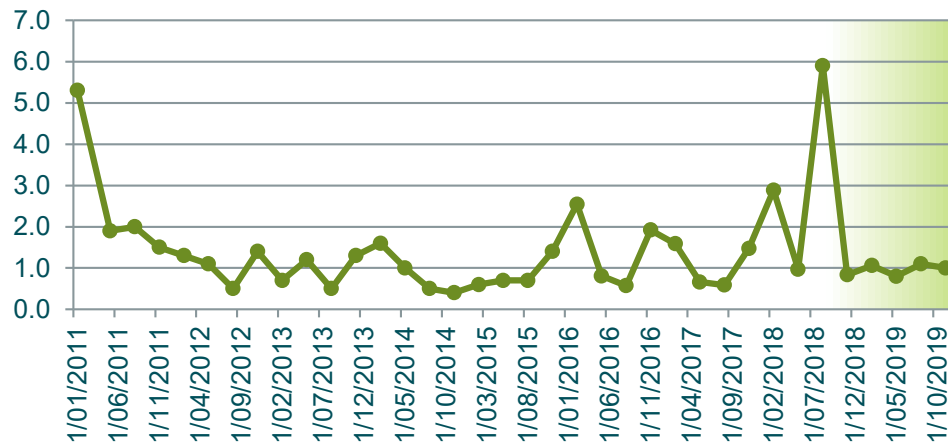
**Temperature**  
C



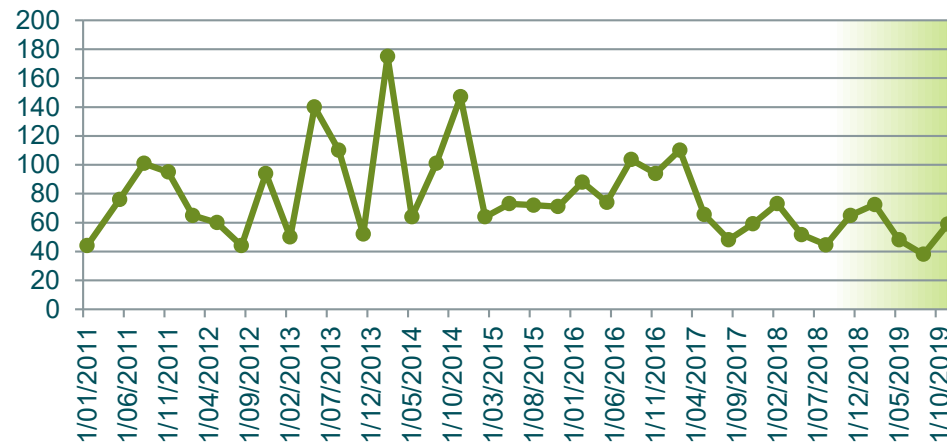
**TKN**  
mg/L



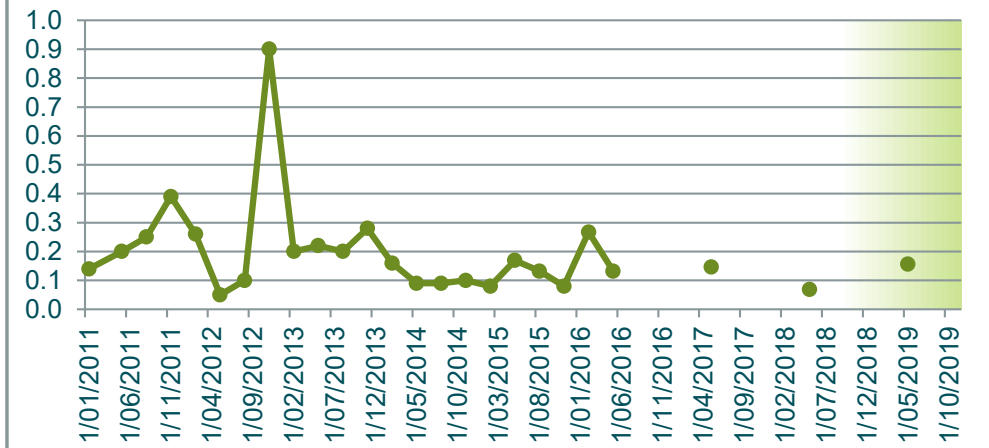
**TOC**  
mg/L



**Total Acidity**  
mg/L CaCO3

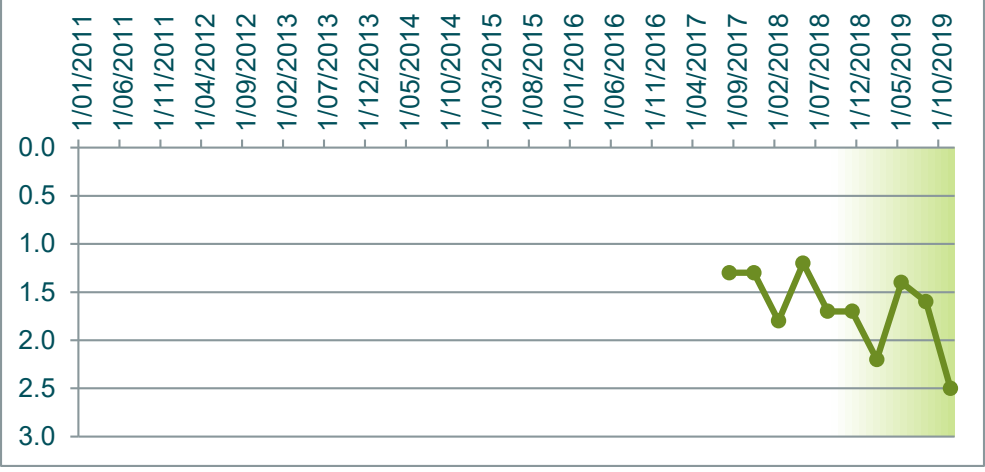


**Zinc (Total)**  
mg/L



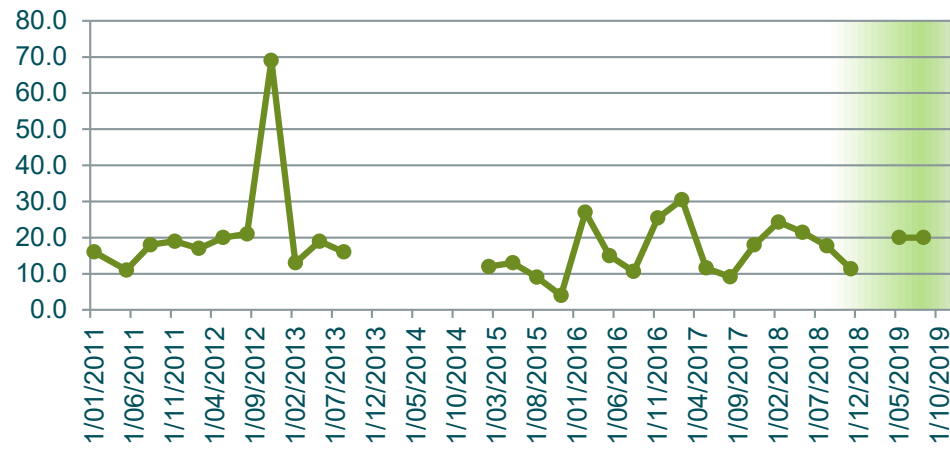


# Depth to Groundwater m

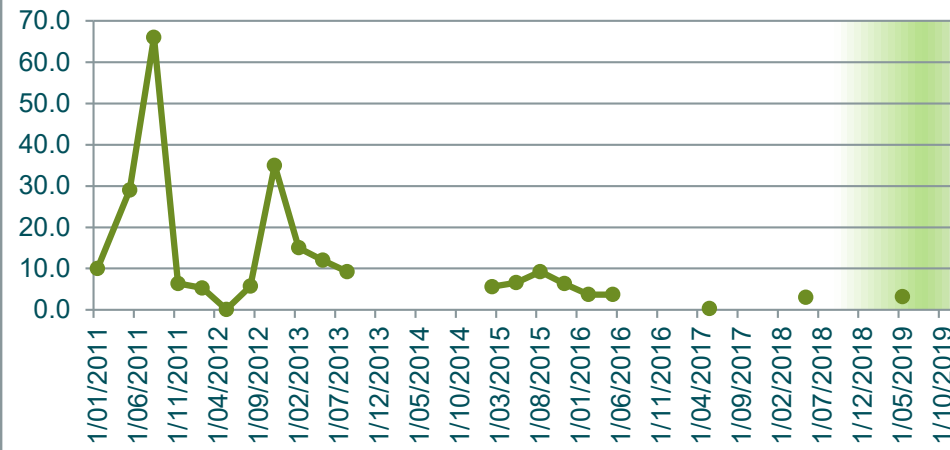


GW9	Alkalinity mg/L as CaCO3	Aluminum (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µS/cm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride 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	Pheno 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	16.0	10.0	0.1	0.0	10.0	6.6	0.0	11	185	0.0	0.0	0.0	639	0.0	2.4	0.0	13.0	0.0	8.8	0.4	0.0	0.1	0.1	0.1	0.4	5.5		0.2	5.0	103	67	38	23.0	0.4	6.1	56	0.1			
10/05/2011	11.0	29.0	0.1	0.0	7.0	2.1	0.0	20	324	0.0	0.0	0.0	1216	0.1	3.0	0.0	25.0	0.1	21.0	0.8	0.0	0.1	0.1	0.1	1.0	5.0		0.2	5.0	100	155	42	21.1	1.0	3.7	52	0.1			
9/08/2011	18.0	66.0	0.1	0.0	11.0	3.3	0.0	11	140	0.0	0.0	0.0	680	0.1	3.0	0.1	51.0	0.1	10.0	0.4	0.0	0.1	0.1	0.1	0.9	5.8		0.2	5.0	240	82	50	18.9	0.9	7.6	108	0.1			
8/11/2011	19.0	6.4	0.0	0.0	12.0	5.7	0.0	13	150	0.0	0.0	0.0	576	0.0	2.7	0.1	13.0	0.0	11.0	0.3	0.0	0.0	0.0	0.2	5.6		0.1	7.0	95	59	65	21.9	0.2	3.7	81	0.1				
6/02/2012	17.0	5.3	0.0	0.0	10.0	3.0	0.0	13	159	0.0	0.0	0.0	679	0.0	2.2	0.0	5.9	0.0	12.0	0.4	0.0	0.0	0.0	0.1	0.3	5.3		0.1	5.0	146	98	54	22.4	0.3	2.7	68	0.1			
8/05/2012	20.0	0.1	0.1	0.0	12.0	2.7	0.0	20	270	0.0	0.0	0.0	1101	0.0	3.8	0.1	4.2	0.0	23.0	0.4	0.0	0.1	0.0	0.1	0.6	6.0		0.1	5.0	256	154	45	21.4	0.5	5.9	68	0.0			
6/08/2012	21.0	5.7	0.0	0.0	13.0	2.1	0.0	18	252	0.0	0.0	0.0	990	0.0	2.6	0.0	14.0	0.0	18.0	0.7	0.0	0.0	0.0	0.0	0.4	5.4		0.2	5.0	186	108	49	19.5	0.4	3.5	64	0.0			
13/11/2012	69.0	35.0	0.1	0.0	42.0	2.1	0.0	11	160	0.0	0.0	0.0	854	0.1	4.0	0.1	37.0	0.1	16.0	0.9	0.0	0.1	0.0	0.1	0.9	6.2		0.4	5.0	19	112	48	20.9	0.8	4.1	94	0.2			
13/02/2013	13.0	15.0	0.0	0.0	8.0	1.2	0.0	35	450	0.0	0.0	0.0	1705	0.0	2.9	0.1	14.0	0.0	34.0	1.7	0.0	0.3	0.0	0.3	0.8	5.3		0.1	5.0	65	206	60	21.5	0.5	6.3	71	0.1			
14/05/2013	19.0	12.0	0.1	0.0	12.0	3.0	0.0	26	320	0.0	0.0	0.0	1218	0.0	2.8	0.0	11.0	0.0	23.0	1.1	0.0	0.1	0.0	0.1	0.6	5.5		0.0	5.0	4	159	60	21.2	0.5	4.1	149	0.1			
6/08/2013	16.0	9.3	0.0	0.0	10.0	2.1	0.0	28	340	0.0	0.0	0.0	1226	0.0	3.4	0.0	14.0	0.0	25.0	1.0	0.0	0.0	0.0	0.0	0.5	5.4		0.2	5.0	59	171	74	18.7	0.5	3.8	143	0.0			
12/11/2013																																								
11/02/2014																																								
13/05/2014																																								
12/08/2014																																								
10/11/2014																																								
9/02/2015	12.0	5.6	0.0	0.0	7.0	3.3	0.0	30	520	0.0	0.0	0.0	1754	0.0	1.7	0.0	6.7	0.0	30.0	1.3	0.0	0.0	0.0	1.0	5.4		0.1	5.0	46	216	64	23.3	1.0	5.3	94	0.1				
11/05/2015	13.0	6.6	0.0	0.0	8.0	4.5	0.0	28	375	0.0	0.0	0.0	1363	0.0	3.5	0.1	6.2	0.0	27.0	1.1	0.0	0.0	0.0	0.7	5.3		0.1	5.0	66	203	62	21.7	0.7	5.5	91	0.1				
11/08/2015	9.0	9.2	0.0	0.0	9.0	3.0	0.0	45	610	0.0	0.0	0.0	2090	0.0	3.7	0.0	11.7	0.0	43.0	1.7	0.0	0.1	0.0	1.1	5.2		0.1	5.0	124	296	94	18.8	1.0	7.0	128	0.1				
10/11/2015	4.0	6.3	0.0	0.0	4.0	1.0	0.0	57	820	0.0	0.0	0.0	2620	0.0	4.1	0.1	4.2	0.0	58.0	0.9	0.0	0.0	0.0	0.6	4.8		0.1	5.0	132	346	83	19.9	0.6	9.4	72	0.1				
8/02/2016	27.0	3.7	0.0	0.0	27.0	1.0	0.0	14	190	0.0	0.0	0.0	826	0.0	3.3	0.0	5.4	0.0	13.3	0.6	0.0	0.1	0.0	0.1	0.6	5.7		0.2	5.0	98	120	63	22.1	0.5	4.8	128	0.1			
9/05/2016	15.0	3.7	0.0	0.0	15.0	7.8	0.0	38	530	0.0	0.0	0.0	1868	0.0	3.1	0.0	7.4	0.0	37.6	1.6	0.0	0.1	0.0	0.1	0.8	5.4		0.1	5.0	102	256	72	22.7	0.8	9.5	120	0.1			
9/08/2016	10.6		0.0		11.0	1.2		48	660				2325		3.3	0.1			49.3			0.1	0.0	0.1	0.5	5.0		0.0	5.0	43	315	91	19.3	0.4	5.5	168				
7/11/2016	25.4		0.0		25.0	1.8		14	194				827		3.2	0.0			13.2			0.0	0.0	0.0	0.5	5.5		0.1	5.0	335	131	69	20.3	0.5	3.6	108				
7/02/2017	30.5		0.0		30.0	1.0		6	80				493		3.5	0.0			5.9			0.0	0.0	0.0	0.4	5.6		0.1	5.0	193	77	63	22.1	0.3	2.4	143				
8/05/2017	11.6	0.3	0.1	0.0	12.0	1.2	0.0	61	860	0.0	0.0	0.0	2886	0.0	3.4	0.0	0.8	0.0	62.1	0.3	0.0	0.0	0.0	0.7	5.0		0.0	5.0	194	362	101	21.7	0.7	7.7	101	0.0				
8/08/2017	9.1		0.0		9.0	1.5		50	675				2447		3.4	0.0			49.4			0.1	0.0	0.1	1.0	5.0		0.1	5.0	270	323	79	19.4	0.9	7.6	91		2.2		
7/11/2017	18.0		0.0		18.0	4.2		28	425				1524		3.9	0.0			26.2			0.1	0.0	0.1	0.6	5.3		0.1	5.0	290	203	68	20.6	0.5	4.0	78		2.5		
13/02/2018	24.3		0.0		24.0	2.1		13	198				884		3.8	0.0			12.7			0.0	0.0	0.0	0.4	5.6		0.1	5.0	138	133	73	22.3	0.4	4.0	95		3.2		
8/05/2018	21.5	3.0	0.1	0.0	21.0	2.1	0.0	75	1070	0.0	0.0	0.0	3513	0.0	3.3	0.1	13.1	0.0	77.1	3.1	0.0	0.0	0.0	0.1	5.3		0.0	2.7	94	478	109	21.9	0.1	10.7	132	0.1	2.2			
14/08/2018	17.7		0.0		18.0	1.8		33	450				1671		4.3	0.1			31.0			0.1	0.0	0.1	0.6	5.3		0.1	2.3	406	267	82	19.5	0.6	10.0	83		3.1		
13/11/2018	11.3		0.0		11.0	1.2		123	910				3080		3.2	0.1			117.7			0.0	0.0	0.0	0.5	5.2		0.0	4.4	177	721	222	20.3	0.5	8.2	89		2.6		
12/02/2019																																								
14/05/2019	20.0	3.2	0.0	0.0	20.0	4.5	0.0	28	370	0.0	0.0	0.0	1406	0.0	3.0	0.0	4.1	0.0	27.0	0.9	0.0	0.0	0.0	0.5	5.4		0.1	2.1	156	228	90	21.4	0.5	5.0	88	0.1	2.7			
13/08/2019	20.0		0.0		20.0	5.1		33	420				1574		4.0	0.0			31.0			0.0	0.0	0.0	0.3	5.4		0.1	2.1	383	234	93	19.4	0.3	6.0	80		2.8		
12/11/2019																																								
<b>2019 Min</b>	<b>20.0</b>	<b>3.2</b>	<b>0.0</b>	<b>0.0</b>	<b>20.0</b>	<b>4.5</b>	<b>0.0</b>	<b>28</b>	<b>370</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1406</b>	<b>0.0</b>	<b>3.0</b>	<b>0.0</b>	<b>4.1</b>	<b>0.0</b>	<b>27.0</b>	<b>0.9</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.3</b>	<b>5.4</b>		<b>0.1</b>	<b>2.1</b>	<b>156</b>	<b>228</b>	<b>90</b>	<b>19.4</b>	<b>0.3</b>	<b>5.0</b>	<b>80</b>	<b>0.1</b>	<b>2.7</b>			
<b>2019 Max</b>	<b>20.0</b>	<b>3.2</b>	<b>0.0</b>	<b>0.0</b>	<b>20.0</b>	<b>5.1</b>	<b>0.0</b>	<b>33</b>	<b>420</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1574</b>	<b>0.0</b>	<b>4.0</b>	<b>0.0</b>	<b>4.1</b>	<b>0.0</b>	<b>31.0</b>	<b>0.9</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.5</b>	<b>5.4</b>		<b>0.1</b>	<b>2.1</b>	<b>383</b>	<b>234</b>	<b>93</b>	<b>21.4</b>	<b>0.5</b>	<b>6.0</b>	<b>88</b>	<b>0.1</b>	<b>2.8</b>			
<b>2019 Mean</b>	<b>20.0</b>	<b>3.2</b>	<b>0.0</b>	<b>0.0</b>	<b>20.0</b>	<b>4.8</b>	<b>0.0</b>	<b>31</b>	<b>395</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1490</b>	<b>0.0</b>	<b>3.5</b>	<b>0.0</b>	<b>4.1</b>	<b>0.0</b>	<b>29.0</b>	<b>0.9</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.4</b>	<b>5.4</b>		<b>0.1</b>	<b>2.1</b>	<b>270</b>	<b>231</b>	<b>92</b>	<b>20.4</b>	<b>0.4</b>	<b>5.5</b>	<b>84</b>	<b>0.1</b>	<b>2.8</b>			
<b>Long-term Average</b>	<b>18.6</b>	<b>11.8</b>	<b>0.0</b>	<b>0.0</b>	<b>15.0</b>	<b>2.8</b>	<b>0.0</b>	<b>32</b>	<b>417</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1518</b>	<b>0.0</b>	<b>3.3</b>	<b>0.0</b>	<b>13.1</b>	<b>0.0</b>	<b>31.5</b>	<b>1.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>0.6</b>	<b>5.4</b>		<b>0.1</b>	<b>4.7</b>	<b>156</b>	<b>217</b>	<b>75</b>	<b>20.9</b>	<b>0.5</b>	<b>5.8</b>	<b>98</b>					

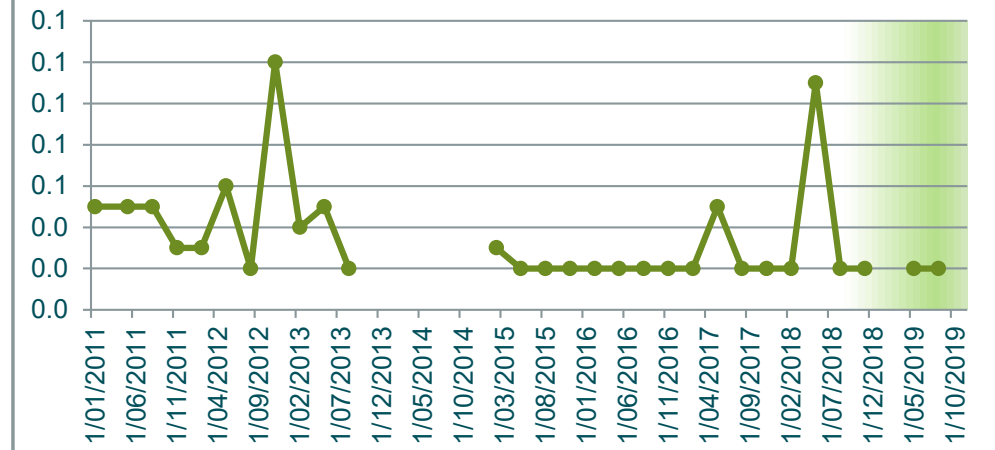
**Alkalinity**  
mg/L as CaCO<sub>3</sub>



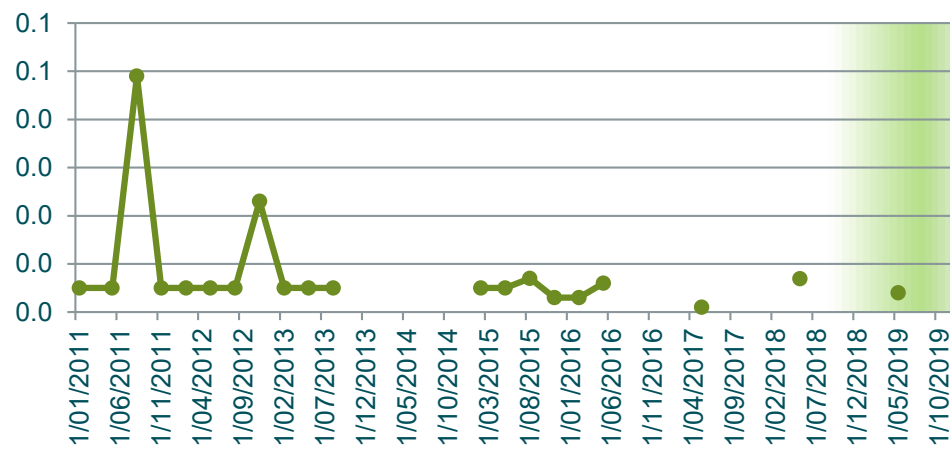
**Aluminium (Total)**  
mg/L



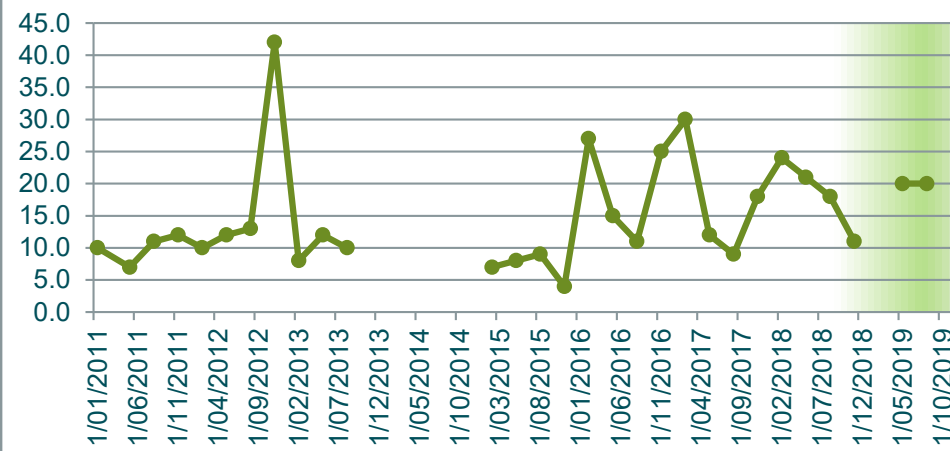
**Ammonia**  
mg/L



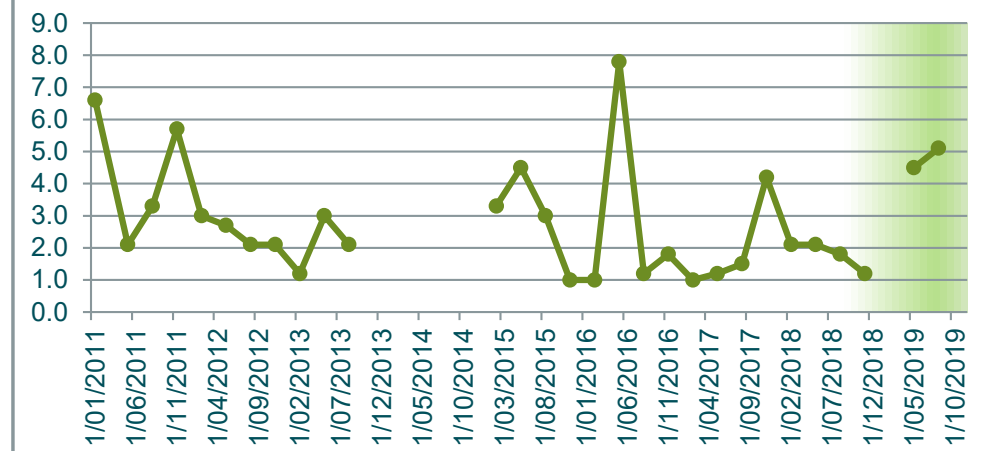
**Arsenic (Total)**  
mg/L



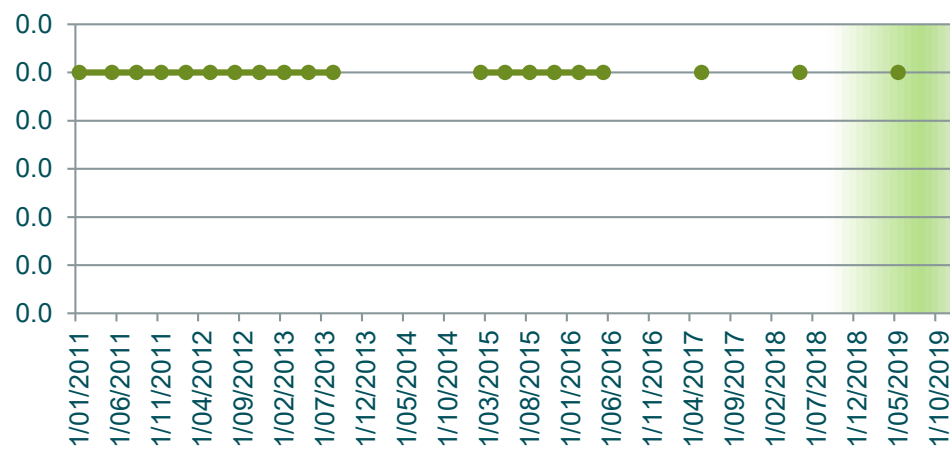
**Bicarbonate HCO<sub>3</sub>**  
mg/L



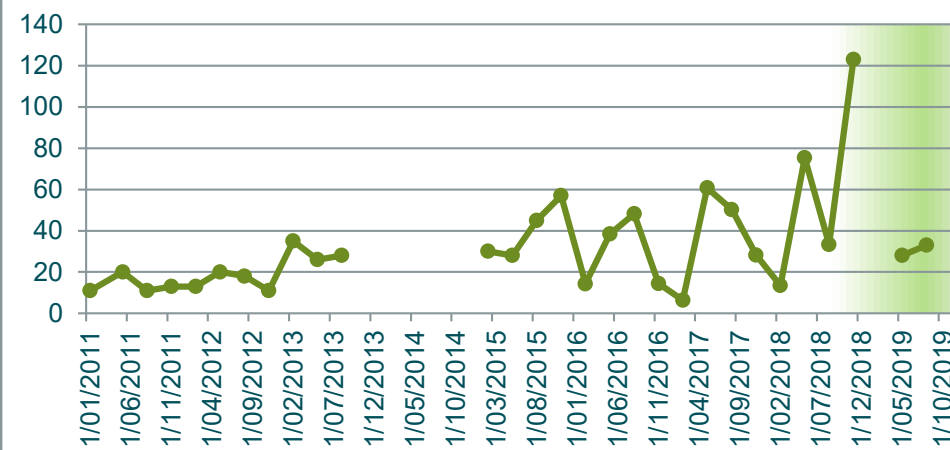
**BOD<sub>5</sub>**  
mg/L



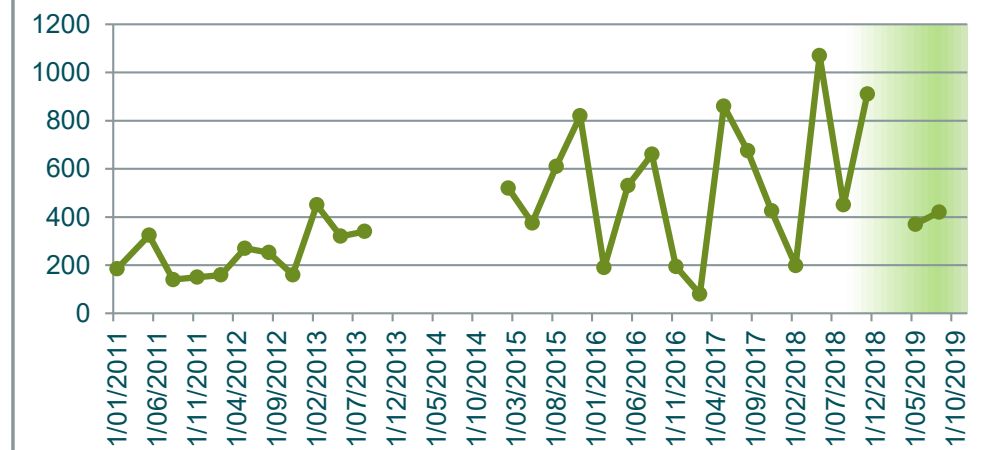
**Cadmium (Total)**  
mg/L



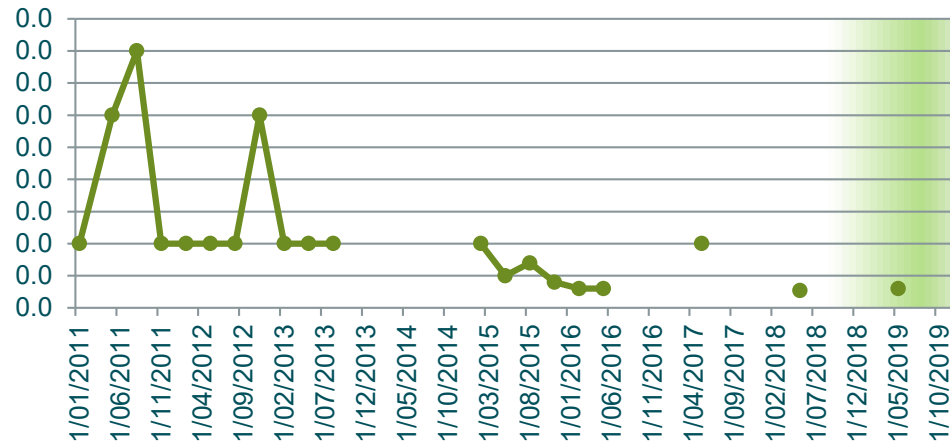
**Calcium (Total)**  
mg/L



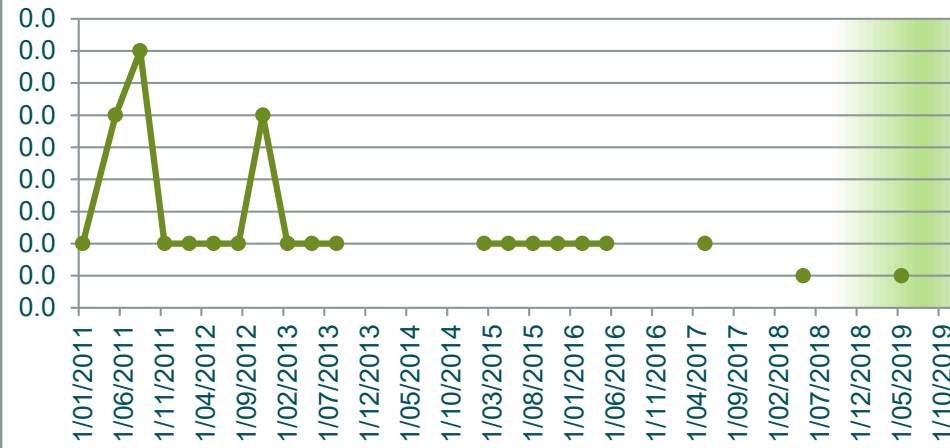
**Chloride**  
mg/L



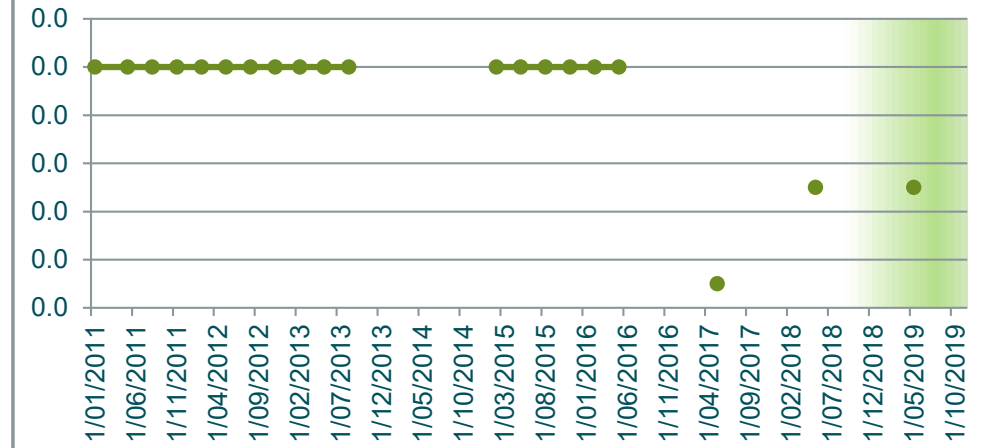
### Chromium (Total) mg/L



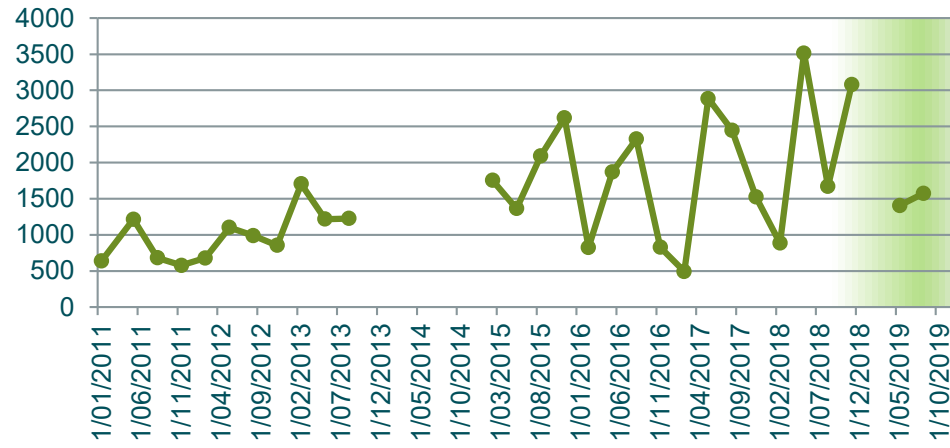
### Chromium 3 mg/L



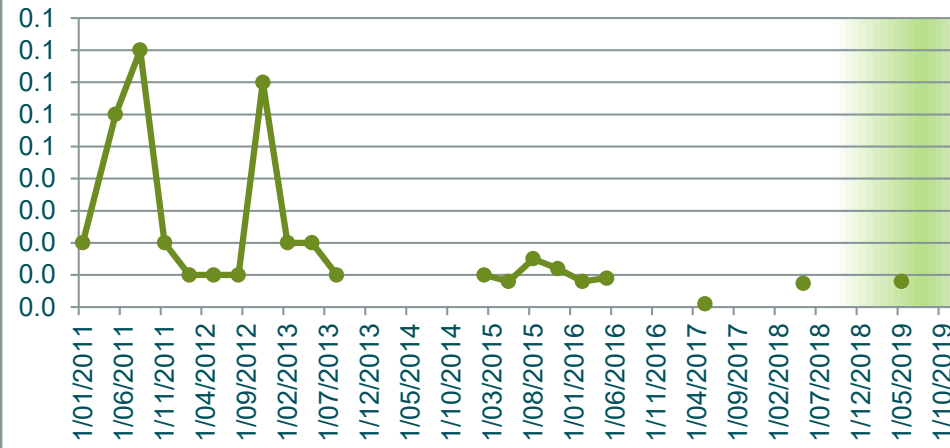
### Chromium 6 mg/L



### Conductivity µScm-1



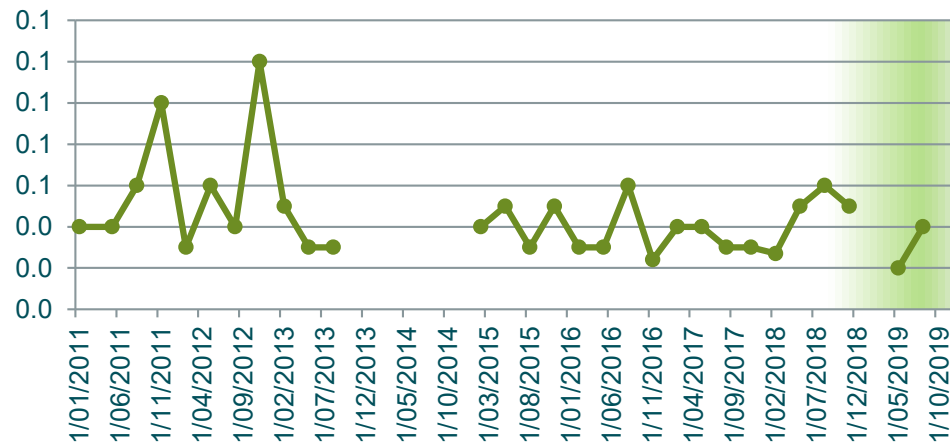
### Copper (Total) mg/L



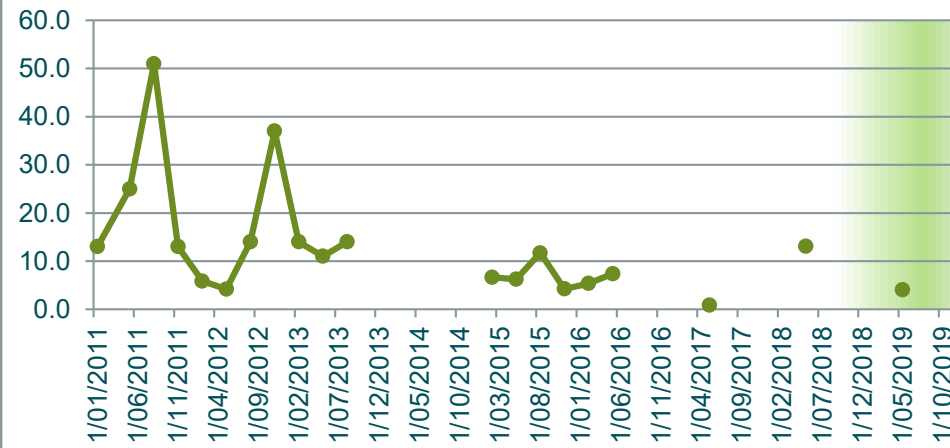
### DO (Membrane Electrode) mg/L



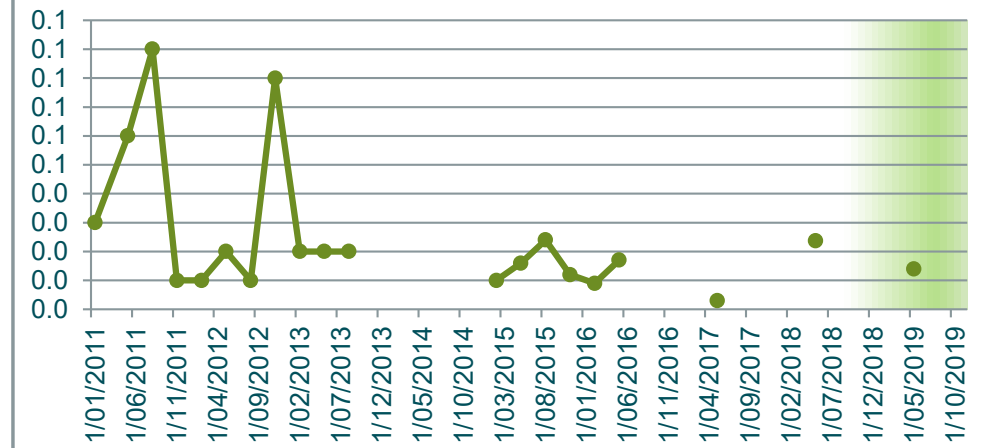
### Flouride mg/L



### Iron Total mg/L

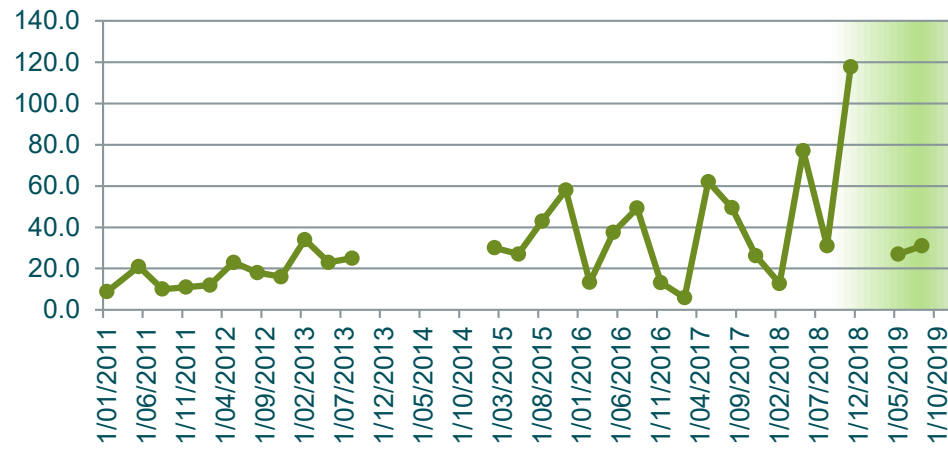


### Lead (Total) mg/L





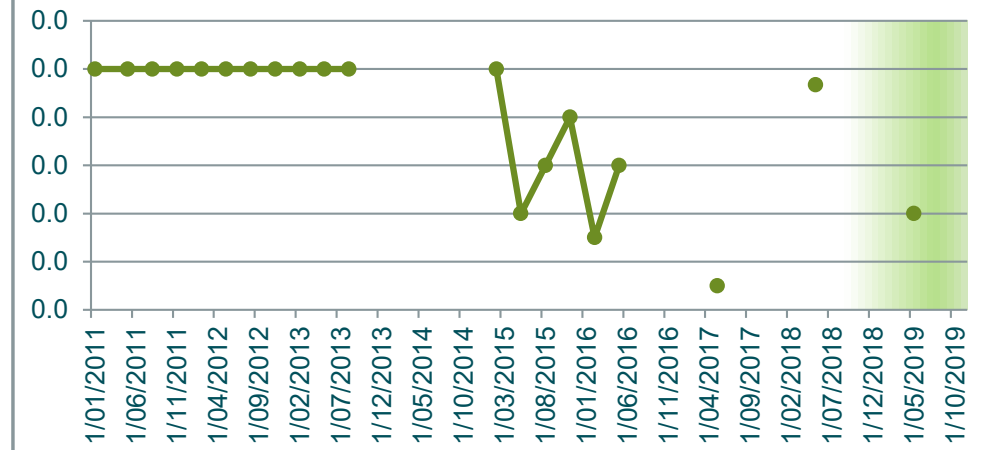
### Magnesium (Total) mg/L



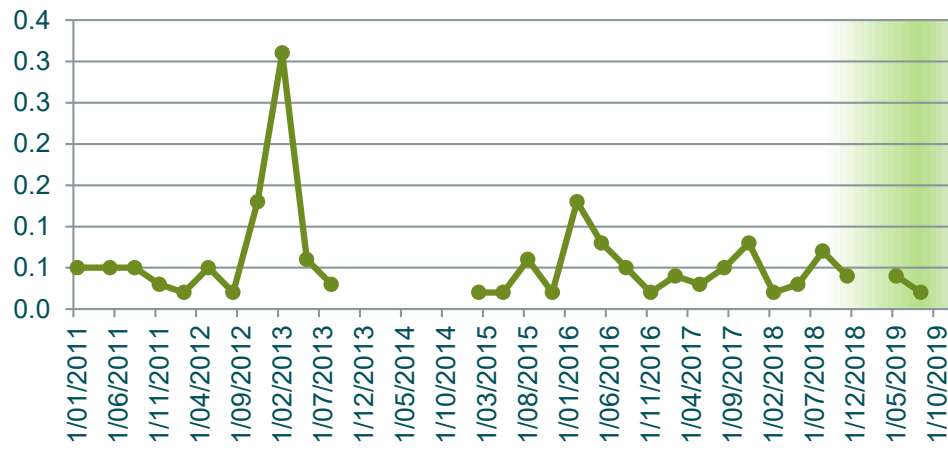
### Manganese Total mg/L



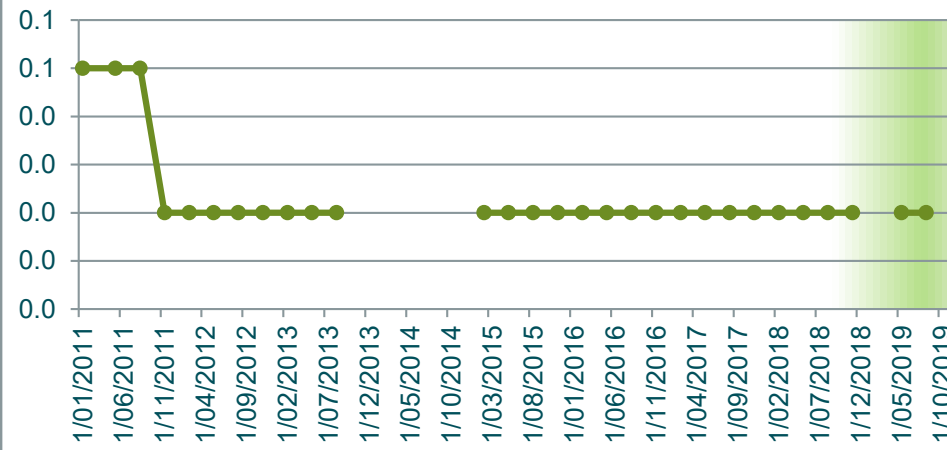
### Nickel (Total) mg/L



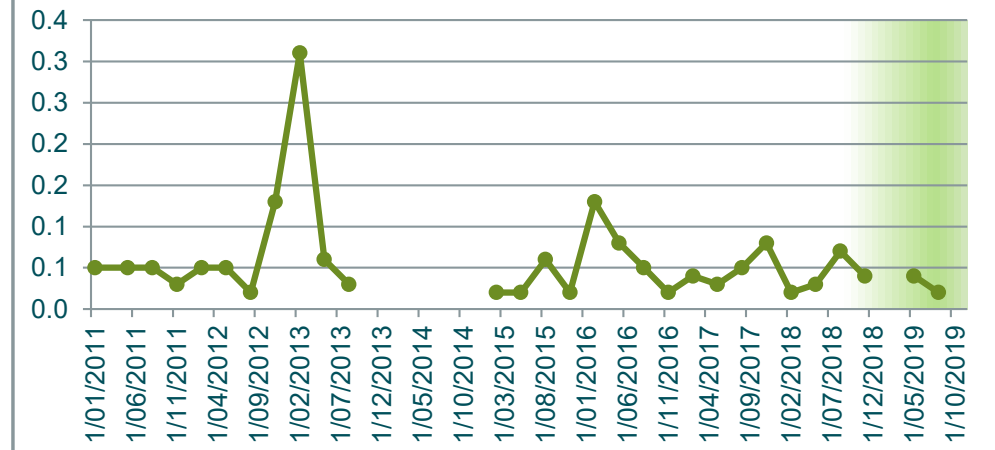
### Nitrate N mg/L



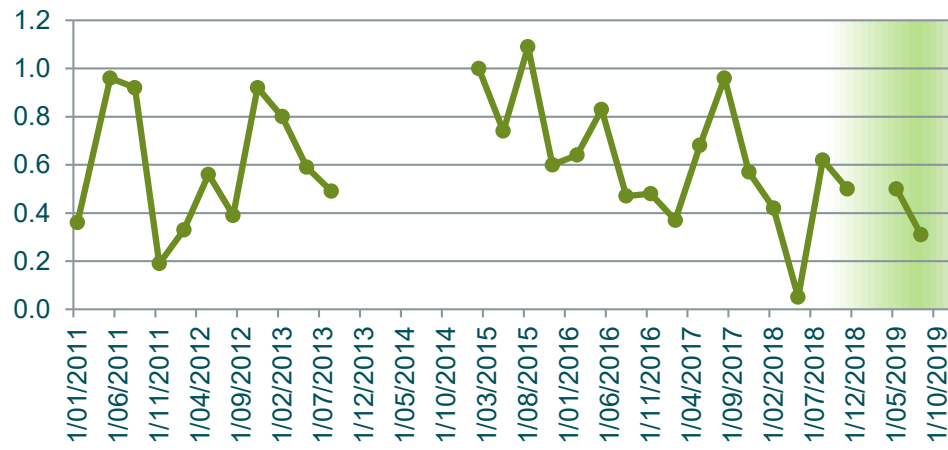
### Nitrite N mg/L



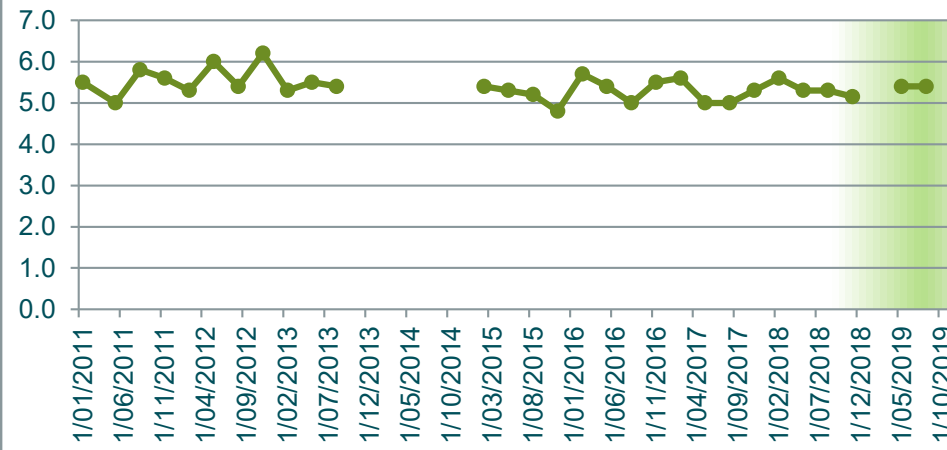
### Nitrogen Oxidised mg/L



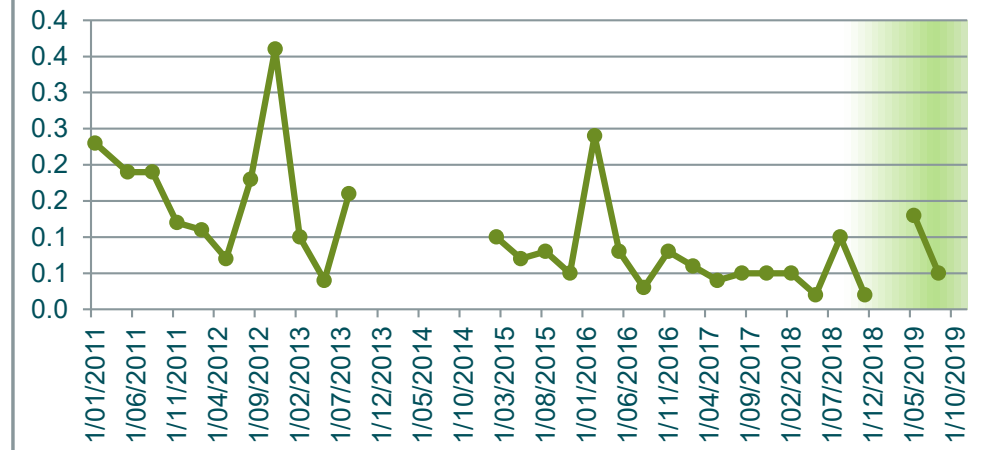
### Nitrogen Total mg/L



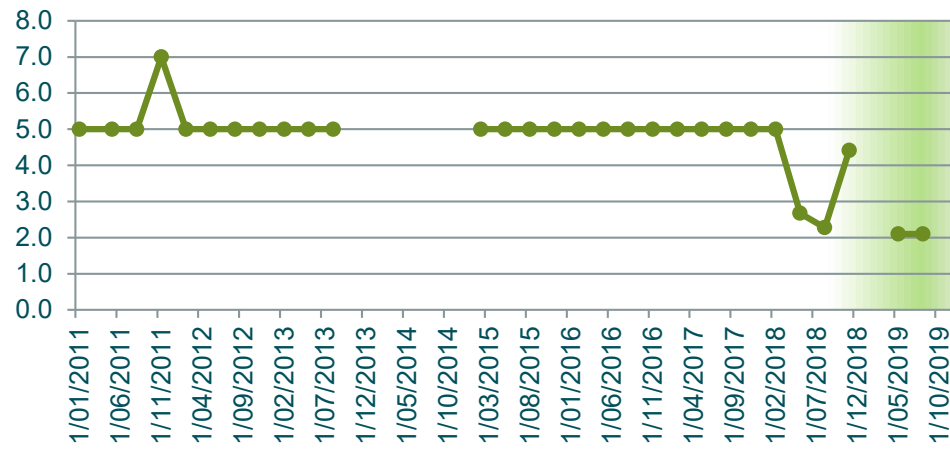
### pH pH units



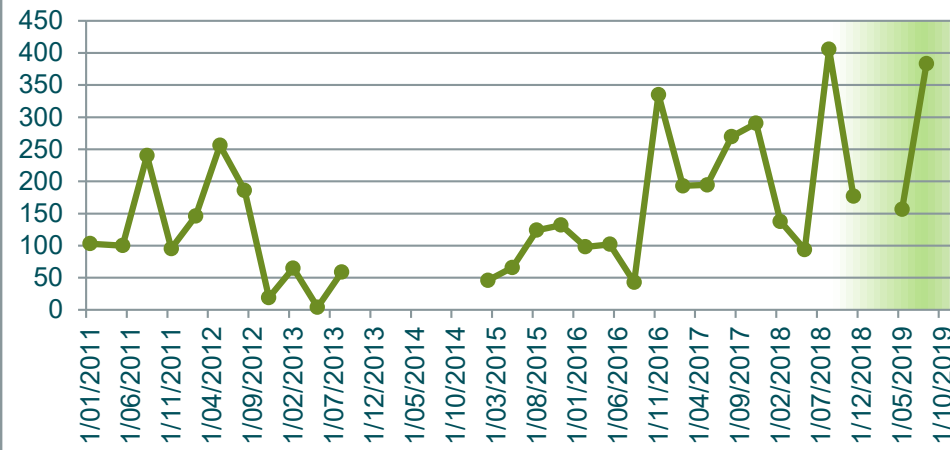
### Phosphorus Total mg/L



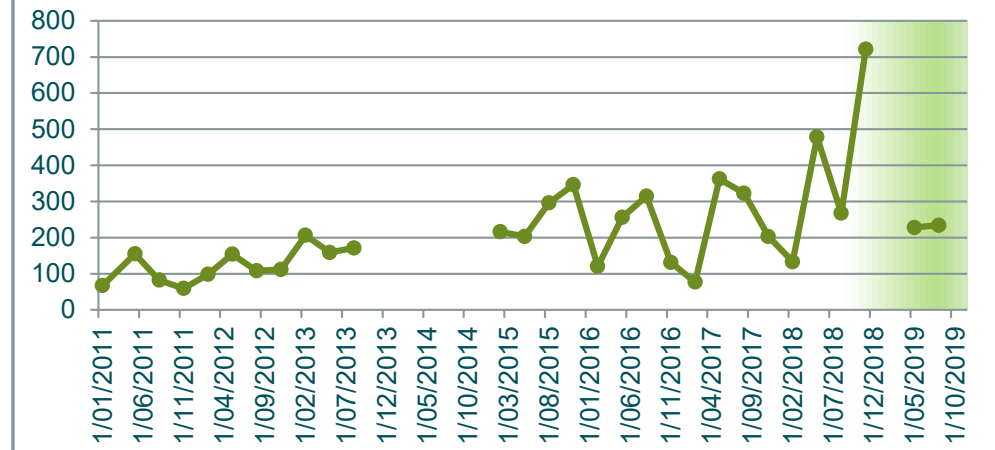
### Potassium Total mg/L



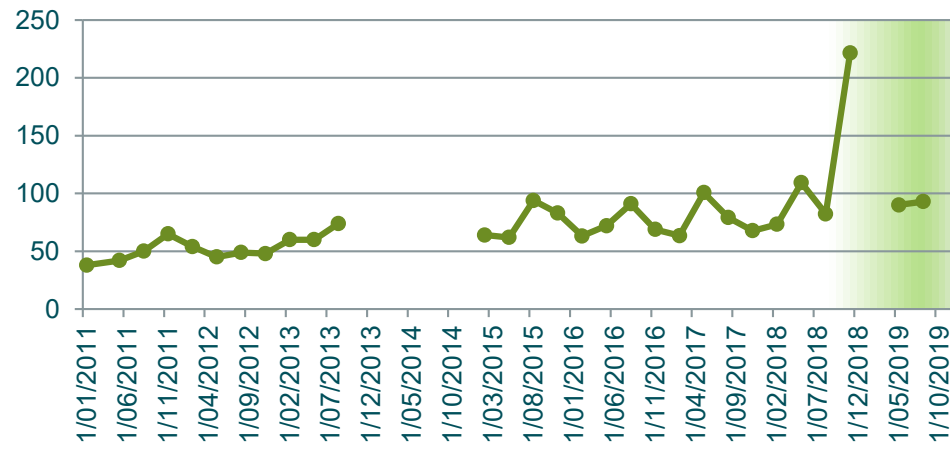
### Redox Potential mV



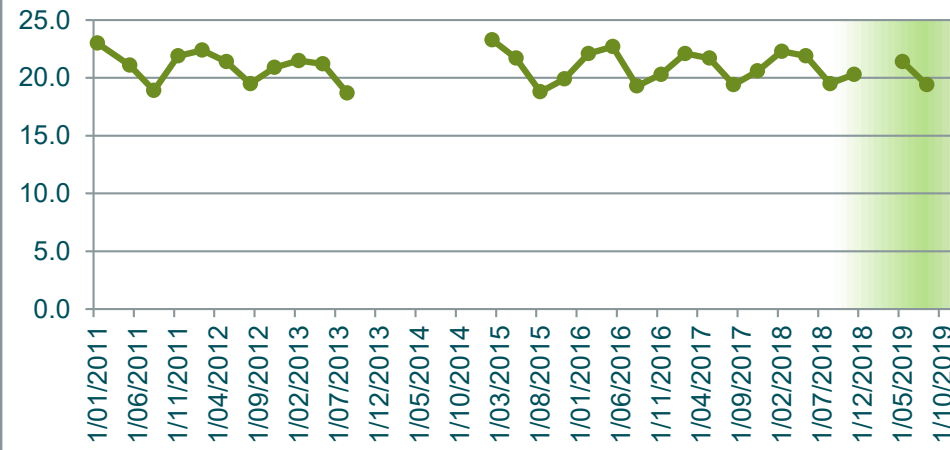
### Sodium (Total) mg/L



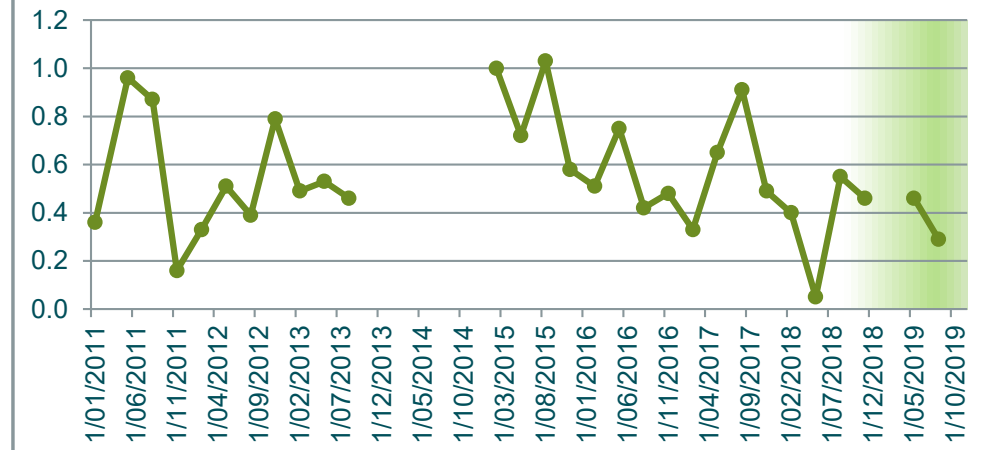
### Sulphate mg/L



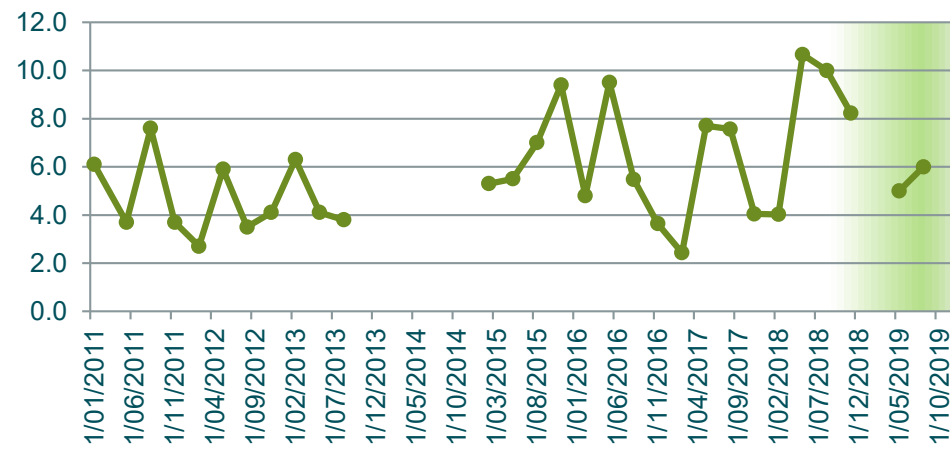
### Temperature C



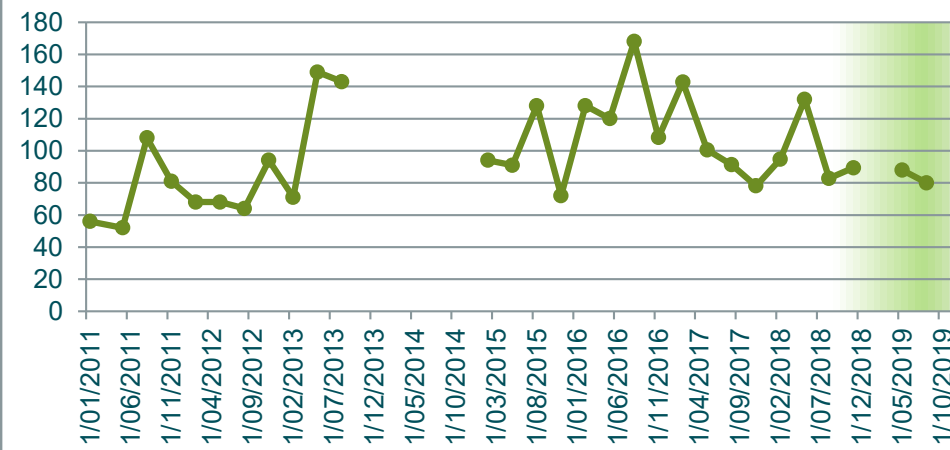
### TKN mg/L



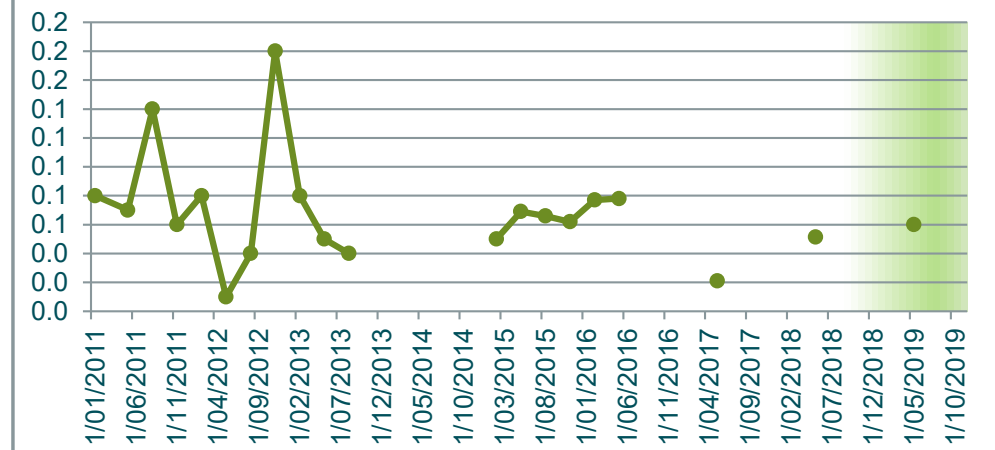
### TOC mg/L



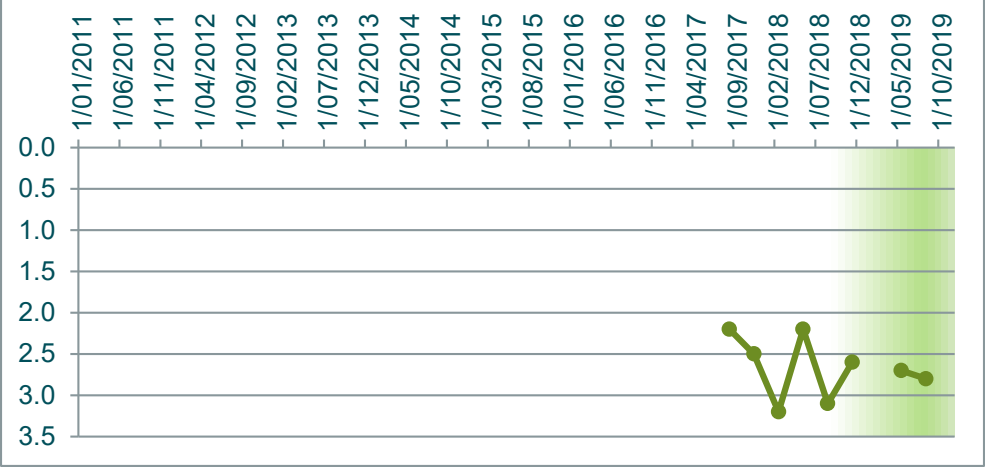
### Total Acidity mg/L CaCO3



### Zinc (Total) mg/L

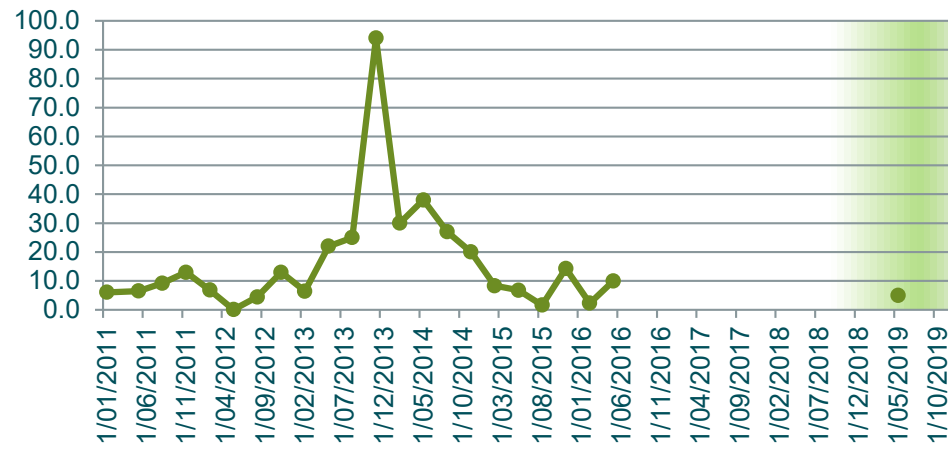


# Depth to Groundwater m

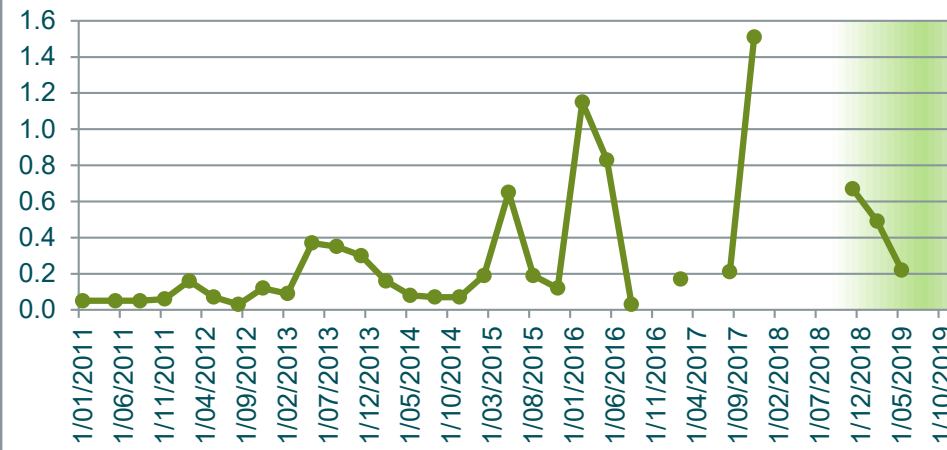


GW10	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µS/cm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride 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	Pheno/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	17.0	6.1	0.1	0.0	10.0	1.0	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	21.0	8.2	21.3	0.8	2.8	52	0.0			
10/05/2011	17.0	6.5	0.1	0.0	10.0	1.2	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	47.0	12.0	20.7	1.1	4.0	10	0.0			
9/08/2011	11.0	9.2	0.1	0.0	7.0	5.7	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	27.0	8.1	18.4	0.9	5.4	74	0.1			
8/11/2011	9.0	13.0	0.1	0.0	5.0	1.0	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	19.0	9.5	19.5	1.3	2.9	60	0.1			
6/02/2012	17.0	6.9	0.2	0.0	10.0	9.0	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	25.0	5.8	21.2	2.2	7.2	55	0.0			
8/05/2012	16.0	0.1	0.1	0.0	10.0	3.0	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	23.0	6.5	20.9	0.1	11.0	52	0.0			
6/08/2012	15.0	4.5	0.0	0.0	9.0	3.0	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	20.0	9.5	18.9	0.7	3.8	52	0.0			
13/11/2012	10.0	13.0	0.1	0.0	6.0	4.8	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	23.0	8.9	20.3	1.8	8.0	36	0.1			
13/02/2013	14.0	6.4	0.1	0.0	8.0	6.9	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	29.0	9.3	21.2	1.8	17.0	43	0.1			
14/05/2013	25.0	22.0	0.4	0.0	15.0	9.6	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	21.0	5.7	20.9	2.8	9.9	105	0.1			
6/08/2013	26.0	25.0	0.4	0.0	16.0	5.7	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	25.0	8.2	18.8	2.7	11.0	100	0.1			
12/11/2013	10.0	94.0	0.3	0.0	6.0	7.2	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	29.0	8.9	20.2	4.2	3.9	51	0.3			
11/02/2014	10.0	30.0	0.2	0.0	6.0	6.3	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	25.0	8.0	22.0	2.1	6.5	132	0.1			
13/05/2014	8.0	38.0	0.1	0.0	5.0	3.3	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	25.0	5.5	21.1	1.9	2.7	63	0.1			
12/08/2014	7.0	27.0	0.1	0.0	4.0	3.9	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	34.0	9.4	19.2	1.9	2.9	112	0.1			
10/11/2014	8.0	20.0	0.1	0.0	5.0	4.2	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	34.0	9.0	20.1	1.7	3.1	144	0.1			
9/02/2015	22.0	8.3	0.2	0.0	13.0	3.9	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	28.0	7.2	22.0	2.4	16.0	60	0.0			
11/05/2015	12.0	6.8	0.7	0.0	7.0	8.1	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	66.0	12.0	21.3	1.7	6.3	100	0.0			
11/08/2015	1.0	1.6	0.2	0.0	1.0	5.1	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	192.0	24.0	19.0	1.6	4.8	147	0.1			
10/11/2015	8.0	14.3	0.1	0.0	8.0	3.0	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	26.0	5.9	19.3	1.9	5.9	57	0.1			
8/02/2016	12.0	2.3	1.2	0.0	12.0	4.2	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	10.8	3.7	23.5	2.0	4.5	25	0.0			
9/05/2016	22.0	10.0	0.8	0.0	22.0	13.2	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	28.9	6.6	22.0	2.8	4.6	75	0.1			
9/08/2016	6.4		0.0		6.0	1.0		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	4.9	19.4	1.4	5.9	58				
7/11/2016																																								
7/02/2017	8.0		0.2		8.0	2.7		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	22.5	6.3	21.4	2.7	2.9	116				
8/05/2017																																								
8/08/2017	18.6		0.2		19.0	4.2		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	24.7	8.8	19.1	2.7	5.5	60		3.1		
7/11/2017	28.4		1.5		28.0	5.7		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	23.0	8.1	19.5	2.4	5.6	66		3.1		
13/02/2018																																								
8/05/2018																																								
14/08/2018																																								
13/11/2018	25.9		0.7		26.0	3.3		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	28.8	9.7	19.7	1.5	10.8	74		2.6		
12/02/2019	34.2		0.5		34.0	6.9		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	24.0	3.8	21.1	2.7	1.2	67		4.2		
14/05/2019	15.0	5.0	0.2	0.0	15.0	6.0	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	26.0	9.8	21.1	1.7	5.3	67	0.1	3.3		
14/08/2019																																								
12/11/2019																																								
2019 Min	15.0	5.0	0.2	0.0	15.0	6.0	0.0	3.4	31	0.0	0.0	0.0	199	0.0	3.0	0.0	11	0.0	3.9	0.4	0.0	0.1	0.0	0.1	1.7	5.7		0.3	1.4	2	24.0	3.8	21.1	1.7	1.2	67	0.1	3.3		
2019 Max	34.2	5.0	0.5	0.0	34.0	6.9	0.0	3.9	40	0.0	0.0	0.0	224	0.0	3.2	0.1	11	0.0	4.0	0.4	0.0	0.1	0.0	0.1	2.8	6.1		0.5	1.5	40	26.0	9.8	21.1	2.7	5.3	67	0.1	4.2		
2019 Mean	24.6	5.0	0.4	0.0	24.5	6.5	0.0	3.7	36	0.0	0.0	0.0	212	0.0	3.1	0.0	11	0.0	3.9	0.4	0.0	0.1	0.0	0.1	2.3	5.9		0.4	1.4	21	25.0	6.8	21.1	2.2	3.2	67	0.1	3.8		
Long-term Average	14.9	16.1	0.3	0.0	11.4	4.9	0.0	5.4	63	0.0	0.0	0.0	278	0.0	3.2	0.0	29	0.0	5.2	0.7	0.0	0.4	0.0	0.4	2.3	5.6		0.4	4.7	88	32.5	8.4	20.5	1.9	6.3	73	0.1	3.3		

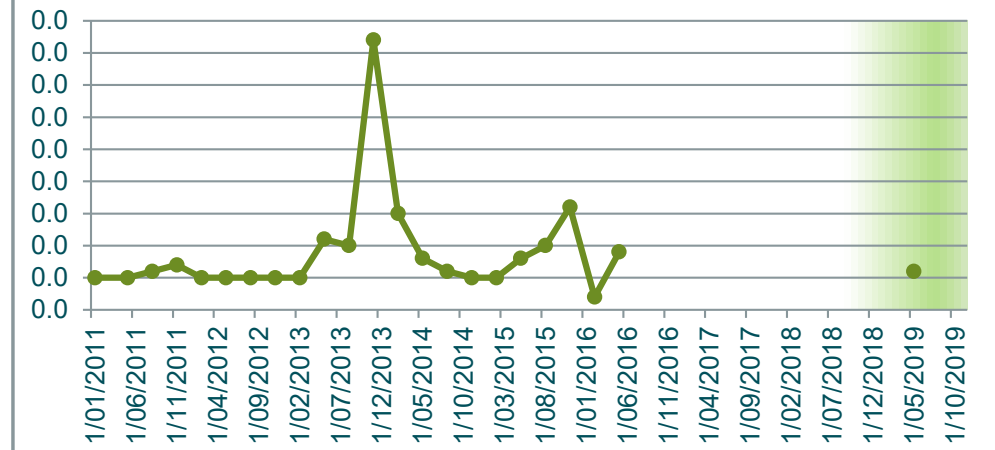
**Aluminium (Total)  
mg/L**



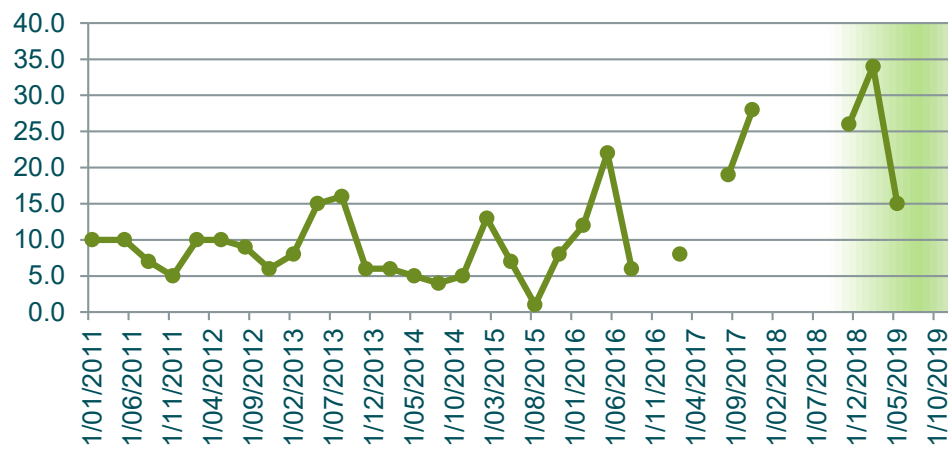
**Ammonia  
mg/L**



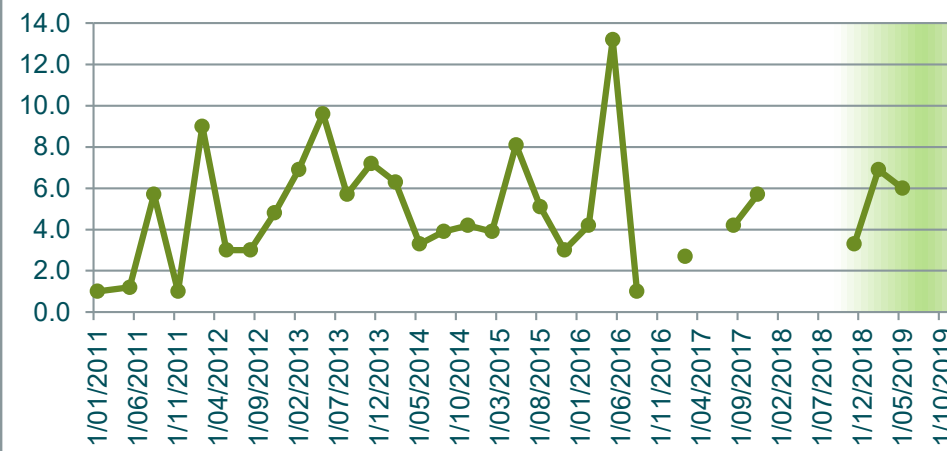
**Arsenic (Total)  
mg/L**



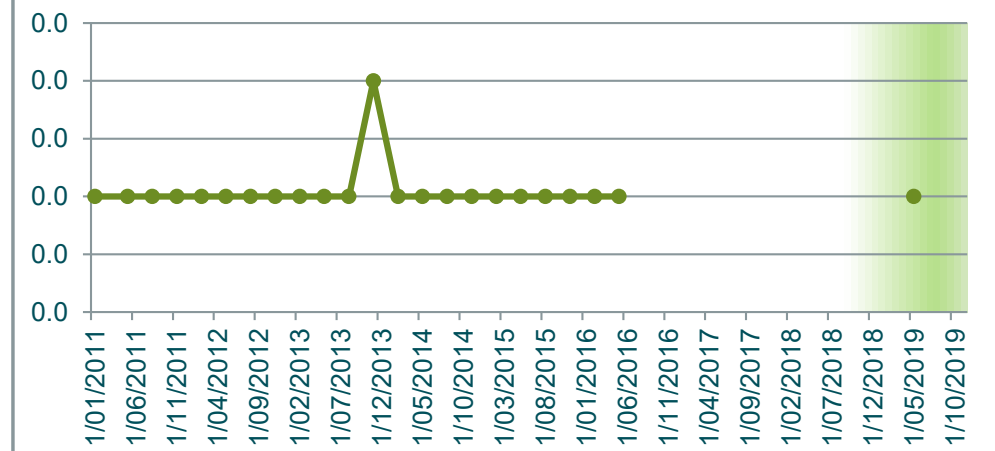
**Bicarbonate HCO3  
mg/L**



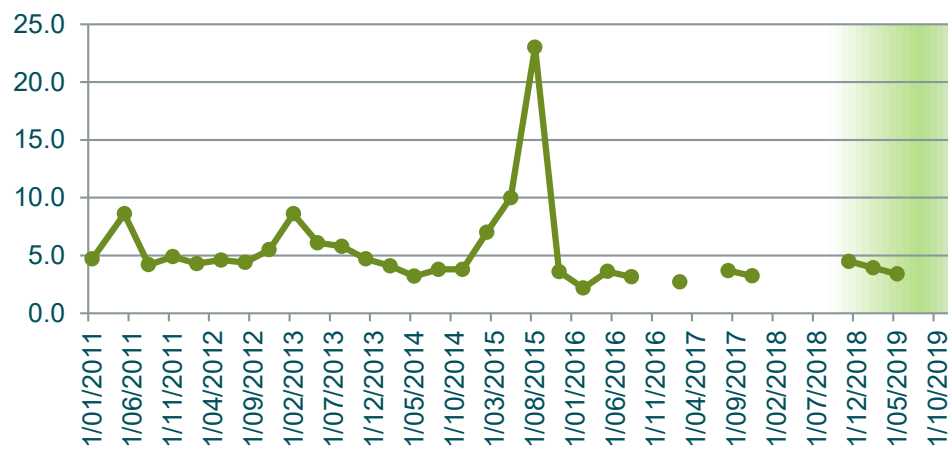
**BOD5  
mg/L**



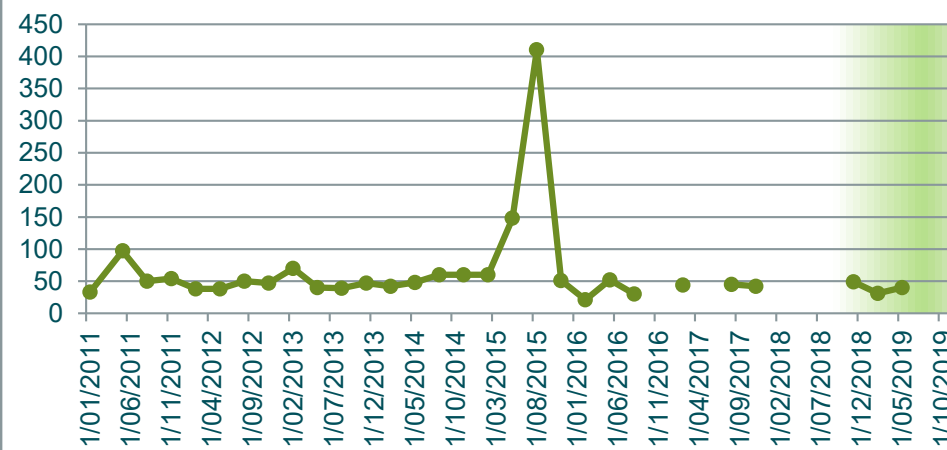
**Cadmium (Total)  
mg/L**



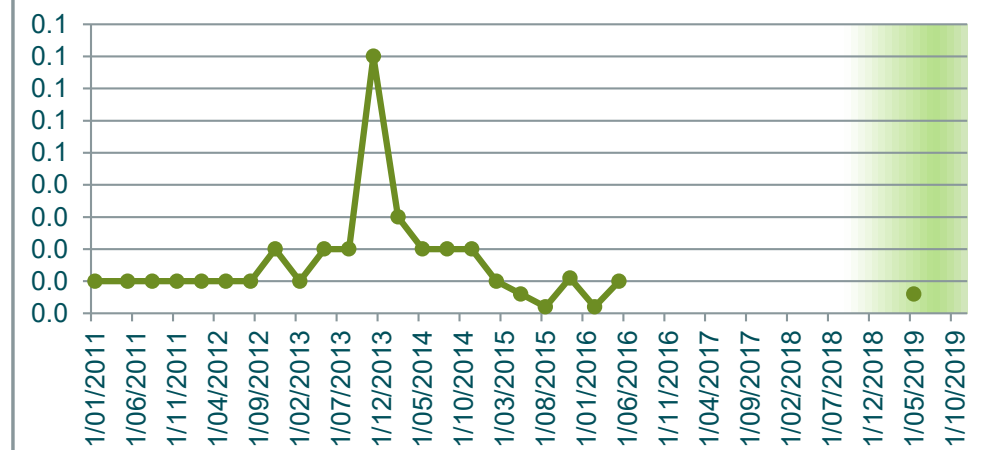
**Calcium (Total)  
mg/L**



**Chloride  
mg/L**

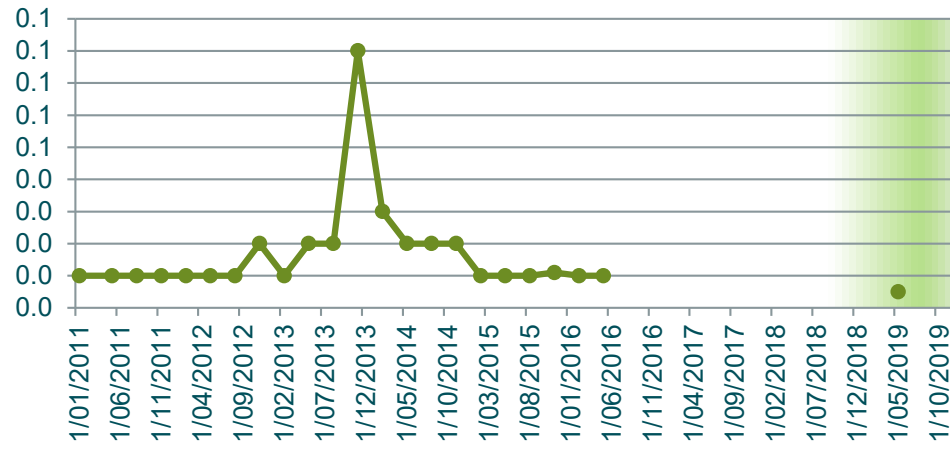


**Chromium (Total)  
mg/L**

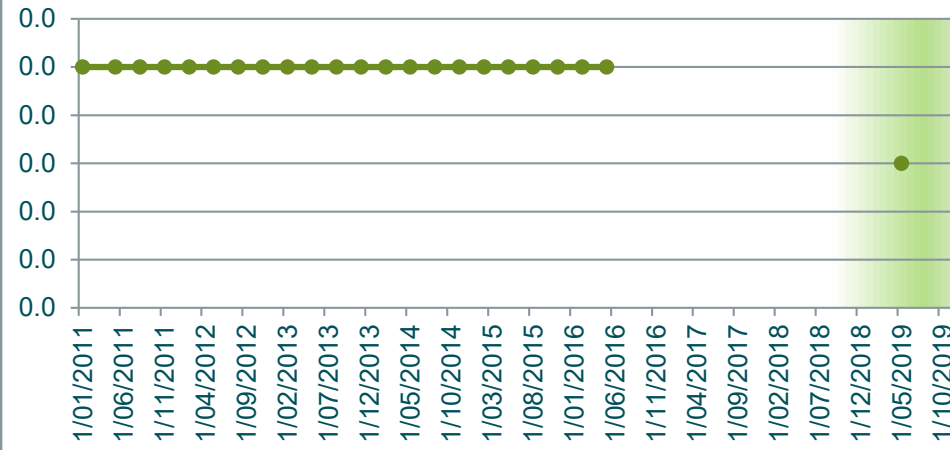




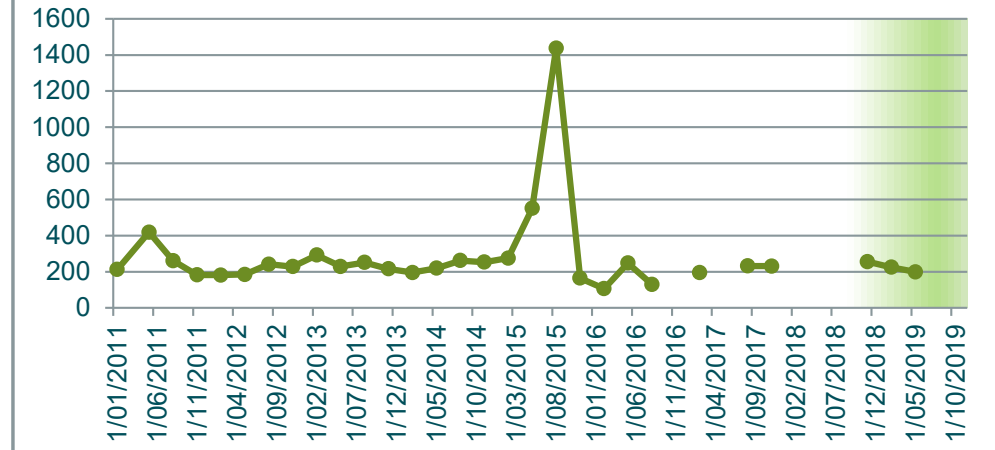
### Chromium 3 mg/L



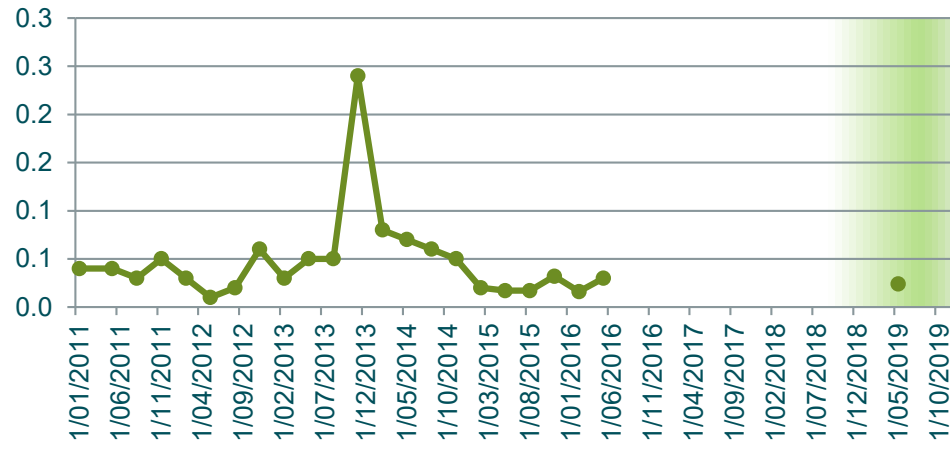
### Chromium 6 mg/L



### Conductivity µScm-1



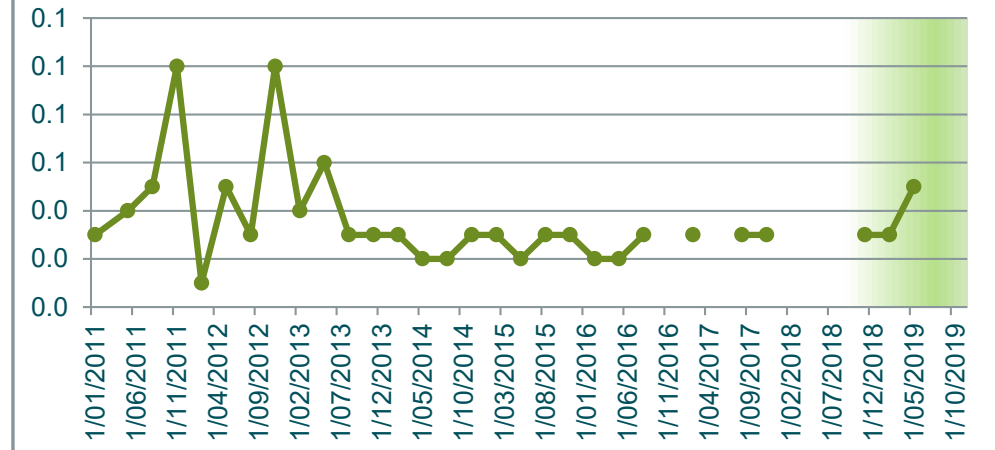
### Copper (Total) mg/L



### DO (Membrane Electrode) mg/L



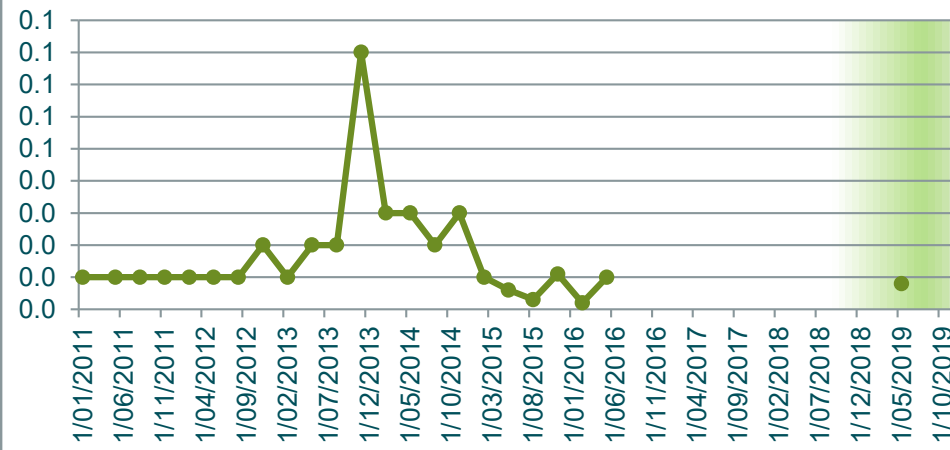
### Flouride mg/L



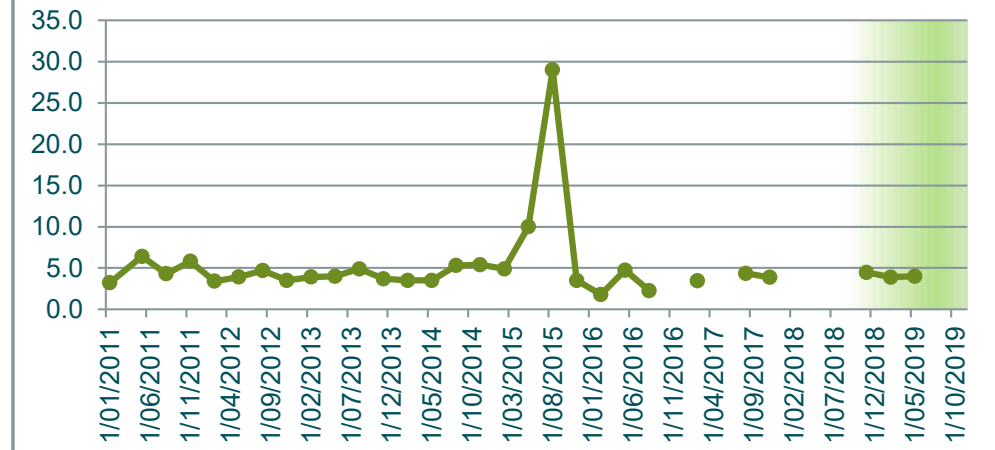
### Iron Total mg/L



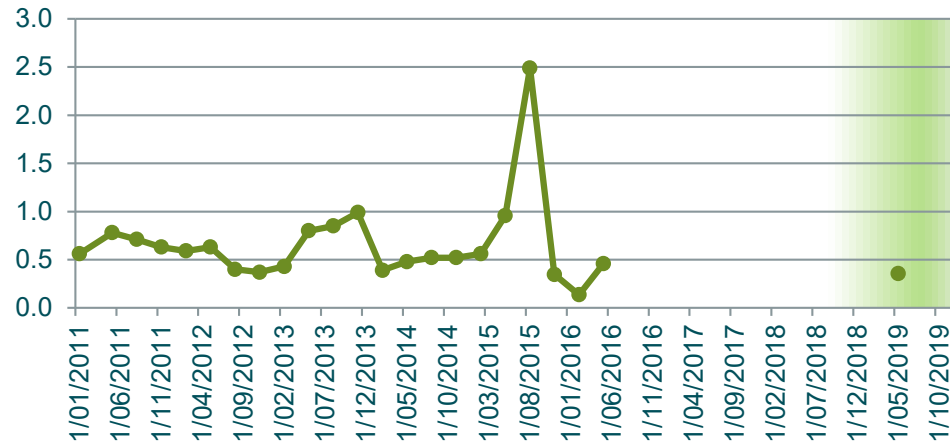
### Lead (Total) mg/L



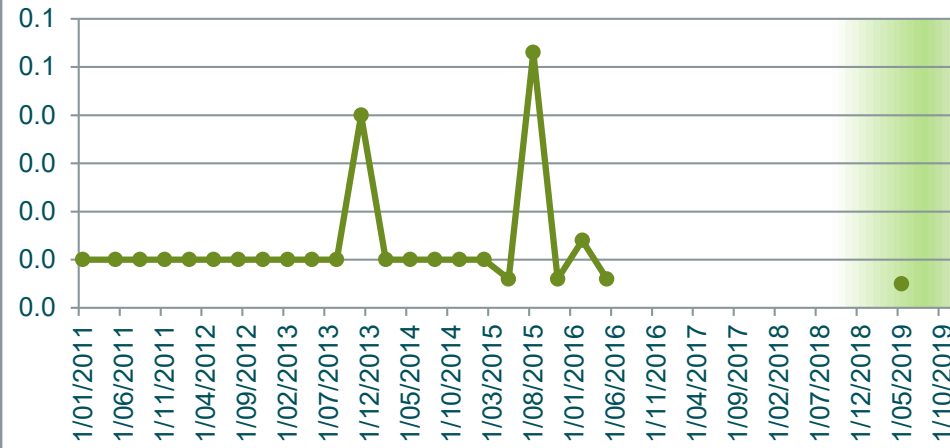
### Magnesium (Total) mg/L



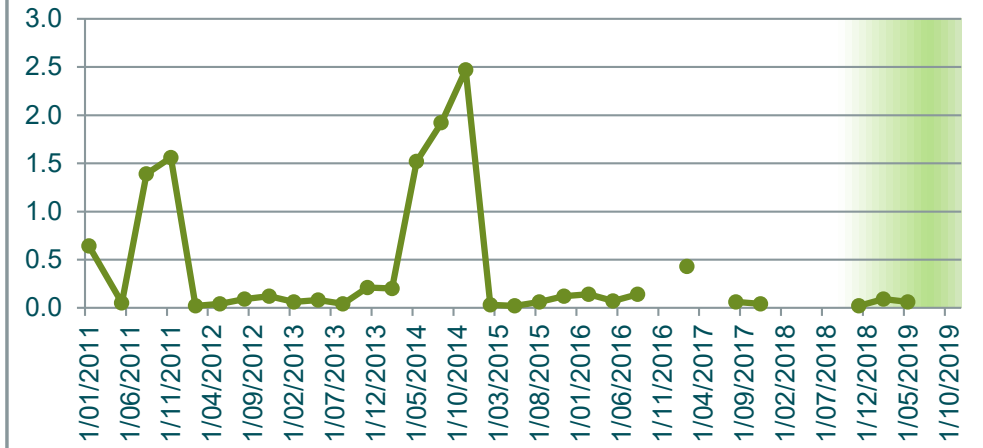
**Manganese Total**  
mg/L



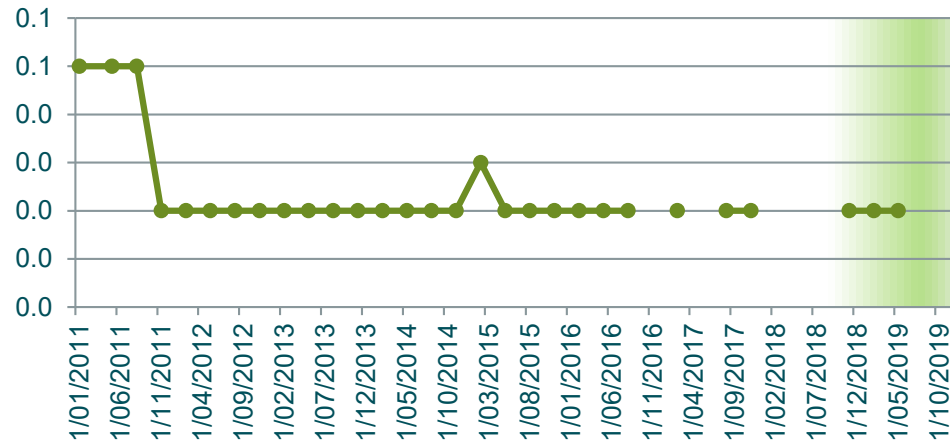
**Nickel (Total)**  
mg/L



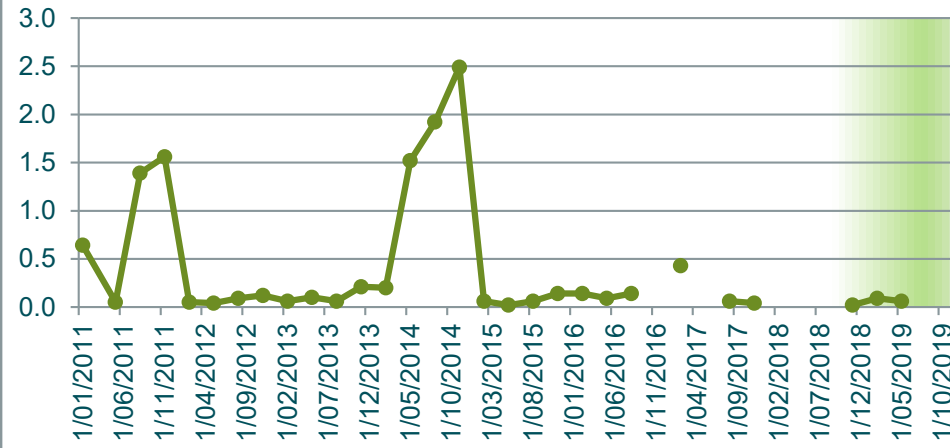
**Nitrate**  
N mg/L



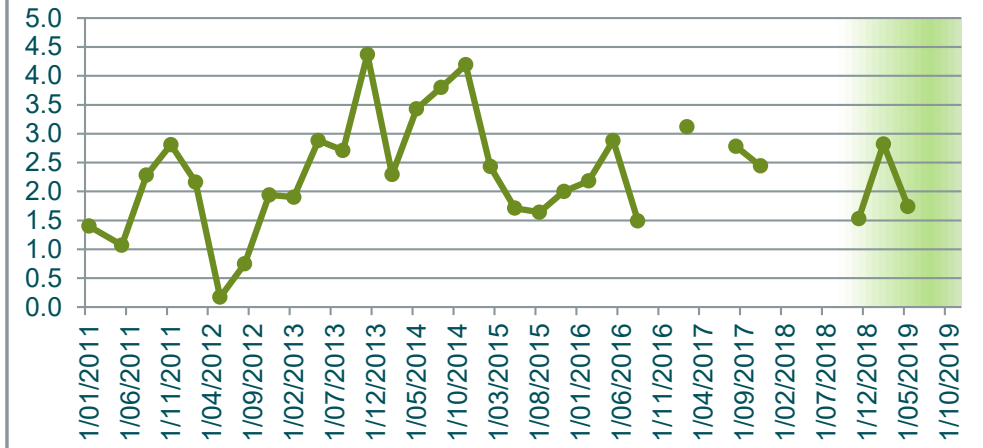
**Nitrite**  
N mg/L



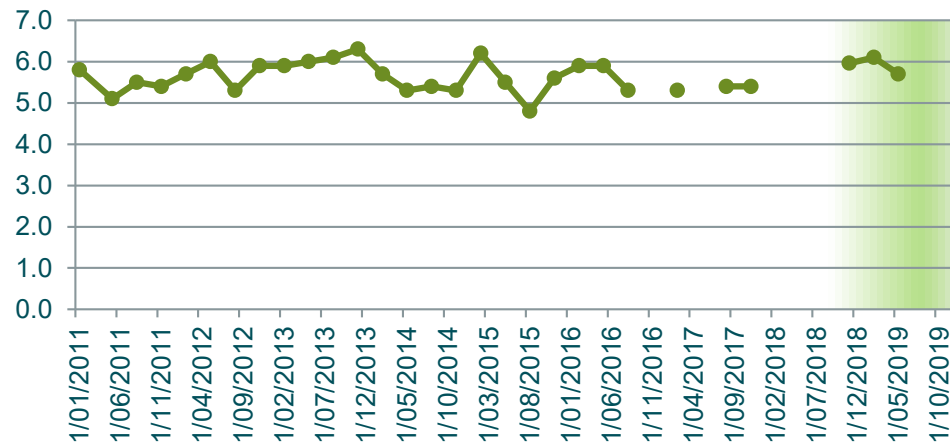
**Nitrogen Oxidised**  
mg/L



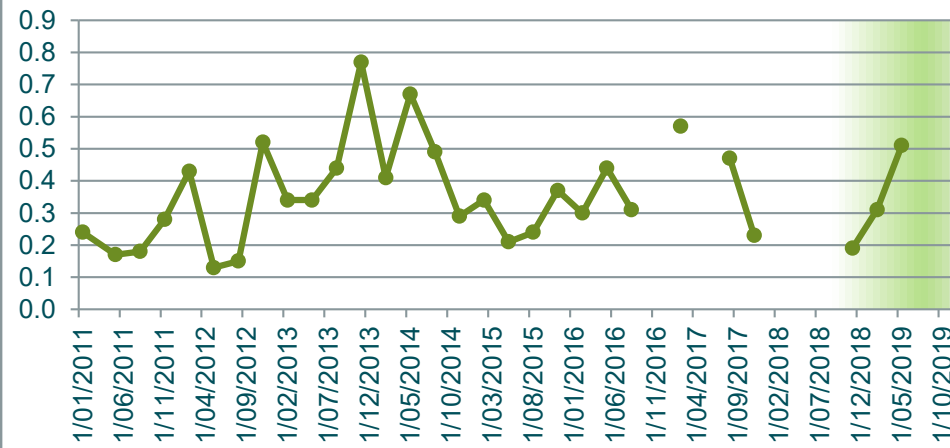
**Nitrogen Total**  
mg/L



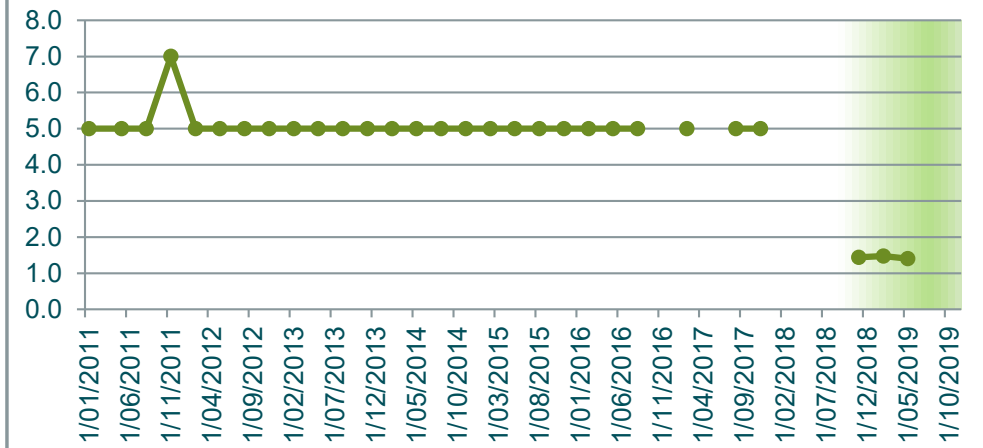
**pH**  
pH units



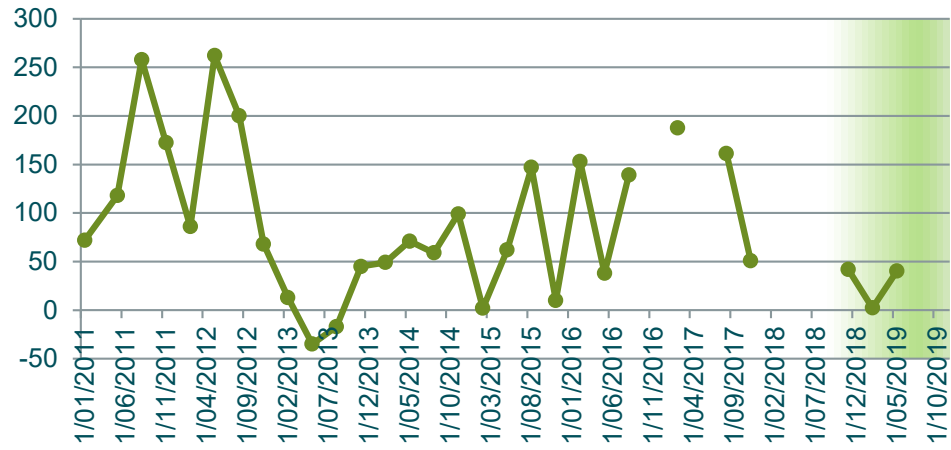
**Phosphorus Total**  
mg/L



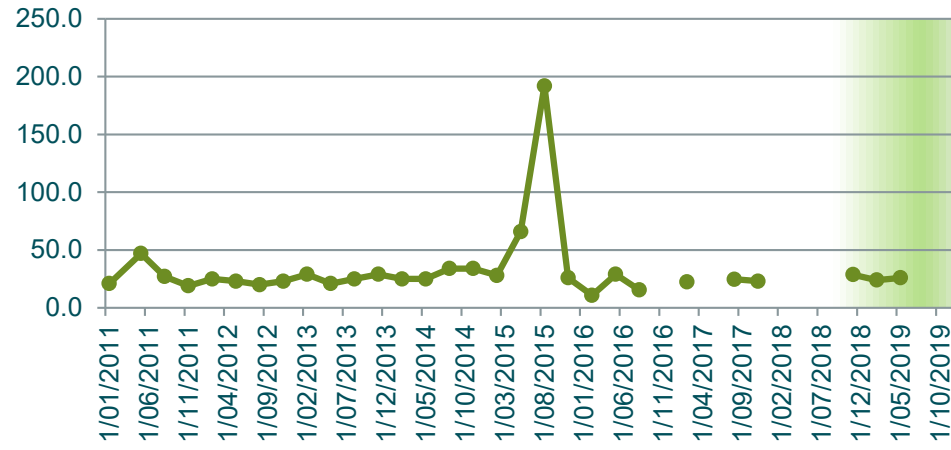
**Potassium Total**  
mg/L



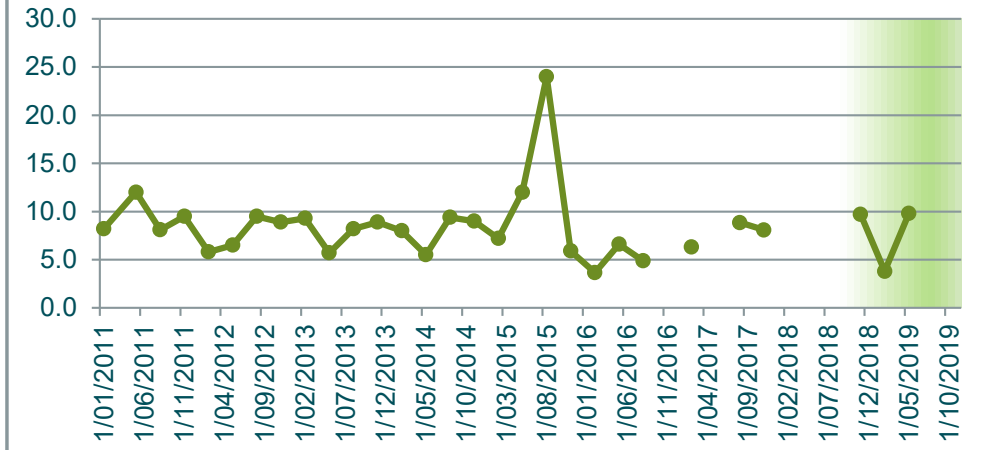
**Redox Potential  
mV**



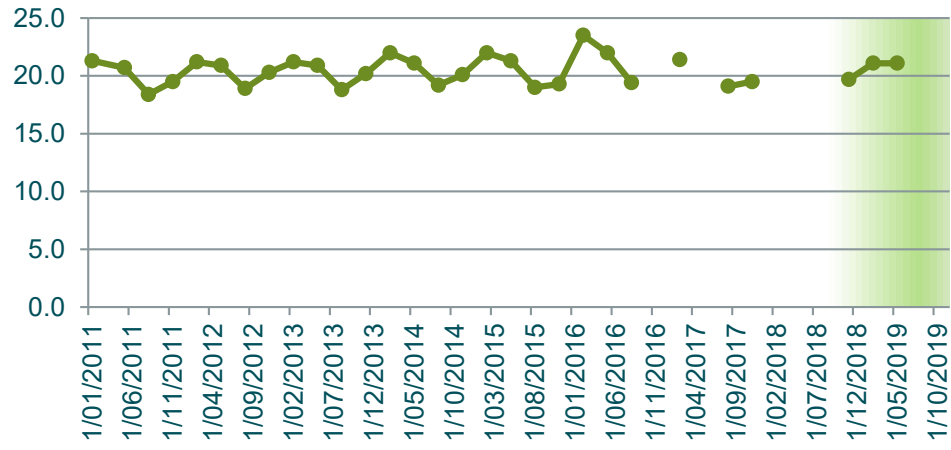
**Sodium (Total)  
mg/L**



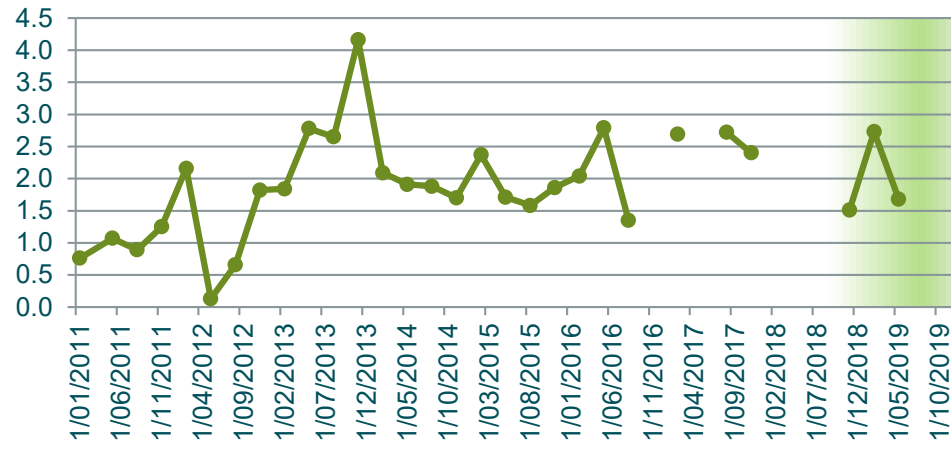
**Sulphate  
mg/L**



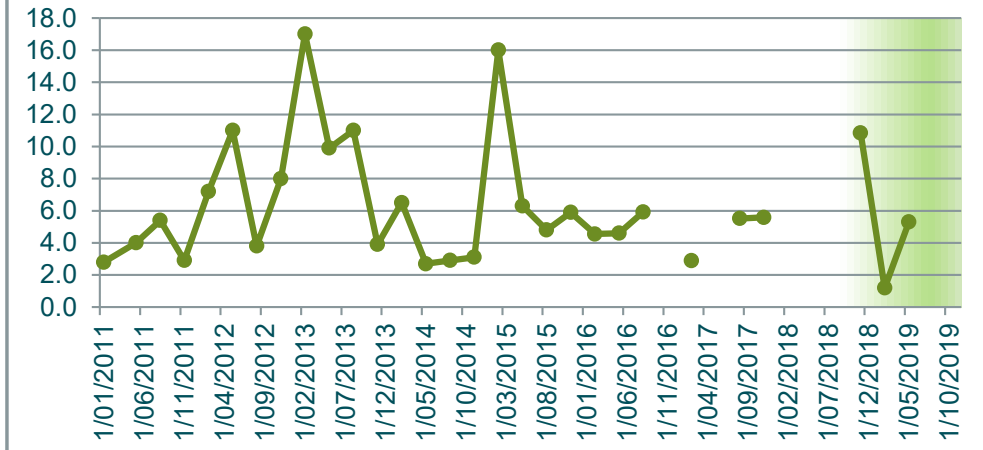
**Temperature  
C**



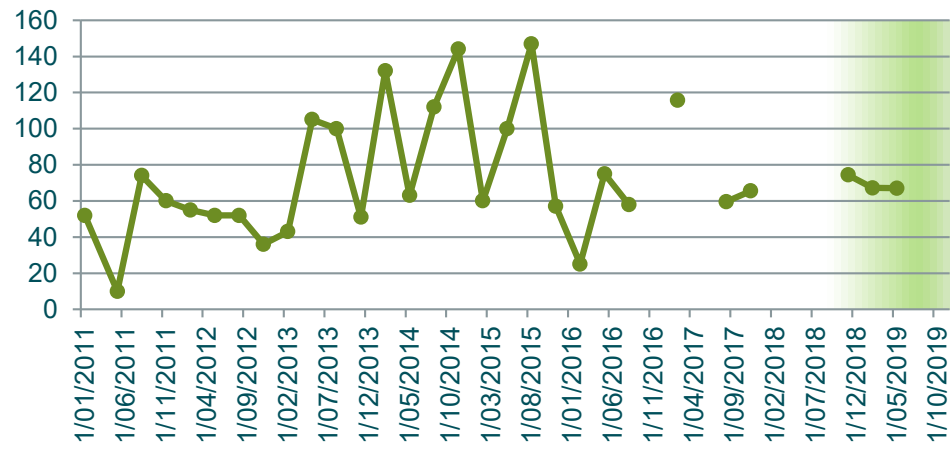
**TKN  
mg/L**



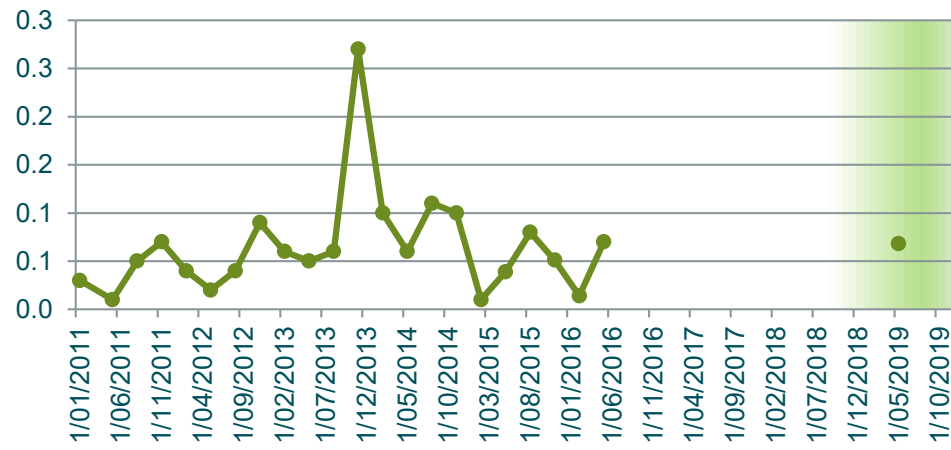
**TOC  
mg/L**



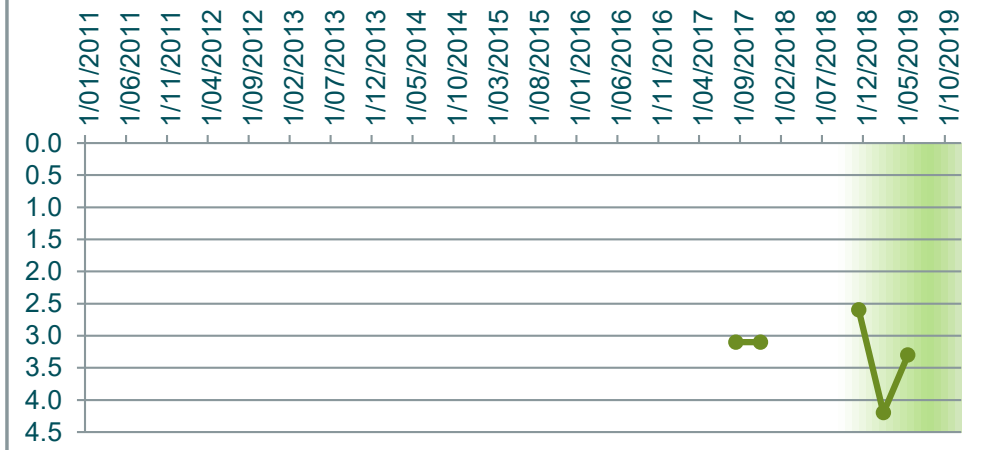
**Total Acidity  
mg/L CaCO3**



**Zinc (Total)  
mg/L**

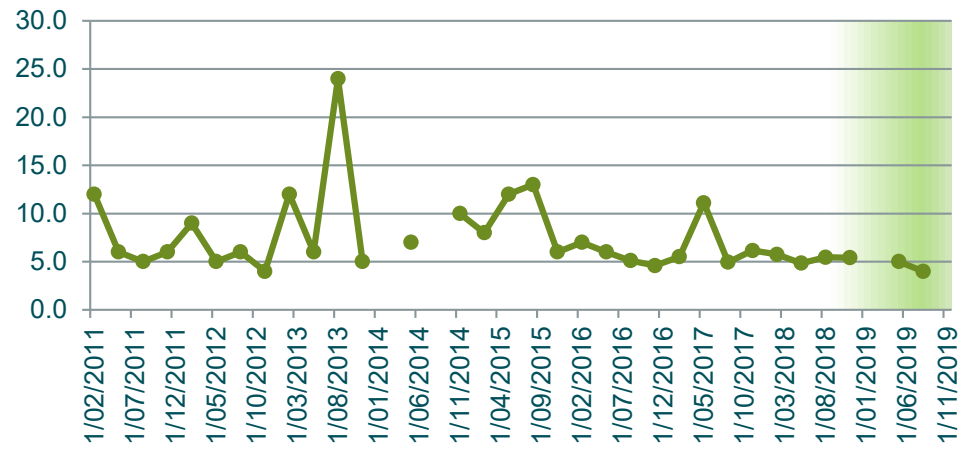


**Depth to Groundwater  
m**

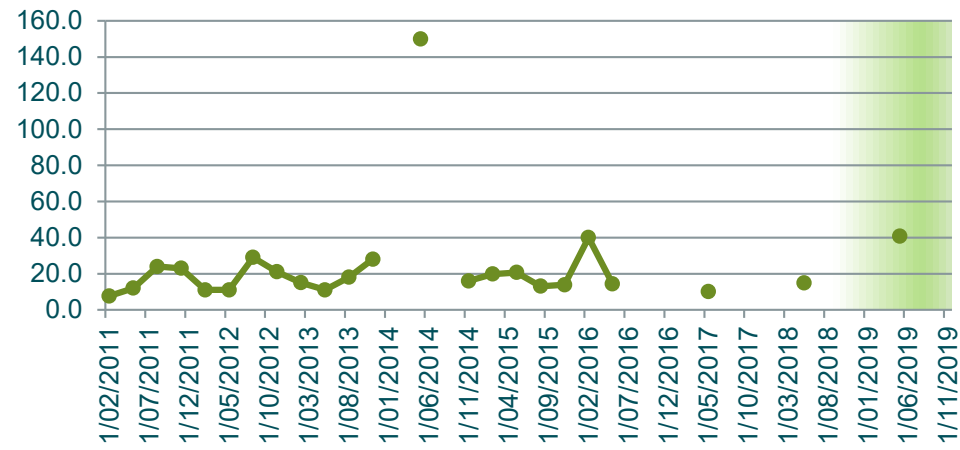


GW11	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µS/cm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride 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	12.0	7.7	0.2	0.0	7.0	1.8	0.0	1.7	18.0	0.0	0.0	0.0	109	0.0	1.3	0.0	8.2	0.0	1.5	0.6	0.0	0.7	0.1	0.7	1.1	5.4		0.1	5.0	173	9.6	7.8	23.0	0.4	1.9	55	0.0				
11/05/2011	6.0	12.0	0.1	0.0	4.0	1.0	0.0	1.0	21.0	0.0	0.0	0.0	131	0.0	1.8	0.0	11.0	0.0	2.0	0.4	0.0	1.3	0.1	1.3	1.7	4.1		0.1	5.0	314	12.0	7.5	22.2	0.3	1.2	54	0.0				
10/08/2011	5.0	24.0	0.1	0.0	3.0	1.8	0.0	0.6	20.0	0.0	0.0	0.0	114	0.0	3.3	0.0	19.0	0.0	1.7	0.6	0.0	0.5	0.1	0.5	0.8	4.9		0.1	5.0	328	14.0	7.2	20.7	0.3	1.3	52	0.1				
9/11/2011	6.0	23.0	0.1	0.1	4.0	2.4	0.0	0.7	19.0	0.0	0.0	0.0	101	0.0	1.8	0.1	18.0	0.0	2.5	0.5	0.0	0.6	0.0	0.6	0.9	5.1		0.2	5.0	345	8.6	12.0	21.5	0.3	0.8	62	0.1				
7/02/2012	9.0	11.0	0.0	0.0	5.0	1.8	0.0	1.3	13.0	0.0	0.0	0.0	97	0.0	2.2	0.0	10.0	0.0	1.9	0.6	0.0	0.7	0.0	0.7	1.0	5.1		0.5	5.0	323	14.0	9.7	23.5	0.3	1.4	66	0.0				
9/05/2012	5.0	11.0	0.1	0.0	3.0	1.0	0.0	0.7	16.0	0.0	0.0	0.0	104	0.0	3.0	0.0	9.8	0.0	1.4	0.3	0.0	0.6	0.0	0.6	0.8	5.4		0.0	5.0	221	11.0	8.8	22.6	0.2	1.2	52	0.0				
7/08/2012	6.0	29.0	0.0	0.0	4.0	1.0	0.0	0.8	15.0	0.0	0.0	0.0	98	0.1	1.6	0.0	24.0	0.0	1.7	0.7	0.0	0.1	0.0	0.1	0.6	4.9		0.1	5.0	279	9.6	9.6	20.7	0.5	0.4	49	0.1				
14/11/2012	4.0	21.0	0.0	0.0	2.0	1.2	0.0	2.2	20.0	0.0	0.0	0.0	135	0.0	5.7	0.1	15.0	0.0	3.6	0.6	0.0	2.7	0.0	2.7	3.1	4.9		0.1	5.0	247	12.0	7.2	21.7	0.3	1.3	40	0.1				
14/02/2013	12.0	15.0	0.1	0.0	7.0	1.0	0.0	1.4	20.0	0.0	0.0	0.0	111	0.0	2.1	0.0	13.0	0.0	1.9	1.1	0.0	0.1	0.0	0.1	0.4	5.4		0.1	5.0	100	12.0	6.7	23.5	0.4	1.4	70	0.1				
15/05/2013	6.0	11.0	0.1	0.0	4.0	1.5	0.0	0.8	12.0	0.0	0.0	0.0	68	0.0	4.3	0.0	9.2	0.0	0.8	0.4	0.0	0.1	0.0	0.1	0.4	5.1		0.0	5.0	146	8.9	6.0	21.6	0.3	1.1	87	0.0				
7/08/2013	24.0	18.0	0.0	0.0	15.0	1.0	0.0	0.6	14.0	0.0	0.0	0.0	88	0.0	3.0	0.0	13.0	0.0	1.3	0.7	0.0	0.2	0.0	0.2	0.5	5.1		0.1	5.0	203	14.0	11.0	19.8	0.3	0.7	100	0.1				
13/11/2013	5.0	28.0	0.1	0.0	3.0	1.8	0.0	0.6	11.0	0.0	0.0	0.0	74	0.0	3.8	0.0	21.0	0.0	1.2	0.6	0.0	0.2	0.0	0.2	0.6	5.1		0.1	5.0	187	9.2	6.9	23.4	0.4	0.9	53	0.1				
11/02/2014																																									
14/05/2014	7.0	150	0.1	0.0	4.0	1.5	0.0	0.4	9.0	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	15.0	8.2	22.4	1.7	1.4	80	0.3				
12/08/2014																																									
11/11/2014	10.0	16.0	0.1	0.0	6.0	3.6	0.0	0.3	13.0	0.0	0.0	0.0	100	0.0	3.4	0.0	11.0	0.0	1.7	1.5	0.0	0.1	0.0	0.1	1.1	5.7		0.1	5.0	136	15.0	9.4	21.9	1.0	1.0	77	0.1				
10/02/2015	8.0	19.8	0.0	0.0	5.0	3.9	0.0	0.7	18.0	0.0	0.0	0.0	94	0.0	2.0	0.0	9.4	0.0	1.5	1.0	0.0	0.1	0.0	0.1	1.0	5.3		0.1	5.0	119	12.0	7.3	24.2	0.9	1.5	84	0.0				
12/05/2015	12.0	20.7	0.0	0.0	7.0	3.6	0.0	0.8	14.0	0.0	0.0	0.0	93	0.0	3.1	0.0	16.1	0.0	1.8	1.8	0.0	0.0	0.0	0.0	1.0	5.4		0.3	5.0	104	13.0	5.8	23.4	1.0	1.1	66	0.1				
12/08/2015	13.0	13.1	0.0	0.0	13.0	3.3	0.0	0.3	15.0	0.0	0.0	0.0	101	0.0	2.6	0.0	21.0	0.0	2.0	1.8	0.0	0.0	0.0	0.0	1.3	5.7		0.1	5.0	141	15.0	5.3	21.0	1.3	0.9	69	0.1				
11/11/2015	6.0	13.9	0.0	0.0	6.0	1.0	0.0	1.1	14.0	0.0	0.0	0.0	82	0.0	3.8	0.0	16.8	0.0	1.8	0.7	0.0	0.0	0.0	0.0	0.9	5.1		0.1	5.0	201	11.0	6.1	21.6	0.8	1.6	65	0.1				
9/02/2016	7.0	40.0	0.0	0.0	7.0	1.0	0.0	0.4	16.0	0.0	0.0	0.0	98	0.1	2.4	0.0	26.5	0.0	1.7	1.5	0.0	0.0	0.0	0.0	1.0	5.5		0.1	5.0	187	13.4	7.9	23.1	1.0	1.4	103	0.1				
10/05/2016	6.0	14.3	0.0	0.0	6.0	1.5	0.0	0.3	18.0	0.0	0.0	0.0	96	0.0	1.5	0.0	7.8	0.0	1.7	0.9	0.0	0.0	0.0	0.0	0.4	5.1		0.1	5.0	195	13.5	7.0	23.5	0.4	1.2	86	0.0				
10/08/2016	5.1		0.0		5.0	1.0		0.6	16.0				91		3.5	0.0			1.8			0.0	0.0	0.0	0.8	4.9		0.1	5.0	228	13.7	6.7	21.0	0.8	1.0	63					
8/11/2016	4.6		0.0		5.0	1.0		0.3	22.0				87		2.7	0.0			1.5			0.0	0.0	0.0	1.1	4.8		0.2	5.0	342	14.6	7.9	22.1	1.1	0.8	93					
8/02/2017	5.5		0.0		6.0	1.0		0.3	17.0				89		3.2	0.0			1.3			0.1	0.0	0.1	1.4	4.9		0.2	5.0	299	11.8	7.5	23.2	1.3	1.3	120					
9/05/2017	11.1	10.1	0.0	0.0	11.0	1.5	0.0	0.9	18.0	0.0	0.0	0.0	82	0.0	4.1	0.1	5.9	0.0	1.6	0.8	0.0	0.1	0.0	0.1	0.7	5.0		0.1	5.0	352	10.3	5.8	22.8	0.6	1.7	49	0.1				
9/08/2017	4.9		0.0		5.0	1.5		0.4	30.0				90		3.1	0.0			1.6			0.0	0.0	0.0	0.6	4.6		0.1	5.0	360	12.2	7.5	20.7	0.6	1.0	58		3.3			
8/11/2017	6.2		0.0		6.0	1.5		0.7	17.5				99		3.3	0.0			1.9			0.9	0.0	0.9	1.4	4.9		0.1	5.0	393	13.4	7.3	21.7	0.5	1.3	63		2.2			
14/02/2018	5.8		0.0		6.0	2.1		0.3	16.0				92		3.5	0.0			1.4			0.2	0.0	0.2	2.1	5.1		0.3	5.0	261	12.9	8.2	24.1	1.9	1.9	71		3.8			
9/05/2018	4.8	14.9	0.0	0.0	5.0	1.0	0.0	0.8	28.5	0.0	0.0	0.0	97	0.0	3.5	0.0	7.5	0.0	1.9	0.8	0.0	0.7	0.0	0.7	1.2	5.1		0.1	0.5	292	13.0	6.4	23.3	0.5	1.2	60	0.0	2.1			
15/08/2018	5.5		0.0		5.0	2.7		0.3	16.0				90		4.1	0.0			1.6			0.3	0.0	0.3	1.9	5.1		0.3	0.5	377	14.0	9.0	20.9	1.5	31.0	53		5.1			
14/11/2018	5.4		0.0		5.0	1.8		0.5	12.0				86		2.6	0.0			1.8			0.1	0.0	0.1	0.8	5.0		0.1	0.5	178	12.4	8.3	21.0	0.8	1.5	69		3.9			
12/02/2019																																									
15/05/2019	5.0	40.7	0.0	0.0	5.0	1.2	0.0	0.9	18.0	0.0	0.0	0.0	87	0.0	3.6	0.2	19.8	0.0	1.9	0.6	0.0	0.6	0.0	0.6	1.6	5.0		0.4	0.6	246	12.0	6.7	22.9	1.0	0.9	54	0.1	2.6			
14/08/2019	4.0		0.0		4.0	1.0		0.6	14.0				86		3.6	0.0			1.9			0.7	0.0	0.7	1.4	5.0		0.2	0.5	400	12.0	8.2	20.3	0.8	1.4	47		3.1			
12/11/2019																																									
2019 Min	4.0	40.7	0.0	0.0	4.0	1.0	0.0	0.6	14.0	0.0	0.0	0.0	86	0.0	3.6	0.0	19.8	0.0	1.9	0.6	0.0	0.6	0.0	0.6	1.4	5.0		0.2	0.5	246	12.0	6.7	20.3	0.8	0.9	47	0.1	2.6			
2019 Max	5.0	40.7	0.0	0.0	5.0	1.2	0.0	0.9	18.0	0.0	0.0	0.0	87	0.0	3.6	0.2	19.8	0.0	1.9	0.6	0.0	0.7	0.0	0.7	1.6	5.0		0.4	0.6	400	12.0	8.2	22.9	1.0	1.4	54	0.1	3.1			
2019 Mean	4.5	40.7	0.0	0.0	4.5	1.1	0.0	0.8	16.0	0.0	0.0	0.0	87	0.0	3.6	0.1	19.8	0.0	1.9	0.6	0.0	0.6	0.0	0.6	1.5	5.0		0.3	0.6	323	12.0	7.5	21.6	0.9	1.2	51	0.1	2.9			
Long-term Average	7.4	24.5	0.0	0.0	5.7	1.7	0.0	0.7	16.9	0.0	0.0	0.0	96	0.0	3.0	0.0	20.6	0.0	1.7	0.9	0.0	0.4	0.0	0.4	1.1	5.1		0.2	4.3	244	12.3	7.7	22.2	0.7	2.1	68	0.1	3.3			

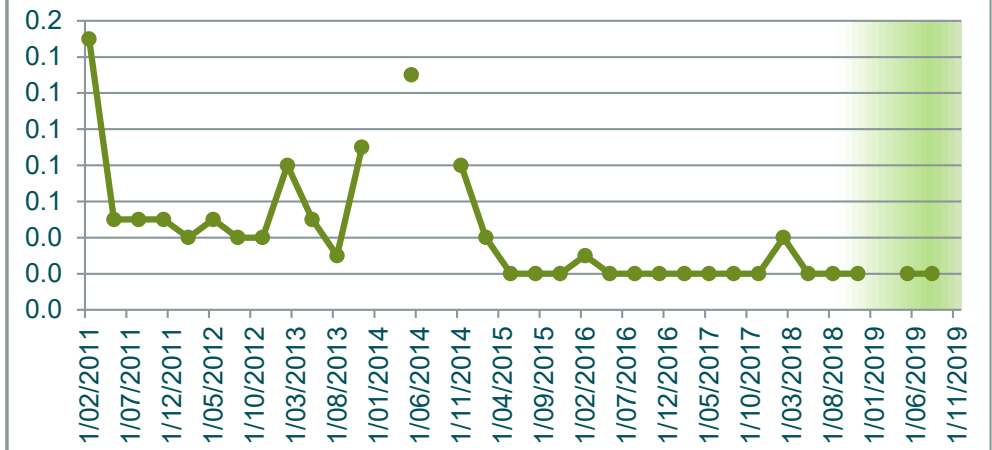
**Alkalinity  
mg/L as CaCO3**



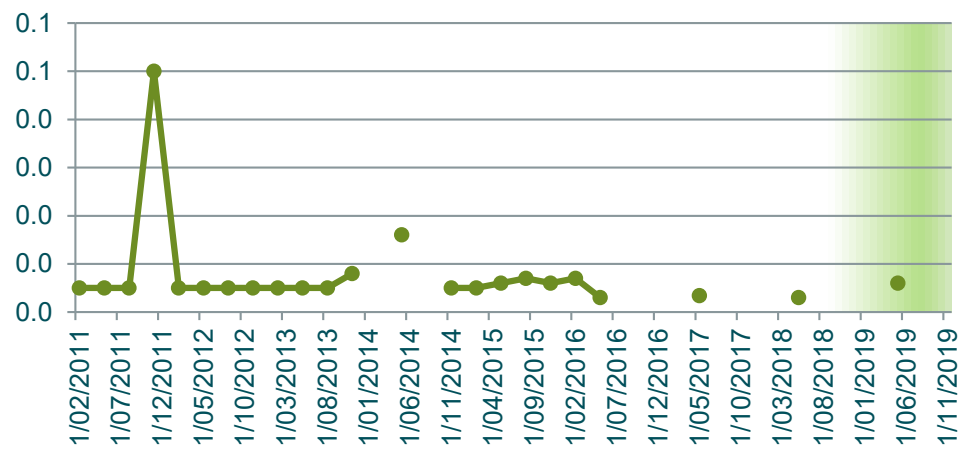
**Aluminium (Total)  
mg/L**



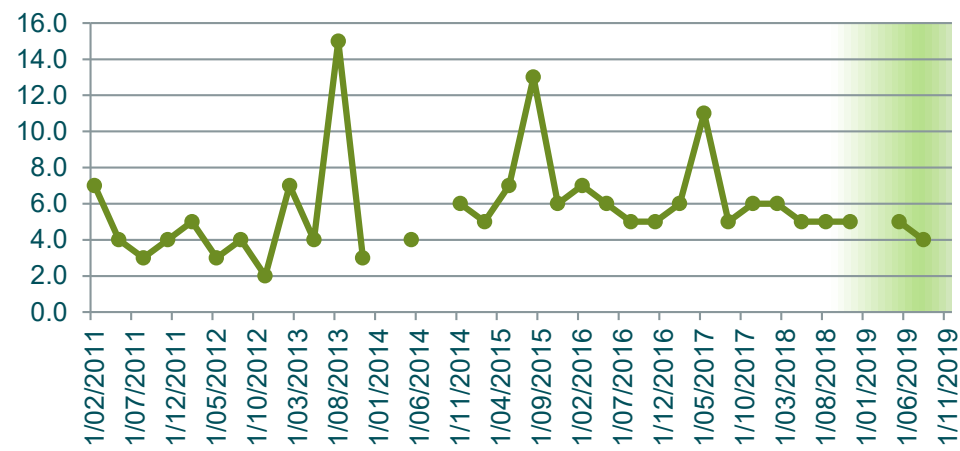
**Ammonia  
mg/L**



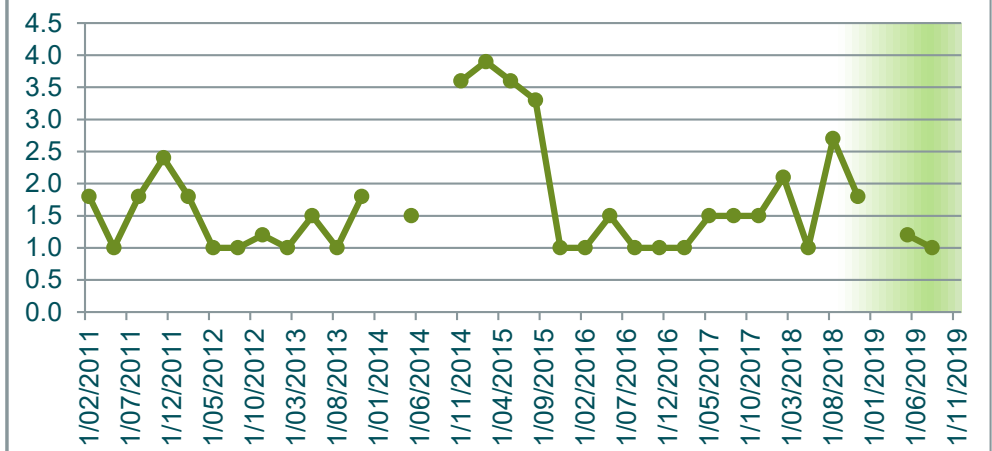
**Arsenic (Total)  
mg/L**



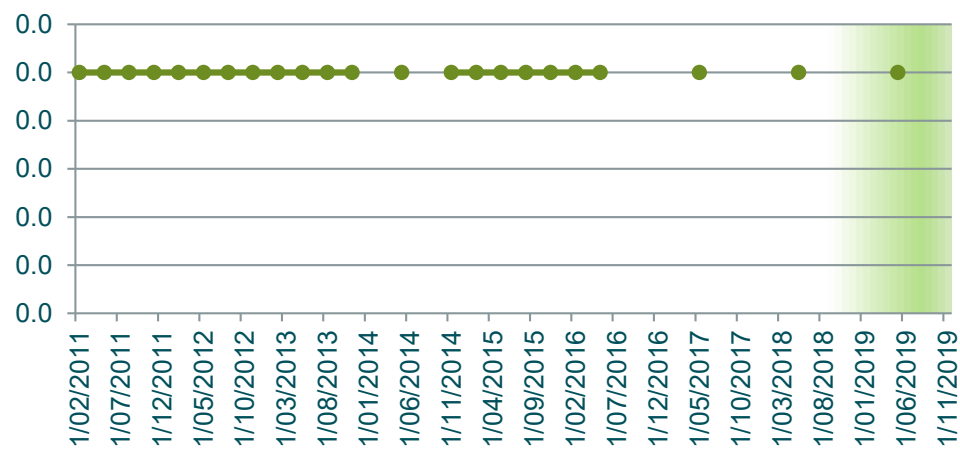
**Bicarbonate HCO3  
mg/L**



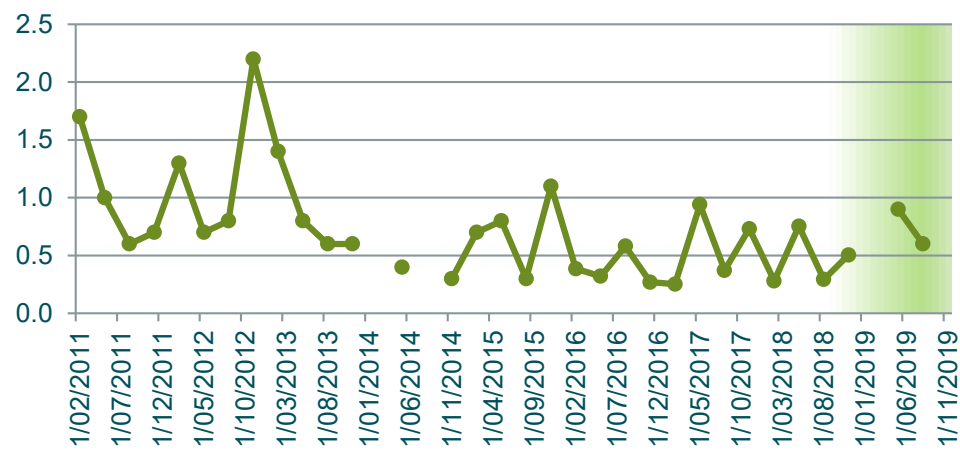
**BOD5  
mg/L**



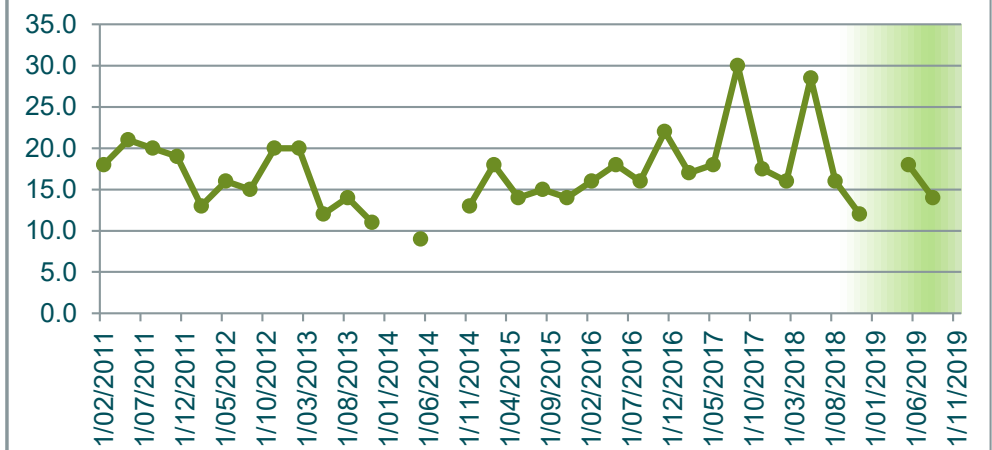
**Cadmium (Total)  
mg/L**



**Calcium (Total)  
mg/L**

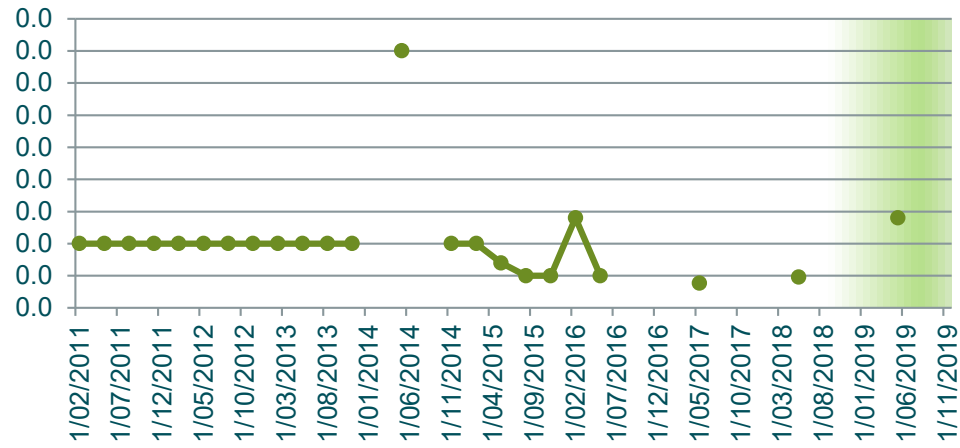


**Chloride  
mg/L**

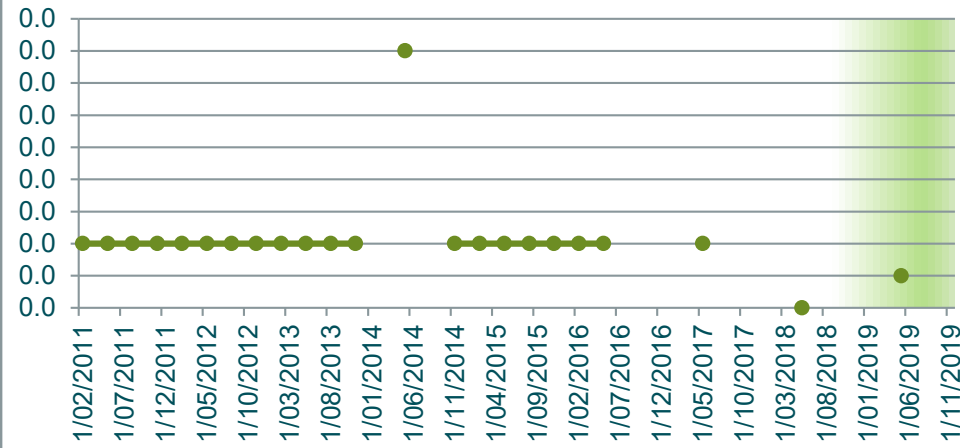




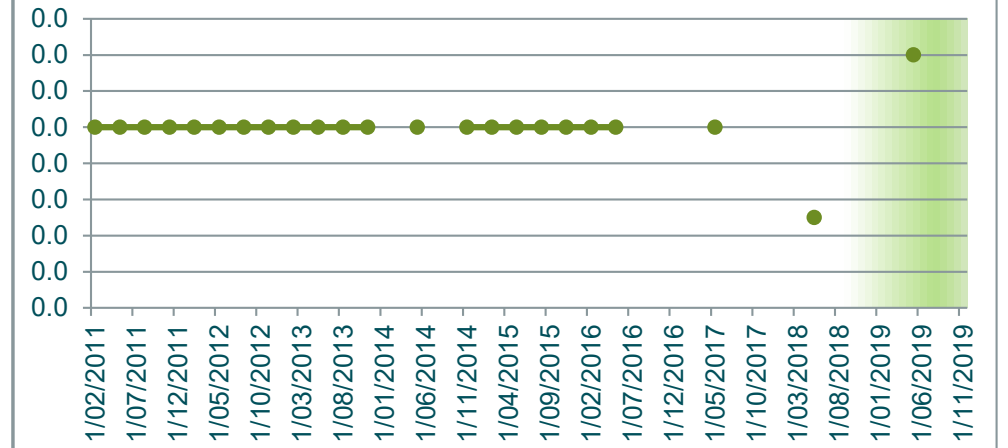
### Chromium (Total) mg/L



### Chromium 3 mg/L



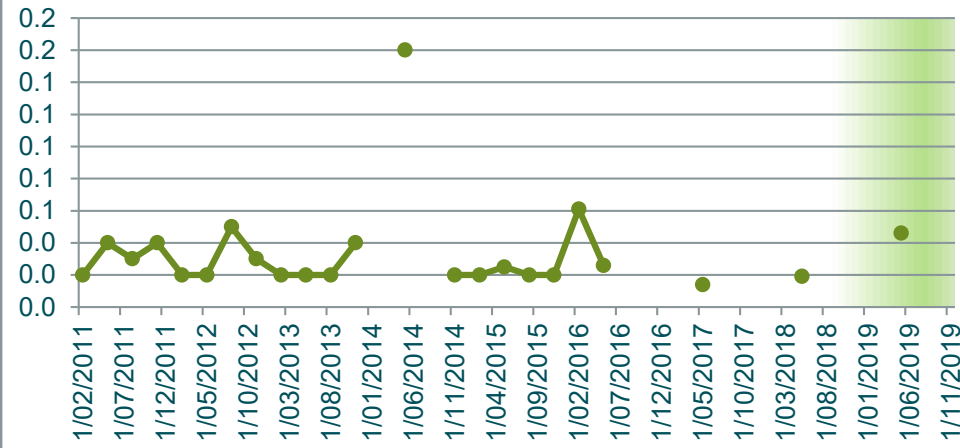
### Chromium 6 mg/L



### Conductivity µScm-1



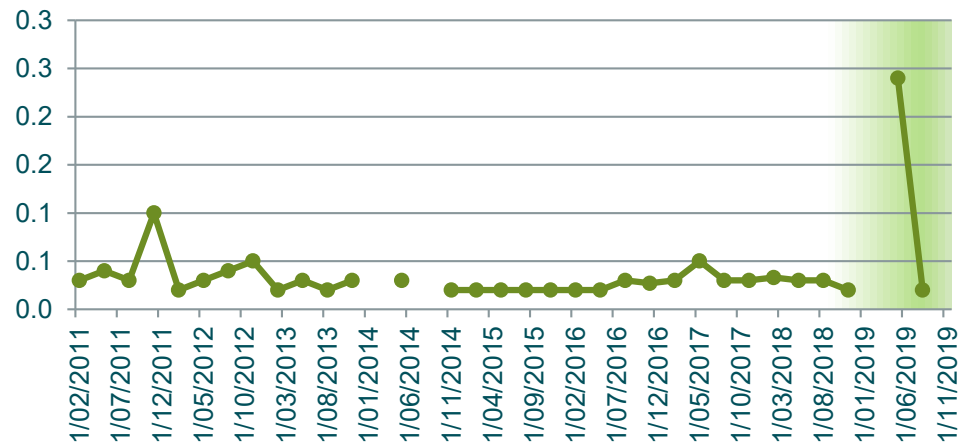
### Copper (Total) mg/L



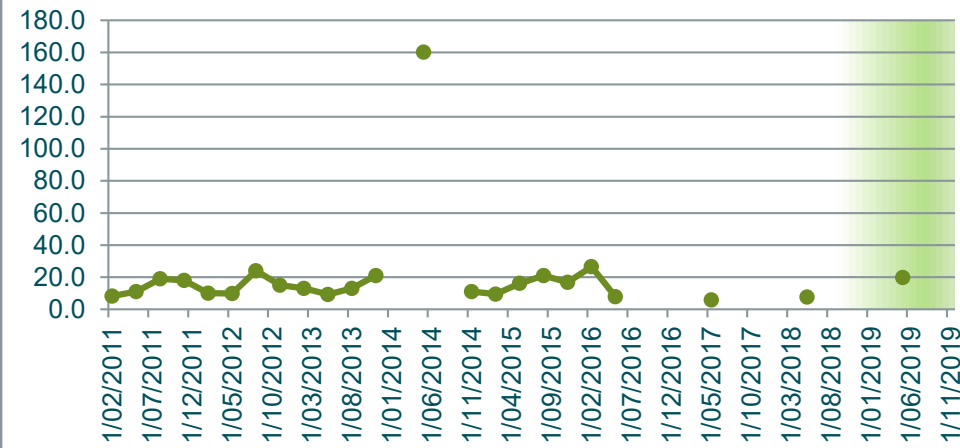
### DO (Membrane Electrode) mg/L



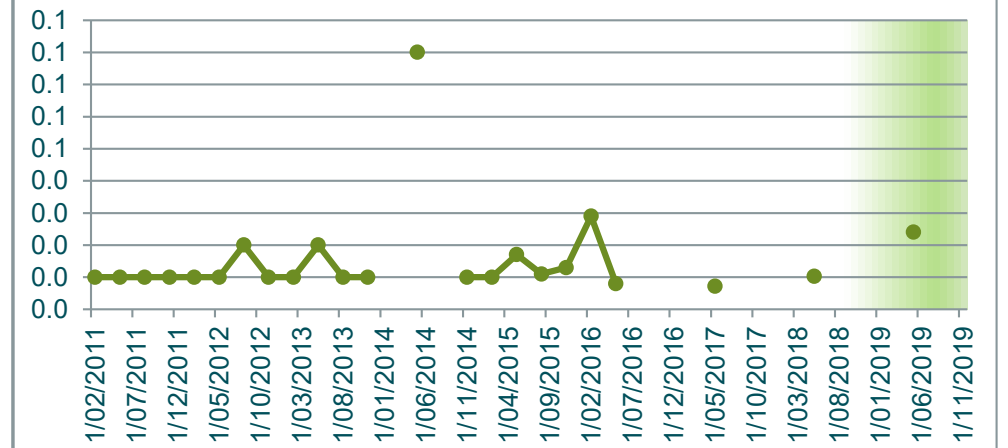
### Flouride mg/L



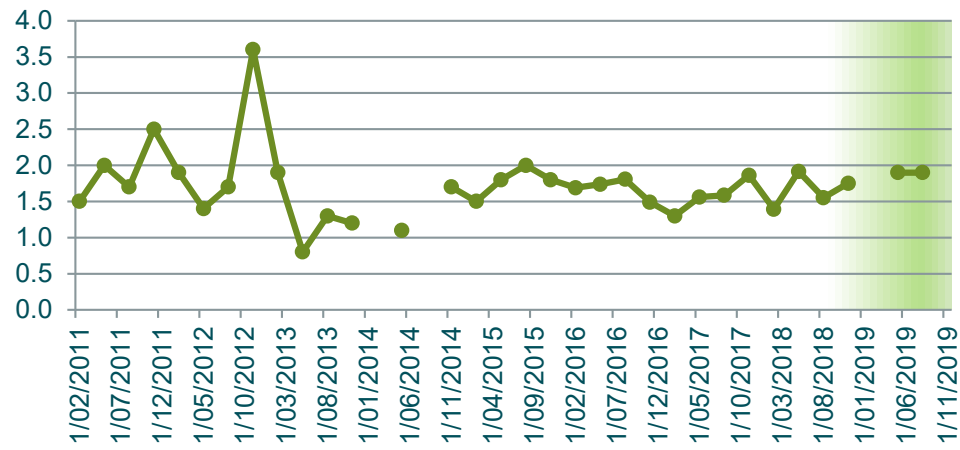
### Iron Total mg/L



### Lead (Total) mg/L



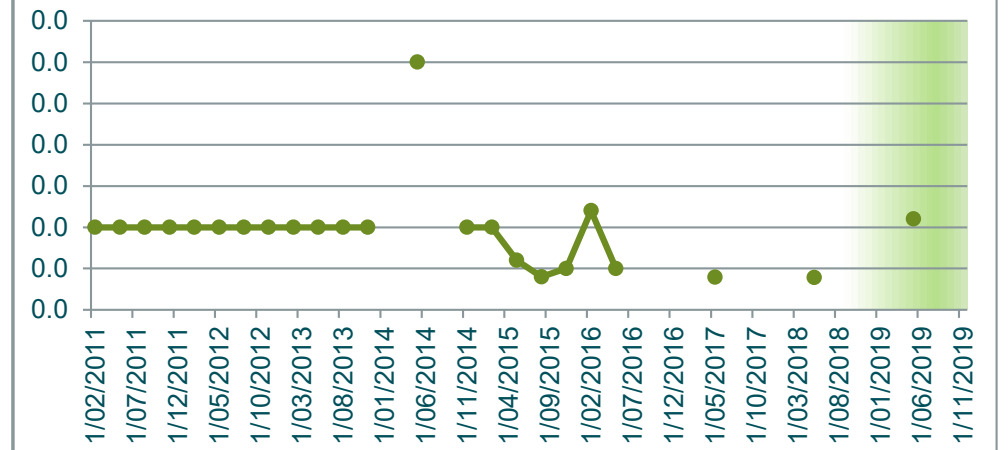
**Magnesium (Total)  
mg/L**



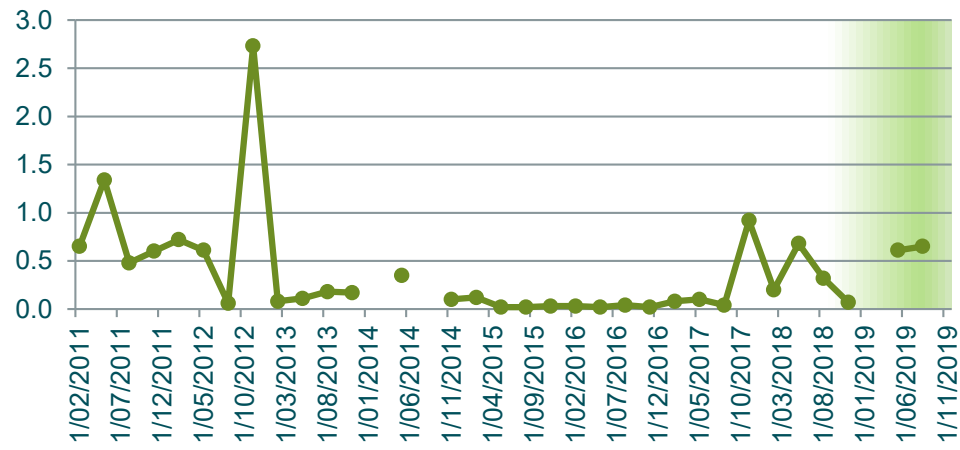
**Manganese Total  
mg/L**



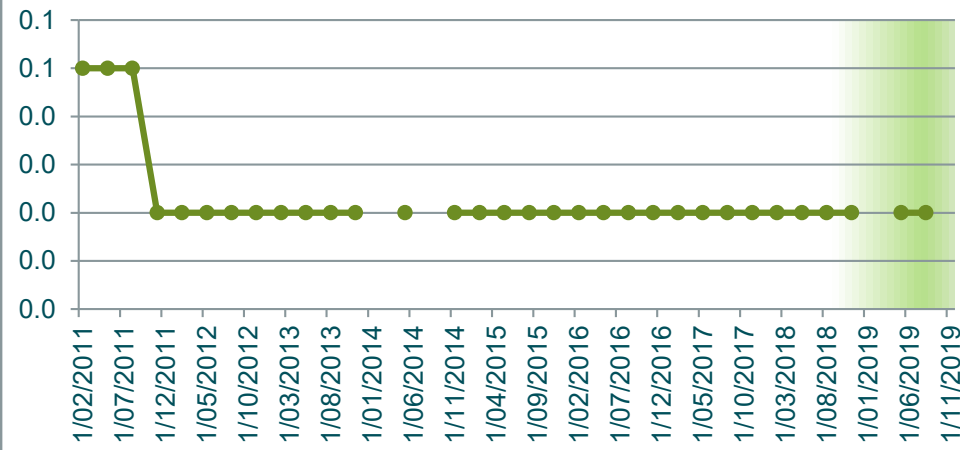
**Nickel (Total)  
mg/L**



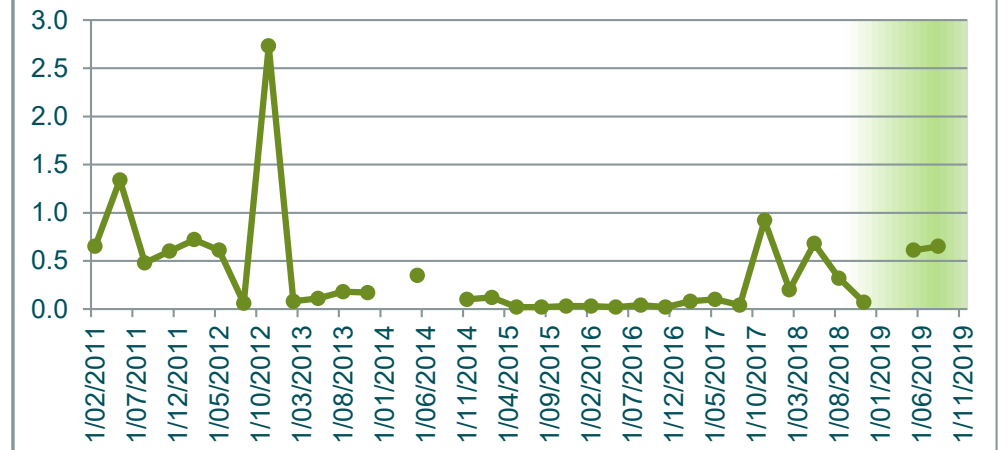
**Nitrate  
N mg/L**



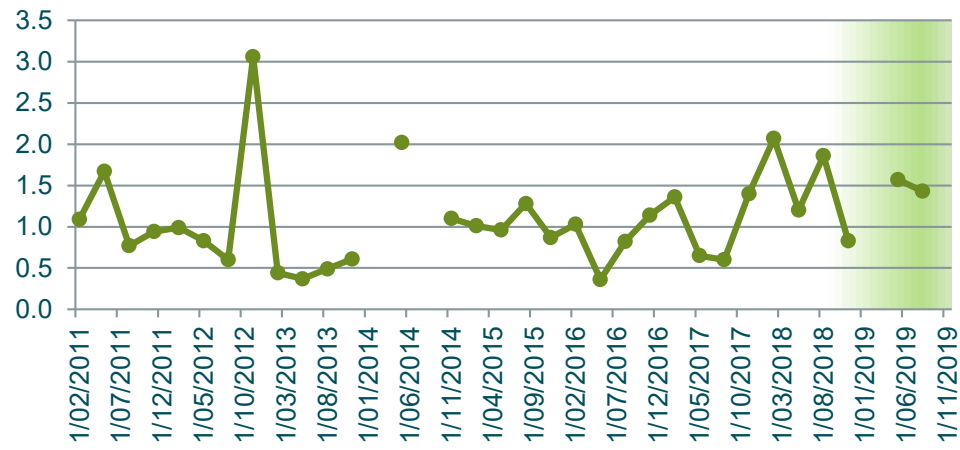
**Nitrite  
N mg/L**



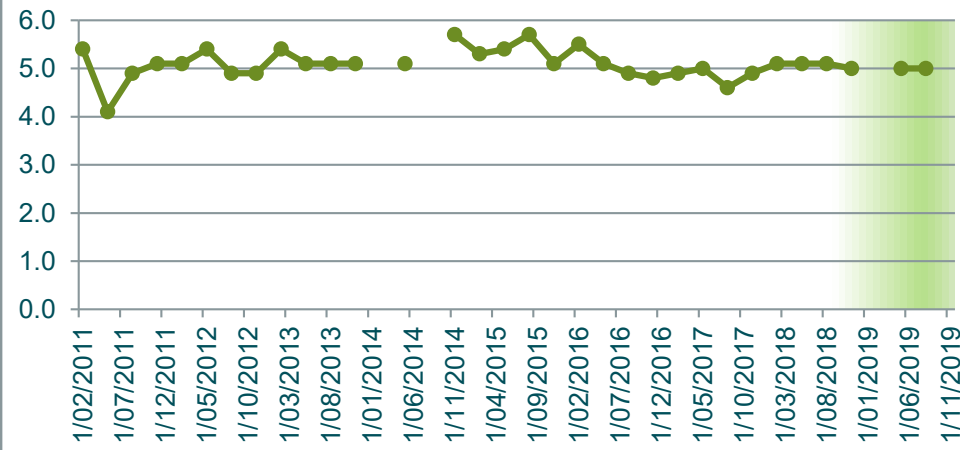
**Nitrogen Oxidised  
mg/L**



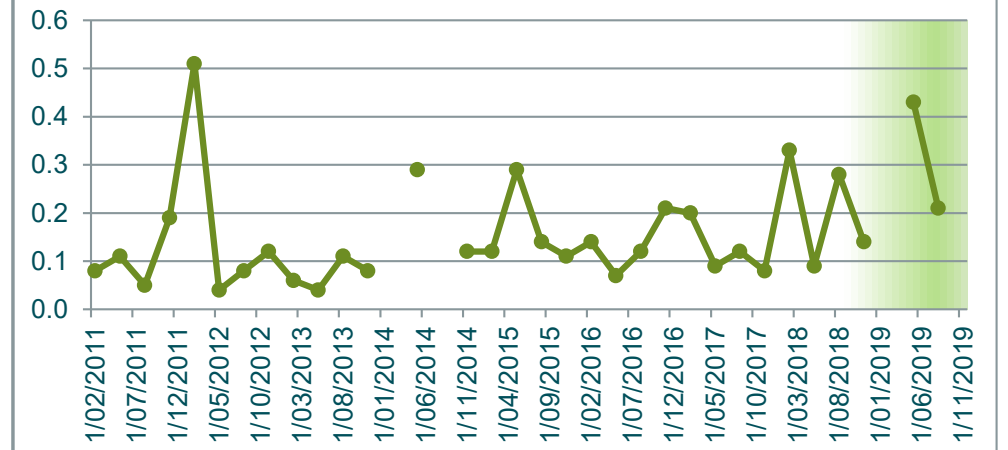
**Nitrogen Total  
mg/L**



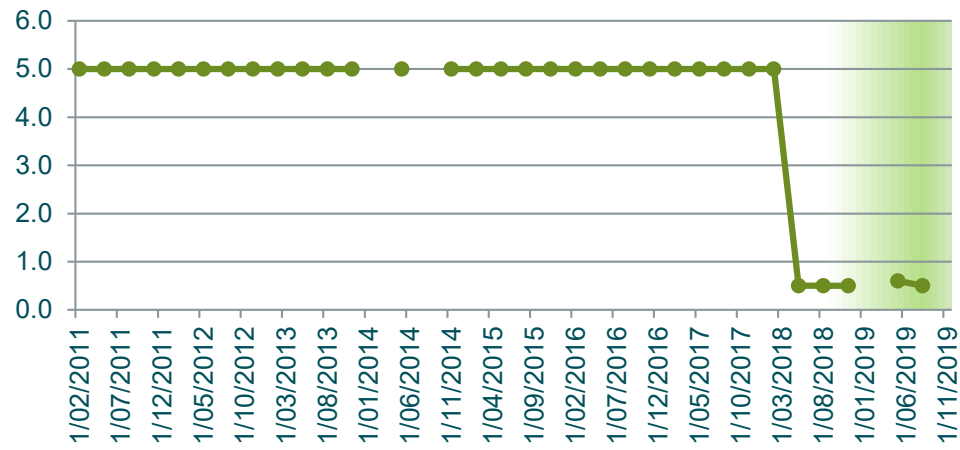
**pH  
pH units**



**Phosphorus Total  
mg/L**



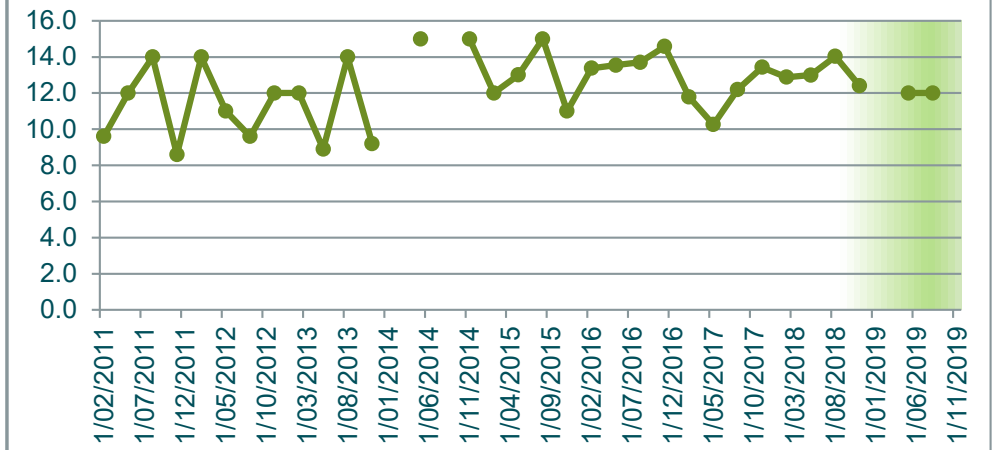
**Potassium Total**  
mg/L



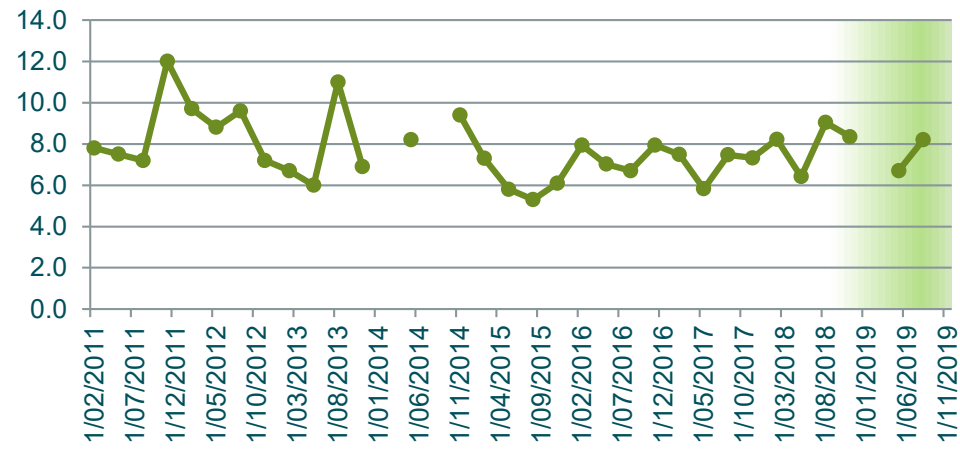
**Redox Potential**  
mV



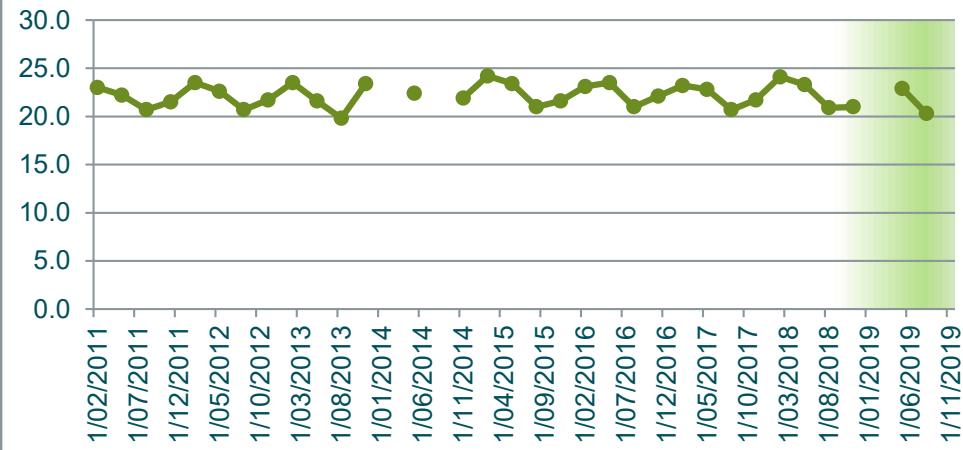
**Sodium (Total)**  
mg/L



**Sulphate**  
mg/L



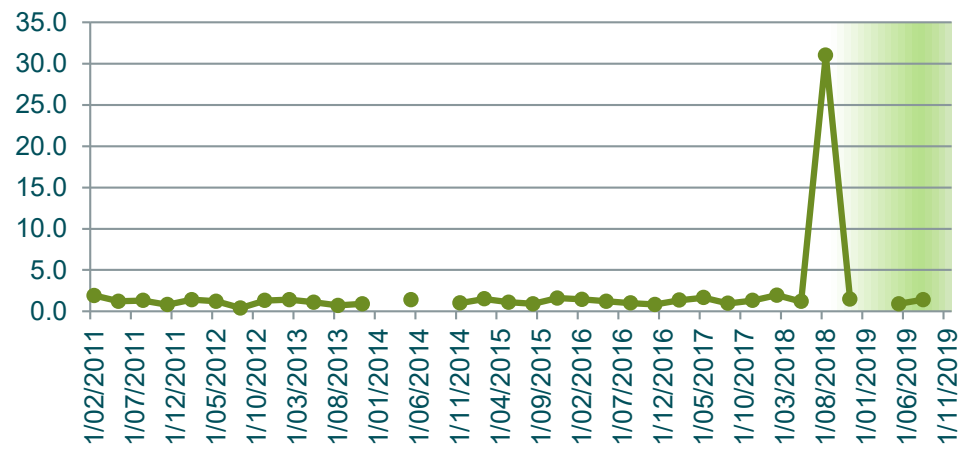
**Temperature**  
C



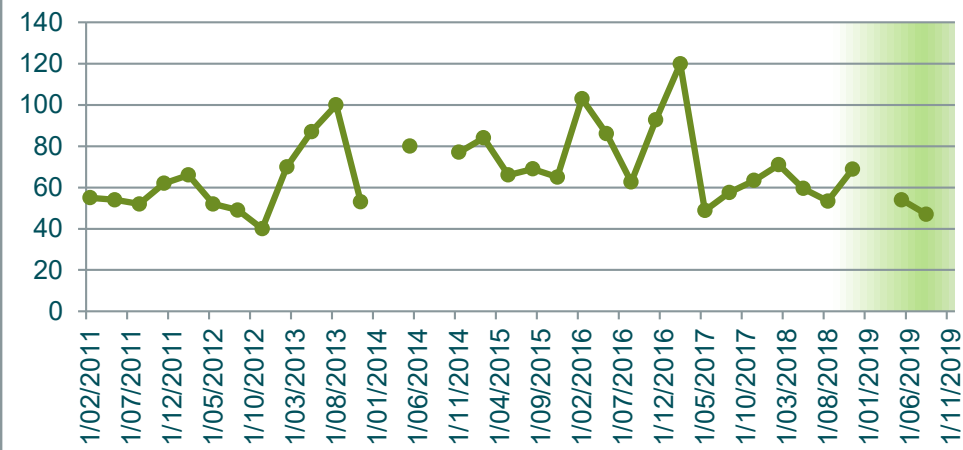
**TKN**  
mg/L



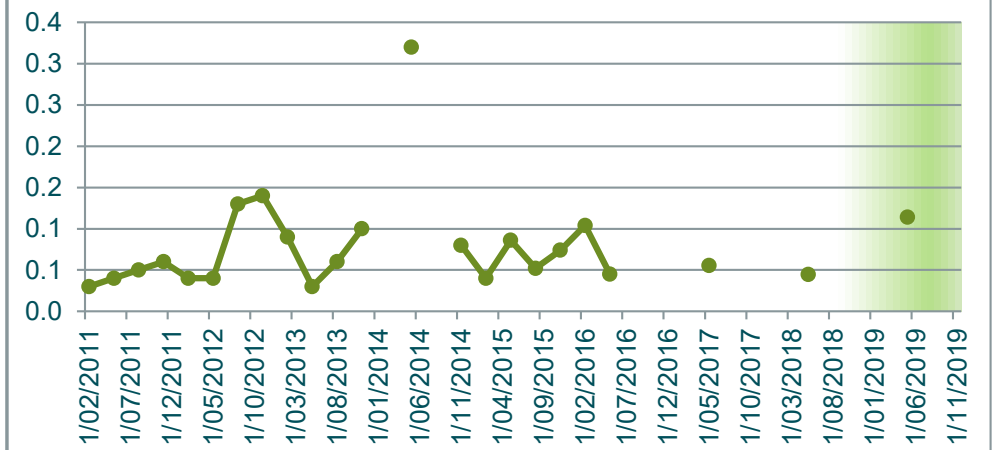
**TOC**  
mg/L



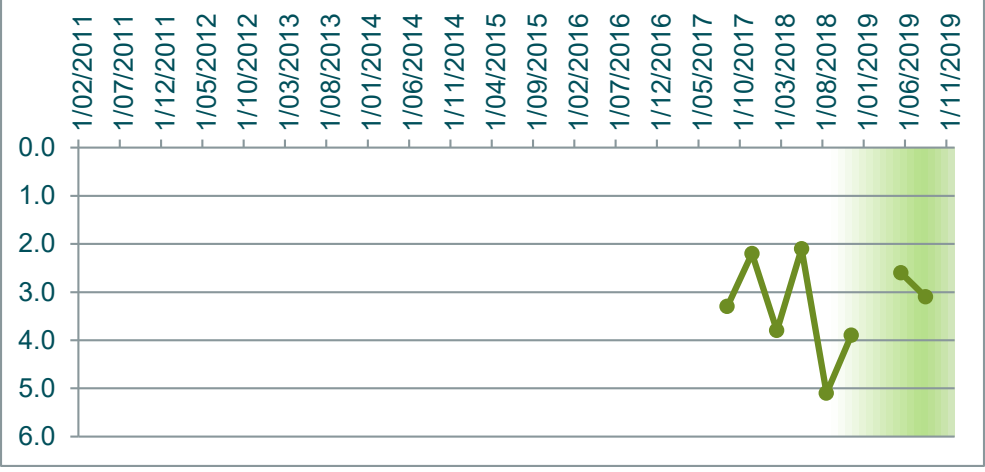
**Total Acidity**  
mg/L CaCO3



**Zinc (Total)**  
mg/L



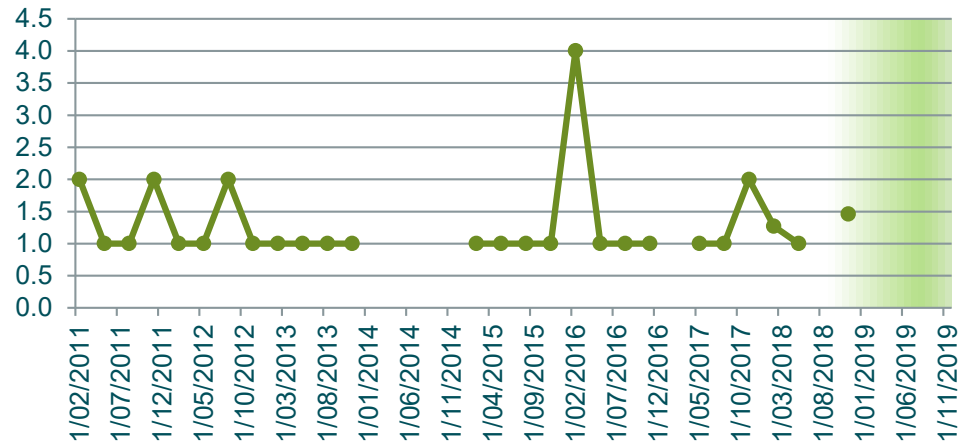
# Depth to Groundwater m



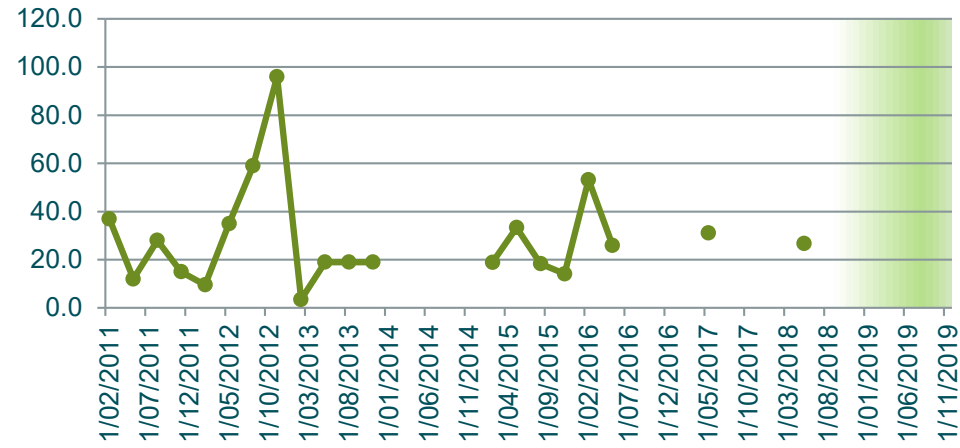
GW14	Alkalinity mg/L as CaCO3	Aluminum (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µS/cm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride 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	Pheno/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		
1/02/2011	2.0	37.0	0.1	0.0	1.0	1.0	0.0	0.8	35.0	0.0	0.0	0.0	137	0.0	3.9	0.0	45.0	0.1	0.9	0.1	0.0	0.3	0.1	0.3	0.5	4.9		0.2	5.0	202	13.0	7.1	24.1	0.2	2.7	45	0.0		
11/05/2011	1.0	12.0	0.1	0.0	NT	1.0	0.0	0.6	36.0	0.0	0.0	0.0	171	0.0	3.1	0.0	14.0	0.0	1.6	0.0	0.0	0.5	0.1	0.5	0.8	3.7		0.2	5.0	341	19.0	6.6	22.0	0.3	1.0	73	0.0		
10/08/2011	1.0	28.0	0.1	0.0	1.0	2.7	0.0	0.5	32.0	0.0	0.0	0.0	156	0.0	3.3	0.0	29.0	0.0	1.4	0.0	0.0	0.5	0.1	0.5	0.6	4.4		0.1	5.0	357	20.0	6.2	20.0	0.2	1.6	77	0.0		
9/11/2011	2.0	15.0	0.1	0.0	1.0	5.4	0.0	21.0	34.0	0.0	0.0	0.0	133	0.0	3.0	0.1	19.0	0.0	20.0	0.1	0.0	0.4	0.0	0.4	0.8	4.6		0.3	8.0	380	96.0	44.0	22.1	0.4	0.7	72	0.0		
7/02/2012	1.0	9.5	0.0	0.0	1.0	1.8	0.0	0.7	33.0	0.0	0.0	0.0	144	0.0	3.8	0.0	11.0	0.0	1.7	0.1	0.0	0.5	0.0	0.5	0.7	4.5		0.6	5.0	347	23.0	8.8	23.3	0.3	0.1	58	0.0		
9/05/2012	1.0	35.0	0.0	0.0	1.0	1.0	0.0	0.6	30.0	0.0	0.0	0.0	153	0.0	4.5	0.0	40.0	0.0	1.5	0.1	0.0	0.5	0.0	0.5	0.7	4.5		0.1	5.0	328	17.0	6.8	22.3	0.3	1.1	71	0.1		
7/08/2012	2.0	59.0	0.0	0.0	1.0	1.0	0.0	1.0	30.0	0.0	0.0	0.0	146	0.1	3.0	0.1	70.0	0.1	1.8	0.2	0.0	0.5	0.0	0.5	0.7	4.3		0.1	5.0	304	15.0	6.6	20.0	0.2	0.6	76	0.1		
14/11/2012	1.0	96.0	0.1	0.0	1.0	1.0	0.0	0.6	28.0	0.0	0.0	0.0	131	0.1	3.2	0.1	94.0	0.1	1.4	0.2	0.0	0.2	0.0	0.2	0.8	4.5		0.3	5.0	280	14.0	6.2	22.1	0.5	0.5	269	0.1		
14/02/2013	1.0	3.5	0.1	0.0		1.0	0.0	0.6	25.0	0.0	0.0	0.0	140	0.0	3.6	0.0	3.4	0.0	1.3	0.0	0.0	0.9	0.0	0.9	1.1	4.4		0.2	5.0	278	19.0	8.0	24.1	0.2	1.1	58	0.0		
15/05/2013	1.0	19.0	0.0	0.0	1.0	1.0	0.0	0.6	30.0	0.0	0.0	0.0	139	0.0	4.6	0.0	19.0	0.0	1.1	0.1	0.0	0.5	0.0	0.5	0.7	4.5		0.1	5.0	192	19.0	6.6	22.2	0.3	0.4	111	0.0		
7/08/2013	1.0	19.0	0.0	0.0	1.0	1.0	0.0	0.6	38.0	0.0	0.0	0.0	139	0.0	4.5	0.0	16.0	0.0	1.3	0.0	0.0	0.5	0.0	0.5	0.7	4.5		0.3	5.0	250	21.0	8.3	19.9	0.2	0.6	120	0.0		
13/11/2013	1.0	19.0	0.1	0.0	1.0	1.8	0.0	0.5	30.0	0.0	0.0	0.0	145	0.0	4.0	0.0	20.0	0.0	1.5	0.1	0.0	0.4	0.0	0.4	1.0	4.6		0.1	5.0	243	20.0	7.6	21.3	0.5	0.9	67	0.1		
11/02/2014																																							
13/05/2014																																							
12/08/2014																																							
10/11/2014																																							
10/02/2015	1.0	18.9	0.0	0.0	1.0	1.2	0.0	0.6	31.0	0.0	0.0	0.0	130	0.0	4.3	0.0	17.3	0.0	1.3	0.1	0.0	0.6	0.0	0.6	1.4	4.6		0.1	5.0	213	17.0	8.1	23.3	0.8	0.7	66	0.1		
12/05/2015	1.0	33.3	0.0	0.0	1.0	2.1	0.0	0.6	29.0	0.0	0.0	0.0	129	0.0	5.3	0.0	25.4	0.0	1.5	0.1	0.0	0.5	0.0	0.5	1.2	4.5		0.1	5.0	226	21.0	6.0	22.1	0.7	0.3	68	0.1		
12/08/2015	1.0	18.3	0.0	0.0	1.0	1.0	0.0	0.6	30.0	0.0	0.0	0.0	129	0.0	4.9	0.0	15.1	0.0	1.5	0.1	0.0	0.4	0.0	0.4	0.8	4.6		0.1	5.0	232	20.0	5.8	19.8	0.4	0.4	74	0.0		
11/11/2015	1.0	14.1	0.0	0.0	1.0	1.0	0.0	0.8	23.0	0.0	0.0	0.0	121	0.0	4.8	0.0	10.1	0.0	1.4	0.1	0.0	1.4	0.0	1.4	1.6	4.5		0.1	5.0	222	16.0	6.2	20.8	0.3	0.6	64	0.0		
9/02/2016	4.0	53.2	0.0	0.0	4.0	1.0	0.0	0.5	26.0	0.0	0.0	0.0	122	0.0	3.9	0.0	44.2	0.0	1.4	0.1	0.0	0.7	0.0	0.7	1.7	4.5		0.1	5.0	245	17.5	6.5	22.4	1.0	0.7	145	0.0		
10/05/2016	1.0	25.9	0.0	0.0	1.0	1.0	0.0	0.5	28.0	0.0	0.0	0.0	127	0.0	2.0	0.0	25.0	0.0	1.3	0.1	0.0	0.5	0.0	0.5	0.8	4.5		0.1	5.0	242	17.1	6.0	22.6	0.3	0.4	86	0.0		
10/08/2016	1.0		0.0		1.0	1.0		0.6	26.0				126		4.2	0.0			1.3			0.7	0.0	0.7	1.6	4.4		0.1	5.0	250	18.7	6.5	20.0	0.9	0.5	103			
8/11/2016	1.0		0.0		1.0	1.0		0.6	13.0				124		2.8	0.0			1.6			0.4	0.0	0.4	1.0	4.4		0.1	5.0	445	19.5	6.3	21.2	0.6	1.0	119			
7/02/2017																																							
9/05/2017	1.0	31.1	0.0	0.0		1.0	0.0	1.6	17.0	0.0	0.0	0.0	109	0.0	6.8	0.0	32.0	0.0	1.7	0.1	0.0	3.0	0.0	3.0	3.6	4.4		0.1	5.0	435	12.6	4.7	22.1	0.6	1.0	54	0.0		
9/08/2017	1.0		0.0			1.0		0.6	80.0				126		4.2	0.0			1.2			0.5	0.0	0.5	1.2	4.3		0.2	5.0	345	16.9	6.6	20.4	0.8	0.9	89			
8/11/2017	2.0		0.0		2.0	1.0		0.5	27.5				125		4.0	0.0			1.5			0.6	0.0	0.6	1.0	4.3		0.1	5.0	468	18.6	6.0	21.0	0.4	1.2	82			
14/02/2018	1.3		0.1		1.0	3.3		0.2	26.0				122		4.6	0.0			0.6			0.5	0.0	0.5	2.7	5.0		0.3	5.0	242	17.3	7.9	23.7	2.2	0.8	229			
9/05/2018	1.0	26.7	0.0	0.0		1.2	0.0	0.5	28.5	0.0	0.0	0.0	121	0.0	3.9	0.0	24.5	0.0	1.3	0.1	0.0	0.8	0.0	0.8	1.4	4.6		0.1	0.5	322	16.9	6.8	22.9	0.6	1.1	72	0.0		
15/08/2018																																							
14/11/2018	1.5		0.0		1.0	1.2		0.9	20.0				118		5.7	0.0			1.5			0.9	0.0	0.9	1.8	4.8		0.3	0.5	121	18.0	7.2	21.4	0.9	1.1	69			
13/02/2019																																							
15/05/2019																																							
14/08/2019																																							
12/11/2019																																							
<b>2018 Min</b>	<b>1.0</b>	<b>26.7</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>1.2</b>	<b>0.0</b>	<b>0.2</b>	<b>20.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>118</b>	<b>0.0</b>	<b>3.9</b>	<b>0.0</b>	<b>24.5</b>	<b>0.0</b>	<b>0.6</b>	<b>0.1</b>	<b>0.0</b>	<b>0.5</b>	<b>0.0</b>	<b>0.5</b>	<b>1.4</b>	<b>4.6</b>		<b>0.1</b>	<b>0.5</b>	<b>121</b>	<b>16.9</b>	<b>6.8</b>	<b>21.4</b>	<b>0.6</b>	<b>0.8</b>	<b>69</b>	<b>0.0</b>		
<b>2018 Max</b>	<b>1.5</b>	<b>26.7</b>	<b>0.1</b>	<b>0.0</b>	<b>1.0</b>	<b>3.3</b>	<b>0.0</b>	<b>0.9</b>	<b>28.5</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>122</b>	<b>0.0</b>	<b>5.7</b>	<b>0.0</b>	<b>24.5</b>	<b>0.0</b>	<b>1.5</b>	<b>0.1</b>	<b>0.0</b>	<b>0.9</b>	<b>0.0</b>	<b>0.9</b>	<b>2.7</b>	<b>5.0</b>		<b>0.3</b>	<b>5.0</b>	<b>322</b>	<b>18.0</b>	<b>7.9</b>	<b>23.7</b>	<b>2.2</b>	<b>1.1</b>	<b>229</b>	<b>0.0</b>		
<b>2018 Mean</b>	<b>1.2</b>	<b>26.7</b>	<b>0.1</b>	<b>0.0</b>	<b>1.0</b>	<b>1.9</b>	<b>0.0</b>	<b>0.5</b>	<b>24.8</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>120</b>	<b>0.0</b>	<b>4.7</b>	<b>0.0</b>	<b>24.5</b>	<b>0.0</b>	<b>1.1</b>	<b>0.1</b>	<b>0.0</b>	<b>0.7</b>	<b>0.0</b>	<b>0.7</b>	<b>1.9</b>	<b>4.8</b>		<b>0.2</b>	<b>2.0</b>	<b>228</b>	<b>17.4</b>	<b>7.3</b>	<b>22.7</b>	<b>1.2</b>	<b>1.0</b>	<b>123</b>	<b>0.0</b>		
<b>Long-term Average</b>	<b>1.3</b>	<b>28.7</b>	<b>0.0</b>	<b>0.0</b>	<b>1.2</b>	<b>1.5</b>	<b>0.0</b>	<b>1.4</b>	<b>30.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>133</b>	<b>0.0</b>	<b>4.1</b>	<b>0.0</b>	<b>28.7</b>	<b>0.0</b>	<b>2.1</b>	<b>0.1</b>	<b>0.0</b>	<b>0.6</b>	<b>0.0</b>	<b>0.6</b>	<b>1.2</b>	<b>4.5</b>		<b>0.2</b>	<b>4.8</b>	<b>289</b>	<b>20.9</b>	<b>8.2</b>	<b>21.8</b>	<b>0.5</b>	<b>0.8</b>	<b>93</b>	<b>0.0</b>		



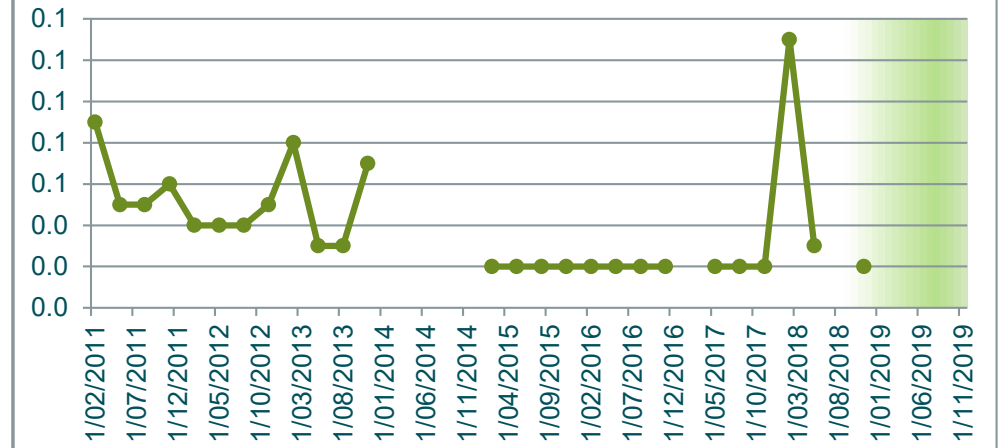
**Alkalinity**  
mg/L as CaCO3



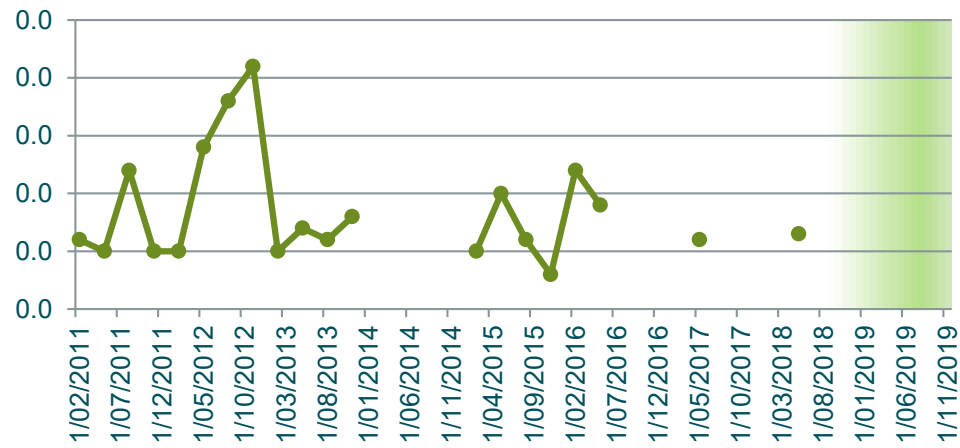
**Aluminium (Total)**  
mg/L



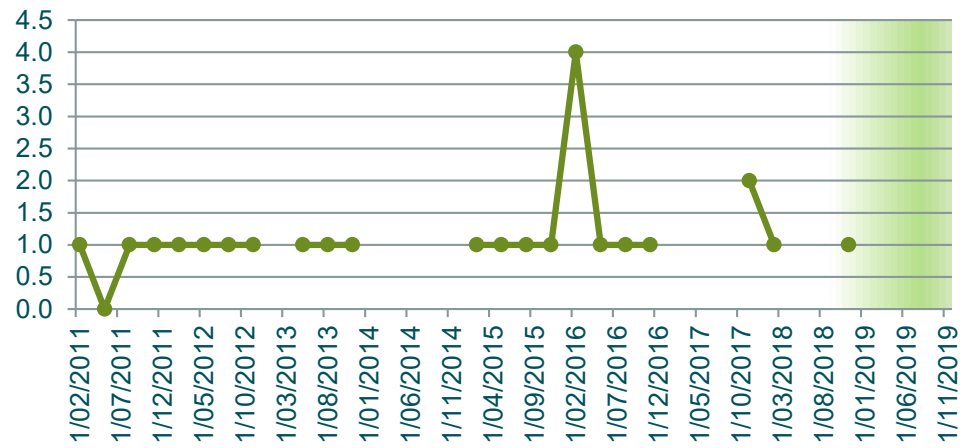
**Ammonia**  
mg/L



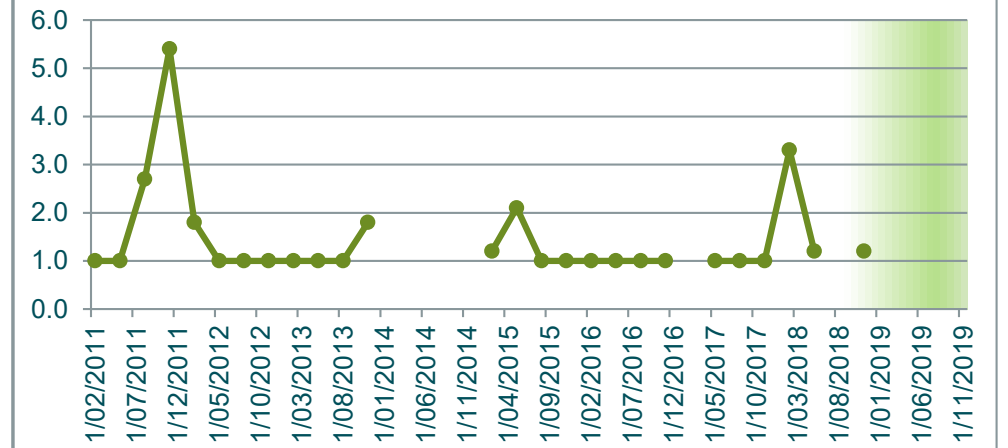
**Arsenic (Total)**  
mg/L



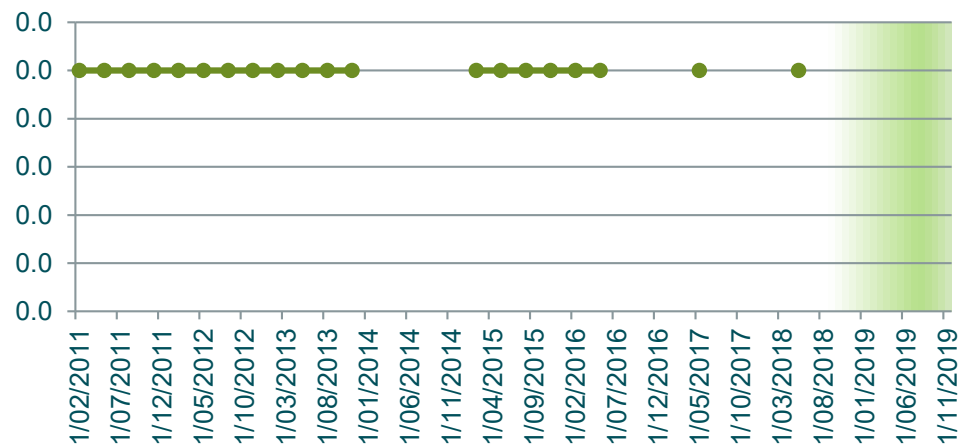
**Bicarbonate HCO3**  
mg/L



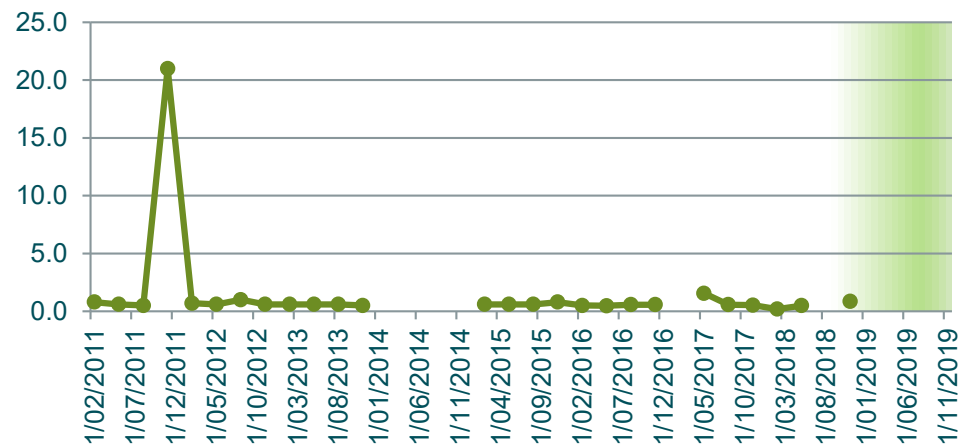
**BOD5**  
mg/L



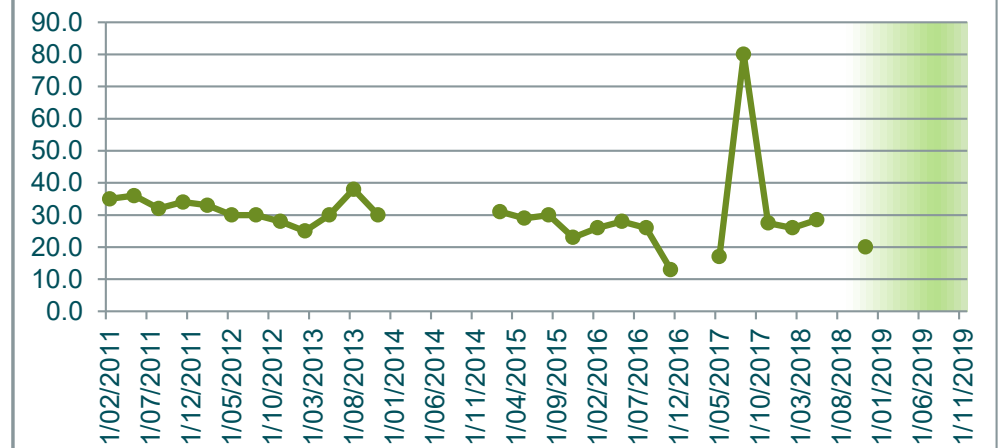
**Cadmium (Total)**  
mg/L



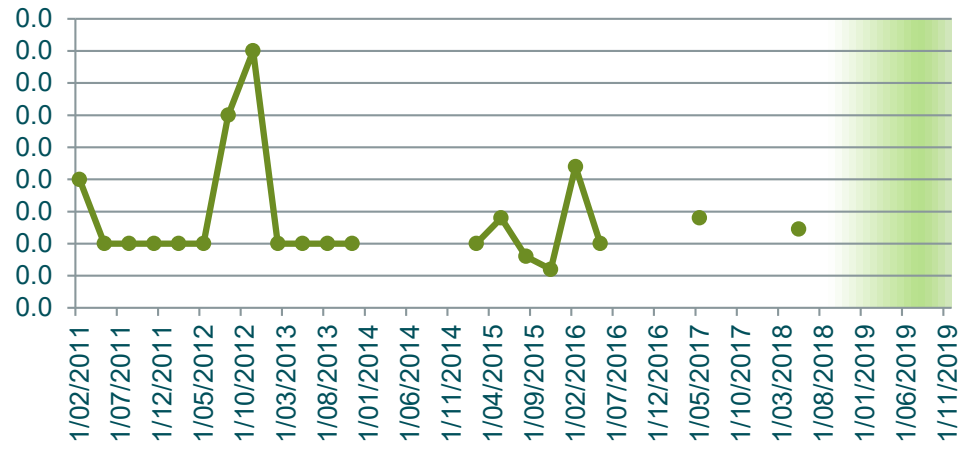
**Calcium (Total)**  
mg/L



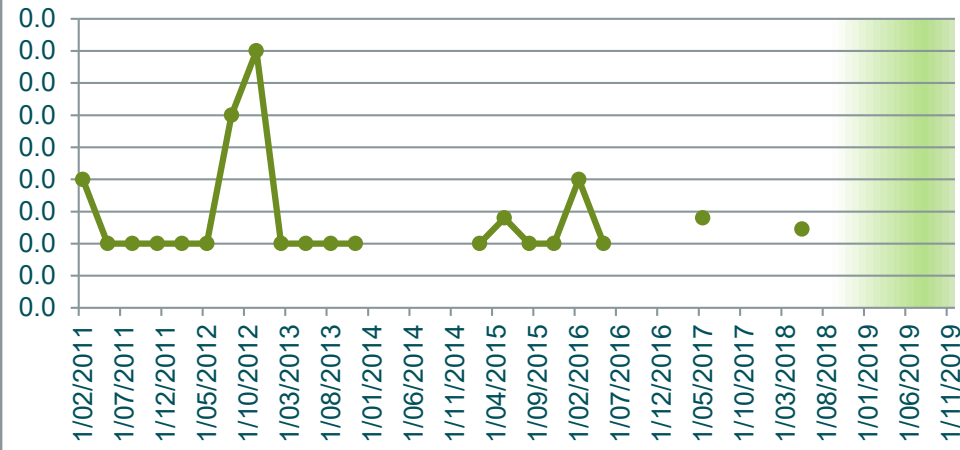
**Chloride**  
mg/L



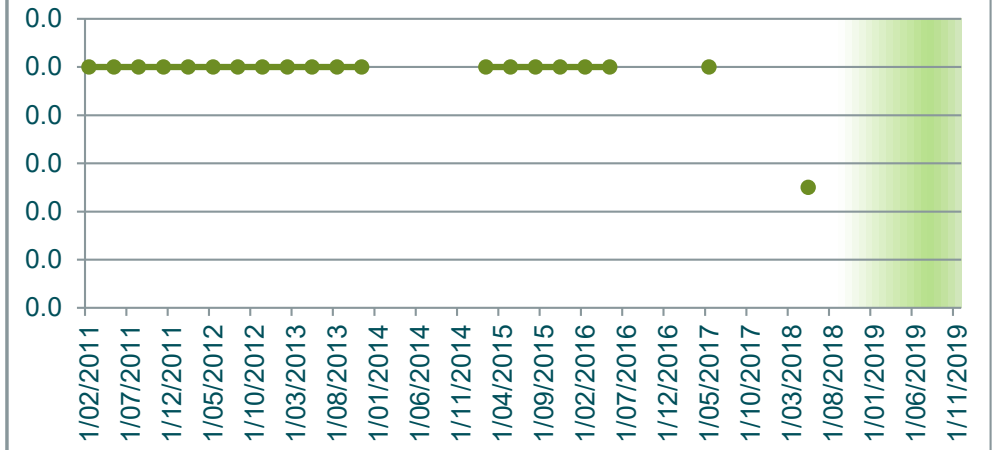
### Chromium (Total) mg/L



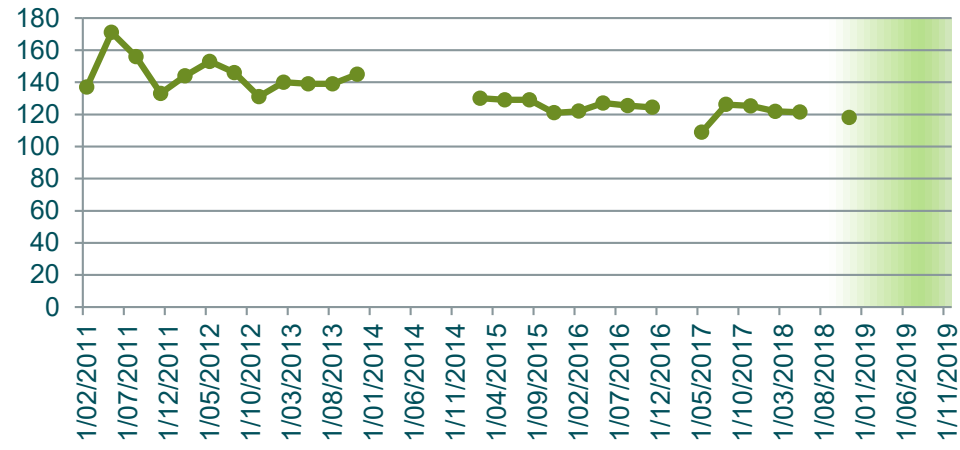
### Chromium 3 mg/L



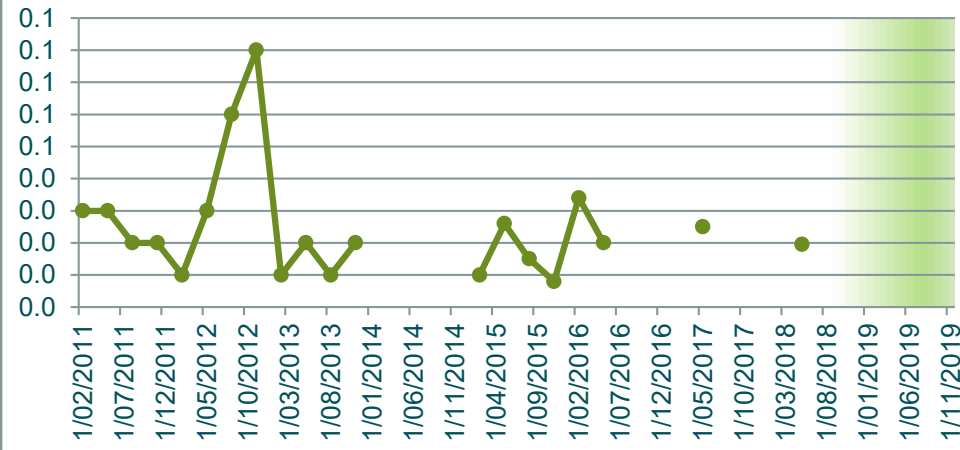
### Chromium 6 mg/L



### Conductivity µScm-1



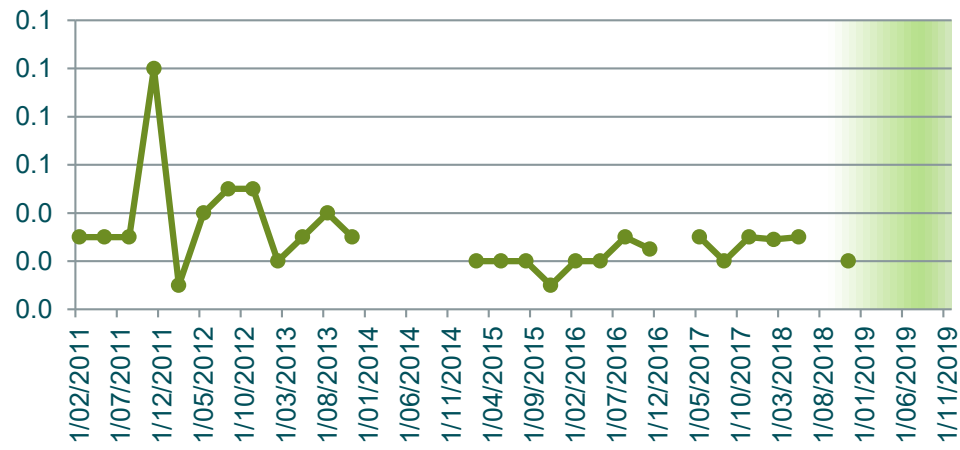
### Copper (Total) mg/L



### DO (Membrane Electrode) mg/L



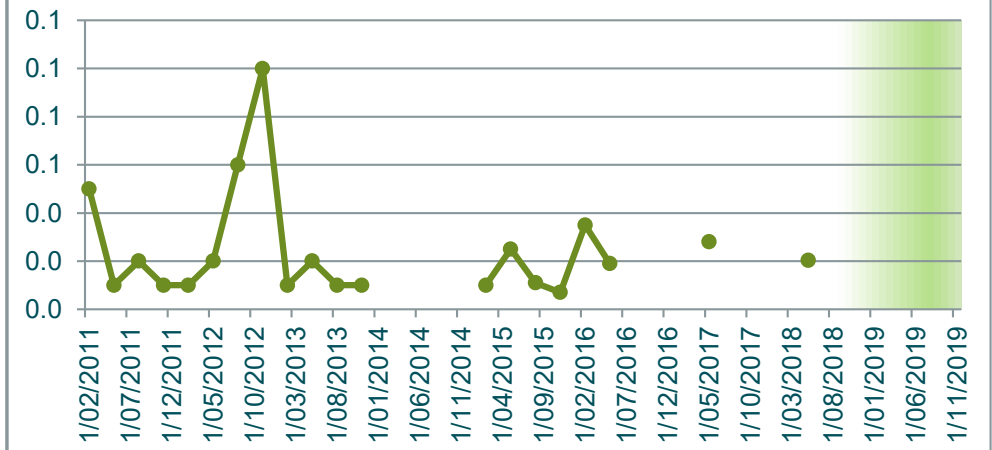
### Flouride mg/L



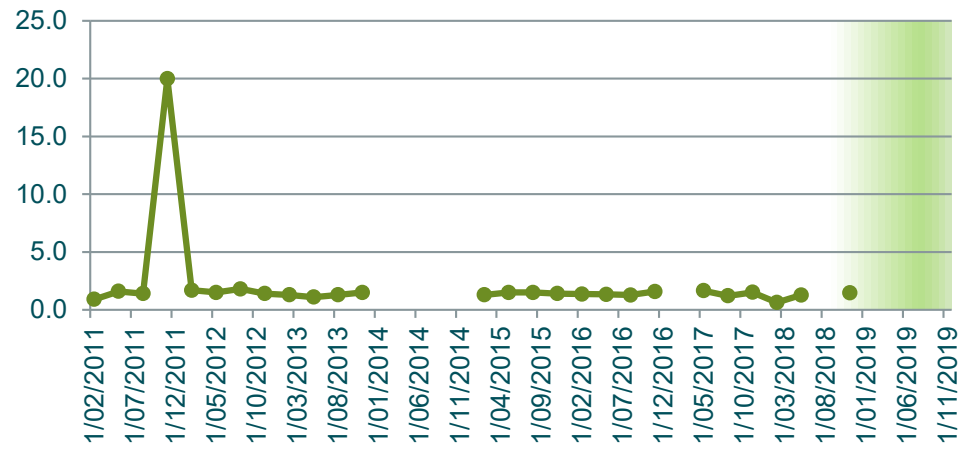
### Iron Total mg/L



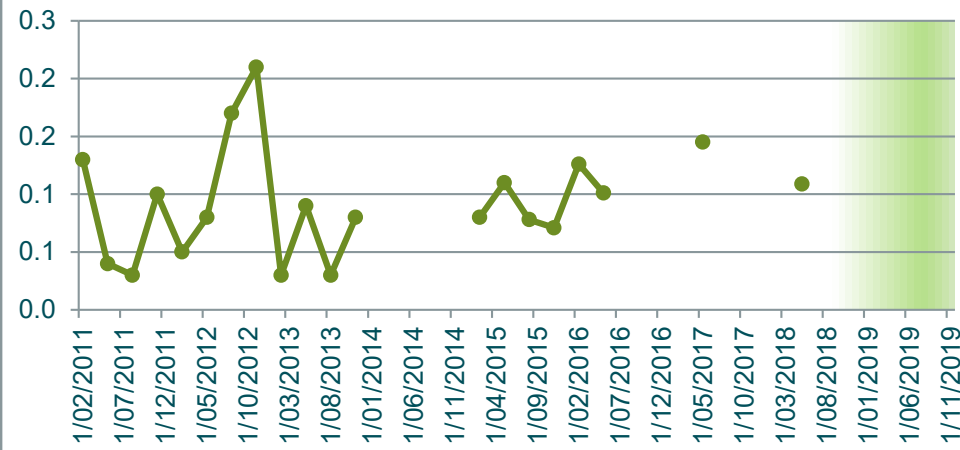
### Lead (Total) mg/L



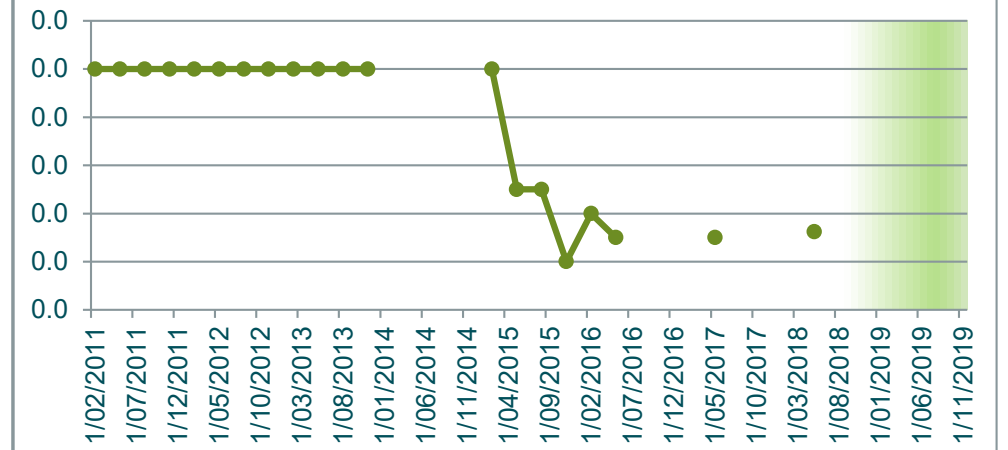
**Magnesium (Total)  
mg/L**



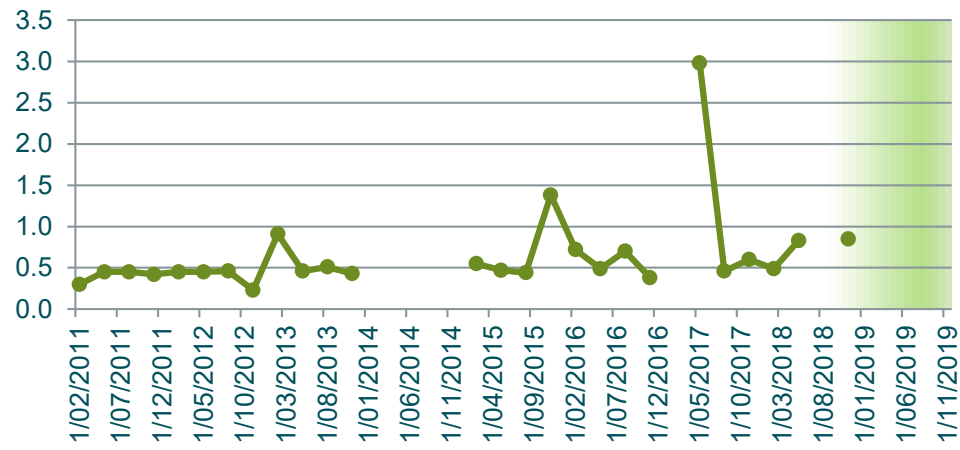
**Manganese Total  
mg/L**



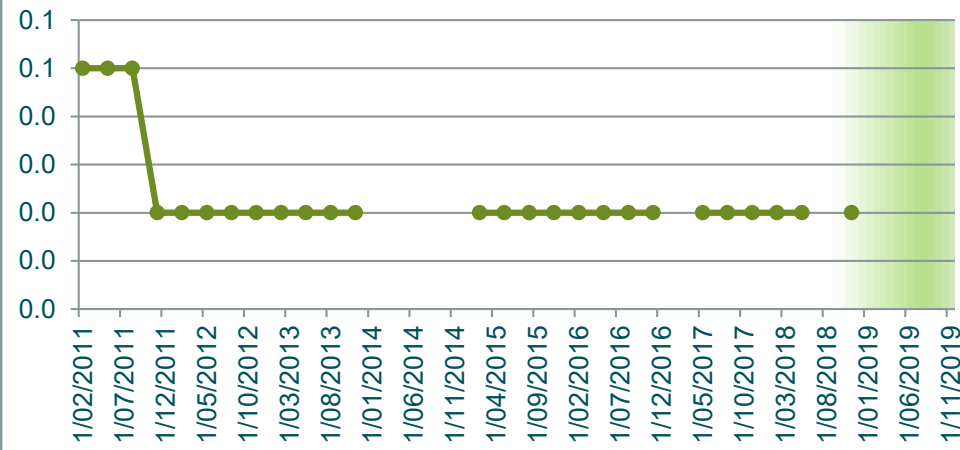
**Nickel (Total)  
mg/L**



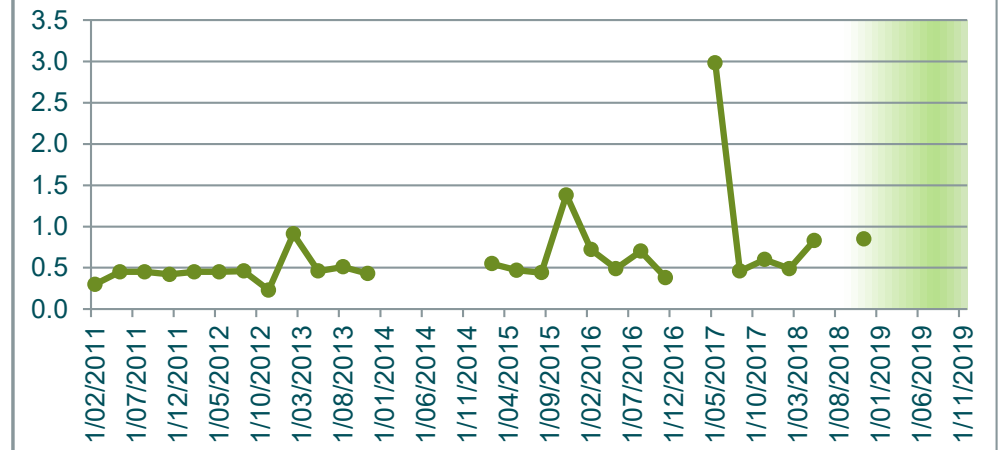
**Nitrate  
N mg/L**



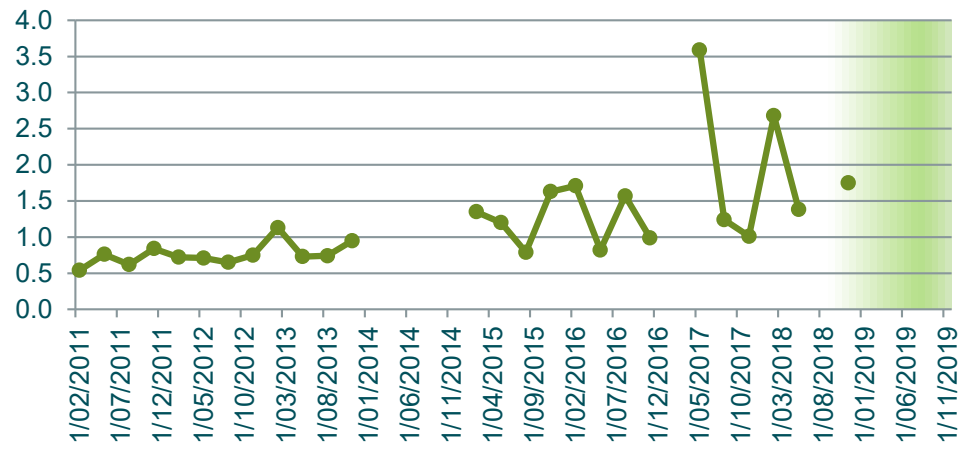
**Nitrite  
N mg/L**



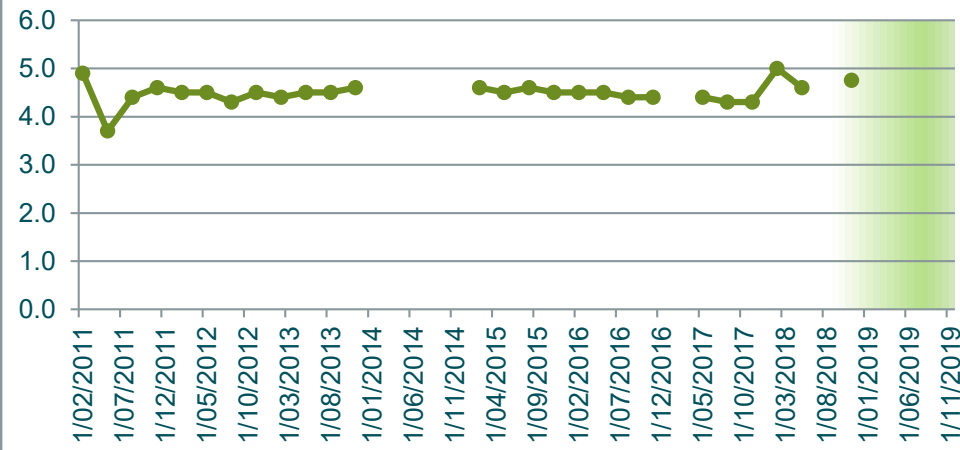
**Nitrogen Oxidised  
mg/L**



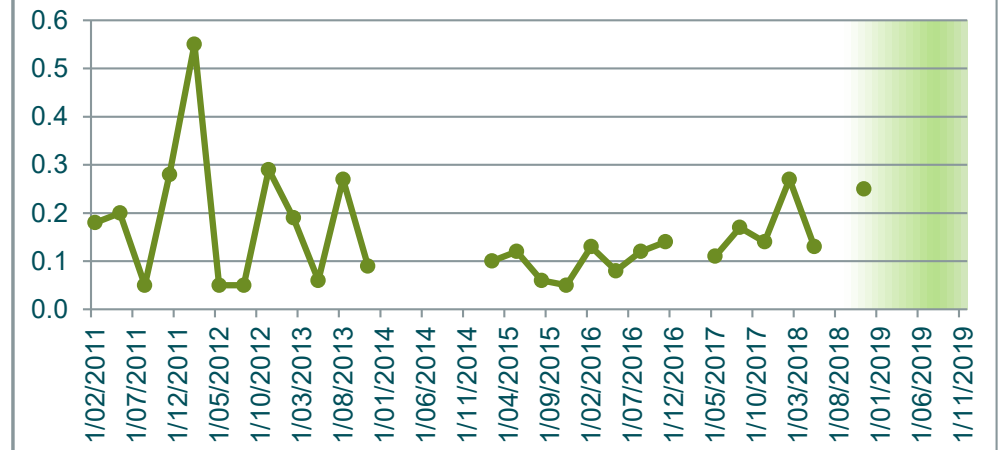
**Nitrogen Total  
mg/L**



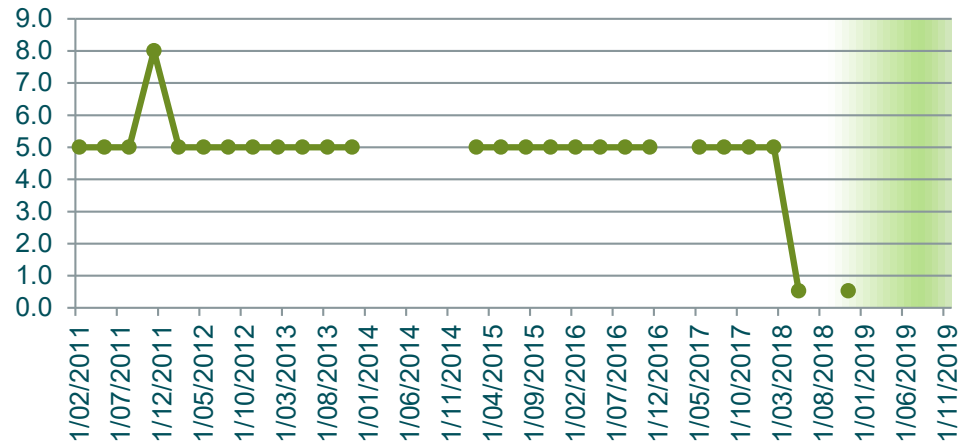
**pH  
pH units**



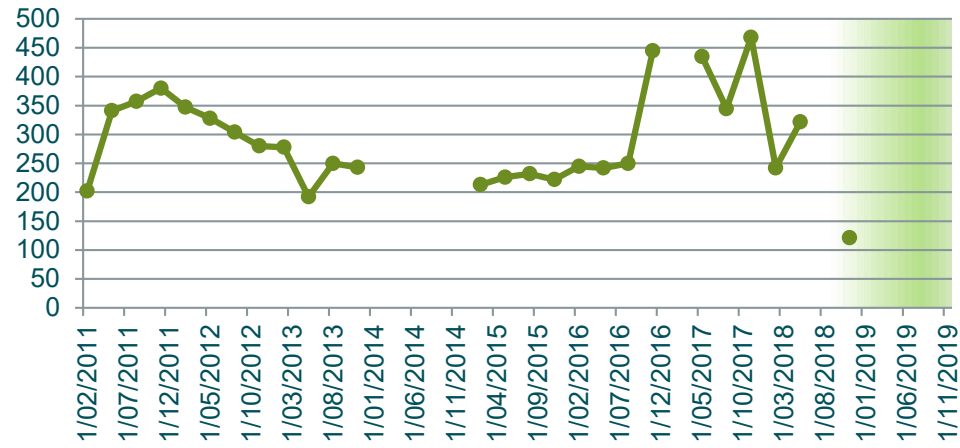
**Phosphorus Total  
mg/L**



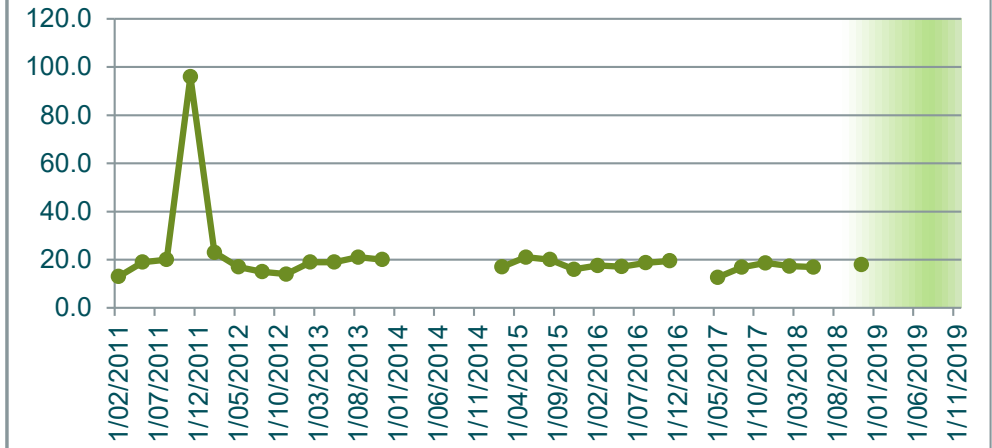
**Potassium Total  
mg/L**



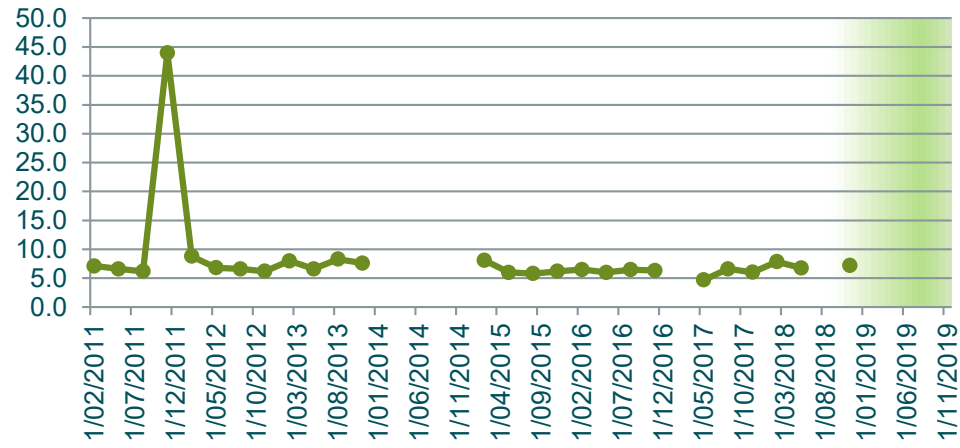
**Redox Potential  
mV**



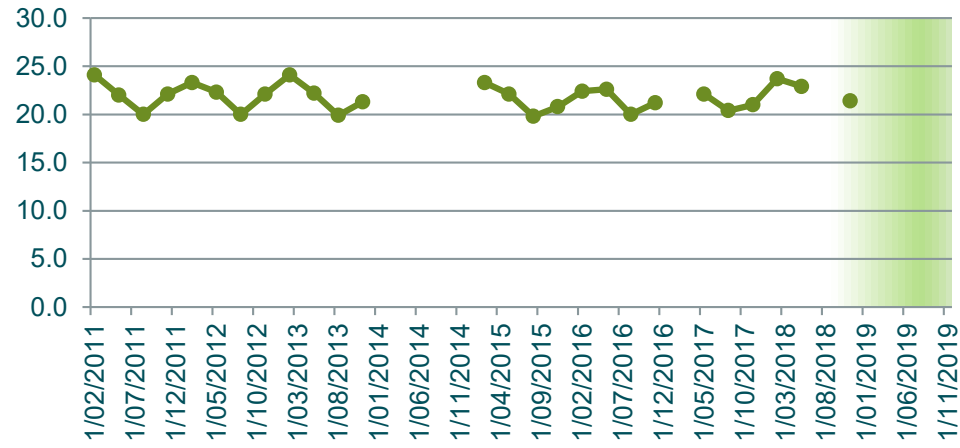
**Sodium (Total)  
mg/L**



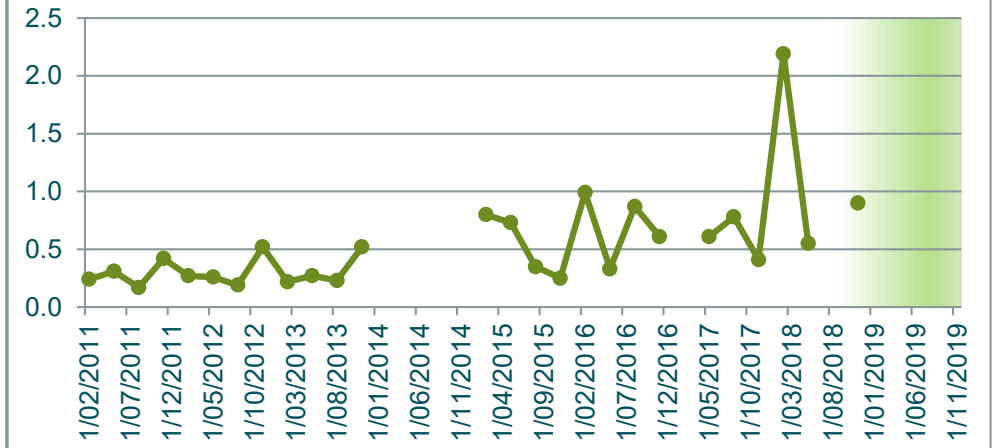
**Sulphate  
mg/L**



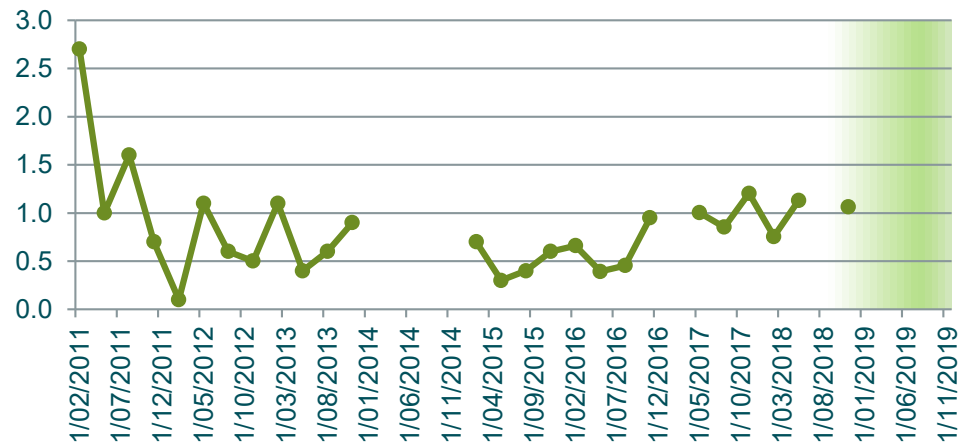
**Temperature  
C**



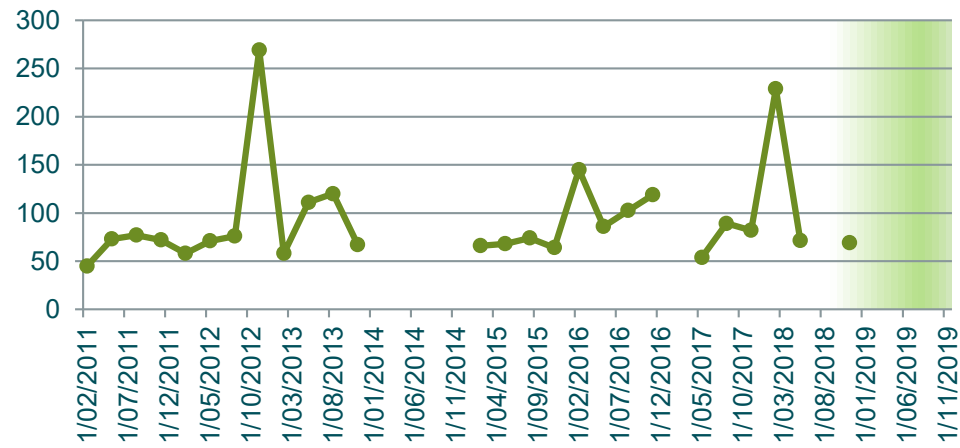
**TKN  
mg/L**



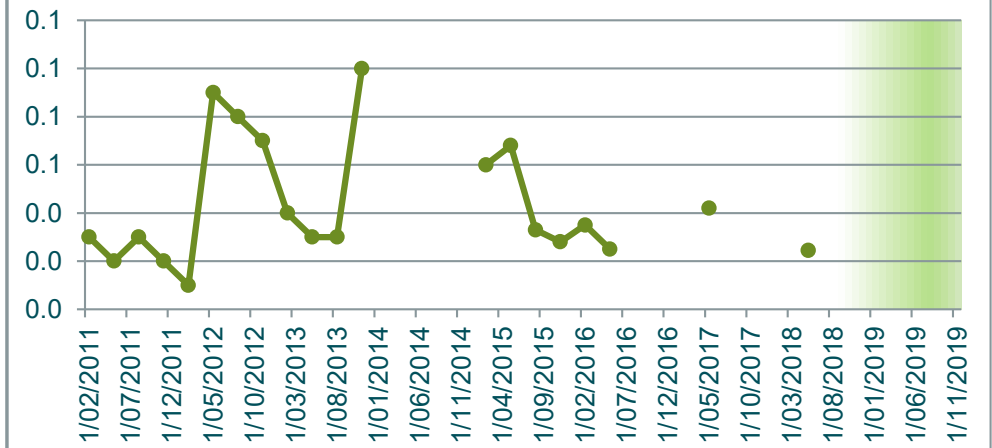
**TOC  
mg/L**



**Total Acidity  
mg/L CaCO3**



**Zinc (Total)  
mg/L**



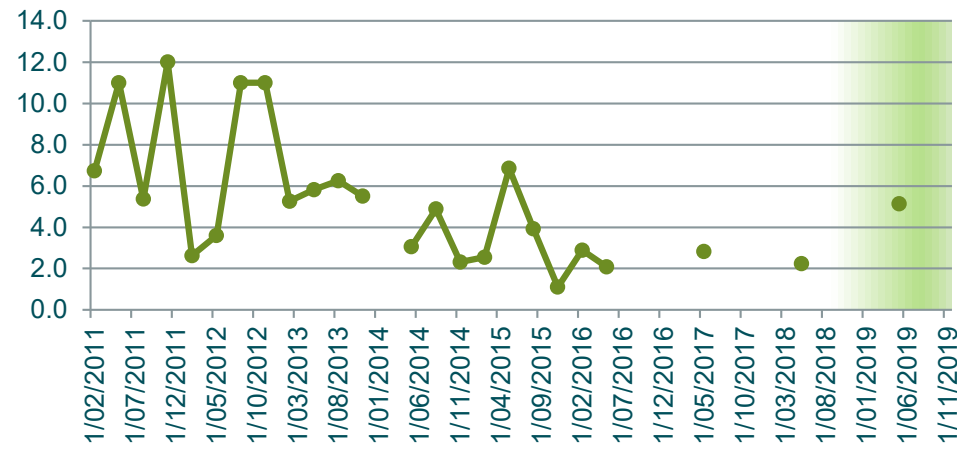
GW15	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µS/cm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride 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	79	6.7	0.2	0.0	48	1.2	0.0	24.0	270	0.0	0.0	0.0	958	0.0	3.5	0.2	12.0	0.0	16.0	0.3	0.0	0.1	0.1	0.1	0.7	6.1		0.1	5.0	45	95	54.0	23.1	0.6	2.0	85	0.1				
11/05/2011	86	11.0	0.1	0.0	52	2.4	0.0	24.0	258	0.0	0.0	0.0	1086	0.0	4.0	0.2	23.0	0.0	19.0	0.5	0.0	0.1	0.1	0.1	0.6	5.6		0.1	5.0	260	128	42.0	20.0	0.6	2.2	30	0.1				
10/08/2011	77	5.4	0.1	0.0	47	2.4	0.0	21.0	23	0.0	0.0	0.0	975	0.0	4.7	0.2	15.0	0.0	18.0	0.4	0.0	0.1	0.1	0.1	0.4	6.0		0.1	5.0	270	138	38.0	17.0	0.3	3.6	76	0.0				
9/11/2011	69	12.0	0.1	0.0	42	6.3	0.0	1.1	208	0.0	0.0	0.0	837	0.0	3.0	0.2	22.0	0.0	2.4	0.9	0.0	0.1	0.0	0.1	0.2	5.9		0.2	5.0	240	22	31.0	22.0	0.2	1.7	92	0.0				
7/02/2012	91	2.6	0.1	0.0	56	1.0	0.0	21.0	187	0.0	0.0	0.0	867	0.0	2.2	0.2	13.0	0.0	17.0	0.3	0.0	0.1	0.0	0.1	0.5	5.9		0.1	5.0	242	147	40.0	23.3	0.4	2.2	100	0.0				
9/05/2012	78	3.6	0.0	0.0	48	1.0	0.0	20.0	200	0.0	0.0	0.0	953	0.0	4.5	0.2	22.0	0.0	16.0	0.4	0.0	0.1	0.0	0.1	0.3	5.8		0.2	5.0	249	110	35.0	21.1	0.2	1.2	68	0.1				
7/08/2012	79	11.0	0.0	0.0	48	1.0	0.0	19.0	205	0.0	0.0	0.0	923	0.0	5.8	0.2	24.0	0.0	15.0	0.5	0.0	0.1	0.0	0.1	0.5	6.1		0.0	5.0	222	102	35.0	16.3	0.5	1.3	59	0.1				
14/11/2012	68	11.0	0.1	0.0	41	1.0	0.0	26.0	178	0.0	0.0	0.0	838	0.0	3.6	0.2	22.0	0.0	18.0	0.4	0.0	0.1	0.0	0.1	0.8	5.7		0.3	5.0	93	92	47.0	20.9	0.7	7.4	96	0.1				
14/02/2013	86	5.3	0.1	0.0	52	1.0	0.0	21.0	150	0.0	0.0	0.0	769	0.0	4.2	0.1	14.0	0.0	15.0	0.3	0.0	0.1	0.0	0.1	0.6	6.1		0.0	5.0	15	107	40.0	23.1	0.5	6.7	73	0.1				
15/05/2013	83	5.8	0.0	0.0	51	1.0	0.0	21.0	196	0.0	0.0	0.0	880	0.0	5.2	0.2	26.0	0.0	15.0	0.4	0.0	0.1	0.0	0.1	0.5	6.1		0.0	5.0	134	115	36.0	20.3	0.4	2.2	89	0.0				
7/08/2013	83	6.3	0.0	0.0	51	1.0	0.0	23.0	208	0.0	0.0	0.0	926	0.0	4.4	0.2	16.0	0.0	19.0	0.5	0.0	0.1	0.0	0.1	0.4	6.0		0.1	5.0	160	131	46.0	17.3	0.3	2.3	189	0.0				
13/11/2013	76	5.5	0.1	0.0	46	1.2	0.0	26.0	185	0.0	0.0	0.0	919	0.0	2.9	0.3	16.0	0.0	18.0	0.4	0.0	1.2	0.0	1.2	1.5	6.0		0.1	5.0	89	125	55.0	21.5	0.3	5.0	105	0.1				
11/02/2014																																									
14/05/2014	135	3.1	1.7	0.0	82	14.0	0.0	20.0	112	0.0	0.0	0.0	687	0.0	2.6	0.3	27.0	0.0	12.0	0.3	0.0	0.2	0.0	0.2	4.2	6.3		0.2	5.0	-27	76	23.0	21.1	3.9	16.3	112	0.1				
13/08/2014	61	4.9	0.0	0.0	37	1.8	0.0	18.0	125	0.0	0.0	0.0	634	0.0	5.5	0.2	13.0	0.0	13.0	0.2	0.0	0.1	0.0	0.1	1.1	6.9		0.1	5.0	156	92	46.0	17.6	1.0	8.8	84	0.1				
11/11/2014	70	2.3	0.1	0.0	43	2.1	0.0	17.0	137	0.0	0.0	0.0	671	0.0	3.1	0.2	6.1	0.0	13.0	0.5	0.0	0.1	0.0	0.1	0.7	6.1		0.1	5.0	83	98	52.0	20.9	0.6	6.7	117	0.1				
10/02/2015	69	2.6	0.0	0.0	42	1.5	0.0	17.0	120	0.0	0.0	0.0	651	0.0	4.0	0.2	7.0	0.0	11.0	0.2	0.0	0.6	0.0	0.6	1.5	6.2		0.1	5.0	48	81	58.0	23.5	0.9	9.2	87	0.0				
12/05/2015	84	6.9	0.0	0.0	51	1.0	0.0	21.0	160	0.0	0.0	0.0	762	0.0	4.7	0.2	9.3	0.0	16.0	0.2	0.0	0.1	0.0	0.1	0.5	6.0		0.1	5.0	155	110	44.0	19.8	0.4	4.0	115	0.0				
12/08/2015	91	3.9	0.0	0.0	91	1.0	0.0	25.0	178	0.0	0.0	0.0	829	0.0	5.0	0.2	11.1	0.0	18.0	0.5	0.0	0.1	0.0	0.1	0.4	6.1		0.0	5.0	203	124	36.0	16.9	0.3	3.6	122	0.0				
11/11/2015	106	1.1	2.6	0.0	106	18.0	0.0	19.0	142	0.0	0.0	0.0	754	0.0	1.8	0.2	11.3	0.0	14.0	1.2	0.0	0.0	0.0	0.0	6.4	6.1		0.4	5.0	29	96	39.0	20.8	6.4	31.0	147	0.0				
9/02/2016	103	2.9	0.2	0.0	103	3.3	0.0	17.7	118	0.0	0.0	0.0	651	0.0	3.7	0.2	8.6	0.0	12.9	0.3	0.0	0.2	0.0	0.2	1.5	6.2		0.3	5.0	21	93	27.7	23.1	1.3	13.1	125	0.0				
10/05/2016	98	2.1	0.0	0.0	98	1.8	0.0	19.3	145	0.0	0.0	0.0	759	0.0	3.6	0.3	5.1	0.0	14.1	0.1	0.0	0.1	0.0	0.1	0.6	6.2		0.2	5.0	173	106	33.1	21.7	0.5	7.7	98	0.0				
10/08/2016	94		0.0		94	2.7		20.8	168				810		6.0	0.2			15.3			0.0	0.0	0.0	0.4	6.1		0.1	5.0	246	118	40.7	17.3	0.4	4.9	86					
8/11/2016	100		0.0		100	1.0		21.2	176				816		2.8	0.2			15.8			0.0	0.0	0.0	0.4	5.9		0.1	5.0	334	119	41.1	20.9	0.4	4.5	143					
8/02/2017	105		0.1		105	1.0		19.4	160				804		3.6	0.2			14.6			0.1	0.0	0.1	0.8	5.9		0.1	5.0	261	110	38.5	23.7	0.7	9.0	189					
9/05/2017	94	2.8	0.0	0.0	94	1.0	0.0	18.9	155	0.0	0.0	0.0	755	0.0	5.2	0.2	5.7	0.0	13.9	0.1	0.0	0.1	0.0	0.1	0.7	6.1		0.1	5.0	409	109	42.9	20.5	0.6	9.6	96	0.0				
9/08/2017	98		0.0		98	2.1		19.0	150				787		6.1	0.2			14.2			0.0	0.0	0.0	0.6	6.2		0.1	5.0	402	110	38.9	17.3	0.5	5.9	69		0.9			
8/11/2017	96		0.0		96	1.5		18.8	23				786		4.6	0.2			13.9			0.5	0.0	0.5	1.1	5.7		0.1	5.0	358	109	39.3	20.6	0.6	6.8	105		0.9			
14/02/2018	95		0.0		95	1.8		16.9	122				710		3.7	0.3			12.3			0.1	0.0	0.1	0.6	6.0		0.1	5.0	182	102	50.2	23.9	0.5	8.6	101		1.5			
9/05/2018	92	2.2	0.0	0.0	92	1.0	0.0	17.4	149	0.0	0.0	0.0	764	0.0	5.6	0.3	5.5	0.0	13.1	0.1	0.0	0.0	0.0	0.0	0.4	6.3		0.1	1.6	339	109	43.6	21.0	0.4	6.2	59	0.0	0.7			
15/08/2018	80		0.0		80	2.7		18.4	160				748		6.2	0.2			13.4			0.0	0.0	0.0	0.4	6.4		0.1	1.6	389	117	46.3	17.8	0.4	11.0	38		1.5			
14/11/2018	105		0.0		105	1.5		18.0	143				744		4.3	0.3			13.3			0.0	0.0	0.0	0.5	6.2		0.1	1.6	73	111	44.4	20.4	0.5	7.9	69		1.2			
12/02/2019																																									
15/05/2019	91	5.1	0.0	0.0	91	1.8	0.0	15.0	110	0.0	0.0	0.0	637	0.0	5.7	0.3	8.4	0.0	11.0	0.1	0.0	0.1	0.0	0.1	0.6	6.3		0.1	1.9	150	107	54.0	21.0	0.5	11.0	53	0.0	1.0			
14/08/2019	85		0.0		85	2.4		15.0	100				639		5.9	0.3			11.0			0.0	0.0	0.0	0.6	6.4		0.2	1.6	397	101	49.0	17.3	0.6	10.0	45		1.1			
12/11/2019																																									
2019 Min	85	5.1	0.0	0.0	85	1.8	0.0	15.0	100	0.0	0.0	0.0	637	0.0	5.7	0.3	8.4	0.0	11.0	0.1	0.0	0.0	0.0	0.6	6.3		0.1	1.6	150	101	49.0	17.3	0.5	10.0	45	0.0	1.0				
2019 Max	91	5.1	0.0	0.0	91	2.4	0.0	15.0	110	0.0	0.0	0.0	639	0.0	5.9	0.3	8.4	0.0	11.0	0.1	0.0	0.1	0.0	0.1	0.6	6.4		0.2	1.9	397	107	54.0	21.0	0.6	11.0	53	0.0	1.1			
2019 Mean	88	5.1	0.0	0.0	88	2.1	0.0	15.0	105	0.0	0.0	0.0	638	0.0	5.8	0.3	8.4	0.0	11.0	0.1	0.0	0.1	0.0	0.1	0.6	6.4		0.1	1.8	273	104	51.5	19.2	0.6	10.5	49	0.0	1.1			
Long-term Average	88	5.2	0.2	0.0	72	2.6	0.0	19.4	155	0.0	0.0	0.0	798	0.0	4.3	0.2	14.3	0.0	14.4	0.4	0.0	0.1	0.0	0.1	0.9	6.1	</														



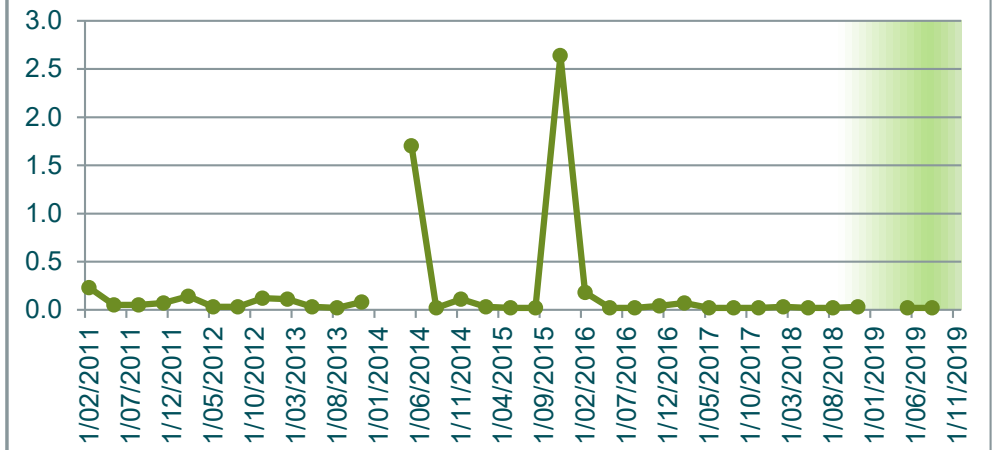
**Alkalinity  
mg/L as CaCO3**



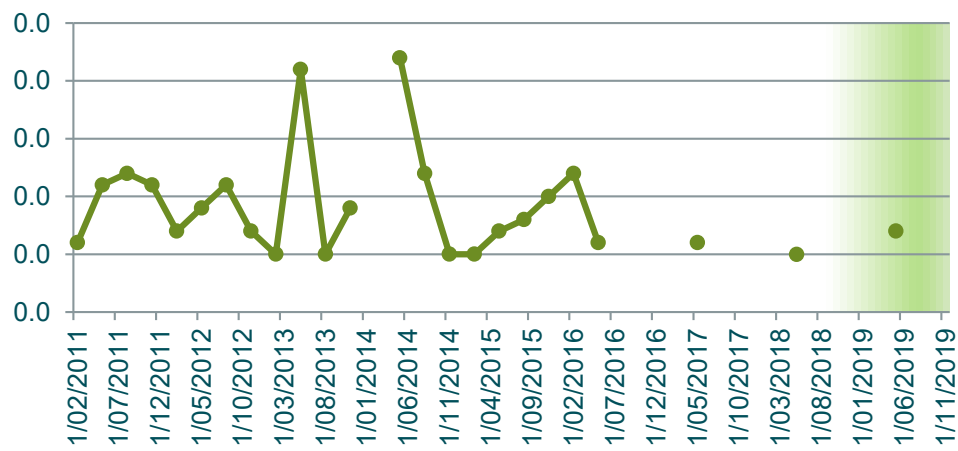
**Aluminium (Total)  
mg/L**



**Ammonia  
mg/L**



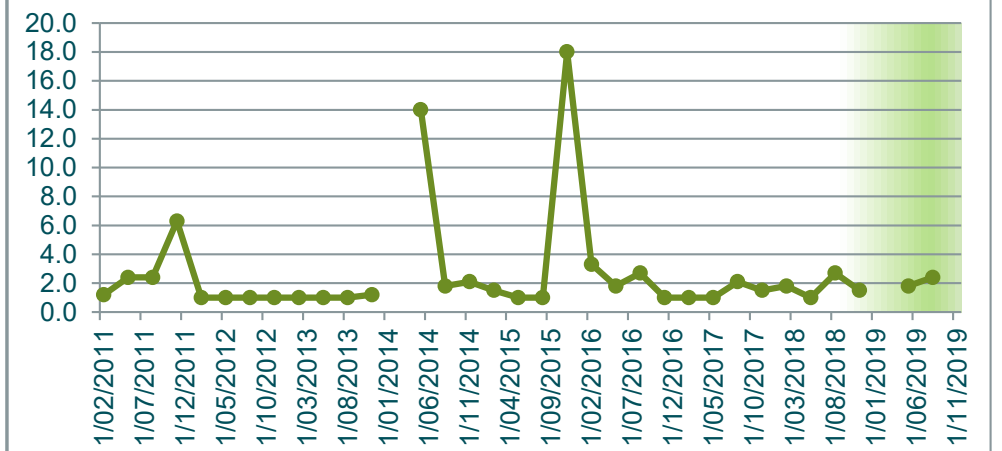
**Arsenic (Total)  
mg/L**



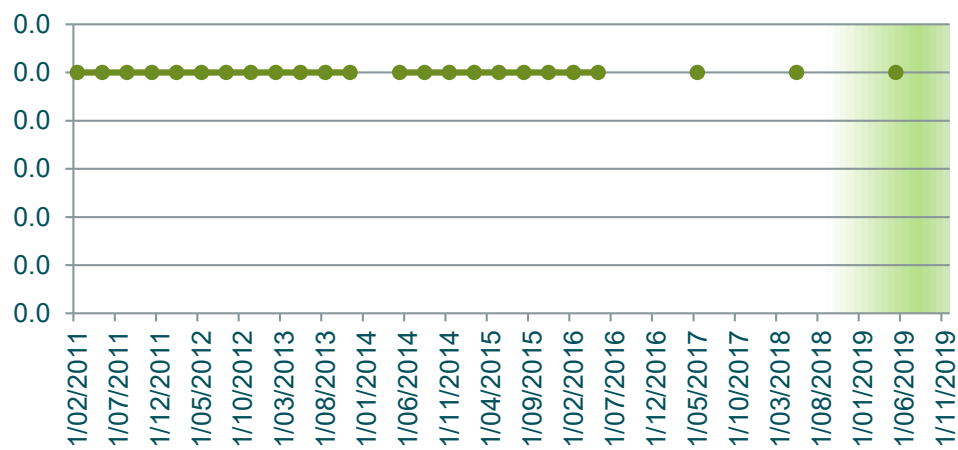
**Bicarbonate HCO3  
mg/L**



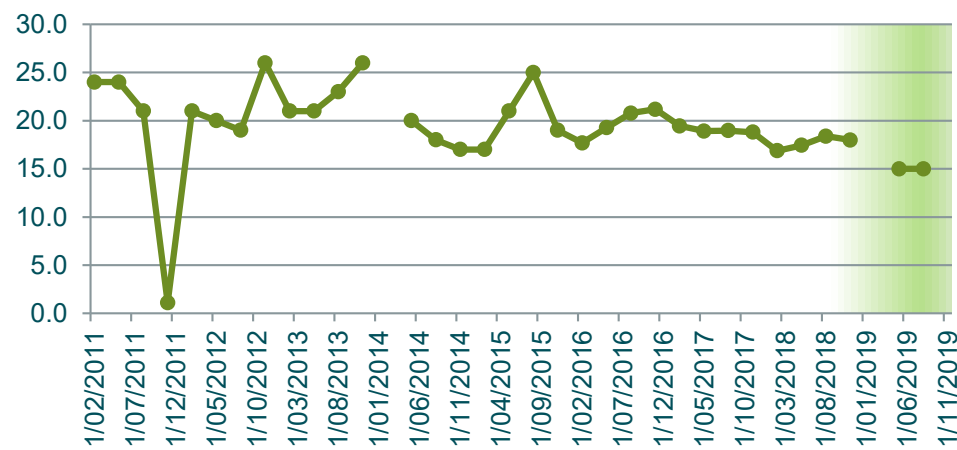
**BOD5  
mg/L**



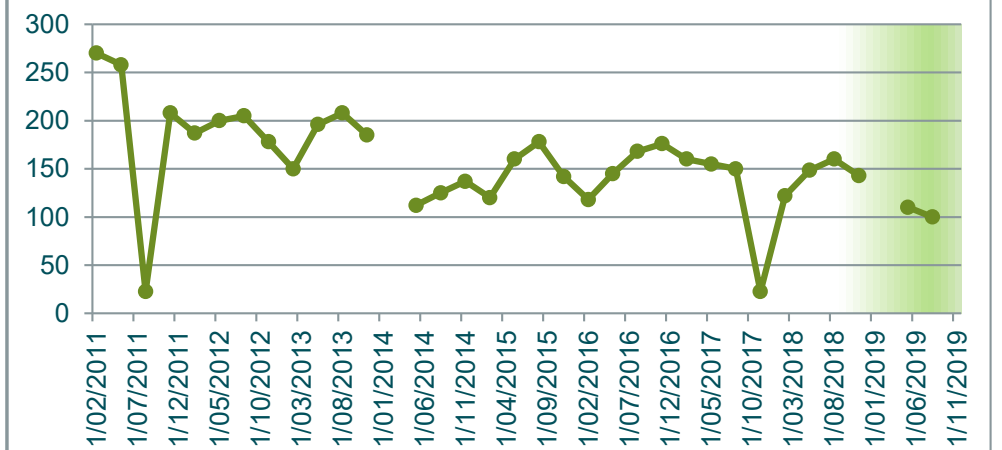
**Cadmium (Total)  
mg/L**



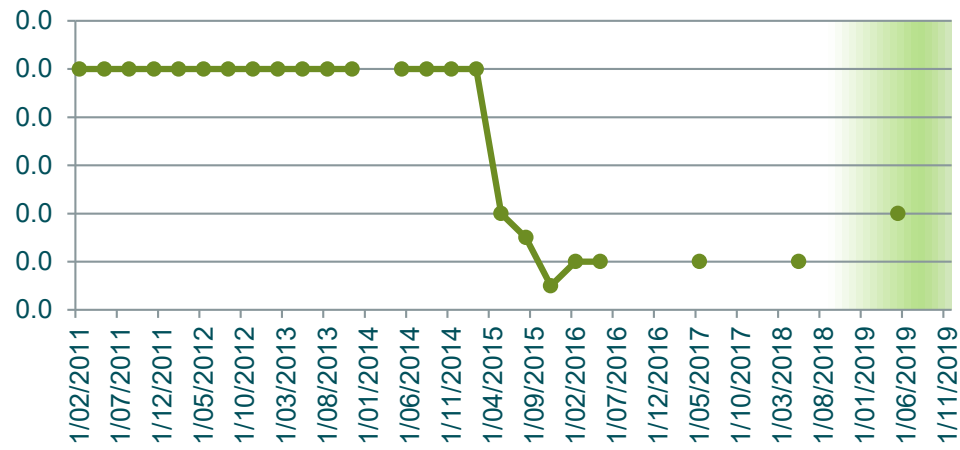
**Calcium (Total)  
mg/L**



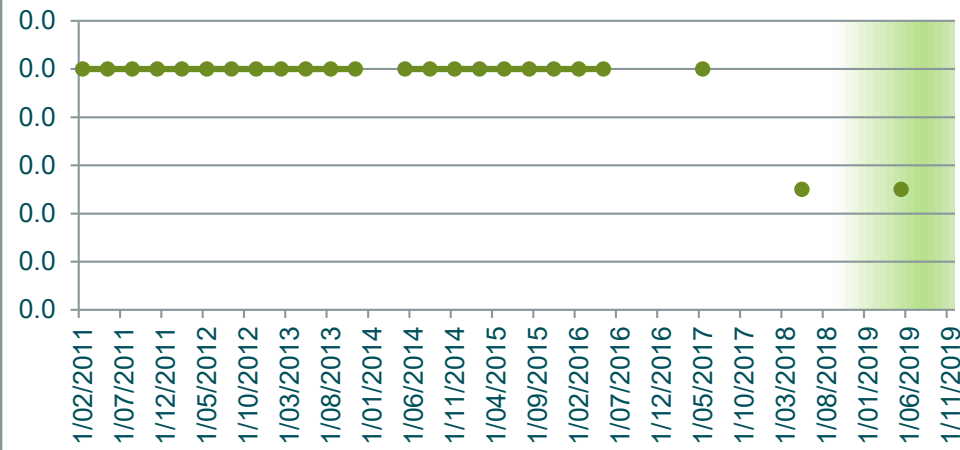
**Chloride  
mg/L**



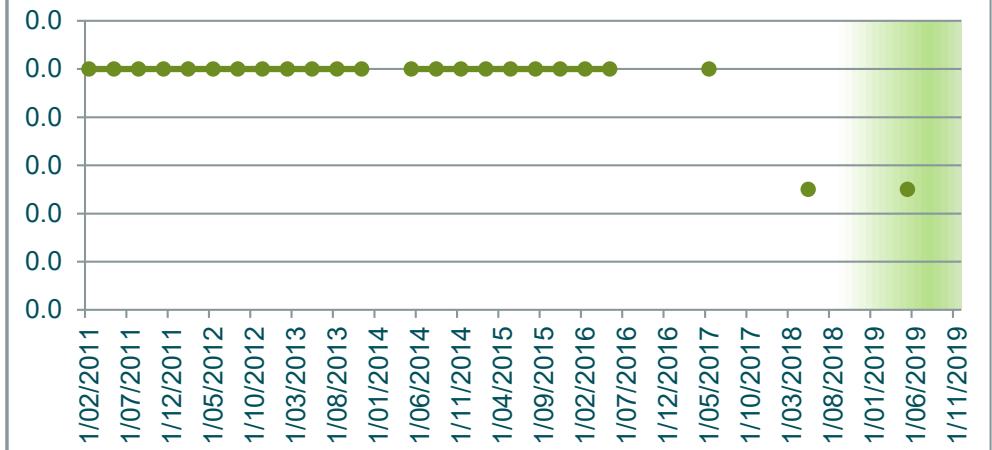
### Chromium (Total) mg/L



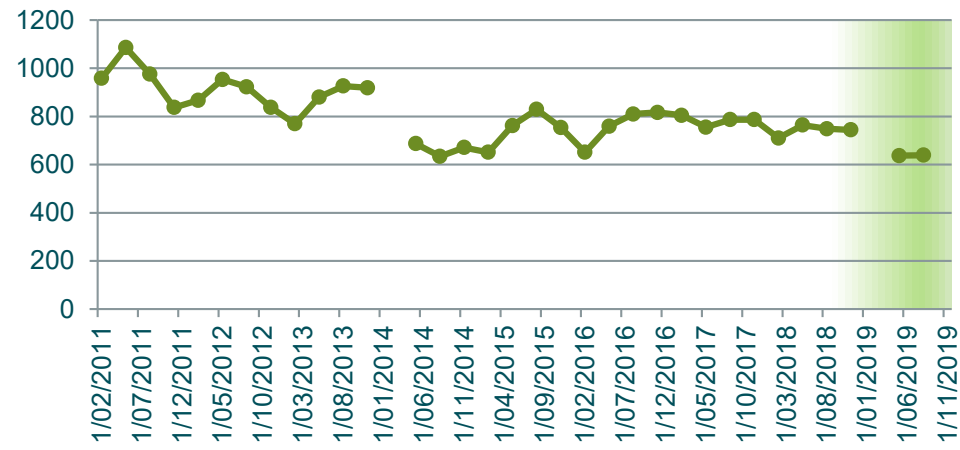
### Chromium 3 mg/L



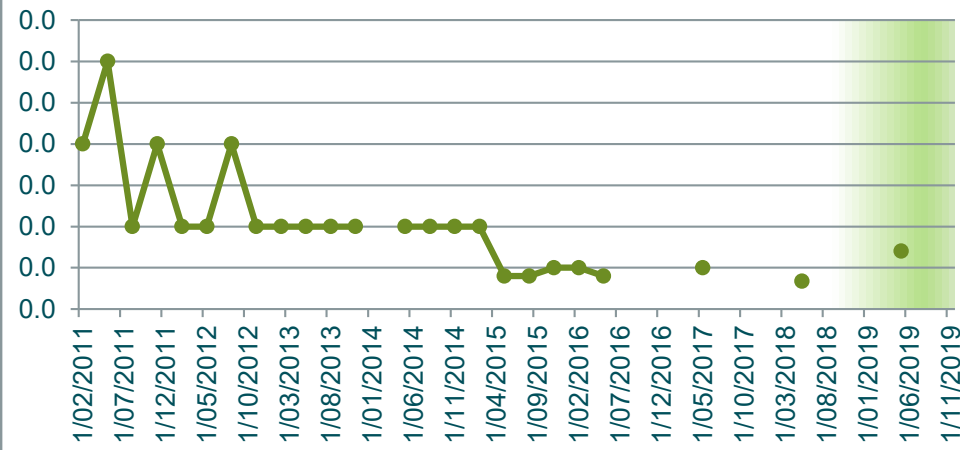
### Chromium 6 mg/L



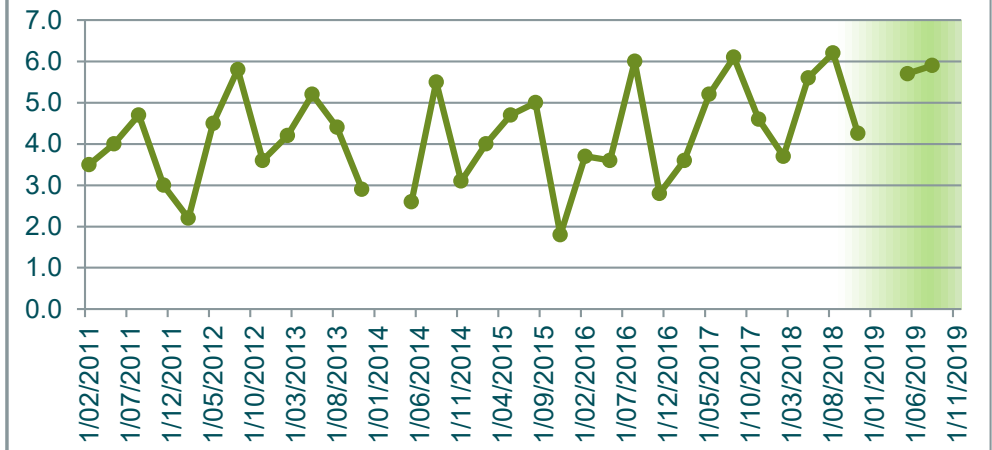
### Conductivity µScm-1



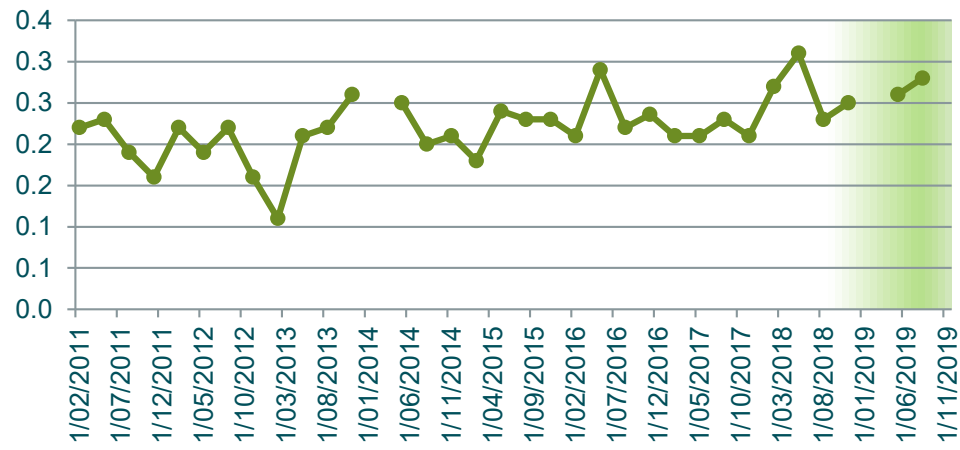
### Copper (Total) mg/L



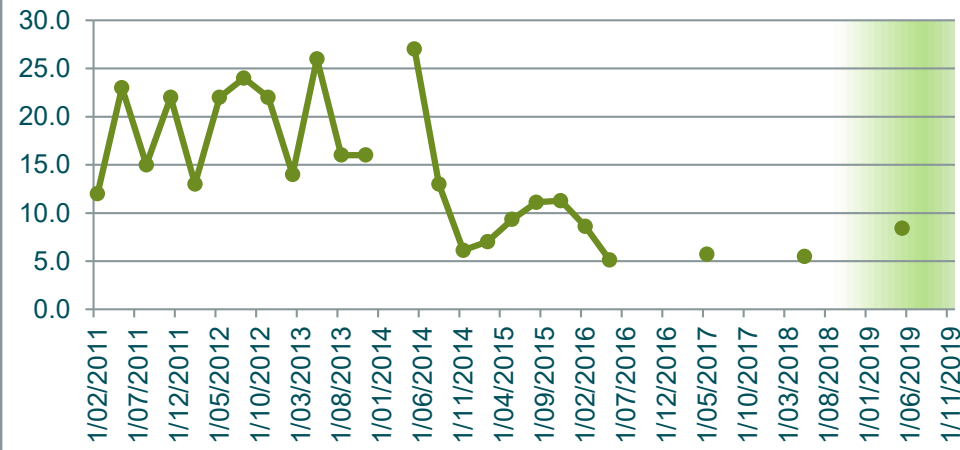
### DO (Membrane Electrode) mg/L



### Flouride mg/L



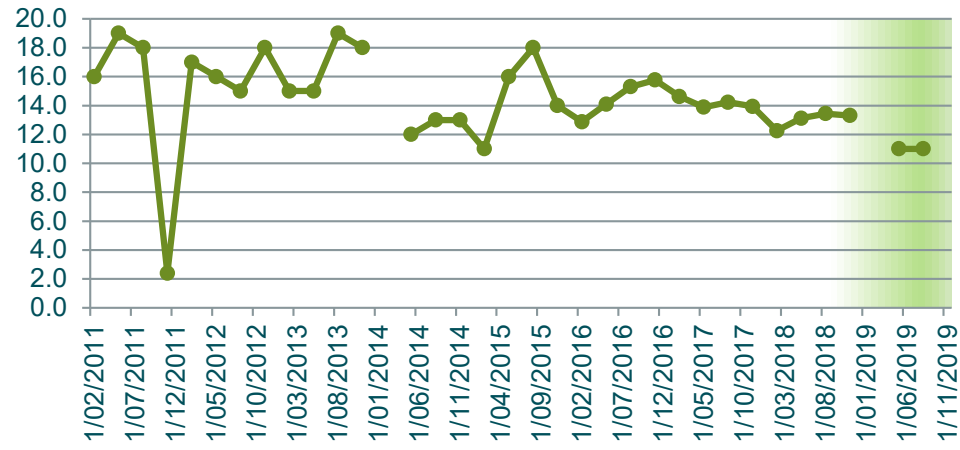
### Iron Total mg/L



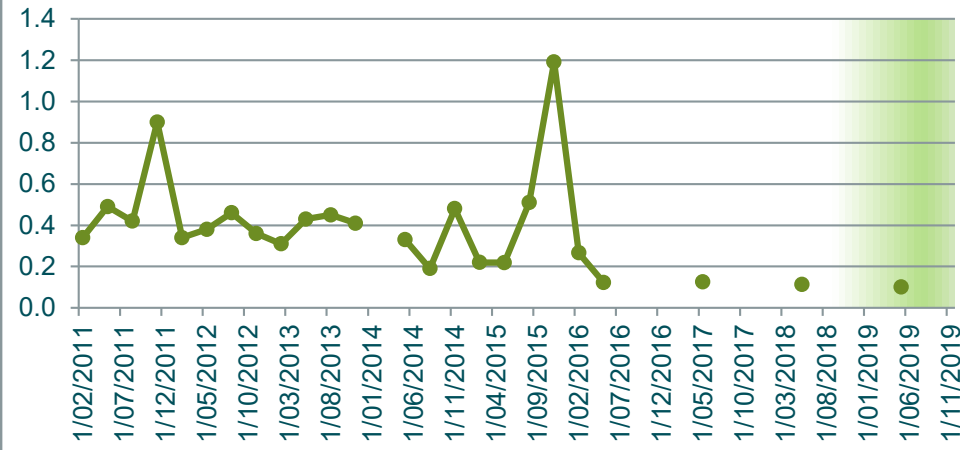
### Lead (Total) mg/L



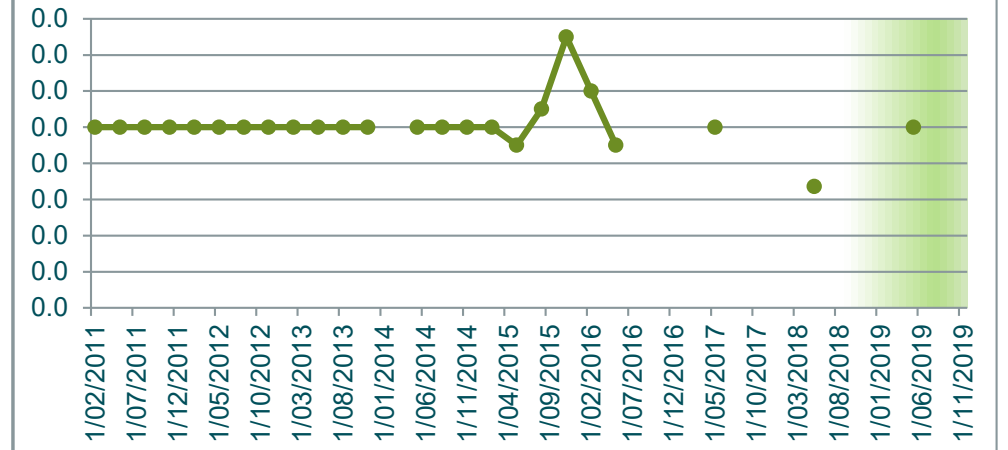
### Magnesium (Total) mg/L



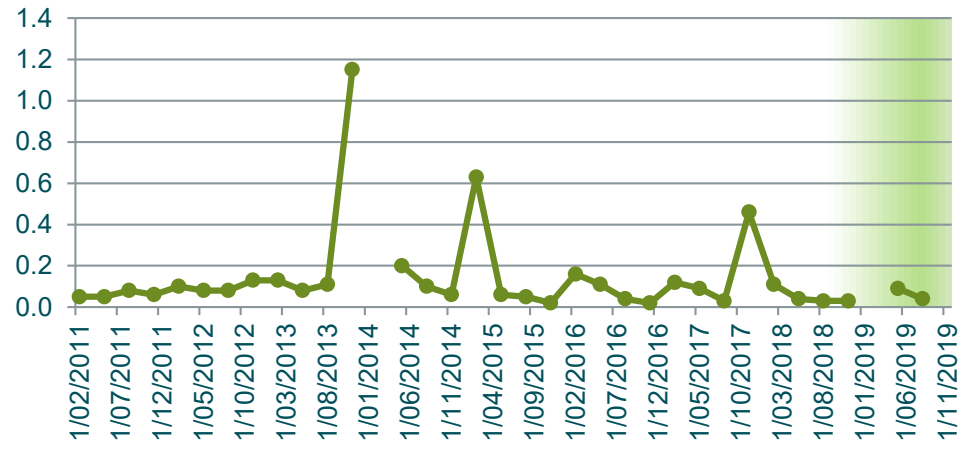
### Manganese Total mg/L



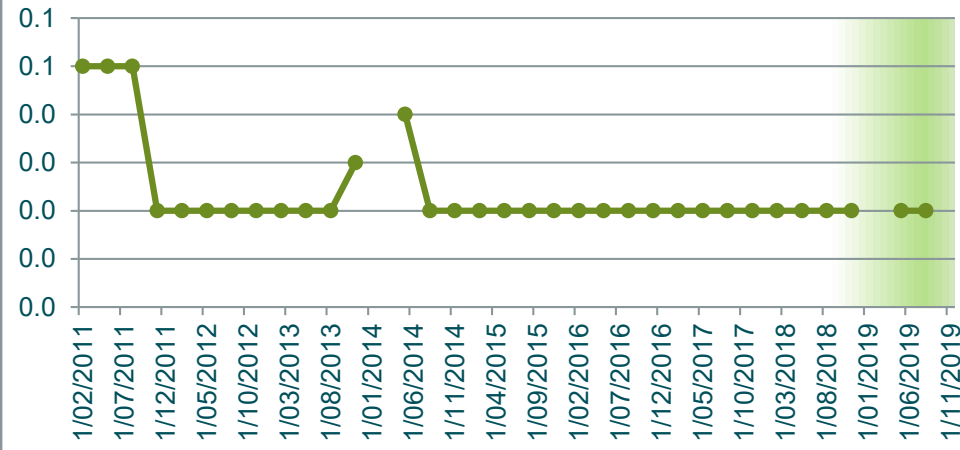
### Nickel (Total) mg/L



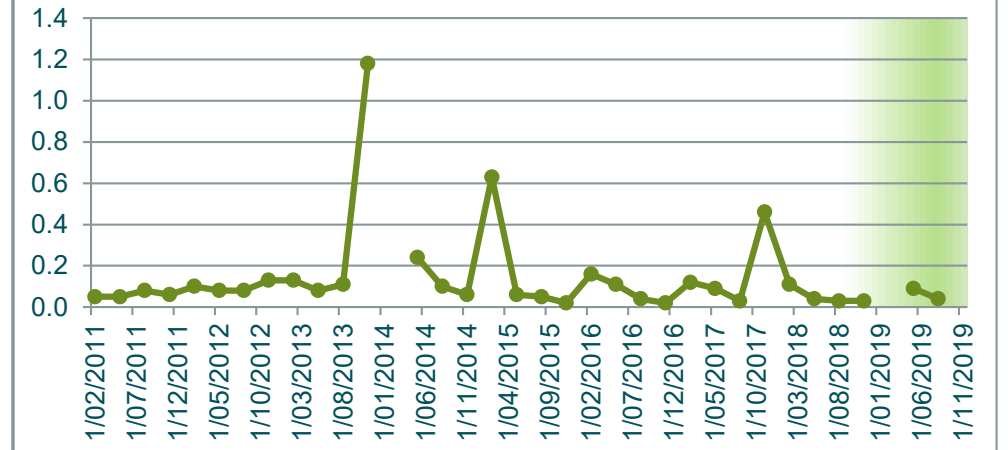
### Nitrate N mg/L



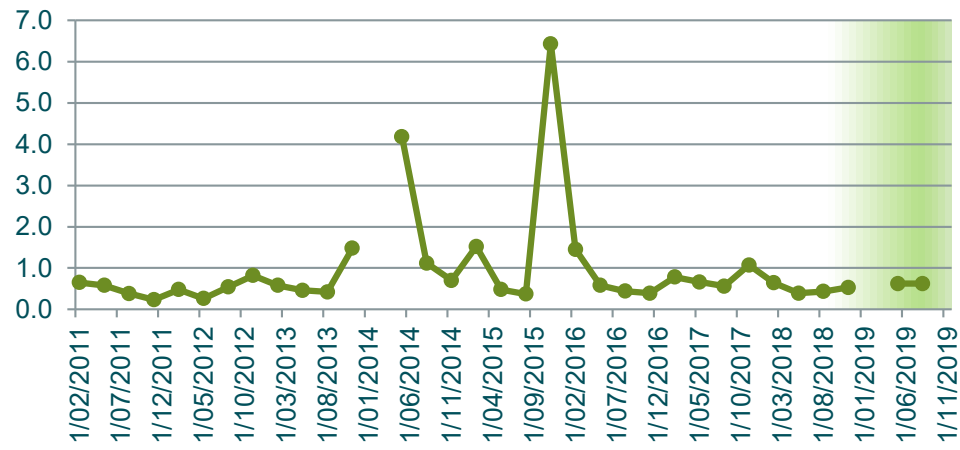
### Nitrite N mg/L



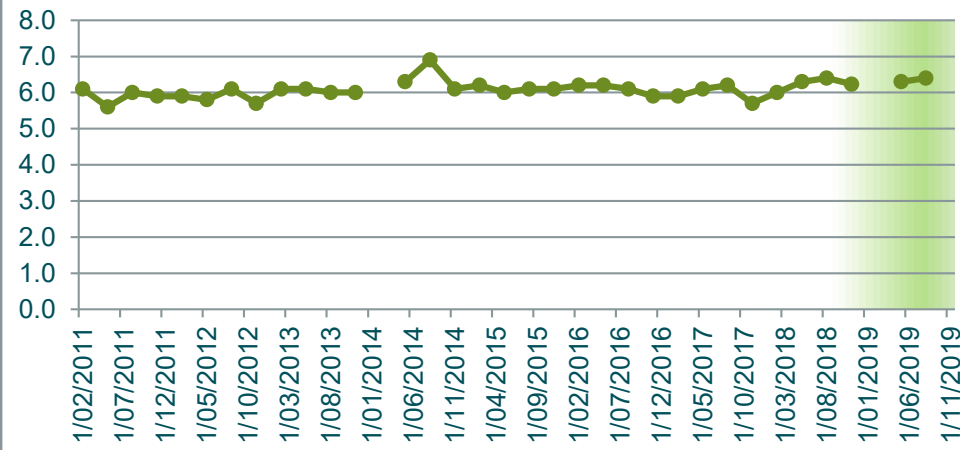
### Nitrogen Oxidised mg/L



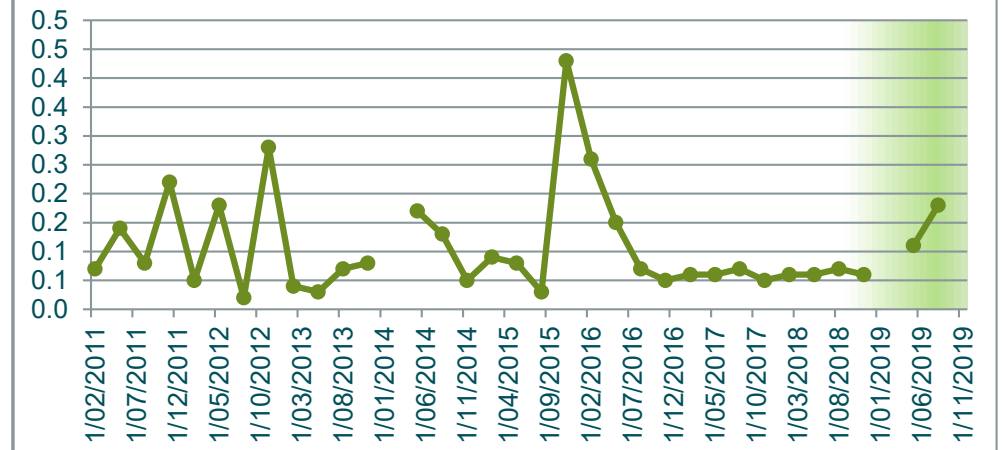
### Nitrogen Total mg/L



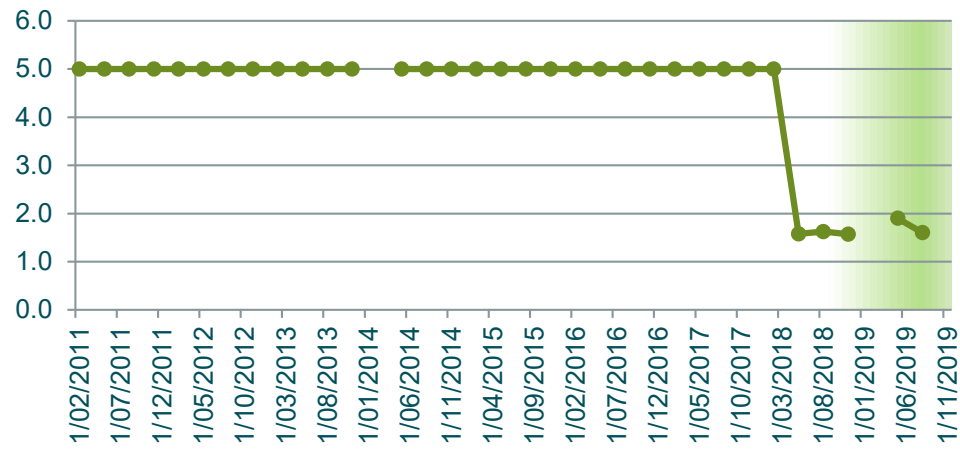
### pH pH units



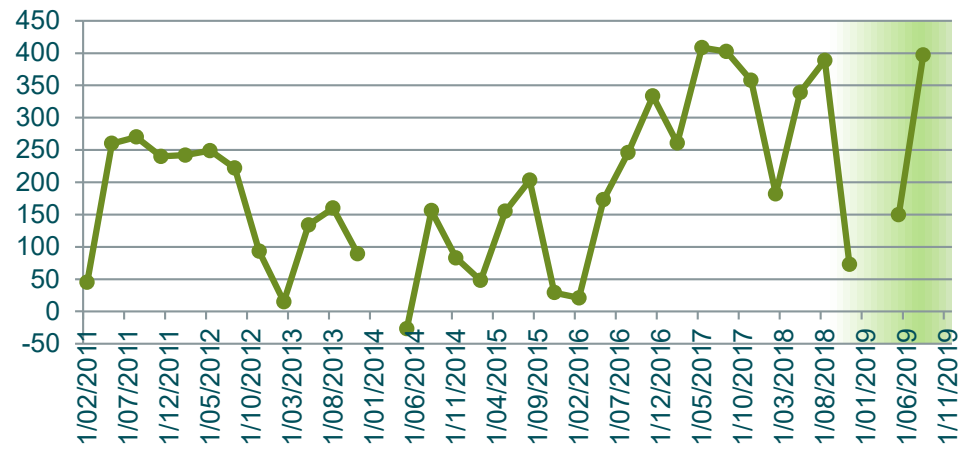
### Phosphorus Total mg/L



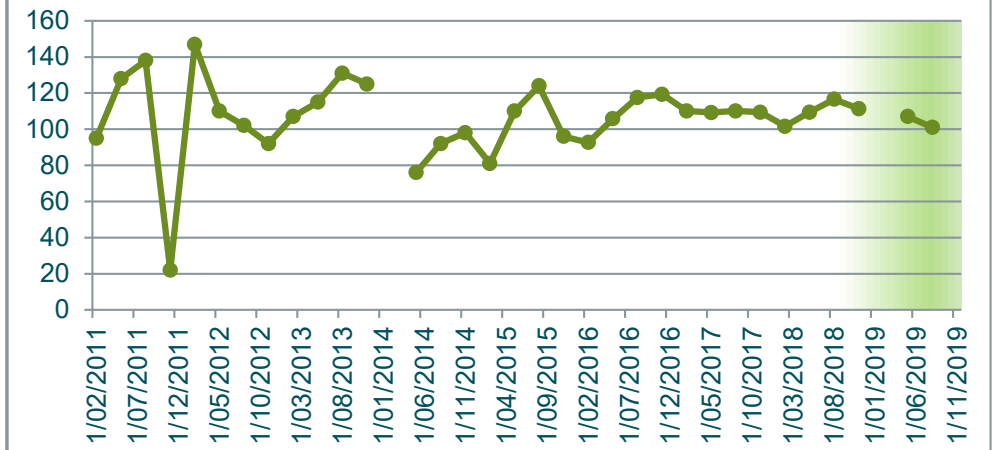
**Potassium Total  
mg/L**



**Redox Potential  
mV**



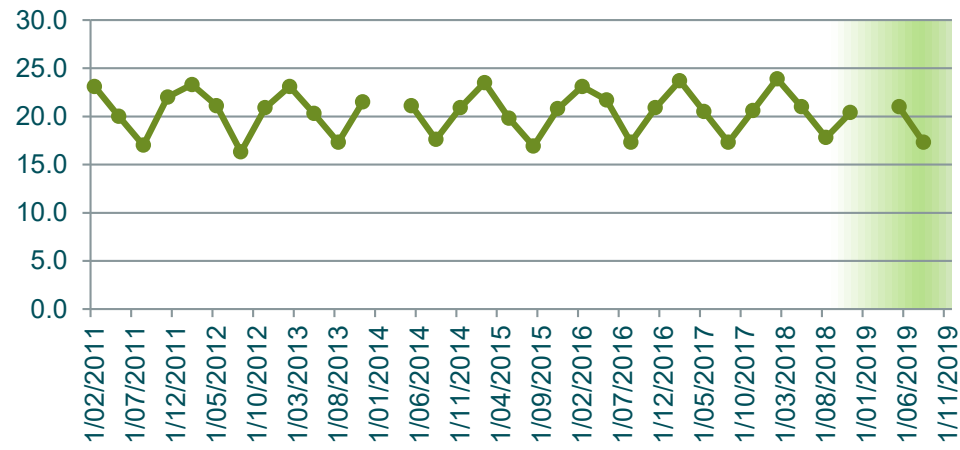
**Sodium (Total)  
mg/L**



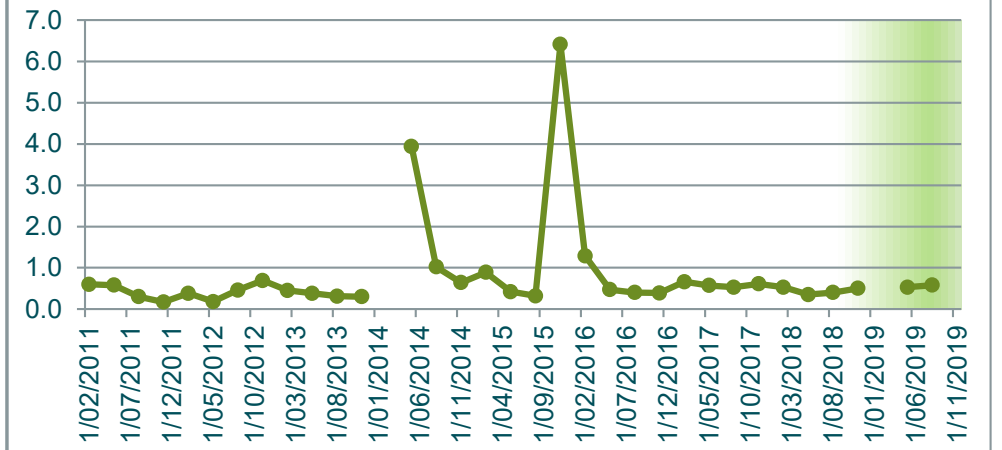
**Sulphate  
mg/L**



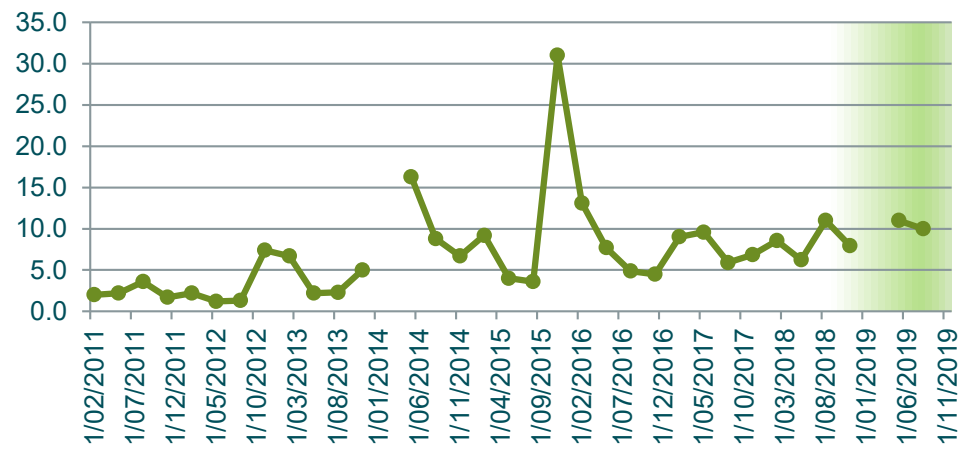
**Temperature  
C**



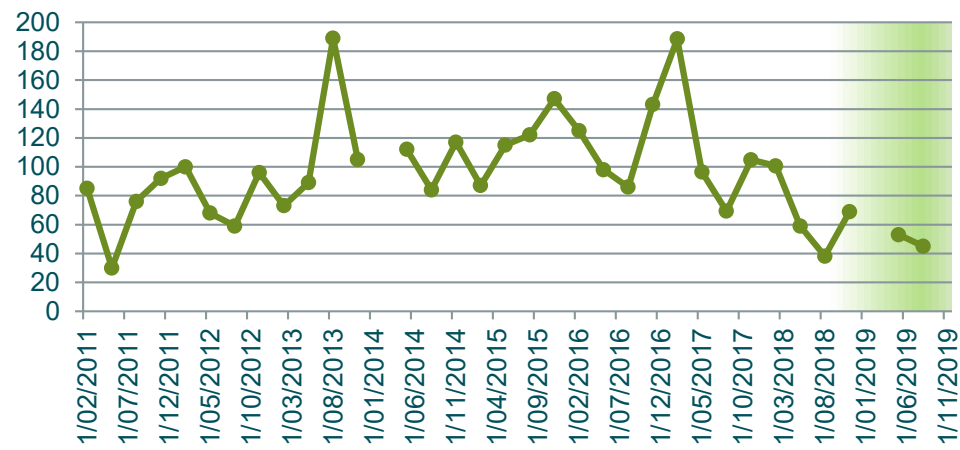
**TKN  
mg/L**



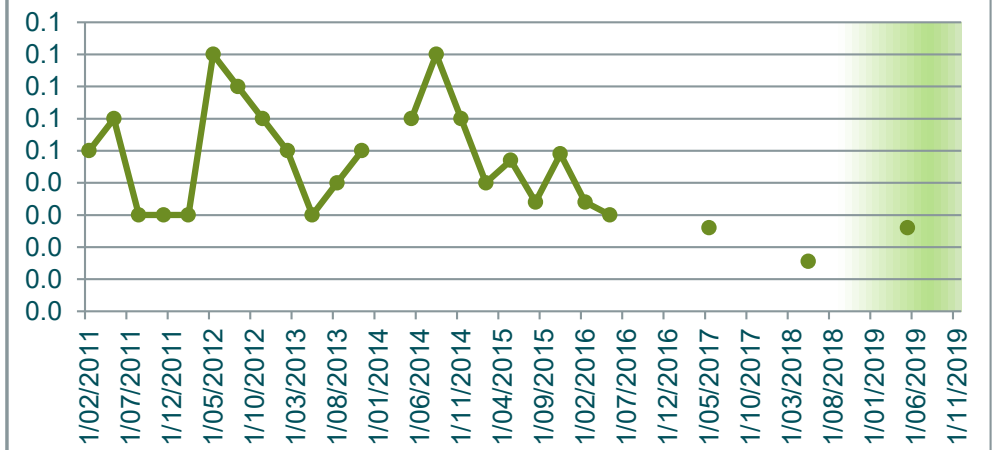
**TOC  
mg/L**



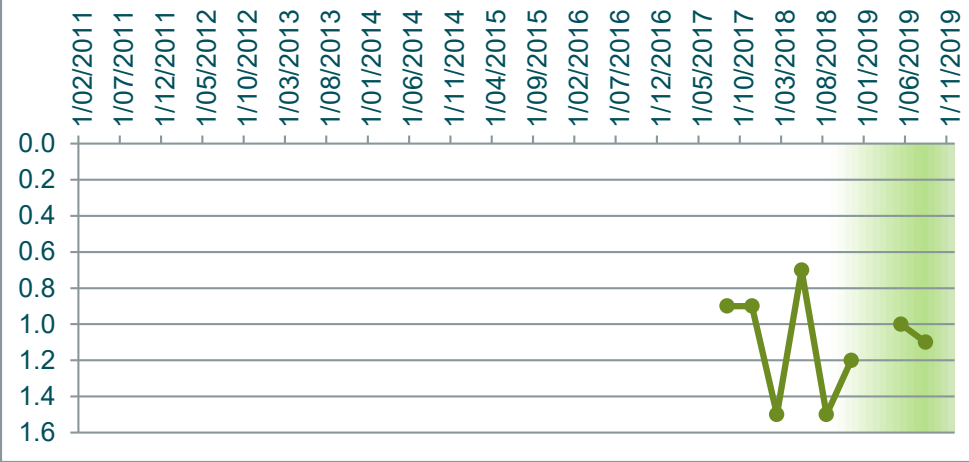
**Total Acidity  
mg/L CaCO3**



**Zinc (Total)  
mg/L**



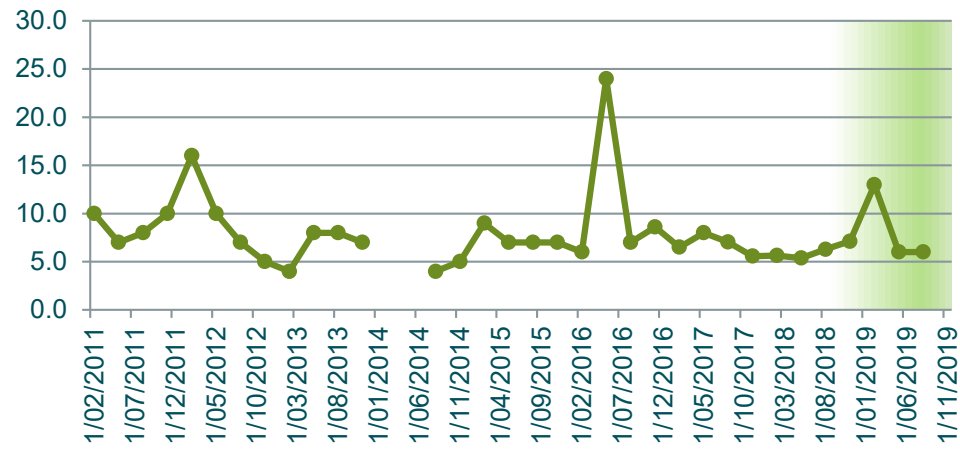
# Depth to groundwater m



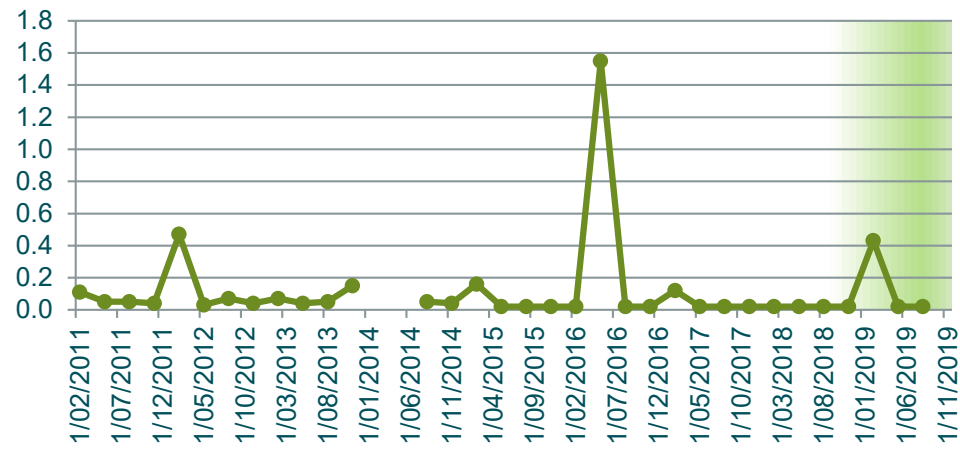


GW16	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µS/cm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride 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	Pheno/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	10.0	11.0	0.1	0.0	6.0	1.0	0.0	0.5	27.0	0.0	0.0	0.0	165	0.0	2.3	0.0	6.8	0.0	0.6	0.1	0.0	0.1	0.1	0.1	0.5	5.6		0.1	5.0	109	20.0	22.0	23.4	0.5	4.9	31	0.0				
11/05/2011	7.0	5.8	0.1	0.0	4.0	1.0	0.0	0.1	31.0	0.0	0.0	0.0	212	0.0	3.4	0.0	3.2	0.0	1.2	0.0	0.0	0.4	0.1	0.4	0.8	4.6		0.1	5.0	282	27.0	22.0	21.6	0.3	1.6	54	0.0				
10/08/2011	8.0	10.0	0.1	0.0	5.0	1.0	0.0	0.2	23.0	0.0	0.0	0.0	205	0.0	3.4	0.1	5.9	0.0	1.1	0.1	0.0	0.2	0.1	0.2	0.4	5.2		0.1	5.0	317	32.0	24.0	19.2	0.2	1.7	54	0.0				
9/11/2011	10.0	9.0	0.0	0.0	6.0	1.0	0.0	119.0	36.0	0.0	0.0	0.0	196	0.0	2.3	0.1	6.0	0.0	21.0	0.1	0.0	0.1	0.0	0.1	0.3	5.3		0.1	15.0	310	100.0	101.0	21.4	0.2	1.2	62	0.0				
7/02/2012	16.0	34.0	0.5	0.0	10.0	3.9	0.0	0.5	30.0	0.0	0.0	0.0	185	0.0	1.7	0.0	27.0	0.0	1.6	0.2	0.0	0.2	0.0	0.2	1.3	5.3		0.2	5.0	119	37.0	29.0	23.1	1.2	2.6	84	0.0				
9/05/2012	10.0	4.1	0.0	0.0	6.0	1.0	0.0	0.5	26.0	0.0	0.0	0.0	191	0.0	4.8	0.1	2.5	0.0	1.4	0.0	0.0	0.0	0.0	0.1	0.2	5.4		0.1	5.0	277	25.0	25.0	22.1	0.2	0.9	50	0.0				
7/08/2012	7.0	20.0	0.1	0.0	4.0	1.0	0.0	0.5	24.0	0.0	0.0	0.0	192	0.0	4.3	0.0	15.0	0.0	1.3	0.1	0.0	0.1	0.0	0.1	0.5	5.1		0.1	5.0	197	22.0	26.0	19.4	0.4	0.9	42	0.1				
14/11/2012	5.0	41.0	0.0	0.0	3.0	1.0	0.0	0.4	29.0	0.0	0.0	0.0	200	0.0	5.8	0.1	26.0	0.0	1.1	0.2	0.0	0.3	0.0	0.3	1.0	5.1		0.2	5.0	193	29.0	22.0	22.3	0.7	2.7	48	0.1				
14/02/2013	4.0	19.0	0.1	0.0	2.0	1.0	0.0	0.7	26.0	0.0	0.0	0.0	183	0.0	3.3	0.1	11.0	0.0	2.0	0.1	0.0	3.2	0.0	3.2	3.2	5.0		0.1	5.0	211	27.0	16.0	24.5	0.1	1.2	46	0.0				
15/05/2013	8.0	12.0	0.0	0.0	5.0	1.2	0.0	0.7	25.0	0.0	0.0	0.0	162	0.0	3.9	0.0	7.0	0.0	1.3	0.1	0.0	1.8	0.0	1.8	2.0	5.3		0.0	5.0	159	24.0	20.0	21.8	0.2	1.0	62	0.0				
7/08/2013	8.0	17.0	0.1	0.0	5.0	1.0	0.0	0.4	24.0	0.0	0.0	0.0	144	0.0	5.0	0.0	9.6	0.0	1.1	0.1	0.0	0.4	0.0	0.4	0.8	5.5		0.2	5.0	162	26.0	23.0	19.0	0.4	1.0	65	0.0				
13/11/2013	7.0	42.0	0.2	0.0	4.0	1.0	0.0	0.3	28.0	0.0	0.0	0.0	198	0.0	2.8	0.0	28.0	0.0	1.1	0.3	0.0	0.7	0.0	0.7	1.7	5.2		0.1	5.0	147	37.0	30.0	21.4	1.1	1.1	68	0.1				
11/02/2014																																									
13/05/2014																																									
13/08/2014	4.0	20.0	0.1	0.0	2.0	3.0	0.0	0.2	29.0	0.0	0.0	0.0	191	0.0	5.4	0.0	9.2	0.0	1.4	0.1	0.0	4.7	0.0	4.7	5.5	6.8		0.2	5.0	158	35.0	19.0	19.0	0.8	1.0	56	0.1				
11/11/2014	5.0	8.0	0.0	0.0	3.0	1.8	0.0	0.3	31.0	0.0	0.0	0.0	187	0.0	3.8	0.0	3.6	0.0	1.4	0.1	0.0	3.0	0.0	3.0	3.4	6.0		0.2	5.0	147	33.4	21.0	20.9	0.4	0.8	51	0.0				
10/02/2015	9.0	8.9	0.2	0.0	5.0	3.6	0.0	0.9	28.0	0.0	0.0	0.0	168	0.0	2.8	0.2	3.3	0.0	1.8	0.1	0.0	4.2	0.0	4.2	5.0	5.9		0.2	5.0	107	25.0	14.0	23.7	0.8	1.3	44	0.0				
12/05/2015	7.0	21.8	0.0	0.0	4.0	3.9	0.0	0.7	34.0	0.0	0.0	0.0	179	0.0	4.5	0.0	10.2	0.0	1.6	0.1	0.0	1.3	0.0	1.3	2.3	5.2		0.2	5.0	159	32.0	16.0	21.8	1.1	0.9	47	0.0				
12/08/2015	7.0	16.2	0.0	0.0	7.0	3.0	0.0	0.3	34.0	0.0	0.0	0.0	189	0.0	4.7	0.0	9.5	0.0	1.5	0.1	0.0	0.5	0.0	0.5	1.4	5.4		0.1	5.0	210	34.0	18.0	18.5	0.8	1.1	47	0.0				
11/11/2015	7.0	5.8	0.0	0.0	7.0	2.4	0.0	0.7	20.0	0.0	0.0	0.0	156	0.0	5.4	0.0	2.5	0.0	2.1	0.1	0.0	5.1	0.0	5.1	5.2	5.2		0.1	5.0	147	24.0	12.0	20.7	0.1	0.9	37	0.0				
9/02/2016	6.0	30.8	0.0	0.0	6.0	2.1	0.0	0.4	27.0	0.0	0.0	0.0	176	0.0	4.1	0.0	15.5	0.0	1.6	0.1	0.0	3.4	0.0	3.4	4.4	5.3		0.2	5.0	195	30.7	14.6	22.9	1.0	1.7	81	0.1				
10/05/2016	24.0	5.6	1.6	0.0	24.0	10.5	0.0	0.7	28.0	0.0	0.0	0.0	193	0.0	1.5	0.0	3.3	0.0	1.8	0.1	0.0	0.2	0.0	0.2	4.1	5.7		0.6	5.0	109	31.1	36.7	22.8	3.9	4.6	77	0.0				
10/08/2016	7.0		0.0		7.0	4.2		0.5	24.0				179		4.2	0.0			1.7			3.8	0.0	3.8	4.3	5.2		0.2	5.0	233	30.4	18.2	19.2	0.5	0.8	54					
8/11/2016	8.6		0.0		9.0	1.0		0.3	32.5				189		2.1	0.0			1.5			0.5	0.0	0.5	0.8	5.1		0.1	5.0	411	35.1	23.9	20.7	0.3	0.9	93					
8/02/2017	6.5		0.1		6.0	1.2		0.2	33.0				202		3.8	0.0			1.0			1.9	0.0	1.9	3.1	5.0		0.3	5.0	297	32.8	21.2	23.2	1.1	1.3	96					
9/05/2017	8.0	11.9	0.0	0.0	8.0	1.8	0.0	0.4	24.0	0.0	0.0	0.0	136	0.0	4.0	0.0	6.2	0.0	1.2	0.1	0.0	1.7	0.0	1.7	2.3	5.3		0.1	5.0	402	23.1	14.6	21.6	0.6	1.7	40	0.0				
9/08/2017	7.0		0.0		7.0	1.5		0.3	45.0				159		4.9	0.0			1.0			0.7	0.0	0.7	1.4	5.3		0.2	5.0	392	27.3	16.2	19.0	0.7	1.2	37		1.7			
8/11/2017	5.6		0.0		6.0	1.0		0.5	23.5				142		4.2	0.0			1.5			2.3	0.0	2.3	2.7	4.6		0.1	5.0	436	22.5	11.7	21.1	0.4	1.0	33		1.3			
14/02/2018	5.6		0.0		6.0	1.0		0.2	28.0				166		3.9	0.0			1.2			1.6	0.0	1.6	1.7	5.1		0.1	5.0	371	29.3	18.0	24.0	0.1	1.0	38		2.2			
9/05/2018	5.4	10.7	0.0	0.0	5.0	1.0	0.0	0.8	27.5	0.0	0.0	0.0	183	0.0	4.6	0.0	4.4	0.0	1.9	0.1	0.0	5.2	0.0	5.2	5.5	5.2		0.1	0.5	385	30.1	16.4	22.1	0.3	0.9	40	0.0	1.2			
15/08/2018	6.3		0.0		6.0	1.5		0.3	28.5				178		4.3	0.0			1.5			1.8	0.0	1.8	2.2	5.2		0.1	0.5	438	32.4	21.1	18.6	0.4	5.3	39		2.1			
14/11/2018	7.1		0.0		7.0	1.5		0.4	27.0				173		3.5	0.0			1.7			1.8	0.0	1.8	2.4	5.3		0.2	0.5	155	30.4	20.9	20.3	0.7	2.0	106		1.9			
13/02/2019	13.0		0.4		13.0	3.9		0.3	31.5				198		3.5	0.0			1.2			0.8	0.0	0.8	3.2	5.5	0.0	0.4	0.5	183	34.9	26.1	23.1	2.4	1.7	62		3.4			
15/05/2019	6.0	20.2	0.0	0.0	6.0	1.0	0.0	0.4	22.0	0.0	0.0	0.0	143	0.0	5.7	0.0	7.3	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	27.0	19.0	21.3	0.5	1.3	32	0.0	1.6			
14/08/2019	6.0		0.0		6.0	1.2		0.3	24.0				152		4.9	0.0			1.3			0.5	0.0	0.5	1.2	5.3	0.0	0.2	0.5	410	29.0	23.0	18.1	0.7	1.8	37		1.8			
13/11/2019																																									
2019 Min	6.0	20.2	0.0	0.0	6.0	1.0	0.0	0.3	22.0	0.0	0.0	0.0	143	0.0	3.5	0.0	7.3	0.0	1.2	0.1	0.0	0.5	0.0	0.5	1.2	5.3	0.0	0.1	0.5	183	27.0	19.0	18.1	0.5	1.3	32	0.0	1.6			
2019 Max	13.0	20.2	0.4	0.0	13.0	3.9	0.0	0.4	31.5	0.0	0.0	0.0	198	0.0	5.7	0.0	7.3	0.0	1.4	0.1	0.0	1.8	0.0	1.8	3.2	5.5	0.0	0.4	0.5	410	34.9	26.1	23.1	2.4	1.8	62	0.0	3.4			
2019 Mean	8.3	20.2	0.2	0.0	8.3	2.0	0.0	0.3	25.8	0.0	0.0	0.0	164	0.0	4.7	0.0	7.3	0.0	1.3	0.1	0.0	1.0	0.0	1.0	2.2	5.4	0.0	0.2	0.5	273	30.3	22.7	20.8	1.2	1.6	44	0.0	2.3			
Long-term Average	7.9	16.7	0.1	0.0	6.4	2.0	0.0	4.0	28.2	0.0	0.0	0.0	178	0.0	3.9	0.0	9.7	0.0																							

**Alkalinity  
mg/L as CaCO3**



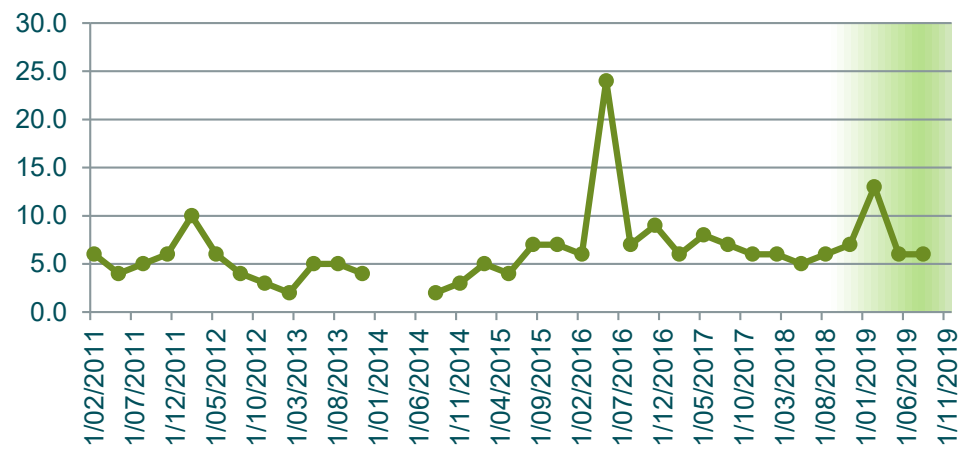
**Ammonia  
mg/L**



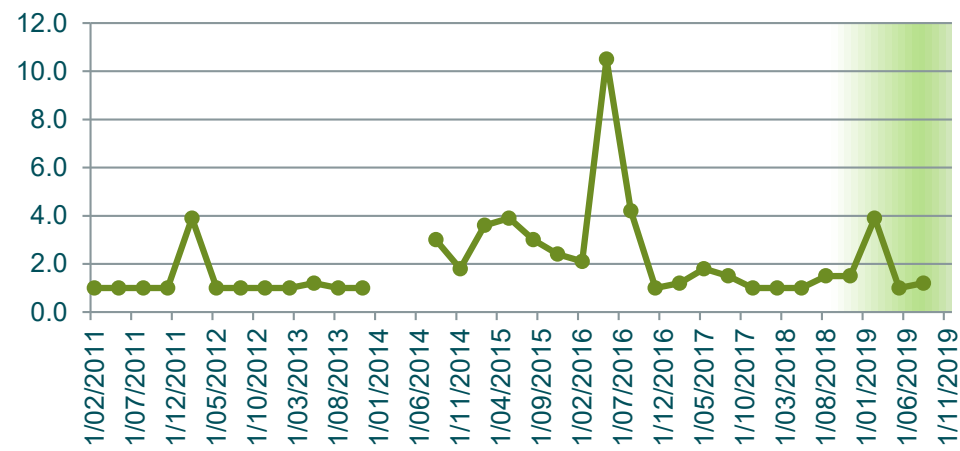
**Arsenic (Total)  
mg/L**



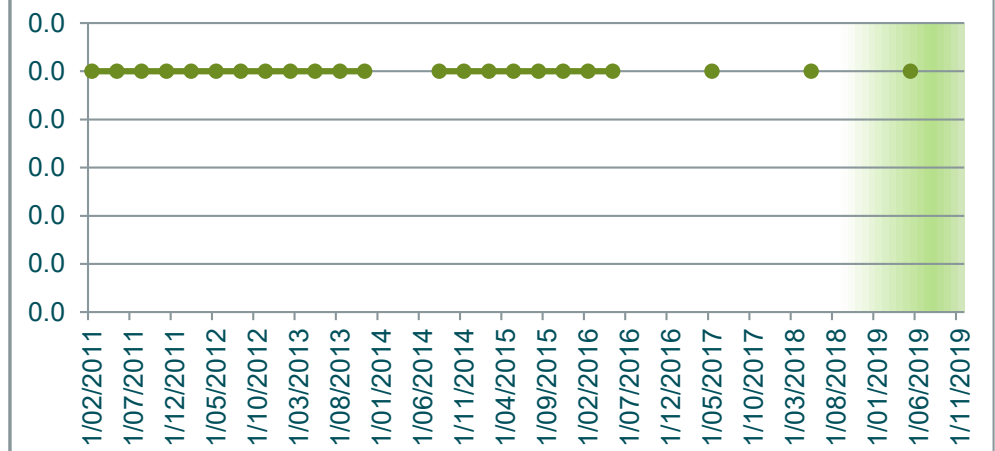
**Bicarbonate HCO3  
mg/L**



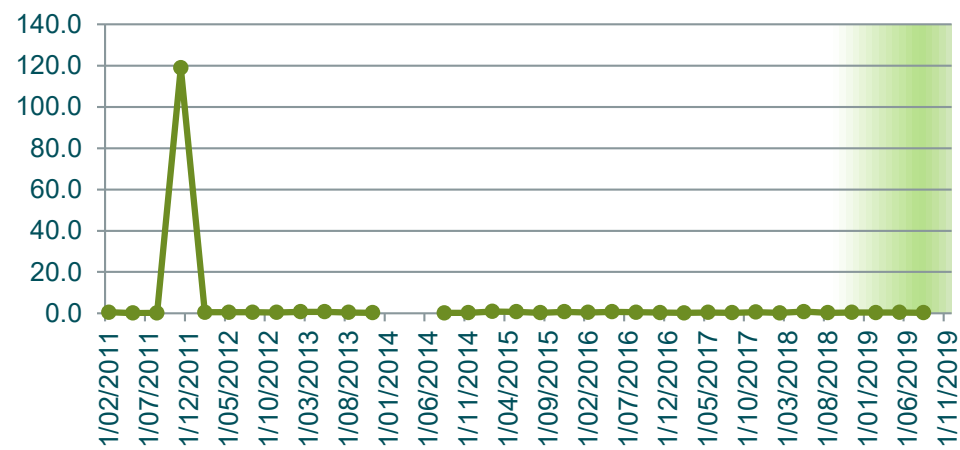
**BOD5  
mg/L**



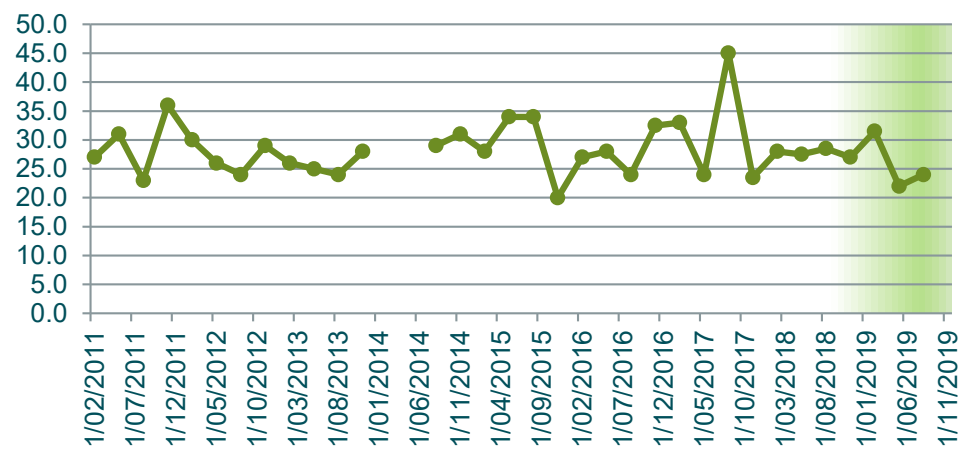
**Cadmium (Total)  
mg/L**



**Calcium (Total)  
mg/L**



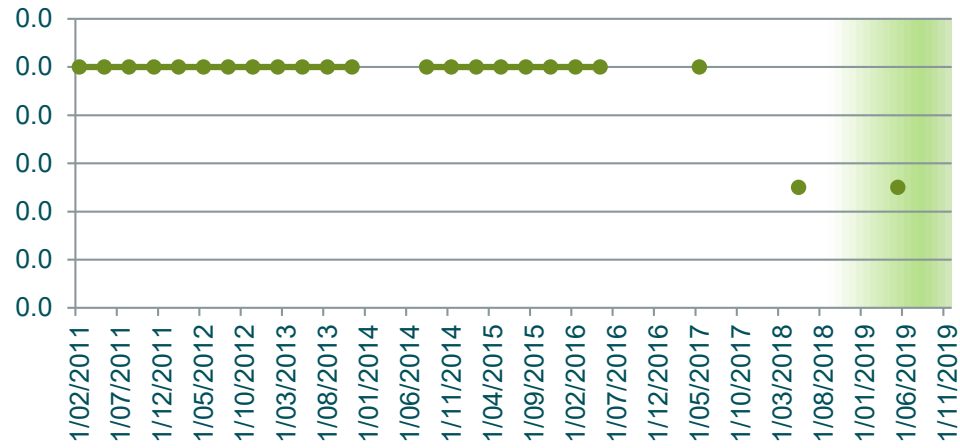
**Chloride  
mg/L**



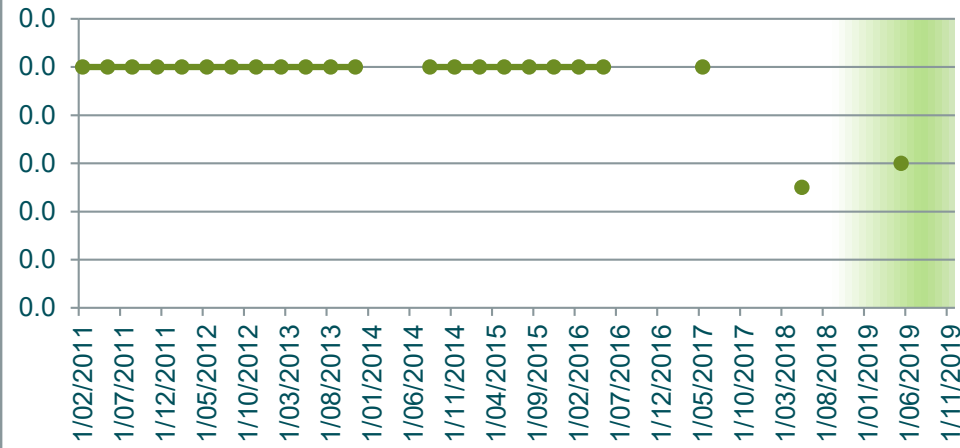
**Chromium (Total)  
mg/L**



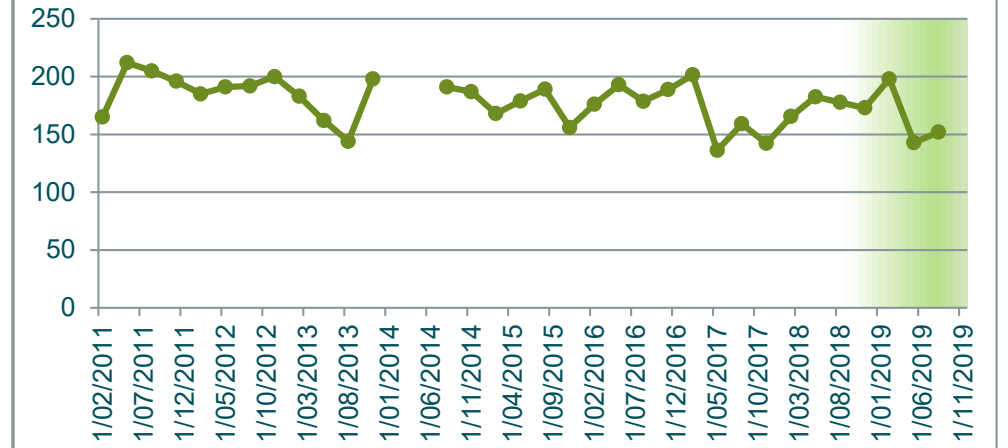
### Chromium 3 mg/L



### Chromium 6 mg/L



### Conductivity µScm-1



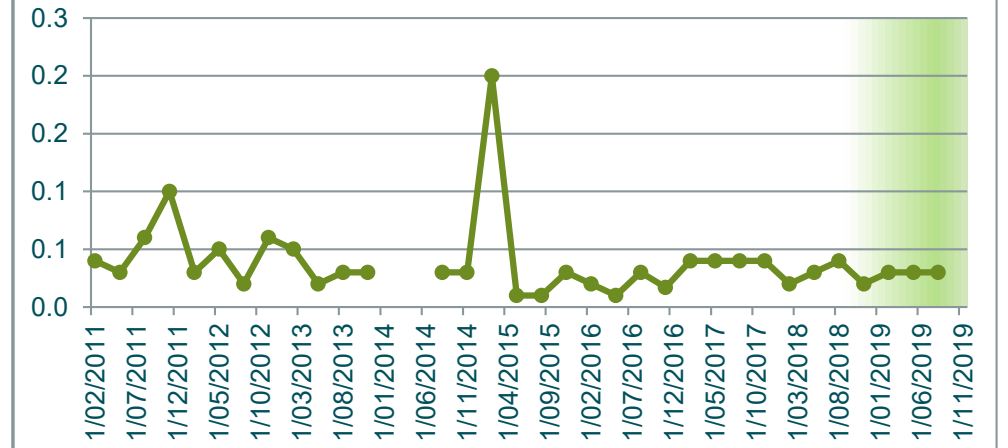
### Copper (Total) mg/L



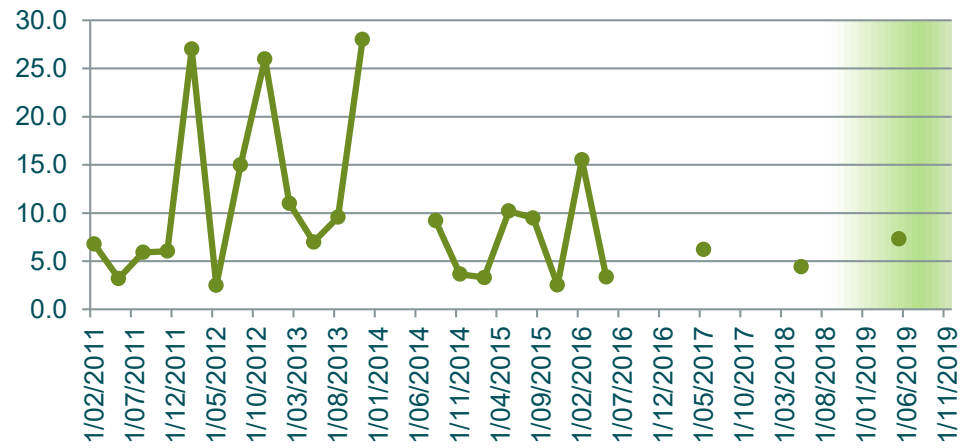
### DO (Membrane Electrode) mg/L



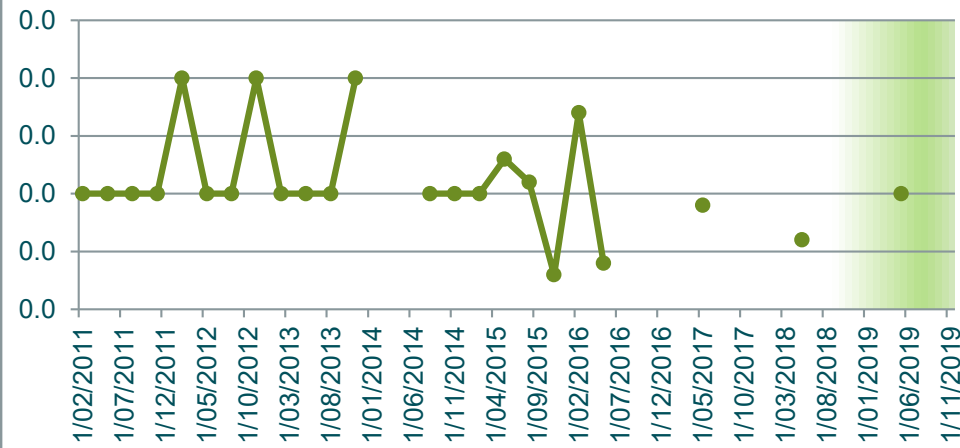
### Flouride mg/L



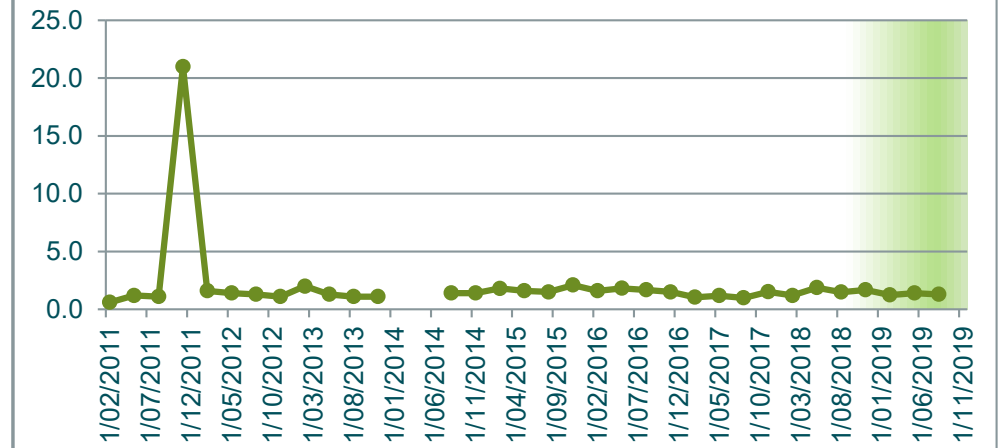
### Iron Total mg/L



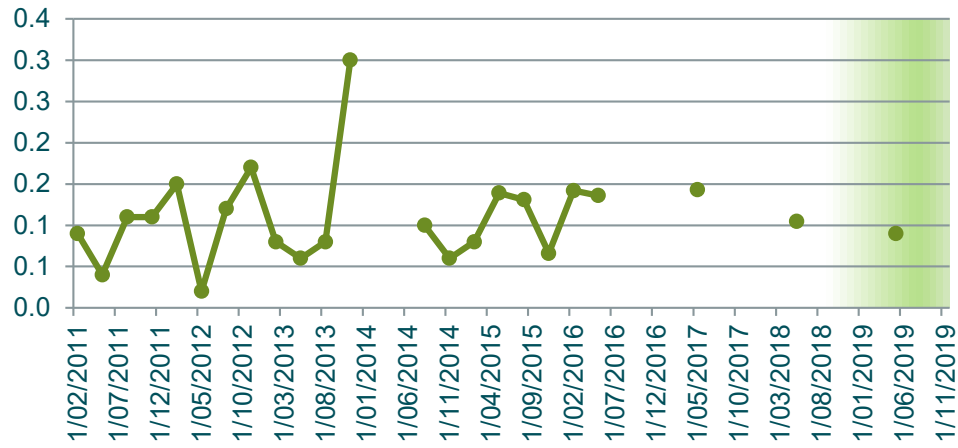
### Lead (Total) mg/L



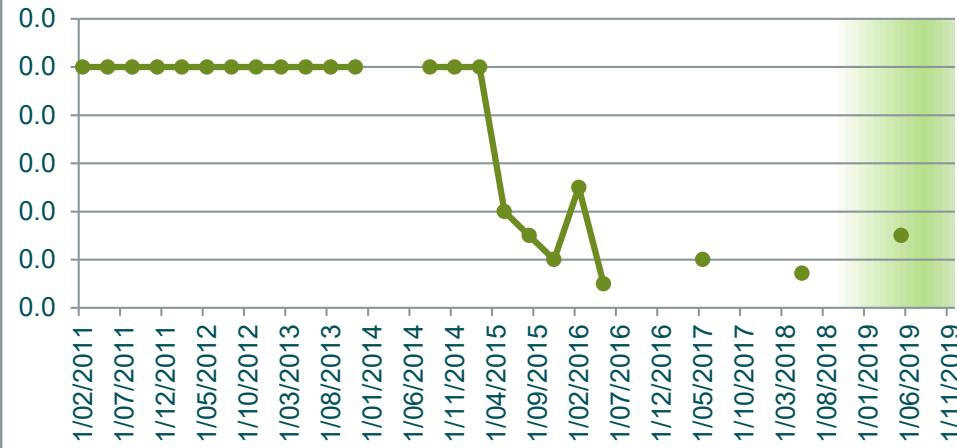
### Magnesium (Total) mg/L



**Manganese Total**  
mg/L



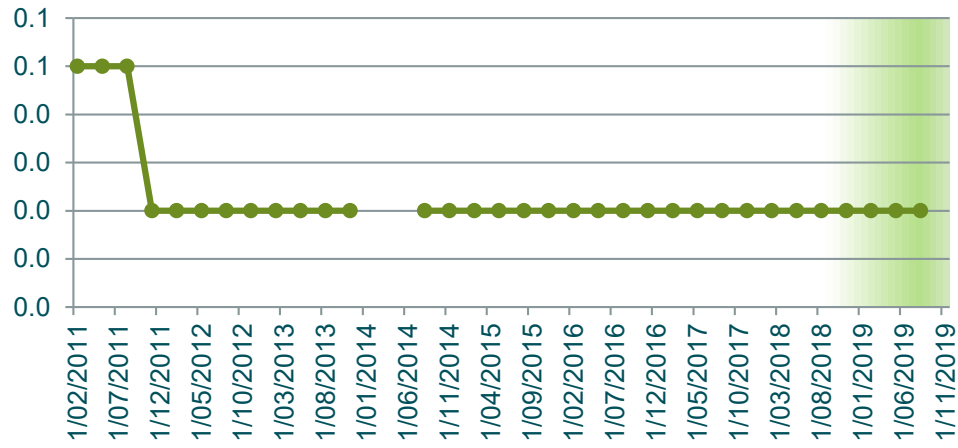
**Nickel (Total)**  
mg/L



**Nitrate**  
N mg/L



**Nitrite**  
N mg/L



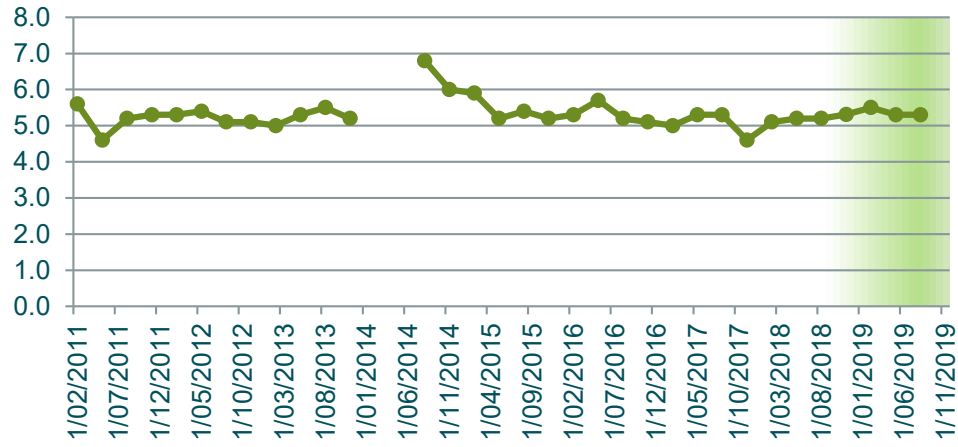
**Nitrogen Oxidised**  
mg/L



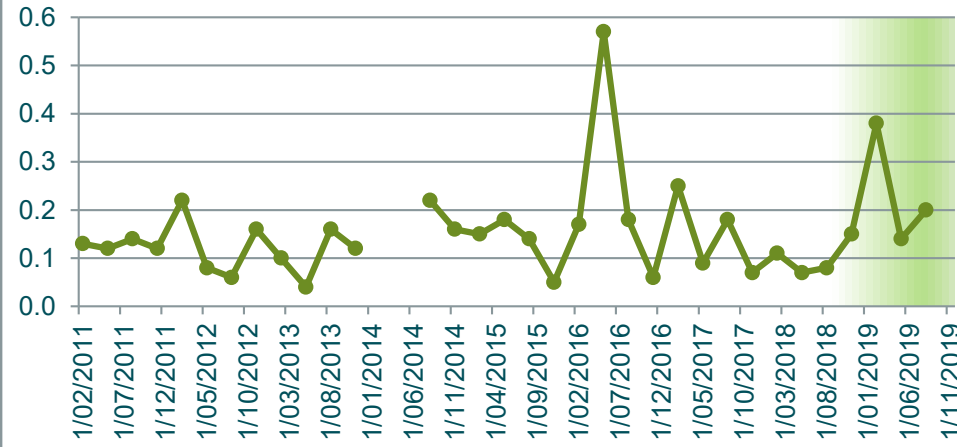
**Nitrogen Total**  
mg/L



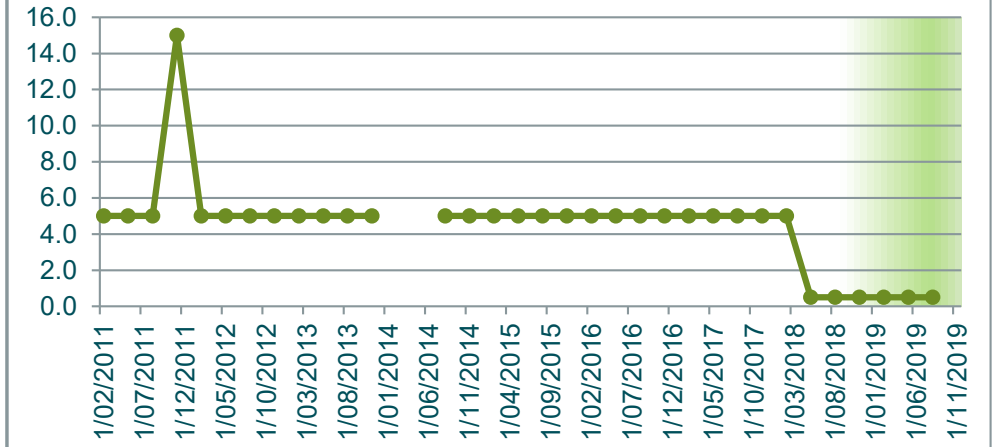
**pH**  
pH units



**Phosphorus Total**  
mg/L



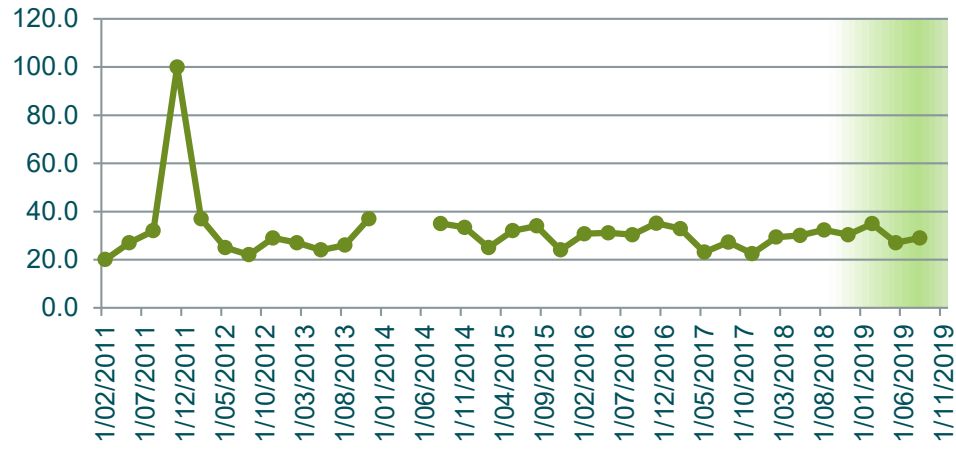
**Potassium Total**  
mg/L



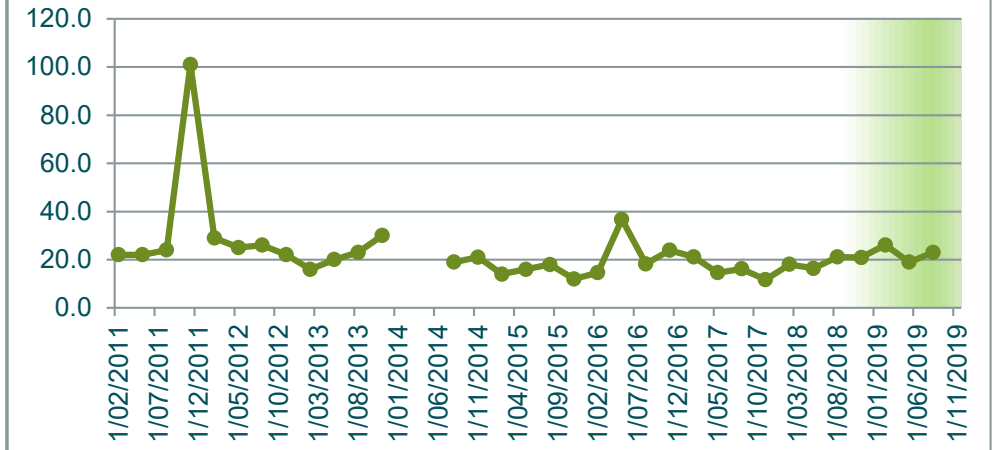
**Redox Potential  
mV**



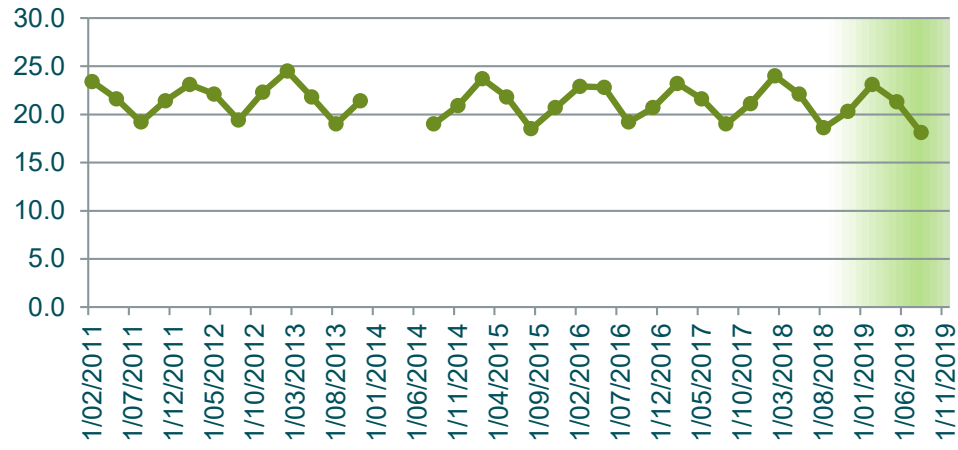
**Sodium (Total)  
mg/L**



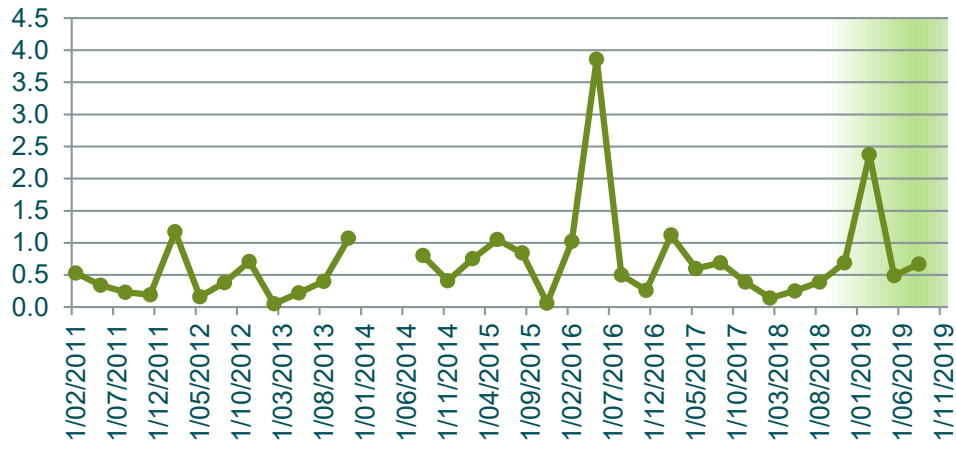
**Sulphate  
mg/L**



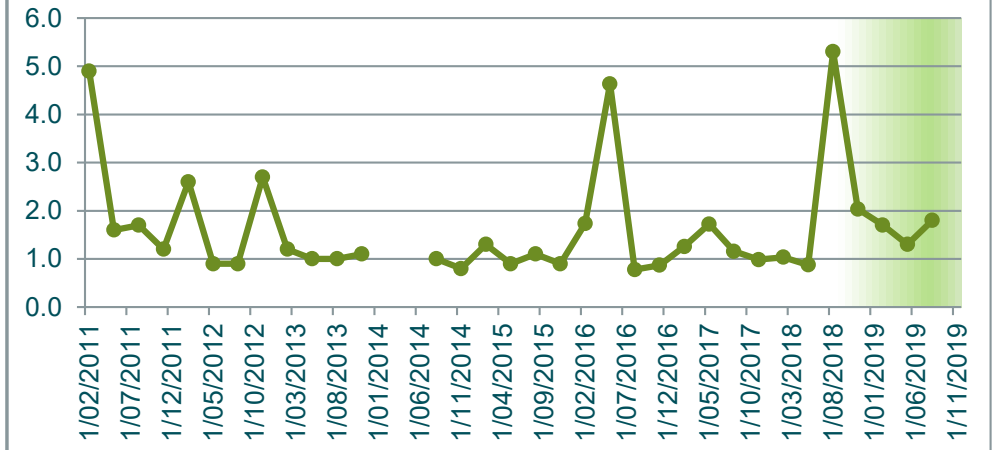
**Temperature  
C**



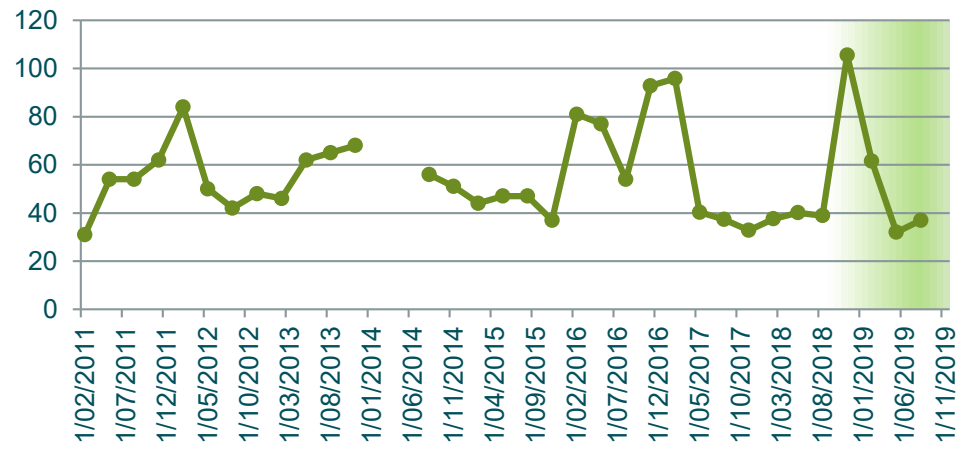
**TKN  
mg/L**



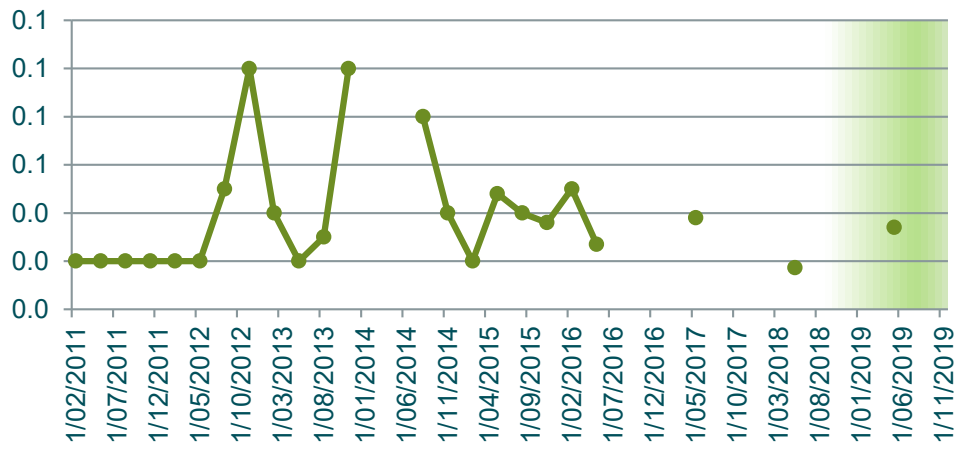
**TOC  
mg/L**



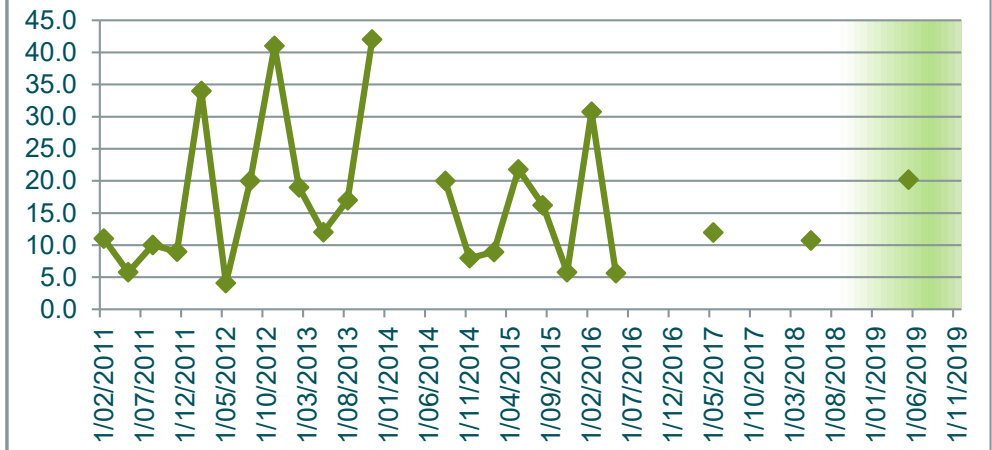
**Total Acidity  
mg/L CaCO3**



**Zinc (Total)  
mg/L**

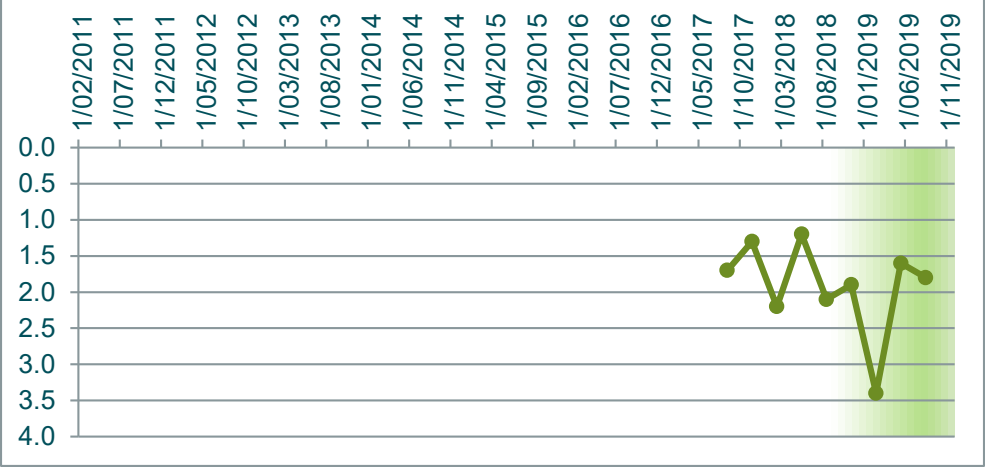


**Aluminium (Total)  
mg/L**



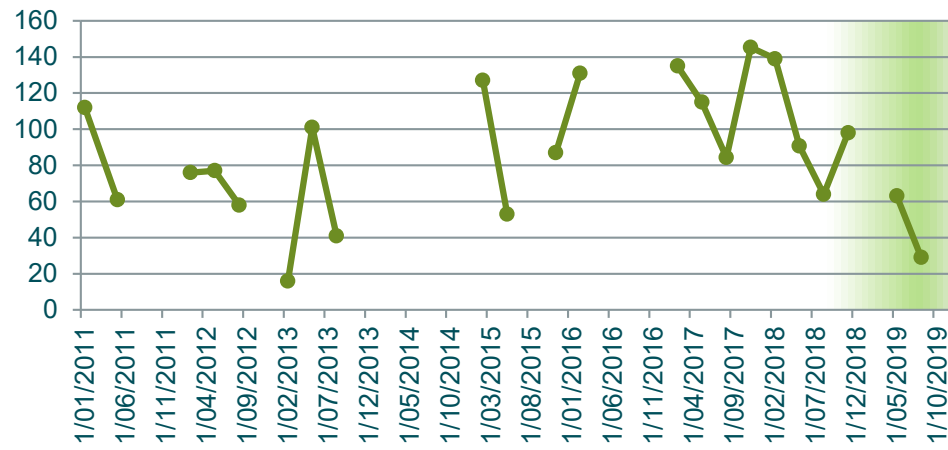


# Depth to Groundwater m

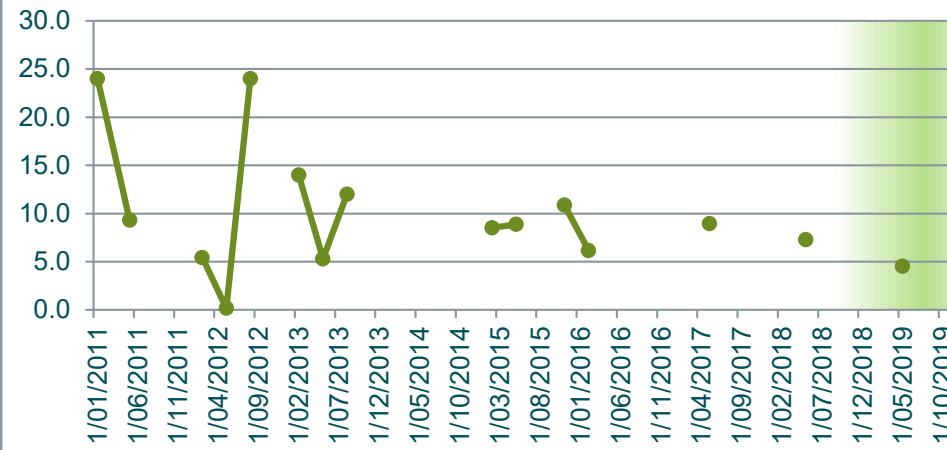


GW17	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µS/cm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride 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																																											
2019 Min	29	4.5	0.7	0.0	29.0	4.8	0.0	41.0	18.0	0.0	0.0	0.0	473	0.0	3.7	0.2	35.5	0.0	8.5	0.5	0.0	0.0	0.0	0.0	1.4	5.6		0.5	3.3	53	31.0	147	20.6	1.4	14.0	150	0.0	2.1					
2019 Max	63	4.5	0.8	0.0	63.0	4.8	0.0	55.0	28.0	0.0	0.0	0.0	584	0.0	3.8	0.2	35.5	0.0	11.0	0.5	0.0	0.0	0.0	0.0	2.1	5.8		0.6	4.5	274	40.0	184	22.7	2.1	18.0	200	0.0	2.2					
2019 Mean	46	4.5	0.7	0.0	46.0	4.8	0.0	48.0	23.0	0.0	0.0	0.0	529	0.0	3.8	0.2	35.5	0.0	9.8	0.5	0.0	0.0	0.0	0.0	1.7	5.7		0.5	3.9	164	35.5	166	21.7	1.7	16.0	175	0.0	2.2					
Long-term Average	87	10.0	0.6	0.0	73.6	5.7	0.0	34.1	38.5	0.0	0.0	0.0	478	0.0	3.7	0.2	34.7	0.0	8.4	0.3	0.0	0.0	0.0	0.0	1.7	5.9		0.4	4.7	59	33.1	76	22.6	1.7	16.3	193	0.1	2.3					

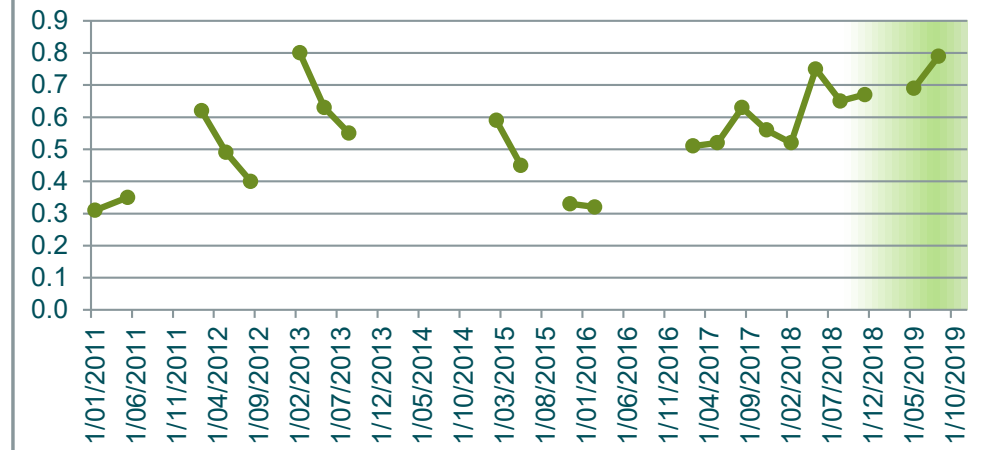
**Alkalinity**  
mg/L as CaCO<sub>3</sub>



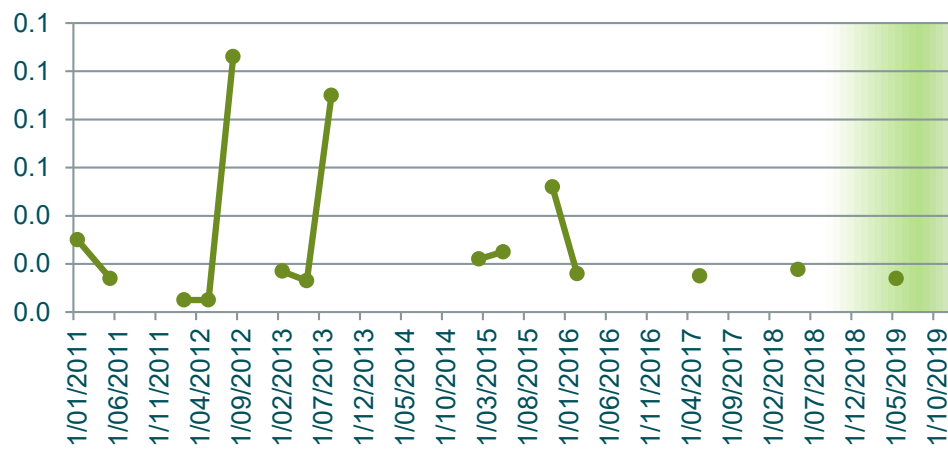
**Aluminium (Total)**  
mg/L



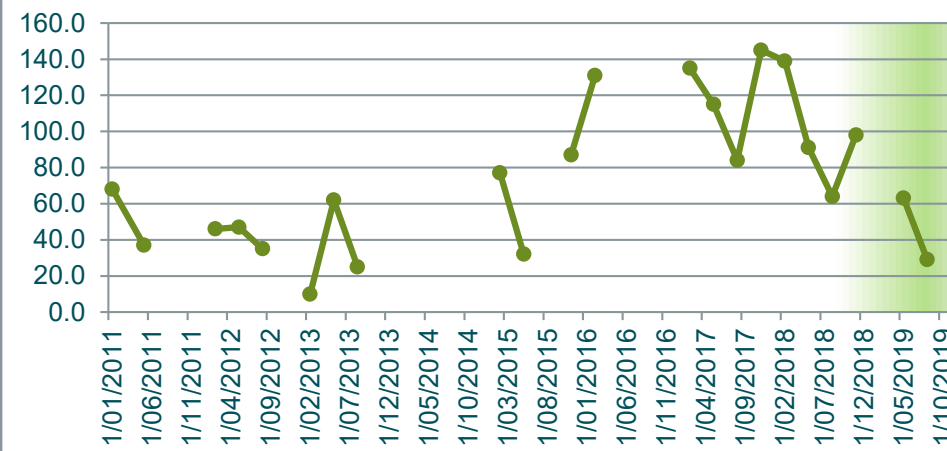
**Ammonia**  
mg/L



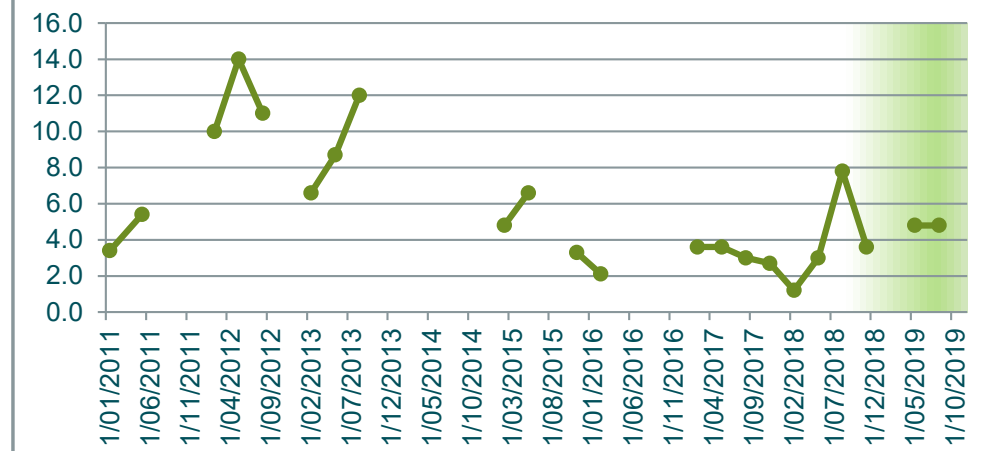
**Arsenic (Total)**  
mg/L



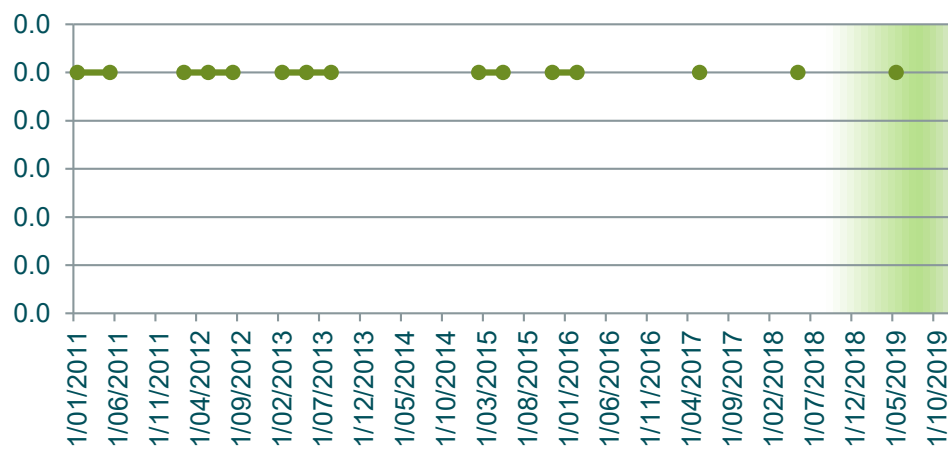
**Bicarbonate HCO<sub>3</sub>**  
mg/L



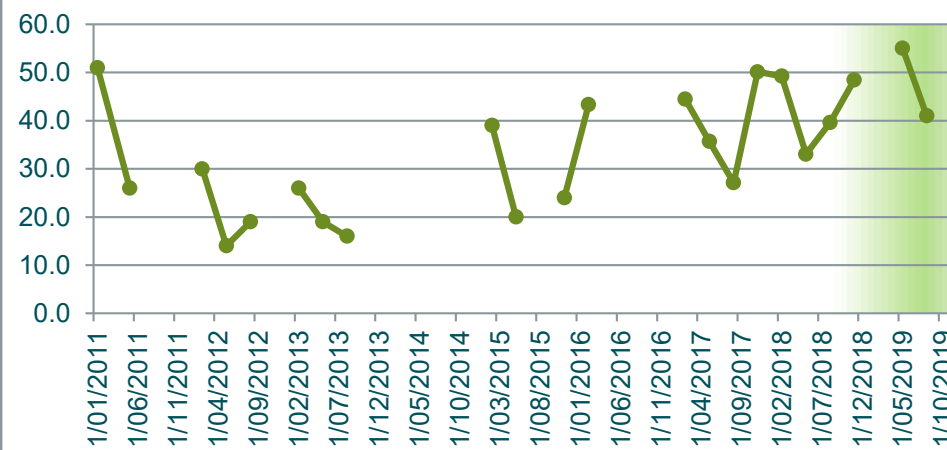
**BOD<sub>5</sub>**  
mg/L



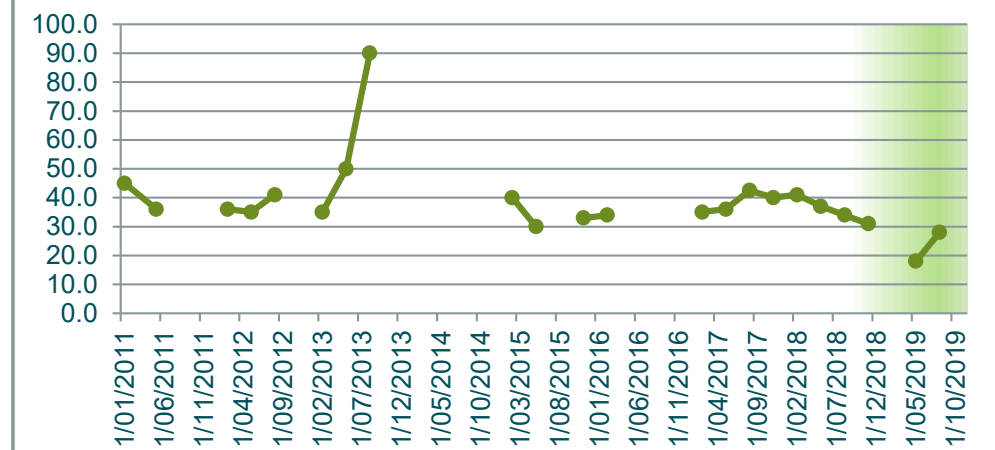
**Cadmium (Total)**  
mg/L



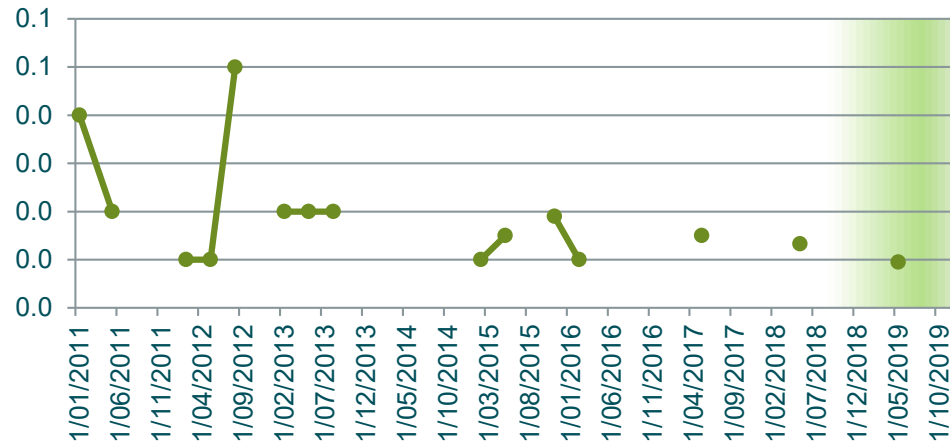
**Calcium (Total)**  
mg/L



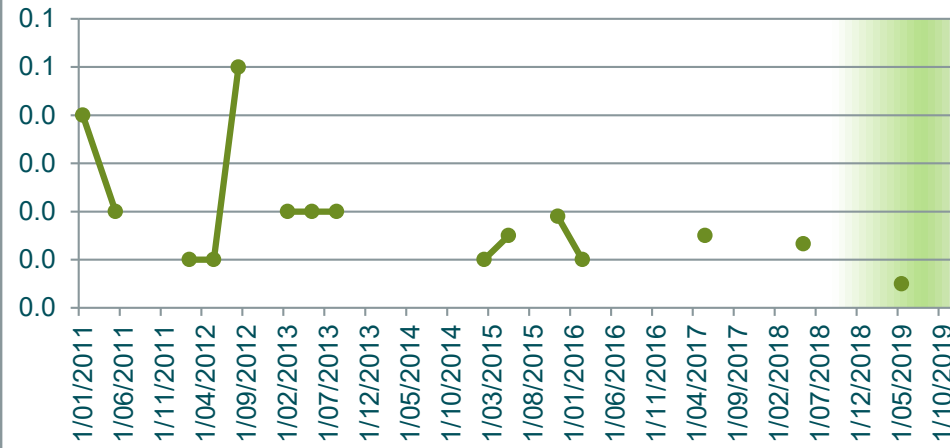
**Chloride**  
mg/L



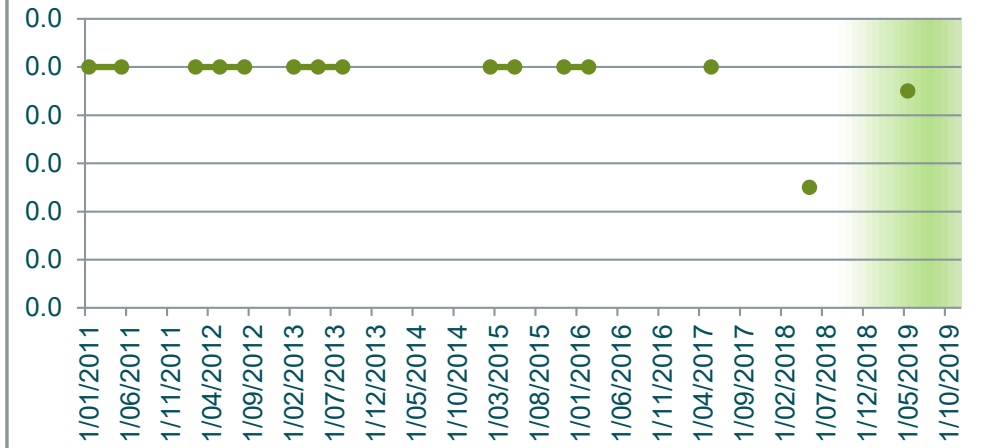
**Chromium (Total)  
mg/L**



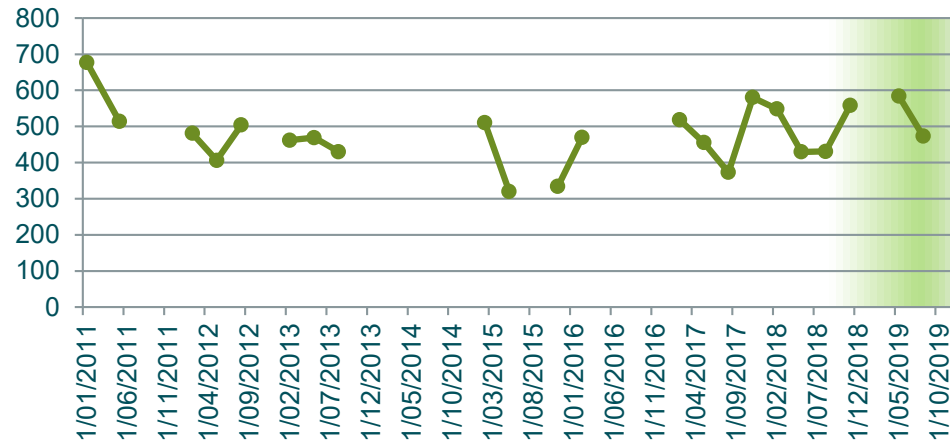
**Chromium 3  
mg/L**



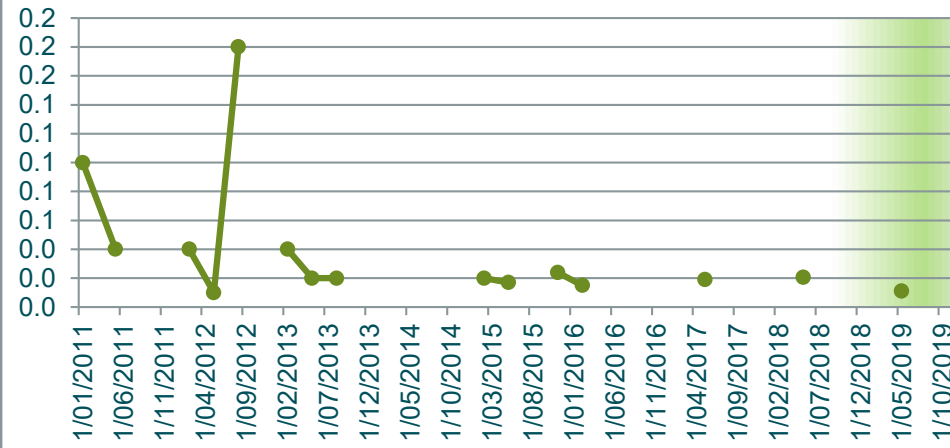
**Chromium 6  
mg/L**



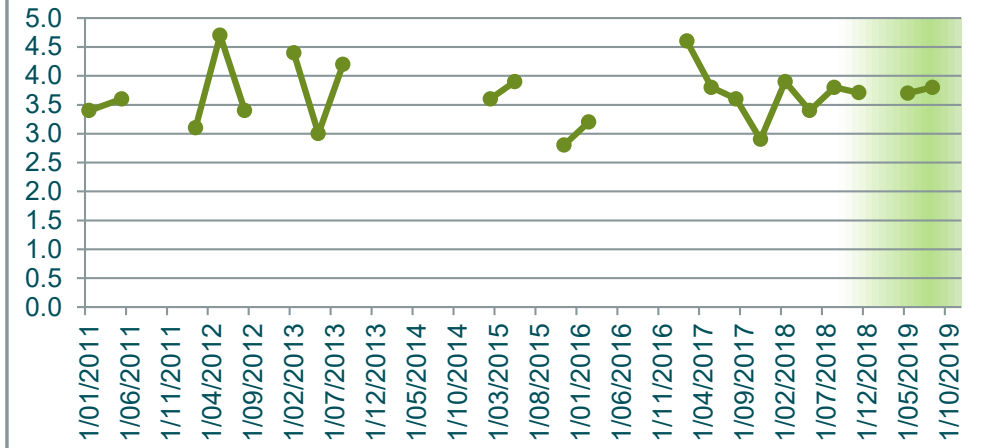
**Conductivity  
µScm-1**



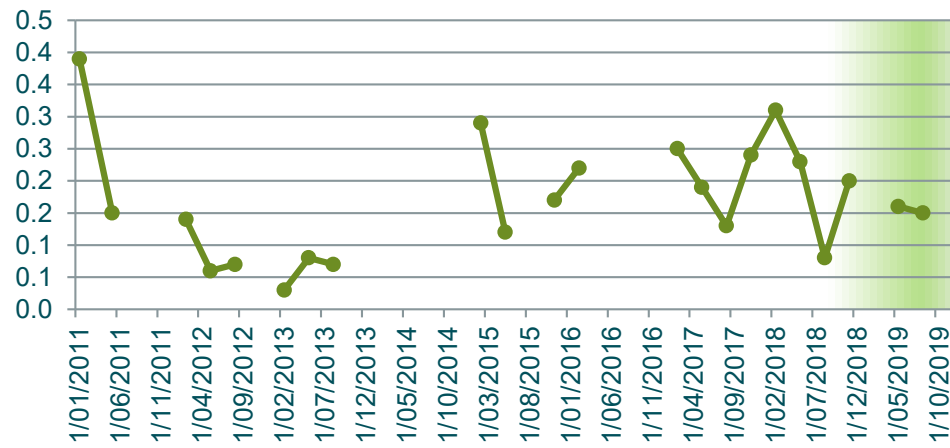
**Copper (Total)  
mg/L**



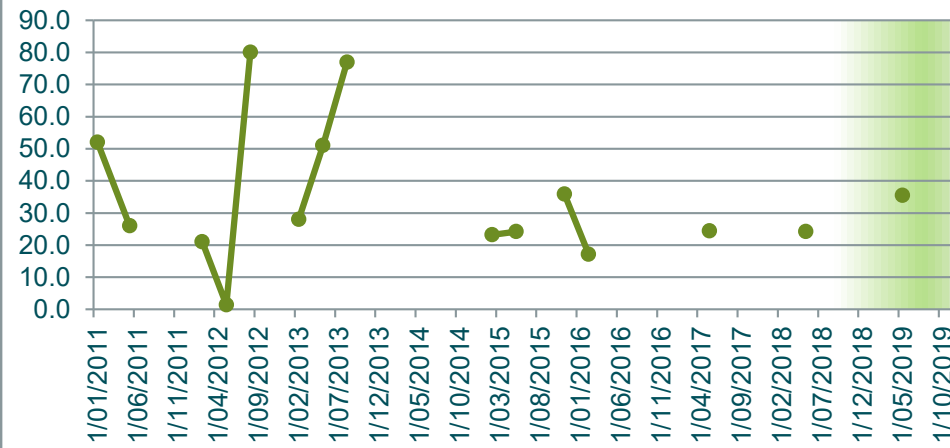
**DO (Membrane Electrode)  
mg/L**



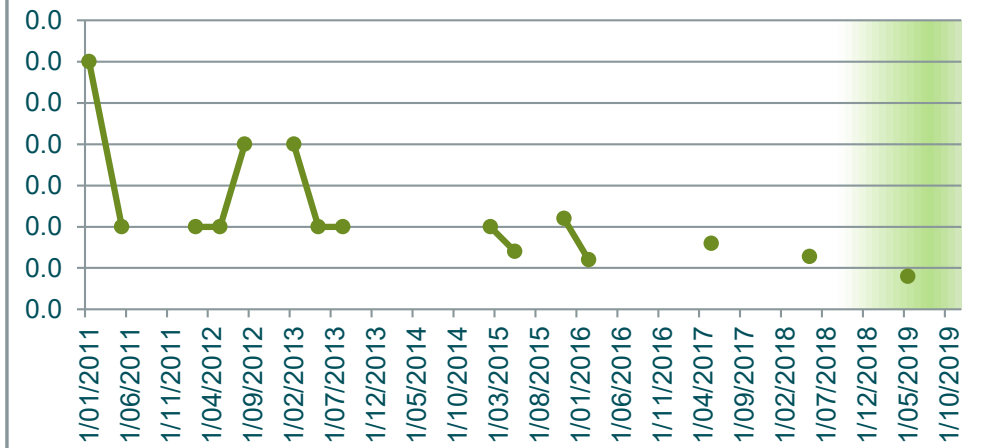
**Flouride  
mg/L**



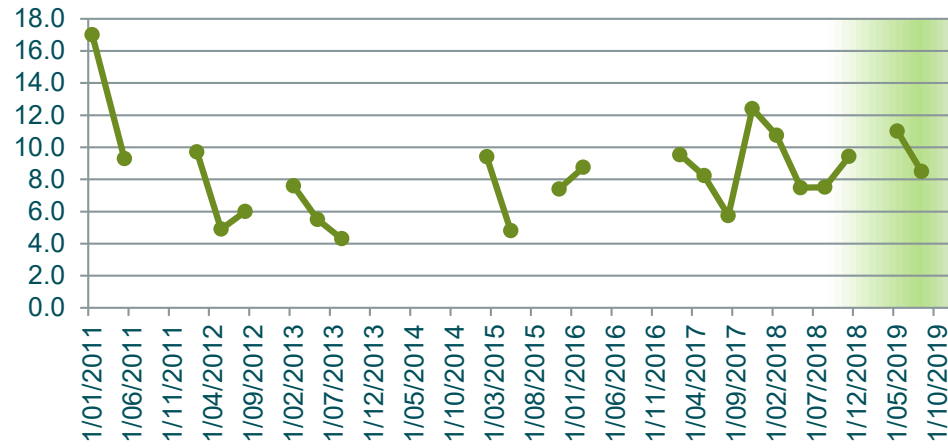
**Iron Total  
mg/L**



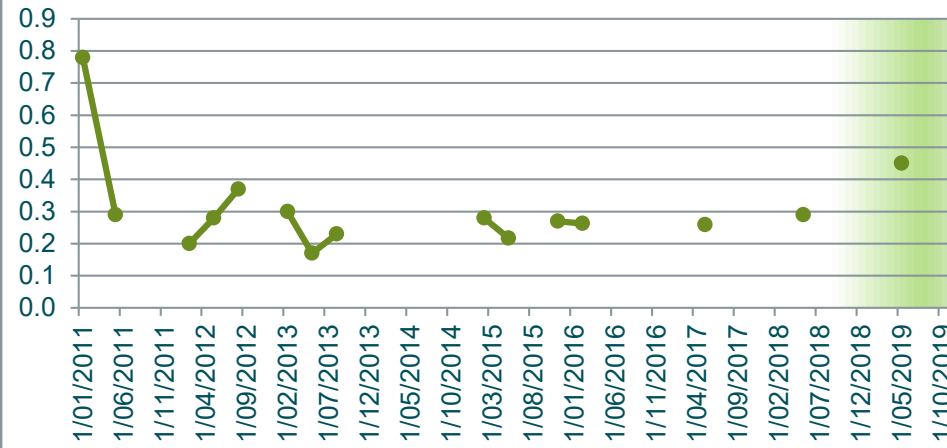
**Lead (Total)  
mg/L**



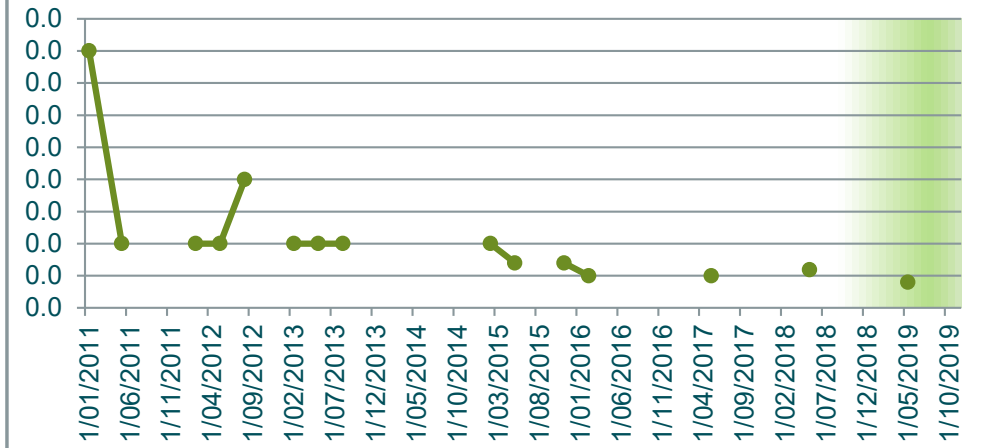
**Magnesium (Total)  
mg/L**



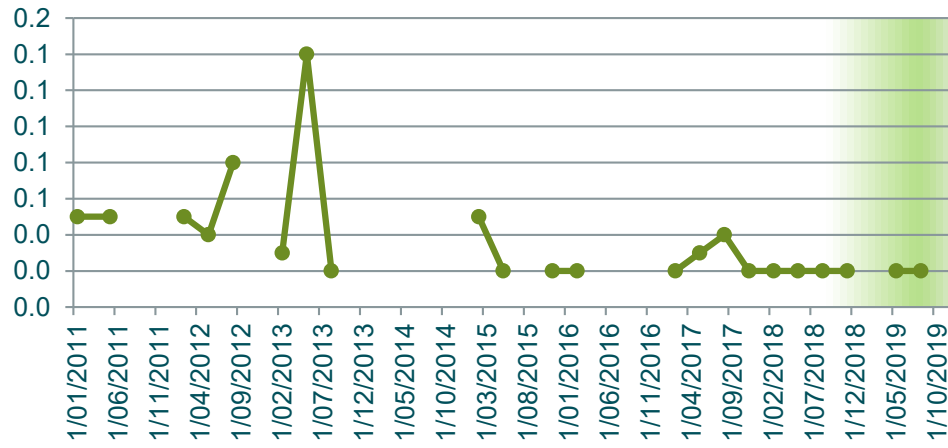
**Manganese Total  
mg/L**



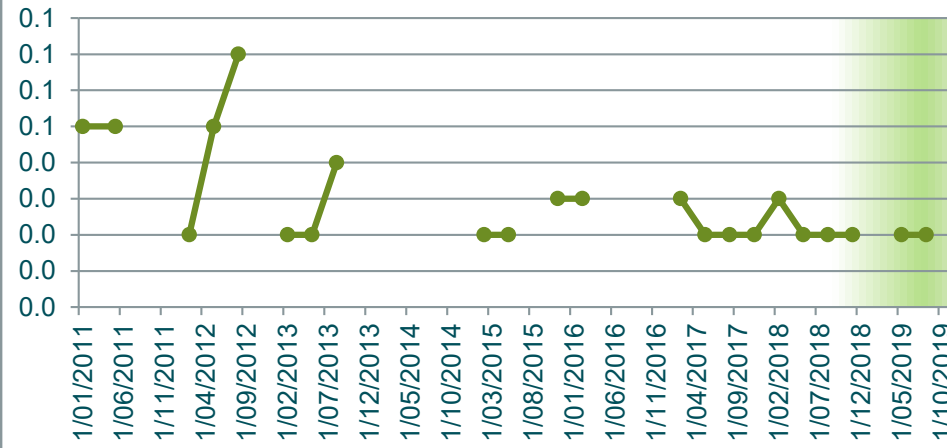
**Nickel (Total)  
mg/L**



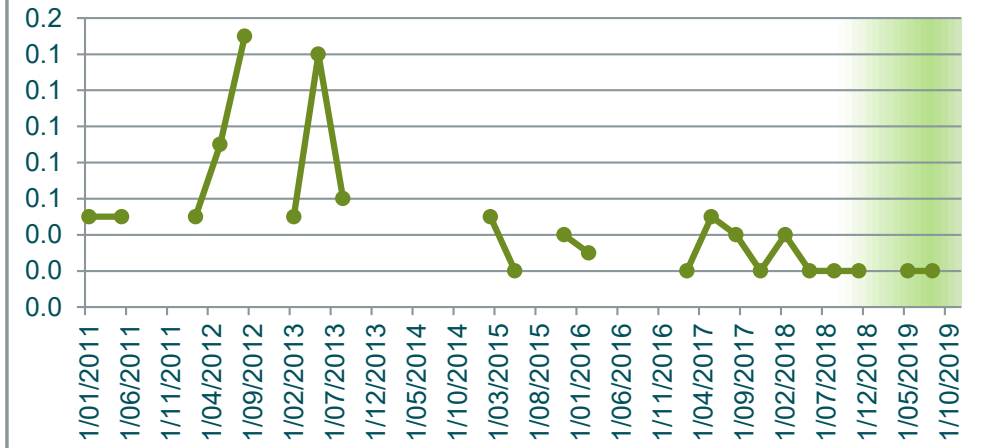
**Nitrate  
N mg/L**



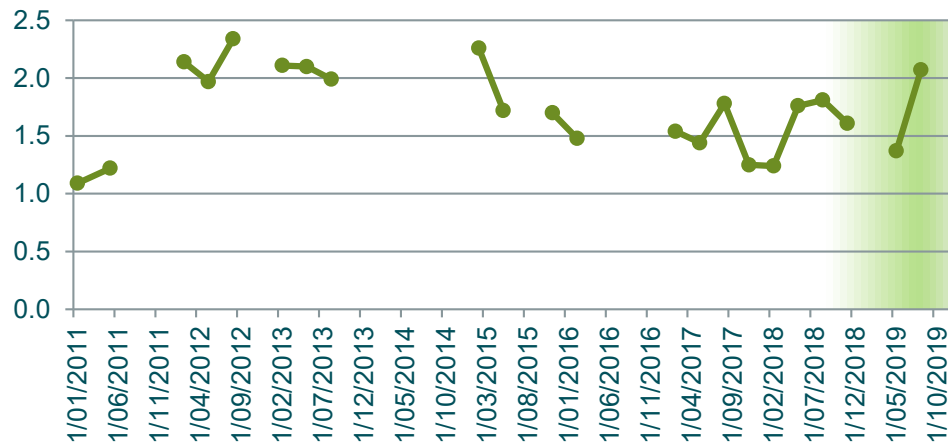
**Nitrite  
N mg/L**



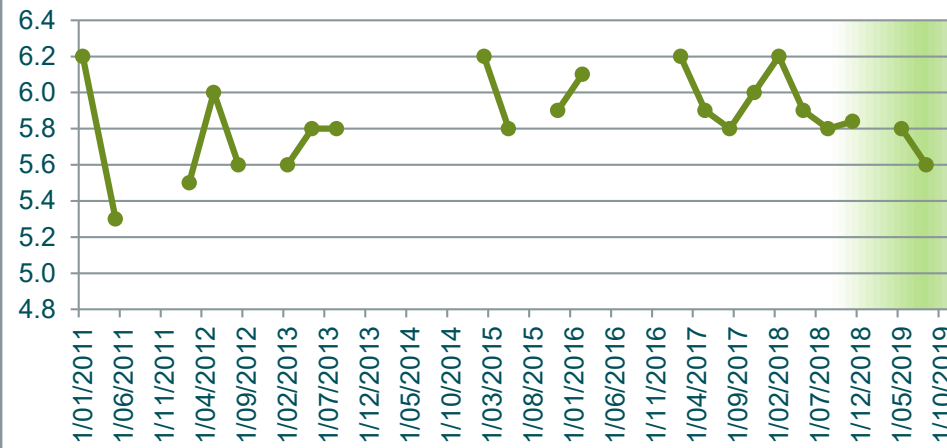
**Nitrogen Oxidised  
mg/L**



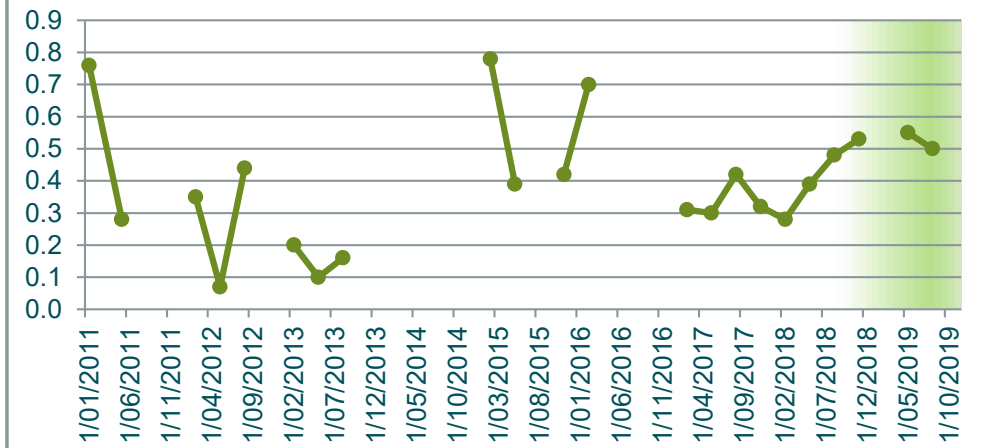
**Nitrogen Total  
mg/L**



**pH  
pH units**

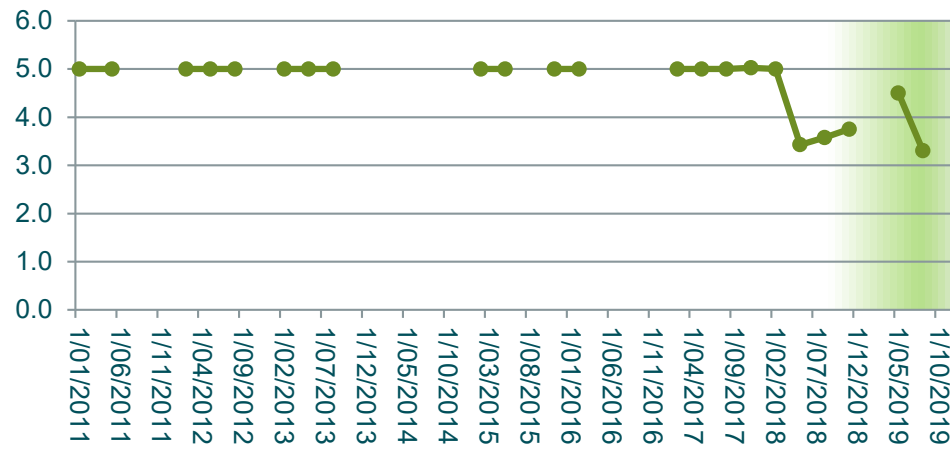


**Phosphorus Total  
mg/L**

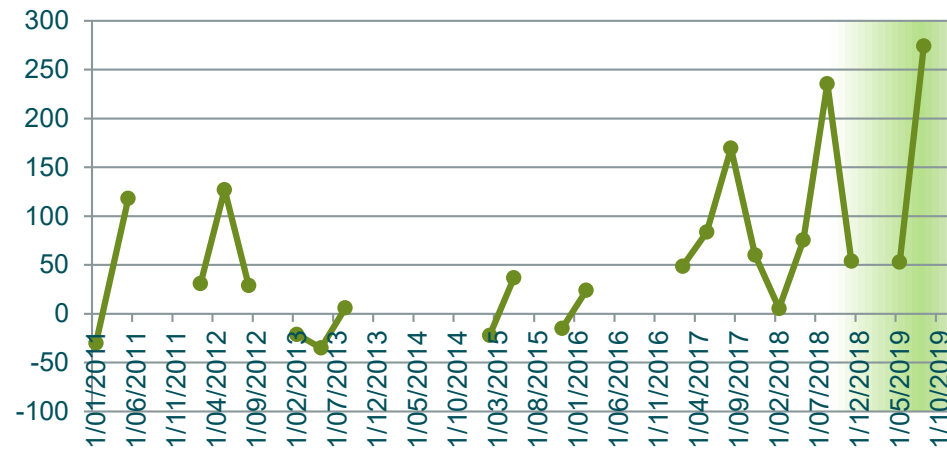




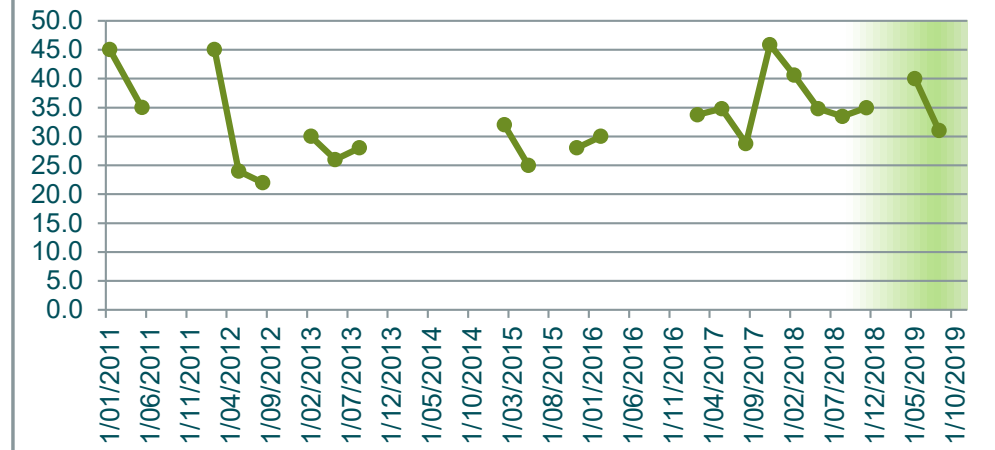
**Potassium Total**  
mg/L



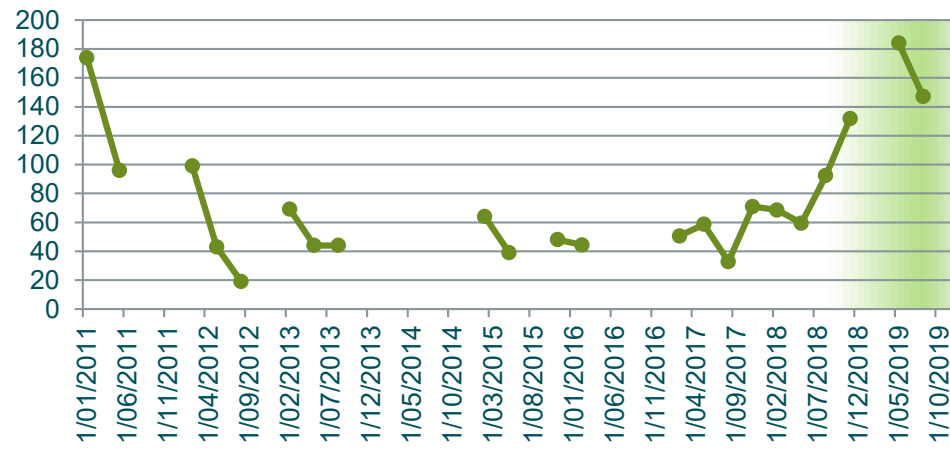
**Redox Potential**  
mV



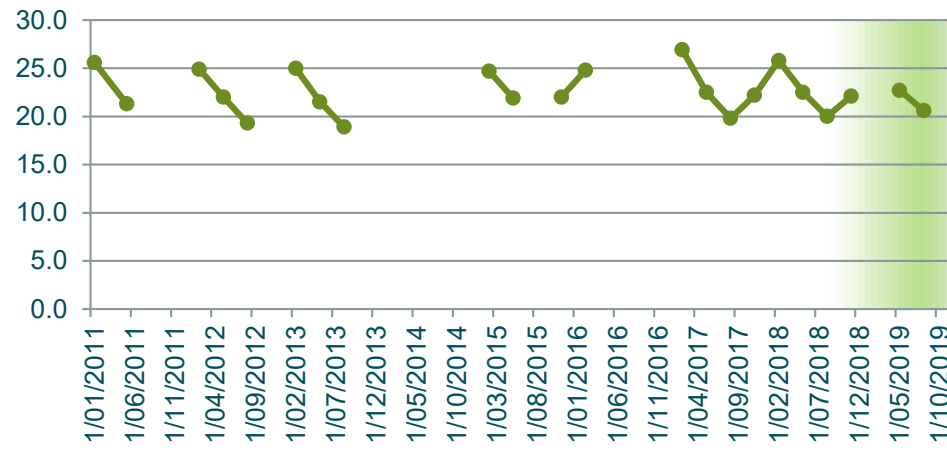
**Sodium (Total)**  
mg/L



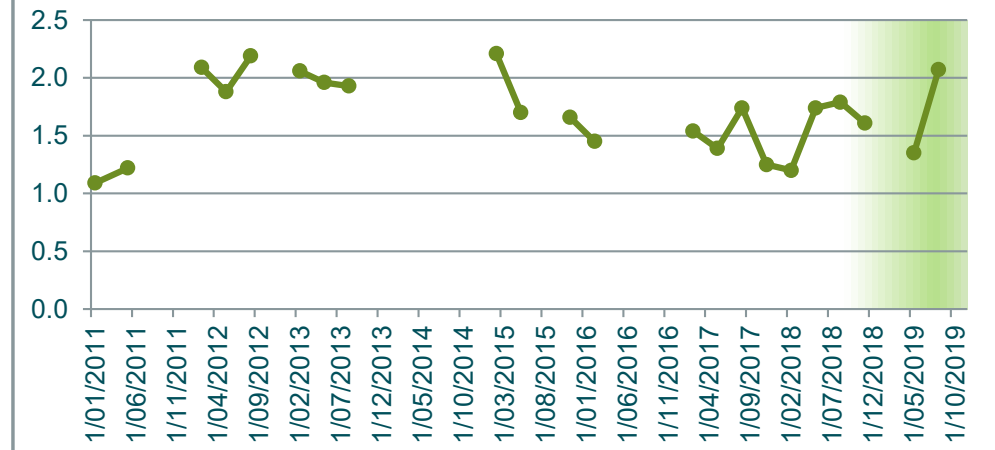
**Sulphate**  
mg/L



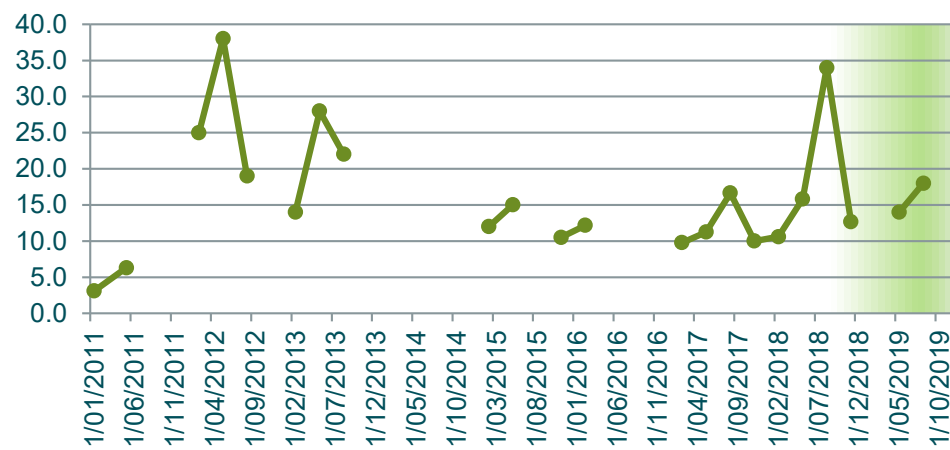
**Temperature**  
C



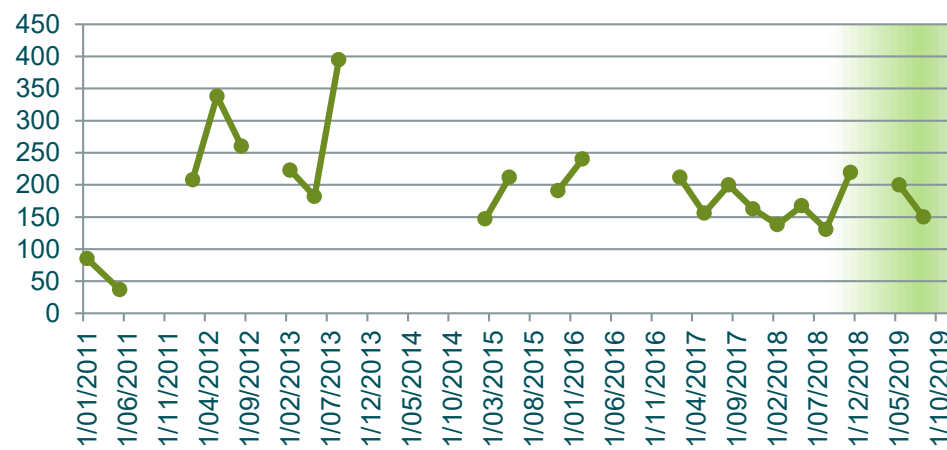
**TKN**  
mg/L



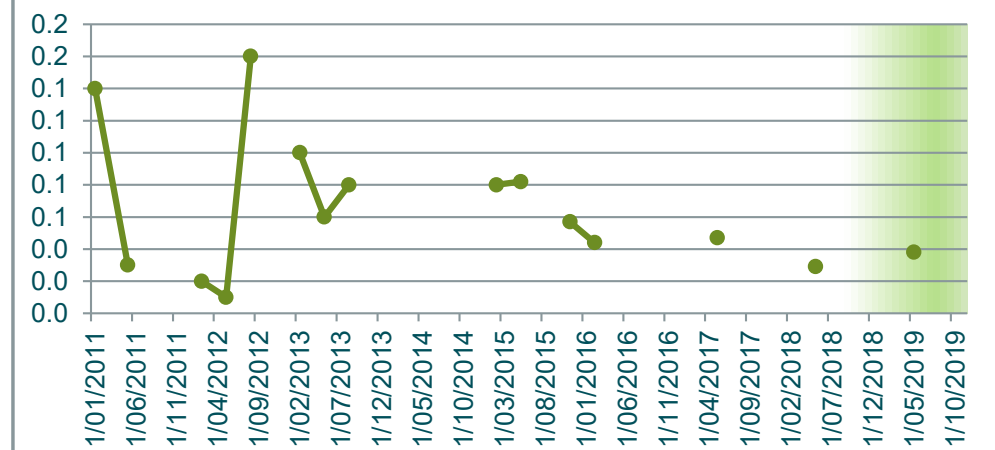
**TOC**  
mg/L



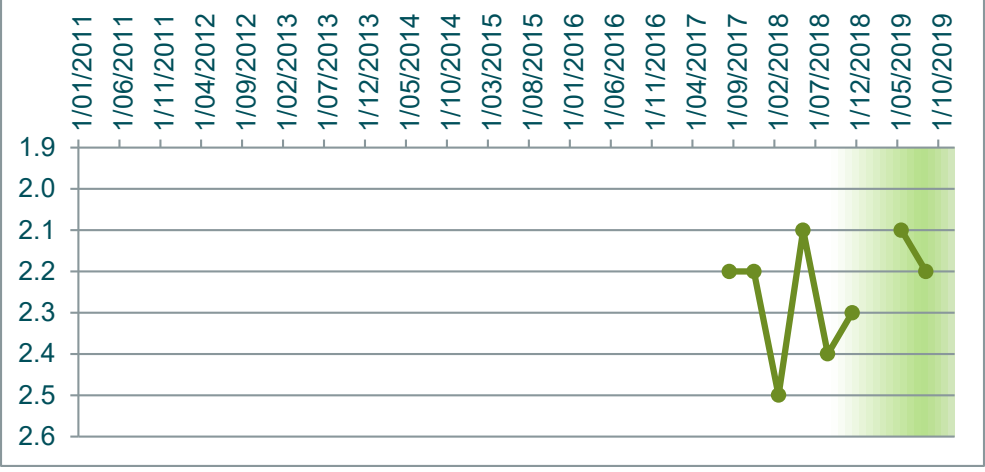
**Total Acidity**  
mg/L CaCO3



**Zinc (Total)**  
mg/L

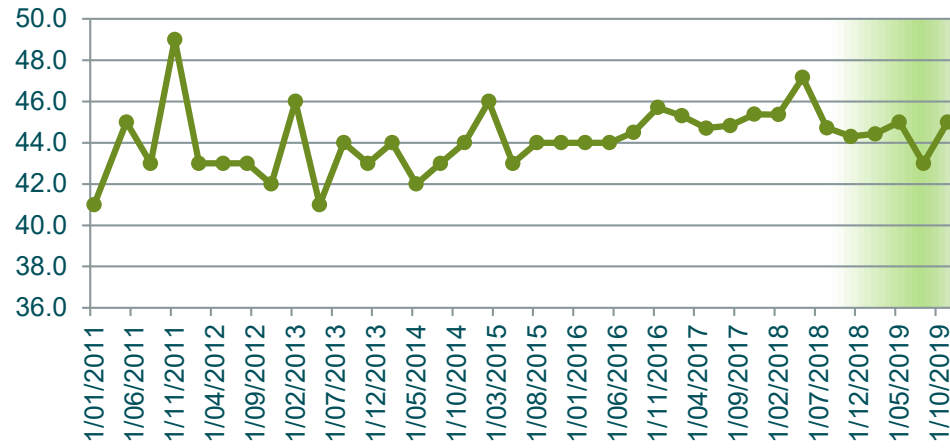


# Depth to Groundwater m

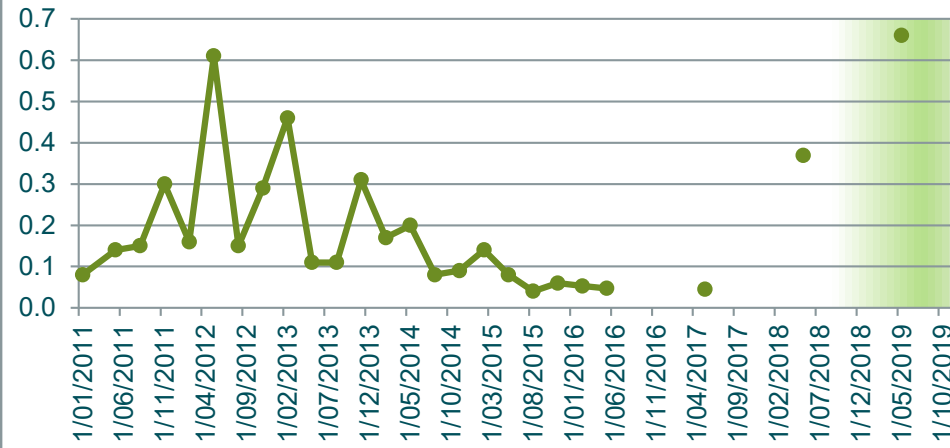


GW19	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µScm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride 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	0.1	0.1	0.0	25.0	1.0	0.0	1.0	42.0	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	46.0	29.0	21.6	0.1	8.4	29	0.0	
10/05/2011	45.0	0.1	0.1	0.0	27.0	1.2	0.0	1.1	65.0	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	60.0	31.0	21.1	0.1	1.0	27	0.0	
9/08/2011	43.0	0.2	0.1	0.0	26.0	1.0	0.0	1.3	42.0	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	57.0	30.0	20.9	0.1	1.0	35	0.0	
8/11/2011	49.0	0.3	0.0	0.0	30.0	1.0	0.0	1.6	50.0	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	45.0	39.0	21.1	0.1	1.2	26	0.0	
6/02/2012	43.0	0.2	0.0	0.0	26.0	1.0	0.0	1.3	42.0	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	71.0	38.0	21.7	0.1	0.1	36	0.0	
8/05/2012	43.0	0.6	0.0	0.0	26.0	1.8	0.0	1.3	42.0	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	62.0	30.0	21.9	0.1	0.8	30	0.0	
6/08/2012	43.0	0.2	0.0	0.0	26.0	2.1	0.0	1.4	40.0	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	46.0	29.0	20.8	0.1	0.7	34	0.0	
13/11/2012	42.0	0.3	0.0	0.0	26.0	1.0	0.0	1.2	42.0	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	54.0	27.0	21.3	0.1	0.2	36	0.0	
13/02/2013	46.0	0.5	0.0	0.0	28.0	1.0	0.0	1.3	44.0	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	59.0	31.0	23.3	0.1	0.2	27	0.0	
14/05/2013	41.0	0.1	0.0	0.0	25.0	1.0	0.0	1.0	40.0	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	56.0	30.0	22.0	0.1	0.4	46	0.0	
6/08/2013	44.0	0.1	0.0	0.0	27.0	1.0	0.0	1.0	42.0	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	61.0	34.0	20.9	0.1	0.4	57	0.0	
12/11/2013	43.0	0.3	0.0	0.0	26.0	1.0	0.0	1.2	44.0	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	65.0	34.0	21.2	0.1	0.3	17	0.1	
11/02/2014	44.0	0.2	0.1	0.0	27.0	1.0	0.0	1.0	43.0	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	61.0	33.0	21.8	0.2	0.5	105	0.0	
13/05/2014	42.0	0.2	0.0	0.0	26.0	1.0	0.0	0.9	45.0	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	59.0	30.0	22.2	0.1	0.4	35	0.0	
12/08/2014	43.0	0.1	0.0	0.0	26.0	1.8	0.0	1.1	43.0	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	63.0	32.0	21.2	0.1	0.2	42	0.0	
10/11/2014	44.0	0.1	0.0	0.0	27.0	1.0	0.0	1.0	45.0	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	64.0	35.0	21.7	0.1	0.2	76	0.0	
9/02/2015	46.0	0.1	0.0	0.0	28.0	1.0	0.0	1.0	44.0	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	59.0	34.0	23.6	0.1	0.2	39	0.0	
11/05/2015	43.0	0.1	0.0	0.0	26.0	1.0	0.0	1.1	41.0	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	61.0	30.0	22.3	0.1	0.9	42	0.0	
11/08/2015	44.0	0.0	0.0	0.0	44.0	1.0	0.0	1.1	40.0	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	61.0	29.0	21.1	0.1	0.6	21	0.0	
10/11/2015	44.0	0.1	0.0	0.0	44.0	1.0	0.0	1.0	44.0	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	58.0	31.0	21.4	0.1	0.2	31	0.0	
8/02/2016	44.0	0.1	0.0	0.0	44.0	1.0	0.0	1.1	41.0	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	60.0	29.8	22.6	0.1	0.6	50	0.0	
9/05/2016	44.0	0.0	0.0	0.0	44.0	1.0	0.0	1.0	42.0	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	56.8	29.3	22.4	0.1	1.0	44	0.0	
9/08/2016	44.5		0.0		44.0	1.0		1.1	41.0				304		7.0	0.2			0.8			0.5	0.0	0.5	0.6	6.4		0.1	5.0	139	60.0	31.6	20.8	0.1	0.2	32		
7/11/2016	45.7		0.0		46.0	1.0		1.1	42.0				302		5.1	0.2			0.8			0.4	0.0	0.4	0.5	6.4		0.1	5.0	285	63.1	30.7	21.6	0.1	0.4	32		
7/02/2017	45.3		0.0		45.0	1.0		1.0	42.0				305		3.3	0.3			0.7			0.4	0.0	0.4	0.4	6.1		0.1	5.0	267	57.2	28.6	22.7	0.1	0.4	60		
8/05/2017	44.7	0.0	0.0	0.0	45.0	1.0	0.0	1.2	42.0	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	57.8	33.4	22.2	0.1	0.4	31	0.0	
8/08/2017	44.8		0.0		45.0	1.0		1.0	35.0				306		6.6	0.2			0.8			0.5	0.0	0.5	0.5	6.2		0.1	5.0	331	57.0	30.4	21.3	0.1	0.8	24		1.3
7/11/2017	45.4		0.0		45.0	1.0		1.1	41.5				312		5.1	0.2			0.8			0.5	0.0	0.5	0.7	5.9		0.1	5.0	355	59.2	31.4	21.3	0.2	0.6	24		1.5
13/02/2018	45.4		0.0		45.0	1.0		1.3	42.0				313		4.0	0.2			0.8			0.7	0.0	0.7	0.9	6.4		0.1	5.0	123	59.9	33.8	24.8	0.2	1.6	21		2.2
8/05/2018	47.2	0.4	0.0	0.0	47.0	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	59.9	32.6	22.6	0.2	0.6	20	0.0	1.4
14/08/2018	44.7		0.0		45.0	3.3		1.2	45.0				303		7.8	0.1			0.8			0.7	0.0	0.7	1.0	6.7		0.2	1.2	293	63.4	35.2	20.1	0.3	2.6	12		2.0
13/11/2018	44.3		0.0		44.0	6.9		1.0	42.0				300		6.3	0.2			0.7			0.6	0.0	0.6	0.7	6.5		0.1	1.0	79	59.8	34.8	21.3	0.1	0.5	19		1.6
12/02/2019	44.4		0.0		44.0	1.0		1.1	41.0				308		4.9	0.2			0.8			0.6	0.0	0.6	0.7	6.4		0.1	1.2	360	62.7	37.0	24.2	0.1	0.8	16		2.6
14/05/2019	45.0	0.7	0.0	0.0	45.0	1.8	0.0	1.2	42.0	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	65.0	38.0	22.7	0.3	1.0	10	0.1	1.4
13/08/2019	43.0		0.0		43.0	1.5		1.2	38.0				304		7.9	0.2			0.8			0.6	0.0	0.6	0.9	6.7		0.2	1.1	307	61.0	36.0	20.7	0.3	4.1	13		1.6
12/11/2019	45.0		0.0		45.0	1.2		1.2	42.0				320		6.3	0.2			0.9			0.6	0.0	0.6	0.9	6.6		0.1	1.2	314	62.0	36.0	21.9	0.3	1.4	14		2.9
<b>2019 Min</b>	<b>43.0</b>	<b>0.7</b>	<b>0.0</b>	<b>0.0</b>	<b>43.0</b>	<b>1.0</b>	<b>0.0</b>	<b>1.1</b>	<b>38.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>304</b>	<b>0.0</b>	<b>4.9</b>	<b>0.2</b>	<b>1.2</b>	<b>0.0</b>	<b>0.8</b>	<b>0.0</b>	<b>0.0</b>	<b>0.6</b>	<b>0.0</b>	<b>0.6</b>	<b>0.7</b>	<b>6.4</b>		<b>0.1</b>	<b>1.1</b>	<b>211</b>	<b>61.0</b>	<b>36.0</b>	<b>20.7</b>	<b>0.1</b>	<b>0.8</b>	<b>10</b>	<b>0.1</b>	<b>1.4</b>
<b>2019 Max</b>	<b>45.0</b>	<b>0.7</b>	<b>0.0</b>	<b>0.0</b>	<b>45.0</b>	<b>1.8</b>	<b>0.0</b>	<b>1.2</b>	<b>42.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>320</b>	<b>0.0</b>	<b>7.9</b>	<b>0.2</b>	<b>1.2</b>	<b>0.0</b>	<b>0.9</b>	<b>0.0</b>	<b>0.0</b>	<b>0.7</b>																

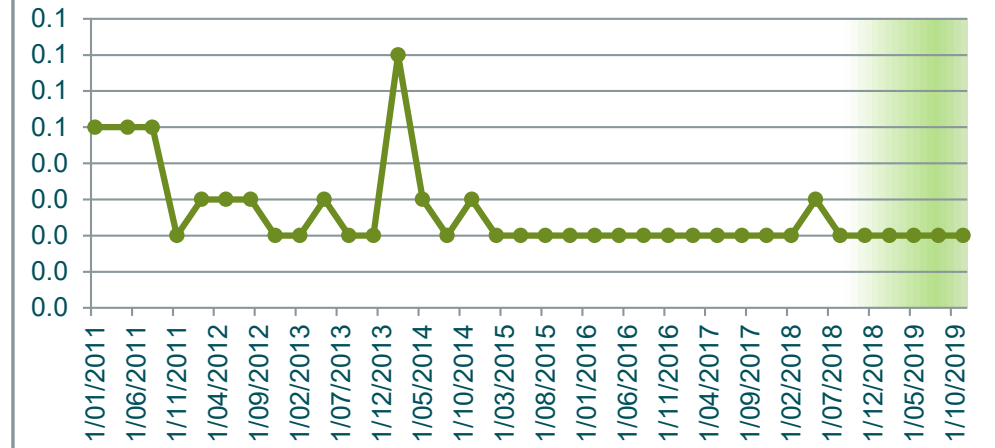
**Alkalinity**  
mg/L as CaCO<sub>3</sub>



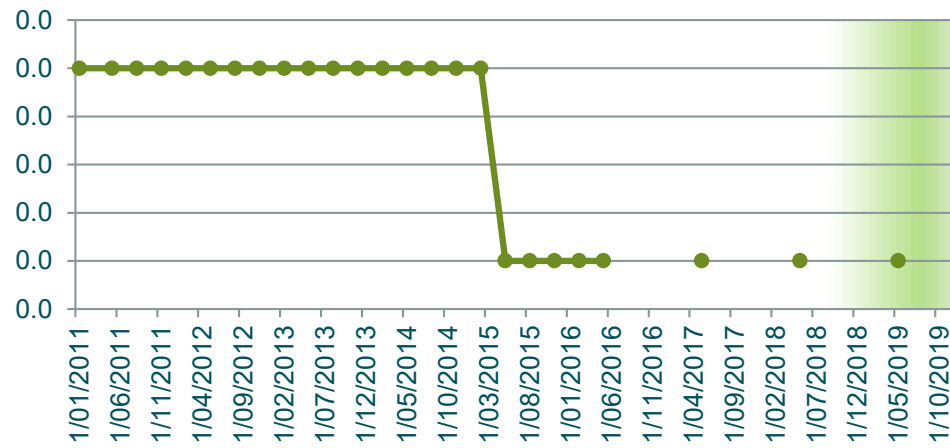
**Aluminium (Total)**  
mg/L



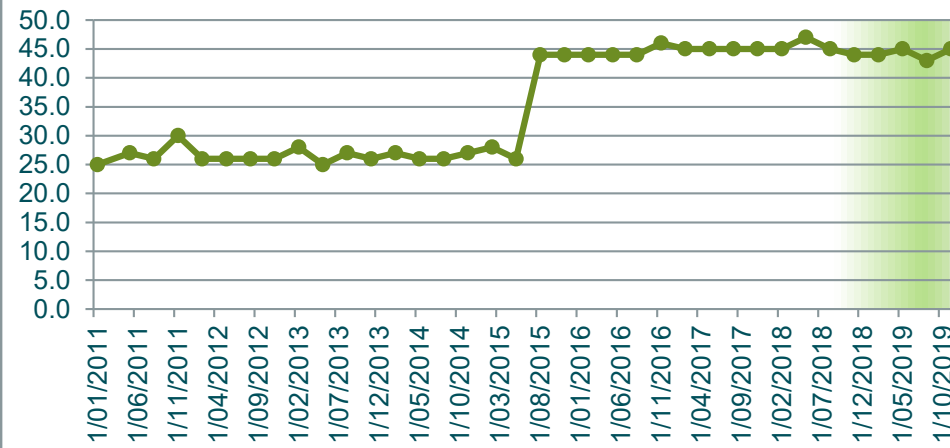
**Ammonia**  
mg/L



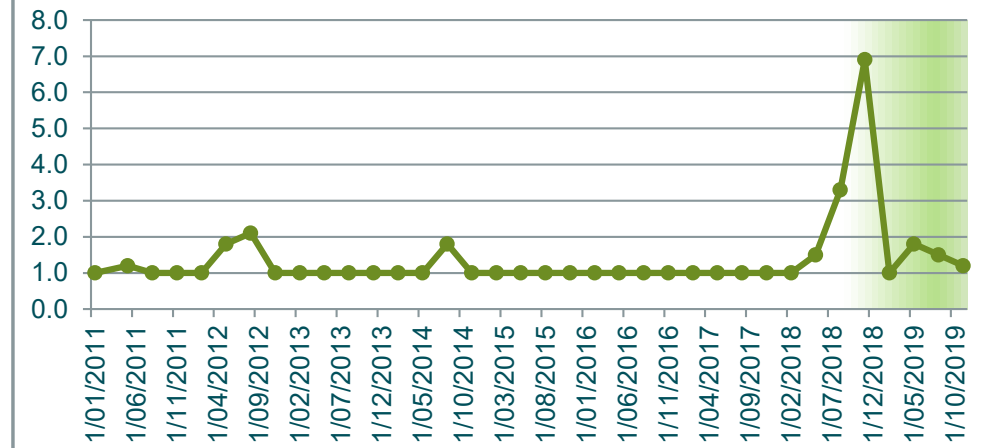
**Arsenic (Total)**  
mg/L



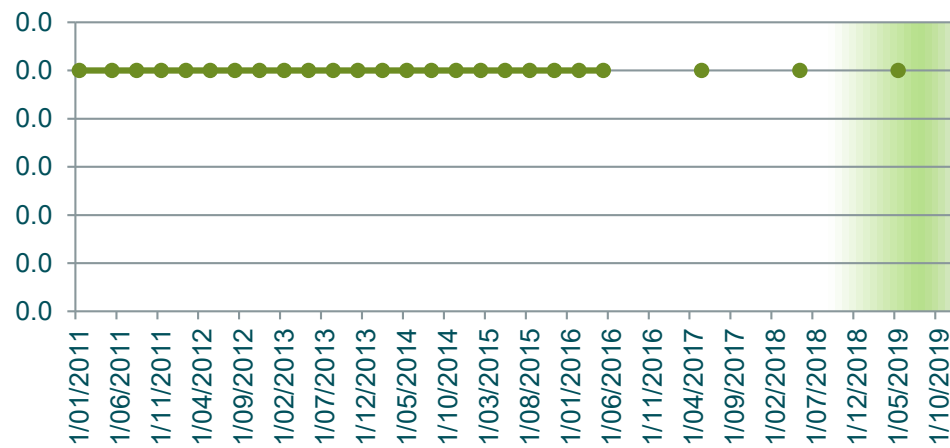
**Bicarbonate HCO<sub>3</sub>**  
mg/L



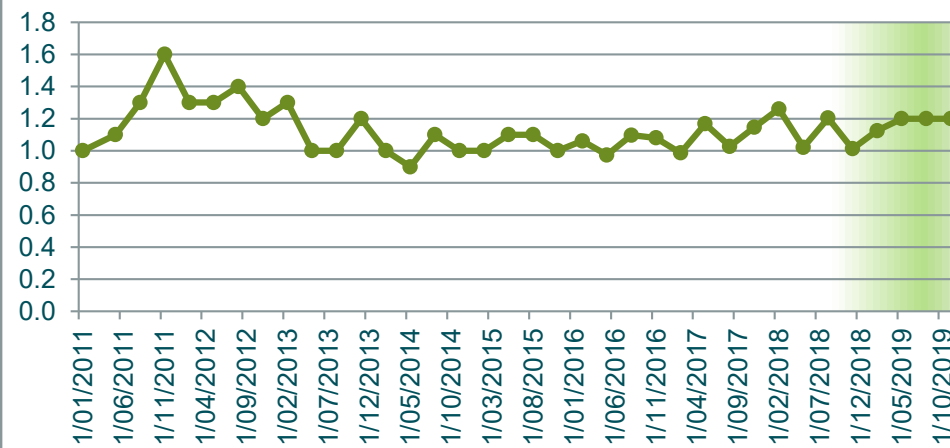
**BOD<sub>5</sub>**  
mg/L



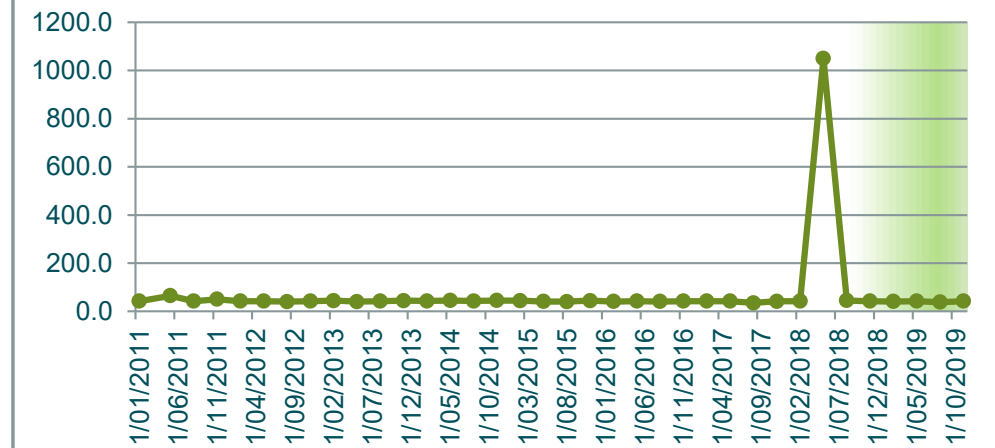
**Cadmium (Total)**  
mg/L



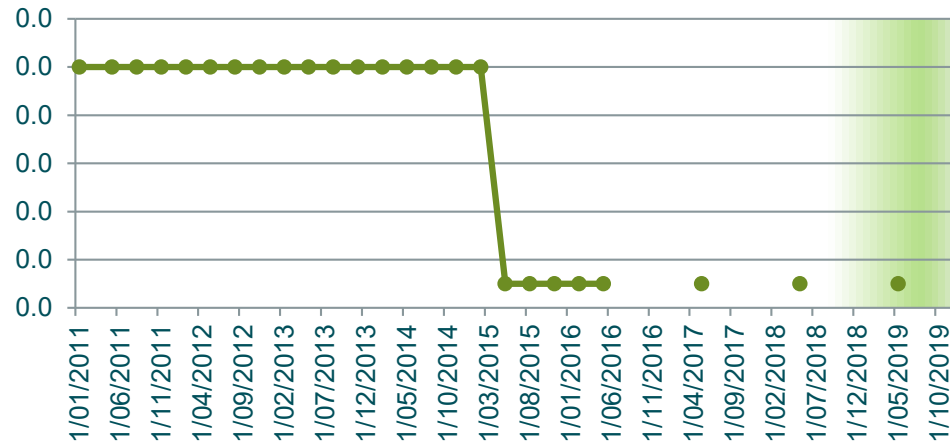
**Calcium (Total)**  
mg/L



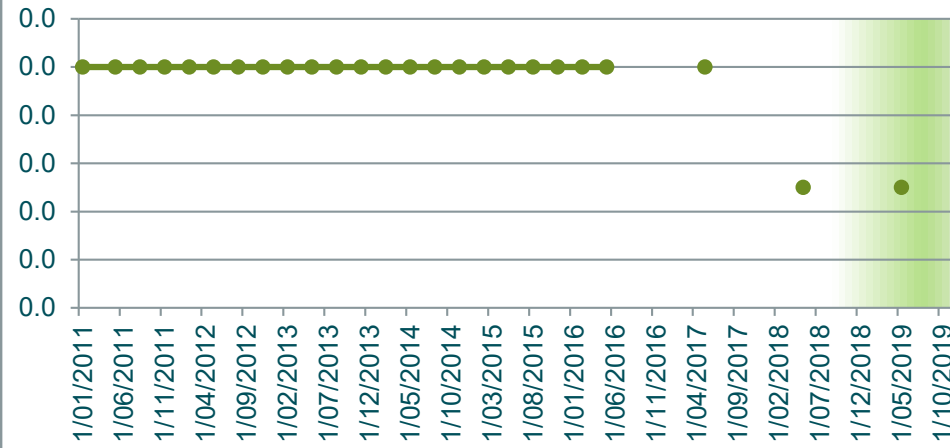
**Chloride**  
mg/L



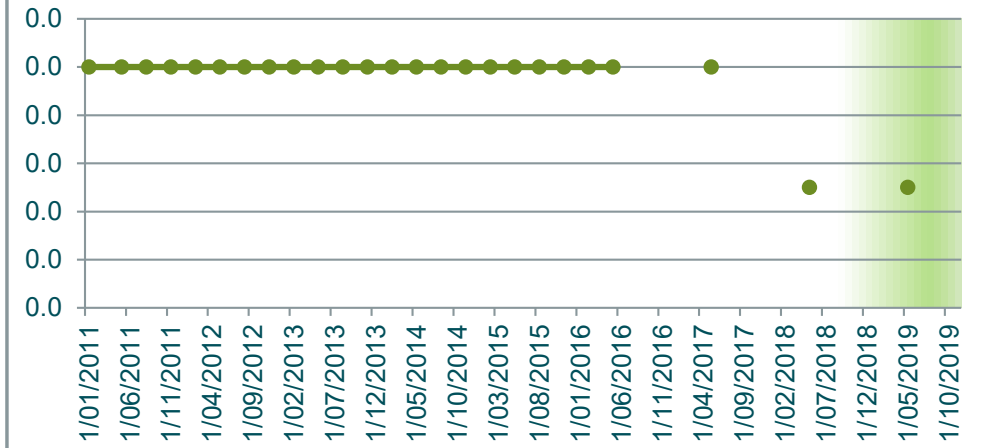
### Chromium (Total) mg/L



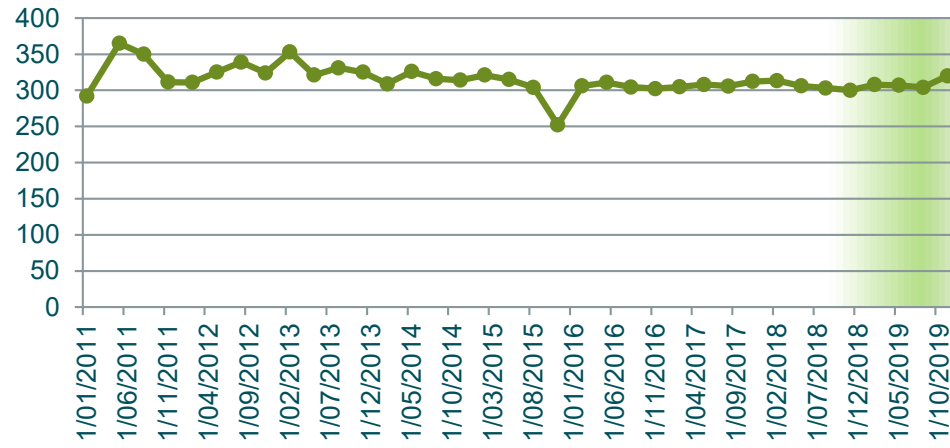
### Chromium 3 mg/L



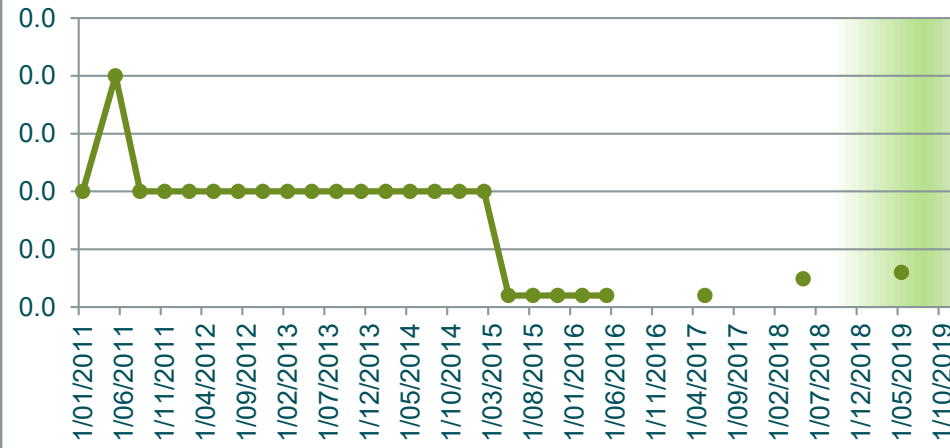
### Chromium 6 mg/L



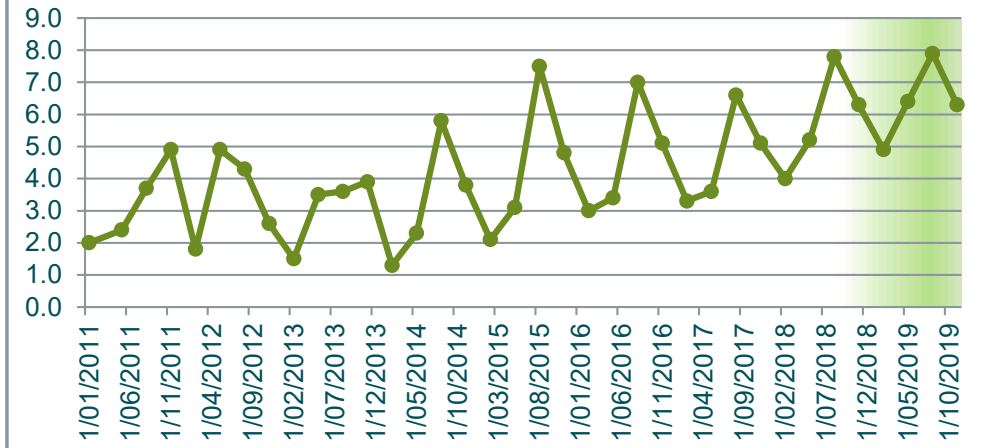
### Conductivity µScm-1



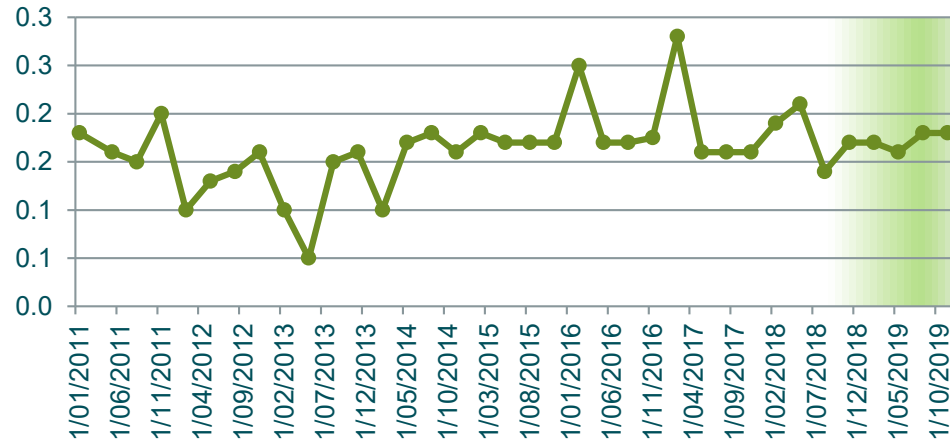
### Copper (Total) mg/L



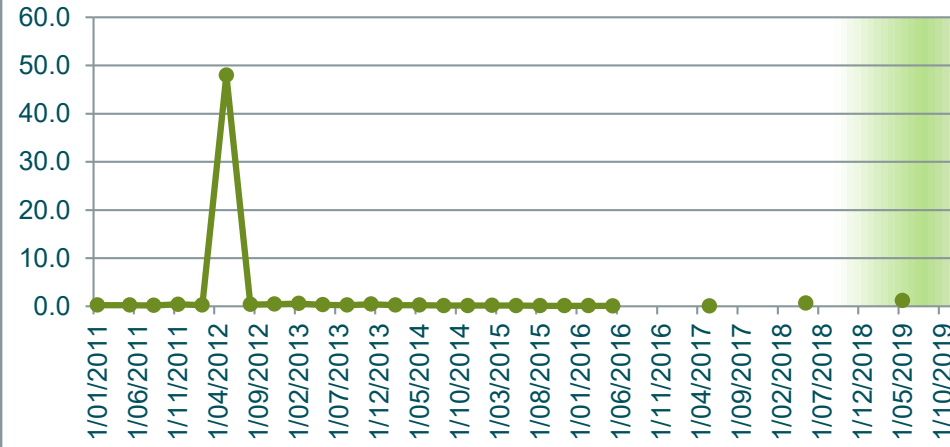
### DO (Membrane Electrode) mg/L



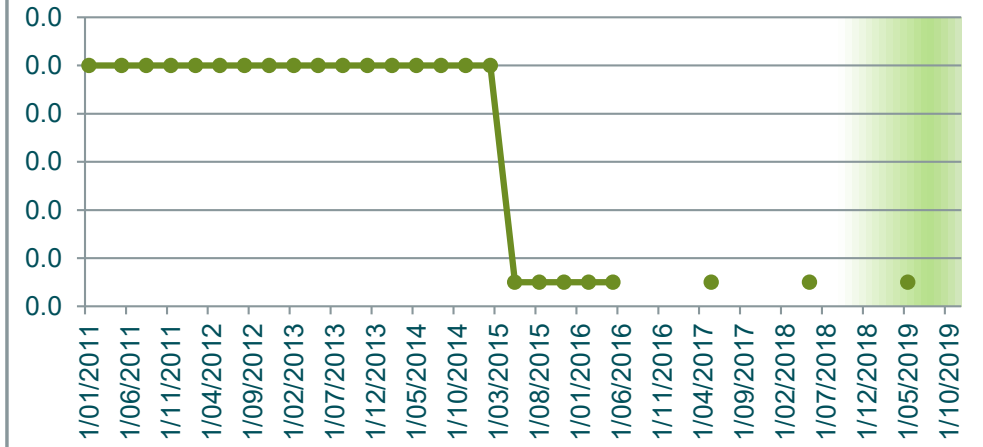
### Flouride mg/L



### Iron Total mg/L

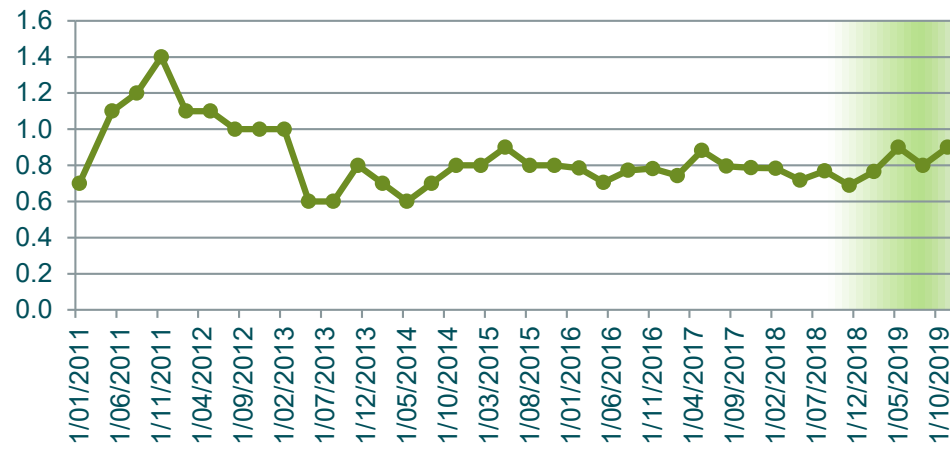


### Lead (Total) mg/L

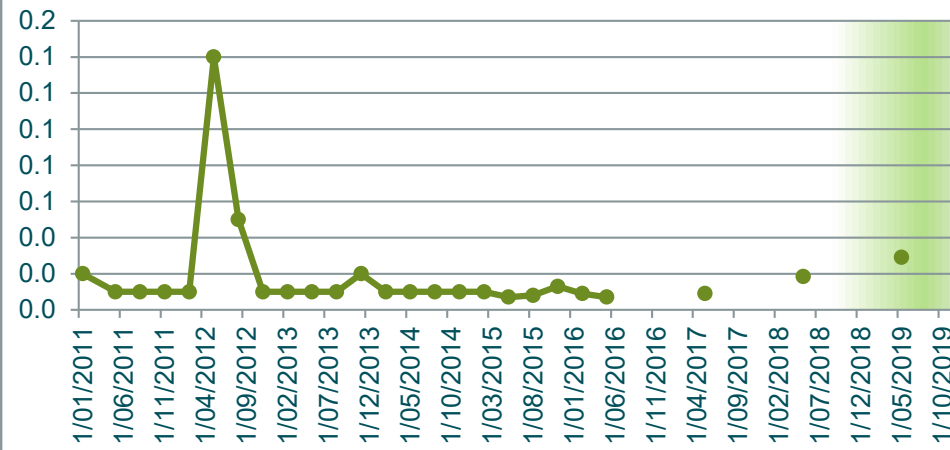




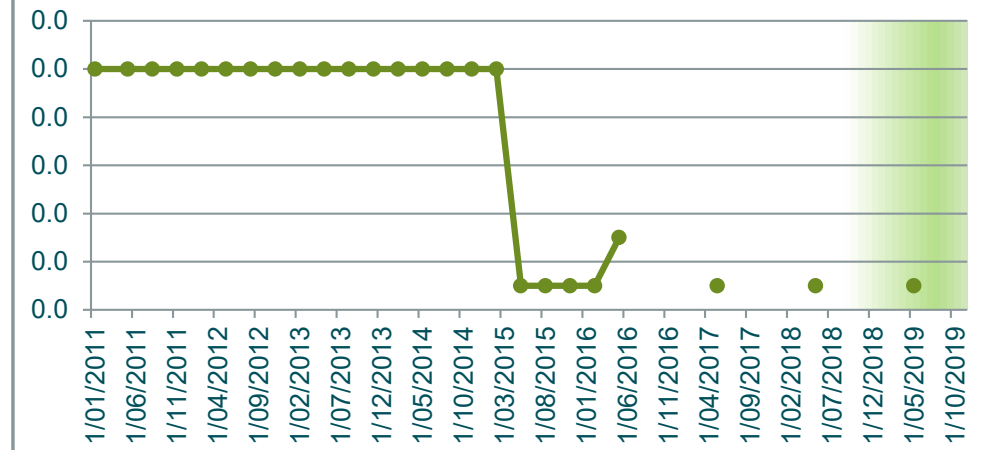
### Magnesium (Total) mg/L



### Manganese Total mg/L



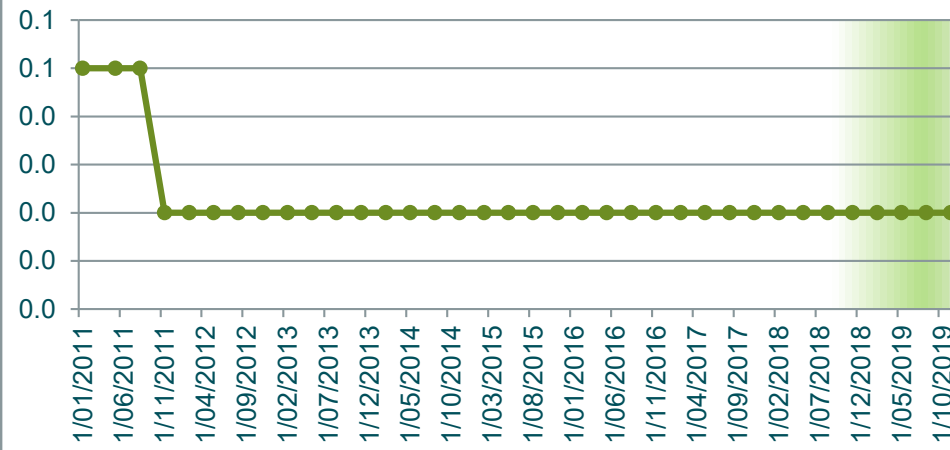
### Nickel (Total) mg/L



### Nitrate N mg/L



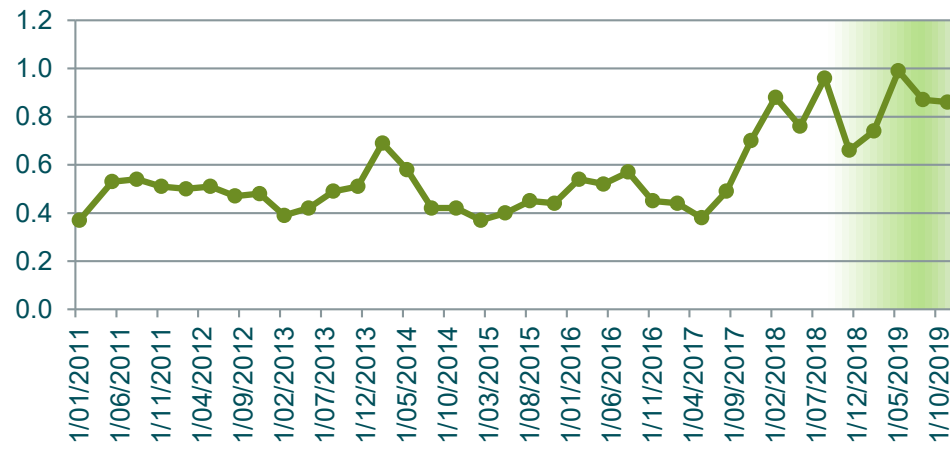
### Nitrite N mg/L



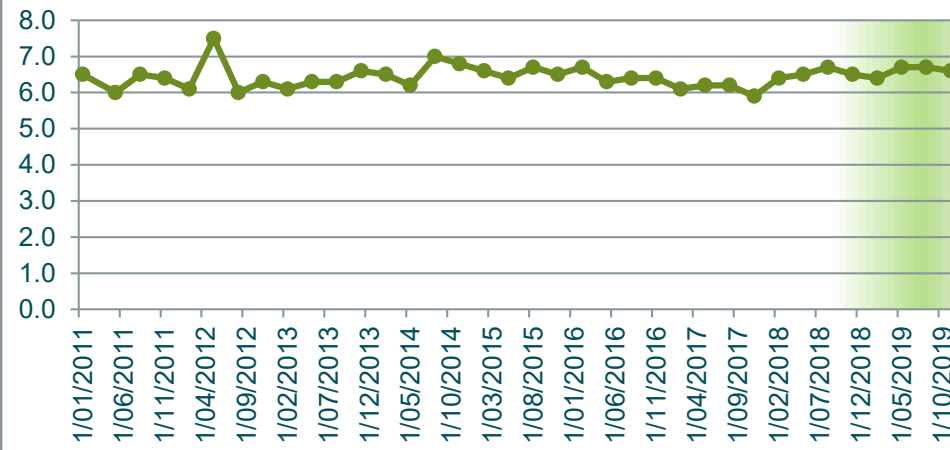
### Nitrogen Oxidised mg/L



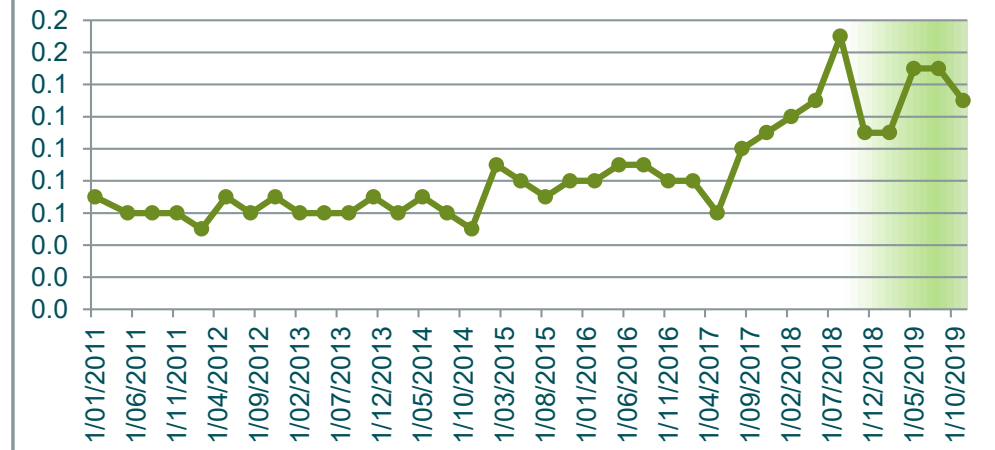
### Nitrogen Total mg/L



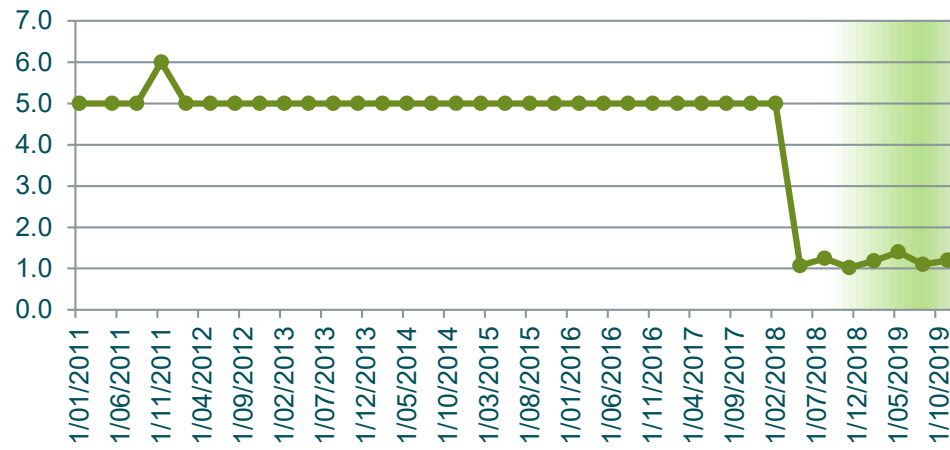
### pH pH units



### Phosphorus Total mg/L



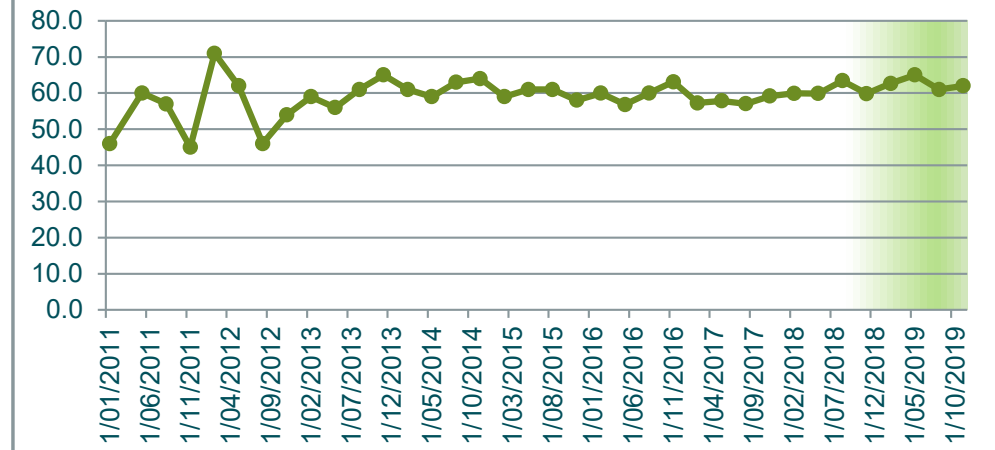
**Potassium Total  
mg/L**



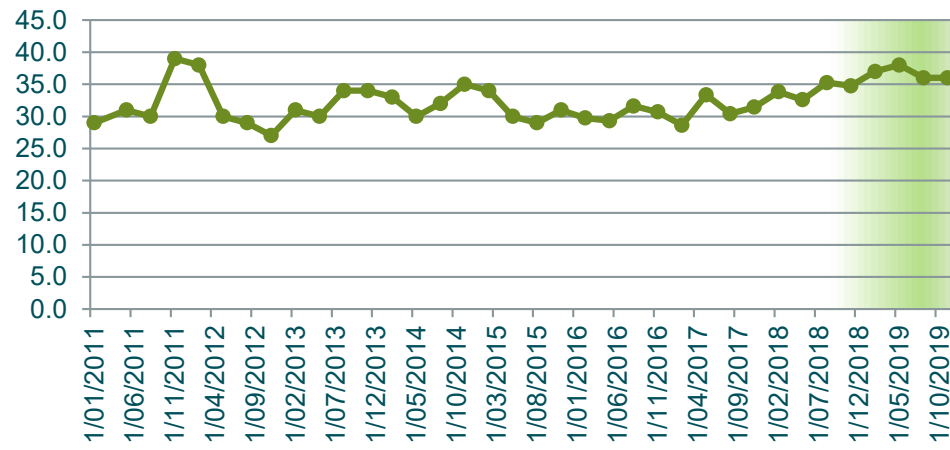
**Redox Potential  
mV**



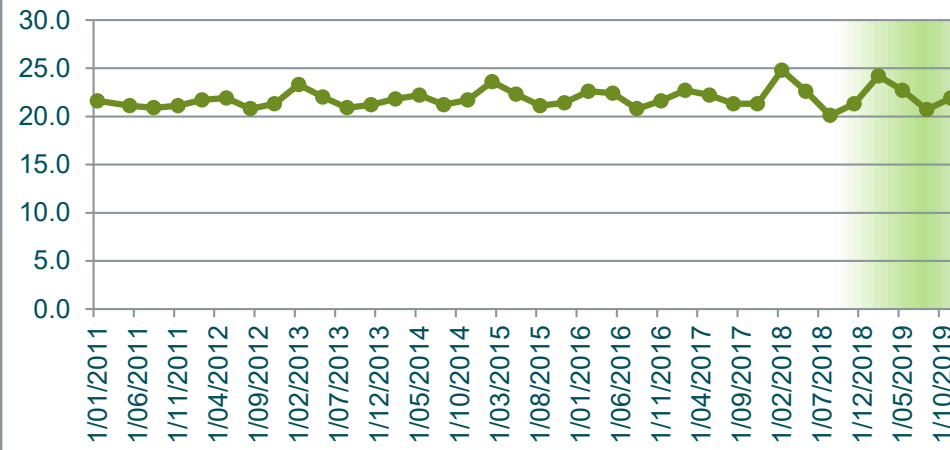
**Sodium (Total)  
mg/L**



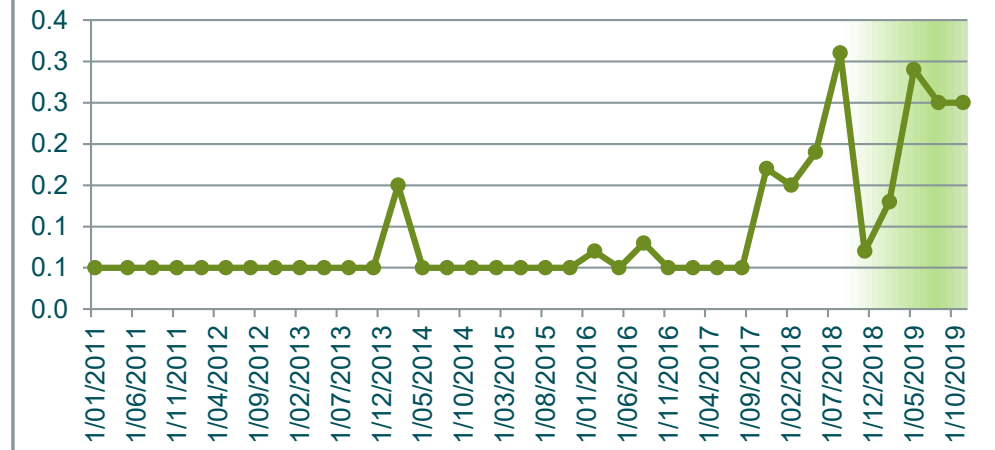
**Sulphate  
mg/L**



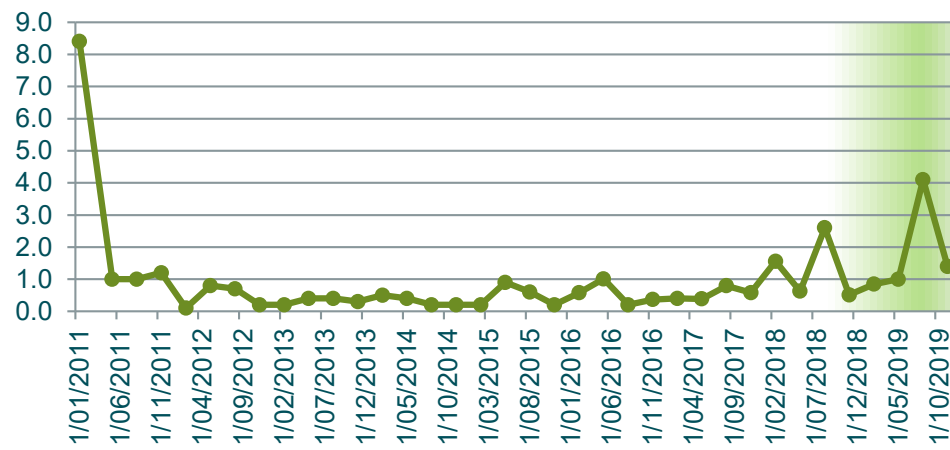
**Temperature  
C**



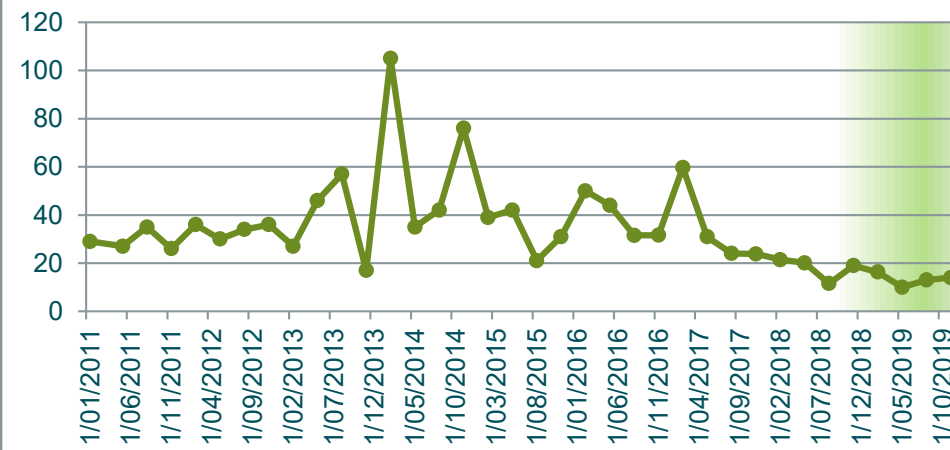
**TKN  
mg/L**



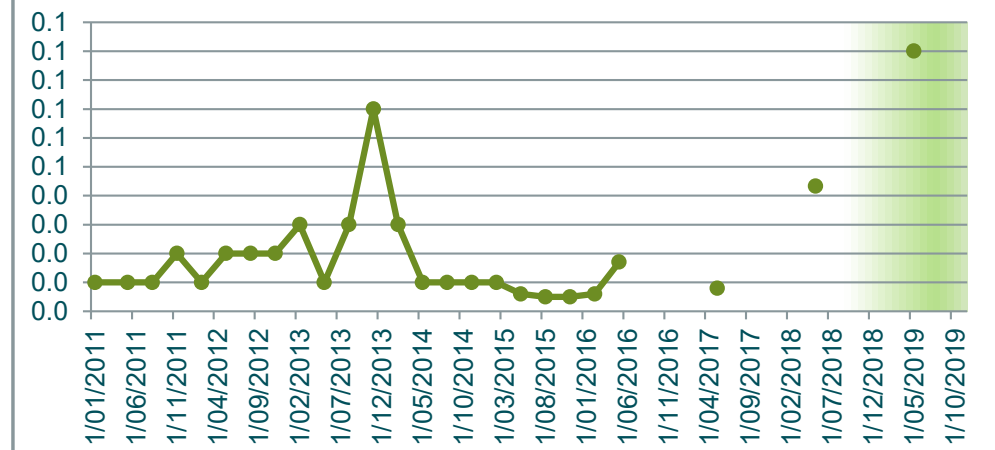
**TOC  
mg/L**



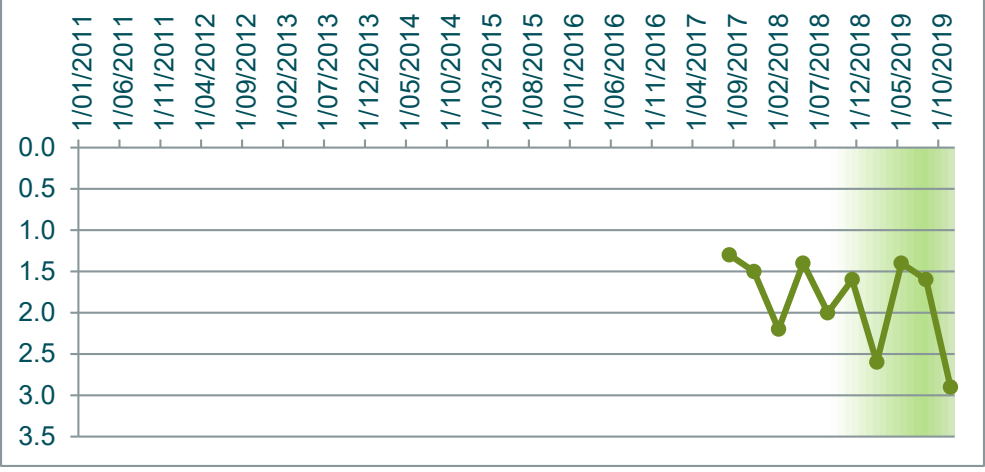
**Total Acidity  
mg/L CaCO3**



**Zinc (Total)  
mg/L**

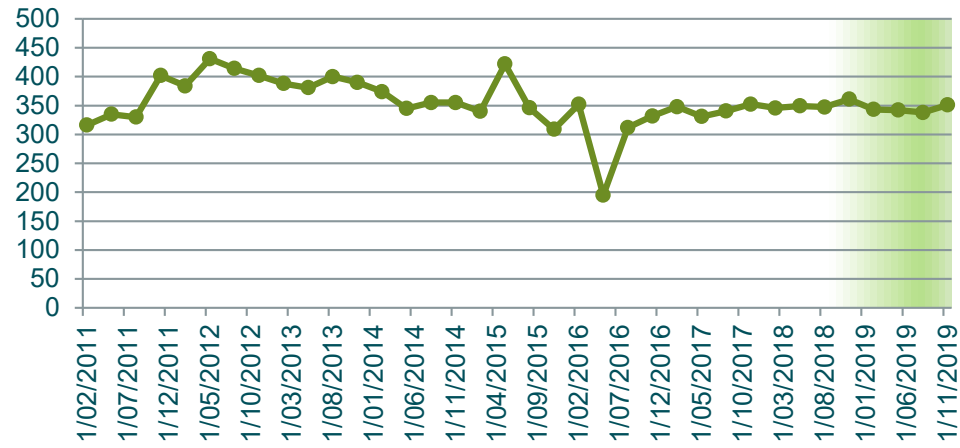


# Depth to Groundwater m

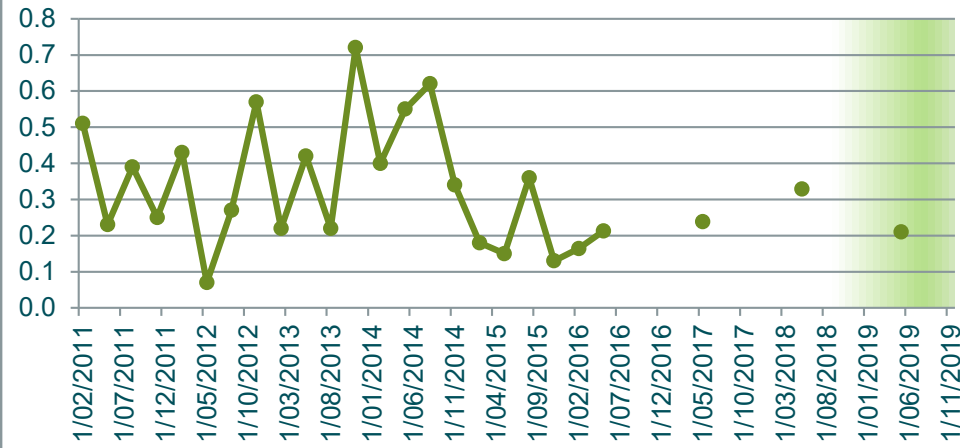


GW20	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µS/cm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride 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	2.4	0.0	86	100	0.0	0.0	0.0	1045	0.0	2.4	0.1	1.0	0.0	13.0	0.6	0.0	0.1	0.1	0.1	0.6	7.6		0.1	5.0	-95	74	91	21.8	0.6	6.8	89.0	0.0	
11/05/2011	335	0.2	0.4	0.0	204	2.2	0.0	103	100	0.0	0.0	0.0	1201	0.0	2.6	0.1	0.9	0.0	18.0	0.7	0.0	0.1	0.1	0.1	0.7	7.2		0.1	10.0	52	99	102	20.2	0.7	3.6	23.0	0.0	
10/08/2011	330	0.4	0.5	0.0	200	4.5	0.0	94	125	0.0	0.0	0.0	1123	0.0	2.6	0.1	1.0	0.0	17.0	0.6	0.0	0.1	0.1	0.1	0.9	7.2		0.1	6.0	48	110	92	20.4	0.9	8.1	22.0	0.0	
9/11/2011	402	0.3	0.1	0.0	245	1.0	0.0	152	101	0.0	0.0	0.0	1092	0.0	0.9	0.2	1.1	0.0	18.0	1.1	0.0	0.0	0.0	0.0	0.2	7.0		0.0	34.0	-10	154	102	21.6	0.1	5.9	42.0	0.0	
7/02/2012	384	0.4	0.1	0.0	234	1.0	0.0	95	70	0.0	0.0	0.0	1038	0.0	1.6	0.2	1.1	0.0	14.0	0.9	0.0	0.0	0.0	0.1	0.1	7.0		0.0	5.0	59	147	75	22.4	0.1	4.7	45.0	0.0	
9/05/2012	431	0.1	0.1	0.0	263	1.0	0.0	79	60	0.0	0.0	0.0	1040	0.0	3.2	0.2	0.8	0.0	12.0	0.9	0.0	0.0	0.0	0.1	0.1	6.8		0.0	5.0	227	100	48	21.0	0.1	1.9	34.0	0.0	
7/08/2012	414	0.3	0.1	0.0	252	2.4	0.0	76	62	0.0	0.0	0.0	981	0.0	2.3	0.3	1.1	0.0	11.0	0.9	0.0	0.0	0.0	0.0	0.2	7.0		0.0	5.0	-83	95	36	20.1	0.2	4.6	38.0	0.1	
14/11/2012	402	0.6	0.1	0.0	245	1.2	0.0	79	64	0.0	0.0	0.0	934	0.0	3.2	0.2	1.5	0.0	13.0	0.8	0.0	0.0	0.0	0.0	0.3	7.1		0.0	5.0	-109	95	24	20.9	0.3	3.7	33.0	0.1	
14/02/2013	388	0.2	0.1	0.0	237	1.0	0.0	84	60	0.0	0.0	0.0	919	0.0	3.3	0.2	1.4	0.0	12.0	0.9	0.0	0.0	0.0	0.0	0.2	7.0		0.0	5.0	-60	107	22	20.7	0.1	3.4	28.0	0.0	
15/05/2013	381	0.4	0.1	0.0	232	2.4	0.0	79	63	0.0	0.0	0.0	902	0.0	2.6	0.3	1.7	0.0	11.0	0.9	0.0	0.1	0.0	0.1	0.6	6.9		0.1	5.0	-81	96	17	20.5	0.5	3.6	66.0	0.1	
7/08/2013	400	0.2	0.1	0.0	244	1.0	0.0	86	62	0.0	0.0	0.0	884	0.0	3.1	0.3	1.4	0.0	12.0	1.0	0.0	0.1	0.0	0.1	0.3	7.1		0.0	5.0	-89	102	18	20.1	0.3	3.2	70.0	0.1	
13/11/2013	390	0.7	0.1	0.0	238	2.1	0.0	88	62	0.0	0.0	0.0	924	0.0	2.9	0.4	2.2	0.0	13.0	1.1	0.0	0.0	0.0	0.0	0.4	7.5		0.1	5.0	-72	108	14	21.0	0.3	3.2	34.0	0.1	
12/02/2014	374	0.4	0.1	0.0	228	2.1	0.0	78	66	0.0	0.0	0.0	825	0.0	3.2	0.4	1.7	0.0	11.0	1.0	0.0	0.1	0.0	0.1	0.5	7.0		0.0	5.0	-73	92	13	21.1	0.5	3.0	85.0	0.1	
14/05/2014	345	0.6	0.3	0.0	210	4.2	0.0	76	67	0.0	0.0	0.0	882	0.0	2.6	0.4	2.1	0.0	11.0	0.9	0.0	0.1	0.0	0.1	0.7	7.0		0.1	5.0	-48	87	13	20.1	0.5	3.0	40.0	0.1	
13/08/2014	355	0.6	0.2	0.0	217	1.8	0.0	89	75	0.0	0.0	0.0	899	0.0	3.3	0.4	1.8	0.0	13.0	1.0	0.0	0.1	0.0	0.1	0.5	7.2		0.1	5.0	-34	97	14	20.0	0.4	2.7	75.0	0.1	
11/11/2014	355	0.3	0.1	0.0	217	1.8	0.0	87	81	0.0	0.0	0.0	887	0.0	3.1	0.4	1.7	0.0	13.0	0.9	0.0	0.0	0.0	0.0	0.4	7.2		0.1	5.0	-68	92	12	20.8	0.3	2.2	44.0	0.0	
10/02/2015	340	0.2	0.1	0.0	207	1.0	0.0	74	72	0.0	0.0	0.0	886	0.0	1.3	0.4	1.5	0.0	11.0	1.0	0.0	0.1	0.0	0.1	0.3	7.1		0.0	5.0	-38	78	9	21.7	0.2	2.1	49.0	0.0	
12/05/2015	422	0.2	0.0	0.0	257	1.0	0.0	92	77	0.0	0.0	0.0	869	0.0	1.2	0.4	1.3	0.0	13.0	0.9	0.0	0.0	0.0	0.0	0.1	6.8		0.0	5.0	-20	85	11	20.6	0.1	1.7	50.0	0.0	
12/08/2015	346	0.4	0.0	0.0	346	1.0	0.0	92	74	0.0	0.0	0.0	875	0.0	1.9	0.5	1.6	0.0	13.0	0.9	0.0	0.0	0.0	0.0	0.1	7.1		0.1	5.0	-28	80	10	20.4	0.1	1.9	40.0	0.1	
11/11/2015	309	0.1	0.1	0.0	319	1.0	0.0	82	73	0.0	0.0	0.0	838	0.0	1.8	0.5	0.9	0.0	12.0	0.7	0.0	0.0	0.0	0.0	0.2	7.1		0.0	5.0	4	75	10	21.4	0.2	1.5	42.0	0.0	
9/02/2016	352	0.2	0.0	0.0	352	1.0	0.0	88	78	0.0	0.0	0.0	869	0.0	1.1	0.4	1.3	0.0	12.4	0.9	0.0	0.0	0.0	0.0	0.1	7.1		0.0	5.0	-43	79	10	21.4	0.1	1.5	55.0	0.0	
10/05/2016	195	0.2	0.1	0.0	195	1.0	0.0	52	38	0.0	0.0	0.0	521	0.0	2.3	0.3	0.8	0.0	6.9	0.5	0.0	0.1	0.0	0.1	0.3	7.2		0.1	5.0	34	44	6	20.7	0.2	1.0	22.0	0.0	
10/08/2016	312		0.1		312	2.7		77	65				791		1.9	0.4			11.2			0.0	0.0	0.0	0.3	7.0		0.1	5.0	-40	71	11	20.7	0.2	1.3	40.4		
8/11/2016	332		0.1		332	1.0		88	76				844		1.7	0.4			12.3			0.1	0.0	0.1	0.3	7.1		0.0	5.0	40	80	13	21.7	0.2	2.2	49.0		
8/02/2017	348		0.1		348	1.0		86	75				883		1.3	0.4			12.5			0.0	0.0	0.0	0.2	7.0		0.0	5.0	83	78	11	23.0	0.2	2.1	68.1		
9/05/2017	331	0.2	0.0	0.0	331	1.0	0.0	90	85	0.0	0.0	0.0	862	0.0	1.0	0.4	1.4	0.0	13.0	0.7	0.0	0.0	0.0	0.0	0.1	7.0		0.0	5.0	-20	77	14	20.4	0.1	1.6	52.7	0.0	
9/08/2017	340		0.2		340	2.1		86	90				867		0.8	0.5			12.4			0.0	0.0	0.0	0.3	6.9		0.0	5.0	-27	76	5	20.3	0.3	2.3	48.6		15.0
8/11/2017	352		0.0		352	1.0		91	72				884		1.2	0.5			13.0			0.0	0.0	0.0	0.1	6.8		0.0	5.0	-27	76	6	20.1	0.1	1.6	53.5		16.0
14/02/2018	346		0.1		346	1.0		85	70				868		3.2	0.5			12.4			0.0	0.0	0.0	0.2	7.2		0.0	5.0	-63	75	5	25.2	0.2	2.2	18.4		16.2
9/05/2018	349	0.3	0.2	0.0	349	1.5	0.0	85	71	0.0	0.0	0.0	856	0.0	3.1	0.5	1.5	0.0	12.3	0.9	0.0	0.0	0.0	0.0	0.5	7.2		0.1	2.2	-67	77	4	20.6	0.5	2.1	25.1	0.0	15.3
15/08/2018	347		0.1		347	3.6		93	63				854		3.2	0.5			13.0			0.1	0.0	0.1	0.5	7.2		0.1	2.3	-22	82	5	20.5	0.4	0.2	20.2		15.9
14/11/2018	361		0.1		361	1.5		88	63				833		3.3	0.6			12.4			0.0	0.0	0.0	0.3	7.3		0.1	2.0	-38	75	5	21.3	0.3	2.1	32.4		16.6
13/02/2019	343		0.1		343	1.2		94	74				856		2.7	0.5			12.8			0.0	0.0	0.0	0.3	7.1		0.1	2.1	-80	78	5	21.7	0.3	2.6	27.1		15.7
15/05/2019	342	0.2	0.1	0.0	342	1.8	0.0	92	67	0.0	0.0	0.0	834	0.0	2.9	0.5	2.1	0.0	13.0	0.7	0.0	0.0	0.0	0.0	0.2	7.2		0.1	2.0	-77	80	4	20.5	0.2	1.8	27.0	0.0	16.0
14/08/2019	338		0.1		338	1.8		90	60				817		3.0	0.6			12.0			0.0	0.0	0.0	0.3	7.2		0.1	2.1	48	74	5	19.9	0.2	2.2	22.0		16.0
13/11/2019	351		0.1		351	2.7		88	55				836		3.0	0.6			12.0			0.0	0.0	0.0	0.4	7.1		0.1	2.0	-42	76	4	20.7	0.3	2.5	27.0		16.0
<b>2019 Min</b>	<b>338</b>	<b>0.2</b>	<b>0.1</b>	<b>0.0</b>	<b>338</b>	<b>1.2</b>	<b>0.0</b>	<b>88</b>	<b>55</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>817</b>	<b>0.0</b>	<b>2.7</b>	<b>0.5</b>	<b>2.1</b>	<b>0.0</b>	<b>12.0</b>	<b>0.7</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.2</b>	<b>7.1</b>		<b>0.1</b>	<b>2.0</b>	<b>-80</b>	<b>74</b>	<b>4</b>	<b>19.9</b>	<b>0.2</b>	<b>1.8</b>	<b>22.0</b>	<b>0.0</b>	<b>15.7</b>
<b>2019 Max</b>	<b>351</b>	<b>0.2</b>	<b>0.1</b>	<b>0.0</b>	<b>351</b>	<b>2.7</b>	<b>0.0</b>	<b>94</b>	<b>74</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>856</b>	<b>0.0</b>	<b>3.0</b>	<b>0.6</b>	<b>2.1</b>	<b>0.0</b>	<b>13.0</b>	<b>0.7</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.4</b>	<b>7.2</b>		<b>0.1</b>	<b>2.1</b>	<b>48</b>	<b>80</b>	<b>5</b>	<b>21.7</b>	<b>0.3</b>	<b>2.6</b>	<b>27.1</b>	<b>0.0</b>	<b>16.0</b>	
<b>2019 Mean</b>	<b>344</b>	<b>0.2</b>	<b>0.1</b>																																			

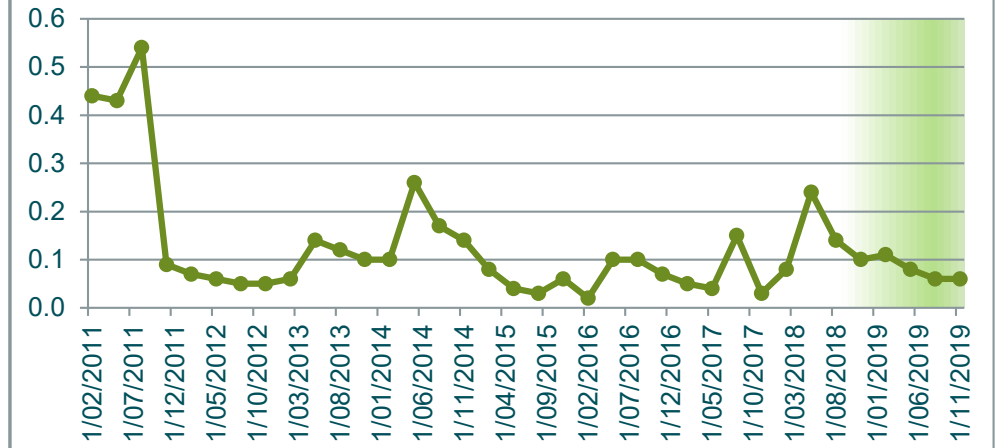
**Alkalinity**  
mg/L as CaCO<sub>3</sub>



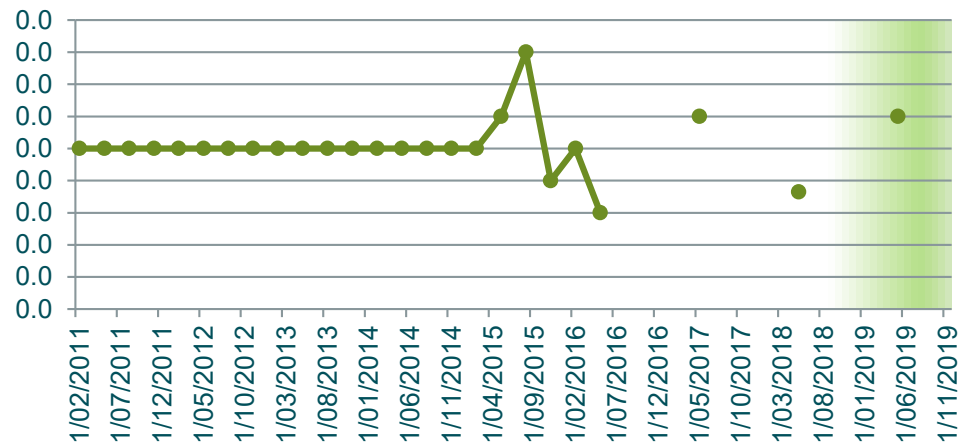
**Aluminium (Total)**  
mg/L



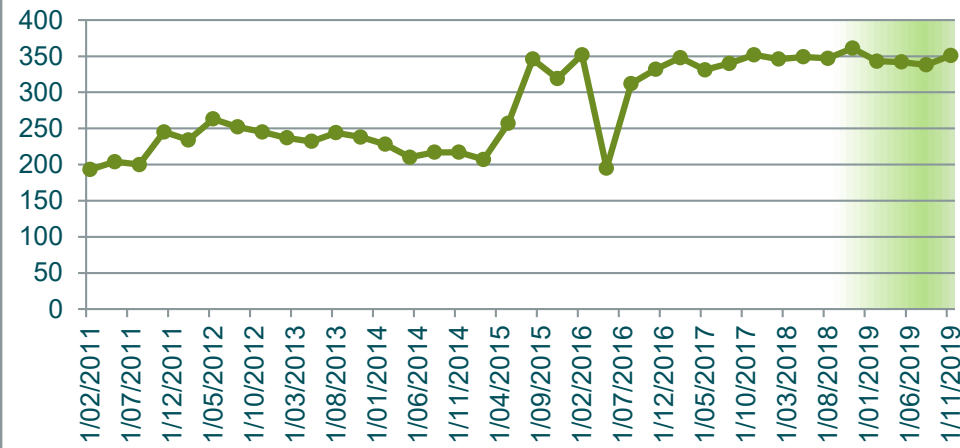
**Ammonia**  
mg/L



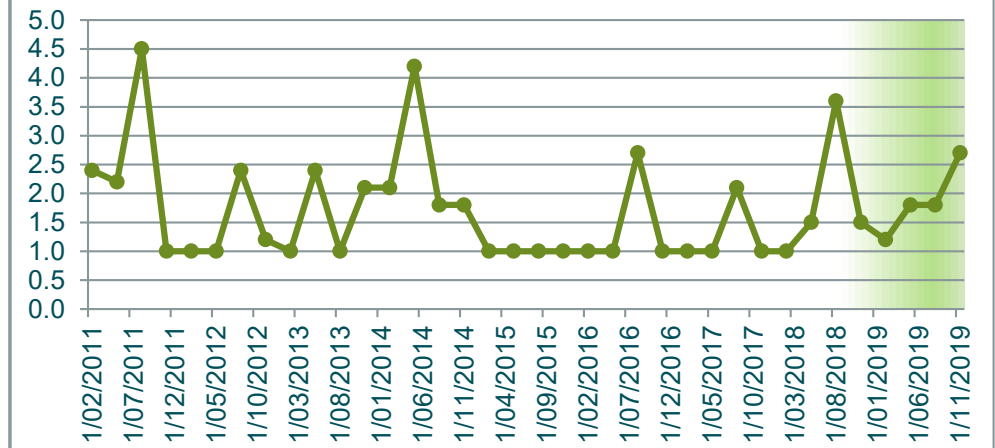
**Arsenic (Total)**  
mg/L



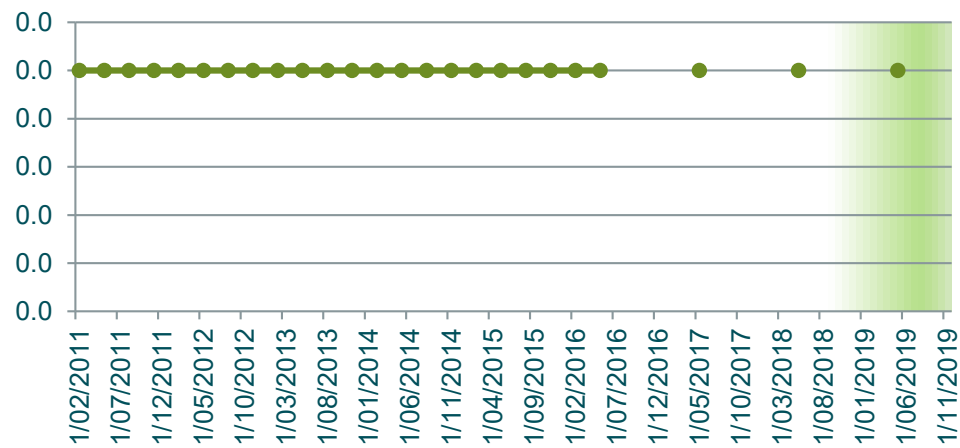
**Bicarbonate HCO<sub>3</sub>**  
mg/L



**BOD<sub>5</sub>**  
mg/L



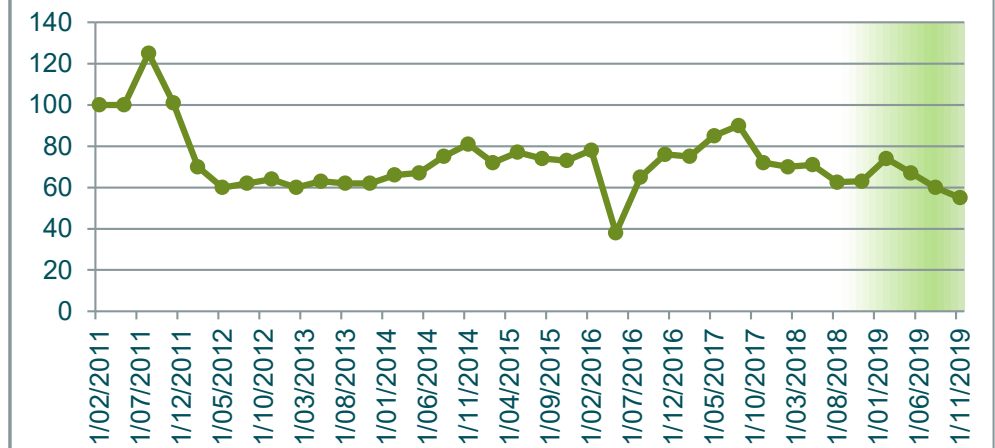
**Cadmium (Total)**  
mg/L



**Calcium (Total)**  
mg/L

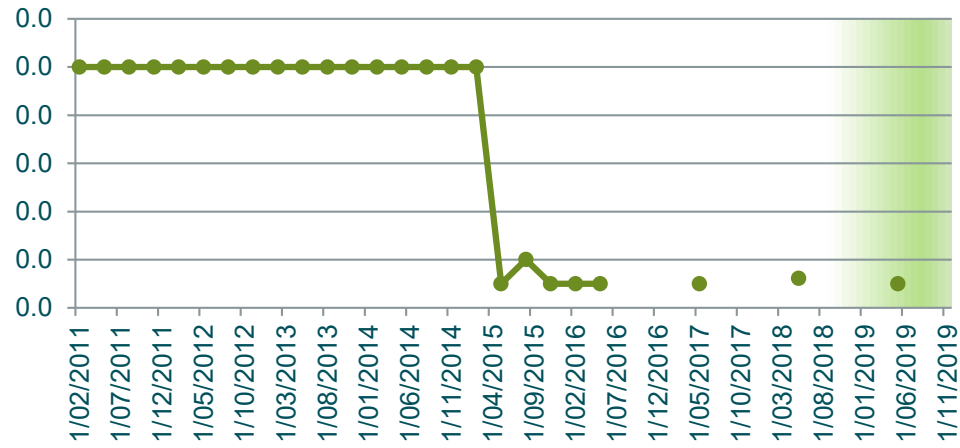


**Chloride**  
mg/L

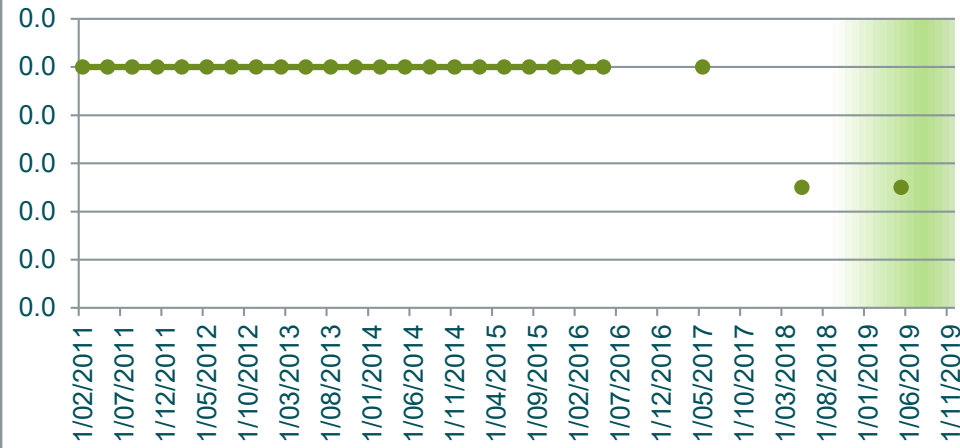




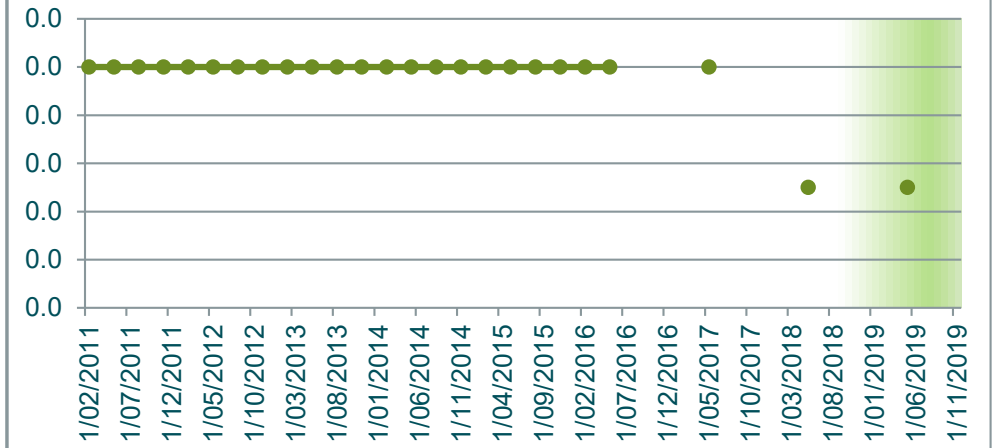
### Chromium (Total) mg/L



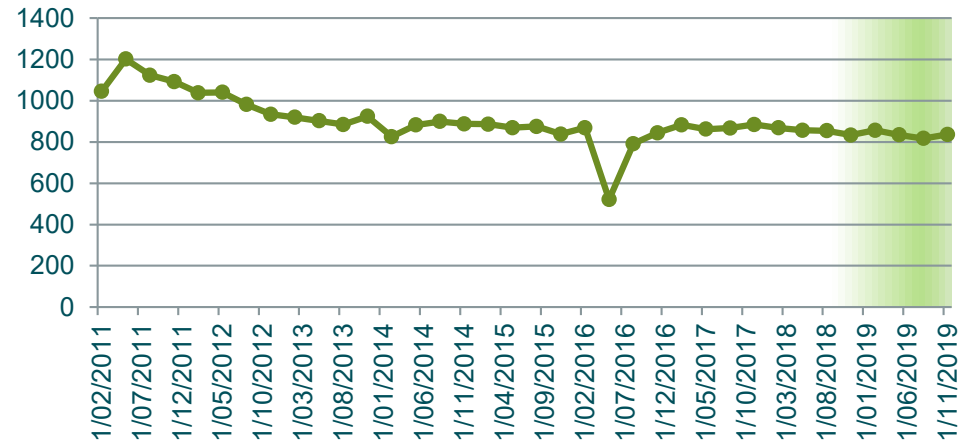
### Chromium 3 mg/L



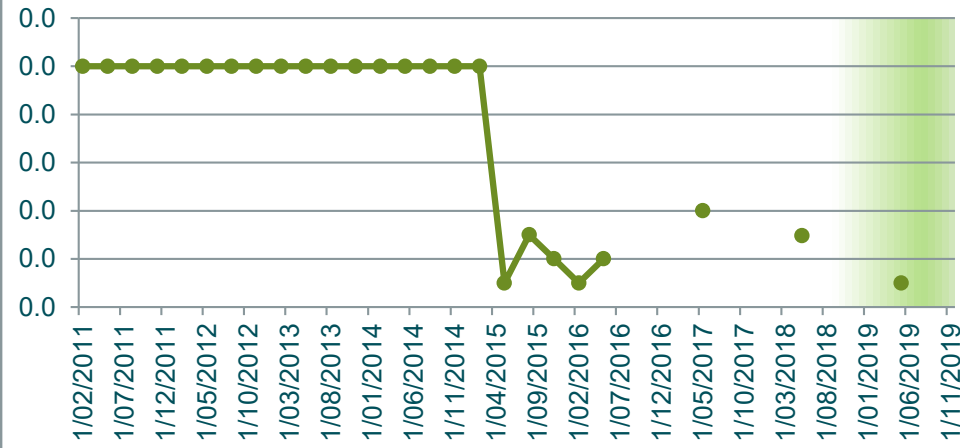
### Chromium 6 mg/L



### Conductivity µScm-1



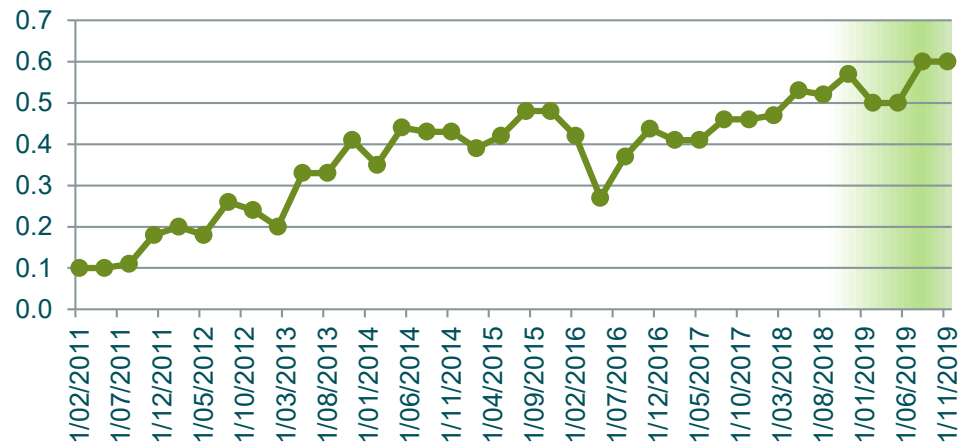
### Copper (Total) mg/L



### DO (Membrane Electrode) mg/L



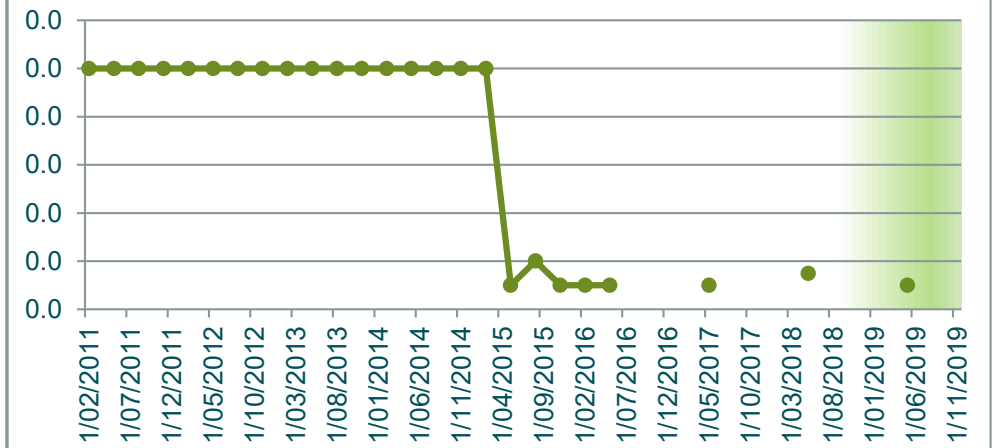
### Flouride mg/L



### Iron Total mg/L



### Lead (Total) mg/L



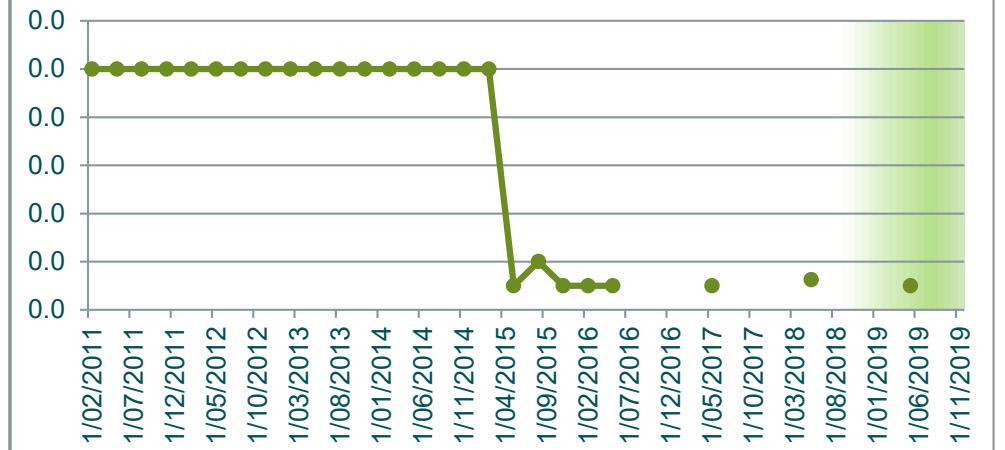
### Magnesium (Total) mg/L



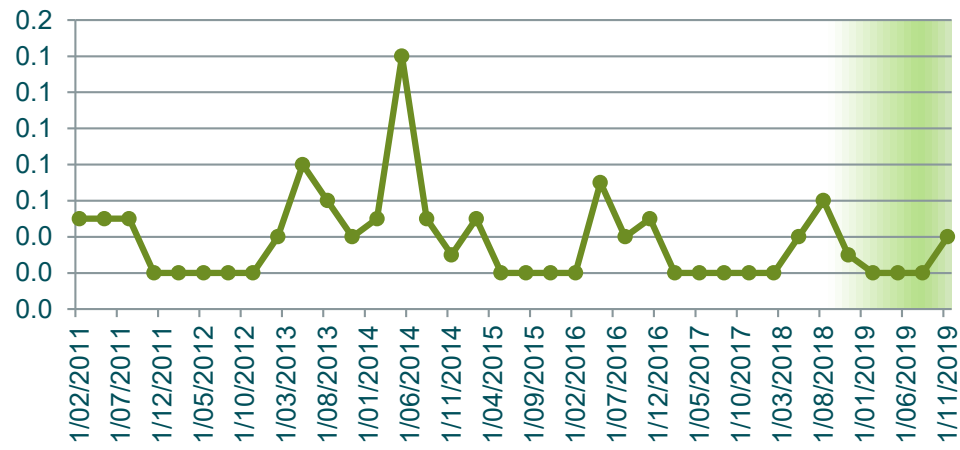
### Manganese Total mg/L



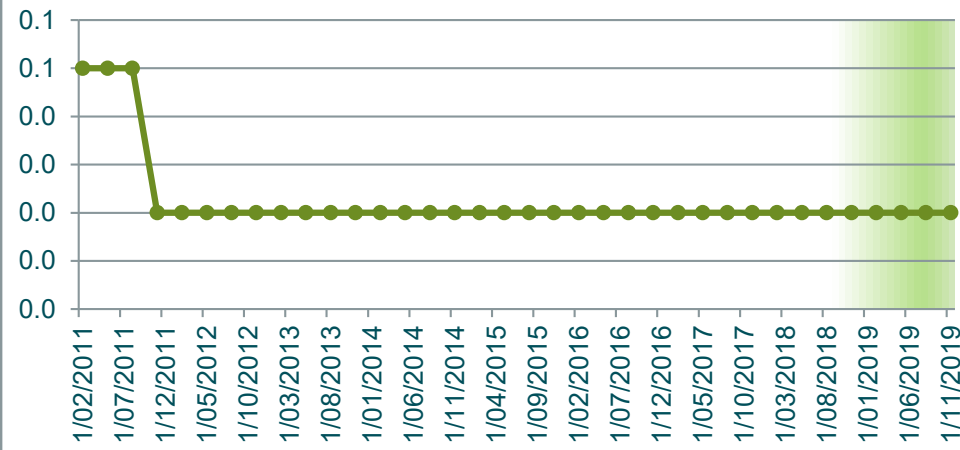
### Nickel (Total) mg/L



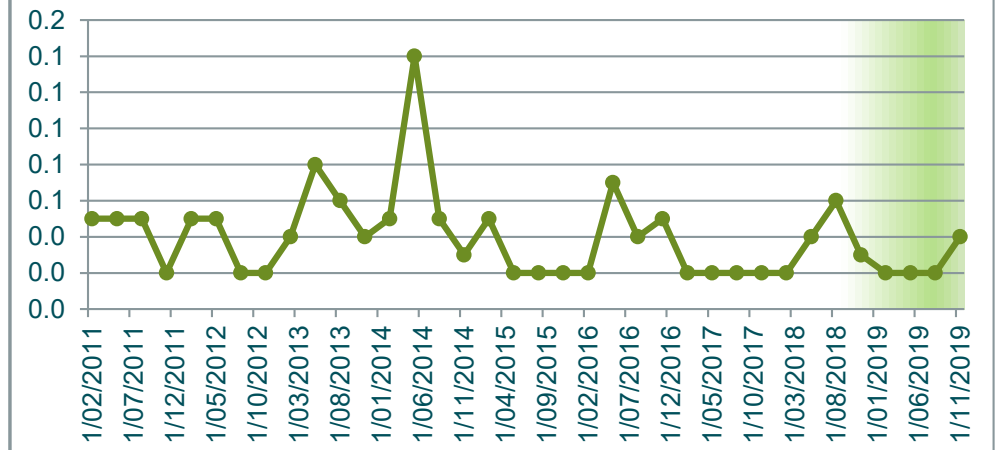
### Nitrate N mg/L



### Nitrite N mg/L



### Nitrogen Oxidised mg/L



### Nitrogen Total mg/L



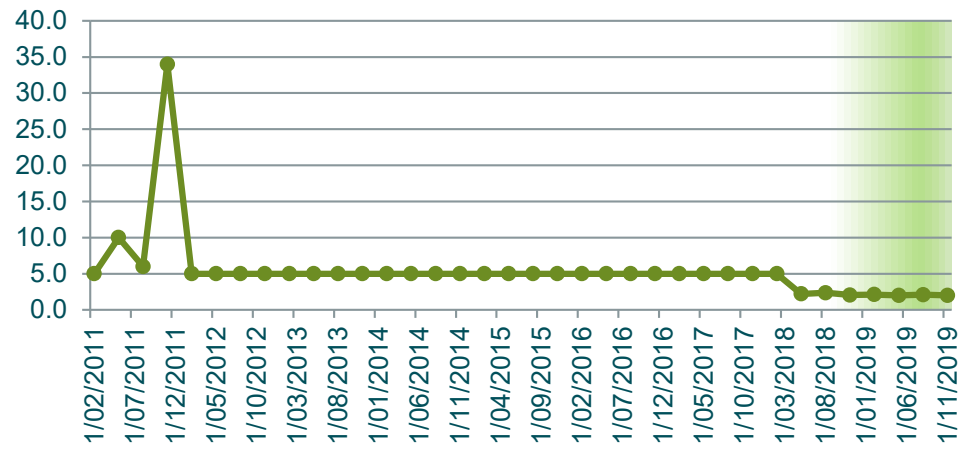
### pH pH units



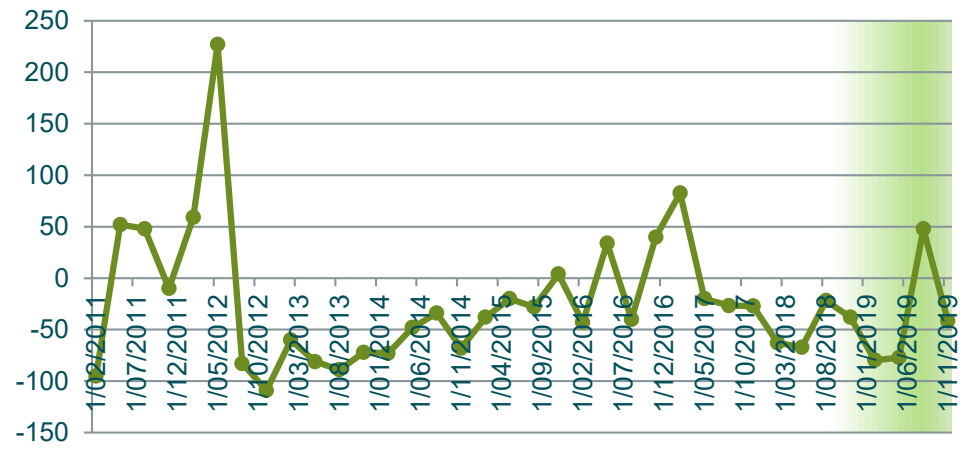
### Phosphorus Total mg/L



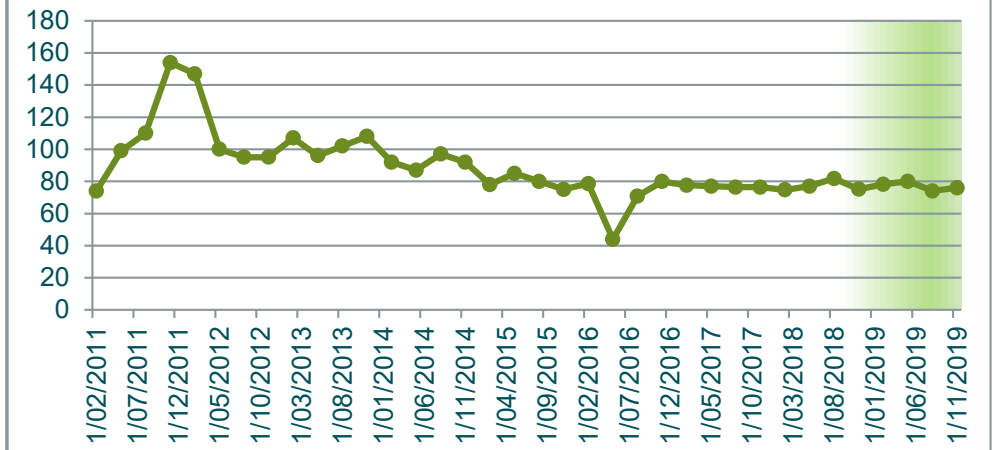
**Potassium Total  
mg/L**



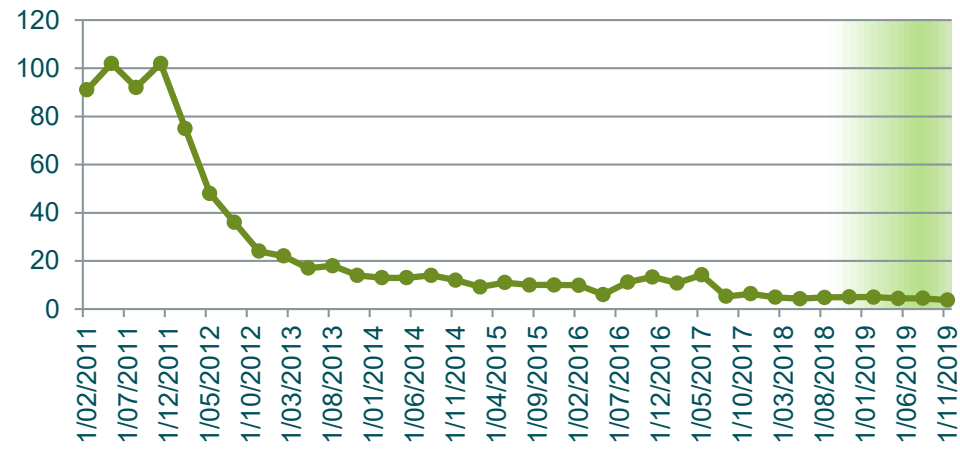
**Redox Potential  
mV**



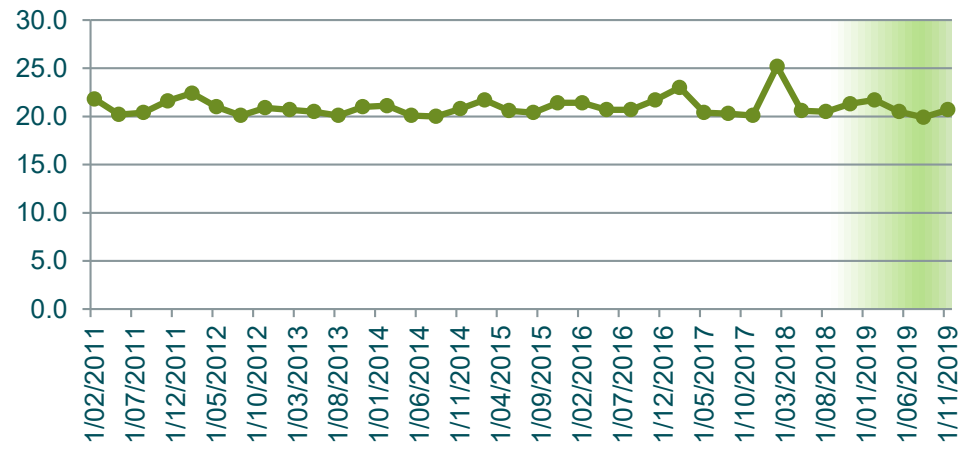
**Sodium (Total)  
mg/L**



**Sulphate  
mg/L**



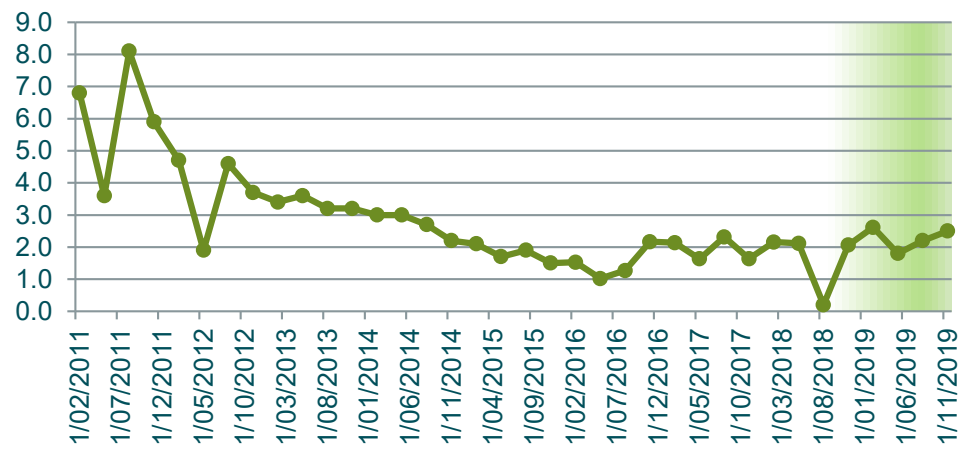
**Temperature  
C**



**TKN  
mg/L**



**TOC  
mg/L**



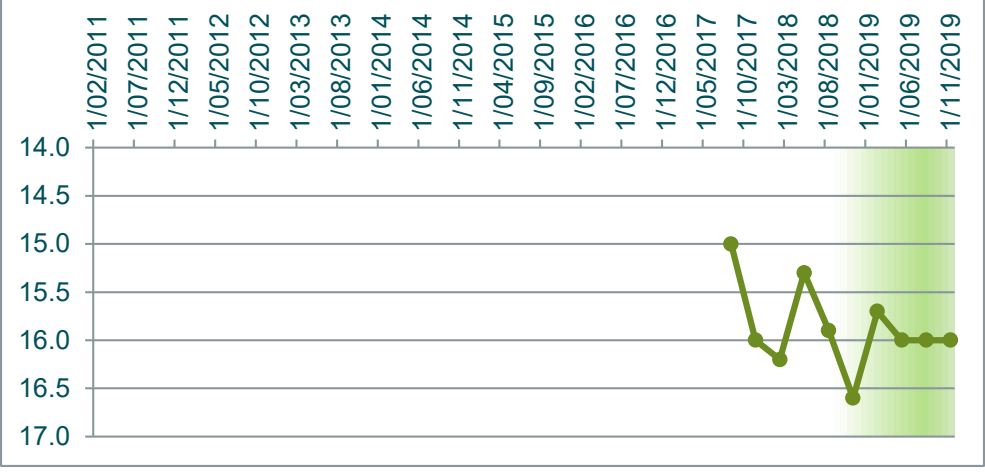
**Total Acidity  
mg/L CaCO3**



**Zinc (Total)  
mg/L**



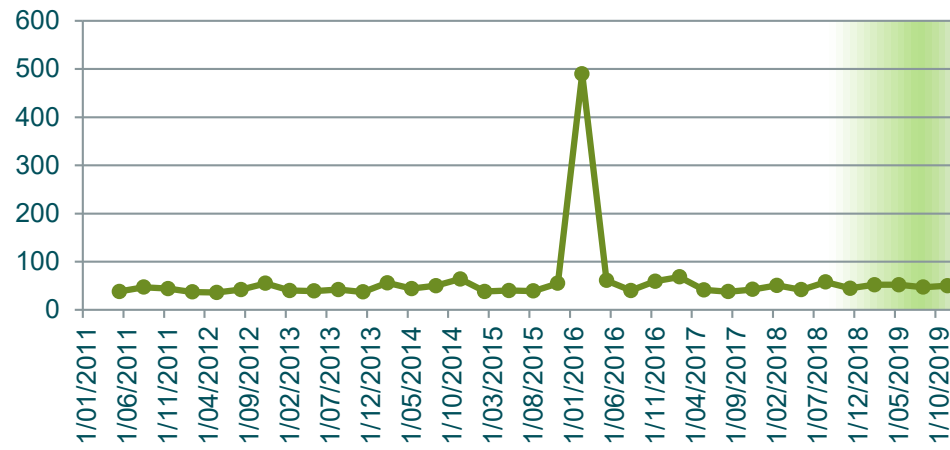
# Depth to Groundwater m



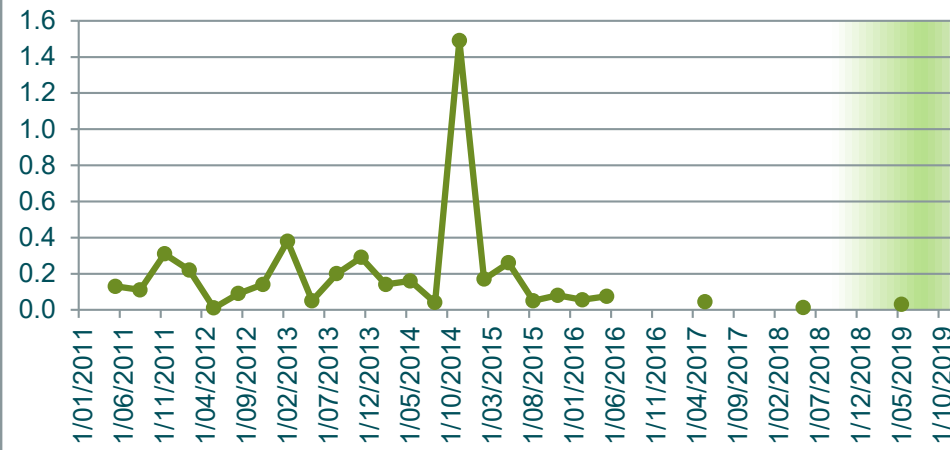
GW21	Alkalinity mg/L as CaCO3	Aluminium (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µS·cm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride 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	12.0	273	0.0	0.0	0.0	556	0.0	1.3	0.1	2.7	0.0	12.0	0.0	0.0	0.1	0.1	0.1	0.2	5.3		0.1	5.0	178	57.0	8.0	19.9	0.1	1.0	23	0.0				
9/08/2011	47	0.1	0.1	0.0	29	1.0	0.0	12.0	120	0.0	0.0	0.0	524	0.0	6.7	0.1	1.8	0.0	12.0	0.0	0.0	0.1	0.1	0.1	0.1	6.5		0.1	5.0	237	54.0	7.6	19.3	0.1	1.0	20	0.0				
8/11/2011	44	0.3	0.0	0.0	27	2.1	0.0	15.0	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	0.1	6.0		0.1	8.0	96	43.0	9.0	20.5	0.1	1.8	64	0.0					
6/02/2012	37	0.2	0.0	0.0	23	1.5	0.0	13.0	122	0.0	0.0	0.0	527	0.0	2.3	0.1	3.5	0.0	12.0	0.0	0.0	0.1	0.0	0.1	0.1	5.8		0.1	5.0	160	65.0	7.9	20.8	0.1	0.1	66	0.0				
8/05/2012	36	0.0	0.0	0.0	22	1.0	0.0	13.0	120	0.0	0.0	0.0	511	0.0	3.2	0.1	0.1	0.0	13.0	1.6	0.0	0.1	0.0	0.1	0.1	5.9		0.2	5.0	193	62.0	10.0	20.3	0.1	0.5	63	0.0				
6/08/2012	42	0.1	0.0	0.0	26	1.8	0.0	12.0	128	0.0	0.0	0.0	580	0.0	2.9	0.1	9.1	0.0	12.0	0.1	0.0	0.0	0.0	0.1	5.8		0.2	5.0	86	44.0	7.4	19.9	0.1	0.2	39	0.0					
13/11/2012	55	0.1	0.0	0.0	34	2.8	0.0	13.0	120	0.0	0.0	0.0	533	0.0	1.9	0.1	6.7	0.0	13.0	0.1	0.0	0.0	0.0	0.1	6.1		0.0	5.0	39	53.0	5.9	20.4	0.1	0.3	69	0.0					
13/02/2013	40	0.4	0.1	0.0	24	1.5	0.0	14.0	130	0.0	0.0	0.0	582	0.0	0.5	0.1	1.3	0.0	13.0	0.0	0.0	0.1	0.0	0.1	5.7		0.0	5.0	83	58.0	7.6	20.2	0.1	0.2	46	0.0					
14/05/2013	39	0.1	0.0	0.0	24	1.0	0.0	14.0	130	0.0	0.0	0.0	551	0.0	3.1	0.1	1.2	0.0	12.0	0.0	0.0	0.1	0.0	0.1	5.9		0.0	5.0	68	55.0	7.3	20.6	0.1	0.2	78	0.0					
6/08/2013	42	0.2	0.0	0.0	26	4.5	0.0	16.0	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	0.1	5.8		0.0	5.0	98	63.0	8.8	19.9	0.1	0.2	130	0.0					
12/11/2013	37	0.3	0.0	0.0	23	1.0	0.0	15.0	132	0.0	0.0	0.0	543	0.0	5.2	0.1	1.9	0.0	15.0	0.0	0.0	0.1	0.0	0.1	6.0		0.1	5.0	787	64.0	9.4	20.4	0.1	0.2	21	0.1					
11/02/2014	56	0.1	0.1	0.0	34	2.7	0.0	19.0	128	0.0	0.0	0.0	536	0.0	1.0	0.1	6.8	0.0	15.0	0.1	0.0	0.1	0.0	0.1	6.1		0.0	5.0	11	75.0	13.0	20.5	0.1	0.2	193	0.0					
13/05/2014	44	0.2	0.0	0.0	27	1.2	0.0	12.0	132	0.0	0.0	0.0	561	0.0	2.2	0.1	2.8	0.0	13.0	0.0	0.0	0.1	0.0	0.1	5.9		0.1	5.0	52	55.0	6.6	20.8	0.1	0.2	64	0.0					
12/08/2014	50	0.0	0.0	0.0	30	1.5	0.0	16.0	130	0.0	0.0	0.0	548	0.0	3.2	0.1	2.9	0.0	15.0	0.0	0.0	0.1	0.0	0.1	6.2		0.0	5.0	48	63.0	7.0	19.9	0.1	0.2	120	0.0					
10/11/2014	64	1.5	0.1	0.0	39	3.0	0.0	16.0	132	0.0	0.0	0.0	562	0.0	1.8	0.1	8.8	0.0	16.0	0.1	0.0	0.1	0.0	0.1	6.3		0.0	5.0	3	64.0	5.8	20.7	0.1	0.2	148	0.0					
9/02/2015	38	0.2	0.0	0.0	23	1.0	0.0	13.0	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	0.2	6.0		0.1	5.0	56	56.0	7.9	21.4	0.2	0.2	75	0.0					
11/05/2015	40	0.3	0.0	0.0	24	1.0	0.0	15.0	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	0.1	6.0		0.2	5.0	61	62.0	8.0	20.5	0.1	0.2	79	0.0					
11/08/2015	39	0.1	0.0	0.0	39	1.0	0.0	15.0	38	0.0	0.0	0.0	528	0.0	8.2	0.1	1.7	0.0	14.0	0.0	0.0	0.1	0.0	0.1	6.6		0.1	5.0	83	60.0	7.7	19.8	0.1	0.2	22	0.0					
10/11/2015	55	0.1	0.0	0.0	55	1.0	0.0	16.0	128	0.0	0.0	0.0	471	0.0	1.5	0.1	4.0	0.0	14.0	0.1	0.0	0.0	0.0	0.1	6.1		0.0	5.0	-45	59.0	6.7	20.4	0.1	0.2	75	0.0					
8/02/2016	490	0.1	0.0	0.0	490	1.2	0.0	15.1	131	0.0	0.0	0.0	552	0.0	1.0	0.1	3.5	0.0	13.9	0.1	0.0	0.0	0.0	0.1	6.1		0.0	5.0	57	59.3	6.5	20.6	0.1	0.2	107	0.0					
9/05/2016	61	0.1	0.0	0.0	61	2.2	0.0	15.9	128	0.0	0.0	0.0	567	0.0	2.1	0.1	6.0	0.0	14.1	0.1	0.0	0.0	0.0	0.1	6.2		0.1	5.0	42	60.4	5.6	20.7	0.1	0.4	92	0.0					
9/08/2016	40		0.0		40	1.0		14.2	132				530		3.9	0.1			13.5			0.1	0.0	0.1	5.8		0.1	5.0	140	60.0	8.4	20.1	0.1	0.3	92						
7/11/2016	59		0.0		59	1.8		17.1	135				562		1.6	0.1			15.0			0.0	0.0	0.1	6.0		0.0	5.0	163	62.8	6.6	20.4	0.1	0.5	87						
7/02/2017	68		0.1		68	3.6		15.8	135				583		1.6	0.1			14.3			0.0	0.0	0.0	6.0		0.1	5.0	102	60.8	5.1	20.6	0.3	2.0	129						
8/05/2017	42	0.0	0.0	0.0	42	1.0	0.0	14.5	132	0.0	0.0	0.0	541	0.0	2.0	0.1	1.6	0.0	13.6	0.1	0.0	0.0	0.0	0.1	5.7		0.1	5.0	202	58.0	9.1	20.6	0.1	0.3	64	0.0					
8/08/2017	38		0.0		38	1.0		14.2	115				540		5.3	0.1			13.5			0.1	0.0	0.1	5.9		0.0	5.0	346	59.2	7.7	20.1	0.1	0.5	36		0.6				
7/11/2017	42		0.0		42	1.0		16.0	136				558		4.0	0.1			14.5			0.2	0.0	0.2	5.9		0.1	5.0	325	61.5	6.7	20.6	0.1	0.5	32		0.8				
13/02/2018	50		0.0		50	1.0		15.3	133				553		2.0	0.1			13.7			0.0	0.0	0.0	6.0		0.0	5.0	105	59.6	5.6	21.6	0.1	0.7	68		1.8				
8/05/2018	42	0.0	0.0	0.0	42	1.8	0.0	15.3	158	0.0	0.0	0.0	551	0.0	2.4	0.1	1.3	0.0	14.5	0.1	0.0	0.0	0.0	0.1	5.8		0.0	2.1	161	63.2	7.1	20.6	0.1	0.2	70	0.0	0.5				
14/08/2018	58		0.0		58	3.6		17.2	135				565		3.2	0.1			15.3			0.0	0.0	0.0	6.0		0.0	2.1	169	66.5	4.3	20.1	0.1	0.8	59		1.2				
13/11/2018	45		0.0		45	1.0		15.9	142				553		5.0	0.1			14.4			0.1	0.0	0.1	6.3		0.1	2.1	93	61.2	6.5	20.5	0.1	0.5	34		0.9				
12/02/2019	52		0.0		52	1.2		17.2	145				561		2.2	0.1			15.0			0.0	0.0	0.0	6.0		0.0	2.0	213	64.9	5.6	21.3	0.1	0.5	16		1.9				
14/05/2019	52	0.0	0.0	0.0	52	1.8	0.0	17.0	140	0.0	0.0	0.0	559	0.0	2.6	0.1	2.0	0.0	16.0	0.1	0.0	0.1	0.0	0.1	6.0		0.0	2.2	84	68.0	5.4	20.7	0.1	0.5	60	0.0	0.8				
13/08/2019	47		0.0		47	1.0		16.0	130				549		6.5	0.1			15.0			0.0	0.0	0.0	6.4		0.1	2.1	354	66.0	5.2	19.5	0.1	0.9	20		0.9				
12/11/2019	50		0.0		50	1.0		16.0	130				574		3.5	0.1			15.0			0.0	0.0	0.0	6.2		0.0	2.1	185	65.0	4.9	20.6	0.1	0.8	40		2.1				
<b>2019 Min</b>	<b>47</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>47</b>	<b>1.0</b>	<b>0.0</b>	<b>16.0</b>	<b>130</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>549</b>	<b>0.0</b>	<b>2.2</b>	<b>0.1</b>	<b>2.0</b>	<b>0.0</b>	<b>15.0</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>6.0</b>		<b>0.0</b>	<b>2.0</b>	<b>84</b>	<b>64.9</b>	<b>4.9</b>	<b>19.5</b>	<b>0.1</b>	<b>0.5</b>	<b>16</b>	<b>0.0</b>	<b>0.8</b>				
<b>2019 Max</b>	<b>58</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>58</b>	<b>3.6</b>	<b>0.0</b>	<b>17.2</b>	<b>158</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>565</b>	<b>0.0</b>	<b>5.0</b>	<b>0.1</b>	<b>1.3</b>	<b>0.0</b>	<b>15.3</b>	<b>0.1</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>0.1</b>	<b>6.3</b>		<b>0.1</b>	<b>5.0</b>	<b>169</b>	<b>66.5</b>	<b>7.1</b>	<b>21.6</b>	<b>0.1</b>	<b>0.8</b>	<b>70</b>	<b>0.0</b>	<b>1.8</b>				
<b>2019 Mean</b>	<b>49</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>49</b>	<b>1.9</b>	<b>0.0</b>	<b>15.9</b>	<b>142</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>555</b>	<b>0.0</b>	<b>3.2</b>	<b>0.1</b>	<b>1.3&lt;/</b>																								



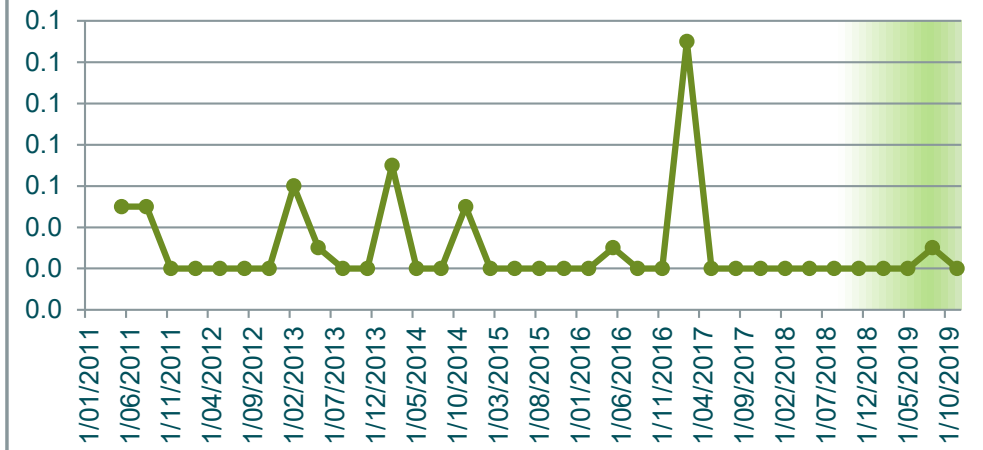
**Alkalinity**  
mg/L as CaCO<sub>3</sub>



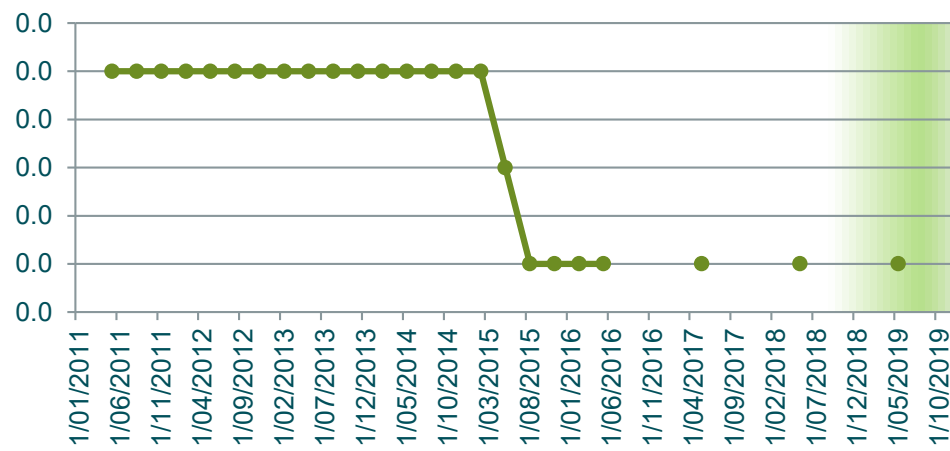
**Aluminium (Total)**  
mg/L



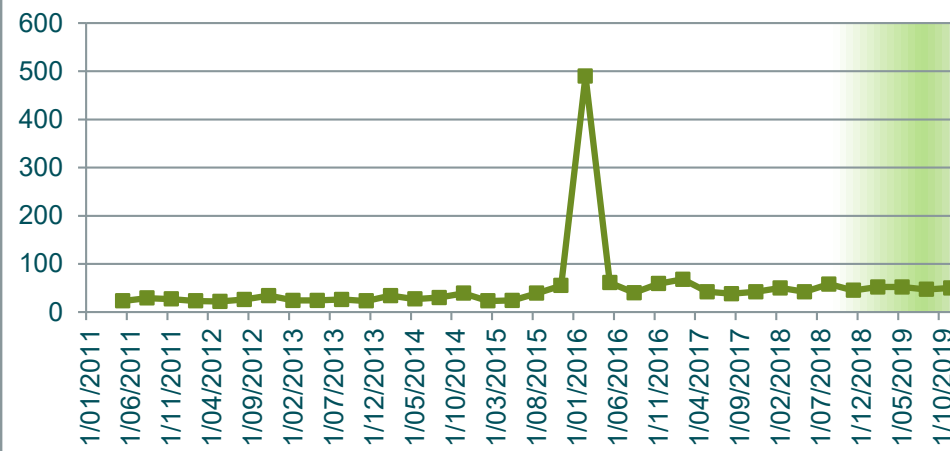
**Ammonia**  
mg/L



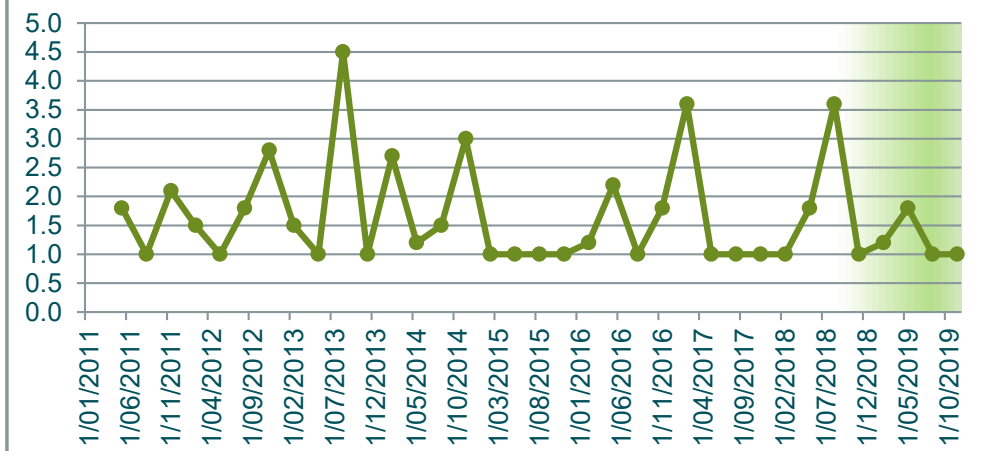
**Arsenic (Total)**  
mg/L



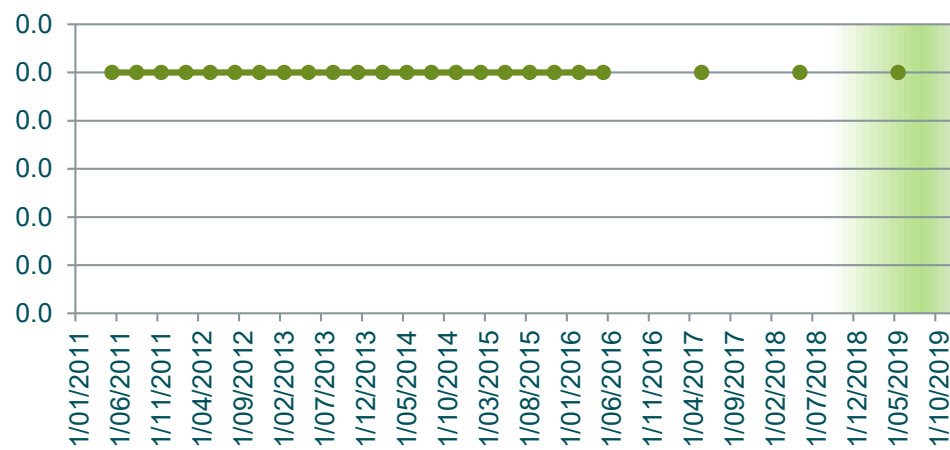
**Bicarbonate HCO<sub>3</sub>**  
mg/L



**BOD<sub>5</sub>**  
mg/L



**Cadmium (Total)**  
mg/L



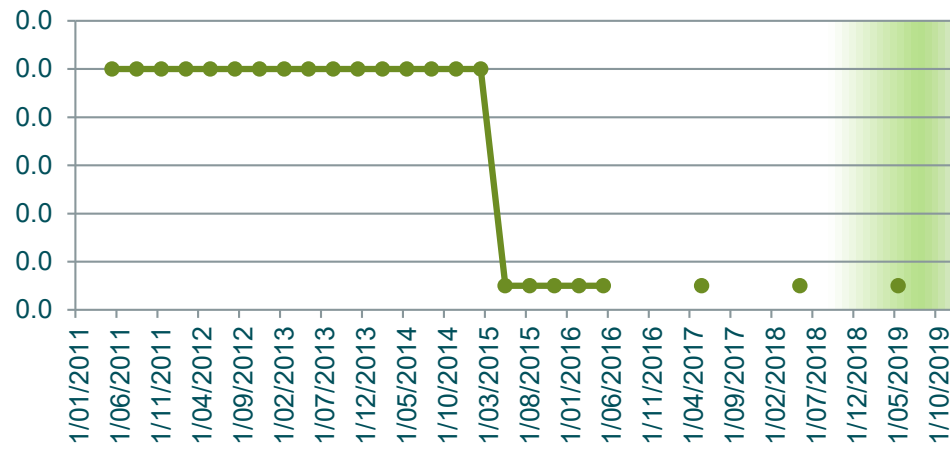
**Calcium (Total)**  
mg/L



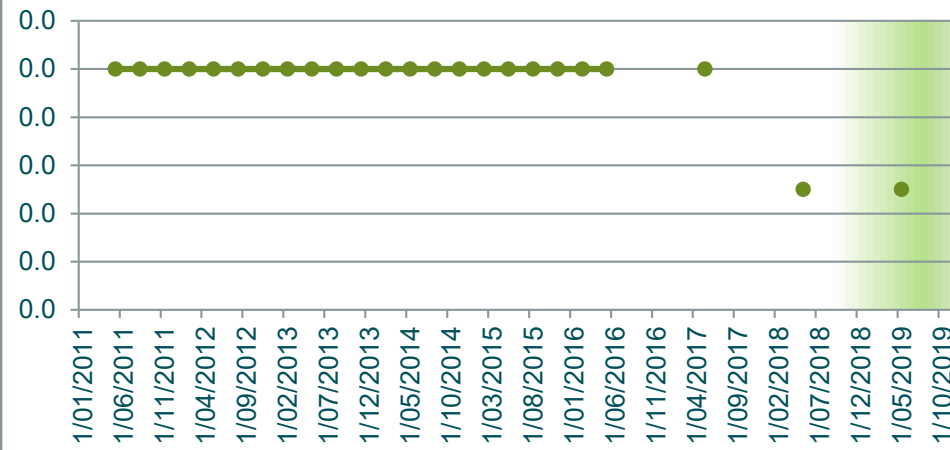
**Chloride**  
mg/L



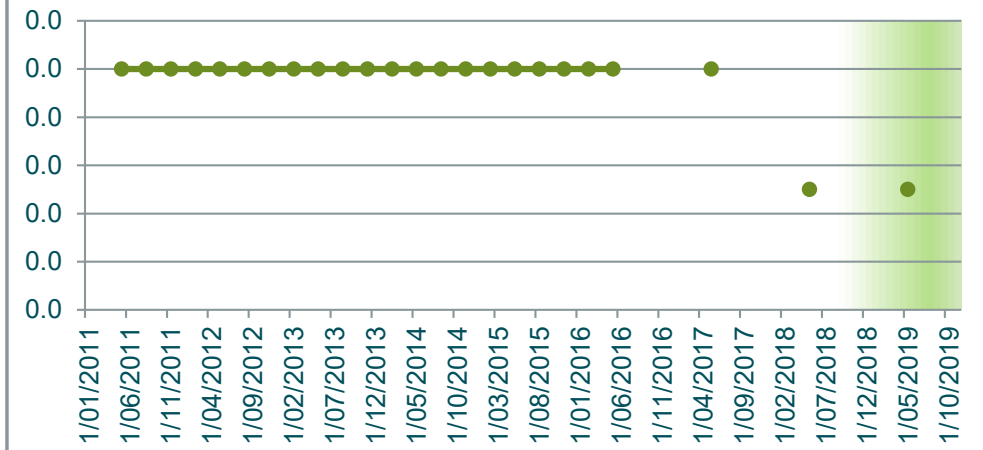
### Chromium (Total) mg/L



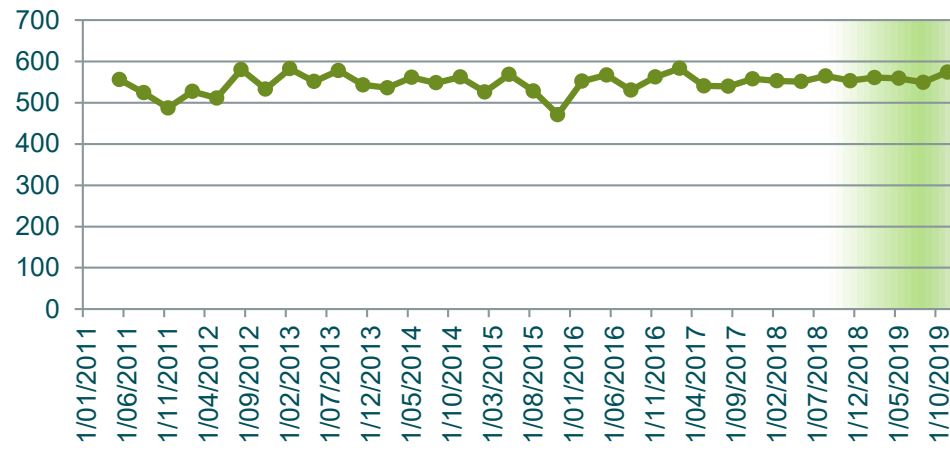
### Chromium 3 mg/L



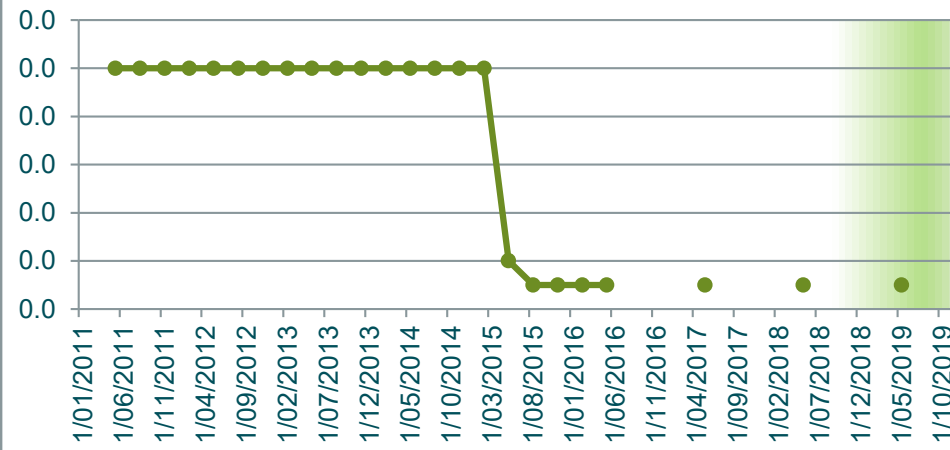
### Chromium 6 mg/L



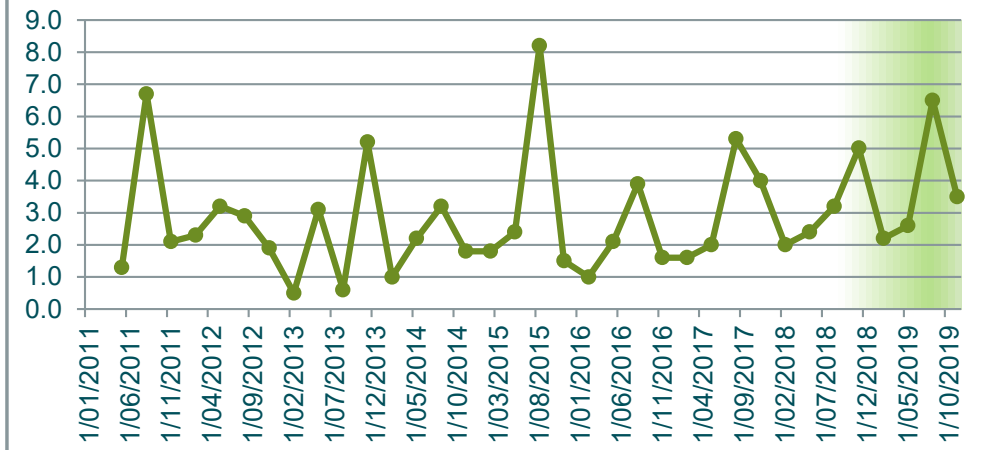
### Conductivity µScm-1



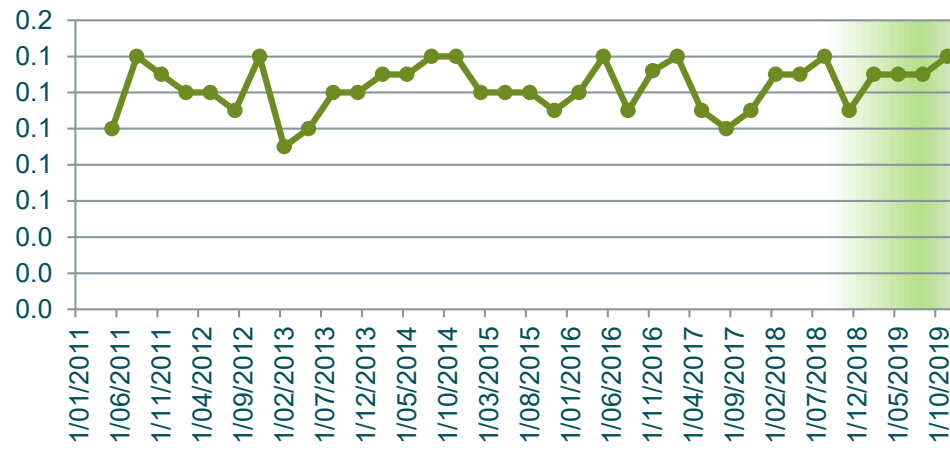
### Copper (Total) mg/L



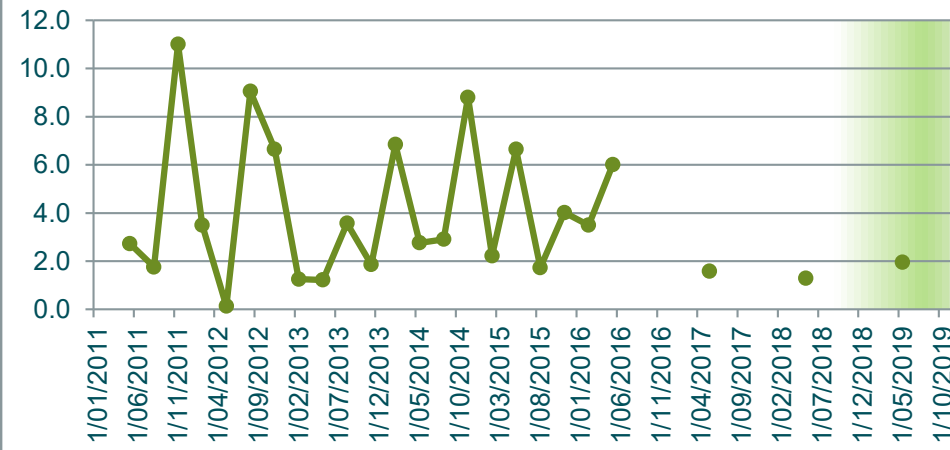
### DO (Membrane Electrode) mg/L



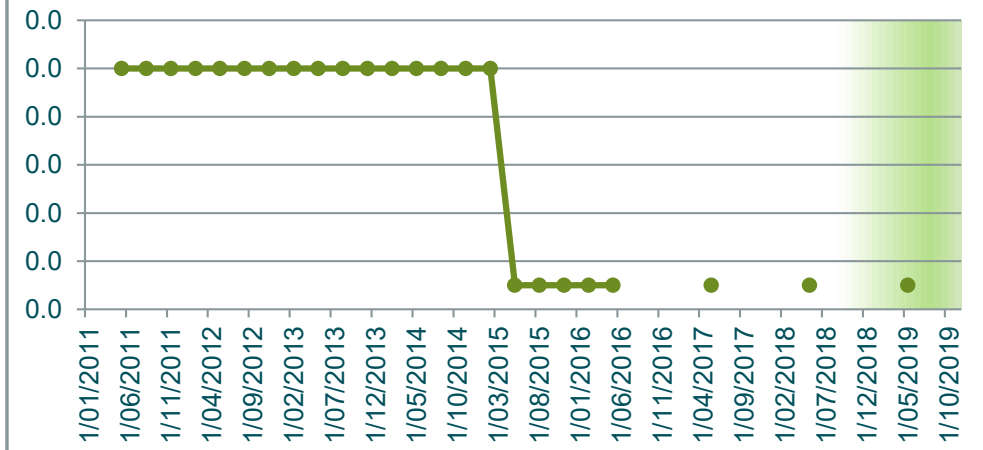
### Flouride mg/L



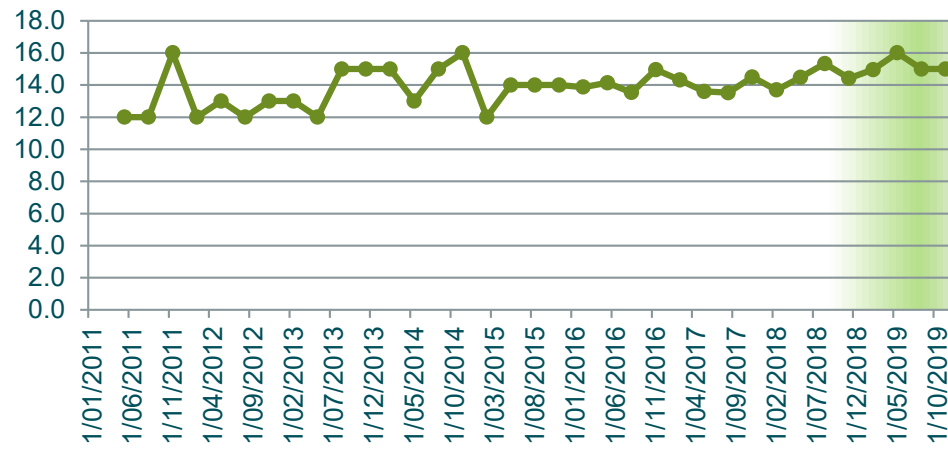
### Iron Total mg/L



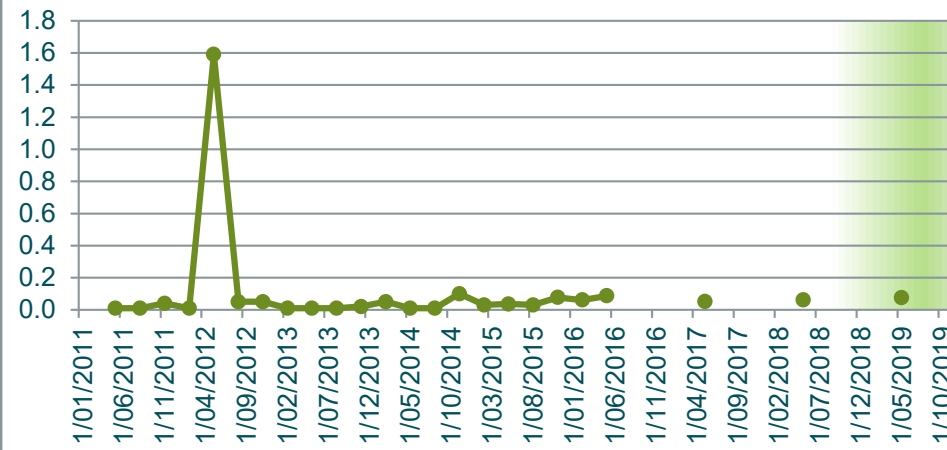
### Lead (Total) mg/L



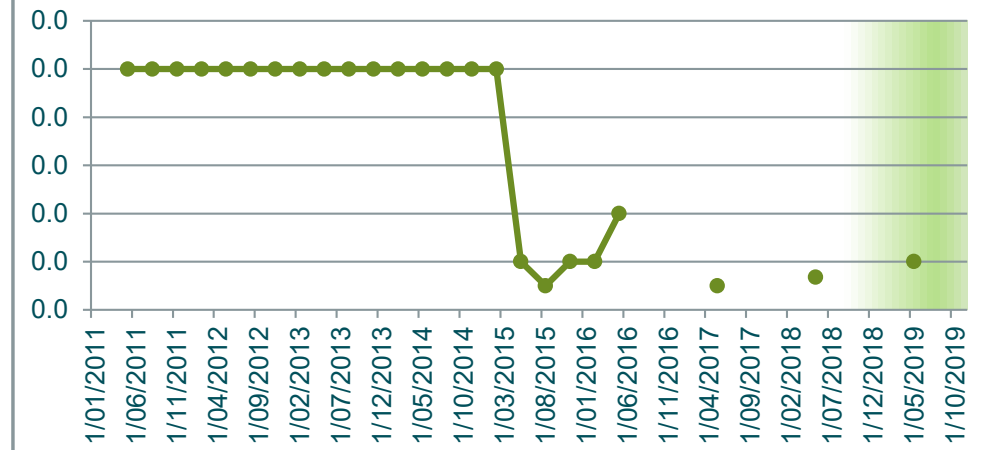
**Magnesium (Total)  
mg/L**



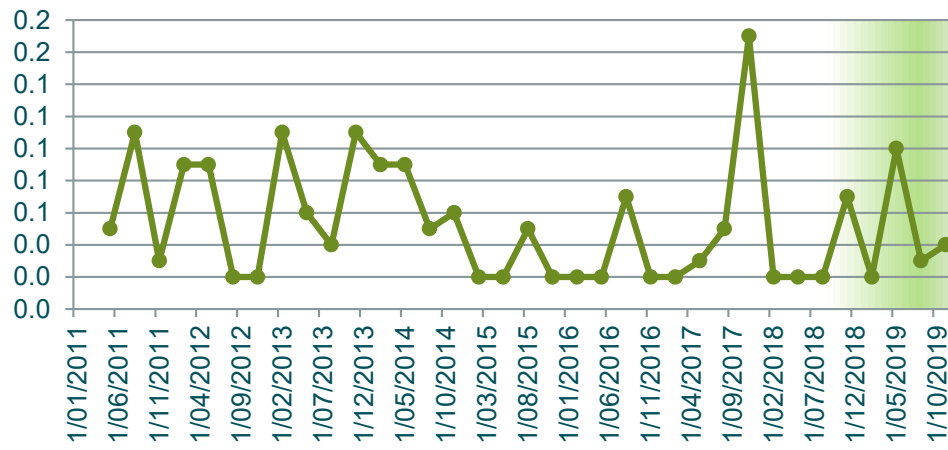
**Manganese Total  
mg/L**



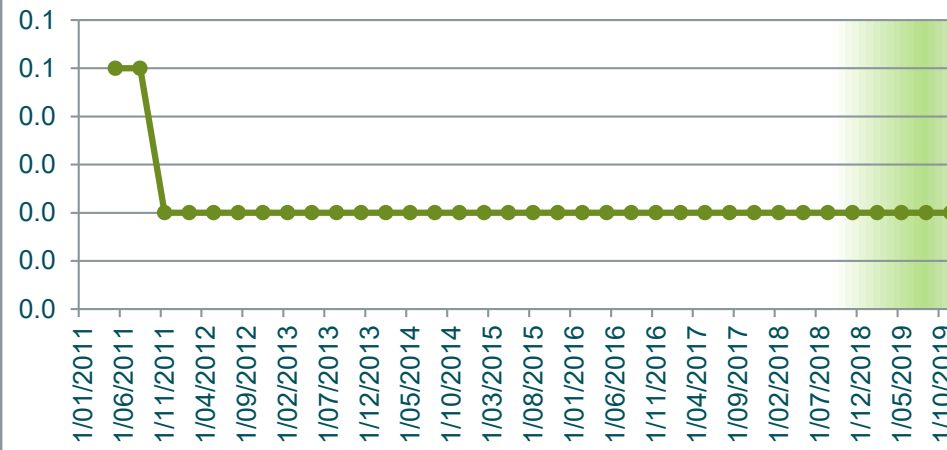
**Nickel (Total)  
mg/L**



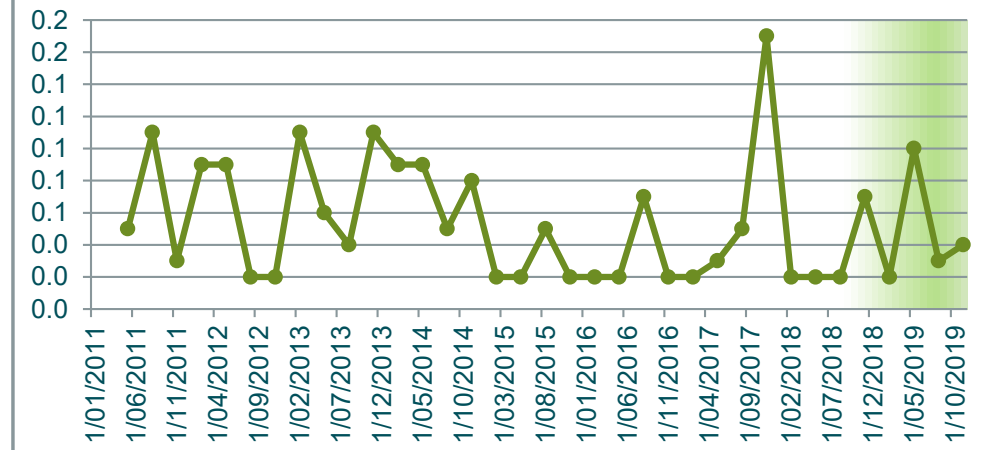
**Nitrate  
N mg/L**



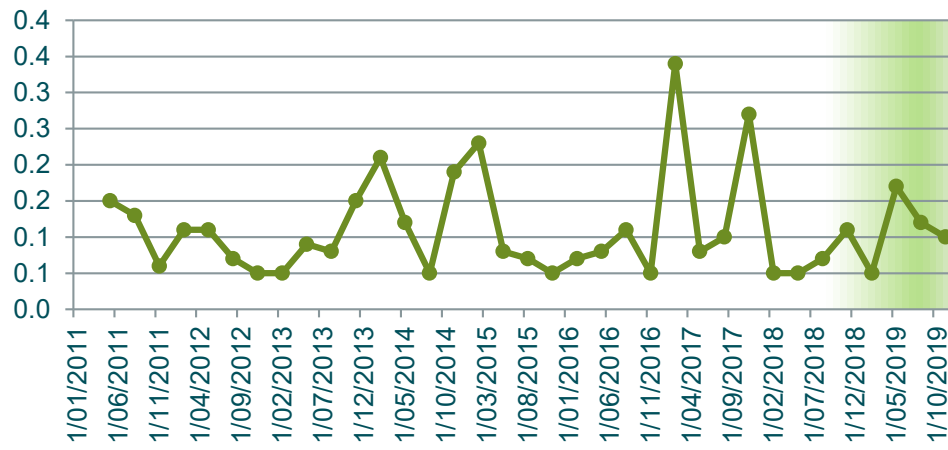
**Nitrite  
N mg/L**



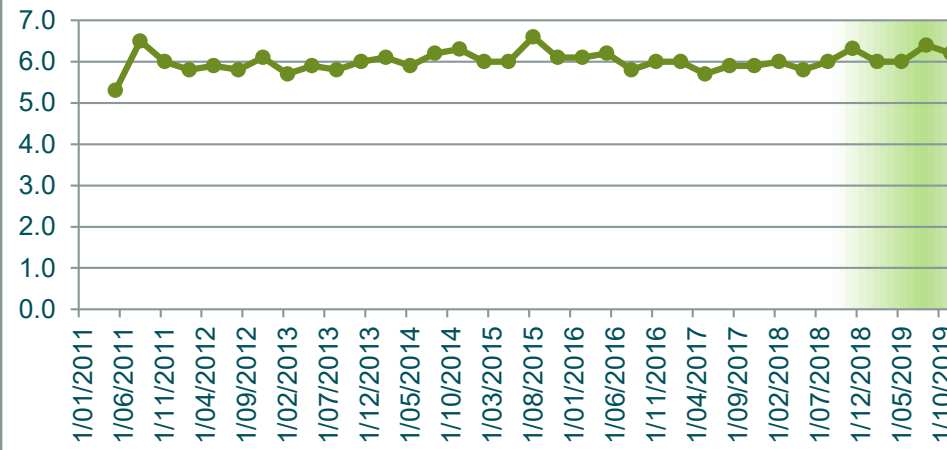
**Nitrogen Oxidised  
mg/L**



**Nitrogen Total  
mg/L**



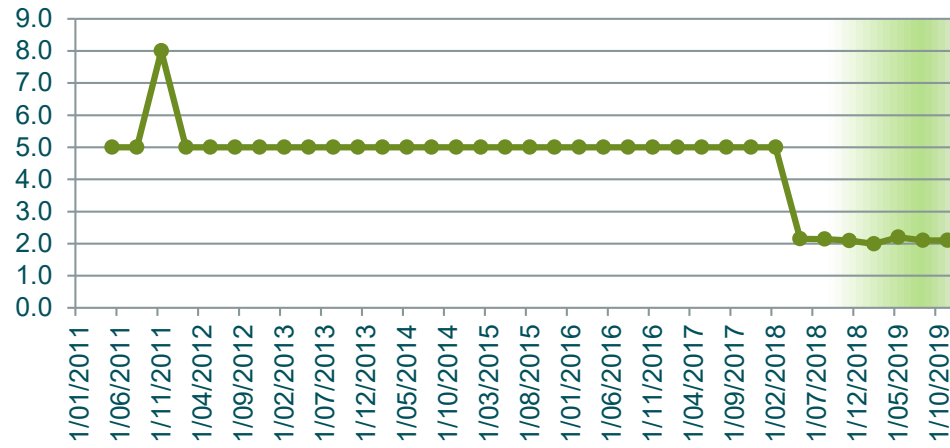
**pH  
pH units**



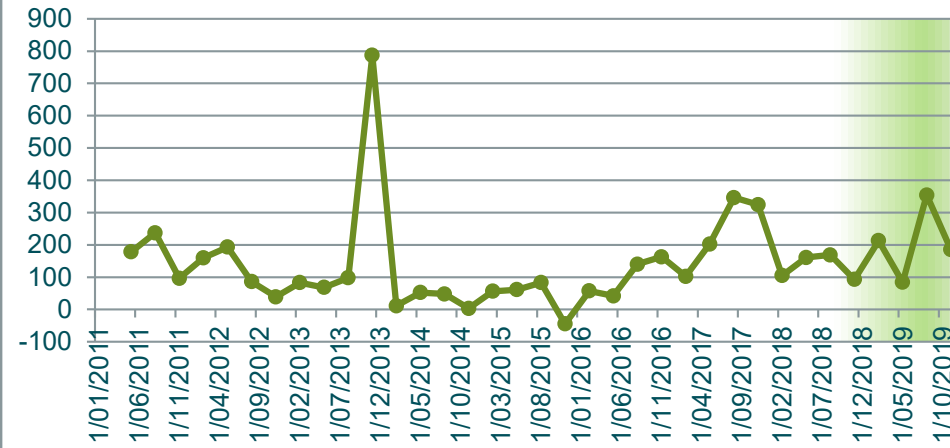
**Phosphorus Total  
mg/L**



**Potassium Total  
mg/L**



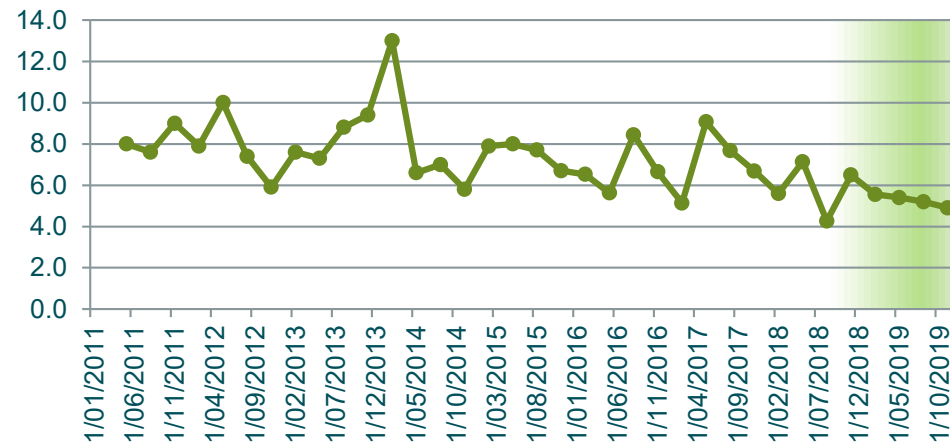
**Redox Potential  
mV**



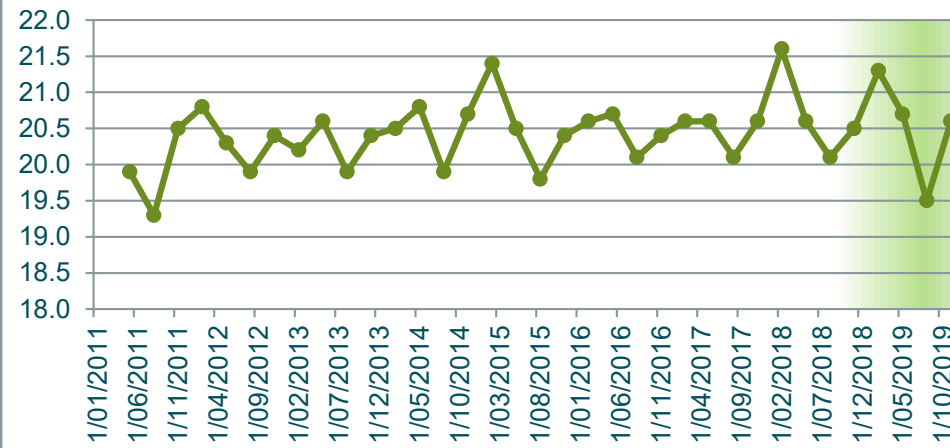
**Sodium (Total)  
mg/L**



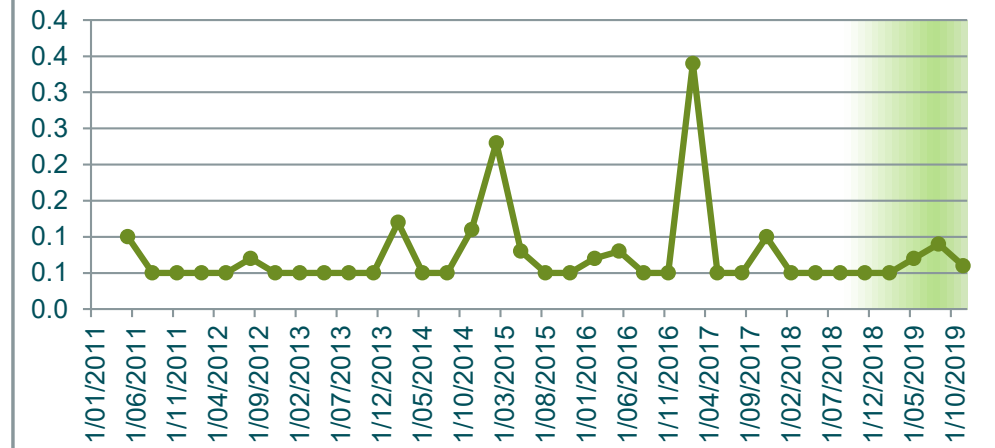
**Sulphate  
mg/L**



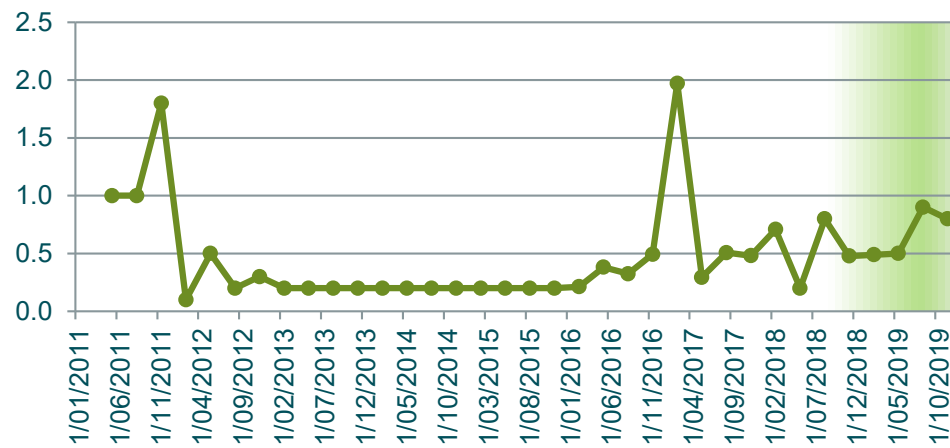
**Temperature  
C**



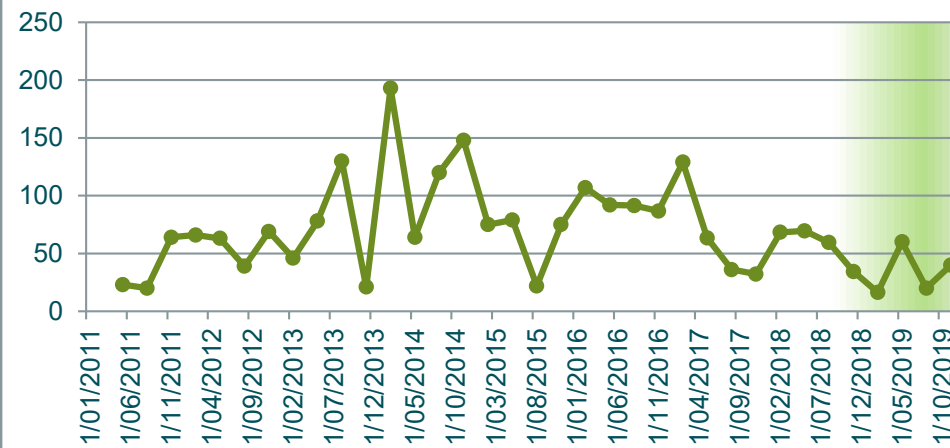
**TKN  
mg/L**



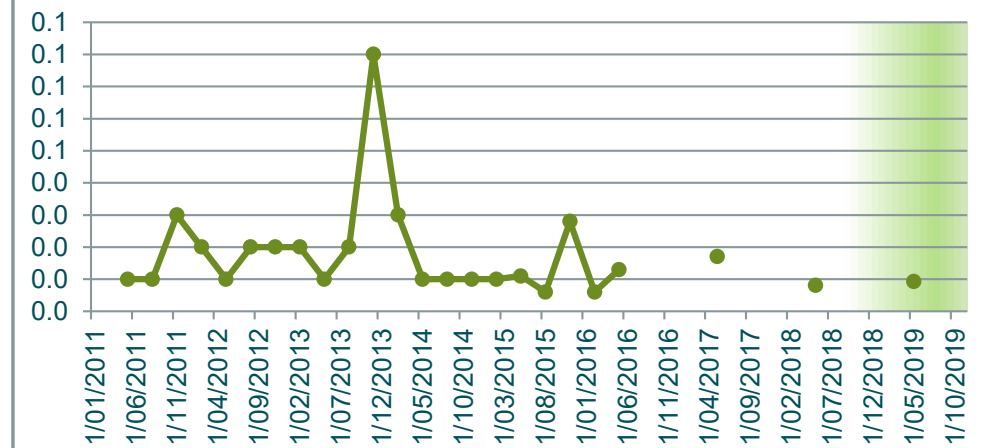
**TOC  
mg/L**



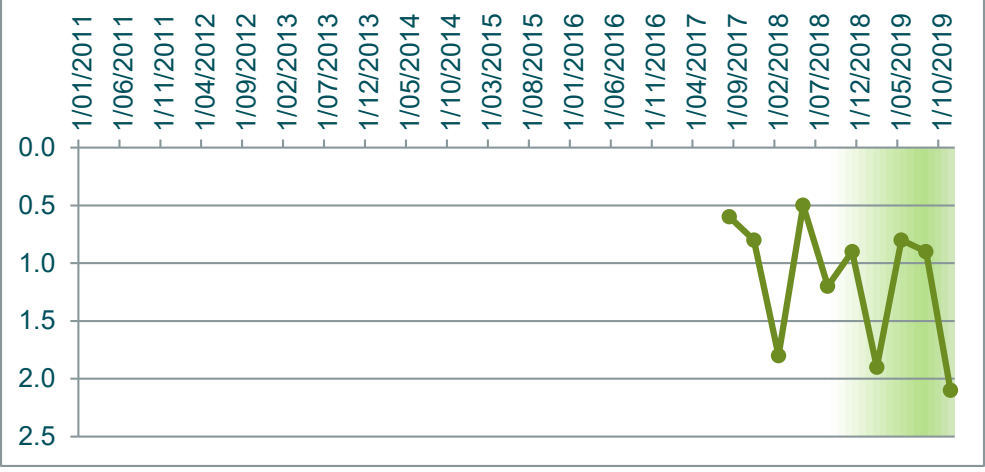
**Total Acidity  
mg/L CaCO3**



**Zinc (Total)  
mg/L**



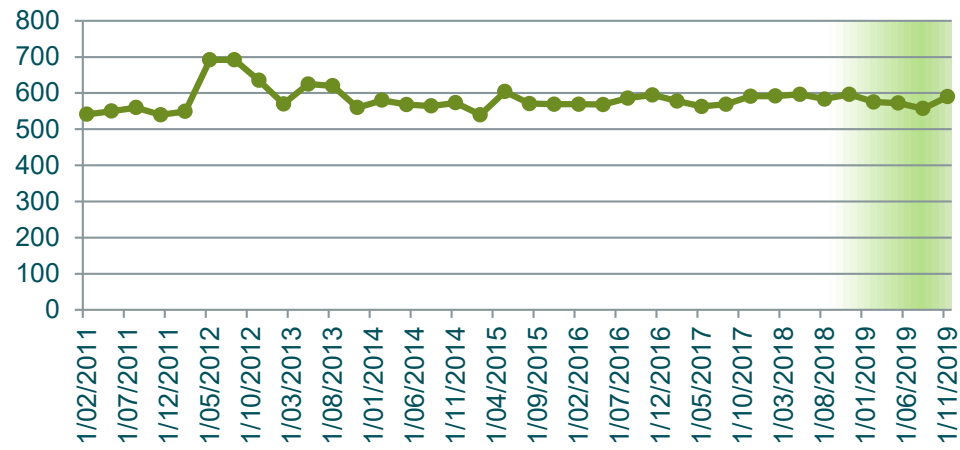
# Depth to Groundwater m



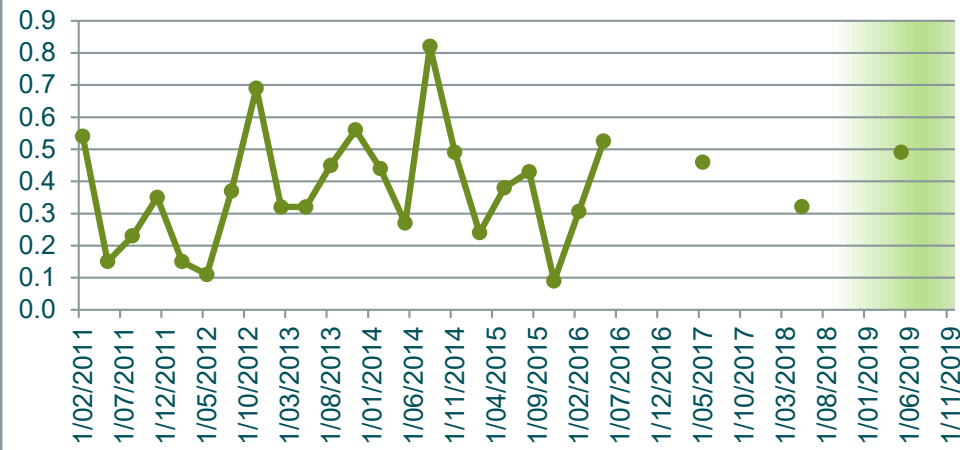


GW22	Alkalinity mg/L as CaCO3	Aluminum (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µS/cm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride 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	Pheno 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	0.9	0.0	0.1	0.1	0.1	0.2	6.9		0.1	5.0	-12	123	80	21.6	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	14.0	1.2	0.0	0.1	0.1	0.1	0.2	6.8		0.1	11.0	103	159	91	19.8	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	13.0	1.0	0.0	0.1	0.1	0.1	0.2	6.8		0.1	6.0	19	170	80	20.4	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	1.2	0.0	0.1	0.0	0.1	0.3	6.9		0.0	25.0	20	12	8	21.7	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	13.0	1.2	0.0	0.0	0.0	0.0	0.2	6.9		0.0	7.0	77	185	89	21.3	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	12.0	1.1	0.0	0.1	0.0	0.1	0.3	6.7		0.0	6.0	218	146	78	20.5	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	12.0	1.2	0.0	0.2	0.0	0.2	0.5	6.9		0.1	6.0	-88	141	76	20.0	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	14.0	1.2	0.0	0.1	0.0	0.1	0.6	6.9		0.1	6.0	-110	144	68	20.6	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	14.0	1.5	0.0	0.1	0.0	0.1	0.8	6.9		0.0	6.0	-81	173	81	20.5	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	13.0	1.5	0.0	0.1	0.0	0.1	0.9	6.9		0.1	5.0	-80	160	80	20.3	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	14.0	1.8	0.0	0.1	0.0	0.1	0.8	6.9		0.1	6.0	-94	175	95	20.3	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	16.0	2.0	0.0	0.1	0.0	0.1	0.6	6.9		0.1	6.0	-76	190	100	20.7	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	14.0	1.9	0.0	0.1	0.0	0.1	0.8	6.9		0.0	5.0	-85	171	90	20.9	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	14.0	1.9	0.0	0.1	0.0	0.1	0.6	6.8		0.0	5.0	-69	169	87	20.2	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	16.0	2.2	0.0	0.1	0.0	0.1	0.7	6.9		0.0	6.0	-70	193	105	20.0	0.6	1.44	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	16.0	2.1	0.0	0.0	0.1	0.1	0.7	6.9		0.0	6.0	-48	196	18	20.9	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	14.0	2.1	0.0	0.1	0.0	0.1	0.8	6.9		0.0	6.0	-48	183	115	20.7	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	16.0	2.6	0.0	0.0	0.1	0.1	0.7	6.8		0.1	6.0	-63	210	127	20.4	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	16.0	2.3	0.0	0.0	0.0	0.1	1.1	7.0		0.1	6.4	-63	207	115	20.4	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	17.0	2.1	0.0	0.0	0.0	0.1	0.9	6.9		0.0	6.3	-45	201	120	20.7	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	14.3	2.6	0.0	0.0	0.0	0.1	0.8	6.9		0.1	5.4	-75	195	127	20.8	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	13.9	2.6	0.0	0.1	0.0	0.1	0.8	6.8		0.1	5.3	-45	198	115	20.7	0.7	2.9	159	0.1	
10/08/2016	586		0.3		586	2.4		137	105				1638		2.7	0.2			13.4			0.0	0.1	0.1	0.7	6.7		0.0	5.2	-45	200	147	20.4	0.6	10.7	143		
8/11/2016	595		0.3		595	1.2		140	105				1583		1.7	0.2			13.1			0.0	0.1	0.1	0.6	6.7		0.0	5.0	-15	203	135	21.5	0.5	2.9	193		
8/02/2017	578		0.2		578	1.0		136	110				1591		2.3	0.1			12.4			0.0	0.1	0.1	0.5	6.5		0.0	5.0	40	196	129	21.1	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	12.3	2.2	0.0	0.0	0.1	0.1	0.5	6.6		0.0	5.0	-39	194	146	20.3	0.4	2.3	152	0.0	
9/08/2017	569		0.1		569	2.4		138	325				1565		3.0	0.2			11.9			0.1	0.1	0.2	0.4	6.5		0.0	5.0	4	201	118	20.3	0.2	3.5	161		12.1
8/11/2017	591		0.1		591	1.2		138	96				1561		2.8	0.2			11.7			0.0	0.1	0.1	0.5	6.6		0.1	5.0	-28	194	118	20.4	0.4	2.1	175		12.9
14/02/2018	592		0.1		592	3.0		135	95				1537		2.7	0.2			11.2			0.1	0.1	0.2	0.5	6.7		0.0	<5	-5	192	120	21.4	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	11.3	1.8	0.0	0.0	0.1	0.0	0.3	6.6		0.0	3.9	-44	194	114	20.5	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			11.6			0.0	0.1	0.0	0.4	6.7		0.0	4.2	-7	206	118	20.3	0.4	3.8	127		12.2
14/11/2018	597		0.2		597	1.2		139	90				1477		3.4	0.2			11.5			0.0	0.1	0.1	0.5	6.8		0.1	4.2	-52	197	116	20.9	0.5	2.3	136		13.4
13/02/2019	575		0.2		575	1.0		146	110				1504		2.6	0.2			11.5			0.0	0.1	0.0	0.5	6.7		0.0	4.2	-49	199	111	21.3	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	12.0	1.9	0.0	0.0	0.1	0.1	0.6	6.7		0.0	4.7	-47	205	116	20.5	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			0.1	0.0	0.2	0.5	6.8		0.0	4.7	78	196	110	20.2	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	0.1	0.1	0.4	6.7		0.0	4.4	-20	191	106	20.8	0.3	2.1	140		14.0
2019 Min	557	0.5	0.1	0.0	557	1.0	0.0	138	84	0.0	0.0	0.0	1468	0.0	2.6	0.2	8.4	0.0	11.5	1.9	0.0	0.0	0.0	0.0	0.4	6.7		0.0	4.2	-49	191	106	20.2	0.3	2.1	120	0.0	13.5
2019 Max	590	0.5	0.3	0.0	590	1.5	0.0	146	110	0.0	0.0	0.0	1518	0.0	3.2	0.2	8.4	0.0	12.0	1.9	0.0	0.1	0.1	0.2	0.6	6.8		0.0	4.7	78	205	116	21.3	0.5	2.5	142	0.0	14.0
2019 Mean	574	0.5	0.2	0.0	574	1.1	0.0	142	94	0.0	0.0	0.0	1492	0.0	2.9	0.2	8.4	0.0	11.9	1.9	0.0	0.1	0.1	0.1	0.5	6.7		0.0	4.5									

**Alkalinity**  
mg/L as CaCO<sub>3</sub>



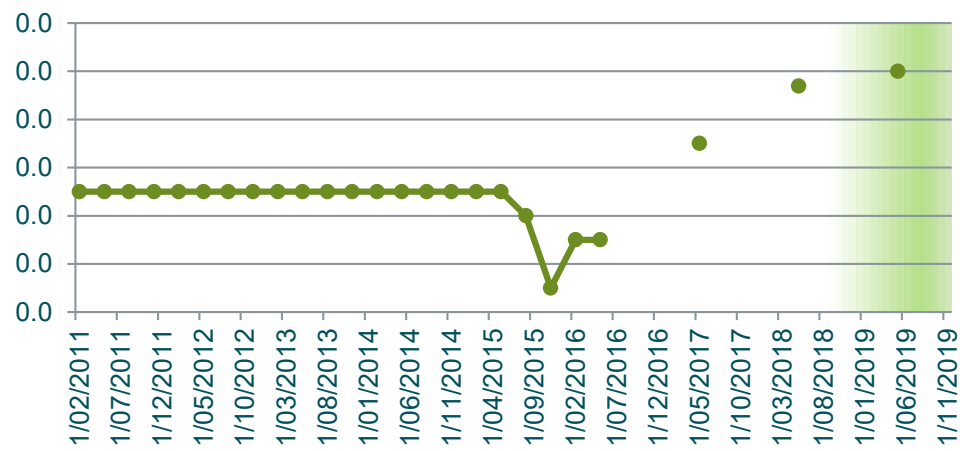
**Aluminium (Total)**  
mg/L



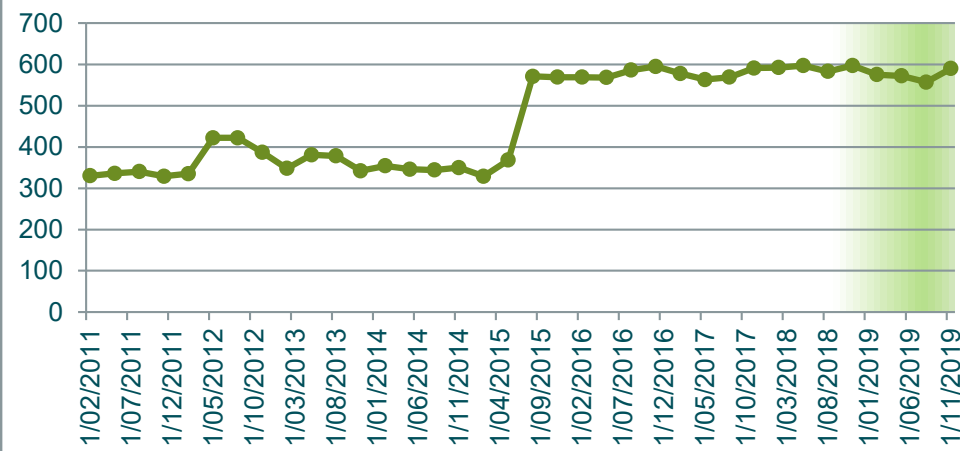
**Ammonia**  
mg/L



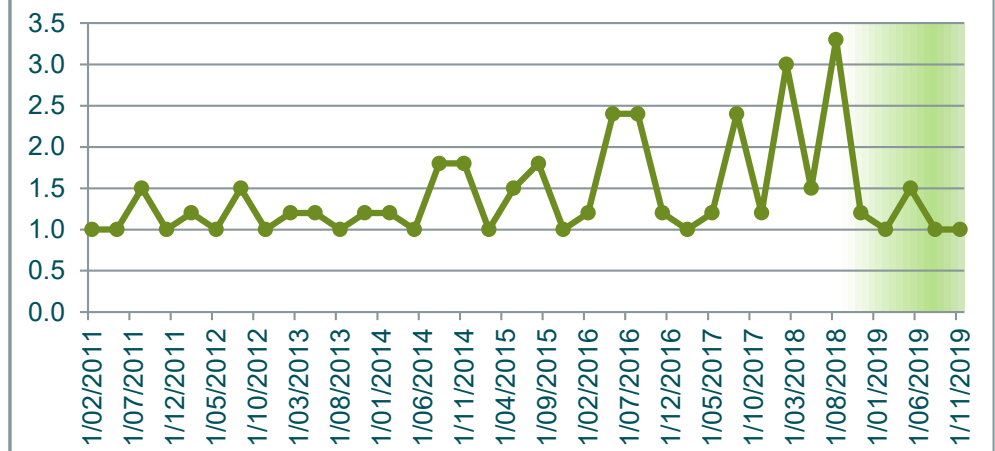
**Arsenic (Total)**  
mg/L



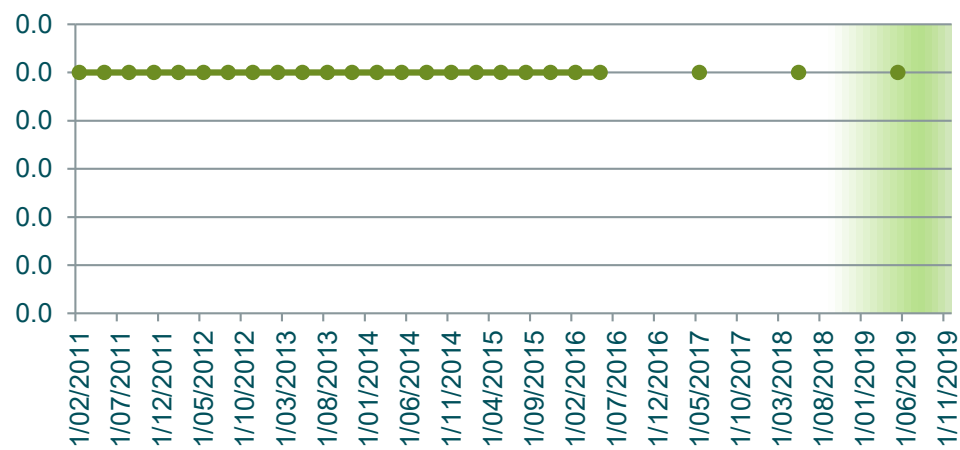
**Bicarbonate HCO<sub>3</sub>**  
mg/L



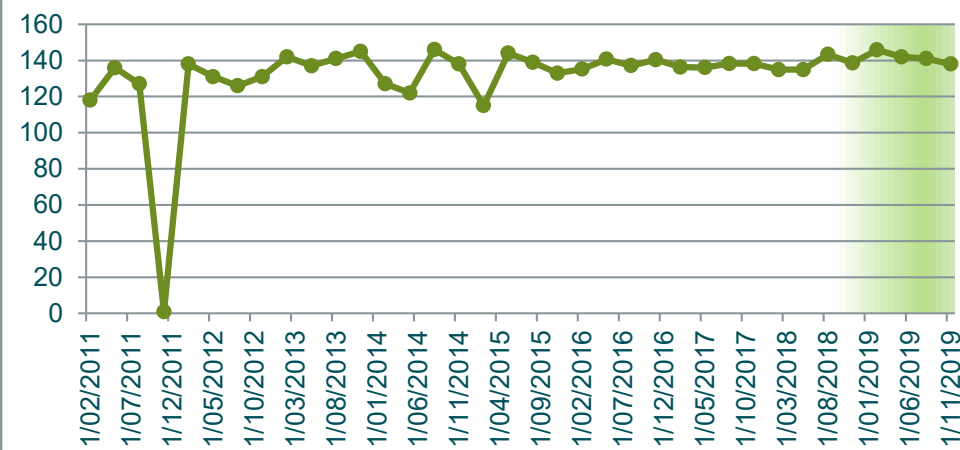
**BOD<sub>5</sub>**  
mg/L



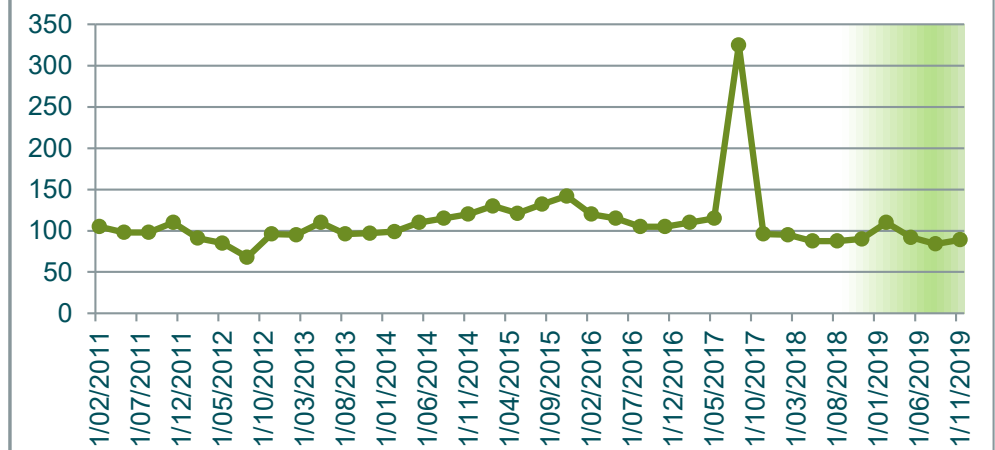
**Cadmium (Total)**  
mg/L



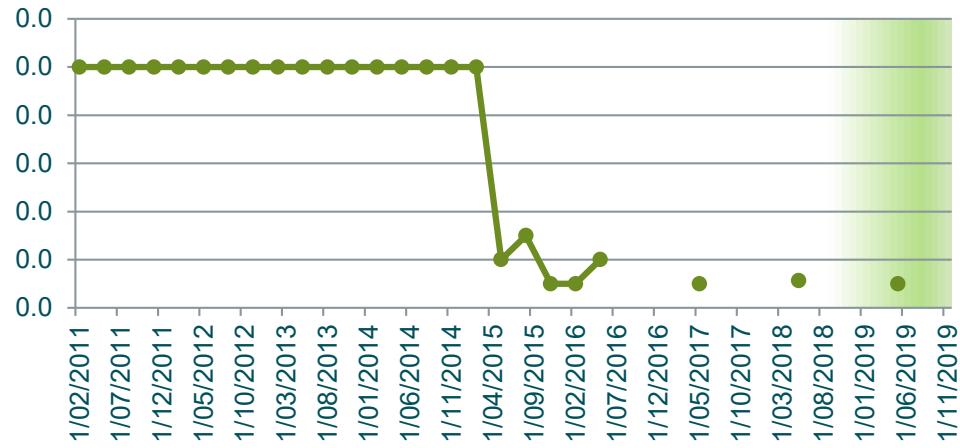
**Calcium (Total)**  
mg/L



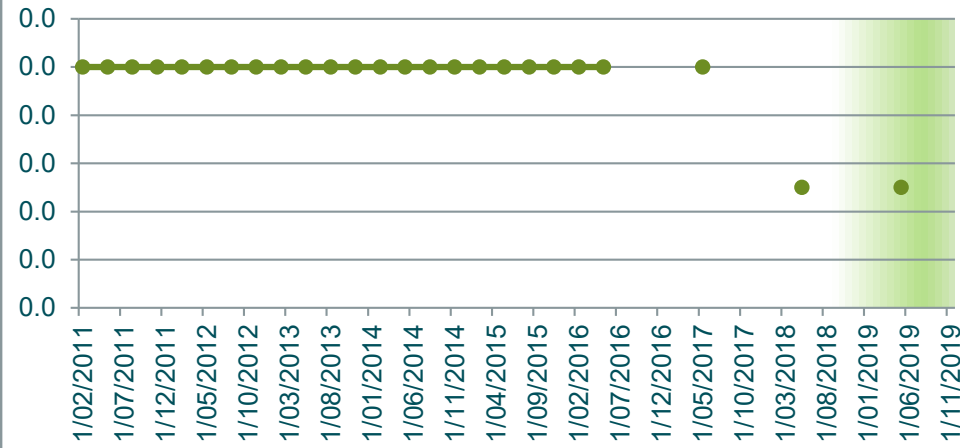
**Chloride**  
mg/L



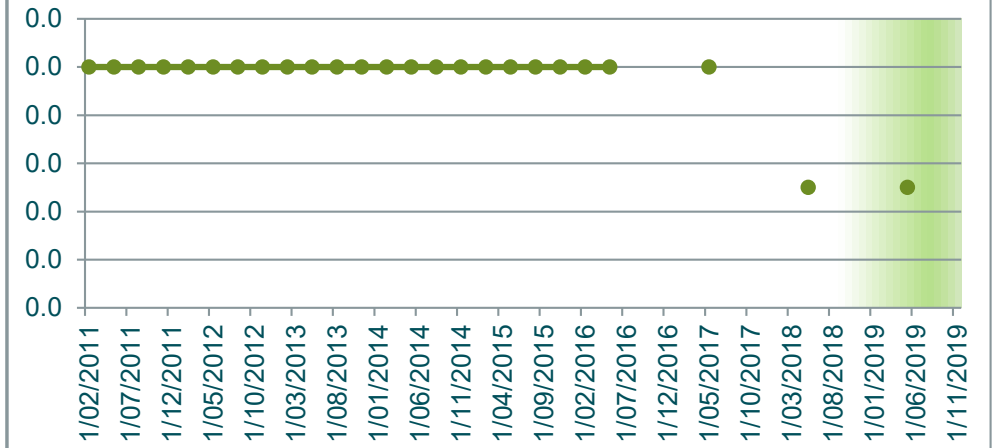
### Chromium (Total) mg/L



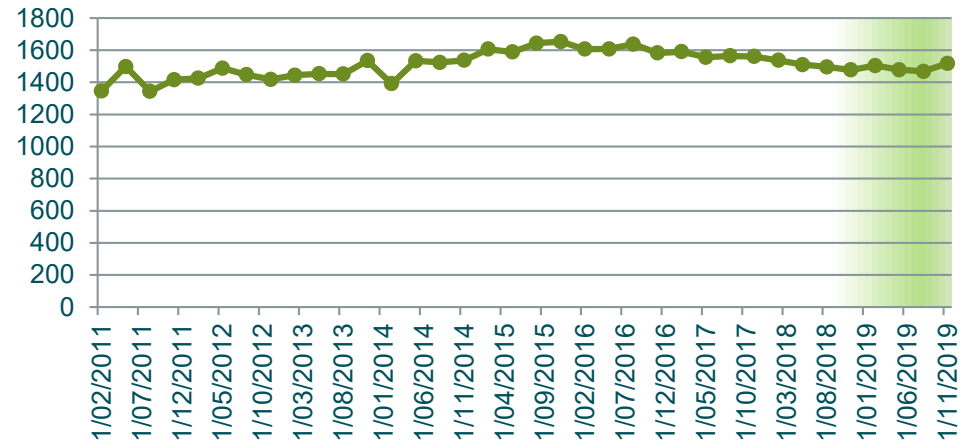
### Chromium 3 mg/L



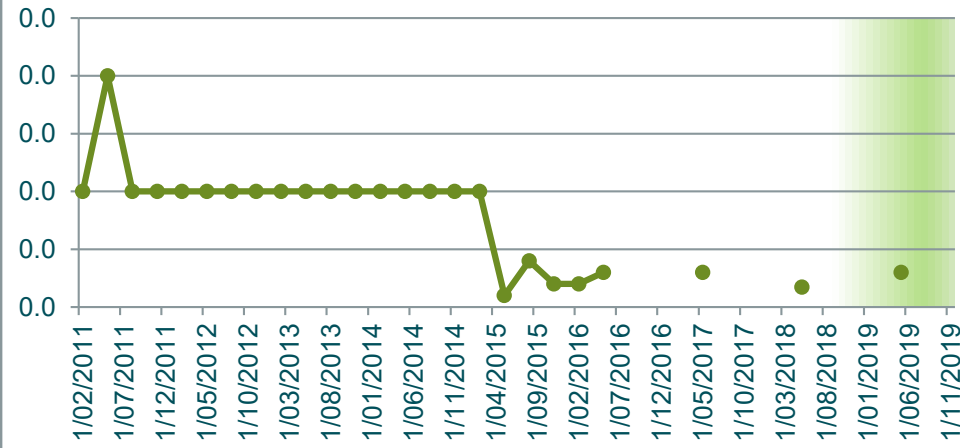
### Chromium 6 mg/L



### Conductivity µScm-1



### Copper (Total) mg/L



### DO (Membrane Electrode) mg/L



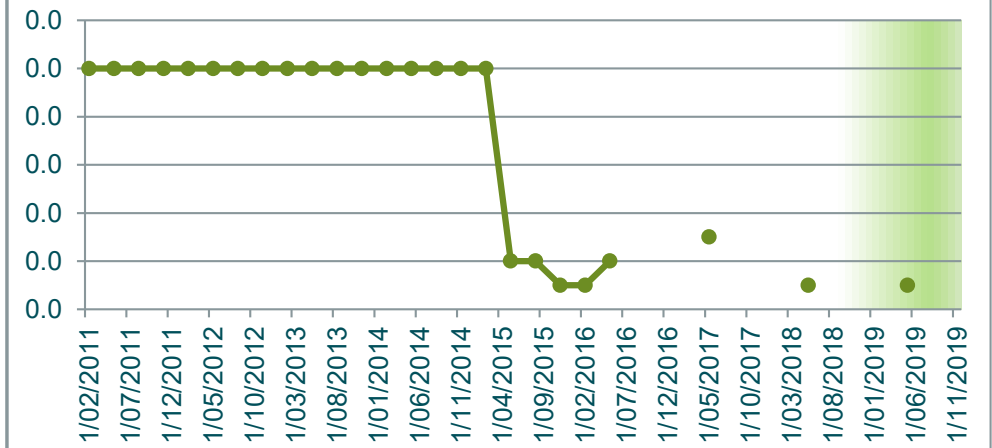
### Flouride mg/L



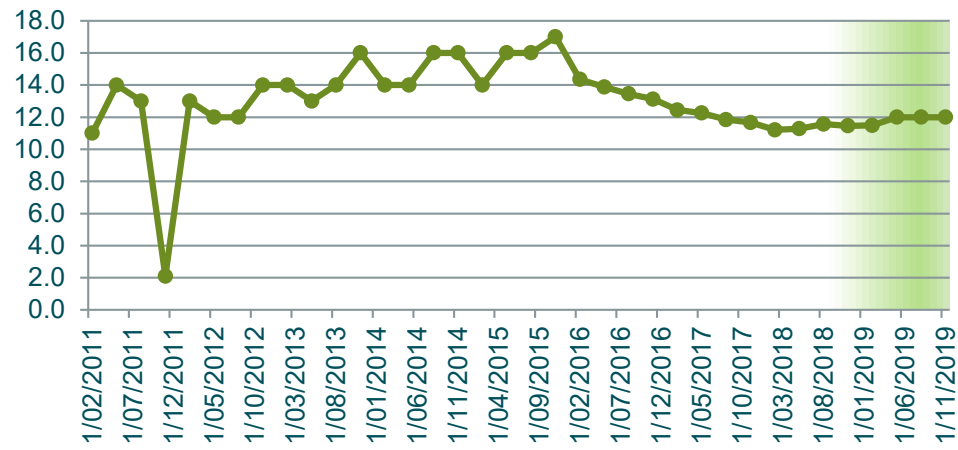
### Iron Total mg/L



### Lead (Total) mg/L



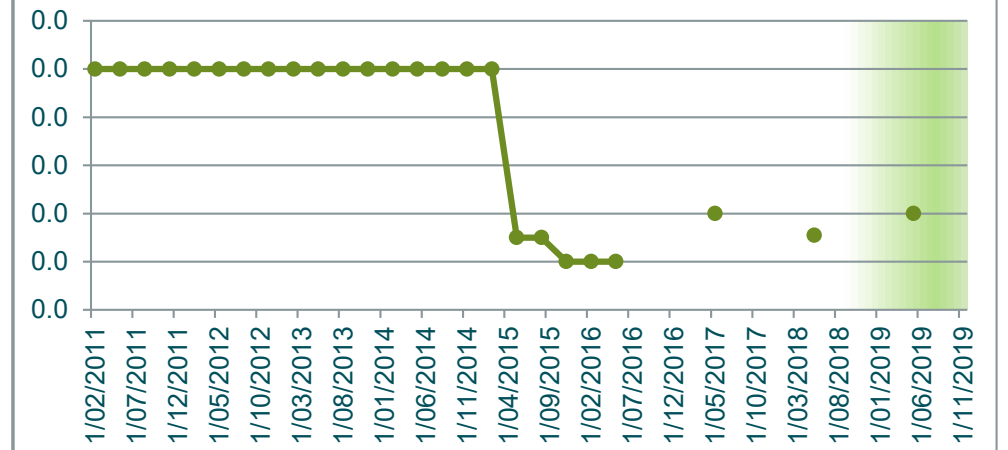
### Magnesium (Total) mg/L



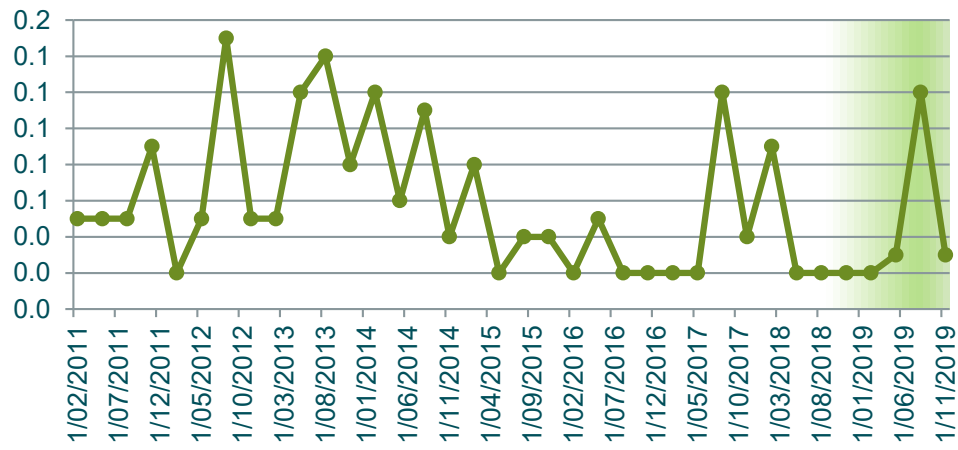
### Manganese Total mg/L



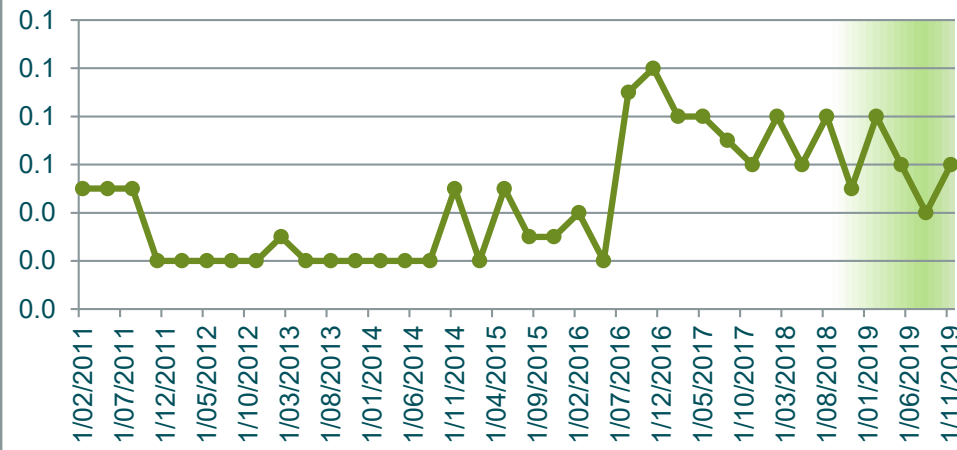
### Nickel (Total) mg/L



### Nitrate N mg/L



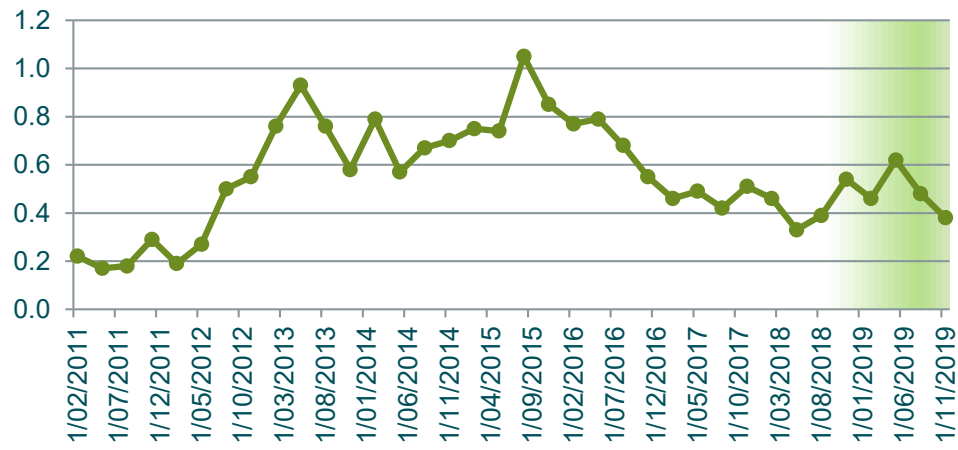
### Nitrite N mg/L



### Nitrogen Oxidised mg/L



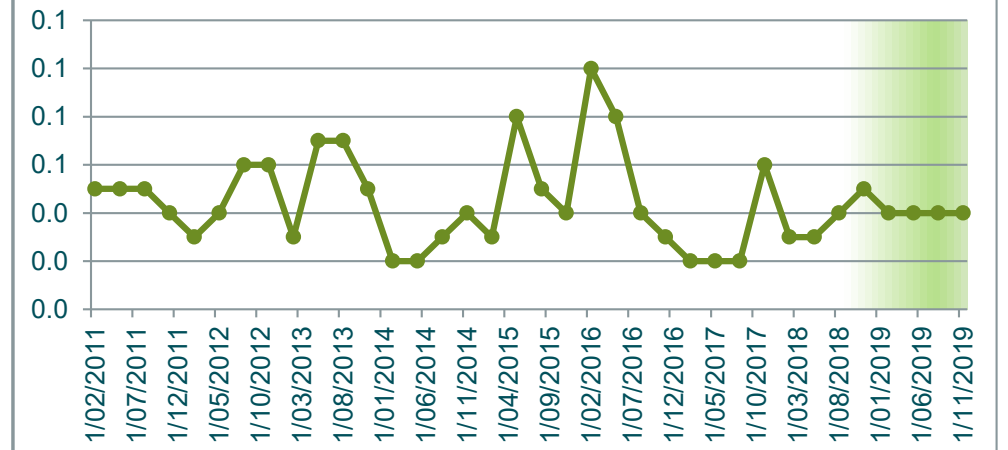
### Nitrogen Total mg/L



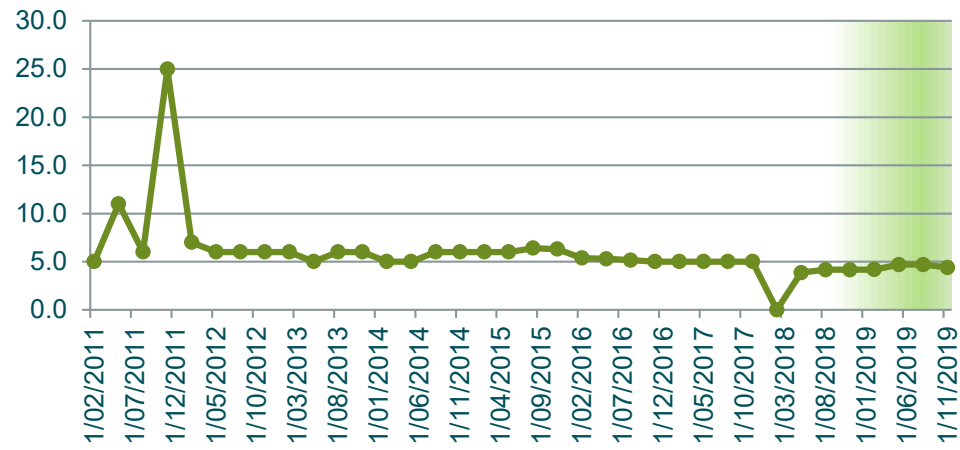
### pH pH units



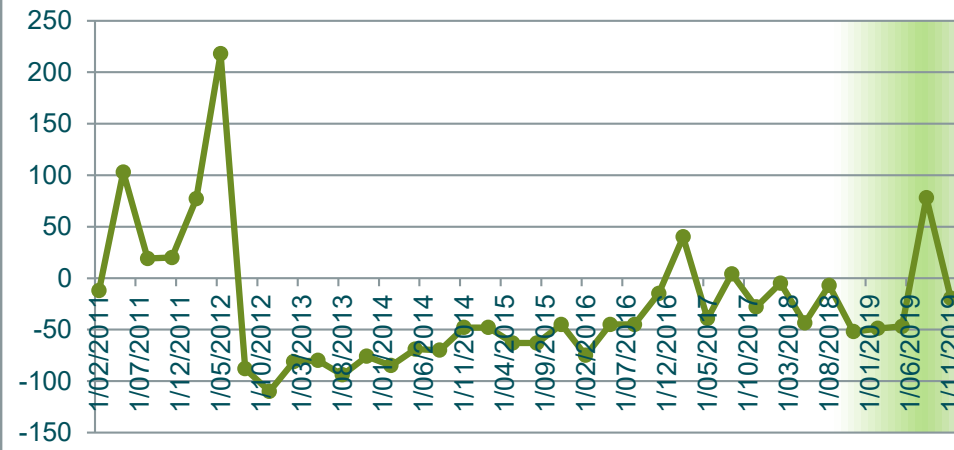
### Phosphorus Total mg/L



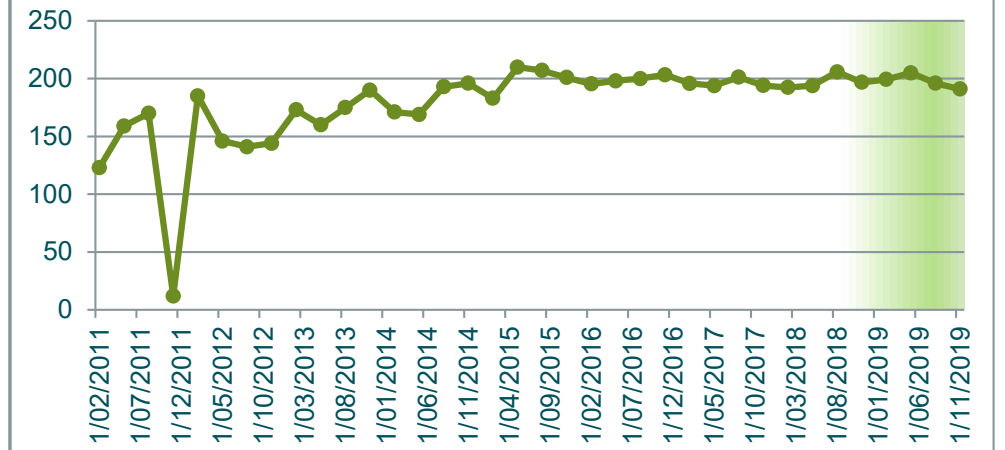
**Potassium Total  
mg/L**



**Redox Potential  
mV**



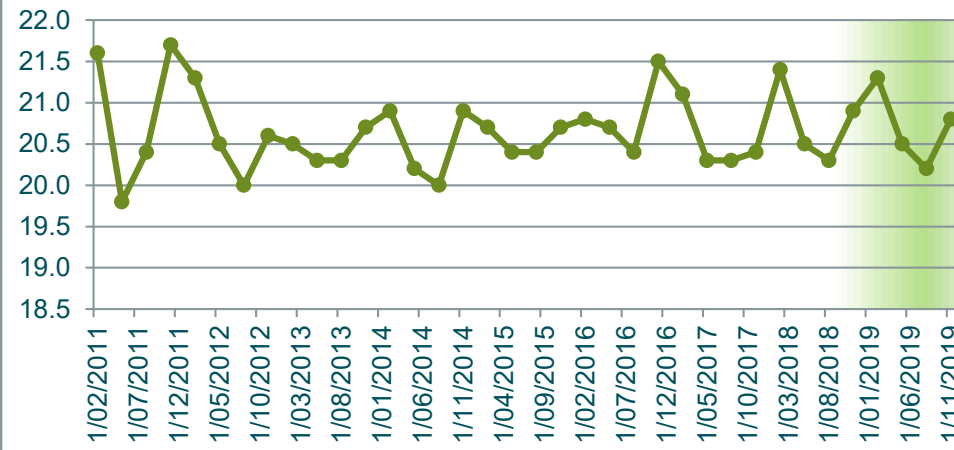
**Sodium (Total)  
mg/L**



**Sulphate  
mg/L**



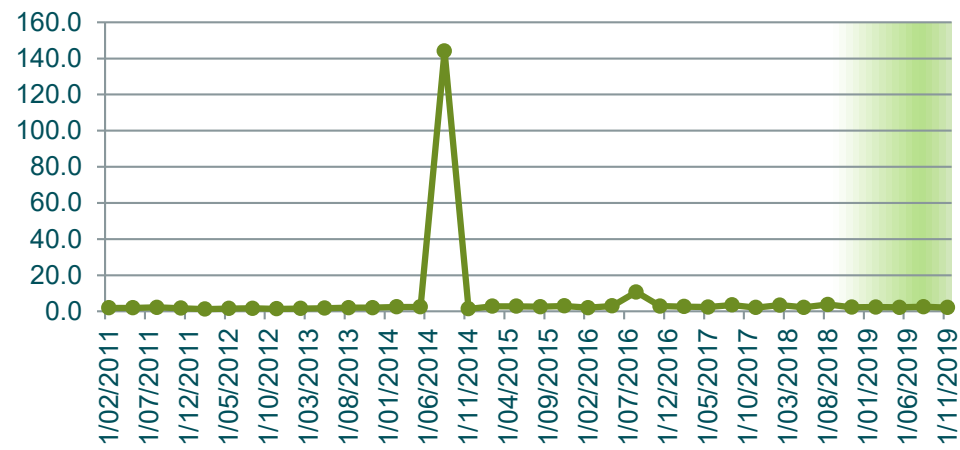
**Temperature  
C**



**TKN  
mg/L**



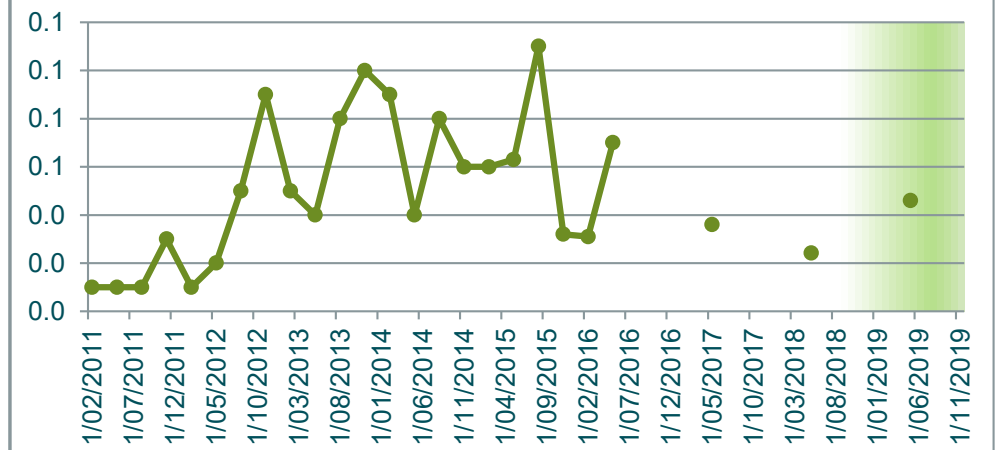
**TOC  
mg/L**



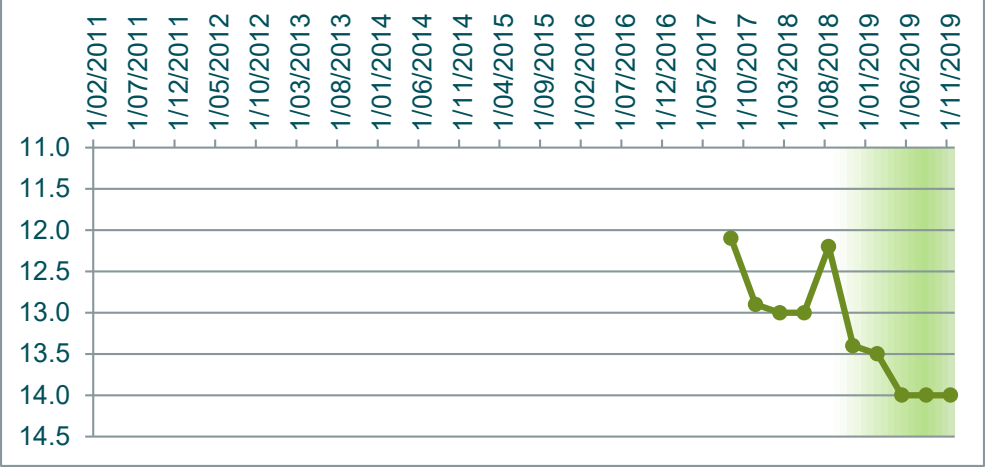
**Total Acidity  
mg/L CaCO3**



**Zinc (Total)  
mg/L**



# Depth to Groundwater m



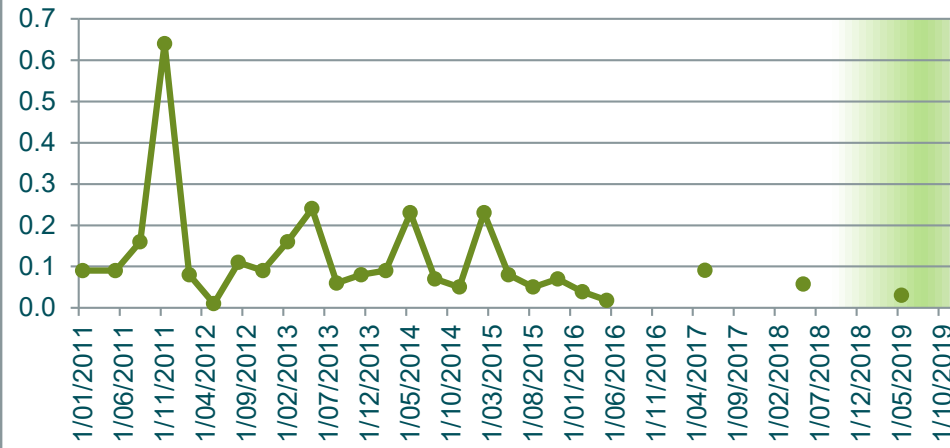


GW23	Alkalinity mg/L as CaCO3	Aluminum (Total) mg/L	Ammonia mg/L	Arsenic (Total) mg/L	Bicarbonate HCO3 mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Chromium 3 mg/L	Chromium 6 mg/L	Conductivity µS/cm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Flouride 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	0.0	19.0	120	0.0	0.0	0.0	732	0.0	3.2	0.2	1.7	0.0	11.0	1.6	0.0	0.1	0.1	0.1	0.1	6.6		0.1	5.0	-41	99	36.0	20.8	0.1	6.3	38	0.1	
10/05/2011	130	0.1	0.1	0.0	79	11.0	0.0	20.0	140	0.0	0.0	0.0	872	0.0	1.8	0.1	3.0	0.0	14.0	1.6	0.0	0.1	0.1	0.1	0.2	6.0		0.1	5.0	104	120	37.0	20.1	0.2	3.9	79	0.0	
9/08/2011	121	0.2	0.1	0.0	74	4.5	0.0	19.0	160	0.0	0.0	0.0	822	0.0	1.3	0.1	2.6	0.0	13.0	1.0	0.0	0.1	0.1	0.1	0.2	6.5		0.1	5.0	214	109	34.0	19.7	0.2	3.8	70	0.0	
8/11/2011	105	0.6	0.0	0.0	64	3.6	0.0	26.0	210	0.0	0.0	0.0	803	0.0	1.4	0.1	15.0	0.0	19.0	1.9	0.0	0.0	0.0	0.0	0.2	6.5		0.1	14.0	94	95	49.0	20.1	0.2	3.6	56	0.3	
6/02/2012	106	0.1	0.0	0.0	65	5.4	0.0	22.0	154	0.0	0.0	0.0	777	0.0	1.0	0.1	3.4	0.0	14.0	1.6	0.0	0.0	0.0	0.1	0.1	6.3		0.0	5.0	68	130	42.0	20.8	0.1	2.9	58	0.1	
8/05/2012	100	0.0	0.1	0.0	61	2.7	0.0	23.0	185	0.0	0.0	0.0	911	0.0	2.7	0.1	3.4	0.0	16.0	1.6	0.0	0.1	0.0	0.1	0.2	6.6		0.1	5.0	137	133	40.0	20.6	0.1	2.2	72	0.0	
6/08/2012	88	0.1	0.0	0.0	54	1.2	0.0	21.0	3	0.0	0.0	0.0	841	0.0	1.0	0.1	2.9	0.0	14.0	0.9	0.0	0.0	0.0	0.0	0.1	6.2		0.1	5.0	192	92	38.0	19.8	0.1	0.8	55	0.1	
13/11/2012	88	0.1	0.0	0.0	54	1.2	0.0	19.0	140	0.0	0.0	0.0	757	0.0	1.4	0.1	3.8	0.0	13.0	0.9	0.0	0.0	0.0	0.0	0.1	6.4		0.0	5.0	100	91	32.0	20.0	0.1	0.7	50	0.0	
13/02/2013	77	0.2	0.0	0.0	47	2.0	0.0	30.0	320	0.0	0.0	0.0	1233	0.0	0.6	0.1	7.7	0.0	20.0	2.4	0.0	0.0	0.0	0.0	0.1	6.1		0.0	5.0	-13	158	63.0	20.2	0.1	1.0	61	0.1	
14/05/2013	186	0.2	0.1	0.0	113	12.0	0.0	24.0	150	0.0	0.0	0.0	824	0.0	1.7	0.2	4.2	0.0	14.0	1.5	0.0	0.0	0.0	0.0	0.2	6.6		0.0	5.0	-74	118	22.0	20.4	0.1	5.1	73	0.0	
6/08/2013	94	0.1	0.0	0.0	57	1.8	0.0	37.0	320	0.0	0.0	0.0	1344	0.0	0.7	0.2	7.9	0.0	24.0	2.4	0.0	0.0	0.0	0.0	0.1	6.2		0.1	5.0	3	190	75.0	20.2	0.1	1.2	133	0.0	
12/11/2013	150	0.1	0.0	0.0	92	1.0	0.0	26.0	155	0.0	0.0	0.0	847	0.0	2.0	0.2	1.1	0.0	16.0	1.3	0.0	0.0	0.0	0.0	0.1	6.5		0.0	5.0	3	122	30.0	20.3	0.1	1.3	18	0.1	
11/02/2014	170	0.1	0.0	0.0	104	3.9	0.0	24.0	127	0.0	0.0	0.0	718	0.0	1.0	0.2	2.8	0.0	14.0	1.5	0.0	0.0	0.0	0.0	0.3	6.6		0.0	5.0	-41	101	23.0	20.5	0.3	1.8	154	0.0	
13/05/2014	144	0.2	0.0	0.0	88	3.9	0.0	27.0	118	0.0	0.0	0.0	692	0.0	2.0	0.2	2.2	0.0	14.0	1.2	0.0	0.0	0.0	0.0	0.1	6.6		0.0	5.0	-61	95	22.0	21.0	0.1	1.4	59	0.0	
12/08/2014	142	0.1	0.0	0.0	87	2.1	0.0	27.0	111	0.0	0.0	0.0	668	0.0	3.4	0.2	1.3	0.0	14.0	0.6	0.0	0.0	0.0	0.0	0.1	6.7		0.0	5.0	-21	89	18.0	20.2	0.1	0.9	84	0.0	
10/11/2014	146	0.1	0.0	0.0	89	1.0	0.0	26.0	106	0.0	0.0	0.0	647	0.0	1.1	0.2	1.2	0.0	14.0	0.5	0.0	0.0	0.0	0.0	0.1	6.7		0.0	5.0	1	88	20.0	20.7	0.1	0.8	93	0.0	
9/02/2015	122	0.2	0.0	0.0	74	2.1	0.0	23.0	140	0.0	0.0	0.0	753	0.0	1.4	0.2	4.6	0.0	13.0	1.9	0.0	0.0	0.0	0.0	0.8	6.5		0.1	5.0	-27	88	28.0	21.7	0.8	1.2	80	0.0	
11/05/2015	136	0.1	0.0	0.0	83	1.5	0.0	26.0	121	0.0	0.0	0.0	681	0.0	2.2	0.2	3.2	0.0	14.0	1.6	0.0	0.0	0.0	0.0	0.1	6.7		0.1	5.0	-30	90	22.0	21.1	0.1	1.3	57	0.0	
11/08/2015	103	0.1	0.0	0.0	103	17.0	0.0	23.0	98	0.0	0.0	0.0	569	0.0	5.6	0.1	1.9	0.0	12.0	0.2	0.0	0.0	0.0	0.0	0.2	6.8		0.1	5.0	25	73	19.0	19.9	0.2	2.9	35	0.0	
10/11/2015	123	0.1	0.0	0.0	123	3.3	0.0	24.0	110	0.0	0.0	0.0	542	0.0	1.3	0.2	2.5	0.0	13.0	0.9	0.0	0.0	0.0	0.0	0.1	6.6		0.1	5.0	-12	78	21.0	20.1	0.1	2.6	49	0.0	
8/02/2016	120	0.0	0.0	0.0	120	7.2	0.0	22.0	100	0.0	0.0	0.0	616	0.0	1.8	0.1	3.2	0.0	12.0	1.3	0.0	0.0	0.0	0.0	0.1	6.6		0.1	5.0	-18	75	19.8	21.3	0.1	3.6	72	0.0	
9/05/2016	122	0.0	0.0	0.0	122	3.6	0.0	23.9	115	0.0	0.0	0.0	663	0.0	1.5	0.1	3.0	0.0	12.9	1.4	0.0	0.0	0.0	0.0	0.1	6.5		0.1	5.0	-20	81	22.2	21.2	0.1	1.1	85	0.0	
9/08/2016	115		0.0		115	1.0		24.2	115				655		4.4	0.1			13.1			0.0	0.0	0.0	0.1	6.5		0.1	5.0	64	83	26.3	20.1	0.1	2.1	58		
7/11/2016	120		0.0		120	1.0		25.4	110				632		1.2	0.1			13.4			0.0	0.0	0.0	0.1	6.4		0.0	5.0	211	81	24.0	20.6	0.1	2.5	51		
7/02/2017	114		0.0		114	1.6		23.5	110				641		1.2	0.2			12.7			0.0	0.0	0.0	0.1	6.2		0.1	5.0	96	76	23.3	21.3	0.1	1.7	105		
8/05/2017	113	0.1	0.0	0.0	113	10.2	0.0	24.9	98	0.0	0.0	0.0	579	0.0	1.0	0.2	3.2	0.0	12.1	1.3	0.0	0.0	0.0	0.0	0.1	6.2		0.1	5.0	53	68	23.8	20.9	0.1	4.3	55	0.0	
8/08/2017	103		0.0		103	1.8		23.0	95				619		4.8	0.1			12.2			0.0	0.0	0.0	0.1	6.2		0.1	5.0	173	75	23.2	19.8	0.1	2.5	46		2.9
7/11/2017	114		0.0		114	1.5		25.2	115				646		1.4	0.1			13.5			0.0	0.0	0.0	0.1	6.3		0.0	5.0	173	75	22.9	20.1	0.1	1.4	50		3.1
13/02/2018	115		0.0		115	2.7		23.0	109				625		1.5	0.1			12.6			0.0	0.0	0.0	0.1	6.4		0.1	5.0	36	76	22.9	21.7	0.1	2.0	60		3.6
8/05/2018	110	0.1	0.0	0.0	110	17.1	0.0	22.7	99	0.0	0.0	0.0	555	0.0	2.0	0.1	3.8	0.0	11.7	1.2	0.0	0.0	0.0	0.0	0.1	6.4		0.1	2.4	22	67	19.4	21.2	0.1	9.5	53	0.0	3.0
14/08/2018	107		0.0		107	1.2		24.4	103				567		1.6	0.1			12.7			0.0	0.0	0.0	0.2	6.5		0.1	2.9	325	73	20.5	20.1	0.2	1.5	39		3.6
13/11/2018	90		0.0		90	24.0		21.6	82				488		2.4	0.1			10.7			0.0	0.0	0.0	0.2	6.5		0.1	2.5	49	61	18.0	21.2	0.2	14.2	38		2.3
12/02/2019	90		0.0		90	6.0		19.2	82				479		1.5	0.1			10.5			0.0	0.0	0.0	0.1	6.4	0.0	0.1	2.3	26	61	18.5	22.8	0.1	3.5	49		4.1
14/05/2019	107	0.0	0.0	0.0	107	3.9	0.0	24.0	95	0.0	0.0	0.0	557	0.0	2.5	0.1	2.8	0.0	13.0	1.1	0.0	0.0	0.0	0.0	0.1	6.4	0.0	0.0	3.0	-3	72	22.0	20.9	0.1	1.4	51	0.0	3.2
13/08/2019	105		0.0		105	2.4		23.0	94				562		3.0	0.1			13.0			0.0	0.0	0.0	0.1	6.5	0.0	0.0	2.9	186	69	22.0	20.2	0.1	1.3	41		3.3
12/11/2019	97		0.0		97	1.0		24.0	120				659		2.7	0.1			14.0			0.0	0.0	0.0	0.2	6.4	0.0	0.1	3.0	267	81	28.0	20.8	0.2	1.6	42		4.6
2019 Min	90	0.0	0.0	0.0	90	1.0	0.0	19.2	82	0.0	0.0	0.0	479	0.0	1.5	0.1	2.8	0.0	10.5	1.1	0.0	0.0	0.0	0.0	0.1	6.4	0.0	0.0	2.3	-3	61	18.5	20.2	0.1	1.3	41	0.0	3.2
2019 Max	107	0.0	0.0	0.0	107	6.0	0.0	24.0	120	0.0	0.0	0.0	659	0.0	3.0	0.1	2.8	0.0	14.0	1.1	0.0	0.0	0.0	0.0	0.2	6.5	0.0	0.1	3.0	267	81	28.0	22.8	0.2	3.5	51	0.0	4.6
2019 Mean	100	0.0	0.0	0.0	100	3.3	0.0	22.6	98	0.0	0.0	0.0	564	0.0	2.4	0.1	2.8	0.0	12.6	1.1	0.0	0.0	0.0	0.0	0.1	6.4	0.0	0.1										

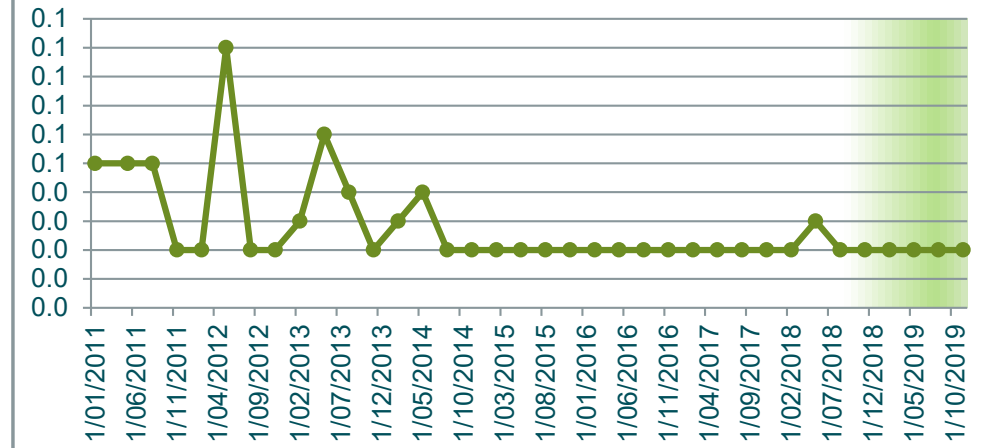
**Alkalinity**  
mg/L as CaCO3



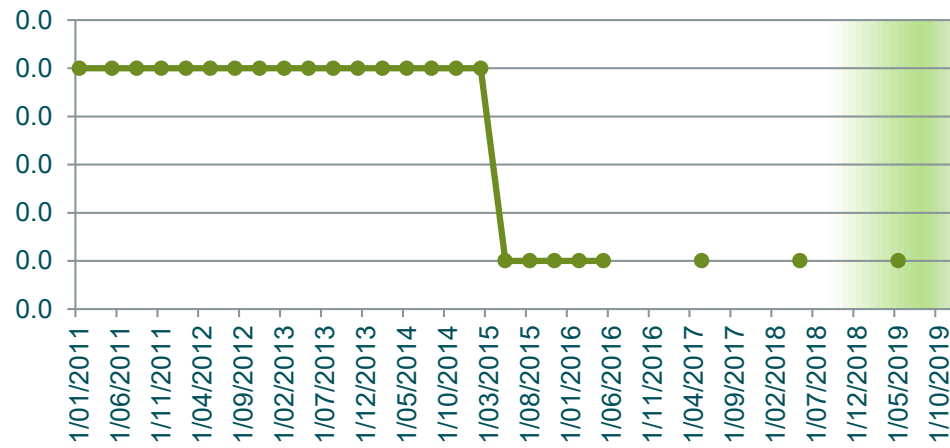
**Aluminium (Total)**  
mg/L



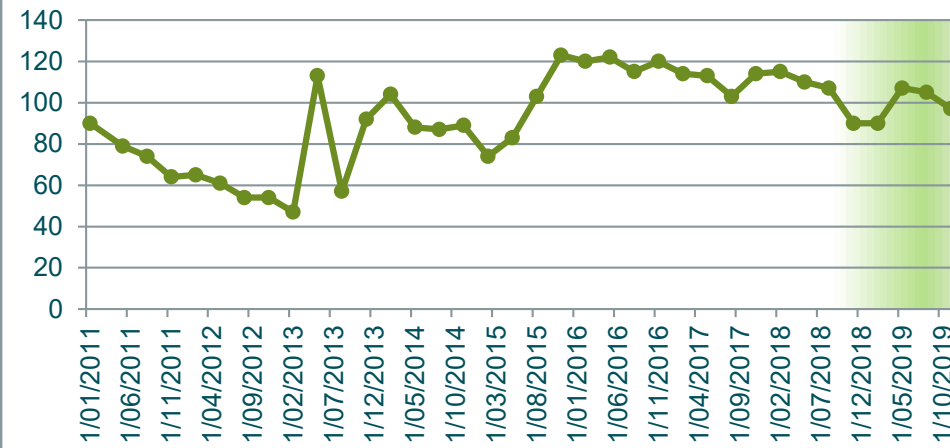
**Ammonia**  
mg/L



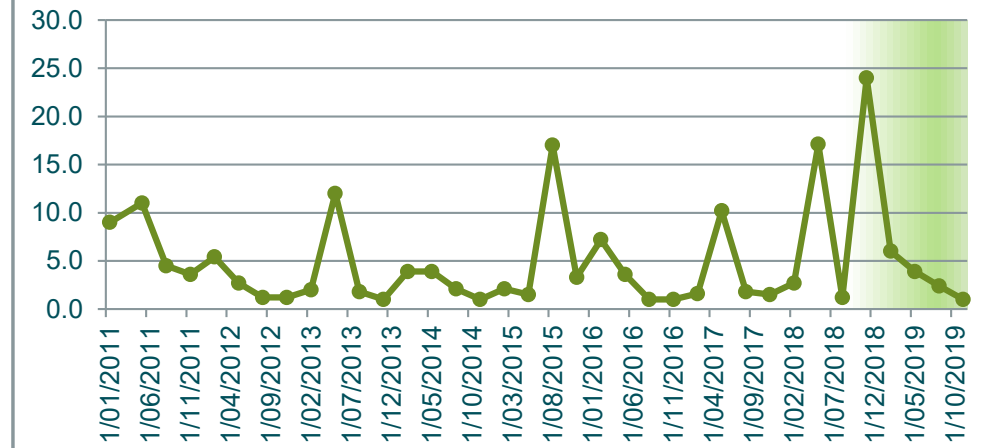
**Arsenic (Total)**  
mg/L



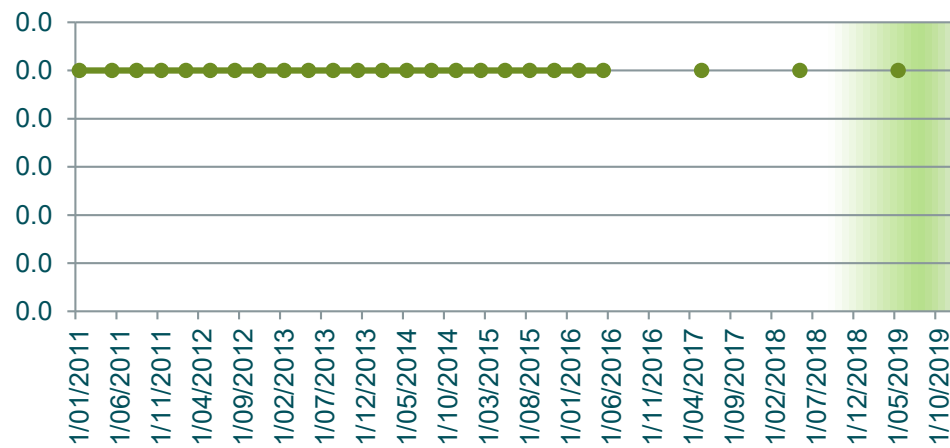
**Bicarbonate HCO3**  
mg/L



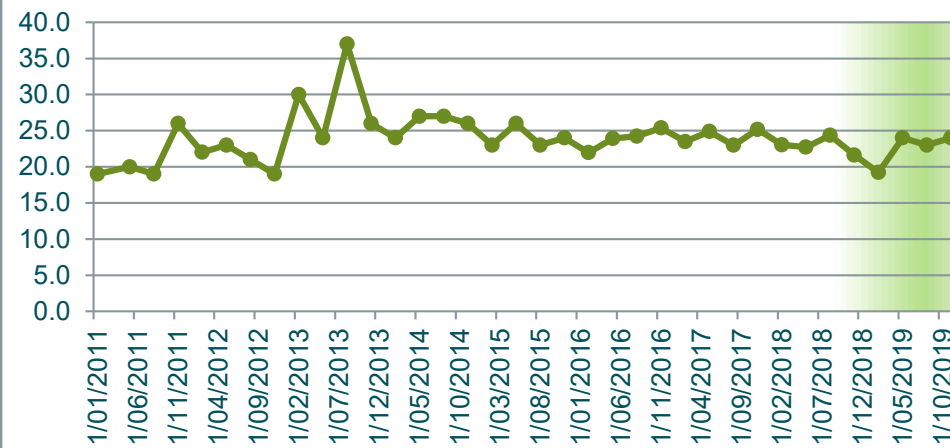
**BOD5**  
mg/L



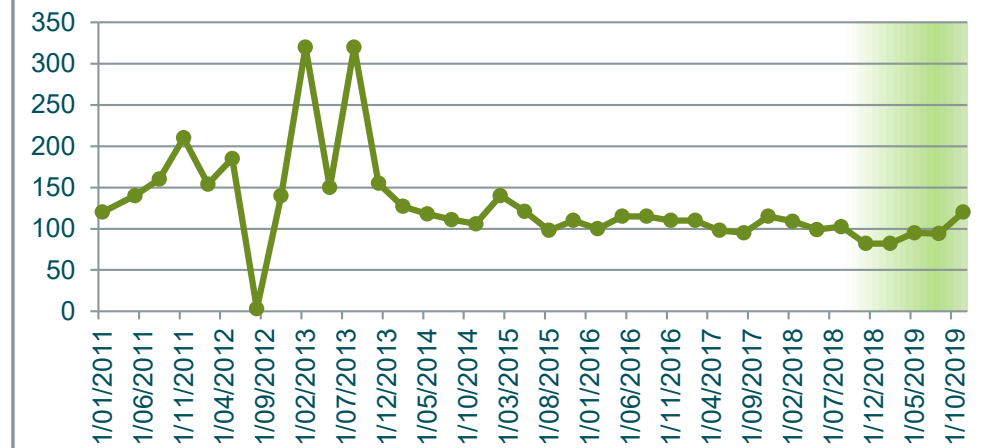
**Cadmium (Total)**  
mg/L



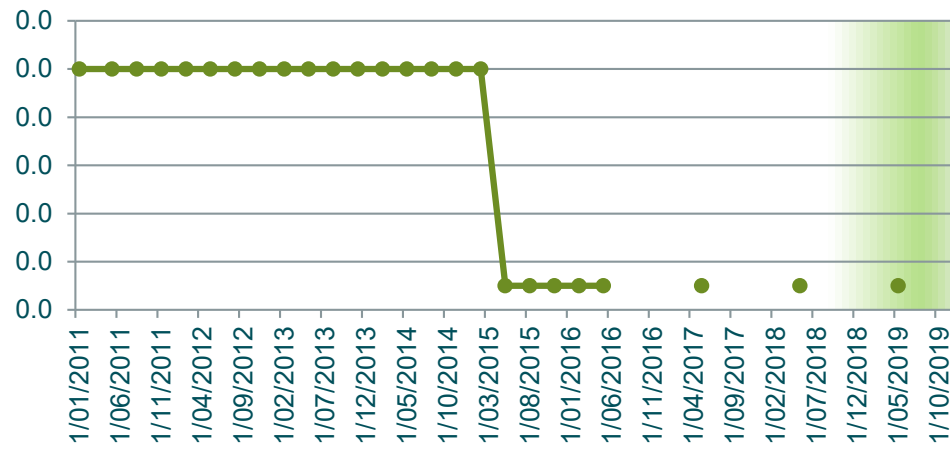
**Calcium (Total)**  
mg/L



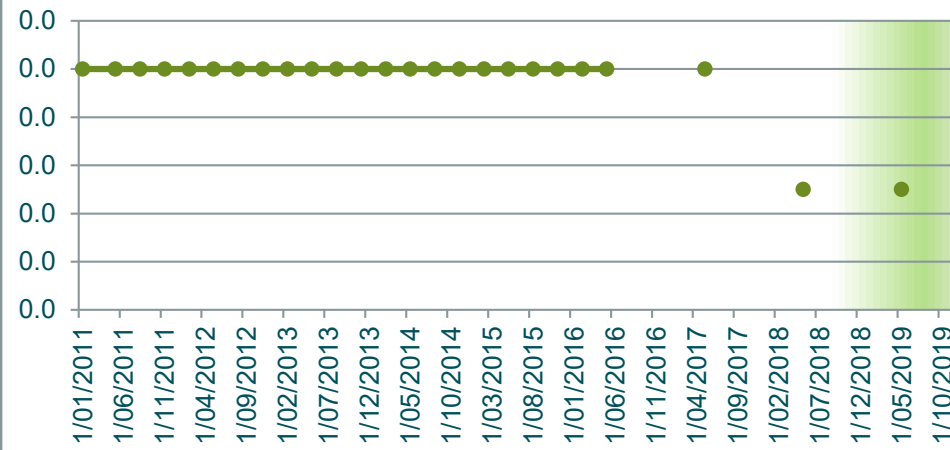
**Chloride**  
mg/L



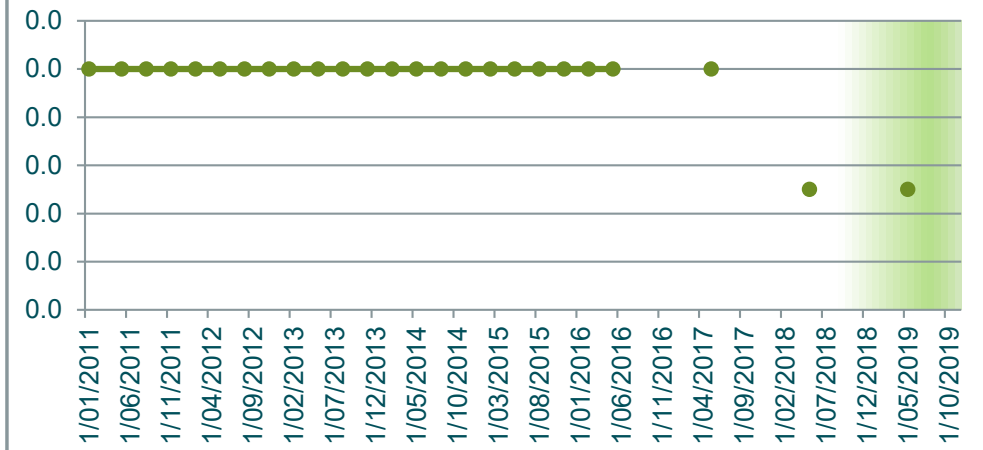
### Chromium (Total) mg/L



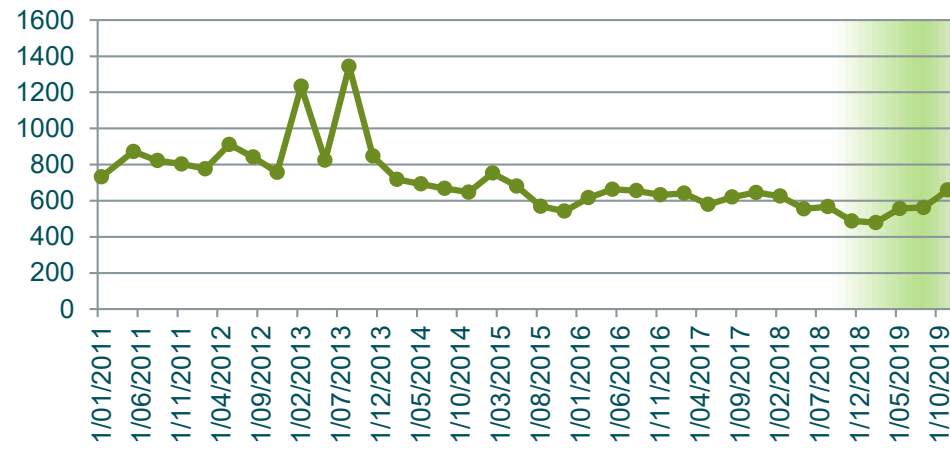
### Chromium 3 mg/L



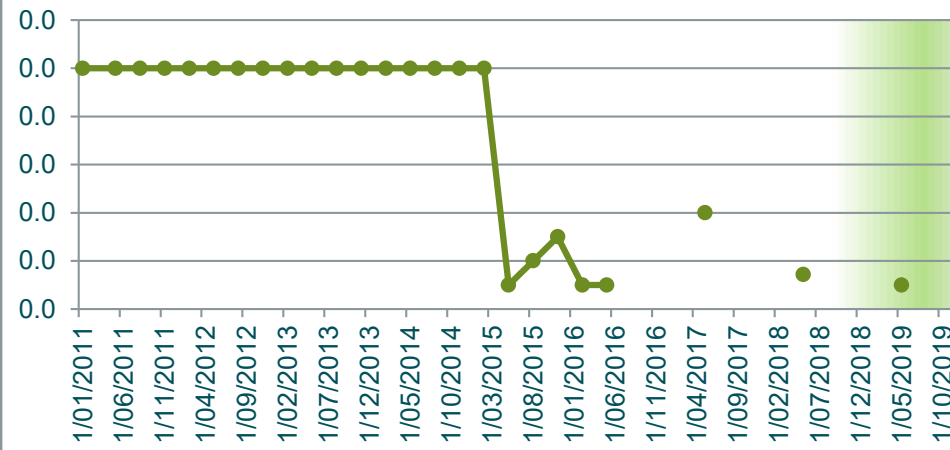
### Chromium 6 mg/L



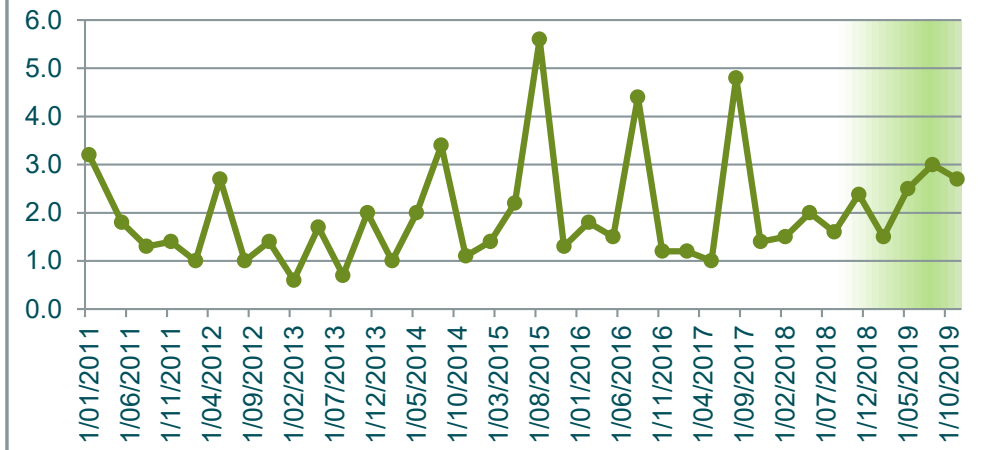
### Conductivity µScm-1



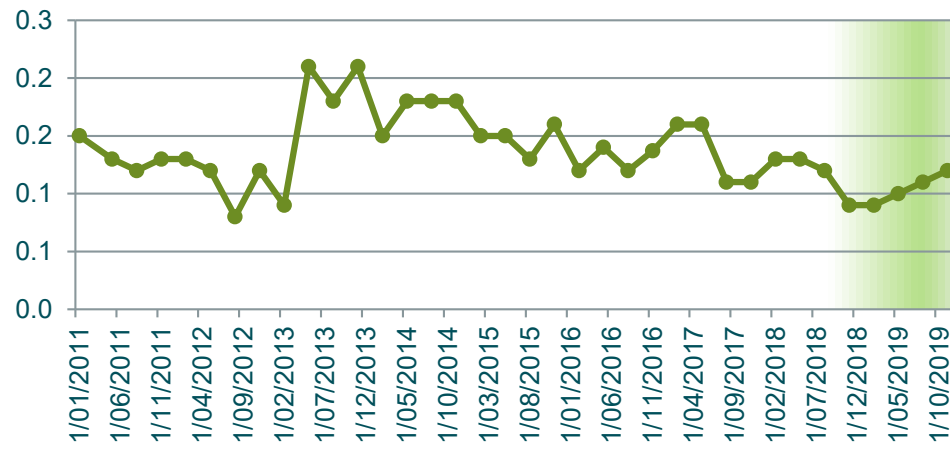
### Copper (Total) mg/L



### DO (Membrane Electrode) mg/L



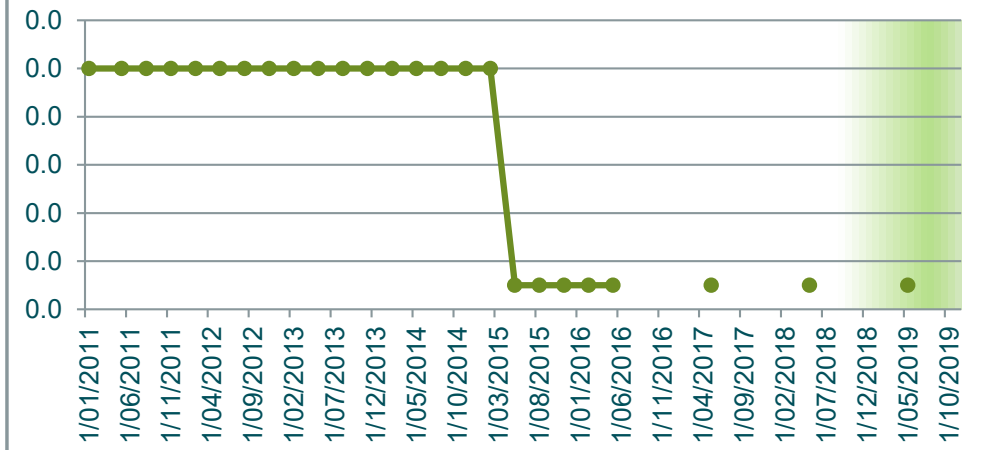
### Flouride mg/L



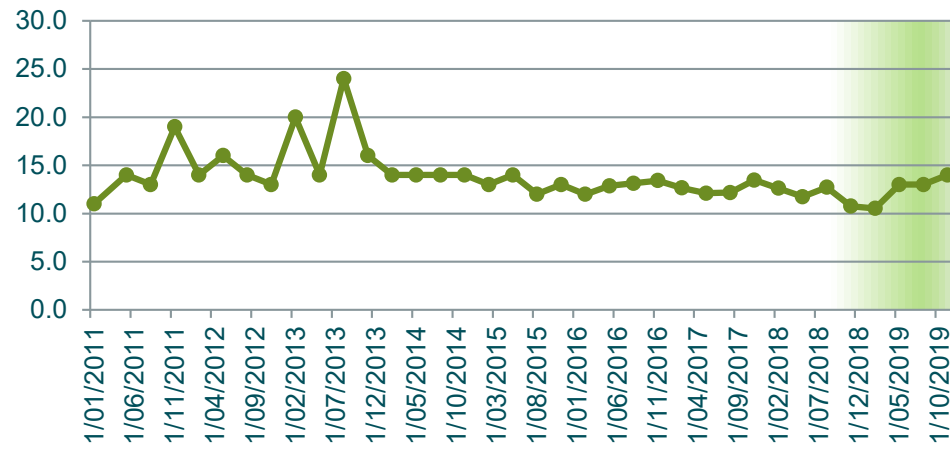
### Iron Total mg/L



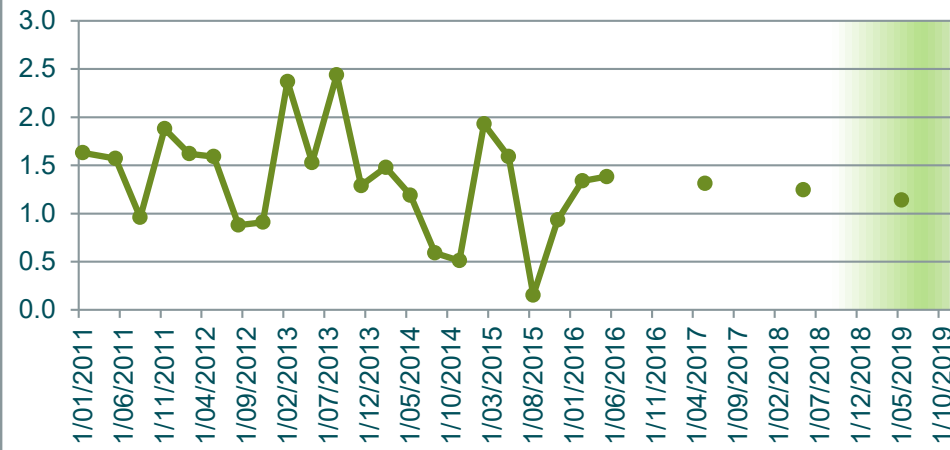
### Lead (Total) mg/L



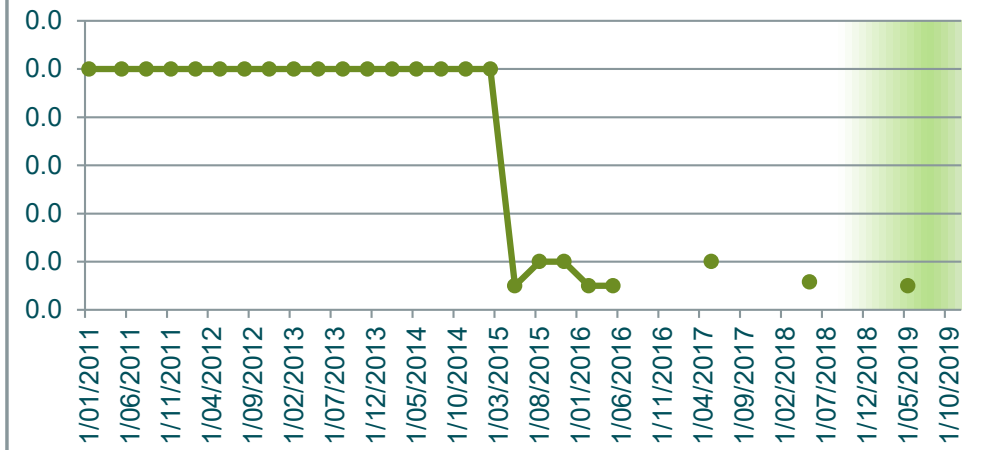
### Magnesium (Total) mg/L



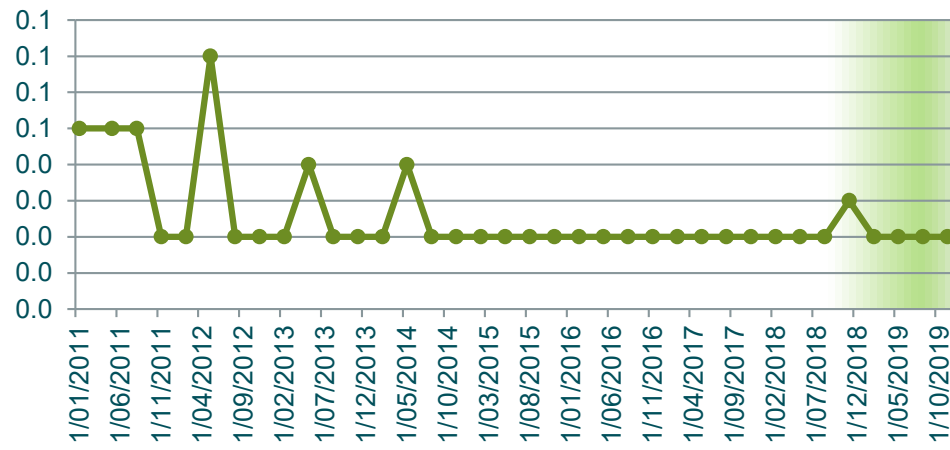
### Manganese Total mg/L



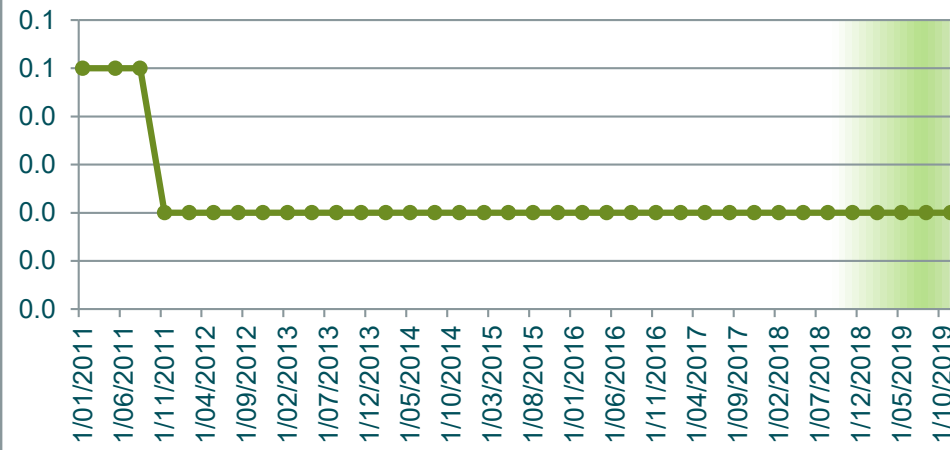
### Nickel (Total) mg/L



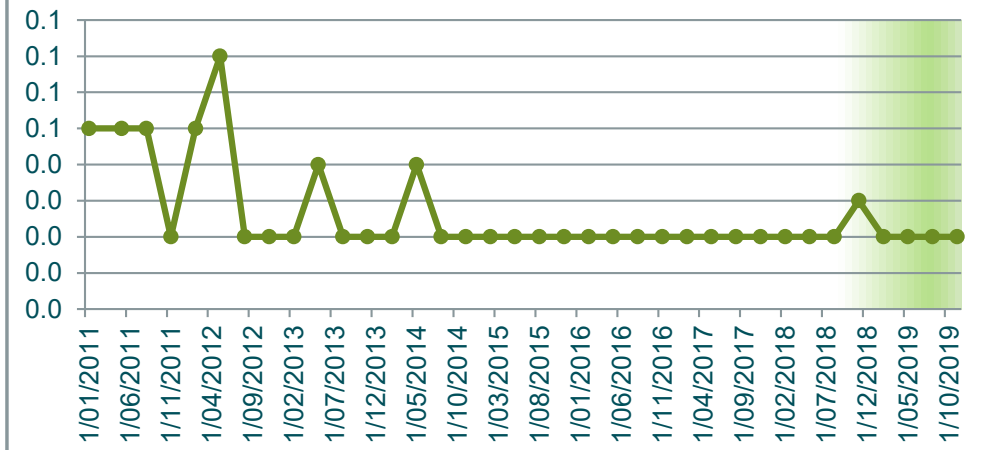
### Nitrate N mg/L



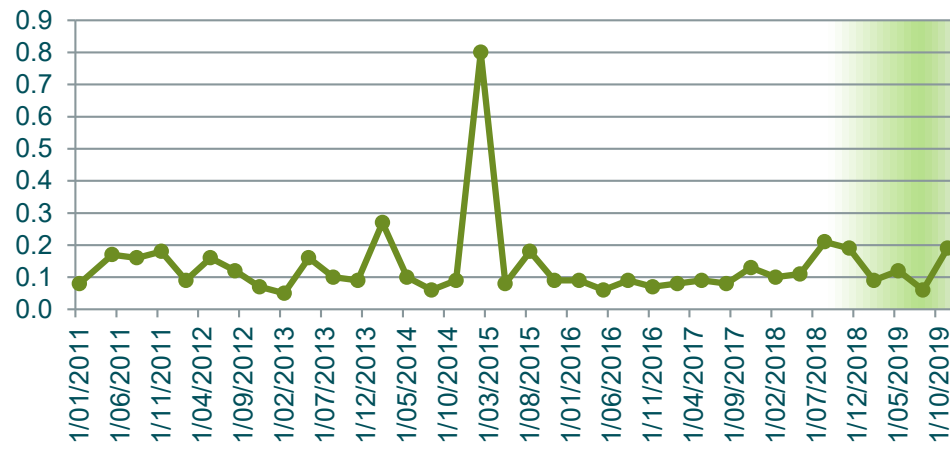
### Nitrite N mg/L



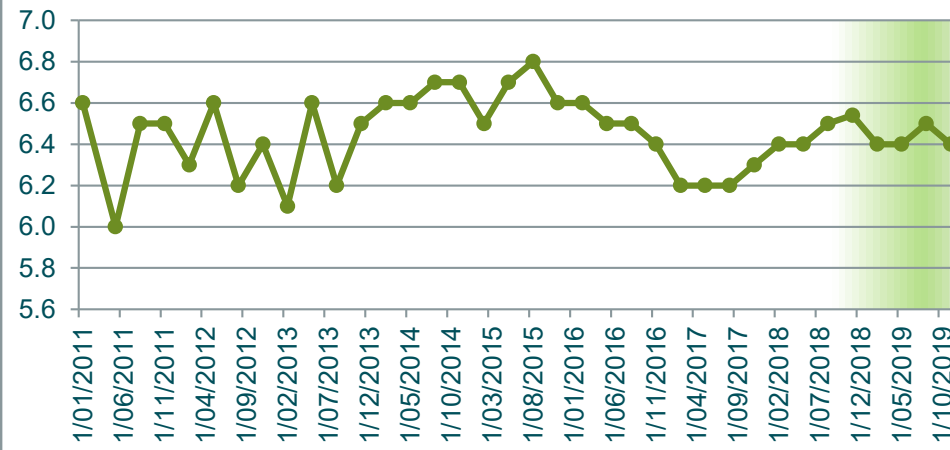
### Nitrogen Oxidised mg/L



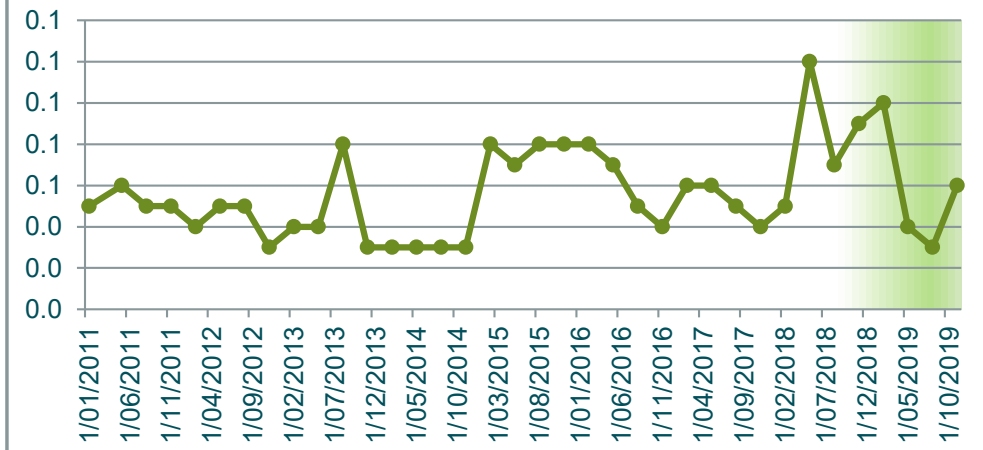
### Nitrogen Total mg/L



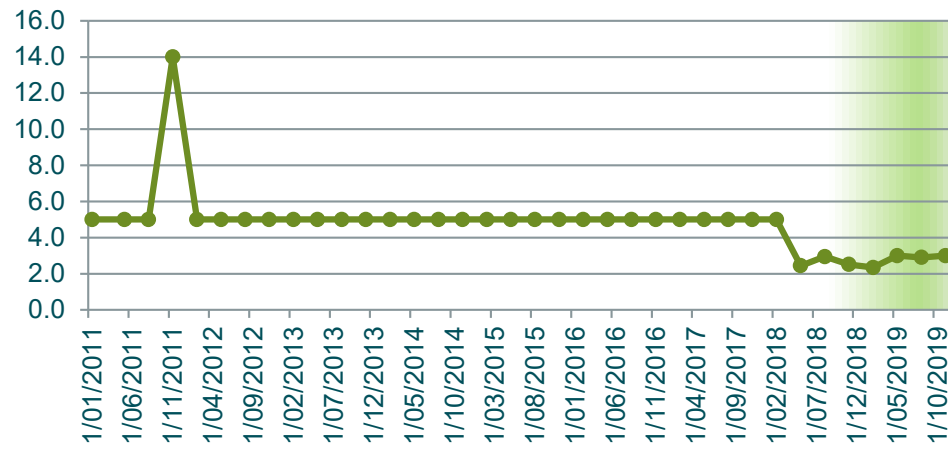
### pH pH units



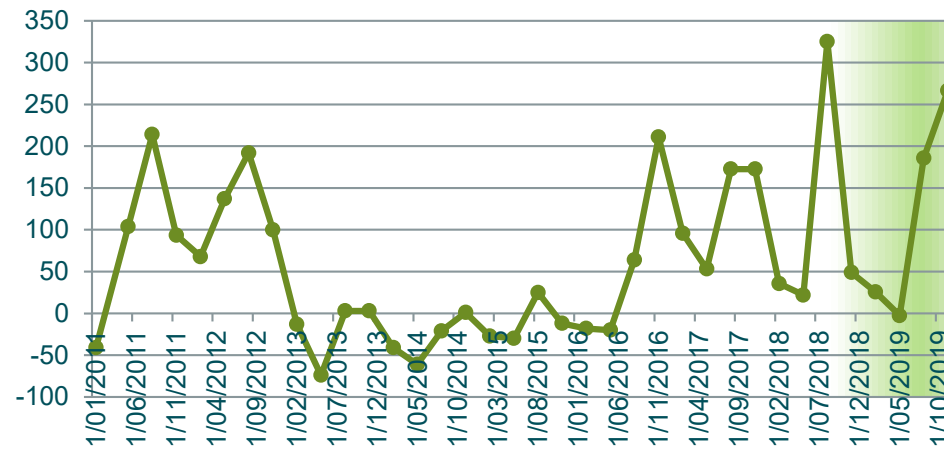
### Phosphorus Total mg/L



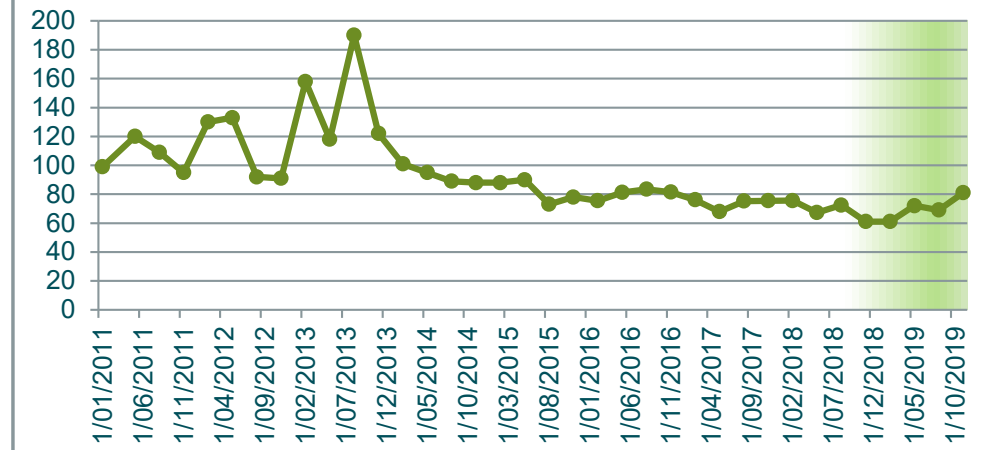
**Potassium Total  
mg/L**



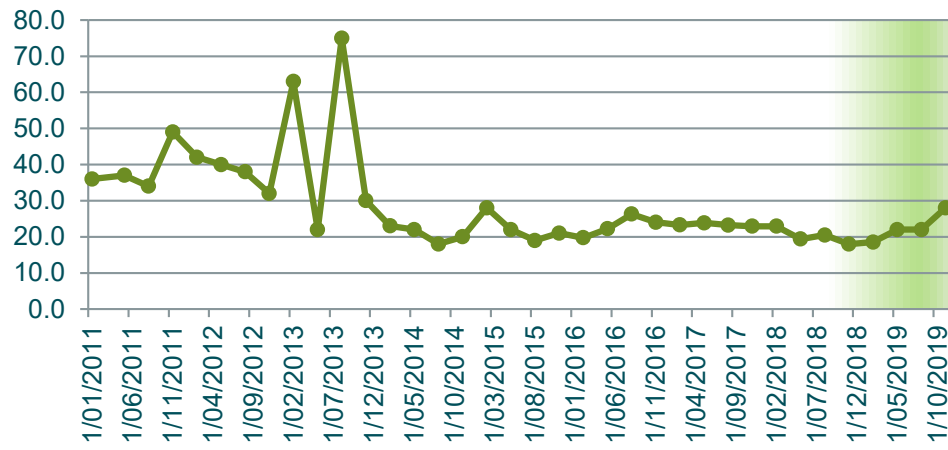
**Redox Potential  
mV**



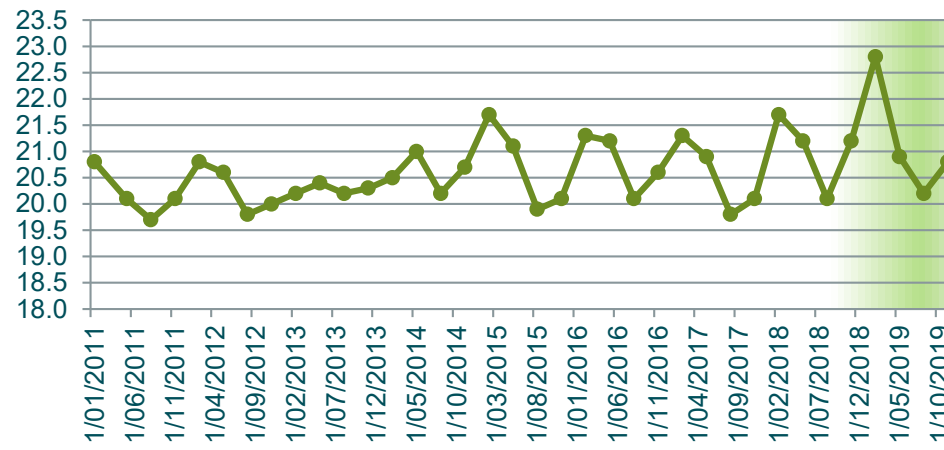
**Sodium (Total)  
mg/L**



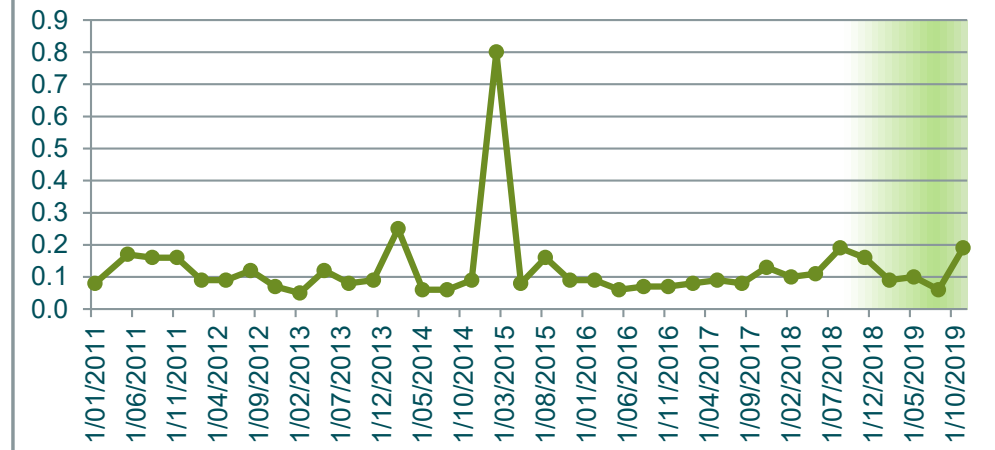
**Sulphate  
mg/L**



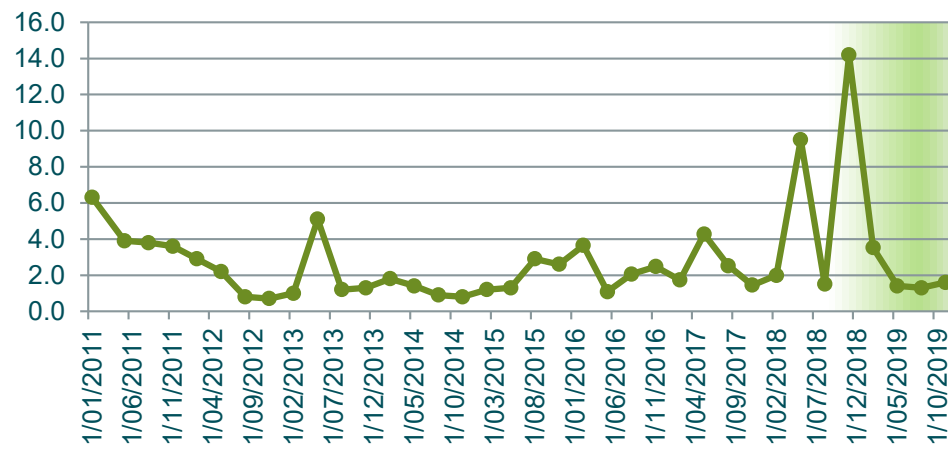
**Temperature  
C**



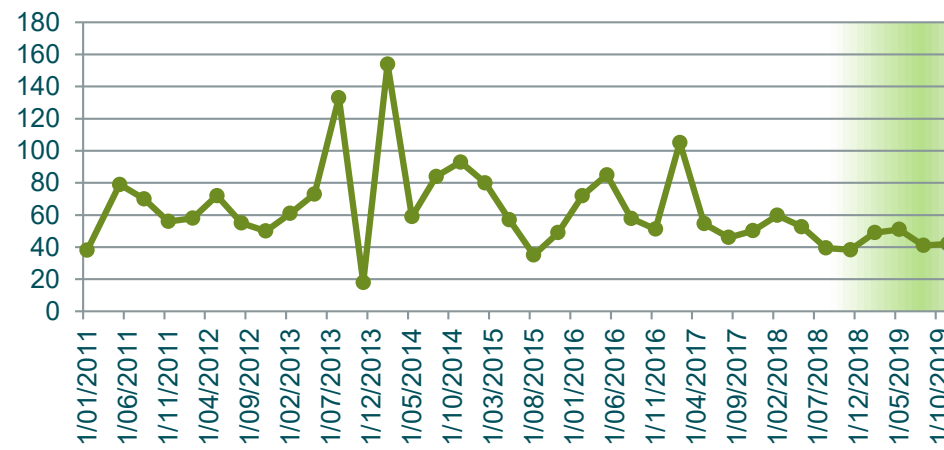
**TKN  
mg/L**



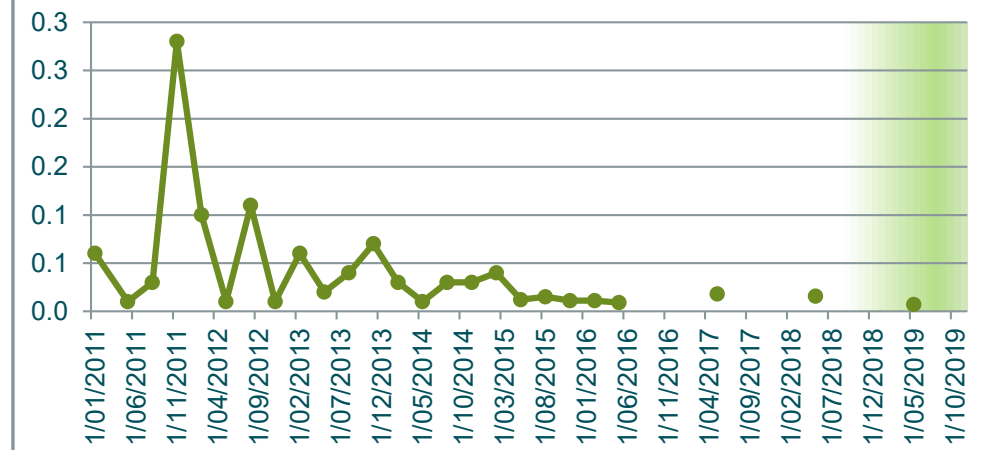
**TOC  
mg/L**



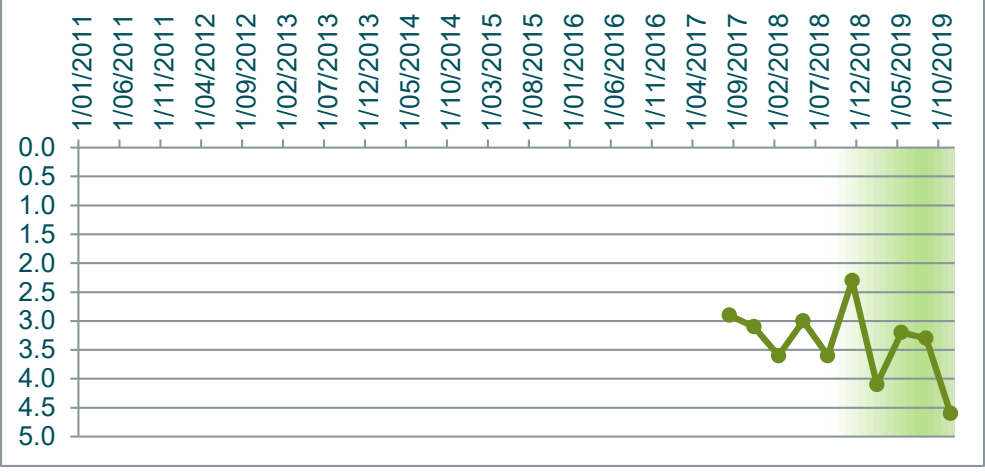
**Total Acidity  
mg/L CaCO3**



**Zinc (Total)  
mg/L**



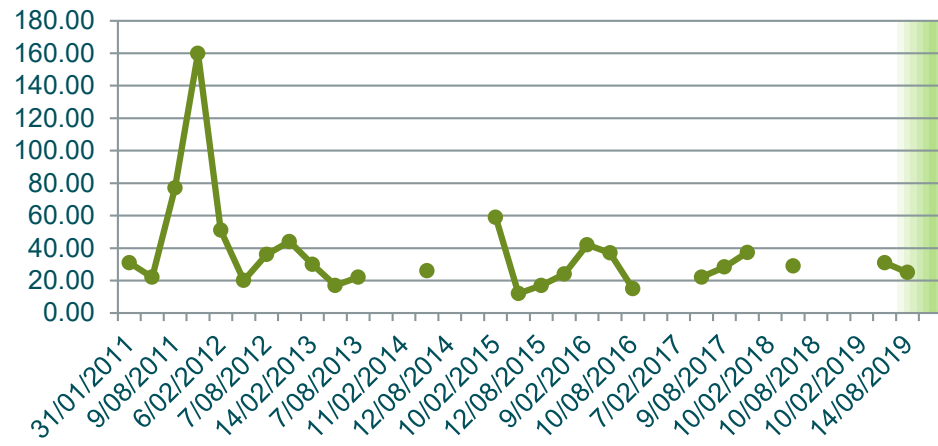
# Depth to Groundwater m



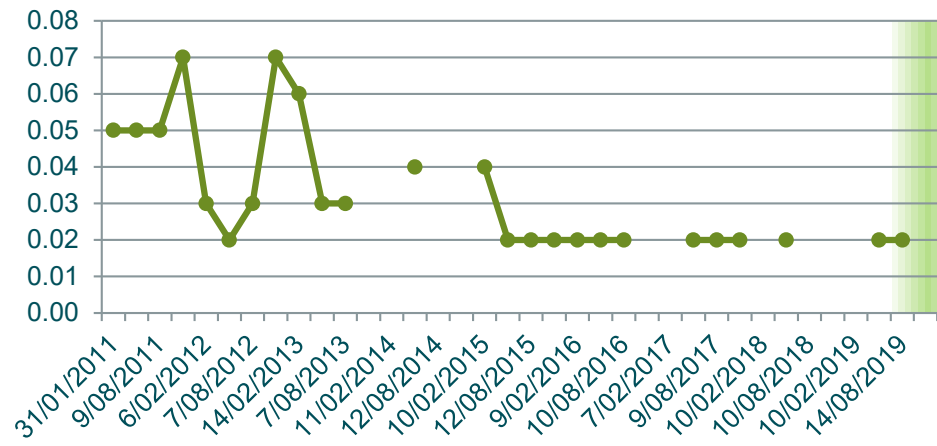


SW1	Alkalinity mg/L as CaCO3	Ammonia mg/L	Arsenic (Total) mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Conductivity µS/cm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	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	31.00	0.05	0.09	21.00	0.00	3.40	44.00	0.01	120.00	0.01	1.00	0.01	1.60	3.30	0.01	0.05	0.05	0.05	0.82	0.05	6.40	0.07	5.00	-13.00	13.00	1237.00	1.70	0.82	5.30	0.01	
10/05/2011	22.00	0.05	0.01	3.60	0.00	4.50	25.00	0.01	150.00	0.01	5.60	0.01	1.90	4.01	0.01	0.05	0.05	0.05	0.94	0.05	6.40	0.10	5.00	196.00	16.00	89.00	2.50	0.94	2.70	0.01	
9/08/2011	77.00	0.05	0.10	18.00	0.00	13.00	44.00	0.02	265.00	0.07	3.60	0.01	4.00	74.00	0.02	0.05	0.05	0.05	9.98	0.05	6.70	0.58	5.00	218.00	24.00	2970.00	4.80	9.98	5.10	0.12	
8/11/2011	160.00	0.07	0.30	108.00	0.00	19.00	35.00	0.01	309.00	0.18	0.10	0.03	5.30	67.00	0.04	0.06	0.02	0.06	11.00	0.02	6.50	0.80	5.00	-56.00	18.00	6820.00	2.60	10.94	3.20	0.34	
6/02/2012	51.00	0.03	0.01	20.00	0.00	7.40	22.00	0.01	193.00	0.01	1.00	0.04	4.80	4.10	0.01	0.02	0.02	0.05	5.12	0.02	6.40	0.17	5.00	53.00	16.00	764.00	1.80	5.12	6.10	0.08	
8/05/2012	20.00	0.02	0.01	1.00	0.00	3.50	22.00	0.01	108.00	0.14	4.80	0.01	2.00	0.01	0.01	0.02	0.02	0.02	0.49	0.02	6.30	0.07	5.00	226.00	15.00	38.00	1.40	0.47	0.60	0.04	
7/08/2012	36.00	0.03	0.01	6.60	0.00	6.60	30.00	0.01	188.00	0.01	1.20	0.01	2.60	1.55	0.01	0.03	0.02	0.03	0.36	0.02	6.30	0.02	5.00	-1.00	13.00	334.00	2.10	0.33	3.70	0.01	
14/11/2012	44.00	0.07	0.01	9.60	0.00	16.00	34.00	0.01	301.00	0.01	0.40	0.01	4.90	1.29	0.01	0.06	0.02	0.06	1.18	0.02	6.60	0.15	5.00	-44.00	18.00	263.00	21.00	1.12	8.40	0.02	
14/02/2013	30.00	0.06	0.01	3.90	0.00	6.50	24.00	0.01	203.00	0.01	1.00	0.01	3.20	0.88	0.01	0.03	0.02	0.05	1.79	0.02	6.20	0.18	5.00	-38.00	17.00	58.00	2.60	1.74	11.00	0.02	
15/05/2013	17.00	0.03	0.01	2.40	0.00	5.00	25.00	0.01	138.00	0.01	1.50	0.01	1.50	0.37	0.01	0.03	0.02	0.03	1.08	0.02	6.00	0.18	5.00	30.00	15.00	74.00	4.10	1.05	3.40	0.01	
7/08/2013	22.00	0.03	0.01	6.30	0.00	4.40	24.00	0.01	124.00	0.01	4.20	0.01	1.80	0.07	0.01	0.03	0.02	0.03	0.54	0.02	6.10	0.10	5.00	148.00	17.00	414.00	3.20	0.51	2.70	0.01	
12/11/2013																															
11/02/2014																															
14/05/2014	26.00	0.04	0.01	5.10	0.00	9.70	58.00	0.01	326.00	0.01	1.00	0.01	4.30	0.41	0.01	0.04	0.02	0.04	0.72	0.03	5.80	0.10	5.00	-2.00	40.00	28.00	28.00	0.68	7.70	0.02	
12/08/2014																															
10/11/2014																															
10/02/2015	59.00	0.04	0.01	6.60	0.00	11.00	24.00	0.01	230.00	0.01	0.10	0.01	4.40	1.71	0.01	0.03	0.02	0.05	1.33	0.02	6.60	0.06	5.00	-63.00	14.00	12.00	2.70	1.28	22.00	0.05	
12/05/2015	12.00	0.02	0.00	3.60	0.00	3.10	20.00	0.00	103.00	0.00	3.90	0.00	1.40	0.15	0.00	0.02	0.02	0.02	0.23	0.02	5.60	0.04	5.00	105.00	14.00	13.00	2.60	0.23	3.00	0.03	
12/08/2015	17.00	0.02	0.01	2.70	0.00	3.90	24.00	0.00	125.00	0.00	3.40	0.00	1.80	0.60	0.00	0.02	0.02	0.02	1.35	0.02	6.60	0.34	5.00	97.00	16.00	165.00	2.80	1.35	4.20	0.01	
11/11/2015	24.00	0.02	0.00	1.50	0.00	7.20	20.00	0.00	146.00	0.00	2.10	0.00	2.30	0.64	0.00	0.02	0.02	0.02	1.49	0.02	6.30	0.23	5.00	48.00	14.00	50.00	6.90	1.47	7.30	0.01	
9/02/2016	42.00	0.02	0.02	13.50	0.00	10.26	28.00	0.00	196.00	0.01	0.60	0.00	3.25	1.16	0.00	0.02	0.03	0.02	4.07	0.02	6.50	0.72	5.00	8.00	17.01	402.00	2.96	4.07	8.73	0.02	
10/05/2016	37.00	0.02	0.01	6.30	0.00	8.27	30.00	0.00	203.00	0.00	1.60	0.00	3.11	0.77	0.00	0.02	0.02	0.02	0.68	0.02	6.20	0.14	5.00	88.00	19.15	40.00	2.62	0.68	6.00	0.01	
10/08/2016	14.90	0.02		6.60		3.80	23.00		120.60		3.70		1.60			0.02	0.02	0.02	2.89	0.02	5.80	0.55	5.00	174.00	16.89	178.00	3.44	2.89	4.27		
8/11/2016																															
7/02/2017																															
9/05/2017	22.10	0.02	0.00	1.00	0.00	8.20	20.00	0.00	139.00	0.00	2.40	0.00	2.39	0.19	0.00	0.02	0.02	0.02	0.36	0.02	5.90	0.04	5.00	256.30	12.76	8.50	11.45	0.36	5.16	0.01	
9/08/2017	28.28	0.02		3.00		5.49	50.00		158.50		0.90		2.46			0.02	0.02	0.02	4.64	0.02	6.00	0.91	5.00	135.30	17.26	119.00	1.55	4.64	5.16		
8/11/2017	37.27	0.02		2.40		12.34	27.50		198.80		1.20		3.14			0.02	0.02	0.02	0.40	0.02	5.60	0.05	5.00	114.90	16.83	9.70	12.31	0.40	5.62		
10/02/2018																															
9/05/2018	28.98	0.02	0.00	2.10	0.00	7.97	22.50	0.00	146.40	0.00	1.60	0.00	2.46	0.39	0.00	0.02	0.02	0.02	0.62	0.02	6.20	0.11	1.53	111.80	14.70	30.00	3.77	0.62	5.67	0.01	
10/08/2018																															
12/11/2018																															
10/02/2019																															
15/05/*2019	31.00	0.02	0.00	3.90	0.00	9.60	31.00	0.00	189.00	0.00	0.80	0.00	3.50	0.59	0.00	0.02	0.02	0.02	1.02	0.02	6.10	0.16	1.30	-12.70	21.00	28.00	6.00	1.00	11.00	0.01	
14/08/2019	25.00	0.02		4.80		7.80	30.00		161.00		0.50		2.80			0.02	0.02	0.02	7.61	0.02	6.10	1.98	1.10	281.20	20.00	160.00	4.00	7.61	8.50		
13/11/2019																															
2019 Min	25.00	0.02	0.00	3.90	0.00	7.80	30.00	0.00	161.00	0.00	0.50	0.00	2.80	0.59	0.00	0.02	0.02	0.02	1.02	0.02	6.10	0.16	1.10	-12.70	20.00	28.00	4.00	1.00	8.50	0.01	
2019 Max	31.00	0.02	0.00	4.80	0.00	9.60	31.00	0.00	189.00	0.00	0.80	0.00	3.50	0.59	0.00	0.02	0.02	0.02	7.61	0.02	6.10	1.98	1.30	281.20	21.00	160.00	6.00	7.61	11.00	0.01	
2019 Mean	28.00	0.02	0.00	4.35	0.00	8.70	30.50	0.00	175.00	0.00	0.65	0.00	3.15	0.59	0.00	0.02	0.02	0.02	4.32	0.02	6.10	1.07	1.20	134.25	20.50	94.00	5.00	4.31	9.75	0.01	
Long-term Average	36.58	0.03	0.03	10.54	0.00	7.92	29.48	0.01	181.65	0.02	1.93	0.01	2.90	7.77	0.01	0.03	0.02	0.03	2.43	0.02	6.21	0.31	4.56	82.43	17.42	572.17	5.56	2.41	6.26	0.04	

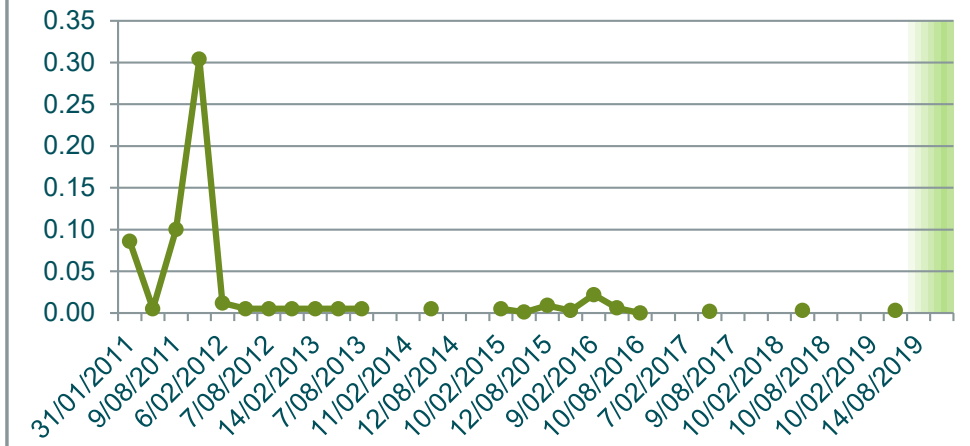
**Alkalinity  
mg/L as CaCO3**



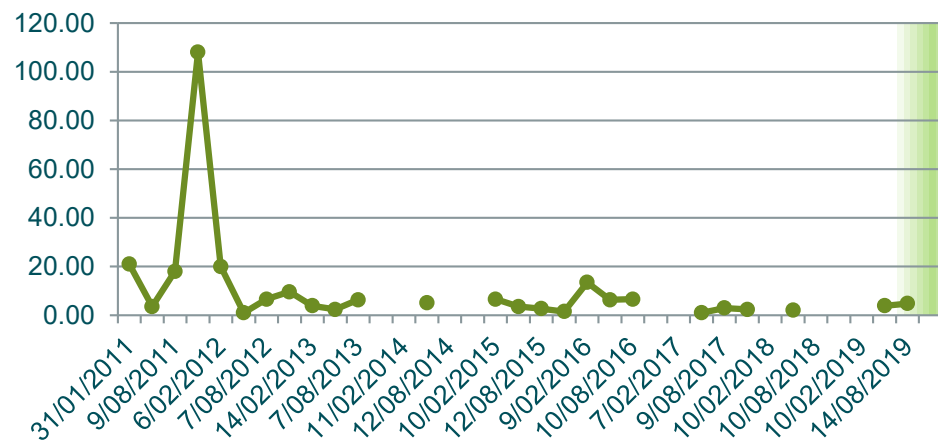
**Ammonia  
mg/L**



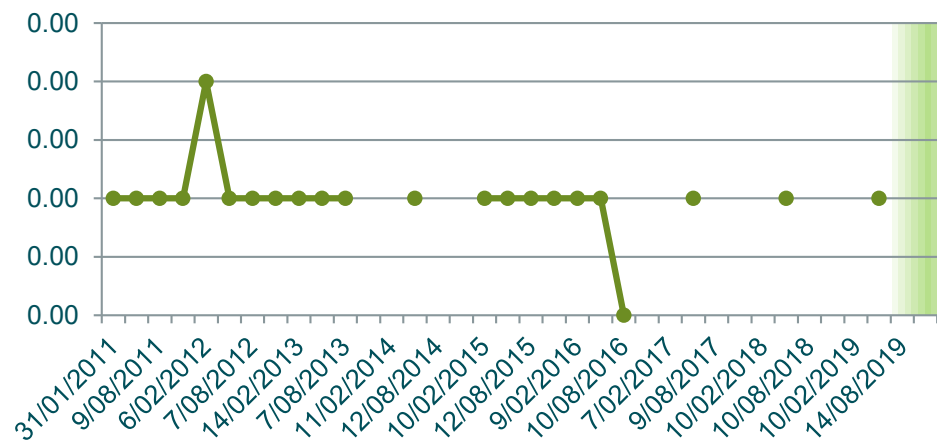
**Arsenic (Total)  
mg/L**



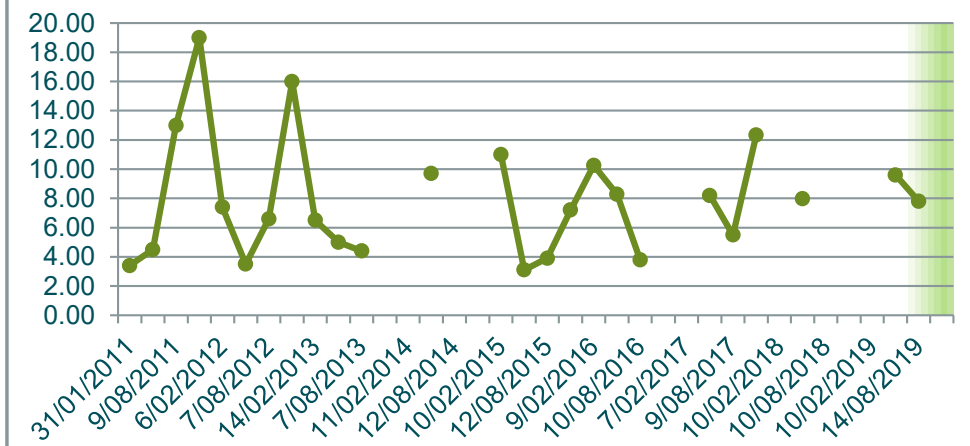
**BOD5  
mg/L**



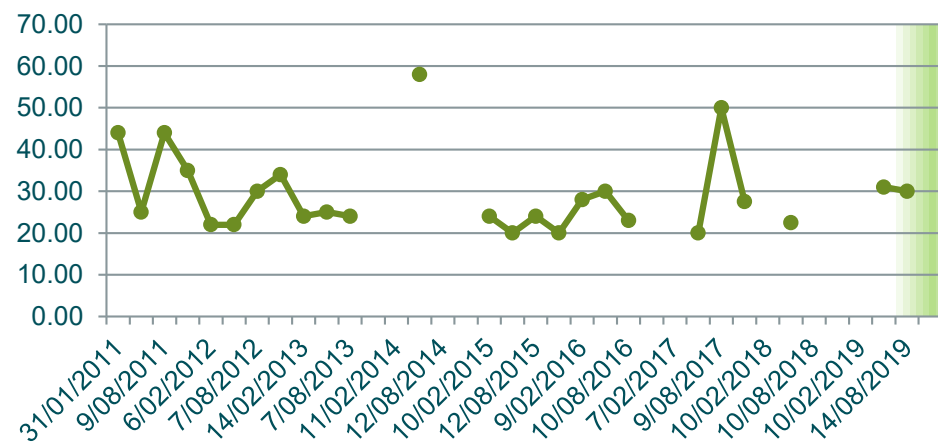
**Cadmium (Total)  
mg/L**



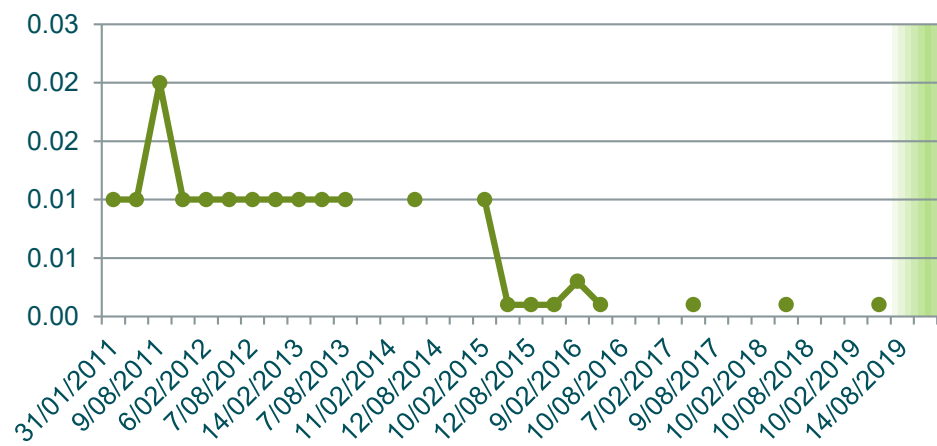
**Calcium (Total)  
mg/L**



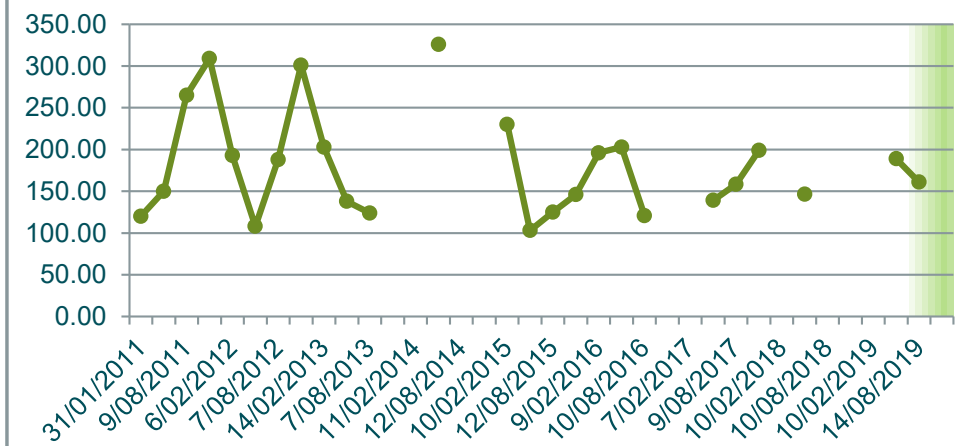
**Chloride  
mg/L**



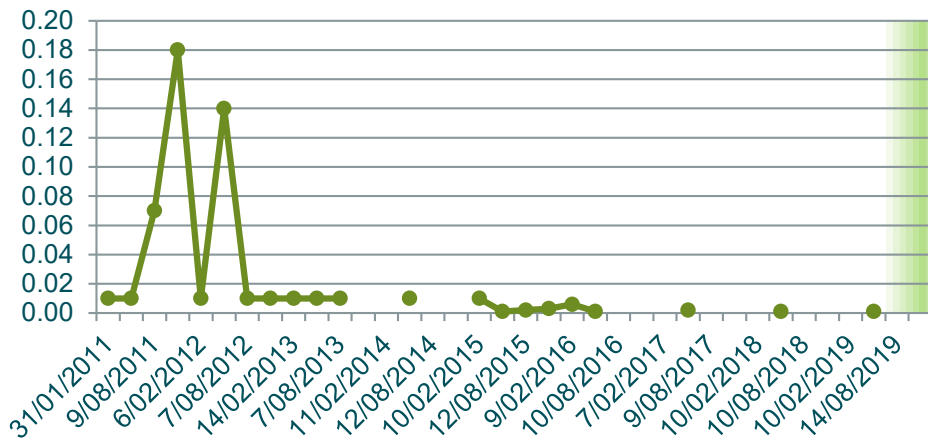
**Chromium (Total)  
mg/L**



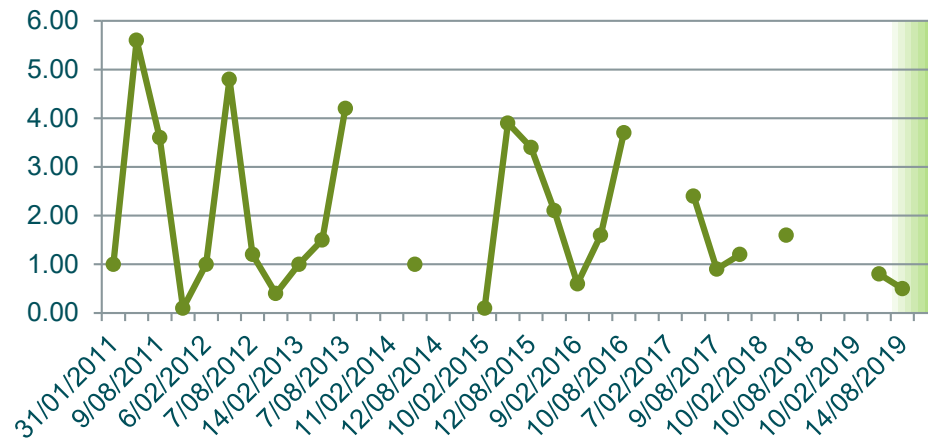
**Conductivity  
µScm-1**



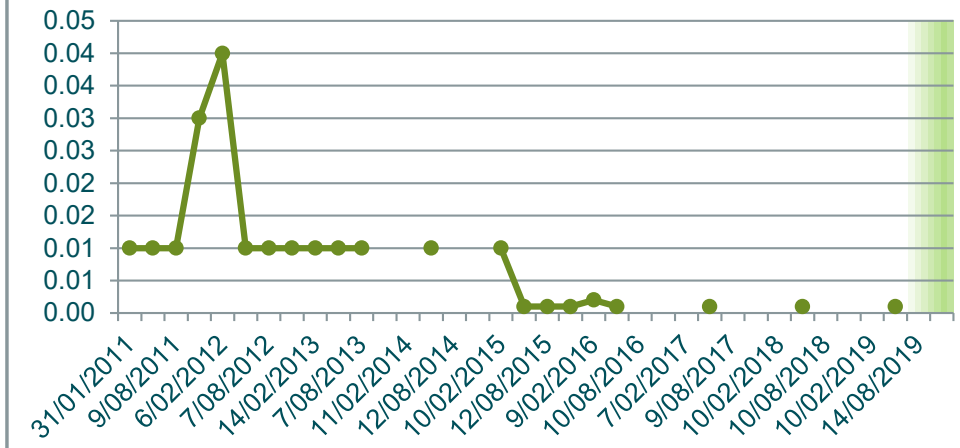
**Copper (Total)**  
mg/L



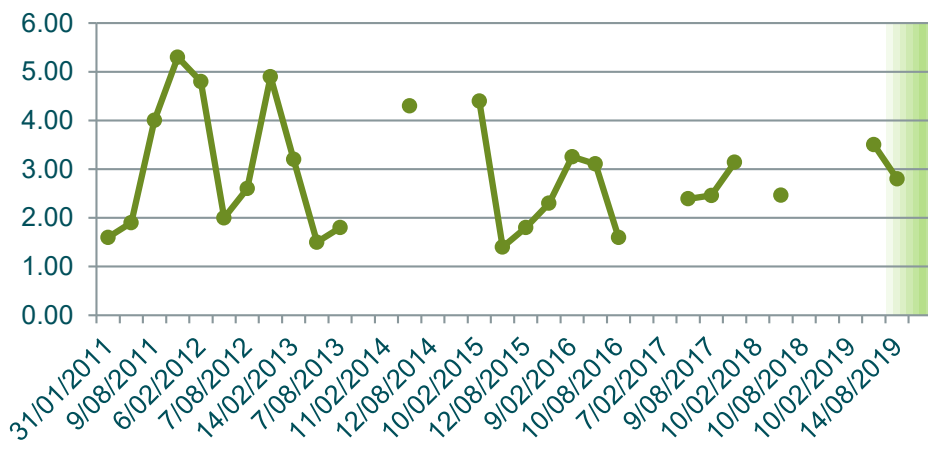
**DO (Membrane Electrode)**  
mg/L



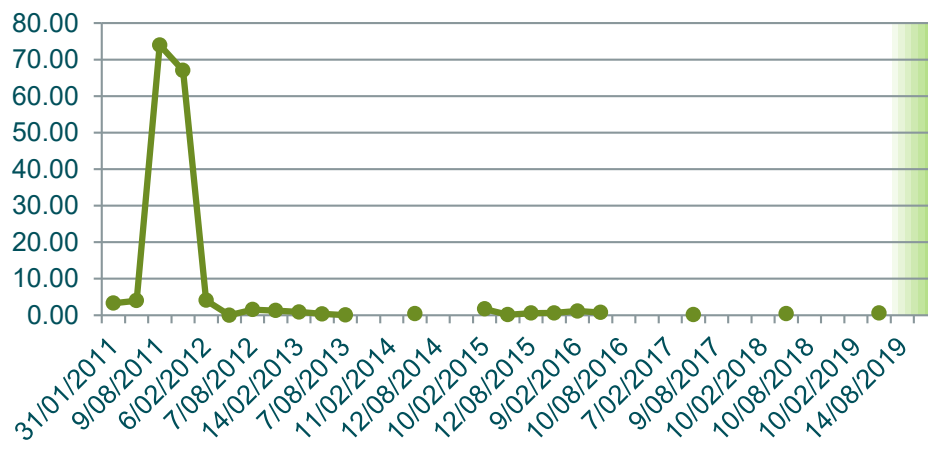
**Lead (Total)**  
mg/L



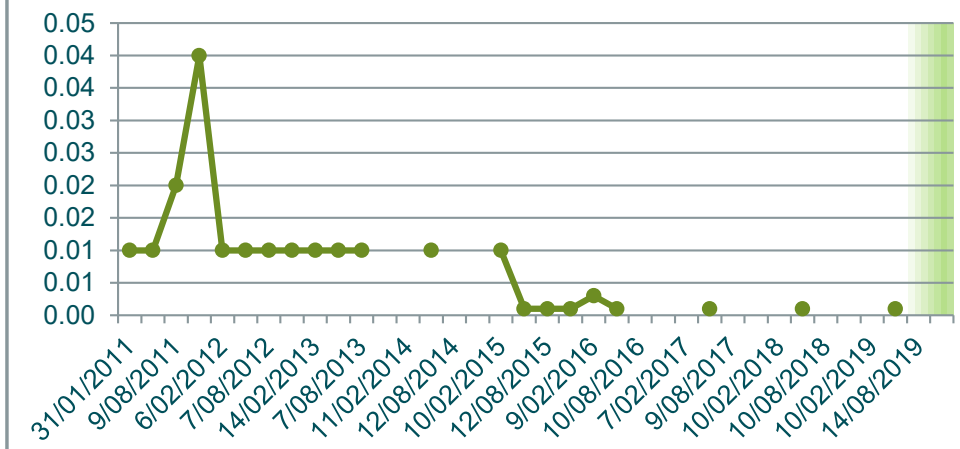
**Magnesium (Total)**  
mg/L



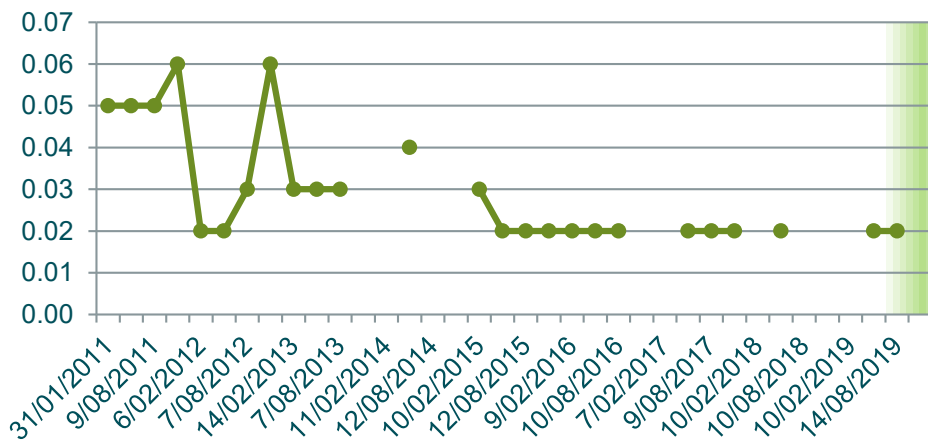
**Manganese Total**  
mg/L



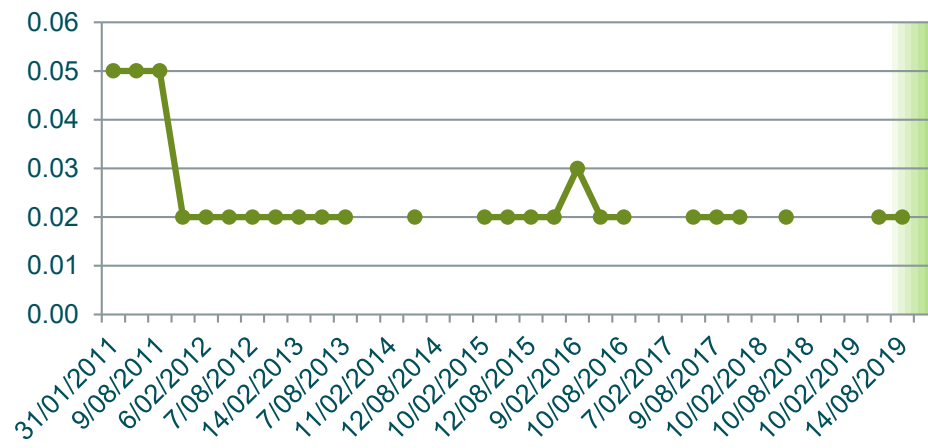
**Nickel (Total)**  
mg/L



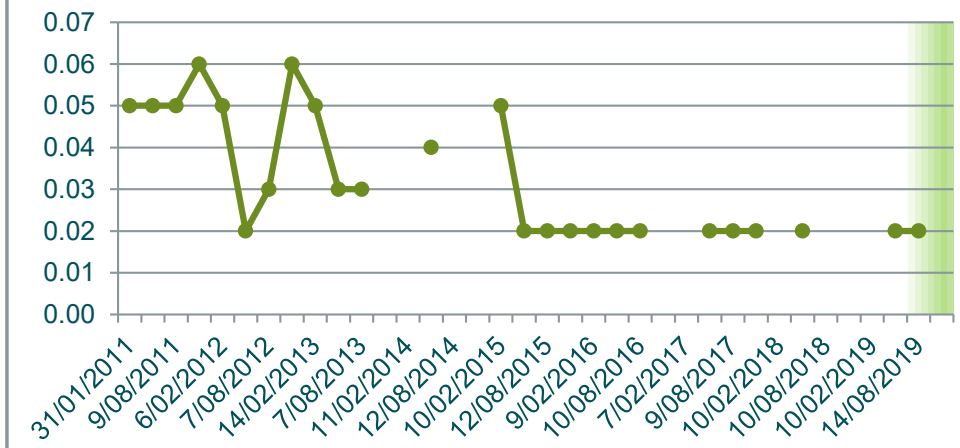
**Nitrate N**  
mg/L



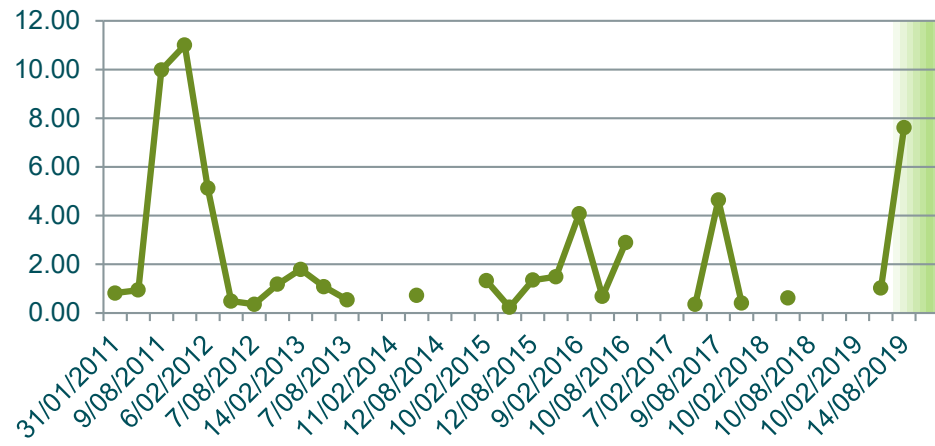
**Nitrite N**  
mg/L



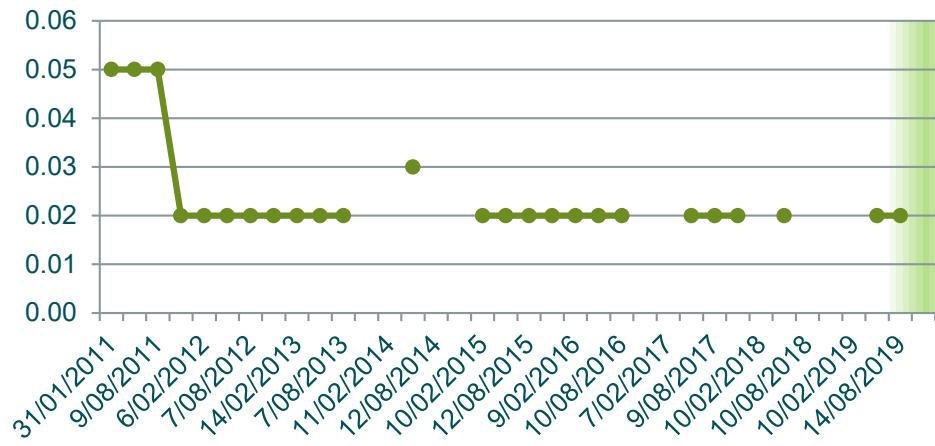
**Nitrogen Oxidised**  
mg/L



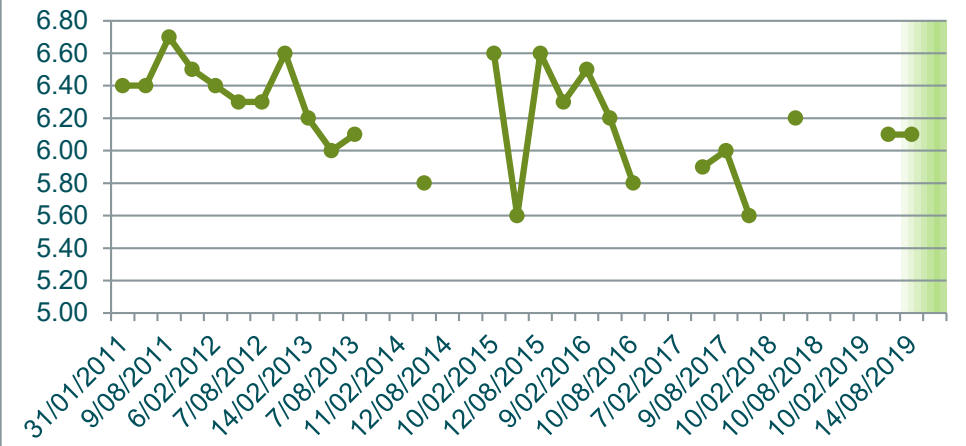
### Nitrogen Total mg/L



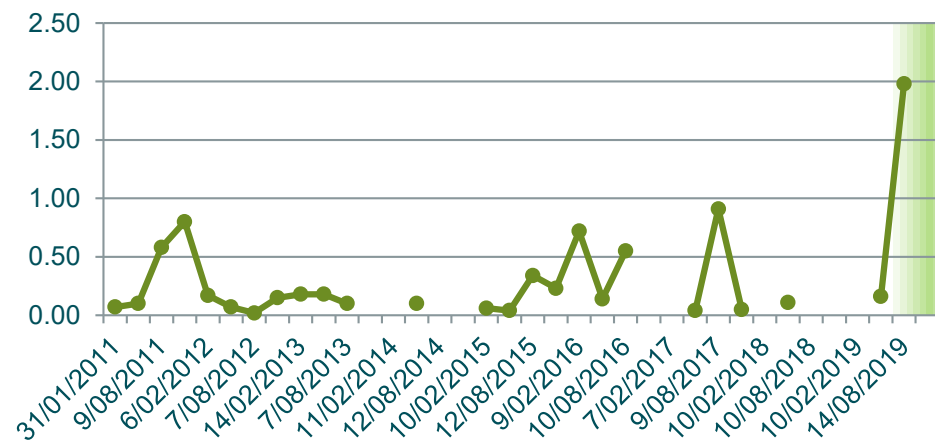
### Orthophosphate mg/L



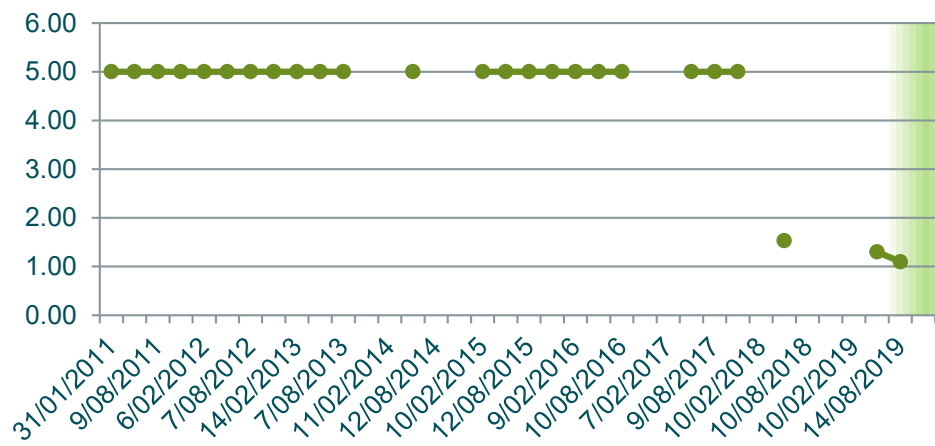
### pH pH units



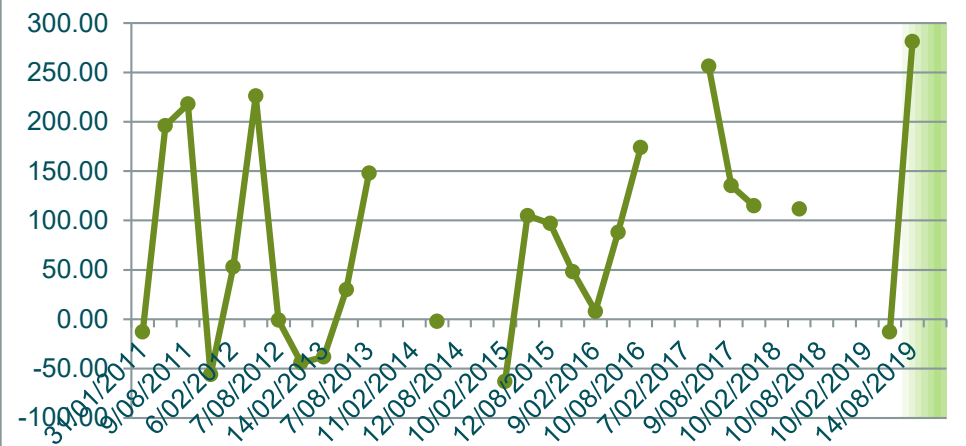
### Phosphorus Total mg/L



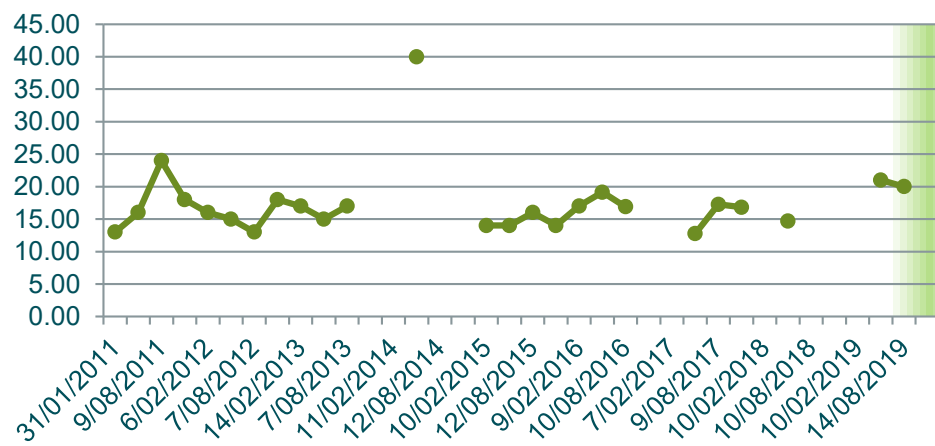
### Potassium Total mg/L



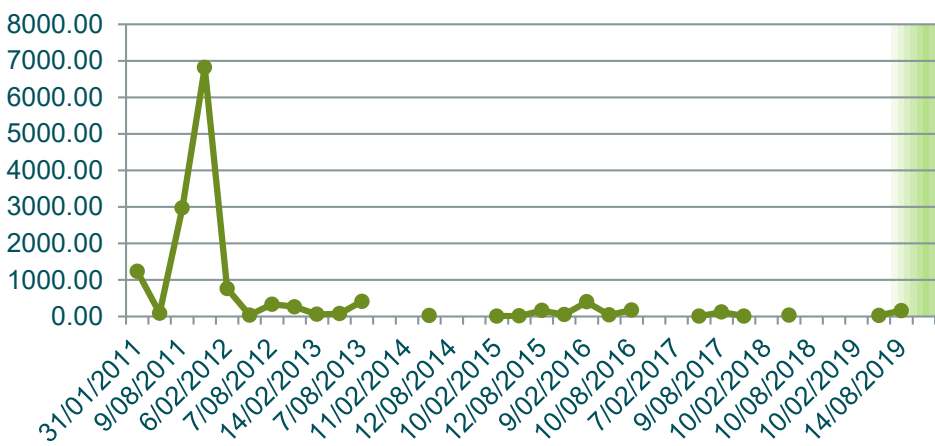
### Redox Potential mV



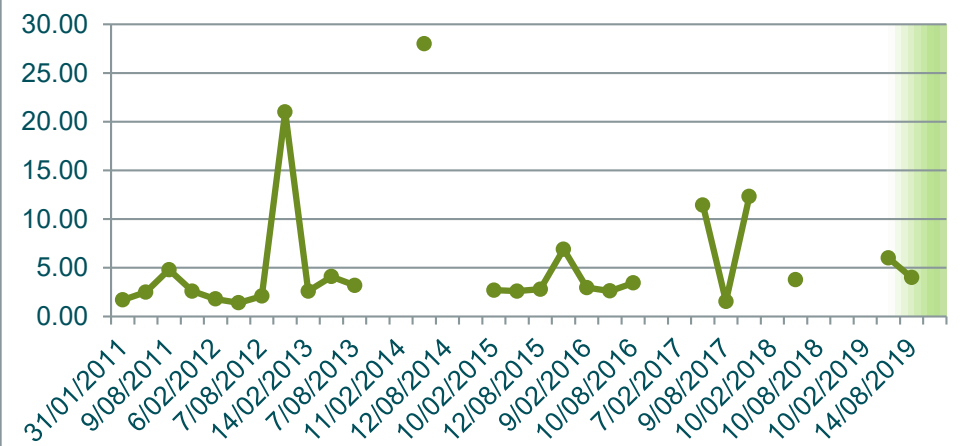
### Sodium (Total) mg/L



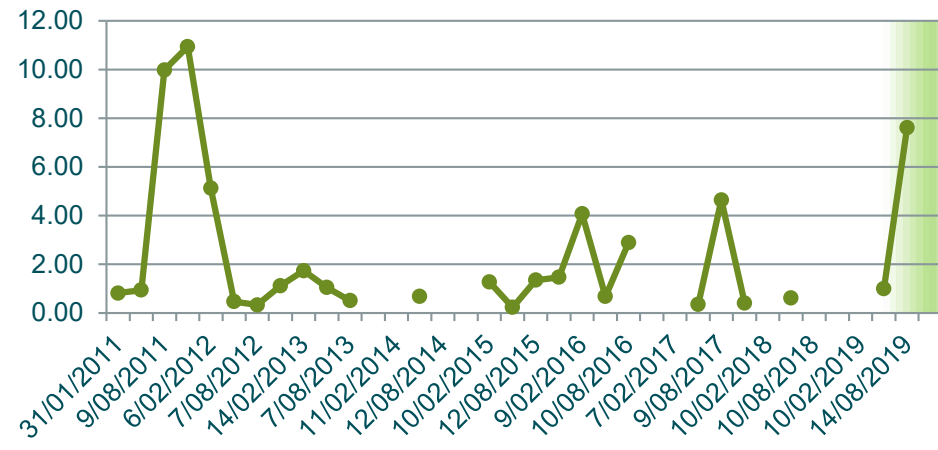
### Solids Suspended mg/L



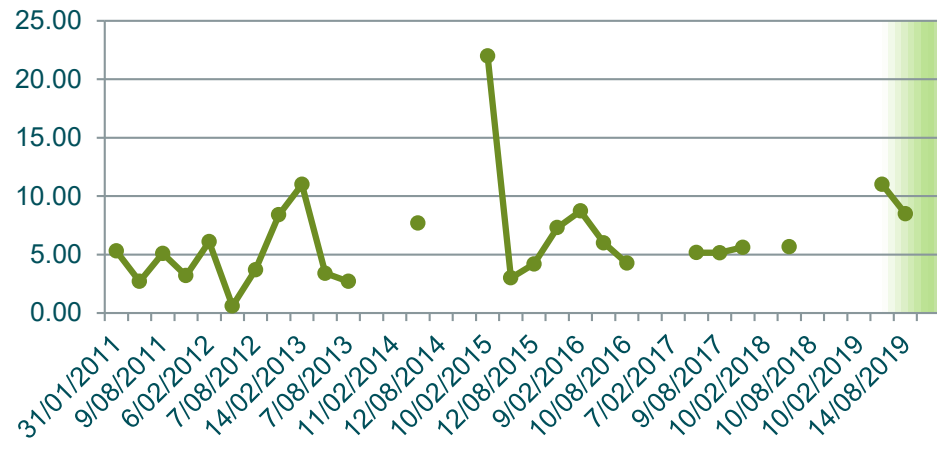
### Sulphate mg/L



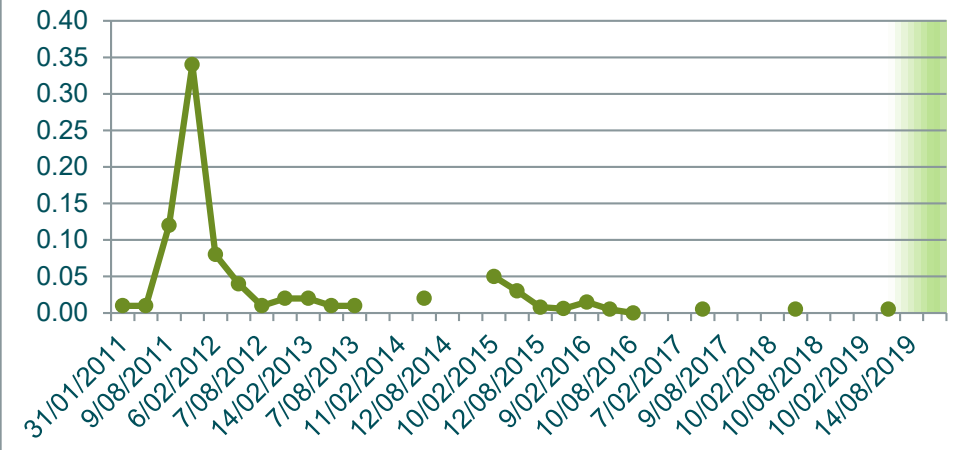
### TKN mg/L



### TOC mg/L



### Zinc (Total) mg/L





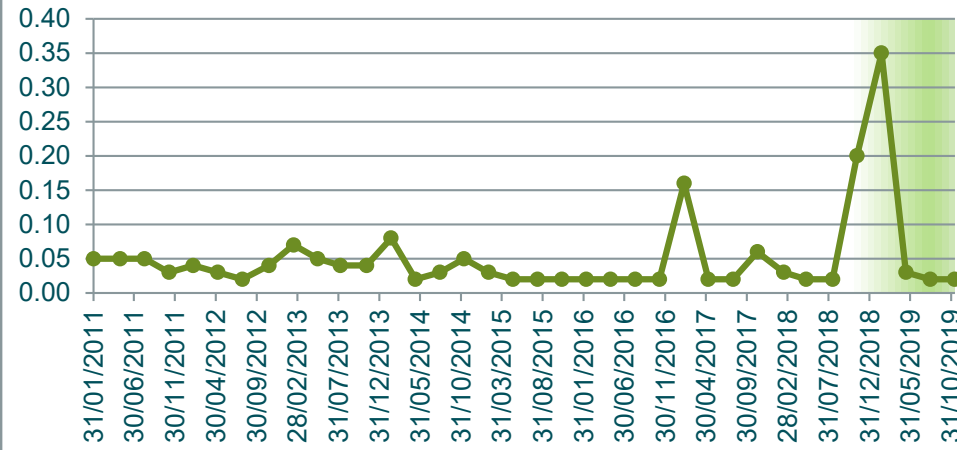
SW2	Alkalinity mg/L as CaCO3	Ammonia mg/L	Arsenic (Total) mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Conductivity µS/cm-1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (Total) mg/L	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	25.00	0.05	0.01	7.80	0.00	3.90	20.00	0.01	142.00	0.01	1.10	0.01	2.10	1.42	0.01	0.05	0.05	0.05	0.95	0.05	6.20	0.08	5.00	-18.00	13.00	82.00	1.00	0.95	5.60	0.01
10/05/2011	17.00	0.05	0.01	2.40	0.00	3.60	28.00	0.01	163.00	0.01	3.10	0.01	2.20	0.01	0.01	0.05	0.05	0.05	0.38	0.05	5.50	0.05	5.00	186.00	19.00	6.00	3.20	0.38	2.90	0.01
9/08/2011	22.00	0.05	0.01	18.00	0.00	5.90	44.00	0.01	224.00	0.01	6.90	0.01	3.10	0.73	0.01	0.05	0.05	0.05	0.71	0.05	6.00	0.07	5.00	244.00	23.00	167.00	4.70	0.71	7.60	0.01
8/11/2011	38.00	0.03	0.01	6.00	0.00	9.90	40.00	0.01	229.00	0.02	2.40	0.01	4.30	1.53	0.01	0.02	0.02	0.02	0.77	0.02	6.30	0.07	5.00	107.30	13.00	52.00	1.80	0.75	5.40	0.03
6/02/2012	45.00	0.04	0.01	6.00	0.00	9.00	24.00	0.01	205.00	0.01	1.00	0.01	5.40	2.93	0.01	0.05	0.02	0.05	1.19	0.02	6.40	0.46	5.00	34.00	17.00	44.00	2.30	1.14	4.80	0.02
8/05/2012	18.00	0.03	0.01	7.80	0.00	3.30	26.00	0.01	123.00	0.01	5.10	0.01	2.20	0.27	0.01	0.03	0.02	0.03	0.75	0.02	5.90	0.07	5.00	228.00	17.00	68.00	1.90	0.72	0.70	0.01
7/08/2012	32.00	0.02	0.01	1.00	0.00	5.30	32.00	0.01	192.00	0.01	3.10	0.01	4.20	0.05	0.01	0.02	0.02	0.02	0.31	0.02	6.10	0.02	5.00	114.00	15.00	3.70	1.80	0.29	4.40	0.01
14/11/2012	19.00	0.04	0.01	2.70	0.00	7.50	56.00	0.01	325.00	0.01	1.50	0.01	5.20	1.64	0.01	0.04	0.02	0.04	0.80	0.02	6.20	0.05	5.00	41.00	27.00	52.00	20.00	0.76	7.00	0.03
14/02/2013	37.00	0.07	0.01	14.00	0.00	8.30	38.00	0.01	272.00	0.01	1.00	0.01	4.40	1.59	0.01	0.02	0.03	0.04	1.02	0.02	6.20	0.06	5.00	-47.00	22.00	39.00	2.60	0.98	15.00	0.02
15/05/2013	7.00	0.05	0.01	3.90	0.00	3.30	35.00	0.01	149.00	0.01	2.10	0.01	1.70	0.41	0.01	0.04	0.02	0.04	0.22	0.02	5.70	0.03	5.00	78.00	18.00	20.00	4.00	0.18	2.70	0.01
7/08/2013	19.00	0.04	0.01	4.50	0.00	4.00	31.00	0.01	144.00	0.01	3.60	0.01	2.60	0.27	0.01	0.04	0.02	0.04	0.78	0.02	6.00	0.07	5.00	146.00	20.00	90.00	1.50	0.74	4.30	0.02
13/11/2013	36.00	0.04	0.01	7.20	0.00	8.40	51.00	0.01	257.00	0.01	4.50	0.01	4.90	1.00	0.01	0.03	0.02	0.03	1.23	0.02	6.50	0.14	5.00	90.00	29.00	35.00	2.20	1.20	6.80	0.05
12/02/2014	36.00	0.08	0.01	22.00	0.00	9.00	56.00	0.01	260.00	0.01	3.60	0.01	5.20	0.74	0.01	0.09	0.02	0.09	2.67	0.02	6.40	0.16	5.00	145.00	34.00	64.00	2.40	2.58	9.30	0.05
14/05/2014	37.00	0.02	0.01	5.70	0.00	7.10	67.00	0.01	321.00	0.01	4.20	0.01	4.90	0.43	0.01	0.02	0.03	0.02	1.64	0.02	6.30	0.17	5.00	34.00	38.00	34.00	4.40	1.62	12.10	0.01
13/08/2014	10.00	0.03	0.01	2.70	0.00	6.20	59.00	0.01	269.00	0.01	3.80	0.01	4.00	0.12	0.01	0.03	0.02	0.03	0.43	0.02	5.80	0.05	5.00	153.00	37.00	10.00	18.00	0.40	5.00	0.03
11/11/2014	31.00	0.05	0.01	5.40	0.00	7.50	60.00	0.01	248.00	0.01	3.90	0.01	4.60	0.44	0.01	0.04	0.02	0.04	1.23	0.02	7.10	0.15	5.00	79.00	33.00	23.00	3.30	1.19	11.00	0.03
10/02/2015	40.00	0.03	0.01	5.70	0.00	8.30	29.00	0.01	196.00	0.01	0.10	0.01	4.80	2.02	0.01	0.02	0.02	0.04	1.45	0.02	6.50	0.05	5.00	-1.00	16.00	22.00	2.60	1.41	20.00	0.01
12/05/2015	9.00	0.02	0.00	4.80	0.00	2.30	24.00	0.00	111.00	0.00	1.50	0.00	1.50	0.18	0.00	0.02	0.02	0.02	0.44	0.02	5.40	0.06	5.00	124.00	16.00	21.00	2.70	0.44	3.80	0.04
12/08/2015	12.00	0.02	0.00	1.20	0.00	3.10	31.00	0.00	140.00	0.00	4.80	0.00	2.10	0.11	0.00	0.02	0.02	0.02	0.28	0.02	6.30	0.03	5.00	139.00	20.00	3.00	3.10	0.28	4.20	0.01
11/11/2015	12.00	0.02	0.00	1.80	0.00	4.00	29.00	0.00	148.00	0.00	2.50	0.00	2.40	0.36	0.00	0.02	0.02	0.02	0.53	0.02	5.90	0.04	5.00	80.00	18.00	17.00	9.80	0.51	6.50	0.01
9/02/2016	27.00	0.02	0.00	6.30	0.00	6.08	39.00	0.00	182.00	0.00	1.10	0.00	3.01	0.54	0.00	0.02	0.02	0.02	0.66	0.02	6.40	0.07	5.00	84.00	20.62	28.00	3.03	0.66	8.57	0.01
10/05/2016	24.00	0.02	0.00	6.30	0.00	5.81	37.00	0.00	176.00	0.00	2.50	0.00	3.15	0.64	0.00	0.02	0.02	0.02	1.10	0.02	6.20	0.14	5.00	116.00	20.68	34.00	1.89	1.10	6.17	0.01
10/08/2016	11.10	0.02		3.90		4.10	41.00		181.20		2.00		2.71			0.02	0.02	0.02	0.51	0.02	5.60	0.07	5.00	134.00	22.30	15.50	6.42	0.51	4.32	
8/11/2016	31.40	0.02		3.60		7.22	39.50		191.00		2.00		3.75			0.02	0.02	0.02	0.94	0.02	6.30	0.10	5.00	408.40	25.38	16.00	2.48	0.94	7.94	
8/02/2017	38.30	0.16		3.00		6.86	38.00		215.10		1.50		4.15			0.02	0.02	0.02	1.16	0.02	6.40	0.10	5.00	330.70	24.47	16.00	3.70	1.16	12.77	
9/05/2017	6.70	0.02	0.00	1.00	0.00	3.46	32.00	0.00	142.00	0.00	2.00	0.00	2.16	0.15	0.00	0.02	0.02	0.02	0.38	0.02	5.40	0.03	5.00	345.80	17.73	5.70	10.37	0.38	5.32	0.01
9/08/2017	19.94	0.02		3.90		3.62	27.50		139.70		2.30		2.30			0.02	0.02	0.02	0.54	0.02	6.00	0.06	5.00	358.80	18.57	15.50	1.09	0.54	5.35	
8/11/2017	34.32	0.06		4.80		8.29	40.00		216.30		1.20		4.15			0.02	0.02	0.02	0.71	0.02	5.60	0.08	5.00	121.30	23.63	18.00	2.91	0.71	9.32	
14/02/2018	40.31	0.03		9.60		8.19	35.00		202.20		1.40		3.73			0.02	0.02	0.02	1.13	0.02	6.40	0.13	5.00	165.10	23.95	31.00	1.95	1.13	11.30	
9/05/2018	26.99	0.02	0.00	4.80	0.00	6.51	28.50	0.00	160.60	0.00	1.90	0.00	3.36	0.57	0.00	0.02	0.02	0.02	0.61	0.02	6.10	0.04	1.15	275.20	18.68	9.20	2.48	0.61	9.32	0.01
15/08/2018	12.86	0.02		6.60		3.99	34.50		148.40		2.30		2.10			0.02	0.02	0.02	0.39	0.02	6.00	0.06	0.98	433.70	21.49	14.00	1.42	0.39	4.40	
14/11/2018	37.28	0.20		9.30		9.16	44.00		227.00		1.20		4.59			0.02	0.02	0.02	1.12	0.02	6.30	0.09	2.67	57.00	27.38	22.00	2.87	1.12	18.31	
13/02/2019	37.84	0.35		15.00		8.86	37.50		205.50		1.70		4.26			0.02	0.03	0.02	2.50	0.03	6.50	0.24	3.84	88.30	23.03	54.00	2.54	2.50	14.42	
15/05/2019	20.00	0.03	0.00	3.60	0.00	6.20	38.00	0.00	186.00	0.00	1.20	0.00	3.30	0.20	0.00	0.02	0.02	0.02	0.58	0.02	6.00	0.08	1.40	56.80	26.00	6.70	5.70	0.58	10.00	0.01
14/08/2019	16.00	0.02		1.20		4.80	33.00		163.00		1.20		2.80			0.02	0.02	0.02	0.47	0.02	6.10	0.05	0.70	299.10	22.00	7.00	2.70	0.47	7.50	
13/11/2019	33.00	0.02		5.70		7.80	50.00		237.00		5.80		4.60			0.02	0.02	0.02	1.21	0.02	6.70	0.19	2.10	322.00	28.00	10.00	2.10	1.19	12.00	
2019 Min	16.00	0.02	0.00	1.20	0.00	4.80	33.00	0.00	163.00	0.00	1.20	0.00	2.80	0.20	0.00	0.02	0.02	0.02	0.47	0.02	6.00	0.05	0.70	56.80	22.00	6.70	2.10	0.47	7.50	0.01
2019 Max	37.84	0.35	0.00	15.00	0.00	8.86	50.00	0.00	237.00	0.00	5.80	0.00	4.60	0.20	0.00	0.02	0.03	0.02	2.50	0.03	6.70	0.24	3.84	322.00	28.00	54.00	5.70	2.50	14.42	0.01
2019 Mean	26.71	0.11	0.00	6.38	0.00	6.91	39.63	0.00	197.88	0.00	2.48	0.00	3.74	0.20	0.00	0.02	0.02	0.02	1.19	0.02	6.33	0.14	2.01	191.55	24.76	19.43	3.26	1.19	10.98	0.01
Long-term Average	25.53	0.05	0.00	6.09	0.00	6.13	38.18	0.01	196.97	0.01	2.53	0.01	3.50	0.73	0.01	0.03	0.02	0.03	0.88	0.02	6.13	0.09	4.38	154.24	22.47	32.09	4.08	0.87	7.95	0.02



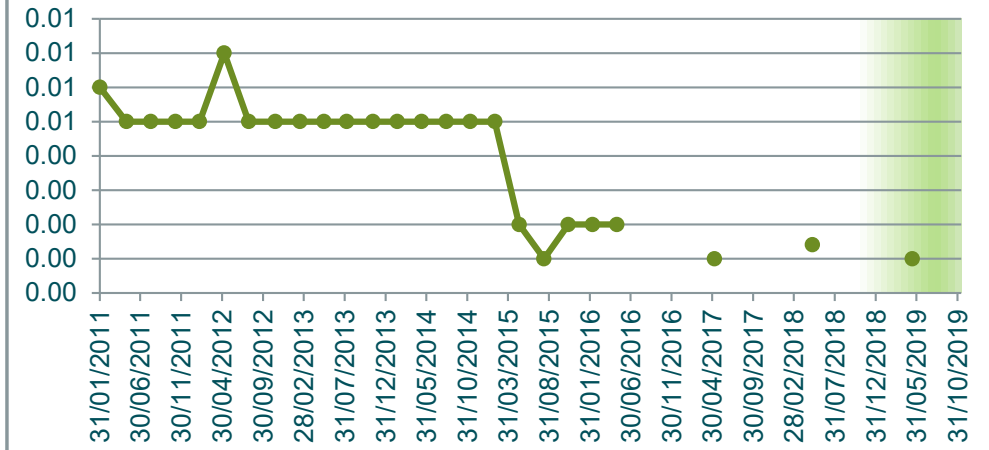
**Alkalinity**  
mg/L as CaCO3



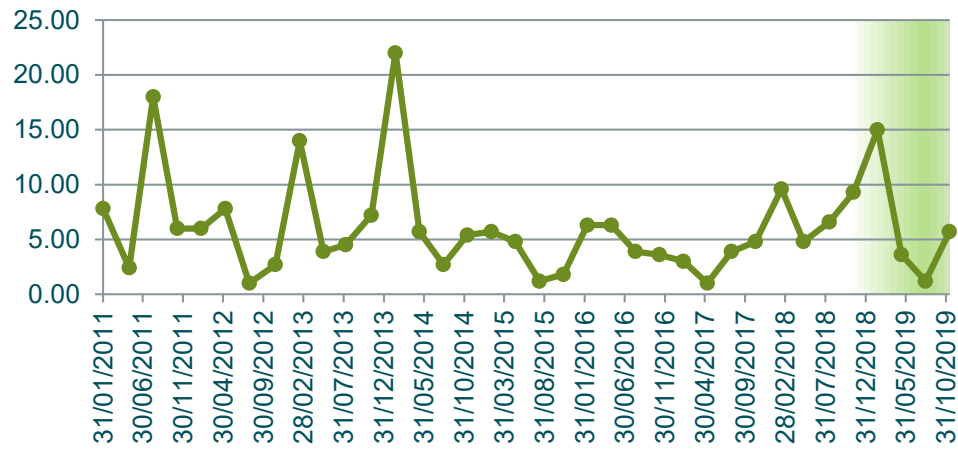
**Ammonia**  
mg/L



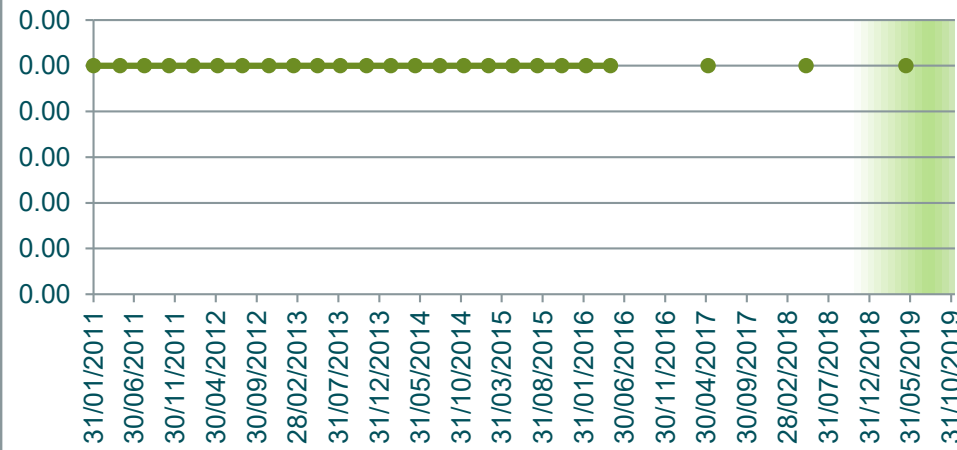
**Arsenic (Total)**  
mg/L



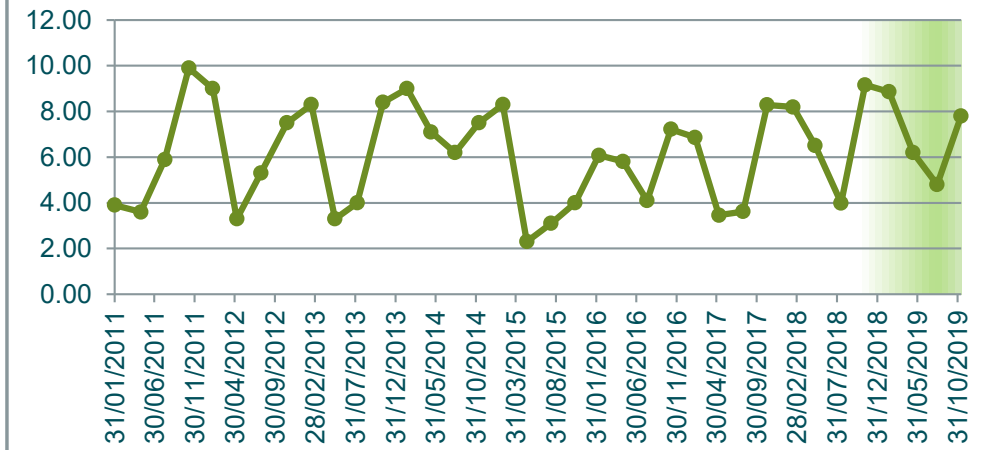
**BOD5**  
mg/L



**Cadmium (Total)**  
mg/L



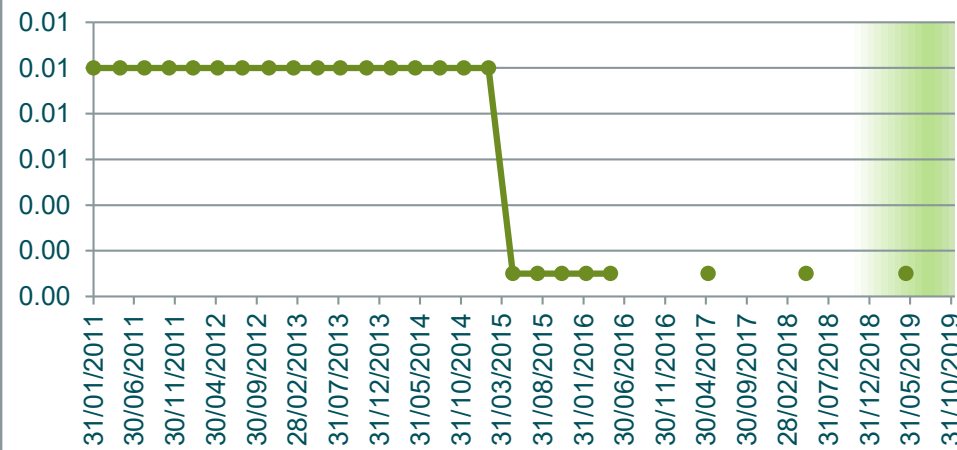
**Calcium (Total)**  
mg/L



**Chloride**  
mg/L



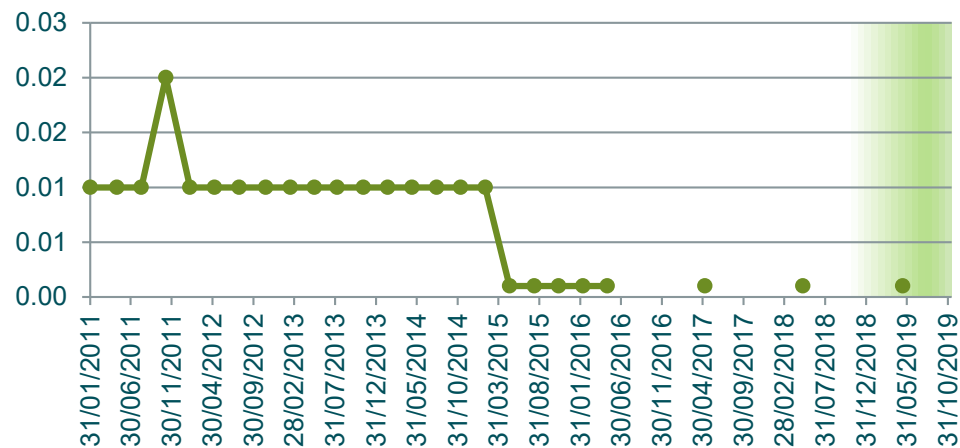
**Chromium (Total)**  
mg/L



**Conductivity**  
µScm-1



### Copper (Total) mg/L



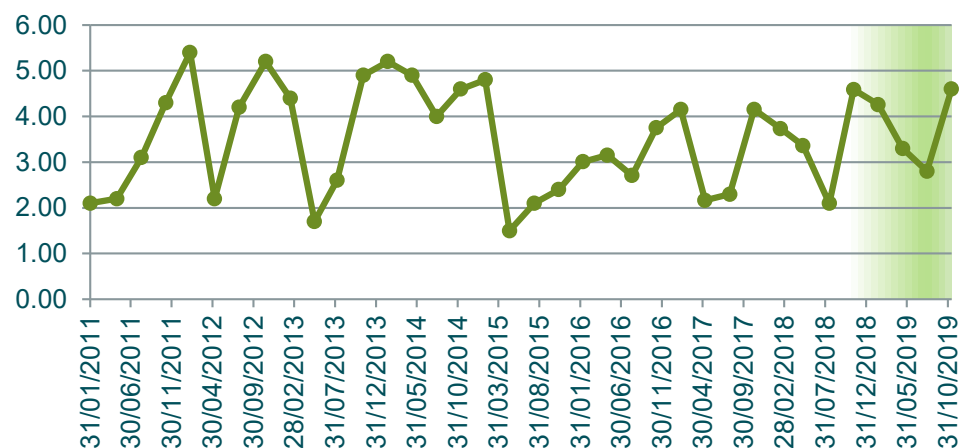
### DO (Membrane Electrode) mg/L



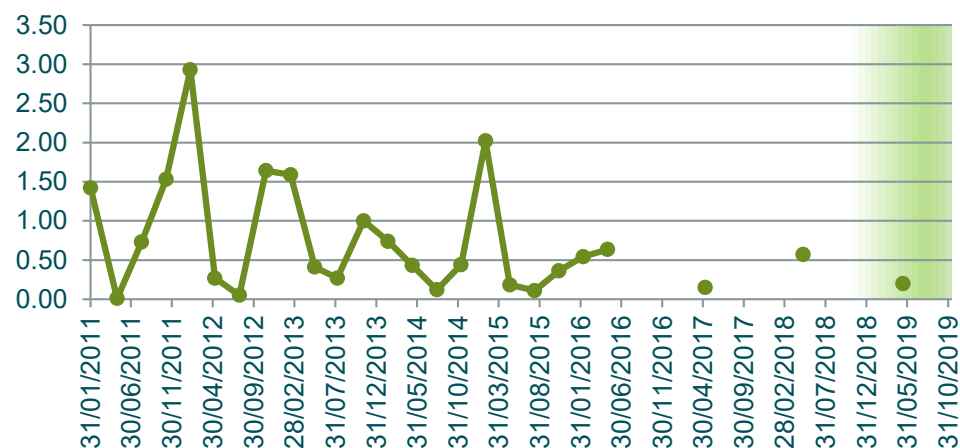
### Lead (Total) mg/L



### Magnesium (Total) mg/L



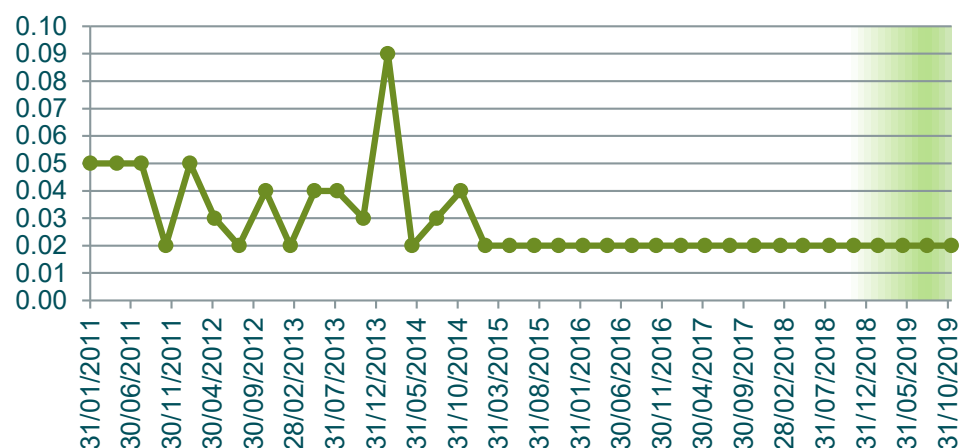
### Manganese Total mg/L



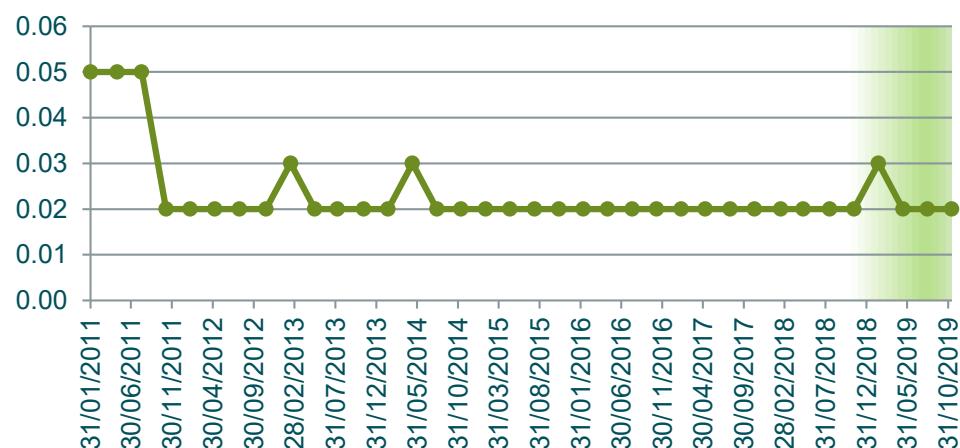
### Nickel (Total) mg/L



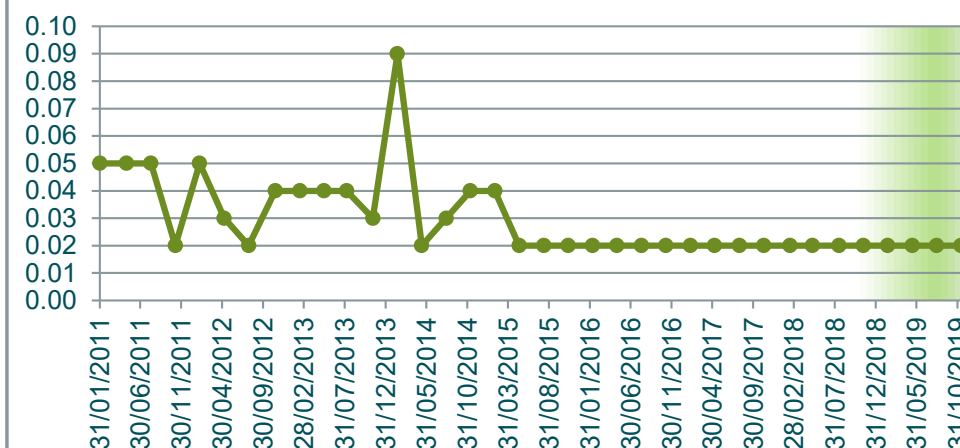
### Nitrate N mg/L



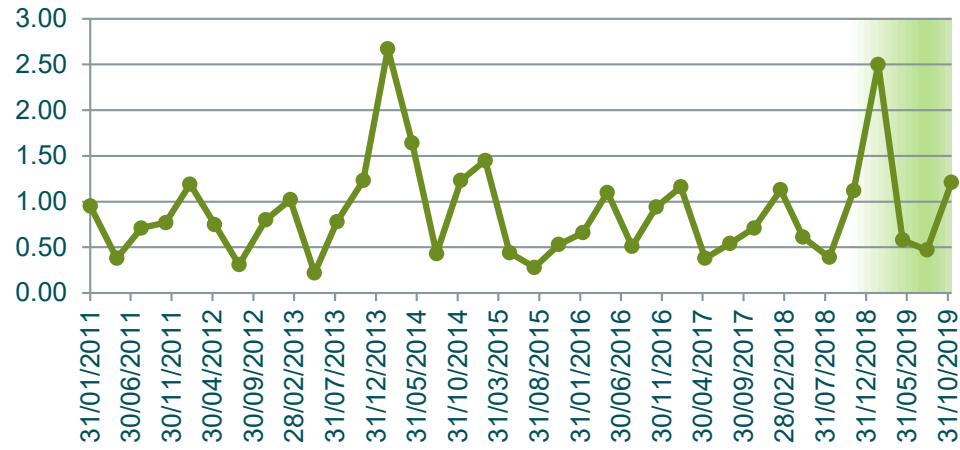
### Nitrite N mg/L



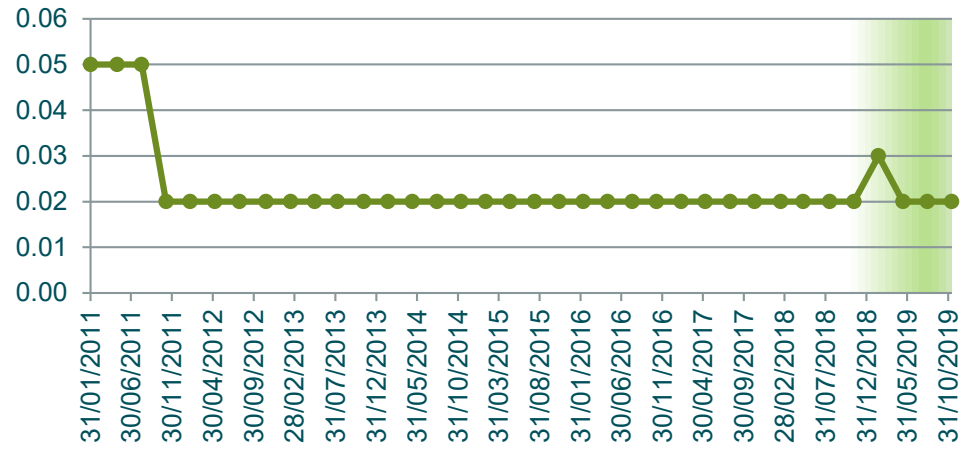
### Nitrogen Oxidised mg/L



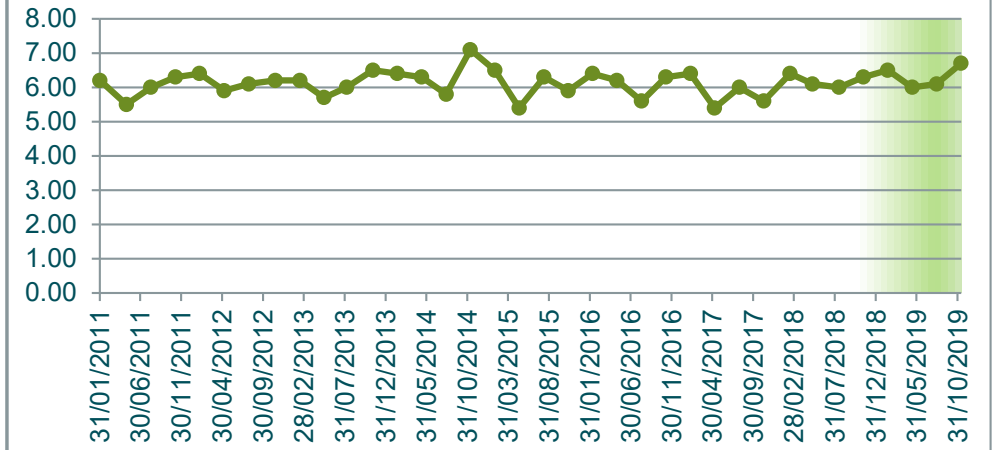
**Nitrogen Total**  
mg/L



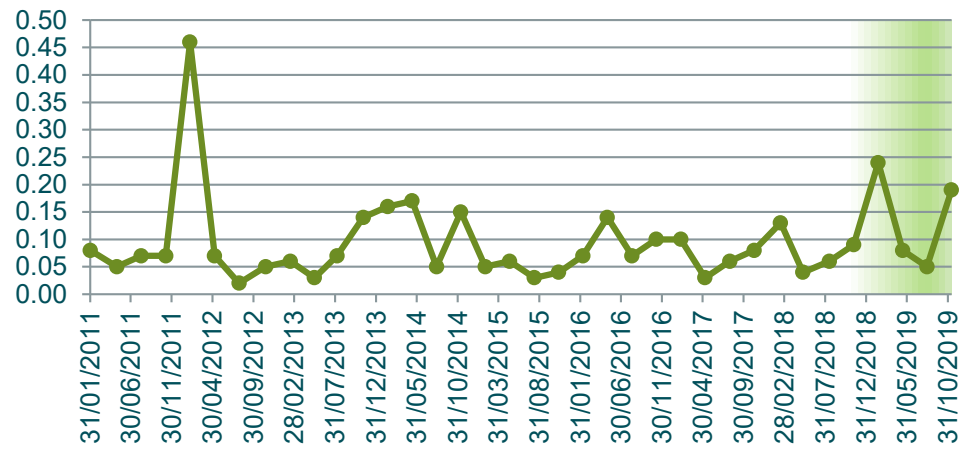
**Orthophosphate**  
mg/L



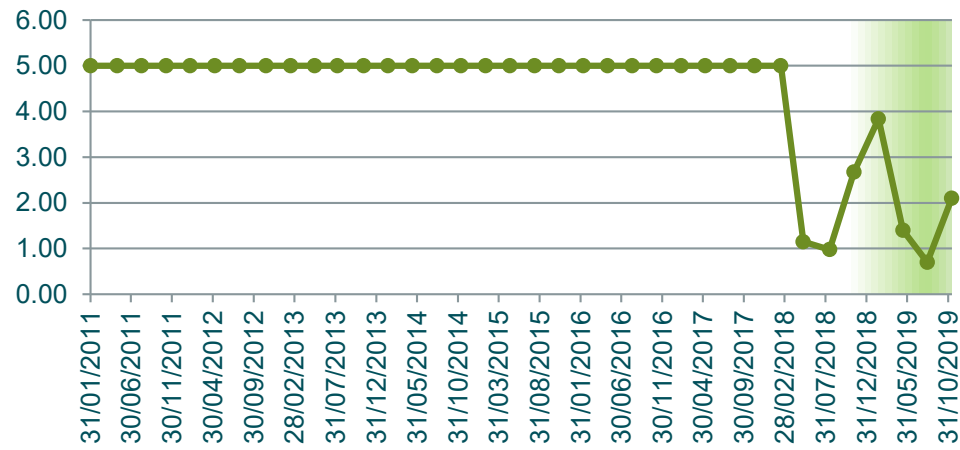
**pH**  
pH units



**Phosphorus Total**  
mg/L



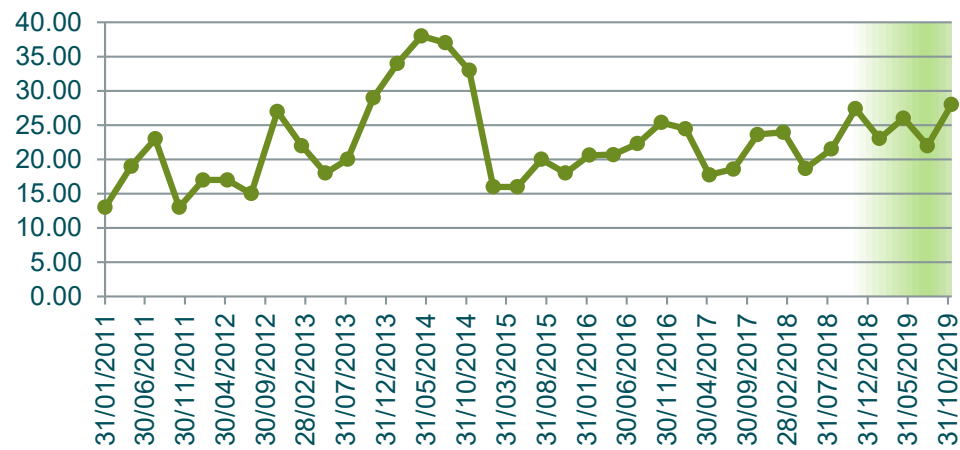
**Potassium Total**  
mg/L



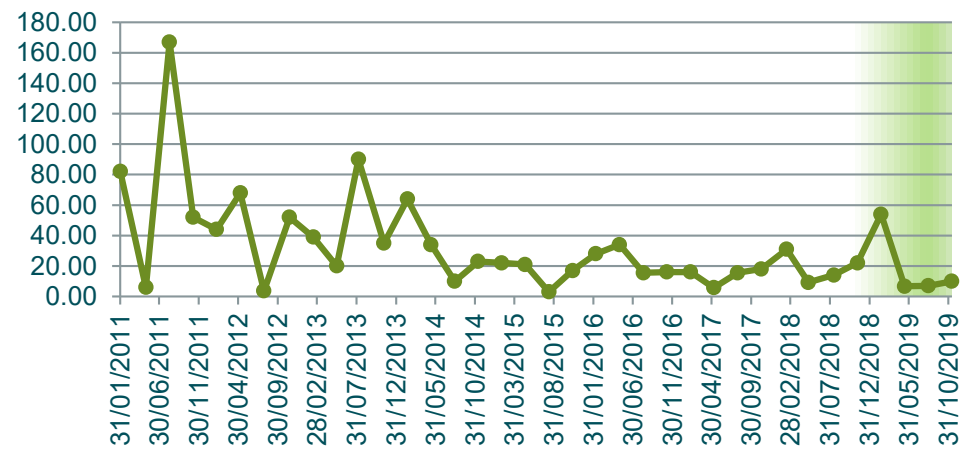
**Redox Potential**  
mV



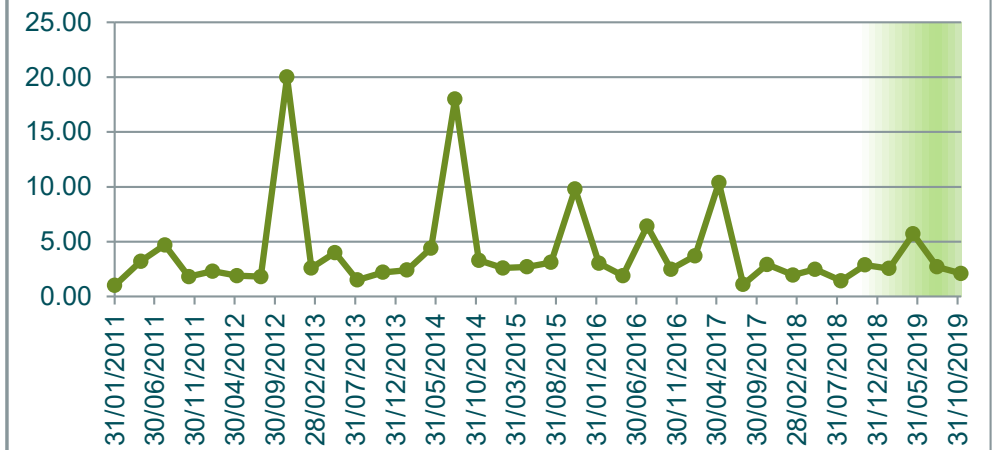
**Sodium (Total)**  
mg/L



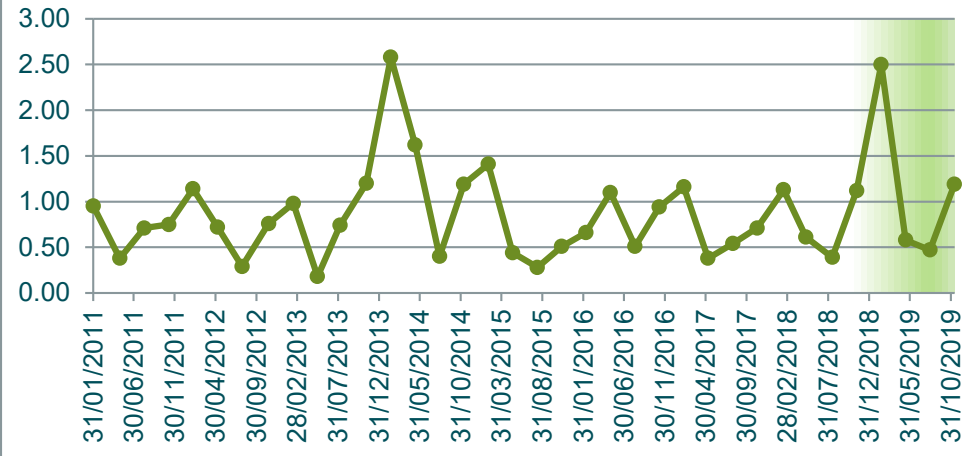
**Solids Suspended**  
mg/L



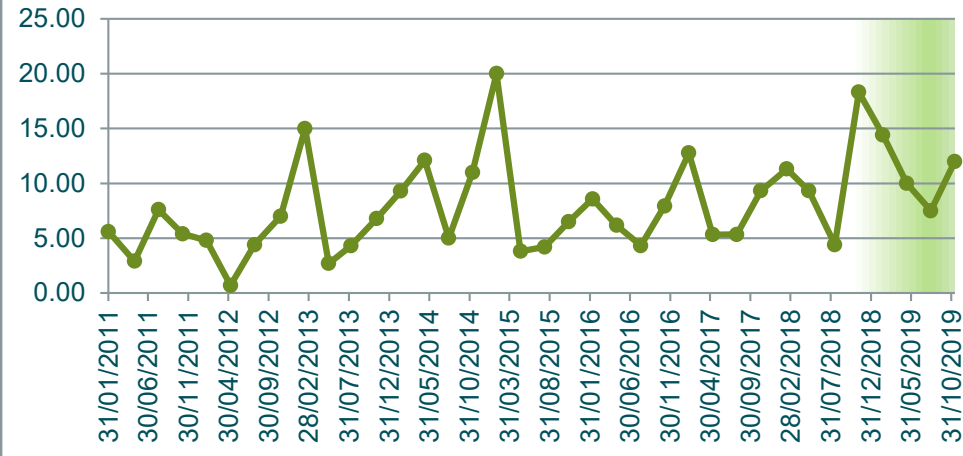
**Sulphate**  
mg/L



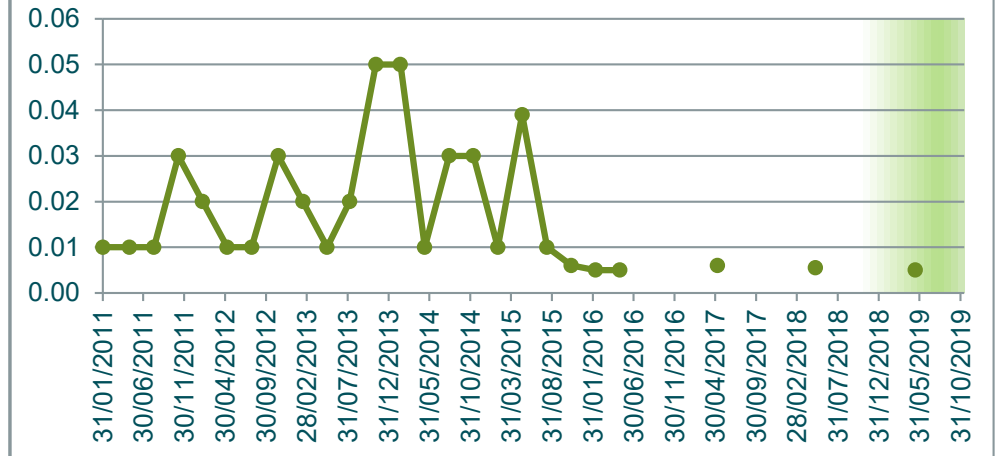
### TKN mg/L



### TOC mg/L

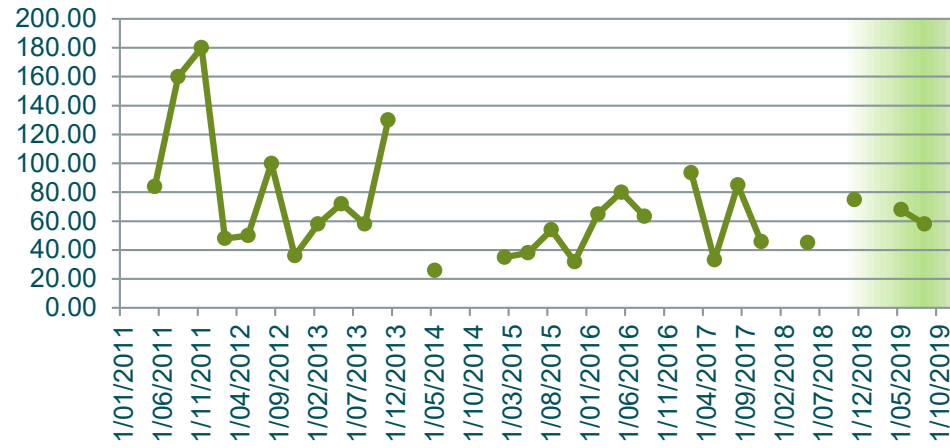


### Zinc (Total) mg/L

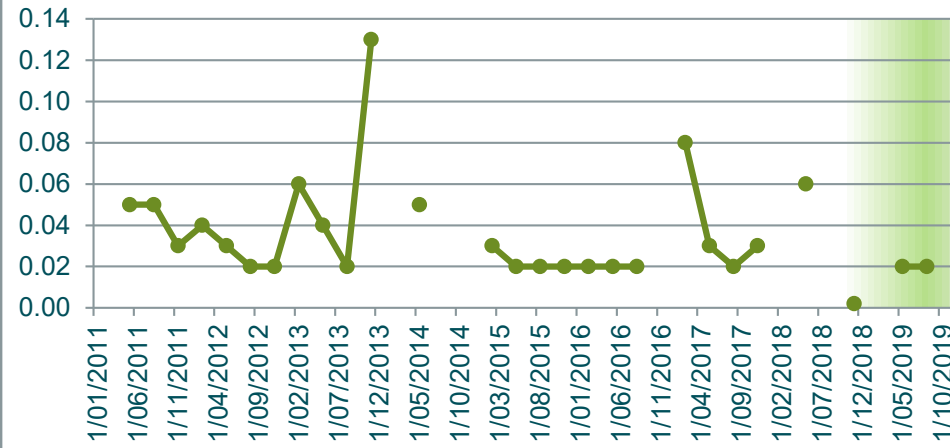


SW4	Alkalinity mg/L as CaCO3	Ammonia mg/L	Arsenic (Total) mg/L	BOD5 mg/L	Cadmium (Total) mg/L	Calcium (Total) mg/L	Chloride mg/L	Chromium (Total) mg/L	Conductivity µS <sub>cm</sub> -1	Copper (Total) mg/L	DO (Membrane Electrode) mg/L	Lead (Total) mg/L	Magnesium (Total) mg/L	Manganese Total mg/L	Nickel (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	84.00	0.05	0.01	1.50	0.00	24.00	15.00	0.01	260.00	0.01	1.70	0.01	3.90	1.45	0.01	0.05	0.05	0.05	0.37	0.05	6.10	0.05	5.00	148.00	12.00	12.00	3.70	0.37	3.20	0.01	
9/08/2011	160.00	0.05	0.01	2.40	0.00	40.00	25.00	0.01	395.00	0.01	2.60	0.01	6.90	0.84	0.01	0.05	0.05	0.05	0.44	0.05	6.70	0.05	5.00	208.00	18.00	11.00	7.40	0.44	8.50	0.01	
8/11/2011	180.00	0.03	0.01	5.10	0.00	58.00	30.00	0.01	439.00	0.06	1.90	0.02	9.80	3.29	0.01	0.03	0.02	0.03	0.81	0.02	6.80	0.08	6.00	69.40	14.00	609.00	5.10	0.78	12.00	0.03	
6/02/2012	48.00	0.04	0.01	6.00	0.00	12.00	11.00	0.01	142.00	0.01	1.00	0.01	3.40	2.31	0.01	0.02	0.02	0.05	0.67	0.02	6.40	0.06	5.00	137.00	9.20	29.00	1.00	0.67	4.60	0.01	
8/05/2012	50.00	0.03	0.01	1.00	0.00	11.00	11.00	0.01	118.00	0.01	4.30	0.01	2.50	1.08	0.01	0.03	0.02	0.03	0.38	0.02	6.30	0.04	5.00	207.00	7.60	18.00	2.80	0.35	3.80	0.01	
7/08/2012	100.00	0.02	0.01	1.00	0.00	23.00	17.00	0.01	255.00	0.01	3.30	0.01	4.30	0.12	0.01	0.02	0.02	0.02	0.24	0.02	6.70	0.02	5.00	176.00	9.30	5.00	7.20	0.22	4.30	0.01	
14/11/2012	36.00	0.02	0.01	1.00	0.00	19.00	23.00	0.01	257.00	0.01	2.30	0.01	4.10	0.45	0.01	0.03	0.02	0.03	0.40	0.02	6.50	0.06	5.00	161.00	12.00	15.00	31.00	0.37	4.30	0.02	
14/02/2013	58.00	0.06	0.01	5.20	0.00	17.00	25.00	0.01	224.00	0.01	1.00	0.01	4.00	1.96	0.01	0.04	0.02	0.04	0.65	0.02	6.20	0.06	5.00	146.00	14.00	37.00	6.90	0.61	6.60	0.02	
15/05/2013	72.00	0.04	0.01	1.80	0.00	24.00	20.00	0.01	242.00	0.01	1.30	0.01	3.80	1.64	0.01	0.03	0.02	0.03	0.36	0.02	6.30	0.03	5.00	137.00	12.00	20.00	9.40	0.33	4.50	0.01	
7/08/2013	58.00	0.02	0.01	1.00	0.00	19.00	12.00	0.01	158.00	0.01	2.10	0.01	3.10	0.17	0.01	0.03	0.02	0.03	0.40	0.02	6.40	0.05	5.00	143.00	10.00	12.00	5.00	0.37	3.40	0.01	
13/11/2013	130.00	0.13	0.01	5.70	0.00	40.00	50.00	0.01	510.00	0.03	4.20	0.01	7.40	5.70	0.01	0.11	0.02	0.11	0.91	0.02	6.10	0.03	5.00	-9.00	35.00	445.00	39.00	0.80	6.60	0.07	
11/02/2014																															
14/05/2014	26.00	0.05	0.01	2.70	0.00	14.00	28.00	0.01	214.00	0.01	7.10	0.01	2.40	0.72	0.01	1.23	0.03	1.26	1.97	0.02	6.10	0.17	5.00	33.00	14.00	127.00	16.00	0.71	4.50	0.02	
12/08/2014																															
10/11/2014																															
10/02/2015	35.00	0.03	0.01	3.00	0.00	10.00	17.00	0.01	118.00	0.01	2.70	0.01	2.20	0.32	0.01	0.04	0.02	0.04	0.94	0.02	7.00	0.10	5.00	153.00	7.10	14.00	2.70	0.90	7.20	0.01	
12/05/2015	38.00	0.02	0.00	2.70	0.00	12.00	10.00	0.00	116.00	0.00	3.40	0.00	2.50	0.51	0.00	0.02	0.02	0.02	0.84	0.02	6.00	0.11	5.00	186.00	8.00	26.00	2.00	0.84	5.00	0.05	
12/08/2015	54.00	0.02	0.00	14.00	0.00	18.00	12.00	0.00	152.00	0.00	5.30	0.00	3.40	0.66	0.00	0.02	0.02	0.02	0.96	0.02	7.00	0.11	5.00	135.00	9.60	52.00	3.20	0.96	6.00	0.03	
11/11/2015	32.00	0.02	0.00	2.70	0.00	11.00	11.00	0.00	124.00	0.01	1.70	0.00	2.50	0.65	0.00	0.02	0.02	0.02	0.76	0.02	6.40	0.13	5.00	148.00	8.00	73.00	8.60	0.76	5.90	0.01	
9/02/2016	65.00	0.02	0.00	6.00	0.00	20.87	26.00	0.00	215.00	0.00	3.80	0.00	3.71	0.71	0.00	0.02	0.02	0.02	2.18	0.02	6.80	0.31	5.00	131.00	12.81	28.00	6.06	2.18	8.97	0.01	
10/05/2016	80.00	0.02	0.00	8.10	0.00	23.67	26.00	0.00	257.00	0.00	5.50	0.00	4.30	0.82	0.00	0.02	0.02	0.02	1.29	0.02	6.70	0.16	5.48	104.00	15.27	18.00	3.04	1.29	11.33	0.01	
10/08/2016	63.30	0.02		3.30		19.79	14.00		193.50		3.10		4.20			0.02	0.02	0.02	0.48	0.02	6.40	0.08	5.00	240.00	11.23	11.00	8.74	0.48	6.00		
8/11/2016																															
8/02/2017	93.40	0.08		22.00		26.39	24.00		286.50		1.10		5.18			0.02	0.05	0.02	2.80	0.02	6.50	0.49	6.42	84.40	16.66	109.00	5.54	2.80	15.78		
9/05/2017	33.20	0.03		3.00	0.00	13.31	16.00	0.00	158.70	0.00	2.00	0.00	3.03	0.37	0.00	0.22	0.02	0.24	0.66	0.02	6.00	0.07	5.00	361.90	9.61	13.00	16.60	0.42	4.89	0.01	
9/08/2017	85.05	0.02		2.70		24.73	20.00		224.10		2.00		4.47			0.02	0.02	0.02	0.53	0.02	6.00	0.08	5.00	334.00	11.89	18.00	4.33	0.53	7.66		
8/11/2017	45.84	0.03		2.70		16.32	22.50		189.50		1.90		3.03			0.02	0.11	0.11	0.74	0.02	6.10	0.15	5.00	391.60	12.22	19.00	10.48	0.63	6.97		
10/02/2018																															
9/05/2018	45.10	0.06	0.00	3.60	0.00	15.98	20.00	0.00	161.80	0.00	4.40	0.00	2.79	0.32	0.00	0.02	0.02	0.02	0.86	0.02	6.50	0.11	2.20	254.10	10.60	8.00	5.89	0.86	6.81	0.01	
1/08/2018																															
14/11/2018	74.83	0.00		11.10		23.88	24.50		235.00		2.24		4.29			0.02	0.02	0.02	1.40	0.02	6.49	0.23	4.02	9.00	14.50	32.00	3.00	1.40	14.29		
10/02/2019																															
15/05/2019	68.00	0.02	0.00	9.60	0.00	23.00	18.00	0.00	204.00	0.00	3.60	0.00	4.20	0.54	0.00	0.02	0.02	0.02	1.29	0.02	6.40	0.32	3.70	42.00	13.00	64.00	3.00	1.29	12.00	0.01	
14/08/2019	58.00	0.02		9.00		19.00	16.00		178.00		2.00		3.70			0.02	0.02	0.02	0.92	0.02	6.50	0.34	3.00	258.20	11.00	144.00	2.20	0.92	12.00		
12/11/2019																															
2019 Min	58.00	0.02	0.00	9.00	0.00	19.00	16.00	0.00	178.00	0.00	2.00	0.00	3.70	0.54	0.00	0.02	0.02	0.02	0.92	0.02	6.40	0.32	3.00	42.00	11.00	64.00	2.20	0.92	12.00	0.01	
2019 Max	68.00	0.02	0.00	9.60	0.00	23.00	18.00	0.00	204.00	0.00	3.60	0.00	4.20	0.54	0.00	0.02	0.02	0.02	1.29	0.02	6.50	0.34	3.70	258.20	13.00	144.00	3.00	1.29	12.00	0.01	
2019 Mean	63.00	0.02	0.00	9.30	0.00	21.00	17.00	0.00	191.00	0.00	2.80	0.00	3.95	0.54	0.00	0.02	0.02	0.02	1.11	0.02	6.45	0.33	3.35	150.10	12.00	104.00	2.60	1.11	12.00	0.01	
Long-term Average	69.36	0.04	0.00	5.11	0.00	21.44	20.15	0.01	223.23	0.01	2.87	0.01	4.04	1.17	0.01	0.08	0.03	0.09	0.90	0.02	6.42	0.13	4.84	162.54	12.54	72.93	8.14	0.83	7.30	0.02	

### Alkalinity mg/L as CaCO3



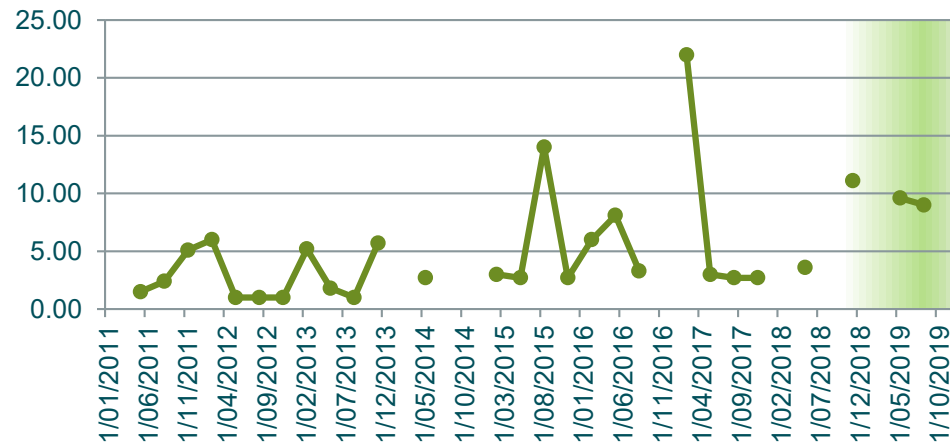
### Ammonia mg/L



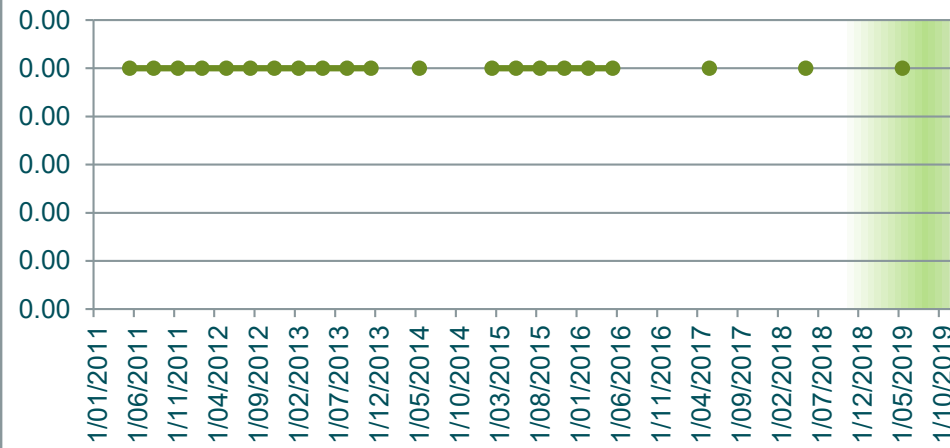
### Arsenic (Total) mg/L



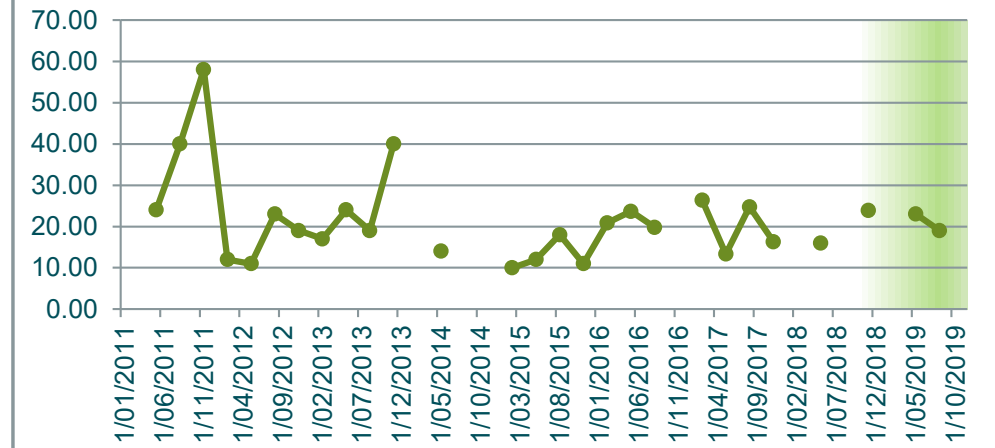
### BOD5 mg/L



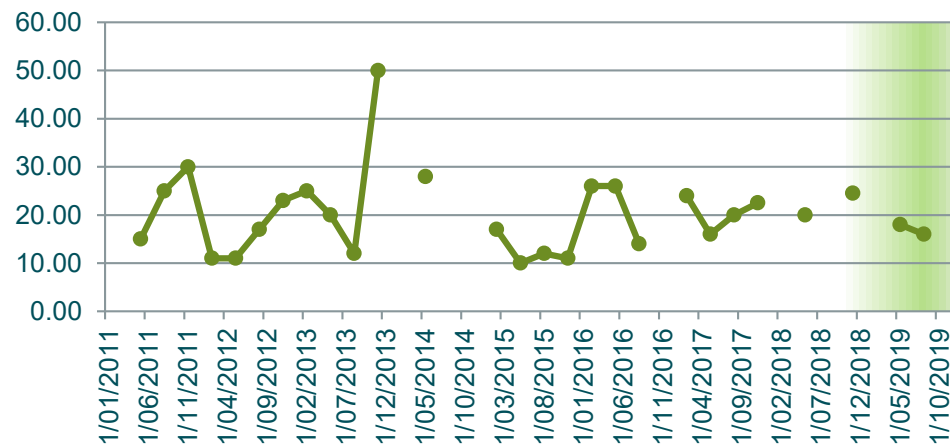
### Cadmium (Total) mg/L



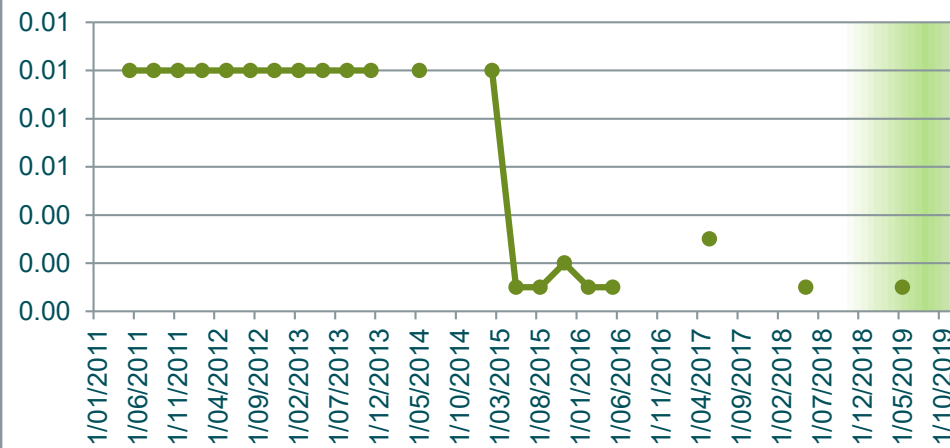
### Calcium (Total) mg/L



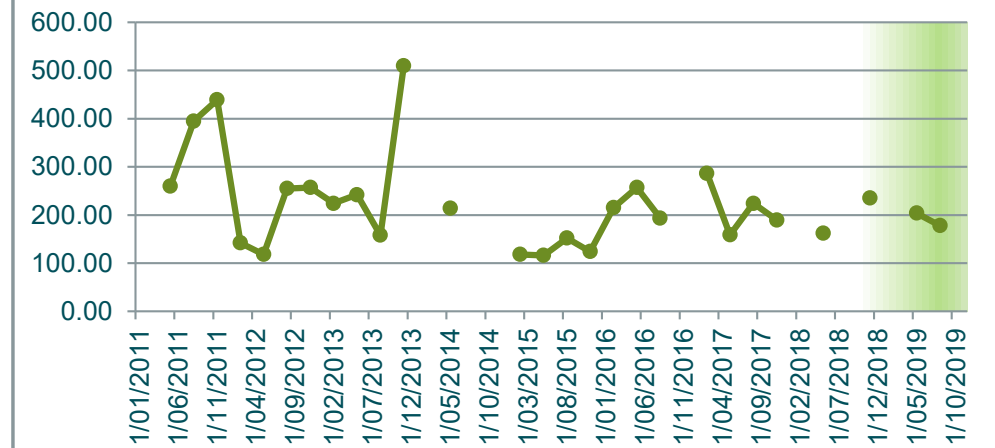
### Chloride mg/L



### Chromium (Total) mg/L

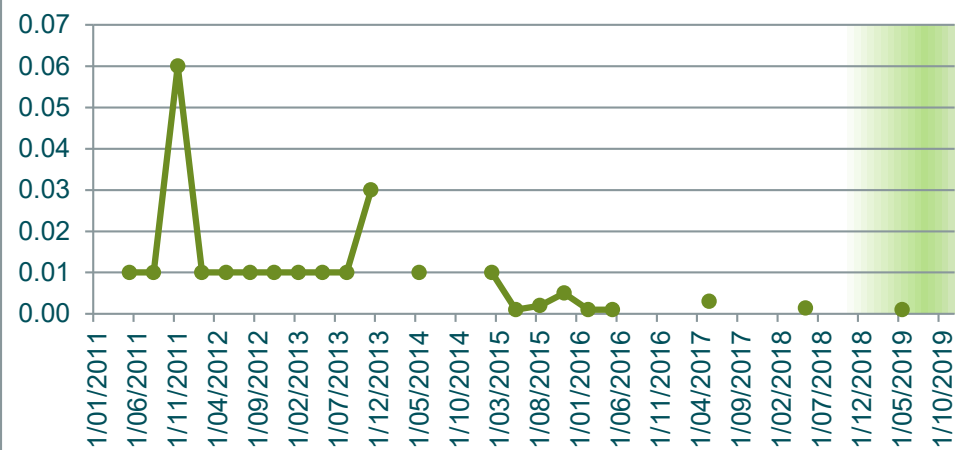


### Conductivity µScm-1

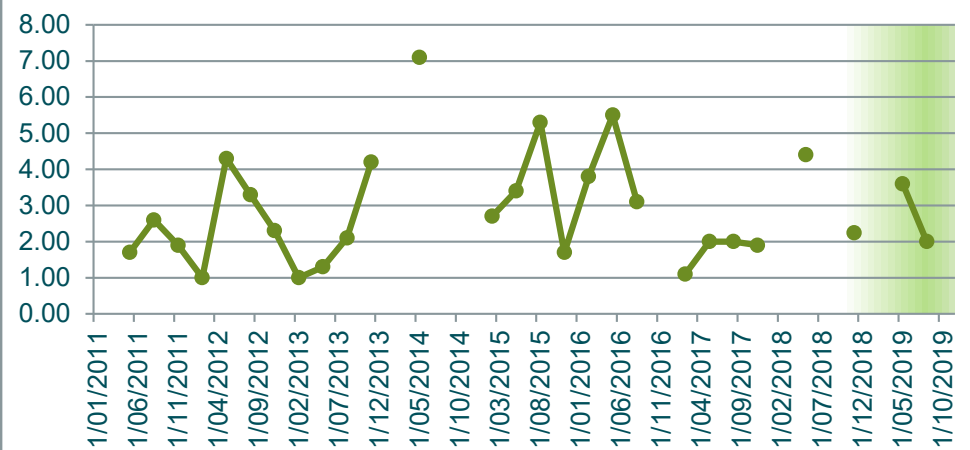




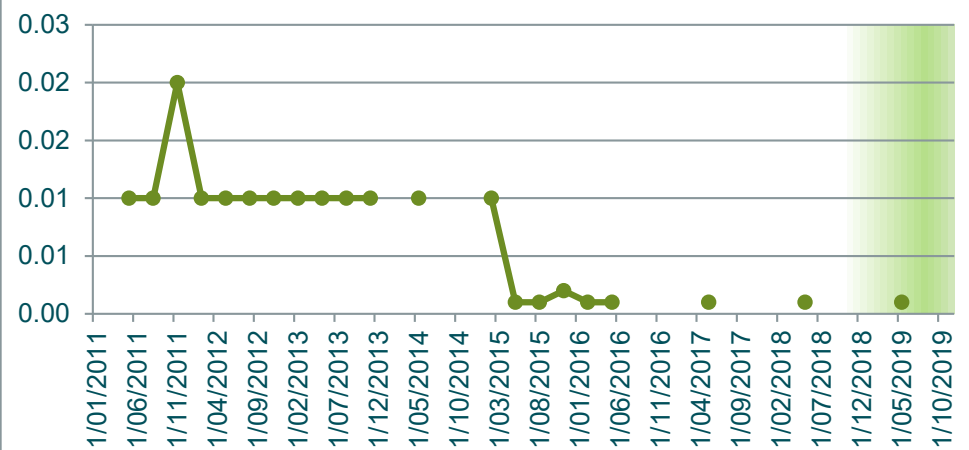
### Copper (Total) mg/L



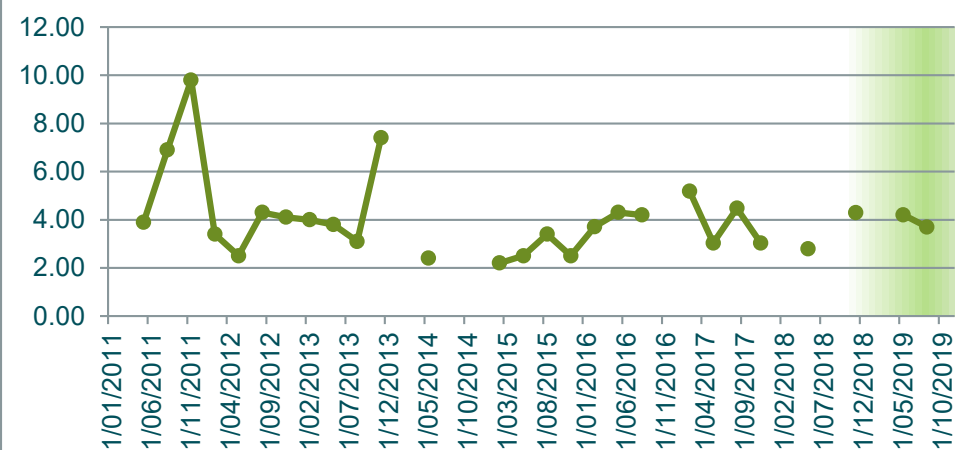
### DO (Membrane Electrode) mg/L



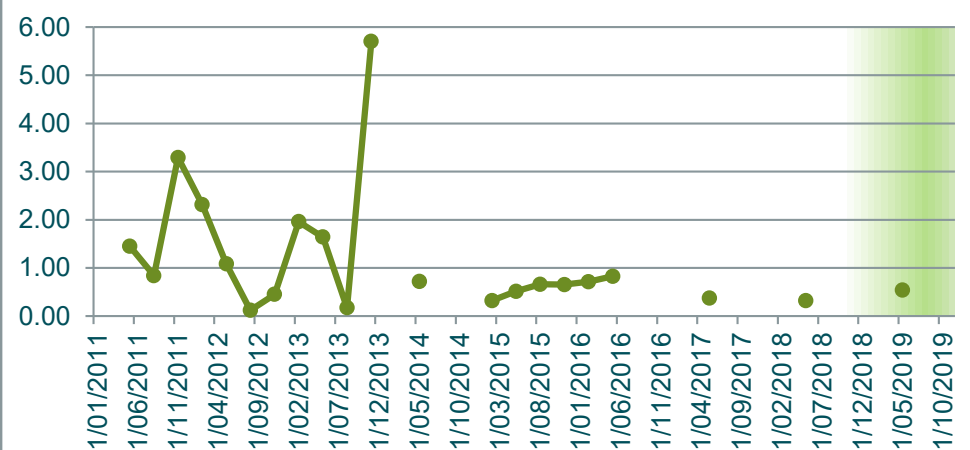
### Lead (Total) mg/L



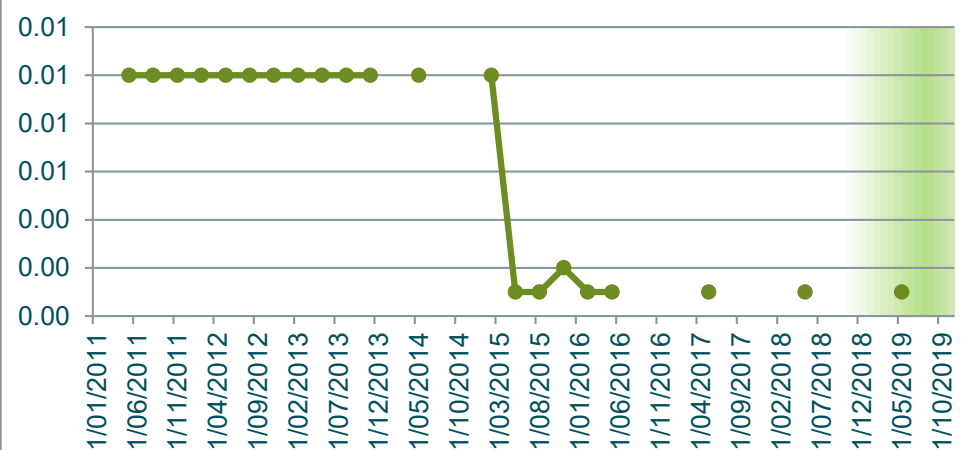
### Magnesium (Total) mg/L



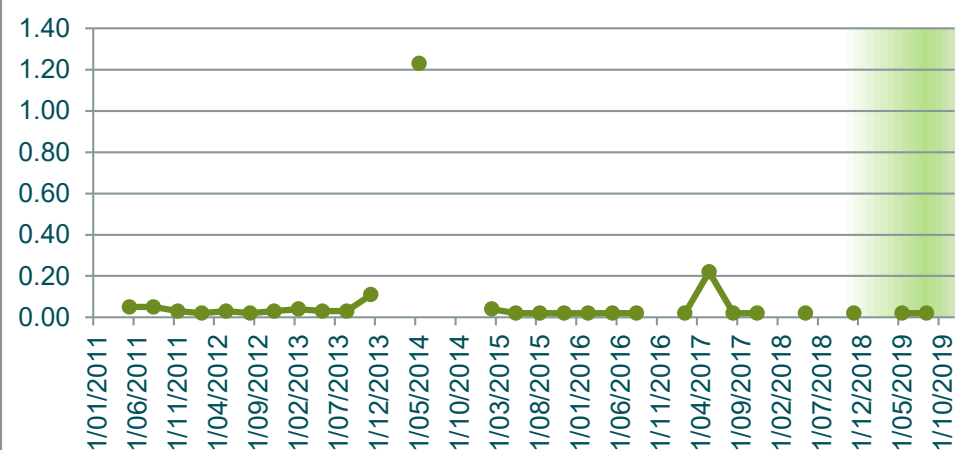
### Manganese Total mg/L



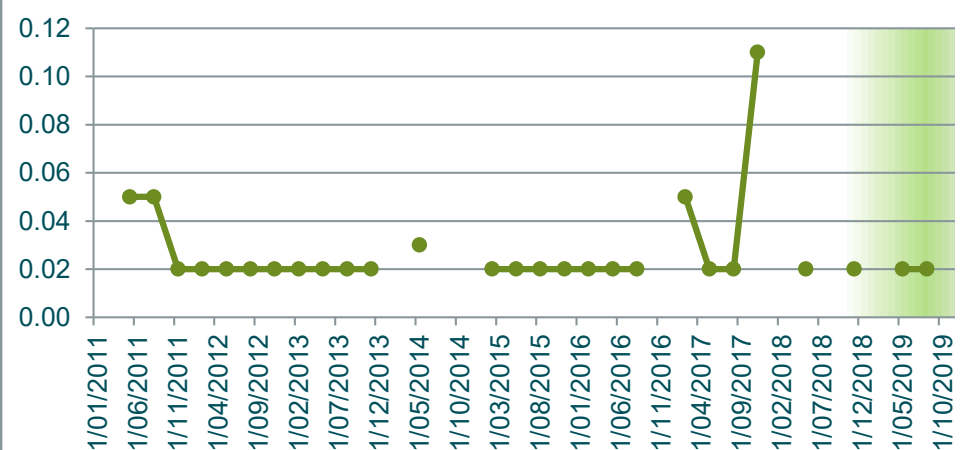
### Nickel (Total) mg/L



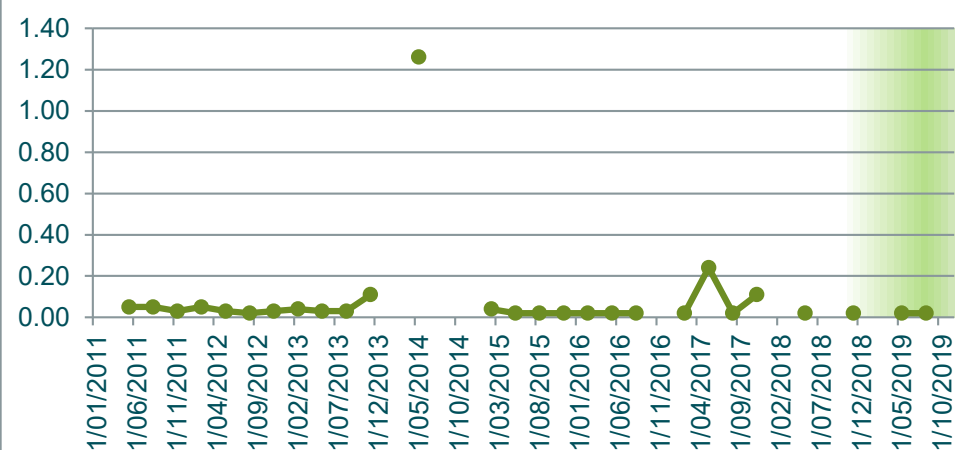
### Nitrate N mg/L



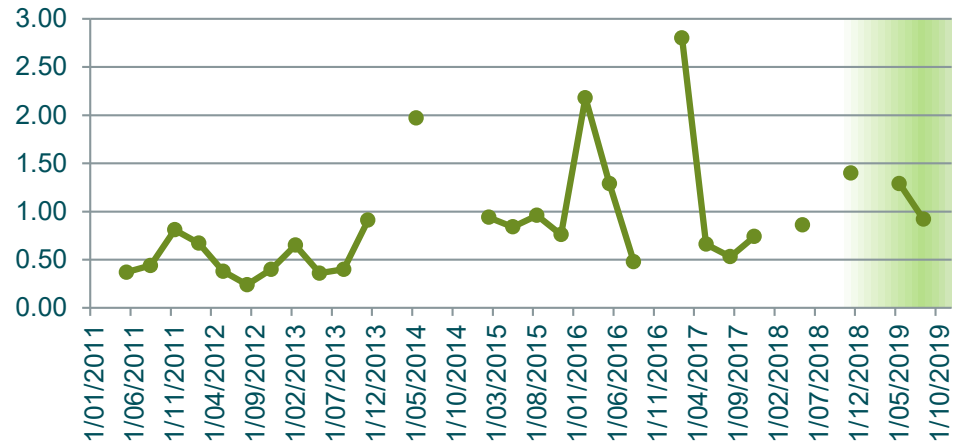
### Nitrite N mg/L



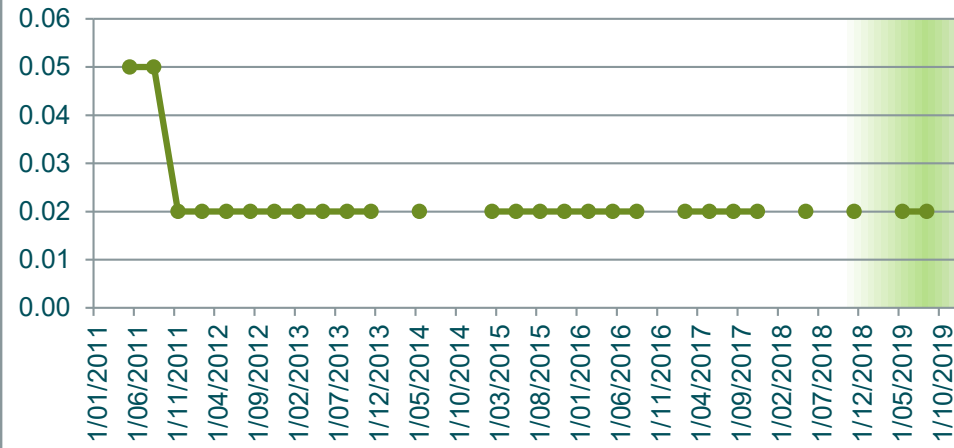
### Nitrogen Oxidised mg/L



### Nitrogen Total mg/L



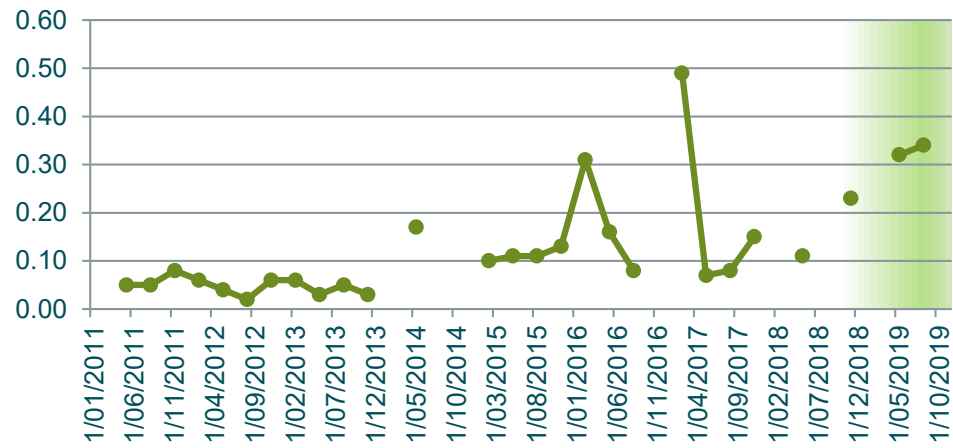
### Orthophosphate mg/L



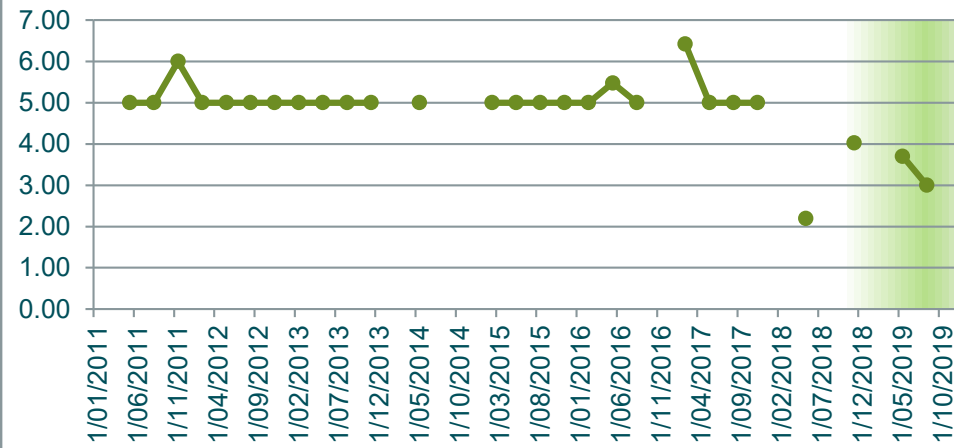
### pH pH units



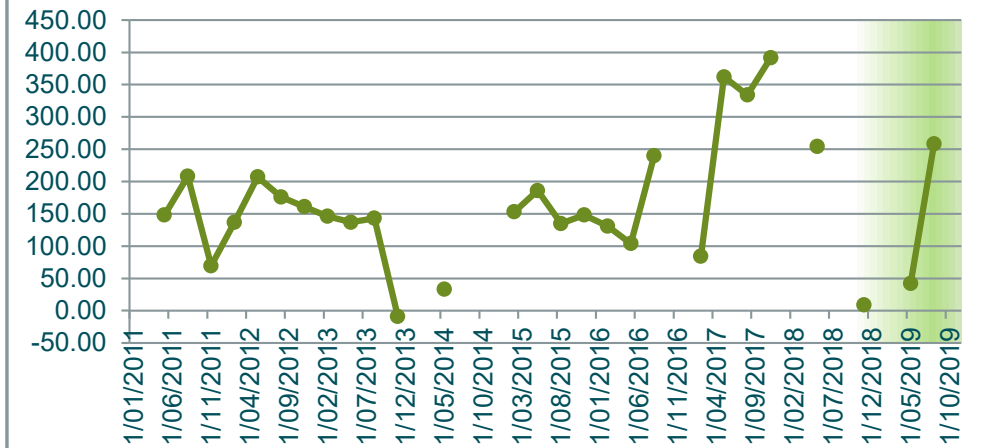
### Phosphorus Total mg/L



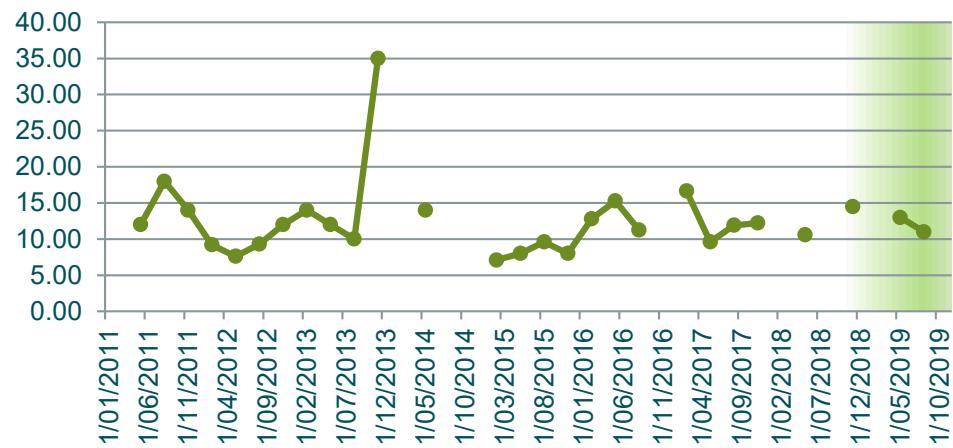
### Potassium Total mg/L



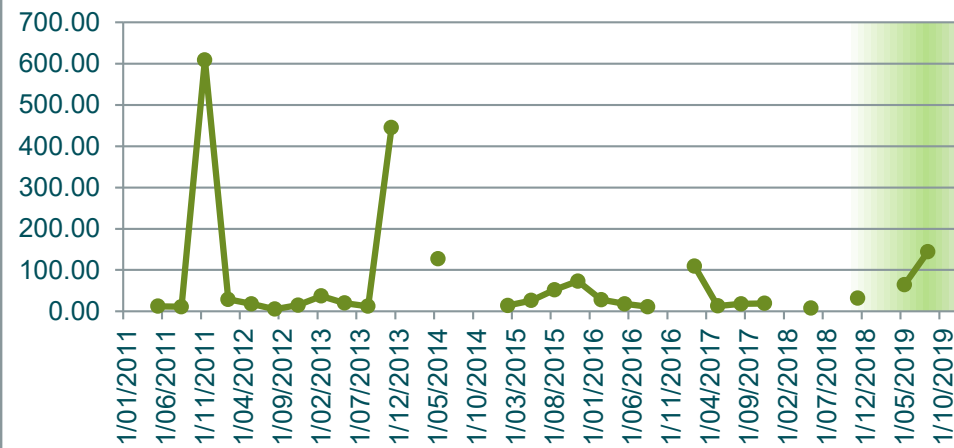
### Redox Potential mV



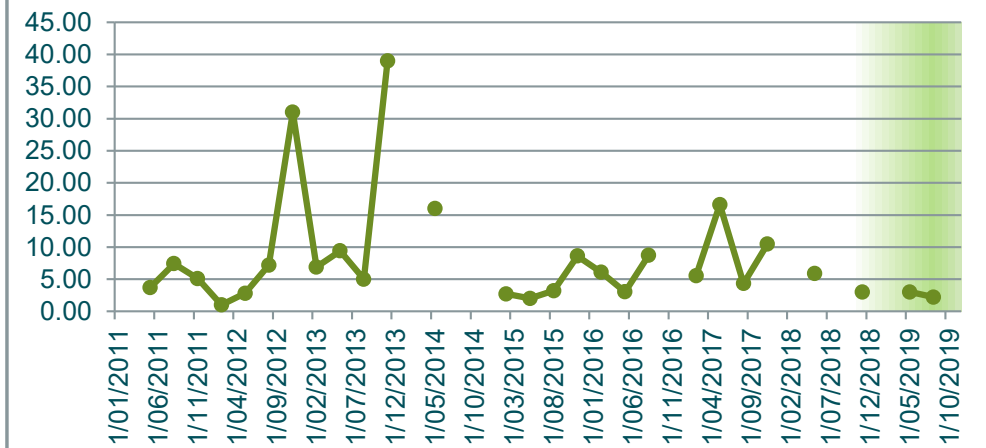
### Sodium (Total) mg/L



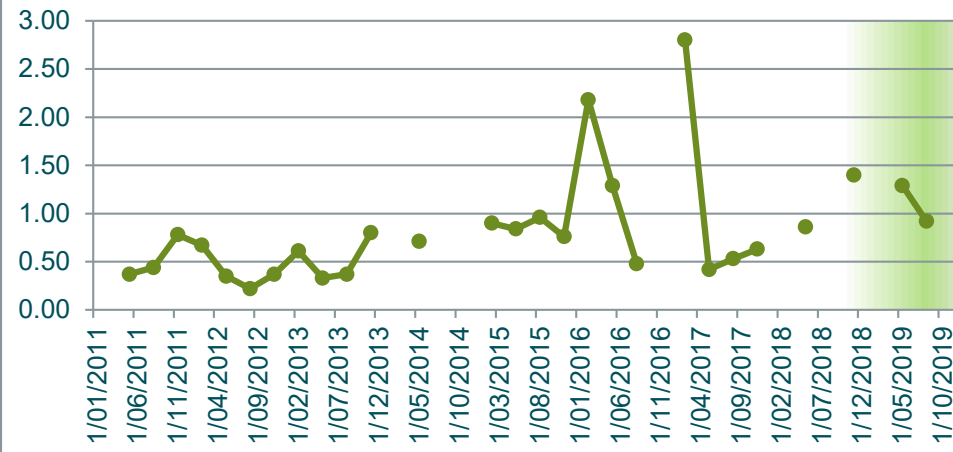
### Solids Suspended mg/L



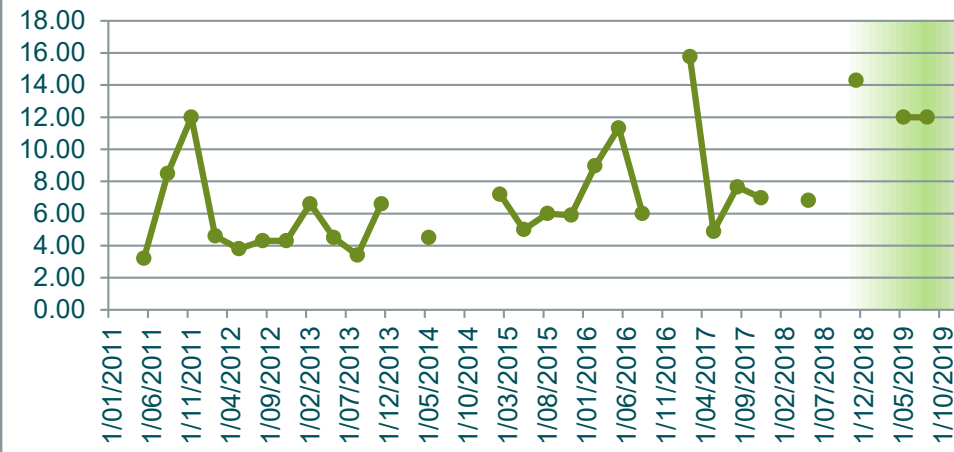
### Sulphate mg/L



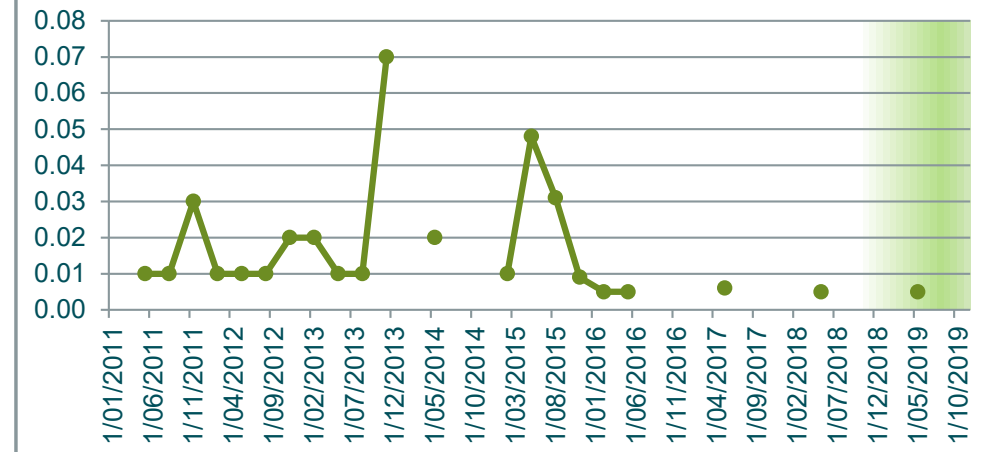
### TKN mg/L



### TOC mg/L



### Zinc (Total) mg/L

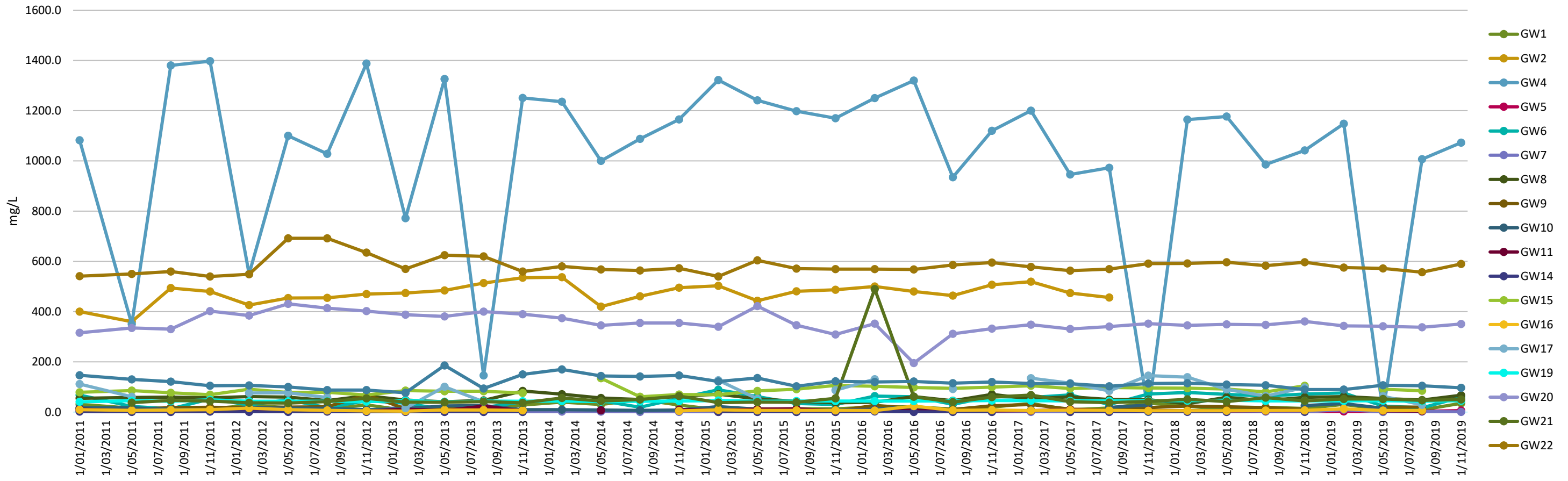


## Appendix F – Water Quality Monitoring Graphs of each Parameter

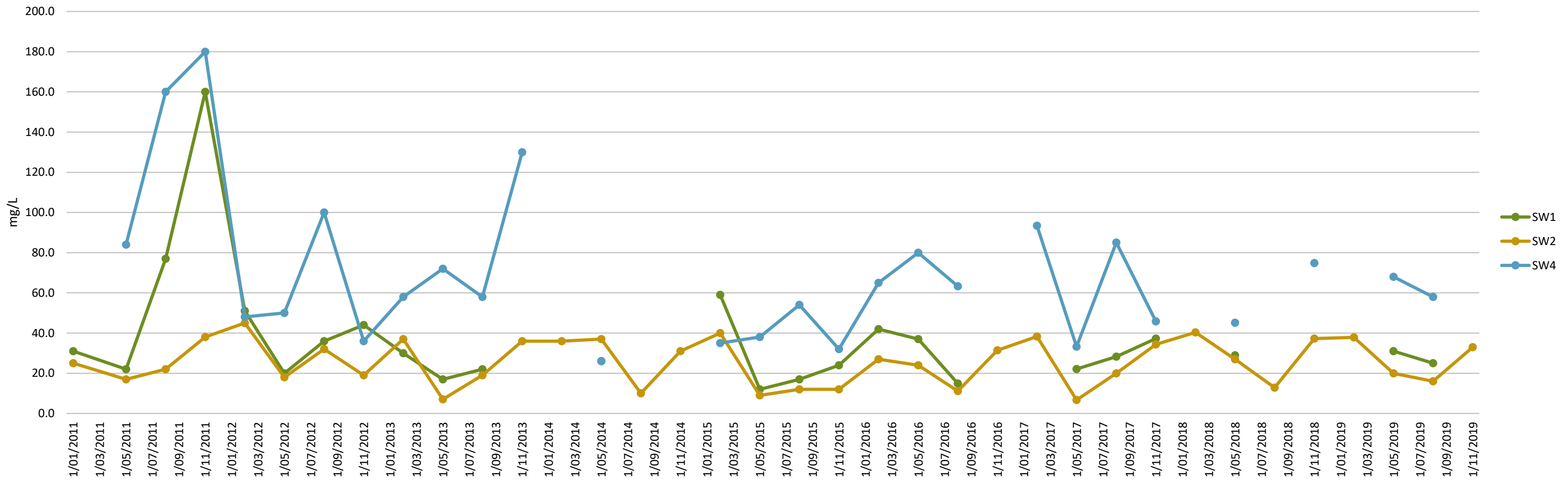
Alkalinity	GW1	GW2	GW4	GW5	GW6	GW7	GW8	GW9	GW10	GW11	GW14	GW15	GW16	GW17	GW19	GW20	GW21	GW22	GW23
31/01/2011	31.0	400.0	1082.0	6.0	68.0	9.0	55.0	16.0	17.0	12.0	2.0	79.0	10.0	112.0	41.0	316.0		541.0	147.0
10/05/2011	16.0	360.0	350.0	2.0	23.0	2.0	58.0	11.0	17.0	6.0	1.0	86.0	7.0	61.0	45.0	335.0	38.0	550.0	130.0
9/08/2011	12.0	494.0	1380.0	4.0	13.0	1.0	60.0	18.0	11.0	5.0	1.0	77.0	8.0		43.0	330.0	47.0	560.0	121.0
8/11/2011	13.0	480.0	1397.0	5.0	52.0	3.0	57.0	19.0	9.0	6.0	2.0	69.0	10.0		49.0	402.0	44.0	540.0	105.0
6/02/2012	27.0	426.0	550.0	2.0	29.0	5.0	62.0	17.0	17.0	9.0	1.0	91.0	16.0	76.0	43.0	384.0	37.0	549.0	106.0
8/05/2012	18.0	454.0	1100.0	3.0	49.0	3.0	60.0	20.0	16.0	5.0	1.0	78.0	10.0	77.0	43.0	431.0	36.0	692.0	100.0
6/08/2012	12.0	455.0	1028.0	3.0	18.0	4.0	46.0	21.0	15.0	6.0	2.0	79.0	7.0	58.0	43.0	414.0	42.0	692.0	88.0
13/11/2012	29.0	470.0	1388.0	4.0	45.0	2.0	65.0	69.0	10.0	4.0	1.0	68.0	5.0		42.0	402.0	55.0	635.0	88.0
13/02/2013	7.0	474.0	772.0	2.0	36.0	22.0	48.0	13.0	14.0	12.0	1.0	86.0	4.0	16.0	46.0	388.0	40.0	570.0	77.0
14/05/2013	9.0	484.0	1326.0	2.0	10.0	1.0	41.0	19.0	25.0	6.0	1.0	83.0	8.0	101.0	41.0	381.0	39.0	625.0	186.0
6/08/2013	11.0	514.0	146.0	2.0	18.0	1.0	47.0	16.0	26.0	24.0	1.0	83.0	8.0	41.0	44.0	400.0	42.0	620.0	94.0
12/11/2013	28.0	535.0	1251.0	4.0	41.0	1.0	84.0		10.0	5.0	1.0	76.0	7.0		43.0	390.0	37.0	560.0	150.0
11/02/2014	40.0	537.0	1236.0	6.0	48.0	2.0	71.0		10.0						44.0	374.0	56.0	580.0	170.0
13/05/2014	30.0	420.0	1000.0	5.0	45.0	2.0	56.0		8.0	7.0		135.0			42.0	345.0	44.0	568.0	144.0
12/08/2014	50.0	461.0	1088.0	4.0	19.0	1.0	50.0		7.0			61.0			43.0	355.0	50.0	564.0	142.0
10/11/2014	28.0	495.0	1165.0	2.0	55.0	1.0	63.0		8.0	10.0		70.0	5.0		44.0	355.0	64.0	573.0	146.0
9/02/2015	9.0	503.0	1322.0	1.0	89.0	2.0	71.0	12.0	22.0	8.0	1.0	69.0	9.0	127.0	46.0	340.0	38.0	540.0	122.0
11/05/2015	12.0	443.0	1241.0	2.0	62.0	1.0	53.0	13.0	12.0	12.0	1.0	84.0	7.0	53.0	43.0	422.0	40.0	604.0	136.0
11/08/2015	13.0	481.0	1198.0	2.0	34.0	1.0	43.0	9.0	1.0	13.0	1.0	91.0	7.0		44.0	346.0	39.0	571.0	103.0
10/11/2015	13.0	487.0	1170.0	1.0	30.0	1.0	37.0	4.0	8.0	6.0	1.0	106.0	7.0	87.0	44.0	309.0	55.0	569.0	123.0
8/02/2016	20.0	500.0	1250.0	4.0	64.0	2.0	39.0	27.0	12.0	7.0	4.0	103.0	6.0	131.0	44.0	352.0	490.0	569.0	120.0
9/05/2016	21.0	480.0	1320.0	3.0	61.0	1.0	62.0	15.0	22.0	6.0	1.0	98.0	24.0		44.0	195.0	61.0	568.0	122.0
9/08/2016	12.0	464.0	935.0	2.4	30.7	1.4	45.5	10.6	6.4	5.1	1.0	94.4	7.0	91.8	44.5	312.0	40.0	586.0	115.0
7/11/2016	20.2	507.0	1120.0	1.6	61.6	1.0	70.3	25.4		4.6	1.0	99.7	8.6		45.7	332.0	59.4	595.0	120.0
7/02/2017	34.1	519.0	1200.0	2.9	58.6	1.0	52.5	30.5	8.0	5.5		105.0	6.5	135.0	45.3	348.0	68.2	578.0	114.0
8/05/2017	8.9	474.0	946.0	1.2	68.7	1.0	60.8	11.6		11.1	1.0	94.2	8.0	115.0	44.7	331.0	41.5	563.0	113.0
8/08/2017	16.4	456.4	972.7	3.0	30.0	1.0	50.3	9.1	18.6	4.9	1.0	98.0	7.0	84.3	44.8	340.4	37.8	569.1	102.6
7/11/2017	35.6		1.0	4.9	71.7	2.9	49.5	18.0	28.4	6.2	2.0	95.7	5.6	145.2	45.4	352.3	42.4	591.1	114.0
14/02/2018	23.54		1164	2.85	77.89	1.00	33.33	24.30		5.75	1.27	95.37	5.64	138.97	45.36	345.62	50.48	591.57	115.47
9/05/2018	10.40		1177		70.84	1.00	59.28	21.46		4.84	1.00	92.03	5.38	90.72	47.16	349.39	41.81	596.74	109.89
15/08/2018	18.98		985	2.56	63.81	1.81	45.50	17.71		5.46		80.27	6.28	63.92	44.72	347.47	57.76	583.08	107.25
14/11/2018	14.64		1042	2.05	71.71	1.00	58.73	11.30	25.86	5.40	1.46	104.77	7.12	98.05	44.30	360.92	44.64	596.63	89.88
13/02/2019	30.64		1148	2.92	75.98	9.72	62.01		34.20						44.42	343.33	51.97	575.47	89.99
15/05/2019	10.00		1	3.00	24.00	1.00	54.00	20.00	15.00	5.00		91.00	6.00	63.00	45.00	342.00	52.00	572.00	107.00
14/08/2019	9.00		1007	3.00	17.00	2.00	48.00	20.00		4.00		85.00	6.00	29.00	43.00	338.00	47.00	557.00	105.00
13/11/2019	35.00		1073	6.00	59.00	1.00	67.00								45.00	351.00	50.00	590.00	97.00

Alkalinity	SW1	SW2	SW4
31/01/2011	31.0	25.0	
10/05/2011	22.0	17.0	84.0
9/08/2011	77.0	22.0	160.0
8/11/2011	160.0	38.0	180.0
6/02/2012	51.0	45.0	48.0
8/05/2012	20.0	18.0	50.0
6/08/2012	36.0	32.0	100.0
13/11/2012	44.0	19.0	36.0
13/02/2013	30.0	37.0	58.0
14/05/2013	17.0	7.0	72.0
6/08/2013	22.0	19.0	58.0
12/11/2013		36.0	130.0
11/02/2014		36.0	
13/05/2014	26.0	37.0	26.0
12/08/2014		10.0	
10/11/2014		31.0	
9/02/2015	59.0	40.0	35.0
11/05/2015	12.0	9.0	38.0
11/08/2015	17.0	12.0	54.0
10/11/2015	24.0	12.0	32.0
8/02/2016	42.0	27.0	65.0
9/05/2016	37.0	24.0	80.0
9/08/2016	14.9	11.1	63.3
7/11/2016		31.4	
7/02/2017		38.3	93.4
8/05/2017	22.1	6.7	33.2
8/08/2017	28.3	19.9	85.1
7/11/2017	37.3	34.3	45.8
14/02/2018		40.3	
9/05/2018	29.0	27.0	45.1
15/08/2018		12.9	
14/11/2018		37.3	74.8
10/02/2019		37.84	
15/05/2019	31.00	20.00	68.00
14/08/2019	25.00	16.00	58.00
13/11/2019		33.00	

Alkalinity (mg/L as CaCO<sub>3</sub>) - Groundwater



Alkalinity (mg/L as CaCO<sub>3</sub>) - Surface Water





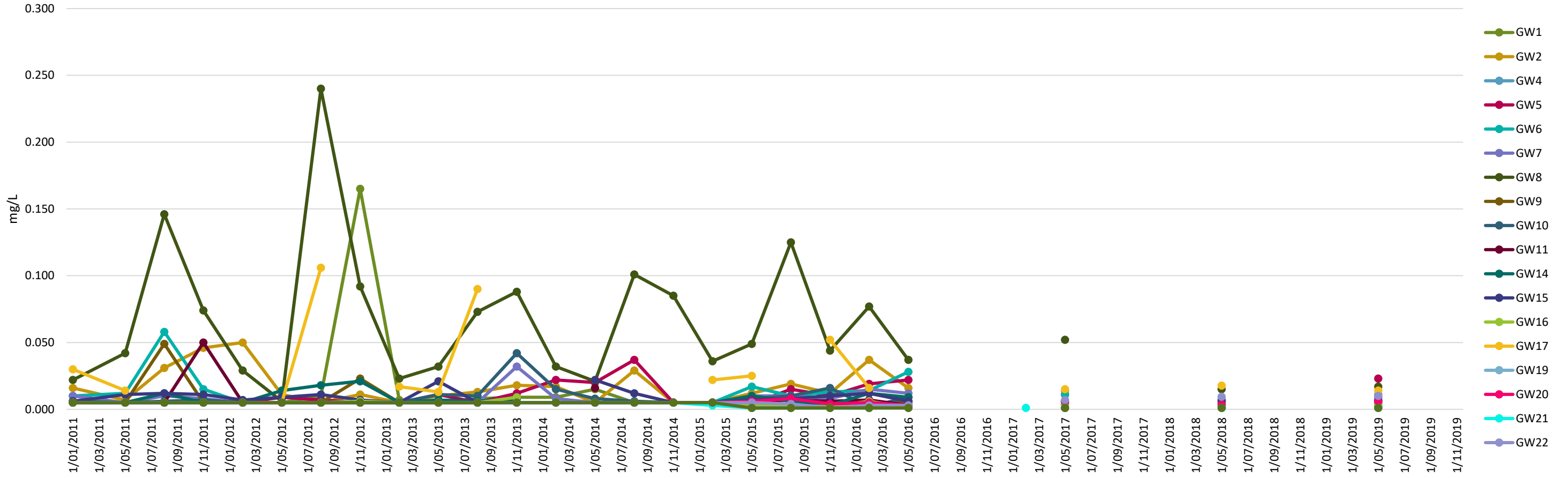




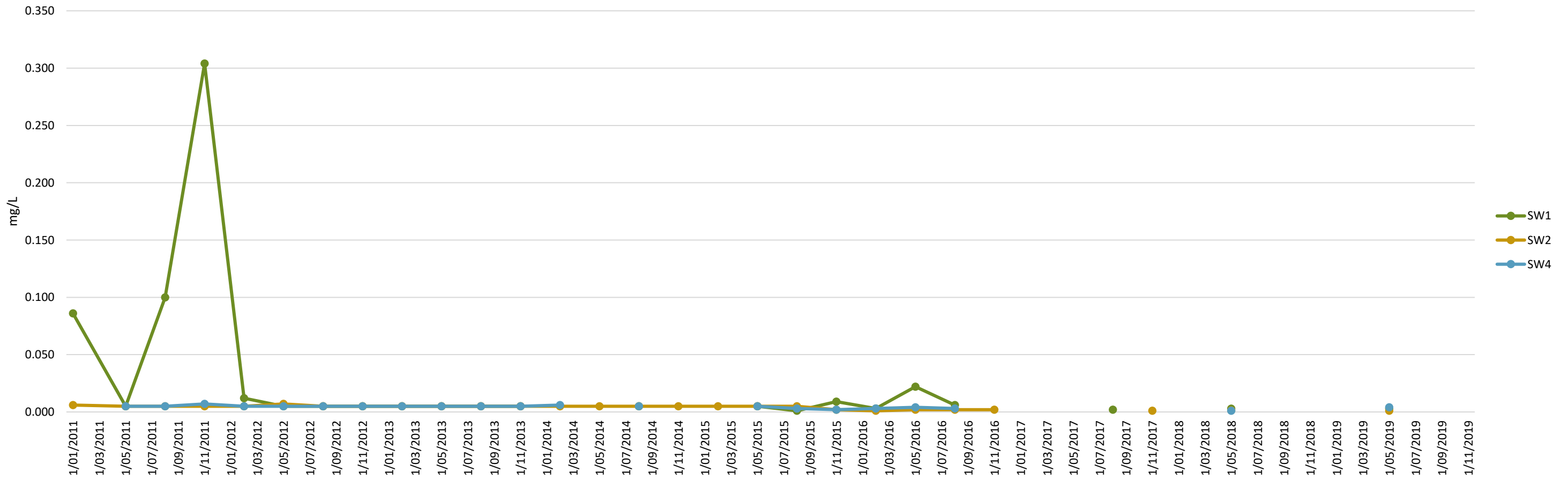
As	GW1	GW2	GW4	GW5	GW6	GW7	GW8	GW9	GW10	GW11	GW14	GW15	GW16	GW17	GW19	GW20	GW21	GW22	GW23
31/01/2011	0.005	0.016	0.005	0.005	0.010	0.010	0.022	0.005	0.005	0.005	0.006	0.006	0.005	0.030	0.005	0.005	0.005	0.005	0.005
10/05/2011	0.005	0.007	0.005	0.005	0.012	0.005	0.042	0.005	0.005	0.005	0.005	0.011	0.005	0.014	0.005	0.005	0.005	0.005	0.005
9/08/2011	0.005	0.031	0.005	0.005	0.058	0.010	0.146	0.049	0.006	0.005	0.012	0.012	0.005		0.005	0.005	0.005	0.005	0.005
8/11/2011	0.005	0.046	0.005	0.005	0.015	0.008	0.074	0.005	0.007	0.050	0.005	0.011	0.005		0.005	0.005	0.005	0.005	0.005
6/02/2012	0.005	0.050	0.005	0.005	0.005	0.005	0.029	0.005	0.005	0.005	0.005	0.007	0.005	0.005	0.005	0.005	0.005	0.005	0.005
8/05/2012	0.005	0.011	0.005	0.009	0.005	0.005	0.006	0.005	0.005	0.005	0.014	0.009	0.005	0.005	0.005	0.005	0.005	0.005	0.005
6/08/2012	0.010	0.005	0.005	0.007	0.005	0.005	0.240	0.005	0.005	0.005	0.018	0.011	0.005	0.106	0.005	0.005	0.005	0.005	0.005
13/11/2012	0.165	0.011	0.005	0.005	0.005	0.005	0.092	0.023	0.005	0.005	0.021	0.007	0.006		0.005	0.005	0.005	0.005	0.005
13/02/2013	0.007	0.005	0.005	0.005	0.005	0.005	0.023	0.005	0.005	0.005	0.005	0.005	0.005	0.017	0.005	0.005	0.005	0.005	0.005
14/05/2013	0.005	0.010	0.005	0.011	0.005	0.005	0.032	0.005	0.011	0.005	0.007	0.021	0.005	0.013	0.005	0.005	0.005	0.005	0.005
6/08/2013	0.008	0.013	0.005	0.005	0.005	0.005	0.073	0.005	0.010	0.005	0.006	0.005	0.005	0.090	0.005	0.005	0.005	0.005	0.005
12/11/2013	0.009	0.018	0.005	0.012	0.005	0.032	0.088		0.042	0.008	0.008	0.009	0.009		0.005	0.005	0.005	0.005	0.005
11/02/2014	0.009	0.017	0.005	0.022	0.005	0.008	0.032		0.015						0.005	0.005	0.005	0.005	0.005
13/05/2014	0.015	0.005	0.005	0.020	0.005	0.005	0.021		0.008	0.016		0.022			0.005	0.005	0.005	0.005	0.005
12/08/2014	0.005	0.029	0.005	0.037	0.005	0.005	0.101		0.006			0.012			0.005	0.005	0.005	0.005	0.005
10/11/2014	0.005	0.005	0.005	0.005	0.005	0.005	0.085		0.005	0.005		0.005	0.005		0.005	0.005	0.005	0.005	0.005
9/02/2015	0.005	0.005	0.005	0.005	0.005	0.005	0.036	0.005	0.005	0.005	0.005	0.005	0.005	0.022	0.005	0.005	0.003	0.005	0.005
11/05/2015	0.001	0.012	0.004	0.004	0.017	0.010	0.049	0.005	0.008	0.006	0.010	0.007	0.003	0.025	0.001	0.006	0.001	0.005	0.001
11/08/2015	0.001	0.019	0.004	0.015	0.010	0.010	0.125	0.007	0.010	0.007	0.006	0.008	0.003		0.001	0.008	0.001	0.004	0.001
10/11/2015	0.005	0.012	0.001	0.010	0.013	0.008	0.044	0.003	0.016	0.006	0.003	0.010	0.002	0.052	0.001	0.004	0.001	0.001	0.001
8/02/2016	0.002	0.037	0.002	0.019	0.014	0.015	0.077	0.003	0.002	0.007	0.012	0.012	0.006	0.016	0.001	0.005	0.001	0.003	0.001
9/05/2016	0.002	0.016	0.005	0.022	0.028	0.012	0.037	0.006	0.009	0.003	0.009	0.006	0.001		0.001	0.003		0.003	0.001
9/08/2016																			
7/11/2016																			
7/02/2017																	0.001		
8/05/2017	0.001	0.014	0.004	0.011	0.011	0.005	0.052	0.001		0.003	0.006	0.006	0.003	0.015	0.001	0.006		0.007	0.001
8/08/2017																			
7/11/2017																			
14/02/2018																			
9/05/2018	0.001		0.001		0.006	0.005	0.015	0.007		0.003	0.007	0.005	0.002	0.018	0.001	0.004	0.001	0.009	0.001
15/08/2018																			
14/11/2018																			
13/02/2019																			
15/05/2019	0.00		0.00	0.02	0.01	0.01	0.02	0.00	0.01	0.01		0.01	0.00	0.01	0.00	0.01	0.00	0.01	0.00
14/08/2019																			
13/11/2019																			

As	SW1	SW2	SW4
31/01/2011	0.086	0.006	
10/05/2011	0.005	0.005	0.005
9/08/2011	0.100	0.005	0.005
8/11/2011	0.304	0.005	0.007
6/02/2012	0.012	0.005	0.005
8/05/2012	0.005	0.007	0.005
6/08/2012	0.005	0.005	0.005
13/11/2012	0.005	0.005	0.005
13/02/2013	0.005	0.005	0.005
14/05/2013	0.005	0.005	0.005
6/08/2013	0.005	0.005	0.005
12/11/2013	0.005	0.005	0.005
11/02/2014		0.005	0.006
13/05/2014		0.005	
12/08/2014	0.005	0.005	0.005
10/11/2014		0.005	
9/02/2015		0.005	
11/05/2015	0.005	0.005	0.005
11/08/2015	0.001	0.005	0.003
10/11/2015	0.009	0.002	0.002
8/02/2016	0.003	0.001	0.003
9/05/2016	0.022	0.002	0.004
9/08/2016	0.006	0.002	0.003
7/11/2016		0.002	
7/02/2017			
8/05/2017			
8/08/2017	0.002		
7/11/2017		0.001	
14/02/2018			
9/05/2018	0.003	0.001	0.001
15/08/2018			
14/11/2018			
10/02/2019			
15/05/2019	0.00	0.00	0.00
14/08/2019			
13/11/2019			

Total Arsenic (mg/L) - Groundwater

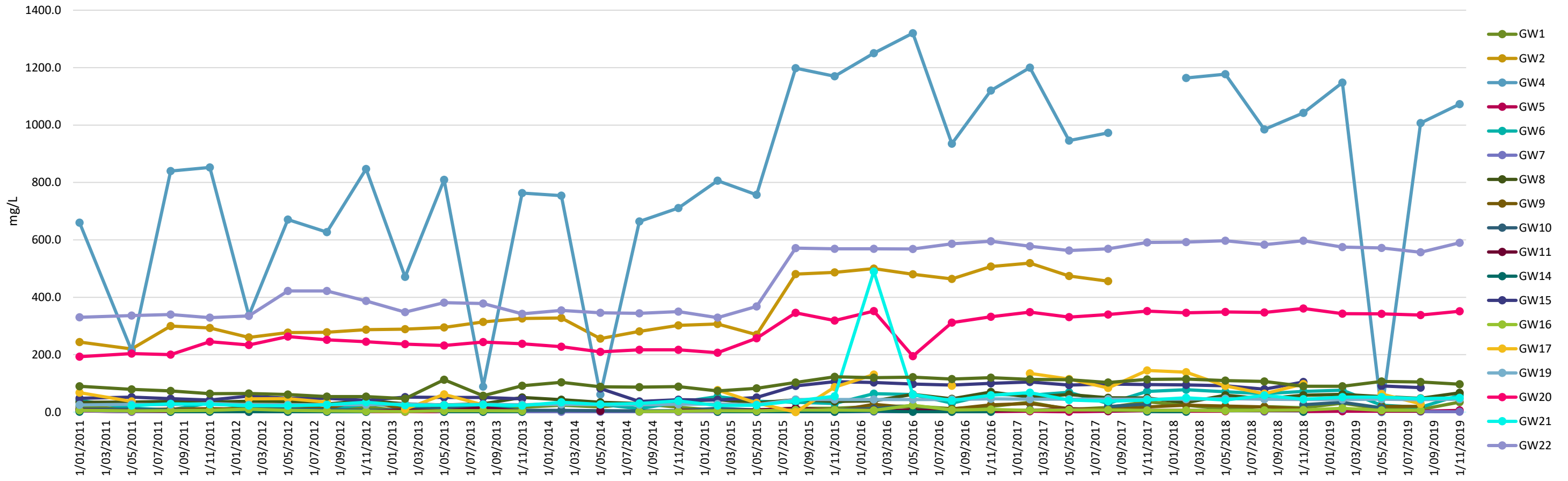


Total Arsenic (mg/L) - Surface Water



Bicarbonate	GM1	GM2	GM4	GM5	GM6	GM7	GM8	GM9	GM10	GM11	GM14	GM15	GM16	GM17	GM19	GM20	GM21	GM22	GM23
31/01/2011	19.0	244.0	660.0	4.0	41.0	5.0	34.0	10.0	10.0	7.0	1.0	48.0	6.0	68.0	25.0	193.0		330.0	90.0
10/05/2011	10.0	220.0	214.0	1.0	14.0	1.0	35.0	7.0	10.0	4.0		52.0	4.0	37.0	27.0	204.0	23.0	336.0	79.0
9/08/2011	7.0	300.0	840.0	2.0	8.0	1.0	37.0	11.0	7.0	3.0	1.0	47.0	5.0		26.0	200.0	29.0	340.0	74.0
8/11/2011	8.0	293.0	852.0	3.0	32.0	2.0	35.0	12.0	5.0	4.0	1.0	42.0	6.0		30.0	245.0	27.0	329.0	64.0
6/02/2012	16.0	260.0	336.0	1.0	18.0	3.0	38.0	10.0	10.0	5.0	1.0	56.0	10.0	46.0	26.0	234.0	23.0	335.0	65.0
8/05/2012	11.0	277.0	671.0	2.0	30.0	2.0	37.0	12.0	10.0	3.0	1.0	48.0	6.0	47.0	26.0	263.0	22.0	422.0	61.0
6/08/2012	7.0	278.0	627.0	2.0	11.0	2.0	28.0	13.0	9.0	4.0	1.0	48.0	4.0	35.0	26.0	252.0	26.0	422.0	54.0
13/11/2012	18.0	287.0	847.0	2.0	27.0	1.0	40.0	42.0	6.0	2.0	1.0	41.0	3.0		26.0	245.0	34.0	387.0	54.0
13/02/2013	4.0	289.0	471.0	1.0	22.0	13.0	29.0	8.0	8.0	7.0		52.0	2.0	10.0	28.0	237.0	24.0	348.0	47.0
14/05/2013	5.0	295.0	809.0	1.0	6.0	1.0	25.0	12.0	15.0	4.0	1.0	51.0	5.0	62.0	25.0	232.0	24.0	381.0	113.0
6/08/2013	7.0	314.0	89.0	1.0	11.0	1.0	29.0	10.0	16.0	15.0	1.0	51.0	5.0	25.0	27.0	244.0	26.0	378.0	57.0
12/11/2013	17.0	326.0	763.0	2.0	25.0	1.0	51.0		6.0	3.0	1.0	46.0	4.0		26.0	238.0	23.0	342.0	92.0
11/02/2014	24.0	328.0	754.0	4.0	29.0	1.0	43.0		6.0						27.0	228.0	34.0	354.0	104.0
13/05/2014	18.0	256.0	61.0	3.0	27.0	1.0	34.0		5.0	4.0		82.0			26.0	210.0	27.0	346.0	88.0
12/08/2014	30.0	281.0	664.0	2.0	12.0	1.0	30.0		4.0			37.0	2.0		26.0	217.0	30.0	344.0	87.0
10/11/2014	17.0	302.0	711.0	1.0	34.0	1.0	38.0		5.0	6.0		43.0	3.0		27.0	217.0	39.0	350.0	89.0
9/02/2015	6.0	307.0	806.0	1.0	54.0	1.0	43.0	7.0	13.0	5.0	1.0	42.0	5.0	77.0	28.0	207.0	23.0	329.0	74.0
11/05/2015	7.0	270.0	757.0	1.0	38.0	1.0	32.0	8.0	7.0	7.0	1.0	51.0	4.0	32.0	26.0	257.0	24.0	368.0	83.0
11/08/2015	13.0	481.0	1198.0	2.0	34.0	1.0	43.0	9.0	1.0	13.0	1.0	91.0	7.0	NT	44.0	346.0	39.0	571.0	103.0
10/11/2015	13.0	487.0	1170.0	1.0	30.0	1.0	37.0	4.0	8.0	6.0	1.0	106.0	7.0	87.0	44.0	319.0	55.0	569.0	123.0
8/02/2016	20.0	500.0	1250.0	4.0	64.0	2.0	39.0	27.0	12.0	7.0	4.0	103.0	6.0	131.0	44.0	352.0	490.0	569.0	120.0
9/05/2016	21.0	480.0	1320.0	3.0	61.0	1.0	62.0	15.0	22.0	6.0	1.0	98.0	24.0		44.0	195.0	61.0	568.0	122.0
9/08/2016	12.0	464.0	935.0	2.0	31.0	1.0	46.0	11.0	6.0	5.0	1.0	94.0	7.0	92.0	44.0	312.0	40.0	586.0	115.0
7/11/2016	20.0	507.0	1120.0	2.0	62.0		70.0	25.0		5.0	1.0	100.0	9.0		46.0	332.0	59.0	595.0	120.0
8/02/2017	34.0	519.0	1200.0	3.0	59.0		52.0	30.0	8.0	6.0		105.0	6.0	135.0	45.0	348.0	68.0	578.0	114.0
9/05/2017	9.0	474.0	946.0	1.0	69.0		61.0	12.0		11.0		94.0	8.0	115.0	45.0	331.0	42.0	563.0	113.0
9/08/2017	16.0	456.0	973.0	3.0	30.0		50.0	9.0	19.0	5.0		98.0	7.0	84.0	45.0	340.0	38.0	569.0	103.0
8/11/2017	36.0			5.0	72.0	3.0	49.0	18.0	28.0	6.0	2.0	96.0	6.0	145.0	45.0	352.0	42.0	591.0	114.0
14/02/2018	24.00		1164	3.00	78.00		33.00	24.00		6.00	1.00	95.00	6.00	139.00	45.00	346.00	50.00	592.00	115.00
9/05/2018	10.00		1177	3.00	71.00		59.00	21.00		5.00		92.00	5.00	91.00	47.00	349.00	42.00	597.00	110.00
15/08/2018	19.00		985		64.00	2.00	46.00	18.00		5.00		80.00	6.00	64.00	45.00	347.00	58.00	583.00	107.00
14/11/2018	15.00		1042	2.00	72.00		59.00	11.00	26.00	5.00	1.00	105.00	7.00	98.00	44.00	361.00	45.00	597.00	90.00
13/02/2019	31.00		1148	3.00	76.00	10.00	62.00		34.00				13.00		44.00	343.00	52.00	575.00	90.00
15/05/2019	10.00		0	3.00	24.00		54.00	20.00	15.00	5.00		91.00	6.00	63.00	45.00	342.00	52.00	572.00	107.00
14/08/2019	9.00		1007	3.00	17.00	2.00	48.00	20.00		4.00		85.00	6.00	29.00	43.00	338.00	47.00	557.00	105.00
13/11/2019	35.00		1073	6.00	59.00	1.00	67.00								45.00	351.00	50.00	590.00	97.00

Bicarbonate HCO<sub>3</sub> (mg/L) - Groundwater

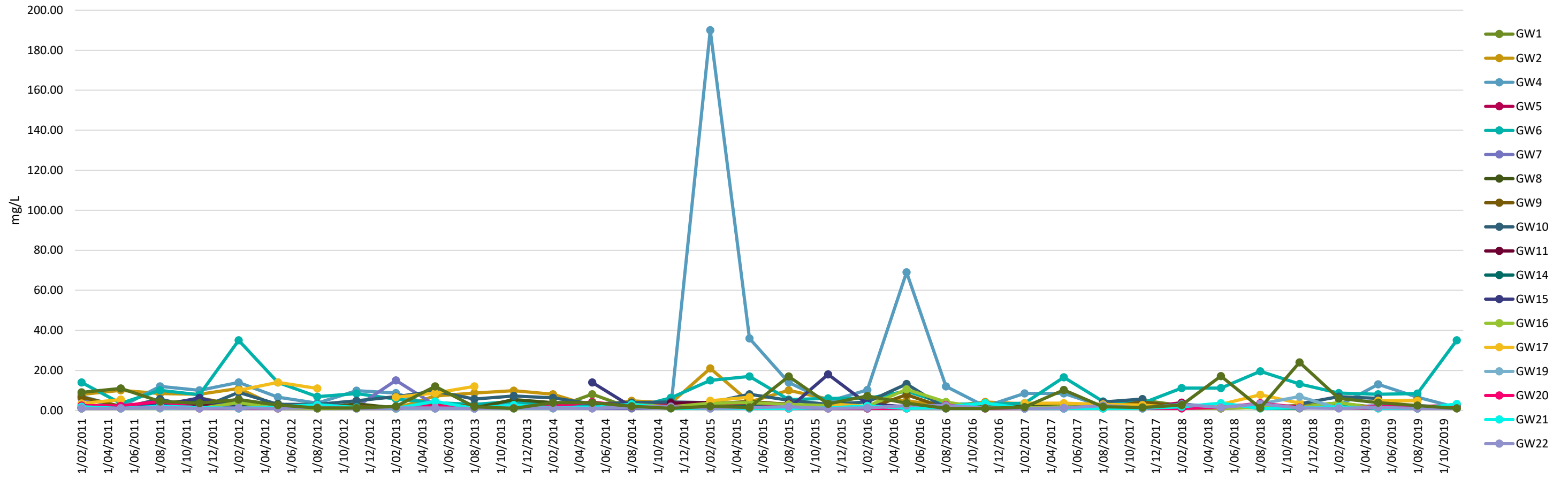




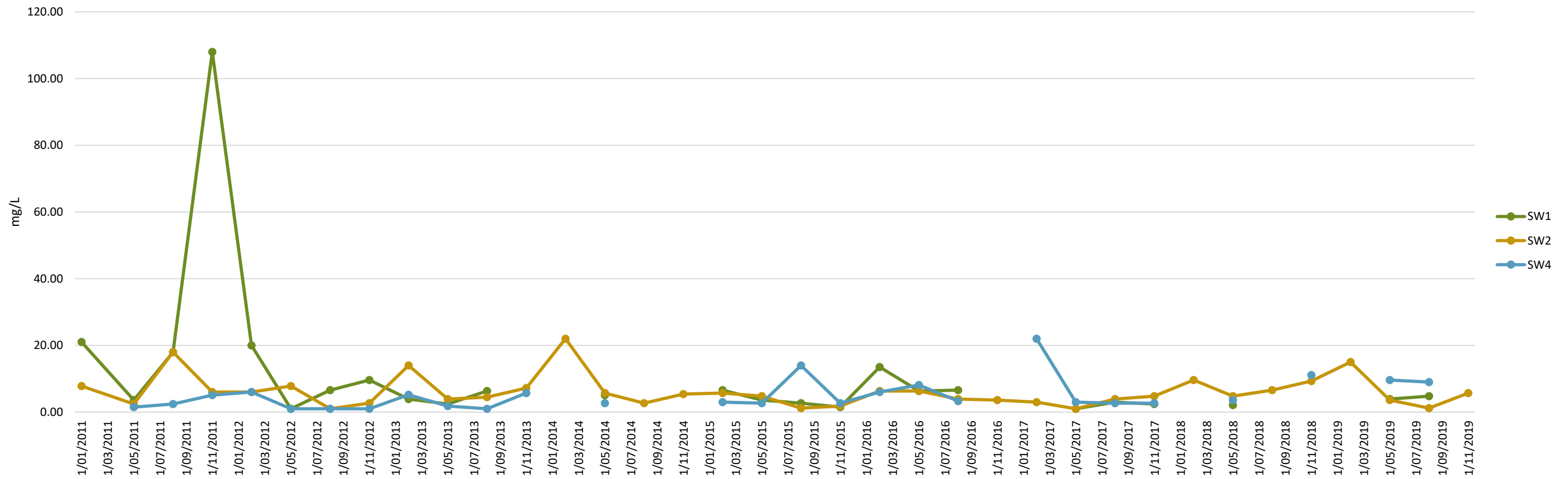
BOD	GM1	GM2	GM4	GM5	GM6	GM7	GM8	GM9	GM10	GM11	GM14	GM15	GM16	GM17	GM19	GM20	GM21	GM22	GM23
1/02/2011	1.00	8.00	7.00	1.00	14.00	6.00	1.60	6.60	1.00	1.80	1.00	1.20	1.00	3.40	1.00	2.40	1.80	1.00	9.00
11/05/2011	1.60	10.00	1.80	1.00	3.50	1.50	1.20	2.10	1.20	1.00	1.00	2.40	1.00	5.40	1.20	2.20	1.00	1.00	11.00
10/08/2011	1.80	8.40	12.00	2.40	10.00	2.10	2.70	3.30	5.70	1.80	2.70	2.40	1.00		1.00	4.50	2.10	1.50	4.50
9/11/2011	6.30	8.10	10.00	6.00	7.80	1.50	4.80	5.70	1.00	2.40	5.40	6.30	1.00		1.00	1.00	1.50	1.00	3.60
7/02/2012	2.40	11.00	14.00	2.10	35.00	5.70	1.80	3.00	9.00	1.80	1.80	1.00	3.90	10.00	1.00	1.00	1.00	1.20	5.40
9/05/2012	2.10	1.80	6.60	1.00	14.00	1.00	3.30	2.70	3.00	1.00	1.00	1.00	1.00	14.00	1.80	1.00	1.80	1.00	2.70
7/08/2012	1.50	1.20	3.60	1.00	6.90	3.00	1.00	2.10	3.00	1.00	1.00	1.00	1.00	11.00	2.10	2.40	2.80	1.50	1.20
14/11/2012	1.80	2.70	9.90	1.00	8.40	1.80	3.30	2.10	4.80	1.20	1.00	1.00	1.00		1.00	1.20	1.50	1.00	1.20
14/02/2013	1.00	1.00	8.70	1.00	5.70	15.00	1.20	1.20	6.90	1.00	1.00	1.00	1.00	6.60	1.00	1.00	1.00	1.20	2.00
15/05/2013	1.50	7.20	1.80	1.80	3.90	2.70	1.80	3.00	9.60	1.50	1.00	1.00	1.20	8.70	1.00	2.40	4.50	1.20	12.00
7/08/2013	1.00	8.70	1.00	1.00	3.00	1.00	1.20	2.10	5.70	1.00	1.00	1.00	1.00	12.00	1.00	1.00	1.00	1.00	1.80
13/11/2013	1.00	9.90	3.30	1.50	4.50	1.00	5.40		7.20	1.80	1.80	1.20	1.00		1.00	2.10	2.70	1.20	1.00
12/02/2014	1.00	8.10	3.00	2.70	2.70	2.40	3.90		6.30						1.00	2.10	1.20	1.20	3.90
14/05/2014	8.10	2.10	2.10	1.50	2.70	1.00	3.60		3.30	1.50		14.00			1.00	4.20	1.50	1.00	3.90
13/08/2014	1.00	4.80	2.70	2.40	1.20	1.00	1.80		3.90			1.80	3.00		1.80	1.80	3.00	1.80	2.10
11/11/2014	2.10	3.60	1.50	3.00	6.30	1.20	1.50		4.20	3.60		2.10	1.80		1.00	1.80	1.00	1.80	1.00
10/02/2015	1.00	21.00	190.00	1.80	15.00	1.20	2.10	3.30	3.90	3.90	1.20	1.50	3.60	4.80	1.00	1.00	1.00	1.00	2.10
12/05/2015	2.70	4.20	36.00	3.00	17.00	1.50	1.50	4.50	8.10	3.60	2.10	1.00	3.90	6.60	1.00	1.00	1.00	1.50	1.50
12/08/2015	2.10	10.00	14.00	1.80	5.40	1.00	1.00	3.00	5.10	3.30	1.00	1.00	3.00		1.00	1.00	1.00	1.80	17.00
11/11/2015	1.50	5.70	4.50	1.00	6.00	1.00	1.00	1.00	3.00	1.00	1.00	18.00	2.40	3.30	1.00	1.00	1.20	1.00	3.30
9/02/2016	1.00	6.00	10.20	1.80	6.00	1.00	2.10	1.00	4.20	1.00	1.00	3.30	2.10	2.10	1.00	1.00	2.20	1.20	7.20
10/05/2016	1.00	4.80	69.00	1.00	9.60	1.50	1.50	7.80	13.20	1.50	1.00	1.80	10.50		1.00	1.00	1.00	2.40	3.60
10/08/2016	1.00	2.10	12.00	2.10	3.30	1.00	1.20	1.20	1.00	1.00	1.00	2.70	4.20		1.00	2.70	1.80	2.40	1.00
8/11/2016	1.80	4.20	2.00	1.00	3.00	1.80	2.10	1.80		1.00	1.00	1.00	1.00		1.00	1.00	3.60	1.20	1.00
8/02/2017	1.50	3.30	8.50	1.00	3.60	1.00	1.80	1.00	2.70	1.00		1.00	1.20	3.60	1.00	1.00	1.00	1.00	1.60
9/05/2017	1.20	1.80	8.50	1.20	16.50	1.00	2.10	1.20		1.50	1.00	1.00	1.80	3.60	1.00	1.00	1.00	1.20	10.20
9/08/2017	1.00	2.10	2.00	1.20	4.50	1.00	1.50	1.50	4.20	1.50	1.00	2.10	1.50	3.00	1.00	2.10	1.00	2.40	1.80
8/11/2017	5.10		4.20	1.50	3.60	1.80	1.50	4.20	5.70	1.50	1.00	1.50	1.00	2.70	1.00	1.00	1.00	1.20	1.50
14/02/2018	2.40		2.10	3.90	11.10	1.80	2.40	2.10		2.10	3.30	1.80	1.00	1.20	1.00	1.00	1.80	3.00	2.70
9/05/2018	2.10		3.00		11.10	1.00	2.40	2.10		1.00	1.20	1.00	1.00	3.00	1.50	1.50	3.60	1.50	17.10
15/08/2018	1.80		2.10	1.50	19.50	1.50	1.00	1.80		2.70		2.70	1.50	7.80	3.30	3.60	1.00	3.30	1.20
14/11/2018	2.40		1.80	1.80	13.20	1.20	1.00	1.20	3.30	1.80	1.20	1.50	1.50	3.60	6.90	1.50	1.20	1.20	24.00
13/02/2019	3.60		2.40	1.20	8.70	1.50	2.40		6.90				3.90		1.00	1.20	1.80	1.00	6.00
15/05/2019	1.50		13.00	1.00	8.10	2.40	1.20	4.50	6.00	1.20		1.80	1.00	4.80	1.80	1.80	1.00	1.50	3.90
14/08/2019	1.00		6.60	1.00	8.40	2.40	1.00	5.10		1.00		2.40	1.20	4.80	1.50	1.80	1.00	1.00	2.40
13/11/2019	3.00		1.50	1.00	35.00	1.50	2.10								1.20	2.70	3.15	1.00	1.00

BOD	SM1	SM2	SM4
31/01/2011	21.00	7.80	
10/05/2011	3.60	2.40	1.50
9/08/2011	18.00	18.00	2.40
8/11/2011	108.00	6.00	5.10
6/02/2012	20.00	6.00	6.00
8/05/2012	1.00	7.80	1.00
7/08/2012	6.60	1.00	1.00
14/11/2012	9.60	2.70	1.00
14/02/2013	3.90	14.00	5.20
15/05/2013	2.40	3.90	1.80
7/08/2013	6.30	4.50	1.00
12/11/2013		7.20	5.70
11/02/2014		22.00	
14/05/2014	5.10	5.70	2.70
12/08/2014		2.70	
10/11/2014		5.40	
10/02/2015	6.60	5.70	3.00
12/05/2015	3.60	4.80	2.70
12/08/2015	2.70	1.20	14.00
11/11/2015	1.50	1.80	2.70
9/02/2016	13.50	6.30	6.00
10/05/2016	6.30	6.30	8.10
10/08/2016	6.60	3.90	3.30
8/11/2016		3.60	
7/02/2017		3.00	22.00
9/05/2017	1.00	1.00	3.00
9/08/2017	3.00	3.90	2.70
8/11/2017	2.40	4.80	2.70
10/02/2018		9.60	
9/05/2018	2.10	4.80	3.60
10/08/2018		6.60	
12/11/2018		9.30	11.10
10/02/2019		15.00	
15/05/2019	3.90	3.60	9.60
14/08/2019	4.80	1.20	9.00
13/11/2019		5.70	

### Biological Oxygen Demand (mg/L) - Groundwater



### Biological Oxygen Demand (mg/L) - Surface Water



Cd	GW1	GW2	GW4	GW5	GW6	GW7	GW8	GW9	GW10	GW11	GW14	GW15	GW16	GW17	GW19	GW20	GW21	GW22	GW23
31/01/2011	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001
10/05/2011	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
9/08/2011	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001	0.001	0.001	0.001
8/11/2011	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001	0.001	0.001	0.001
6/02/2012	0.001	0.004	0.001	0.001	0.003	0.002	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
8/05/2012	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
6/08/2012	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
13/11/2012	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001	0.001	0.001	0.001
13/02/2013	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
14/05/2013	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
6/08/2013	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
12/11/2013	0.001	0.001	0.001	0.001	0.001	0.001	0.002		0.002	0.001	0.001	0.001	0.001		0.001	0.001	0.001	0.001	0.001
11/02/2014	0.001	0.001	0.001	0.001	0.001	0.001	0.001		0.001						0.001	0.001	0.001	0.001	0.001
13/05/2014	0.001	0.001	0.001	0.001	0.001	0.001	0.002		0.001	0.001		0.001			0.001	0.001	0.001	0.001	0.001
12/08/2014	0.001	0.001	0.001	0.001	0.001	0.001	0.003		0.001			0.001	0.001		0.001	0.001	0.001	0.001	0.001
10/11/2014	0.001	0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001		0.001	0.001		0.001	0.001	0.001	0.001	0.001
9/02/2015	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
11/05/2015	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
11/08/2015	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001	0.001	0.001	0.001
10/11/2015	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
8/02/2016	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
9/05/2016	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001	0.001	0.001	0.001
9/08/2016																			
7/11/2016																			
7/02/2017																			
8/05/2017	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
8/08/2017																			
7/11/2017																			
14/02/2018																			
9/05/2018	0.001		0.001		0.001	0.001	0.001	0.001		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
15/08/2018																			
14/11/2018																			
13/02/2019																			
15/05/2019	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14/08/2019																			
13/11/2019																			

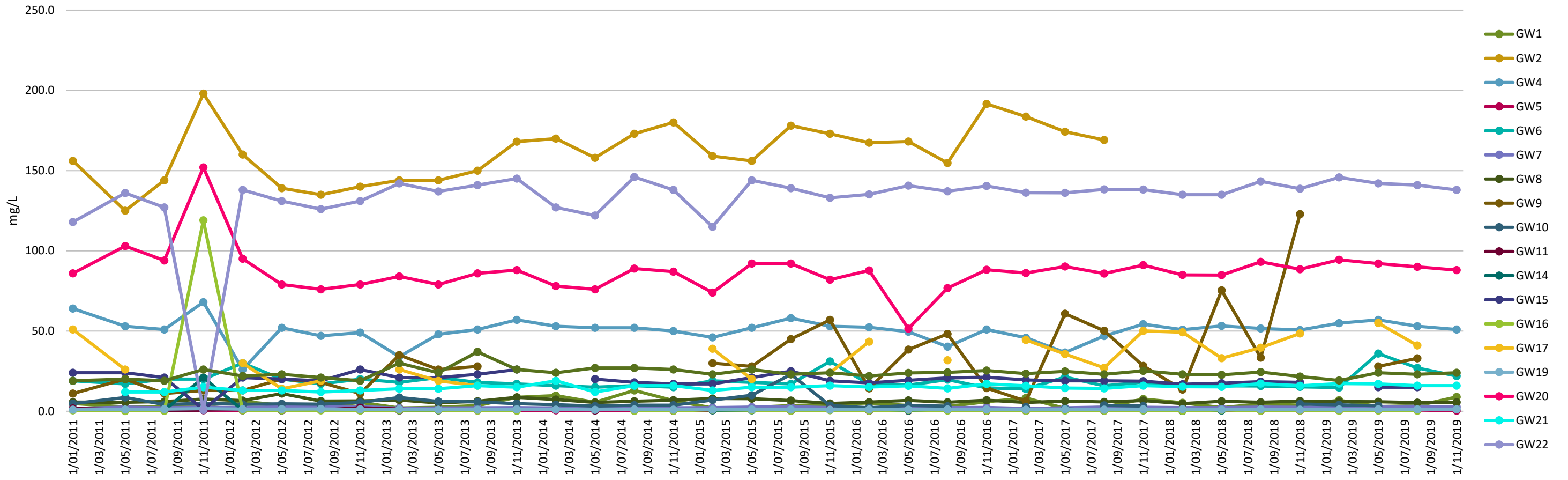
Cd	SW1	SW2	SW4
31/01/2011	0.001	0.001	
10/05/2011	0.001	0.001	0.001
9/08/2011	0.001	0.001	0.001
8/11/2011	0.001	0.001	0.001
6/02/2012	0.002	0.001	0.001
8/05/2012	0.001	0.001	0.001
6/08/2012	0.001	0.001	0.001
13/11/2012	0.001	0.001	0.001
13/02/2013	0.001	0.001	0.001
14/05/2013	0.001	0.001	0.001
6/08/2013	0.001	0.001	0.001
12/11/2013	0.001	0.001	0.001
11/02/2014		0.001	0.001
13/05/2014		0.001	
12/08/2014	0.001	0.001	0.001
10/11/2014		0.001	
9/02/2015		0.001	
11/05/2015	0.001	0.001	0.001
11/08/2015	0.001	0.001	0.001
10/11/2015	0.001	0.001	0.001
8/02/2016	0.001	0.001	0.001
9/05/2016	0.001	0.001	0.001
9/08/2016	0.001	0.001	0.001
7/11/2016		0.001	
7/02/2017			
8/05/2017			
8/08/2017	0.001		0.001
7/11/2017		0.001	
14/02/2018			
9/05/2018	0.001	0.001	0.001
15/08/2018			
14/11/2018			
10/02/2019			
15/05/2019	0.00	0.00	0.00
14/08/2019			
13/11/2019			



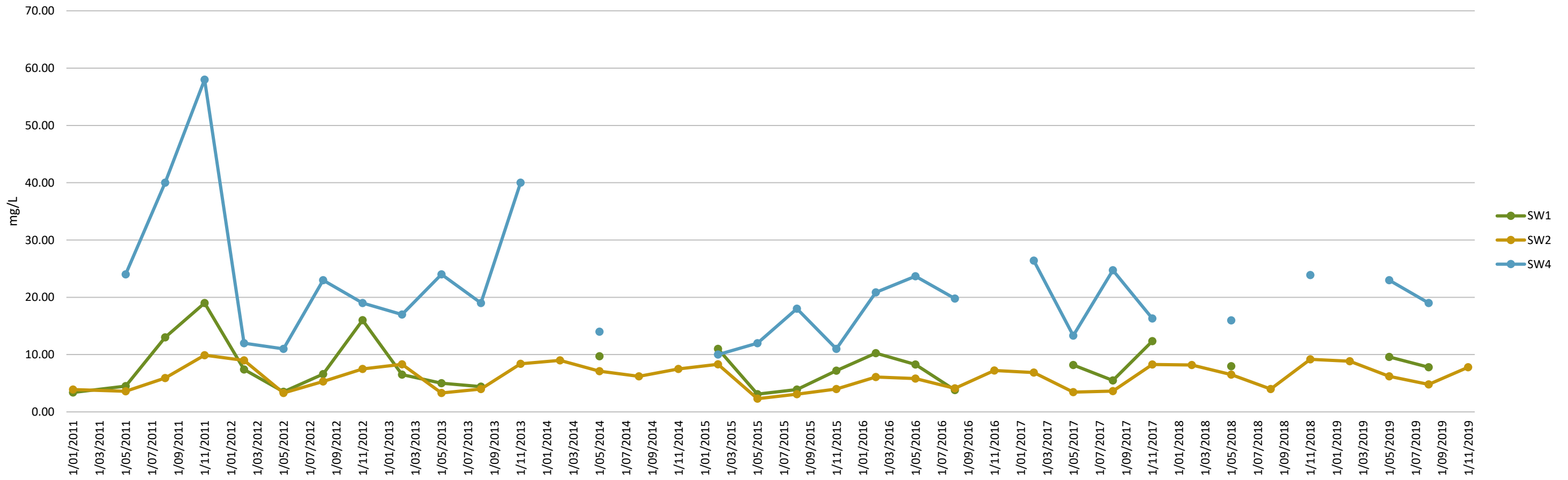
Ca	GW1	GW2	GW4	GW5	GW6	GW7	GW8	GW9	GW10	GW11	GW14	GW15	GW16	GW17	GW19	GW20	GW21	GW22	GW23
31/01/2011	4.8	156.0	64.0	1.2	19.0	1.7	5.7	11.0	4.7	1.7	0.8	24.0	0.5	51.0	1.0	86.0		118.0	19.0
10/05/2011	2.7	125.0	53.0	2.2	17.0	2.6	5.6	20.0	8.6	1.0	0.6	24.0	0.1	26.0	1.1	103.0	12.0	136.0	20.0
9/08/2011	2.7	144.0	51.0	0.7	20.0	2.2	6.0	11.0	4.2	0.6	0.5	21.0	0.2		1.3	94.0	12.0	127.0	19.0
8/11/2011	3.6	198.0	68.0	0.7	20.0	2.6	7.6	13.0	4.9	0.7	21.0	1.1	119.0		1.6	152.0	15.0	0.8	26.0
6/02/2012	6.1	160.0	26.0	0.5	30.0	2.2	6.7	13.0	4.3	1.3	0.7	21.0	0.5	30.0	1.3	95.0	13.0	138.0	22.0
8/05/2012	3.8	139.0	52.0	0.4	20.0	2.9	11.0	20.0	4.6	0.7	0.6	20.0	0.5	14.0	1.3	79.0	13.0	131.0	23.0
6/08/2012	2.8	135.0	47.0	1.2	17.0	3.2	6.3	18.0	4.4	0.8	1.0	19.0	0.5	19.0	1.4	76.0	12.0	126.0	21.0
13/11/2012	5.5	140.0	49.0	0.6	20.0	2.9	6.4	11.0	5.5	2.2	0.6	26.0	0.4		1.2	79.0	13.0	131.0	19.0
13/02/2013	2.1	144.0	34.0	0.4	18.0	1.9	7.0	35.0	8.6	1.4	0.6	21.0	0.7	26.0	1.3	84.0	14.0	142.0	30.0
14/05/2013	2.5	144.0	48.0	0.5	21.0	2.1	5.2	26.0	6.1	0.8	0.6	21.0	0.7	19.0	1.0	79.0	14.0	137.0	24.0
6/08/2013	3.5	150.0	51.0	0.4	18.0	2.2	6.2	28.0	5.8	0.6	0.6	23.0	0.4	16.0	1.0	86.0	16.0	141.0	37.0
12/11/2013	8.7	168.0	57.0	0.5	17.0	2.3	8.7		4.7	0.6	0.5	26.0	0.3		1.2	88.0	15.0	145.0	26.0
11/02/2014	9.8	170.0	53.0	0.5	16.0	2.1	7.3		4.1						1.0	78.0	19.0	127.0	24.0
13/05/2014	5.6	158.0	52.0	0.5	15.0	2.0	5.5		3.2	0.4		20.0			0.9	76.0	12.0	122.0	27.0
12/08/2014	13.0	173.0	52.0	0.4	16.0	2.6	6.2		3.8			18.0	0.2		1.1	89.0	16.0	146.0	27.0
10/11/2014	6.7	180.0	50.0	0.5	15.0	2.2	6.9		3.8	0.3		17.0	0.3		1.0	87.0	16.0	138.0	26.0
9/02/2015	2.1	159.0	46.0	0.8	19.0	2.3	7.9	30.0	7.0	0.7	0.6	17.0	0.9	39.0	1.0	74.0	13.0	115.0	23.0
11/05/2015	2.4	156.0	52.0	0.9	18.0	2.6	7.8	28.0	10.0	0.8	0.6	21.0	0.7	20.0	1.1	92.0	15.0	144.0	26.0
11/08/2015	3.6	178.0	58.0	0.9	17.0	2.9	6.7	45.0	23.0	0.3	0.6	25.0	0.3		1.1	92.0	15.0	139.0	23.0
10/11/2015	4.2	173.0	53.0	1.3	31.0	2.3	4.8	57.0	3.6	1.1	0.8	19.0	0.7	24.0	1.0	82.0	16.0	133.0	24.0
8/02/2016	5.1	167.4	52.4	1.4	17.0	2.3	5.7	14.3	2.2	0.4	0.5	17.7	0.4	43.4	1.1	87.8	15.1	135.2	22.0
9/05/2016	3.5	168.2	49.6	0.5	16.3	2.0	6.8	38.4	3.6	0.3	0.5	19.3	0.7		1.0	51.5	15.9	140.7	23.9
9/08/2016	3.1	154.7	40.3	1.0	19.7	2.3	5.6	48.2	3.1	0.6	0.6	20.8	0.5	31.8	1.1	76.8	14.2	137.1	24.2
7/11/2016	5.9	191.6	50.9	0.5	14.6	2.3	6.9	14.5		0.3	0.6	21.2	0.3		1.1	88.2	17.1	140.4	25.4
7/02/2017	8.3	183.6	45.8	0.5	13.9	1.8	5.5	6.3	2.7	0.3		19.4	0.2	44.4	1.0	86.1	15.8	136.3	23.5
8/05/2017	1.8	174.2	36.7	2.0	21.3	2.1	6.3	60.8		0.9	1.6	18.9	0.4	35.7	1.2	90.2	14.5	136.1	24.9
8/08/2017	2.5	169.1	46.9	1.0	15.9	2.6	5.8	50.2	3.7	0.4	0.6	19.0	0.3	27.1	1.0	85.8	14.2	138.3	23.0
7/11/2017	7.6		54.3	1.1	18.1	2.5	6.7	28.2	3.2	0.7	0.5	18.8	0.5	50.1	1.1	91.1	16.0	138.2	25.2
14/02/2018	5.3		50.9	0.7	15.3	2.3	4.7	13.5		0.3	0.2	16.9	0.2	49.2	1.3	85.0	15.3	134.9	23.0
9/05/2018	2.3		53.2	0.6	15.9	2.2	6.2	75.3		0.8	0.5	17.4	0.8	33.1	1.0	84.9	15.3	134.9	22.7
15/08/2018	4.6		51.6		15.8	2.5	5.6	33.4		0.3		18.4	0.3	39.6	1.2	93.2	17.2	143.4	24.4
14/11/2018	3.7		50.7	0.6	15.2	2.5	6.3	122.9	4.5	0.5	0.9	18.0	0.4	48.5	1.0	88.5	15.9	138.7	21.6
13/02/2019	6.91		54.88	0.53	14.81	2.51	6.00		3.94				0.34		1.13	94.39	17.22	145.82	19.22
15/05/2019	2.90		57.00	0.60	36.00	2.80	5.90	28.00	3.40	0.90		15.00	0.40	55.00	1.20	92.00	17.00	142.00	24.00
14/08/2019	3.40		53.00	0.80	27.00	3.10	5.40	33.00		0.60		15.00	0.30	41.00	1.20	90.00	16.00	141.00	23.00
13/11/2019	8.90		51.00	0.30	22.00	2.70	5.60								1.20	88.00	16.00	138.00	24.00

Ca	SW1	SW2	SW4
31/01/2011	3.40	3.90	
10/05/2011	4.50	3.60	24.00
9/08/2011	13.00	5.90	40.00
8/11/2011	19.00	9.90	58.00
6/02/2012	7.40	9.00	12.00
8/05/2012	3.50	3.30	11.00
6/08/2012	6.60	5.30	23.00
13/11/2012	16.00	7.50	19.00
13/02/2013	6.50	8.30	17.00
14/05/2013	5.00	3.30	24.00
6/08/2013	4.40	4.00	19.00
12/11/2013		8.40	40.00
11/02/2014		9.00	
13/05/2014	9.70	7.10	14.00
12/08/2014		6.20	
10/11/2014		7.50	
9/02/2015	11.00	8.30	10.00
11/05/2015	3.10	2.30	12.00
11/08/2015	3.90	3.10	18.00
10/11/2015	7.20	4.00	11.00
8/02/2016	10.26	6.08	20.87
9/05/2016	8.27	5.81	23.67
9/08/2016	3.80	4.10	19.79
7/11/2016		7.22	
7/02/2017		6.86	26.39
8/05/2017	8.20	3.46	13.31
8/08/2017	5.49	3.62	24.73
7/11/2017	12.34	8.29	16.32
14/02/2018		8.19	
9/05/2018	7.97	6.51	15.98
15/08/2018		3.99	
14/11/2018		9.16	23.88
10/02/2019		8.86	
15/05/2019	9.60	6.20	23.00
14/08/2019	7.80	4.80	19.00
13/11/2019		7.80	

Calcium (mg/L) - Groundwater



Calcium (mg/L) - Surface Water

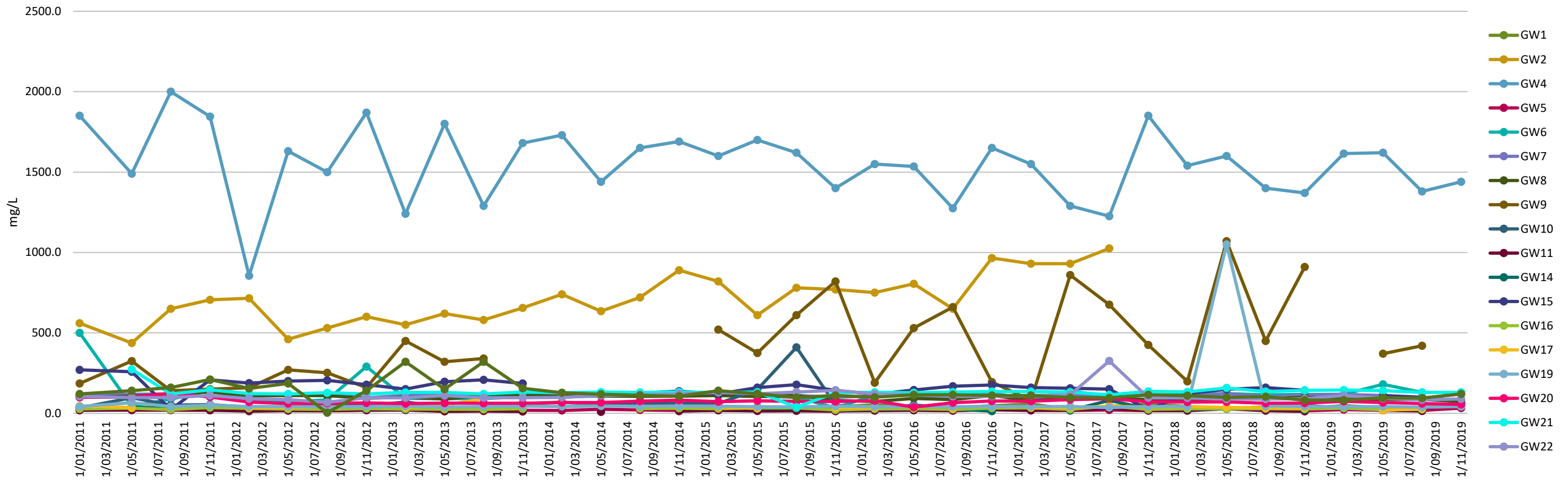




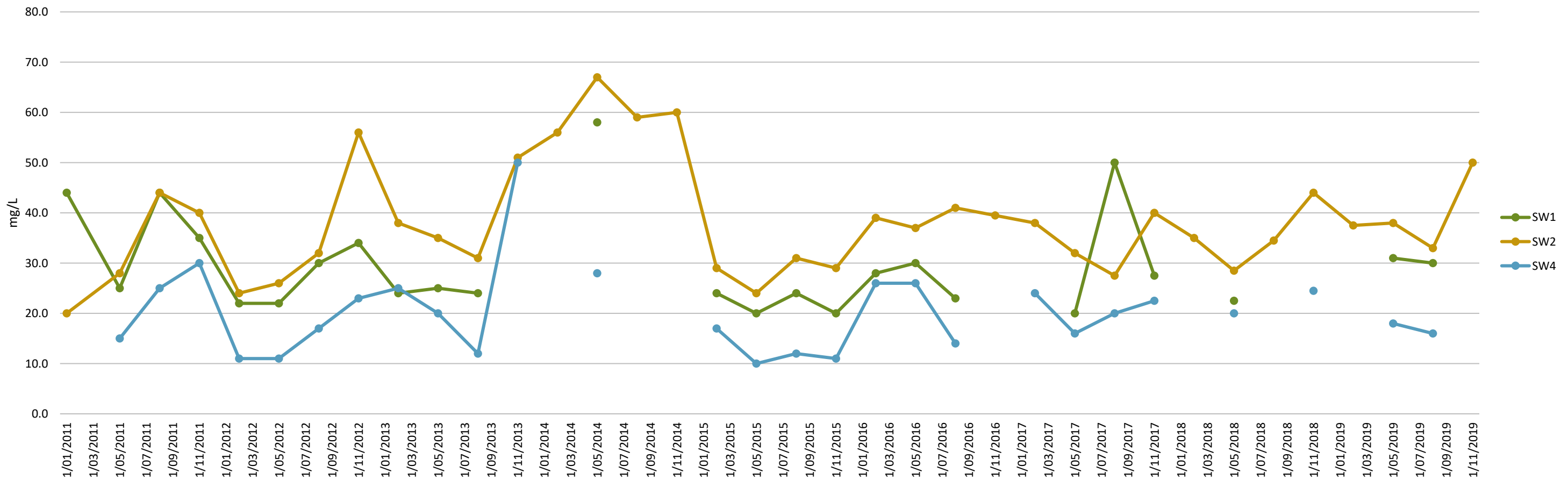
Chloride	GW1	GW2	GW4	GW5	GW6	GW7	GW8	GW9	GW10	GW11	GW14	GW15	GW16	GW17	GW19	GW20	GW21	GW22	GW23
31/01/2011	34.0	560.0	1850.0	22.0	500.0	112.0	99.0	185.0	33.0	18.0	35.0	270.0	27.0	45.0	42.0	100.0		105.0	120.0
10/05/2011	35.0	437.0	1490.0	19.0	44.0	118.0	106.0	324.0	97.0	21.0	36.0	258.0	31.0	36.0	65.0	100.0	273.0	98.0	140.0
9/08/2011	34.0	650.0	2000.0	19.0	88.0	120.0	120.0	140.0	50.0	20.0	32.0	22.5	23.0		42.0	125.0	120.0	98.0	160.0
8/11/2011	36.0	705.0	1845.0	18.0	140.0	140.0	132.0	150.0	54.0	19.0	34.0	208.0	36.0		50.0	101.0	146.0	110.0	210.0
6/02/2012	39.0	715.0	855.0	20.0	86.0	108.0	109.0	159.0	38.0	13.0	33.0	187.0	30.0	36.0	42.0	70.0	122.0	91.0	154.0
8/05/2012	34.0	460.0	1630.0	21.0	70.0	110.0	110.0	270.0	38.0	16.0	30.0	200.0	26.0	35.0	42.0	60.0	120.0	85.0	185.0
6/08/2012	31.0	530.0	1500.0	16.0	84.0	114.0	109.0	252.0	50.0	15.0	30.0	205.0	24.0	41.0	40.0	62.0	128.0	68.0	3.0
13/11/2012	56.0	600.0	1870.0	18.0	290.0	96.0	93.0	160.0	47.0	20.0	28.0	178.0	29.0		42.0	64.0	120.0	96.0	140.0
13/02/2013	27.0	550.0	1240.0	20.0	92.0	110.0	100.0	450.0	70.0	20.0	25.0	150.0	26.0	35.0	44.0	60.0	130.0	95.0	320.0
14/05/2013	32.0	620.0	1800.0	15.0	91.0	120.0	88.0	320.0	40.0	12.0	30.0	196.0	25.0	50.0	40.0	63.0	130.0	110.0	150.0
6/08/2013	40.0	580.0	1290.0	16.0	91.0	110.0	110.0	340.0	39.0	14.0	38.0	208.0	24.0	90.0	42.0	62.0	120.0	96.0	320.0
12/11/2013	59.0	655.0	1680.0	18.0	102.0	119.0	113.0		47.0	11.0	30.0	185.0	28.0		44.0	62.0	132.0	97.0	155.0
11/02/2014	70.0	740.0	1730.0	17.0	101.0	111.0	106.0		42.0						43.0	66.0	128.0	99.0	127.0
13/05/2014	54.0	635.0	1440.0	25.0	107.0	117.0	107.0		48.0	9.0		112.0			45.0	67.0	132.0	110.0	118.0
12/08/2014	77.0	720.0	1650.0	20.0	106.0	118.0	105.0		60.0			125.0	29.0		43.0	75.0	130.0	115.0	111.0
10/11/2014	60.0	890.0	1690.0	17.0	115.0	114.0	106.0		60.0	13.0		137.0	31.0		45.0	81.0	132.0	120.0	106.0
9/02/2015	28.0	820.0	1600.0	18.0	120.0	110.0	110.0	520.0	60.0	18.0	31.0	120.0	28.0	40.0	44.0	72.0	130.0	130.0	140.0
11/05/2015	27.0	610.0	1700.0	16.0	105.0	116.0	104.0	375.0	148.0	14.0	29.0	160.0	34.0	30.0	41.0	77.0	132.0	121.0	121.0
11/08/2015	32.0	780.0	1620.0	16.0	100.0	110.0	110.0	610.0	410.0	15.0	30.0	178.0	34.0		40.0	74.0	38.0	132.0	98.0
10/11/2015	40.0	770.0	1400.0	13.0	34.0	100.0	79.0	820.0	51.0	14.0	23.0	142.0	20.0	33.0	44.0	73.0	128.0	142.0	110.0
8/02/2016	53.0	750.0	1550.0	26.0	111.0	107.0	73.0	190.0	21.0	16.0	26.0	118.0	27.0	34.0	41.0	78.0	131.0	120.0	100.0
9/05/2016	40.0	805.0	1535.0	20.0	112.0	114.0	92.0	530.0	52.0	18.0	28.0	145.0	28.0		42.0	38.0	128.0	115.0	115.0
9/08/2016	36.0	650.0	1275.0	16.0	120.0	92.0	85.0	660.0	30.0	16.0	26.0	168.0	24.0	30.0	41.0	65.0	132.0	105.0	115.0
7/11/2016	46.0	965.0	1650.0		125.0	120.0	110.0	194.0		22.0	13.0	176.0	32.5		42.0	76.0	135.0	105.0	110.0
7/02/2017	58.0	930.0	1550.0	20.0	85.0	92.0	78.0	80.0	44.0	17.0		160.0	33.0	35.0	42.0	75.0	135.0	110.0	110.0
8/05/2017	23.0	930.0	1290.0	17.0	141.0	113.0	93.0	860.0		18.0	17.0	155.0	24.0	36.0	42.0	85.0	132.0	115.0	98.0
8/08/2017	35.0	1025.0	1225.0	20.0	100.0	95.0	90.0	675.0	45.0	30.0	80.0	150.0	45.0	42.5	35.0	90.0	115.0	325.0	95.0
7/11/2017	58.0		1850.0	16.0	115.0	113.0	86.0	425.0	42.0	17.5	27.5	22.5	23.5	40.0	41.5	72.0	136.0	96.0	115.0
14/02/2018	43.0		1540.0	17.0	115.0	107.0	80.0	198.0		16.0	26.0	122.0	28.0	41.0	42.0	70.0	133.0	95.0	109.0
9/05/2018	28.5		1600.0		122.0	123.0	97.0	1070.0		28.5	28.5	148.5	27.5	37.0	1050.0	71.0	157.5	87.5	99.0
15/08/2018	40.0		1400.0	19.0	115.0	102.5	87.5	450.0		16.0		160.0	28.5	34.0	45.0	62.5	135.0	87.5	102.5
14/11/2018	30.0		1370.0	15.0	117.0	113.0	100.0	910.0	49.0	12.0	20.0	143.0	27.0	31.0	42.0	63.0	142.0	90.0	82.0
13/02/2019	47.50		1615	22.50	118.00	117.00	89.00		31.00				31.50		41.00	74.00	145.00	110.00	82.00
15/05/2019	34.00		1620	18.00	180.00	110.00	85.00	370.00	40.00	18.00		110.00	22.00	18.00	42.00	67.00	140.00	92.00	95.00
14/08/2019	36.00		1380	17.00	130.00	93.00	86.00	420.00		14.00		100.00	24.00	28.00	38.00	60.00	130.00	84.00	94.00
13/11/2019	60.00		1440	32.00	130.00	120.00	73.00								42.00	55.00	130.00	89.00	120.00

Chloride	SW1	SW2	SW4
31/01/2011	44.0	20.0	
10/05/2011	25.0	28.0	15.0
9/08/2011	44.0	44.0	25.0
8/11/2011	35.0	40.0	30.0
6/02/2012	22.0	24.0	11.0
8/05/2012	22.0	26.0	11.0
6/08/2012	30.0	32.0	17.0
13/11/2012	34.0	56.0	23.0
13/02/2013	24.0	38.0	25.0
14/05/2013	25.0	35.0	20.0
6/08/2013	24.0	31.0	12.0
12/11/2013		51.0	50.0
11/02/2014		56.0	
13/05/2014	58.0	67.0	28.0
12/08/2014		59.0	
10/11/2014		60.0	
9/02/2015	24.0	29.0	17.0
11/05/2015	20.0	24.0	10.0
11/08/2015	24.0	31.0	12.0
10/11/2015	20.0	29.0	11.0
8/02/2016	28.0	39.0	26.0
9/05/2016	30.0	37.0	26.0
9/08/2016	23.0	41.0	14.0
7/11/2016		39.5	
7/02/2017		38.0	24.0
8/05/2017	20.0	32.0	16.0
8/08/2017	50.0	27.5	20.0
7/11/2017	27.5	40.0	22.5
14/02/2018		35.0	
9/05/2018	22.5	28.5	20.0
15/08/2018		34.5	
14/11/2018		44.0	24.5
10/02/2019		37.50	
15/05/2019	31.00	38.00	18.00
14/08/2019	30.00	33.00	16.00
13/11/2019		50.00	

### Chloride (mg/L) - Groundwater



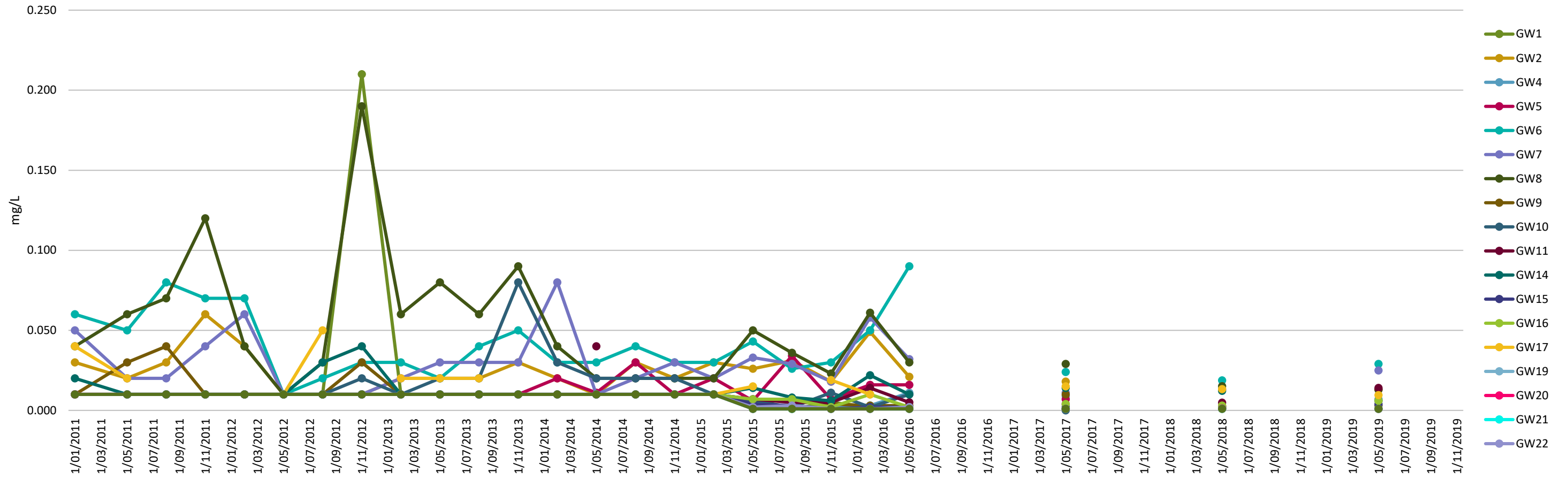
### Chloride (mg/L) - Surface Water



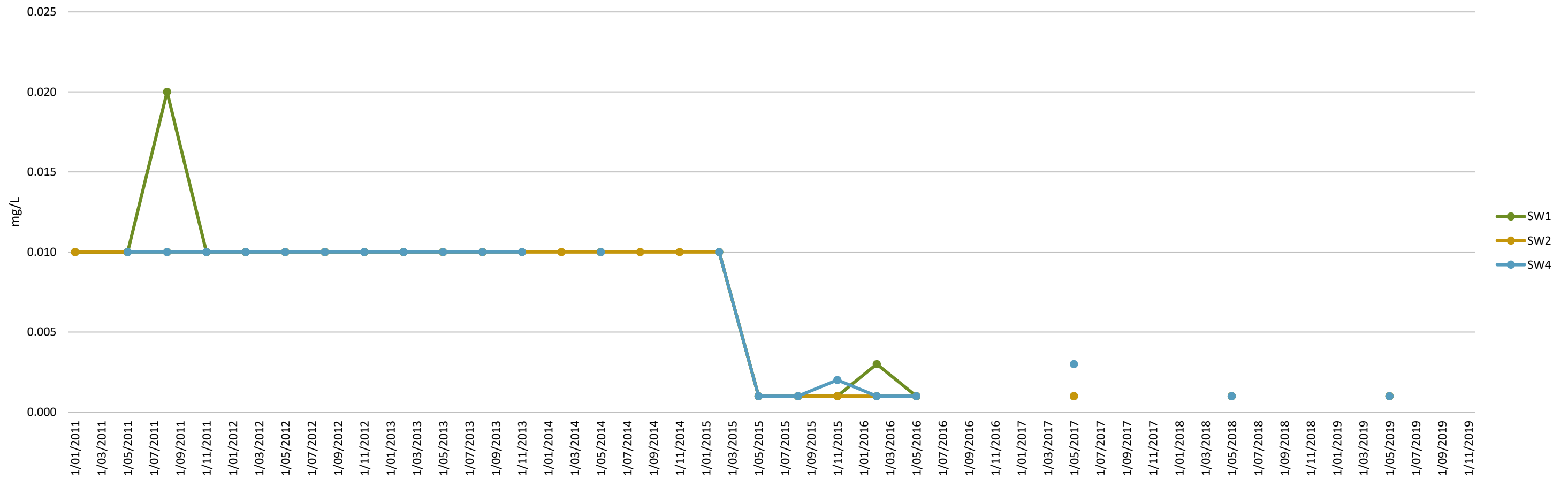
Chromium	GW1	GW2	GW4	GW5	GW6	GW7	GW8	GW9	GW10	GW11	GW14	GW15	GW16	GW17	GW19	GW20	GW21	GW22	GW23
31/01/2011	0.010	0.030	0.010	0.010	0.060	0.050	0.040	0.010	0.010	0.010	0.020	0.010	0.010	0.040	0.010	0.010		0.010	0.010
10/05/2011	0.010	0.020	0.010	0.010	0.050	0.020	0.060	0.030	0.010	0.010	0.010	0.010	0.010	0.020	0.010	0.010	0.010	0.010	0.010
9/08/2011	0.010	0.030	0.010	0.010	0.080	0.020	0.070	0.040	0.010	0.010	0.010	0.010	0.010		0.010	0.010	0.010	0.010	0.010
8/11/2011	0.010	0.060	0.010	0.010	0.070	0.040	0.120	0.010	0.010	0.010	0.010	0.010	0.010		0.010	0.010	0.010	0.010	0.010
6/02/2012	0.010	0.040	0.010	0.010	0.070	0.060	0.040	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
8/05/2012	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
6/08/2012	0.010	0.010	0.010	0.010	0.020	0.010	0.030	0.010	0.010	0.010	0.030	0.010	0.010	0.050	0.010	0.010	0.010	0.010	0.010
13/11/2012	0.210	0.010	0.010	0.010	0.030	0.010	0.190	0.030	0.020	0.010	0.040	0.010	0.010		0.010	0.010	0.010	0.010	0.010
13/02/2013	0.010	0.020	0.010	0.010	0.030	0.020	0.060	0.010	0.010	0.010	0.010	0.010	0.010	0.020	0.010	0.010	0.010	0.010	0.010
14/05/2013	0.010	0.020	0.010	0.010	0.020	0.030	0.080	0.010	0.020	0.010	0.010	0.010	0.010	0.020	0.010	0.010	0.010	0.010	0.010
6/08/2013	0.010	0.020	0.010	0.010	0.040	0.030	0.060	0.010	0.020	0.010	0.010	0.010	0.010	0.020	0.010	0.010	0.010	0.010	0.010
12/11/2013	0.010	0.030	0.010	0.010	0.050	0.030	0.090		0.080	0.010	0.010	0.010	0.010		0.010	0.010	0.010	0.010	0.010
11/02/2014	0.010	0.020	0.010	0.020	0.030	0.080	0.040		0.030						0.010	0.010	0.010	0.010	0.010
13/05/2014	0.010	0.010	0.010	0.011	0.030	0.010	0.020		0.020	0.040		0.010			0.010	0.010	0.010	0.010	0.010
12/08/2014	0.010	0.030	0.010	0.030	0.040	0.020	0.020		0.020			0.010	0.010		0.010	0.010	0.010	0.010	0.010
10/11/2014	0.010	0.020	0.010	0.010	0.030	0.030	0.020		0.020	0.010		0.010	0.010		0.010	0.010	0.010	0.010	0.010
9/02/2015	0.010	0.030	0.010	0.020	0.030	0.020	0.020	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
11/05/2015	0.001	0.026	0.007	0.006	0.043	0.033	0.050	0.005	0.006	0.007	0.014	0.004	0.007	0.015	0.001	0.001	0.001	0.002	0.001
11/08/2015	0.001	0.031	0.007	0.034	0.026	0.029	0.036	0.007	0.002	0.005	0.008	0.003	0.007		0.001	0.002	0.001	0.003	0.001
10/11/2015	0.005	0.018	0.003	0.007	0.030	0.018	0.023	0.004	0.011	0.005	0.006	0.001	0.002	0.019	0.001	0.001	0.001	0.001	0.001
8/02/2016	0.002	0.049	0.003	0.016	0.050	0.058	0.061	0.003	0.002	0.014	0.022	0.002	0.010	0.010	0.001	0.001	0.001	0.001	0.001
9/05/2016	0.002	0.021	0.011	0.016	0.090	0.032	0.030	0.003	0.010	0.005	0.010	0.002	0.002		0.001	0.001	0.001	0.002	0.001
9/08/2016																			
7/11/2016																			
7/02/2017																			
8/05/2017	0.001	0.018	0.009	0.007	0.024	0.011	0.029	0.010		0.004	0.014	0.002	0.004	0.015	0.001	0.001	0.001	0.001	0.001
8/08/2017																			
7/11/2017																			
14/02/2018																			
9/05/2018	0.001	0.002			0.019	0.013	0.015	0.003		0.005	0.012	0.002	0.003	0.013	0.001	0.001	0.001	0.001	0.001
15/08/2018																			
14/11/2018																			
13/02/2019																			
15/05/2019	0.00		0.01	0.01	0.03	0.03	0.01	0.00	0.01	0.01		0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
14/08/2019																			
13/11/2019																			

Chromium	SW1	SW2	SW4
31/01/2011	0.010	0.010	
10/05/2011	0.010	0.010	0.010
9/08/2011	0.020	0.010	0.010
8/11/2011	0.010	0.010	0.010
6/02/2012	0.010	0.010	0.010
8/05/2012	0.010	0.010	0.010
6/08/2012	0.010	0.010	0.010
13/11/2012	0.010	0.010	0.010
13/02/2013	0.010	0.010	0.010
14/05/2013	0.010	0.010	0.010
6/08/2013	0.010	0.010	0.010
12/11/2013		0.010	0.010
11/02/2014		0.010	
13/05/2014	0.010	0.010	0.010
12/08/2014		0.010	
10/11/2014		0.010	
9/02/2015	0.010	0.010	0.010
11/05/2015	0.001	0.001	0.001
11/08/2015	0.001	0.001	0.001
10/11/2015	0.001	0.001	0.002
8/02/2016	0.003	0.001	0.001
9/05/2016	0.001	0.001	0.001
9/08/2016			
7/11/2016			
7/02/2017			
8/05/2017	0.001	0.001	0.003
8/08/2017			
7/11/2017			
14/02/2018			
9/05/2018	0.001	0.001	0.001
15/08/2018			
14/11/2018			
10/02/2019			
15/05/2019	0.00	0.00	0.00
14/08/2019			
13/11/2019			

Total Chromium (mg/L) - Groundwater



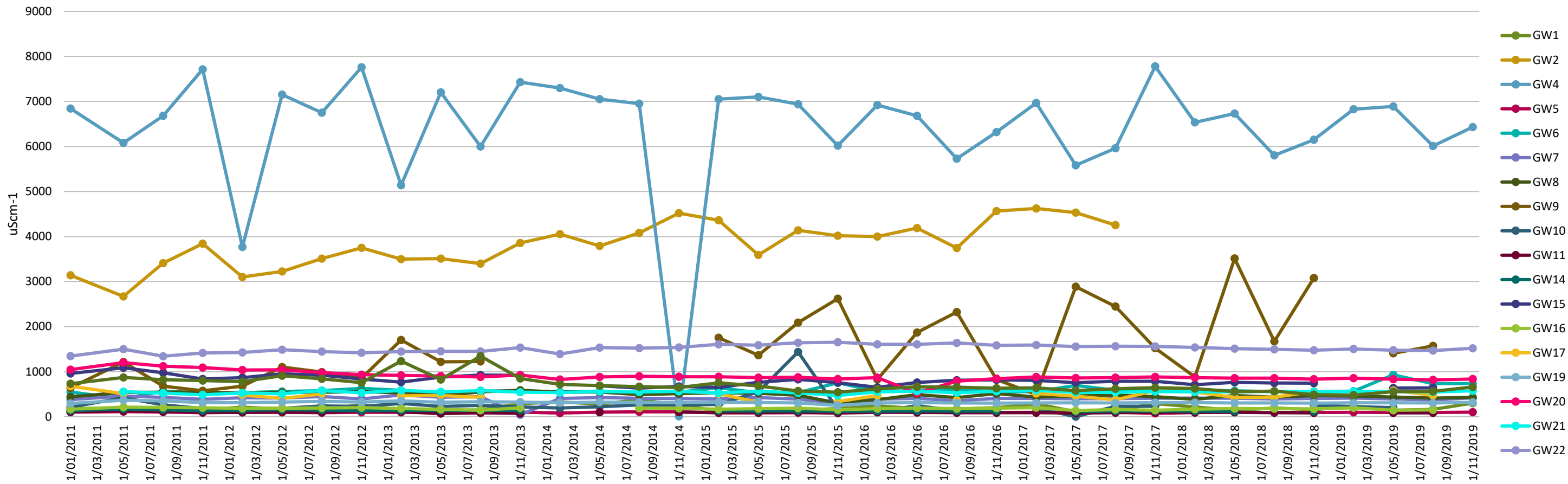
Total Chromium (mg/L) - Surface Water



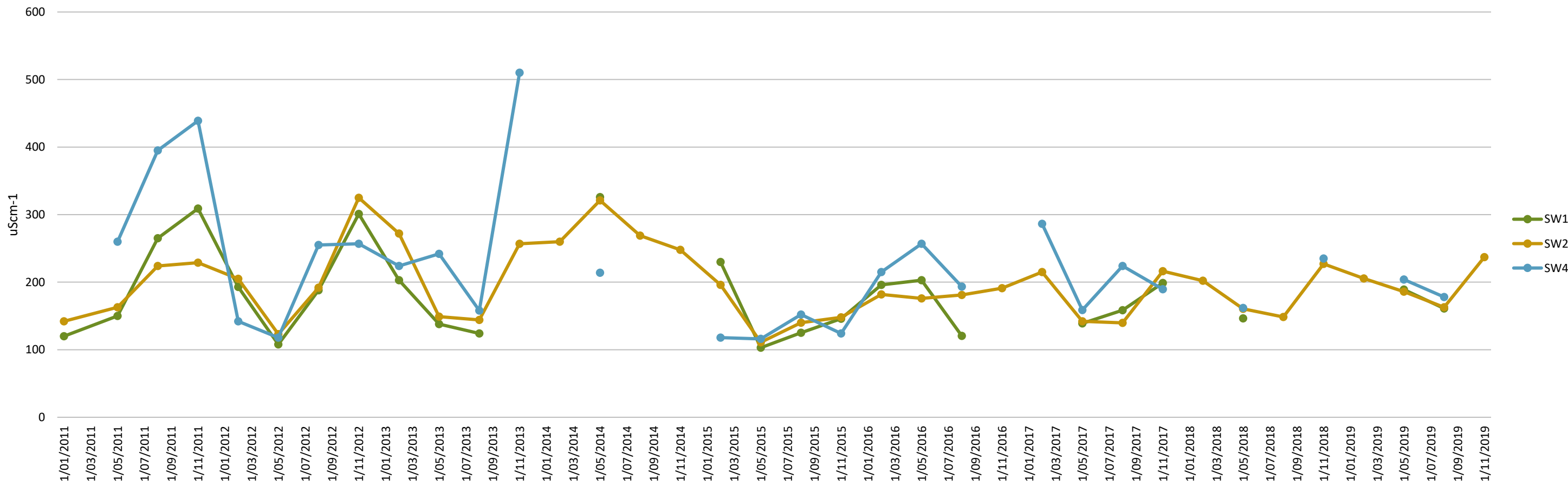
Cond	GW1	GW2	GW4	GW5	GW6	GW7	GW8	GW9	GW10	GW11	GW14	GW15	GW16	GW17	GW19	GW20	GW21	GW22	GW23
31/01/2011	184	3141	6843	99	546	379	438	639	212	109	137	958	165	677	292	1045		1346	732
10/05/2011	181	2671	6080	111	399	458	539	1216	419	131	171	1086	212	514	365	1201	556	1498	872
9/08/2011	179	3410	6680	106	567	428	543	680	261	114	156	975	205		350	1123	524	1343	822
8/11/2011	154	3842	7715	90	530	387	546	576	182	101	133	837	196		311	1092	487	1416	803
6/02/2012	211	3100	3770	97	532	420	520	679	181	97	144	867	185	481	311	1038	527	1425	777
8/05/2012	171	3225	7151	96	559	411	541	1101	185	104	153	953	191	406	325	1040	511	1488	911
6/08/2012	160	3510	6750	91	578	449	544	990	241	98	146	923	192	504	339	981	580	1447	841
13/11/2012	266	3750	7760	95	630	394	557	854	228	135	131	838	200		324	934	533	1418	757
13/02/2013	130	3500	5140	95	586	483	529	1705	292	111	140	769	183	462	353	919	582	1444	1233
14/05/2013	136	3510	7200	88	521	432	463	1218	229	68	139	880	162	469	321	902	551	1453	824
6/08/2013	150	3400	6000	84	573	445	552	1226	251	88	139	926	144	430	331	884	578	1451	1344
12/11/2013	289	3858	7430	101	565	42	587		216	74	145	919	198		325	924	543	1535	847
11/02/2014	328	4052	7298	83	548	405	545		195						309	825	536	1391	718
13/05/2014	282	3790	7050	100	567	425	547		219	100		687			326	882	561	1534	692
12/08/2014	375	4080	6950	109	522	409	490		262			634	191		316	899	548	1524	668
10/11/2014	262	4520	7	109	544	402	512		253	100		671	187		314	887	562	1537	647
9/02/2015	122	4360	7050	86	643	395	533	1754	275	94	130	651	168	510	321	886	526	1606	753
11/05/2015	130	3590	7100	85	532	423	522	1363	551	93	129	762	179	320	315	869	568	1588	681
11/08/2015	149	4140	6940	89	533	389	476	2090	1438	101	129	829	189		304	875	528	1643	569
10/11/2015	177	4020	6020	85	753	301	303	2620	164	82	121	754	156	334	252	838	471	1653	542
8/02/2016	238	4000	6920	120	564	391	377	826	106	98	122	651	176	470	306	869	552	1606	616
9/05/2016	180	4190	6680	94	571	406	490	1868	248	96	127	759	193		311	521	567	1607	663
9/08/2016	166	3744	5728	92	609	354	425	2325	129	91	126	810	179	366	304	791	530	1638	655
7/11/2016	202	4565	6321	92	550	405	514	827		87	124	816	189		302	844	562	1583	632
7/02/2017	288	4624	6965	96	557	407	435	493	194	89		804	202	519	305	883	583	1591	641
8/05/2017	110	4532	5581	104	694	398	459	2886	NT	82	109	755	136	455	308	862	541	1555	579
8/08/2017	135	4255	5962	102	587	401	482	2447	231	90	126	787	159	373	306	867	540	1565	619
7/11/2017	289		7777	74	610	408	442	1524	231	99	125	786	142	580	312	884	558	1561	646
14/02/2018	216		6535	94	590	412	386	884		92	122	710	166	548	313	868	553	1537	625
9/05/2018	138		6730		573	407	471	3513		97	121	764	183	430	306	856	551	1510	555
15/08/2018	194		5801	94	557	395	431	1671		90		748	178	431	303	854	565	1496	567
14/11/2018	153		6150	94	554	404	472	3080	256	86	118	744	173	558	300	833	553	1477	488
13/02/2019	236.60		6826	96.20	568.50	412.10	458.70		224.40				198.00		307.80	856.10	560.70	1503.50	478.80
15/05/2019	145.00		6890	92.00	930.00	395.00	434.00	1406.00	199.00	87.00		637.00	143.00	584.00	307.00	834.00	559.00	1478.00	557.00
14/08/2019	162.00		6010	94.00	734.00	369.00	413.00	1574.00		86.00		639.00	152.00	473.00	304.00	817.00	549.00	1468.00	562.00
13/11/2019	300.00		6429	100.00	738.00	422.00	430.00								320.00	836.00	574.00	1518.00	659.00

Cond	SW1	SW2	SW4
31/01/2011	120	142	
10/05/2011	150	163	260
9/08/2011	265	224	395
8/11/2011	309	229	439
6/02/2012	193	205	142
8/05/2012	108	123	118
6/08/2012	188	192	255
13/11/2012	301	325	257
13/02/2013	203	272	224
14/05/2013	138	149	242
6/08/2013	124	144	158
12/11/2013		257	510
11/02/2014		260	
13/05/2014	326	321	214
12/08/2014		269	
10/11/2014		248	
9/02/2015	230	196	118
11/05/2015	103	111	116
11/08/2015	125	140	152
10/11/2015	146	148	124
8/02/2016	196	182	215
9/05/2016	203	176	257
9/08/2016	121	181	194
7/11/2016		191	
7/02/2017		215	287
8/05/2017	139	142	159
8/08/2017	159	140	224
7/11/2017	199	216	190
14/02/2018		202	
9/05/2018	146	161	162
15/08/2018		148	
14/11/2018		227	235
10/02/2019		205.50	
15/05/2019	189.00	186.00	204.00
14/08/2019	161.00	163.00	178.00
13/11/2019		237.00	

### Conductivity (uScm-1) - Groundwater



### Conductivity (uScm-1) - Surface Water

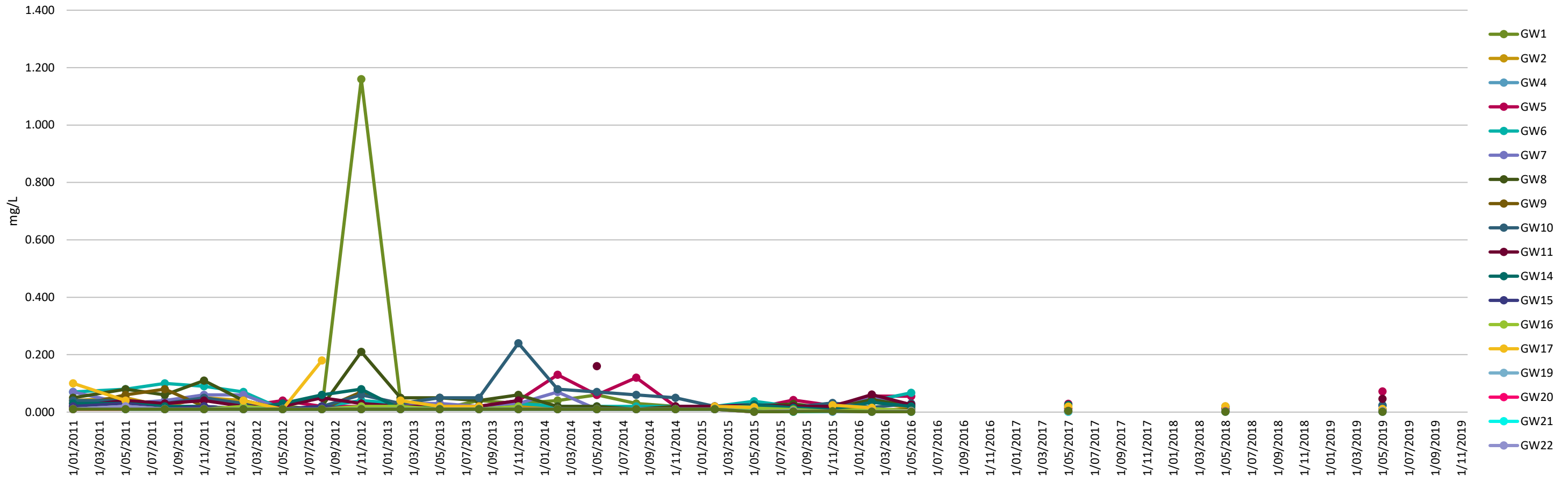




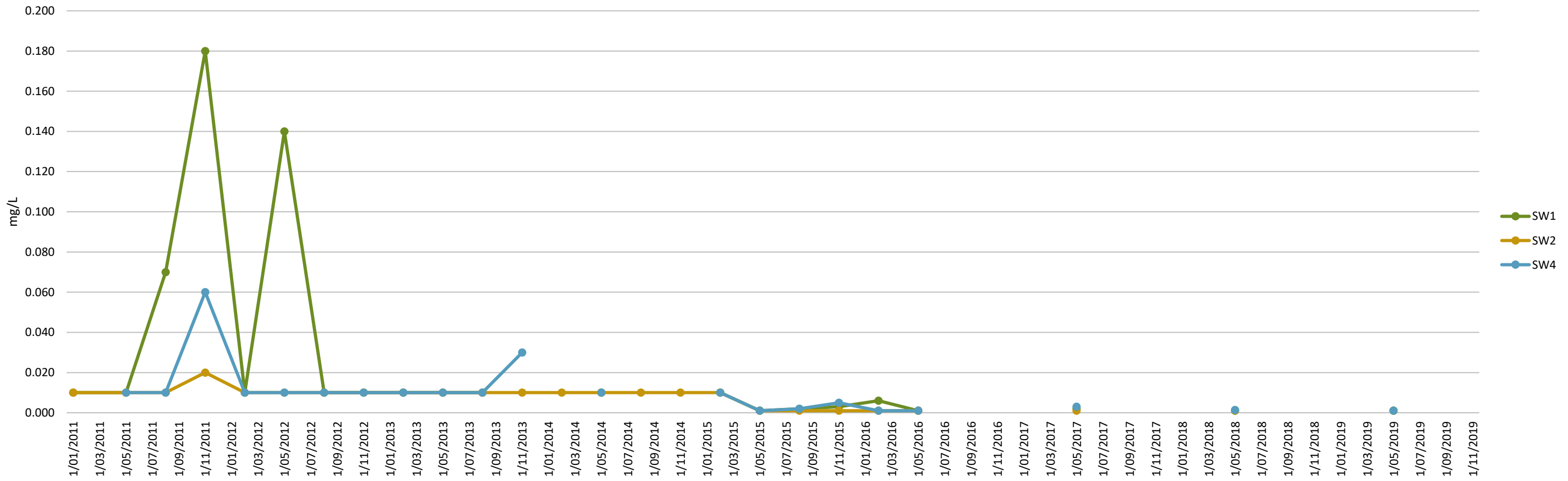
Cu	GW1	GW2	GW4	GW5	GW6	GW7	GW8	GW9	GW10	GW11	GW14	GW15	GW16	GW17	GW19	GW20	GW21	GW22	GW23
31/01/2011	0.010	0.040	0.010	0.030	0.070	0.070	0.050	0.020	0.040	0.020	0.030	0.020	0.010	0.100	0.010	0.010		0.010	0.010
10/05/2011	0.040	0.050	0.020	0.030	0.080	0.030	0.080	0.060	0.040	0.040	0.030	0.030	0.020	0.040	0.020	0.010	0.010	0.020	0.010
9/08/2011	0.010	0.020	0.020	0.020	0.100	0.040	0.060	0.080	0.030	0.030	0.020	0.010	0.010		0.010	0.010	0.010	0.010	0.010
8/11/2011	0.010	0.050	0.020	0.010	0.090	0.060	0.110	0.020	0.050	0.040	0.020	0.020	0.010		0.010	0.010	0.010	0.010	0.010
6/02/2012	0.010	0.040	0.010	0.020	0.070	0.060	0.040	0.010	0.030	0.020	0.010	0.010	0.020	0.040	0.010	0.010	0.010	0.010	0.010
8/05/2012	0.020	0.010	0.010	0.040	0.010	0.010	0.010	0.010	0.010	0.020	0.030	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
6/08/2012	0.010	0.010	0.010	0.020	0.020	0.010	0.020	0.010	0.020	0.050	0.060	0.020	0.010	0.180	0.010	0.010	0.010	0.010	0.010
13/11/2012	1.160	0.010	0.010	0.020	0.040	0.010	0.210	0.070	0.060	0.030	0.080	0.010	0.020		0.010	0.010	0.010	0.010	0.010
13/02/2013	0.040	0.020	0.020	0.010	0.030	0.030	0.050	0.020	0.030	0.020	0.010	0.010	0.020	0.040	0.010	0.010	0.010	0.010	0.010
14/05/2013	0.010	0.010	0.010	0.020	0.020	0.030	0.050	0.020	0.050	0.020	0.020	0.010	0.010	0.020	0.010	0.010	0.010	0.010	0.010
6/08/2013	0.040	0.010	0.010	0.020	0.020	0.020	0.040	0.010	0.050	0.020	0.010	0.010	0.010	0.020	0.010	0.010	0.010	0.010	0.010
12/11/2013	0.030	0.020	0.010	0.040	0.030	0.030	0.060		0.240	0.040	0.020	0.010	0.020		0.010	0.010	0.010	0.010	0.010
11/02/2014	0.040	0.010	0.010	0.130	0.020	0.070	0.020		0.080						0.010	0.010	0.010	0.010	0.010
13/05/2014	0.060	0.010	0.010	0.060	0.020	0.010	0.020		0.070	0.160		0.010			0.010	0.010	0.010	0.010	0.010
12/08/2014	0.030	0.020	0.010	0.120	0.020	0.010	0.010		0.060			0.010	0.010		0.010	0.010	0.010	0.010	0.010
10/11/2014	0.020	0.010	0.010	0.020	0.020	0.020	0.020		0.050	0.020		0.010	0.010		0.010	0.010	0.010	0.010	0.010
9/02/2015	0.010	0.010	0.020	0.010	0.020	0.020	0.010	0.010	0.020	0.020	0.010	0.010	0.010	0.020	0.010	0.010	0.010	0.010	0.010
11/05/2015	0.001	0.015	0.006	0.014	0.038	0.012	0.021	0.008	0.017	0.025	0.026	0.004	0.014	0.017	0.001	0.001	0.002	0.001	0.001
11/08/2015	0.001	0.023	0.007	0.042	0.019	0.022	0.028	0.015	0.017	0.020	0.015	0.004	0.009		0.001	0.003	0.001	0.004	0.002
10/11/2015	0.015	0.010	0.003	0.023	0.020	0.013	0.013	0.012	0.032	0.020	0.008	0.005	0.003	0.024	0.001	0.002	0.001	0.002	0.003
8/02/2016	0.005	0.036	0.003	0.056	0.039	0.048	0.044	0.008	0.016	0.061	0.034	0.005	0.012	0.015	0.001	0.001	0.001	0.002	0.001
9/05/2016	0.006	0.014	0.010	0.055	0.067	0.027	0.021	0.009	0.030	0.026	0.020	0.004	0.004		0.001	0.002	0.001	0.003	0.001
9/08/2016																			
7/11/2016																			
7/02/2017																			
8/05/2017	0.002	0.013	0.006	0.029	0.021	0.011	0.022	0.001		0.014	0.025	0.005	0.005	0.019	0.001	0.004	0.001	0.003	0.004
8/08/2017																			
7/11/2017																			
14/02/2018																			
9/05/2018	0.003		0.002		0.015	0.011	0.010	0.007		0.019	0.020	0.003	0.004	0.021	0.002	0.003	0.001	0.002	0.001
15/08/2018																			
14/11/2018																			
13/02/2019																			
15/05/2019	0.00		0.01	0.07	0.02	0.02	0.01	0.01	0.02	0.05		0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
14/08/2019																			
13/11/2019																			

Cu	SW1	SW2	SW4
31/01/2011	0.010	0.010	
10/05/2011	0.010	0.010	0.010
9/08/2011	0.070	0.010	0.010
8/11/2011	0.180	0.020	0.060
6/02/2012	0.010	0.010	0.010
8/05/2012	0.140	0.010	0.010
6/08/2012	0.010	0.010	0.010
13/11/2012	0.010	0.010	0.010
13/02/2013	0.010	0.010	0.010
14/05/2013	0.010	0.010	0.010
6/08/2013	0.010	0.010	0.010
12/11/2013		0.010	0.030
11/02/2014		0.010	
13/05/2014	0.010	0.010	0.010
12/08/2014		0.010	
10/11/2014		0.010	
9/02/2015	0.010	0.010	0.010
11/05/2015	0.001	0.001	0.001
11/08/2015	0.002	0.001	0.002
10/11/2015	0.003	0.001	0.005
8/02/2016	0.006	0.001	0.001
9/05/2016	0.001	0.001	0.001
9/08/2016			
7/11/2016			
7/02/2017			
8/05/2017	0.002	0.001	0.003
8/08/2017			
7/11/2017			
14/02/2018			
9/05/2018	0.001	0.001	0.001
15/08/2018			
14/11/2018			
10/02/2019			
15/05/2019	0.00	0.00	0.00
14/08/2019			
12/11/2019			

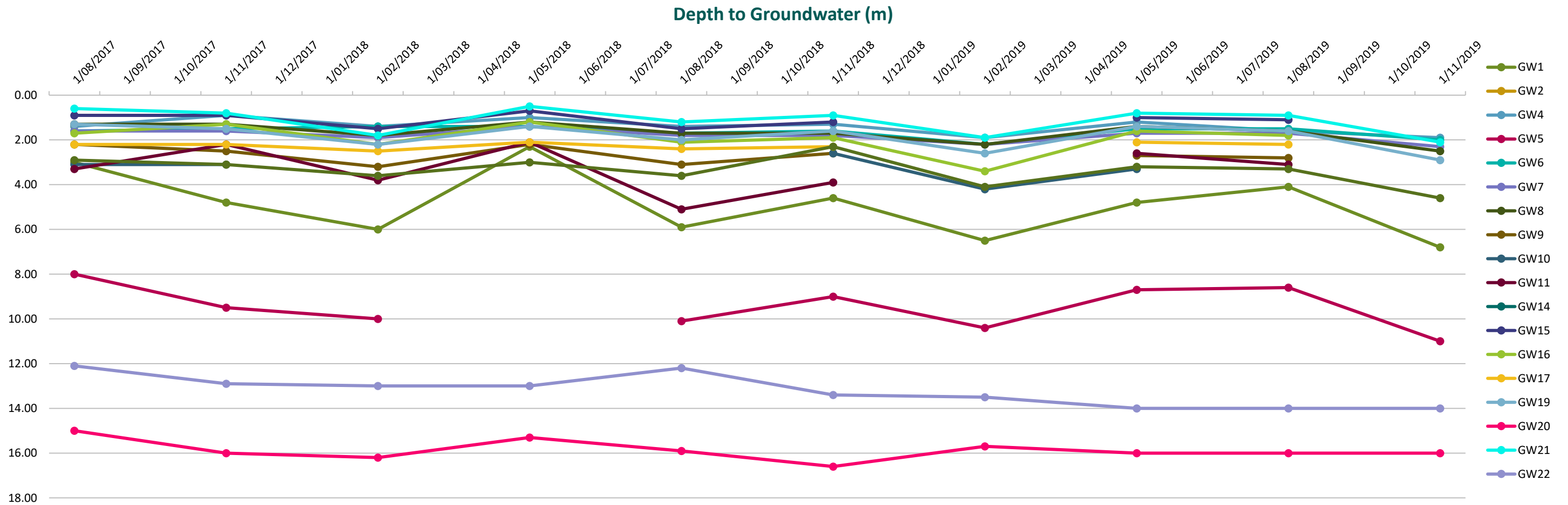
### Total Copper (mg/L) - Groundwater



### Total Copper (mg/L) - Surface Water

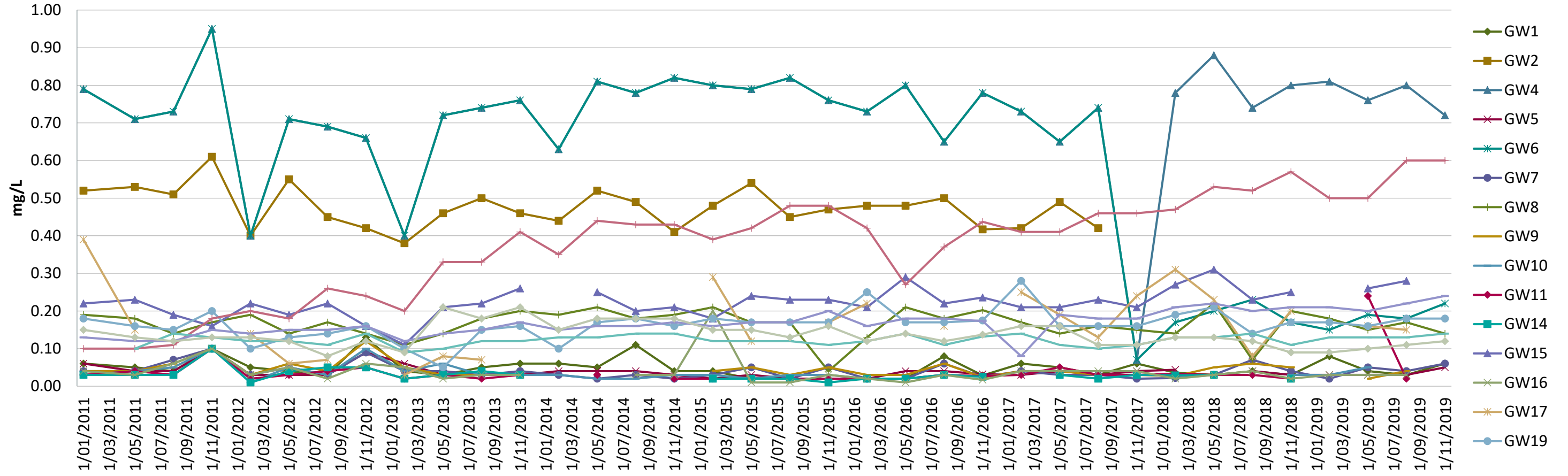


Depth to Groundwater	GW1	GW2	GW4	GW5	GW6	GW7	GW8	GW9	GW10	GW11	GW14	GW15	GW16	GW17	GW19	GW20	GW21	GW22	GW23
8/08/2017	3.00	1.40	1.40	8.00	1.60	1.60	1.30	2.20	3.10	3.30		0.90	1.70	2.20	1.30	15.00	0.60	12.10	2.90
7/11/2017	4.80		0.90	9.50	1.50	1.60	1.30	2.50	3.10	2.20		0.90	1.30	2.20	1.50	16.00	0.80	12.90	3.10
14/02/2018	6.00		1.40	10.00	1.40	1.90	1.80	3.20		3.80		1.50	2.20	2.50	2.20	16.20	1.80	13.00	3.60
9/05/2018	2.30		1.00		1.40	1.40	1.20	2.20		2.10		0.70	1.20	2.10	1.40	15.30	0.50	13.00	3.00
15/08/2018	5.90		1.40	10.10	1.70	1.80	1.70	3.10		5.10		1.50	2.10	2.40	2.00	15.90	1.20	12.20	3.60
14/11/2018	4.60		1.30	9.00	1.60	1.80	1.70	2.60	2.60	3.90		1.20	1.90	2.30	1.60	16.60	0.90	13.40	2.30
13/02/2019	6.50		1.90	10.40	2.20	2.20	2.20		4.20				3.40		2.60	15.70	1.90	13.50	4.10
15/05/2019	4.80		1.20	8.70	1.50	1.70	1.40	2.70	3.30	2.60		1.00	1.60	2.10	1.40	16.00	0.80	14.00	3.20
14/08/2019	4.10		1.60	8.60	1.50	1.70	1.60	2.80		3.10		1.10	1.80	2.20	1.60	16.00	0.90	14.00	3.30
13/11/2019	6.80		1.90	11.00	2.00	2.30	2.50								2.90	16.00	2.10	14.00	4.60



Flouride	GM1	GM2	GM4	GM5	GM6	GM7	GM8	GM9	GM10	GM11	GM14	GM15	GM16	GM17	GM19	GM20	GM21	GM22	GM23
31/01/2011	0.06	0.52	0.79	0.06	0.79	0.04	0.19	0.04	0.03	0.03	0.03	0.22	0.04	0.39	0.18	0.10		0.13	0.15
10/05/2011	0.05	0.53	0.71	0.04	0.71	0.04	0.18	0.04	0.04	0.04	0.03	0.23	0.03	0.15	0.16	0.10	0.10	0.12	0.13
9/08/2011	0.04	0.51	0.73	0.04	0.73	0.07	0.14	0.06	0.05	0.03	0.03	0.19	0.06		0.15	0.11	0.14	0.12	0.12
8/11/2011	0.10	0.61	0.95	0.10	0.95	0.10	0.17	0.10	0.10	0.10	0.10	0.16	0.10		0.20	0.18	0.13	0.15	0.13
6/02/2012	0.05	0.40	0.40	0.03	0.40	0.03	0.19	0.03	0.01	0.02	0.01	0.22	0.03	0.14	0.10	0.20	0.12	0.14	0.13
8/05/2012	0.04	0.55	0.71	0.03	0.71	0.05	0.14	0.06	0.05	0.03	0.04	0.19	0.05	0.06	0.13	0.18	0.12	0.15	0.12
6/08/2012	0.03	0.45	0.69	0.03	0.69	0.03	0.17	0.04	0.03	0.04	0.05	0.22	0.02	0.07	0.14	0.26	0.11	0.15	0.08
13/11/2012	0.13	0.42	0.66	0.09	0.66	0.09	0.14	0.12	0.10	0.05	0.05	0.16	0.06		0.16	0.24	0.14	0.16	0.12
13/02/2013	0.04	0.38	0.40	0.06	0.40	0.04	0.11	0.05	0.04	0.02	0.02	0.11	0.05	0.03	0.10	0.20	0.09	0.12	0.09
14/05/2013	0.03	0.46	0.72	0.03	0.72	0.04	0.14	0.03	0.06	0.03	0.03	0.21	0.02	0.08	0.05	0.33	0.10	0.14	0.21
6/08/2013	0.05	0.50	0.74	0.03	0.74	0.03	0.18	0.03	0.03	0.02	0.04	0.22	0.03	0.07	0.15	0.33	0.12	0.15	0.18
12/11/2013	0.06	0.46	0.76	0.03	0.76	0.04	0.20		0.03	0.03	0.03	0.26	0.03		0.16	0.41	0.12	0.17	0.21
11/02/2014	0.06	0.44	0.63	0.04	0.63	0.03	0.19		0.03						0.10	0.35	0.13	0.15	0.15
13/05/2014	0.05	0.52	0.81	0.04	0.81	0.02	0.21		0.02	0.03		0.25			0.17	0.44	0.13	0.16	0.18
12/08/2014	0.11	0.49	0.78	0.04	0.78	0.03	0.18		0.02			0.20	0.03		0.18	0.43	0.14	0.16	0.18
10/11/2014	0.04	0.41	0.82	0.03	0.82	0.02	0.19		0.03	0.02		0.21	0.03		0.16	0.43	0.14	0.17	0.18
9/02/2015	0.04	0.48	0.80	0.02	0.80	0.03	0.21	0.04	0.03	0.02	0.02	0.18	0.20	0.29	0.18	0.39	0.12	0.16	0.15
11/05/2015	0.02	0.54	0.79	0.03	0.79	0.05	0.17	0.05	0.02	0.02	0.02	0.24	0.01	0.12	0.17	0.42	0.12	0.17	0.15
11/08/2015	0.02	0.45	0.82	0.02	0.82	0.02	0.17	0.03	0.03	0.02	0.02	0.23	0.01		0.17	0.48	0.12	0.17	0.13
10/11/2015	0.02	0.47	0.76	0.02	0.76	0.05	0.04	0.05	0.03	0.02	0.01	0.23	0.03	0.17	0.17	0.48	0.11	0.20	0.16
8/02/2016	0.02	0.48	0.73	0.02	0.73	0.02	0.13	0.03	0.02	0.02	0.02	0.21	0.02	0.22	0.25	0.42	0.12	0.16	0.12
9/05/2016	0.02	0.48	0.80	0.04	0.80	0.02	0.21	0.03	0.02	0.02	0.02	0.29	0.01		0.17	0.27	0.14	0.18	0.14
9/08/2016	0.08	0.50	0.65	0.04	0.65	0.06	0.18	0.06	0.03	0.03	0.03	0.22	0.03	0.16	0.17	0.37	0.11	0.18	0.12
7/11/2016	0.03	0.42	0.78	0.03	0.78	0.03	0.20	0.02		0.03	0.03	0.24	0.02		0.18	0.44	0.13	0.17	0.14
7/02/2017	0.06	0.42	0.73	0.03	0.73	0.04	0.17	0.04	0.03	0.03		0.21	0.04	0.25	0.28	0.41	0.14	0.08	0.16
8/05/2017	0.05	0.49	0.65	0.04	0.65	0.03	0.14	0.04		0.05	0.03	0.21	0.04	0.19	0.16	0.41	0.11	0.19	0.16
8/08/2017	0.03	0.42	0.74	0.03	0.74	0.03	0.16	0.03	0.03	0.03	0.02	0.23	0.04	0.13	0.16	0.46	0.10	0.18	0.11
7/11/2017	0.06		0.07	0.04	0.07	0.02	0.15	0.03	0.03	0.03	0.03	0.21	0.04	0.24	0.16	0.46	0.11	0.18	0.11
14/02/2018	0.04		0.78	0.04	0.17	0.02	0.14	0.03		0.03	0.03	0.27	0.02	0.31	0.19	0.47	0.13	0.21	0.13
9/05/2018	0.03		0.88		0.20	0.03	0.22	0.05		0.03	0.03	0.31	0.03	0.23	0.21	0.53	0.13	0.22	0.13
15/08/2018	0.04		0.74	0.04	0.23	0.07	0.07	0.06		0.03		0.23	0.04	0.08	0.14	0.52	0.14	0.20	0.12
14/11/2018	0.03		0.80	0.03	0.17	0.04	0.20	0.05	0.03	0.02	0.02	0.25	0.02	0.20	0.17	0.57	0.11	0.21	0.09
13/02/2019	0.08		0.81	0.03	0.15	0.02	0.18		0.03				0.03		0.17	0.50	0.13	0.21	0.09
15/05/2019	0.04		0.76	0.03	0.19	0.05	0.15	0.02	0.05	0.24		0.26	0.03	0.16	0.16	0.50	0.13	0.20	0.10
14/08/2019	0.03		0.80	0.03	0.18	0.04	0.17	0.04		0.02		0.28	0.03	0.15	0.18	0.60	0.13	0.22	0.11
13/11/2019	0.06		0.72	0.05	0.22	0.06	0.14								0.18	0.60	0.14	0.24	0.12

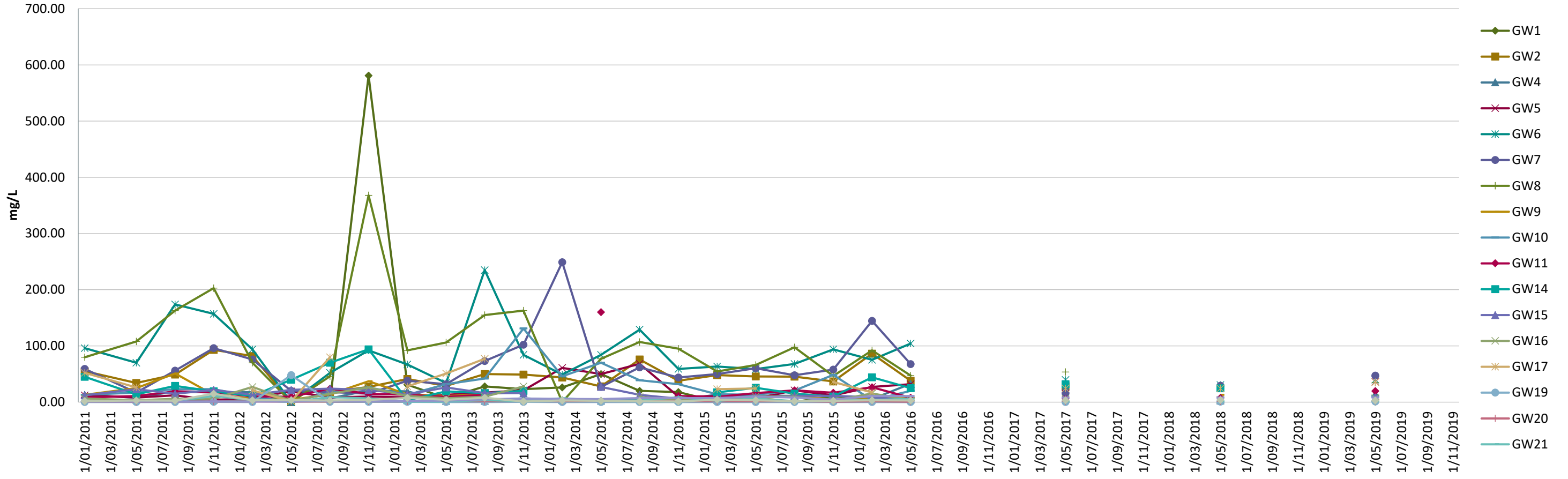
Flouride (mg/L) - Groundwater







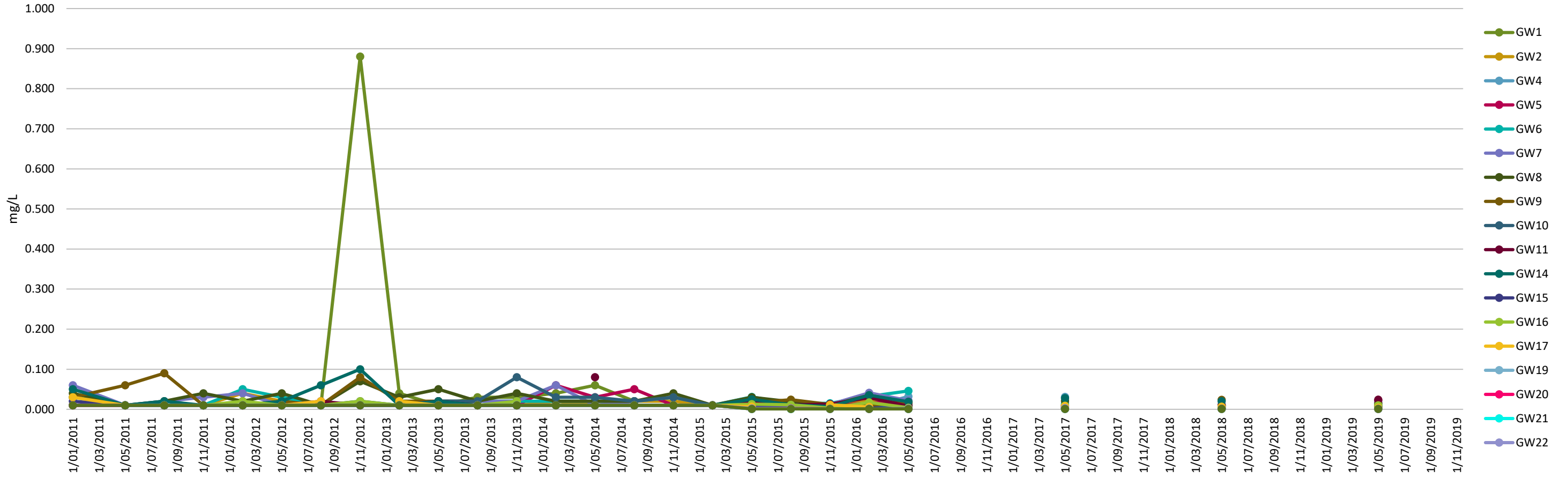
Total Iron (mg/L) - Groundwater



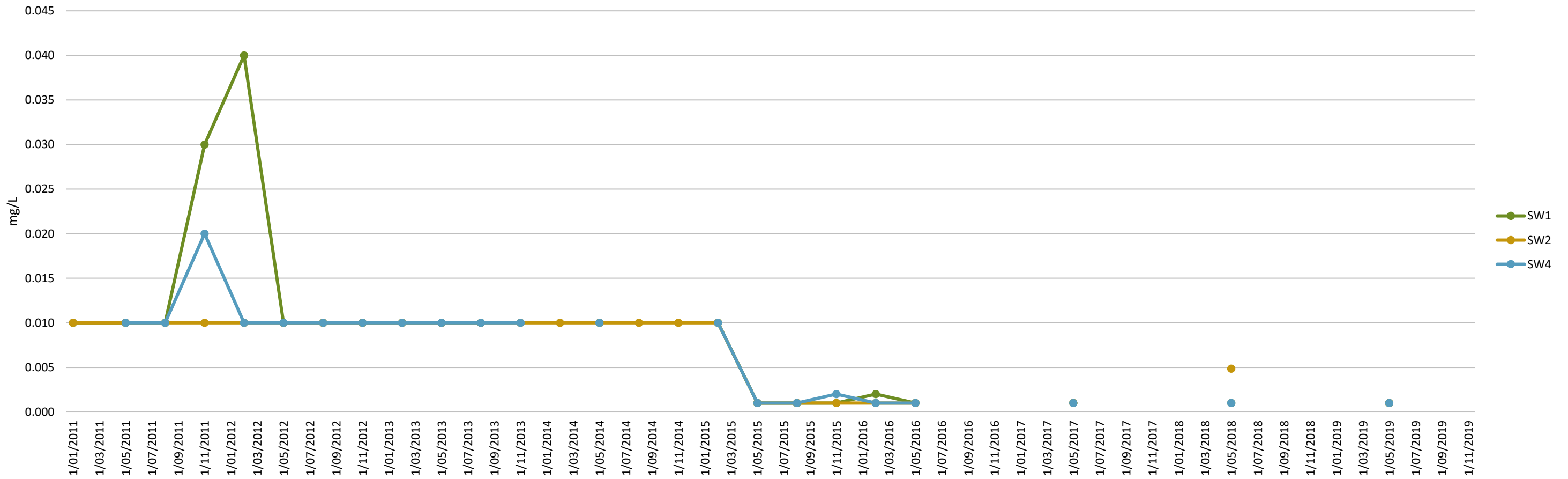
Pb	GM1	GM2	GM4	GM5	GM6	GM7	GM8	GM9	GM10	GM11	GM14	GM15	GM16	GM17	GM19	GM20	GM21	GM22	GM23
31/01/2011	0.010	0.010	0.010	0.010	0.030	0.060	0.040	0.030	0.010	0.010	0.050	0.020	0.010	0.030	0.010	0.010		0.010	0.010
10/05/2011	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.060	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
9/08/2011	0.010	0.010	0.010	0.010	0.010	0.020	0.020	0.090	0.010	0.010	0.020	0.010	0.010		0.010	0.010	0.010	0.010	0.010
8/11/2011	0.010	0.010	0.010	0.010	0.010	0.030	0.040	0.010	0.010	0.010	0.010	0.010	0.010		0.010	0.010	0.010	0.010	0.010
6/02/2012	0.010	0.040	0.010	0.010	0.050	0.040	0.020	0.010	0.010	0.010	0.010	0.010	0.020	0.010	0.010	0.010	0.010	0.010	0.010
8/05/2012	0.010	0.020	0.010	0.010	0.030	0.010	0.040	0.020	0.010	0.010	0.020	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
6/08/2012	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.020	0.060	0.010	0.010	0.020	0.010	0.010	0.010	0.010	0.010
13/11/2012	0.880	0.010	0.010	0.010	0.010	0.010	0.070	0.080	0.020	0.010	0.100	0.010	0.020		0.010	0.010	0.010	0.010	0.010
13/02/2013	0.040	0.010	0.010	0.010	0.010	0.010	0.030	0.020	0.010	0.010	0.010	0.010	0.010	0.020	0.010	0.010	0.010	0.010	0.010
14/05/2013	0.010	0.010	0.010	0.010	0.020	0.020	0.050	0.020	0.020	0.020	0.020	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
6/08/2013	0.030	0.010	0.010	0.010	0.020	0.020	0.020	0.020	0.020	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
12/11/2013	0.030	0.010	0.010	0.010	0.020	0.020	0.040		0.080	0.010	0.010	0.010	0.020		0.010	0.010	0.010	0.010	0.010
11/02/2014	0.040	0.020	0.010	0.060	0.020	0.060	0.020		0.030						0.010	0.010	0.010	0.010	0.010
13/05/2014	0.060	0.010	0.010	0.030	0.020	0.010	0.020		0.030	0.080		0.010			0.010	0.010	0.010	0.010	0.010
12/08/2014	0.020	0.020	0.010	0.050	0.020	0.020	0.020		0.020			0.010	0.010		0.010	0.010	0.010	0.010	0.010
10/11/2014	0.030	0.020	0.010	0.010	0.030	0.030	0.040		0.030	0.010		0.010	0.010		0.010	0.010	0.010	0.010	0.010
9/02/2015	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
11/05/2015	0.002	0.018	0.013	0.008	0.031	0.023	0.030	0.016	0.006	0.017	0.025	0.006	0.013	0.007	0.001	0.001	0.001	0.002	0.001
11/08/2015	0.001	0.016	0.009	0.014	0.014	0.016	0.019	0.024	0.003	0.011	0.011	0.005	0.011		0.001	0.002	0.001	0.002	0.001
10/11/2015	0.010	0.008	0.002	0.008	0.015	0.012	0.010	0.012	0.011	0.013	0.007	0.002	0.003	0.011	0.001	0.001	0.001	0.001	0.001
8/02/2016	0.004	0.025	0.005	0.016	0.032	0.041	0.035	0.009	0.002	0.029	0.035	0.003	0.017	0.006	0.001	0.001	0.001	0.001	0.001
9/05/2016	0.003	0.010	0.032	0.016	0.046	0.022	0.017	0.017	0.010	0.008	0.019	0.002	0.004		0.001	0.001	0.001	0.002	0.001
9/08/2016																			
7/11/2016																			
7/02/2017																			
8/05/2017	0.002	0.010	0.031	0.011	0.014	0.008	0.021	0.003		0.007	0.028	0.004	0.009	0.008	0.001	0.001	0.001	0.003	0.001
8/08/2017																			
7/11/2017																			
14/02/2018																			
9/05/2018	0.002		0.003		0.010	0.009	0.008	0.024		0.010	0.020	0.003	0.006	0.006	0.001	0.001	0.001	0.001	0.001
15/08/2018																			
14/11/2018																			
13/02/2019																			
15/05/2019	0.00		0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.02		0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
14/08/2019																			
13/11/2019																			

Pb	SW1	SW2	SW4
31/01/2011	0.010	0.010	
10/05/2011	0.010	0.010	0.010
9/08/2011	0.010	0.010	0.010
8/11/2011	0.030	0.010	0.020
6/02/2012	0.040	0.010	0.010
8/05/2012	0.010	0.010	0.010
6/08/2012	0.010	0.010	0.010
13/11/2012	0.010	0.010	0.010
13/02/2013	0.010	0.010	0.010
14/05/2013	0.010	0.010	0.010
6/08/2013	0.010	0.010	0.010
12/11/2013		0.010	0.010
11/02/2014		0.010	
13/05/2014	0.010	0.010	0.010
12/08/2014		0.010	
10/11/2014		0.010	
9/02/2015	0.010	0.010	0.010
11/05/2015	0.001	0.001	0.001
11/08/2015	0.001	0.001	0.001
10/11/2015	0.001	0.001	0.002
8/02/2016	0.002	0.001	0.001
9/05/2016	0.001	0.001	0.001
9/08/2016			
7/11/2016			
7/02/2017			
8/05/2017	0.001	0.001	0.001
8/08/2017			
7/11/2017			
14/02/2018			
9/05/2018	0.001	0.005	0.001
15/08/2018			
14/11/2018			
10/02/2019			
15/05/2019	0.00	0.00	0.00
14/08/2019			
12/11/2019			

Total Lead (mg/L) - Groundwater



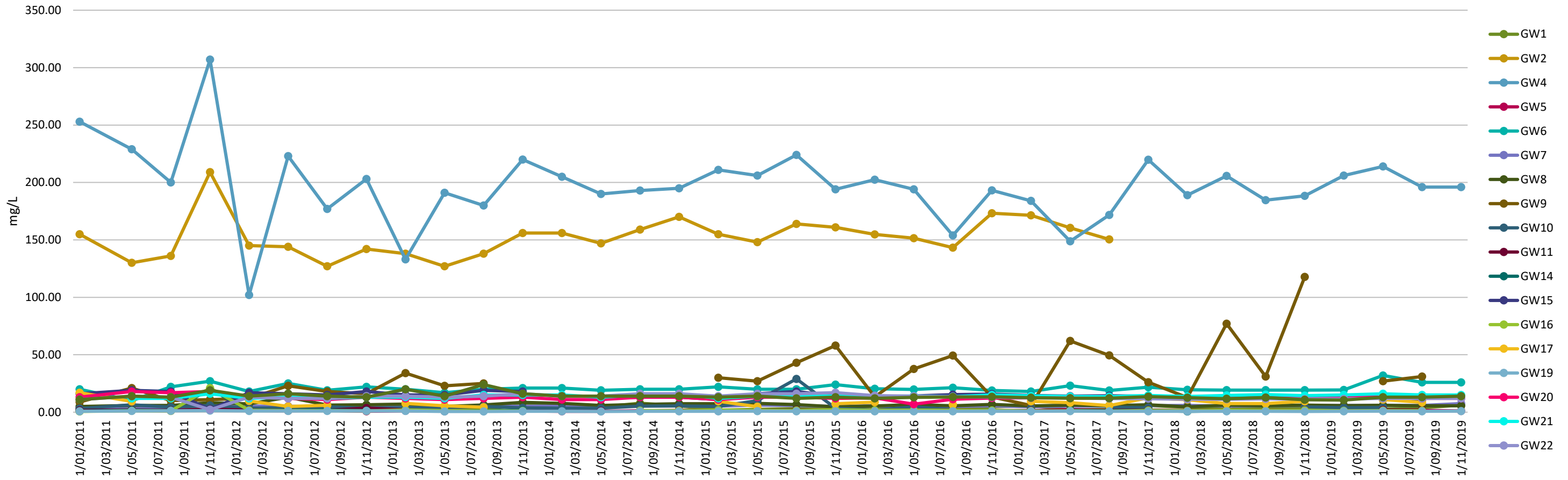
Total Lead (mg/L) - Surface Water



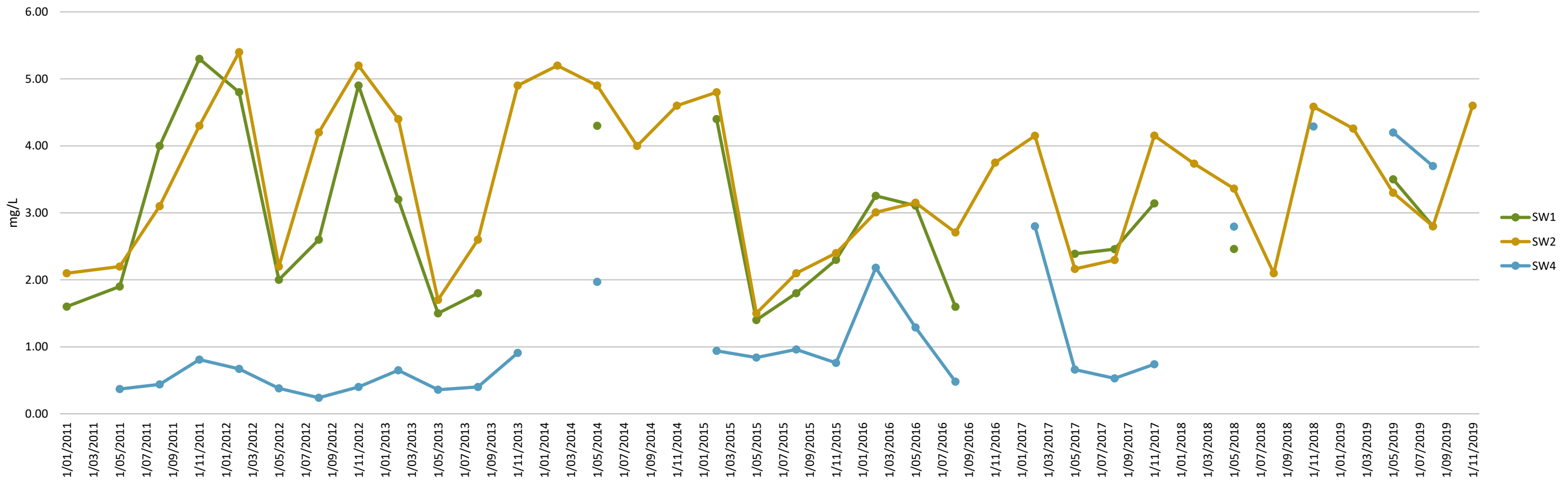
Mg	GW1	GW2	GW4	GW5	GW6	GW7	GW8	GW9	GW10	GW11	GW14	GW15	GW16	GW17	GW19	GW20	GW21	GW22	GW23
31/01/2011	2.50	155.00	253.00	1.00	20.00	3.60	5.00	8.80	3.20	1.50	0.90	16.00	0.60	17.00	0.70	13.00		11.00	11.00
10/05/2011	2.60	130.00	229.00	1.40	10.00	4.30	5.80	21.00	6.40	2.00	1.60	19.00	1.20	9.30	1.10	18.00	12.00	14.00	14.00
9/08/2011	3.40	136.00	200.00	1.20	22.00	4.10	5.80	10.00	4.30	1.70	1.40	18.00	1.10		1.20	17.00	12.00	13.00	13.00
8/11/2011	4.20	209.00	307.00	2.20	27.00	5.90	8.30	11.00	5.80	2.50	20.00	2.40	21.00		1.40	18.00	16.00	2.10	19.00
6/02/2012	4.20	145.00	102.00	1.30	18.00	5.30	7.20	12.00	3.40	1.90	1.70	17.00	1.60	9.70	1.10	14.00	12.00	13.00	14.00
8/05/2012	3.30	144.00	223.00	1.20	25.00	5.20	13.00	23.00	3.90	1.40	1.50	16.00	1.40	4.90	1.10	12.00	13.00	12.00	16.00
6/08/2012	3.20	127.00	177.00	1.50	19.00	4.70	6.20	18.00	4.70	1.70	1.80	15.00	1.30	6.00	1.00	11.00	12.00	12.00	14.00
13/11/2012	4.90	142.00	203.00	0.80	22.00	5.10	6.50	16.00	3.50	3.60	1.40	18.00	1.10		1.00	13.00	13.00	14.00	13.00
13/02/2013	2.20	138.00	133.00	1.20	20.00	4.60	7.00	34.00	3.90	1.90	1.30	15.00	2.00	7.60	1.00	12.00	13.00	14.00	20.00
14/05/2013	2.20	127.00	191.00	1.00	17.00	4.30	4.90	23.00	4.00	0.80	1.10	15.00	1.30	5.50	0.60	11.00	12.00	13.00	14.00
6/08/2013	2.50	138.00	180.00	1.00	20.00	5.20	6.30	25.00	4.90	1.30	1.30	19.00	1.10	4.30	0.60	12.00	15.00	14.00	24.00
12/11/2013	6.30	156.00	220.00	1.00	21.00	5.10	8.50		3.70	1.20	1.50	18.00	1.10		0.80	13.00	15.00	16.00	16.00
11/02/2014	6.50	156.00	205.00	0.70	21.00	5.60	7.60		3.50						0.70	11.00	15.00	14.00	14.00
13/05/2014	4.50	147.00	190.00	0.80	19.00	4.90	5.90		3.50	1.10		12.00			0.60	11.00	13.00	14.00	14.00
12/08/2014	7.80	159.00	193.00	1.20	20.00	5.40	6.70		5.30			13.00	1.40		0.70	13.00	15.00	16.00	14.00
10/11/2014	5.50	170.00	195.00	1.50	20.00	5.50	7.40		5.40	1.70		13.00	1.40		0.80	13.00	16.00	16.00	14.00
9/02/2015	1.80	155.00	211.00	1.10	22.00	5.30	7.40	30.00	4.90	1.50	1.30	11.00	1.80	9.40	0.80	11.00	12.00	14.00	13.00
11/05/2015	2.40	148.00	206.00	1.40	20.00	6.20	7.60	27.00	10.00	1.80	1.50	16.00	1.60	4.80	0.90	13.00	14.00	16.00	14.00
11/08/2015	3.10	164.00	224.00	1.60	20.00	5.90	6.60	43.00	29.00	2.00	1.50	18.00	1.50		0.80	13.00	14.00	16.00	12.00
10/11/2015	4.00	161.00	194.00	1.60	24.00	4.90	4.70	58.00	3.50	1.80	1.40	14.00	2.10	7.40	0.80	12.00	14.00	17.00	13.00
8/02/2016	4.91	154.80	202.41	2.00	20.35	5.61	5.41	13.30	1.79	1.69	1.37	12.88	1.60	8.75	0.79	12.42	13.87	14.35	11.99
9/05/2016	3.41	151.48	193.99	1.24	19.74	4.91	6.61	37.58	4.73	1.74	1.34	14.10	1.82		0.71	6.94	14.14	13.89	12.87
9/08/2016	3.52	143.28	153.94	1.53	21.34	4.93	5.64	49.28	2.26	1.81	1.29	15.30	1.69	6.55	0.77	11.19	13.53	13.45	13.14
7/11/2016	4.67	173.28	193.15	1.43	18.88	5.62	6.80	13.20		1.49	1.58	15.76	1.51		0.78	12.26	14.96	13.12	13.42
7/02/2017	5.86	171.42	183.96	1.27	17.97	4.67	5.44	5.86	3.46	1.30		14.62	1.04	9.53	0.74	12.51	14.31	12.44	12.66
8/05/2017	1.81	160.42	148.84	2.32	23.08	5.33	6.14	62.09		1.56	1.66	13.88	1.18	8.23	0.88	12.99	13.60	12.25	12.10
8/08/2017	2.61	150.38	171.68	1.54	18.94	5.24	5.73	49.44	4.35	1.58	1.21	14.22	0.99	5.74	0.80	12.41	13.53	11.85	12.16
7/11/2017	5.69		219.81	1.34	21.81	5.73	6.40	26.15	3.87	1.86	1.51	13.93	1.52	12.41	0.79	13.01	14.50	11.66	13.46
14/02/2018	4.18		188.93	1.39	19.55	5.82	4.61	12.73		1.39	0.63	12.26	1.20	10.75	0.78	12.38	13.69	11.21	12.62
9/05/2018	2.47		205.80		19.26	5.45	6.16	77.06		1.92	1.28	13.12	1.87	7.48	0.72	12.35	14.48	11.28	11.73
15/08/2018	4.18		184.68	1.49	19.19	5.62	5.57	31.02		1.55		13.44	1.49	7.51	0.77	12.96	15.34	11.57	12.71
14/11/2018	3.02		188.39	1.42	19.13	5.80	6.20	117.73	4.47	1.75	1.47	13.31	1.68	9.43	0.69	12.41	14.42	11.46	10.75
13/02/2019	4.63		206	1.35	19.35	5.83	5.77		3.88				1.23		0.76	12.83	14.96	11.49	10.53
15/05/2019	2.70		214	1.30	32.00	5.90	6.00	27.00	4.00	1.90		11.00	1.40	11.00	0.90	13.00	16.00	12.00	13.00
14/08/2019	3.70		196	1.50	26.00	5.90	5.50	31.00		1.90		11.00	1.30	8.50	0.80	12.00	15.00	12.00	13.00
13/11/2019	6.20		196	1.00	26.00	7.50	5.60								0.90	12.00	15.00	12.00	14.00

Mg	SW1	SW2	SW4
31/01/2011	1.60	2.10	
10/05/2011	1.90	2.20	0.37
9/08/2011	4.00	3.10	0.44
8/11/2011	5.30	4.30	0.81
6/02/2012	4.80	5.40	0.67
8/05/2012	2.00	2.20	0.38
6/08/2012	2.60	4.20	0.24
13/11/2012	4.90	5.20	0.40
13/02/2013	3.20	4.40	0.65
14/05/2013	1.50	1.70	0.36
6/08/2013	1.80	2.60	0.40
12/11/2013		4.90	0.91
11/02/2014		5.20	
13/05/2014	4.30	4.90	1.97
12/08/2014		4.00	
10/11/2014		4.60	
9/02/2015	4.40	4.80	0.94
11/05/2015	1.40	1.50	0.84
11/08/2015	1.80	2.10	0.96
10/11/2015	2.30	2.40	0.76
8/02/2016	3.25	3.01	2.18
9/05/2016	3.11	3.15	1.29
9/08/2016	1.60	2.71	0.48
7/11/2016		3.75	
7/02/2017		4.15	2.80
8/05/2017	2.39	2.16	0.66
8/08/2017	2.46	2.30	0.53
7/11/2017	3.14	4.15	0.74
14/02/2018		3.73	
9/05/2018	2.46	3.36	2.79
15/08/2018		2.10	
14/11/2018		4.59	4.29
10/02/2019		4.26	
15/05/2019	3.50	3.30	4.20
14/08/2019	2.80	2.80	3.70
12/11/2019		4.60	

Total Magnesium (mg/L) - Groundwater



Total Magnesium (mg/L) - Surface Water

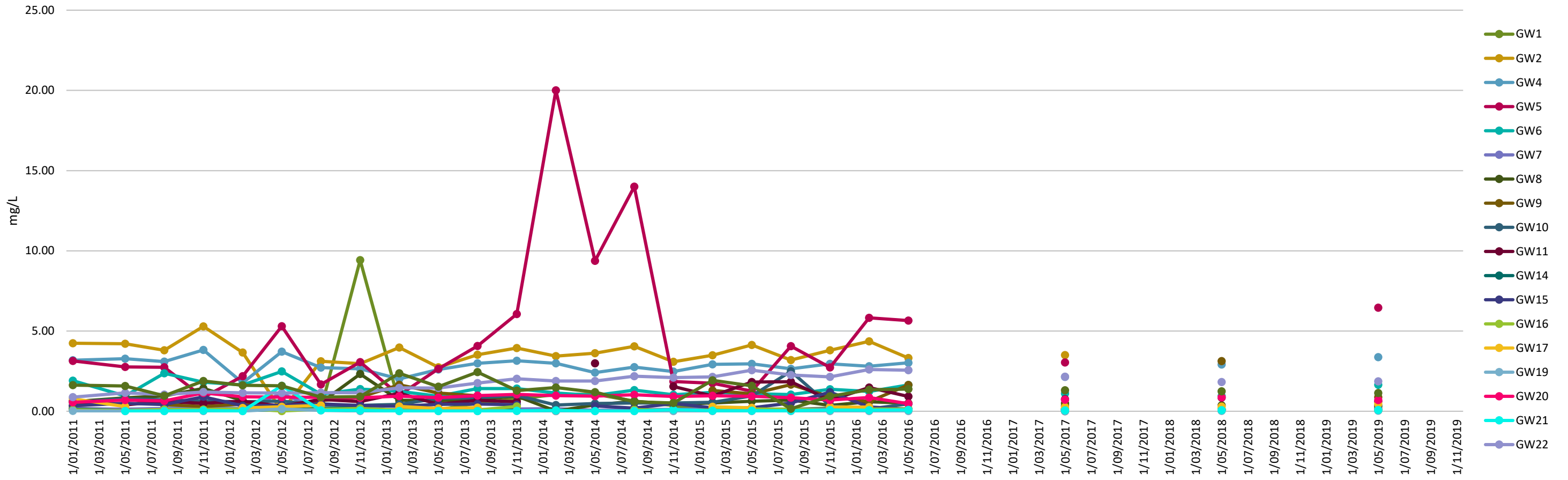


Mn	GW1	GW2	GW4	GW5	GW6	GW7	GW8	GW9	GW10	GW11	GW14	GW15	GW16	GW17	GW19	GW20	GW21	GW22	GW23
31/01/2011	0.19	4.24	3.18	3.14	1.91	0.16	0.60	0.35	0.56	0.62	0.13	0.34	0.09	0.78	0.02	0.56		0.88	1.63
10/05/2011	0.08	4.21	3.28	2.76	0.95	0.13	0.84	0.79	0.78	0.40	0.04	0.49	0.04	0.29	0.01	0.70	0.01	1.15	1.57
9/08/2011	0.17	3.80	3.09	2.74	2.37	0.17	0.95	0.41	0.71	0.61	0.03	0.42	0.11		0.01	0.64	0.01	1.04	0.96
8/11/2011	0.15	5.29	3.82	0.86	1.81	0.22	1.43	0.30	0.63	0.49	0.10	0.90	0.11		0.01	1.14	0.04	1.20	1.88
6/02/2012	0.16	3.66	1.77	2.18	1.64	0.17	0.67	0.44	0.59	0.63	0.05	0.34	0.15	0.20	0.01	0.90	0.01	1.15	1.62
8/05/2012	0.12	0.01	3.71	5.30	2.48	1.09	0.09	0.35	0.63	0.31	0.08	0.38	0.02	0.28	0.14	0.88	1.59	1.14	1.59
6/08/2012	0.14	3.12	2.72	1.67	1.06	0.12	0.54	0.67	0.40	0.74	0.17	0.46	0.12	0.37	0.05	0.87	0.05	1.16	0.88
13/11/2012	9.42	2.97	2.64	3.06	1.38	0.09	2.32	0.88	0.37	0.60	0.21	0.36	0.17		0.01	0.84	0.05	1.16	0.91
13/02/2013	0.50	3.97	2.01	1.01	1.24	0.09	0.69	1.65	0.43	1.12	0.03	0.31	0.08	0.30	0.01	0.94	0.01	1.46	2.37
14/05/2013	0.09	2.74	2.60	2.65	0.94	0.08	0.65	1.14	0.80	0.43	0.09	0.43	0.06	0.17	0.01	0.85	0.01	1.45	1.53
6/08/2013	0.52	3.52	2.99	4.07	1.41	0.10	0.74	0.96	0.85	0.69	0.03	0.45	0.08	0.23	0.01	0.98	0.01	1.76	2.44
12/11/2013	0.77	3.94	3.15	6.06	1.41	0.14	0.94		0.99	0.59	0.08	0.41	0.30		0.02	1.05	0.02	2.02	1.29
11/02/2014	1.04	3.44	2.99	20.00	1.14	0.16	0.01		0.39						0.01	0.98	0.05	1.88	1.48
13/05/2014	1.06	3.62	2.41	9.38	0.99	0.06	0.40		0.48	2.99		0.33			0.01	0.94	0.01	1.89	1.19
12/08/2014	0.63	4.05	2.75	14.00	1.32	0.10	0.62		0.52			0.19	0.10		0.01	1.03	0.01	2.19	0.59
10/11/2014	0.36	3.08	2.47	1.85	1.03	0.12	0.45		0.52	1.54		0.48	0.06		0.01	0.92	0.10	2.10	0.51
9/02/2015	0.03	3.49	2.92	1.75	1.18	0.13	0.51	1.30	0.56	0.95	0.08	0.22	0.08	0.28	0.01	0.97	0.03	2.14	1.93
11/05/2015	0.07	4.13	2.96	1.25	1.09	0.14	0.62	1.08	0.96	1.82	0.11	0.22	0.14	0.22	0.01	0.94	0.04	2.56	1.59
11/08/2015	0.11	3.19	2.64	4.06	1.04	0.13	0.69	1.66	2.49	1.84	0.08	0.51	0.13		0.01	0.85	0.03	2.26	0.15
10/11/2015	0.19	3.80	2.96	2.73	1.37	0.13	0.36	0.91	0.35	0.69	0.07	1.19	0.07	0.27	0.01	0.69	0.08	2.14	0.93
8/02/2016	0.14	4.36	2.81	5.82	1.23	0.18	0.59	0.61	0.14	1.48	0.13	0.27	0.14	0.26	0.01	0.86	0.06	2.60	1.34
9/05/2016	0.09	3.32	3.02	5.66	1.64	0.14	0.51	1.64	0.46	0.92	0.10	0.12	0.14		0.01	0.47	0.09	2.55	1.38
9/08/2016																			
7/11/2016																			
7/02/2017																			
8/05/2017	0.05	3.51	2.14	3.04	1.10	0.10	0.49	0.35	NT	0.75	0.15	0.13	0.14	0.26	0.01	0.72	0.05	2.15	1.31
8/08/2017																			
7/11/2017																			
14/02/2018																			
9/05/2018	0.04		2.91		0.94	0.12	0.36	3.12		0.84	0.11	0.11	0.10	0.29	0.02	0.87	0.06	1.82	1.25
15/08/2018																			
14/11/2018																			
13/02/2019																			
15/05/2019	0.06		3.37	6.45	1.65	0.14	0.30	0.88	0.36	0.61		0.10	0.09	0.45	0.03	0.70	0.08	1.86	1.14
14/08/2019																			
13/11/2019																			

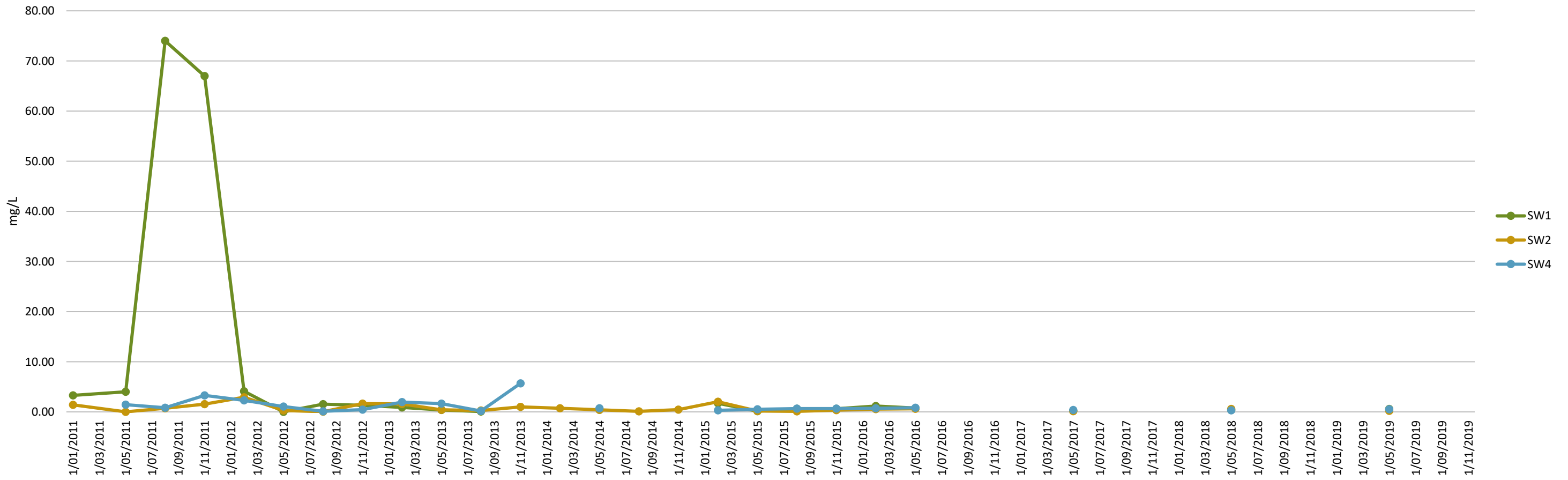
Mn	SW1	SW2	SW4
31/01/2011	3.30	1.42	
10/05/2011	4.01	0.01	1.45
9/08/2011	74.00	0.73	0.84
8/11/2011	67.00	1.53	3.29
6/02/2012	4.10	2.93	2.31
8/05/2012	0.01	0.27	1.08
6/08/2012	1.55	0.05	0.12
13/11/2012	1.29	1.64	0.45
13/02/2013	0.88	1.59	1.96
14/05/2013	0.37	0.41	1.64
6/08/2013	0.07	0.27	0.17
12/11/2013		1.00	5.70
11/02/2014		0.74	
13/05/2014	0.41	0.43	0.72
12/08/2014		0.12	
10/11/2014		0.44	
9/02/2015	1.71	2.02	0.32
11/05/2015	0.15	0.18	0.51
11/08/2015	0.60	0.11	0.66
10/11/2015	0.64	0.36	0.65
8/02/2016	1.16	0.54	0.71
9/05/2016	0.77	0.64	0.82
9/08/2016			
7/11/2016			
7/02/2017			
8/05/2017	0.19	0.15	0.37
8/08/2017			
7/11/2017			
14/02/2018			
9/05/2018	0.39	0.57	0.32
15/08/2018			
14/11/2018			
10/02/2019			
15/05/2019	0.59	0.20	0.54
14/08/2019			
12/11/2019			



Total Manganese (mg/L) - Groundwater



Total Manganese (mg/L) - Surface Water



Ni	GW1	GW2	GW4	GW5	GW6	GW7	GW8	GW9	GW10	GW11	GW14	GW15	GW16	GW17	GW19	GW20	GW21	GW22	GW23
31/01/2011	0.010	0.010	0.010	0.010	0.050	0.010	0.020	0.010	0.010	0.010	0.010	0.010	0.010	0.040	0.010	0.010		0.010	0.010
10/05/2011	0.010	0.010	0.010	0.010	0.030	0.010	0.020	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
9/08/2011	0.010	0.010	0.010	0.010	0.080	0.010	0.030	0.010	0.010	0.010	0.010	0.010	0.010		0.010	0.010	0.010	0.010	0.010
8/11/2011	0.010	0.030	0.010	0.010	0.050	0.010	0.050	0.010	0.010	0.010	0.010	0.010	0.010		0.010	0.010	0.010	0.010	0.010
6/02/2012	0.010	0.030	0.010	0.010	0.080	0.010	0.020	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
8/05/2012	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
6/08/2012	0.010	0.010	0.010	0.010	0.020	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.020	0.010	0.010	0.010	0.010	0.010
13/11/2012	0.250	0.010	0.010	0.010	0.040	0.010	0.110	0.010	0.010	0.010	0.010	0.010	0.010		0.010	0.010	0.010	0.010	0.010
13/02/2013	0.010	0.010	0.010	0.010	0.030	0.010	0.020	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
14/05/2013	0.010	0.010	0.010	0.010	0.020	0.010	0.030	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
6/08/2013	0.010	0.010	0.010	0.010	0.040	0.010	0.020	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
12/11/2013	0.010	0.020	0.010	0.020	0.040	0.010	0.040		0.040	0.010	0.010	0.010	0.010		0.010	0.010	0.010	0.010	0.010
11/02/2014	0.010	0.010	0.010	0.060	0.020	0.020	0.020		0.010						0.010	0.010	0.010	0.010	0.010
13/05/2014	0.010	0.010	0.010	0.030	0.020	0.010	0.010		0.010	0.030		0.010			0.010	0.010	0.010	0.010	0.010
12/08/2014	0.010	0.020	0.010	0.050	0.030	0.010	0.010		0.010			0.010	0.010		0.010	0.010	0.010	0.010	0.010
10/11/2014	0.010	0.010	0.010	0.010	0.020	0.010	0.010		0.010	0.010		0.010	0.010		0.010	0.010	0.010	0.010	0.010
9/02/2015	0.010	0.010	0.010	0.010	0.020	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
11/05/2015	0.001	0.019	0.007	0.007	0.042	0.012	0.025	0.004	0.006	0.006	0.005	0.009	0.004	0.007	0.001	0.001	0.002	0.003	0.001
11/08/2015	0.001	0.020	0.005	0.018	0.027	0.012	0.018	0.006	0.053	0.004	0.005	0.011	0.003		0.001	0.002	0.001	0.003	0.002
10/11/2015	0.004	0.013	0.001	0.012	0.042	0.009	0.011	0.008	0.006	0.005	0.002	0.015	0.002	0.007	0.001	0.001	0.002	0.002	0.002
8/02/2016	0.002	0.033	0.005	0.025	0.061	0.019	0.032	0.003	0.014	0.012	0.004	0.012	0.005	0.005	0.001	0.001	0.002	0.002	0.001
9/05/2016	0.002	0.015	0.011	0.020	0.111	0.010	0.015	0.006	0.006	0.005	0.003	0.009	0.001		0.003	0.001	0.004	0.002	0.001
9/08/2016																			
7/11/2016																			
7/02/2017																			
8/05/2017	0.001	0.012	0.009	0.012	0.029	0.008	0.017	0.001		0.004	0.003	0.010	0.002	0.005	0.001	0.001	0.001	0.004	0.002
8/08/2017																			
7/11/2017																			
14/02/2018																			
9/05/2018	0.001		0.001		0.019	0.007	0.008	0.009		0.004	0.003	0.007	0.001	0.006	0.001	0.001	0.001	0.003	0.001
15/08/2018																			
14/11/2018																			
13/02/2019																			
15/05/2019	0.00		0.01	0.03	0.06	0.01	0.01	0.00	0.01	0.01		0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14/08/2019																			
13/11/2019																			

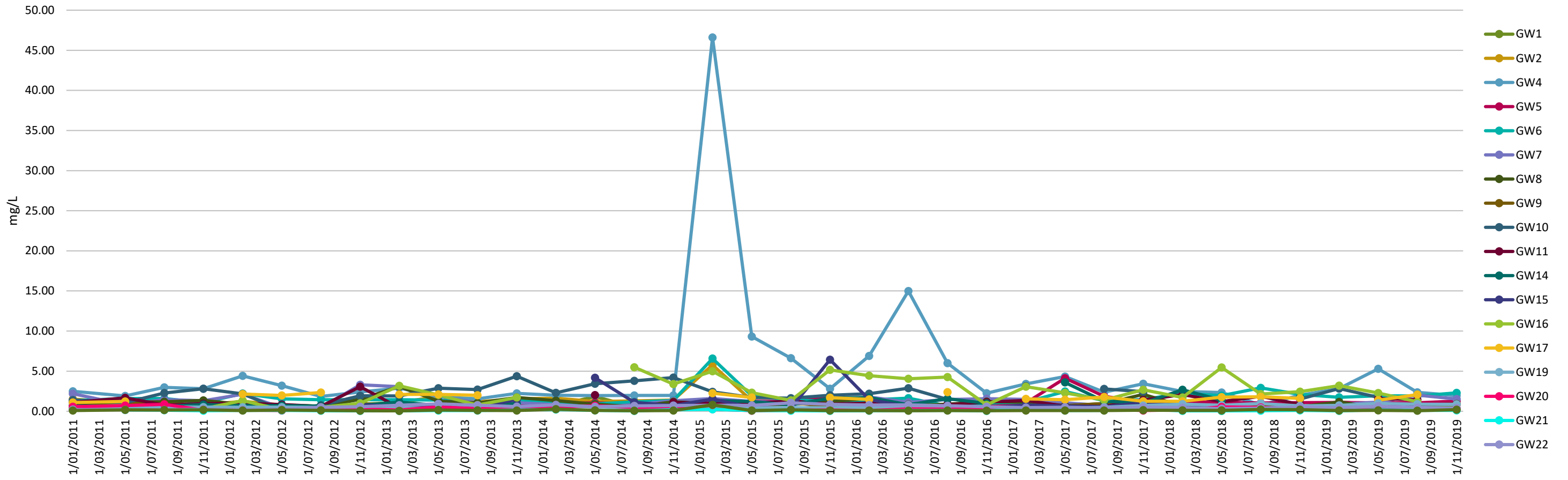
Ni	SW1	SW2	SW4
31/01/2011	0.010	0.010	
10/05/2011	0.010	0.010	0.010
9/08/2011	0.020	0.010	0.010
8/11/2011	0.040	0.010	0.010
6/02/2012	0.010	0.010	0.010
8/05/2012	0.010	0.010	0.010
6/08/2012	0.010	0.010	0.010
13/11/2012	0.010	0.010	0.010
13/02/2013	0.010	0.010	0.010
14/05/2013	0.010	0.010	0.010
6/08/2013	0.010	0.010	0.010
12/11/2013		0.010	0.010
11/02/2014		0.010	
13/05/2014	0.010	0.010	0.010
12/08/2014		0.010	
10/11/2014		0.010	
9/02/2015	0.010	0.010	0.010
11/05/2015	0.001	0.001	0.001
11/08/2015	0.001	0.001	0.001
10/11/2015	0.001	0.001	0.002
8/02/2016	0.003	0.001	0.001
9/05/2016	0.001	0.001	0.001
9/08/2016			
7/11/2016			
7/02/2017			
8/05/2017	0.001	0.001	0.001
8/08/2017			
7/11/2017			
14/02/2018			
9/05/2018	0.001	0.001	0.001
15/08/2018			
14/11/2018			
10/02/2019			
15/05/2019	0.00	0.00	0.00
14/08/2019			
12/11/2019			



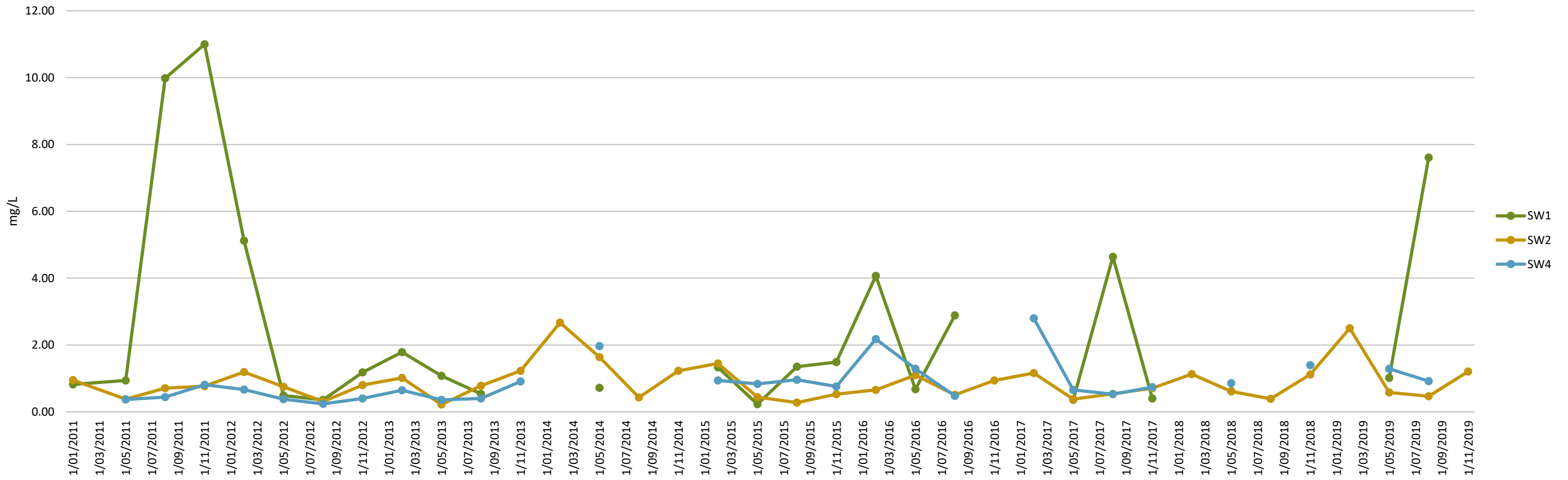
Total Nitrogen	GW1	GW2	GW4	GW5	GW6	GW7	GW8	GW9	GW10	GW11	GW14	GW15	GW16	GW17	GW19	GW20	GW21	GW22	GW23
31/01/2011	0.33	1.51	2.49	0.25	1.32	2.19	0.72	0.36	1.40	1.09	0.54	0.65	0.53	1.09	0.37	0.57		0.22	0.08
10/05/2011	0.22	1.14	1.90	0.68	1.59	0.81	1.14	0.96	1.07	1.67	0.76	0.58	0.75	1.22	0.53	0.72	0.15	0.17	0.17
9/08/2011	0.17	0.95	2.97	0.46	1.59	1.46	1.17	0.92	2.28	0.77	0.62	0.38	0.43		0.54	0.86	0.13	0.18	0.16
8/11/2011	0.19	0.78	2.80	0.39	1.08	1.31	1.35	0.19	2.81	0.94	0.84	0.23	0.31		0.51	0.16	0.06	0.29	0.18
6/02/2012	0.18	1.24	4.42	0.36	2.21	2.13	0.86	0.33	2.16	0.99	0.72	0.48	1.34	2.14	0.50	0.14	0.11	0.19	0.09
8/05/2012	0.28	0.77	3.20	0.37	1.55	0.44	0.76	0.56	0.17	0.83	0.71	0.26	0.16	1.97	0.51	0.08	0.11	0.27	0.16
6/08/2012	0.10	0.64	1.84	0.43	1.43	0.42	0.63	0.39	0.75	0.60	0.65	0.54	0.50	2.34	0.47	0.23	0.07	0.50	0.12
13/11/2012	0.53	0.85	2.40	0.72	1.44	3.30	1.47	0.92	1.94	3.06	0.75	0.82	0.98		0.48	0.28	0.05	0.55	0.07
13/02/2013	0.63	1.10	2.89	0.32	1.44	3.07	3.08	0.80	1.90	0.44	1.13	0.58	3.18	2.11	0.39	0.15	0.05	0.76	0.05
14/05/2013	0.38	1.85	1.81	0.51	1.39	1.92	1.27	0.59	2.88	0.37	0.73	0.46	2.04	2.10	0.42	0.56	0.09	0.93	0.16
6/08/2013	0.56	1.19	1.54	0.61	1.05	1.04	1.02	0.49	2.71	0.49	0.74	0.42	0.77	1.99	0.49	0.32	0.08	0.76	0.10
12/11/2013	0.60	1.55	2.22	0.74	1.31	1.07	1.72		4.37	0.61	0.95	1.48	1.72		0.51	0.38	0.15	0.58	0.09
11/02/2014	0.74	1.63	1.99	0.94	1.04	0.81	1.34		2.29						0.69	0.52	0.21	0.79	0.27
13/05/2014	1.82	1.22	1.95	1.05	0.93	0.51	0.88		3.43	2.02		4.18			0.58	0.68	0.12	0.57	0.10
12/08/2014	0.55	1.29	1.97	0.87	1.15	0.81	0.56		3.80			1.12	5.49		0.42	0.49	0.05	0.67	0.06
10/11/2014	0.82	1.40	1.97	0.84	1.36	1.31	1.18		4.19	1.10		0.70	3.38		0.42	0.35	0.19	0.70	0.09
9/02/2015	0.47	5.77	46.60	1.06	6.57	1.58	0.92	1.00	2.43	1.01	1.35	1.52	4.98	2.26	0.37	0.26	0.23	0.75	0.80
11/05/2015	0.36	1.30	9.32	1.27	1.93	1.23	0.79	0.74	1.71	0.96	1.20	0.48	2.31	1.72	0.40	0.07	0.08	0.74	0.08
11/08/2015	0.15	1.07	6.61	1.21	1.42	1.07	0.85	1.09	1.64	1.28	0.79	0.37	1.35		0.45	0.13	0.07	1.05	0.18
10/11/2015	0.78	1.24	2.80	1.75	1.25	1.17	1.18	0.60	2.00	0.87	1.63	6.43	5.17	1.70	0.44	0.15	0.05	0.85	0.09
8/02/2016	0.49	1.20	6.90	1.29	1.41	1.79	1.63	0.64	2.18	1.03	1.71	1.45	4.44	1.48	0.54	0.09	0.07	0.77	0.09
9/05/2016	0.34	1.03	14.99	1.13	1.62	1.12	0.72	0.83	2.88	0.36	0.82	0.58	4.05		0.52	0.31	0.08	0.79	0.06
9/08/2016	0.15	0.79	5.99	0.70	0.67	1.46	0.88	0.47	1.49	0.82	1.57	0.44	4.27	2.38	0.57	0.26	0.11	0.68	0.09
7/11/2016	0.11	0.99	2.26	0.74	1.00	1.56	1.20	0.48		1.14	0.99	0.39	0.80		0.45	0.27	0.05	0.55	0.07
7/02/2017	0.35	1.01	3.40	1.04	1.14	1.47	1.13	0.37	3.12	1.36		0.78	3.06	1.54	0.44	0.17	0.34	0.46	0.08
8/05/2017	0.53	0.92	4.32	4.12	2.47	1.05	0.70	0.68		0.65	3.59	0.66	2.29	1.44	0.38	0.12	0.08	0.49	0.09
8/08/2017	0.22	0.65	2.38	1.87	1.31	0.71	0.94	0.96	2.78	0.60	1.24	0.56	1.39	1.78	0.49	0.25	0.10	0.42	0.08
7/11/2017	1.31		3.43	1.13	1.46	1.45	2.09	0.57	2.44	1.40	1.01	1.07	2.68	1.25	0.70	0.09	0.27	0.51	0.13
14/02/2018	0.45		2.46	1.13	2.22	0.38	0.67	0.42		2.07	2.68	0.64	1.71	1.24	0.88	0.17	0.05	0.46	0.10
9/05/2018	0.77		2.34	1.12	1.96	0.61	0.28	0.05		1.20	1.38	0.39	5.47	1.76	0.76	0.53	0.05	0.33	0.11
15/08/2018	0.49		0.79	1.02	2.92	0.99	0.49	0.62		1.86		0.43	2.15	1.81	0.96	0.47	0.07	0.39	0.21
14/11/2018	0.25		2.00	1.07	2.11	0.48	0.56	0.50	1.53	0.83	1.75	0.53	2.44	1.61	0.66	0.31	0.11	0.54	0.19
13/02/2019	1.16		2.82	1.10	1.74	0.88	1.15		2.82				3.20		0.74	0.28	0.05	0.46	0.09
15/05/2019	0.84		5.29	1.05	1.94	1.13	0.42	0.50	1.74	1.57		0.62	2.28	1.37	0.99	0.22	0.17	0.62	0.12
14/08/2019	0.32		2.36	1.05	1.90	2.01	0.80	0.31		1.43		0.62	1.18	2.07	0.87	0.25	0.12	0.48	0.06
13/11/2019	0.84		1.96	1.27	2.30	1.52	0.90								0.86	0.37	0.10	0.38	0.19

Total Nitrogen	SW1	SW2	SW4
31/01/2011	0.82	0.95	
10/05/2011	0.94	0.38	0.37
9/08/2011	9.98	0.71	0.44
8/11/2011	11.00	0.77	0.81
6/02/2012	5.12	1.19	0.67
8/05/2012	0.49	0.75	0.38
6/08/2012	0.36	0.31	0.24
13/11/2012	1.18	0.80	0.40
13/02/2013	1.79	1.02	0.65
14/05/2013	1.08	0.22	0.36
6/08/2013	0.54	0.78	0.40
12/11/2013		1.23	0.91
11/02/2014		2.67	
13/05/2014	0.72	1.64	1.97
12/08/2014		0.43	
10/11/2014		1.23	
9/02/2015	1.33	1.45	0.94
11/05/2015	0.23	0.44	0.84
11/08/2015	1.35	0.28	0.96
10/11/2015	1.49	0.53	0.76
8/02/2016	4.07	0.66	2.18
9/05/2016	0.68	1.10	1.29
9/08/2016	2.89	0.51	0.48
7/11/2016		0.94	
7/02/2017		1.16	2.80
8/05/2017	0.36	0.38	0.66
8/08/2017	4.64	0.54	0.53
7/11/2017	0.40	0.71	0.74
14/02/2018		1.13	
9/05/2018	0.62	0.61	0.86
15/08/2018		0.39	
14/11/2018		1.12	1.40
10/02/2019		2.50	
15/05/2019	1.02	0.58	1.29
14/08/2019	7.61	0.47	0.92
12/11/2019		1.21	

Total Nitrogen (mg/L) - Groundwater



Total Nitrogen (mg/L) - Surface Water

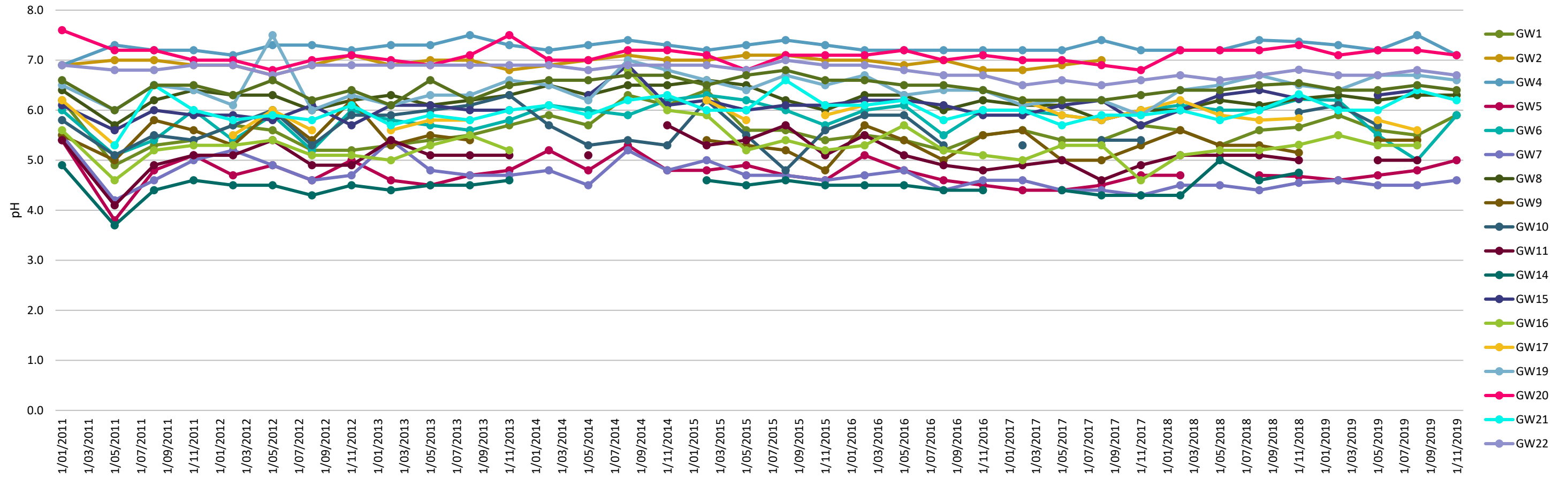


pH	GW1	GW2	GW4	GW5	GW6	GW7	GW8	GW9	GW10	GW11	GW14	GW15	GW16	GW17	GW19	GW20	GW21	GW22	GW23
31/01/2011	6.2	6.9	6.9	5.4	6.0	5.5	6.4	5.5	5.8	5.4	4.9	6.1	5.6	6.2	6.5	7.6		6.9	6.6
10/05/2011	4.9	7.0	7.3	3.8	5.1	4.2	5.7	5.0	5.1	4.1	3.7	5.6	4.6	5.3	6.0	7.2	5.3	6.8	6.0
9/08/2011	5.3	7.0	7.2	4.8	5.4	4.6	6.2	5.8	5.5	4.9	4.4	6.0	5.2		6.5	7.2	6.5	6.8	6.5
8/11/2011	5.4	6.9	7.2	5.1	6.0	5.0	6.4	5.6	5.4	5.1	4.6	5.9	5.3		6.4	7.0	6.0	6.9	6.5
6/02/2012	5.7	6.9	7.1	4.7	5.4	5.2	6.3	5.3	5.7	5.1	4.5	5.9	5.3	5.5	6.1	7.0	5.8	6.9	6.3
8/05/2012	5.6	6.7	7.3	4.9	5.9	4.9	6.3	6.0	6.0	5.4	4.5	5.8	5.4	6.0	7.5	6.8	5.9	6.7	6.6
6/08/2012	5.2	6.9	7.3	4.6	5.2	4.6	6.0	5.4	5.3	4.9	4.3	6.1	5.1	5.6	6.0	7.0	5.8	6.9	6.2
13/11/2012	5.2	7.1	7.2	5.0	6.0	4.7	6.2	6.2	5.9	4.9	4.5	5.7	5.1		6.3	7.1	6.1	6.9	6.4
13/02/2013	5.3	6.9	7.3	4.6	5.8	5.4	6.3	5.3	5.9	5.4	4.4	6.1	5.0	5.6	6.1	7.0	5.7	6.9	6.1
14/05/2013	5.4	7.0	7.3	4.5	5.7	4.8	6.1	5.5	6.0	5.1	4.5	6.1	5.3	5.8	6.3	6.9	5.9	6.9	6.6
6/08/2013	5.5	7.0	7.5	4.7	5.6	4.7	6.2	5.4	6.1	5.1	4.5	6.0	5.5	5.8	6.3	7.1	5.8	6.9	6.2
12/11/2013	5.7	6.8	7.3	4.8	5.8	4.7	6.3		6.3	5.1	4.6	6.0	5.2		6.6	7.5	6.0	6.9	6.5
11/02/2014	5.9	6.9	7.2	5.2	6.1	4.8	6.5		5.7						6.5	7.0	6.1	6.9	6.6
13/05/2014	5.7	7.0	7.3	4.8	6.0	4.5	6.3		5.3	5.1		6.3			6.2	7.0	5.9	6.8	6.6
12/08/2014	6.3	7.1	7.4	5.3	5.9	5.2	6.5		5.4			6.9	6.8		7.0	7.2	6.2	6.9	6.7
10/11/2014	6.1	7.0	7.3	4.8	6.2	4.8	6.5		5.3	5.7		6.1	6.0		6.8	7.2	6.3	6.9	6.7
9/02/2015	6.4	7.0	7.2	4.8	6.3	5.0	6.6	5.4	6.2	5.3	4.6	6.2	5.9	6.2	6.6	7.1	6.0	6.9	6.5
11/05/2015	5.6	7.1	7.3	4.9	6.2	4.7	6.5	5.3	5.5	5.4	4.5	6.0	5.2	5.8	6.4	6.8	6.0	6.8	6.7
11/08/2015	5.6	7.1	7.4	4.7	6.0	4.7	6.2	5.2	4.8	5.7	4.6	6.1	5.4		6.7	7.1	6.6	7.0	6.8
10/11/2015	5.4	7.0	7.3	4.6	5.7	4.6	6.0	4.8	5.6	5.1	4.5	6.1	5.2	5.9	6.5	7.1	6.1	6.9	6.6
8/02/2016	5.5	7.0	7.2	5.1	6.0	4.7	6.3	5.7	5.9	5.5	4.5	6.2	5.3	6.1	6.7	7.1	6.1	6.9	6.6
9/05/2016	5.4	6.9	7.2	4.8	6.1	4.8	6.3	5.4	5.9	5.1	4.5	6.2	5.7		6.3	7.2	6.2	6.8	6.5
9/08/2016	5.2	7.0	7.2	4.6	5.5	4.4	6.0	5.0	5.3	4.9	4.4	6.1	5.2	5.8	6.4	7.0	5.8	6.7	6.5
7/11/2016	5.5	6.8	7.2	4.5	6.0	4.6	6.2	5.5		4.8	4.4	5.9	5.1		6.4	7.1	6.0	6.7	6.4
7/02/2017	5.6	6.8	7.2	4.4	6.0	4.6	6.1	5.6	5.3	4.9		5.9	5.0	6.2	6.1	7.0	6.0	6.5	6.2
8/05/2017	5.4	6.9	7.2	4.4	5.9	4.4	6.1	5.0		5.0	4.4	6.1	5.3	5.9	6.2	7.0	5.7	6.6	6.2
8/08/2017	5.4	7.0	7.4	4.5	5.8	4.4	5.8	5.0	5.4	4.6	4.3	6.2	5.3	5.8	6.2	6.9	5.9	6.5	6.2
7/11/2017	5.7		7.2	4.7	6.0	4.3	6.0	5.3	5.4	4.9	4.3	5.7	4.6	6.0	5.9	6.8	5.9	6.6	6.3
14/02/2018	5.6		7.2	4.7	6.1	4.5	6.0	5.6		5.1	4.3	6.0	5.1	6.2	6.4	7.2	6.0	6.7	6.4
9/05/2018	5.3		7.2		6.0	4.5	6.2	5.3		5.1	5.0	6.3	5.2	5.9	6.5	7.2	5.8	6.6	6.4
15/08/2018	5.6		7.4	4.7	6.0	4.4	6.1	5.3		5.1	4.6	6.4	5.2	5.8	6.7	7.2	6.0	6.7	6.5
14/11/2018	5.7		7.4	4.7	6.2	4.6	6.2	5.2	6.0	5.0	4.8	6.2	5.3	5.8	6.5	7.3	6.3	6.8	6.5
13/02/2019	5.90		7.30	4.60	6.20	4.60	6.30		6.10				5.50		6.40	7.10	6.00	6.70	6.40
15/05/2019	5.60		7.20	4.70	5.50	4.50	6.20	5.40	5.70	5.00		6.30	5.30	5.80	6.70	7.20	6.00	6.70	6.40
14/08/2019	5.50		7.50	4.80	5.00	4.50	6.30	5.40		5.00		6.40	5.30	5.60	6.70	7.20	6.40	6.80	6.50
13/11/2019	5.90		7.10	5.00	5.90	4.60	6.30								6.60	7.10	6.20	6.70	6.40

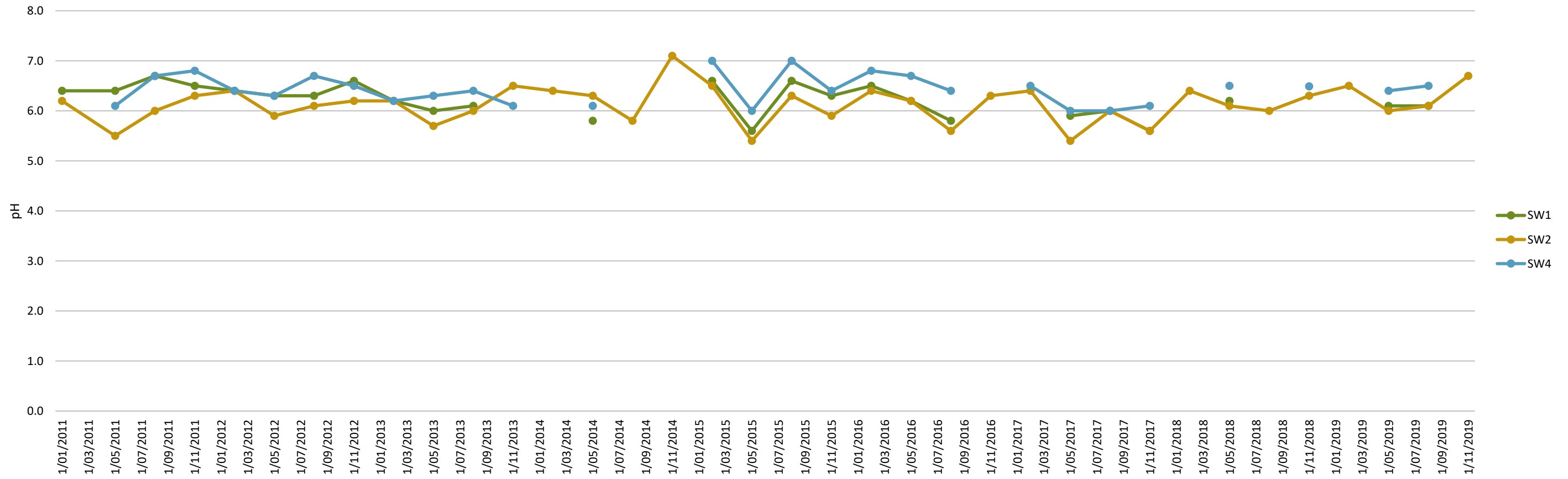
pH	SW1	SW2	SW4
31/01/2011	6.4	6.2	
10/05/2011	6.4	5.5	6.1
9/08/2011	6.7	6.0	6.7
8/11/2011	6.5	6.3	6.8
6/02/2012	6.4	6.4	6.4
8/05/2012	6.3	5.9	6.3
6/08/2012	6.3	6.1	6.7
13/11/2012	6.6	6.2	6.5
13/02/2013	6.2	6.2	6.2
14/05/2013	6.0	5.7	6.3
6/08/2013	6.1	6.0	6.4
12/11/2013		6.5	6.1
11/02/2014		6.4	
13/05/2014	5.8	6.3	6.1
12/08/2014		5.8	
10/11/2014		7.1	
9/02/2015	6.6	6.5	7.0
11/05/2015	5.6	5.4	6.0
11/08/2015	6.6	6.3	7.0
10/11/2015	6.3	5.9	6.4
8/02/2016	6.5	6.4	6.8
9/05/2016	6.2	6.2	6.7
9/08/2016	5.8	5.6	6.4
7/11/2016		6.3	
7/02/2017		6.4	6.5
8/05/2017	5.9	5.4	6.0
8/08/2017	6.0	6.0	6.0
7/11/2017	5.6	5.6	6.1
14/02/2018		6.4	
9/05/2018	6.2	6.1	6.5
15/08/2018		6.0	
14/11/2018		6.3	6.5
10/02/2019		6.50	
15/05/2019	6.10	6.00	6.40
14/08/2019	6.10	6.10	6.50
12/11/2019		6.70	



### pH - Groundwater



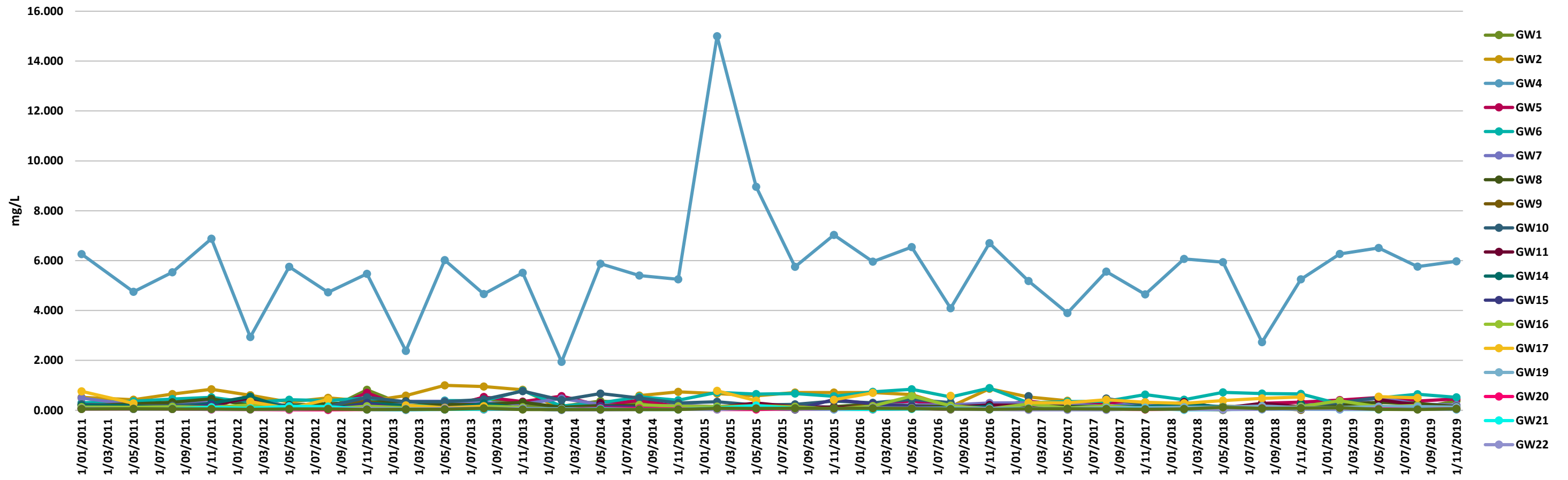
### pH - Surface Water



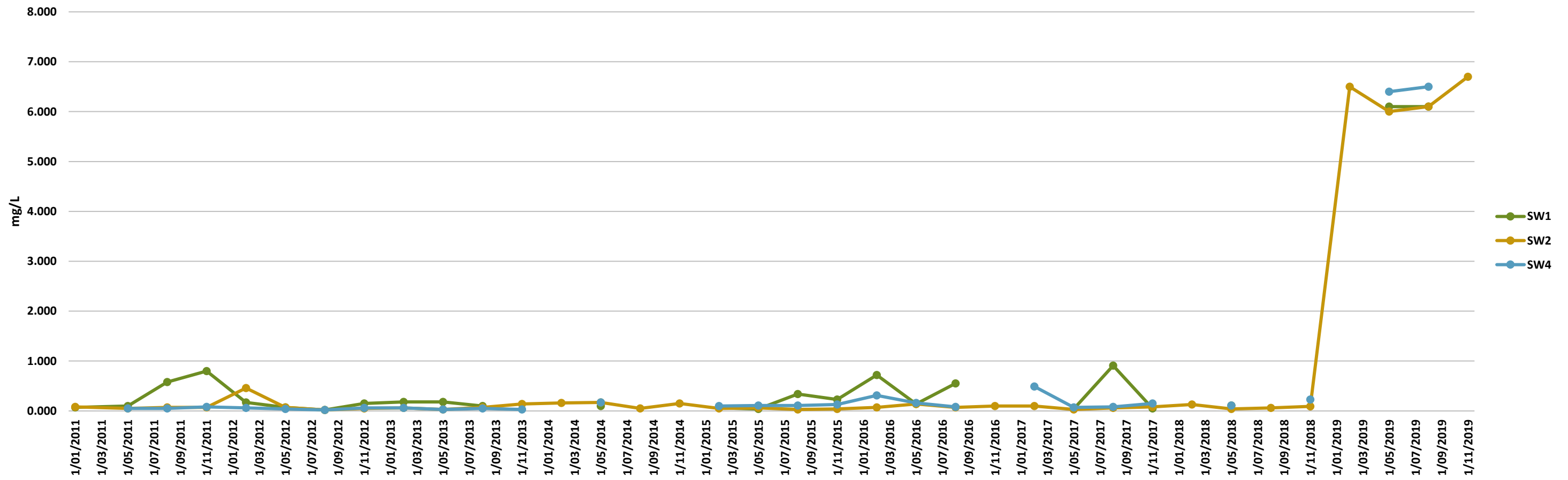
Phosphorus	GM1	GM2	GM4	GM5	GM6	GM7	GM8	GM9	GM10	GM11	GM14	GM15	GM16	GM17	GM19	GM20	GM21	GM22	GM23
31/01/2011	0.100	0.520	6.260	0.230	0.300	0.490	0.190	0.230	0.240	0.080	0.180	0.070	0.130	0.760	0.070	0.050		0.050	0.050
10/05/2011	0.050	0.420	4.750	0.260	0.360	0.220	0.260	0.190	0.170	0.110	0.200	0.140	0.120	0.280	0.060	0.050	0.050	0.050	0.060
9/08/2011	0.060	0.650	5.530	0.160	0.450	0.290	0.320	0.190	0.180	0.050	0.050	0.080	0.140		0.060	0.050	0.060	0.050	0.050
8/11/2011	0.100	0.840	6.880	0.200	0.520	0.330	0.460	0.120	0.280	0.190	0.280	0.220	0.120		0.060	0.030	0.120	0.040	0.050
6/02/2012	0.600	0.600	2.940	0.100	0.310	0.420	0.200	0.110	0.430	0.510	0.550	0.050	0.220	0.350	0.050	0.030	0.080	0.030	0.040
8/05/2012	0.110	0.330	5.750	0.120	0.420	0.160	0.210	0.070	0.130	0.040	0.050	0.180	0.080	0.070	0.070	0.020	0.160	0.040	0.050
6/08/2012	0.050	0.500	4.730	0.060	0.390	0.150	0.260	0.180	0.150	0.080	0.050	0.020	0.060	0.440	0.060	0.020	0.150	0.060	0.050
13/11/2012	0.820	0.360	5.470	0.700	0.490	0.190	0.320	0.360	0.520	0.120	0.290	0.280	0.160		0.070	0.030	0.030	0.060	0.030
13/02/2013	0.200	0.590	2.380	0.100	0.100	0.360	0.360	0.100	0.340	0.060	0.190	0.040	0.100	0.200	0.060	0.020	0.020	0.030	0.040
14/05/2013	0.200	1.000	6.020	0.080	0.390	0.360	0.230	0.040	0.340	0.040	0.060	0.030	0.040	0.100	0.060	0.050	0.040	0.070	0.040
6/08/2013	0.500	0.950	4.660	0.530	0.380	0.310	0.230	0.160	0.440	0.110	0.270	0.070	0.160	0.160	0.060	0.030	0.040	0.070	0.080
12/11/2013	0.190	0.820	5.510	0.350	0.790	0.250	0.320		0.770	0.080	0.090	0.080	0.120		0.070	0.050	0.050	0.050	0.030
11/02/2014	0.160	0.040	1.940	0.570	0.170	0.470	0.120		0.410						0.060	0.020	0.020	0.020	0.030
13/05/2014	0.370	0.090	5.880	0.190	0.290	0.240	0.190		0.670	0.290		0.170			0.070	0.090	0.060	0.020	0.030
12/08/2014	0.280	0.590	5.400	0.400	0.540	0.120	0.190		0.490			0.130	0.220		0.060	0.070	0.030	0.030	0.030
10/11/2014	0.200	0.740	5.250	0.150	0.400	0.210	0.150		0.290	0.120		0.050	0.160		0.050	0.050	0.030	0.040	0.030
9/02/2015	0.070	0.670	15.000	0.090	0.720	0.140	0.150	0.100	0.340	0.120	0.100	0.090	0.150	0.780	0.090	0.030	0.090	0.030	0.080
11/05/2015	0.090	0.580	8.960	0.090	0.650	0.230	0.160	0.070	0.210	0.290	0.120	0.080	0.180	0.390	0.080	0.030	0.190	0.080	0.070
11/08/2015	0.030	0.710	5.750	0.200	0.670	0.180	0.120	0.080	0.240	0.140	0.060	0.030	0.140		0.070	0.050	0.070	0.050	0.080
10/11/2015	0.150	0.710	7.030	0.110	0.560	0.120	0.130	0.050	0.370	0.110	0.050	0.430	0.050	0.420	0.080	0.040	0.030	0.040	0.080
8/02/2016	0.250	0.710	5.960	0.190	0.740	0.250	0.260	0.240	0.300	0.140	0.130	0.260	0.170	0.700	0.080	0.030	0.040	0.100	0.080
9/05/2016	0.160	0.630	6.540	0.380	0.840	0.220	0.170	0.080	0.440	0.070	0.080	0.150	0.570		0.090	0.060	0.050	0.080	0.070
9/08/2016	0.040	0.150	4.090	0.140	0.530	0.220	0.150	0.030	0.310	0.120	0.120	0.070	0.180	0.580	0.090	0.050	0.060	0.040	0.050
7/11/2016	0.060	0.860	6.700	0.170	0.890	0.290	0.190	0.080		0.210	0.140	0.050	0.060		0.080	0.040	0.030	0.030	0.040
7/02/2017	0.110	0.530	5.180	0.360	0.300	0.300	0.180	0.060	0.570	0.200		0.060	0.250	0.310	0.080	0.030	0.060	0.020	0.060
8/05/2017	0.110	0.380	3.900	0.220	0.350	0.280	0.150	0.040		0.090	0.110	0.060	0.090	0.300	0.060	0.040	0.050	0.020	0.060
8/08/2017	0.040	0.050	5.560	0.310	0.360	0.150	0.160	0.050	0.470	0.120	0.170	0.070	0.180	0.420	0.100	0.040	0.040	0.020	0.050
7/11/2017	0.310		4.650	0.290	0.630	0.330	0.110	0.050	0.230	0.080	0.140	0.050	0.070	0.320	0.110	0.030	0.070	0.060	0.040
14/02/2018	0.120		6.070	0.270	0.420	0.070	0.120	0.050		0.330	0.270	0.060	0.110	0.280	0.120	0.040	0.020	0.030	0.050
9/05/2018	0.160		5.940		0.720	0.120	0.020	0.020		0.090	0.130	0.060	0.070	0.390	0.130	0.080	0.030	0.030	0.120
15/08/2018	0.130		2.730	0.280	0.670	0.200	0.140	0.100		0.280		0.070	0.080	0.480	0.170	0.080	0.040	0.040	0.070
14/11/2018	0.060		5.250	0.330	0.660	0.110	0.140	0.020	0.190	0.140	0.250	0.060	0.150	0.530	0.110	0.050	0.050	0.050	0.090
13/02/2019	0.23		6.27	0.41	0.25	0.18	0.24		0.31				0.38		0.11	0.06	0.03	0.04	0.10
15/05/2019	0.17		6.51	0.51	0.49	0.51	0.32	0.13	0.51	0.43		0.11	0.14	0.55	0.15	0.05	0.03	0.04	0.04
14/08/2019	0.07		5.76	0.37	0.64	0.25	0.27	0.05		0.21		0.18	0.20	0.50	0.15	0.05	0.05	0.04	0.03
13/11/2019	0.38		5.97	0.46	0.52	0.21	0.15								0.13	0.06	0.03	0.04	0.06

Phosphorus	SW1	SW2	SW4
31/01/2011	0.070	0.080	
10/05/2011	0.100	0.050	0.050
9/08/2011	0.580	0.070	0.050
8/11/2011	0.800	0.070	0.080
6/02/2012	0.170	0.460	0.060
8/05/2012	0.070	0.070	0.040
6/08/2012	0.020	0.020	0.020
13/11/2012	0.150	0.050	0.060
13/02/2013	0.180	0.060	0.060
14/05/2013	0.180	0.030	0.030
6/08/2013	0.100	0.070	0.050
12/11/2013		0.140	0.030
11/02/2014		0.160	
13/05/2014	0.100	0.170	0.170
12/08/2014		0.050	
10/11/2014		0.150	
9/02/2015	0.060	0.050	0.100
11/05/2015	0.040	0.060	0.110
11/08/2015	0.340	0.030	0.110
10/11/2015	0.230	0.040	0.130
8/02/2016	0.720	0.070	0.310
9/05/2016	0.140	0.140	0.160
9/08/2016	0.550	0.070	0.080
7/11/2016		0.100	
7/02/2017		0.100	0.490
8/05/2017	0.040	0.030	0.070
8/08/2017	0.910	0.060	0.080
7/11/2017	0.050	0.080	0.150
14/02/2018		0.130	
9/05/2018	0.110	0.040	0.110
15/08/2018		0.060	
14/11/2018		0.090	0.230
10/02/2019		6.50	
15/05/2019	6.10	6.00	6.40
14/08/2019	6.10	6.10	6.50
12/11/2019		6.70	

Phosphorus (mg/L) - Groundwater



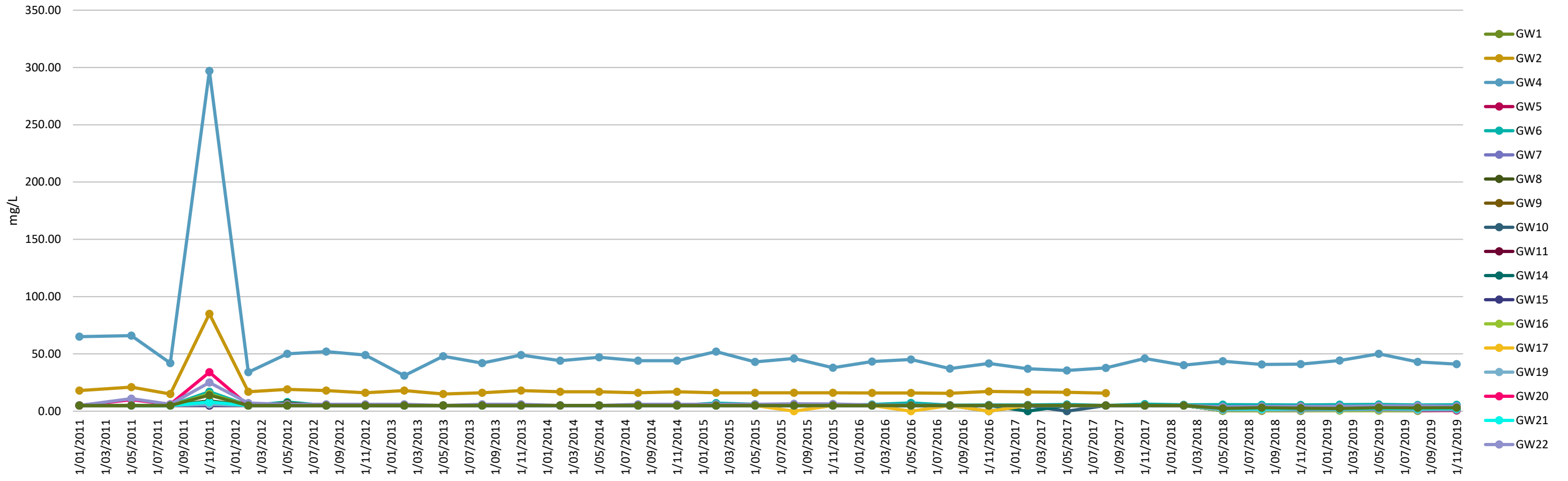
Phosphorus (mg/L) - Surface Water



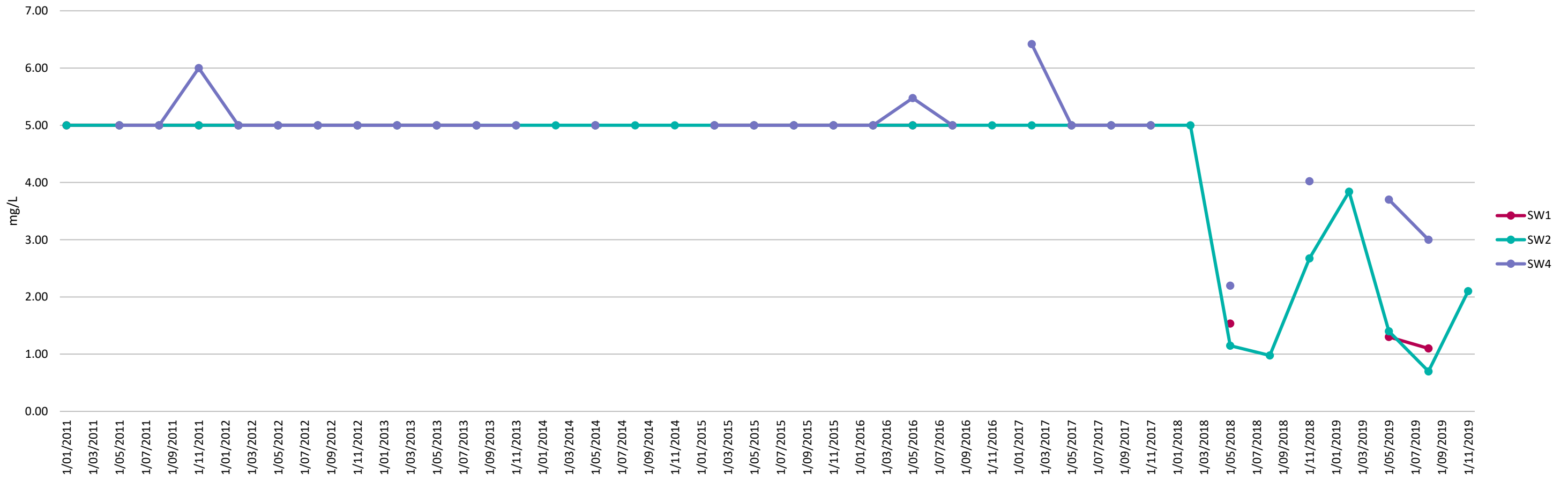
K	GW1	GW2	GW4	GW5	GW6	GW7	GW8	GW9	GW10	GW11	GW14	GW15	GW16	GW17	GW19	GW20	GW21	GW22	GW23
31/01/2011	5.00	18.00	65.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00		5.00	5.00
10/05/2011	5.00	21.00	66.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	10.00	5.00	11.00	5.00
9/08/2011	5.00	15.00	42.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00		5.00	6.00	5.00	6.00	5.00
8/11/2011	5.00	85.00	297.00	5.00	17.00	7.00	9.00	7.00	7.00	5.00	8.00	5.00	15.00		6.00	34.00	8.00	25.00	14.00
6/02/2012	5.00	17.00	34.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	7.00	5.00
8/05/2012	5.00	19.00	50.00	5.00	8.00	5.00	7.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	6.00	5.00
6/08/2012	5.00	18.00	52.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	6.00	5.00
13/11/2012	5.00	16.00	49.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00		5.00	5.00	5.00	6.00	5.00
13/02/2013	5.00	18.00	31.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	6.00	5.00
14/05/2013	5.00	15.00	48.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
6/08/2013	5.00	16.00	42.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	6.00	5.00
12/11/2013	5.00	18.00	49.00	5.00	5.00	5.00	5.00		5.00	5.00	5.00	5.00	5.00		5.00	5.00	5.00	6.00	5.00
11/02/2014	5.00	17.00	44.00	5.00	5.00	5.00	5.00		5.00						5.00	5.00	5.00	5.00	5.00
13/05/2014	5.00	17.00	47.00	5.00	5.00	5.00	5.00		5.00	5.00		5.00			5.00	5.00	5.00	5.00	5.00
12/08/2014	5.00	16.00	44.00	5.00	5.00	5.00	5.00		5.00			5.00	5.00		5.00	5.00	5.00	6.00	5.00
10/11/2014	5.00	17.00	44.00	5.00	5.00	5.00	5.00		5.00	5.00		5.00	5.00		5.00	5.00	5.00	6.00	5.00
9/02/2015	5.00	16.00	52.00	5.00	7.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	6.00	5.00
11/05/2015	5.00	16.00	43.00	5.00	6.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	6.00	5.00
11/08/2015	5.00	16.00	46.00	5.00	5.50	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	NT	5.00	5.00	5.00	6.40	5.00
10/11/2015	5.00	16.00	38.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	6.30	5.00
8/02/2016	5.00	15.96	43.26	5.00	5.79	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.38	5.00
9/05/2016	5.00	15.89	45.09	5.00	7.24	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	NT	5.00	5.00	5.00	5.30	5.00
9/08/2016	5.00	15.66	37.23	5.00	5.26	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.16	5.00
7/11/2016	5.00	17.29	41.69	5.00	5.42	5.00	5.00	5.00	NT	5.00	5.00	5.00	5.00	NT	5.00	5.00	5.00	5.00	5.00
7/02/2017	5.00	16.85	37.10	5.00	5.36	5.00	5.00	5.00	5.00	5.00	NT	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
8/05/2017	5.00	16.51	35.50	5.00	5.92	5.00	5.00	5.00	NT	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
8/08/2017	5.00	15.82	37.83	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
7/11/2017	5.00		46.02	5.00	6.19	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.02	5.00	5.00	5.00	5.00	5.00
14/02/2018	5.00		40.10	5.00	5.52	5.00	5.00	5.00		5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
9/05/2018	0.55		43.59		5.74	1.86	2.21	2.67		0.50	0.53	1.58	0.50	3.43	1.07	2.21	2.15	3.86	2.44
15/08/2018	0.52		40.73	0.52	5.57	1.77	2.17	2.27		0.50		1.62	0.50	3.58	1.25	2.35	2.14	4.16	2.94
14/11/2018	0.50		41.09	0.54	5.35	1.82	2.22	4.41	1.44	0.50	0.53	1.57	0.50	3.75	1.02	2.04	2.09	4.17	2.51
13/02/2019	0.91		44.15	0.57	5.77	1.96	2.36		1.47				0.50		1.19	2.11	1.99	4.18	2.35
15/05/2019	0.70		50.00	0.60	5.90	2.00	2.30	2.10	1.40	0.60		1.90	0.50	4.50	1.40	2.00	2.20	4.70	3.00
14/08/2019	0.50		43.00	0.50	5.40	1.70	2.10	2.10		0.50		1.60	0.50	3.30	1.10	2.10	2.10	4.70	2.90
13/11/2019	1.10		41.00	0.60	5.60	2.10	2.10								1.20	2.00	2.10	4.40	3.00

K	SW1	SW2	SW4
31/01/2011	5.00	5.00	
10/05/2011	5.00	5.00	5.00
9/08/2011	5.00	5.00	5.00
8/11/2011	5.00	5.00	6.00
6/02/2012	5.00	5.00	5.00
8/05/2012	5.00	5.00	5.00
6/08/2012	5.00	5.00	5.00
13/11/2012	5.00	5.00	5.00
13/02/2013	5.00	5.00	5.00
14/05/2013	5.00	5.00	5.00
6/08/2013	5.00	5.00	5.00
12/11/2013		5.00	5.00
11/02/2014		5.00	
13/05/2014	5.00	5.00	5.00
12/08/2014		5.00	
10/11/2014		5.00	
9/02/2015	5.00	5.00	5.00
11/05/2015	5.00	5.00	5.00
11/08/2015	5.00	5.00	5.00
10/11/2015	5.00	5.00	5.00
8/02/2016	5.00	5.00	5.00
9/05/2016	5.00	5.00	5.48
9/08/2016	5.00	5.00	5.00
7/11/2016		5.00	
7/02/2017		5.00	6.42
8/05/2017	5.00	5.00	5.00
8/08/2017	5.00	5.00	5.00
7/11/2017	5.00	5.00	5.00
14/02/2018		5.00	
9/05/2018	1.53	1.15	2.20
15/08/2018		0.98	
14/11/2018		2.67	4.02
10/02/2019		3.84	
15/05/2019	1.30	1.40	3.70
14/08/2019	1.10	0.70	3.00
12/11/2019		2.10	

Total Potassium (mg/L) - Groundwater



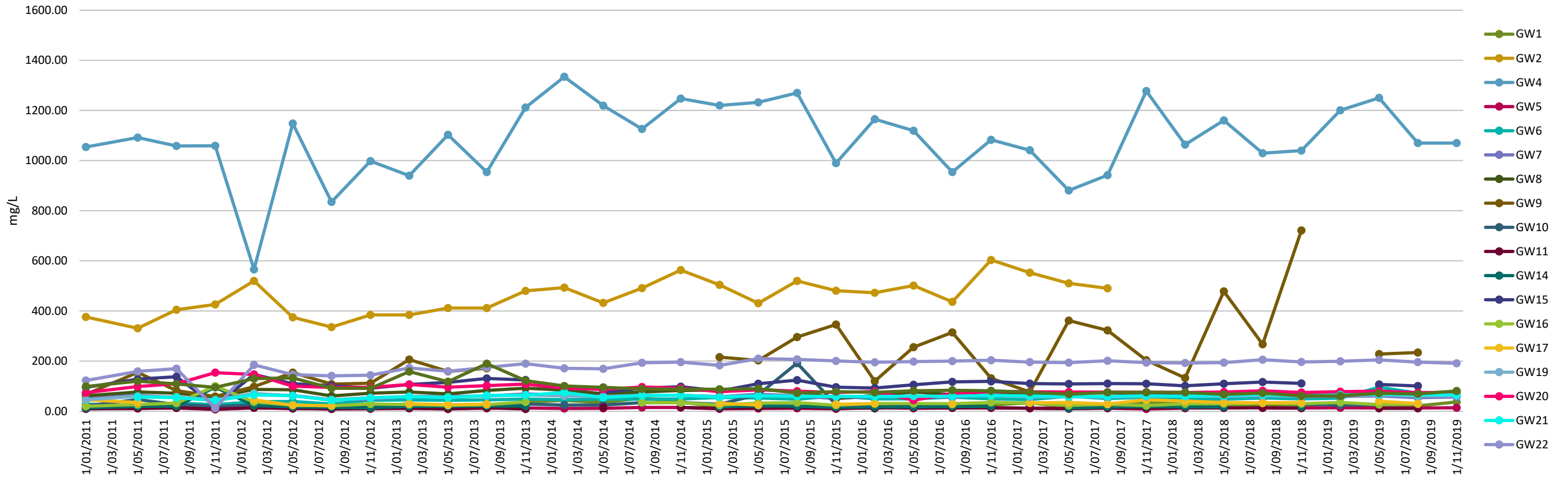
Total Potassium (mg/L) - Surface Water



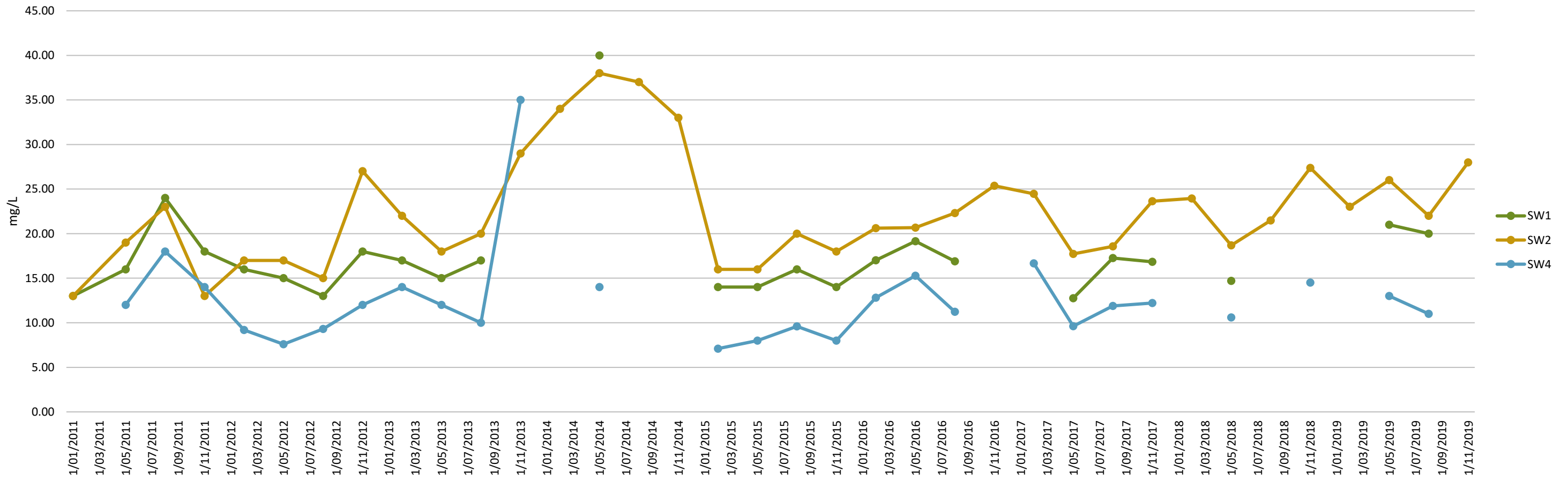
Na	GM1	GM2	GM4	GM5	GM6	GM7	GM8	GM9	GM10	GM11	GM14	GM15	GM16	GM17	GM19	GM20	GM21	GM22	GM23	Na	SW1	SW2	SW4
31/01/2011	16.00	376.00	1054.00	9.40	29.00	51.00	62.00	67.00	21.00	9.60	13.00	95.00	20.00	45.00	46.00	74.00		123.00	99.00	31/01/2011	13.00	13.00	
10/05/2011	15.00	331.00	1092.00	11.00	20.00	64.00	77.00	155.00	47.00	12.00	19.00	128.00	27.00	35.00	60.00	99.00	57.00	159.00	120.00	10/05/2011	16.00	19.00	12.00
9/08/2011	21.00	405.00	1058.00	13.00	33.00	55.00	72.00	82.00	27.00	14.00	20.00	138.00	32.00		57.00	110.00	54.00	170.00	109.00	9/08/2011	24.00	23.00	18.00
8/11/2011	13.00	426.00	1059.00	7.30	26.00	44.00	57.00	59.00	19.00	8.60	96.00	22.00	100.00		45.00	154.00	43.00	12.00	95.00	8/11/2011	18.00	13.00	14.00
6/02/2012	30.00	520.00	566.00	14.00	38.00	66.00	87.00	98.00	25.00	14.00	23.00	147.00	37.00	45.00	71.00	147.00	65.00	185.00	130.00	6/02/2012	16.00	17.00	9.20
8/05/2012	19.00	375.00	1148.00	11.00	39.00	63.00	86.00	154.00	23.00	11.00	17.00	110.00	25.00	24.00	62.00	100.00	62.00	146.00	133.00	8/05/2012	15.00	17.00	7.60
6/08/2012	14.00	336.00	835.00	8.70	29.00	46.00	61.00	108.00	20.00	9.60	15.00	102.00	22.00	22.00	46.00	95.00	44.00	141.00	92.00	6/08/2012	13.00	15.00	9.30
13/11/2012	25.00	384.00	998.00	10.00	44.00	48.00	72.00	112.00	23.00	12.00	14.00	92.00	29.00		54.00	95.00	53.00	144.00	91.00	13/11/2012	18.00	27.00	12.00
13/02/2013	16.00	384.00	940.00	12.00	45.00	59.00	77.00	206.00	29.00	12.00	19.00	107.00	27.00	30.00	59.00	107.00	58.00	173.00	158.00	13/02/2013	17.00	22.00	14.00
14/05/2013	17.00	412.00	1103.00	11.00	44.00	59.00	69.00	159.00	21.00	8.90	19.00	115.00	24.00	26.00	56.00	96.00	55.00	160.00	118.00	14/05/2013	15.00	18.00	12.00
6/08/2013	21.00	412.00	954.00	12.00	45.00	61.00	83.00	171.00	25.00	14.00	21.00	131.00	26.00	28.00	61.00	102.00	63.00	175.00	190.00	6/08/2013	17.00	20.00	10.00
12/11/2013	37.00	480.00	1212.00	13.00	49.00	69.00	92.00		29.00	9.20	20.00	125.00	37.00		65.00	108.00	64.00	190.00	122.00	12/11/2013		29.00	35.00
11/02/2014	43.00	493.00	1334.00	11.00	46.00	65.00	84.00		25.00						61.00	92.00	75.00	171.00	101.00	11/02/2014		34.00	
13/05/2014	34.00	432.00	1219.00	12.00	49.00	62.00	70.00		25.00	15.00		76.00			59.00	87.00	55.00	169.00	95.00	13/05/2014	40.00	38.00	14.00
12/08/2014	53.00	491.00	1126.00	15.00	48.00	63.00	77.00		34.00			92.00	35.00		63.00	97.00	63.00	193.00	89.00	12/08/2014		37.00	
10/11/2014	37.00	563.00	1247.00	15.00	49.00	64.00	83.00		34.00	15.00		98.00	33.40		64.00	92.00	64.00	196.00	88.00	10/11/2014		33.00	
9/02/2015	16.00	504.00	1220.00	9.90	55.00	58.00	84.00	216.00	28.00	12.00	17.00	81.00	25.00	32.00	59.00	78.00	56.00	183.00	88.00	9/02/2015	14.00	16.00	7.10
11/05/2015	18.00	431.00	1232.00	11.00	53.00	68.00	88.00	203.00	66.00	13.00	21.00	110.00	32.00	25.00	61.00	85.00	62.00	210.00	90.00	11/05/2015	14.00	16.00	8.00
11/08/2015	19.00	520.00	1270.00	12.00	48.00	62.00	78.00	296.00	192.00	15.00	20.00	124.00	34.00		61.00	80.00	60.00	207.00	73.00	11/08/2015	16.00	20.00	9.60
10/11/2015	23.00	481.00	990.00	9.70	61.00	50.00	52.00	346.00	26.00	11.00	16.00	96.00	24.00	28.00	58.00	75.00	59.00	201.00	78.00	10/11/2015	14.00	18.00	8.00
8/02/2016	29.47	472.92	1165.20	15.82	49.32	59.78	63.15	120.06	10.83	13.38	17.54	92.67	30.72	29.99	59.98	78.64	59.30	195.40	75.49	8/02/2016	17.01	20.62	12.81
9/05/2016	22.54	501.68	1119.15	11.96	49.19	60.17	76.98	255.65	28.93	13.54	17.14	105.77	31.10		56.84	43.92	60.35	198.04	81.27	9/05/2016	19.15	20.68	15.27
9/08/2016	21.22	436.53	954.44	12.85	56.13	55.03	66.73	314.68	15.43	13.70	18.70	117.54	30.35	28.03	60.02	70.84	59.96	200.05	83.43	9/08/2016	16.89	22.30	11.23
7/11/2016	25.37	603.61	1082.99	12.93	49.30	67.24	80.43	131.50		14.58	19.47	119.34	35.12		63.11	79.84	62.82	203.37	81.49	7/11/2016		25.38	
7/02/2017	33.70	553.03	1041.14	12.29	46.69	58.25	65.84	76.81	22.48	11.78		110.10	32.85	33.74	57.25	77.57	60.83	195.87	76.18	7/02/2017		24.47	16.66
8/05/2017	15.10	510.61	880.88	10.39	59.49	60.01	72.92	362.04		10.26	12.63	109.18	23.08	34.79	57.85	77.02	58.04	193.88	67.95	8/05/2017	12.76	17.73	9.61
8/08/2017	17.41	490.61	941.95	12.36	51.11	55.57	73.20	322.79	24.69	12.19	16.86	110.07	27.29	28.77	57.04	76.40	59.21	201.19	75.25	8/08/2017	17.26	18.57	11.89
7/11/2017	34.62		1277.58	9.01	55.42	67.08	70.67	203.18	22.98	13.43	18.63	109.35	22.51	45.88	59.17	76.42	61.47	194.04	75.48	7/11/2017	16.83	23.63	12.22
14/02/2018	28.03		1063.90	12.27	49.74	59.74	59.94	132.93		12.88	17.33	101.58	29.32	40.62	59.91	74.75	59.57	192.33	75.57	14/02/2018		23.95	
9/05/2018	18.15		1160.42		48.12	60.86	70.77	478.11		13.00	16.89	109.34	30.05	34.79	59.87	77.02	63.24	193.85	67.25	9/05/2018	14.70	18.68	10.60
15/08/2018	27.02		1029.59	13.38	53.01	62.14	71.45	267.26		14.04		116.56	32.35	33.47	63.41	81.75	66.54	205.86	72.53	15/08/2018		21.49	
14/11/2018	21.15		1039.53	12.77	49.17	59.82	73.60	721.00	28.78	12.40	17.99	111.33	30.35	34.97	59.83	75.07	61.19	196.79	61.04	14/11/2018		27.38	14.50
13/02/2019	31.44		1201	13.85	51.85	59.88	72.54		24.00				34.90		62.66	78.20	64.87	199.25	61.03	13/02/2019		23.03	
15/05/2019	21.00		1250	13.00	96.00	61.00	74.00	228.00	26.00	12.00		107.00	27.00	40.00	65.00	80.00	68.00	205.00	72.00	15/05/2019	21.00	26.00	13.00
14/08/2019	21.00		1070	13.00	72.00	54.00	69.00	234.00		12.00		101.00	29.00	31.00	61.00	74.00	66.00	196.00	69.00	14/08/2019	20.00	22.00	11.00
13/11/2019	37.00		1070	14.00	59.00	57.00	68.00								62.00	76.00	65.00	191.00	81.00	13/11/2019		28.00	



Total Sodium (mg/L) - Groundwater



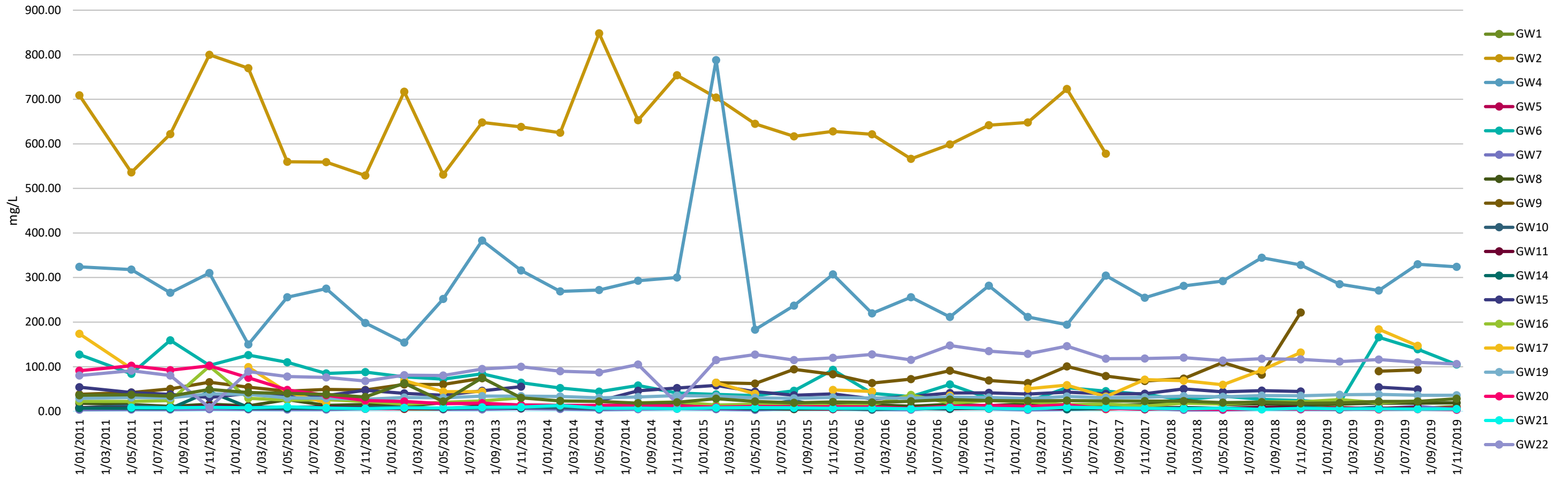
Total Sodium (mg/L) - Surface Water



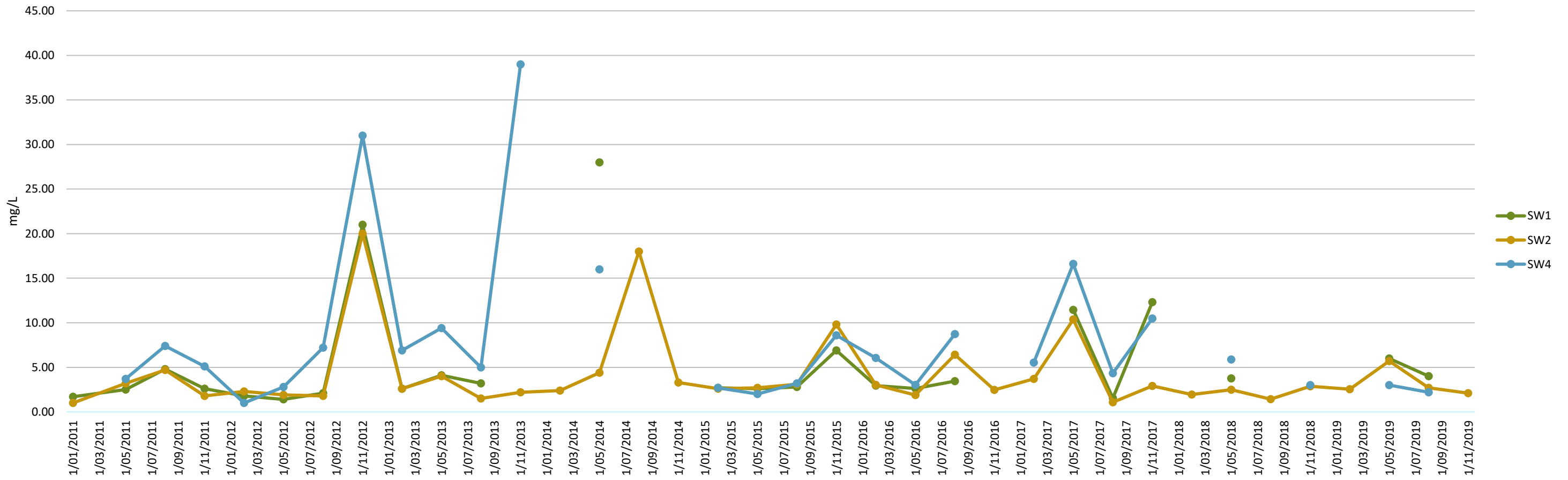
Sulfate	GM1	GM2	GM4	GM5	GM6	GM7	GM8	GM9	GM10	GM11	GM14	GM15	GM16	GM17	GM19	GM20	GM21	GM22	GM23	
31/01/2011	4.10	709.00	324.00	7.50	127.00	3.60	18.00	38.00	8.20	7.80	7.10	54.00	22.00	174.00	29.00	91.00		80.00	36.00	
10/05/2011	5.20	536.00	318.00	6.80	84.00	3.90	15.00	42.00	12.00	7.50	6.60	42.00	22.00	96.00	31.00	102.00	8.00	91.00	37.00	
9/08/2011	5.40	622.00	266.00	5.20	159.00	3.90	11.00	50.00	8.10	7.20	6.20	38.00	24.00		30.00	92.00	7.60	80.00	34.00	
8/11/2011	8.10	800.00	310.00	7.40	103.00	4.70	16.00	65.00	9.50	12.00	44.00	31.00	101.00		39.00	102.00	9.00	8.20	49.00	
6/02/2012	9.00	770.00	150.00	7.50	126.00	4.10	12.00	54.00	5.80	9.70	8.80	40.00	29.00	99.00	38.00	75.00	7.90	89.00	42.00	
8/05/2012	6.10	560.00	256.00	6.50	110.00	3.90	26.00	45.00	6.50	8.80	6.80	35.00	25.00	43.00	30.00	48.00	10.00	78.00	40.00	
6/08/2012	5.40	559.00	275.00	6.30	85.00	4.00	13.00	49.00	9.50	9.60	6.60	35.00	26.00	19.00	29.00	36.00	7.40	76.00	38.00	
13/11/2012	7.60	529.00	198.00	5.30	88.00	5.30	15.00	48.00	8.90	7.20	6.20	47.00	22.00		27.00	24.00	5.90	68.00	32.00	
13/02/2013	5.20	717.00	154.00	6.00	77.00	8.30	12.00	60.00	9.30	6.70	8.00	40.00	16.00	69.00	31.00	22.00	7.60	81.00	63.00	
14/05/2013	4.80	531.00	252.00	6.10	72.00	4.40	19.00	60.00	5.70	6.00	6.60	36.00	20.00	44.00	30.00	17.00	7.30	80.00	22.00	
6/08/2013	4.50	648.00	383.00	7.40	84.00	4.30	16.00	74.00	8.20	11.00	8.30	46.00	23.00	44.00	34.00	18.00	8.80	95.00	75.00	
12/11/2013	10.00	638.00	316.00	7.30	64.00	6.00	14.00		8.90	6.90	7.60	55.00	30.00		34.00	14.00	9.40	100.00	30.00	
11/02/2014	13.00	625.00	269.00	6.00	52.00	5.20	13.00		8.00						33.00	13.00	13.00	90.00	23.00	
13/05/2014	11.00	848.00	272.00	5.30	44.00	3.60	12.00		5.50	8.20		23.00			30.00	13.00	6.60	87.00	22.00	
12/08/2014	13.00	653.00	293.00	7.40	58.00	4.80	15.00		9.40			46.00	19.00		32.00	14.00	7.00	105.00	18.00	
10/11/2014	10.00	754.00	300.00	7.60	41.00	5.60	14.00		9.00	9.40		52.00	21.00		35.00	12.00	5.80	18.00	20.00	
9/02/2015	6.40	704.00	788.00	6.60	38.00	4.60	10.00	64.00	7.20	7.30	8.10	58.00	14.00	64.00	34.00	9.20	7.90	115.00	28.00	
11/05/2015	4.90	645.00	183.00	5.50	35.00	3.30	12.00	62.00	12.00	5.80	6.00	44.00	16.00	39.00	30.00	11.00	8.00	127.00	22.00	
11/08/2015	4.50	617.00	237.00	5.30	46.00	6.20	15.00	94.00	24.00	5.30	5.80	36.00	18.00		29.00	10.00	7.70	115.00	19.00	
10/11/2015	5.00	628.00	307.00	4.70	93.00	6.20	17.00	83.00	5.90	6.10	6.20	39.00	12.00	48.00	31.00	10.00	6.70	120.00	21.00	
8/02/2016	7.33	621.51	219.67	6.21	40.14	4.38	14.64	63.18	3.65	7.94	6.49	27.74	14.59	44.34	29.76	9.87	6.53	127.49	19.76	
9/05/2016	5.80	566.50	255.94	5.95	32.91	3.40	11.39	72.08	6.61	7.02	6.00	33.11	36.72		29.32	6.03	5.62	115.32	22.23	
9/08/2016	6.05	598.78	211.58	5.48	60.27	9.59	15.63	90.95	4.88	6.71	6.46	40.71	18.21	35.04	31.62	11.17	8.44	147.48	26.31	
7/11/2016	7.18	641.77	281.56	6.58	29.02	5.28	12.38	68.90		7.94	6.32	41.10	23.91		30.69	13.30	6.65	134.73	24.01	
7/02/2017	9.58	648.05	211.49	6.22	21.33	3.30	16.87	63.41	6.32	7.48		38.45	21.19	50.55	28.62	10.80	5.13	128.55	23.30	
8/05/2017	6.14	723.28	194.42	4.90	52.95	4.47	14.43	100.69		5.83	4.70	42.87	14.61	58.64	33.37	14.16	9.06	145.91	23.84	
8/08/2017	4.78	577.91	304.27	6.49	45.30	5.84	12.79	79.16	8.84	7.47	6.61	38.94	16.21	32.79	30.41	5.26	7.67	117.97	23.24	
7/11/2017	8.14		254.53	4.38	37.91	6.91	14.94	67.78	8.09	7.32	6.01	39.30	11.70	70.88	31.43	6.35	6.69	118.41	22.92	
14/02/2018	6.94		281.32	6.52	25.88	2.97	24.96	73.32		8.22	7.86	50.15	18.02	68.47	33.84	4.86	5.60	120.33	22.95	
9/05/2018	6.04		291.91		33.99	3.32	15.02	109.31		6.42	6.78	43.64	16.41	59.41	32.58	4.26	7.13	113.84	19.40	
15/08/2018	7.10		344.51	6.93	26.54	4.78	17.19	82.31		9.03		46.32	21.07	92.30	35.24	4.80	4.27	117.78	20.50	
14/11/2018	6.50		328.40	7.14	23.96	4.19	13.61	221.60	9.69	8.34	7.18	44.38	20.88	131.91	34.75	5.04	6.49	116.34	17.97	
13/02/2019	8.74		285.25	7.56	18.32	3.96	16.38		3.79					26.08		36.99	4.96	5.55	111.23	18.53
15/05/2019	4.10		271.00	7.10	166.00	5.70	18.00	90.00	9.80	6.70		54.00	19.00	184.00	38.00	4.40	5.40	116.00	22.00	
14/08/2019	6.30		330.00	6.90	139.00	11.00	18.00	93.00		8.20		49.00	23.00	147.00	36.00	4.50	5.20	110.00	22.00	
13/11/2019	11.00		324.00	7.30	105.00	3.70	19.00								36.00	3.70	4.90	106.00	28.00	

Sulfate	SW1	SW2	SW4
31/01/2011	1.70	1.00	
10/05/2011	2.50	3.20	3.70
9/08/2011	4.80	4.70	7.40
8/11/2011	2.60	1.80	5.10
6/02/2012	1.80	2.30	1.00
8/05/2012	1.40	1.90	2.80
6/08/2012	2.10	1.80	7.20
13/11/2012	21.00	20.00	31.00
13/02/2013	2.60	2.60	6.90
14/05/2013	4.10	4.00	9.40
6/08/2013	3.20	1.50	5.00
12/11/2013		2.20	39.00
11/02/2014		2.40	
13/05/2014	28.00	4.40	16.00
12/08/2014		18.00	
10/11/2014		3.30	
9/02/2015	2.70	2.60	2.70
11/05/2015	2.60	2.70	2.00
11/08/2015	2.80	3.10	3.20
10/11/2015	6.90	9.80	8.60
8/02/2016	2.96	3.03	6.06
9/05/2016	2.62	1.89	3.04
9/08/2016	3.44	6.42	8.74
7/11/2016		2.48	
7/02/2017		3.70	5.54
8/05/2017	11.45	10.37	16.60
8/08/2017	1.55	1.09	4.33
7/11/2017	12.31	2.91	10.48
14/02/2018		1.95	
9/05/2018	3.77	2.48	5.89
15/08/2018		1.42	
14/11/2018		2.87	3.00
10/02/2019		2.54	
15/05/2019	6.00	5.70	3.00
14/08/2019	4.00	2.70	2.20
12/11/2019		2.10	

### Sulfate (mg/L) - Groundwater



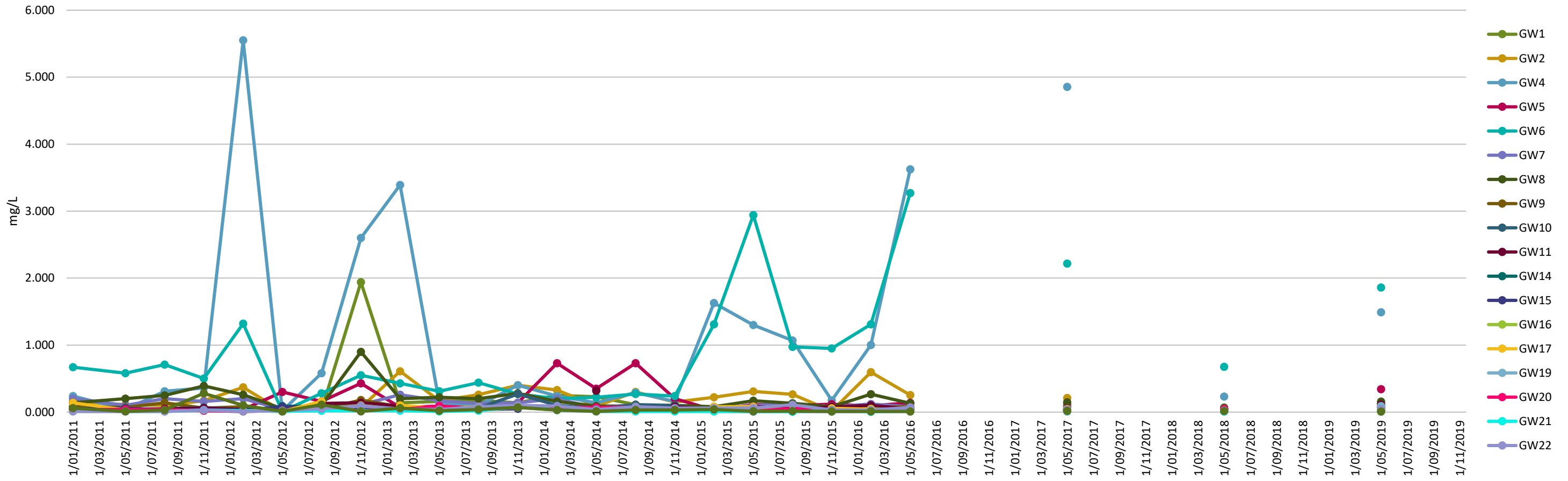
### Sulfate (mg/L) - Surface Water



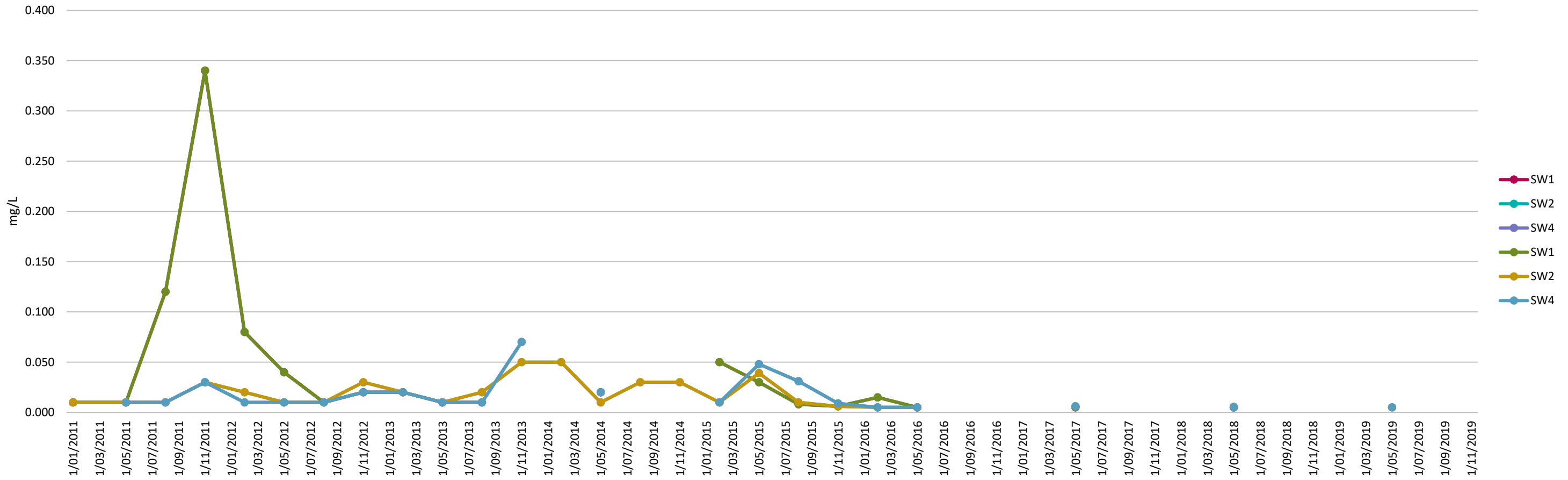
Zn	GW1	GW2	GW4	GW5	GW6	GW7	GW8	GW9	GW10	GW11	GW14	GW15	GW16	GW17	GW19	GW20	GW21	GW22	GW23
31/01/2011	0.090	0.160	0.240	0.030	0.670	0.200	0.140	0.080	0.030	0.030	0.030	0.050	0.020	0.140	0.010	0.040		0.010	0.060
10/05/2011	0.030	0.110	0.040	0.050	0.580	0.100	0.200	0.070	0.010	0.040	0.020	0.060	0.020	0.030	0.010	0.040	0.010	0.010	0.010
9/08/2011	0.010	0.100	0.310	0.040	0.710	0.200	0.250	0.140	0.050	0.050	0.030	0.030	0.020		0.010	0.040	0.010	0.010	0.030
8/11/2011	0.040	0.170	0.360	0.020	0.500	0.160	0.390	0.060	0.070	0.060	0.020	0.030	0.020		0.020	0.020	0.030	0.030	0.280
6/02/2012	0.010	0.370	5.550	0.040	1.320	0.200	0.260	0.080	0.040	0.040	0.010	0.030	0.020	0.020	0.010	0.010	0.020	0.010	0.100
8/05/2012	0.080	0.010	0.020	0.300	0.010	0.040	0.050	0.010	0.020	0.040	0.090	0.080	0.020	0.010	0.020	0.020	0.010	0.020	0.010
6/08/2012	0.030	0.080	0.580	0.160	0.280	0.080	0.100	0.040	0.040	0.130	0.080	0.070	0.050	0.160	0.020	0.050	0.020	0.050	0.110
13/11/2012	1.940	0.070	2.600	0.430	0.550	0.110	0.900	0.180	0.090	0.140	0.070	0.060	0.100		0.020	0.090	0.020	0.090	0.010
13/02/2013	0.140	0.610	3.390	0.070	0.430	0.260	0.200	0.080	0.060	0.090	0.040	0.050	0.040	0.100	0.030	0.040	0.020	0.050	0.060
14/05/2013	0.160	0.170	0.140	0.090	0.310	0.170	0.220	0.050	0.050	0.030	0.030	0.030	0.020	0.060	0.010	0.090	0.010	0.040	0.020
6/08/2013	0.170	0.260	0.100	0.060	0.440	0.130	0.200	0.040	0.060	0.060	0.030	0.040	0.030	0.080	0.030	0.050	0.020	0.080	0.040
12/11/2013	0.140	0.400	0.400	0.140	0.270	0.140	0.280		0.270	0.100	0.100	0.050	0.100		0.070	0.090	0.080	0.100	0.070
11/02/2014	0.250	0.330	0.240	0.730	0.200	0.200	0.160		0.100						0.030	0.070	0.030	0.090	0.030
13/05/2014	0.230	0.090	0.140	0.350	0.220	0.060	0.090		0.060	0.320		0.060			0.010	0.070	0.010	0.040	0.010
12/08/2014	0.110	0.300	0.290	0.730	0.270	0.090	0.090		0.110			0.080	0.080		0.010	0.071	0.010	0.080	0.030
10/11/2014	0.070	0.150	0.160	0.200	0.240	0.070	0.100		0.100	0.080		0.060	0.040		0.010	0.040	0.010	0.060	0.030
9/02/2015	0.020	0.220	1.630	0.030	1.310	0.060	0.080	0.050	0.010	0.040	0.060	0.040	0.020	0.080	0.010	0.030	0.010	0.060	0.040
11/05/2015	0.045	0.309	1.300	0.113	2.940	0.099	0.169	0.069	0.039	0.086	0.068	0.047	0.048	0.082	0.006	0.011	0.011	0.063	0.012
11/08/2015	0.012	0.264	1.070	0.098	0.975	0.128	0.132	0.066	0.080	0.052	0.033	0.034	0.040		0.005	0.056	0.006	0.110	0.015
10/11/2015	0.069	0.015	0.176	0.119	0.950	0.080	0.080	0.062	0.051	0.074	0.028	0.049	0.036	0.057	0.005	0.030	0.028	0.032	0.011
8/02/2016	0.039	0.597	1.001	0.094	1.309	0.120	0.267	0.077	0.014	0.104	0.035	0.034	0.050	0.044	0.006	0.013	0.006	0.031	0.011
9/05/2016	0.060	0.255	3.625	0.139	3.271	0.079	0.132	0.078	0.070	0.045	0.025	0.030	0.027		0.017	0.027	0.013	0.070	0.009
9/08/2016																			
7/11/2016																			
7/02/2017																			
8/05/2017	0.116	0.210	4.855	0.097	2.216	0.083	0.146	0.021		0.055	0.042	0.026	0.038	0.047	0.008	0.033	0.017	0.036	0.018
8/08/2017																			
7/11/2017																			
14/02/2018																			
9/05/2018	0.046		0.231		0.677	0.043	0.068	0.051		0.044	0.024	0.016	0.017	0.029	0.043	0.044	0.008	0.024	0.015
15/08/2018																			
14/11/2018																			
13/02/2019																			
15/05/2019	0.13		1.49	0.34	1.86	0.10	0.16	0.06	0.07	0.11		0.03	0.03	0.04	0.09	0.02	0.01	0.05	0.01
14/08/2019																			
13/11/2019																			

Zn	SW1	SW2	SW4
31/01/2011	0.010	0.010	
10/05/2011	0.010	0.010	0.010
9/08/2011	0.120	0.010	0.010
8/11/2011	0.340	0.030	0.030
6/02/2012	0.080	0.020	0.010
8/05/2012	0.040	0.010	0.010
6/08/2012	0.010	0.010	0.010
13/11/2012	0.020	0.030	0.020
13/02/2013	0.020	0.020	0.020
14/05/2013	0.010	0.010	0.010
6/08/2013	0.010	0.020	0.010
12/11/2013		0.050	0.070
11/02/2014		0.050	
13/05/2014	0.020	0.010	0.020
12/08/2014		0.030	
10/11/2014		0.030	
9/02/2015	0.050	0.010	0.010
11/05/2015	0.030	0.039	0.048
11/08/2015	0.008	0.010	0.031
10/11/2015	0.006	0.006	0.009
8/02/2016	0.015	0.005	0.005
9/05/2016	0.005	0.005	0.005
9/08/2016			
7/11/2016			
7/02/2017			
8/05/2017	0.005	0.006	0.006
8/08/2017			
7/11/2017			
14/02/2018			
9/05/2018	0.005	0.006	0.005
15/08/2018			
14/11/2018			
10/02/2019			
15/05/2019	0.01	0.01	0.01
14/08/2019			
12/11/2019			

### Total Zinc (mg/L) - Groundwater



### Total Zinc (mg/L) - Surface Water





# TWEED

SHIRE COUNCIL

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