vgt environmental compliance solutions and laboratories

Report Period

1/12/2025 12/01/2026

Monitoring Summary for Hodgson Quarries and Plant Pty Ltd Roberts Road Sand Quarry, Maroota, NSW

Report Date: 09/02/2026

Site Monitoring Locations

Groundwater Levels

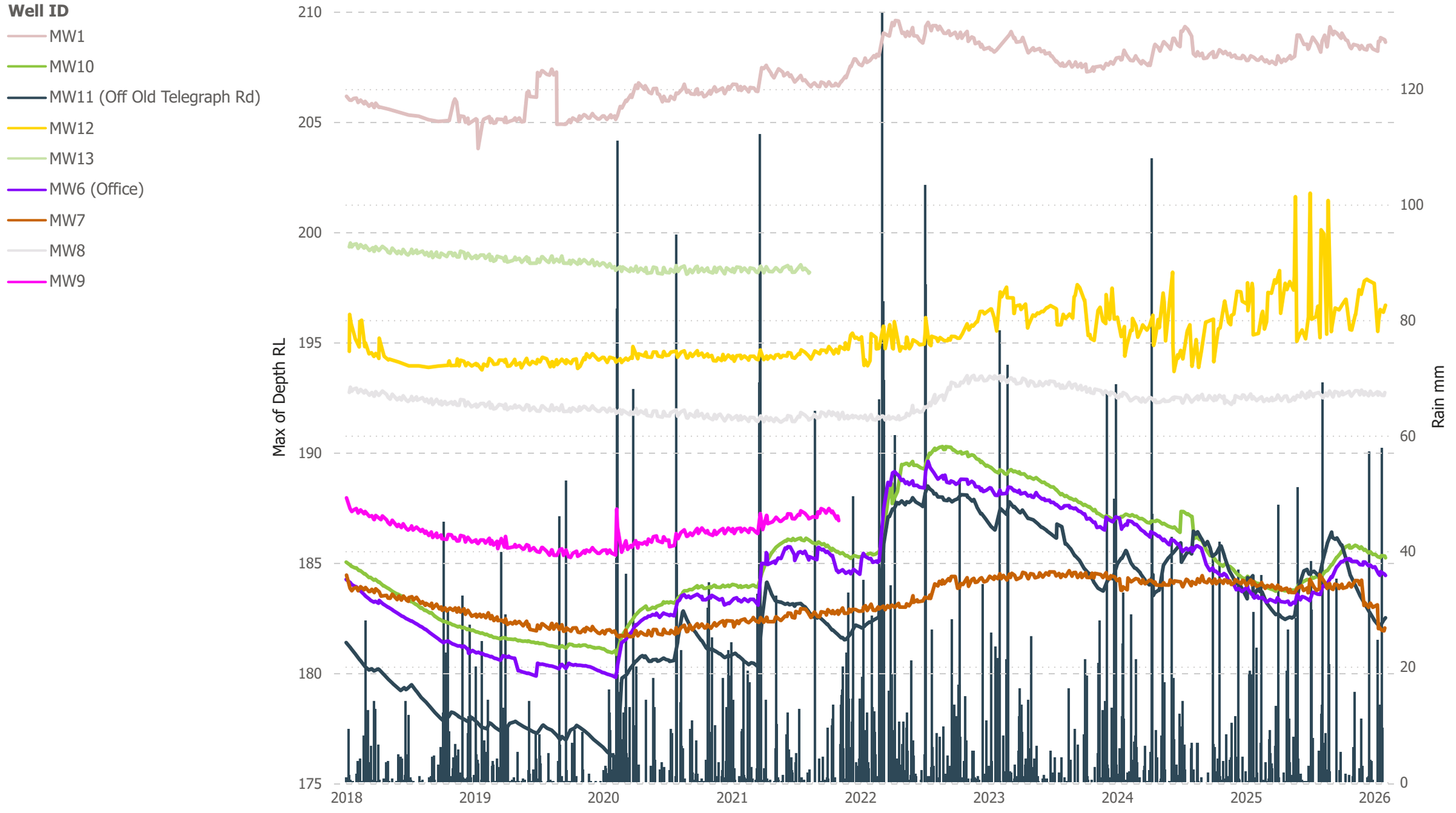
Groundwater levels are currently monitored in nine boreholes located on the site. Groundwater levels are manually measured for depth each month using a groundwater dipper. Data is downloaded from groundwater loggers where present. MW1 logger was installed prior to 2015; the remaining loggers were installed in 2017.

Graph 1 displays the depths as of January 2017. Graph 2 shows depths in the past month. Following anomalous readings from the MW5 logger, the bore was investigated and discovered to have collapsed. The logger was relocated to a functioning bore and the bore abandoned and replaced by nearby MW8.

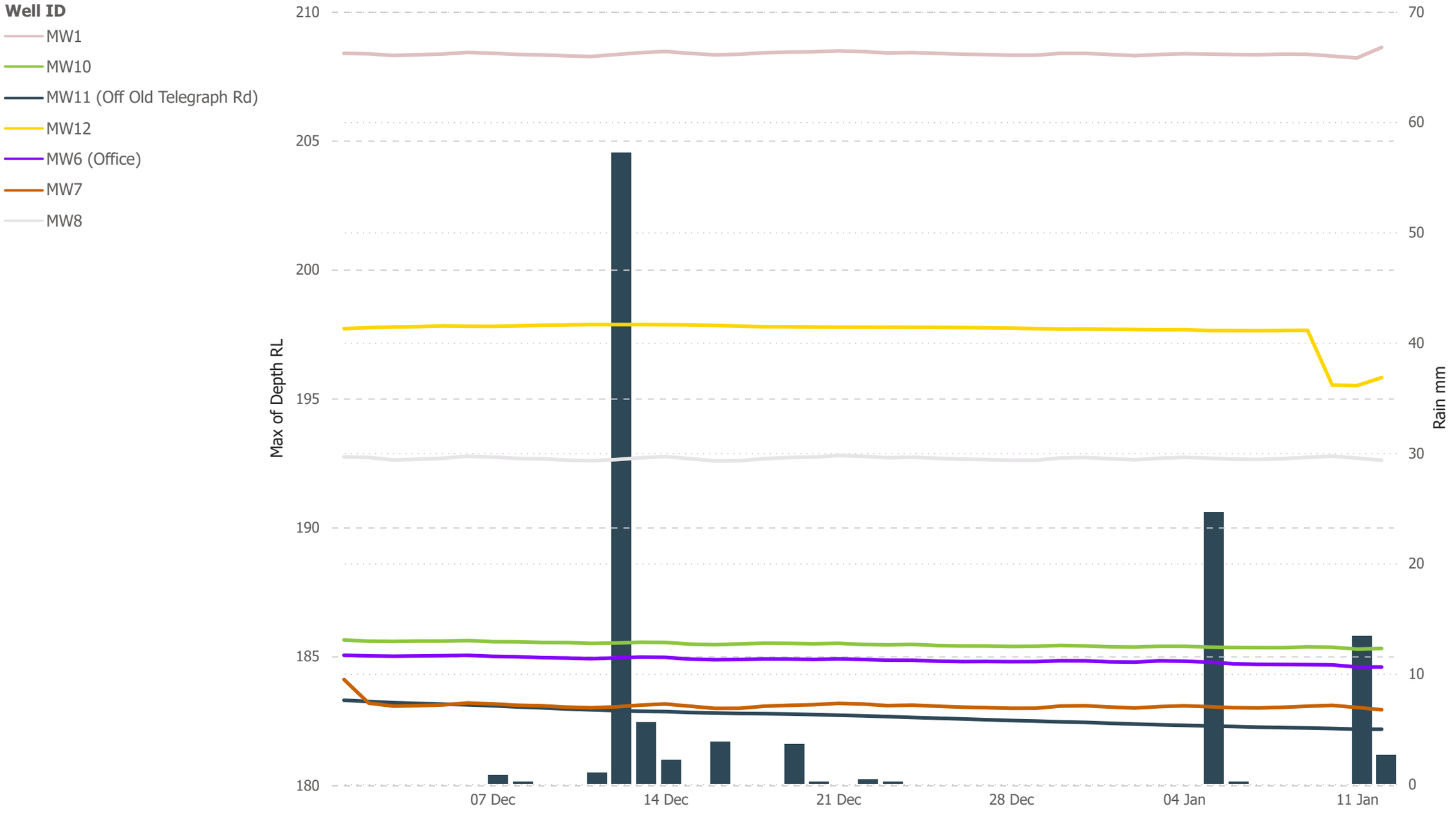
MW1 and MW12 were taken away for repairs during April 2018 and returned in October 2018, hence the gap in reporting on the following graphs.

Due to rain gauge malfunctions, rainfall was not recorded in 2020 until a new weather station was installed onsite 29th May 2020. Where available, daily rainfall received in the interim was been sourced from the Bureau of Meteorology.

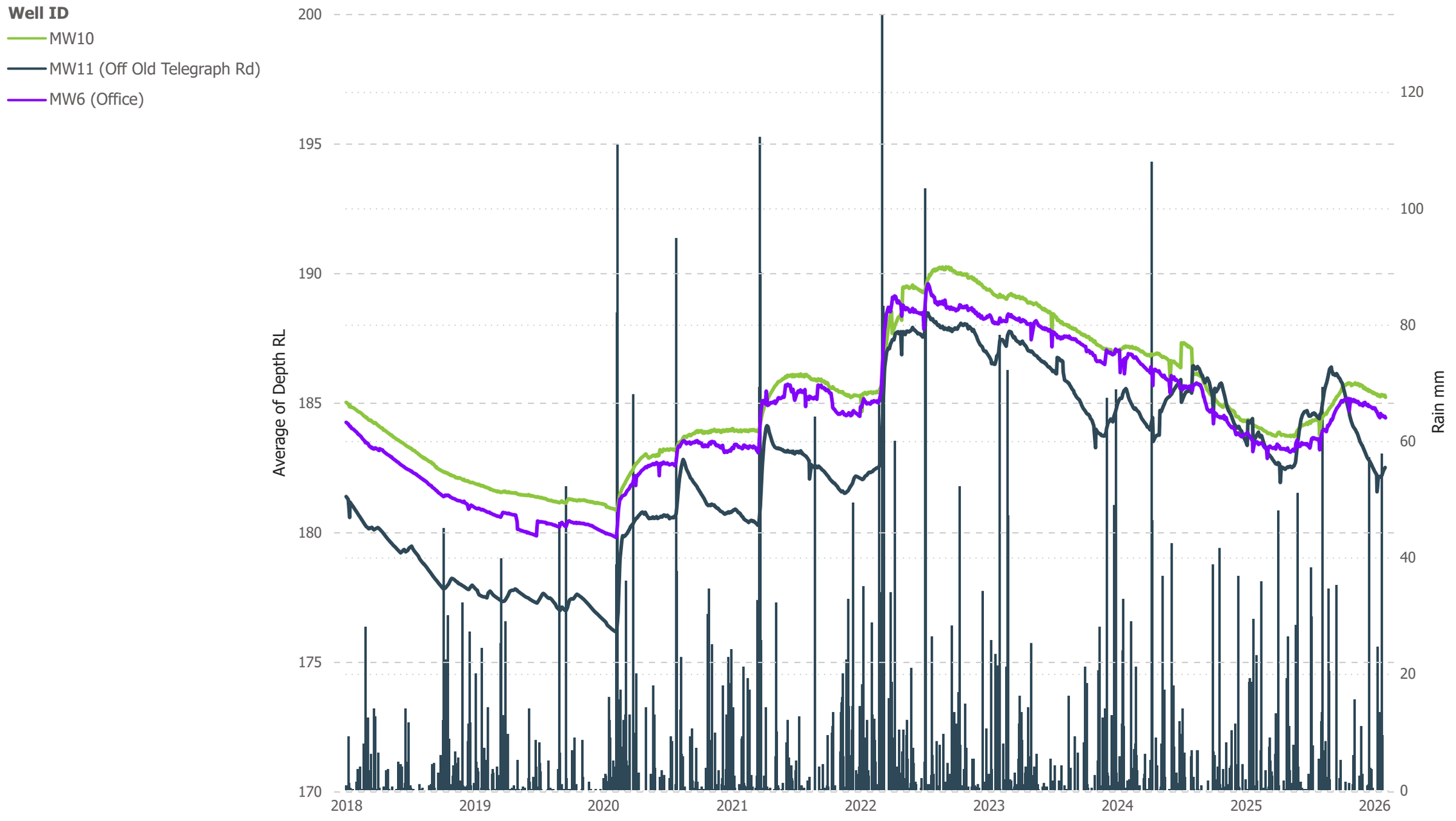
Graph 1: All Groundwater Depths with Rainfall from 1/1/2017



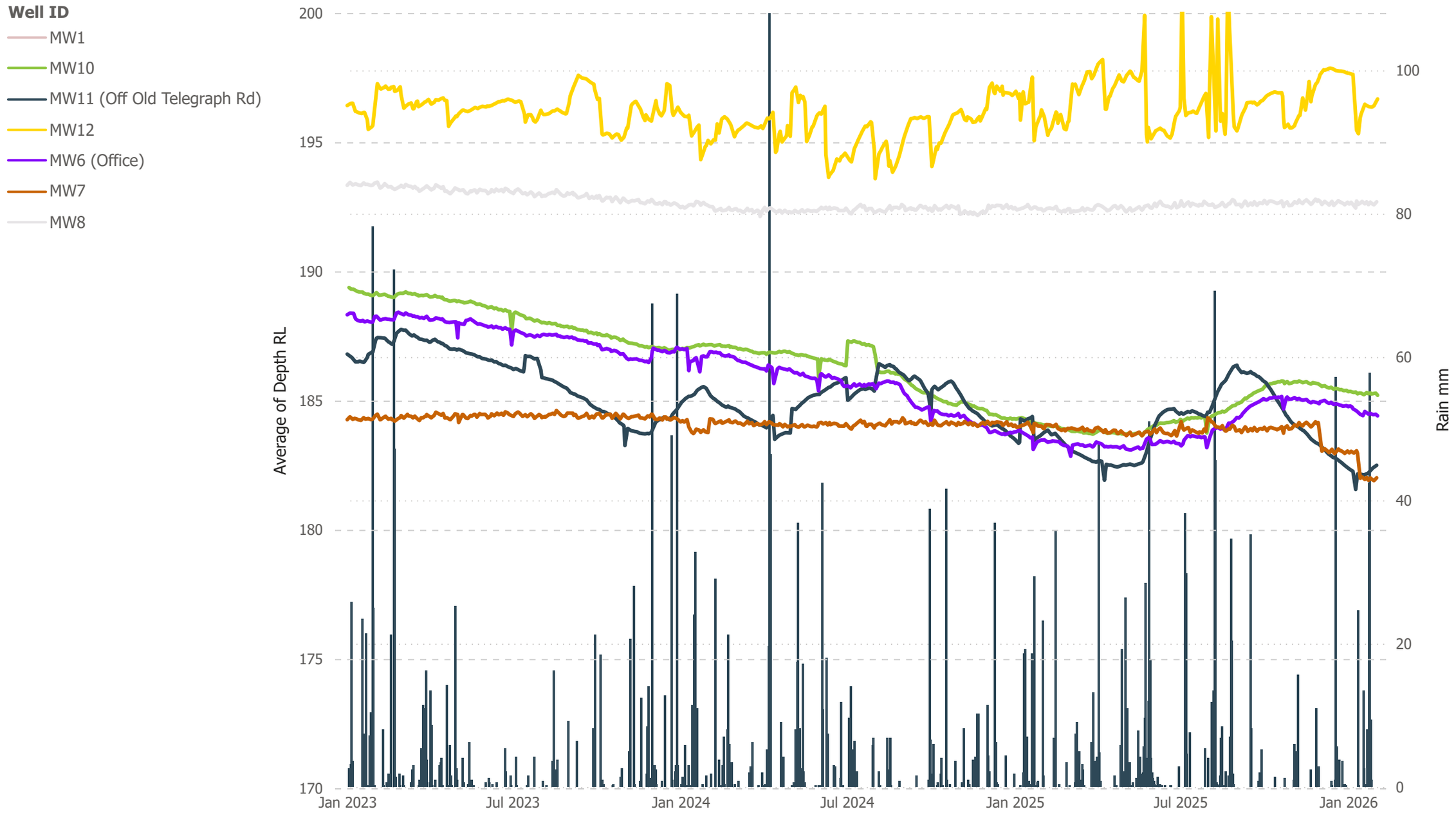
Graph 2: All Groundwater Depths with Rainfall this period



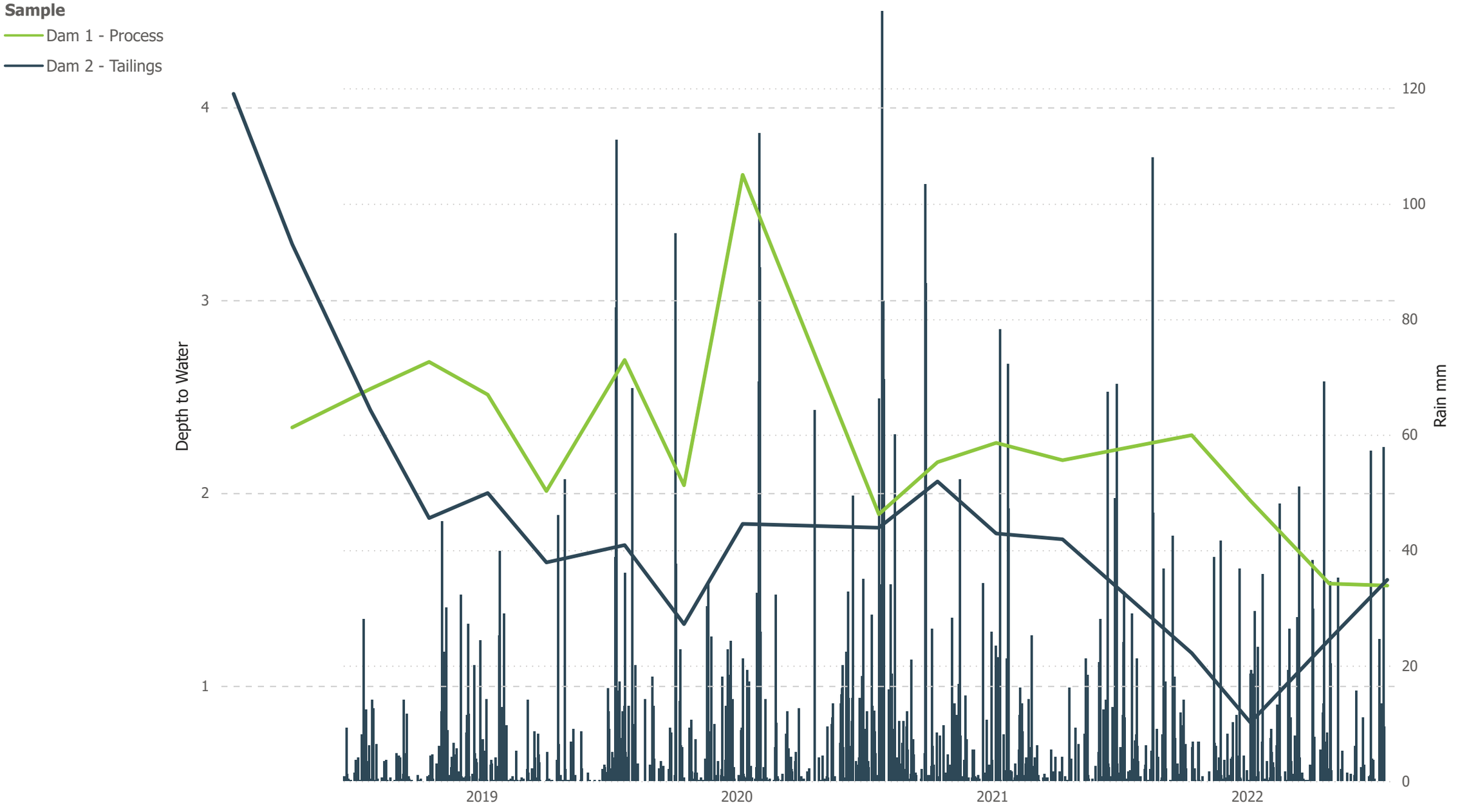
Graph 3: All Groundwater Depths with Rainfall in Maroota Sand



Graph 4: All Groundwater Depths with Rainfall in Hawkesbury Sandstone



Graph 5: Surface Water Depths with Rainfall

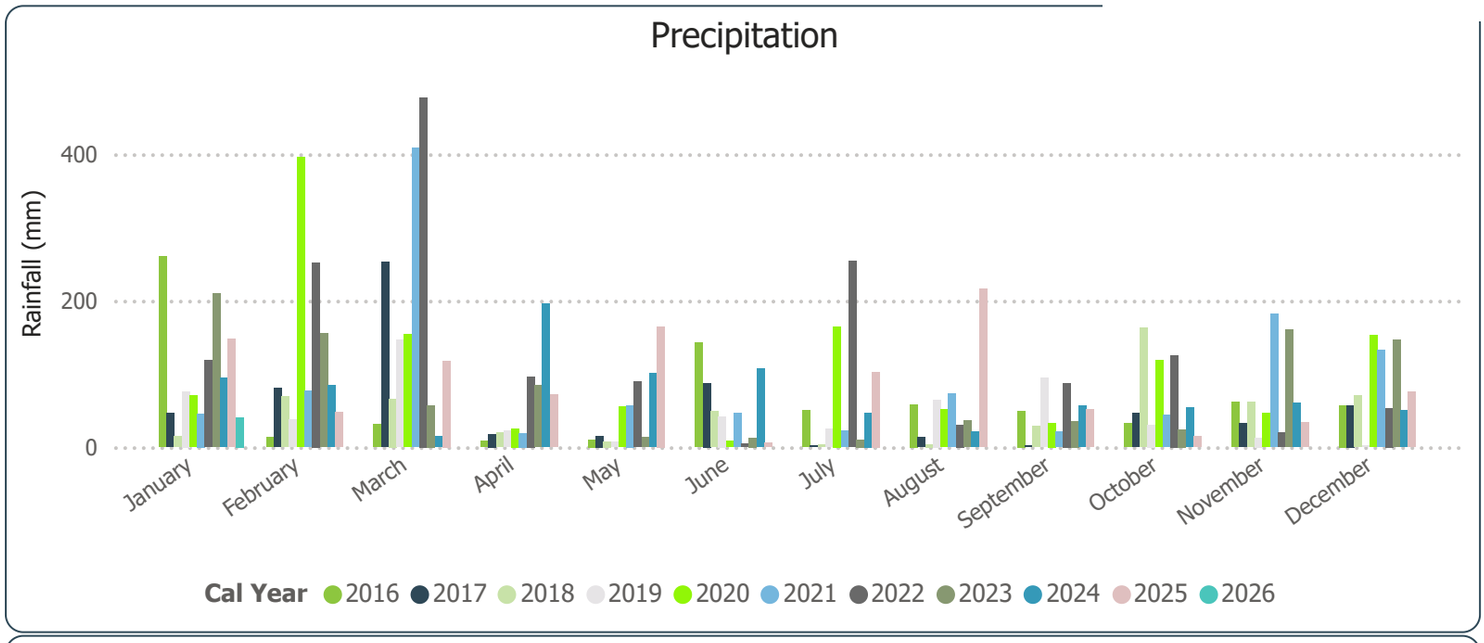


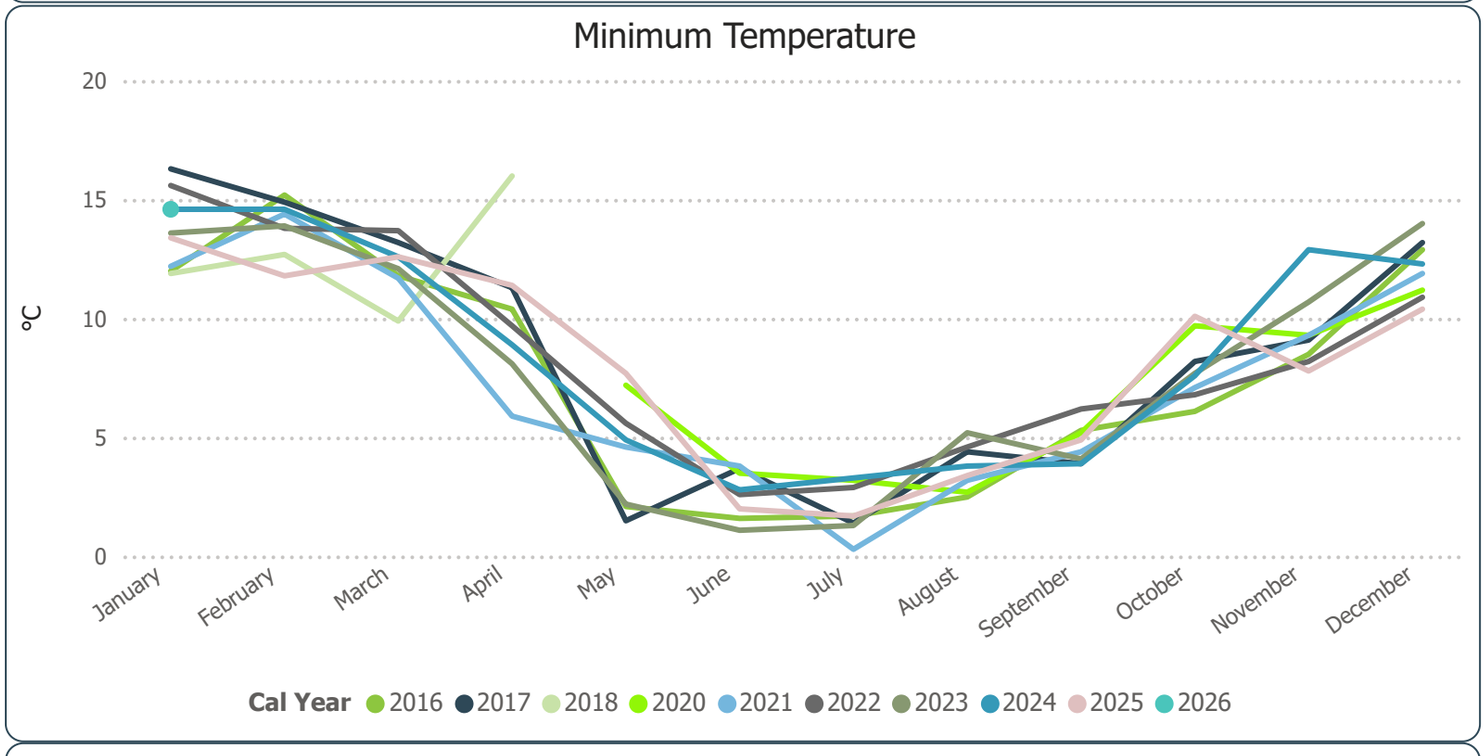
Weather Station Monitoring

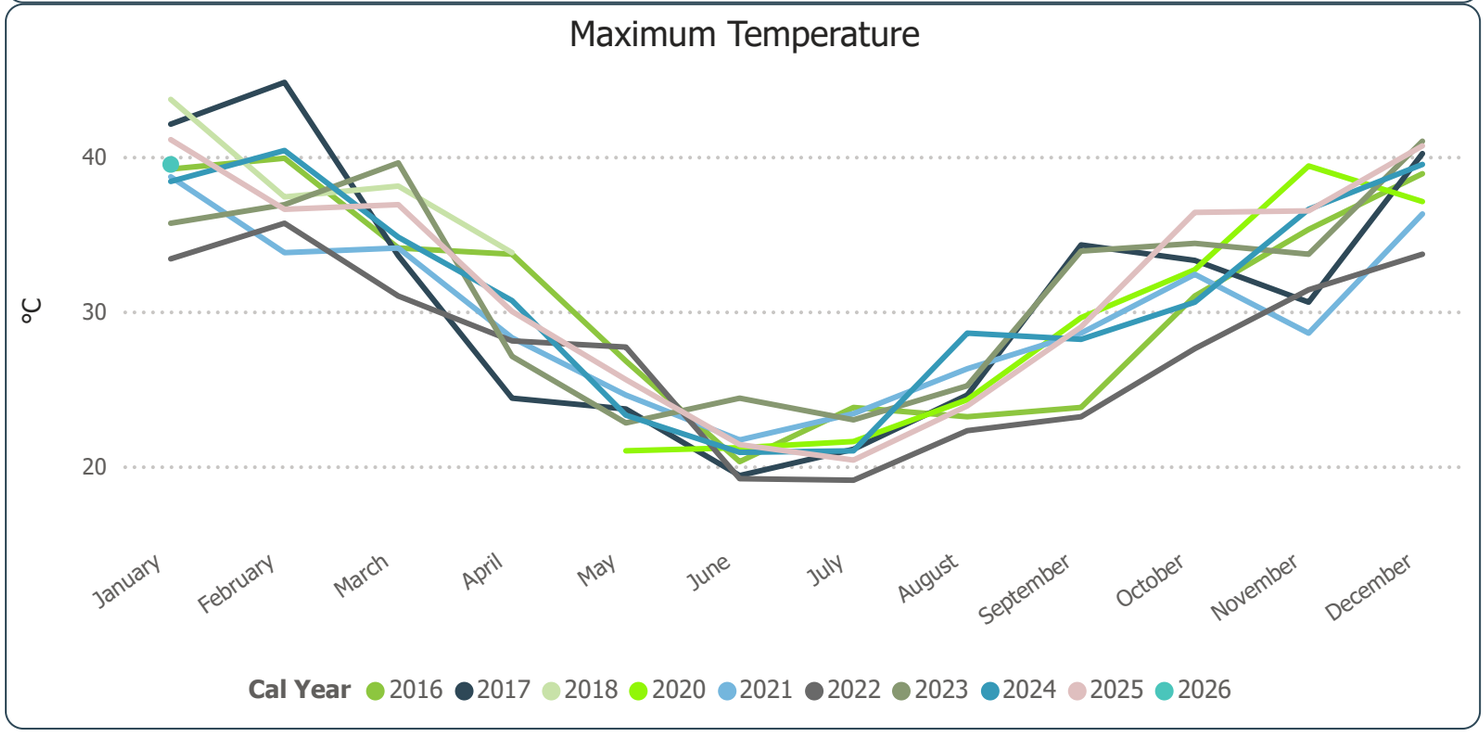
Due to gauge malfunctions, rainfall was not recorded in 2020 until a new weather station was installed onsite 29th May 2020. Where available, daily rainfall received in the interim was been sourced from the Bureau of Meteorology. Temperature monitoring during that period also shows gaps in the data. For modelling and reporting, Bureau of Meteorology averages were used

Weather Trends

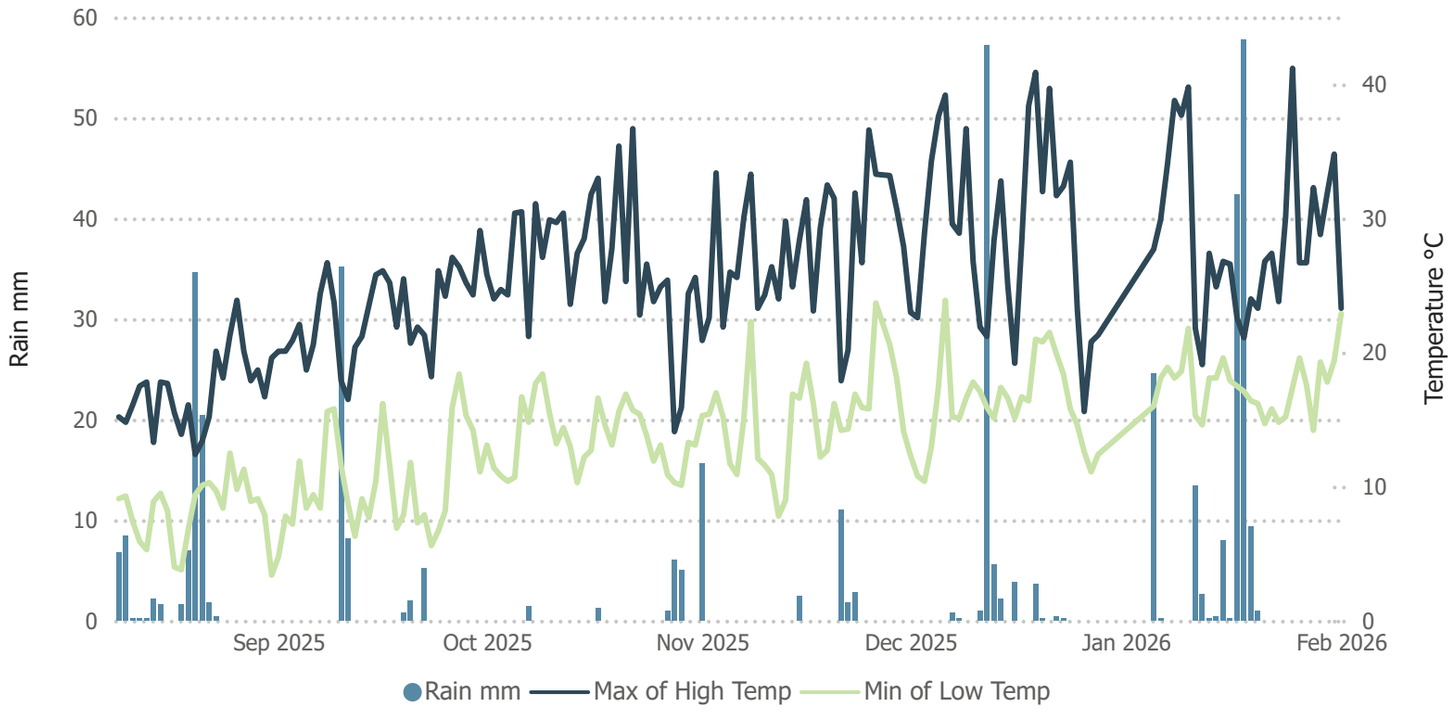
1/01/2016 12/01/2026







Weather Detail for last 6 months



Precipitation mm

Cal Year	January	February	August	September	October	November	December	**Total**
2025			85.4	51.4	14.6	33.6	75.2	**260.2**
2026	160.2	0.0						**160.2**

Minimum Temperature °C

Cal Year	January	February	August	September	October	November	December	**Total**
2025			3.4	4.9	10.1	7.8	10.4	**3.4**
2026	14.3	23.0						**14.3**

Average Temperature °C

Cal Year	January	February	August	September	October	November	December	**Total**
2025			12.2	16.3	19.5	20.3	21.9	**18.3**
2026	22.3	23.0						**22.3**

Maximum Temperature °C

Cal Year	January	February	August	September	October	November	December	**Total**
2025			23.9	29.0	36.4	36.5	40.7	**40.7**
2026	41.2	23.0						**41.2**

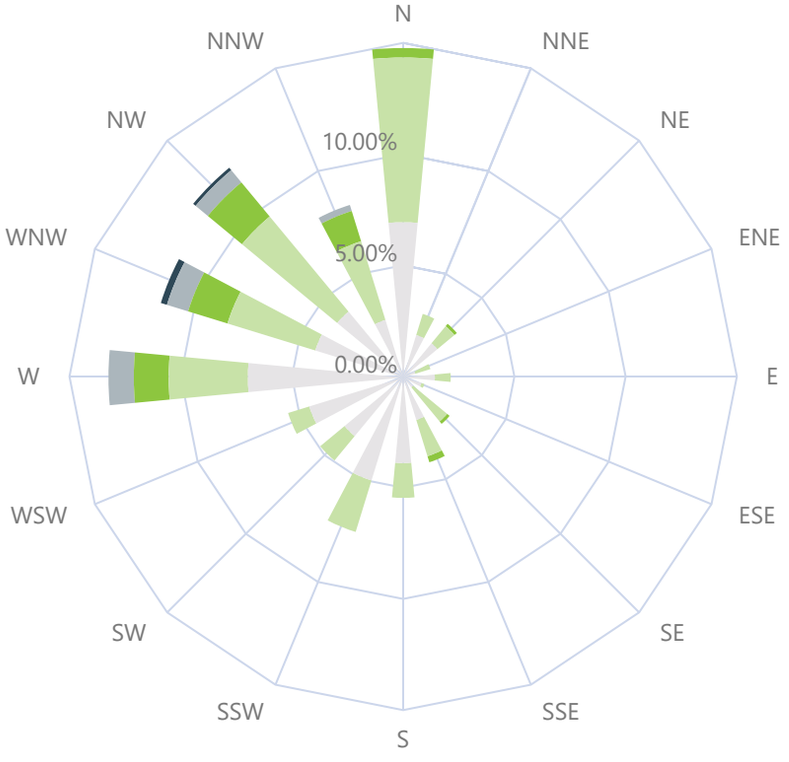
Wind Rose for Last 12 Months

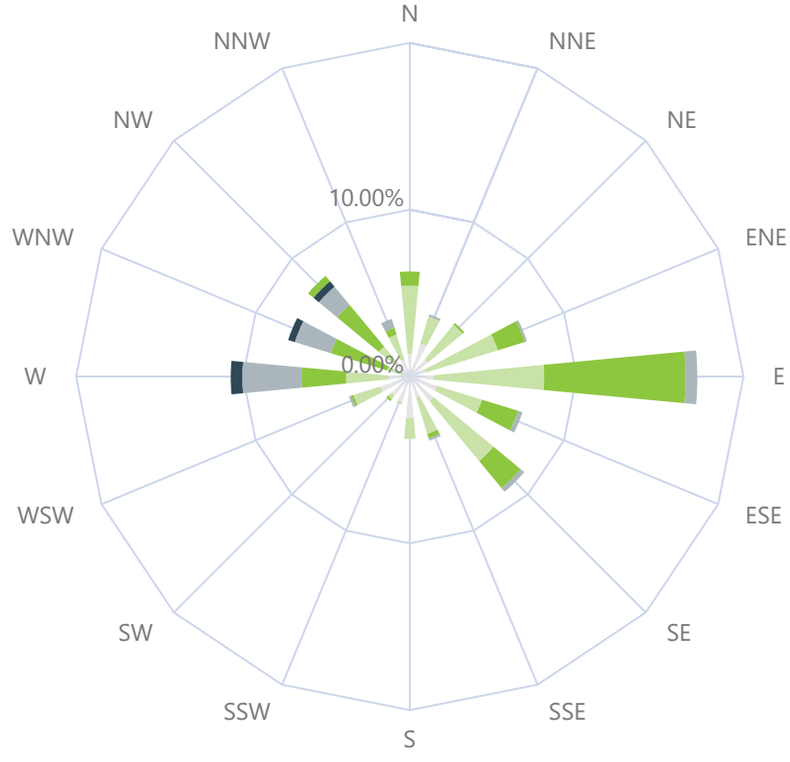
9 am

3 pm

Wind Speed Groups

0-5 km/h | 5-10 km/h | 10-15 km/h | 15-20 km/h | 20-25 Km/h | 25-30 Km/h | 30+ Km/h





Plan of:	Annual Review & Compliance Report 2025 for Roberts Road Maroota Sand Quarry - Wet Weather High Groundwater Level Maroota Sands (2022)	**Location:**	Maroota Quarry, Roberts Road, Maroota, NSW	**Source:**	nearmap - Image Date 23/10/2024 Zone MGA 56	**Plan By:**	TO
Figure:	SIX	**Council:**	Hills Shire Council	**Survey:**	Fyfe Quarry Contours 24/02/2022 NSW Spatial Services ELVISDEM Surrounding Contours Dated: May 2017, Spot Heights by Ross Robinson Consulting March 2023	**Project Manager:**	TO
Version/ Date:	V2 3/03/2025	**Tenure:**	Not Applicable	**Projection:**	GDA2020/MGA Zone 56 EPSG:7856		
Our Ref:	12700_HMA_AR2024-2025_C006_V2_F6	**Client:**	Hodgson Quarries & Plant Pty Ltd	**Contour Interval:**	1m		

0 50 100 m

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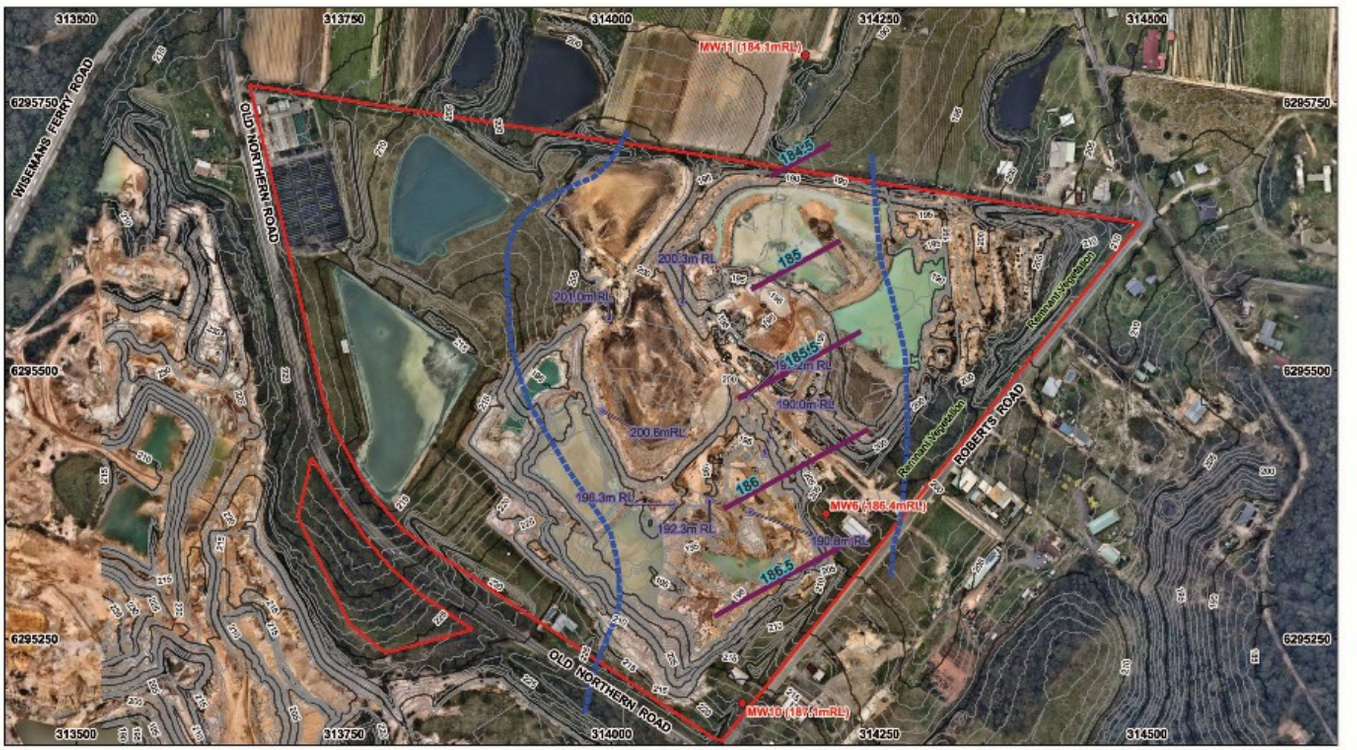
This figure may be based on third party data which has not been verified by vgt and may not be to scale. Unless expressly agreed otherwise, this figure is intended as a guide only and vgt does not warrant its accuracy.



Legend

- Property Boundary
- Dam Areas
- Contours of Wet Weather High GW Level (mRL)
- Edge of Saturated Maroota Sands
- Groundwater Monitoring Well Location
- 2024-2025 Survey Point

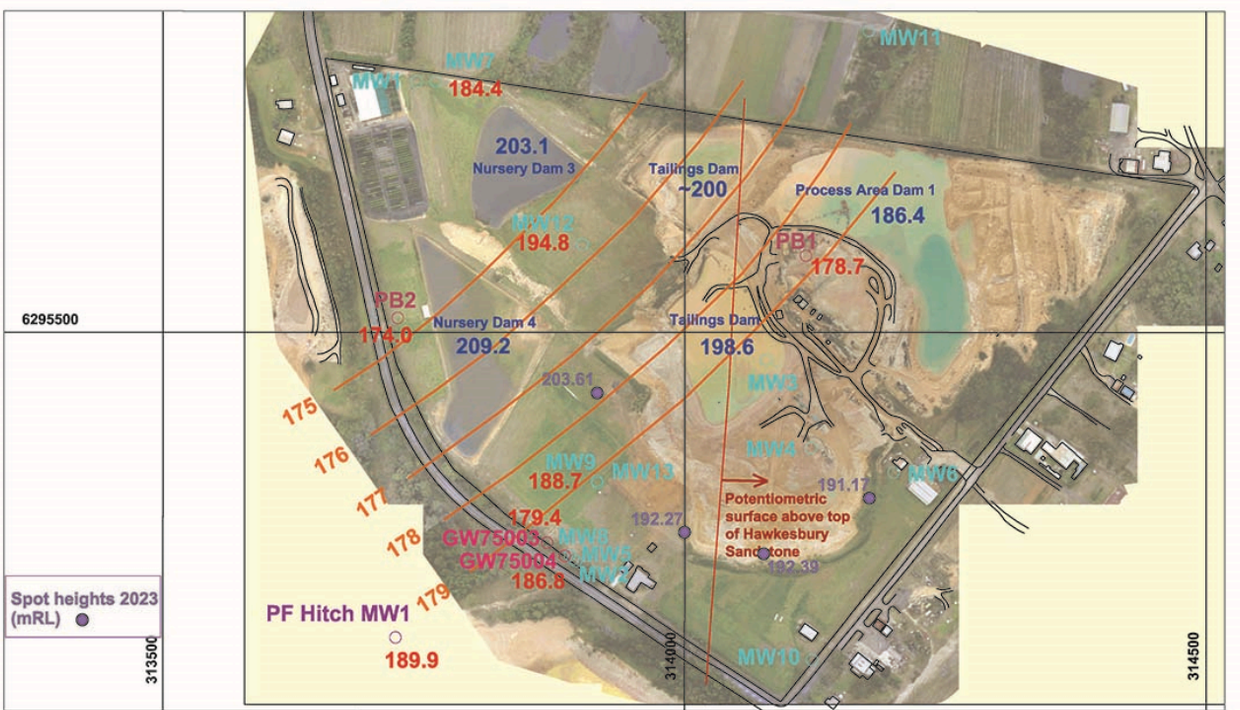
Plan of:	Annual Review & Compliance Report 2022 for Roberts Road Maroota Sand Quarry - Wet Weather High Groundwater Level Hawkesbury Sandstone (Feb 2018)	**Location:**	Maroota Quarry, Roberts Road, Maroota, NSW	**Source:**	Dundon Consulting Pty Ltd Figure 16 Dwg No. 06-0318-021d 08/03/2018	**Our Ref:**	12498_HMA_AR2022_C001_V0_F5B.cdr
Figure:	FIVE-B	**Council:**	Hills Shire Council	**Survey:**	Dundon Consulting Pty Ltd 08/03/2018	**Plan By:**	LT/JD/SK
Sheet:	1 of 1	**Tenures:**	N/A	**Projection:**	MGA	**Project Manager:**	LT
Version/Date:	V0 15/03/2023	**Client:**	Hodgson Quarries & Plant Pty Ltd	**Contour Interval:**	1m	**Office:**	Thornton

vgt

This figure may be based on third party data which has not been verified by vgt and may not be to scale. Unless expressly agreed otherwise, this figure is intended as a guide only and vgt does not warrant its accuracy.

N

0 20 40 60 80 100m



LEGEND:

- Hodgson monitoring bore
- Hodgson production bore
- 174.0 Hawkesbury Sandstone water level
- Contours of wet weather high GW level
- Potentiometric surface above top of HS

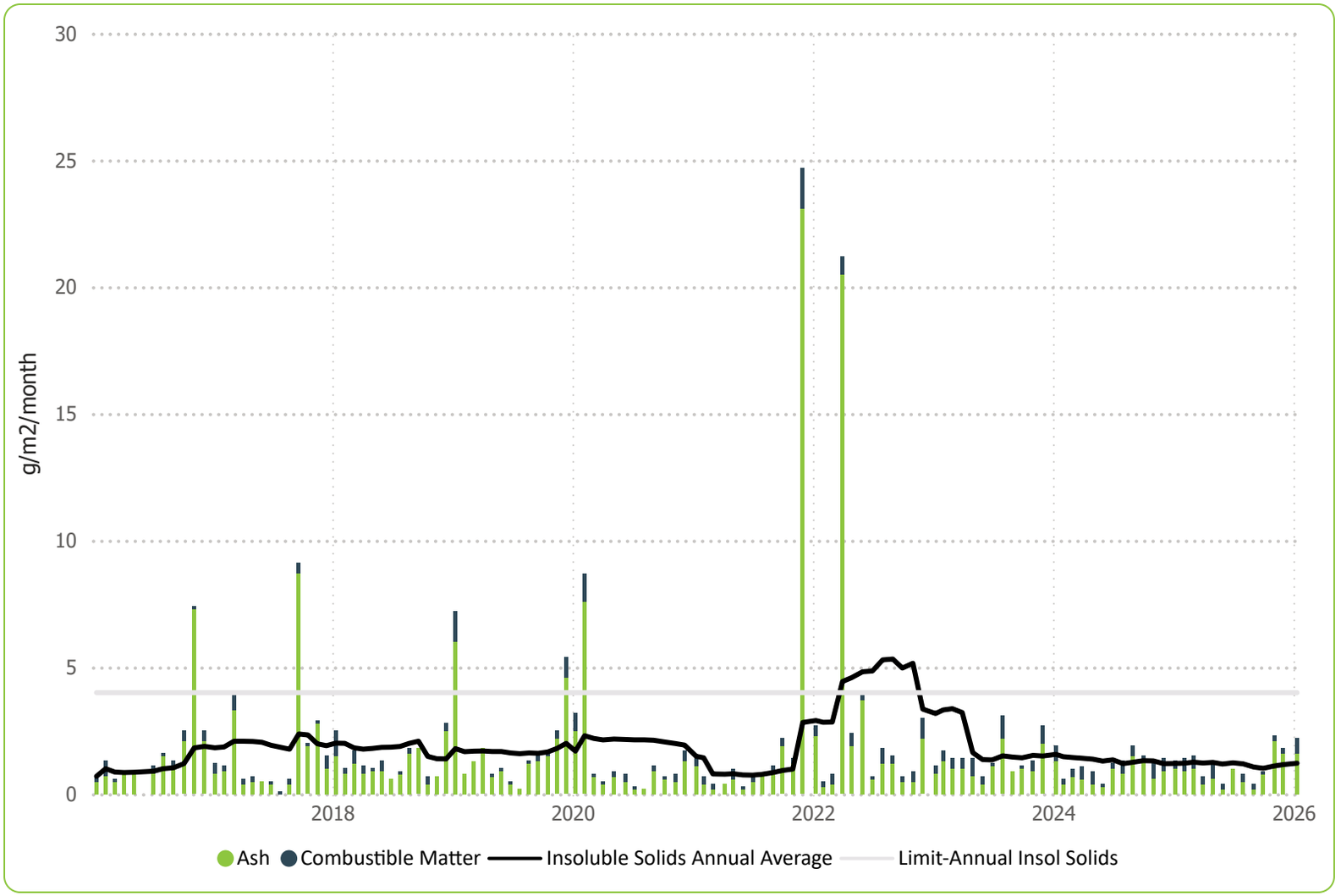
DATE: 8 March 2018	SCALE:	**Hodgson Quarry and Plant Pty Ltd**	
PROJECT NO: 06-0318	AUTHOR: PD	**ROBERTS ROAD MAROOTA SAND QUARRY**	
DRAWING NO: 06-0318-021d	REVISION: D	**Wet Weather High Groundwater Level**	
Dundon Consulting Pty Ltd		**Hawkesbury Sandstone (February 2018)**	**Figure 16**

Depositional Dust and Particulate Matter Monitoring

Depositional Dusts last 12 months

D1 Gate

Insoluble Solids Annual Average g/m2/month



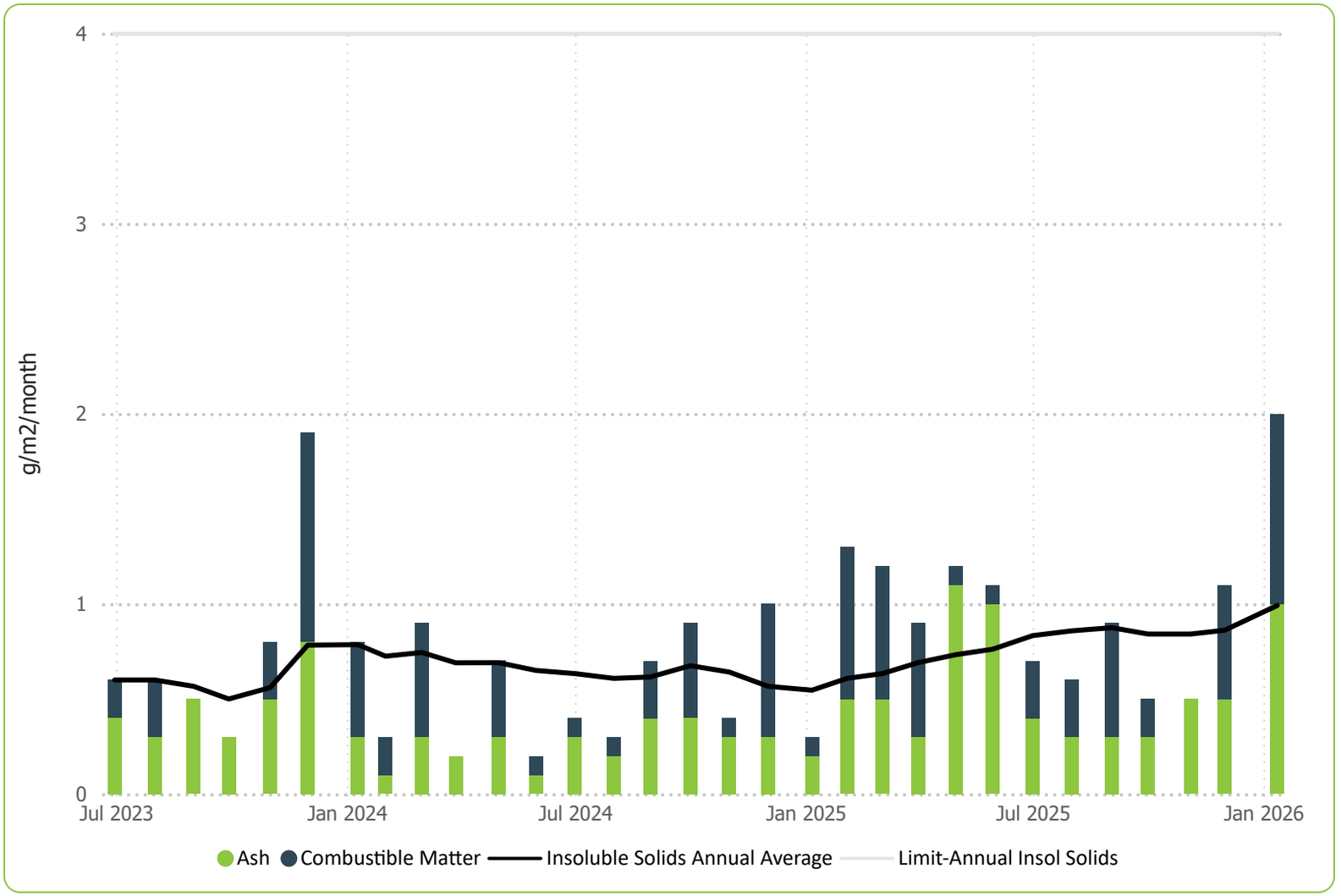
Date On	Comments
6/01/25	Bottle full of water
3/02/25	
3/03/25	
1/04/25	
1/05/25	
30/05/25	
1/07/25	
1/08/25	
2/09/25	
1/10/25	
4/11/25	
1/12/25	

Date Sampled	Days On	Insoluble Solids	Ash	Combustible Matter	Calculated Rain
3/2/25	28	1.4	0.9	0.5	114
3/3/25	28	1.5	1.0	0.5	48
1/4/25	29	0.7	0.4	0.3	115
1/5/25	30	1.2	0.6	0.6	80
30/5/25	28	0.4	0.2	0.2	115
1/7/25	32	1.0	1.0	0.0	22
1/8/25	31	0.8	0.5	0.3	100
2/9/25	32	0.4	0.2	0.2	115
1/10/25	29	0.9	0.8	0.1	49
4/11/25	28	2.3	2.1	0.2	30
1/12/25	27	1.8	1.6	0.2	23
12/1/26	28	2.2	1.6	0.6	115

Depositional Dusts last 12 months

D2a North East Corner

Insoluble Solids Annual Average g/m2/month



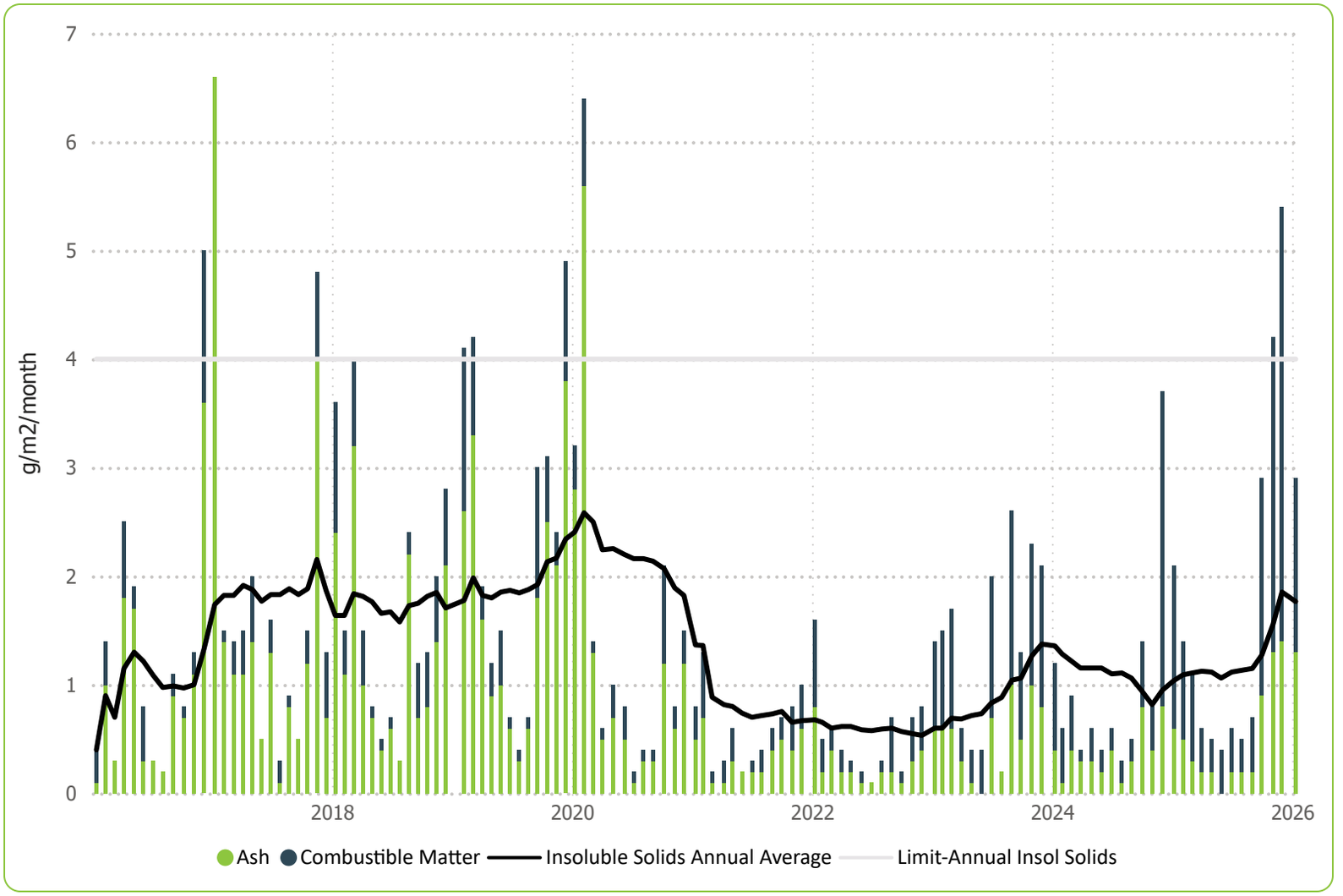
Date On	Comments
2/12/24	
6/01/25	Bottle full of water
3/02/25	
3/03/25	
1/04/25	
1/05/25	
30/05/25	
1/07/25	
1/08/25	
2/09/25	
1/10/25	
4/11/25	
1/12/25	

Date Sampled	Days On	Insoluble Solids	Ash	Combustible Matter	Calculated Rain
3/2/25	28	1.3	0.5	0.8	114
3/3/25	28	1.2	0.5	0.7	40
1/4/25	29	0.9	0.3	0.6	107
1/5/25	30	1.2	1.1	0.1	78
30/5/25	28	1.1	1.0	0.1	115
1/7/25	32	0.7	0.4	0.3	14
1/8/25	31	0.6	0.3	0.3	86
2/9/25	32	0.9	0.3	0.6	114
1/10/25	29	0.5	0.3	0.2	42
4/11/25	28	0.4	0.5	0.0	26
1/12/25	27	1.1	0.5	0.6	11
12/1/26	28	2.0	1.0	1.0	115

Depositional Dusts last 12 months

D3A Bundwall

Insoluble Solids Annual Average g/m2/month



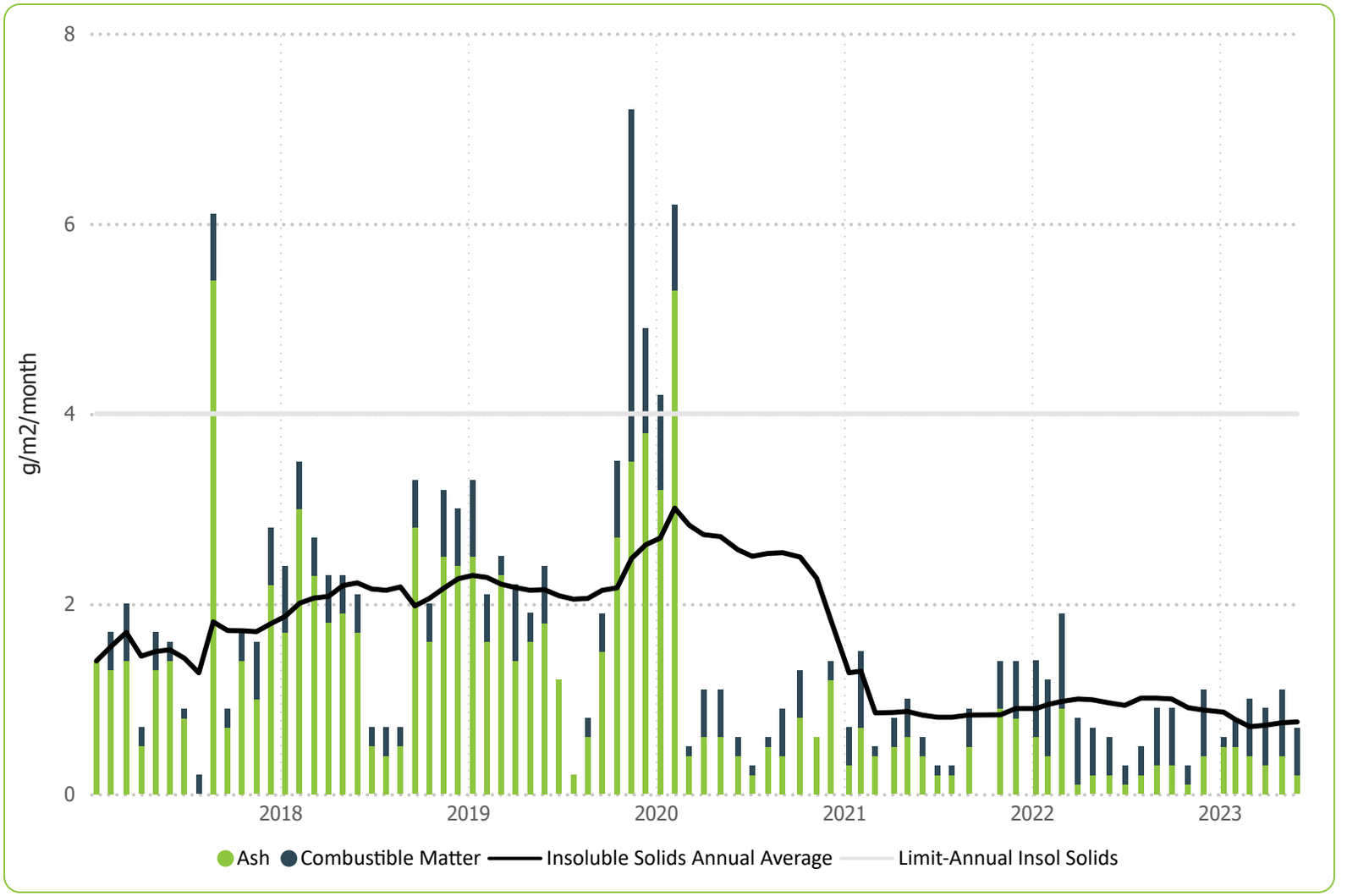
Date On	Comments
6/01/25	Bottle full of water
3/02/25	
3/03/25	
1/04/25	
1/05/25	
30/05/25	
1/07/25	
1/08/25	
2/09/25	
1/10/25	
4/11/25	
1/12/25	

Date Sampled	Days On	Insoluble Solids	Ash	Combustible Matter	Calculated Rain
3/2/25	28	1.4	0.5	0.9	116
3/3/25	28	1.1	0.3	0.8	43
1/4/25	29	0.6	0.2	0.4	115
1/5/25	30	0.5	0.2	0.3	80
30/5/25	28	0.4	0.0	0.4	115
1/7/25	32	0.6	0.2	0.4	21
1/8/25	31	0.5	0.2	0.3	96
2/9/25	32	0.7	0.2	0.5	114
1/10/25	29	2.9	0.9	2.0	51
4/11/25	28	4.2	1.3	2.9	32
1/12/25	27	5.4	1.4	4.0	22
12/1/26	28	2.9	1.3	1.6	110

Depositional Dusts last 12 months

D2 North East Corner

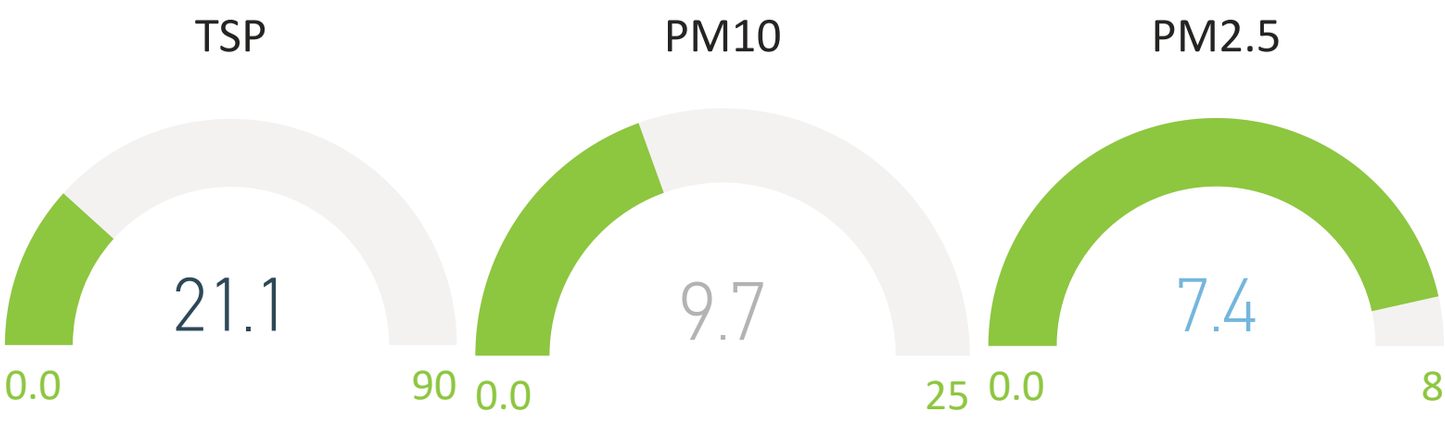
Insoluble Solids Annual Average g/m2/month

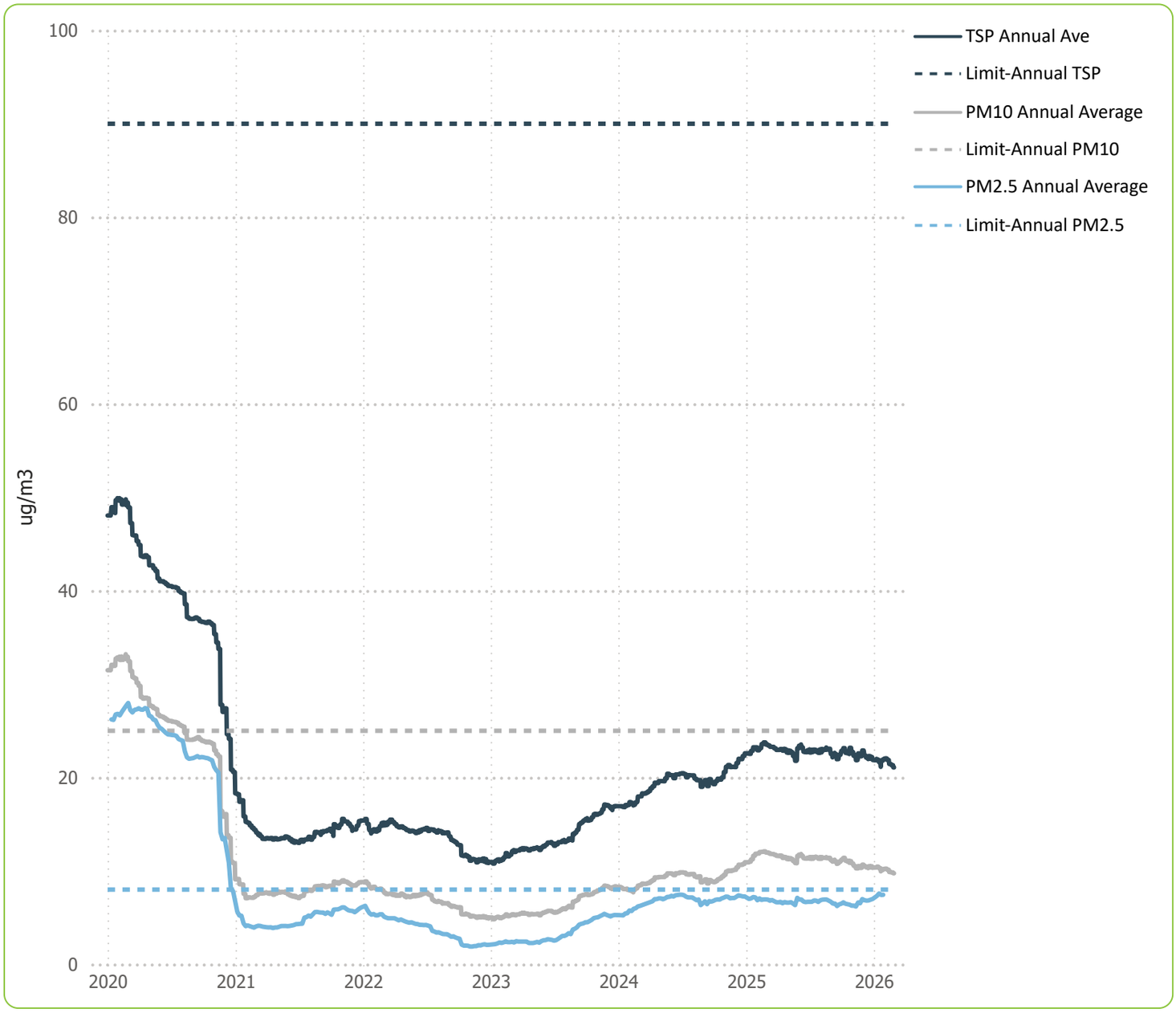


Date On	Comments
1/06/22	Sampled by Melissa Mass
1/07/22	Sampled by Melissa Mass. Flooding rainfall event during July.
1/08/22	Sampled by Melissa Mass.
1/09/22	Sampled by Melissa Mass.
30/09/22	Sampled by Melissa Mass.
1/11/22	Sampled by Melissa Mass.
1/12/22	Sampled by Melissa Mass.
9/01/23	
1/02/23	Sampled by M.Mass
1/03/23	Sampled by M.Mass. Not compliant - Clear sky/ 10m from obstacle
31/03/23	Sampled by M.Mass.
2/05/23	Sampled by M.Mass.

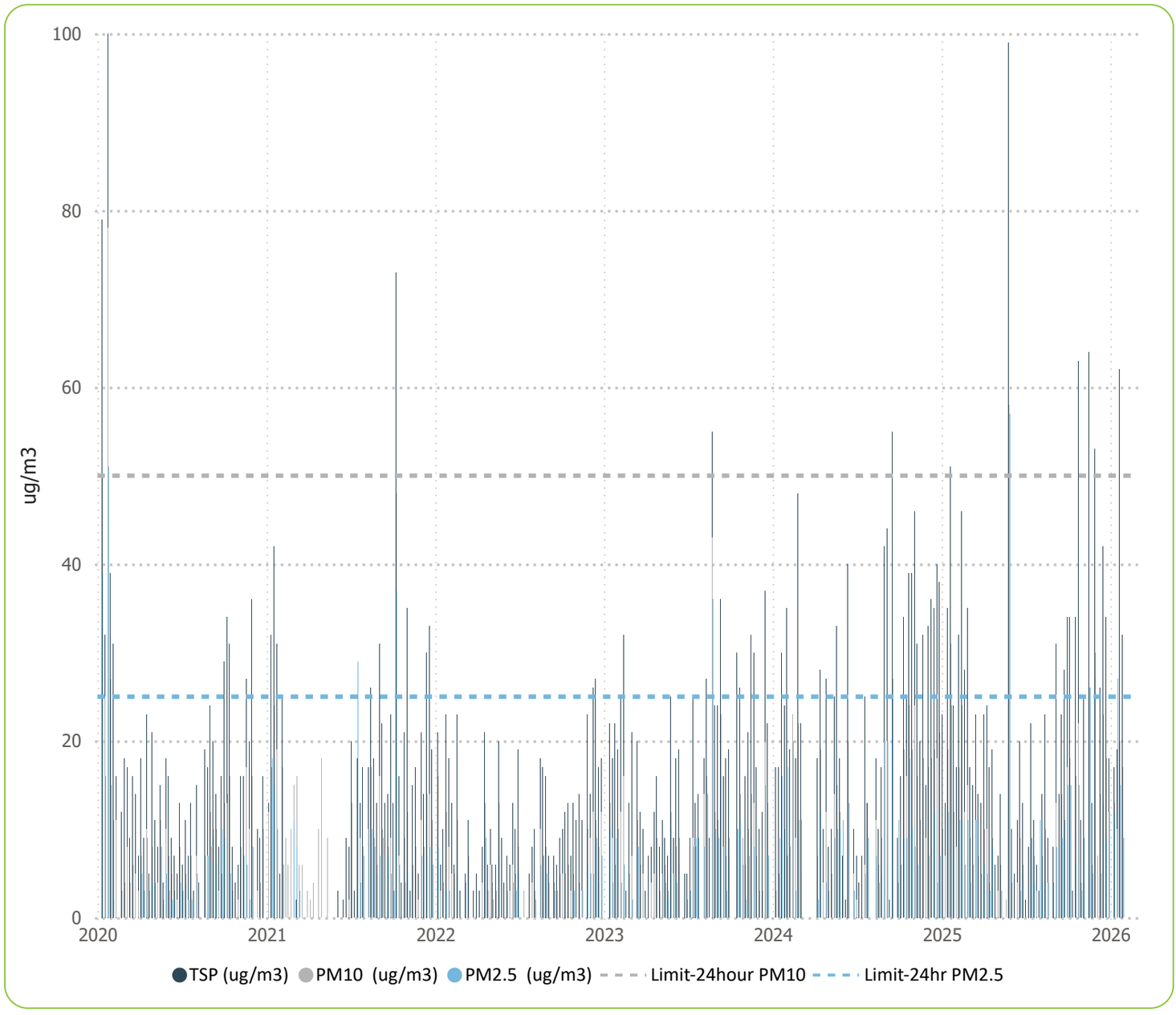
Date Sampled	Days On	Insoluble Solids	Ash	Combustible Matter	Calculated Rain
1/7/22	30	0.3	0.1	0.2	4
1/8/22	31	0.5	0.2	0.3	115
1/9/22	31	0.9	0.3	0.6	26
30/9/22	29	0.9	0.3	0.6	72
1/11/22	32	0.3	0.1	0.2	114
1/12/22	30	1.1	0.4	0.7	20
9/1/23	39	0.6	0.5	0.1	68
1/2/23	23	0.8	0.5	0.3	114
1/3/23	28	1.0	0.4	0.6	114
31/3/23	30	0.9	0.3	0.6	47
2/5/23	32	1.1	0.4	0.7	67
1/6/23	30	0.7	0.2	0.5	12

Particulate Matter Annual Averages (µg/m3)





Particulate Matter 24 Hour Averages (µg/m3)



PM10 24 hour exceedances (>50 µg/m3)

Date	PM10 (ug/m3)	Sampling Comments

PM2.5 24 hour exceedances (>25 µg/m3)

Date	PM2.5 (ug/m3)	Sampling Comments
17/11/25	26.00	
29/11/25	27.00	
16/1/26	27.00	Paper got wet and dirt spilt on it.

Sample

Dam 1 - Process

Sample	Date	pH	Electrical Conductivity	Total Dissolved Solids	Chloride	Sulphate	Calcium	Magnesium	Sodium	Potassium
Dam 1 - Process	9/4/25	6.6	219	140	53	11	5.0	4.0	20	2.0
Dam 1 - Process	30/7/25	6.8	184	110	36	14	5.4	3.0	20	2.0
Dam 1 - Process	22/10/25	5.7	181	110	36	16	4.0	3.0	17	2.0
Dam 1 - Process	9/1/26	6.9	193	120	40	14	6.2	3.0	20	2.0

Sample	Date	Average of pH	Average of Electrical Conductivity	Average of Total Dissolved Solids	Average of Chloride	Average of Sulphate	Average of Calcium	Average of Magnesium	Average of Sodium	Average of Potassium
Dam 1 - Process	9/4/25	6.6	219	140	53	11	5.0	4.0	20	2.0
Dam 1 - Process	30/7/25	6.8	184	110	36	14	5.4	3.0	20	2.0
Dam 1 - Process	22/10/25	5.7	181	110	36	16	4.0	3.0	17	2.0
Dam 1 - Process	9/1/26	6.9	193	120	40	14	6.2	3.0	20	2.0

Sample	Date	Min of pH	Min of Electrical Conductivity	Min of Total Dissolved Solids	Min of Chloride	Min of Sulphate	Min of Calcium	Min of Magnesium	Min of Sodium	Min of Potassium
Dam 1 - Process	9/4/25	6.6	219	140	53	11	5.0	4.0	20	2.0
Dam 1 - Process	30/7/25	6.8	184	110	36	14	5.4	3.0	20	2.0
Dam 1 - Process	22/10/25	5.7	181	110	36	16	4.0	3.0	17	2.0
Dam 1 - Process	9/1/26	6.9	193	120	40	14	6.2	3.0	20	2.0

Sample	Date	Max of pH	Max of Electrical Conductivity	Max of Total Dissolved Solids	Max of Chloride	Max of Sulphate	Max of Calcium	Max of Magnesium	Max of Sodium	Max of Potassium
Dam 1 - Process	9/4/25	6.6	219	140	53	11	5.0	4.0	20	2.0
Dam 1 - Process	30/7/25	6.8	184	110	36	14	5.4	3.0	20	2.0
Dam 1 - Process	22/10/25	5.7	181	110	36	16	4.0	3.0	17	2.0
Dam 1 - Process	9/1/26	6.9	193	120	40	14	6.2	3.0	20	2.0

Sample

Dam 2 - Tailings

Sample	Date	pH	Electrical Conductivity	Total Dissolved Solids	Chloride	Sulphate	Calcium	Magnesium	Sodium	Potassium
Dam 2 - Tailings	9/4/25	4.3	209	130	51	7	4.0	4.0	18	2.0
Dam 2 - Tailings	30/7/25	4.0	264	160	66	3	1.0	5.7	31	1.0
Dam 2 - Tailings	22/10/25	4.6	205	130	44	7	3.0	4.0	18	2.0
Dam 2 - Tailings	9/1/26	5.8	207	130	46	11	5.6	4.0	24	2.0

Sample	Date	Average of pH	Average of Electrical Conductivity	Average of Total Dissolved Solids	Average of Chloride	Average of Sulphate	Average of Calcium	Average of Magnesium	Average of Sodium	Average of Potassium
Dam 2 - Tailings	9/4/25	4.3	209	130	51	7	4.0	4.0	18	2.0
Dam 2 - Tailings	30/7/25	4.0	264	160	66	3	1.0	5.7	31	1.0
Dam 2 - Tailings	22/10/25	4.6	205	130	44	7	3.0	4.0	18	2.0
Dam 2 - Tailings	9/1/26	5.8	207	130	46	11	5.6	4.0	24	2.0

Sample	Date	Min of pH	Min of Electrical Conductivity	Min of Total Dissolved Solids	Min of Chloride	Min of Sulphate	Min of Calcium	Min of Magnesium	Min of Sodium	Min of Potassium
Dam 2 - Tailings	9/4/25	4.3	209	130	51	7	4.0	4.0	18	2.0
Dam 2 - Tailings	30/7/25	4.0	264	160	66	3	1.0	5.7	31	1.0
Dam 2 - Tailings	22/10/25	4.6	205	130	44	7	3.0	4.0	18	2.0
Dam 2 - Tailings	9/1/26	5.8	207	130	46	11	5.6	4.0	24	2.0

Sample	Date	Max of pH	Max of Electrical Conductivity	Max of Total Dissolved Solids	Max of Chloride	Max of Sulphate	Max of Calcium	Max of Magnesium	Max of Sodium	Max of Potassium
Dam 2 - Tailings	9/4/25	4.3	209	130	51	7	4.0	4.0	18	2.0
Dam 2 - Tailings	30/7/25	4.0	264	160	66	3	1.0	5.7	31	1.0
Dam 2 - Tailings	22/10/25	4.6	205	130	44	7	3.0	4.0	18	2.0
Dam 2 - Tailings	9/1/26	5.8	207	130	46	11	5.6	4.0	24	2.0

Sample

Dam 3 - Nursery

Sample	Date	pH	Electrical Conductivity	Total Dissolved Solids	Chloride	Sulphate	Calcium	Magnesium	Sodium	Potassium
Dam 3 - Nursery	9/4/25	6.2	216	130	50	6	5.8	5.3	19	5.0
Dam 3 - Nursery	30/7/25	5.8	173	110	37	6	3.0	4.0	18	3.0
Dam 3 - Nursery	22/10/25	6.4	167	100	36	7	4.0	4.0	15	3.0
Dam 3 - Nursery	9/1/26	6.2	184	110	39	8	5.3	4.0	19	3.0

Sample	Date	Average of pH	Average of Electrical Conductivity	Average of Total Dissolved Solids	Average of Chloride	Average of Sulphate	Average of Calcium	Average of Magnesium	Average of Sodium	Average of Potassium
Dam 3 - Nursery	9/4/25	6.2	216	130	50	6	5.8	5.3	19	5.0
Dam 3 - Nursery	30/7/25	5.8	173	110	37	6	3.0	4.0	18	3.0
Dam 3 - Nursery	22/10/25	6.4	167	100	36	7	4.0	4.0	15	3.0
Dam 3 - Nursery	9/1/26	6.2	184	110	39	8	5.3	4.0	19	3.0

Sample	Date	Min of pH	Min of Electrical Conductivity	Min of Total Dissolved Solids	Min of Chloride	Min of Sulphate	Min of Calcium	Min of Magnesium	Min of Sodium	Min of Potassium
Dam 3 - Nursery	9/4/25	6.2	216	130	50	6	5.8	5.3	19	5.0
Dam 3 - Nursery	30/7/25	5.8	173	110	37	6	3.0	4.0	18	3.0
Dam 3 - Nursery	22/10/25	6.4	167	100	36	7	4.0	4.0	15	3.0
Dam 3 - Nursery	9/1/26	6.2	184	110	39	8	5.3	4.0	19	3.0

Sample	Date	Max of pH	Max of Electrical Conductivity	Max of Total Dissolved Solids	Max of Chloride	Max of Sulphate	Max of Calcium	Max of Magnesium	Max of Sodium	Max of Potassium
Dam 3 - Nursery	9/4/25	6.2	216	130	50	6	5.8	5.3	19	5.0
Dam 3 - Nursery	30/7/25	5.8	173	110	37	6	3.0	4.0	18	3.0
Dam 3 - Nursery	22/10/25	6.4	167	100	36	7	4.0	4.0	15	3.0
Dam 3 - Nursery	9/1/26	6.2	184	110	39	8	5.3	4.0	19	3.0

Sample

Dam 4 - Farm

Sample	Date	pH	Electrical Conductivity	Total Dissolved Solids	Chloride	Sulphate	Calcium	Magnesium	Sodium	Potassium
Dam 4 - Farm	9/4/25	8.8	212	130	31	2	6.6	5.7	15	13.0
Dam 4 - Farm	30/7/25	6.1	123	77	24	3	3.0	3.0	13	4.0
Dam 4 - Farm	22/10/25	6.4	138	86	27	4	3.0	3.0	13	4.0
Dam 4 - Farm	9/1/26	6.3	176	110	32	4	4.0	4.0	16	5.1

Sample	Date	Average of pH	Average of Electrical Conductivity	Average of Total Dissolved Solids	Average of Chloride	Average of Sulphate	Average of Calcium	Average of Magnesium	Average of Sodium	Average of Potassium
Dam 4 - Farm	9/4/25	8.8	212	130	31	2	6.6	5.7	15	13.0
Dam 4 - Farm	30/7/25	6.1	123	77	24	3	3.0	3.0	13	4.0
Dam 4 - Farm	22/10/25	6.4	138	86	27	4	3.0	3.0	13	4.0
Dam 4 - Farm	9/1/26	6.3	176	110	32	4	4.0	4.0	16	5.1

Sample	Date	Min of pH	Min of Electrical Conductivity	Min of Total Dissolved Solids	Min of Chloride	Min of Sulphate	Min of Calcium	Min of Magnesium	Min of Sodium	Min of Potassium
Dam 4 - Farm	9/4/25	8.8	212	130	31	2	6.6	5.7	15	13.0
Dam 4 - Farm	30/7/25	6.1	123	77	24	3	3.0	3.0	13	4.0
Dam 4 - Farm	22/10/25	6.4	138	86	27	4	3.0	3.0	13	4.0
Dam 4 - Farm	9/1/26	6.3	176	110	32	4	4.0	4.0	16	5.1

Sample	Date	Max of pH	Max of Electrical Conductivity	Max of Total Dissolved Solids	Max of Chloride	Max of Sulphate	Max of Calcium	Max of Magnesium	Max of Sodium	Max of Potassium
Dam 4 - Farm	9/4/25	8.8	212	130	31	2	6.6	5.7	15	13.0
Dam 4 - Farm	30/7/25	6.1	123	77	24	3	3.0	3.0	13	4.0
Dam 4 - Farm	22/10/25	6.4	138	86	27	4	3.0	3.0	13	4.0
Dam 4 - Farm	9/1/26	6.3	176	110	32	4	4.0	4.0	16	5.1

Sample

MW1

Sample	Date	pH	Electrical Conductivity	Total Dissolved Solids	Chloride	Sulphate	Calcium	Magnesium	Sodium	Potassium
MW1	9/4/25	4.1	332	210	40	30	9.1	15.0	13	6.0
MW1	30/7/25	4.5	305	190	47	16	6.5	11.0	20	4.0
MW1	22/10/25	4.7	274	170	52	13	5.0	9.1	20	3.0
MW1	9/1/26	4.7	338	210	44	20	9.5	16.0	20	6.1

Sample	Date	Average of pH	Average of Electrical Conductivity	Average of Total Dissolved Solids	Average of Chloride	Average of Sulphate	Average of Calcium	Average of Magnesium	Average of Sodium	Average of Potassium
MW1	9/4/25	4.1	332	210	40	30	9.1	15.0	13	6.0
MW1	30/7/25	4.5	305	190	47	16	6.5	11.0	20	4.0
MW1	22/10/25	4.7	274	170	52	13	5.0	9.1	20	3.0
MW1	9/1/26	4.7	338	210	44	20	9.5	16.0	20	6.1

Sample	Date	Min of pH	Min of Electrical Conductivity	Min of Total Dissolved Solids	Min of Chloride	Min of Sulphate	Min of Calcium	Min of Magnesium	Min of Sodium	Min of Potassium
MW1	9/4/25	4.1	332	210	40	30	9.1	15.0	13	6.0
MW1	30/7/25	4.5	305	190	47	16	6.5	11.0	20	4.0
MW1	22/10/25	4.7	274	170	52	13	5.0	9.1	20	3.0
MW1	9/1/26	4.7	338	210	44	20	9.5	16.0	20	6.1

Sample	Date	Max of pH	Max of Electrical Conductivity	Max of Total Dissolved Solids	Max of Chloride	Max of Sulphate	Max of Calcium	Max of Magnesium	Max of Sodium	Max of Potassium
MW1	9/4/25	4.1	332	210	40	30	9.1	15.0	13	6.0
MW1	30/7/25	4.5	305	190	47	16	6.5	11.0	20	4.0
MW1	22/10/25	4.7	274	170	52	13	5.0	9.1	20	3.0
MW1	9/1/26	4.7	338	210	44	20	9.5	16.0	20	6.1

Sample

MW10

Sample	Date	pH	Electrical Conductivity	Total Dissolved Solids	Chloride	Sulphate	Calcium	Magnesium	Sodium	Potassium
MW10	9/4/25	4.3	173	110	38	0	0.7	5.3	12	0.7
MW10	30/7/25	4.6	148	92	33	0	1.0	5.0	13	0.9
MW10	22/10/25	4.5	143	89	32	0	0.5	5.0	11	1.0
MW10	9/1/26	4.5	154	96	32	1	0.8	4.0	13	1.0

Sample	Date	Average of pH	Average of Electrical Conductivity	Average of Total Dissolved Solids	Average of Chloride	Average of Sulphate	Average of Calcium	Average of Magnesium	Average of Sodium	Average of Potassium
MW10	9/4/25	4.3	173	110	38	0	0.7	5.3	12	0.7
MW10	30/7/25	4.6	148	92	33	0	1.0	5.0	13	0.9
MW10	22/10/25	4.5	143	89	32	0	0.5	5.0	11	1.0
MW10	9/1/26	4.5	154	96	32	1	0.8	4.0	13	1.0

Sample	Date	Min of pH	Min of Electrical Conductivity	Min of Total Dissolved Solids	Min of Chloride	Min of Sulphate	Min of Calcium	Min of Magnesium	Min of Sodium	Min of Potassium
MW10	9/4/25	4.3	173	110	38	0	0.7	5.3	12	0.7
MW10	30/7/25	4.6	148	92	33	0	1.0	5.0	13	0.9
MW10	22/10/25	4.5	143	89	32	0	0.5	5.0	11	1.0
MW10	9/1/26	4.5	154	96	32	1	0.8	4.0	13	1.0

Sample	Date	Max of pH	Max of Electrical Conductivity	Max of Total Dissolved Solids	Max of Chloride	Max of Sulphate	Max of Calcium	Max of Magnesium	Max of Sodium	Max of Potassium
MW10	9/4/25	4.3	173	110	38	0	0.7	5.3	12	0.7
MW10	30/7/25	4.6	148	92	33	0	1.0	5.0	13	0.9
MW10	22/10/25	4.5	143	89	32	0	0.5	5.0	11	1.0
MW10	9/1/26	4.5	154	96	32	1	0.8	4.0	13	1.0

Sample

MW11 (Off Old Telegraph Rd)

Sample	Date	pH	Electrical Conductivity	Total Dissolved Solids	Chloride	Sulphate	Calcium	Magnesium	Sodium	Potassium
MW11 (Off Old Telegraph Rd)	9/4/25	5.5	184	110	40	4	5.2	3.0	15	3.0
MW11 (Off Old Telegraph Rd)	30/7/25	5.8	243	150	40	21	15.0	5.3	20	5.0
MW11 (Off Old Telegraph Rd)	22/10/25	5.9	238	150	37	20	16.0	5.0	16	4.0
MW11 (Off Old Telegraph Rd)	9/1/26	5.7	202	130	37	7	7.1	4.0	18	4.0

Sample	Date	Average of pH	Average of Electrical Conductivity	Average of Total Dissolved Solids	Average of Chloride	Average of Sulphate	Average of Calcium	Average of Magnesium	Average of Sodium	Average of Potassium
MW11 (Off Old Telegraph Rd)	9/4/25	5.5	184	110	40	4	5.2	3.0	15	3.0
MW11 (Off Old Telegraph Rd)	30/7/25	5.8	243	150	40	21	15.0	5.3	20	5.0
MW11 (Off Old Telegraph Rd)	22/10/25	5.9	238	150	37	20	16.0	5.0	16	4.0
MW11 (Off Old Telegraph Rd)	9/1/26	5.7	202	130	37	7	7.1	4.0	18	4.0

Sample	Date	Min of pH	Min of Electrical Conductivity	Min of Total Dissolved Solids	Min of Chloride	Min of Sulphate	Min of Calcium	Min of Magnesium	Min of Sodium	Min of Potassium
MW11 (Off Old Telegraph Rd)	9/4/25	5.5	184	110	40	4	5.2	3.0	15	3.0
MW11 (Off Old Telegraph Rd)	30/7/25	5.8	243	150	40	21	15.0	5.3	20	5.0
MW11 (Off Old Telegraph Rd)	22/10/25	5.9	238	150	37	20	16.0	5.0	16	4.0
MW11 (Off Old Telegraph Rd)	9/1/26	5.7	202	130	37	7	7.1	4.0	18	4.0

Sample	Date	Max of pH	Max of Electrical Conductivity	Max of Total Dissolved Solids	Max of Chloride	Max of Sulphate	Max of Calcium	Max of Magnesium	Max of Sodium	Max of Potassium
MW11 (Off Old Telegraph Rd)	9/4/25	5.5	184	110	40	4	5.2	3.0	15	3.0
MW11 (Off Old Telegraph Rd)	30/7/25	5.8	243	150	40	21	15.0	5.3	20	5.0
MW11 (Off Old Telegraph Rd)	22/10/25	5.9	238	150	37	20	16.0	5.0	16	4.0
MW11 (Off Old Telegraph Rd)	9/1/26	5.7	202	130	37	7	7.1	4.0	18	4.0

Sample

MW12

Sample	Date	pH	Electrical Conductivity	Total Dissolved Solids	Chloride	Sulphate	Calcium	Magnesium	Sodium	Potassium
MW12	9/4/25	5.8	129	81	23	4	3.0	2.0	10	0.8
MW12	30/7/25	5.0	114	71	22	6	3.0	1.0	14	0.7
MW12	22/10/25	4.7	111	69	22	7	1.0	2.0	12	0.8
MW12	9/1/26	5.0	125	78	23	8	3.0	2.0	14	0.7

Sample	Date	Average of pH	Average of Electrical Conductivity	Average of Total Dissolved Solids	Average of Chloride	Average of Sulphate	Average of Calcium	Average of Magnesium	Average of Sodium	Average of Potassium
MW12	9/4/25	5.8	129	81	23	4	3.0	2.0	10	0.8
MW12	30/7/25	5.0	114	71	22	6	3.0	1.0	14	0.7
MW12	22/10/25	4.7	111	69	22	7	1.0	2.0	12	0.8
MW12	9/1/26	5.0	125	78	23	8	3.0	2.0	14	0.7

Sample	Date	Min of pH	Min of Electrical Conductivity	Min of Total Dissolved Solids	Min of Chloride	Min of Sulphate	Min of Calcium	Min of Magnesium	Min of Sodium	Min of Potassium
MW12	9/4/25	5.8	129	81	23	4	3.0	2.0	10	0.8
MW12	30/7/25	5.0	114	71	22	6	3.0	1.0	14	0.7
MW12	22/10/25	4.7	111	69	22	7	1.0	2.0	12	0.8
MW12	9/1/26	5.0	125	78	23	8	3.0	2.0	14	0.7

Sample	Date	Max of pH	Max of Electrical Conductivity	Max of Total Dissolved Solids	Max of Chloride	Max of Sulphate	Max of Calcium	Max of Magnesium	Max of Sodium	Max of Potassium
MW12	9/4/25	5.8	129	81	23	4	3.0	2.0	10	0.8
MW12	30/7/25	5.0	114	71	22	6	3.0	1.0	14	0.7
MW12	22/10/25	4.7	111	69	22	7	1.0	2.0	12	0.8
MW12	9/1/26	5.0	125	78	23	8	3.0	2.0	14	0.7

Sample

MW6 (Office)

Sample	Date	pH	Electrical Conductivity	Total Dissolved Solids	Chloride	Sulphate	Calcium	Magnesium	Sodium	Potassium
MW6 (Office)	9/4/25	7.2	331	210	80	0	4.0	3.0	36	2.0
MW6 (Office)	30/7/25	8.2	323	200	78	0	4.0	3.0	46	2.0
MW6 (Office)	22/10/25	8.0	292	180	69	0	4.0	4.0	37	2.0
MW6 (Office)	9/1/26	7.9	275	170	61	0	5.0	4.0	38	2.0

Sample	Date	Average of pH	Average of Electrical Conductivity	Average of Total Dissolved Solids	Average of Chloride	Average of Sulphate	Average of Calcium	Average of Magnesium	Average of Sodium	Average of Potassium
MW6 (Office)	9/4/25	7.2	331	210	80	0	4.0	3.0	36	2.0
MW6 (Office)	30/7/25	8.2	323	200	78	0	4.0	3.0	46	2.0
MW6 (Office)	22/10/25	8.0	292	180	69	0	4.0	4.0	37	2.0
MW6 (Office)	9/1/26	7.9	275	170	61	0	5.0	4.0	38	2.0

Sample	Date	Min of pH	Min of Electrical Conductivity	Min of Total Dissolved Solids	Min of Chloride	Min of Sulphate	Min of Calcium	Min of Magnesium	Min of Sodium	Min of Potassium
MW6 (Office)	9/4/25	7.2	331	210	80	0	4.0	3.0	36	2.0
MW6 (Office)	30/7/25	8.2	323	200	78	0	4.0	3.0	46	2.0
MW6 (Office)	22/10/25	8.0	292	180	69	0	4.0	4.0	37	2.0
MW6 (Office)	9/1/26	7.9	275	170	61	0	5.0	4.0	38	2.0

Sample	Date	Max of pH	Max of Electrical Conductivity	Max of Total Dissolved Solids	Max of Chloride	Max of Sulphate	Max of Calcium	Max of Magnesium	Max of Sodium	Max of Potassium
MW6 (Office)	9/4/25	7.2	331	210	80	0	4.0	3.0	36	2.0
MW6 (Office)	30/7/25	8.2	323	200	78	0	4.0	3.0	46	2.0
MW6 (Office)	22/10/25	8.0	292	180	69	0	4.0	4.0	37	2.0
MW6 (Office)	9/1/26	7.9	275	170	61	0	5.0	4.0	38	2.0

Sample

MW7

Sample	Date	pH	Electrical Conductivity	Total Dissolved Solids	Chloride	Sulphate	Calcium	Magnesium	Sodium	Potassium
MW7	9/4/25	5.4	176	110	30	6	3.0	2.0	19	0.7
MW7	30/7/25	4.8	235	150	48	6	6.3	4.0	29	1.0
MW7	22/10/25	5.2	176	110	30	5	3.0	3.0	19	0.8
MW7	9/1/26	5.3	207	130	33	5	5.4	4.0	23	0.9

Sample	Date	Average of pH	Average of Electrical Conductivity	Average of Total Dissolved Solids	Average of Chloride	Average of Sulphate	Average of Calcium	Average of Magnesium	Average of Sodium	Average of Potassium
MW7	9/4/25	5.4	176	110	30	6	3.0	2.0	19	0.7
MW7	30/7/25	4.8	235	150	48	6	6.3	4.0	29	1.0
MW7	22/10/25	5.2	176	110	30	5	3.0	3.0	19	0.8
MW7	9/1/26	5.3	207	130	33	5	5.4	4.0	23	0.9

Sample	Date	Min of pH	Min of Electrical Conductivity	Min of Total Dissolved Solids	Min of Chloride	Min of Sulphate	Min of Calcium	Min of Magnesium	Min of Sodium	Min of Potassium
MW7	9/4/25	5.4	176	110	30	6	3.0	2.0	19	0.7
MW7	30/7/25	4.8	235	150	48	6	6.3	4.0	29	1.0
MW7	22/10/25	5.2	176	110	30	5	3.0	3.0	19	0.8
MW7	9/1/26	5.3	207	130	33	5	5.4	4.0	23	0.9

Sample	Date	Max of pH	Max of Electrical Conductivity	Max of Total Dissolved Solids	Max of Chloride	Max of Sulphate	Max of Calcium	Max of Magnesium	Max of Sodium	Max of Potassium
MW7	9/4/25	5.4	176	110	30	6	3.0	2.0	19	0.7
MW7	30/7/25	4.8	235	150	48	6	6.3	4.0	29	1.0
MW7	22/10/25	5.2	176	110	30	5	3.0	3.0	19	0.8
MW7	9/1/26	5.3	207	130	33	5	5.4	4.0	23	0.9

Sample

MW8

Sample	Date	pH	Electrical Conductivity	Total Dissolved Solids	Chloride	Sulphate	Calcium	Magnesium	Sodium	Potassium
MW8	9/4/25	4.2	236	150	60	1	2.0	4.0	21	0.0
MW8	30/7/25	4.3	246	150	60	1	2.0	3.0	27	0.0
MW8	22/10/25	4.2	244	150	60	1	0.8	3.0	25	0.0
MW8	9/1/26	4.3	260	160	61	2	2.0	4.0	28	0.0

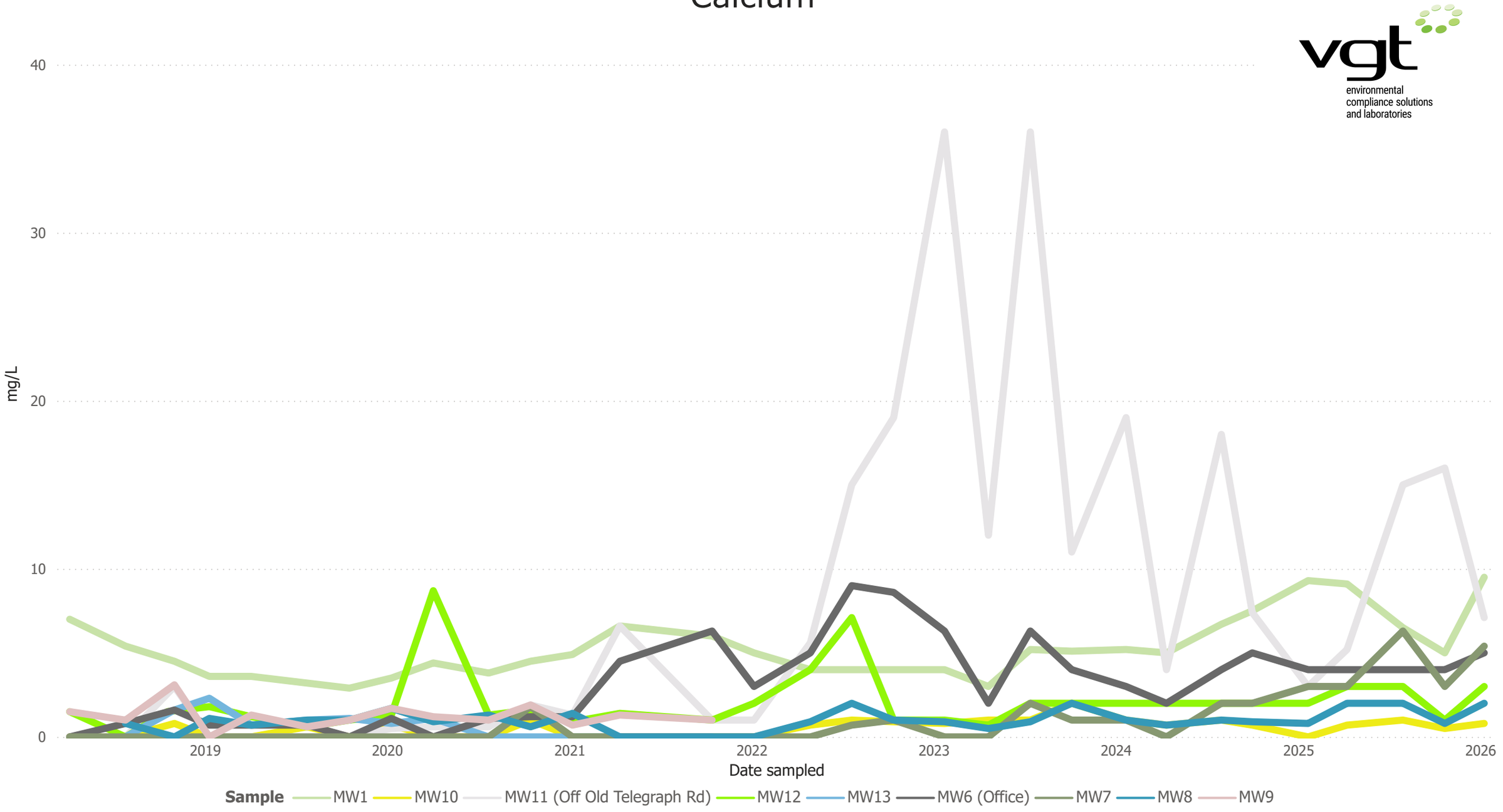
Sample	Date	Average of pH	Average of Electrical Conductivity	Average of Total Dissolved Solids	Average of Chloride	Average of Sulphate	Average of Calcium	Average of Magnesium	Average of Sodium	Average of Potassium
MW8	9/4/25	4.2	236	150	60	1	2.0	4.0	21	0.0
MW8	30/7/25	4.3	246	150	60	1	2.0	3.0	27	0.0
MW8	22/10/25	4.2	244	150	60	1	0.8	3.0	25	0.0
MW8	9/1/26	4.3	260	160	61	2	2.0	4.0	28	0.0

Sample	Date	Min of pH	Min of Electrical Conductivity	Min of Total Dissolved Solids	Min of Chloride	Min of Sulphate	Min of Calcium	Min of Magnesium	Min of Sodium	Min of Potassium
MW8	9/4/25	4.2	236	150	60	1	2.0	4.0	21	0.0
MW8	30/7/25	4.3	246	150	60	1	2.0	3.0	27	0.0
MW8	22/10/25	4.2	244	150	60	1	0.8	3.0	25	0.0
MW8	9/1/26	4.3	260	160	61	2	2.0	4.0	28	0.0

Sample	Date	Max of pH	Max of Electrical Conductivity	Max of Total Dissolved Solids	Max of Chloride	Max of Sulphate	Max of Calcium	Max of Magnesium	Max of Sodium	Max of Potassium
MW8	9/4/25	4.2	236	150	60	1	2.0	4.0	21	0.0
MW8	30/7/25	4.3	246	150	60	1	2.0	3.0	27	0.0
MW8	22/10/25	4.2	244	150	60	1	0.8	3.0	25	0.0
MW8	9/1/26	4.3	260	160	61	2	2.0	4.0	28	0.0

Water Quality Trends

Calcium



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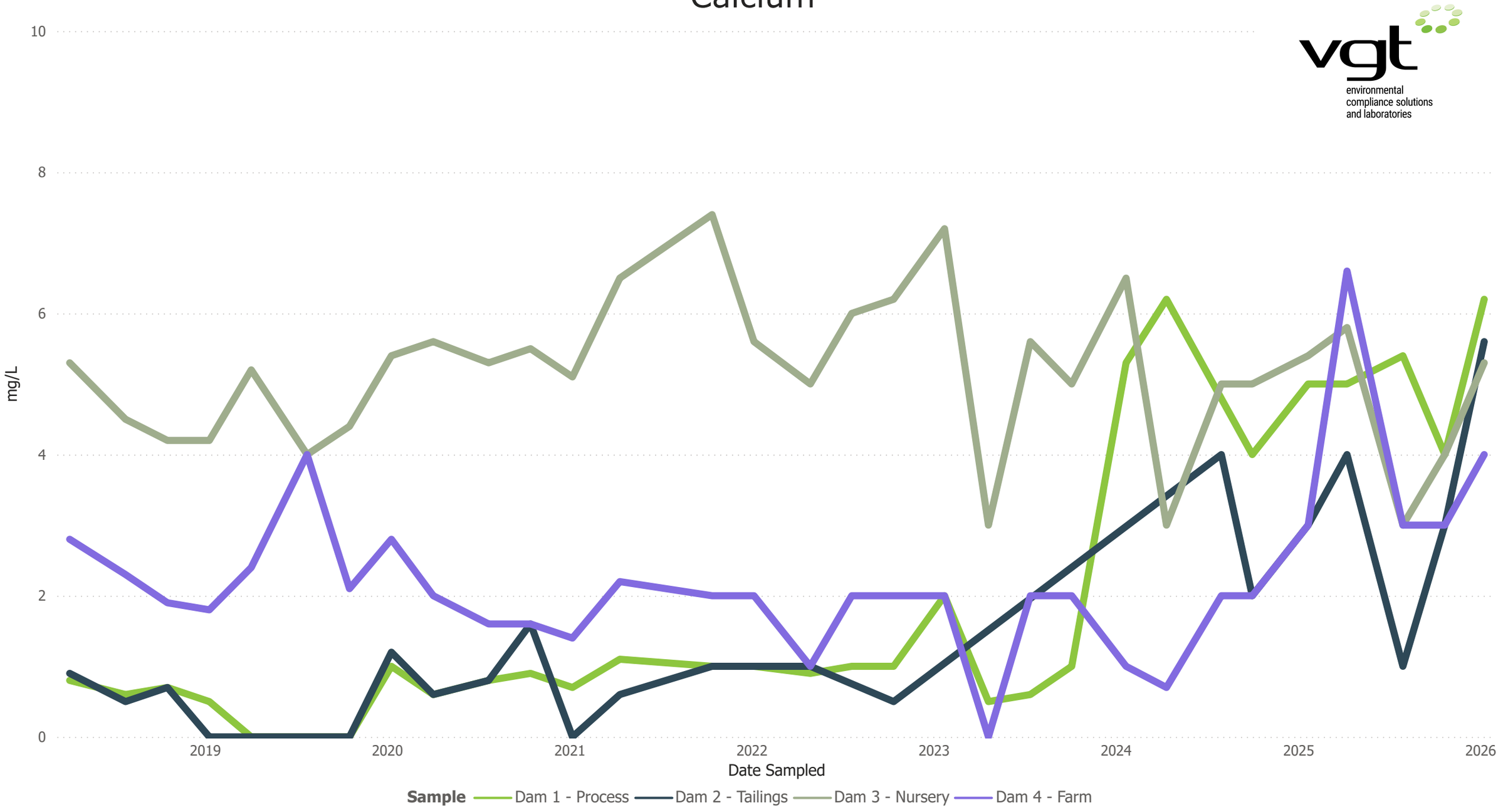
Calcium



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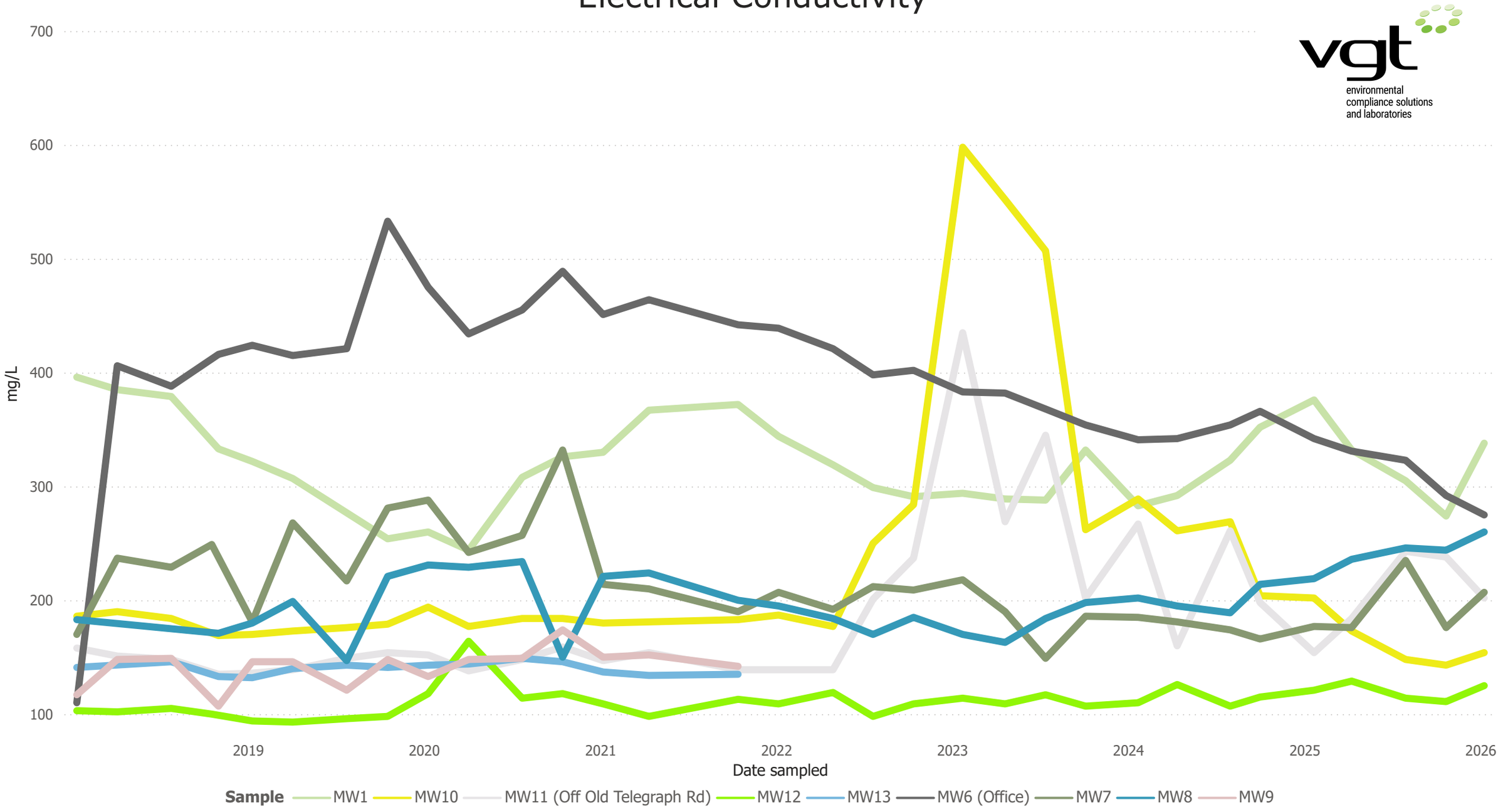
Electrical Conductivity



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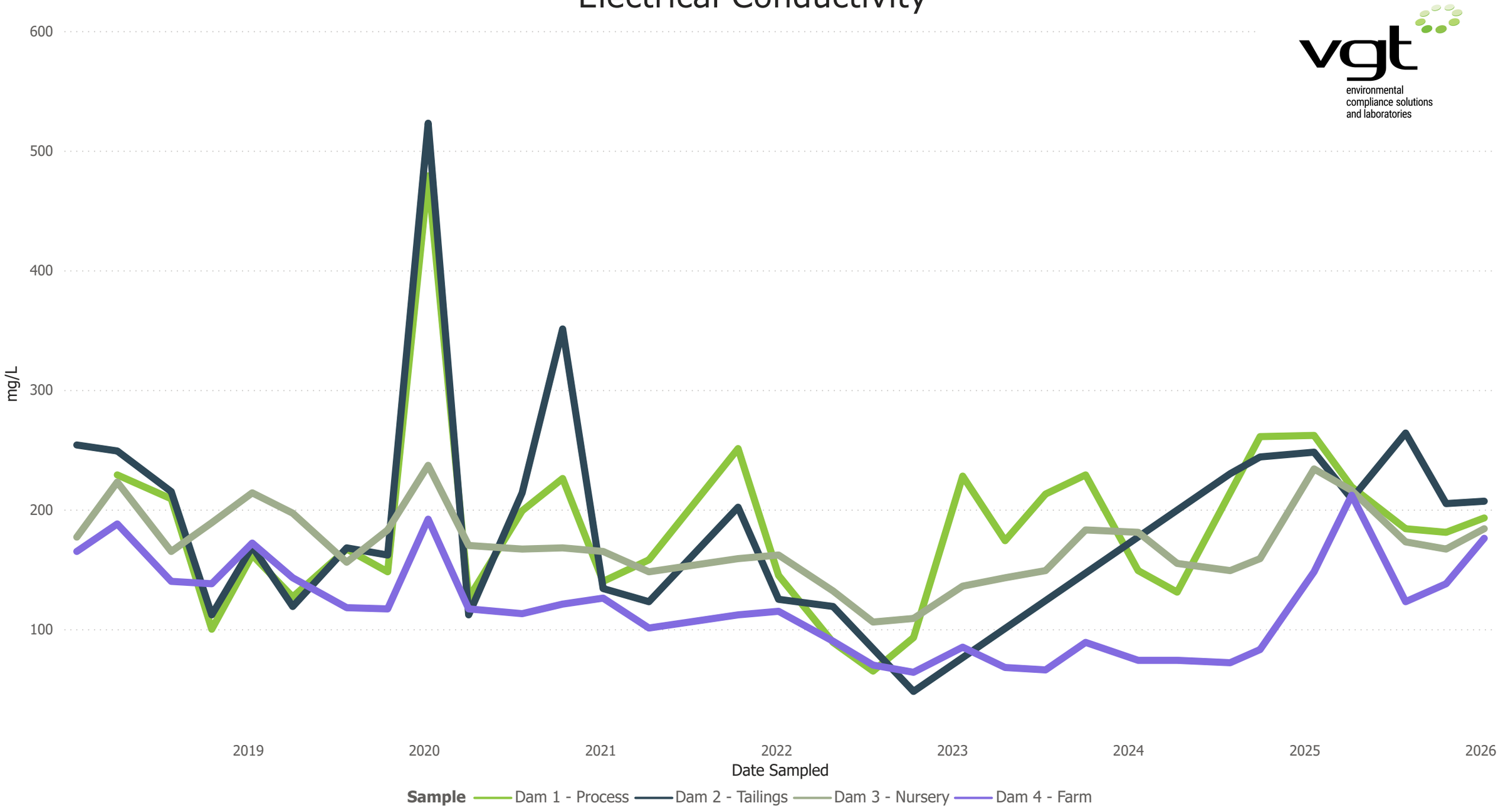
Electrical Conductivity



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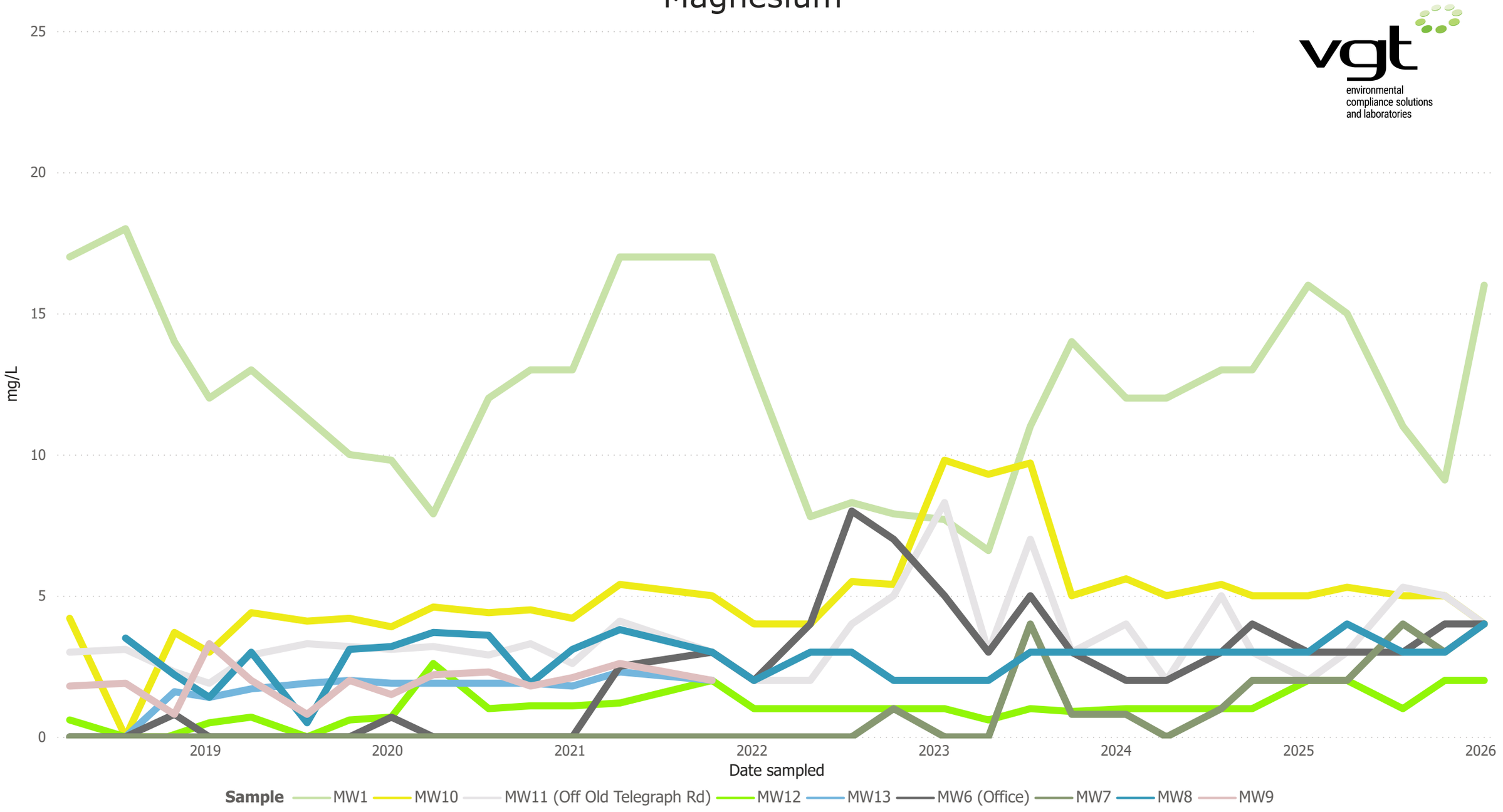
Magnesium



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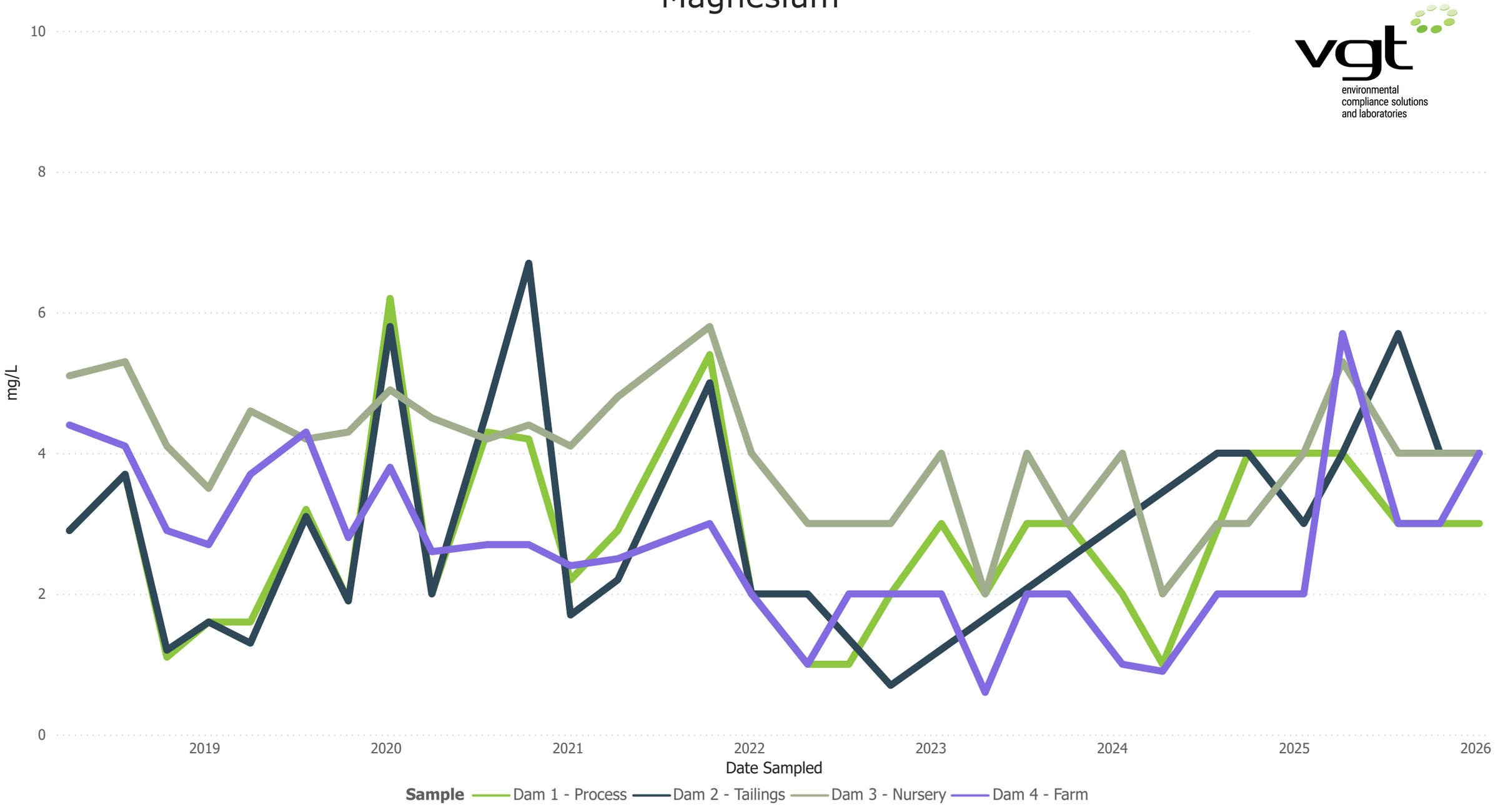
Magnesium



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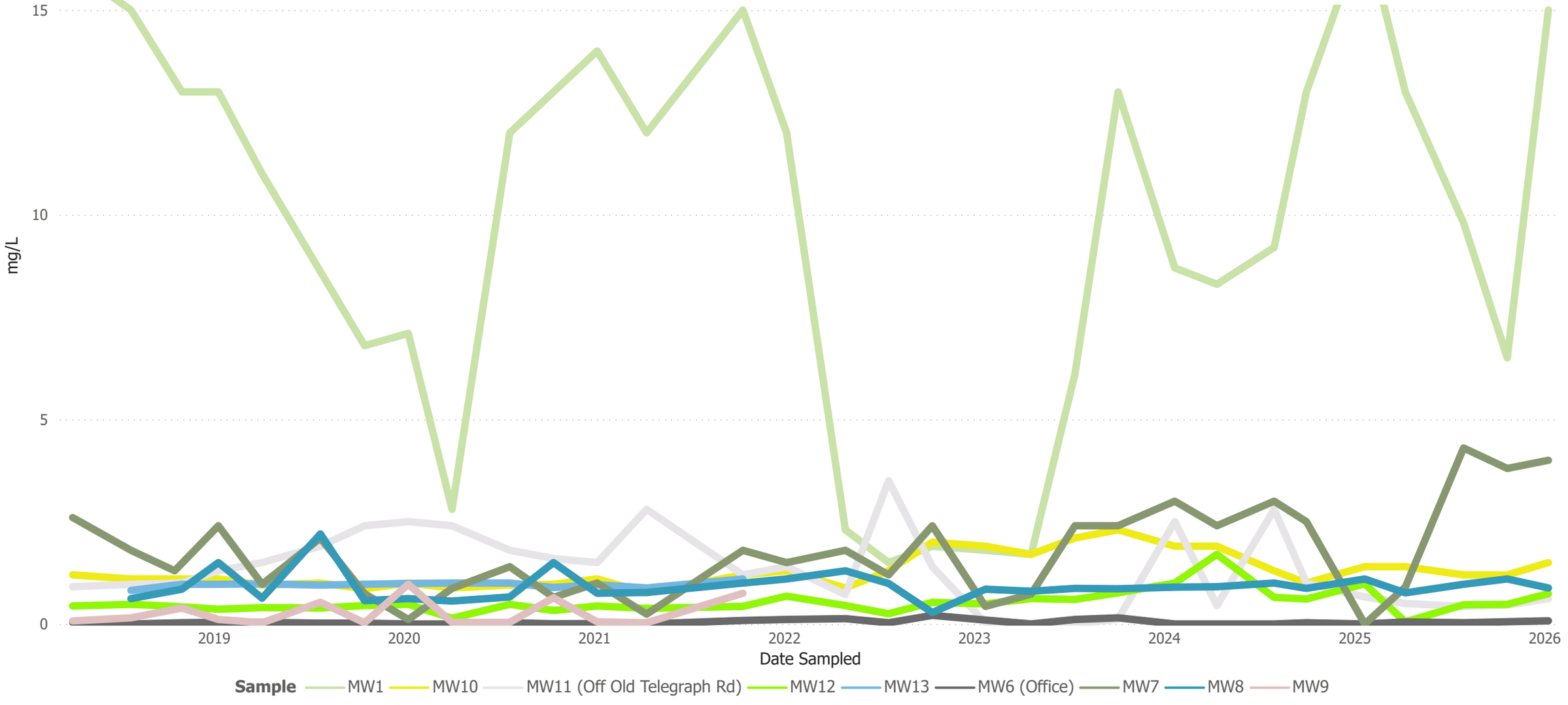
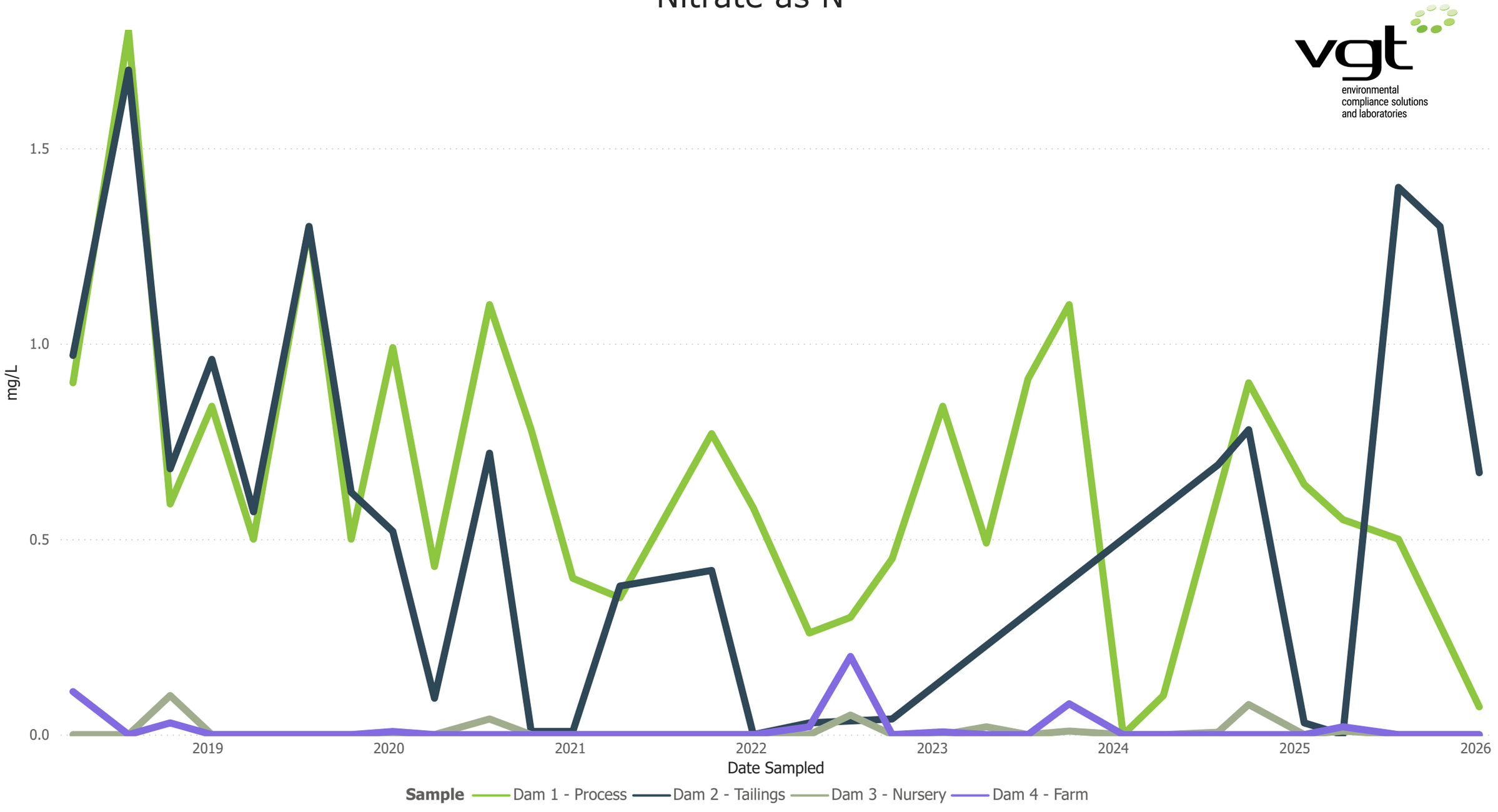
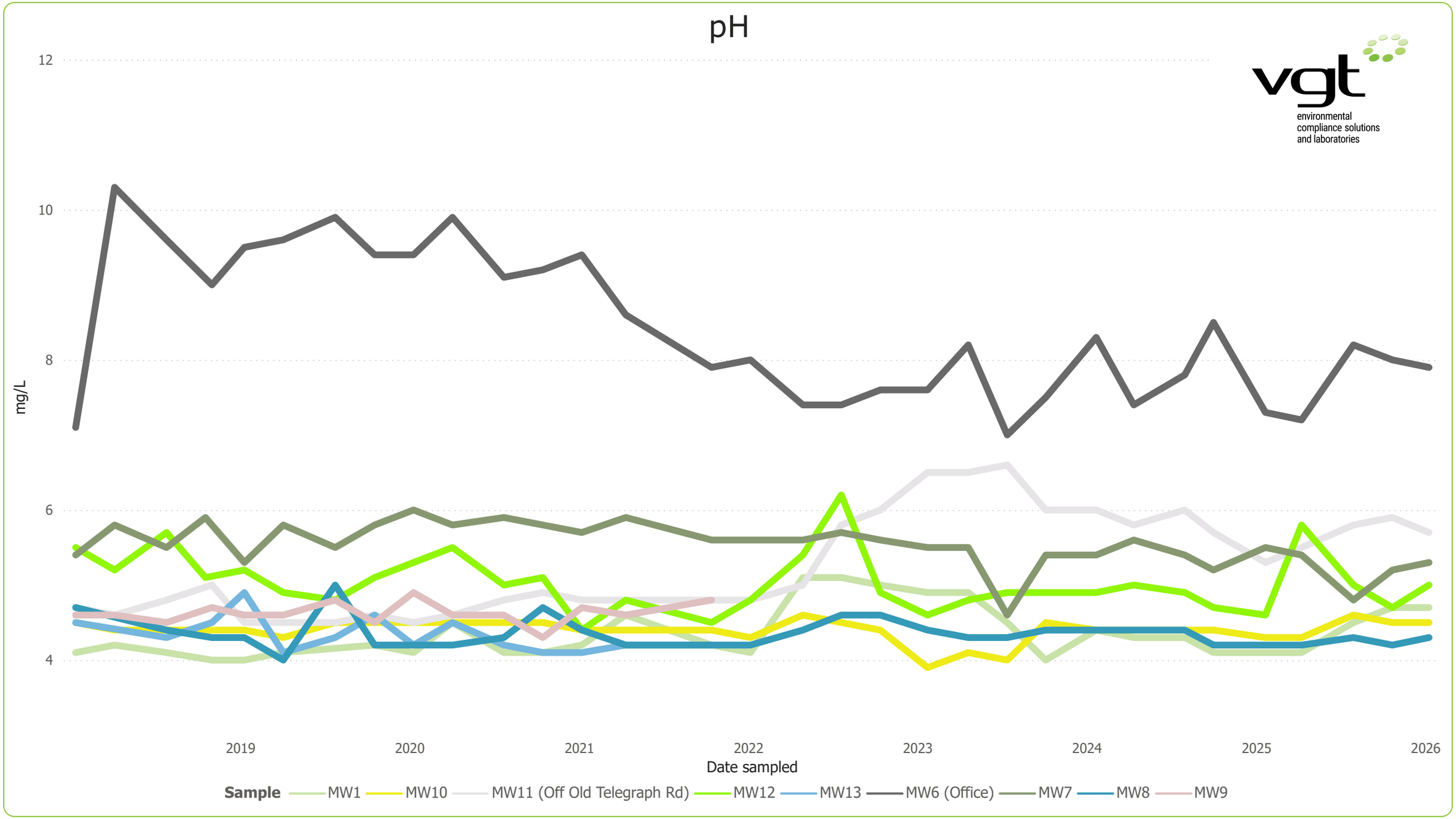
Nitrate as N

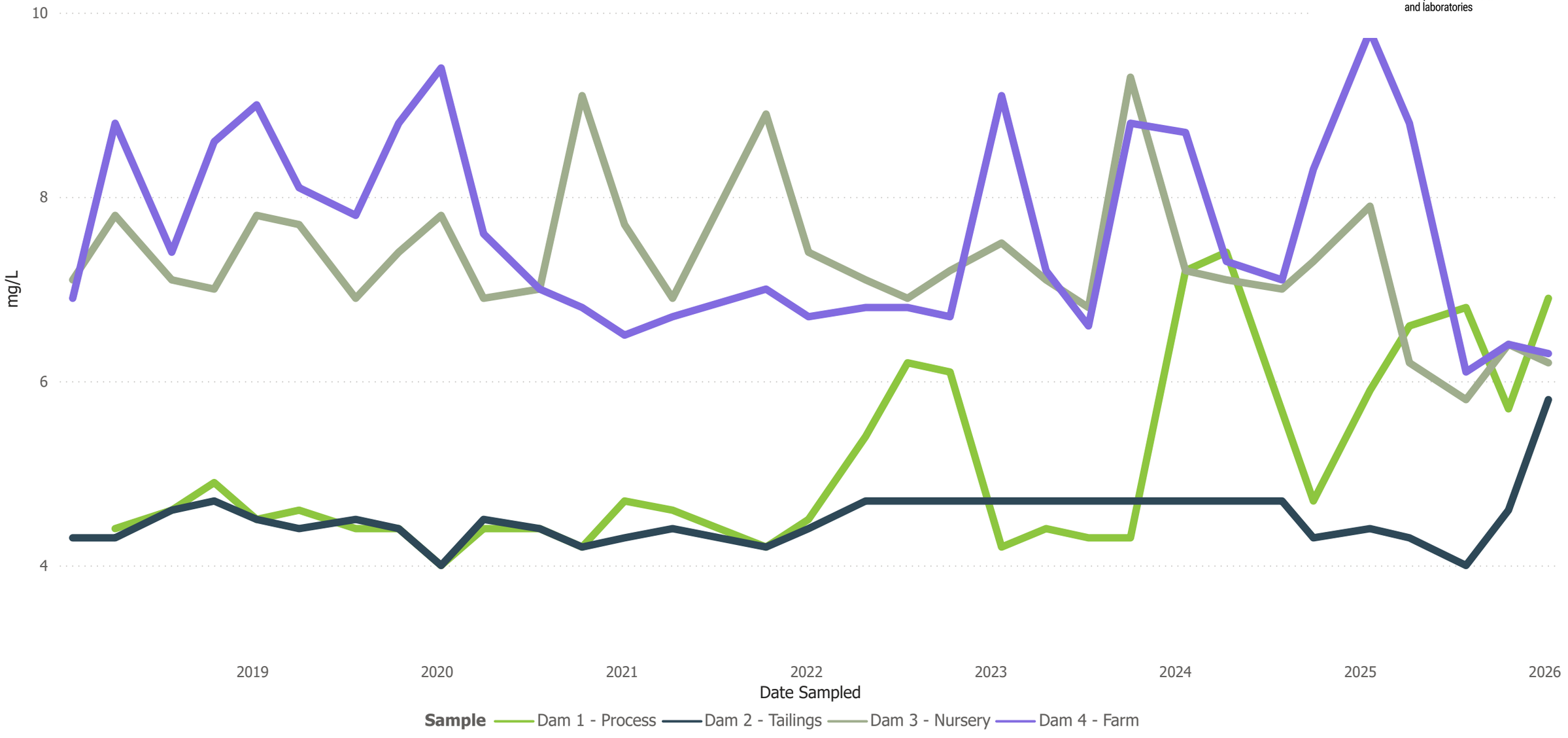

15
10
5
0
mg/L
2019
2020
2021
2022
2023
2024
2025
2026
Date Sampled
Sample
MW1
MW10
MW11 (Off Old Telegraph Rd)
MW12
MW13
MW6 (Office)
MW7
MW8
MW9

Nitrate as N

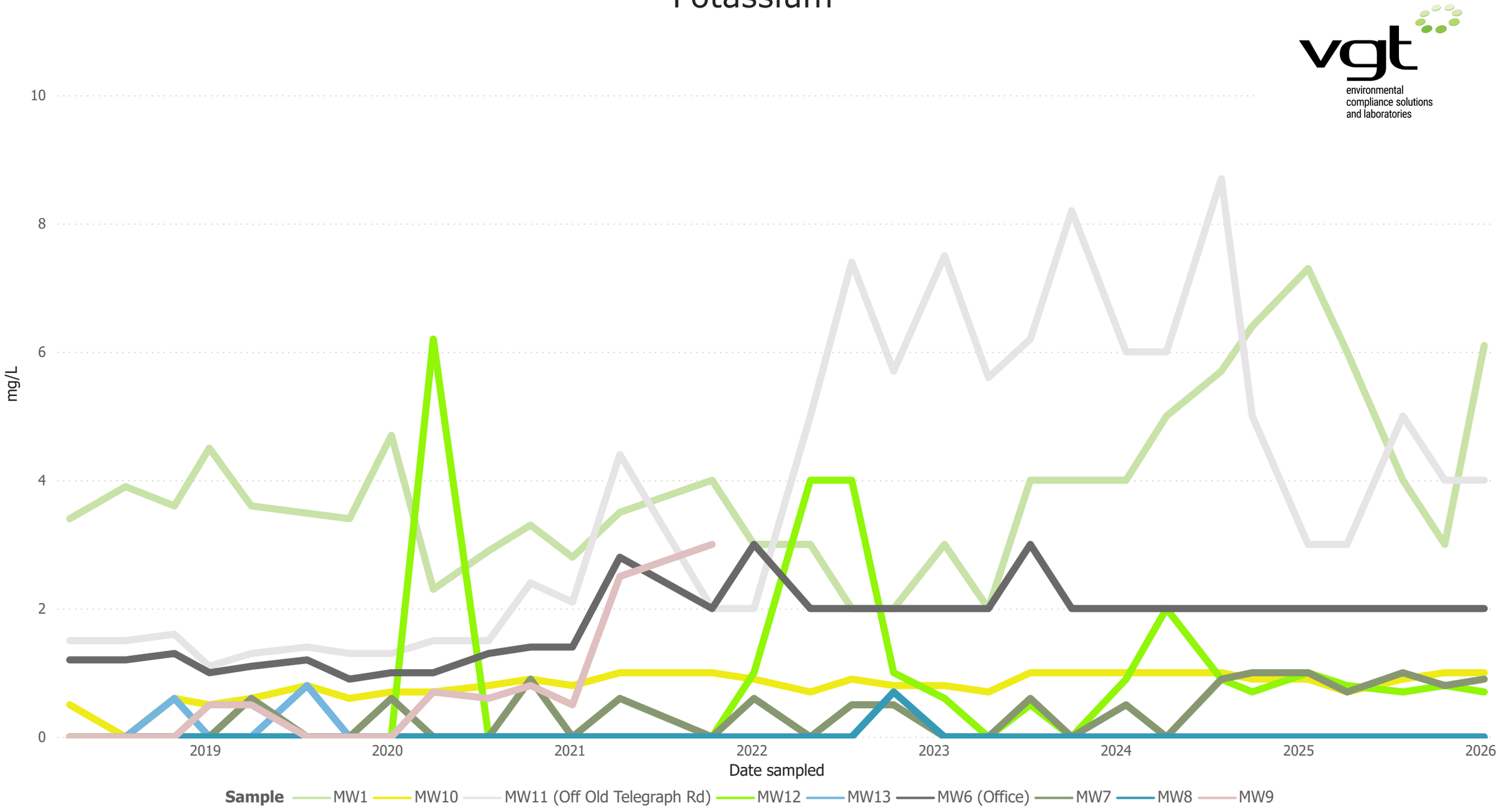

mg/L
1.5
1.0
0.5
0.0
2019
2020
2021
2022
2023
2024
2025
2026
Date Sampled
Sample
Dam 1 - Process
Dam 2 - Tailings
Dam 3 - Nursery
Dam 4 - Farm


pH
vgt
environmental
compliance solutions
and laboratories
12
10
8
6
4
mg/L
2019
2020
2021
2022
2023
2024
2025
2026
Date sampled
Sample
MW1
MW10
MW11 (Off Old Telegraph Rd)
MW12
MW13
MW6 (Office)
MW7
MW8
MW9

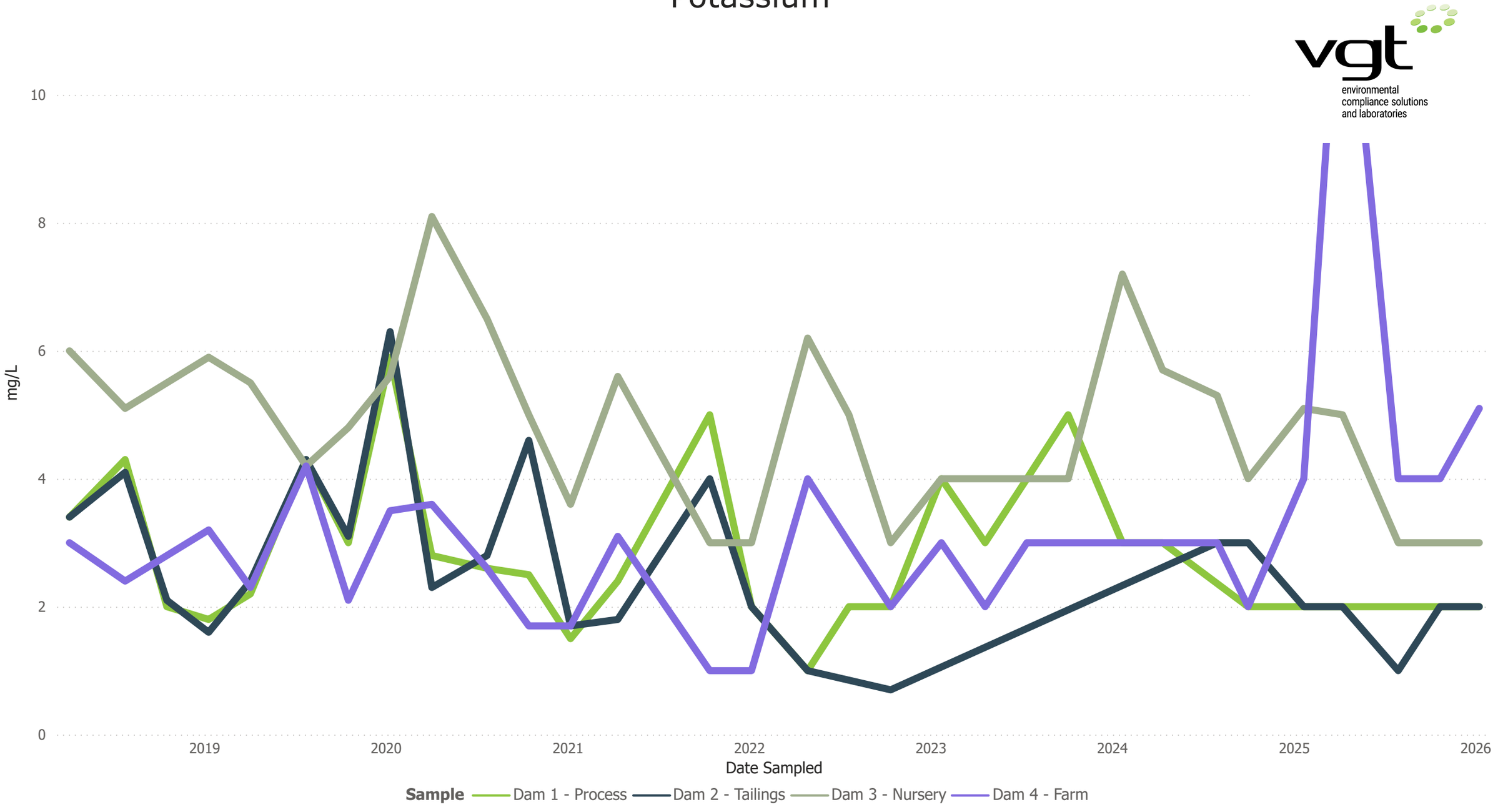
pH


10
8
6
4
mg/L
2019
2020
2021
2022
2023
2024
2025
2026
Date Sampled
Sample
Dam 1 - Process
Dam 2 - Tailings
Dam 3 - Nursery
Dam 4 - Farm

Potassium


10
8
6
4
2
0
mg/L
2019
2020
2021
2022
2023
2024
2025
2026
Date sampled
Sample
MW1
MW10
MW11 (Off Old Telegraph Rd)
MW12
MW13
MW6 (Office)
MW7
MW8
MW9

Potassium



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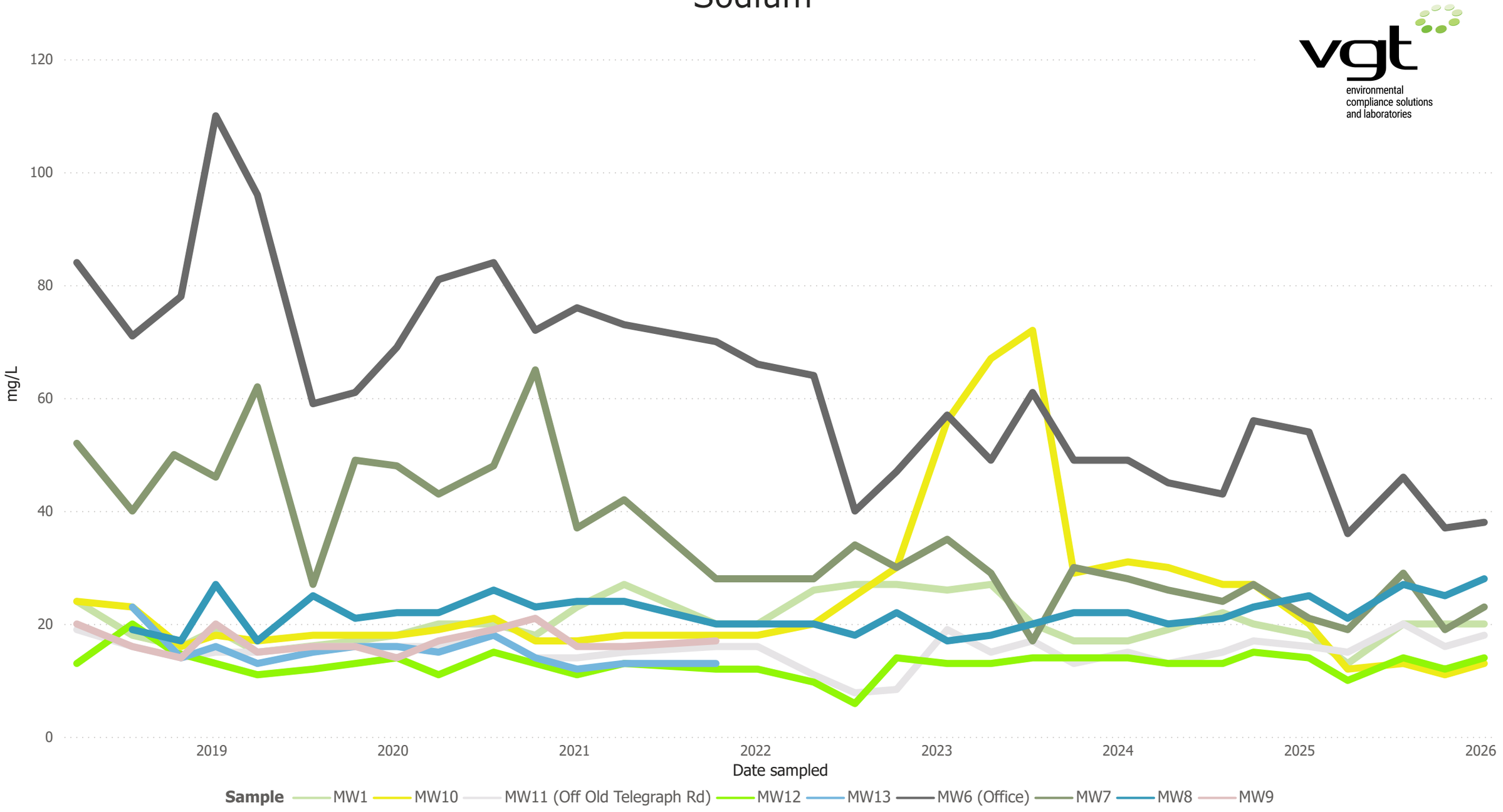
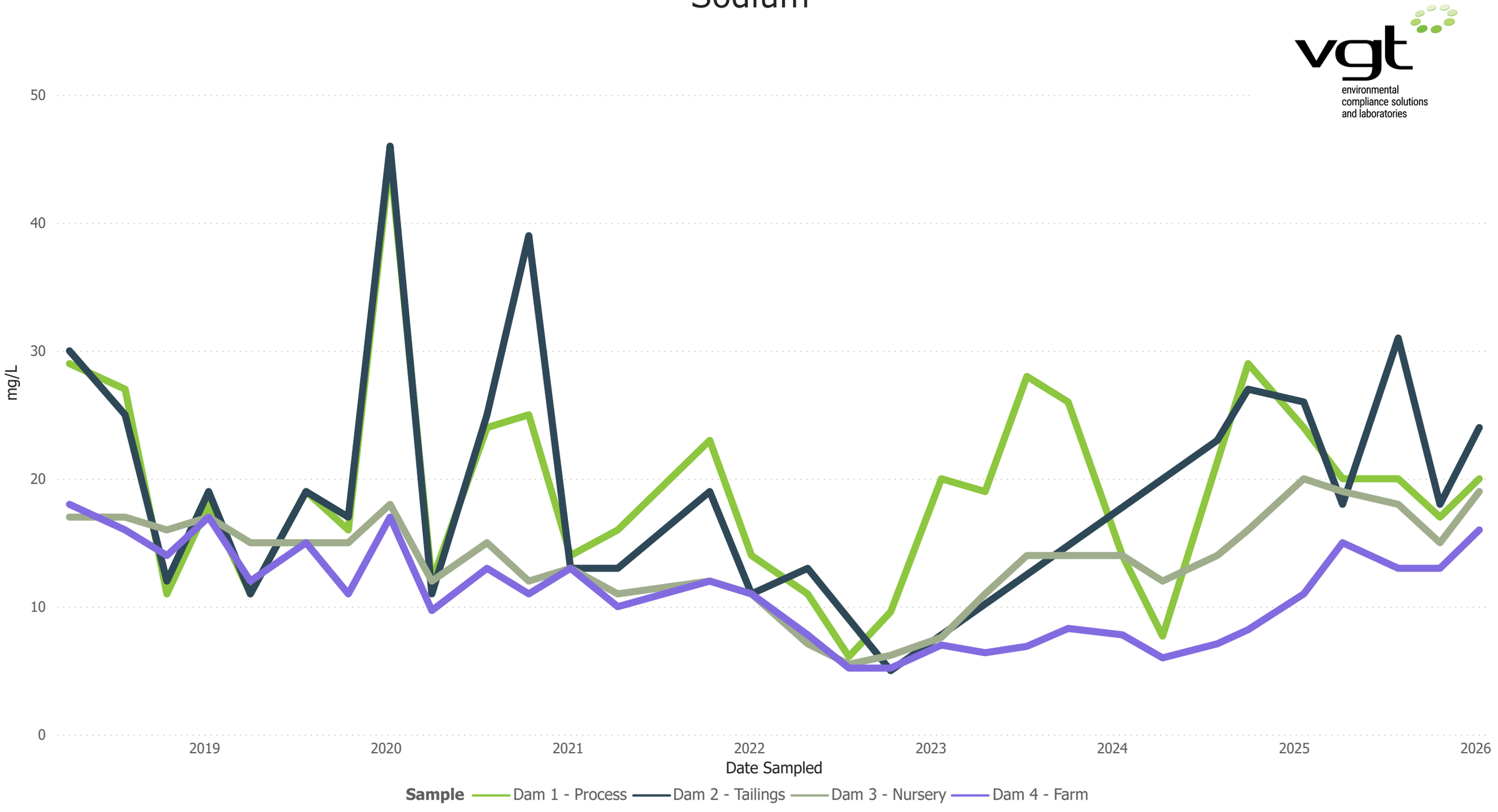
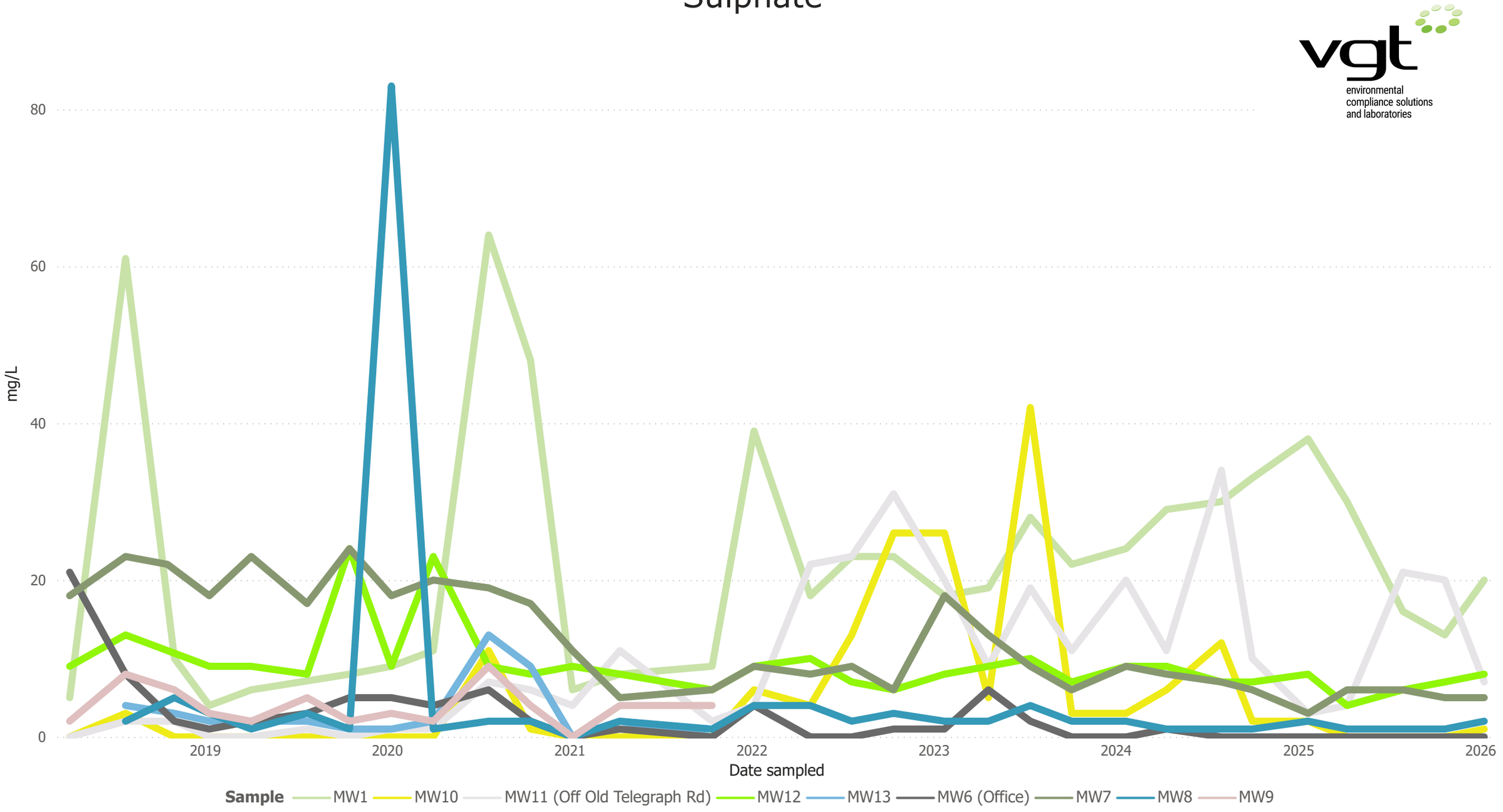
Sodium


120
100
80
60
40
20
0
mg/L
2019
2020
2021
2022
2023
2024
2025
2026
Date sampled
Sample
MW1
MW10
MW11 (Off Old Telegraph Rd)
MW12
MW13
MW6 (Office)
MW7
MW8
MW9

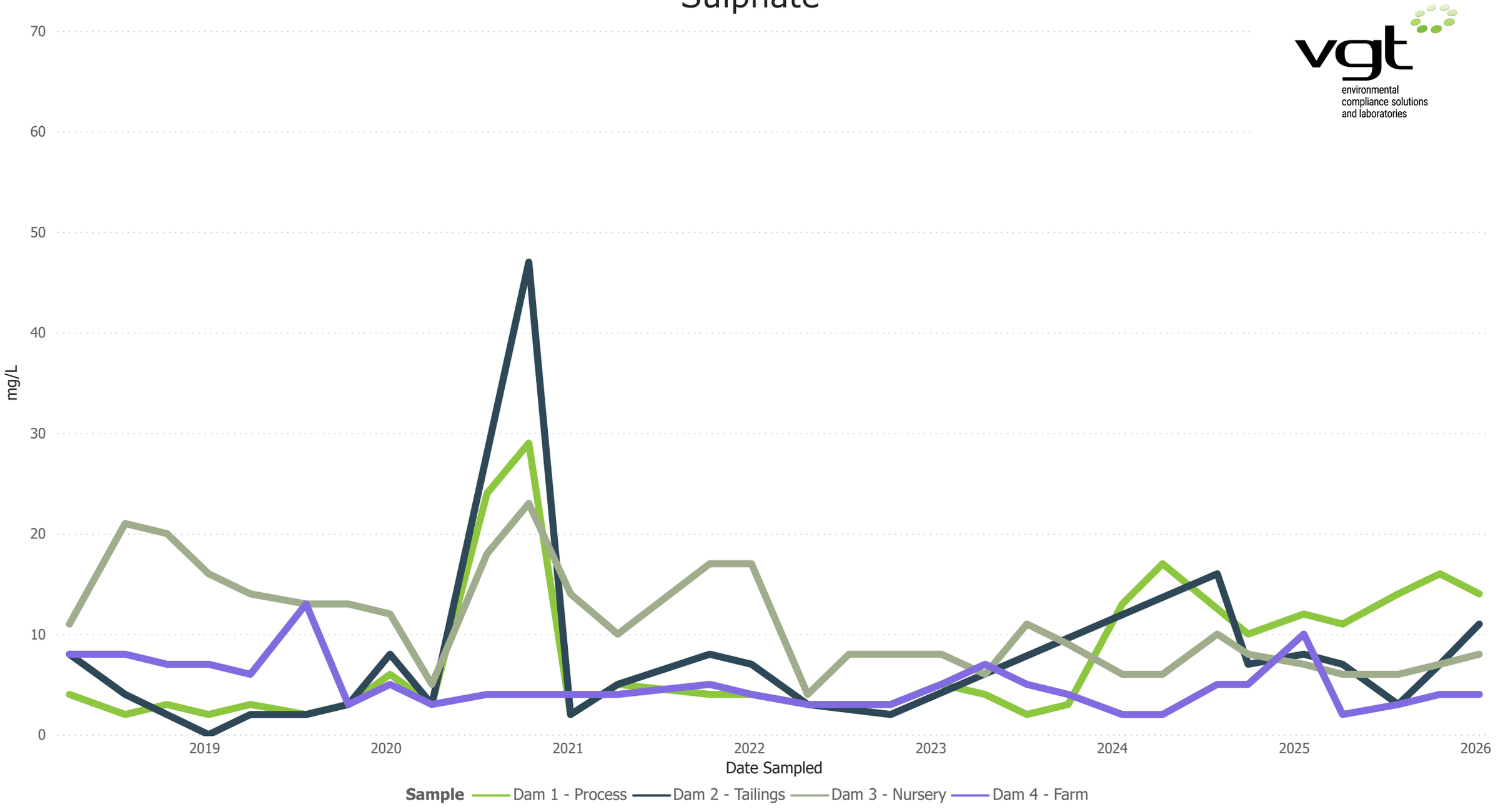
Sodium


vgt
environmental
compliance solutions
and laboratories
50
40
30
20
10
0
mg/L
2019
2020
2021
2022
2023
2024
2025
2026
Date Sampled
Sample
Dam 1 - Process
Dam 2 - Tailings
Dam 3 - Nursery
Dam 4 - Farm

Sulphate


mg/L
80
60
40
20
0
2019
2020
2021
2022
2023
2024
2025
2026
Date sampled
Sample
MW1
MW10
MW11 (Off Old Telegraph Rd)
MW12
MW13
MW6 (Office)
MW7
MW8
MW9

Sulphate



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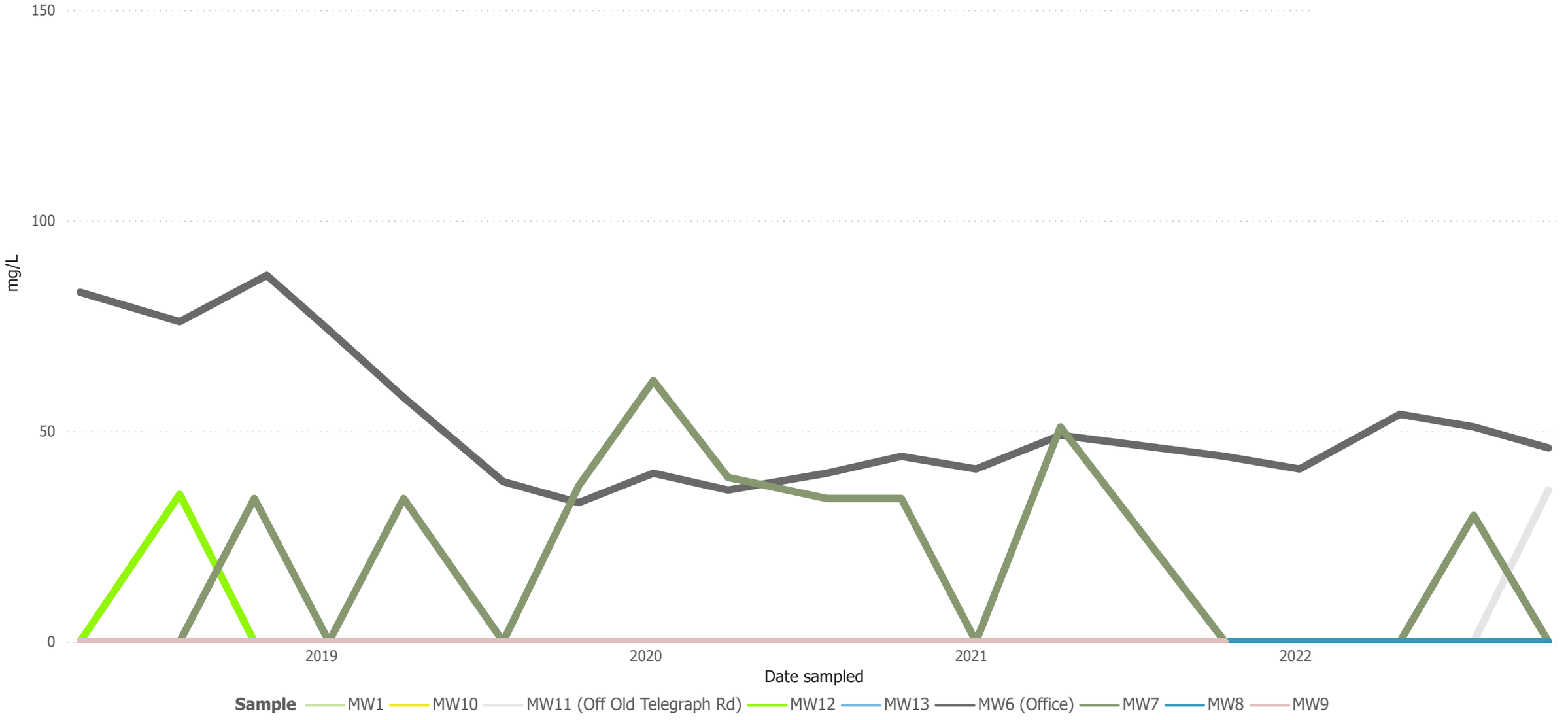
Total Alkalinity



Total Alkalinity

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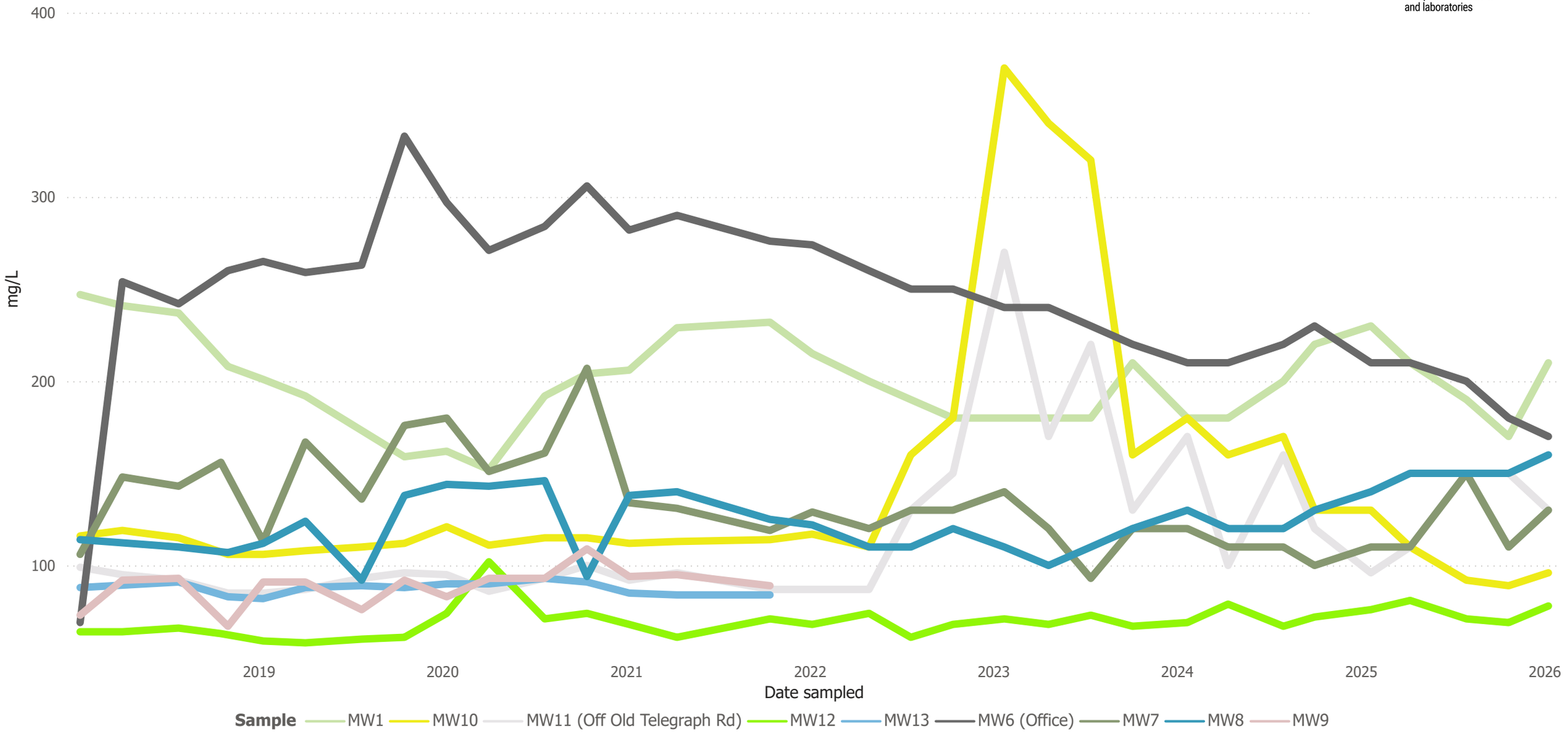
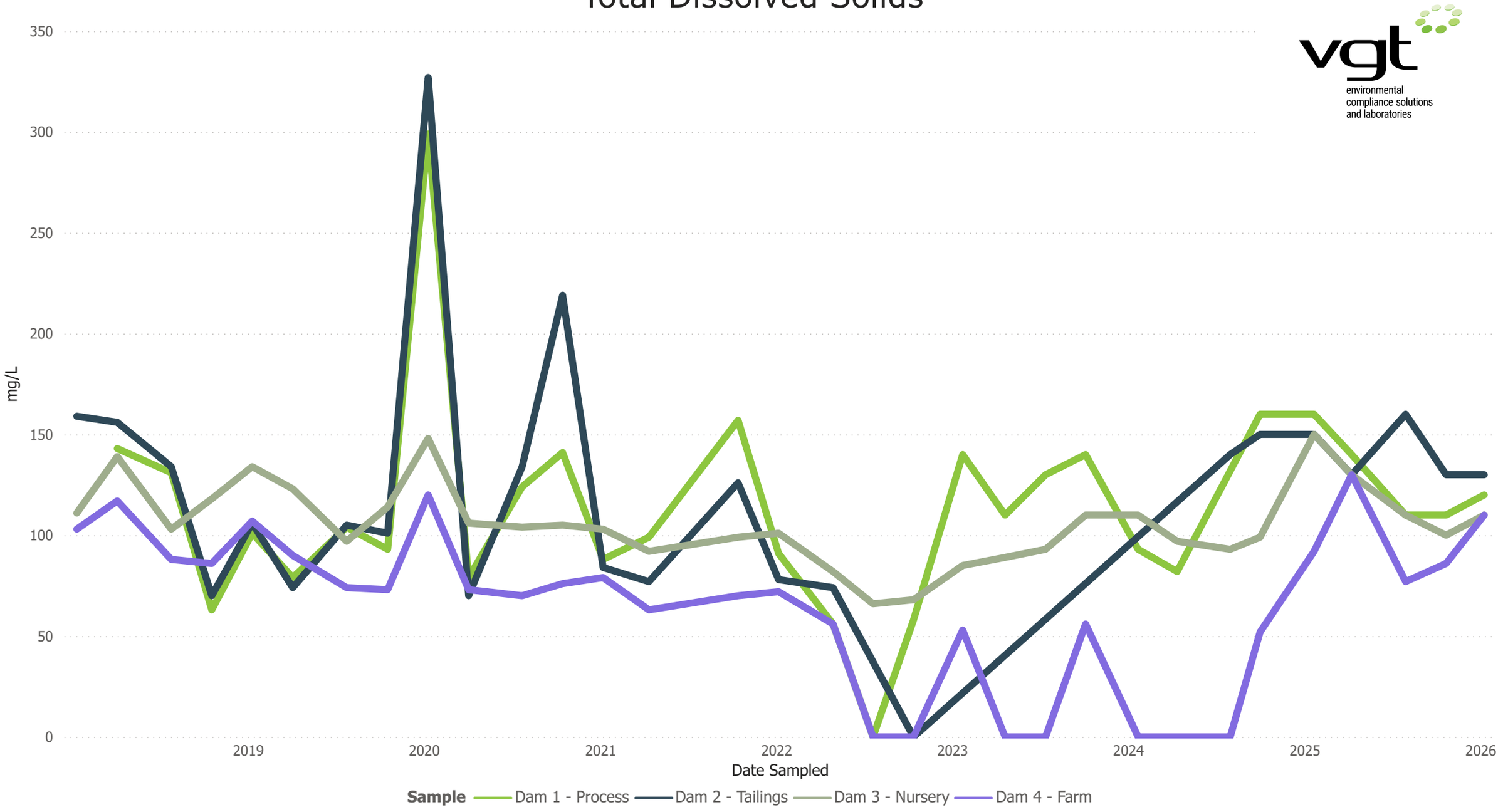
Total Dissolved Solids



Total Dissolved Solids



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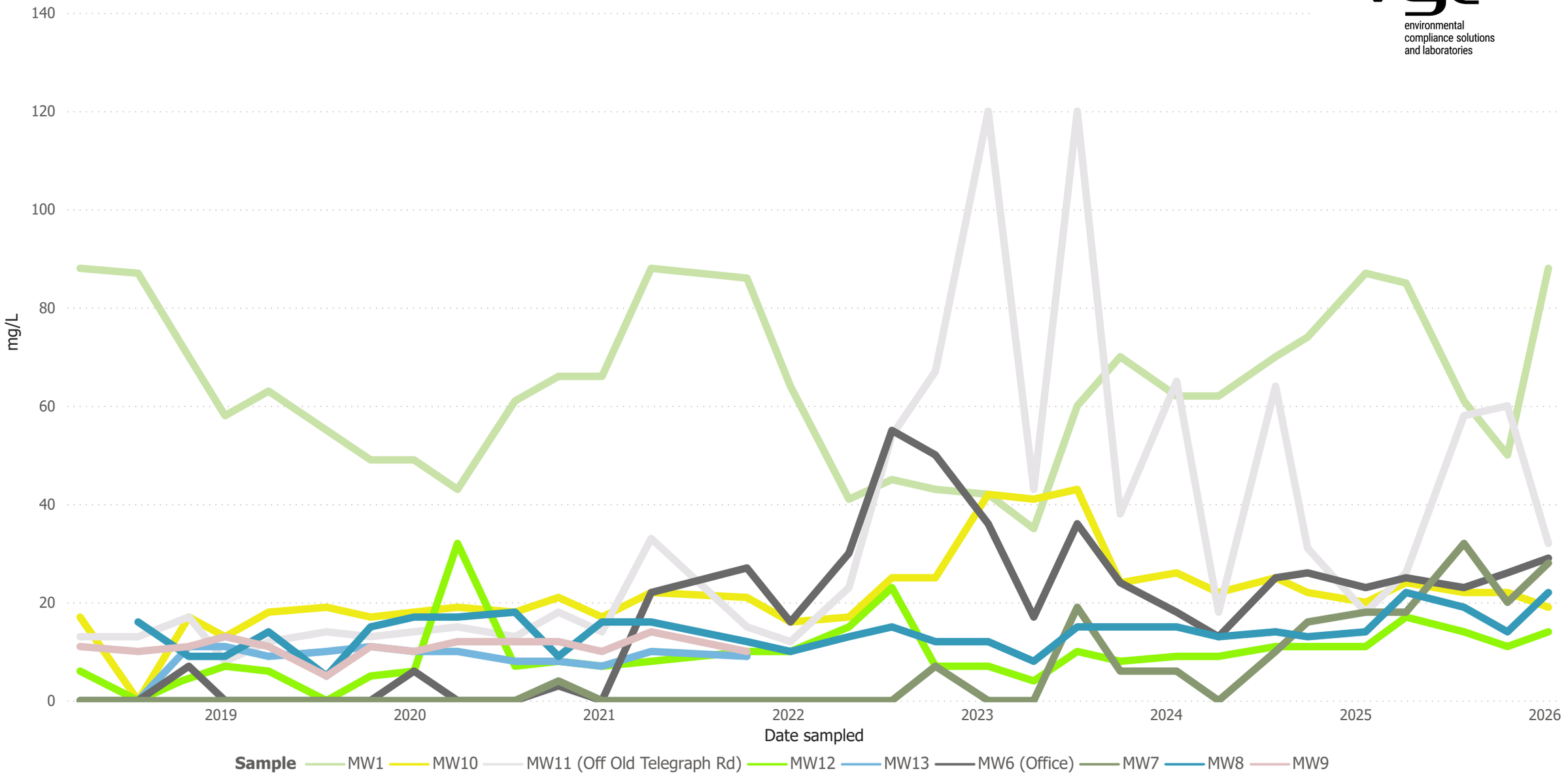
Total Hardness



Total Hardness

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environmental
compliance solutions
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