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May 28, 2025

GROUNDWATER QUALITY TESTING REPORT

For

GEORGIA – PACIFIC GYPSUM

Fort Dodge, Iowa

NORTH RECYCLE PILE

PERMIT #94-SDP-18-09

EVERGREEN #9510

RECEIVED

JUL 24 2025

MAY 28, 2025 GROUNDWATER TESTING REPORT
For
GEORGIA – PACIFIC GYPSUM NORTH RECYCLE PILE
Fort Dodge, Iowa
PERMIT #94-SDP-18-09

EVERGREEN #9510

Georgia-Pacific Gypsum North Recycle Pile

May 28, 2025, Groundwater Testing

Permit #94-SDP-18-09

Per MER Engineering correspondence dated October 12, 2022, Georgia-Pacific Gypsum proposed to make changes to the current groundwater testing at this site. This proposal would eliminate the testing for the indicator parameters listed in Table 3-2 from the HMSP and Closure / Post Closure Authorization. The proposed change in groundwater testing would include testing for the Table 3-1 parameters; total arsenic, total barium, total cadmium, total chromium, total lead, total mercury, and total zinc, as well as field tested parameters temperature, pH, and specific conductance. These metal parameters have US EPA and Iowa Statewide Groundwater Standards to adhere to. The Department approved the proposed changes per DNR correspondence dated October 18, 2022. Georgia-Pacific Gypsum completed a first round of sampling for this new list of parameters in November 2022. Four of five monitoring locations were successfully sampled and tested during the November 2022 event. Monitoring well MW4 could not be sampled as there was insufficient groundwater available at that time. A second round of this testing was proposed to be completed in March 2023. That groundwater testing was dismissed as MW4 did not contain adequate groundwater to complete the sampling. Groundwater was successfully sampled/tested at all monitoring locations in April 2023 and July 2023. The Department then suspended groundwater testing for the remainder of 2023. In December 2023, the Department reinstated groundwater testing for calendar year 2024. Three (3) rounds of groundwater testing were completed in calendar year 2024, May 1, 2024, August 6, 2024, and November 25, 2024. Per email from Brian Rath (IDNR) dated January 6, 2025, Georgia-Pacific is to continue groundwater testing and reporting until an Environmental Covenant has been submitted and approved by the Department. Georgia-Pacific completed another round of groundwater sampling / testing on May 28, 2025.

In early May 2025, groundwater levels were checked to see if groundwater was available where sampling / testing could be completed. Georgia-Pacific Gypsum completed another round of groundwater sampling / testing on May 28, 2025, at all monitoring locations at the North Recycle Pile. Arsenic was not detected at any of the five monitoring locations during this groundwater testing event. All monitoring locations had barium detected at low levels. Two monitoring locations, MW5 (22.3 µg/L) and MW2 (88.4 µg/L) had low level zinc detected. Monitoring well MW5 (0.786 µg/L) had cadmium detected. No other groundwater detects were noted for the remaining parameters during this May 2025 testing event. The table below displays the parameter detects for the 1st (November 2022), 2nd (April 2023), 3rd (July 2023), 4th (May 2024), 5th (August 2024), 6th (November 2024), and 7th May 2025 rounds of testing for the new list of parameters. As can be seen below and on the next page, all parameter detects are low level with none exceeding any known US EPA or Iowa Statewide Groundwater Standards.

GEORGIA-PACIFIC NORTH RECYCLE PILE - PERMIT # 94-SDP-18-09C						
ARSENIC - SS (10 µg/L)						
DATE		MW1	MW2	MW3	MW4	MW5
11/21/2022	(µg/L)	2.22	2.1	<2.00		<2.00
4/27/2023	(µg/L)	<2.00	<2.00	<2.00	<2.00	<2.00
7/20/2023	(µg/L)	<2.00	2.5	<2.00	<2.00	<2.00
5/1/2024	(µg/L)	<2.00	<2.00	<2.00	<2.00	<2.00
8/6/2024	(µg/L)	4.97	<2.00	<2.00	<2.00	<2.00
11/25/2024	(µg/L)	2.82	<2.00	<2.00	<2.00	<2.00
5/28/2025	(µg/L)	<2.00	<2.00	<2.00	<2.00	<2.00
BARIUM - SS (2000 µg/L)						
11/21/2022	(µg/L)	11.0	13.1	16.3		11.6
4/27/2023	(µg/L)	9.1	11.4	12.9	9.6	9.22
7/20/2023	(µg/L)	9.52	11.5	15.6	9.2	10.3
5/1/2024	(µg/L)	10.1	11.0	13.7	9.18	8.17
8/6/2024	(µg/L)	10.5	11.7	12.1	9.32	9.94
11/25/2024	(µg/L)	9.84	10.9	16.2	9.58	10.6
5/28/2025	(µg/L)	10.1	10.3	11.9	8.59	6.96

SS is the Iowa Statewide Standard (GWPS) for that parameter

Bold font (2.22) with gray back shading indicates a detect.

GEORGIA-PACIFIC NORTH RECYCLE PILE - PERMIT # 94-SDP-18-09C						
CADMIUM - SS (5.0 µg/L)						
DATE		MW 1	MW 2	MW 3	MW 4	MW 5
1/21/2022	(µg/L)	<0.100	<0.100	0.255		<0.100
4/27/2023	(µg/L)	<0.200	<0.200	<0.200	<0.200	<0.200
7/20/2023	(µg/L)	<0.200	<0.200	<0.200	<0.200	<0.200
5/1/2024	(µg/L)	<0.200	<0.200	<0.200	<0.200	<0.200
8/6/2024	(µg/L)	<0.200	<0.200	<0.200	<0.200	<0.200
1/25/2024	(µg/L)	<0.200	<0.200	<0.200	<0.200	<0.200
5/28/2025	(µg/L)	<0.200	<0.200	<0.200	<0.200	0.786
ZINC - SS (2000 µg/L)						
1/21/2022	(µg/L)	23.3	69.8	<20.00		<20.00
4/27/2023	(µg/L)	<20.00	64.2	<20.00	<20.00	<20.00
7/20/2023	(µg/L)	<20.00	59.8	<20.00	<20.00	<20.00
5/1/2024	(µg/L)	<20.00	85.9	<20.00	<20.00	<20.00
8/6/2024	(µg/L)	24.2	87.3	<20.00	<20.00	<20.00
1/25/2024	(µg/L)	<20.00	71.1	<20.00	<20.00	<20.00
5/28/2025	(µg/L)	<20.00	88.4	<20.00	<20.00	22.3

SS is the Iowa Statewide Standard (GWPS) for that parameter

Bold font (2.22) with gray back shading indicates a detect.

Monitoring well MW2 had some history with arsenic detects (3) that did exceed GWPS when utilizing dissolved analysis. These arsenic detects were reported to the Department during the first three quarters of calendar year 2013 groundwater testing at this site. The fourth quarter 2013 arsenic result returned from dissolved analysis as no detect. MW2 has had no arsenic detects since 2013 groundwater testing that have exceeded GWPS.

Lower Confidence (LCL) and Upper Confidence (UCL) limits were examined for groundwater parameters arsenic, barium, and zinc that have been detected with Total Analysis in monitoring wells MW1 and MW2. The LCL and UCL calculations are for the last six groundwater testing events and are displayed in the tables below.

Georgia-Pacific North Recycle Pile

MW2	Arsenic (ug/L)
Apr-23	2.0
Jul-23	2.5
May-24	2.0
Aug-24	2.0
Nov-24	2.0
May-25	2.0
Nov-25	2.08 Future levels of arsenic are interpolated using the 2.08 average of the previous 6 events
Jun-26	
Mean	2.1
Standard Deviation	0.17
Confidence Level	0.01
number of samples	8
Table 16-1 Unified Guidance	2.998 for 7 degrees of freedom @ 99 percentile
Lower Confidence Limit	1.90 Which is less than the GWPS of 10 µg/L for Arsenic
Upper Confidence Limit	2.27 Which is less than the GWPS of 10 µg/L for Arsenic

Georgia-Pacific North Recycle Pile

MW2	Barium (ug/L)
Apr-23	11.4
Jul-23	11.5
May-24	11.0
Aug-24	11.7
Nov-24	10.9
May-25	10.3
Nov-25	11.1 Future levels of arsenic are interpolated using the 11.1 average of the previous 6 events
Jun-26	
Mean	11.1
Standard Deviation	0.43
Confidence Level	0.01
number of samples	8
Table 16-1 Unified Guidance	2.998 for 7 degrees of freedom @ 99 percentile
Lower Confidence Limit	10.67 Which is less than the GWPS of 2000 µg/L for Barium
Upper Confidence Limit	11.58 Which is less than the GWPS of 2000 µg/L for Barium

Georgia-Pacific North Recycle Pile

MW2	Zinc (ug/L)
Apr-23	64.2
Jul-23	59.8
May-24	85.9
Aug-24	87.3
Nov-24	71.1
May-25	88.4
Nov-25	76.12 Future levels of arsenic are interpolated using the 76.12 average of the previous 6 events
Jun-26	
Mean	76.12
Standard Deviation	10.72
Confidence Level	0.01
number of samples	8
Table 16-1 Unified Guidance	2.998 for 7 degrees of freedom @ 99 percentile
Lower Confidence Limit	64.75 Which is less than the GWPS of 2000 µg/L for Zinc
Upper Confidence Limit	87.48 Which is less than the GWPS of 2000 µg/L for Zinc

Georgia-Pacific North Recycle Pile

MW1	Arsenic (ug/L)
Apr-23	2.0
Jul-23	2.0
May-24	2.0
Aug-24	4.97
Nov-24	2.82
May-25	2.0
Nov-25	2.63
Jun-26	2.63
Mean	2.63
Standard Deviation	1.01
Confidence Level	0.01
number of samples	8
Table 16-1 Unified Guidance	2.998 for 7 degrees of freedom @ 99 percentile
Lower Confidence Limit	1.56 Which is less than the GWPS of 10 µg/L for Arsenic
Upper Confidence Limit	3.70 Which is less than the GWPS of 10 µg/L for Arsenic

Georgia-Pacific North Recycle Pile

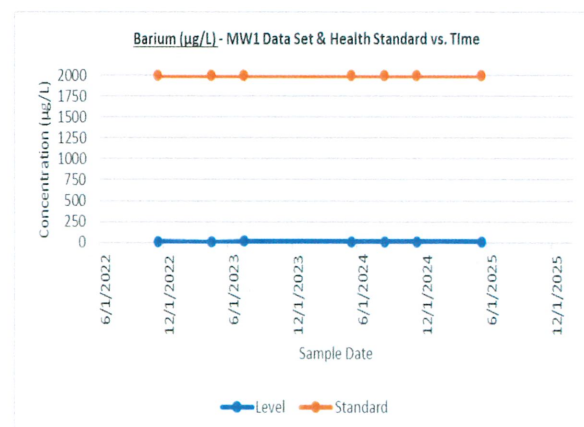
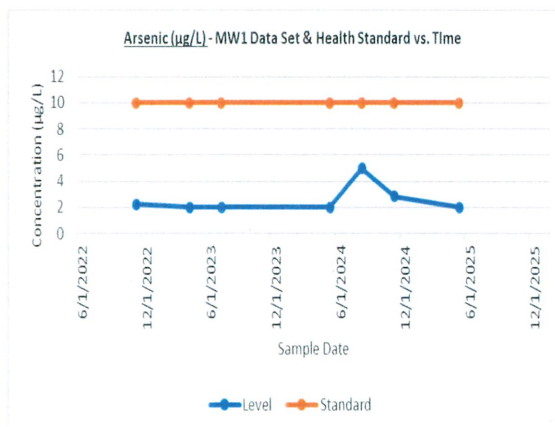
MW1	Barium (ug/L)
Apr-23	9.1
Jul-23	9.52
May-24	10.1
Aug-24	10.5
Nov-24	9.84
May-25	6.96
Nov-25	9.34
Jun-26	9.34
Mean	9.34
Standard Deviation	1.06
Confidence Level	0.01
number of samples	8
Table 16-1 Unified Guidance	2.998 for 7 degrees of freedom @ 99 percentile
Lower Confidence Limit	8.21 Which is less than the GWPS of 2000 µg/L for Barium
Upper Confidence Limit	10.47 Which is less than the GWPS of 2000 µg/L for Barium

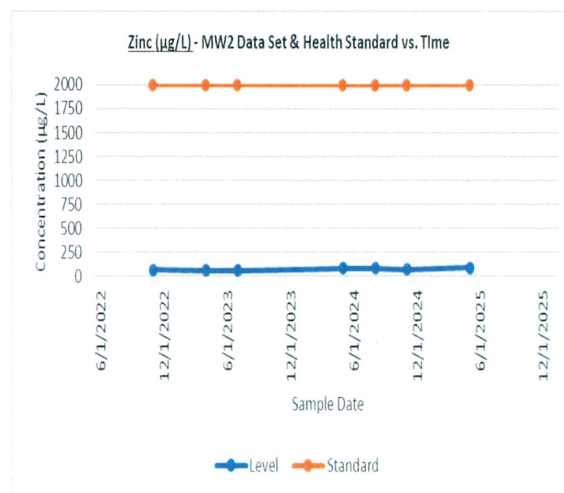
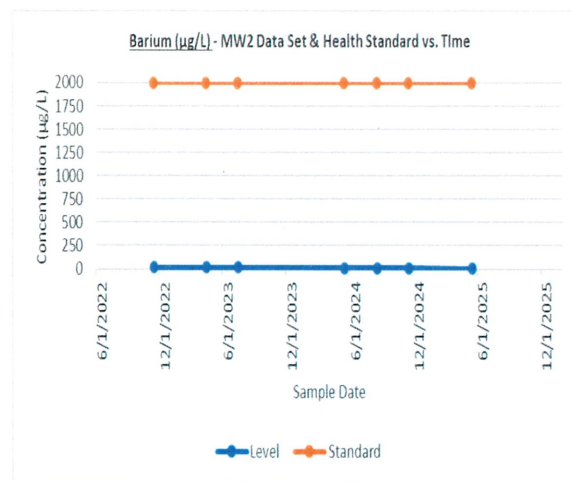
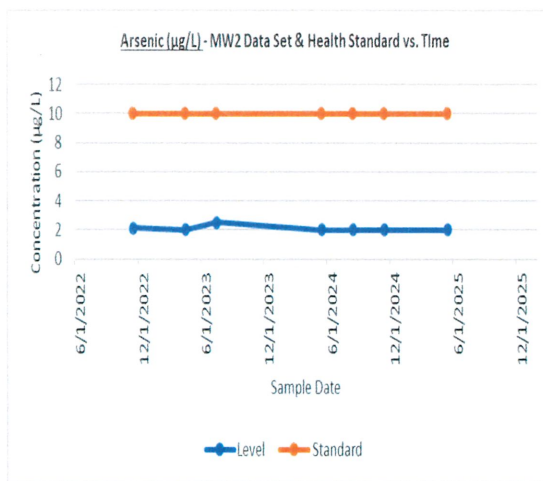
Georgia-Pacific North Recycle Pile

MW1	Zinc (ug/L)
Apr-23	20.0
Jul-23	20.0
May-24	20.0
Aug-24	24.2
Nov-24	20.0
May-25	20.0
Nov-25	20.70
Jun-26	20.70
Mean	20.70
Standard Deviation	1.45
Confidence Level	0.01
number of samples	8
Table 16-1 Unified Guidance	2.998 for 7 degrees of freedom @ 99 percentile
Lower Confidence Limit	19.16 Which is less than the GWPS of 2000 µg/L for Zinc
Upper Confidence Limit	22.24 Which is less than the GWPS of 2000 µg/L for Zinc

As can be seen, all LCL and UCL calculations are well below the GWPS for arsenic, barium, and zinc in MW1 and MW2. As stated previously, monitoring well MW2 has had some arsenic levels detected by dissolved analysis which did exceed GWPS in calendar year 2013. Since that 2013 testing, there have been 2 - arsenic detects utilizing total analysis, both well below the GWPS of 10.0 µg/L. MW2 had no arsenic detected during this May 2025 testing event. There have been no other parameter detects that have exceeded a GWPS at any of the other monitoring locations at this closed unit.

Please note below and on the next page, Health Standards have been plotted using the test data from the last seven (7) groundwater testing events utilizing Total Analysis for MW1 and MW2. The Health Standards include the detect levels for arsenic, barium, and zinc compared to their respective Groundwater Protection Standards.





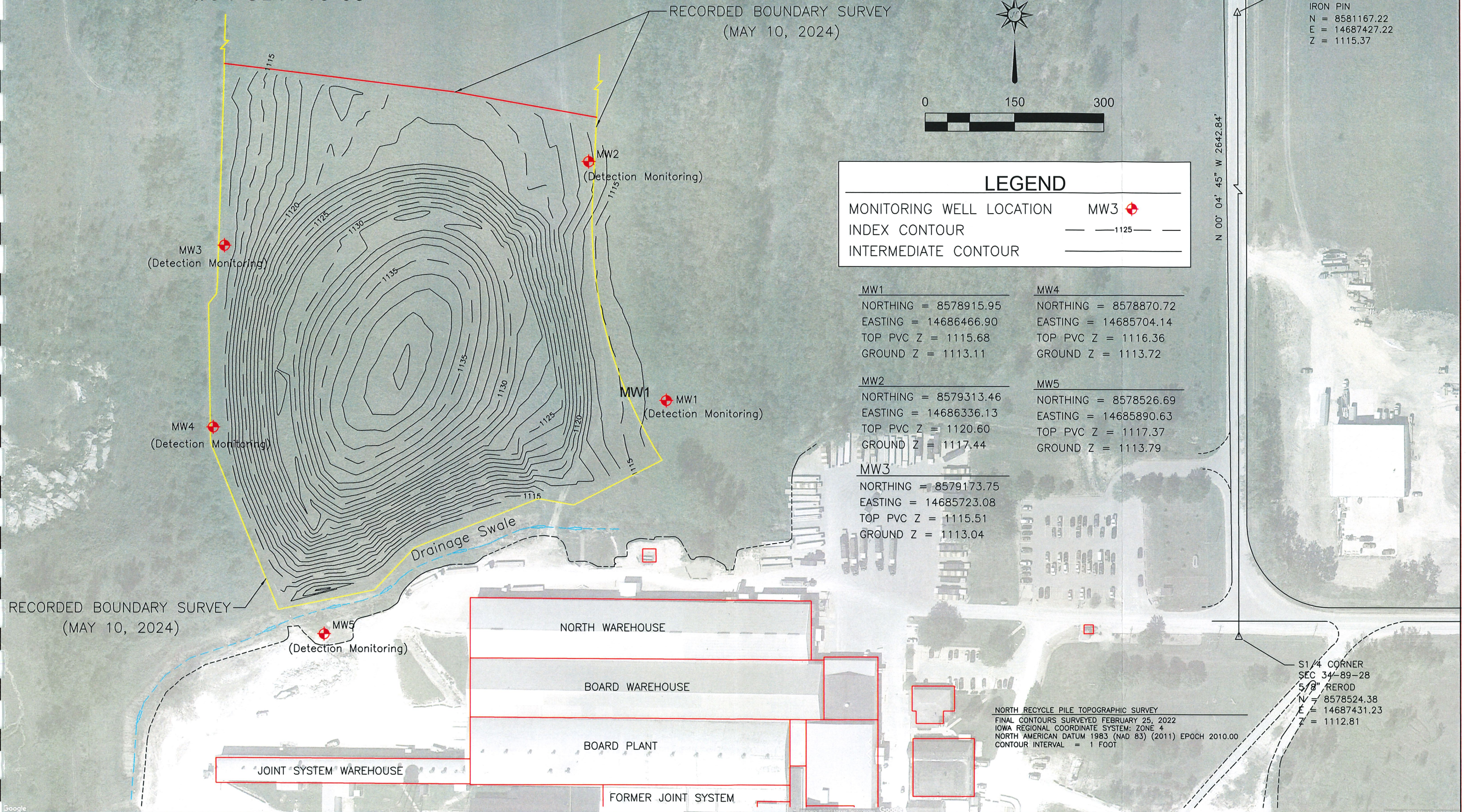
The Health Standards graphs show that none of the groundwater detects for arsenic, barium, or zinc exceed the GWPS at monitoring locations MW1 or MW2. All detects are low level with none exceeding any known US EPA or Iowa Statewide Groundwater Standards.

Georgia-Pacific and MER Engineering discussed these latest groundwater testing results as well as the updated Environmental Covenant guidance documents provided by Brian Rath (IDNR). Georgia-Pacific intends to pursue an Environmental Covenant (EC) for both of their closed gypsum board waste piles in calendar year 2025. The Department in their January 6, 2025 e-mail, instructed Georgia-Pacific Gypsum to continue groundwater testing and all reporting until an Environmental Covenant for this site has been approved.

Enclosed are copies of the site plat, data tables summarizing the parameters tested to date for each of the five monitoring locations, analytical results, and field data measurement data forms (542-1322).

Site Plat
(May 2025)

GEORGIA-PACIFIC GYPSUM NORTH RECYCLE PILE IDNR PERMIT #94-SDP-18-09



GEORGIA-PACIFIC GYPSUM NORTH RECYCLE PILE - SITE PLAT

DATE 05/28/2025
MER NO. 9510



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Groundwater Data Tables with Detects Noted in Bold Font
(May 2025)

[illegible]

11/21/2022 (*) Indicates first time in which Total Metals Analysis was completed.

GEORGIA-PACIFIC NORTH RECYCLE PILE - PERMIT #94-SDP-18-09C

BARIUM - SS (2000 µg/L)

[illegible]

Value in Bold Font indicates a detect.

MCL = USEPA Maximum Contaminant Level

SDWS = Secondary Drinking Water Standard

SS = Iowa State Standard

11/21/2022 (*) Indicates first time in which Total Metals Analysis was completed.

[illegible]

11/21/2022 (*) Indicates first time in which Total Metals Analysis was completed.

[illegible]

11/21/2022 (*) Indicates first time in which Total Metals Analysis was completed.

MERCURY - SS (2.0 µg/L)

11/21/2022 (*) Indicates first time in which Total Metals Analysis was completed.

[illegible]

Value in Bold Font indicates a detect.

[illegible]

Value in Bold Font indicates a detect.

SDWS = Secondary Drinking Water Standard

11/15/2018 (*) Indicates first time in which Total Metals Analysis was completed.

GEORGIA-PACIFIC NORTH RECYCLE PILE - PERMIT #94-SDP-18-09C					
pH (Field Measurement) (SDWS = 6.5-8.5)					
DATE	MW1	MW2	MW3	MW4	MW5
2/6/2013	6.92	6.68	6.74	6.77	7.03
5/21/2013	6.79	6.59	6.79	6.76	6.81
8/14/2013	6.72	6.44	6.71	6.68	6.76
11/7/2013	6.79	6.60	6.69	6.69	6.83
5/14/2014	6.78	6.51	6.62	6.67	6.74
11/3/2014	6.65	6.54	6.64	6.67	6.75
5/15/2015	6.85	6.53	6.72	6.74	6.77
11/4/2015	6.64	6.68	6.70	6.78	6.72
5/18/2016	6.83	6.48	6.69	6.62	6.58
11/1/2016	6.65	6.52	6.69	6.75	6.95
5/24/2017	6.94	6.50	6.90	6.73	6.74
11/14/2017	6.72	6.51	6.62	6.73	6.81
5/24/2018	6.94	6.67	6.96	6.79	6.82
11/15/18 (*)	6.91	6.59	6.94	6.83	6.82
5/2/2019	7.02	6.68	7.02	6.85	6.77
11/14/2019	6.70	6.58	6.75	6.90	6.74
5/26/2020	6.78	6.57	6.88	6.84	6.81
11/16/2020	6.95	6.66	6.59	6.87	7.18
5/24/2021	7.02	6.52	6.68	6.98	6.83
11/16/2021	7.26	6.78	6.60	6.99	6.87
5/24/2022	7.06	6.54	6.62	6.96	6.90
11/21/2022	7.22	6.69	6.58		6.92
4/27/2023	7.04	6.65	6.73	6.99	6.94
7/20/2023	6.86	6.59	6.59	6.79	6.95
5/1/2024	7.10	6.62	6.82	6.96	6.87
8/6/2024	6.83	6.67	6.68	6.83	6.89
11/25/2024	7.04	6.75	6.60	6.91	6.94
5/28/2025	7.14	6.73	6.8	7.03	6.85

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GEORGIA-PACIFIC NORTH RECYCLE PILE - PERMIT #94-SDP-18-09C						
SPECIFIC CONDUCTANCE						
DATE		MW1	MW2	MW3	MW4	MW5
2/6/2013	(mS/cm)	2.87	3.83	3.07	3.44	3.05
5/21/2013	(mS/cm)	2.39	3.56	2.27	3.31	3.05
8/14/2013	(mS/cm)	2.84	3.51	2.46	3.29	2.90
11/7/2013	(mS/cm)	2.88	3.69	2.76	3.32	2.98
5/14/2014	(mS/cm)	2.74	3.53	2.74	3.30	2.98
11/3/2014	(mS/cm)	2.87	3.60	2.57	3.21	2.99
5/15/2015	(mS/cm)	2.83	3.55	2.44	3.16	3.02
11/4/2015	(mS/cm)	2.80	3.49	2.52	3.17	3.05
5/18/2016	(mS/cm)	2.85	3.51	2.42	3.21	3.19
11/1/2016	(mS/cm)	2.79	3.45	2.58	3.11	3.08
5/24/2017	(mS/cm)	2.72	3.45	2.37	3.07	3.17
11/14/2017	(mS/cm)	2.78	3.47	2.95	3.07	3.12
5/24/2018	(mS/cm)	2.70	3.40	2.33	3.08	3.19
11/15/18 (*)	(mS/cm)	2.72	3.46	2.30	3.08	3.22
5/2/2019	(mS/cm)	2.72	3.37	2.25	3.02	3.16
11/14/2019	(mS/cm)	2.78	3.41	2.62	3.01	3.15
5/26/2020	(mS/cm)	2.70	3.32	2.36	2.93	3.02
11/16/2020	(mS/cm)	2.65	3.26	2.65	3.05	2.88
5/24/2021	(mS/cm)	2.57	3.13	2.64	2.95	2.72
11/16/2021	(mS/cm)	2.71	3.25	3.11	3.04	2.73
5/24/2022	(mS/cm)	2.64	3.26	2.77	3.01	2.83
11/21/2022	(mS/cm)	2.71	3.23	3.02		2.65
4/27/2023	(mS/cm)	2.59	3.10	2.61	2.96	2.64
7/20/2023	(mS/cm)	2.59	3.18	2.75	2.93	2.60
5/1/2024	(mS/cm)	2.68	3.13	2.89	3.02	2.97
8/6/2024	(mS/cm)	2.71	3.23	2.71	2.91	2.66
11/25/2024	(mS/cm)	2.70	3.32	2.93	2.98	2.66
5/28/2025	(mS/cm)	2.83	3.16	2.72	3.03	2.75

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GEORGIA-PACIFIC NORTH RECYCLE PILE - PERMIT #94-SDP-18-09C						
TEMPERATURE						
DATE		MW1	MW2	MW3	MW4	MW5
2/6/2013	(°C)	11.0	9.9	9.8	9.7	10.3
5/21/2013	(°C)	10.9	11.3	8.3	10.9	9.0
8/14/2013	(°C)	12.6	12.3	12.4	11.7	12.6
11/7/2013	(°C)	12.5	10.7	11.8	10.2	12.1
5/14/2014	(°C)	12.9	11.4	8.6	10.5	8.6
11/3/2014	(°C)	13.7	12.4	12.9	10.5	13.0
5/15/2015	(°C)	13.4	11.4	8.9	10.1	8.8
11/4/2015	(°C)	14.2	12.0	13.2	10.6	12.9
5/18/2016	(°C)	12.2	11.2	9.3	10.4	9.6
11/1/2016	(°C)	14.3	11.7	13.3	10.8	13.4
5/24/2017	(°C)	12.4	11.0	9.1	10.5	9.1
11/14/2017	(°C)	12.6	11.0	11.9	10.5	12.9
5/24/2018	(°C)	12.7	11.3	9.4	11.0	10.4
11/15/18 (*)	(°C)	13.2	10.8	11.8	10.0	12.2
5/2/2019	(°C)	11.6	11.0	7.6	10.0	8.2
11/14/2019	(°C)	12.2	10.4	11.4	10.0	10.6
5/26/2020	(°C)	12.1	11.4	9.1	10.4	9.2
11/16/2020	(°C)	11.4	10.9	11.1	9.9	10.9
5/24/2021	(°C)	12.5	11.6	9.8	10.6	9.4
11/16/2021	(°C)	11.2	10.8	11.3	9.8	11.8
5/24/2022	(°C)	11.9	10.9	8.6	9.9	8.0
11/21/2022	(°C)	11.3	10.8	10.8		11.4
4/27/2023	(°C)	12.2	11.1	8.7	10.2	8.8
7/20/2023	(°C)	12.3	12.1	10.2	10.1	11.3
5/1/2024	(°C)	12.2	11.2	8.7	10.3	8.6
8/6/2024	(°C)	12.8	11.4	11.1	10.4	11.4
11/25/2024	(°C)	11.1	10.8	11.1	9.9	12.4
5/28/2025	(°C)	12.3	11.3	8.8	10.2	9

11/21/2022 (*) indicates first time in which Total Metals Analysis was completed.

Value in Bold Font indicates a detect.

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11/15/2018 (*) Indicates first time in which Total Metals Analysis was completed.

Eurofins Test America Laboratory Reports for Groundwater Testing
(May 28, 2025)

ANALYTICAL REPORT

PREPARED FOR

Attn: Dave Minikis
Evergreen Engineers
109 Regency West Court
Fort Dodge, Iowa 50501

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JOB DESCRIPTION

Georgia Pacific MW Sampling

JOB NUMBER

310-307406-1

Eurofins Cedar Falls

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Authorization



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Case Narrative

Client: Evergreen Engineers
Project: Georgia Pacific MW Sampling

Job ID: 310-307406-1

Job ID: 310-307406-1

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Job Narrative 310-307406-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 5/29/2025 8:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.5°C.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Sample Summary

Client: Evergreen Engineers
Project/Site: Georgia Pacific MW Sampling

Job ID: 310-307406-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-307406-1	MW5	Water	05/28/25 09:10	05/29/25 08:40
310-307406-2	MW3	Water	05/28/25 09:30	05/29/25 08:40
310-307406-3	MW4	Water	05/28/25 09:50	05/29/25 08:40
310-307406-4	MW1	Water	05/28/25 10:15	05/29/25 08:40
310-307406-5	MW2	Water	05/28/25 10:55	05/29/25 08:40

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Detection Summary

Client: Evergreen Engineers
Project/Site: Georgia Pacific MW Sampling

Job ID: 310-307406-1

Client Sample ID: MW5

Lab Sample ID: 310-307406-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Barium	0.00696		0.00200		mg/L		1		6020B	Total/NA
Cadmium	0.000786		0.000200		mg/L		1		6020B	Total/NA
Zinc	0.0223		0.0200		mg/L		1		6020B	Total/NA
Total Suspended Solids	13.9		1.9		mg/L		1		I-3765-85	Total/NA

Client Sample ID: MW3

Lab Sample ID: 310-307406-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Barium	0.0119		0.00200		mg/L		1		6020B	Total/NA
Total Suspended Solids	39.4		1.9		mg/L		1		I-3765-85	Total/NA

Client Sample ID: MW4

Lab Sample ID: 310-307406-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Barium	0.00859		0.00200		mg/L		1		6020B	Total/NA

Client Sample ID: MW1

Lab Sample ID: 310-307406-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Barium	0.0101		0.00200		mg/L		1		6020B	Total/NA
Total Suspended Solids	27.5		7.5		mg/L		1		I-3765-85	Total/NA

Client Sample ID: MW2

Lab Sample ID: 310-307406-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Barium	0.0103		0.00200		mg/L		1		6020B	Total/NA
Zinc	0.0884		0.0200		mg/L		1		6020B	Total/NA
Total Suspended Solids	17.1		1.9		mg/L		1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample Results

Client: Evergreen Engineers
Project/Site: Georgia Pacific MW Sampling

Job ID: 310-307406-1

Client Sample ID: MW5

Lab Sample ID: 310-307406-1

Date Collected: 05/28/25 09:10

Matrix: Water

Date Received: 05/29/25 08:40

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200		mg/L		05/30/25 09:30	06/09/25 20:46	1
Barium	0.00696		0.00200		mg/L		05/30/25 09:30	06/09/25 20:46	1
Cadmium	0.000786		0.000200		mg/L		05/30/25 09:30	06/10/25 16:32	1
Chromium	<0.00500		0.00500		mg/L		05/30/25 09:30	06/09/25 20:46	1
Lead	<0.000500		0.000500		mg/L		05/30/25 09:30	06/09/25 20:46	1
Zinc	0.0223		0.0200		mg/L		05/30/25 09:30	06/09/25 20:46	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		06/09/25 10:45	06/10/25 11:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	13.9		1.9		mg/L			05/30/25 11:40	1

Eurofins Cedar Falls

Client Sample Results

Client: Evergreen Engineers
Project/Site: Georgia Pacific MW Sampling

Job ID: 310-307406-1

Client Sample ID: MW3

Lab Sample ID: 310-307406-2

Date Collected: 05/28/25 09:30

Matrix: Water

Date Received: 05/29/25 08:40

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200		mg/L		05/30/25 09:30	06/09/25 20:49	1
Barium	0.0119		0.00200		mg/L		05/30/25 09:30	06/09/25 20:49	1
Cadmium	<0.000200		0.000200		mg/L		05/30/25 09:30	06/10/25 16:35	1
Chromium	<0.00500		0.00500		mg/L		05/30/25 09:30	06/09/25 20:49	1
Lead	<0.000500		0.000500		mg/L		05/30/25 09:30	06/09/25 20:49	1
Zinc	<0.0200		0.0200		mg/L		05/30/25 09:30	06/09/25 20:49	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		06/09/25 10:45	06/10/25 11:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	39.4		1.9		mg/L			05/30/25 11:40	1

Client Sample Results

Client: Evergreen Engineers
Project/Site: Georgia Pacific MW Sampling

Job ID: 310-307406-1

Client Sample ID: MW4

Lab Sample ID: 310-307406-3

Date Collected: 05/28/25 09:50

Matrix: Water

Date Received: 05/29/25 08:40

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200		mg/L		05/30/25 09:30	06/09/25 20:51	1
Barium	0.00859		0.00200		mg/L		05/30/25 09:30	06/09/25 20:51	1
Cadmium	<0.000200		0.000200		mg/L		05/30/25 09:30	06/10/25 16:38	1
Chromium	<0.00500		0.00500		mg/L		05/30/25 09:30	06/09/25 20:51	1
Lead	<0.000500		0.000500		mg/L		05/30/25 09:30	06/09/25 20:51	1
Zinc	<0.0200		0.0200		mg/L		05/30/25 09:30	06/09/25 20:51	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		06/09/25 10:45	06/10/25 12:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.9		1.9		mg/L			05/30/25 11:40	1

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Client Sample Results

Client: Evergreen Engineers
Project/Site: Georgia Pacific MW Sampling

Job ID: 310-307406-1

Client Sample ID: MW1

Lab Sample ID: 310-307406-4

Date Collected: 05/28/25 10:15

Matrix: Water

Date Received: 05/29/25 08:40

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200		mg/L		06/02/25 08:40	06/02/25 19:18	1
Barium	0.0101		0.00200		mg/L		06/02/25 08:40	06/02/25 19:18	1
Cadmium	<0.000200		0.000200		mg/L		06/02/25 08:40	06/02/25 19:18	1
Chromium	<0.00500		0.00500		mg/L		06/02/25 08:40	06/02/25 19:18	1
Lead	<0.000500		0.000500		mg/L		06/02/25 08:40	06/02/25 19:18	1
Zinc	<0.0200		0.0200		mg/L		06/02/25 08:40	06/02/25 19:18	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		06/09/25 10:45	06/10/25 12:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	27.5		7.5		mg/L			05/30/25 11:40	1

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Client Sample Results

Client: Evergreen Engineers
Project/Site: Georgia Pacific MW Sampling

Job ID: 310-307406-1

Client Sample ID: MW2

Lab Sample ID: 310-307406-5

Date Collected: 05/28/25 10:55

Matrix: Water

Date Received: 05/29/25 08:40

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200		mg/L		06/02/25 08:40	06/02/25 19:20	1
Barium	0.0103		0.00200		mg/L		06/02/25 08:40	06/02/25 19:20	1
Cadmium	<0.000200		0.000200		mg/L		06/02/25 08:40	06/02/25 19:20	1
Chromium	<0.00500		0.00500		mg/L		06/02/25 08:40	06/02/25 19:20	1
Lead	<0.000500		0.000500		mg/L		06/02/25 08:40	06/02/25 19:20	1
Zinc	0.0884		0.0200		mg/L		06/02/25 08:40	06/02/25 19:20	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		06/09/25 10:45	06/10/25 12:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	17.1		1.9		mg/L			05/30/25 11:40	1

Definitions/Glossary

Client: Evergreen Engineers
Project/Site: Georgia Pacific MW Sampling

Job ID: 310-307406-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Sample Results

Client: Evergreen Engineers
Project/Site: Georgia Pacific MW Sampling

Job ID: 310-307406-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-456118/1-A

Matrix: Water

Analysis Batch: 457064

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 456118

Analyte	Result	MB MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200		mg/L		05/30/25 09:30	06/09/25 19:34	1
Barium	<0.00200		0.00200		mg/L		05/30/25 09:30	06/09/25 19:34	1
Chromium	<0.00500		0.00500		mg/L		05/30/25 09:30	06/09/25 19:34	1
Lead	<0.000500		0.000500		mg/L		05/30/25 09:30	06/09/25 19:34	1
Zinc	<0.0200		0.0200		mg/L		05/30/25 09:30	06/09/25 19:34	1

Lab Sample ID: MB 310-456118/1-A

Matrix: Water

Analysis Batch: 457198

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 456118

Analyte	Result	MB MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.000200		0.000200		mg/L		05/30/25 09:30	06/10/25 14:47	1

Lab Sample ID: LCS 310-456118/2-A

Matrix: Water

Analysis Batch: 457064

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 456118

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.200	0.2067		mg/L		103	80 - 120
Barium	0.100	0.09861		mg/L		99	80 - 120
Chromium	0.100	0.1012		mg/L		101	80 - 120
Lead	0.200	0.2066		mg/L		103	80 - 120
Zinc	0.200	0.1980		mg/L		99	80 - 120

Lab Sample ID: LCS 310-456118/2-A

Matrix: Water

Analysis Batch: 457198

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 456118

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	0.100	0.1064		mg/L		106	80 - 120

Lab Sample ID: MB 310-456236/1-A

Matrix: Water

Analysis Batch: 456403

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 456236

Analyte	Result	MB MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200		mg/L		06/02/25 08:40	06/02/25 19:04	1
Barium	<0.00200		0.00200		mg/L		06/02/25 08:40	06/02/25 19:04	1
Cadmium	<0.000200		0.000200		mg/L		06/02/25 08:40	06/02/25 19:04	1
Chromium	<0.00500		0.00500		mg/L		06/02/25 08:40	06/02/25 19:04	1
Lead	<0.000500		0.000500		mg/L		06/02/25 08:40	06/02/25 19:04	1
Zinc	<0.0200		0.0200		mg/L		06/02/25 08:40	06/02/25 19:04	1

Lab Sample ID: LCS 310-456236/2-A

Matrix: Water

Analysis Batch: 456403

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 456236

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.600	0.5761		mg/L		96	80 - 120
Barium	0.300	0.2672		mg/L		89	80 - 120

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QC Sample Results

Client: Evergreen Engineers
Project/Site: Georgia Pacific MW Sampling

Job ID: 310-307406-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 310-456236/2-A

Matrix: Water

Analysis Batch: 456403

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 456236

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Cadmium	0.300	0.2641		mg/L		88	80 - 120	
Chromium	0.300	0.2786		mg/L		93	80 - 120	
Lead	0.600	0.5472		mg/L		91	80 - 120	
Zinc	0.600	0.5119		mg/L		85	80 - 120	

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-456946/1-A

Matrix: Water

Analysis Batch: 457127

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 456946

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.000200		0.000200		mg/L		06/09/25 10:45	06/10/25 11:33	1

Lab Sample ID: LCS 310-456946/2-A

Matrix: Water

Analysis Batch: 457127

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 456946

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Mercury	0.00167	0.001712		mg/L		103	80 - 120	

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-456200/1

Matrix: Water

Analysis Batch: 456200

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Suspended Solids	<5.0		5.0		mg/L			05/30/25 11:40	1

Lab Sample ID: LCS 310-456200/2

Matrix: Water

Analysis Batch: 456200

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Total Suspended Solids	100	107.0		mg/L		107	82 - 117	

Eurofins Cedar Falls

QC Association Summary

Client: Evergreen Engineers
Project/Site: Georgia Pacific MW Sampling

Job ID: 310-307406-1

Metals

Prep Batch: 456118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307406-1	MW5	Total/NA	Water	3005A	
310-307406-2	MW3	Total/NA	Water	3005A	
310-307406-3	MW4	Total/NA	Water	3005A	
MB 310-456118/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-456118/2-A	Lab Control Sample	Total/NA	Water	3005A	

Prep Batch: 456236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307406-4	MW1	Total/NA	Water	3005A	
310-307406-5	MW2	Total/NA	Water	3005A	
MB 310-456236/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-456236/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 456403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307406-4	MW1	Total/NA	Water	6020B	456236
310-307406-5	MW2	Total/NA	Water	6020B	456236
MB 310-456236/1-A	Method Blank	Total/NA	Water	6020B	456236
LCS 310-456236/2-A	Lab Control Sample	Total/NA	Water	6020B	456236

Prep Batch: 456946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307406-1	MW5	Total/NA	Water	7470A	
310-307406-2	MW3	Total/NA	Water	7470A	
310-307406-3	MW4	Total/NA	Water	7470A	
310-307406-4	MW1	Total/NA	Water	7470A	
310-307406-5	MW2	Total/NA	Water	7470A	
MB 310-456946/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-456946/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 457064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307406-1	MW5	Total/NA	Water	6020B	456118
310-307406-2	MW3	Total/NA	Water	6020B	456118
310-307406-3	MW4	Total/NA	Water	6020B	456118
MB 310-456118/1-A	Method Blank	Total/NA	Water	6020B	456118
LCS 310-456118/2-A	Lab Control Sample	Total/NA	Water	6020B	456118

Analysis Batch: 457127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307406-1	MW5	Total/NA	Water	7470A	456946
310-307406-2	MW3	Total/NA	Water	7470A	456946
310-307406-3	MW4	Total/NA	Water	7470A	456946
310-307406-4	MW1	Total/NA	Water	7470A	456946
310-307406-5	MW2	Total/NA	Water	7470A	456946
MB 310-456946/1-A	Method Blank	Total/NA	Water	7470A	456946
LCS 310-456946/2-A	Lab Control Sample	Total/NA	Water	7470A	456946

Analysis Batch: 457198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307406-1	MW5	Total/NA	Water	6020B	456118

Eurofins Cedar Falls

QC Association Summary

Client: Evergreen Engineers
Project/Site: Georgia Pacific MW Sampling

Job ID: 310-307406-1

Metals (Continued)

Analysis Batch: 457198 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307406-2	MW3	Total/NA	Water	6020B	456118
310-307406-3	MW4	Total/NA	Water	6020B	456118
MB 310-456118/1-A	Method Blank	Total/NA	Water	6020B	456118
LCS 310-456118/2-A	Lab Control Sample	Total/NA	Water	6020B	456118

General Chemistry

Analysis Batch: 456200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307406-1	MW5	Total/NA	Water	I-3765-85	
310-307406-2	MW3	Total/NA	Water	I-3765-85	
310-307406-3	MW4	Total/NA	Water	I-3765-85	
310-307406-4	MW1	Total/NA	Water	I-3765-85	
310-307406-5	MW2	Total/NA	Water	I-3765-85	
MB 310-456200/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-456200/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Lab Chronicle

Client: Evergreen Engineers
Project/Site: Georgia Pacific MW Sampling

Job ID: 310-307406-1

Client Sample ID: MW5

Date Collected: 05/28/25 09:10

Date Received: 05/29/25 08:40

Lab Sample ID: 310-307406-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			456118	WK2X	EET CF	05/30/25 09:30
Total/NA	Analysis	6020B		1	457064	NFT2	EET CF	06/09/25 20:46
Total/NA	Prep	3005A			456118	WK2X	EET CF	05/30/25 09:30
Total/NA	Analysis	6020B		1	457198	ZRI4	EET CF	06/10/25 16:32
Total/NA	Prep	7470A			456946	F5MW	EET CF	06/09/25 10:45
Total/NA	Analysis	7470A		1	457127	F5MW	EET CF	06/10/25 11:56
Total/NA	Analysis	I-3765-85		1	456200	HE7K	EET CF	05/30/25 11:40

Client Sample ID: MW3

Date Collected: 05/28/25 09:30

Date Received: 05/29/25 08:40

Lab Sample ID: 310-307406-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			456118	WK2X	EET CF	05/30/25 09:30
Total/NA	Analysis	6020B		1	457064	NFT2	EET CF	06/09/25 20:49
Total/NA	Prep	3005A			456118	WK2X	EET CF	05/30/25 09:30
Total/NA	Analysis	6020B		1	457198	ZRI4	EET CF	06/10/25 16:35
Total/NA	Prep	7470A			456946	F5MW	EET CF	06/09/25 10:45
Total/NA	Analysis	7470A		1	457127	F5MW	EET CF	06/10/25 11:58
Total/NA	Analysis	I-3765-85		1	456200	HE7K	EET CF	05/30/25 11:40

Client Sample ID: MW4

Date Collected: 05/28/25 09:50

Date Received: 05/29/25 08:40

Lab Sample ID: 310-307406-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			456118	WK2X	EET CF	05/30/25 09:30
Total/NA	Analysis	6020B		1	457064	NFT2	EET CF	06/09/25 20:51
Total/NA	Prep	3005A			456118	WK2X	EET CF	05/30/25 09:30
Total/NA	Analysis	6020B		1	457198	ZRI4	EET CF	06/10/25 16:38
Total/NA	Prep	7470A			456946	F5MW	EET CF	06/09/25 10:45
Total/NA	Analysis	7470A		1	457127	F5MW	EET CF	06/10/25 12:00
Total/NA	Analysis	I-3765-85		1	456200	HE7K	EET CF	05/30/25 11:40

Client Sample ID: MW1

Date Collected: 05/28/25 10:15

Date Received: 05/29/25 08:40

Lab Sample ID: 310-307406-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			456236	WK2X	EET CF	06/02/25 08:40
Total/NA	Analysis	6020B		1	456403	NFT2	EET CF	06/02/25 19:18
Total/NA	Prep	7470A			456946	F5MW	EET CF	06/09/25 10:45
Total/NA	Analysis	7470A		1	457127	F5MW	EET CF	06/10/25 12:03
Total/NA	Analysis	I-3765-85		1	456200	HE7K	EET CF	05/30/25 11:40

Eurofins Cedar Falls

Lab Chronicle

Client: Evergreen Engineers
Project/Site: Georgia Pacific MW Sampling

Job ID: 310-307406-1

Client Sample ID: MW2

Lab Sample ID: 310-307406-5

Date Collected: 05/28/25 10:55

Matrix: Water

Date Received: 05/29/25 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			456236	WK2X	EET CF	06/02/25 08:40
Total/NA	Analysis	6020B		1	456403	NFT2	EET CF	06/02/25 19:20
Total/NA	Prep	7470A			456946	F5MW	EET CF	06/09/25 10:45
Total/NA	Analysis	7470A		1	457127	F5MW	EET CF	06/10/25 12:05
Total/NA	Analysis	I-3765-85		1	456200	HE7K	EET CF	05/30/25 11:40

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Accreditation/Certification Summary

Client: Evergreen Engineers
Project/Site: Georgia Pacific MW Sampling

Job ID: 310-307406-1

Laboratory: Eurofins Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Method Summary

Client: Evergreen Engineers
Project/Site: Georgia Pacific MW Sampling

Job ID: 310-307406-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
7470A	Preparation, Mercury	SW846	EET CF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



Environment Testing
America



310-307406 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>MER</u>			
City/State: <u>Fort Dodge</u>	STATE: <u>IA</u>	Project:	
Receipt Information			
Date/Time Received: <u>5/29/25</u> <u>840</u>	Received By: <u>AB</u>		
Delivery Type: <input checked="" type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		If yes: Cooler ID: _____	
Multiple Coolers? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes: Cooler # _____ of _____	
Cooler Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes: Which VOA samples are in cooler? ↓	
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID: <u>2</u>		Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <u>0.5</u>		Corrected Temp (°C): <u>0.5</u>	
• Sample Container Temperature			
Container(s) used.	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding If no, proceed with login			
Additional Comments			

Login Sample Receipt Checklist

Client: Evergreen Engineers

Job Number: 310-307406-1

Login Number: 307406

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Bunker, Xavier M

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

DNR Field Form 542-1322
(May 28, 2025 Groundwater Testing)

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name Georgia Pacific North Recycle Pile Permit No. 94-SDP-18-09
Monitoring Well/Piezometer No. MW5 Upgradient X
SEQUENCE NUMBER (1) Downgradient _____
Name of person sampling Evergreen Engineers – Dave Minikis

A. MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? Yes Standing Water or Litter No
If no, explain _____ If yes, explain _____

B. GROUNDWATER ELEVATION MEASUREMENT (± 0.01 foot, MSL)

Elevation: Top of inner well casing 1117.37 Ground Elevation 1113.79
** Depth of Well 26.20 Inside Casing Diameter (in inches) 2.0
Equipment Used Electronic water depth indicator

Groundwater Level (± 0.01 foot below top of inner casing, MSL):

	<u>Date/Time</u>	<u>Depth to Groundwater</u>	<u>Groundwater Elevation</u>
* Before Purging	_____	_____	_____
* After Purging	_____	_____	_____
* Before Sampling	<u>05-28-25/ 9:10</u>	<u>10.70</u>	<u>1106.67</u>

*C. WELL PURGING

Quantity of Water Removed from Well (gallons) _____ gal.
No. of Well Volumes (based on current water level) (0.5 gal./ft. of liquid)
Was well pumped/bailed dry? n/a

Equipment used:

Bailer type PVC-Disposable Dedicated Bailer? X
Pump type _____ Dedicated Pump? _____
If not dedicated, method of cleaning _____

*D. FIELD MEASUREMENT

Weather Conditions Cloudy / $\pm 55^{\circ}$ F
Field Measurements (after stabilization):
Temperature 9.0 Units C $^{\circ}$
Equipment Used Oakton Multi-Parameter Tester 35
pH 6.85
Equipment Used Oakton Multi-Parameter Tester 35
Specific Cond. 2.75 Units μ S/cm
Equipment Used Oakton Multi-Parameter Tester 35

Comments Total Depth Measured - 25.65'

NOTE: Attach Laboratory Report and 8-1/2" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

* Omit if only measuring groundwater elevations.

** Secure this data before beginning field work.

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name Georgia Pacific North Recycle Pile Permit No. 94-SDP-18-09
Monitoring Well/Piezometer No. MW3 Upgradient X
SEQUENCE NUMBER (2) Downgradient _____
Name of person sampling Evergreen Engineers – Dave Minikis

A. MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? Yes Standing Water or Litter No
If no, explain _____ If yes, explain _____

B. GROUNDWATER ELEVATION MEASUREMENT (± 0.01 foot, MSL)

Elevation: Top of inner well casing 1115.51 Ground Elevation 1113.04
** Depth of Well 20.02 Inside Casing Diameter (in inches) 2.0
Equipment Used Electronic water depth indicator

Groundwater Level (± 0.01 foot below top of inner casing, MSL):

	<u>Date/Time</u>	<u>Depth to Groundwater</u>	<u>Groundwater Elevation</u>
* Before Purging	_____	_____	_____
* After Purging	_____	_____	_____
* Before Sampling	<u>05-28-25/ 9:30</u>	<u>8.39</u>	<u>1107.12</u>

*C. WELL PURGING

Quantity of Water Removed from Well (gallons) _____ gal.
No. of Well Volumes (based on current water level) (0.5 gal./ft. of liquid)
Was well pumped/bailed dry? n/a

Equipment used:

Bailer type PVC-Disposable Dedicated Bailer? X
Pump type _____ Dedicated Pump? _____
If not dedicated, method of cleaning _____

*D. FIELD MEASUREMENT

Weather Conditions Cloudy / $\pm 57^{\circ}$ F
Field Measurements (after stabilization):
Temperature 8.8 Units C $^{\circ}$
Equipment Used Oakton Multi-Parameter Tester 35
pH 6.80
Equipment Used Oakton Multi-Parameter Tester 35
Specific Cond. 2.72 Units μ S/cm
Equipment Used Oakton Multi-Parameter Tester 35

Comments Total Depth Measured - 20.01'

NOTE: Attach Laboratory Report and 8-1/2" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

* Omit if only measuring groundwater elevations.

** Secure this data before beginning field work.

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name Georgia Pacific North Recycle Pile Permit No. 94-SDP-18-09
Monitoring Well/Piezometer No. MW4 Upgradient _____
SEQUENCE NUMBER (3) Downgradient X
Name of person sampling Evergreen Engineers – Dave Minikis

A. MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? Yes Standing Water or Litter No
If no, explain _____ If yes, explain _____

B. GROUNDWATER ELEVATION MEASUREMENT (± 0.01 foot, MSL)

Elevation: Top of inner well casing 1116.36 Ground Elevation 1113.72
** Depth of Well 32.30 Inside Casing Diameter (in inches) 2.0
Equipment Used Electronic water depth indicator

Groundwater Level (± 0.01 foot below top of inner casing, MSL):

	<u>Date/Time</u>	<u>Depth to Groundwater</u>	<u>Groundwater Elevation</u>
* Before Purging	_____	_____	_____
* After Purging	_____	_____	_____
* Before Sampling	<u>05-28-25/ 9:50</u>	<u>22.15</u>	<u>1094.21</u>

*C. WELL PURGING

Quantity of Water Removed from Well (gallons) _____ gal.
No. of Well Volumes (based on current water level) (0.5 gal./ft. of liquid)
Was well pumped/bailed dry? n/a

Equipment used:

Bailer type PVC-Disposable Dedicated Bailer? X
Pump type _____ Dedicated Pump? _____
If not dedicated, method of cleaning _____

*D. FIELD MEASUREMENT

Weather Conditions Cloudy / $\pm 58^{\circ}$ F
Field Measurements (after stabilization):
Temperature 10.2 Units C $^{\circ}$
Equipment Used Oakton Multi-Parameter Tester 35
pH 7.03
Equipment Used Oakton Multi-Parameter Tester 35
Specific Cond. 3.03 Units μ S/cm
Equipment Used Oakton Multi-Parameter Tester 35

Comments Total Depth Measured – 32.35'

NOTE: Attach Laboratory Report and 8-1/2" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

* Omit if only measuring groundwater elevations.

** Secure this data before beginning field work.

(June - 1989)

542-1322

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name Georgia Pacific North Recycle Pile Permit No. 94-SDP-18-09
Monitoring Well/Piezometer No. MW1 Ugradient _____
SEQUENCE NUMBER (4) Downgradient X
Name of person sampling Evergreen Engineers – Dave Minikis

A. MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? Yes Standing Water or Litter No
If no, explain _____ If yes, explain _____

B. GROUNDWATER ELEVATION MEASUREMENT (± 0.01 foot, MSL)

Elevation: Top of inner well casing 1115.68 Ground Elevation 1113.11

** Depth of Well 65.95 Inside Casing Diameter (in inches) 2.0
Equipment Used Electronic water depth indicator

Groundwater Level (± 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
* Before Purging	_____	_____	_____
* After Purging	_____	_____	_____
* Before Sampling	<u>05-28-25/10:15</u>	<u>57.14</u>	<u>1058.54</u>

*C. WELL PURGING

Quantity of Water Removed from Well (gallons) _____ gal.

No. of Well Volumes (based on current water level) (0.5 gal./ft. of liquid)

Was well pumped/bailed dry? n/a

Equipment used:

Bailer type PVC-Disposable Dedicated Bailer? X

Pump type _____ Dedicated Pump? _____

If not dedicated, method of cleaning _____

*D. FIELD MEASUREMENT

Weather Conditions Cloudy / $\pm 58^\circ$ F

Field Measurements (after stabilization):

Temperature 12.3 Units C $^\circ$

Equipment Used Oakton Multi-Parameter Tester 35

pH 7.14

Equipment Used Oakton Multi-Parameter Tester 35

Specific Cond. 2.83 Units μ S/cm

Equipment Used Oakton Multi-Parameter Tester 35

Comments Total Depth Measured – 65.75'.

NOTE: Attach Laboratory Report and 8-1/2" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

* Omit if only measuring groundwater elevations.

** Secure this data before beginning field work.

(June - 1989)

542-1322

FORM FOR
GROUNDWATER SAMPLING AND/OR
GROUNDWATER ELEVATION MEASUREMENT

Site Name Georgia Pacific North Recycle Pile Permit No. 94-SDP-18-09
Monitoring Well/Piezometer No. MW2 Ugradient _____
SEQUENCE NUMBER (5) Downgradient X
Name of person sampling Evergreen Engineers – Dave Minikis

A. MONITORING WELL/PIEZOMETER CONDITIONS

Well/Piezometer Properly Capped? Yes Standing Water or Litter No
If no, explain _____ If yes, explain _____

B. GROUNDWATER ELEVATION MEASUREMENT (± 0.01 foot, MSL)

Elevation: Top of inner well casing 1120.06 Ground Elevation 1116.90
** Depth of Well 73.83 Inside Casing Diameter (in inches) 2.0
Equipment Used Electronic water depth indicator

Groundwater Level (± 0.01 foot below top of inner casing, MSL):

	Date/Time	Depth to Groundwater	Groundwater Elevation
* Before Purging	_____	_____	_____
* After Purging	_____	_____	_____
* Before Sampling	<u>05-28-25/10:55</u>	<u>62.18</u>	<u>1058.42</u>

*C. WELL PURGING

Quantity of Water Removed from Well (gallons) _____ gal.
No. of Well Volumes (based on current water level) (0.5 gal./ft. of liquid)
Was well pumped/bailed dry? n/a

Equipment used:

Bailer type PVC-Disposable Dedicated Bailer? X
Pump type _____ Dedicated Pump? _____
If not dedicated, method of cleaning _____

*D. FIELD MEASUREMENT

Weather Conditions Cloudy / $\pm 59^\circ$ F
Field Measurements (after stabilization):
Temperature 11.3 Units C $^\circ$
Equipment Used Oakton Multi-Parameter Tester 35
pH 6.73
Equipment Used Oakton Multi-Parameter Tester 35
Specific Cond. 3.16 Units μ S/cm
Equipment Used Oakton Multi-Parameter Tester 35

Comments Total Depth Measured – 74.03'

NOTE: Attach Laboratory Report and 8-1/2" x 11" site plan showing locations of all surface and groundwater monitoring points. One map per sampling round.

* Omit if only measuring groundwater elevations.

** Secure this data before beginning field work.

