Galmoy Mines Ltd

# Galmoy Mines TMF Independent Audit 2023

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Public

Galmoy Mines Ltd

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WSP

Town Centre House
Dublin Road
Naas
Co Kildare

WSP.com

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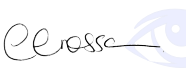
| Signature | |  Digitally signed by Clare Crossan<br>Reason: I am the author of this document<br>Location: Ireland<br>Date: 2024.03.19 09:20:10 | |
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# 1 Introduction

## 1.1 General

WSP was commissioned by Galmoy Mines Ltd (GML) to prepare an independent Audit Report to facilitate licensing compliance with the conditions of Schedule C.4.2: *Monitoring of the Tailings Management Facility* of the license (IPPCL P01517-02 as amended in January and December 2015 for reductions to license boundary) and subsequent agreements with the EPA with regard to a reduced monitoring programme, namely the 'Independent Audit' for the Galmoy Mines Tailings Facility (TMF).

WSP has previously conducted the Galmoy TMF Independent Audit Report in 2016 [1] and 2019 [2] through Golder Associates which it acquired in 2021. The Galmoy TMF has been maintained in a similar condition in the intervening period. The main conclusions from this latest inspection /audit as well as the previous two were the following:

- The TMF site is clean, tidy, and the side slopes well vegetated. The security of the facility is satisfactory and the electronic gate to the site is normally closed.
- Based on the visual inspection and an evaluation of the monitoring data, Cell 1, Cell 2, and Cell 3 are performing in accordance with the design. The dam walls are in excellent condition and the piezometers installed in the dam wall are stable and/or dry for much of the year as indicated in the monitoring data.

## 1.2 TMF Location

The Galmoy Mine is located three miles west of the village of Galmoy in the townlands of Castletown, Whiteswall, Rathreagh, Garrylaun, and Rathpatrick in north Co. Kilkenny. The surface facilities of the mine are confined largely to the townland of Castletown on both sides of the Johnstown/Rathdowney road (R435). The TMF and the former explosives storage facilities are located to the west of this road. The footprint of the TMF is approximately 32 hectares (Ha) and is located immediately south-west of the former plant site in a relatively shallow valley which drains to the north-west. The maximum relief of the valley is approximately 66 metres (m) with a hill peak forming part of the west valley at an elevation of 196 m AOD (Above Ordnance Datum) and the valley floor attaining an elevation low of 130 m AOD. The eastern and southern sections of the valley sides attain maximum elevations of 142 m AOD and 145 m AOD respectively.

## 1.3 Background

Galmoy Mine was an underground mining operation processing local zinc-lead (Zn-Pb) ore bodies where a large proportion of the tailings produced were mixed with cement and pumped underground as a high density paste material for backfilling. This aided the stabilisation of worked out areas whilst the remaining tailings not utilised as backfill were pumped to the TMF. The TMF consists of three adjacent cells:

- Cell 1 – Storage capacity of 880,000 $m^3$. Constructed in 1996, filled with tailings by 2000 and has a surface area of approximately 9 Ha.
- Cell 2 – Storage capacity of 1,167,000 $m^3$. Constructed in 2000, filled with tailings by 2006 and has a surface area of approximately 13.7 Ha.
- Cell 3 – Storage capacity of 777,000 $m^3$. Constructed in 2006 and partially filled (60%) prior to the mill operation closing in June 2009 and has a surface area of approximately 9 Ha.

During operations, water within these facilities was pumped back to the concentrator for re-use or was treated and safely discharged to the River Goul. The Galmoy processing plant has been demolished and no tailings have been produced since 2009. Mining operations were ceased in October 2012 and the groundwater profile or “water table” has recovered since March 2014. The capping and closure work for the Galmoy TMF and plant were completed in 2015. An overall layout of the TMF and plant may be seen in Figure 1-1 below.

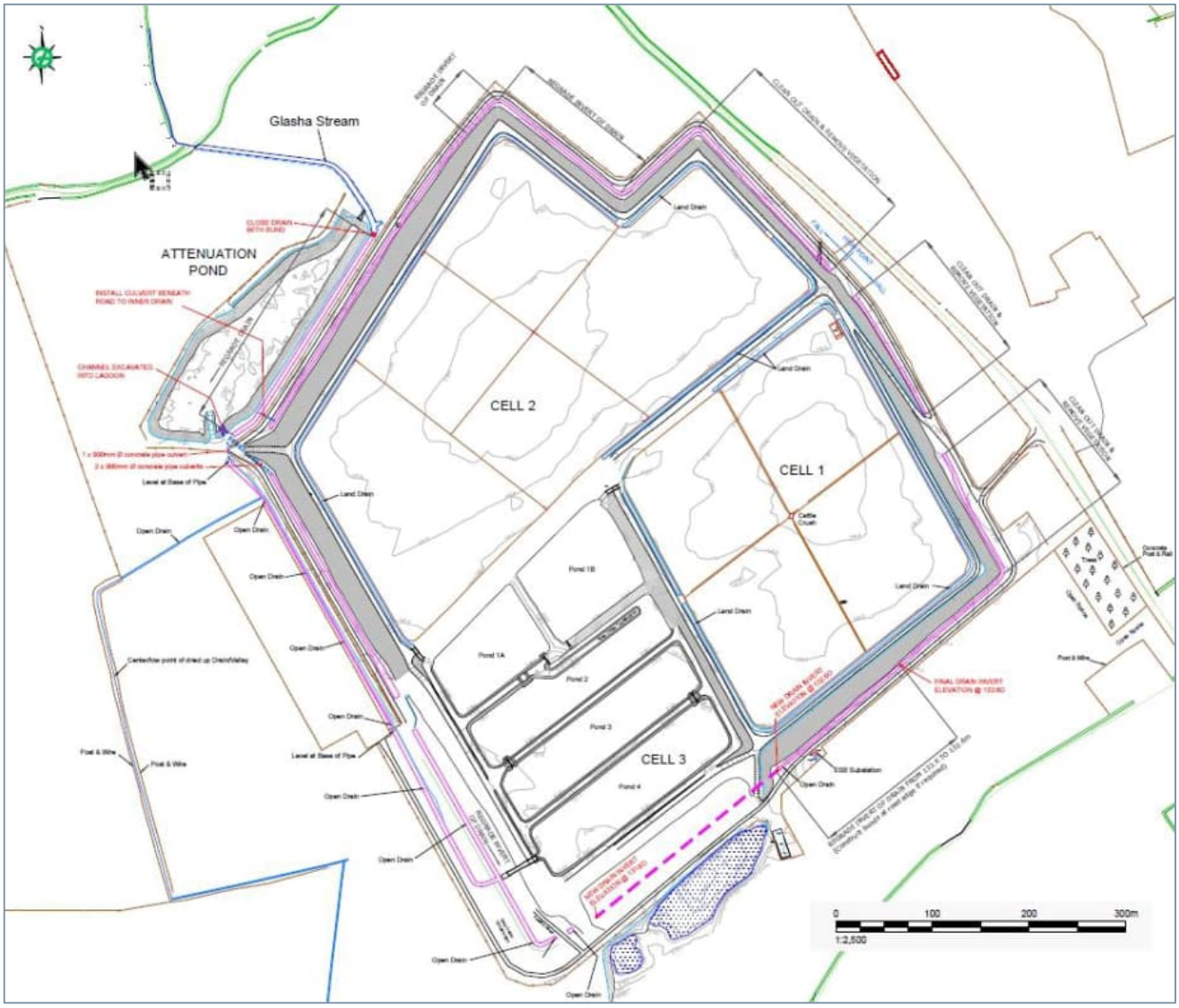


**Figure 1-1 -** Galmoy TMF Layout [1]

Cell 1 and Cell 2 are completely capped and include a perimeter drainage system that decants into Cell 3 via spillways and cascade chutes. Cell 3 was only partially filled with tailings (60%) at closure and thereafter was capped and a wetland constructed above the capping to attenuate/treat the surface water from Cell 1 and Cell 2. The Cell 3 wetlands consists of four main ponds with the uppermost pond further subdivided into two ponds (1A and 1B).

The wetlands retain approximately 300 mm of water over the base and water migrates to the main external spillway located in the southwestern section of pond 4, by a series of intermediate decant structures constructed in the dividing wall of each cell. A series of intermediate open concrete spillways are also provided on the dividing wall to manage water flow for the design event and to permit access for the maintenance and monitoring vehicles. Surface water runoff from Cell 1 and Cell 2 is passively treated in the wetlands prior to being discharged to the attenuation pond via the spillway and open drain system prior to entering the Glasha stream.

The TMF embankments were constructed as earth fill walls with a central chimney drain to reduce the phreatic level within the embankments. The embankments at Cells 1, 2 and 3 were constructed in two stages to a crest elevation of 143.3 m AOD. The outer embankments for Cell 3 were subsequently reduced to 139 m AOD during the wetland construction.

## 1.4 Scope of Works

This review will comprise the following monitoring locations which are active since 2019:

- **Boreholes (9 No.)** – BH3, BH4, BH5, BH7, BH8, BH9 BH10, BH11 and BH13.
- **Piezometers (26 No.)**:
  - Cell 1 (P4, P5, P14, P15, P16, P17, P18, P21, P22, P24 and P56);
  - Cell 2 (P26, P27, P28, P29, P30, P33, P34, P36, P37, P38, P39, P57 and P58); and
  - Cell 3 (P59 and P60).
- **Chimney Sumps (3 No.)** – Sump 3, Sump 4 and Sump 5.

WSP conducted a TMF inspection in October of 2023 which consisted of the following:

- Assessment of the TMF surroundings i.e. lower perimeter road, toe drain, surface water diversion and collection systems.
- Assessment of the TMF side slopes.
- Assessment of the TMF cap, inter-cell walls, upper perimeter road and the perimeter drainage system.
- Check on select piezometer elevations, select borehole elevations and select chimney sump elevations.
- Assessment of the Cell 3 Wetlands i.e. spillways, ponds, water elevations, vegetation, overflow systems and water level control systems.

- Assessment of the Drainage Ditch and Attenuation Pond.
- Assessment of the Outfall Structure and discharge to the Glasha stream.

# 2 Monitoring Data

## 2.1 Monitoring Installation

The geotechnical monitoring system installed for the facility consisted of the following:

- Standpipe piezometers.
- Borehole monitoring wells.
- Internal drainage sumps.
- Chimney drain sumps.
- Interceptor channel sumps.

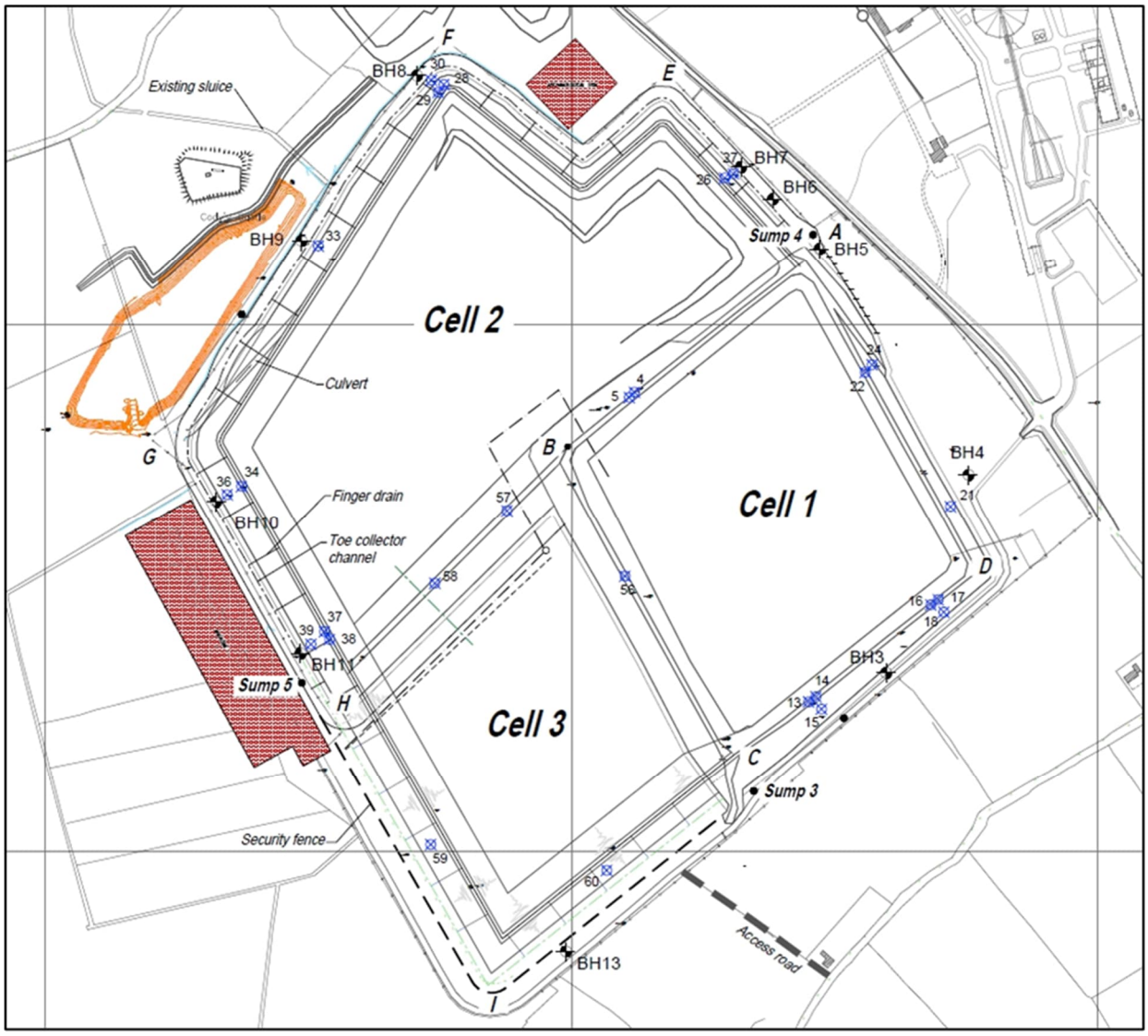


**Figure 2-1 –** Instrumentation and Monitoring Points Layout

To facilitate the evaluation of the TMF, the dam area has been divided into Sectors A to I and the original monitoring points installed are tabulated in Table 2-1 below. A number of these original monitoring points are no longer active resulting from the modifications to Cell 3, the closure works, decommissioning, damage, and/or loss.

**Table 2-1 –** Borehole Monitoring Locations

| TMF Area | Dam Sector | Piezometers (Pz) | Monitoring Wells | Internal Drainage Sumps | Chimney Drain Sumps | Interceptor Channel Sumps |
|---|---|---|---|---|---|---|
| Cell 1 | A – B | 1, 2, 3, 4, 5, 6 | | | | |
| | B – C | 7, 8, 9, 10, 11, 12, 55, 56 | BH2 | | | |
| | C – D | 13, 14, 15, 16, 17, 18 | BH3 | | Sump 3 | IC1 |
| | D – A | 19, 20, 21, 22, 23, 24 | BH4, BH5 | | Sump 4 | |
| Cell 2 | A – F | 25, 26, 27 | BH6, BH7 | | | IC4 |
| | F – G | 28, 29, 30, 31, 32, 33 | BH8, BH9 | IDS2 | | IC2 |
| | G – H | 34, 35, 36, 37, 38, 39 | BH10, BH11 | | Sump 5 | |
| | H – B | 40, 41, 42, 57, 58 | BH12 | IDS1 | | |
| Cell 3 | H – I | 43, 44, 45, 46, 47, 48, 59 | | | | |
| | I – C | 49, 50, 51, 52, 53, 54, 60 | BH13 | | | |

Notes:

Installations highlighted in yellow are decommissioned/removed/missing.

Installations highlighted in red are blocked.

## 2.2 Instrumentation Data

Groundwater level readings and water quality readings for the piezometers and monitoring boreholes are located in Appendix A.

### 2.2.1. Monitoring Well Borehole Data

Dewatering during the mining activity reduced the groundwater level beneath the cells of the TMF. Prior to mine dewatering, groundwater levels at the site typically varied between 0 m and 5 m below ground level (BGL) which ranged in elevation from 135 m AOD and 130 m AOD. Mine dewatering has since ceased, and the borehole monitoring data indicates the water level had recovered fully by Q1 of 2014 to between 3 m BGL and 8 m BGL (132 m AOD to 127 m AOD), which is slightly below the baseline levels. The trend in seasonal fluctuation in water levels is apparent. It should be noted that these boreholes were drilled deep into the bedrock and reflect the phreatic surface in the rock. Water levels at high elevations were recorded from the piezometers installed in the dam wall and glacial till dam foundations.

Groundwater monitoring data recorded between 2019 and 2023 is tabulated below and overleaf in Table 2-3 and Table 2-3 and illustrated in Figure 2-2. No elevations were recorded for BH09 and instead groundwater level is reported as meters below ground level (mbgl).

**Table 2-2 -** Monitoring Borehole BH 9 Data 2020 - 2023

| Borehole ID | 2020 Groundwater Level (m bgl) | | 2021 Groundwater Level (m bgl) | | 2022 Groundwater Level (m bgl) | | 2023 Groundwater Level (m bgl) | |
|---|---|---|---|---|---|---|---|---|
| | Average | Maximum | Average | Maximum | Average | Maximum | Average | Maximum |
| BH9 (rock) | 2.55 | 2.00 | 2.64 | 1.55 | 2.72 | 1.85 | 2.07 | 1.77 |

**Table 2-3 -** Monitoring Borehole Data 2019 - 2023

| Borehole ID | Elevation (m OD) | 2019 Groundwater Elevation (m OD) | | 2020 Groundwater Elevation (m OD) | | 2021 Groundwater Elevation (m OD) | | 2022 Groundwater Elevation (m OD) | | 2023 Groundwater Elevation (m OD) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average | Maximum | Average | Maximum | Average | Maximum | Average | Maximum | Average | Maximum |
| BH3 (rock) | 133.47 | 131.24 | 133.47 | 129.57 | 130.85 | 129.46 | 131.37 | 129.68 | 131.47 | 130.55 | 131.01 |
| BH4 (rock) | 137.09 | 128.97 | 131.19 | 129.40 | 130.81 | 128.56 | 129.27 | 129.38 | 131.54 | 130.44 | 131.32 |
| BH5 (rock) | 136.89 | 129.32 | 131.27 | 129.42 | 130.49 | 129.36 | 130.99 | 129.01 | 130.54 | 130.16 | 130.53 |
| BH6 (rock) | 135.72 | 128.02 | 129.83 | 129.07 | 129.84 | 129.04 | 130.54 | 128.88 | 129.92 | 129.65 | 130.00 |
| BH7 (rock) | 138.03 | 129.08 | 132.02 | 128.86 | 129.56 | 128.87 | 130.51 | 128.90 | 130.23 | 129.67 | 130.04 |
| BH8 (rock) | 136.99 | 128.81 | 130.44 | 129.03 | 129.93 | 129.21 | 130.63 | 129.19 | 130.11 | 129.97 | 130.23 |
| BH10 (rock) | 132.79 | 129.14 | 130.49 | 129.55 | 130.26 | 129.53 | 130.79 | 129.47 | 130.33 | 129.99 | 130.43 |
| BH11 (rock) | 132.56 | 128.73 | 130.36 | 129.32 | 130.21 | 129.05 | 130.56 | 129.47 | 130.26 | 130.28 | 130.28 |
| BH13 (rock) | 134.5 | 129.48 | 131.40 | 129.84 | 131.05 | 129.58 | 131.72 | 129.89 | 131.56 | 130.86 | 131.28 |

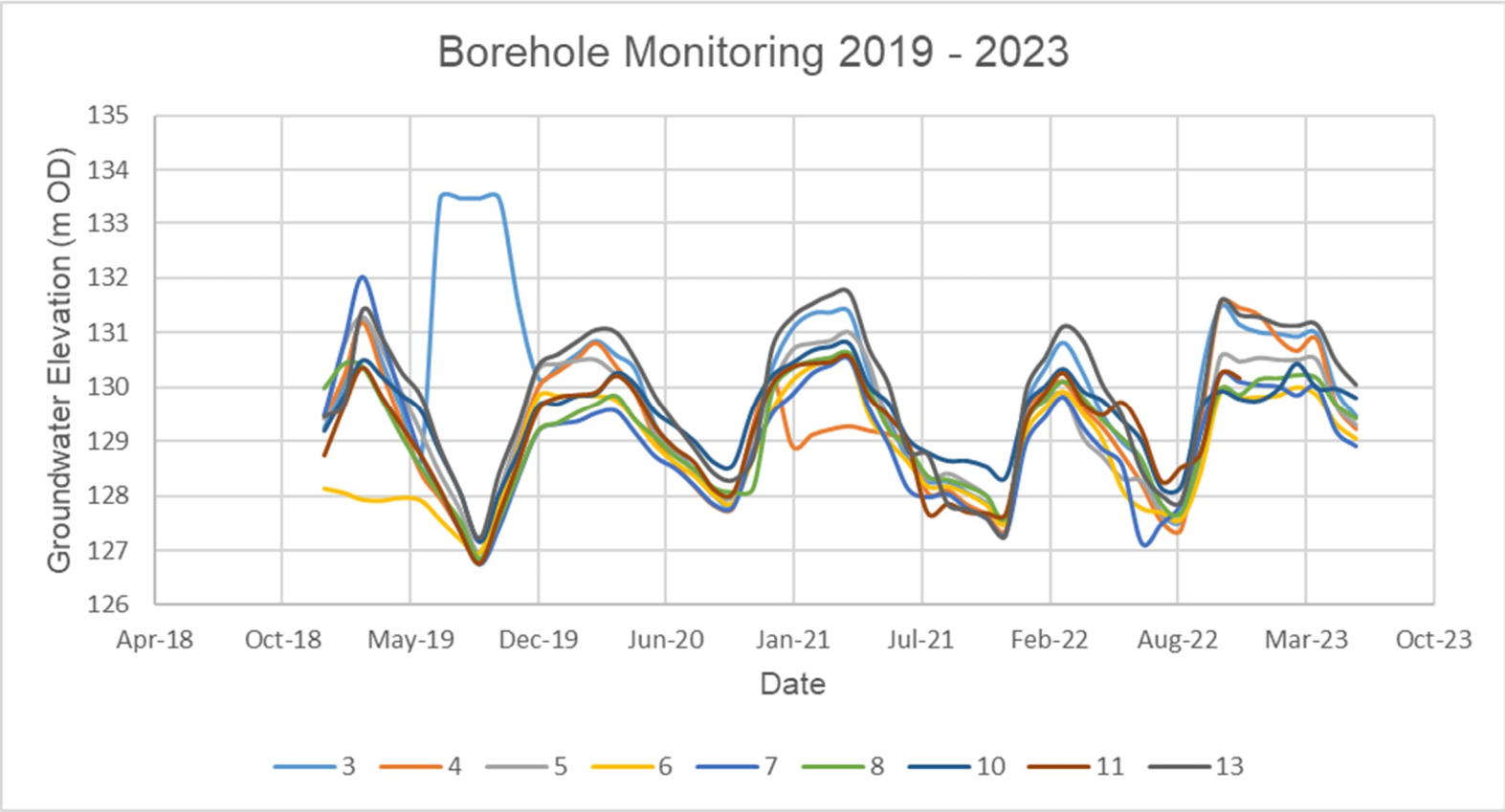


**Figure 2-2 -** Borehole Groundwater Monitoring 2019 - 2023

The following was observed from the monitoring:

- BH09 recorded the lowest depths to groundwater at an average of 2.5 m BGL between 2020 and 2023.
- BH07 recorded the greatest depths to groundwater at an average of 8.96 m BGL between 2019 and 2023.
- Groundwater elevations are generally within 1 m of each other.
- The elevation of BH9 is unknown, although the measured levels indicate that the groundwater level is at a comparable level to the other monitoring wells.

## 2.3 Water Quality

The boreholes are sampled and tested for pH, conductivity and sulphate concentration. The sulphate data from the ongoing monitoring has been used as an indicator of potential seepage paths from the vase of the TMF. Sulphate has been chosen for it's mobility.

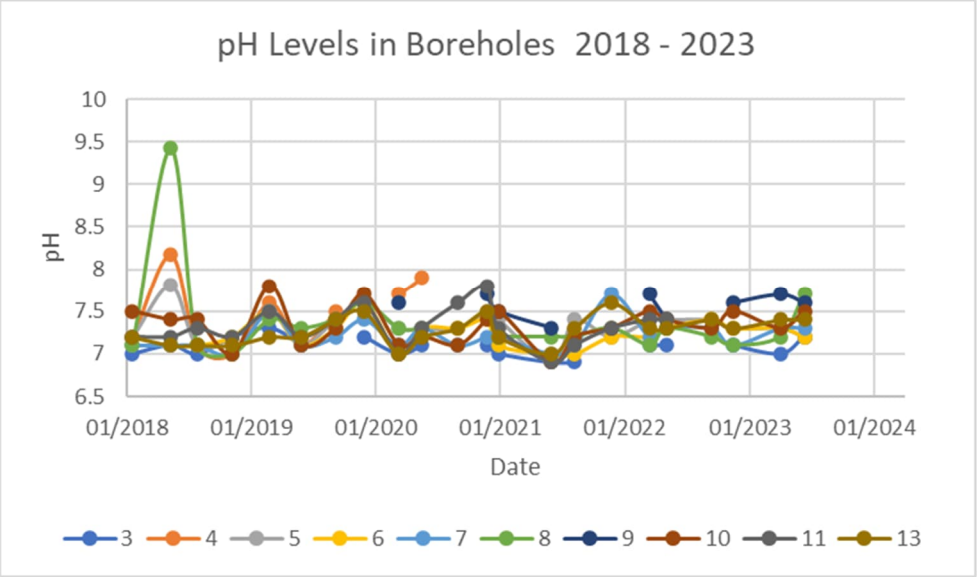


**Figure 2-3 –** pH Levels in Boreholes 2018 - 2023

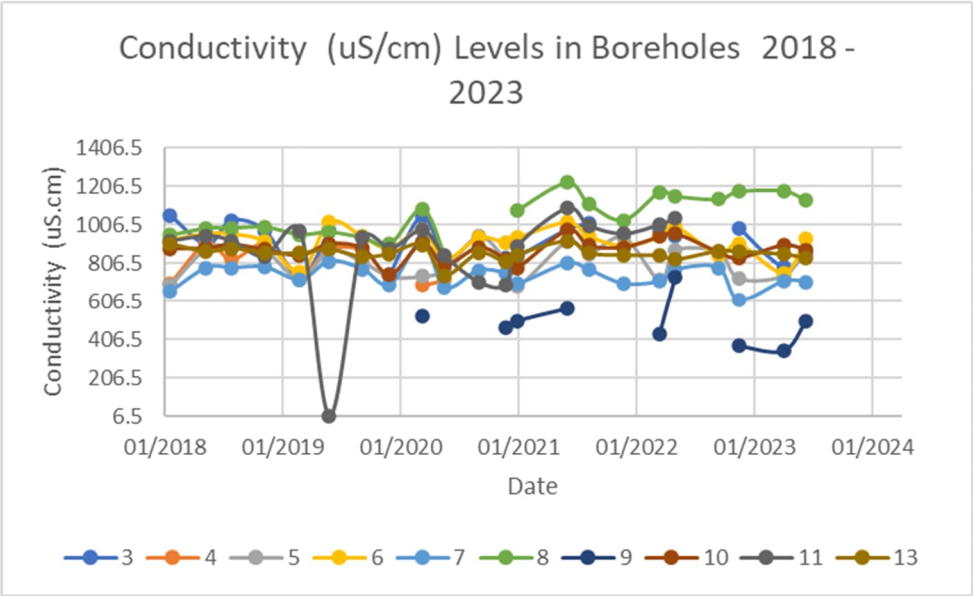


**Figure 2-4 -** Conductivity Levels in Boreholes 2018 - 2023

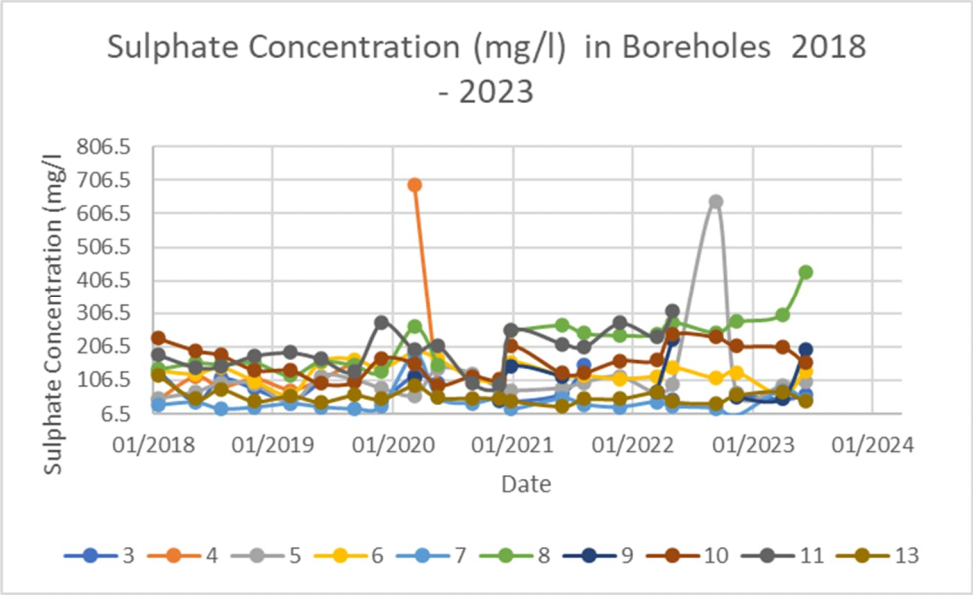


**Figure 2-5 –** Sulphate Levels in Boreholes 2018 – 2023

- The pre-rebound pH values aresimilar in range for those recorded for post-rebound and generally range from 6.9 to 8.1 pH. Anomalies present in the data only extend slightly outside this range (BH7 9.42 pH May 2018). Data from 2018 – 2023 is consistent with previous years.
- The range of conductivity values has increased from 2018 to a range of 347 µS to 1,227 µS. The higher values are being recorded at BH8, similar to 2018 and this can be correlated to increasing sulphate values.

- The range of sulphate values has increased from 2018 to a range of 19.9 mg/l to 433 mg/l. Anomalous results of over 600 mg/l were reported at BH4 and BH5, however results returned to within the normal range in the subsequent monitoring rounds.
- The background level of sulphate concentration for sites with similar geology in Ireland can be as high as 250 mg/l and results above the 187.5 mg/l threshold for EC Environmental Objectives (Groundwater) Regulations S.I. No. 9 of 2010 have been reported in BH8, BH10 and BH11.

### 2.3.1. Piezometer Data

Piezometers have been installed through the crest and at approximately midway on the downstream slope of the dam walls to allow measurement of the piezometric surface within the dam walls and of the groundwater table beneath in either the till foundations or the bedrock. Piezometers into the bedrock are likely to be more impacted by changes in recharge to the fracture system into the bedrock. Piezometers into the till foundations are likely to be more stable, reflecting groundwater perching within the till strata.

Piezometer monitoring data recorded between 2019 and 2023 is tabulated overleaf in Table 2-4 and illustrated in Figure 2-6, Figure 2-7 and Figure 2-8.

**Table 2-4 -** Monitoring Piezometer Data 2019 - 2023

| Cell No. | Piezometer ID | Elevation (m OD) | 2019 Groundwater Elevation (m OD) | | 2020 Groundwater Elevation (m OD) | | 2021 Groundwater Elevation (m OD) | | 2022 Groundwater Elevation (m OD) | | 2022 Groundwater Elevation (m OD) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Average | Maximum | Average | Maximum | Average | Average | Maximum | Average | Maximum | Average |
| Cell 1 | Pz4 (Till) | 143.4 | 134.05 | 134.40 | 133.87 | 134.30 | 134.29 | 134.90 | 133.80 | 134.55 | 133.98 | 135.01 |
| | Pz5 (Rock) | 143.44 | 129.45 | 130.84 | 129.66 | 131.07 | 129.73 | 131.26 | 129.83 | 131.08 | 130.59 | 130.96 |
| | Pz13 (Dam Wall) | 143.58 | 133.25 | 133.86 | 133.26 | 133.48 | 133.23 | 133.40 | 133.12 | 133.30 | 133.01 | 133.06 |
| | Pz14 (Rock) | 143.5 | 130.10 | 131.25 | 132.23 | 135.42 | 130.15 | 131.50 | 130.10 | 131.17 | 131.11 | 131.23 |
| | Pz15 (Till) | 136.13 | 129.75 | 131.13 | 130.02 | 131.05 | 130.07 | 132.25 | 130.11 | 131.63 | 130.76 | 131.35 |
| | Pz16 (Dam Wall) | 143.34 | 135.10 | 135.34 | 135.09 | 135.34 | 135.10 | 135.38 | 135.04 | 135.13 | 135.03 | 135.11 |
| | Pz17 (Dam Wall) | 143.32 | 132.69 | 132.69 | 132.69 | 132.69 | 132.69 | 132.69 | 132.67 | 132.69 | 132.69 | 132.69 |
| | Pz18 (Till) | 137.64 | 132.91 | 132.91 | 132.91 | 132.91 | 132.91 | 132.91 | 132.91 | 132.91 | 132.91 | 132.91 |
| | Pz21 (Till) | 139.75 | 135.17 | 135.17 | 135.17 | 135.17 | 135.17 | 135.17 | 135.17 | 135.17 | 135.17 | 135.17 |
| | Pz24 (Till) | 139.76 | 133.53 | 133.53 | 133.53 | 133.53 | 133.51 | 133.53 | 133.53 | 133.53 | 133.53 | 133.53 |
| | Pz56 (Rock) | 143.72 | 134.41 | 136.77 | 135.21 | 137.66 | 133.51 | 134.58 | 134.80 | 136.02 | 135.64 | 136.73 |

| Cell No. | Piezometer ID | Elevation (m OD) | 2019 Groundwater Elevation (m OD) | | 2020 Groundwater Elevation (m OD) | | 2021 Groundwater Elevation (m OD) | | 2022 Groundwater Elevation (m OD) | | 2022 Groundwater Elevation (m OD) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Average | Maximum | Average | Maximum | Average | Average | Maximum | Average | Maximum | Average |
| Cell 2 | Pz26 (Dam Wall) | 143.25 | 140.11 | 140.11 | 140.13 | 140.25 | 140.20 | 140.41 | 140.08 | 140.15 | 140.12 | 140.15 |
| | Pz27 (Till) | 139.7 | 134.60 | 134.60 | 134.60 | 134.60 | 134.72 | 134.98 | 134.60 | 134.60 | 134.60 | 134.60 |
| | Pz28 (Till) | 134.35 | 128.02 | 131.80 | 125.44 | 127.35 | 125.85 | 131.80 | 127.35 | 133.25 | 127.66 | 128.86 |
| | Pz29 (Dam Wall) | 143.1 | 137.54 | 137.90 | 137.08 | 137.80 | 136.97 | 137.92 | 137.69 | 138.02 | 136.89 | 137.87 |
| | Pz30 (Till) | 138.49 | 133.66 | 134.31 | 134.05 | 134.30 | 134.33 | 134.57 | 134.04 | 134.35 | 134.06 | 134.29 |
| | Pz33 (Till) | 135.82 | 129.60 | 130.35 | 129.64 | 130.14 | 129.77 | 130.67 | 129.58 | 130.28 | 129.99 | 130.42 |
| | Pz34 (Till) | 143.39 | 131.06 | 131.74 | 131.31 | 131.71 | 130.97 | 131.57 | 131.35 | 131.77 | 131.32 | 131.70 |
| | Pz36 (Till) | 136.01 | 130.22 | 130.74 | 130.17 | 130.56 | 130.33 | 131.09 | 130.21 | 130.73 | 130.59 | 130.79 |
| | Pz37 (Till) | 143.02 | 129.74 | 130.81 | 129.99 | 130.92 | 129.88 | 130.97 | 129.97 | 130.86 | 130.41 | 130.74 |
| | Pz38 (Dam Wall) | 143.02 | 134.48 | 135.91 | 134.41 | 135.37 | 134.39 | 136.10 | 134.30 | 134.48 | 134.39 | 134.68 |
| | Pz39 (Till) | 135.23 | 129.55 | 130.81 | 129.73 | 130.61 | 129.67 | 131.05 | 129.81 | 130.87 | 130.52 | 130.82 |
| | Pz58 (Rock) | 143.2 | 129.35 | 131.00 | 129.87 | 131.18 | 129.75 | 131.38 | 129.87 | 131.19 | 130.69 | 130.95 |

| Cell No. | Piezometer ID | Elevation (m OD) | 2019 Groundwater Elevation (m OD) | | 2020 Groundwater Elevation (m OD) | | 2021 Groundwater Elevation (m OD) | | 2022 Groundwater Elevation (m OD) | | 2022 Groundwater Elevation (m OD) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Average | Maximum | Average | Maximum | Average | Average | Maximum | Average | Maximum | Average |
| Cell 3 | Pz59 (Rock) | 139.82 | 129.67 | 131.26 | 129.86 | 131.34 | 129.87 | 131.44 | 129.93 | 131.32 | 130.79 | 131.14 |
| | Pz60 (Rock) | 139.71 | 129.63 | 131.47 | 129.98 | 131.11 | 129.83 | 131.69 | 129.99 | 131.48 | 130.96 | 131.27 |

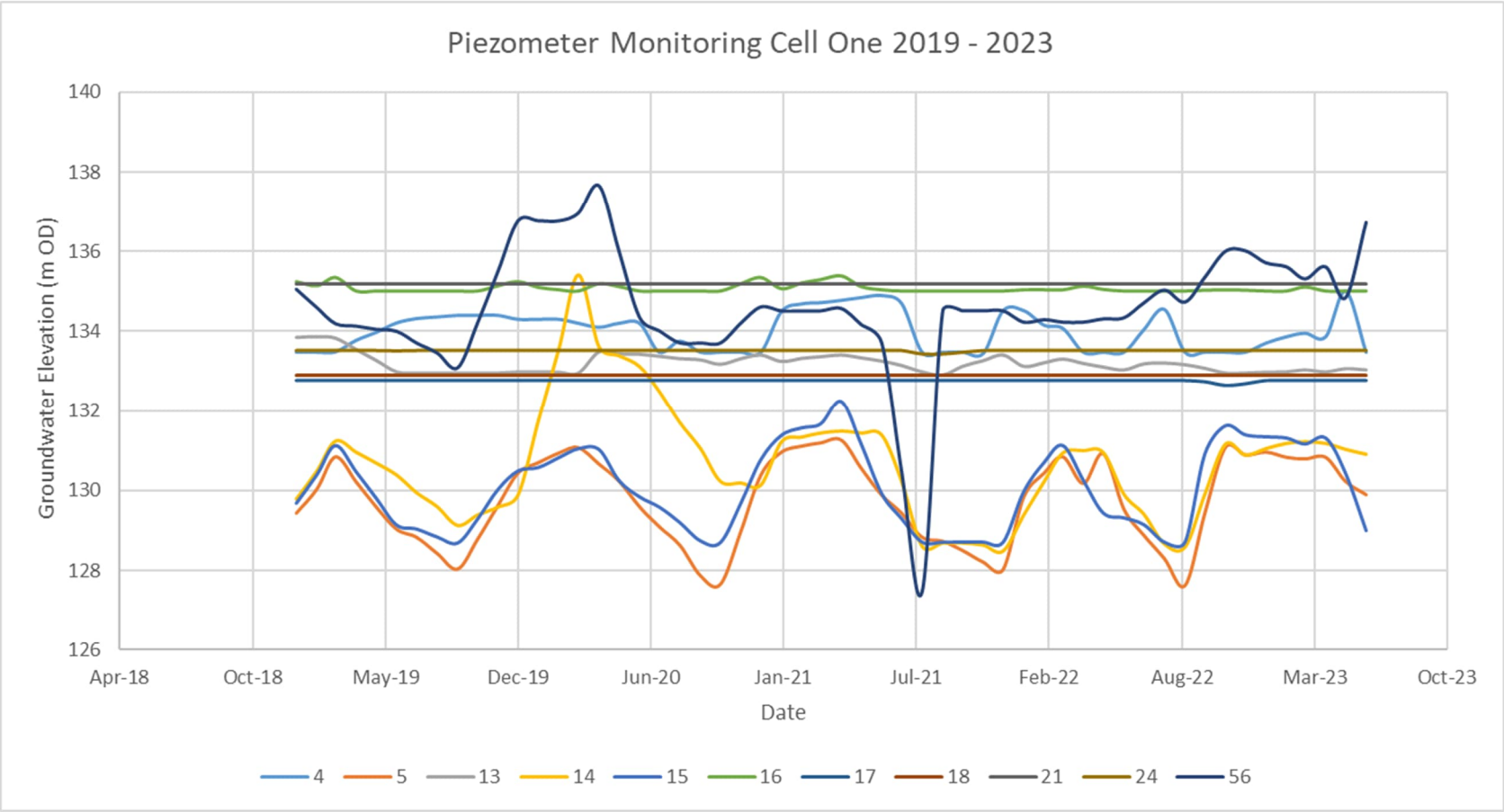


**Figure 2-6 -** Piezometer Groundwater Monitoring Cell One 2019 - 2023

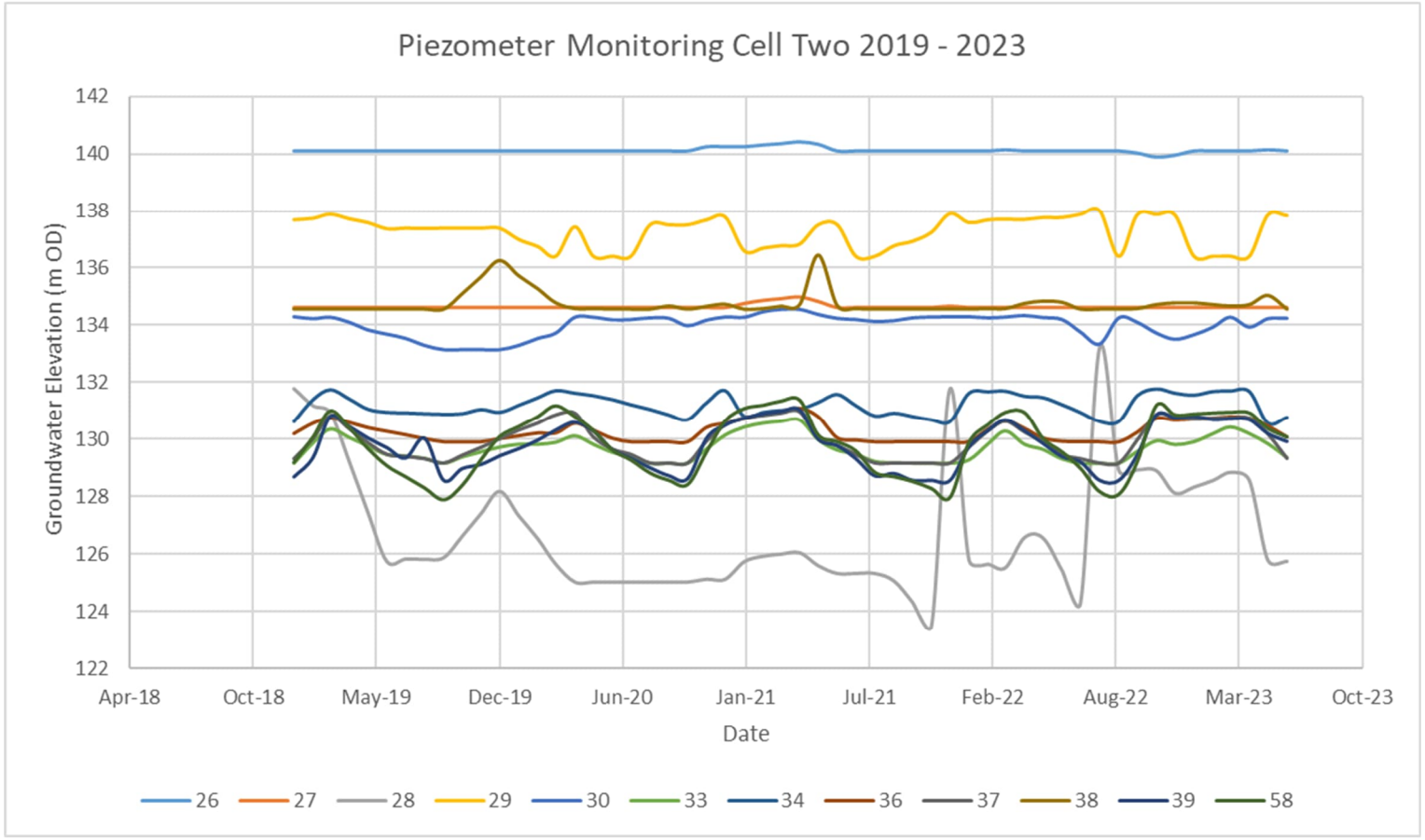


**Figure 2-7 -** Piezometer Groundwater Monitoring Cell Two 2019 - 2023

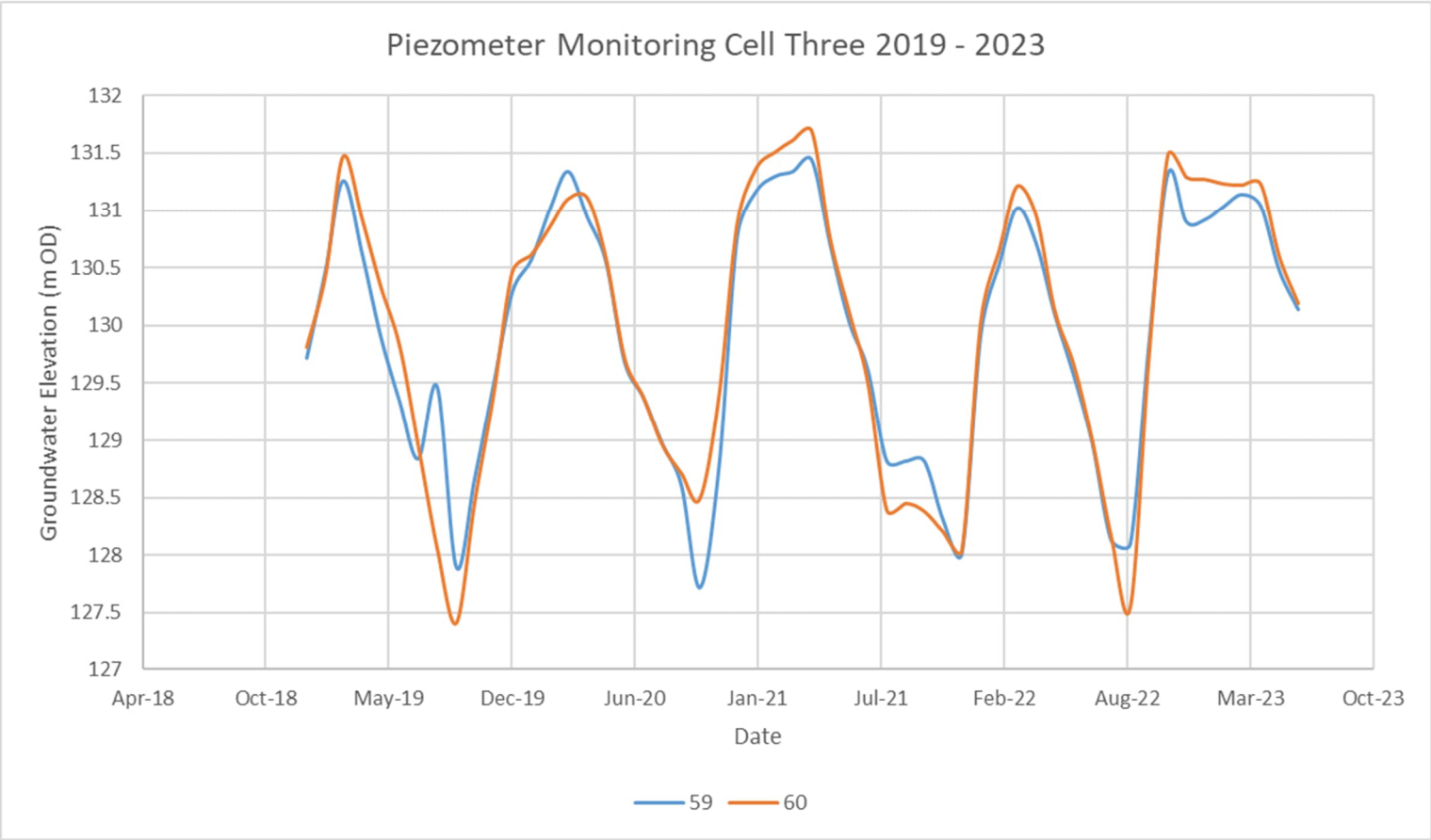


**Figure 2-8 -** Piezometer Groundwater Monitoring Cell Three 2019 - 2023

The following was observed from analysis of the monitoring data:

- Cells one, two and three generally followed consistent trends in each of the piezometers measured inclusive of seasonal variations.
- In Cell one, Pz56 reported the largest variation in groundwater elevations, between 127.66 m OD (April 2020) and 127.49 m OD (August 2021).
- In Cell two, Pz28 Pz56 reported the largest variation in groundwater elevations, between 123.53 m OD (November 2021) and 133.34 (August 2022).
- The largest variation in groundwater elevation was recorded as 13.26 m (140.13 m AOD and 126.86 m AOD) between Pz26 and Pz28 from 2019 to 2023 (Cell Two).
- Pz19 and Pz25 are both blocked between 2019 and 2023.
- The elevation of Pz20 is unknown, although the measured levels indicate that the groundwater level is at a comparable level to the other monitoring wells.

**Water Quality**

The piezometers are sampled and tested for sulphate concentration. The sulphate data from the ongoing monitoring has been used as an indicator of potential seepage paths from the base of the TMF. Sulphate has been chosen for mobility.

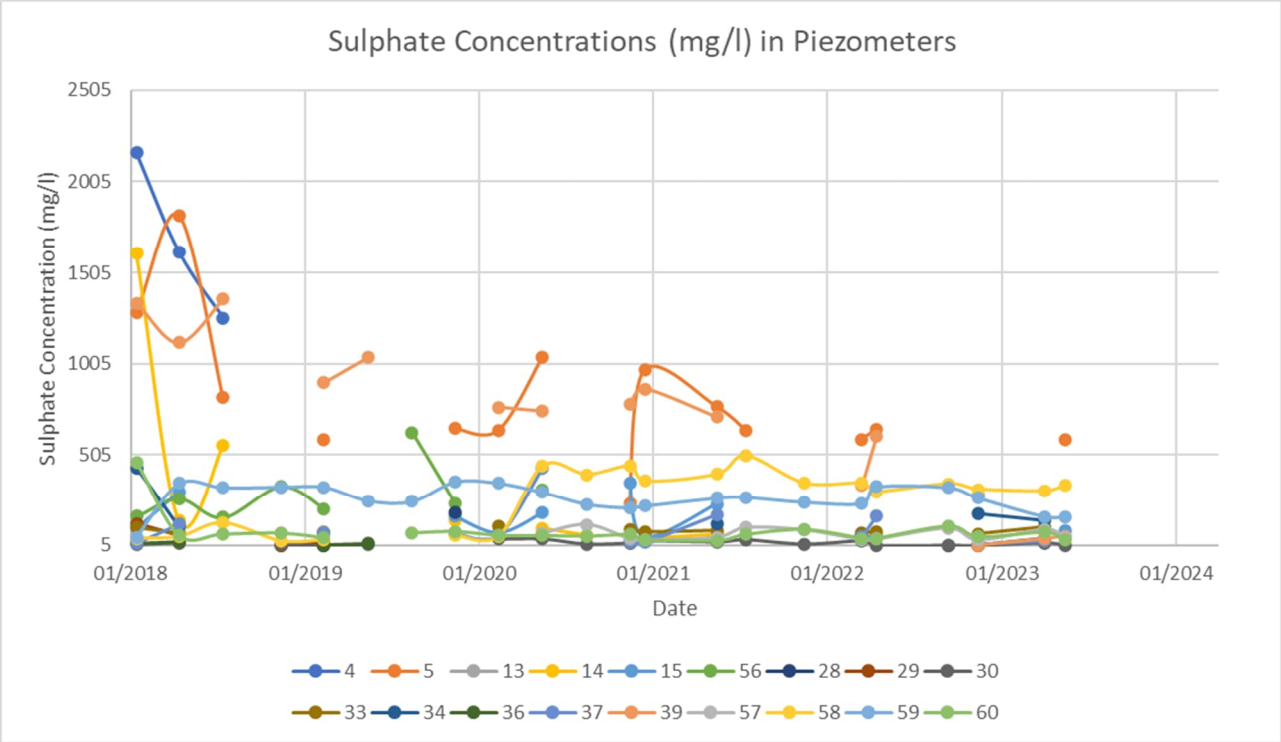


**Figure 2-9 –** Sulphate Concentrations in Piezometers 2018 - 2023

- The overall data from 2018 to 2023 shows a steady trend.
- Pz4 and Pz5 located in Sector A – B are installed in the dam crest between Cell 1 and Cell 2, into the dam wall foundations and the underlying bedrock respectively, and report a similar range of concentrations to those between 2016 and 2018. Sulphate

concentrations range from 237.6 mg/l to 1,820 mg/l. The high sulphate levels at this location reflect past issues relating to the integrity of the lining at this locality. Seepage will be controlled by the low permeability of the tailings and the level of defect in the lining and thus will be mnimal

- Pz14 located in Sector C to D has historically reported sulphate concentration levels <200 mg/l and reported concentrations of 500 mg/l and 1,600 mg/l in 2018. However, levels have returned to <200 mg/l in 2019, 2020 and 2021. No sample has been collected since Q2 2021.
- Pz39 located in Sector G – H is installed in the dam wall foundations and reports the highest trending levels of sulphate with similar values reported prior to 2018. However, there is a decreasing trend from 2018 to 2023.
- Pz59 located in Sector H – I is installed into the bedrock and is reporting sulphate concentrations between 160 and 350 mg/l, which are slightly lower than those reported prior to 2018. These levels are greater than the background sulphate concentrations recorded by the perimeter boreholes and would suggest a seepage route from the Cell 3 lining at this location.

### 2.3.2. Internal Drainage Sumps

IDS1 and IDS2 were concrete manhole chambers which served as external sumps for the outlet pipes at the internal drainage systems installed above the cell lining systems. These sumps were pumped dry and decommissioned by filling with concrete in 2015 and are no longer monitored.

- **IDS1** – Sectors A to B and B to H contained the outlet for the internal drainage system above the lining systems of Cell 1 and Cell 3. IDS1 was located on the downstream side of the Cell 3 dam wall at Point H. The original IDS1 sump was located in Cell 2 prior to being moved to Cell 3, extended and then located outside the footprint of Cell 3 where it was combined with the internal drainage above the lining system of Cell 3. By moving IDS1 from Cell 2 into Cell 3, the connecting pipes crossed the base of the chimney drainage system, it is considered that these diversions resulted in a connection between the connecting pipes and the base of the chimney drain. All of these structures are located below the lining systems of Cell 2 and Cell 3. However, there was a defect in the lining of Cell 3 and water escaping could find its way into the base of the chimney drain and subsequently into the internal drainage system. Following the filling of Cell 3 with tailings, this issue became resolved as the seepage was minimised.
- **IDS2** – Sectors F to G contained the outlet for the internal drainage system above the lining system for Cell 2. IDS2 was located on the downstream side of the Cell 2 dam wall midway between Point F and Point G.

### 2.3.3. Chimney Drain Sumps

Chimney drains were installed in the centreline of embankments of the Stage 2 downstream raises. Internal chimney drains are present between Cells 1, 2 and 3. Their purpose is to

intercept any seepage through the geomembrane liner system and to ensure the long-term stability of the embankments. The chimney drains comprised a minimum of a 0.5 m wide zone of Type B and Type C material (coarse sand and gravel).

Sumps 3, 4, and 5 were concrete manhole chambers which served as external sumps for the outlet pipes of the chimney drain systems installed in the dam walls. The pipes were installed to allow for camera inspections of the base of the chimney drain to be carried out. Sumps 3, 4, and 5 were observed during the site investigation and the following was determined:

- **Sump 3 –** Cover elevation of 133.23 m AOD and a manhole depth of 2.1 m (Invert Level at 131.13 m AOD). The base of the chimney drain on the dividing wall between Cell 1 and Cell 3 has an external outlet on the downstream toe of the Cell 3 dam wall at point C.
- **Sump 4 –** Cover elevation of 137.97 m AOD and a manhole depth of 2.2 m (Invert Level at 135.77 m AOD). The base of the chimney drains on the dividing walls of Cells 1 and 2, and Cells 2 and 3 are connected via a pipe to manholes at either ends.
- **Sump 5 –** Cover elevation of 133.22 m AOD. Inspection of Sump 5 in 2016 indicated no flow of water into the manhole but the standing water level was higher than the pipe outlet level which suggested that the head was sufficient to force water to discharge from elsewhere beneath the dam wall. Sump 5 was then purged during 2016 and flow returned to a similar pre-pumping water level.
- Sump 4 at Point A and Sump 5 at Point H located on the downstream toe of the dam walls. Sump 4 at Point A is several metres higher than Sump 5 at point H.

Data was not collected during 2019 for Sumps 3, 4, and 5.

Chimney Drain Sump monitoring data recorded between 2020 and 2023 is tabulated overleaf in Table 2-5 and illustrated in Figure 2-10.

**Table 2-5 –** Chimney Drain Sumps Water Elevations 2020 - 2023

| ID | Elevation (m OD) | 2020 Groundwater Elevation (m OD) | | 2021 Groundwater Elevation (m OD) | | 2022 Groundwater Elevation (m OD) | | 2023 Groundwater Elevation (m OD) | |
|---|---|---|---|---|---|---|---|---|---|
| | | Average | Maximum | Average | Maximum | Average | Maximum | Average | Maximum |
| Sump 3 | 133.47 | 131.88 | 132.43 | 131.64 | 132.18 | 131.57 | 132.01 | 131.67 | 132.03 |
| Sump 4 | 137.09 | 136.18 | 136.37 | 136.24 | 136.45 | 136.14 | 136.21 | 136.14 | 136.27 |
| Sump 5 | 136.89 | 132.60 | 133.22 | 132.79 | 133.22 | 132.31 | 133.22 | 132.20 | 133.22 |

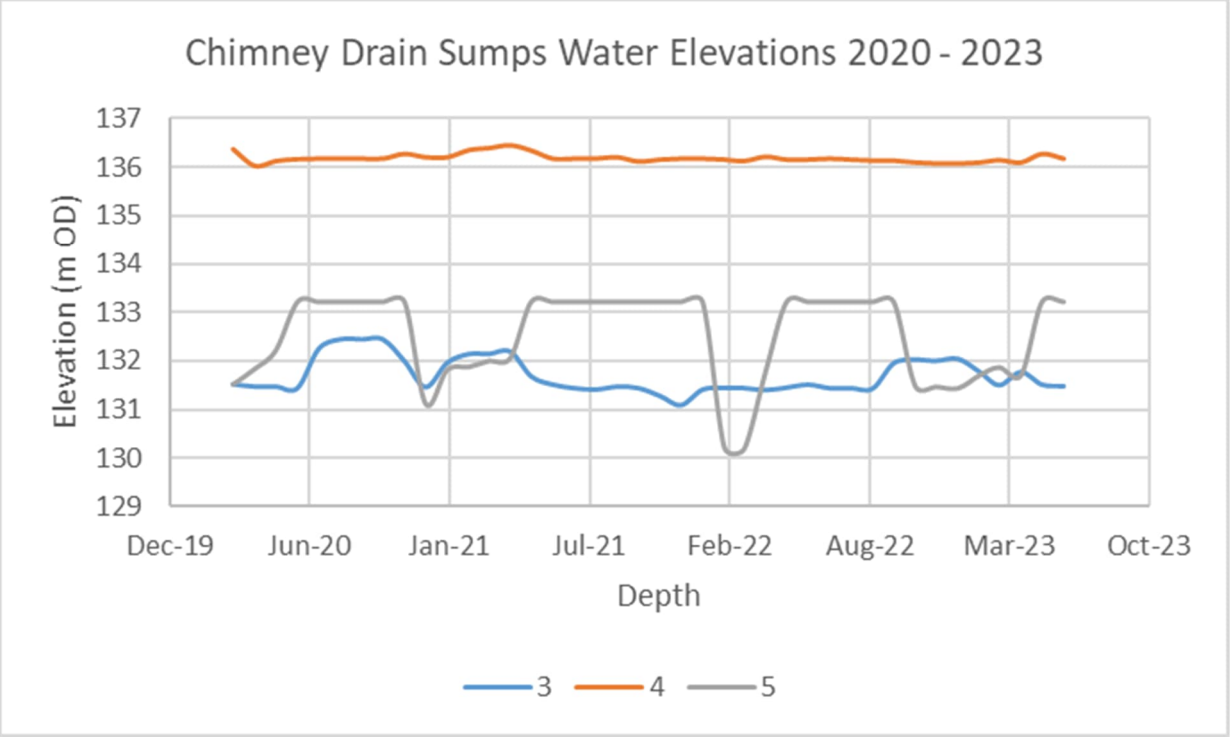


**Figure 2-10** - Chimney Sumps Water Levels 2020

The following was observed from the analysis of the monitoring data:

- Sump 5 recorded the lowest depths to groundwater during March 2022 at 130.18 m OD.
- Sump 4 recorded the most consistent groundwater elevation data between 2020 and 2023, varying from 136.02 m OD and 136.45 m OD.

### 2.3.4. Interceptor Channel Sumps

Finger drains were installed previously at approximately 50 m intervals around the perimeter of the facility connecting to the base of the chimney drains and fed into the perimeter interceptor channel at the downstream toe of the dam walls. A number of sumps were constructed in the perimeter channel for this purpose (IC1, IC2, and IC4), and concrete manhole chambers installed. These manhole chambers were removed, and the sumps decommissioned during the re-grading of the perimeter interceptor channel in 2015.

## 2.4 Monitoring Dates

The instruments have been monitored and/or sampled monthly or quarterly in accordance with agreements with the EPA with a reduced monitoring programme adopted in 2019, 2020, 2021, 2022 and 2023 (January to June).

The majority of the piezometers and boreholes appear to be functioning as expected and the short-term anomalies can be correlated to seasonal fluctuations.

# 3 Site Inspection

The site inspection was undertaken by Peter Corrigan and Billy Murphy of WSP on the 04 October 2023. A summary of the visual inspection and comments related to specific areas are presented below for each of the dam wall sectors. Refer to Appendix B for photographs taken during the site inspection.

## 3.1 General

The TMF is clean, tidy, and the slopes are well vegetated. The security of the facility is satisfactory, and the electronic gate is closed except for authorised access to the site.

The capping of Cells 1 and 2 prevents the accumulation of water on the surface, and therefore the potential for damage from over topping of the dam walls will be eliminated or at least minimized. The slope of the dome is designed to be approximately 1%, which has resulted in isolated ponding on the surface allowing the formation of hollows due to differential settlements of the underlying tailings and the cap itself. Isolated zones of ponding were evident on the caps during the site visit. This is not expected to have an impact on the structural integrity of the facility. Cell 3 restoration as a wetland appears to be thriving.

The vegetation growth on the downstream dam walls is good, although the grass should be continually maintained and managed. It is evident that there has been success in managing the gorse by spraying and by physical removal. This work should be continued to ensure that the gorse growth is kept under control. This allows any defects on the wall to be readily observed. A program of removing the large shrubs and trees from the walls of the TMF was previously completed in 2015 as part of the closure works and evidence of further gorse removal was noted during the inspection.

## 3.2 Dam Sectors A to B

This Sector of the dam wall is the common dividing wall between Cells 1 and 2. The lining in this section of the dam wall had been slightly damaged and repaired prior to 2019. Tailings were placed against the damaged area to minimise any potential seepage. The internal crest access road was in good repair and the upper perimeter drainage system was intact and covered with some drainage stone. Localised ponding was identified on the cap of Cell 1 during the inspection.

## 3.3 Dam Sectors B to C

This Sector, which is the dividing wall between Cells 1 and 3, has an internal collector drain with no finger drain outlets. The collector drain is at the base of the central chimney drain and discharges into Sump 3. The internal crest access road was in good condition and the upper perimeter drainage system was in intact and covered with drainage stone. Localised ponding was previously identified on the cap of Cell during the inspection.

## 3.4 Dam Sectors C to D

The dam wall along this Sector is well vegetated with no signs of distress or surface sloughing. Gorse bushes are beginning to become established on the slopes and should be addressed in the same manner as gorse has been managed elsewhere at the facility. This Sector has a series of finger drains connected to the collector drain at the base of the chimney drain. All finger drains were dry, and no seepage was evident.

## 3.5 Dam Sectors D to A

The dam wall along this Sector is well vegetated with no signs of distress or surface sloughing. This Sector has a series of finger drains connected to the collector drain at the base of the chimney drain. All finger drains were dry, and no seepage was evident.

## 3.6 Dam Sectors A to F

The dam wall along this Sector is well vegetated with no signs of distress or surface sloughing. This Sector has a series of finger drains connected to the collector drain at the base of the chimney drain. All finger drains were dry, and no seepage was evident.

## 3.7 Dam Sectors F to G

The dam wall along this Sector is well vegetated with no signs of distress or surface sloughing. This Sector has a series of finger drains connected to the collector drain at the base of the chimney drain. All finger drains were dry, and no seepage was evident.

## 3.8 Dam Sectors G to H

Evidence of gorse removal was noted during the inspection. This Sector has a series of finger drains connected to the collector drain at the base of the chimney drain. All finger drains were dry, and no seepage was evident.

## 3.9 Dam Sectors H to B

This Sector of the dam wall forms the internal dividing wall between Cells 2 and 3. The base of the chimney drains on the dividing wall of Cells 1 and 2, and on the dividing wall of Cells 2 and 3 are connected via a pipe to manholes at both ends (Sump 4 at Point A and Sump 5 at Point H).

The internal crest access road was in good repair and the upper perimeter drainage system was intact and generally covered over with drainage stone.

## 3.10 Dam Sectors H to I

This Sector of the dam wall has been modified by the construction of the wetlands on Cell 3. The original dam height has been reduced to an elevation of approximately 139.7 m AOD.

No impact of constructing the wetlands is apparent on the external dam walls.

## 3.11 Dam Sectors I to C

This Sector of the dam wall has been modified by the construction of the wetlands on Cell 3. The original dam height has been reduced to an elevation of approximately 139.7 m AOD.

## 3.12 Cell 3 Wetlands

The wetland vegetation is flourishing and the spillways, water control, and overflow systems between the ponds are operating appropriately. There are no signs of erosion of the pond wall or the channels within the wetlands.

## 3.13 Surface Water Drainage

The surface water drainage system has an upper perimeter system for Cells 1 and 2, which decants into Cell 3 via spillways, and a lower perimeter system which discharges into the attenuation pond.

**Upper Perimeter System –** Surface water from the cap, and sub-surface infiltration and migrations are collected in the perimeter drainage systems of Cells 1 and 2 and directed into Cell 3 by spillways. The perimeter drainage system consists of two smooth HDPE pipes at a gradient of 1% and with an internal diameter of 500 mm, encased in drainage stone and positioned on the upstream side of the lining system. The pipes drain approximately 50% of each cell area so that the four pipes deliver water to each spillway. The system is designed for a 1 in a 150-year rainfall event of a four-hour duration.

**Lower Perimeter System –** Surface water from the downstream slope of the dam walls, seepages from the finger drains and inflows from other sources are captured in the perimeter interceptor channel (PIC) at the downstream toe of the dam walls. The base of the channel is approximately 1 m, and to maintain falls, it varies in depth around the facility, but generally has a depth of approximately 1 m to 5 m. The PIC has a high point slightly north-west of Point A, and grades clockwise and anti-clockwise around the facility to Point G at the western corner of the facility, where the flows enter the attenuation pond. The west wall of the facility has an outer open drain which collects the flows from PICs in these sectors and transfers them to the attenuation pond.

The 2015 Annual Review [2] noted that the recovery of the groundwater had highlighted some deficiencies in the lower perimeter drainage system in the southeastern sector of Cell 3, particularly at a low spot near Sump 3. Significant perimeter drainage works were undertaken during 2015 to re-grade and connect the perimeter drainage system at the toe of the dam walls to the attenuation pond. No flooding was observed in 2016, 2017, 2018 or the current inspection (2023). Should flooding occur, it will have no impact on the dam walls along the sector and would spill along the channel before contacting the downstream toe of the dam wall.

The following items were noted regarding the lower perimeter system during the site inspection visit:

- PIC is in good order and appears to be operating appropriately.
- An existing inflow is connected to the outer open drain along the west wall of the facility which may pose a risk of outside sources negatively impacting on the discharge waters for the TMF.
- The outer drain at Sectors G to H and H to I are in good condition and operating appropriately.

## 3.14 Attenuation Pond

The attenuation pond receives all the surface water discharging from the TMF, and depending on the elevation in the pond, subsequently discharges to the Glasha Stream via the outfall structure.

The attenuation pond and outfall structure are operating accordingly and appear to be in good working order. Refer to Figure 3-1, Figure 3-2, Figure 3-3, Figure 3-4, and Figure 3-5 below for water levels recorded in the Attenuation Pond between 2019 and 2023.

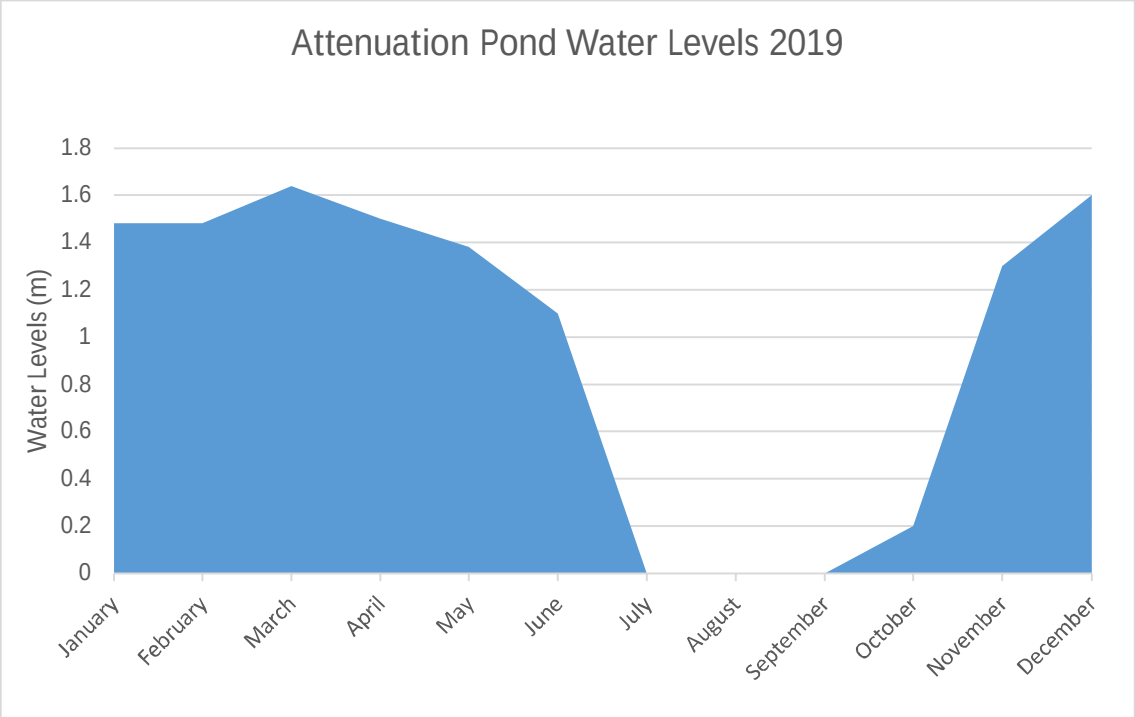


**Figure 3-1** - Attenuation Pond Water Levels in 2019

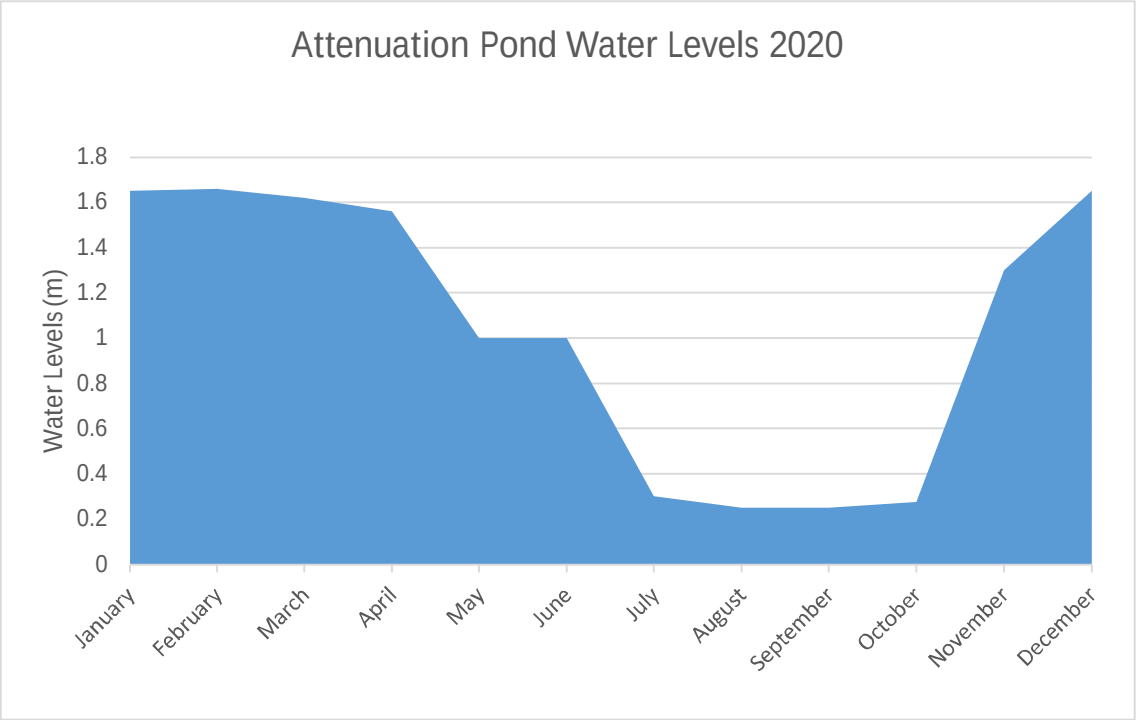


**Figure 3-2** - Attenuation Pond Water Levels in 2020

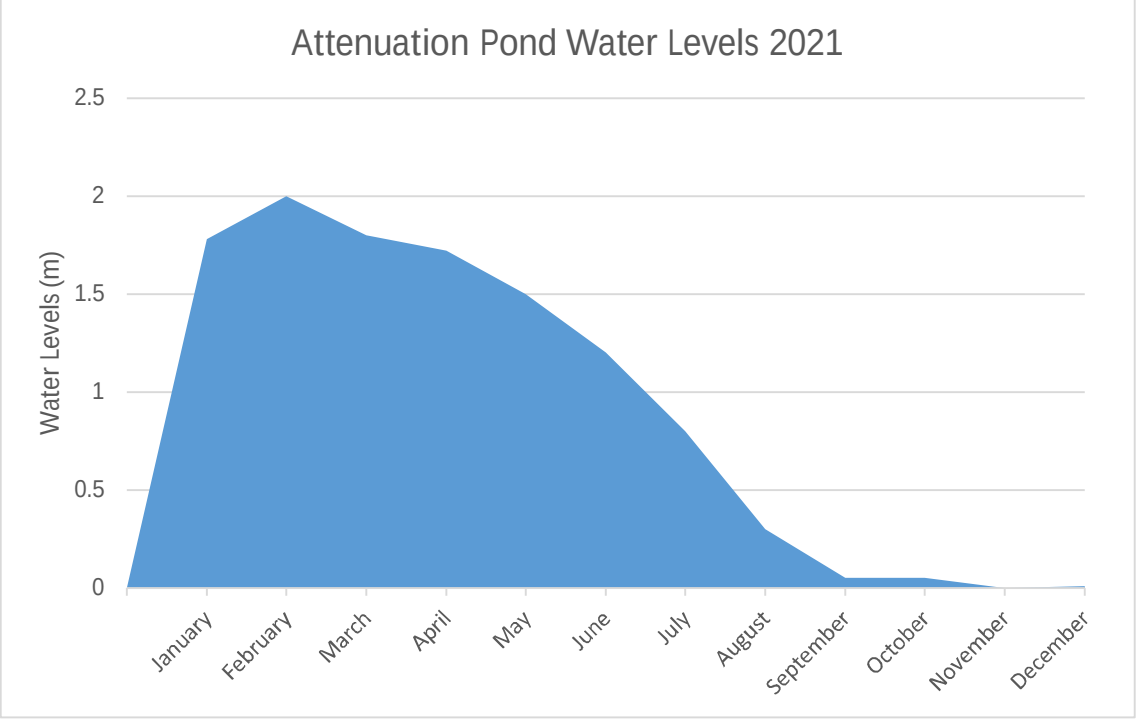


**Figure 3-3** - Attenuation Pond Water Levels in 2021

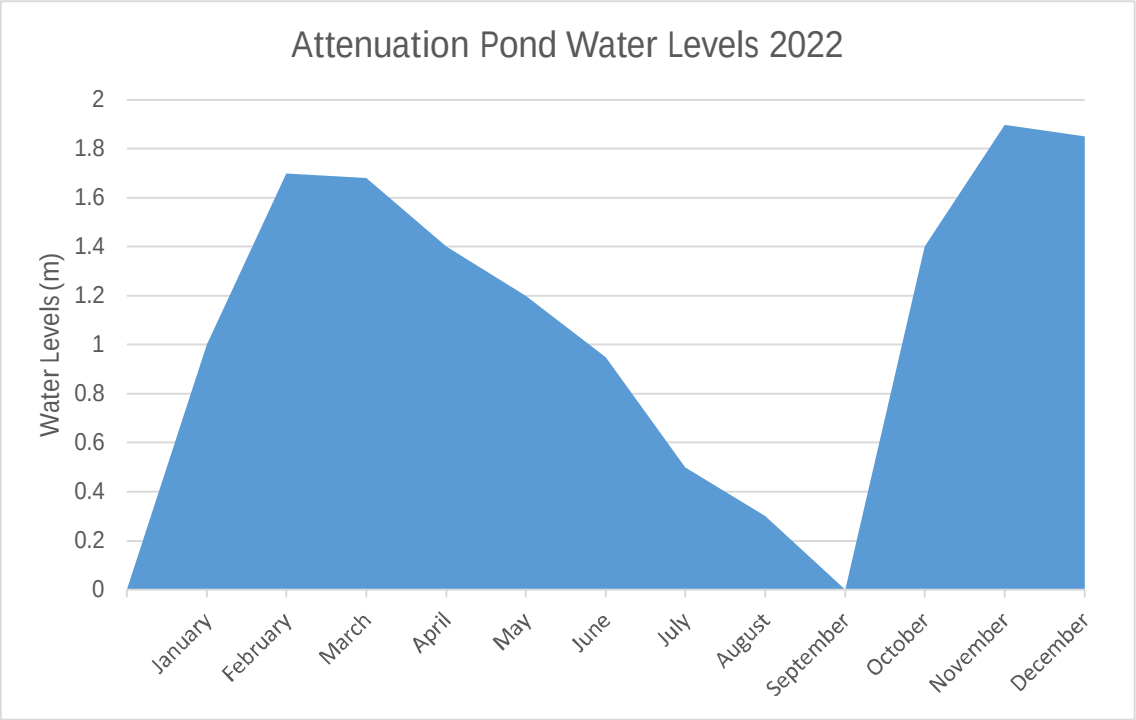


**Figure 3-4 -** Attenuation Pond Water Levels in 2022

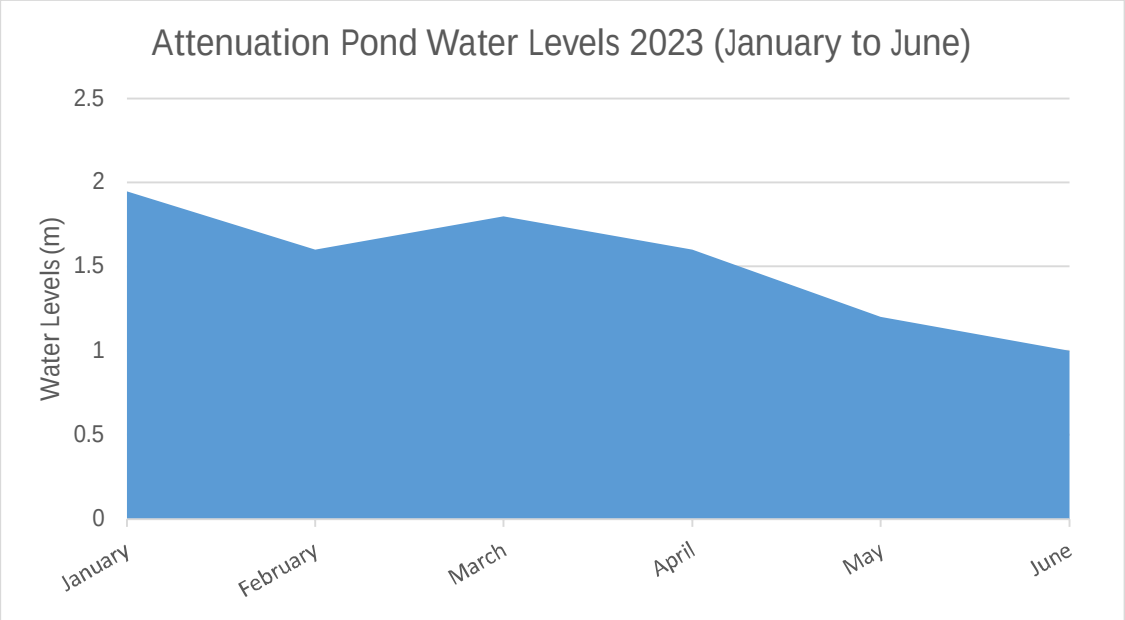


**Figure 3-5** - Attenuation Pond Water Levels in 2023

The following was observed from the analysis of the monitoring data from the attenuation pond:

- The lowest average water level was recorded in 2022 at 0.93 m (June).

- The highest average water level was recorded in 2023 between the months of January and June at 1.95 m (January).
- The month of August typically recorded the lowest depths of water between 2019 and 2023 whilst the month of February typically recorded the highest.

# 4 Slope Stability

The stability of the external dams' walls was assessed in (Golder 2013) using the limit equilibrium software Slope/W and using the Morgenstern-Price method which considers both force and moment equilibrium. The analyses considered the stability of the dam wall at its elevation in 2013 of 143 mOD for Cell 1 and 2 and its final elevation of 139.0 mOD for Cell 3. A pseudo-static analysis was also carried out in both cases for a peak ground acceleration (PGA) of 0.06 g. An elevated phreatic level was used in all four models. The results of the stability assessment are tabulated below.

**Table 4-1 –** Galmoy TMF Dam Walls Stability Assessment (2013)

| Dam Wall Crest Elevation (m OD) | Operating Conditions Factor of Safety (FoS) | Pseudo-Static Factor of Safety (FoS) 0.06 g |
|---|---|---|
| 143 | 1.58 | 1.37 |
| 139 | 1.56 | 1.35 |

The industry standard factors of safety (FoS) for normal operating conditions are 1.5 and for during the design seismic event are 1.0 (pseudo-static). The stability assessment has shown that the external dam walls meets these requirements.

# 5 Conclusions & Recommendations

Based on the visual inspection and an evaluation of the monitoring data, Cells 1 to 3 are performing in accordance with the design. The dam walls are in excellent condition and the piezometers installed in the dam wall are stable and/or dry for much of the year. The piezometers installed into the foundations of the dam wall indicate that the phreatic surface is generally below foundation level, and the majority of the results are between 128 m AOD and 132 m AOD. Where the dam wall is constructed on higher ground, as observed on the northeastern walls of Cells 1 and 2, water levels above 132 m AOD were observed but remained generally within the dam foundations. Many of the piezometer readings are impacted by the seasons.

Average 2019 water levels recorded in piezometers ranged in elevation from 128.02 m AOD to 140.11 m AOD. Average 2020 water levels recorded in piezometers ranged in elevation from 125.44 m AOD to 140.13 m AOD. Average 2021 water levels recorded in piezometers ranged in elevation from 125.85 m AOD to 140.2 m AOD. Average 2022 water levels recorded in piezometers ranged in elevation from 127.35 m AOD to 140.08 m AOD. Average 2023 water levels recorded in piezometers ranged in elevation from 127.66 m AOD to 140.12 m AOD.

The water levels in the monitoring boreholes indicate seasonal variations, where previous levels for 2016 to 2018 were in the general range from 128 m AOD to 133 m AOD [1] [3]. The winter of 2015/2016 was extremely wet and showed a short-term range from 130 m AOD to 134 m AOD. Average 2019 water levels recorded in boreholes ranged in elevation from 128.02 m AOD to 131.24 m AOD. Average 2020 water levels recorded in boreholes ranged in elevation from 128.86 m AOD to 129.84 m AOD. Average 2021 water levels recorded in boreholes ranged in elevation from 128.56 m AOD to 129.85 m AOD. Average 2022 water levels recorded in boreholes ranged in elevation from 128.88 m AOD to 129.89 m AOD. Average 2023 (January to June) water levels recorded in boreholes ranged in elevation from 129.65 m AOD to 130.86 m AOD.

Recommendations are noted in the following:

- Obtain elevations for the top of casing for BH9 and Pz20.
- Attempt to unblock Pz19 and Pz25 to obtain future readings.
- Continue with removal of large sections gorse from the downstream side slopes.
- Monitoring should be continued to be carried out as per the licence requirements.

# 6 References

[1] Golder, “1521236 501/A0: Galmoy Mines TMF Independent Audit,” 2016.

[2] Golder, “19118326.R01.A0: Galmoy Mines TMF Independent Audit,” 2019.

[3] Golder, “1521236 502/A0: Galmoy Mines TMF Independent Audit,” 2017.

# Appendix A

# Piezometer & Boreholes Monitoring Data

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 15.01.21, 18.01.21

*Inspected/ Sampled by*

| Piezometers | | | | |
|---|---|---|---|---|
| | | (M) | | (Q) |
| Piezo | Depth | Level | Wet/Dry | Sampled |
| 4 | 9.93 | 8.9 | Dry | no |
| 5 | 15.96 | 12.48 | Wet | Yes |
| 13 | 10.63 | 10.34 | Wet | no |
| 14 | 15 | 12.27 | Wet | Yes |
| 15 | 7.43 | 4.74 | wet | Yes |
| 16 | 8.33 | 8.27 | wet | no |
| 17 | 10.63 | 10.63 | Dry | no |
| 18 | 4.73 | 4.73 | Dry | no |
| 19 | | BLOCKED | | |
| 20 | 6.43 | 6.43 | Dry | no |
| 21 | 4.58 | 4.58 | Dry | no |
| 22 | | 10 | Dry | no |
| 24 | 6.23 | 6.23 | Dry | no |
| 25 | | BLOCKED | | |
| 26 | 3.14 | 3 | wet | no |
| 27 | 5.1 | 4.95 | wet | no |
| 28 | 11.89 | 8.59 | wet | no |
| 29 | 6.69 | 6.5 | wet | no |
| 30 | 5.35 | 4.2 | wet | Yes |
| 33 | 6.66 | 5.4 | wet | Yes |
| 34 | 12.78 | 12.6 | wet | no |
| 36 | 6.11 | 5.28 | ~~Yes~~ | yes |
| 37 | 13.85 | 12.26 | wet | Yes |
| 38 | 8.82 | 8.82 | Dry | no |
| 39 | 6.66 | 4.48 | wet | yes |
| 56 | 16.23 | 9.2 | Dry | no |
| 57 | 16.5 | 12.15 | wet | yes |
| 58 | 18.19 | 12.12 | wet | Yes |
| 59 | 15.59 | 8.65 | wet | yes |
| 60 | 15.49 | 8.34 | wet | yes |

| Boreholes | | |
|---|---|---|
| | (M) | (Q) |
| Borehole | Level | Sampled |
| 3 | 2.4 | Yes |
| 4 | 8.18 | no |
| 5 | 6.22 | Yes |
| 6 | 5.6 | Yes |
| 7 | 8.17 | Yes |
| 8 | 6.64 | ~~Yes~~ Yes |
| 9 | 1.73 | Yes |
| 10 | 2.35 | Yes |
| 11 | 2.19 | Yes |
| 13 | 3.22 | Yes |

| Chimney Sump | | Level | Sample Taken (Q) |
|---|---|---|---|
| 1.28 | 3 | 1.28 | Yes |
| | 4 | 1.77 | Yes |
| | 5 | 1.4 | Yes |

| Sample Point | Sample Taken (Q) |
|---|---|
| Spillway 01 | Yes |
| Spillway 02 | Yes |
| Pond 4 | Yes |
| ASW3 | Yes |
| Duggans Bridge | Yes |

| Attenuation Pond (M) | |
|---|---|
| Level | Sampled |
| 1.78 | Yes |

*Comments*

BH 08 pump not working (repaired)
BH 04 Blocked.
PZ 28 Blocked.

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 05.02.21

*Inspected/ Sampled by* [signature]

| *Piezometers* | | | | |
|---|---|---|---|---|
| | | *(M)* | | *(Q)* |
| *Piezo* | *Depth* | *Level* | *Wet/Dry* | Sampled |
| *4* | *9.93* | 8.71 | Wet | No |
| *5* | *15.96* | 12.33 | Wet | No |
| *13* | *10.63* | 10.26 | Wet | No |
| *14* | *15* | 12.15 | Wet | No |
| *15* | *7.43* | 4.55 | Wet | No |
| *16* | *8.33* | 8.13 | Wet | No |
| *17* | *10.63* | 10.63 | Dry | No |
| *18* | *4.73* | 4.73 | Dry | No |
| *19* | | Blocked | | |
| *20* | *6.43* | 6.43 | Dry | No |
| *21* | *4.58* | 4.58 | Dry | No |
| *22* | 10 | 10 | Dry | No |
| *24* | *6.23* | 6.23 | Dry | No |
| *25* | | Blocked | | |
| *26* | *3.14* | 2.94 | Wet | No |
| *27* | *5.1* | 4.84 | Wet | No |
| *28* | *11.89* | 8.4 | Wet | No |
| *29* | *6.69* | 6.4 | Wet | No |
| *30* | *5.35* | 4 | Wet | No |
| *33* | *6.66* | 5.26 | Wet | No |
| *34* | *12.78* | 12.45 | Wet | No |
| *36* | *6.11* | 5.14 | Wet | No |
| *37* | *13.85* | 12.18 | Wet | No |
| *38* | *8.82* | 8.8 | Wet | No |
| *39* | *6.66* | 4.32 | Wet | No |
| *56* | *16.23* | 9.2 | Dry | No |
| 57 | 16.5 | 11.92 | Wet | No |
| *58* | *18.19* | 12 | Wet | No |
| *59* | *15.59* | 8.52 | Wet | No |
| *60* | *15.49* | 8.2 | Wet | No |

| *Boreholes* | | |
|---|---|---|
| | *(M)* | *(Q)* |
| *Borehole* | *Level* | *Sampled* |
| *3* | 2.12 | No |
| *4* | 7.98 | No |
| *5* | 6.1 | No |
| *6* | 5.34 | No |
| *7* | 7.78 | No |
| *8* | 6.5 | No |
| *9* | 1.68 | No |
| *10* | 2.12 | No |
| *11* | 2.12 | No |
| *13* | 2.98 | No |
| | | No |

| *Chimney Sump* | *Level* | *Sample Taken (Q)* |
|---|---|---|
| *3* | 1.10 | No |
| *4* | 1.62 | No |
| *5* | 1.34 | No |
| | | |

| *Sample Point* | *Sample Taken (Q)* |
|---|---|
| *Spillway 01* | No |
| *Spillway 02* | No |
| *Pond 4* | No |
| *ASW3* | No |
| *Duggans Bridge* | No |

| *Attenuation Pond (M)* | |
|---|---|
| *Level* | *Sampled* |
| 2 MTR | Yes |

*Comments*

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 31.03.21

*Inspected/ Sampled by*

| Piezometers | | | | |
|---|---|---|---|---|
| | | (M) | | (Q) |
| Piezo | Depth | Level | Wet/Dry | Sampled |
| 4 | 9.93 | 8.68 | wet | no |
| 5 | 15.96 | 12.25 | wet | no |
| 13 | 10.63 | 10.22 | wet | no |
| 14 | 15 | 12.05 | wet | no |
| 15 | 7.43 | 4.45 | wet | no |
| 16 | 8.33 | 8.05 | wet | no |
| 17 | 10.63 | 10.63 | Dry | no |
| 18 | 4.73 | 4.73 | Dry | no |
| 19 | | Blocked | | no |
| 20 | 6.43 | 6.43 | Dry | no |
| 21 | 4.58 | 4.58 | Dry | no |
| 22 | 10 | 10 | Dry | no |
| 24 | 6.23 | 6.23 | Dry | no |
| 25 | | Blocked | | no |
| 26 | 3.14 | 2.9 | wet | no |
| 27 | 5.1 | 4.78 | wet | no |
| 28 | 11.89 | 8.33 | wet | no |
| 29 | 6.69 | 6.32 | wet | no |
| 30 | 5.35 | 3.92 | wet | no |
| 33 | 6.66 | 5.2 | wet | no |
| 34 | 12.78 | 12.38 | wet | no |
| 36 | 6.11 | 5.05 | wet | no |
| 37 | 13.85 | 12.1 | wet | no |
| 38 | 8.82 | 8.72 | wet | no |
| 39 | 6.66 | 4.24 | wet | no |
| 56 | 16.23 | 9.2 | Dry | no |
| 57 | 16.5 | 11.88 | wet | no |
| 58 | 18.19 | 11.86 | wet | no |
| 59 | 15.59 | 8.48 | wet | no |
| 60 | 15.49 | 8.1 | wet | no |

| Boreholes | | |
|---|---|---|
| | (M) | (Q) |
| Borehole | Level | Sampled |
| 3 | 2.1 | no |
| 4 | 7.88 | no |
| 5 | 6.05 | no |
| 6 | 5.22 | no |
| 7 | 7.63 | no |
| 8 | 6.44 | no |
| 9 | 1.6 | no |
| 10 | 2.05 | no |
| 11 | 2.1 | no |
| 13 | 2.82 | no |

| Chimney Sump | Level | Sample Taken (Q) |
|---|---|---|
| 3 | 1.10 | no |
| 4 | 1.58 | no |
| 5 | 1.22 | no |

| Sample Point | Sample Taken (Q) |
|---|---|
| Spillway 01 | no |
| Spillway 02 | no |
| Pond 4 | no |
| ASW3 | no |
| Duggans Bridge | no |

| Attenuation Pond (M) | |
|---|---|
| Level | Sampled |
| 1.8 m. | Yes |

*Comments*

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 29.04.21

*Inspected/ Sampled by*

| Piezometers | | | | | Boreholes | | |
|---|---|---|---|---|---|---|---|
| | | (M) | | (Q) | | (M) | (Q) |
| Piezo | Depth | Level | Wet/Dry | Sampled | Borehole | Level | Sampled |
| 4 | 9.93 | 8.62 | wet | no | 3 | 2.1 | no |
| 5 | 15.96 | 12.18 | wet | no | 4 | 7.82 | no |
| 13 | 10.63 | 10.18 | wet | no | 5 | 5.9 | no |
| 14 | 15 | 12 | wet | no | 6 | 5.18 | no |
| 15 | 7.43 | 6.88 | wet | no | 7 | 7.52 | no |
| 16 | 8.33 | 7.96 | wet | no | 8 | 6.36 | no |
| 17 | 10.63 | 10.63 | Dry | no | 9 | 1.55 | no |
| 18 | 4.73 | 4.73 | Dry | no | 10 | 2 | no |
| 19 | | Blocked | | no | 11 | 2 | no |
| 20 | 6.43 | 6.43 | Dry | no | 13 | 2.78 | no |
| 21 | 4.58 | 4.58 | Dry | no | | | |
| 22 | 10 | 10 | Dry | no | Chimney Sump | Level | Sample Taken (Q) |
| 24 | 6.23 | 6.23 | Dry | no | 3 | 1.05 | no |
| 25 | | Blocked | | no | 4 | 1.52 | no |
| 26 | 3.14 | 2.84 | wet | no | 5 | 1.16 | no |
| 27 | 5.1 | 4.72 | wet | no | | | |
| 28 | 11.89 | 8.28 | wet | no | | | |
| 29 | 6.69 | 6.26 | wet | no | Sample Point | | Sample Taken (Q) |
| 30 | 5.35 | 2.92 | wet | no | Spillway 01 | | no |
| 33 | 6.66 | 5.15 | wet | no | Spillway 02 | | no |
| 34 | 12.78 | 12.34 | wet | no | Pond 4 | | no |
| 36 | 6.11 | 4.98 | wet | no | ASW3 | | no |
| 37 | 13.85 | 12.05 | wet | no | Duggans Bridge | | no |
| 38 | 8.82 | 8.66 | wet | no | | | |
| 39 | 6.66 | 4.18 | wet | no | | | |
| 56 | 16.23 | 9.14 | wet | no | Attenuation Pond (M) | | |
| 57 | 16.5 | 11.8 | wet | no | Level | | Sampled |
| 58 | 18.19 | 11.82 | wet | no | 1.72 | | Yes |
| 59 | 15.59 | 8.38 | wet | no | | | |
| 60 | 15.49 | 8.02 | wet | no | | | |

*Comments*

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 27.05.21

*Inspected/ Sampled by* [signature]

| Piezometers | | | | | Boreholes | | |
|---|---|---|---|---|---|---|---|
| | | (M) | | (Q) | | (M) | (Q) |
| Piezo | Depth | Level | Wet/Dry | Sampled | Borehole | Level | Sampled |
| 4 | 9.93 | 8.55 | wet | No | 3 | 3.22 | No |
| 5 | 15.96 | 12.88 | wet | no | 4 | 7.9 | No |
| 13 | 10.63 | 10.25 | wet | no | 5 | 6.46 | No |
| 14 | 15 | 12.05 | wet | no | 6 | 6.24 | No |
| 15 | 7.43 | 4.96 | wet | no | 7 | 8.42 | No |
| 16 | 8.33 | 8.22 | wet | no | 8 | 7.02 | No |
| 17 | 10.63 | 10.63 | Dry | no | 9 | 1.86 | No |
| 18 | 4.73 | 4.73 | Dry | no | 10 | 2.76 | No |
| 19 | | Blocked | | no | 11 | 2.74 | No |
| 20 | 6.43 | 6.43 | Dry | no | 13 | 3.8 | no |
| 21 | 4.58 | 4.58 | Dry | no | | | |
| 22 | 10 | 10 | Dry | no | Chimney Sump | Level | Sample Taken (Q) |
| 24 | 6.23 | 6.23 | Dry | no | | | |
| 25 | | Blocked | | no | 3 | 1.56 | No |
| 26 | 3.14 | 2.92 | wet | no | 4 | 1.63 | No |
| 27 | 5.1 | 4.88 | wet | no | 5 | Dry | no |
| 28 | 11.89 | 8.73 | wet | no | | | |
| 29 | 6.69 | 5.58 | Dry | no | Sample Point | | Sample Taken (Q) |
| 30 | 5.35 | 4.1 | wet | no | | | |
| 33 | 6.66 | 5.84 | wet | no | Spillway 01 | | No |
| 34 | 12.78 | 12.1 | wet | no | Spillway 02 | | No |
| 36 | 6.11 | 5.22 | wet | no | Pond 4 | | No |
| 37 | 13.85 | 13 | wet | no | ASW3 | | No |
| 38 | 8.82 | 6.92 | wet | No | Duggans Bridge | | No |
| 39 | 6.66 | 5.22 | wet | no | | | |
| 56 | 16.23 | 9.54 | wet | no | Attenuation Pond (M) | | |
| 57 | 16.5 | 12.22 | wet | no | Level | | Sampled |
| 58 | 18.19 | 13.05 | wet | no | 1.5 m. | | Yes |
| 59 | 15.59 | 9.12 | wet | no | | | |
| 60 | 15.49 | 8.96 | wet | no | | | |

*Comments*

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 17.06.21

*Inspected/ Sampled by*

| *Piezometers* | | | | | *Boreholes* | | |
|---|---|---|---|---|---|---|---|
| | | *(M)* | | *(Q)* | | *(M)* | *(Q)* |
| *Piezo* | *Depth* | *Level* | *Wet/Dry* | Sampled | *Borehole* | *Level* | *Sampled* |
| *4* | *9.93* | 8.5 | Dry | No | *3* | 4.06 | Yes |
| *5* | *15.96* | 13.55 | wet | Yes | *4* | 7.97 | No, blocked |
| *13* | *10.63* | 10.33 | wet | No | *5* | 7.64 | Yes |
| *14* | *15* | 12.1 | wet | Yes | *6* | 6.72 | Yes |
| *15* | *7.43* | 6.21 | wet | Yes | *7* | 9.1 | Yes |
| *16* | *8.33* | 8.3 | wet | No | *8* | 7.78 | Yes |
| *17* | *10.63* | 10.63 | Dry | No | *9* | 2.47 | Yes |
| *18* | *4.73* | 4.73 | Dry | No | *10* | 3.1 | Yes |
| *19* | | Blocked | | | *11* | 3.1 | Yes |
| *20* | *6.43* | 6.43 | Dry | No | *13* | 4.47 | Yes |
| *21* | *4.58* | 4.58 | Dry | No | | | |
| *22* | *10* | 10 | Dry | No | *Chimney Sump* | *Level* | *Sample Taken (Q)* |
| *24* | *6.23* | 6.23 | Dry | No | *3* | 1.73 | Yes |
| *25* | | Blocked | | | *4* | 1.18 | Yes |
| *26* | *3.14* | 3.14 | Dry | No | *5* | Dry | No |
| *27* | *5.1* | 5.1 | Dry | No | | | |
| *28* | *11.89* | 9 | Dry | No | | | |
| *29* | *6.69* | 5.58 | Dry | No | *Sample Point* | | *Sample Taken (Q)* |
| *30* | *5.35* | 4.24 | wet | Yes | *Spillway 01* | | Yes |
| *33* | *6.66* | 6.2 | wet | Yes | *Spillway 02* | | Yes |
| *34* | *12.78* | 11.82 | wet | Yes | *Pond 4* | | No, dry (not discharging) |
| *36* | *6.11* | 5.97 | wet | No | *ASW3* | | Yes |
| *37* | *13.85* | 13.24 | wet | Yes | *Duggans Bridge* | | Yes |
| *38* | *8.82* | 8.7 | wet | No | | | |
| *39* | *6.66* | 5.45 | wet | Yes | | | |
| *56* | *16.23* | 10 | Dry | No | *Attenuation Pond (M)* | | |
| 57 | 16.5 | 13.28 | wet | Yes | *Level* | | *Sampled* |
| *58* | *18.19* | 13.28 | wet | Yes | 1.2 M. | | Yes |
| *59* | *15.59* | 9.79 | wet | Yes | | | |
| *60* | *15.49* | 9.6 | wet | Yes | | | |

*Comments*

PZ 56 blocked @ 10 mtrs

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 22.02.21

*Inspected/ Sampled by* [signature]

| Piezometers | | | | |
|---|---|---|---|---|
| | | (M) | | (Q) |
| Piezo | Depth | Level | Wet/Dry | Sampled |
| 4 | 9.93 | 8.7 | D | no |
| 5 | 15.96 | 14 | W | no |
| 13 | 10.63 | 10.44 | W | no |
| 14 | 15 | 13.26 | W | no |
| 15 | 7.43 | 6.84 | W | no |
| 16 | 8.33 | 8.33 | D | no |
| 17 | 10.63 | 10.63 | D | no |
| 18 | 4.73 | 4.73 | D | no |
| 19 | | Blocked | | |
| 20 | 6.43 | 6.43 | D | no |
| 21 | 4.58 | 4.58 | D | no |
| 22 | | 10 | D | no |
| 24 | 6.23 | 6.23 | D | no |
| 25 | | Blocked | | |
| 26 | 3.14 | 3.14 | D | no |
| 27 | 5.1 | 5.1 | D | no |
| 28 | 11.89 | 9 | D | no |
| 29 | 6.69 | 6.69 | D | no |
| 30 | 5.35 | 4.28 | W | no |
| 33 | 6.66 | 6.34 | W | no |
| 34 | 12.78 | 12.21 | W | no |
| 36 | 6.11 | 6.05 | D | no |
| 37 | 13.85 | 13.55 | W | no |
| 38 | 8.82 | 8.8 | D | no |
| 39 | 6.66 | 5.9 | W | no |
| 56 | 16.23 | 13.23 | W | no |
| 57 | | 13.75 | W | no |
| 58 | 18.19 | 13.66 | W | no |
| 59 | 15.59 | 10.2 | W | no |
| 60 | 15.49 | 10.2 | W | no |

| Boreholes | | |
|---|---|---|
| | (M) | (Q) |
| Borehole | Level | Sampled |
| 3 | 4.8 | no |
| 4 | 8.14 | no |
| 5 | 8.05 | no |
| 6 | 7.10 | no |
| 7 | 9.9 | no |
| 8 | 8.10 | no |
| 9 | 2.87 | no |
| 10 | 3.75 | no |
| 11 | 3.62 | no |
| 13 | 5.69 | no |

| Chimney Sump | Level | Sample Taken (Q) |
|---|---|---|
| 3 | 1.8 | no |
| 4 | 1.8 | no |
| 5 | Dry | no |

| Sample Point | Sample Taken (Q) |
|---|---|
| Spillway 01 | no |
| Spillway 02 | no |
| Pond 4 | no |
| ASW3 | no |
| Duggans Bridge | no |

| Attenuation Pond (M) | |
|---|---|
| Level | Sampled |
| 0.8 | Yes |

*Comments*

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 25.08.21 30.08.21

*Inspected/ Sampled by* [signature]

| *Piezometers* | | | | |
|---|---|---|---|---|
| | | *(M)* | | *(Q)* |
| *Piezo* | *Depth* | *Level* | *Wet/Dry* | Sampled |
| *4* | *9.93* | 9.93 | D | no |
| *5* | *15.96* | 14.6 | W | Yes |
| *13* | *10.63* | 10.6 | W | no |
| *14* | *15* | 14.88 | W | no |
| *15* | *7.43* | 7.43 | D | no |
| *16* | *8.33* | 8.33 | D | no |
| *17* | *10.63* | 10.68 | D | no |
| *18* | *4.73* | 4.73 | D | no |
| *19* | | Blocked | | |
| *20* | *6.43* | 6.43 | D | no |
| *21* | *4.58* | 4.58 | D | no |
| *22* | *10* | 10 | D | no |
| *24* | *6.23* | 6.33 | D | no |
| *25* | | Blocked | | |
| *26* | *3.14* | 3.14 | D | no |
| *27* | *5.1* | 5.1 | D | no |
| *28* | *11.89* | 9 | D | no |
| *29* | *6.69* | 6.69 | D | no |
| *30* | *5.35* | 4.35 | W | Yes |
| *33* | *6.66* | 6.6 | W | no |
| *34* | *12.78* | 12.58 | W | no |
| *36* | *6.11* | 6.11 | D | no |
| *37* | *13.85* | 13.85 | D | no |
| *38* | *8.82* | 8.82 | D | no |
| *39* | *6.66* | 6.5 | W | no |
| *56* | *16.23* | 16.23 | D | no |
| 57 | | 14.45 | W | Yes |
| *58* | *18.19* | 14.35 | W | Yes |
| *59* | *15.59* | 11 | W | Yes |
| *60* | *15.49* | 11.32 | W | Yes |

| *Boreholes* | | |
|---|---|---|
| | *(M)* | *(Q)* |
| *Borehole* | *Level* | *Sampled* |
| *3* | 5.2 | Yes |
| *4* | 9.05 | No, blocked |
| *5* | 8.58 | Yes |
| *6* | 7.54 | Yes |
| *7* | 10.05 | Yes |
| *8* | 8.64 | Yes |
| *9* | 3.3 | no |
| *10* | 4 | Yes |
| *11* | 4.88 | Yes |
| *13* | 5.75 | Yes |

| *Chimney Sump* | *Level* | *Sample Taken (Q)* |
|---|---|---|
| *3* | 1.83 | Yes |
| *4* | 1.8 | Yes |
| *5* | Dry | no |

| *Sample Point* | *Sample Taken (Q)* |
|---|---|
| *Spillway 01* | No, dry |
| *Spillway 02* | Yes |
| *Pond 4* | Yes |
| *ASW3* | Yes |
| *Duggans Bridge* | Yes |

| *Attenuation Pond (M)* | |
|---|---|
| *Level* | *Sampled* |
| 0.3 M. | Yes |

*Comments*

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 27.09.21

*Inspected/ Sampled by*

| Piezometers | | | | |
|---|---|---|---|---|
| | | (M) | | (Q) |
| *Piezo* | *Depth* | *Level* | *Wet/Dry* | Sampled |
| 4 | 9.93 | 9.93 | Dry | No |
| 5 | 15.96 | 14.7 | Wet | No |
| 13 | 10.63 | 10.68 | Wet | No |
| 14 | 15 | 14.8 | Wet | No |
| 15 | 7.43 | 7.43 | Dry | No |
| 16 | 8.33 | 8.33 | Dry | No |
| 17 | 10.63 | 10.63 | Dry | No |
| 18 | 4.73 | 4.73 | Dry | No |
| 19 | | Blocked | | No |
| 20 | 6.43 | 6.43 | Dry | No |
| 21 | 4.58 | 4.58 | Dry | No |
| 22 | | 10 | Dry | No |
| 24 | 6.23 | 6.33 | Dry | No |
| 25 | | Blocked | | No |
| 26 | 3.14 | 3.14 | Dry | No |
| 27 | 5.1 | 5.1 | Dry | No |
| 28 | 11.89 | 9.26 | Wet | No |
| 29 | 6.69 | 6.32 | Wet | No |
| 30 | 5.35 | 4.32 | Wet | No |
| 33 | 6.66 | 6.64 | Wet | No |
| 34 | 12.78 | 12.48 | Wet | No |
| 36 | 6.11 | 6.11 | Wet | No |
| 37 | 13.85 | 13.85 | Dry | No |
| 38 | 8.82 | 8.82 | Dry | No |
| 39 | 6.66 | 6.42 | Wet | No |
| 56 | 16.23 | 9.2 | Dry | No |
| 57 | | 14.63 | Wet | No |
| 58 | 18.19 | 14.5 | Wet | No |
| 59 | 15.59 | 11 | Wet | No |
| 60 | 15.49 | 11.26 | | No |

| Boreholes | | |
|---|---|---|
| | (M) | (Q) |
| *Borehole* | *Level* | *Sampled* |
| 3 | 5.2 | No |
| 4 | 9 | No |
| 5 | 8.49 | No |
| 6 | 7.54 | No |
| 7 | 10 | No |
| 8 | 8.7 | No |
| 9 | 3.2 | No |
| 10 | 4.15 | No |
| 11 | 4.71 | No |
| 13 | 6.66 | No |
| | | No |

| *Chimney Sump* | *Level* | *Sample Taken (Q)* |
|---|---|---|
| 3 | 1.77 | No |
| 4 | 1.77 | No |
| 5 | Dry | No |
| | | No |

| *Sample Point* | *Sample Taken (Q)* |
|---|---|
| *Spillway 01* | No |
| *Spillway 02* | No |
| *Pond 4* | No |
| *ASW3* | No |
| *Duggans Bridge* | No |
| | |

| *Attenuation Pond (M)* | |
|---|---|
| *Level* | *Sampled* |
| 50.44 | Yes |

*Comments*

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 31.10.21

*Inspected/ Sampled by*

| Piezometers | | | | |
|---|---|---|---|---|
| | | (M) | | (Q) |
| Piezo | Depth | Level | Wet/Dry | Sampled |
| 4 | 9.93 | 9.93 | Dry | no |
| 5 | 15.96 | 14.93 | Wet | No |
| 13 | 10.63 | 10.46 | wet | no |
| 14 | 15 | 14.8 | wet | No |
| 15 | 7.43 | 7.43 | Dry | No |
| 16 | 8.33 | 8.33 | Dry | No |
| 17 | 10.63 | 10.63 | Dry | No |
| 18 | 4.73 | 4.73 | Dry | No |
| 19 | | Blocked | | No |
| 20 | 6.43 | 6.43 | Dry | No |
| 21 | 4.58 | 4.58 | Dry | No |
| 22 | | 10 | Dry | No |
| 24 | 6.23 | 6.28 | Dry | No |
| 25 | | Blocked | | No |
| 26 | 3.14 | 3.14 | Dry | No |
| 27 | 5.1 | 5.1 | Dry | No |
| 28 | 11.89 | 10 | wet | No |
| 29 | 6.69 | 6.16 | wet | No |
| 30 | 5.35 | 4.22 | Wet | No |
| 33 | 6.66 | 6.66 | Dry | No |
| 34 | 12.78 | 12.6 | wet | No |
| 36 | 6.11 | 6.11 | wet | No |
| 37 | 13.85 | 13.85 | Dry | No |
| 38 | 8.82 | 8.82 | Dry | No |
| 39 | 6.66 | 6.66 | Dry | No |
| 56 | 16.23 | 9.2 | Dry | No |
| 57 | | 14.7 | wet | No |
| 58 | 18.19 | 14.66 | wet | No |
| 59 | 15.59 | 11 | wet | No |
| 60 | 15.49 | 11.33 | | No |

| Boreholes | | |
|---|---|---|
| | (M) | (Q) |
| Borehole | Level | Sampled |
| 3 | 5.4 | No |
| 4 | 9.26 | No |
| 5 | 8.66 | No |
| 6 | 7.67 | No |
| 7 | 10.26 | No |
| 8 | 8.82 | No |
| 9 | 3.5 | No |
| 10 | 4.15 | No |
| 11 | 4.86 | No |
| 13 | 6.75 | no |
| | | |

| Chimney Sump | Level | Sample Taken (Q) |
|---|---|---|
| 3 | 1.8 | |
| 4 | 1.86 | No |
| 5 | Dry | No |
| | | |

| Sample Point | Sample Taken (Q) |
|---|---|
| Spillway 01 | No |
| Spillway 02 | No |
| Pond 4 | No |
| ASW3 | No |
| Duggans Bridge | No |
| | |

| Attenuation Pond (M) | |
|---|---|
| Level | Sampled |
| 50mm. | Yes |

*Comments*

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 29.11.21

*Inspected/ Sampled by* [signature]

| Piezometers | | | | |
|---|---|---|---|---|
| | | (M) | | (Q) |
| Piezo | Depth | Level | Wet/Dry | Sampled |
| 4 | 9.93 | 9.96 | Dry | no |
| 5 | 15.96 | 15.22 | Wet | No |
| 13 | 10.63 | 10.32 | Wet | No |
| 14 | 15 | 14.85 | wet | No |
| 15 | 7.43 | 7.43 | Dry | No |
| 16 | 8.33 | 8.33 | Dry | No |
| 17 | 10.63 | 10.63 | Dry | No |
| 18 | 4.73 | 4.73 | Dry | No |
| 19 | | Blocked | | No |
| 20 | 6.43 | 6.43 | Dry | No |
| 21 | 4.58 | 4.58 | Dry | No |
| 22 | | 10 | Dry | No |
| 24 | 6.23 | 6.23 | Dry | No |
| 25 | | Blocked | | No |
| 26 | 3.14 | 3.14 | Dry | No |
| 27 | 5.1 | 5.1 | Dry | No |
| 28 | 11.89 | 10.82 | Wet | No |
| 29 | 6.69 | 5.84 | Wet | No |
| 30 | 5.35 | 4.19 | Wet | No |
| 33 | 6.66 | 6.66 | Dry | No |
| 34 | 12.78 | 12.72 | Wet | No |
| 36 | 6.11 | 6.11 | wet | No |
| 37 | 13.85 | 13.85 | Dry | No |
| 38 | 8.82 | 8.82 | Dry | No |
| 39 | 6.66 | 6.66 | Dry | No |
| 56 | 16.23 | 9.2 | Dry | No |
| 57 | | 14.93 | Dry | No |
| 58 | 18.19 | 14.91 | Wet | No |
| 59 | 15.59 | 11.52 | Wet | No |
| 60 | 15.49 | 11.51 | Wet | No |

| Boreholes | | |
|---|---|---|
| | (M) | (Q) |
| Borehole | Level | Sampled |
| 3 | 5.6 | No |
| 4 | 9.44 | No |
| 5 | 8.9 | No |
| 6 | 7.88 | No |
| 7 | 10.44 | No |
| 8 | 9 | No |
| 9 | 3.77 | No |
| 10 | 4.26 | No |
| 11 | 4.88 | No |
| 13 | 6.92 | No |

| Chimney Sump | Level | Sample Taken (Q) |
|---|---|---|
| 3 | 1.96 | No |
| 4 | 1.82 | No |
| 5 | Dry | No |

| Sample Point | Sample Taken (Q) |
|---|---|
| Spillway 01 | No |
| Spillway 02 | No |
| Pond 4 | No |
| ASW3 | No |
| Duggans Bridge | No |

| Attenuation Pond (M) | |
|---|---|
| Level | Sampled |
| 0 | no |

*Comments*

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 09.12.21

*Inspected/ Sampled by* [signature]

| Piezometers | | | | |
|---|---|---|---|---|
| | | (M) | | (Q) |
| *Piezo* | *Depth* | *Level* | *Wet/Dry* | Sampled |
| 4 | 9.93 | 8.88 | Dry | No |
| 5 | 15.96 | 15.4 | Wet | No |
| 13 | 10.63 | 10.18 | Wet | No |
| 14 | 15 | 15 | Wet | No |
| 15 | 7.43 | 7.43 | Dry | No |
| 16 | 8.33 | 8.33 | Dry | No |
| 17 | 10.63 | 10.63 | Dry | No |
| 18 | 4.73 | 4.73 | Dry | No |
| 19 | | Blocked | | |
| 20 | 6.43 | 6.43 | Dry | No |
| 21 | 4.58 | 4.58 | Dry | No |
| 22 | | 10 | Dry | No |
| 24 | 6.23 | 6.23 | Dry | No |
| 25 | | Blocked | | |
| 26 | 3.14 | 3.14 | Dry | No |
| 27 | 5.1 | 5.05 | Wet | No |
| 28 | 11.89 | 2.55 | wet | No |
| 29 | 6.69 | 5.18 | Wet | Yes |
| 30 | 5.35 | 4.18 | Wet | Yes |
| 33 | 6.66 | 6.66 | Dry | No |
| 34 | 12.78 | 12.78 | Dry | No |
| 36 | 6.11 | 6.11 | Dry | No |
| 37 | 13.85 | 13.85 | Dry | No |
| 38 | 8.82 | 8.82 | Dry | No |
| 39 | 6.66 | 6.66 | Dry | No |
| 56 | 16.23 | 9.2 | Dry | No |
| 57 | | 15.25 | Wet | Yes |
| 58 | 18.19 | 15.22 | wet | Yes |
| 59 | 15.59 | 11.8 | wet | Yes |
| 60 | 15.49 | 11.67 | Wet | Yes |

| Boreholes | | |
|---|---|---|
| | (M) | (Q) |
| *Borehole* | *Level* | *Sampled* |
| 3 | 5.9 | No, dry |
| 4 | 9.72 | No, blocked |
| 5 | 9.36 | Yes |
| 6 | 8.14 | Yes |
| 7 | 10.71 | Yes |
| 8 | 9.38 | Yes |
| 9 | 4.15 | No, dry |
| 10 | 4.45 | Yes |
| 11 | 4.89 | Yes |
| 13 | 7.22 | Yes |

| *Chimney Sump* | *Level* | *Sample Taken (Q)* |
|---|---|---|
| 3 | 2.15 | Yes |
| 4 | 1.8 | Yes |
| 5 | Dry | No |

| *Sample Point* | *Sample Taken (Q)* |
|---|---|
| *Spillway 01* | Yes |
| *Spillway 02* | Yes |
| *Pond 4* | Yes |
| *ASW3* | Yes |
| *Duggans Bridge* | Yes |

| *Attenuation Pond (M)* | |
|---|---|
| *Level* | *Sampled* |
| 10mm | Yes |

*Comments* P2 28 blocked (snails)

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 26.01.22

*Inspected/ Sampled by* [signature]

| Piezometers | | | | |
|---|---|---|---|---|
| | | (M) | | (Q) |
| *Piezo* | *Depth* | *Level* | *Wet/Dry* | Sampled |
| 4 | 9.93 | 8.88 | D | no |
| 5 | 15.96 | 13.6 | W | no |
| 13 | 10.63 | 10.46 | W | No |
| 14 | 15 | 14.1 | W | No |
| 15 | 7.43 | 6.16 | W | No |
| 16 | 8.33 | 8.3 | W | No |
| 17 | 10.63 | 10.63 | D | No |
| 18 | 4.73 | 4.73 | D | no |
| 19 | | Blocked | | |
| 20 | 6.43 | 6.43 | D | no |
| 21 | 4.58 | 4.58 | D | No |
| 22 | 999 | 9.99 | D | No |
| 24 | 6.23 | 6.23 | D | No |
| 25 | | Blocked | | |
| 26 | 3.14 | 3.14 | D | No |
| 27 | 5.1 | 5.1 | D | no |
| 28 | 11.89 | 8.55 | W | No |
| 29 | 6.69 | 5.5 | D | No |
| 30 | 5.35 | 4.18 | W | no |
| 33 | 6.66 | 6.54 | W | No |
| 34 | 12.78 | 11.77 | W | no |
| 36 | 6.11 | 6.1 | W | no |
| 37 | 13.85 | 13.29 | W | No |
| 38 | 8.82 | 8.82 | D | No |
| 39 | 6.66 | 5.48 | W | No |
| 56 | 16.23 | 9.48 | D | no |
| 57 | | 13.34 | W | No |
| 58 | 18.19 | 13.3 | W | no |
| 59 | 15.59 | 9.89 | W | No |
| 60 | 15.49 | 9.67 | W | no |

| Boreholes | | |
|---|---|---|
| | (M) | (Q) |
| *Borehole* | *Level* | *Sampled* |
| 3 | 3.82 | No |
| 4 | 7.55 | No |
| 5 | 7.49 | no |
| 6 | 6.58 | no |
| 7 | 9.08 | no |
| 8 | 7.66 | No |
| 9 | 2.55 | no |
| 10 | 3.15 | No |
| 11 | 3.21 | no |
| 13 | 4.6 | No |

| *Chimney Sump* | *Level* | *Sample Taken (Q)* |
|---|---|---|
| 3 | 1.83 | no |
| 4 | 1.8 | no |
| 5 | Dry | No |

| *Sample Point* | *Sample Taken (Q)* |
|---|---|
| *Spillway 01* | No |
| *Spillway 02* | No |
| *Pond 4* | No |
| *ASW3* | No |
| *Duggans Bridge* | no |

| *Attenuation Pond (M)* | |
|---|---|
| *Level* | *Sampled* |
| 1M | Yes |

*Comments*

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 21.02.22

*Inspected/ Sampled by*

| Piezometers | | | | |
|---|---|---|---|---|
| | | (M) | | (Q) |
| Piezo | Depth | Level | Wet/Dry | Sampled |
| 4 | 9.93 | 9.25 | D | no |
| 5 | 15.96 | 13 | W | no |
| 13 | 10.63 | 10.37 | W | no |
| 14 | 15 | 13.26 | W | no |
| 15 | 7.43 | 5.42 | W | no |
| 16 | 8.33 | 8.3 | W | no |
| 17 | 10.63 | 10.63 | D | no |
| 18 | 4.73 | 4.73 | D | no |
| 19 | | Blocked | | |
| 20 | 6.43 | 6.43 | D | no |
| 21 | 4.58 | 4.58 | D | no |
| 22 | | [redacted]10 | D | no |
| 24 | 6.23 | 6.23 | D | no |
| 25 | | Blocked | | |
| 26 | 3.14 | 3.14 | D | no |
| 27 | 5.1 | 5.1 | D | no |
| 28 | 11.89 | 8.66 | W | no |
| 29 | 6.69 | 5.4 | D | no |
| 30 | 5.35 | 4.22 | W | no |
| 33 | 6.66 | 5.98 | W | no |
| 34 | 12.78 | 11.72 | D | no |
| 36 | 6.11 | 5.66 | W | no |
| 37 | 13.85 | 12.72 | W | no |
| 38 | 8.82 | 8.8 | D | no |
| 39 | 6.66 | 4.91 | W | no |
| 56 | 16.23 | 9.42 | D | no |
| 57 | | 12.69 | W | no |
| 58 | 18.19 | 12.68 | W | no |
| 59 | 15.59 | 9.27 | W | no |
| 60 | 15.49 | 9.04 | W | |

| Boreholes | | |
|---|---|---|
| | (M) | (Q) |
| Borehole | Level | Sampled |
| 3 | 3.11 | no |
| 4 | 7.17 | no |
| 5 | 7.15 | no |
| 6 | 6.1 | no |
| 7 | 8.57 | no |
| 8 | 7.2 | no |
| 9 | 2.11 | no |
| 10 | 2.77 | no |
| 11 | 2.66 | no |
| 13 | 3.95 | no |

| Chimney Sump | Level | Sample Taken (Q) |
|---|---|---|
| 3 | 1.8 | no |
| 4 | 1.82 | no |
| 5 | 3 | no |

| Sample Point | Sample Taken (Q) |
|---|---|
| Spillway 01 | no |
| Spillway 02 | no |
| Pond 4 | no |
| ASW3 | no |
| Duggans Bridge | no |

| Attenuation Pond (M) | |
|---|---|
| Level | Sampled |
| 1.7 M. | Yes. |

*Comments*

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 30.03.22

*Inspected/ Sampled by* [signature]

| Piezometers | | | | |
|---|---|---|---|---|
| | | (M) | | (Q) |
| *Piezo* | *Depth* | *Level* | *Wet/Dry* | Sampled |
| 4 | 9.93 | 9.93 | D | no |
| 5 | 15.96 | 12.6 | W | Yes |
| 13 | 10.63 | 10.28 | W | no |
| 14 | 15 | 12.55 | W | Yes |
| 15 | 7.43 | 5 | W | Yes |
| 16 | 8.33 | 8.3 | W | no |
| 17 | 10.63 | 10.63 | D | no |
| 18 | 4.73 | 4.73 | D | no |
| 19 | | Blocked | | |
| 20 | 6.43 | 6.43 | D | no |
| 21 | 4.58 | 4.58 | D | no |
| 22 | | 10 | D | no |
| 24 | 6.23 | 6.23 | D | no |
| 25 | | Blocked | | |
| 26 | 3.14 | 3.1 | W | no |
| 27 | 5.1 | 5.1 | D | no |
| 28 | 11.89 | 88 | D | no |
| 29 | 6.69 | 5.38 | D | no |
| 30 | 5.35 | 4.19 | W | Yes |
| 33 | 6.66 | 5.54 | W | Yes |
| 34 | 12.78 | 11.7 | D | no |
| 36 | 6.11 | 5.37 | W | Yes |
| 37 | 13.85 | 12.38 | W | Yes |
| 38 | 8.82 | 8.8 | D | no |
| 39 | 6.66 | 4.54 | W | Yes |
| 56 | 16.23 | 9.48 | D | no |
| 57 | | 12.29 | W | Yes |
| 58 | 18.19 | 12.25 | W | Yes |
| 59 | 15.59 | 8.8 | W | Yes |
| 60 | 15.49 | 8.5 | W | Yes |

| Boreholes | | |
|---|---|---|
| | (M) | (Q) |
| *Borehole* | *Level* | *Sampled* |
| 3 | 2.65 | Yes |
| 4 | 6.99 | no blocked |
| 5 | 7.04 | Yes |
| 6 | 5.8 | Yes |
| 7 | 8.22 | Yes |
| 8 | 6.86 | Yes |
| 9 | 1.85 | Yes |
| 10 | 2.46 | Yes |
| 11 | 2.3 | Yes |
| 13 | 3.39 | Yes |
| | | |
| *Chimney Sump* | 1.8 *Level* ↑ | *Sample Taken (Q)* |
| 3 | 3.04 | ~~no~~ Yes |
| 4 | 1.85 | Yes |
| 5 | 304 | no |
| | | |

| *Sample Point* | *Sample Taken (Q)* |
|---|---|
| *Spillway 01* | Yes |
| *Spillway 02* | Yes |
| *Pond 4* | Yes |
| *ASW3* | Yes |
| *Duggans Bridge* | Yes |

| *Attenuation Pond (M)* | |
|---|---|
| *Level* | *Sampled* |
| 1.68M | Yes |

*Comments*

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 28.04.22

*Inspected/ Sampled by*

| Piezometers | | | | |
|---|---|---|---|---|
| | | (M) | | (Q) |
| Piezo | Depth | Level | Wet/Dry | Sampled |
| 4 | 9.93 | 9.93 | Dry | No |
| 5 | 15.96 | 13.26 | Wet | No |
| 13 | 10.63 | 10.39 | Wet | No |
| 14 | 15 | 12.49 | Wet | No |
| 15 | 7.43 | 5.88 | Wet | No |
| 16 | 8.33 | 8.21 | Wet | No |
| 17 | 10.63 | 10.63 | Dry | No |
| 18 | 4.73 | 4.73 | Dry | No |
| 19 | | Blocked | | No |
| 20 | 6.43 | 6.43 | Dry | No |
| 21 | 4.58 | 4.58 | Dry | No |
| 22 | | 10 | Dry | No |
| 24 | 6.23 | 6.23 | Dry | No |
| 25 | | Blocked | | No |
| 26 | 3.14 | 3.14 | Dry | No |
| 27 | 5.1 | 5.1 | Dry | No |
| 28 | 11.89 | 7.25 | Dry | No |
| 29 | 6.69 | 5.39 | Dry | No |
| 30 | 5.35 | 4.14 | Wet | No |
| 33 | 6.66 | 6 | Wet | No |
| 34 | 12.78 | 11.88 | Dry | No |
| 36 | 6.11 | 5.64 | Wet | No |
| 37 | 13.85 | 12.77 | Wet | No |
| 38 | 8.82 | 8.62 | Dry | No |
| 39 | 6.66 | 4.93 | Wet | No |
| 56 | 16.23 | 9.48 | Dry | No |
| 57 | | 12.55 | Wet | No |
| 58 | 18.19 | 12.26 | Wet | No |
| 59 | 15.59 | 9.11 | Wet | No |
| 60 | 15.49 | 8.76 | | No |

| Boreholes | | |
|---|---|---|
| | (M) | (Q) |
| Borehole | Level | Sampled |
| 3 | 3.22 | No |
| 4 | 7.48 | No |
| 5 | 7.84 | No |
| 6 | 6.22 | No |
| 7 | 8.78 | No |
| 8 | 7.19 | No |
| 9 | 2 | No |
| 10 | 2.87 | No |
| 11 | 2.86 | No |
| 13 | 3.66 | No |
| | | No |

| Chimney Sump | Level | Sample Taken (Q) |
|---|---|---|
| 3 | 1.84 | No |
| 4 | 1.76 | No |
| 5 | 1.44 | No |
| | | |

| Sample Point | Sample Taken (Q) |
|---|---|
| Spillway 01 | No |
| Spillway 02 | No |
| Pond 4 | No |
| ASW3 | No |
| Duggans Bridge | No |
| | |

| Attenuation Pond (M) | |
|---|---|
| Level | Sampled |
| 1.4 M | Yes |

*Comments*

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 20.05.22

*Inspected/ Sampled by*

| Piezometers | | | | |
|---|---|---|---|---|
| | | (M) | | (Q) |
| Piezo | Depth | Level | Wet/Dry | Sampled |
| 4 | 9.93 | 9.93 | Dry | Not |
| 5 | 15.96 | 13.52 | wet | Yes |
| 13 | 10.63 | 10.48 | wet | no |
| 14 | 15 | 12.54 | wet | Yes |
| 15 | 7.43 | 6.7 | wet | Yes |
| 16 | 8.33 | 8.29 | wet | no |
| 17 | 10.63 | 10.63 | Dry | No |
| 18 | 4.73 | 4.73 | Dry | No |
| 19 | | Blocked | | |
| 20 | 6.43 | 6.43 | Dry | No |
| 21 | 4.58 | 4.58 | Dry | no |
| 22 | | 10 | Dry | no |
| 24 | 6.23 | 6.23 | Dry | no |
| 25 | | Blocked. | | |
| 26 | 3.14 | 3.14 | Dry | no |
| 27 | 5.1 | 5.1 | Dry | no |
| 28 | 11.89 | 7.77 | Dry | no |
| 29 | 6.69 | 5.32 | Dry | no |
| 30 | 5.35 | 4.21 | wet | Yes |
| 33 | 6.66 | 6.18 | wet | Yes |
| 34 | 12.78 | 11.93 | wet | No, blocked |
| 36 | 6.11 | 5.98 | wet | No |
| 37 | 13.85 | ~~11.93~~ 13.12 | wet | Yes |
| 38 | 8.82 | 8.54 | Dry | No |
| 39 | 6.66 | 5.37 | wet | Yes |
| 56 | 16.23 | 9.4 | Dry | No |
| 57 | | 13.2 | wet | Yes |
| 58 | 18.19 | 13.17 | wet | Yes |
| 59 | 15.59 | 9.72 | wet | Yes |
| 60 | 15.49 | 9.58 | wet | Yes |

| Boreholes | | |
|---|---|---|
| | (M) | (Q) |
| Borehole | Level | Sampled |
| 3 | 3.98 | Yes |
| 4 | 7.84 | No, blocked |
| 5 | 8.18 | Yes |
| 6 | 6.68 | Yes |
| 7 | 9.18 | Yes |
| 8 | 7.6 | Yes |
| 9 | 2.44 | Yes |
| 10 | 3.04 | Yes |
| 11 | 3.07 | Yes |
| 13 | 4.46 | Yes |
| | | |
| Chimney Sump | Level | Sample Taken (Q) |
| 3 | 1.79 | Yes |
| 4 | 1.82 | Yes |
| 5 | Dry | No |
| | | |
| Sample Point | | Sample Taken (Q) |
| Spillway 01 | | Yes |
| Spillway 02 | | Yes |
| Pond 4 | | Yes |
| ASW3 | | Yes |
| Duggans Bridge | | Yes |
| | | |
| Attenuation Pond (M) | | |
| Level | | Sampled |
| 1.2 M. | | Yes |

*Comments*

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 15.06.22

*Inspected/ Sampled by*

| Piezometers | | | | |
|---|---|---|---|---|
| | | (M) | | (Q) |
| Piezo | Depth | Level | Wet/Dry | Sampled |
| 4 | 9.93 | 9.93 | D | No |
| 5 | 15.96 | 13.9 | W | |
| 13 | 10.63 | 10.55 | W | |
| 14 | 15 | 13.58 | W | |
| 15 | 7.43 | 6.82 | W | |
| 16 | 8.33 | 8.33 | D | |
| 17 | 10.63 | 10.63 | D | |
| 18 | 4.73 | 4.73 | D | |
| 19 | Blocked | | | |
| 20 | 6.43 | 6.43 | D | |
| 21 | 4.58 | 4.58 | D | |
| 22 | | 10 | D | |
| 24 | 6.23 | 6.23 | D | |
| 25 | Blocked | | | |
| 26 | 3.14 | 3.14 | D | |
| 27 | 5.1 | 5.1 | D | |
| 28 | 11.89 | 8.9 | D | |
| 29 | 6.69 | 5.32 | D | |
| 30 | 5.35 | 4.28 | W | |
| 33 | 6.66 | 6.51 | W | |
| 34 | 12.78 | 12.18 | W | |
| 36 | 6.11 | 6.09 | W | |
| 37 | 13.85 | 13.56 | W | |
| 38 | 8.82 | 8.58 | D | |
| 39 | 6.66 | 5.83 | W | |
| 56 | 16.23 | 9.57 | D | |
| 57 | | 13.67 | W | |
| 58 | 18.19 | 13.64 | W | |
| 59 | 15.59 | 10.25 | W | |
| 60 | 15.49 | 10.05 | W | ✓ |

| Boreholes | | |
|---|---|---|
| | (M) | (Q) |
| Borehole | Level | Sampled |
| 3 | 4.48 | No |
| 4 | 8.34 | No |
| 5 | 8.58 | No |
| 6 | 7.6 | No |
| 7 | 9.48 | No |
| 8 | 7.94 | No |
| 9 | 2.73 | No |
| 10 | 3.41 | No |
| 11 | 2.84 | No |
| 13 | 5.05 | No |

| Chimney Sump | Level | Sample Taken (Q) |
|---|---|---|
| 3 | 1.73 | No |
| 4 | 1.82 | No |
| 5 | Dry | No |

| Sample Point | Sample Taken (Q) |
|---|---|
| Spillway 01 | No |
| Spillway 02 | No |
| Pond 4 | No |
| ASW3 | No |
| Duggans Bridge | No |

| Attenuation Pond (M) | |
|---|---|
| Level | Sampled |
| 950 mm. | Yes |

*Comments*

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 21.07.22

*Inspected/ Sampled by* [signature]

| Piezometers | | | | |
|---|---|---|---|---|
| Piezo | Depth | (M) Level | Wet/Dry | (Q) Sampled |
| 4 | 9.93 | 9.36 | W | No |
| 5 | 15.96 | 14.55 | W | ↓ |
| 13 | 10.63 | 10.4 | W | |
| 14 | 15 | 14.08 | W | |
| 15 | 7.43 | 6.99 | W | |
| 16 | 8.33 | 8.33 | D | |
| 17 | 10.63 | 10.63 | D | |
| 18 | 4.73 | 4.73 | D | |
| 19 | Blocked | | | |
| 20 | 6.43 | 6.43 | D | |
| 21 | 4.58 | 4.58 | D | |
| 22 | 10 | 10 | D | |
| 24 | 6.23 | 6.23 | D | |
| 25 | Blocked | | | |
| 26 | 3.14 | 3.14 | D | |
| 27 | 5.1 | 5.1 | D | |
| 28 | 11.89 | 10.01 | W | |
| 29 | 6.69 | 5.2 | W | |
| 30 | 5.35 | 4.73 | W | |
| 33 | 6.66 | 6.66 | D | |
| 34 | 12.78 | 12.46 | W | |
| 36 | 6.11 | 6.11 | D | |
| 37 | 13.85 | 13.7 | W | |
| 38 | 8.82 | 8.82 | D | |
| 39 | 6.66 | 6.02 | W | |
| 56 | 16.23 | 9 | W | |
| 57 | | 14.06 | W | |
| 58 | 18.19 | 14.21 | W | |
| 59 | 15.59 | 10.84 | W | |
| 60 | 15.49 | 10.71 | W | |

| Boreholes | | |
|---|---|---|
| Borehole | (M) Level | (Q) Sampled |
| 3 | 4.84 | No |
| 4 | 8.88 | ↓ |
| 5 | 8.63 | |
| 6 | 7.94 | |
| 7 | 10.89 | |
| 8 | 8.33 | |
| 9 | 2.99 | |
| 10 | 3.79 | |
| 11 | 3.36 | |
| 13 | 6.06 | |

| Chimney Sump | Level | Sample Taken (Q) |
|---|---|---|
| 3 | 1.8 | No |
| 4 | 1.8 | ↓ |
| 5 | Dry | |

| Sample Point | Sample Taken (Q) |
|---|---|
| Spillway 01 | No |
| Spillway 02 | ↓ |
| Pond 4 | |
| ASW3 | |
| Duggans Bridge | |

| Attenuation Pond (M) | |
|---|---|
| Level | Sampled |
| 500 mm | Yes |

*Comments*

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 24.08.23

*Inspected/ Sampled by* [signature]

| Piezometers | | | | |
|---|---|---|---|---|
| | | (M) | | (Q) |
| Piezo | Depth | Level | Wet/Dry | Sampled |
| 4 | 9.93 | 8.85 | W | No |
| 5 | 15.96 | 15.13 | W | |
| 13 | 10.63 | 10.38 | W | |
| 14 | 15 | 14.82 | W | |
| 15 | 7.43 | 7.43 | D | |
| 16 | 8.33 | 8.33 | D | |
| 17 | 10.63 | 10.63 | D | |
| 18 | 4.73 | 4.73 | D | |
| 19 | | Blocked | | |
| 20 | 6.43 | 6.43 | D | |
| 21 | 4.58 | 4.58 | D | |
| 22 | 10 | 10 | D | |
| 24 | 6.23 | 6.23 | D | |
| 25 | | Blocked | | |
| 26 | 3.14 | 3.14 | D | |
| 27 | 5.1 | 5.1 | D | |
| 28 | 11.89 | 1.1 | W | |
| 29 | 6.69 | 5.08 | W | |
| 30 | 5.35 | 5.15 | W | |
| 33 | 6.66 | 6.66 | D | |
| 34 | 12.78 | 12.78 | D | |
| 36 | 6.11 | 6.11 | D | |
| 37 | 13.85 | 13.85 | D | |
| 38 | 8.82 | 8.82 | D | |
| 39 | 6.66 | 6.66 | D | |
| 56 | 16.23 | 8.68 | W | |
| 57 | | 15.07 | W | |
| 58 | 18.19 | 15.02 | W | |
| 59 | 15.59 | 11.69 | W | |
| 60 | 15.49 | 11.55 | W | |

| Boreholes | | |
|---|---|---|
| | (M) | (Q) |
| Borehole | Level | Sampled |
| 3 | 5.79 | No |
| 4 | 9.57 | |
| 5 | 9.19 | |
| 6 | 8.02 | |
| 7 | 10.54 | |
| 8 | 9.15 | |
| 9 | 3.91 | |
| 10 | 4.65 | |
| 11 | 4.3 | |
| 13 | 6.5 | |

| Chimney Sump | Level | Sample Taken (Q) |
|---|---|---|
| 3 | 1.8 | No |
| 4 | 1.82 | |
| 5 | 2.17 | |

| Sample Point | Sample Taken (Q) |
|---|---|
| Spillway 01 | No |
| Spillway 02 | |
| Pond 4 | |
| ASW3 | |
| Duggans Bridge | |

| Attenuation Pond (M) | |
|---|---|
| Level | Sampled |
| 300 MM | Yes |

*Comments*

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 28.09.22

*Inspected/ Sampled by* [signature]

| Piezometers | | | | |
|---|---|---|---|---|
| | | (M) | | (Q) |
| Piezo | Depth | Level | Wet/Dry | Sampled |
| 4 | 9.93 | 9.93 | D | no |
| 5 | 15.96 | 15.8 | W | no |
| 13 | 10.63 | 10.42 | W | no |
| 14 | 15 | 14.9 | W | no |
| 15 | 7.43 | 7.43 | D | no |
| 16 | 8.33 | 8.33 | D | no |
| 17 | 10.63 | 10.63 | D | no |
| 18 | 4.73 | 4.73 | D | no |
| 19 | | Blocked | | |
| 20 | 6.43 | 6.43 | D | no |
| 21 | 4.58 | 4.58 | D | no |
| 22 | 9.98 | 9.98 | D | no |
| 24 | 6.23 | 6.23 | D | no |
| 25 | | Blocked | | |
| 26 | 3.14 | 3.14 | D | no |
| 27 | 5.1 | 5.1 | D | no |
| 28 | 11.89 | 5.42 | W | Yes |
| 29 | 6.69 | 6.69 | D | no |
| 30 | 5.35 | 4.22 | W | Yes |
| 33 | 6.66 | 6.66 | D | no |
| 34 | 12.78 | 12.78 | D | no |
| 36 | 6.11 | 6.11 | D | no |
| 37 | 13.85 | 13.85 | D | no |
| 38 | 8.82 | 8.82 | D | no |
| 39 | 6.66 | 6.66 | D | no |
| 56 | 16.23 | 8.98 | D | no |
| 57 | | 15.74 | W | Yes |
| 58 | 18.19 | 15.11 | W | Yes |
| 59 | 15.59 | 11.72 | W | Yes |
| 60 | 15.49 | 12.16 | W | Yes |

| Boreholes | | |
|---|---|---|
| | (M) | (Q) |
| Borehole | Level | Sampled |
| 3 | 5.9 | no * |
| 4 | 9.71 | no blocked |
| 5 | 9.32 | Yes |
| 6 | 8.13 | Yes |
| 7 | 10.6 | Yes |
| 8 | 9.3 | Yes |
| 9 | 4.22 | no * |
| 10 | 4.61 | Yes |
| 11 | 4.04 | no * |
| 13 | 6.61 | no |
| | | |

| Chimney Sump | Level | Sample Taken (Q) |
|---|---|---|
| 3 | 1.81 | Yes |
| 4 | 1.84 | Yes |
| 5 | Dry | no |
| | | |

| Sample Point | Sample Taken (Q) |
|---|---|
| Spillway 01 | Yes |
| Spillway 02 | Yes |
| Pond 4 | Yes |
| ASW3 | Yes |
| Duggans Bridge | Yes |
| | |

| Attenuation Pond (M) | |
|---|---|
| Level | Sampled |
| 0 | No |

*Comments*

* Not enough water

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 28.10.22

*Inspected/ Sampled by* [signature]

| *Piezometers* | | | | |
|---|---|---|---|---|
| | | *(M)* | | *(Q)* |
| *Piezo* | *Depth* | *Level* | *Wet/Dry* | Sampled |
| *4* | *9.93* | 9.93 | Dry | NO |
| *5* | *15.96* | 14 | wet | |
| *13* | *10.63* | 10.51 | wet | |
| *14* | *15* | 13.58 | wet | |
| *15* | *7.43* | 5.21 | wet | |
| *16* | *8.33* | 8.31 | Dry | |
| *17* | *10.63* | 10.66 | Dry | |
| *18* | *4.73* | 4.73 | Dry | |
| *19* | *Blocked* | *Blocked* | *Blocked* | *Blocked* |
| *20* | *6.43* | 6.48 | Dry | |
| *21* | *4.58* | 4.58 | Dry | |
| *22* | *9.98* | 9.98 | Dry | |
| *24* | *6.23* | 6.23 | Dry | |
| *25* | *Blocked* | *Blocked* | *Blocked* | *Blocked* |
| *26* | *3.14* | 3.21 | Dry | |
| *27* | *5.1* | 5.1 | Dry | |
| *28* | *11.89* | 5.4 | wet | |
| *29* | *6.69* | 5.22 | Dry | |
| *30* | *5.35* | 4.38 | wet | |
| *33* | *6.66* | 6.25 | wet | |
| *34* | *12.78* | 11.86 | wet | |
| *36* | *6.11* | 5.77 | wet | |
| *37* | *13.85* | 13.04 | wet | |
| *38* | *8.82* | 8.8 | Dry | |
| *39* | *6.66* | 5.77 | wet | |
| *56* | *16.23* | 8.36 | wet | |
| *57* | | 14.42 | wet | |
| *58* | *18.19* | 13.98 | wet | |
| *59* | *15.59* | 10 | wet | |
| *60* | *15.49* | 10.01 | wet | |

| *Boreholes* | | | |
|---|---|---|---|
| | | *(M)* | *(Q)* |
| *Borehole* | | *Level* | *Sampled* |
| 3.38 | *3* | wet | NO |
| 7.76 | *4* | wet | |
| 8.32 | *5* | wet | |
| 7.29 | *6* | wet | |
| 8.89 | *7* | wet | |
| 8.21 | *8* | wet | |
| 3.37 | *9* | wet | |
| 3.21 | *10* | wet | |
| 3.78 | *11* | wet | |
| 4.93 | 13 | wet | |

| *Chimney Sumps* | *Level* | *Sample Taken (Q)* |
|---|---|---|
| | | NO |
| *Sump* | | |
| *3* | 1.29 | |
| *4* | 1.84 | |
| *5* | Dry | |

| *Sample Point* | *Sample Taken (Q)* |
|---|---|
| *Spillway 01* | NO |
| *Spillway 02* | |
| *Pond 4 Discharge* | |
| *ASW3* | |
| *Duggans Bridge* | |

| *Attenuation Pond (M)* | |
|---|---|
| *Level* | *Sampled* |
| 1.4 M | YES |

**Comments**

*Galmoy Mines*
*Monthly/Quarterly TMF Record Sheet*
*Date* 30.11.22
*Inspected/ Sampled by* [signature]

| Piezometers | | | | |
|---|---|---|---|---|
| Piezo | Depth | (M) Level | Wet/Dry | (Q) Sampled |
| 4 | 9.93 | 9.93 | Dry | no |
| 5 | 15.96 | 12.36 | wet | Yes |
| 13 | 10.63 | 10.63 | wet | no |
| 14 | 15 | 12.33 | wet | Yes |
| 15 | 7.43 | 4.5 | wet | Yes |
| 16 | 8.33 | 8.3 | Dry | No |
| 17 | 10.63 | 10.75 | Dry | no |
| 18 | 4.73 | 4.73 | Dry | No |
| 19 | Blocked | Blocked | Blocked | Blocked |
| 20 | 6.43 | 6.56 | Dry | no |
| 21 | 4.58 | 4.58 | Dry | no |
| 22 | 9.98 | 9.97 | Dry | no |
| 24 | 6.23 | 6.23 | Dry | No |
| 25 | Blocked | Blocked | Blocked | Blocked |
| 26 | 3.14 | 3.34 | Dry | no |
| 27 | 5.1 | 5.1 | Dry | no |
| 28 | 11.89 | 5.43 | wet | Yes |
| 29 | 6.69 | 5.21 | Dry | no |
| 30 | 5.35 | 4.76 | wet | Yes |
| 33 | 6.66 | 5.88 | wet | Yes |
| 34 | 12.78 | 11.62 | wet | Yes |
| 36 | 6.11 | 5.28 | wet | Yes |
| 37 | 13.85 | 12.16 | wet | Yes |
| 38 | 8.82 | 8.66 | Dry | no |
| 39 | 6.66 | 4.36 | wet | Yes |
| 56 | 16.23 | 7.71 | Dry | no |
| 57 | | 12.02 | wet | Yes |
| 58 | 18.19 | 12.01 | wet | Yes |
| 59 | 15.59 | 8.5 | wet | Yes |
| 60 | 15.49 | 8.23 | wet | Yes |

| Boreholes | | |
|---|---|---|
| Borehole | (M) Level | (Q) Sampled |
| 3 | 2 | Yes |
| 4 | 5.55 | no, blocked |
| 5 | 6.35 | Yes |
| 6 | 5.82 | Yes |
| 7 | 7.8 | Yes |
| 8 | 7.02 | Yes |
| 9 | 2.22 | Yes |
| 10 | 2.87 | Yes |
| 11 | 2.32 | no, blocked |
| 13 | 2.94 | Yes |

| Chimney Sumps | Level | Sample Taken (Q) |
|---|---|---|
| Sump | | |
| 3 | 1.22 | Yes |
| 4 | 1.85 | Yes |
| 5 | 1.74 | Yes |

| Sample Point | Sample Taken (Q) |
|---|---|
| Spillway 01 | Yes |
| Spillway 02 | Yes |
| Pond 4 Discharge | Yes |
| ASW3 | Yes |
| Duggans Bridge | Yes |

| Attenuation Pond (M) | |
|---|---|
| Level | Sampled |
| 1.9 M | Yes |

**Comments** other samples taken
Field Drain
attenuation Pond toe pond

*Galmoy Mines*

*Monthly/Quarterly TMF Record Sheet*

*Date* 09.12.22

*Inspected/ Sampled by* [signature]

| Piezometers | | | | |
|---|---|---|---|---|
| | | (M) | | (Q) |
| Piezo | Depth | Level | Wet/Dry | Sampled |
| 4 | 9.93 | 9.93 | Dry | No |
| 5 | 15.96 | 12.55 | wet | |
| 13 | 10.63 | 10.63 | wet | |
| 14 | 15 | 12.6 | wet | |
| 15 | 7.43 | 4.73 | wet | |
| 16 | 8.33 | 8.31 | Dry | |
| 17 | 10.63 | 10.71 | Dry | |
| 18 | 4.73 | 4.73 | Dry | |
| 19 | Blocked | Blocked | Blocked | Blocked |
| 20 | 6.43 | 6.5 | Dry | |
| 21 | 4.58 | 4.58 | Dry | |
| 22 | 9.98 | 9.98 | Dry | |
| 24 | 6.23 | 6.23 | Dry | |
| 25 | Blocked | Blocked | Blocked | Blocked |
| 26 | 3.14 | 3.28 | Dry | |
| 27 | 5.1 | 5.1 | Dry | |
| 28 | 11.89 | 6.21 | wet | |
| 29 | 6.69 | 5.23 | Dry | |
| 30 | 5.35 | 4.98 | wet | |
| 33 | 6.66 | 6.01 | wet | |
| 34 | 12.78 | 11.77 | wet | |
| 36 | 6.11 | 5.34 | wet | |
| 37 | 13.85 | 12.22 | wet | |
| 38 | 8.82 | 8.6 | Dry | |
| 39 | 6.66 | 4.47 | wet | |
| 56 | 16.23 | 7.7 | Dry | |
| 57 | | 12.39 | wet | |
| 58 | 18.19 | 12.34 | wet | |
| 59 | 15.59 | 8.92 | wet | |
| 60 | 15.49 | 8.42 | wet | |

| Boreholes | | |
|---|---|---|
| | (M) | (Q) |
| Borehole | Level | Sampled |
| 3 | 2.32 | No |
| 4 | 5.63 | |
| 5 | 6.43 | |
| 6 | 5.91 | |
| 7 | 7.93 | |
| 8 | 9.13 | |
| 9 | 2.29 | |
| 10 | 3.01 | |
| 11 | 2.39 | |
| 13 | 3.18 | |

| Chimney Sumps | Level | Sample Taken (Q) |
|---|---|---|
| | | No |
| Sump | | |
| 3 | 1.24 | |
| 4 | 1.9 | |
| 5 | 1.75 | |

| Sample Point | Sample Taken (Q) |
|---|---|
| Spillway 01 | No |
| Spillway 02 | |
| Pond 4 Discharge | |
| ASW3 | |
| Duggans Bridge | |

| Attenuation Pond (M) | |
|---|---|
| Level | Sampled |
| 1.85 | Yes |

**Comments**

# Appendix B

# Site Photos

Site Observation Report

| Site Location | Date | Weather | Time |
|---|---|---|---|
| Galmoy Mine | 04/10/23 | 16 degrees | 14:00 |



4 Oct 2023 14:24:09
52°48'16.72937"N -7°36'1.11608"W
278° W
R435
County Kilkenny


4 Oct 2023 15:20:45
52°48'6.51879"N -7°36'1.40958"W
179° S
County Kilkenny


4 Oct 2023 13:34:43
52°47'52.45145"N -7°36'2.31277"W
306° NW
R639
County Kilkenny
Google


4 Oct 2023 14:41:45
315° NW
MOUNTFINN
Google


GLASHARE
Google
4 Oct 2023 15:32:57
52°48'4.58024"N -7°35'42.17144"W
317° NW
County Kilkenny


Google
4 Oct 2023 13:42:02
52°47'55.31514"N -7°36'8.19272"W
5° N
Unnamed Road
County Kilkenny


4 Oct 2023 14:59:44
52°47'54.38093"N -7°36'5.81484"W
239° SW
14 Lios Na Sí
Johnstown
County Kilkenny


4 Oct 2023 14:59:54
52°47'54.29438"N -7°36'5.68003"W
79° E
14 Lios Na Sí
Johnstown
County Kilkenny


4 Oct 2023 13:50:17
52°48'0.43437"N -7°36'14.2985"W
41° NE
R693
County Kilkenny
Google


4 Oct 2023 15:09:12
52°47'56.83496"N -7°36'8.18246"W
142° SE
14 Lios Na Sí
Johnstown
County Kilkenny
Inver Johnstown
Google


4 Oct 2023 14:00:43
52°48'7.95184"N -7°36'22.82176"W
344° N
Unnamed Road
County Tipperary


4 Oct 2023 15:12:55
52°48'1.24983"N -7°36'12.31301"W
103° E
14 Lios Na Sí
Johnstown
County Kilkenny


CASTLETOWN
Google
4 Oct 2023 14:13:43
281° W


Google
4 Oct 2023 15:20:15
52°48'6.73288"N -7°36'1.53586"W
238° SW
R639
County Kilkenny


Coolnacritta
Google
4 Oct 2023 14:25:52
52°47'56.42808"N -7°30'48.33684"W
151° SE
L5810
County Kilkenny


Google
4 Oct 2023 15:20:47
52°48'6.51879"N -7°36'1.40958"W
236° SW
County Kilkenny


4 Oct 2023 15:33:01
52°48'4.76176"N -7°35'41.96283"W
162° S
County Kilkenny


4 Oct 2023 13:45:51
52°47'6.67932"N -7°36'30.5838"W
118° SE
Rathpatrick
Crosspatrick
County Kilkenny


N
W
E
S
4 Oct 2023 13:50:21
52°48'0.74101"N -7°36'14.00238"W
353° N
R693
County Kilkenny
Google


N
W
E
S
4 Oct 2023 15:09:16
52°47'56.85743"N -7°36'8.24474"W
359° N
14 Lios Na Sí
Johnstown
County Kilkenny
Google


4 Oct 2023 14:05:24
18° N


4 Oct 2023 15:12:58
52°48'1.24354"N -7°36'12.30904"W
140° SE
Unnamed Road
County Kilkenny


CASTLETOWN
4 Oct 2023 14:13:50
52°48'16.45161"N -7°36'15.42698"W
210° SW
L5800
County Kilkenny


4 Oct 2023 15:20:17
52°48'6.7394"N -7°36'1.54738"W
245° SW
R639
County Kilkenny


Coolnacritta
Google
4 Oct 2023 14:25:54
52°48'18.76851"N -7°35'56.72619"W
223° SW
L5810
County Kilkenny


Google
4 Oct 2023 14:41:53
52°48'3.62055"N -7°35'39.79589"W
240° SW


4 Oct 2023 13:37:26
52°47'53.67588"N -7°36'7.19697"W
153° SE
R639
County Kilkenny


4 Oct 2023 14:45:53
52°47'59.21336"N -7°35'47.71734"W
111° E
L5810
County Kilkenny


4 Oct 2023 15:33:04
52°48'4.79123"N -7°35'41.98953"W
243° SW
County Kilkenny


4 Oct 2023 13:45:57
52°47'59.55187"N -7°36'12.93371"W
32° NE
Rathpatrick
Crosspatrick
County Kilkenny


4 Oct 2023 13:51:52
52°46'57.77652"N -7°31'53.24196"W
234° SW
M8
County Kilkenny
Google


4 Oct 2023 15:12:30
52°45'15.37776"N -7°33'19.38672"W
319° NW
14 Lios Na Sí
Johnstown
County Kilkenny


4 Oct 2023 14:05:33
52°48'8.66887"N -7°36'20.58013"W
124° SE


4 Oct 2023 14:59:58
52°47'54.2977"N -7°36'5.65288"W
11° N
Unnamed Road
County Kilkenny


CASTLETOWN
4 Oct 2023 14:14:08
52°48'16.21581"N -7°36'14.87435"W
218° SW
L5800
County Kilkenny


4 Oct 2023 15:20:22
52°48'6.7076"N -7°36'1.65533"W
219° SW
R639
County Kilkenny


4 Oct 2023 14:31:43
52°48'11.01723"N -7°35'45.49364"W
293° NW
R693
County Kilkenny


RATHREAGH
Google
4 Oct 2023 15:30:07
52°48'0.45345"N -7°35'48.28484"W
41° NE
County Kilkenny


Google
4 Oct 2023 13:37:45
52°47'53.78863"N -7°36'7.56097"W
8° N
R639
County Kilkenny


4 Oct 2023 13:45:59
52°47'59.55751"N -7°36'12.85972"W
349° N
Rathpatrick
Crosspatrick
County Kilkenny


4 Oct 2023 14:46:02
52°47'59.38922"N -7°35'47.64078"W
28° NE
L5810
County Kilkenny


4 Oct 2023 13:51:58
52°48'1.74053"N -7°36'15.35942"W
309° NW
M8
County Kilkenny


4 Oct 2023 15:12:32
52°48'1.02236"N -7°36'12.27355"W
316° NW
14 Lios Na Sí
Johnstown
County Kilkenny


CASTLETOWN
Google
4 Oct 2023 14:07:25
152° SE


Google
4 Oct 2023 15:17:06
52°48'4.12251"N -7°36'7.66285"W
220° SW
R639
County Kilkenny


4 Oct 2023 14:21:44
52°47'56.42808"N -7°30'48.33684"W
158° S
L5810
County Kilkenny


4 Oct 2023 15:20:24
52°48'6.69652"N -7°36'1.63285"W
69° E
R639
County Kilkenny


S
E
W
N
AOS Environmental Solutions
TOWN
Google
4 Oct 2023 14:31:47
52°48'11.00287"N -7°35'45.6453"W
173° S
R693
County Kilkenny


W
S
N
E
R433
Google
4 Oct 2023 15:30:11
52°48'0.65622"N -7°35'48.3488"W
247° SW
County Kilkenny


4 Oct 2023 13:37:54
52°47'53.70153"N -7°36'7.41416"W
324° NW
Unnamed Road
County Kilkenny


4 Oct 2023 14:46:07
52°47'59.38768"N -7°35'47.79843"W
245° SW
L5810
County Kilkenny


4 Oct 2023 15:00:20
52°47'54.21463"N -7°36'6.25914"W
233° SW
Unnamed Road
County Kilkenny
Google


4 Oct 2023 13:56:49
52°48'6.84782"N -7°36'19.92024"W
173° S
Unnamed Road
County Tipperary
Google


4 Oct 2023 13:46:58
47° NE


4 Oct 2023 14:12:16
52°51'31.662"N -7°41'38.7078"W
46° NE
R433
County Laois


4 Oct 2023 15:17:16
52°48'4.22944"N -7°36'7.53323"W
62° NE
R639
County Kilkenny
Google


4 Oct 2023 14:21:47
52°48'18.67203"N -7°36'7.91359"W
280° W
L5810
County Kilkenny
Google


4 Oct 2023 14:34:13
52°43'33.24"N -7°33'7.14132"W
172° S
R693
County Kilkenny


4 Oct 2023 15:30:14
52°48'0.6249"N -7°35'48.25429"W
333° NW
County Kilkenny


4 Oct 2023 13:41:44
52°47'55.36308"N -7°36'8.24824"W
214° SW
Unnamed Road
County Kilkenny
Google


4 Oct 2023 14:59:33
52°47'54.36237"N -7°36'5.91971"W
286° W
14 Lios Na Si
Johnstown
County Kilkenny
Google


AQS Environmental Solutions
LETOWN
Google
4 Oct 2023 15:36:53
52°48'10.59417"N -7°35'47.35552"W
164° S
R434
County Laois


Google
4 Oct 2023 13:47:26
52°48'0.52347"N -7°36'14.19466"W
315° NW


4 Oct 2023 15:00:32
52°47'54.28788"N -7°36'6.0502"W
84° E
Unnamed Road
County Kilkenny


4 Oct 2023 13:56:54
52°48'6.46191"N -7°36'19.4547"W
316° NW
Unnamed Road
County Tipperary


4 Oct 2023 15:12:45
52°48'1.21583"N -7°36'12.27525"W
147° SE
14 Lios Na Sí
Johnstown
County Kilkenny


CASTLETOWN
4 Oct 2023 14:12:21
52°48'15.45669"N -7°36'13.68311"W
131° SE
R433
County Laois


4 Oct 2023 13:34:29
52°44'10.10148"N -7°34'14.39112"W
10° N
R639
County Kilkenny


4 Oct 2023 14:24:05
52°48'16.69196"N -7°36'1.138"W
81° E
R435
County Kilkenny


4 Oct 2023 14:34:17
52°48'8.51693"N -7°35'43.93825"W
313° NW
R693
County Kilkenny


4 Oct 2023 15:30:18
52°48'0.64606"N -7°35'48.13746"W
341° N
County Kilkenny


4 Oct 2023 13:41:49
52°47'55.24425"N -7°36'8.22274"W
179° S
Unnamed Road
County Kilkenny


4 Oct 2023 14:59:39
52°47'54.39047"N -7°36'5.83194"W
239° SW
14 Lios Na Sí
Johnstown
County Kilkenny


4 Oct 2023 13:34:39
52°47'52.45039"N -7°36'2.27888"W
12° N
R639
County Kilkenny


4 Oct 2023 13:47:31
52°48'0.19116"N -7°36'14.0075"W
166° S
Unnamed Road
County Kilkenny


4 Oct 2023 15:09:09
52°45'15.37776"N -7°33'19.38672"W
40° NE
14 Lios Na Sí
Johnstown
County Kilkenny
Inver Johnstown
Google


4 Oct 2023 14:00:40
52°55'34.65408"N -7°40'19.85772"W
304° NW
Unnamed Road
County Tipperary
Google


4 Oct 2023 15:12:52
52°48'1.24916"N -7°36'12.29729"W
57° NE
14 Lios Na Sí
Johnstown
County Kilkenny
Google

# Appendix C

# Environmental Testing

| Year | Month | Date | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mg/l | mg/l | units | mg/l | mg/l | mg/l | mg/l | µS/cm | µg/l | µg/l | mg/l | µg/l | µg/l | µg/l |
| | **Spillway 1** | | **DO** | **SS** | **PH** | **Sulphate** | **BOD** | **Ammonia** | **O-Phos** | **Conductivity** | **Aluminium** | **Arsenic** | **Cadmium** | **Nickel** | **Lead** | **Zinc** |
| 2018 | Q1 | 06/02/18 | 6.99 | 53.00 | 7.50 | 665.10 | 5.00 | 4.33 | 0.25 | 1392.00 | <100 | 30.00 | <0.6 | 93.00 | <6 | 1050.00 |
| | Q2 | 29/05/18 | 4.49 | 101 | 7.8 | 2604 | 9 | 14.63 | 0.51 | 3400 | <100 | 14 | <0.6 | 245 | <6 | 743 |
| | Q3 | 14/08/18 | 10.68 | <10 | 9.1 | 1861 | 3 | 0.07 | <0.02 | 2430 | <100 | 18 | <0.6 | 186 | <6 | 34 |
| | Q4 | 26/11/18 | 7.5 | 22 | 7.5 | 471.6 | 2 | 0.05 | 0.32 | 1139 | <100 | 21 | <0.6 | 31 | <6 | 825 |
| 2019 | Q1 | 15/03/19 | 8.87 | 7.00 | 7.70 | 257.30 | <1 | 1.82 | 0.17 | **926** | <100 | 49 | <0.6 | 75 | <6 | 1030 |
| | Q2 | 14/06/19 | 9.34 | 9 | 8 | 1415 | <2 | 5.66 | 0.36 | 2600 | <100 | 9.1 | <0.6 | 147 | <6 | 612 |
| | Q3 | 24/09/19 | 1.85 | 1516 | 7.4 | 398.3 | 71 | 0.1 | 0.21 | 1071 | <100 | 11 | <0.6 | 29 | <6 | <18 |
| | Q4 | 17/12/19 | 9.21 | <5 | 7.9 | 80.2 | 2 | 0.09 | 0.41 | 1100 | <100 | 21 | <0.6 | 25 | <6 | 772 |
| 2020 | Q1 | 27/03/20 | 8.89 | 13.00 | 7.80 | 1016.00 | 2.90 | 1.32 | 0.13 | 2540.00 | <100 | 15.00 | <0.6 | 44.00 | <6 | 1130.00 |
| | Q2 | | | | | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | | | | | |
| | Q4 | 10/12/20 | 8.37 | 39 | 7.6 | 697.5 | 3 | 6.2 | 0.14 | 1766 | <100 | 0.97 | <0.6 | <3 | <6 | <18 |
| 2021 | Q1 | 18/01/21 | 11.53 | 7.00 | 8.3 | 444.50 | 1.00 | 3.66 | 0.12 | 1307.00 | <100 | 39.00 | <0.6 | 99 | <6 | 1310 |
| | Q2 | 18/06/21 | 5.55 | 64 | 7.6 | 1127.8 | 17 | 7.96 | 0.09 | 3010 | <100 | 29.00 | <0.6 | 294.00 | <6 | 1310.00 |
| | Q3 | | | | | | | | | | | | | | | |
| | Q4 | 10/12/21 | 9.18 | 10 | 7.7 | 524.5 | 2 | 0.48 | 0.15 | 1140 | 11.8 | 28.2 | <0.4 | 50 | <5 | 1060 |
| 2022 | Q1 | 01/04/2022 | 9.12 | 7.00 | 7.60 | 405.40 | 2.00 | 2.90 | 0.41 | 1851.00 | <100 | 25.00 | <0.6 | 135.00 | <6 | 1310.00 |
| | Q2 | 20/05/22 | 9.9 | 31 | 7.9 | 660.1 | 7 | 0.03 | 0.05 | 1463 | <100 | 39.00 | <0.6 | 82.00 | <6 | 451.00 |
| | Q3 | 29/09/2022 | 7.45 | 111.00 | 7.60 | 1126 | 7.00 | 0.12 | 0.10 | 1972 | <3.5 | 20 | <0.2 | 82 | <0.3 | 570 |
| | Q4 | 02/12/22 | 10.2 | 6 | 7.7 | 566 | 3 | 1.82 | 0.07 | 1397 | 12 | 32 | 0.04 | 32 | 0.8 | 450 |
| 2023 | Q1 | 18/04/23 | 9.60 | <7 | 7.7 | 712 | 2 | 2.52 | 0.12 | 1643 | 5.7 | 28 | <0.2 | 130 | <0.3 | 1500 |
| | Q2 | | | | | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | | | | | |

| Year | Month | Date | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mg/l | mg/l | units | mg/l | mg/l | mg/l | mg/l | µS/cm | µg/l | µg/l | mg/l | µg/l | µg/l | µg/l |
| **Spillway 2** | | | **DO** | **SS** | **PH** | **Sulphate** | **BOD** | **Ammonia** | **O-Phos** | **Conductivity** | **Aluminium** | **Arsenic** | **Cadmium** | **Nickel** | **Lead** | **Zinc** |
| 2018 | Q1 | 06/02/18 | 9.20 | 18.00 | 7.60 | 806.50 | 2.00 | 9.56 | 0.12 | 1806.00 | <100 | 9.3 | <0.6 | 40 | <6 | 1900 |
| | Q2 | 29/05/18 | 9.27 | 8 | 7.9 | 2740 | 4 | 5.79 | 0.02 | 3720 | <100 | 5.3 | <0.6 | 50 | <6 | 2100 |
| | Q3 | 14/08/18 | 11.55 | 94 | 8.5 | 6290.1 | 10 | 0.35 | 0.53 | 7970 | <100 | 54 | <0.6 | 26 | 7 | 90 |
| | Q4 | 26/11/18 | 7.75 | 27 | 7.4 | 866.8 | 2 | 5.18 | 0.06 | 1689 | <100 | 5 | 2.2 | 67 | <6 | 3720 |
| 2019 | Q1 | 15/03/19 | 7.67 | <5 | 7.50 | 312.95 | 2 | 2.97 | 0.08 | 945 | <100 | 6.5 | 1.1 | 27 | <6 | 1390 |
| | Q2 | 14/06/19 | 8.25 | 9 | 7.7 | 2094 | 2 | 2.59 | <0.02 | 3620 | <100 | 3.8 | <0.6 | 61 | <6 | 3050 |
| | Q3 | 24/09/19 | 9.13 | 3219 | 7.5 | 2296 | 3 | 0.35 | 0.02 | 3030 | <100 | 2.5 | <0.6 | 32 | <6 | 2360 |
| | Q4 | 17/12/19 | 8.2 | <5 | 7.9 | 67.4 | 1 | 6.48 | 0.09 | 1441 | <100 | 4.9 | <0.6 | 31 | <6 | 1840 |
| 2020 | Q1 | 27/03/20 | 8.80 | 10.00 | 7.60 | 1053.00 | 1.70 | 10.68 | 0.02 | 2690.00 | <100 | 4.90 | <0.6 | 4.00 | <6 | 1760.00 |
| | Q2 | 04/06/20 | 8.99 | 18.00 | 8.00 | 168.80 | 2.00 | 0.34 | 0.04 | 4340.00 | <100 | 3.30 | <0.6 | 38.00 | <6 | 1930.00 |
| | Q3 | 18/09/20 | 7.87 | 7.00 | 7.80 | 2127.50 | 2.00 | 8.86 | 0.03 | 3170.00 | <100 | 5.70 | <0.6 | 49.00 | <6 | 1890.00 |
| | Q4 | 10/12/20 | 9.34 | 8.00 | 7.90 | 742.20 | 2.00 | 8.32 | 0.05 | 1807.00 | <100 | 4.80 | <0.6 | 37.00 | <6 | 1960.00 |
| 2021 | Q1 | 15/01/21 | 8.18 | <5 | 7.50 | 429.00 | 1.00 | 0.12 | 0.41 | 1170.00 | <100 | 9.50 | <0.6 | 18.00 | <6 | 1160.00 |
| | Q2 | 18/06/21 | 6.00 | 10.00 | 7.70 | 1160.60 | 2.00 | 2.96 | 0.03 | 3250.00 | <100 | 5.60 | <0.6 | 31.00 | <6 | 935.00 |
| | Q3 | 25/08/21 | 8.18 | 12.00 | 7.50 | 1313.00 | 1.00 | 3.42 | 0.03 | 3420.00 | <100 | 3.90 | <0.6 | 47.00 | <6 | 2008.00 |
| | Q4 | 10/12/21 | 9.04 | 7 | 7.6 | 394.3 | 1 | 2.85 | 0.06 | 1044 | <10 | <5 | <0.41 | 28.1 | <5 | 1950 |
| 2022 | Q1 | 01/04/22 | 10.29 | 8.00 | 7.80 | 792.80 | 1.00 | 8.61 | <0.02 | 2850.00 | <100 | 6.50 | <0.6 | 30.00 | <6 | 1190.00 |
| | Q2 | 20/05/22 | 9.80 | 17.00 | 7.80 | 1475.00 | 9.00 | 3.41 | 0.04 | 2850.00 | <100 | 5.10 | <0.6 | 35.00 | <6 | 1450.00 |
| | Q3 | 29/09/2022 | 8.29 | 6.00 | 7.80 | 1347 | 4.00 | 3.16 | <0.02 | 2470 | <3.5 | 4.8 | 0.25 | 50 | <0.3 | 2800 |
| | Q4 | 02/12/22 | 9.90 | 12.00 | 7.60 | 826.40 | 1.00 | 5.51 | 0.02 | 1734.00 | 4.60 | 5.60 | 0.34 | 3.40 | <0.3 | 1900.00 |
| 2023 | Q1 | 18/04/23 | 9.50 | <5 | 7.70 | 1137.80 | 2.00 | 5.94 | 0.03 | 2020.00 | 3.60 | 5.30 | 0.33 | 35.00 | <0.3 | 2100.00 |
| | Q2 | 29/06/23 | 8.89 | 44.00 | 7.90 | 1376.40 | 2.00 | 5.40 | <0.02 | 3040.00 | <3.5 | 3.5 | 0.13 | 41 | <0.3 | 1400 |
| | Q3 | | | | | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | | | | | |

| Year | Month | Date | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mg/l | mg/l | units | mg/l | mg/l | mg/l | mg/l | µS/cm | µg/l | µg/l | mg/l | µg/l | µg/l | µg/l |
| **Phase 3/Wetland Discharge (aka Pon** | | | **DO** | **SS** | **PH** | **Sulphate** | **BOD** | **Ammonia** | **O-Phos** | **Conductivity** | **Aluminium** | **Arsenic** | **Cadmium** | **Nickel** | **Lead** | **Zinc** |
| 2018 | Q1 | 06/02/2018 | 4.77 | <5 | 7.40 | 211 | <2 | 0.02 | 0.02 | 621 | <100 | 2.00 | <0.6 | 8.00 | <6 | <18 |
| | Q2 | 29/05/2018 | 8.14 | <5 | 7.60 | 196 | 5.00 | 0.04 | <0.02 | 761 | <100 | 2.00 | <0.6 | 4.00 | <6 | <18 |
| | Q3 | | | | | | | | | | | | | | | |
| | Q4 | 26/11/2018 | 6.19 | <5 | 7.1 | 349 | 3 | 0.23 | 0.67 | 1000 | <100 | 1.90 | <0.6 | 6.00 | <6 | <18 |
| 2019 | Q1 | 28/03/2019 | 6.58 | <5 | 7.50 | 172 | 1.00 | 0.04 | 0.02 | 646 | | | | | | |
| | Q2 | 14/06/2019 | 7.70 | <7 | 7.50 | 168 | 78.00 | 0.12 | <0.02 | 710 | <100 | 1.70 | <0.6 | 4.00 | <6 | 27.00 |
| | Q3 | 24/09/2019 | 8.85 | 35.00 | 8.00 | 173 | 6.00 | 0.03 | <0.02 | 627 | <100 | 2.90 | <0.6 | 3.00 | <6 | <18 |
| | Q4 | | | | | | | | | | | | | | | |
| 2020 | Q1 | 27/03/2020 | 10.39 | 14.00 | 7.90 | 257 | 10.00 | 0.02 | <0.02 | 732 | <100 | 2.40 | <0.6 | 8.00 | <6 | <18 |
| | Q2 | | | | | | | | | | | | | | | |
| | Q3 | 17/09/2020 | 4.43 | 7.00 | 7.10 | 353 | 4.00 | 0.03 | 0.12 | 981 | <100 | 2.00 | <0.6 | 4.00 | <6 | <18 |
| | Q4 | 10/12/2020 | 8.40 | <5 | 7.90 | 352 | 3.00 | 0.27 | 0.05 | 987 | <100 | 3.00 | <0.6 | 4.00 | <6 | 45.00 |
| 2021 | Q1 | 18/01/2021 | 8.91 | <5 | 8 | 257 | 1 | 0.17 | 0.14 | 829 | <100 | 4.20 | <0.6 | 6.00 | <6 | <18 |
| | Q2 | | | | | | | | | | | | | | | |
| | Q3 | 26/08/2021 | 6.46 | <5 | 7.4 | 342 | 3 | 0.9 | 0.21 | 1020 | <100 | 5.40 | <0.6 | 6.00 | <6 | <18 |
| | Q4 | 10/12/21 | 8.12 | 7 | 7.7 | 427 | 3 | 0.08 | 0.27 | 1057 | <10 | <5 | <0.4 | 2.6 | <5 | 7.7 |
| 2022 | Q1 | 01/04/2022 | 10.88 | <5 | 7.9 | 253 | 2 | 0.08 | 0.15 | 870 | <100 | 3.6 | <0.6 | 4 | <6 | <18 |
| | Q2 | 20/05/2022 | 8.50 | 11.00 | 7.70 | 314 | 6.00 | 0.08 | 0.23 | 937 | <100 | 3.10 | <0.6 | 6.00 | <6 | <18 |
| | Q3 | 29/09/2022 | 6.60 | <5 | 7.60 | 588 | 4.00 | 0.06 | 0.04 | 1277 | <3.5 | 2.2 | <0.02 | 4.8 | <0.3 | <5 |
| | Q4 | 02/12/22 | 8.65 | <5 | 7.6 | 207 | 2 | 0.06 | 0.07 | 731 | <3.5 | 3.7 | <0.02 | 6.8 | <0.3 | 17 |
| 2023 | Q1 | 18/04/23 | 9.1 | <5 | 7.7 | 313 | 1 | 0.04 | 0.04 | 908 | <3.5 | 2.2 | <0.02 | 6.4 | <0.3 | 9.1 |
| | Q2 | 29/06/23 | 8.69 | 7 | 7.9 | 239 | 2 | 0.07 | <0.02 | 1124 | <3.5 | 1.7 | <0.02 | 5.4 | <0.3 | <5 |
| | Q3 | | | | | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | | | | | |

| Year | Month | Date | DO | SS | PH | Sulphate | BOD | Ammonia | Conductivity | O-Phos | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mg/l | mg/l | units | mg/l | mg/l | mg/l | µS/cm | mg/l | µg/l | µg/l | µg/l | µg/l | µg/l | µg/l |
| **Codys Castle - ASW3** | | | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly |
| 2018 | Q1 | 06/02/18 | 10.75 | <5 | 7.7 | 203.8 | 2 | 0.08 | 837 | 0.04 | <100 | <1 | <0.6 | 5 | <6 | 23 |
| | Q2 | 29/05/18 | 6.95 | 12 | 7.6 | 271.5 | 3 | 0.04 | 906 | <0.02 | <100 | <1 | <0.6 | 6 | <6 | <18 |
| | Q3 | 14/08/18 | 10.15 | 12 | 8.1 | 232.6 | 12 | 0.12 | 664 | <0.02 | <100 | 1.9 | <0.6 | 6 | <6 | <18 |
| | Q4 | 26/11/18 | 7.79 | 10 | 7.5 | 79 | 4 | 0.17 | 382 | <0.02 | <100 | 1.1 | <0.6 | 3 | <6 | <18 |
| 2019 | Q1 | 15/03/19 | 6.79 | 9.00 | **8** | 247.05 | 2 | <0.02 | **840** | <0.02 | <100 | <1 | <0.6 | 5 | <6 | 22 |
| | Q2 | 14/06/19 | 8.83 | <5 | 7.5 | 240.8 | 2 | 0.03 | 859 | <0.02 | <100 | <1 | <0.6 | 5 | <6 | 20 |
| | Q3 | 24/09/19 | 2.43 | 34 | 7.6 | 26.86 | 12 | 0.37 | 531 | <0.02 | <100 | 1.1 | <0.6 | <3 | <6 | <18 |
| | Q4 | 17/12/19 | 8.38 | <5 | 8 | 299.7 | 3 | 0.09 | 842 | <0.02 | <100 | 0.94 | <0.6 | 4 | <6 | 60 |
| 2020 | Q1 | 27/03/20 | 9.58 | <10 | 7.7 | 236.6 | 2 | 0.03 | 982 | <0.02 | <100 | 0.88 | <0.6 | 5 | <6 | <18 |
| | Q2 | 04/06/20 | 8.08 | <5 | 8 | 209.4 | 1.8 | 0.03 | 716 | <0.02 | <100 | 0.59 | <0.6 | <3 | <6 | <18 |
| | Q3 | 17/09/20 | 11.36 | 7 | 9 | 24.16 | 9 | 0.05 | 246 | 0.02 | <100 | 1.9 | <0.6 | <3 | <6 | <18 |
| | Q4 | 10/12/20 | 9.73 | <5 | 8.1 | 253.7 | 4 | 0.03 | 874 | <0.02 | <100 | 1.1 | <0.6 | 5 | <6 | <18 |
| 2021 | Q1 | 15/01/21 | 10.68 | <6 | 7.6 | 277.3 | <1 | 1.01 | 939 | 0.02 | <100 | 1.2 | <0.6 | 4 | <6 | 25 |
| | Q2 | 18/06/21 | 6.99 | 17 | 7.5 | 248.8 | 6 | 0.27 | 850 | 0.08 | <100 | 1.1 | <0.6 | 5 | <6 | <18 |
| | Q3 | 26/08/21 | 7.51 | 15 | 7.6 | 110.7 | 7 | 0.15 | 555 | <0.02 | <100 | 1.9 | <0.6 | 5 | <6 | <18 |
| | Q4 | 10/12/21 | 9.57 | <5 | 7.9 | 109.2 | 2 | 0.08 | 434 | <0.02 | <10 | <5 | <0.4 | 2.5 | <5 | 8 |
| 2022 | Q1 | 01/04/2022 | 10.15 | <5 | 7.8 | 276.5 | 1 | 0.05 | 857 | <0.02 | <100 | 1.1 | <0.6 | <3 | <6 | <18 |
| | Q2 | 20/05/22 | 10.00 | 27 | 7.7 | 247.6 | 6 | 0.03 | 809 | <0.02 | <100 | 1.2 | <0.6 | 6 | <6 | <18 |
| | Q3 | 20/09/22 | 7.87 | 13.00 | 7.70 | 161.10 | 12.00 | 0.09 | 521.00 | <0.02 | <3.5 | 1.4 | <0.02 | 4.6 | <0.3 | 28 |
| | Q4 | 02/12/22 | 9.09 | <5 | 7.7 | 197.05 | 1 | 0.09 | 775 | 0.06 | <3.5 | 1.5 | <0.02 | 4.7 | <0.3 | 37 |
| 2023 | Q1 | 18/04/23 | 9.20 | <5 | 7.7 | 222 | 1 | 0.02 | 830 | <0.02 | <3.5 | 0.94 | <0.02 | 4 | <0.3 | 9.4 |
| | Q2 | 29/06/23 | 8.45 | 13 | 7.9 | 207.7 | 2 | 0.04 | 790 | <0.02 | <3.5 | 1.4 | <0.02 | 5 | <0.3 | 5.8 |
| | Q3 | | | | | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | | | | | |

| Year | Month | Date | DO | SS | PH | Sulphate | BOD | Ammonia | Conductivity | O-Phos | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mg/l | mg/l | units | mg/l | mg/l | mg/l | µS/cm | mg/l | µg/l | µg/l | µg/l | µg/l | µg/l | µg/l |
| **Duggans Bridge** | | | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly | Quaterly |
| 2018 | Q1 | 06/02/18 | 10.24 | <5 | 7.60 | 147.10 | <2 | 0.05 | 838.00 | 0.03 | <100 | <1 | <0.6 | 5.00 | <6 | <18 |
| | Q2 | 29/05/18 | 9.45 | <5 | 7.8 | 116.6 | 3 | 0.02 | 872 | <0.02 | <100 | <1 | <0.6 | 3.00 | <6 | <18 |
| | Q3 | 14/08/18 | 10.49 | <5 | 7.50 | 70.90 | <1 | <0.03 | 874.00 | <0.02 | <100 | <1 | <0.6 | 4.00 | <6 | <18 |
| | Q4 | 26/11/18 | 8.52 | <5 | 7.40 | 97.70 | <1 | 0.04 | 1069.00 | <0.02 | <100 | <1 | <0.6 | 4.00 | <6 | <18 |
| 2019 | Q1 | 28/03/19 | 9.64 | <5 | 7.70 | 143.75 | <1 | 0.26 | 811.00 | <0.02 | | | | | | |
| | Q2 | 14/06/19 | 8.18 | <5 | 7.40 | 75.50 | <1 | 0.02 | 872.00 | <0.02 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | Q3 | 24/09/19 | 8.07 | <5 | 8.10 | 73.05 | <1 | 0.02 | 862.00 | <0.02 | <100 | 0.24 | <0.6 | <3 | <6 | <18 |
| | Q4 | 17/12/19 | 8.94 | <5 | 7.50 | 184.60 | 2.00 | 0.06 | 867.00 | <0.02 | <100 | 0.68 | <0.6 | <3 | <6 | <18 |
| 2020 | Q1 | 30/03/20 | 10.29 | <6 | 8.20 | 141.10 | 2.00 | <0.02 | 839.00 | <0.02 | <100 | 0.59 | <0.6 | <3 | <6 | <18 |
| | Q2 | 04/06/20 | 8.16 | <5 | 8.00 | 87.50 | 2.00 | 0.02 | 782.00 | <0.02 | <100 | 0.21 | <0.6 | <3 | <6 | <18 |
| | Q3 | 17/09/20 | 6.35 | 41 | 7.50 | 62.78 | 4.00 | <0.02 | 831.00 | 0.03 | <100 | 0.29 | <0.6 | <3 | <6 | <18 |
| | Q4 | 10/12/20 | 9.21 | <5 | 7.90 | 123.20 | 1.00 | <0.02 | 860.00 | <0.02 | <100 | 0.57 | <0.6 | 4.00 | <6 | <18 |
| 2021 | Q1 | 18/01/21 | 11.73 | <5 | 8.10 | 138.60 | <1 | 0.04 | 894.00 | 0.02 | <100 | 0.82 | <0.6 | 4.00 | <6 | <18 |
| | Q2 | 18/06/21 | 7.95 | <5 | 7.30 | 72.20 | 1.00 | 0.03 | 840.00 | <0.02 | <100 | 0.36 | <0.6 | 3.00 | <6 | <18 |
| | Q3 | 25/08/21 | 8.43 | 6.00 | 7.30 | 77.40 | 1.00 | <0.02 | 867.00 | <0.02 | <100 | 0.24 | <0.6 | 26.00 | <6 | <18 |
| | Q4 | 10/12/21 | 8.30 | <5 | 7.4 | 156 | 1 | 0.06 | 1040 | <0.02 | <10 | <5 | <0.4 | 3.2 | <5 | 12.2 |
| 2022 | Q1 | 01/04/22 | 10.43 | 10.00 | 7.60 | 165.40 | 1.00 | 0.04 | 850.00 | <0.02 | <100 | 0.52 | <0.6 | <3 | <6 | <18 |
| | Q2 | 20/05/22 | 9.90 | <10 | 7.60 | 91.75 | 8.00 | 0.10 | 857.00 | <0.02 | <100 | 0.35 | <0.6 | <3 | <6 | <18 |
| | Q3 | 20/09/22 | 8.22 | 5.00 | 7.70 | 101.65 | <2 | <0.02 | 929.00 | <0.02 | <3.5 | 0.22 | <0.02 | <0.1 | <0.3 | 9.5 |
| | Q4 | 02/12/22 | 9.44 | <5 | 7.50 | 121.75 | 1.00 | 0.02 | 831.00 | <0.02 | <3.5 | 0.84 | <0.02 | 2.8 | <0.3 | 16 |
| 2023 | Q1 | 18/04/23 | 9.90 | <5 | 7.50 | 140.00 | <1 | 0.02 | 820.00 | <0.02 | <3.5 | 0.56 | <0.02 | 2.3 | 0.4 | 12 |
| | Q2 | 29/06/23 | 8.86 | 23.00 | 7.90 | 75.05 | <1 | 0.03 | 845.00 | <0.02 | <3.5 | 0.4 | <0.02 | <1 | <0.3 | 6.6 |
| | Q3 | | | | | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | | | | | |

| Year | Month | Date | DO | SS | PH | Sulphate | BOD | Ammonia | Conductivity | O-Phos | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Attenuation Pond | | | mg/l | mg/l | units | mg/l | mg/l | mg/l | µS/cm | mg/l | µg/l | µg/l | µg/l | µg/l | µg/l | µg/l |
| | | | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly |
| 2018 | Jan | 14/01/18 | 10.37 | 6.00 | 7.70 | 259.00 | 2.00 | 0.09 | 866.00 | 0.02 | <100 | 1.20 | <0.6 | <6 | 5.00 | 19.00 |
| | Feb | 06/02/18 | 10.77 | <5 | 7.7 | 166.3 | <2 | 0.11 | 795 | 0.05 | <100 | <1 | <0.6 | 5 | <6 | 19 |
| | Mar | 09/03/18 | 10.5 | <5 | 7.7 | 197.8 | 2 | 0.03 | 796 | <0.02 | <100 | <1 | <0.6 | 4 | <6 | <18 |
| | Apr | 10/04/18 | 11.53 | <5 | 8 | 200 | 5 | 0.04 | 766 | <0.02 | <100 | <1 | <0.6 | 4 | <6 | <18 |
| | May | 03/05/18 | 10.3 | 8 | 8.2 | 216.15 | 4 | 0.02 | 889 | 0.06 | <100 | <1 | <0.6 | 4 | <6 | <18 |
| | Jun | 07/06/18 | 11.8 | <5 | 8.1 | 217 | 3 | 0.06 | 771 | 4.65 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | Jul | 11/07/18 | 9.91 | <5 | 8.3 | 512.9 | 4 | 0.02 | 597 | <0.02 | <100 | 1.5 | <0.6 | 4 | <6 | <18 |
| | Aug | 14/08/18 | 11.15 | <5 | 8.9 | 251.9 | 3 | 0.03 | 554 | <0.02 | <100 | 1.5 | <0.6 | 5 | <6 | <18 |
| | Sep | 12/09/18 | 8.98 | 14 | 7.7 | 204.7 | 8 | 0.22 | 535 | <0.02 | <100 | 2.1 | <0.6 | <3 | <6 | <18 |
| | Oct | | | | | | | | | | | | | | | |
| | Nov | 26/11/18 | 8.73 | 67 | 7.7 | 193.7 | 6 | 0.24 | 652 | <0.02 | <100 | 1.3 | <0.6 | 6 | <6 | <18 |
| | Dec | 06/12/18 | 9.91 | 15 | 8.1 | 317.3 | 5 | 0.06 | 906 | 0.08 | <100 | 1.4 | <0.6 | 8 | <6 | <18 |
| 2019 | Jan | 31/01/19 | 11.46 | 18 | 8.3 | 209.2 | 10 | 0.04 | 849 | <0.02 | <100 | 1.1 | <0.6 | <3 | <6 | <18 |
| | 21/02/19 | 21/02/19 | 10.53 | 11.00 | 8.20 | 224.6 | 7 | 0.04 | 857 | <0.02 | <100 | 1 | <0.6 | 6 | <6 | 59 |
| | Feb | 28/02/19 | 7.82 | 9 | 8 | 300.1 | 5 | 0.09 | 915 | <0.02 | <100 | 1.2 | <0.6 | 6 | <6 | <18 |
| | Mar | 14/03/19 | 10.51 | <5 | 8.1 | 191.85 | 2 | 0.04 | 744 | <0.02 | <100 | <1 | <0.6 | 5 | <6 | <18 |
| | Apr | 19/04/19 | 10.55 | <5 | 8.3 | 201.7 | <1 | 0.02 | 826 | <0.02 | <100 | <1 | <0.6 | 4 | <6 | <18 |
| | May | | | | | | | | | | | | | | | |
| | Jun | 14/06/19 | 9.59 | 19 | 8.1 | 236.95 | 2 | 0.12 | 810 | <0.2 | <100 | 1.4 | <0.6 | 31 | 7 | 57 |
| | Jul | empty | | | | | | | | | | | | | | |
| | Aug | empty | | | | | | | | | | | | | | |
| | Sep | empty | | | | | | | | | | | | | | |
| | Oct | 23/10/19 | 9.68 | <6 | 8.2 | 237.4 | 3 | 0.04 | 797 | 0.05 | <100 | 1.6 | <0.6 | <3 | <6 | <18 |
| | Nov | 20/11/19 | 13.47 | 10 | 8.4 | 279.75 | 6 | <0.02 | 782 | <0.02 | <100 | 1.4 | <0.6 | <7 | <6 | <18 |
| | Dec | | | | | | | | | | | | | | | |
| 2020 | Jan | 15/01/2020 | 10.13 | <5 | 8.20 | 230.70 | 2.00 | 0.16 | 873.0 | <0.02 | <100 | 1.10 | <0.6 | 4.000 | <6 | 24.00 |
| | Feb | 14/02/2020 | 10.96 | 28.00 | 7.80 | 262.30 | 2.00 | 0.06 | 787.0 | 0.05 | <100 | 1.30 | <0.6 | 7.000 | <6 | 26.00 |
| | Mar | 27/03/2020 | 9.88 | <10 | 7.70 | 159.20 | 2.00 | 0.06 | 763.0 | <0.02 | <100 | 0.75 | <0.6 | 4.000 | <6 | <18 |
| | Apr | 14/04/2020 | 9.24 | <5 | 8.20 | 188.50 | 3.00 | 0.02 | 787.0 | <0.02 | <100 | 0.70 | <0.6 | 5.000 | <6 | <18 |
| | May | 28/05/2020 | 9.80 | <5 | 8.10 | 184.00 | 1.00 | 0.11 | 721.0 | 0.17 | <100 | 1.30 | <0.6 | 4.000 | <6 | <18 |
| | Jun | 04/06/2020 | 8.89 | <5 | 8.30 | 255.40 | 2.00 | 0.12 | 730.0 | <0.02 | <100 | 1.50 | <0.6 | <3 | <6 | <18 |
| | Jul | 31/07/2020 | 8.74 | 14.00 | 8.20 | 127.00 | 1.90 | 0.08 | 476.0 | 0.24 | <100 | 1.30 | <0.6 | <3 | <6 | <18 |
| | Aug | 19/08/2020 | 9.18 | <5 | 8.30 | 158.15 | 2.00 | 0.04 | 436.0 | <0.02 | <100 | 1.60 | <0.6 | 3.000 | <6 | <18 |
| | Sep | 17/09/2020 | 8.67 | <5 | 8.30 | 116.20 | 2.00 | 0.06 | 508.0 | <0.02 | <100 | 1.60 | <0.6 | 4.000 | <6 | <18 |
| | Oct | 27/10/2020 | 9.61 | 10.00 | 8.20 | 229.50 | 8.00 | <0.02 | 665.0 | <0.02 | <100 | 1.2 | <0.6 | <3 | <6 | <18 |
| | Nov | 24/11/2020 | 9.8 | <5 | 8.20 | 304.40 | 4.00 | 0.05 | 876.0 | <0.02 | <100 | 1.3 | <0.6 | 6.000 | <6 | <18 |
| | Dec | 10/12/20 | 10.07 | 10 | 8.2 | 259.1 | 3 | <0.02 | 864.0 | <0.02 | <100 | 1.5 | <0.6 | <3 | <6 | 19 |
| 2021 | Jan | 15/01/21 | 11.25 | <5 | 8.00 | 227.6 | 1 | 0.03 | 841.0 | 0.02 | <100 | 2.1 | <0.6 | 4.000 | <6 | <18 |
| | Feb | 05/02/2021 | 10.73 | <5 | 8.1 | 200.4 | 2 | 0.04 | 704.0 | 0.02 | <100 | 2.1 | <0.6 | 4.000 | <6 | <18 |
| | Mar | 31/03/2021 | 9.75 | <5 | 8.2 | 159.65 | 3.3 | 0.04 | 752.0 | <0.02 | <100 | 0.66 | <0.6 | 3.000 | 8 | <18 |
| | Apr | 29/04/2021 | 10.93 | <5 | 8.2 | 177.75 | 2 | 0.07 | 792 | 0.11 | <100 | 1 | <0.6 | 5.000 | <6 | <18 |
| | May | 27/05/2021 | 12.64 | <5 | 8.4 | 198.8 | 2 | 0.03 | 739 | <0.02 | <100 | 1.1 | <0.6 | 6.000 | <6 | <18 |
| | Jun | 18/06/2021 | 10.16 | 6 | 8.3 | 233.8 | 3 | 0.09 | 752 | <0.02 | <100 | 1.3 | <0.6 | 4.000 | <6 | <18 |
| | Jul | 22/07/2021 | 9.94 | 9 | 9 | 223.35 | 3 | 0.05 | 576 | <0.02 | <100 | 1.8 | <0.6 | 4.000 | <6 | <18 |
| | Aug | 25/08/2021 | 9.37 | <5 | 9.2 | 218.6 | 2 | 0.07 | 489 | <0.02 | <100 | 2.1 | <0.6 | <3 | <6 | <18 |
| | Sep | 27/09/2021 | 10.44 | 20 | 8.5 | 184.3 | 6 | 0.06 | 507 | <0.02 | <100 | 3.2 | <0.6 | 4.000 | <6 | <18 |
| | Oct | 27/09/2021 | 10.69 | 13 | 8.2 | 269.7 | 7 | 0.03 | 709 | <0.02 | <100 | 1.5 | 0.7 | 6.000 | <6 | <18 |
| | Nov | 27/09/2021 | | | | | | | | | | | | | | |
| | Dec | 10/12/2021 | 6.82 | <5 | 7.6 | 318.4 | 2 | 0.92 | 904 | 0.02 | <10 | <5 | <0.4 | 8.400 | <5 | 21.1 |
| 2022 | Jan | 26/01/2022 | 11.19 | 9 | 8.2 | 296.3 | 3 | 0.09 | 849 | 0.02 | <100 | 2 | <0.6 | 4.000 | <6 | 18 |
| | Feb | 21/02/2022 | 11.56 | 6 | 8.1 | 236.1 | 3 | <0.02 | 840 | <0.02 | <100 | 1.6 | <0.6 | 7.000 | <6 | 30 |
| | Mar | 01/04/2022 | 11.613 | 5 | 8.1 | 265.2 | 2 | 0.07 | 793 | <0.02 | <100 | 1.8 | <0.6 | 5.000 | <6 | <18 |
| | Apr | 28/04/2022 | 11.77 | 15 | 8.2 | 242.55 | 9 | 0.08 | 862 | <0.02 | <100 | 1.4 | <0.6 | <3 | <6 | <18 |
| | May | 20/05/2022 | 11.1 | 14 | 8.3 | 226.6 | <5 | 0.05 | 709 | <0.02 | <100 | 1.5 | 2.6 | 30.000 | 28.00 | |
| | Jun | 15/06/2022 | 10.97 | 5 | 8.4 | 212.8 | 3 | 0.18 | 527 | 0.02 | <100 | 1.8 | <0.6 | <3 | <6 | <18 |
| | Jul | 21/07/2022 | 8.91 | 15 | 9.3 | 192.8 | 3 | 0.1 | 504 | <0.02 | | | | | | |
| | Jul | 27/07/2022 | 12.93 | 14 | 9.7 | 123.8 | 5 | 0.08 | 508 | <0.02 | <3.5 | 2.6 | <0.02 | 2.4 | <0.3 | <5 |
| | Aug | 24/08/2022 | 12.65 | 25 | 10.1 | 258.45 | 10 | 0.06 | 560 | 0.03 | 4.6 | 5.3 | <0.02 | 3.5 | <0.3 | <5 |
| | Sep | | | | | | | | | | | | | | | |
| | Oct | 28/10/2022 | 10.63 | <5 | 8 | 202.55 | <5 | 0.03 | 728 | 0.02 | <3.5 | 2.7 | <0.02 | <0.3 | 4.9 | 30 |
| | Nov | 02/12/2022 | 10.6 | <5 | 8.1 | 167.35 | 2 | 0.07 | 678 | 0.02 | <3.5 | 2.5 | <0.02 | 5 | <0.3 | 20 |
| | Dec | 09/12/2022 | 12.12 | 6 | 7.8 | 176.15 | 6 | 0.26 | 739 | 0.04 | <3.5 | 2.2 | <0.02 | 5.1 | <0.3 | 19 |
| 2023 | Jan | 27/01/2023 | 10.14 | <5 | 7.9 | 130.87 | 1 | 0.02 | 734 | 0.02 | <3.5 | 2.4 | <0.02 | 4.8 | <0.3 | 28 |
| | Feb | 28/02/2023 | 10.97 | 5 | 8.1 | 162.7 | 2 | 0.05 | 824 | <0.02 | <3.5 | 1.2 | <0.02 | 3.2 | <0.3 | 14 |
| | Mar | 17/04/2023 | 9.8 | <5 | 8.1 | 200.25 | 2 | 0.08 | 753 | <0.02 | <3.5 | 1.2 | <0.02 | 4.4 | <0.3 | 11 |
| | Apr | 18/04/2023 | 9.7 | 7 | 8.2 | 196.2 | 5 | 0.16 | 748 | 0.03 | <3.5 | 1.2 | <0.02 | 4.1 | <0.3 | 7.9 |
| | May | 31/05/2023 | 10.04 | 6 | 8.3 | 224.2 | 3 | 0.08 | 820 | <0.02 | <3.5 | 1.5 | <0.02 | 4 | <0.3 | 9 |
| | Jun | 29/06/2023 | 7.81 | 22 | 8.2 | 189.35 | 4 | 0.15 | 705 | <0.02 | <3.5 | 1.6 | <0.02 | 3.5 | <0.3 | <5 |
| | Jul | 28/07/2023 | 8.95 | <10 | 7.9 | 214.5 | 10 | 0.05 | 686 | <0.02 | <3.5 | 1.5 | <0.02 | 3.4 | <0.3 | 14 |
| | Aug | 31/08/2023 | 9.19 | 20 | 8.2 | 161.6 | 4 | 0.03 | 720 | <0.02 | <10 | <5 | <0.4 | 3.2 | <5 | 7.5 |
| | Sep | | | | | | | | | | | | | | | |
| | Oct | | | | | | | | | | | | | | | |
| | Nov | | | | | | | | | | | | | | | |
| | Dec | | | | | | | | | | | | | | | |

| | | mg/l | mg/l | units | mg/l | mg/l | mg/l | µS/cm | mg/l | µg/l | µg/l | µg/l | µg/l | µg/l | µg/l |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Licence limit | | 25 | | 400 | 1.5 | 0.065 | | 0.035 | | 25 | 2.5 | | 7.2 | 100 |
| | | Weekly | Weekly | Weekly | Weekly | Weekly | Weekly | Weekly | Weekly | Weekly | Weekly | Weekly | Weekly | Weekly | Weekly |
| | | DO | SS | PH | Sulphate | BOD | Ammonia | Conductivity | O-Phos | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
| Flow started 26Nov2017 | 27/11/17 | 10.31 | <5 | 8 | 292 | 5 | 0.08 | 840 | <0.02 | <100 | 1.1 | <0.6 | 3 | <6 | <18 |
| | 13/12/17 | 10.29 | 6 | 8 | 338 | 3 | 0.03 | 812 | 0.02 | <100 | 1.2 | <0.6 | 8 | <6 | <18 |
| | 19/12/17 | 10.27 | 5 | 7.8 | 302 | 5 | 0.04 | 835 | 0.02 | <100 | 1.3 | <0.6 | 5 | <6 | 19 |
| | 05/01/2018 | 9.87 | 6 | 7.9 | 256 | 3 | 0.11 | 836 | 0.02 | <100 | 1 | <0.6 | 6 | <6 | 20 |
| | 12/01/2018 | 10.39 | <5 | 7.8 | 240 | 2 | 0.09 | 867 | 0.02 | <100 | 1.1 | <0.6 | <6 | 5 | 21 |
| | 19/01/2018 | 10.88 | <5 | 7.9 | 242 | 2 | 0.02 | 815 | 0.02 | <100 | 1.1 | <0.6 | 4 | <6 | <18 |
| | 26/01/2018 | 10.1 | <5 | 7.8 | 175 | 2 | 0.17 | 713 | 0.04 | <100 | 1.5 | <0.6 | 5 | <6 | 19 |
| | 02/02/2018 | 10.26 | <5 | 7.7 | 130 | 4 | 0.13 | 739 | 0.08 | <100 | <1 | <0.6 | 6 | <6 | 40 |
| | 06/02/2018 | 10.7 | <5 | 7.8 | 144 | 2 | 0.1 | 795 | 0.04 | <100 | <1 | <0.6 | 5 | <6 | 28 |
| | 14/02/2018 | 10.37 | <5 | 8 | 134 | 2 | 0.05 | 788 | 0.02 | <100 | <1 | <0.6 | 5 | <6 | 19 |
| | 21/02/2018 | 11.42 | <5 | 7.8 | 204 | 4 | 0.04 | 793 | <0.02 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | 27/02/2018 | 11.93 | <5 | 7.9 | 203 | 4 | 0.02 | 856 | <0.02 | <100 | <1 | <0.6 | 4 | <6 | <18 |
| | 09/03/2018 | 10.52 | <5 | 7.7 | 204 | 2 | 0.03 | 797 | <0.02 | <100 | <1 | <0.6 | 4 | <6 | <18 |
| | 22/03/2018 | 10.72 | <5 | 8 | 167 | 2 | 0.05 | 768 | <0.02 | <100 | <1 | <0.6 | 7 | <6 | <18 |
| | 09/04/2018 | 11.53 | <5 | 8 | 200 | 5 | 0.04 | 766 | <0.02 | <100 | <1 | <0.6 | 4 | <6 | <18 |
| | 13/04/2018 | 10.74 | 6 | 8 | 227 | 3 | 0.07 | 811 | 0.02 | <100 | <1 | <0.6 | 6 | <6 | <18 |
| | 18/04/2018 | 9.88 | 10 | 8.3 | 222 | 4 | 0.1 | 810 | <0.02 | <100 | <1 | <0.6 | 5 | <6 | <18 |
| | 26/05/2018 | 10.35 | 7 | 8.3 | 199 | 4 | 0.02 | 840 | <0.02 | <100 | <1 | <0.6 | <6 | 5 | <18 |
| | 03/05/2018 | 10.58 | 9 | 8.2 | 200 | 4 | 0.02 | 900 | <0.02 | <100 | <1 | <0.6 | 4 | <6 | <18 |
| Flow at SW1 stopped on 17May2018 | 11/05/2018 | 10.15 | 12 | 8.2 | 182 | 4 | 0.03 | 866 | <0.02 | <100 | <1 | <0.6 | 4 | <6 | <18 |
| | 10/01/2019 | 9.94 | <7 | 7.8 | 229 | 5 | 0.23 | 859 | 0.04 | <100 | 1.7 | <0.6 | 10 | 7 | 42 |
| | 08/02/2019 | 12.37 | 90 | 8.4 | 134 | 9 | 0.02 | 835 | <0.02 | <100 | 1.2 | <0.6 | 5 | <6 | <18 |
| | 21/02/2019 | 10.5 | 13 | 8.6 | 170 | 6 | 0.04 | 817 | <0.02 | <100 | <1 | <0.6 | 6 | <6 | <18 |
| | 07/03/2019 | 10.15 | <5 | 8.1 | 165 | 2 | 0.04 | 761 | <0.02 | <100 | <1 | <0.6 | 5 | <6 | <18 |
| | 14/03/2019 | 10.56 | <5 | 8.1 | 169 | 1 | 0.02 | 713 | <0.02 | <100 | <1 | <0.6 | 5 | <6 | <18 |
| | 21/03/2019 | 10.59 | <5 | 8 | 195 | 1 | 0.02 | 735 | <0.02 | <100 | <1 | <0.6 | 5 | <6 | 18 |
| | 28/03/2019 | 11.21 | <5 | 8 | 154 | 2 | 0.04 | 776 | <0.02 | <100 | <1 | <0.6 | 4 | <6 | 18 |
| | 11/04/2019 | 10.39 | <5 | 8.1 | 220 | 2 | 0.03 | 847 | 0.14 | <100 | <1 | <0.6 | 5 | <6 | <18 |
| | 19/04/2019 | 10.29 | <5 | 8.3 | 200 | <1 | 0.03 | 806 | <0.02 | <100 | <1 | <0.6 | 5 | <6 | <18 |
| | 26/04/2019 | 9.88 | 9 | 8.2 | 172 | <1 | 0.09 | 790 | <0.02 | <100 | <1 | <0.6 | 8 | <6 | <18 |
| | 17/12/2019 | 9.46 | <5 | 8.1 | 248 | 2 | 0.6 | 705 | <0.02 | <100 | 1.4 | <0.6 | <3 | <6 | <18 |
| | 23/12/2019 | 11.32 | <10 | 7.8 | 231 | 3 | 0.23 | 831 | 0.04 | <100 | 1.2 | <0.6 | 4 | <6 | 24 |
| | 02/01/2020 | 11.4 | <5 | 8.1 | 166 | 2 | 0.11 | 789 | 0.03 | <100 | 1.4 | <0.6 | 4 | <6 | 23 |
| | 10/01/2020 | 10.62 | 7 | 8 | 273 | 2 | 0.06 | 901 | 0.02 | <100 | 1.2 | <0.6 | 5 | <6 | 25 |
| | 15/01/2020 | 9.92 | <5 | 8.3 | 222 | 2 | 0.16 | 863 | 0.02 | <100 | 1.1 | <0.6 | 4 | <6 | 26 |
| | 22/01/2020 | 10.95 | <5 | 7.9 | 292 | 2 | 0.08 | 883 | <0.02 | <100 | 1.1 | <0.6 | 5 | <6 | 31 |
| | 27/01/2020 | 10.36 | <5 | 7.9 | 288 | 1 | 0.12 | 925 | 0.05 | <100 | 0.72 | <0.6 | 6 | <6 | 66 |
| | 04/02/2020 | 10.94 | <5 | 8.2 | 253 | <1 | 0.03 | 930 | 0.02 | <100 | 1 | <0.6 | 4 | <6 | 26 |
| | 14/02/2020 | 10.77 | <5 | 7.7 | 260 | 2 | 0.06 | 768 | 0.07 | <100 | 1.3 | <0.6 | 6 | <6 | 30 |
| | 21/02/2020 | 11.8 | 7 | 8 | 176 | 3.8 | 0.57 | 757 | 0.23 | <100 | 1.4 | <0.6 | 7 | <6 | 45 |
| | 27/02/2020 | 10.81 | <5 | 7.7 | 127 | 1 | 0.06 | 658 | 0.11 | <100 | 1.2 | <0.6 | 4 | <6 | 29 |
| | 06/03/2020 | 10.83 | <5 | 7.7 | 122 | 1.5 | 0.04 | 697 | 0.15 | <100 | 1.2 | <0.6 | 4 | <6 | 33 |
| | 13/32020 | 9.87 | <5 | 7.7 | 86 | 3 | 0.34 | 678 | 0.03 | <100 | 0.67 | <0.6 | 3 | <6 | <18 |
| | 20/03/2020 | 11.56 | <5 | 7.6 | 94 | 1 | 0.05 | 673 | <0.02 | <100 | 0.71 | <0.6 | <3 | <6 | <18 |
| | 27/03/2020 | 9.84 | <10 | 7.7 | 146 | 2 | 0.04 | 774 | <0.02 | <100 | 0.76 | <0.6 | 4 | <6 | 21 |
| | 30/03/2020 | 12.68 | 10 | 8.3 | 168 | 5 | 0.02 | 813 | <0.02 | <100 | 0.68 | <0.6 | 5 | <6 | <18 |
| | 09/04/2020 | 9.93 | <5 | 8.2 | 145 | 2 | <0.02 | 755 | <0.02 | <100 | 0.52 | <0.6 | <3 | <6 | <18 |
| | 14/04/2020 | 10.23 | <5 | 8.2 | 179 | 2 | <0.02 | 788 | <0.02 | <100 | 0.74 | <0.6 | 5 | <6 | 19 |
| | 23/04/2020 | 9.51 | 5 | 8.1 | 136 | 1 | 0.04 | 788 | <0.02 | <100 | 0.77 | <0.6 | 3 | <6 | <18 |
| | 05/02/2021 | 10.6 | <5 | 8.1 | 194.2 | 1 | 0.03 | 709 | <0.02 | <100 | 2.1 | <0.6 | 4 | <6 | <18 |

**Sump 3**

| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **DO** | **pH** | **Sulphate** | **Cond** | **Aluminium** | **Arsenic** | **Cadmium** | **Nickel** | **Lead** | **Zinc** |
| 2018 | **Q1** | **06/02/2018** | 7.47 | 7.3 | 85.8 | 589 | <100 | <1 | <0.6 | 4.00 | <6 | <18 |
| | **Q2** | **29/05/2018** | 6.55 | 7.4 | 88.6 | 778 | <100 | 2.1 | <0.6 | 4.00 | <6 | <18 |
| | **Q3** | **14/08/2018** | 2.55 | 7.8 | 19.7 | 796 | <100 | 2.6 | <0.6 | 6.00 | <6 | <18 |
| | **Q4** | **26/11/2018** | 8.7 | 7.8 | 79.72 | 609 | <100 | 1.2 | <0.6 | 5.00 | <6 | <18 |
| 2019 | **Q1** | **21/03/2019** | 9.76 | 7.2 | 551 | 63.41 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q2** | **14/06/2019** | 6.9 | 7.7 | 143 | 858 | <100 | 3.3 | <0.6 | 5.00 | <6 | <18 |
| | **Q3** | **24/09/2019** | 8.17 | 8 | 71.55 | 710 | <100 | 2.5 | <0.6 | 4.00 | <6 | <18 |
| | **Q4** | **17/12/2019** | 9.79 | 8 | 645.5 | 561 | <100 | 0.57 | <0.6 | <3 | <6 | <18 |
| 2020 | **Q1** | **27/03/2020** | 7.37 | 6.9 | 233.9 | 895 | <100 | 0.83 | <0.6 | 8.00 | <6 | <18 |
| | **Q2** | **04/06/2020** | 6.32 | 7.8 | 96.4 | 760 | <100 | 2.2 | <0.6 | <3 | <6 | <18 |
| | **Q3** | **17/09/2020** | 7.77 | 7.9 | 47.64 | 745 | <100 | 1.5 | <0.6 | <3 | <6 | <18 |
| | **Q4** | **10/12/2020** | 8.65 | 7.9 | 46.6 | 607 | <100 | 0.97 | <0.6 | <3 | <6 | <18 |
| 2021 | **Q1** | **15/01/2021** | 6.52 | 7.1 | 126.2 | 702 | <100 | 0.32 | <0.6 | <3 | <6 | <18 |
| | **Q2** | **18/06/2021** | 3.65 | 7.5 | 74.3 | 799 | <100 | 1.3 | 0.8 | 7.00 | <6 | <18 |
| | **Q3** | **26/08/2021** | 5.29 | 7.7 | 66 | 669 | <100 | 1.9 | <0.6 | 5.00 | <6 | <18 |
| | **Q4** | 10/12/2021 | 9.16 | 7.3 | 60.2 | 655 | <10 | <5 | <0.4 | <2 | <5 | 46.2 |
| 2022 | **Q1** | **01/04/2022** | 9.88 | 7.9 | 88.4 | 601 | <100 | 0.59 | <0.6 | <3 | <6 | <18 |
| | **Q2** | **20/05/2022** | 10.4 | 8 | 38.43 | 610 | <100 | 1.4 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 29/09/2022 | 5.94 | 7.7 | 47.17 | 606 | 9.5 | 1.9 | <0.02 | 3.00 | 0.4 | 9.1 |
| | **Q4** | **02/12/2022** | 9.37 | 7.2 | 90.46 | 760 | <3.5 | 0.41 | 0.02 | 2.10 | <0.3 | 7.7 |
| 2023 | **Q1** | **19/04/2023** | 8.6 | 7.3 | 137.92 | 810 | 9.4 | 0.87 | 0.02 | 5.50 | 0.4 | 28 |
| | **Q2** | 29/06/2023 | 5.77 | 7.8 | 57.24 | 741 | 9 | 2.1 | 0.03 | 3.30 | <0.3 | 12 |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | | | | | | | | | | | |

**Sump 4**

| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **DO** | **pH** | **Sulphate** | **Cond** | **Aluminium** | **Arsenic** | **Cadmium** | **Nickel** | **Lead** | **Zinc** |
| 2018 | **Q1** | **06/02/2018** | 9.21 | 7.2 | 161.3 | 601 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q2** | **29/05/2018** | 8.44 | 7.3 | 93.9 | 537 | <100 | 1.1 | <0.6 | <3 | <6 | <18 |
| | **Q3** | **14/08/2018** | 9.36 | 7.5 | 87.8 | 610 | <100 | 1.9 | <0.6 | 5.00 | <6 | <18 |
| | **Q4** | **26/11/2018** | 8.4 | 7.6 | 158.8 | 666 | <100 | 1.6 | <0.6 | <3 | <6 | <18 |
| 2019 | **Q1** | **21/03/2019** | 9.13 | 6.8 | 161.15 | 686 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q2** | **14/06/2019** | 9.22 | 7.2 | 142.75 | 713 | <100 | 2.4 | <0.6 | 4.00 | <6 | <18 |
| | **Q3** | **24/09/2019** | 7.34 | 7.7 | 79.8 | 721 | <100 | 2.3 | <0.6 | <3 | <6 | <18 |
| | **Q4** | **17/12/2019** | 8.86 | 7.3 | 188.1 | 764 | <100 | 1.5 | <0.6 | <3 | <6 | <18 |
| 2020 | **Q1** | **27/03/2020** | 9.48 | 7.3 | 148.4 | 638 | <100 | 1 | <0.6 | <3 | <6 | <18 |
| | **Q2** | **04/06/2020** | 8.46 | 7.6 | 134.3 | 572 | <100 | 1.5 | <0.6 | <3 | <6 | <18 |
| | **Q3** | **17/09/2020** | 5.63 | 7.5 | 91.6 | 673 | <100 | 1.4 | <0.6 | 3.00 | <6 | <18 |
| | **Q4** | **10/12/2020** | 8.64 | 7.3 | 186.3 | 728 | <100 | 1.7 | <0.6 | <3 | <6 | <18 |
| 2021 | **Q1** | **15/01/2021** | 10.88 | 7.5 | 184.2 | 725 | <100 | 1.4 | <0.6 | <3 | <6 | <18 |
| | **Q2** | **18/06/2021** | 6 | 7.2 | 86.5 | 592 | <100 | 1.6 | <0.6 | <3 | <6 | <18 |
| | **Q3** | **26/08/2021** | <1 | 7.2 | 68.3 | 621 | <100 | 3.8 | <0.6 | 3.00 | <6 | <18 |
| | **Q4** | 10/12/2021 | 9.24 | 7.6 | 85.3 | 622 | <10 | <5 | <0.4 | <2 | <5 | 8 |
| 2022 | **Q1** | **01/04/2022** | 9.19 | 7.1 | 161 | 648 | <100 | 1.5 | <0.6 | <3 | <6 | <18 |
| | **Q2** | **20/05/2022** | 10.1 | 7.3 | 112.2 | 671 | <100 | 2.7 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 29/09/2022 | 8.51 | 7.9 | 57.5 | 600 | 4.4 | 3 | <0.02 | 1.60 | <0.3 | <5 |
| | **Q4** | **02/12/2022** | 8.27 | 7.3 | 119.5 | 608 | <3.5 | 1.5 | <0.02 | 1.20 | <0.3 | 11 |
| 2023 | **Q1** | **19/04/2023** | 9.7 | 7.5 | 105.55 | 565 | <3.5 | 1.2 | 0.03 | <1 | <0.3 | 9.8 |
| | **Q2** | **29/06/2023** | 5.54 | 7.4 | 64.74 | 530 | 4.9 | 2.2 | <0.02 | 1.10 | <0.3 | <5 |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | | | | | | | | | | | |

**Sump 5**

| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DO | pH | Sulphate | Cond | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
| 2018 | Q1 | 06/02/2018 | 5.16 | 7.5 | 5242 | 5350 | <100 | 6.5 | <0.06 | 5.00 | <6 | <18 |
| | Q2 | 29/05/2018 | 8.05 | 7.2 | 3464 | 4460 | <100 | 6 | <0.06 | 9.00 | <6 | <18 |
| | Q3 | 14/08/2018 | | no sample | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2019 | Q1 | 21/03/2019 | 7.52 | 7.6 | 4034 | 5390 | <100 | 8.9 | <0.6 | 5.00 | <6 | <18 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | 17/12/2019 | 9.17 | 7.7 | 4965 | 5090 | <100 | 3.7 | <0.6 | <3 | <6 | 40 |
| 2020 | Q1 | 27/03/2020 | 8.15 | 7.4 | 3597 | 5660 | <100 | 7.6 | <0.6 | 6.00 | <6 | <18 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2021 | Q1 | 15/01/2021 | 9.93 | 7.6 | 2390 | 5290 | <100 | 12 | <0.6 | 4.00 | <6 | <18 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2022 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | 02/12/2022 | 8.15 | 7.5 | 3853 | 5270 | 6.4 | 4.3 | 0.02 | 1.50 | <0.3 | 8.4 |
| 2023 | Q1 | 19/04/2023 | 9.3 | 7.5 | 4043 | 5350 | 4.9 | 11 | 0.02 | 1.50 | <0.3 | 13 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |

**Borehole 3**

| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **DO** | **pH** | **Sulphate** | **Cond** | **Aluminium** | **Arsenic** | **Cadmium** | **Nickel** | **Lead** | **Zinc** |
| 2018 | **Q1** | 06/02/2018 | 7.3 | 7 | 133.5 | 1053 | <100 | <1 | <0.6 | 3 | <6 | <18 |
| | **Q2** | 29/05/2018 | 9.04 | 7.1 | 44.1 | 906 | <100 | <1 | <0.6 | 4 | <6 | <18 |
| | **Q3** | 14/08/2018 | 8.39 | 7 | 112.8 | 1029 | <100 | <1 | <0.6 | 12 | <6 | <18 |
| | **Q4** | 26/11/2018 | 7.68 | 7.2 | 81.4 | 975 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| 2019 | **Q1** | 15/03/2019 | 9.21 | 7.3 | 48.33 | 735 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 14/06/2019 | 8.73 | 7.1 | 104.5 | 984 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | 17/12/2019 | 9.02 | 7.2 | 44.1 | 747 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| 2020 | **Q1** | 27/03/2020 | 8.41 | 7 | 121.5 | 1051 | <100 | <0.2 | <0.6 | 3 | <6 | <18 |
| | **Q2** | 04/06/2020 | 6.9 | 7.1 | 99.6 | 778 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | 10/12/2020 | 8.57 | 7.1 | 45.28 | 835 | <100 | 0.21 | <0.6 | <3 | <6 | <18 |
| 2021 | **Q1** | 15/01/2021 | 9.84 | 7 | 43.52 | 843 | <100 | 0.21 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 18/06/2021 | 7.42 | 6.9 | 67.9 | 982 | <100 | 0.23 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 25/08/2021 | 5.78 | 6.9 | 151.8 | 1012 | <100 | 0.37 | <0.6 | <3 | <6 | <18 |
| | **Q4** | | | | | | | | | | | |
| 2022 | **Q1** | 01/04/2022 | 8.93 | 7.1 | 72.24 | 976 | <100 | <0.2 | <0.6 | 4 | <6 | <18 |
| | **Q2** | 20/05/2022 | 9.5 | 7.1 | 48.25 | 948 | <100 | 0.24 | <0.6 | <3 | <6 | <18 |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | 02/12/2022 | 7.79 | 7.1 | 66.44 | 991 | <3.5 | 0.25 | <0.02 | <1 | <0.3 | 11 |
| 2023 | **Q1** | 19/04/2023 | 8.9 | 7 | 51.32 | 787 | <3.5 | 0.24 | 0.03 | 1.3 | 2.2 | 16 |
| | **Q2** | 29/06/2023 | 7.66 | 7.2 | 63.57 | 862 | <3.5 | 0.23 | <0.02 | <1 | <0.3 | <5 |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | | | | | | | | | | | |

**Borehole 4**

| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **DO** | **pH** | **Sulphate** | **Cond** | **Aluminium** | **Arsenic** | **Cadmium** | **Nickel** | **Lead** | **Zinc** |
| 2018 | **Q1** | 06/02/2018 | 10.09 | 7.2 | 48.8 | 703 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 29/05/2018 | 8.17 | 8.17 | 116 | 911 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 14/08/2018 | 9.43 | 7.1 | 85 | 827 | <100 | <1 | <0.6 | 4 | <6 | <18 |
| | **Q4** | 26/11/2018 | 7.32 | 7 | 109.25 | 908 | <100 | <1 | <0.6 | 4 | <6 | <18 |
| 2019 | **Q1** | 15/03/2019 | 9.69 | 7.6 | 77.08 | 751 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 14/06/2019 | 8.65 | 7.1 | 107.25 | 884 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 24/09/2019 | 9.07 | 7.5 | 159.65 | 883 | <100 | <0.2 | <0.6 | 4 | <6 | <18 |
| | **Q4** | | | | | | | | | | | |
| 2020 | **Q1** | 27/03/2020 | 9.64 | 7.7 | 692 | 692 | <100 | <0.2 | <0.6 | 3 | <6 | <18 |
| | **Q2** | 04/06/2020 | 8.41 | 7.9 | 89.7 | 718 | <100 | <0.2 | 0.8 | 9 | 11 | <18 |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | | | | | | | | | | | |
| 2023 | **Q1** | 19/04/2023 | | | | | | | | | | |
| | **Q2** | | | | | | | | | | | |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | | | | | | | | | | | |

**Borehole 5**

| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **DO** | **pH** | **Sulphate** | **Cond** | **Aluminium** | **Arsenic** | **Cadmium** | **Nickel** | **Lead** | **Zinc** |
| 2018 | **Q1** | 06/02/2018 | 9.83 | 7.2 | 51.9 | 692 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 29/05/2018 | 7.81 | 7.81 | 71.3 | 885 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 14/08/2018 | 8.31 | 7.1 | 96.7 | 891 | <100 | <1 | <0.6 | 5 | <6 | <18 |
| | **Q4** | 26/11/2018 | 8.77 | 7.2 | 94.48 | 873 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| 2019 | **Q1** | 15/03/2019 | 9.75 | 7.5 | 38.34 | 724 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 14/06/2019 | 9.06 | 7.1 | 119 | 875 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 24/09/2019 | 8.27 | 7.4 | 108.2 | 814 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q4** | 17/12/2019 | 9.58 | 7.6 | 81.9 | 738 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| 2020 | **Q1** | 27/03/2020 | 9.69 | 7.3 | 61.5 | 739 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 04/06/2020 | 8.3 | 7.3 | 140.9 | 774 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 17/09/2020 | 9.08 | 7.3 | 126 | 945 | <100 | <0.2 | <0.6 | <3 | <6 | 28 |
| | **Q4** | 10/12/2020 | 9.46 | 7.5 | 80.12 | 818 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| 2021 | **Q1** | 15/01/2021 | 11.45 | 7.4 | 74.9 | 689 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 18/06/2021 | 2.82 | 6.9 | 83.3 | 920 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 25/08/2021 | 8.49 | 7.4 | 100.1 | 856 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q4** | 10/12/2021 | 7.71 | 7.2 | 117 | 942 | <10 | <5 | <0.4 | <2 | <5 | 11.2 |
| 2022 | **Q1** | 01/04/2022 | 11.81 | 7.4 | 67.63 | 719 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 21/05/2022 | 10 | 7.4 | 94.25 | 874 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 29/09/2022 | 7.71 | 7.4 | 642.5 | 866 | <3.5 | 0.35 | <0.02 | <1 | 0.5 | <5 |
| | **Q4** | 02/12/2022 | 11.29 | 7.3 | 68.46 | 728 | <3.5 | <0.2 | <0.02 | <1 | <0.3 | 6.7 |
| 2023 | **Q1** | 19/04/2023 | 9.9 | 7.3 | 91.6 | 742 | <3.5 | <0.2 | <0.02 | <1 | 0.3 | 11 |
| | **Q2** | 29/06/2023 | 7.66 | 7.2 | 101.58 | 882 | <3.5 | <0.2 | <0.02 | <1 | 0.3 | <5 |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | | | | | | | | | | | |

**Borehole 6**

| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **DO** | **pH** | **Sulphate** | **Cond** | **Aluminium** | **Arsenic** | **Cadmium** | **Nickel** | **Lead** | **Zinc** |
| 2018 | **Q1** | 06/02/2018 | 7.7 | 7.1 | 134.4 | 927 | <100 | <1 | <0.6 | 4 | <6 | <18 |
| | **Q2** | 29/05/2018 | 6.02 | 7.1 | 124.4 | 962 | <100 | <1 | <0.6 | 3 | <6 | <18 |
| | **Q3** | 14/08/2018 | 8.57 | 7.1 | 144 | 959 | <100 | <1 | <0.6 | 4 | <6 | <18 |
| | **Q4** | 26/11/2018 | 9.1 | 7.2 | 102.5 | 920 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| 2019 | **Q1** | 15/03/2019 | 9.6 | 7.5 | 63.74 | 758 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 14/06/2019 | 3.99 | 7.1 | 159.9 | 1022 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 24/09/2019 | 1.81 | 7.3 | 168.7 | 945 | <100 | 0.54 | <0.6 | <3 | <6 | <18 |
| | **Q4** | 17/12/2019 | 9.11 | 7.6 | 141.6 | 884 | <100 | <0.2 | <0.6 | <3 | <6 | 47 |
| 2020 | **Q1** | 27/03/2020 | 8.4 | 7 | 190.3 | 982 | <100 | <0.2 | <0.6 | <3 | <6 | 22 |
| | **Q2** | 04/06/2020 | 8.26 | 7.3 | 169.6 | 824 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 17/09/2020 | 9.23 | 7.3 | 112.8 | 939 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q4** | 10/12/2020 | 9.1 | 7.4 | 106.28 | 915 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| 2021 | **Q1** | 15/01/2021 | 9.38 | 7.1 | 161.1 | 939 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 18/06/2021 | 8.42 | 7 | 119.5 | 1021 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 25/08/2021 | 7.31 | 7 | 120.3 | 947 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q4** | 10/12/2021 | 8 | 7.2 | 111 | 896 | <10 | <5 | <0.4 | <2 | <5 | <20 |
| 2022 | **Q1** | 01/04/2022 | 9.78 | 7.2 | 119.2 | 945 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 20/05/2022 | 10 | 7.3 | 144.7 | 998 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 29/09/2022 | 7.94 | 7.4 | 113 | 851 | <3.5 | <0.2 | <0.02 | <1 | <0.3 | <5 |
| | **Q4** | 02/12/2022 | 10.9 | 7.3 | 130.7 | 905 | <3.5 | <0.2 | <0.02 | <1 | <0.3 | 9.4 |
| 2023 | **Q1** | 19/04/2023 | 9.5 | 7.3 | 61.69 | 754 | <3.5 | <0.2 | <0.02 | <1 | <0.3 | 7.8 |
| | **Q2** | 29/06/2023 | 7.59 | 7.2 | 134.42 | 936 | <3.5 | <0.2 | <0.02 | <1 | <0.3 | 7.8 |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | | | | | | | | | | | |

**Borehole 7**

| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **DO** | **pH** | **Sulphate** | **Cond** | **Aluminium** | **Arsenic** | **Cadmium** | **Nickel** | **Lead** | **Zinc** |
| 2018 | **Q1** | 06/02/2018 | 7.75 | 7.1 | 32 | 659 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 29/05/2018 | 7.67 | 7.1 | 40.2 | 784 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 14/08/2018 | 7.84 | 7.1 | 19.9 | 783 | <100 | <1 | <0.6 | 3 | <6 | <18 |
| | **Q4** | 26/11/2018 | 6.56 | 7 | 25.09 | 786 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| 2019 | **Q1** | 15/03/2019 | 8.92 | 7.5 | 35.84 | 721 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 14/06/2019 | 8.59 | 7.1 | 25.94 | 817 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 24/09/2019 | 8.21 | 7.2 | 20.46 | 775 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q4** | 17/12/2019 | 8.93 | 7.4 | 28.3 | 695 | <100 | 0.41 | <0.6 | <3 | <6 | <18 |
| 2020 | **Q1** | 27/03/2020 | 8.63 | 7.1 | 185 | 920 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 04/06/2020 | 8.13 | 7.3 | 55.6 | 680 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 17/09/2020 | 9.03 | 7.1 | 37.96 | 769 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q4** | 10/12/2020 | 8.74 | 7.2 | 52.38 | 753 | <100 | 0.22 | <0.6 | <3 | <6 | <18 |
| 2021 | **Q1** | 15/01/2021 | 6.64 | 7.2 | 20.14 | 701 | <100 | 0.22 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 18/06/2021 | 6.96 | 7 | 51.8 | 806 | <100 | <0.2 | 0.8 | <3 | <6 | <18 |
| | **Q3** | 25/08/2021 | 8.3 | 7.1 | 33.4 | 772 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q4** | 10/12/2021 | 8.89 | 7.7 | 25.84 | 700 | <10 | <5 | <0.4 | <2 | <5 | 11.2 |
| 2022 | **Q1** | 01/04/2022 | 10.44 | 7.2 | 41.62 | 712 | 160 | 0.27 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 21/05/2022 | 10.3 | 7.3 | 28.34 | 773 | <100 | 0.23 | <0.6 | <3 | <6 | |
| | **Q3** | 29/09/2022 | 8.03 | 7.3 | 21.92 | 783 | <3.5 | 0.28 | <0.02 | <1 | 0.3 | 5.3 |
| | **Q4** | 02/12/2022 | 7.98 | 7.1 | <5 | 614 | <3.5 | 0.54 | <0.02 | 3.5 | <0.3 | 6.8 |
| 2023 | **Q1** | 19/04/2023 | 9 | 7.3 | 77.12 | 712 | <3.5 | <0.2 | <0.02 | <1 | <0.3 | 6.1 |
| | **Q2** | 29/06/2023 | 8.09 | 7.3 | 46.96 | 710 | <3.5 | 0.27 | <0.02 | <1 | <0.3 | <5 |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | | | | | | | | | | | |

**Borehole 8**

| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **DO** | **pH** | **Sulphate** | **Cond** | **Aluminium** | **Arsenic** | **Cadmium** | **Nickel** | **Lead** | **Zinc** |
| 2018 | **Q1** | 06/02/2018 | 8.01 | 7.1 | 140.2 | 952 | <100 | <1 | <0.6 | 3 | <6 | <18 |
| | **Q2** | 30/05/2018 | 9.42 | 9.42 | 158.4 | 988 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 14/08/2018 | 10.04 | 7.1 | 154.25 | 989 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q4** | 26/11/2018 | 7.07 | 7 | 158.8 | 994 | <100 | <1 | <0.6 | 3 | <6 | <18 |
| 2019 | **Q1** | 15/03/2019 | 9.07 | 7.4 | 121.1 | 955 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 14/06/2019 | 8.9 | 7.3 | 162.85 | 968 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 24/09/2019 | 8.94 | 7.4 | 151.7 | 938 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q4** | 17/12/2019 | 10.12 | 7.6 | 132.2 | 905 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| 2020 | **Q1** | 27/03/2020 | 9.04 | 7.3 | 265.7 | 1089 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 04/06/2020 | 8.14 | 7.3 | 153.9 | 842 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | | | | | | | | | | | |
| 2021 | **Q1** | 18/01/2021 | 10.63 | 7.2 | 254.2 | 1081 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 18/06/2021 | 8.76 | 7.2 | 270.5 | 1227 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q3** | 25/08/2021 | 8.53 | 7.2 | 246.4 | 1115 | <100 | <0.2 | <0.6 | <3 | <6 | 36 |
| | **Q4** | 10/12/2021 | 9.59 | 7.3 | 240.6 | 1030 | <10 | <5 | <0.4 | <2 | <5 | 12.9 |
| 2022 | **Q1** | 01/04/2022 | 8.45 | 7.1 | 243 | 1178 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 20/05/2022 | 10.3 | 7.3 | 279.8 | 1155 | <100 | <0.2 | <0.6 | <3 | <6 | |
| | **Q3** | 29/09/2022 | 7.33 | 7.2 | 248.75 | 1139 | <3.5 | <0.2 | <0.02 | <1 | <0.3 | 9.6 |
| | **Q4** | 02/12/2022 | 8.92 | 7.1 | 280.8 | 1180 | <3.5 | <0.2 | <0.02 | <1 | <0.3 | 11 |
| 2023 | **Q1** | 19/04/2023 | 8.7 | 7.2 | 302.35 | 1183 | <3.5 | <0.2 | 0.03 | 1.50 | <0.3 | 50 |
| | **Q2** | 29/06/2023 | 8.65 | 7.7 | 433.7 | 1133 | <3.5 | <0.2 | <0.02 | 31.00 | <0.3 | 50 |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | | | | | | | | | | | |

**Borehole 9**

| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **DO** | **pH** | **Sulphate** | **Cond** | **Aluminium** | **Arsenic** | **Cadmium** | **Nickel** | **Lead** | **Zinc** |
| | | | | | | | | | | | | |
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| 2020 | **Q1** | 27/03/2020 | 9.93 | 7.6 | 114.4 | 524 | <100 | 0.59 | 0.7 | 17 | <6 | 3650 |
| | **Q2** | | | | | | | | | | | |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | 10/12/2020 | 9.76 | 7.7 | 47.35 | 468 | <100 | 0.47 | <0.6 | 16 | <6 | 3630 |
| 2021 | **Q1** | 15/01/2021 | 11.43 | 7.5 | 148.3 | 503 | <100 | 0.47 | 0.8 | 33 | <6 | 8400 |
| | **Q2** | 18/06/2021 | 8.19 | 7.3 | 119.2 | 567 | <100 | 0.45 | 1 | 23 | <6 | 6410 |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | | | | | | | | | | | |
| 2022 | **Q1** | 01/04/2022 | 11.07 | 7.7 | 71.3 | 434 | <100 | 0.49 | <0.6 | 11 | <6 | 3420 |
| | **Q2** | 20/05/2022 | 10.2 | 7.4 | 227.05 | 737 | <100 | 0.48 | <0.6 | 16 | <6 | 3350 |
| | | | | | | | | | | | | |
| | | 02/12/2022 | 10.97 | 7.6 | 57.8 | 375 | <3.5 | 0.48 | 0.82 | 13.00 | 1.7 | 3700 |
| 2023 | **Q1** | 19/04/2023 | 10.1 | 7.7 | 52.5 | 347 | <3.5 | 0.48 | 0.88 | 1.5 | 2 | 4200 |
| | **Q2** | 29/06/2023 | 8.42 | 7.6 | 198.8 | 503 | <3.5 | 0.61 | 0.21 | 8.3 | 6 | 1600 |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | | | | | | | | | | | |

## Borehole 10

| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **DO** | **pH** | **Sulphate** | **Cond** | **Aluminium** | **Arsenic** | **Cadmium** | **Nickel** | **Lead** | **Zinc** |
| 2018 | **Q1** | 06/02/2018 | 5.36 | 7.5 | 231.5 | 884 | <100 | <1 | <0.6 | 11 | <6 | 130 |
| | **Q2** | 29/05/2018 | 7.71 | 7.4 | 195.4 | 886 | <100 | <1 | <0.6 | 9 | <6 | 173 |
| | **Q3** | 14/08/2018 | 6.87 | 7.4 | 181.4 | 907 | <100 | <1 | <0.6 | 13 | <6 | <18 |
| | **Q4** | 26/11/2018 | 6.64 | 7 | 137.2 | 878 | <100 | <1 | <0.6 | 10 | <6 | 318 |
| 2019 | **Q1** | 15/03/2019 | 9.25 | 7.8 | 136.15 | 849 | <100 | <1 | <0.6 | 8 | <6 | 561 |
| | **Q2** | 14/06/2019 | 7.39 | 7.1 | 96.7 | 909 | <100 | <1 | <0.6 | 6 | <6 | 153 |
| | **Q3** | 24/09/2019 | 7.48 | 7.3 | 101.35 | 885 | <100 | 0.66 | <0.6 | 6 | <6 | 185 |
| | **Q4** | 17/12/2019 | 9.35 | 7.7 | 172.7 | 747 | <100 | 0.4 | <0.6 | 8 | <6 | 1260 |
| 2020 | **Q1** | 27/03/2020 | 7.73 | 7.1 | 155.7 | 913 | <100 | 0.27 | <0.6 | 6 | <6 | 414 |
| | **Q2** | 04/06/2020 | 7.09 | 7.2 | 92.1 | 796 | <100 | 0.2 | <0.6 | <3 | <6 | 167 |
| | **Q3** | 17/09/2020 | 5.94 | 7.1 | 118.7 | 890 | <100 | 0.41 | <0.6 | 9 | <6 | 228 |
| | **Q4** | 10/12/2020 | 6.52 | 7.4 | 110.82 | 827 | <100 | 0.49 | <0.6 | 7 | <6 | 112 |
| 2021 | **Q1** | 15/01/2021 | 9.76 | 7.5 | 210.4 | 784 | <100 | 0.42 | <0.6 | 7 | <6 | 131 |
| | **Q2** | 18/06/2021 | 5.19 | 6.9 | 127.5 | 981 | <100 | 0.37 | <0.6 | 10 | <6 | 135 |
| | **Q3** | 25/08/2021 | 6.85 | 7.2 | 129.2 | 899 | <100 | 0.51 | <0.6 | 12 | <6 | 103 |
| | **Q4** | 10/12/2021 | 7.44 | 7.3 | 164.8 | 891 | <10 | <5 | <0.4 | 15.2 | <5 | 17.6 |
| 2022 | **Q1** | 01/04/2022 | 10.96 | 7.5 | 166.6 | 946 | <100 | 0.33 | <0.6 | 8 | <6 | 65 |
| | **Q2** | 21/05/2022 | 10 | 7.4 | 243.4 | 963 | <100 | 0.48 | <0.6 | 18 | <6 | 123 |
| | **Q3** | 29/09/2022 | 6.29 | 7.3 | 235.65 | 866 | <3.5 | 0.66 | 0.08 | 0.02 | <0.3 | 24 |
| | **Q4** | 02/12/2022 | 10.43 | 7.5 | 209.55 | 834 | <3.5 | 0.57 | <0.02 | 7.2 | <0.3 | 17 |
| 2023 | **Q1** | 19/04/2023 | 8.6 | 7.3 | 204.5 | 902 | <3.5 | 0.4 | <0.02 | 1.6 | <0.3 | 26 |
| | **Q2** | 29/06/2023 | 7.62 | 7.5 | 158.3 | 875 | <3.5 | 0.48 | 0.03 | 1.2 | <0.3 | 26 |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | | | | | | | | | | | |

**Borehole 11**

| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **DO** | **pH** | **Sulphate** | **Cond** | **Aluminium** | **Arsenic** | **Cadmium** | **Nickel** | **Lead** | **Zinc** |
| 2018 | **Q1** | 06/02/2018 | 7.5 | 7.2 | 181.8 | 924 | <100 | <1 | <0.6 | <3 | <6 | 21 |
| | **Q2** | 29/05/2018 | 8.15 | 7.2 | 144.9 | 950 | <100 | <1 | <0.6 | 3 | <6 | 22 |
| | **Q3** | 14/08/2018 | 8.22 | 7.3 | 147.1 | 924 | <100 | <1 | <0.6 | 6 | <6 | 20 |
| | **Q4** | 26/11/2018 | 8.17 | 7.2 | 179.6 | 843 | <100 | <1 | <0.6 | 4 | <6 | <18 |
| 2019 | **Q1** | 15/03/2019 | <1 | 7.5 | 188.75 | 975 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | **Q2** | 14/06/2019 | 8.21 | 7.2 | 169.7 | 8.21 | <100 | <1 | <0.6 | <3 | <6 | 24 |
| | **Q3** | 24/09/2019 | 8.06 | 7.4 | 133.65 | 939 | <100 | 0.29 | <0.6 | 17 | <6 | 20 |
| | **Q4** | 17/12/2019 | 7.98 | 7.6 | 277.1 | 882 | <100 | 0.29 | <0.6 | <3 | <6 | 25 |
| 2020 | **Q1** | 27/03/2020 | 8.18 | 7 | 196.5 | 980 | <100 | 0.21 | <0.6 | <3 | <6 | 29 |
| | **Q2** | 04/06/2020 | 7.95 | 7.3 | 210.8 | 846 | <100 | 0.21 | <0.6 | <3 | <6 | 20 |
| | **Q3** | 17/09/2020 | 8.8 | 7.6 | 96.82 | 710 | <100 | 0.54 | <0.6 | 5 | <6 | <18 |
| | **Q4** | 10/12/2020 | 9.43 | 7.8 | 93.26 | 695 | <100 | 0.51 | <0.6 | 5 | <6 | <18 |
| 2021 | **Q1** | 15/01/2021 | 9.43 | 7.3 | 255.6 | 895 | <100 | 0.28 | <0.6 | <3 | <6 | 19 |
| | **Q2** | 18/06/2021 | 4.77 | 6.9 | 215.2 | 1094 | <100 | 0.21 | <0.6 | 4 | <6 | 25 |
| | **Q3** | 25/08/2021 | 6.89 | 7.1 | 206.6 | 1003 | <100 | 0.3 | <0.6 | <3 | <6 | 25 |
| | **Q4** | 10/12/2021 | 8.14 | 7.3 | 276.8 | 961 | <10 | <5 | <0.4 | 5.7 | <5 | 20.2 |
| 2022 | **Q1** | 01/04/2022 | 9.57 | 7.4 | 236 | 1009 | <100 | 0.29 | <0.6 | 7 | <6 | 25 |
| | **Q2** | 21/05/2022 | 10 | 7.4 | 311.9 | 1043 | <100 | 0.32 | <0.6 | 5 | <6 | |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | | | | | | | | | | | |
| 2023 | **Q1** | 19/04/2023 | | | | | | | | | | |
| | **Q2** | | | | | | | | | | | |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | | | | | | | | | | | |

**Borehole 13**

| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **DO** | **pH** | **Sulphate** | **Cond** | **Aluminium** | **Arsenic** | **Cadmium** | **Nickel** | **Lead** | **Zinc** |
| 2018 | **Q1** | 06/02/2018 | 7.93 | 7.2 | 120.1 | 907 | <100 | <1 | <0.6 | 6 | <6 | 613 |
| | **Q2** | 29/05/2018 | 7.24 | 7.1 | 50.9 | 867 | <100 | <1 | <0.6 | 4 | <6 | 375 |
| | **Q3** | 14/08/2018 | 7.77 | 7.1 | 79.32 | 884 | <100 | <1 | <0.6 | 6 | <6 | 534 |
| | **Q4** | 26/01/2018 | 7.16 | 7.1 | 44.35 | 860 | <100 | <1 | <0.6 | 4 | <6 | 396 |
| 2019 | **Q1** | 15/03/2019 | 6.79 | 7.2 | 60.6 | 858 | <100 | <1 | <0.6 | 5 | <6 | 298 |
| | **Q2** | 14/06/2019 | 7.55 | 7.2 | 41.95 | 878 | <100 | <1 | <0.6 | 3 | <6 | 279 |
| | **Q3** | 24/09/2019 | 8 | 7.4 | 62.4 | 838 | <100 | 0.26 | <0.6 | 4 | <6 | 332 |
| | **Q4** | 17/12/2019 | 7.87 | 7.5 | 50.86 | 856 | <100 | 0.29 | <0.6 | <3 | <6 | 317 |
| 2020 | **Q1** | 27/03/2020 | 7.81 | 7 | 90.3 | 904 | <100 | 0.44 | <0.6 | 6 | <6 | 486 |
| | **Q2** | 04/06/2020 | 6.77 | 7.2 | 55.2 | 742 | <100 | 0.32 | 0.6 | <3 | <6 | 301 |
| | **Q3** | 17/09/2020 | 8.64 | 7.3 | 54.07 | 859 | <100 | 0.31 | <0.6 | <3 | <6 | 282 |
| | **Q4** | 10/12/2020 | 8.7 | 7.5 | 52.75 | 813 | <100 | 0.3 | <0.6 | <3 | <6 | 386 |
| 2021 | **Q1** | 15/01/2021 | 9.91 | 7.2 | 45.82 | 851 | <100 | 0.36 | <0.6 | 3 | <6 | 308 |
| | **Q2** | 18/06/2021 | 7.9 | 7 | 29.8 | 922 | <100 | 0.3 | <0.6 | 3 | <6 | 296 |
| | **Q3** | 26/08/2021 | 7.53 | 7.3 | 50.7 | 858 | <100 | 0.38 | <0.6 | 3 | <6 | 315 |
| | **Q4** | 10/12/2021 | 8.21 | 7.6 | 51.5 | 847 | <10 | <5 | <0.4 | <2 | <5 | 28.8 |
| 2022 | **Q1** | 01/04/2022 | 10.64 | 7.3 | 70.5 | 845 | <100 | 4.5 | <0.6 | 4 | <6 | 317 |
| | **Q2** | 21/05/2022 | 9.4 | 7.3 | 43.6 | 825 | <100 | 0.31 | <0.6 | <3 | <6 | 262 |
| | **Q3** | 29/09/2022 | 7.36 | 7.4 | 38.9 | 869 | <3.5 | 0.31 | 0.1 | 1.10 | <0.3 | 93 |
| | **Q4** | 02/12/2022 | 9.92 | 7.3 | 62.02 | 866 | <3.5 | 0.31 | 0.51 | 2.3 | 0.7 | 440 |
| 2023 | **Q1** | 19/04/2023 | 8.5 | 7.4 | 73.34 | 852 | <3.5 | 0.43 | 0.1 | 4.1 | 0.9 | 480 |
| | **Q2** | 29/06/2023 | 6.83 | 7.4 | 43.24 | 833 | <3.5 | 0.38 | <0.02 | 1.50 | <0.3 | <5 |
| | **Q3** | | | | | | | | | | | |
| | **Q4** | | | | | | | | | | | |

| Piezo 4 | | | DO | pH | Sulphate | Cond | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
| 2018 | Q1 | 27/02/2018 | 8.92 | 7.8 | 2163 | 3040 | 215 | 1.4 | <0.6 | 17 | 13 | <18 |
| | Q2 | 30/05/2018 | <1 | 7.5 | 1617 | 2730 | 815 | 2.2 | <0.6 | 20 | 13 | <18 |
| | Q3 | 15/08/2018 | <1 | 7.5 | 1255 | 2840 | 354 | 9.9 | <0.6 | 24 | 31 | 51 |
| | Q4 | | | | | | | | | | | |
| 2019 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2020 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2021 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2022 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2023 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |

| Piezo 5 | | | DO | pH | Sulphate | Cond | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
| 2018 | Q1 | 27/02/2018 | 5.91 | 6.9 | 1287 | 2140 | <100 | <1 | <0.6 | 16 | <6 | <18 |
| | Q2 | 30/05/2018 | <1 | 7.4 | 1820 | 2550 | <100 | <1 | <0.6 | 28 | 16 | <18 |
| | Q3 | 14/08/2018 | <1 | 7.2 | 823.4 | 1988 | <100 | 1.9 | <0.6 | 17 | 7 | <18 |
| | Q4 | | | | | | | | | | | |
| 2019 | Q1 | 15/03/2019 | 8.97 | 7.9 | 589.2 | 1680 | <100 | 1.2 | <0.6 | 24 | <6 | 48 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | 17/12/2019 | 6.82 | 7.9 | 649.1 | 1615 | <100 | 4.6 | <0.6 | 16 | 18 | 19 |
| 2020 | Q1 | 30/03/2020 | 9.54 | 8.5 | 638.8 | 1652 | <100 | 4.3 | <0.6 | 13 | 25 | <18 |
| | Q2 | 12/06/2020 | 8.63 | 8.3 | 1040.4 | 2120 | <100 | 4.3 | <0.6 | 26 | 39 | 36 |
| | Q3 | | | | | | | | | | | |
| | Q4 | 10/12/2020 | 7.17 | 8 | 237.6 | 1768 | <100 | 4.3 | <0.6 | 11 | <6 | <18 |
| 2021 | Q1 | 18/01/2021 | 8.97 | 7.4 | 971 | 2060 | <100 | 3.1 | <0.6 | 25 | 13 | 25 |
| | Q2 | 18/06/2021 | 0.81 | 7.4 | 769.6 | 1648 | <100 | 1.2 | 0.8 | 35 | <6 | <18 |
| | Q3 | 26/08/2021 | 7.75 | 7.6 | 638.8 | 1561 | <100 | 1.6 | <0.6 | 32 | 10 | <18 |
| | Q4 | | | | | | | | | | | |
| 2022 | Q1 | 01/04/2022 | 8 | 7.5 | 589.3 | 1535 | <100 | 2.1 | <0.6 | 16 | 7 | <18 |
| | Q2 | 20/05/2022 | 9.7 | 7.2 | 643.8 | 1725 | <100 | 5.5 | <0.6 | 21 | 10 | <18 |
| | Q3 | | | | | | | | | | | |
| | Q4 | 02/12/2022 | 0.43 | 7.8 | 279.05 | 1927 | 15 | 9 | 0.62 | 20.00 | 10 | 23 |
| 2023 | Q1 | | | | | | | | | | | |
| | Q2 | 29/06/2023 | 2.93 | 7.6 | 589.1 | 1718 | 6 | 3.9 | <0.02 | 21 | 0.8 | <5 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |

| Piezo 13 | | | DO | pH | Sulphate | Cond | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
| 2018 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2019 | Q1 | 19/03/2019 | 8.72 | 8 | 76.4 | 80 | 30 | <5 | <0.4 | 56.9 | <5 | 27.2 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2020 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2021 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2022 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2023 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |

| Piezo 14 | | | DO | pH | Sulphate | Cond | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
| 2018 | Q1 | 27/02/2018 | 7.13 | 7.3 | 1611 | 561 | 226 | 1.1 | <0.6 | 29 | 8 | <18 |
| | Q2 | 30/05/2018 | 9.4 | 7.4 | 139.7 | 554 | <100 | 1.4 | <0.6 | 40 | <6 | <18 |
| | Q3 | 14/08/2018 | 7.03 | 7.4 | 554.6 | 1520 | <100 | 11 | <0.6 | 31 | 29 | 21 |
| | Q4 | | | | | | | | | | | |
| 2019 | Q1 | 19/03/2019 | 7.84 | 8 | 27 | 498 | 22 | <5 | <0.4 | 57.3 | <5 | 15.1 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | 17/12/2019 | 9 | 8.1 | 139.6 | 814 | <100 | 4 | <0.6 | 65 | 9 | 62 |
| 2020 | Q1 | 27/03/2020 | | | | | <100 | 1.2 | <0.6 | 29 | 26 | 126 |
| | Q2 | 12/06/2020 | 8.71 | 7.7 | 100.3 | 671 | <100 | 2.1 | <0.6 | 29 | 10 | 60 |
| | Q3 | 17/09/2020 | 7.62 | 7.6 | 61.7 | 739 | <100 | 3.7 | <0.6 | 34 | 27 | 28 |
| | Q4 | | | | | | | | | | | |
| 2021 | Q1 | 18/01/2021 | 8.8 | 7.6 | 44.5 | 1087 | <100 | 4.5 | <0.6 | 26 | 7 | <18 |
| | Q2 | 18/06/2021 | 7.34 | 7.3 | 66.9 | 498 | <100 | 1.3 | <0.6 | 30 | 33 | 57 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2022 | Q1 | 01/04/2022 | 4.28 | 7.4 | 221.2 | 2220 | <100 | 4 | <0.6 | 24 | 7 | <18 |
| | Q2 | 20/05/2022 | <1 | 7.6 | 112.4 | 1457 | <100 | 12 | <0.6 | 40 | <6 | |
| | Q3 | | | | | | | | | | | |
| | Q4 | 02/12/2022 | 0.18 | 7.4 | 28.6 | 1714 | 4.7 | 14 | 0.82 | 16.00 | 1.5 | 14 |
| 2023 | Q1 | 19/04/2023 | 6.2 | 7.5 | 88.3 | 1499 | 6.9 | 6.8 | 0.08 | 19 | 2.6 | 24 |
| | Q2 | 29/06/2023 | <1 | 7.4 | 61.6 | 1268 | 5.3 | 2.6 | <0.02 | 38 | 0.7 | 10 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |

| Piezo 15 | | | DO | pH | Sulphate | Cond | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
| 2018 | Q1 | 27/02/2018 | 6.12 | 7.3 | 97.1 | 647 | <100 | <1 | <0.6 | 5 | <6 | <18 |
| | Q2 | 30/05/2018 | 10.87 | 7.5 | 298.7 | 663 | <100 | <1 | <0.6 | 11 | <6 | <18 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2019 | Q1 | 19/03/2019 | 9.47 | 8 | 24.8 | 578 | 18 | <5 | <0.4 | 11.3 | <5 | 8.5 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | 17/12/2019 | 7.76 | 7.8 | 165.1 | 615 | <100 | 0.47 | <0.6 | 6 | <6 | <18 |
| 2020 | Q1 | 27/03/2020 | 8.38 | 7.6 | 73.3 | 612 | <100 | 0.6 | <0.6 | 10 | <6 | <18 |
| | Q2 | 04/06/2020 | 7.09 | 7.8 | 183.9 | 601 | <100 | 0.56 | <0.6 | 7 | <6 | <18 |
| | Q3 | | | | | | | | | | | |
| | Q4 | 10/12/2020 | 8.01 | 7.9 | 350.4 | 624 | <100 | 0.6 | <0.6 | 5 | <6 | <18 |
| 2021 | Q1 | 18/01/2021 | 11.3 | 7.8 | 51.62 | 613 | <100 | 0.29 | <0.6 | 4 | <6 | <18 |
| | Q2 | 18/06/2021 | 4.85 | 7.5 | 231.9 | 634 | <100 | 0.44 | 0.7 | 5 | <6 | <18 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2022 | Q1 | 01/04/2022 | 12.33 | 7.9 | 56.21 | 635 | <100 | 0.43 | <0.6 | 6 | <6 | <18 |
| | Q2 | 20/05/2022 | 9.4 | 7.4 | 53.65 | 722 | <100 | 0.4 | <0.6 | 4 | <6 | |
| | Q3 | | | | | | | | | | | |
| | Q4 | 02/12/2022 | 9.37 | 7.5 | 41 | 626 | <3.5 | 0.49 | 0.05 | 7.20 | 0.6 | 30 |
| 2023 | Q1 | 19/04/2023 | 9.4 | 7.5 | 88.3 | 631 | 5.4 | 0.48 | <0.02 | 3.6 | 0.5 | <5 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |

| Piezo 28 | | | DO | pH | Sulphate | Cond | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
| 2018 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | 06/12/2018 | 8.08 | 7.2 | 6 | 153 | <100 | 1.2 | <0.6 | 23 | <6 | 33 |
| 2019 | Q1 | 19/03/2019 | 9.6 | 7.6 | <5 | 171 | 10 | <5 | <0.4 | <2 | <5 | 75.8 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | 18/12/2019 | 9.72 | 7.5 | 183.6 | 209 | <100 | 1.9 | <0.6 | <3 | <6 | 23 |
| 2020 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2021 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2022 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | 29/09/2022 | 1.97 | 6.8 | <5 | 144 | 6.9 | 2.5 | 0.2 | 2.5 | 7.9 | 24 |
| | Q4 | | | | | | | | | | | |
| 2023 | Q1 | 19/04/2023 | 9 | 7.6 | 100.5 | 1499 | 7.3 | 1.3 | 0.11 | 1.4 | 1 | 20 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |

| Piezo 29 | | | DO | pH | Sulphate | Cond | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
| 2018 | Q1 | 27/02/2018 | 4.64 | 7.3 | 123.4 | 527 | <100 | 1.1 | <0.6 | <3 | <6 | <18 |
| | Q2 | 30/05/2018 | 1.25 | 7.2 | 58.2 | 845 | <100 | 3.6 | <0.6 | 6 | <6 | 20 |
| | Q3 | | | | | | | | | | | |
| | Q4 | 06/12/2018 | 5.92 | 7.4 | 6.1 | 435 | <100 | 1.8 | <0.6 | 8 | <6 | <18 |
| 2019 | Q1 | 19/03/2019 | 10.04 | 8.1 | 19.8 | 381 | 12 | <5 | <0.4 | <2 | <5 | 3 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2020 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2021 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | 10/12/2021 | 6.02 | 7.7 | 53.9 | 437 | <10 | <5 | <0.4 | 2.6 | <6 | 20.5 |
| 2022 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2023 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |

| Piezo 30 | | | DO | pH | Sulphate | Cond | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
| 2018 | Q1 | 27/02/2018 | 10.49 | 7.9 | 10.2 | 653 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | Q2 | 30/05/2018 | 7.71 | 7.7 | 19.2 | 560 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | Q3 | | | | | | | | | | | |
| | Q4 | 06/12/2018 | 9.08 | 7.9 | 8.4 | 498 | <100 | <1 | <0.6 | 6 | <6 | <18 |
| 2019 | Q1 | 19/03/2019 | 10.62 | 8.3 | <5 | 450 | 11 | <5 | <0.4 | <2 | <5 | 9.2 |
| | Q2 | 14/06/2019 | 9.08 | 7 | 9.41 | 520 | <100 | <1 | <0.6 | 3 | <6 | <18 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2020 | Q1 | 27/03/2020 | 9.72 | 7.9 | 40.2 | 443 | <100 | 0.55 | <0.6 | <3 | <6 | 29 |
| | Q2 | 04/06/2020 | 8.23 | 7.7 | 41.3 | 479 | <100 | 0.42 | <0.6 | <3 | <6 | <18 |
| | Q3 | 23/09/2020 | 1.15 | 7.7 | 12.38 | 488 | <100 | 0.73 | <0.6 | 4 | <6 | 18 |
| | Q4 | 10/12/2020 | 9.34 | 8 | 18.99 | 481 | <100 | 0.8 | <0.6 | <3 | <6 | <18 |
| 2021 | Q1 | 15/01/2021 | 12.16 | 7.9 | 31.82 | 501 | <100 | 0.66 | <0.6 | <3 | <6 | <18 |
| | Q2 | 18/06/2021 | 8.5 | 7.7 | 25 | 550 | <100 | 0.48 | <0.6 | <3 | <6 | <18 |
| | Q3 | 26/08/2021 | 5.74 | 7.5 | 37.1 | 430 | <100 | 0.6 | <0.6 | 3 | <6 | 18 |
| | Q4 | 10/12/2021 | 9.27 | 8 | 12.35 | 460 | <10 | <0.4 | <0.4 | <2 | <5 | 19 |
| 2022 | Q1 | 01/04/2022 | 10.7 | 8 | 31.3 | 456 | <100 | 0.75 | <0.6 | <3 | <6 | <18 |
| | Q2 | 20/05/2022 | 10.1 | 7.8 | 5.4 | 561 | <100 | 0.46 | <0.6 | 3 | <6 | <18 |
| | Q3 | 29/09/2022 | 8.61 | 7.8 | <5 | 471 | <3.5 | 0.63 | 0.02 | 2.20 | <0.3 | 11 |
| | Q4 | 02/12/2022 | 10.99 | 8 | <5 | 513 | <3.5 | 0.99 | 0.03 | 3.40 | 0.5 | 23 |
| 2023 | Q1 | 19/04/2023 | 9.9 | 7.8 | 19.2 | 550 | <3.5 | 0.51 | 0.04 | <1 | 0.5 | 10 |
| | Q2 | 29/06/2023 | 8.26 | 7.9 | 5.82 | 549 | <3.5 | 0.61 | <0.02 | 1.40 | <0.3 | 5.5 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |

| Piezo 33 | | | DO | pH | Sulphate | Cond | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
| 2018 | Q1 | 27/02/2018 | 11.02 | 9.7 | 103.6 | 278 | 633 | 1.9 | <0.6 | <3 | <6 | <18 |
| | Q2 | 30/05/2018 | 11.52 | 8.1 | 70.5 | 337 | 161 | 1.8 | <0.6 | <3 | <6 | <18 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2019 | Q1 | 19/03/2019 | 10.65 | 9.2 | 72.2 | 313 | 338 | <5 | <0.4 | <2 | <5 | <2 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2020 | Q1 | 27/03/2020 | 8.49 | 7.5 | 109 | 390 | <100 | 5.7 | <0.6 | <3 | <6 | <18 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | 10/12/2020 | 8.34 | 7.4 | 89.1 | 472 | <100 | 2.8 | <0.6 | <3 | <6 | <18 |
| 2021 | Q1 | 15/01/2021 | 7.95 | 7.2 | 79 | 411 | <100 | 3.1 | <0.6 | <3 | <6 | <18 |
| | Q2 | | | | | | | | | | | |
| | Q3 | 18/06/2021 | 3.21 | 7.4 | 86.7 | 482 | <100 | 1.6 | <0.6 | 4 | <6 | <18 |
| | Q4 | | | | | | | | | | | |
| 2022 | Q1 | 01/04/2022 | 11.5 | 9.3 | 75.03 | 346 | 248 | 4.9 | <0.6 | <3 | <6 | <18 |
| | Q2 | 20/05/2022 | 8.5 | 7.7 | 80.25 | 480 | <100 | 2.4 | <0.6 | <3 | <6 | |
| | Q3 | | | | | | | | | | | |
| | Q4 | 02/12/2022 | 10.89 | 7.6 | 68.8 | 363 | 93 | 6.6 | 0.02 | <1 | 0.4 | 10 |
| 2023 | Q1 | 19/04/2023 | 10 | 9.6 | 107.2 | 337 | 323 | 4.3 | <0.02 | <1 | <0.3 | <5 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |

| Piezo 34 | | | DO | pH | Sulphate | Cond | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
| 2018 | Q1 | 27/02/2018 | 8.57 | 7.5 | 433.3 | 1139 | <100 | 4.6 | <0.6 | 8 | 24 | 41 |
| | Q2 | 30/05/2018 | 11.79 | 7.7 | 109.8 | 966 | <100 | 5.7 | <0.6 | 14 | 20 | 19 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2019 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2020 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2021 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | 18/06/2021 | 2.46 | 7.1 | 124.4 | 1016 | <100 | 1.4 | <0.6 | 4 | <6 | <18 |
| | Q4 | | | | | | | | | | | |
| 2022 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | 02/12/2022 | 6.24 | 7 | 181 | 1308 | 3.8 | 5.2 | <0.02 | 6.1 | 1.1 | 9.6 |
| 2023 | Q1 | 19/04/2023 | 1.5 | 7.1 | 143.4 | 1283 | <3.5 | 3 | <0.02 | 1.3 | 3 | <5 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |

| Piezo 36 | | | DO | pH | Sulphate | Cond | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
| 2018 | Q1 | 27/02/2018 | 8.15 | 7.1 | 14.1 | 863 | <100 | <1 | <0.6 | 27 | <6 | <18 |
| | Q2 | 30/05/2018 | 10.31 | 7.2 | 22.6 | 924 | <100 | 1.4 | <0.6 | 31 | <6 | <18 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2019 | Q1 | 19/03/2019 | 9.87 | 7.6 | 6.2 | 973 | 16 | <5 | <0.4 | 24.6 | <5 | 24.2 |
| | Q2 | 14/06/2019 | 7.69 | 7.2 | 13.51 | 1050 | <100 | 2.4 | <0.6 | 49 | <6 | 19 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2020 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | 10/12/2020 | 8.38 | 7.3 | 24.45 | 1032 | <100 | 1.4 | <0.6 | 10 | <6 | <18 |
| 2021 | Q1 | 15/01/2021 | 8.78 | 7 | 35.4 | 993 | <100 | 1.5 | <0.6 | 27 | <6 | <18 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2022 | Q1 | 01/04/2022 | 9.93 | 7.1 | 57.34 | 1047 | <100 | 1.3 | <0.6 | 7 | <6 | <18 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | 02/12/2022 | 9.77 | 7.3 | 6.1 | 1111 | <3.5 | 2.8 | 0.11 | 46.00 | <0.3 | 37 |
| 2023 | Q1 | 19/04/2023 | 6.8 | 7.2 | 42.51 | 986 | <3.5 | 1.5 | <0.02 | 31.00 | <0.3 | 6.9 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |

| Piezo 37 | | | DO | pH | Sulphate | Cond | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
| 2018 | Q1 | 27/02/2018 | 10.38 | 7.3 | 16.9 | 593 | <100 | <1 | <0.6 | 3 | <6 | <18 |
| | Q2 | 30/05/2018 | 10.55 | 7.3 | 120.2 | 873 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2019 | Q1 | 19/03/2019 | 8.81 | 7.2 | 74.9 | 947 | 13 | <5 | <0.4 | <2 | <5 | 6.7 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | 18/12/2019 | 8.74 | 7.9 | 69.9 | 456 | <100 | 1.4 | <0.6 | <3 | <6 | <18 |
| 2020 | Q1 | 27/03/2020 | 9.65 | 7.4 | 62.2 | 519 | <100 | 0.41 | <0.6 | <3 | <6 | <18 |
| | Q2 | 04/06/2020 | 5.76 | 7.2 | 431.3 | 1152 | <100 | 0.65 | <0.6 | 6 | <6 | <18 |
| | Q3 | | | | | | | | | | | |
| | Q4 | 10/12/2020 | 9.76 | 7.1 | 20.32 | 750 | <100 | 0.36 | <0.6 | <3 | <6 | <18 |
| 2021 | Q1 | 15/01/2021 | 10.38 | 7.4 | 23.11 | 550 | <100 | 0.26 | <0.6 | <3 | <6 | <18 |
| | Q2 | | | | | | | | | | | |
| | Q3 | 18/06/2021 | 7.62 | 7.1 | 173.9 | 1048 | <100 | 0.51 | <0.6 | 4 | <6 | <18 |
| | Q4 | | | | | | | | | | | |
| 2022 | Q1 | 01/04/2022 | 9.74 | 7.2 | 53.41 | 858 | <100 | 0.38 | <0.6 | 5 | <6 | 19 |
| | Q2 | 20/05/2022 | 8.5 | 7.6 | 166.25 | 1154 | <100 | 0.34 | <0.6 | <3 | <6 | 19 |
| | Q3 | | | | | | | | | | | |
| | Q4 | 02/12/2022 | 9.44 | 7.2 | 13.16 | 620 | <3.5 | 0.51 | <0.02 | <1 | <0.3 | <5 |
| 2023 | Q1 | 19/04/2023 | 8.6 | 7.1 | 29.14 | 650 | <3.5 | 0.43 | <0.02 | <1 | <0.3 | 6.2 |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |

| Piezo 39 | | | DO | pH | Sulphate | Cond | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
| 2018 | Q1 | 27/02/2018 | 9.71 | 7.2 | 1338 | 2500 | <100 | <1 | <0.6 | 37 | <6 | 36 |
| | Q2 | 30/05/2018 | 9.57 | 7.3 | 1119 | 2490 | <100 | <1 | <0.6 | 31 | <6 | <18 |
| | Q3 | 14/08/2018 | 9.57 | 7 | 1359 | 2590 | <100 | <1 | <0.6 | 53 | <6 | <18 |
| | Q4 | | | | | | | | | | | |
| 2019 | Q1 | 19/03/2019 | 8.02 | 7.2 | 900.5 | 2650 | 19 | <5 | <0.4 | 8.6 | <5 | 70.7 |
| | Q2 | 14/06/2019 | 7.45 | 7 | 1039 | 2200 | <100 | <1 | <0.6 | 25 | <6 | 59 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2020 | Q1 | 27/03/2020 | 8.5 | 8.2 | 766.7 | 1919 | <100 | 0.28 | <0.6 | 12 | <6 | <18 |
| | Q2 | 04/06/2020 | 7.34 | 7.1 | 744.5 | 1614 | <100 | 0.33 | <0.6 | 10 | <6 | <18 |
| | Q3 | | | | | | | | | | | |
| | Q4 | 10/12/2020 | 7.49 | 7.1 | 780.6 | 1895 | <100 | 0.44 | <0.6 | 59 | <6 | 44 |
| 2021 | Q1 | 15/01/2021 | 9.14 | 6.9 | 867 | 2170 | <100 | 0.63 | <0.6 | 20 | <6 | 47 |
| | Q2 | 18/06/2021 | 6.76 | 6.9 | 710.8 | 1838 | <100 | 0.33 | <0.6 | 20 | <6 | 50 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2022 | Q1 | 01/04/2022 | 11.56 | 7.7 | 336.7 | 1333 | <100 | 0.33 | <0.6 | 24 | <6 | 624 |
| | Q2 | 20/05/2022 | 10.2 | 7.2 | 604.6 | 1684 | <100 | 0.87 | <0.6 | 15 | <6 | <18 |
| | Q3 | | | | | | | | | | | |
| | Q4 | 02/12/2022 | 10.13 | 7.5 | <5 | 631 | <3.5 | 3.3 | 0.06 | 11.00 | <0.3 | 220 |
| 2023 | Q1 | 19/04/2023 | 9.8 | 7.2 | 41.57 | 740 | <3.5 | 4.5 | 0.06 | 7.60 | <0.3 | 95 |
| | Q2 | 29/06/2023 | 7.69 | 7.2 | 57.24 | 877 | <3.5 | 3.9 | 0.19 | 12.00 | <0.3 | 380 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |

| | | | DO | pH | Sulphate | Cond | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mg/l | pH units | mg/l | µg/l | µg/l | µg/l | µg/l | µg/l | µg/l | µg/l |
| **Piezo 56** | | | Quarterly | Monthly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
| 2018 | Q1 | 27/02/2018 | 3.82 | 8 | 164.4 | 992 | <100 | 3.4 | <0.6 | 6 | <6 | <18 |
| | Q2 | 30/05/2018 | 8.47 | 7.6 | 264.1 | 898 | <100 | 2.4 | <0.6 | 7 | <6 | <18 |
| | Q3 | 14/08/2018 | 2.74 | 7.4 | 158.95 | 1078 | <100 | 3.4 | <0.6 | 8 | <6 | <18 |
| | Q4 | 07/12/2018 | 8.46 | 7.4 | 329.6 | 989 | <100 | 2.8 | <0.6 | 15 | <6 | 23 |
| 2019 | Q1 | 19/03/2019 | 9.73 | 8 | 206.6 | 787 | 13 | <5 | <0.4 | <2 | <5 | 3.6 |
| | Q2 | | | | | | | | | | | |
| | Q3 | 24/09/2019 | 1.71 | 7.7 | 626 | 1428 | <100 | 4.5 | <0.6 | 12 | <6 | <18 |
| | Q4 | 17/12/2019 | <1 | 7.5 | 235.3 | 877 | <100 | 1.5 | <0.6 | 4 | <6 | 19 |
| 2020 | Q1 | | | | | | | | | | | |
| | Q2 | 12/06/2020 | 6.44 | 7.7 | 313 | 974 | <100 | 3.2 | <0.6 | 6 | <6 | <18 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2021 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2022 | Q1 | | | | | | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |
| 2023 | Q1 | | | | | | | | | | | |
| | Q2 | 29/06/2023 | 1.71 | 7.1 | 243 | 786 | <3.5 | 2.2 | 0.06 | 9.7 | 1.1 | 59 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |

**Piezo 57**

| | | DO | pH | Sulphate | Cond | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
| 2020 | Q1 | | | | | | | | | | |
| | Q2 | 12/06/2020 | 8.6 | 7.7 | 70.4 | 443 | <100 | 1.5 | <0.6 | <3 | <6 | <18 |
| | Q3 | 23/09/2020 | 8.38 | 7.2 | 118.7 | 606 | <100 | 4.6 | <0.6 | 5 | <6 | 20 |
| | Q4 | 10/12/2020 | 3 | 7.9 | 40.04 | 570 | <100 | 0.9 | <0.6 | <3 | <6 | <18 |
| 2021 | Q1 | 18/01/2021 | 11.26 | 7.6 | 34.78 | 499 | <100 | 0.58 | <0.6 | <3 | <6 | <18 |
| | Q2 | 18/06/2021 | 6.26 | 7.3 | 50.1 | 572 | <100 | 1.2 | 0.8 | <3 | <6 | <18 |
| | Q3 | 25/08/2021 | <1 | 7 | 101.9 | 510 | <100 | 3.7 | <0.6 | 4 | <6 | <18 |
| | Q4 | 10/12/2021 | 6.86 | 7.5 | 89.1 | 484 | 15.1 | <5 | <0.4 | 2.4 | <5 | 8.5 |
| 2022 | Q1 | 01/04/2022 | 11.19 | 7.5 | 36.34 | 540 | <100 | 0.43 | <0.6 | 4 | <6 | <18 |
| | Q2 | 20/05/2022 | 9.1 | 7.4 | 40.15 | 549 | <100 | 0.76 | <0.6 | <3 | <6 | |
| | Q3 | 29/09/2022 | 1.3 | 7.1 | 98.4 | 610 | 5.6 | 3.2 | <0.02 | 5.1 | 1.6 | 9.2 |
| | Q4 | 02/12/2022 | 7.49 | 7.4 | 35.35 | 550 | <3.5 | 0.7 | 3.4 | 4.20 | 0.8 | 32 |
| 2023 | Q1 | 19/04/2023 | 8 | 7.7 | 92.5 | 479 | 7.2 | 0.88 | 0.05 | 1.1 | <0.3 | 15 |
| | Q2 | 29/06/2023 | 7.22 | 7.5 | 48.32 | 382 | 3.8 | 1.2 | 0.1 | 2.1 | 0.5 | 38 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |

| Piezo 58 | | | DO | pH | Sulphate | Cond | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quarterly | Monthly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
| 2018 | Q1 | 27/02/2018 | 10.45 | 7.8 | 43.4 | 495 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | Q2 | 30/05/2018 | 9.06 | 7.5 | 51.7 | 474 | <100 | 1.7 | <0.6 | 3 | <6 | 18 |
| | Q3 | 14/08/2018 | 7.13 | 7.1 | 128.76 | 717 | <100 | 1.7 | <0.6 | <3 | <6 | <18 |
| | Q4 | 06/12/2018 | 9.67 | 7.9 | 28 | 316 | <100 | <1 | <0.6 | 5 | <6 | 23 |
| 2019 | Q1 | 15/03/2019 | 9.69 | 7.9 | 35.2 | 427 | | | | | | |
| | Q2 | | | | | | | | | | | |
| | Q3 | | | | | | | | | | | |
| | Q4 | 17/12/2019 | 9.28 | 8.1 | 60.3 | 443 | <100 | 0.81 | <0.6 | <3 | <6 | 32 |
| 2020 | Q1 | 30/03/2020 | 10.16 | 7.9 | 56.2 | 466 | <100 | 0.85 | <0.6 | <3 | <6 | <18 |
| | Q2 | 12/06/2020 | 7.9 | 7.1 | 444 | 1366 | <100 | 2.9 | 0.6 | 4 | <6 | 186 |
| | Q3 | 23/09/2020 | 8.99 | 7.3 | 396.3 | 108 | <100 | 0.62 | <0.6 | 4 | <6 | 39 |
| | Q4 | 10/12/2020 | 8.07 | 7.4 | 442.7 | 1138 | <100 | 4.1 | <0.6 | <3 | <6 | 84 |
| 2021 | Q1 | 18/01/2021 | 7.27 | 7 | 359.2 | 1146 | <100 | 1.4 | <0.6 | 4 | <6 | 175 |
| | Q2 | 18/06/2021 | 5.7 | 7 | 398.2 | 1260 | <100 | 1.2 | 0.7 | <3 | <6 | 53 |
| | Q3 | 25/08/2021 | <1 | 6.9 | 500 | 1380 | <100 | 12 | <0.6 | 4 | <6 | <18 |
| | Q4 | 10/12/2021 | 4.75 | 7.2 | 348 | 1126 | 29.3 | <5 | <0.4 | 3 | <5 | 12 |
| 2022 | Q1 | 01/04/2022 | 9.42 | 7.2 | 348.5 | 1179 | <100 | 0.62 | <0.6 | <3 | <6 | 31 |
| | Q2 | 20/05/2022 | 9 | 7.2 | 301.2 | 1280 | <100 | 0.83 | <0.6 | <3 | <6 | <18 |
| | Q3 | 29/09/2022 | 2.82 | 7.1 | 345.05 | 1226 | <3.5 | 1.3 | 0.04 | 2.00 | 1.1 | 17 |
| | Q4 | 02/12/2022 | 2.03 | 7.1 | 314.8 | 1228 | 6.1 | 7.2 | 0.1 | 7.1 | 1.5 | 11 |
| 2023 | Q1 | 19/04/2023 | 5.2 | 7 | 306.1 | 1164 | 5.8 | 0.84 | 0.15 | 1.2 | 0.8 | 28 |
| | Q2 | 29/06/2023 | 1.06 | 7.1 | 336.3 | 1239 | 3.8 | 6.4 | 0.07 | 1.4 | 0.7 | 12 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |

| Piezo 59 | | | DO | pH | Sulphate | Cond | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quarterly | Monthly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
| 2018 | Q1 | 27/02/2018 | 9.14 | 7.4 | 50.4 | 1103 | <100 | <1 | <0.6 | 6 | <6 | <18 |
| | Q2 | 30/05/2018 | 9.76 | 7.4 | 346.9 | 1093 | <100 | <1 | <0.6 | 3 | <6 | <18 |
| | Q3 | 15/08/2018 | 9.94 | 7.1 | 325 | 1099 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | Q4 | 06/12/2018 | 9.61 | 6.9 | 327 | 1189 | <100 | <1 | <0.6 | 10 | <6 | 26 |
| 2019 | Q1 | 19/03/2019 | 8.88 | 7.4 | 327.3 | 1125 | 15 | <5 | <0.4 | <2 | <5 | 20.5 |
| | Q2 | 14/06/2019 | 8.05 | 7.2 | 251 | 1122 | <100 | <1 | <0.6 | 4 | <6 | <18 |
| | Q3 | 24/09/2019 | 7.78 | 7.1 | 246.8 | 1101 | <100 | 0.21 | <0.6 | 4 | <6 | <18 |
| | Q4 | 17/12/2019 | 8.15 | 7.4 | 356.4 | 976 | <100 | 0.32 | <0.6 | 15 | <6 | 36 |
| 2020 | Q1 | 30/03/2020 | 9.89 | 8.1 | 348.7 | 953 | <100 | 0.54 | <0.6 | 4 | <6 | <18 |
| | Q2 | 12/06/2020 | 7.66 | 7.3 | 297.8 | 1008 | <100 | 0.44 | <0.6 | 3 | <6 | <18 |
| | Q3 | 17/09/2020 | 7.68 | 7.2 | 231.35 | 1010 | <100 | 0.34 | <0.6 | 4 | <6 | <18 |
| | Q4 | 10/12/2020 | 8.07 | 7.2 | 211.6 | 944 | <100 | 0.52 | <0.6 | 6 | <6 | 28 |
| 2021 | Q1 | 18/01/2021 | 10.22 | 7.2 | 222.3 | 933 | <100 | 0.33 | <0.6 | 11 | <6 | <18 |
| | Q2 | 18/06/2021 | 7.19 | 7.5 | 265.9 | 981 | <100 | 0.31 | <0.6 | 4 | <6 | <18 |
| | Q3 | 25/08/2021 | 7.35 | 7.2 | 269.9 | 986 | <100 | 0.43 | <0.6 | 3 | <6 | <18 |
| | Q4 | 10/12/2021 | 6.57 | 6.9 | 243 | 1000 | <10 | <5 | <0.4 | 5.2 | <5 | 10.1 |
| 2022 | Q1 | 01/04/2022 | 8.87 | 7.3 | 236.6 | 1058 | <100 | 0.51 | <0.6 | 39 | <6 | 24 |
| | Q2 | 20/05/2022 | 9.3 | 7.3 | 327.55 | 1075 | <100 | 0.81 | <0.6 | 66 | <6 | |
| | Q3 | 29/09/2022 | 2.26 | 7.2 | 324.1 | 1122 | <3.5 | 2 | 0.03 | 0.02 | <0.3 | 6.1 |
| | Q4 | 02/12/2022 | 0.13 | 7.3 | 265.7 | 1122 | 8.5 | 0.05 | 4.3 | 3.5 | 0.5 | 6.8 |
| 2023 | Q1 | 19/04/2023 | 6.8 | 7.1 | 162.4 | 1035 | <3.5 | 0.29 | <0.02 | 22 | <0.3 | 13 |
| | Q2 | 29/06/2023 | 3.96 | 7.3 | 163.15 | 1024 | <3.5 | 0.44 | 0.04 | 8.1 | <0.3 | 8 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |

| Piezo 60 | | | DO | pH | Sulphate | Cond | Aluminium | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |
| 2018 | Q1 | 27/02/2018 | 10.4 | 7.5 | 463.7 | 372 | <100 | <1 | <0.6 | <3 | <6 | <18 |
| | Q2 | 30/05/2018 | 8.68 | 7.1 | 60.4 | 428 | <100 | <1 | <0.6 | 3 | <6 | <18 |
| | Q3 | 14/08/2018 | 10.15 | 7 | 66.54 | 440 | <100 | <1 | <0.6 | <3 | <6 | 19 |
| | Q4 | 06/12/2018 | 9.78 | 7.8 | 71.8 | 482 | <100 | <1 | <0.6 | 7 | <6 | 18 |
| 2019 | Q1 | 19/03/2019 | 9.41 | 7.1 | 46 | 308 | 12 | <5 | <0.4 | <2 | <5 | 11.5 |
| | Q2 | | | | | | | | | | | |
| | Q3 | 24/09/2019 | 7.83 | 7 | 72.8 | 397 | <100 | <0.2 | <0.6 | <3 | <6 | 21 |
| | Q4 | 17/12/2019 | 7.98 | 7.5 | 80.7 | 363 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| 2020 | Q1 | 27/03/2020 | 8.95 | 7.3 | 59.9 | 388 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | Q2 | 12/06/2020 | 8.66 | 7.1 | 58.6 | 410 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | Q3 | 17/09/2020 | 9.66 | 7 | 55.15 | 406 | <100 | <0.2 | <0.6 | 5 | <6 | <18 |
| | Q4 | 10/12/2020 | 9.04 | 7.1 | 63.81 | 451 | <100 | 0.52 | <0.6 | <3 | <6 | <18 |
| 2021 | Q1 | 18/01/2021 | 11.55 | 7.4 | 36.74 | 323 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | Q2 | 18/06/2021 | 7.21 | 6.8 | 31.2 | 343 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | Q3 | 25/08/2021 | 7.05 | 6.8 | 64.8 | 370 | <100 | 0.22 | <0.6 | 3 | <6 | 21 |
| | Q4 | 10/12/2021 | 9.09 | 6.9 | 91.9 | 440 | <10 | <5 | <0.4 | <2 | <5 | 17.2 |
| 2022 | Q1 | 01/04/2022 | 10.44 | 7.5 | 44.03 | 335 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | Q2 | 20/05/2022 | 9.7 | 7.2 | 43.94 | 351 | <100 | <0.2 | <0.6 | <3 | <6 | <18 |
| | Q3 | 29/09/2022 | 7.05 | 6.7 | 110.75 | 437 | <3.5 | 0.22 | 0.05 | 1.70 | <0.3 | 11 |
| | Q4 | 02/12/2022 | 9.33 | 7.7 | 51.9 | 378 | <3.5 | <0.2 | <0.02 | <1 | <0.3 | 7.9 |
| 2023 | Q1 | 19/04/2023 | 9.5 | 7.7 | 77 | 351 | <3.5 | <0.2 | 0.03 | <1 | <0.3 | 8.3 |
| | Q2 | 29/06/2023 | 7.39 | 7.3 | 34.9 | 347 | 5.2 | 0.36 | 0.03 | 1.5 | <0.3 | 24 |
| | Q3 | | | | | | | | | | | |
| | Q4 | | | | | | | | | | | |

| Date | totaliser 1 | totaliser 2 | Flow $m^3$ | total flow (L) |
|---|---|---|---|---|
| 21/11/2022 | 1156624 | 1,159,032 | 2,408 | 2,408,000 |
| 30/11/2022 | 1,159,032 | 1,163,414 | 4,382 | 4,382,000 |
| | | | | 6,790,000 |

| Date | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|
| | µg/l | µg/l | µg/l | µg/l | µg/l |
| Values below LOD at 50% | | | | | |
| 02/12/2022 | 2.5 | 0.01 | 5 | 0.15 | 20 |

| Date | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|
| | mg/l | mg/l | mg/l | mg/l | mg/l |
| micrograms converted to miligrams | | | | | |
| 02/12/2022 | 0.0025 | 0.00001 | 0.005 | 0.00015 | 0.02 |

| Date | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|
| | mg | mg | mg | mg | mg |
| mass emission in miligrams | | | | | |
| 02/12/2022 | 16975 | 67.9 | 33,950 | 1018.5 | 135,800 |

| Year | Units | Arsenic | Cadmium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|
| **2022** | **mg/year** | 16,975 | 67.9 | 33,950 | 1,018.5 | 135,800 |
| **2022** | **kg/year** | 0.016975 | 0.0000679 | 0.03395 | 0.0010185 | 0.1358 |
| **2021** | **kg/year** | 0.014259 | 0.002037 | 0.02716 | 0.02037 | 0.06111 |
| **change** | | 19.05 | -96.67 | 25.00 | -95.00 | 122.22 |

Town Centre House
Dublin Road
Naas
Co Kildare

**wsp.com**