



May 26, 2023

Wisconsin Department of Natural Resources

Attn: Mr. Phil Richard
875 South 4th Avenue
Park Falls, WI 54552

Subject:

Site Update
Phillips Plating Corporation
984 North Lake Avenue
Phillips, WI
BRRTS: 02-51-559634

Dear Phil,

The purpose of this letter is to provide you with an update for ongoing natural attenuation determination activities associated with the above referenced site. The site location is shown on Figure 1.

BACKGROUND

This site is in the NW ¼ , SW ¼ , Section 7, T37N, R01E in the City of Phillips, Price County. The facility is an operating plating facility which specializes in metallic plating of various plastic components.

SUMMARY OF DATES AND WORK COMPLETED

- **May 3, 2022** – REI onsite to direct and oversee the installation of piezometer PZ-4.
- **June 8, 2022** – REI onsite to develop, piezometer PZ4, and sample the entire well network.
- **June 9, 2022** – REI onsite to sample piezometer PZ-4.
- **June 28, 2022** – REI onsite to re-sample monitoring wells MW-6 and MW-8.
- **November 1, 2022** – REI onsite to sample all monitoring wells and piezometers. Piezometer PZ-4 was surveyed into the site well network.

SITE SUMMARY

REI submitted the Site Investigation Report / Remedial Action Plan on October 30, 2013. Site Update reports have been submitted on January 24, 2013; March 13, 2013; October 14, 2014; January 19, 2017; December 29, 2017; September 4, 2018; September 5, 2019 and December 6, 2021. These reports conclude that groundwater contamination originating from the Phillips Plating former wastewater process system is present on and off site. REI presented three (3) alternatives as a part of the Remedial Action Plan including source excavation, chemical injection, and long-term groundwater monitoring for natural attenuation. Groundwater monitoring was selected due to the limited ability to access the impacted source areas inside the building as well as the limited access between the building, State Highway 13, and railroad right of way along State Highway 13.

Since the identification of the issue, Phillips Plating has also replaced or upgraded all process water tanks and piping by adding secondary containment or removing the Underground Storage Tanks (USTs) and replacing with Aboveground Storage Tanks (ASTs). They have also recoated the floors



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under the plating machines with chemical resistant epoxy to prevent any migration of materials. Therefore, it is believed that there is no additional leak or ongoing source to the contamination. A site map with all monitoring locations is included on Figure 2.

Groundwater elevation data was collected prior to sampling and summarized on Tables 1a-1b and vertical gradient calculations are summarized on Tables 2a-2c. Groundwater flow maps for the June 2022 and November 2022 sample are depicted in Figures 3a and 3b. Piezometric flow maps for the June 2022 and November 2022 sample events are depicted in Figures 4a and 4b.

Please note, the groundwater samples collected from monitoring wells MW6 and MW8 were mislabeled during the June 8, 2022 sampling event, and were resampled on June 28, 2022. Corrected results are noted with an asteric (*) on Tables 3f and 3h.

Based on groundwater elevation data collected from the four (4) piezometers, groundwater flow deeper in the aquifer near piezometers PZ2 and PZ3 appears to flow towards the southwest, while flow near PZ4 flows towards the east. Flow direction at the water table and deeper in the aquifer appear to be impacted by potential infiltration from Elk Lake. Based on the nested monitoring well MW6 and piezometer PZ1, identified an upward vertical component during the last sampling event with a gradient ranging from 4.64×10^{-2} to 1.47×10^{-1} . The well nest of monitoring well MW10 and piezometer PZ3 has shown a downward flow gradient for five (5) of the nine (9) rounds of groundwater monitoring conducted with four (4) rounds identifying an upward flow gradient. The well nest of monitoring well MW13 and piezometer PZ2 has shown an upward flow gradient for six (6) of the nine (9) rounds of groundwater monitoring conducted with three (3) rounds identifying a downward flow gradient.

GROUNDWATER ANALYTICAL RESULTS

Upgradient monitoring wells

Monitoring well MW1 identified concentrations of dissolved Nickel exceeding the Wisconsin Administrative Code (WAC) Chapter NR140 Preventive Action Limit (PAL) during the June 2022 and November 2022 sampling event. Dissolved Nickel concentrations, at this location, have demonstrated a stable/decreasing trend. Concentrations of dissolved Chromium have remained below the laboratory method limit of detection for the last twelve (12) rounds of groundwater monitoring.

Piezometer PZ-4 did not identify concentrations of dissolved Chromium or dissolved Nickel above the laboratory method limit of detection.

Side-gradient monitoring wells

Monitoring well MW2 identified low-level detections of dissolved Nickel for the last thirteen (13) rounds of groundwater monitoring, but the concentrations have remained below the WAC Chapter NR140 state groundwater standards. Concentrations of dissolved Chromium have remained below the laboratory method limit of detection for the last thirteen (13) rounds of groundwater monitoring.

Monitoring well MW4 identified low-level detections of dissolved Nickel during the June 2022 and November 2022 sampling events. Concentrations have remained below the WAC Chapter NR140 state groundwater standards. Concentrations of dissolved Chromium have remained below the laboratory method limit of detection for the last ten (10) rounds of groundwater monitoring with the exception of the June 2020 sampling event.

Monitoring well MW7 identified low-level detections of dissolved Nickel during the November 2022 sampling event. However, concentrations have remained below the WAC Chapter NR140 state

groundwater standards. Concentrations of dissolved Chromium below the laboratory method limit of quantitation was identified in the November 2022 sampling event. Dissolved Chromium and dissolved Nickel have demonstrated an overall stable trend since 2016. MW7 could not be located during the June 2022 sampling event, therefore MW7 was not sampled.

Downgradient monitoring wells

Monitoring well MW5 identified concentrations of dissolved Chromium and dissolved Nickel exceeding the WAC Chapter NR140 Enforcement Standards (ES) during the June 2022 and November 2022 sampling events. Dissolved Chromium has demonstrated a stable trend at this location. Conversely, dissolved Nickel has demonstrated an unstable to increasing trend since December 2012.

Monitoring well MW6 identified concentrations of dissolved Chromium and dissolved Nickel exceeding the WAC Chapter NR140 ES during the June 2022 and November 2022 sampling events. Nickel has demonstrated a stable/decreasing trend since 2014. Conversely, Chromium has demonstrated an increasing trend since 2015.

Monitoring well MW8 identified concentrations of dissolved Chromium and dissolved Nickel exceeding the WAC Chapter NR140 ES during the June 2022 and November 2022 sampling events. Dissolved Chromium and dissolved Nickel have demonstrated a stable/decreasing trend since 2014.

Monitoring well MW9 identified concentrations of dissolved Chromium and dissolved Nickel exceeding the WAC Chapter NR140 ES during the June 2022 and November 2022 sampling events. Dissolved Chromium and dissolved Nickel have demonstrated a stable/decreasing trend since 2014.

Monitoring well MW10 identified concentrations of dissolved Chromium exceeding the WAC Chapter NR140 PAL during the June 2022 and November 2022 sampling events. Dissolved Nickel exceeding the WAC Chapter NR140 PAL during the November 2022 sampling event. Overall, a stable trend continues in MW10 since March 2021.

Monitoring well MW11 did not identify concentrations of dissolved Nickel or dissolved Chromium above the laboratory detection limits during the June 2022 and/or November 2022 sampling events. Concentrations of dissolved Chromium and dissolved Nickel have historically identified concentrations above the laboratory detection limits, however detections have remained below the WAC Chapter NR140 state groundwater standards since the monitoring well was first sampled in July 2013.

Monitoring well MW12 did not identify detections of dissolved Chromium or dissolved Nickel above the laboratory limit of detection in the June 2022 and November 2022 sampling events. Concentrations of dissolved Chromium and dissolved Nickel have remained below the WAC Chapter NR140 state groundwater standards since the monitoring well was first sampled in February 2016.

Monitoring well MW13 identified detections of dissolved Chromium above the laboratory limit of detection but below the laboratory limit of quantitation during the June 2022 and November 2022 sampling events. However, the concentrations identified are below the WAC Chapter NR140 state groundwater standards. Analytical results identified no detections of dissolved Nickel above the laboratory limit of detection during the June 2022 and November 2022 sampling events.

Concentrations of dissolved Chromium and dissolved Nickel have remained below the WAC Chapter NR140 state groundwater standards since the monitoring well was first sampled in July 2018.

Monitoring well MW14 did not identify concentrations of dissolved Chromium and dissolved Nickel above the laboratory method limit of detection during the June 2022 and November 2022 sampling events. Concentrations of dissolved Chromium and dissolved Nickel have remained below the laboratory method limit of detection since the monitoring well was first sampled in July 2018.

Monitoring well MW15 did not identify concentrations of dissolved Chromium or dissolved Nickel above the laboratory method limit of detection during the June 2022 and November 2022 sampling events. Concentrations of dissolved Chromium and dissolved Nickel have fluctuated between low-level detects and below the laboratory method limit of detection since the monitoring well was first sampled in July 2018.

Piezometer PZ1 identified concentrations of dissolved Chromium exceeding the WAC Chapter NR140 ES during the June 2022 and November 2022 sampling events. During the June 2022 sampling event low-level concentrations of dissolved Nickel were identified. The November 2022 sampling event did not identify concentrations of dissolved Nickel above the laboratory limit of detection. Dissolved Chromium and dissolved Nickel have demonstrated a stable/decreasing trend since 2013.

Piezometer PZ2 did not identify any concentrations of dissolved Chromium or dissolved Nickel above the laboratory limit of detection during the June 2022 or November 2022 sampling events. Concentrations of dissolved Chromium and dissolved Nickel have remained below the WAC Chapter NR140 state groundwater standards since the piezometer was first sampled in July 2018.

Piezometer PZ3 did not identify any concentrations of dissolved Chromium and dissolved Nickel during the June 2022 and November 2022 sampling events exceeding the WAC Chapter NR140 ES. Dissolved Chromium and dissolved Nickel have demonstrated a stable/decreasing trend since 2018.

Groundwater field monitoring and laboratory analytical results are summarized on Tables 3a-3u. Groundwater Isoconcentration maps based on the laboratory analytical results for the June 2022, and November 2022 groundwater monitoring events are included as Figures 5a and 5b.

EMERGING CONTAMINANTS

WDNR has previously requested sampling on the Phillips Plating site for Emerging Contaminants, specifically, Perfluoroalkyl and polyfluoroalkyl substances (PFAS). In March 2021, a representative of WDNR did conduct a site visit and collected an effluent sample from Phillips Plating. This sample was submitted to the Wisconsin State Lab of Hygiene. REI submitted a public records request to obtain the list of sampling sites and associated results. Through the process of reviewing this information, Phillips Plating was identified as Industry 12. The analytical report is summarized on Table 4. A copy of the laboratory analytical report is also included in Attachment A. The laboratory analytical results identified no exceedences of the proposed WDNR NR140 state groundwater standards, EPA Interim Screening Levels, or EPA Interim Preliminary Remediation Goal Values.

There are two (2) wells that service the City of Phillips. The WDNR has also sampled these municipal wells for PFAS and submitted to the state lab for analysis. Table 5 reveals the water sampling results for PFAS samples collected on July 12, 2022. Analytical results reveal no detections of PFAS. Thus, the drinking water supply serving the City of Phillips has not been impacted by PFAS as in other communities.

Phillips Plating believes that the results of municipal well sampling along with the results of the effluent discharge demonstrate that PFAS is not an issue at this site and that the emerging contaminants question specifically for PFAS associated with Phillips Plating has been satisfied.

CONCLUSIONS AND RECOMMENDATIONS

Phillips Plating converted all processes at the facility to aboveground for many years now and based on those changes, there have not been additional releases to the environment. REI has conducted ongoing groundwater monitoring and demonstrated stable or decreasing contaminant trends in many of the Phillips Plating monitoring wells. REI recommends reviewing and discussion of a pathway to case closure as the contamination is substantially defined and has been monitored since 2012. Please contact our office at (715) 675-9784 or electronically at klassa@reiengineering.com upon your review and questions.

Sincerely,
REI Engineering, Inc.



Kenneth J. Lassa, P.S.
Senior Consultant



Kaylin Felix
Hydrogeologist

Attachments

- Table 1 – Groundwater Elevation Summary
- Table 2a-2c – Vertical Gradient Calculations
- Table 3a-3u – Groundwater Analytical Results Summary
- Table 4 – Effluent PFAS Sample Results
- Table 5 – Municipal PFAS Sample Results
- Figure 1 – Site Vicinity Map
- Figure 2 – Site Map
- Figure 3a-3b – Groundwater Flow Maps
- Figure 4a-4b – Piezometric Flow Maps
- Figure 5a-5b – Groundwater Isoconcentrations Maps
- Attachment A – Laboratory Analytical Reports
- Attachment B – Well Forms
- Attachment C – Disposal Documentation

Cc: Mr. Darin Baratka, Phillips Plating Corp. (electronic copy)

TABLE 1a
GROUNDWATER ELEVATION SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI

Well	MW1	MW2	MW3	MW4	MW5	MW6	MW7	MW8	MW9	MW10	MW11	MW12	MW13	MW14	MW15	PZ1	PZ2	PZ3	PZ4
Well Depth	23.90	24.30	24.48	24.34	23.65	19.67	19.54	20.06	20.06	14.33	17.24	19.62	21.43	13.73	13.61	33.23	33.19	23.88	36.00
Depth to Water (from TOC)																			
12/12/2012	12.76	12.58	15.43	13.79	15.70	NI													
1/3/2013	13.06	12.83	15.74	14.02	15.77	16.76	15.04	NI											
2/6/2013	13.49	13.24	16.08	14.19	15.84	16.85	15.19	NI											
2/19/2013	NC	NC	NC	NC	NC	NC	NC	9.78	17.39	NI									
3/5/2013	13.76	13.50	16.33	14.46	15.74	16.76	15.12	9.78	17.37	NI									
5/8/2013	10.38	9.83	9.72	9.79	11.38	15.75	13.07	9.39	14.86	NI									
7/15/2013	9.39	10.69	10.81	10.51	15.15	16.19	13.96	9.68	15.97	7.80	9.94	13.06	NI	NI	NI	17.05	NI	NI	
8/12/2013	9.76	11.09	12.01	11.35	15.31	16.11	14.21	9.57	16.24	8.03	10.28	14.21	NI	NI	NI	17.21	NI	NI	
11/12/2013	10.14	11.13	11.37	11.49	15.29	16.30	14.20	9.63	16.34	8.10	10.39	14.61	NI	NI	NI	17.43	NI	NI	
2/12/2014	10.99	12.20	14.31	12.95	15.56	16.61	15.13	10.04	17.32	9.04	11.41	16.16	NI	NI	NI	18.27	NI	NI	
6/2/2014	8.42	10.03	9.41	9.63	14.38	15.91	13.14	9.41	15.12	7.29	9.11	11.42	NI	NI	NI	16.32	NI	NI	
8/5/2014	9.45	10.94	11.28	11.05	15.28	16.27	14.11	9.73	16.13	8.03	10.19	12.95	NI	NI	NI	17.11	NI	NI	
11/5/2014	9.91	11.25	11.56	NC	15.39	16.39	14.33	9.89	16.50	8.28	10.54	13.57	NI	NI	NI	17.45	NI	NI	
2/10/2015	11.31	11.73	13.36	12.59	15.56	16.51	14.95	10.01	17.11	8.85	11.17	17.80	NI	NI	NI	18.03	NI	NI	
5/4/2015	10.53	12.94	11.26	11.87	15.37	16.31	14.10	9.87	16.19	8.04	10.24	12.94	NI	NI	NI	17.45	NI	NI	
8/4/2015	9.94	11.11	Well Abandoned	11.27	15.24	16.18	14.11	9.39	16.02	8.02	10.24	13.61	NI	NI	NI	17.25	NI	NI	
11/3/2015	10.21	11.78		12.56	15.41	16.32	14.25	9.58	16.42	8.22	10.37	14.13	NI	NI	NI	17.60	NI	NI	
2/22/2016	10.86	12.06		NC	15.52	16.36	14.89	9.41	17.07	8.76	11.08	15.77	NI	NI	NI	18.06	NI	NI	
8/31/2016	10.32	11.55		12.38	NC	16.32	13.99	9.78	16.09	7.90	10.07	15.45	NI	NI	NI	17.16	NI	NI	
2/14/2017	11.68	12.90		13.12	15.76	16.55	14.81	9.76	17.09	8.76	11.06	15.81	NI	NI	NI	18.20	NI	NI	
8/29/2017	9.71	11.71		11.90	15.42	NC	13.87	10.17	16.19	7.90	10.07	13.66	NI	NI	NI	17.13	NI	NI	
7/11/2018	10.90	11.35		11.76	15.41	16.35	13.94	10.21	16.04	7.84	10.01	13.25	15.28	6.55	7.34	17.15	14.94	8.31	NI
12/11/2018	11.02	12.00		12.40	15.66	16.61	14.70	10.99	16.95	8.68	10.96	15.34	16.08	7.30	8.04	18.05	15.66	9.15	NI
4/30/2019	9.38	12.20		11.55	15.28	16.22	13.55	10.03	15.69	7.50	9.50	12.27	9.32	6.15	6.88	17.15	14.45	9.32	NI
11/13/2019	10.24	11.39		11.80	15.49	16.40	14.43	10.01	16.60	8.41	10.61	13.85	15.78	7.02	7.81	17.27	15.40	8.90	NI
2/10/2020	11.51	12.34		12.70	15.48	16.59	14.65	10.25	16.97	8.65	10.91	15.70	16.00	7.20	7.86	17.86	15.56	9.10	NI
3/3/2021	12.71	12.98		13.38	15.85	16.86	14.86	13.53	17.25	8.88	11.15	16.15	16.23	7.35	7.90	18.21	15.50	9.32	NI
8/25/2021	9.95	11.45		12.25	15.31	16.24	13.88	9.72	16.12	7.95	10.15	13.30	15.30	6.56	7.26	17.18	14.91	8.42	NI
6/8/2022	9.74	11.11		11.36	15.41	16.21	CNL	9.99	16.13	7.87	9.96	12.83	14.82	6.50	7.28	17.09	15.87	8.03	15.71
11/1/2022	11.87	12.52		14.85	14.72	17.76	14.41	10.10	16.72	8.45	10.65	15.74	15.76	6.99	7.65	16.54	15.33	8.80	16.42
Average Depth to Water (feet bbls)	11.21	12.15	13.02	12.59	15.75	16.94	15.05	10.30	16.86	8.79	10.94	14.80	15.13	7.03	7.97	17.83	15.96	8.98	16.37
Minimum Depth to Water (feet bbls)	8.82	10.17	9.67	9.96	11.86	16.26	13.79	9.70	15.28	7.86	9.63	11.90	9.50	6.33	7.29	16.72	15.12	8.19	16.01
Maximum Depth to Water (feet bbls)	14.16	13.84	16.59	15.18	16.33	18.27	15.91	13.84	17.81	9.61	11.93	18.28	16.41	7.53	8.45	18.67	16.54	9.48	16.72

NI = Not Installed

NC = Not Collected

bbls = below land surface

CNL = Could Not Locate

TABLE 1b
GROUNDWATER ELEVATION SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI

Well	MW1	MW2	MW3	MW4	MW5	MW6	MW7	MW8	MW9	MW10	MW11	MW12	MW13	MW14	MW15	PZ1	PZ2	PZ3	PZ4
TOC Elevation	1,459.82	1,457.24	1,461.33	1,459.19	1,457.51	1,458.16	1,453.30	1,457.92	1,455.91	1,450.54	1,452.99	1,459.50	1,457.91	1,449.03	1,449.48	1,457.96	1,457.55	1,451.00	1,462.63
Ground surface Elevation	1,460.22	1,457.58	1,461.59	1,459.52	1,457.99	1,458.67	1,454.02	1,458.23	1,456.33	1,451.11	1,453.51	1,459.98	1,458.09	1,449.21	1,449.89	1,458.36	1,458.22	1,451.16	1,462.93
Top of Screen Elevation	1,445.92	1,442.94	1,446.85	1,444.85	1,443.86	1,448.49	1,443.76	1,447.86	1,445.85	1,446.21	1,445.75	1,449.88	1,446.48	1,445.30	1,445.87	1,429.73	1,429.36	1,432.12	1,431.63
Water Elevation																			
12/12/2012	1,447.06	1,444.66	1,445.90	1,445.40	1,441.81	NI													
1/3/2013	1,446.76	1,444.41	1,445.59	1,445.17	1,441.74	1,441.40	1,438.26	NI											
2/6/2013	1,446.33	1,444.00	1,445.25	1,445.00	1,441.67	1,441.31	1,438.11	NI											
2/19/2013	NC	1,448.45	1,438.94	NI															
3/5/2013	1,446.06	1,443.74	1,445.00	1,444.73	1,441.77	1,441.40	1,438.18	1,448.14	1,438.54	NI									
5/8/2013	1,449.44	1,447.41	1,451.61	1,449.40	1,446.13	1,442.41	1,440.23	1,448.53	1,441.05	NI									
7/15/2013	1,450.43	1,446.55	1,450.52	1,448.68	1,442.36	1,441.97	1,439.34	1,448.24	1,439.94	1,442.74	1,443.05	1,446.44	NI	NI	NI	1,440.91	NI	NI	NI
8/12/2013	1,450.06	1,446.15	1,449.32	1,447.84	1,442.20	1,442.05	1,439.09	1,448.35	1,439.67	1,442.51	1,442.71	1,445.29	NI	NI	NI	1,440.75	NI	NI	NI
11/12/2013	1,449.68	1,446.11	1,449.96	1,447.70	1,442.22	1,441.86	1,439.10	1,448.29	1,439.57	1,442.44	1,442.60	1,444.89	NI	NI	NI	1,440.53	NI	NI	NI
2/12/2014	1,448.83	1,445.04	1,447.02	1,446.24	1,441.95	1,441.55	1,438.17	1,447.88	1,438.59	1,441.50	1,441.58	1,443.34	NI	NI	NI	1,439.69	NI	NI	NI
6/2/2014	1,451.40	1,447.21	1,451.92	1,449.56	1,443.13	1,442.25	1,440.16	1,448.51	1,440.79	1,443.25	1,443.88	1,448.08	NI	NI	NI	1,441.64	NI	NI	NI
8/5/2014	1,450.37	1,446.30	1,450.05	1,448.14	1,442.23	1,441.89	1,439.19	1,448.19	1,439.78	1,442.51	1,442.80	1,446.55	NI	NI	NI	1,440.85	NI	NI	NI
11/5/2014	1,449.91	1,445.99	1,449.77	NC	1,442.12	1,441.77	1,438.97	1,448.03	1,439.41	1,442.26	1,442.45	1,445.93	NI	NI	NI	1,440.51	NI	NI	NI
2/10/2015	1,448.51	1,445.51	1,447.97	1,446.60	1,441.95	1,441.65	1,438.35	1,447.91	1,438.80	1,441.69	1,441.82	1,441.70	NI	NI	NI	1,439.93	NI	NI	NI
5/4/2015	1,449.29	1,444.30	1,450.07	1,447.32	1,442.14	1,441.85	1,439.20	1,448.05	1,439.72	1,442.50	1,442.75	1,446.56	NI	NI	NI	1,440.51	NI	NI	NI
8/4/2015	1,449.88	1,446.13																	
11/3/2015	1,449.61	1,445.46																	
2/22/2016	1,448.96	1,445.18																	
8/31/2016	1,449.50	1,445.69																	
2/14/2017	1,448.14	1,444.34																	
8/29/2017	1,450.11	1,445.53																	
7/11/2018	1,448.92	1,445.89																	
12/11/2018	1,448.80	1,445.24																	
4/30/2019	1,450.44	1,445.04																	
11/13/2019	1,449.58	1,445.85																	
2/10/2020	1,448.31	1,444.90																	
3/3/2021	1,447.11	1,444.26																	
8/25/2021	1,449.87	1,445.79																	
6/8/2022	1,450.08	1,446.13																	
11/1/2022	1,447.95	1,444.72																	
Average Elevation of Water (at Groundwater Surface)	1,449.01	1,445.43	1,448.57	1,446.93	1,442.24	1,441.73	1,438.97	1,447.94	1,439.49	1,442.32	1,442.57	1,445.18	1,442.96	1,442.18	1,441.92	1,440.53	1,442.26	1,442.18	1,446.57
Minimum Elevation of Water (at Groundwater Surface)	1,446.06	1,443.74	1,445.00	1,444.34	1,441.66	1,440.40	1,438.11	1,444.39	1,438.54	1,441.50	1,441.58	1,441.70	1,441.68	1,441.68	1,439.69	1,441.68	1,441.68	1,446.21	
Maximum Elevation of Water (at Groundwater Surface)	1,451.40	1,447.41	1,451.92	1,449.56	1,446.13	1,442.41	1,440.23	1,448.53	1,441.05	1,443.25	1,443.88	1,448.08	1,448.59	1,442.88	1,442.60	1,441.64	1,443.10	1,442.97	1,446.92

All well elevations referenced to an on site benchmark with an assumed elevation of 1460.00

NI = Not Installed

NC = Not Collected

CNL = Could Not Locate

TABLE 2a
MW6/PZ1 VERTICAL GRADIENT CALCULATIONS
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI

	Well Name -->	MW6	PZ1
Ground Surface Elevation (feet MSL) -->	1,458.67	1,458.36	
Top of Well Casing Elevation (feet MSL) -->	1,458.16	1,457.96	
Screen Joint (feet bgs) -->	10.18	28.63	
Screen Joint (feet MSL) -->	1,448.49	1,429.73	
Screen Length (feet) -->	10	5	

Date	MW6 Groundwater Elevation (feet MSL)	PZ1 Groundwater Elevation (feet MSL)	Mid-Point to Mid-Point	
	Vertical Gradient ft/ft	Vertical Gradient Direction		
7/15/2013	1,441.97	1,440.91	8.15E-02	Down
8/12/2013	1,442.05	1,440.75	9.97E-02	Down
11/12/2013	1,441.86	1,440.53	1.03E-01	Down
2/12/2014	1,441.55	1,439.69	1.45E-01	Down
6/2/2014	1,442.25	1,441.64	4.64E-02	Down
8/5/2014	1,441.89	1,440.85	8.02E-02	Down
11/5/2014	1,441.77	1,440.51	9.77E-02	Down
2/10/2015	1,441.65	1,439.93	1.34E-01	Down
5/4/2015	1,441.85	1,440.51	1.04E-01	Down
8/4/2015	1,441.98	1,440.71	9.77E-02	Down
11/3/2015	1,441.84	1,440.36	1.14E-01	Down
2/22/2016	1,441.80	1,439.90	1.47E-01	Down
8/31/2016	1,441.84	1,440.80	8.04E-02	Down
2/14/2017	1,441.61	1,439.76	1.44E-01	Down
7/11/2018	1,441.81	1,440.81	7.74E-02	Down
12/11/2018	1,441.55	1,439.91	1.28E-01	Down
4/30/2019	1,441.94	1,440.81	8.70E-02	Down
11/13/2019	1,441.76	1,440.69	8.30E-02	Down
2/10/2020	1,441.57	1,440.10	1.15E-01	Down
3/3/2021	1,441.30	1,439.75	1.22E-01	Down
8/25/2021	1,441.92	1,440.78	8.79E-02	Down
6/8/2022	1,441.95	1,440.87	8.31E-02	Down
11/1/2022	1,440.40	1,441.42	8.35E-02	Up
		Minimum	4.64E-02	Down
		Maximum	1.47E-01	Down
		Average	1.04E-01	Down

TABLE 2b
MW10/PZ3 VERTICAL GRADIENT CALCULATIONS
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI

	Well Name -->	MW10	PZ3
Ground Surface Elevation (feet MSL) -->	1,451.11	1,451.16	
Top of Well Casing Elevation (feet MSL) -->	1,450.54	1,451.00	
Screen Joint (feet bgs) -->	4.90	19.04	
Screen Joint (feet MSL) -->	1,446.21	1,432.12	
Screen Length (feet) -->	10	5	

Date	MW10	PZ3	Mid-Point to Mid-Point	
	Groundwater Elevation (feet MSL)	Groundwater Elevation (feet MSL)	Vertical Gradient ft/ft	Vertical Gradient Direction
7/11/2018	1,442.70	1,442.69	1.02E-03	Down
12/11/2018	1,441.86	1,441.85	1.06E-03	Down
4/30/2019	1,443.04	1,441.68	1.36E-01	Down
11/13/2019	1,442.13	1,442.10	3.14E-03	Down
2/10/2020	1,441.89	1,441.90	1.06E-03	Up
3/3/2021	1,441.66	1,441.68	2.15E-03	Up
8/25/2021	1,442.59	1,442.58	1.02E-03	Down
6/8/2022	1,442.67	1,442.97	3.05E-02	Up
11/1/2022	1,442.09	1,442.20	1.15E-02	Up
		Minimum	1.02E-03	Down
		Maximum	1.36E-01	Down
		Average	4.60E-02	Down

TABLE 2c
MW13/PZ2 VERTICAL GRADIENT CALCULATIONS
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI

	Well Name -->	MW13	PZ2
Ground Surface Elevation (feet MSL) -->	1,458.09	1,458.22	
Top of Well Casing Elevation (feet MSL) -->	1,457.91	1,457.55	
Screen Joint (feet bgs) -->	11.67	28.19	
Screen Joint (feet MSL) -->	1,446.48	1,429.36	
Screen Length (feet) -->	10	5	

Date	MW13	PZ2	Mid-Point to Mid-Point	
	Groundwater Elevation (feet MSL)	Groundwater Elevation (feet MSL)	Vertical Gradient ft/ft	Vertical Gradient Direction
7/11/2018	1,441.97	1,440.91	8.57E-02	Down
12/11/2018	1,441.83	1,441.89	4.88E-03	Up
4/30/2019	1,448.59	1,443.10	3.76E-01	Down
11/13/2019	1,442.13	1,442.15	1.61E-03	Up
2/10/2020	1,441.91	1,441.99	6.49E-03	Up
3/3/2021	1,441.68	1,442.05	3.03E-02	Up
8/25/2021	1,442.61	1,442.64	2.36E-03	Up
6/8/2022	1,443.09	1,441.68	1.09E-01	Down
11/1/2022	1,442.15	1,442.22	5.62E-03	Up
		Minimum	4.88E-03	Up
		Maximum	3.76E-01	Down
		Average	1.52E-01	Down

TABLE 3a
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
MW1

PARAMETER	ES	PAL	12/11/2012	3/5/2013	8/12/2013	11/12/2013	2/12/2014	6/2/2014	8/5/2014	5/4/2015	8/4/2015	2/22/2016	8/31/2016	2/14/2017	8/29/2017	7/11/2018	12/11/2018	4/30/2019
Metals (ug/L)																		
Arsenic	10	1	<0.50	<4.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	280	230	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	<0.10	0.91 ^J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Chromium	--	--	2	<1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	NA	<0.0039	<0.026	<0.0051	<0.0051	<0.051	<0.051	<0.13
Lead	15	1.5	<0.10	1.5 ^I	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	<0.025	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	--	--	5.5	7.7 ^I	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	50	10	<2.0	<6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	<0.13	<1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dis. Total Chromium (filtered)	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 ^J	<2.1	<2.5	<2.5	<2.5	<2.5	<2.5
Dissolved Iron (filtered)	300	150	NA	NA	NA	NA	NA	NA	NA	NA	NA	26.9 ^J	30.6 ^J	20.6 ^J	<15.5	17.8 ^J	44.6 ^J	173
Dissolved Manganese (filtered)	300	60	NA	NA	NA	NA	NA	NA	NA	NA	NA	15.8	1.9 ^J	2.8 ^J	2.3 ^J	1.1 ^J	7.3	15.8
Dissolved Nickel (filtered)	100	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	98.8	93	66.7	60.9	41.5	45.3	35.4
Inorganics (mg/L)																		
Nitrate Nitrogen	10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2	5.1	5.0	6.0	7.0	7.8	7.2
Sulfate	250	125	NA	NA	NA	NA	NA	NA	NA	NA	NA	23.8	23	21.5	18.2	17.7	20.1	15.3
Field Measurements																		
Temperature (°F)	--	--	NA	NA	56.26	57.11	44.14	49.97	58.55	45.98	56.33	47.80	60.25	47.73	60.61	54.50	53.42	46.20
Conductivity (ms/cm)	--	--	NA	NA	1,803	2,370	2,680	2,305	1,922	1,747	1,146	1,205	1,006	1,135	793	1,311	1,539	2,362
Dissolved Oxygen (mg/L)	--	--	NA	NA	4.22	1.03	2.71	3.35	2.19	2.01	2.86	2.93	3.95	3.79	6.41	2.86	6.47	3.74
pH	--	--	NA	NA	6.45	6.9	6.19	7.08	7.51	7.12	7.58	7.76	7.93	7.21	7.53	6.95	7.15	NA
Redox Potential (mV)	--	--	NA	NA	139.4	24.1	244.6	-8.9	-70.5	97.5	59.7	245.0	30.4	180.1	54.9	167.6	-2.8	125.5

PARAMETER	ES	PAL	11/13/2019	2/10/2020	3/3/2021	8/25/2021	6/8/2022	11/1/2022
Metals (ug/L)								
Arsenic	10	1	NA	NA	NA	NA	NA	NA
Barium	2000	400	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	NA	NA	NA	NA	NA	NA
Total Chromium	--	--	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	<0.037	<0.018	<0.018	<0.018	<0.018	<0.018
Lead	15	1.5	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	NA	NA	NA	NA	NA	NA
Nickel	--	--	NA	NA	NA	NA	NA	NA
Selenium	50	10	NA	NA	NA	NA	NA	NA
Silver	50	10	NA	NA	NA	NA	NA	NA
Dis. Total Chromium (filtered)	100	10	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Dissolved Iron (filtered) ²	300	150	<29.6	<29.6	<56.7	<56.7	<56.7	<56.7
Dissolved Manganese (filtered)	300	60	<1.1	<1.1	1.6 ^J	<1.5	<1.5	<1.5
Dissolved Nickel (filtered)	100	20	35.4	33.4	30.8	22.1	23.5	22.3
Inorganics (mg/L)								
Nitrate Nitrogen	10	2	8.8	10.2	8.1	9.3	10.9	10.5
Sulfate ²	250	125	20.4	24.8	23.6	35.7	38	32.8
Field Measurements								
Temperature (°F)	--	--	54.60	49.7	49.7	59.7	45.4	58.4
Conductivity (ms/cm)	--	--	1,209	3,295	721	723	2,150	721.4
Dissolved Oxygen (mg/L)	--	--	5.32	5.31	5.17	6.31	9.31	4.89
pH	--	--	8.70	7.22	7.08	8.35	7.58	8.34
Redox Potential (mV)	--	--	77.1	130.8	2719.0	161.4	75.6	102.6

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD = Exceeds Enforcement Standard

Italic = Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

-- = No NR140 Standard

J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

pH electrode malfunction 4/30/2019

² = NR140 Table 2 Public Welfare Groundwater Quality Standard

TABLE 3b
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
MW2

PARAMETER	ES	PAL	12/11/2012	3/5/2013	8/12/2013	11/12/2013	2/12/2014	6/2/2014	8/5/2014	5/4/2015	8/4/2015	2/22/2016	8/31/2016	2/14/2017	8/29/2017	7/11/2018	12/11/2018	4/30/2019
Metals (ug/L)																		
Arsenic	10	1	<0.50	<4.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	180	190	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	<0.10	0.40 ^j	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Chromium	--	--	1.4	<1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	NA	<0.039	<0.13	<0.051	<0.26	<0.13	<0.13	<0.13
Lead	15	1.5	<0.10	1.3 ^j	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	<0.025	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	--	--	9.0	4.5 ^j	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	50	10	<2.0	<6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	<0.13	<1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dis. Total Chromium (filtered) ²	100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.1	<2.1	<2.5	<2.5	<2.5	<2.5	<2.5
Dissolved Iron (filtered)	300	150	NA	NA	NA	NA	NA	NA	NA	NA	NA	28.7 ^j	41.9 ^j	60.5 ^j	<15.5	16.9 ^j	<35.4	<35.4
Dissolved Manganese (filtered)	300	60	NA	NA	NA	NA	NA	NA	NA	NA	NA	72.5	72.2	46.9	136	126	427	271
Dissolved Nickel (filtered)	100	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	14.2	10.3	10 ^j	8.1 ^j	4.0 ^j	10.9	4.8 ^j
Inorganics (mg/L)																		
Nitrate Nitrogen	10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	31.7	23.1	15.7	22.9	32.5	37.6	14.4
Sulfate ²	250	125	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.6	27.8	20.3	16.3	22.7	17.2	32.2
Field Measurements																		
Temperature (°F)	--	--	NA	NA	58.47	57.95	46.8	44.95	56.7	44.08	56.13	47.83	62.47	49.06	61.07	57.38	53.42	43.8
Conductivity (ms/cm)	--	--	NA	NA	458	459	1,053	115	154	1,052	161	798	212	589	40	21	714	1,028
Dissolved Oxygen (mg/L)	--	--	NA	NA	6.44	3.77	5.66	3.81	4.46	10.75	5.56	2.87	2.63	3.05	3.83	1.59	4.14	8.52
pH	--	--	NA	NA	5.74	6.87	5.65	7.17	7.82	6.94	7.32	6.25	6.93	5.75	7.64	3.50	5.62	NA
Redox Potential (mV)	--	--	NA	NA	112.0	-32.7	230.1	45.8	-9.8	138.8	81.3	217.6	96.9	195.1	72.0	355.3	-66.8	220.1

PARAMETER	ES	PAL	11/13/2019	2/10/2020	3/3/2021	8/25/2021	6/8/2022	11/1/2022
Metals (ug/L)								
Arsenic	10	1	NA	NA	NA	NA	NA	NA
Barium	2000	400	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	NA	NA	NA	NA	NA	NA
Total Chromium	--	--	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	<0.37	<0.18	<0.37	<0.37	<0.37	<0.37
Lead	15	1.5	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	NA	NA	NA	NA	NA	NA
Nickel	--	--	NA	NA	NA	NA	NA	NA
Selenium	50	10	NA	NA	NA	NA	NA	NA
Silver	50	10	NA	NA	NA	NA	NA	NA
Dis. Total Chromium (filtered)	100	10	<2.5	<2.4	<2.5	<2.5	<2.5	<2.5
Dissolved Iron (filtered) ²	300	150	<29.6	<29.6	<56.7	<56.7	<56.7	<56.7
Dissolved Manganese (filtered)	300	60	22.4	85.1	48.9	20.1	27.9	43.8
Dissolved Nickel (filtered)	100	20	6.4 ^j	5.7 ^j	11.2	10 ^j	7.2 ^j	5.3 ^j
Inorganics (mg/L)								
Nitrate Nitrogen	10	2	21	24	11.5	31.8	28.4	28.3
Sulfate ²	250	125	14.7 ^j	15.9	15.5	26.6	23.5	23.6
Field Measurements								
Temperature (°F)	--	--	55.1	47.5	47.3	60.9	47.8	58.9
Conductivity (ms/cm)	--	--	321.4	815	842	723.2	520.0	721.2
Dissolved Oxygen (mg/L)	--	--	3.69	3.1	6.72	2.4	2.1	2.13
pH	--	--	5.79	5.74	6.01	7.61	7.97	8.38
Redox Potential (mV)	--	--	208.6	183.0	1929.0	197.4	9.7	93.4

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD	= Exceeds Enforcement Standard
<i>Italic</i>	= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

-- = No NR140 Standard

J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

pH electrode malfunction 4/30/2019

² = NR140 Table 2 Public Welfare Groundwater Quality Standard

TABLE 3c
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
MW3

PARAMETER	ES	PAL	12/11/2012	3/5/2013	8/12/2013	11/12/2013	2/12/2014	6/2/2014	8/5/2014	11/5/2014	2/10/2015	5/4/2015	5/4/2015
Metals (ug/L)													
Arsenic	10	1	<0.50	<4.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	25	57.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	<0.10	<0.38	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dis. Total Chromium (filtered)	100	10	2.2	<1.2	<1.2	<1.2	<1.2	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1
Total Chromium (unfiltered)	--	--	NA	NA	35.1	58.8	41.4	34.7	16.1	71.5	47.7	100	
Chromium, Hexavalent (mg/L)	--	--	<0.0017	<0.0034	<0.0034	<0.0034	<0.034	<0.0039	<0.0097	<0.019	<0.039	<0.019	
Lead	15	1.5	<0.10	2.2 ^J	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	<0.025	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Nickel (filtered)	100	20	1.4	1.5 ^J	24.7	1.8 ^J	<0.75	3.4 ^J	1.8 ^J	1.9 ^J	<1.4	<1.4	
Nickel (Unfiltered)	--	--	NA	NA	1.4 ^J	47.9	30.5	25.6	12.8	55.4	38.8	70.6	
Selenium	50	10	<2.0	<6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	<0.13	<1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Manganese (filtered)	300	60	NA	NA	2.1 ^J	2.0 ^J	2.3 ^J	2.1 ^J	<1.4	1.8 ^J	1.9 ^J	<1.4	
Manganese (unfiltered)	--	--	NA	NA	881	1,130	845	493	216	945	743	1,230	
Dissolved Iron (filtered) ²	300	150	NA	NA	68.9 ^J	28.6 ^J	22.8 ^J	<12.9	16.9 ^J	28.8 ^J	18.4 ^J	<12.9	
Total Iron (unfiltered)	--	--	NA	NA	26,200	42,900	29,500	26,300	10,900	55,700	38,500	75,300	
Inorganics (mg/L)													
Nitrate Nitrogen	10	2	NA	NA	2.3	3.1	3.4	5	2.1	2.2 ^J	2.8	3.2	
Sulfate ²	250	125	NA	NA	8.4	6.7	10.3	9.6	10.7	21.3 ^J	12.8 ^J	<10.0	
Field Measurements													
Temperature (°F)	--	--	NA	NA	52.73	54.12	48.23	47.91	53.76	53.53	47.85	45.38	
Conductivity (ms/cm)	--	--	NA	NA	162	221	267	301	216	194	193	203	
Dissolved Oxygen (mg/L)	--	--	NA	NA	7.63	5.33	8.04	4.73	3.81	6.99	7.66	9.2	
pH	--	--	NA	NA	6.43	7.41	5.67	6.22	6.83	6.36	6.77	6.46	
Redox Potential (mV)	--	--	NA	NA	90.6	11.2	273.6	77.2	52.2	121	158.2	188.5	

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD

= Exceeds Enforcement Standard

Italic

= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

-- = No NR140 Standard

J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

² = NR140 Table 2 Public Welfare Groundwater Quality Standard

Well Abandoned - Following Sample Collection

TABLE 3d
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
MW4

PARAMETER	ES	PAL	12/11/2012	3/5/2013	8/12/2013	11/12/2013	2/12/2014	6/2/2014	8/5/2014	5/4/2015	2/22/2016	8/4/2015	8/31/2016	2/14/2017	8/29/2017	7/11/2018	12/11/2018	4/30/2019
Metals (ug/L)																		
Arsenic	10	1	<0.50	<4.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	45	29.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	<0.10	<0.38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Chromium (dissolved)	100	10	3.4	1.5 ^J	NA	NA	NA	NA	NA	NA	NA	<2.1	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Chromium, Hexavalent (mg/L)	--	--	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.026	<0.0051	
Lead	15	1.5	<0.10	<1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	<0.025	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel (dissolved)	100	20	6.8	3.5 ^J	NA	NA	NA	NA	NA	NA	NA	<1.4	<1.9	<1.9	<1.9	2.7 ^J	3.9 ^J	
Selenium	50	10	<2.0	<6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	<0.13	<1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese (dissolved)	300	60	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.4	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Dissolved Iron (filtered) ²	300	150	NA	NA	NA	NA	NA	NA	NA	NA	NA	<15.5	<15.5	<15.5	<35.4	<35.4		
Inorganics (mg/L)																		
Nitrate Nitrogen	10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1	2.8	3.5	2.4	2.3	2.0	
Sulfate ²	250	125	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.9 ^J	10.3 ^J	8.5	7.2 ^J	9.1	7.2	
Field Measurements																		
Temperature (°F)	--	--	NA	NA	53.04	54.38	49.93	47.78	54.59	47.22	NA	52.74	55.41	49.55	53.89	54.86	53.06	47.7
Conductivity (ms/cm)	--	--	NA	NA	3.71	374	423	381	235	351	NA	320	380	412	390	459.9	566.5	701.9
Dissolved Oxygen (mg/L)	--	--	NA	NA	4.74	6.02	5.29	1.24	3.21	4.91	NA	6.31	4.15	2.48	2.80	2.60	0.78	0.45
pH	--	--	NA	NA	7.19	7.69	6.4	8.05	8.19	7.22	NA	7.38	7.95	7.16	7.54	7.66	7.94	NA
Redox Potential (mV)	--	--	NA	NA	-27.2	-43.8	200.0	-7.2	-24.1	159.1	NA	92.5	49.3	177.1	40.0	200.9	-113.9	193.1

PARAMETER	ES	PAL	11/13/2019	2/10/2020	3/3/2021	8/25/2021	6/8/2022	11/1/2022
Metals (ug/L)								
Arsenic	10	1	NA	NA	NA	NA	NA	NA
Barium	2000	400	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	NA	NA	NA	NA	NA	NA
Total Chromium (dissolved)	100	10	<2.5	2.9 ^J	<2.5	<2.5	<2.5	<2.5
Chromium, Hexavalent (mg/L)	--	--	<0.037	<0.037	<0.037	<0.037	<0.037	<0.037
Lead	15	1.5	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	NA	NA	NA	NA	NA	NA
Nickel (dissolved)	100	20	<3.0	4.7 ^J	7.1 ^J	<2.6	4.3 ^J	<2.6
Selenium	50	10	NA	NA	NA	NA	NA	NA
Silver	50	10	NA	NA	NA	NA	NA	NA
Manganese (dissolved)	300	60	<1.1	29.1	2.1 ^J	<1.5	7.9	<1.5
Dissolved Iron (filtered) ²	300	150	<29.6	502	<56.7	<56.7	<56.7	<56.7
Inorganics (mg/L)								
Nitrate Nitrogen (mg/L)	10	2	2.3	2.9	3.0	3.0	3.5	3.9
Sulfate ²	250	125	9.0 ^J	10.6	9.4	9.2 ^J	11.5	13.5
Field Measurements								
Temperature (°F)	--	--	54.3	49.1	51.1	56.4	50.8	56.1
Conductivity (ms/cm)	--	--	795	954	1382	724.3	1744	721.2
Dissolved Oxygen (mg/L)	--	--	0.26	0.72	0.95	0.50	1.54	0.58
pH	--	--	7.81	7.55	7.32	6.92	7.3	7.08
Redox Potential (mV)	--	--	178.0	138.3	192.9	137.5	108.0	150.4

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD	= Exceeds Enforcement Standard
<i>Italic</i>	= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

-- = No NR140 Standard

J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

pH electrode malfunction 4/30/2019

² = NR140 Table 2 Public Welfare Groundwater Quality Standard

TABLE 3e
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
MW5

PARAMETER	ES	PAL	12/11/2012	1/3/2013	3/6/2013	5/8/2013	8/12/2013	11/12/2013	2/12/2014	6/2/2014	8/5/2014	11/5/2014	2/10/2015	5/4/2015	8/4/2015	11/3/2015	2/22/2016	2/14/2017
Metals (ug/L)																		
Arsenic	10	1	<0.50	<4.7	<4.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	110	138	686	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	<0.10	<0.39	1.8 ^j	18.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dis. Total Chromium (filtered)	100	10	430	414	359	49.2	174	254	458	188	360	340	330	317	351	381	351	321
Total Chromium (unfiltered)	--	--	NA	NA	NA	NA	1,130	1,540	1,680	1,700	1,380	1,770	1,010	1,090	1,970	1,530	NA	NA
Chromium, Hexavalent (mg/L)	--	--	0.59	0.46	0.33	<0.86	0.26	0.34	0.31 ^j	0.39	0.24	0.28	0.27	0.33	0.25	0.093 ^j	<0.097	0.28
Lead	15	1.5	<0.10	<1.4	2.5 ^j	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	<0.025	<0.10	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Nickel (filtered)	100	20	440	787	6,230	1,420	1,090	368	295	3,870	267	236	303	1,160	379	378	462	593
Nickel (Unfiltered)	--	--	NA	NA	NA	NA	974	1,220	1,120	1,920	952	1,160	977	1,660	1,520	1,280	NA	NA
Selenium	50	10	<2.0	<5.8	<6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	<0.13	<2.3	<1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered) ²	0.3	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<12.9	21.4 ^j
Dissolved Manganese (filtered)	300	60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5	5.3
Inorganics (mg/L)																		
Nitrate Nitrogen	10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3
Sulfate ²	250	125	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	30.1
Field Measurements																		
Temperature (°F)	--	--	NA	NA	NA	NA	55.26	57.59	50.02	47.71	55.12	54.57	49.94	46.65	53.67	57.27	49.82	51.68
Conductivity (ms/cm)	--	--	NA	NA	NA	NA	1,498	1,753	1,215	3,866	1,996	1,456	818	2,377	941	621	491	878
Dissolved Oxygen (mg/L)	--	--	NA	NA	NA	NA	5.03	4.53	6.76	3.89	2.92	5.35	7.02	9.18	6.03	4.57	6.27	5.56
pH	--	--	NA	NA	NA	NA	5.02	6.94	5.15	5.63	6.01	5.95	6.25	6.21	6.87	6.25	6.60	6.44
Redox Potential (mV)	--	--	NA	NA	NA	NA	185.2	-11.4	227.1	127.6	61.1	144.3	160	147.8	134	294.7	224.2	182.1

PARAMETER	ES	PAL	8/29/2017	7/11/2018	12/11/2018	4/30/2019	11/13/2019	2/10/2020	3/3/2021	8/25/2021	6/8/2022	11/1/2022
Metals (ug/L)												
Arsenic	10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dis. Total Chromium (filtered)	100	10	365	195	306	160	209	196	494	104	105	105
Total Chromium (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	0.22 ^j	0.18	0.24	0.11	0.13	0.19	<0.073	<0.37	<0.073	<0.37
Lead	15	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Nickel (filtered)	100	20	922	3,040	1,830	2,120	2,010	2,990	7,280	2,610	4,920	4,310
Nickel (Unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered) ²	0.3	0.15	<15.5	<15.5	<35.4	<35.4	<29.6	<29.6	50,000	276	<56.7	<56.7
Dissolved Manganese (filtered)	300	60	11	54.2	21.6	32.9	31.6	41.3	1,460	113	212	156
Inorganics (mg/L)												
Nitrate Nitrogen	10	2	5.0	7.5	6.7	6.2	6.6	6.6	5.2	5.7	7.5	6.2
Sulfate ²	250	125	24.4	37.1	33.9	38.8	26.1	23.0	19.5	26.4	35.3	28.8
Field Measurements												
Temperature (°F)	--	--	55.42	53.78	52.16	47.20	49.70	50.6	50.8	56.0	50.2	57.1
Conductivity (ms/cm)	--	--	1,009	3,496	1,478	4,393	1,688	1,796	232.7	724.3	2,970	722
Dissolved Oxygen (mg/L)	--	--	6.61	5.03	4.98	8.06	5.00	5.68	5.15	5.58	9.11	5.12
pH	--	--	6.69	5.87	5.93	NA	6.10	6.20	5.93	6.35		

TABLE 3f
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
MW6

PARAMETER	ES	PAL	1/3/2013	3/5/2013	5/8/2013	8/12/2013	11/12/2013	2/12/2014	6/2/2014	8/5/2014	11/5/2014	2/10/2015	5/4/2015	8/4/2015	11/3/2015	2/22/2016	8/31/2016	2/14/2017
Metals (ug/L)																		
Arsenic	10	1	<4.7	<4.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	225	112	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	1.6 ^J	0.87 ^J	0.51 ^J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dis. Total Chromium (filtered)	100	10	323	146	337	1,010	602	858	844	6,230	19,900	14,300	1,920	2,510	3,160	6,960	7,720	6,030
Total Chromium (unfiltered)	--	--	NA	NA	NA	3,160	4,550	2,840	4,290	8,910	21,800	16,000	6,210	8,500	7,250	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	0.14	0.14	<0.086	<0.0034	0.58	0.66	1.1	5.9	21.7	13.9	2.2	2.6	3.5	6.8	7.4	7.0
Lead	15	1.5	2.5 ^J	2.2 ^J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	0.28	0.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Nickel (filtered)	100	20	14,100	9,820	3,690	16,700	10,900	6,460	6,870	17,500	23,800	19,000	2,480	3,400	3,720	8,810	10,100	5,720
Nickel (Unfiltered)	--	--	NA	NA	NA	14,300	11,100	6,010	7,360	17,600	22,900	18,200	3,700	4,960	5,130	NA	NA	NA
Selenium	50	10	<5.8	<6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	<2.3	<1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Manganese (filtered)	300	60	NA	NA	NA	1,090	982	690	783	NA	954	974	645	703	597	669	781	767
Manganese (unfiltered)	--	--	NA	NA	NA	1,340	1,690	1,120	1,390	1,720	1,380	1,880	1,350	2,140	1,150	NA	NA	NA
Dissolved Iron (filtered) ²	300	150	NA	NA	NA	<14.0	<14.0	<14	<12.9	<12.9	<12.9	<12.9	<12.9	<12.9	<12.9	<12.9	<12.9	<15.5
Iron (unfiltered)	--	--	NA	NA	NA	22,300	34,600	26,600	32,600	31,600	25,400	52,000	38,000	75,600	28,600	NA	NA	NA
Inorganics (mg/L)																		
Nitrate Nitrogen	10	2	NA	NA	NA	14.3	16.1	11.6	10.9	12	12.2	11.8	7.9	6.8	9.2	8.4	11.1	10.9
Sulfate ²	250	125	NA	NA	NA	204	208	194	195	266	274	288	209	211	217	256	236	269
Field Measurements																		
Temperature (°F)			NA	NA	NA	57.42	58.27	55.93	51.79	57.88	56.83	54.18	53.71	56.97	58.6	55.96	58.41	56.07
Conductivity (ms/cm)			NA	NA	NA	1,203	1,209	1,419	1,200	1,254	1,167	1,077	1,188	1,171	1,244	1,124	1,269	1,139
Dissolved Oxygen (mg/L)			NA	NA	NA	0.72	1.07	1.31	0.79	0.89	0.36	0.36	0.52	0.74	0.03	0.36	0.13	0.33
pH			NA	NA	NA	6.09	7.63	5.49	6.79	7.15	6.87	6.84	6.82	7.2	6.91	7.13	7.21	6.81
Redox Potential (mV)			NA	NA	NA	167.7	-7.5	196	40.4	114.6	176.2	198	197.6	148.6	290.3	261.5	147.3	196.9

PARAMETER	ES	PAL	8/29/2017	7/11/2018	12/11/2018	4/30/2019	11/13/2019	2/10/2020	3/3/2021	8/25/2021	6/28/2022	11/1/2022
Metals (ug/L)												
Arsenic	10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dis. Total Chromium (filtered)	100	10	5,800	11,500	13,200	14,300	9,660	10,100	8,480	5,270	6,260	6,430
Total Chromium (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	7.3	11.7	11.7	14.0	14.0	10.0	7.9	5.8	6.1	0.35
Lead	15	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Nickel (filtered)	100	20	4,140	6,030	6,560	6,680	6,710	6,580	7,730	6,910	11,800	17,400
Nickel (Unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Manganese (filtered)	300	60	922	1,220	1,290	1,060	1,080	1,220	1,390	1,040	1,660	1,300
Manganese (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered) ²	300	150	<15.5	<31.0	<35.4	<35.4	<29.6	<29.6	<56.7	<113	<284	<567
Iron (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics (mg/L)												
Nitrate Nitrogen	10	2	6.7	12.5	11	13.9	13.1	11.6	8.5	11.2	8.1	4.2
Sulfate ²	250	125	251	302	334	439	213	337	285	226	326	53
Field Measurements												
Temperature (°F)	--	--	57.06	55.94	55.4	54.10	55.30	51.6	53.3</td			

TABLE 3g
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
MW7

PARAMETER	ES	PAL	1/3/2013	3/5/2013	8/12/2013	11/12/2013	2/12/2014	6/2/2014	8/5/2014	11/5/2014	2/10/2015	5/4/2015	8/4/2015	11/3/2015	2/22/2016	8/31/2016	2/14/2017	8/29/2017
Metals (ug/L)																		
Arsenic	10	1	<4.7	<4.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	841	661	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	<0.39	0.58 ^j	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Chromium	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dis. Total Chromium (filtered)	100	10	<2.4	<1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 ^j	<2.1	<2.5	5.2 ^j
Chromium, Hexavalent (mg/L)	--	--	<0.0039	<0.0034	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.039	<0.026	<0.026	<0.51	
Lead	15	1.5	<1.4	<1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	<0.10	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	--	--	6.1 ^j	4.3 ^j	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	50	10	<5.8	<6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	<2.3	2.0 ^j	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered) ²	300	150	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<12.9	<12.9	<15.5	90.6 ^j
Dissolved Manganese (filtered)	300	60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 ^j	<1.4	<1.1	3.5 ^j
Dissolved Nickel (filtered)	100	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 ^j	1.8 ^j	<1.9 ^j	<1.9 ^j
Inorganics (mg/L)																		
Nitrate Nitrogen	10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2	3.4	3.8	2.8
Sulfate ²	250	125	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.8	42.4	36.7	35.0
Field Measurements																		
Temperature (°F)	--	--	NA	NA	52.35	53.45	48.45	47.88	53.67	52.87	47.82	46.41	52.43	53.88	48.61	53.82	48.65	54.25
Conductivity (ms/cm)	--	--	NA	NA	4,130	2,795	4,908	3,054	4,771	3,358	2,708	4,173	4,047	2,571	2,447	4,913	3,095	1,730
Dissolved Oxygen (mg/L)	--	--	NA	NA	5.21	4.62	5.83	5.97	3.71	4.99	7.9	9.51	8.41	7.61	7.50	7.89	9.66	9.46
pH	--	--	NA	NA	6.11	7.44	6.31	6.34	6.77	6.83	7.08	6.69	7.64	6.71	7.24	7.09	7.37	
Redox Potential (mV)	--	--	NA	NA	135.1	-37.3	278.2	56.7	20.2	102.5	130.7	139.9	95.4	272.8	202.8	91.6	143.5	64.4

PARAMETER	ES	PAL	7/11/2018	12/11/2018	4/30/2019	11/13/2019	2/10/2020	3/3/2021	8/25/2021	6/8/2022	11/1/2022
Metals (ug/L)											
Arsenic	10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Chromium	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dis. Total Chromium (filtered)	100	10	<2.5	<2.5	<2.5	42.7	4.3 ^j	2.8 ^j	<2.5	NA	<2.5
Chromium, Hexavalent (mg/L)	--	--	<0.013	<0.26	<0.13	<0.73	<0.37	<0.37	<0.37	NA	<0.37
Lead	15	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered) ²	300	150	293	46.8 ^j	85.9 ^j	4000	75.4 ^j	74.1 ^j	125	NA	NA
Dissolved Manganese (filtered)	300	60	7.4	1.6 ^j	3.7 ^j	233	8.9	5.0	6.1	NA	267
Dissolved Nickel (filtered)	100	20	<1.9	<1.9	7.2 ^j	13.8	<3.0	3.6 ^j	<2.6	NA	3.6 ^j
Inorganics (mg/L)											
Nitrate Nitrogen	10	2	3.2	3.3	2.5	2.3	2.6	3	2.8	NA	3
Sulfate ²	250	125	34.3	44.8	23.6	20.4	22.3	33.3	27.9	NA	32.4
Field Measurements											
Temperature (°F)	--	--	53.96	50.90	45.20	53.10	41.3	47.9	54.7	NA	54.3
Conductivity (ms/cm)	--	--	3,595	2,369	2,678	1,207	1,258	2,425	723.1	NA	1535
Dissolved Oxygen (mg/L)	--	--	6.95	7.44	8.85	6.09	8.56	5.07	7.92	NA	6.83
pH	--	--	6.24	6.72	NA	6.68	6.78	7.63	7.01	NA	6.13
Redox Potential (mV)	--	--	229.2	-15.1	195.0	180.7	154.2	155.0	191.6	NA	170.3

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD

= Exceeds Enforcement Standard

Italic

= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

-- = No NR140 Standard

J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

pH electrode malfunction 4/30/2019

TABLE 3h
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
MW8

PARAMETER	ES	PAL	2/19/2013	3/5/2013	5/8/2013	8/12/2013	11/12/2013	2/12/2014	6/2/2014	8/5/2014	11/5/2014	2/10/2015	5/4/2015	8/4/2015	11/2/2015	2/22/2016	8/31/2016	2/14/2017
Metals (ug/L)																		
Arsenic	10	1	<4.4	<4.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	50.5	39.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	<0.38	<0.38	0.47 ^j	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dis. Total Chromium (filtered)	100	10	537	507	1,540	2,630	2,570	1,550	2,030	3,320	1,910	1,850	1,020	1,060	776	1,270	488	426
Total Chromium (unfiltered)	--	--	NA	NA	NA	2,610	2,700	1,910	2,220	3,420	2,110	2,110	1,330	1,580	986	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	0.53	0.46	1.1	2.7	2.7	1.8	3.3	1.8	1.6	0.98	1.1	0.76	1.1	0.49	0.42	
Lead	15	1.5	<1.2	1.5 ^j	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	<0.10	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Nickel (filtered)	100	20	278	546	1,060	1,720	1,510	605	1,710	3,420	1,920	1,010	1,530	1,450	1,770	1,460	1,400	1,040
Nickel (Unfiltered)	--	--	NA	NA	NA	1,860	1,860	1,190	2,070	3,700	2,300	1,980	1,900	1,930	1,920	NA	NA	NA
Selenium	50	10	<6.6	<6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	<1.4	<1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered) ^z	300	150	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	65.0 ^j	<12.9	<15.5
Dissolved Manganese (filtered)	300	60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	160	105	37.2
Inorganics (mg/L)																		
Nitrate Nitrogen	10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5	6.6
Sulfate ^z	250	125	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	24.9	<10.0	9.1 ^j
Field Measurements																		
Temperature (°F)	--	--	NA	NA	NA	59.35	57.67	51	54.9	60.92	57.19	51.46	52.5	60.51	59.48	49.76	63.53	50.87
Conductivity (ms/cm)	--	--	NA	NA	NA	474	330	234	255	398	255	188	271	234	243	138	223	239
Dissolved Oxygen (mg/L)	--	--	NA	NA	NA	3.58	3.29	3.29	1.2	1.05	3.56	4.09	5.76	4.08	3.45	4.82	3.46	7.63
pH	--	--	NA	NA	NA	5.75	6.19	5.14	5.51	5.52	5.65	5.86	5.71	6.63	5.72	6.28	6.38	6.37
Redox Potential (mV)	--	--	NA	NA	NA	160.9	72.4	235.5	148.1	129.8	148.4	181.8	186.7	145.1	318.8	248.7	141.3	206.7

PARAMETER	ES	PAL	8/29/2017	7/11/2018	12/11/2018	4/30/2019	11/13/2019	2/10/2020	3/3/2021	8/25/2021	6/28/2022	11/1/2022
Metals (ug/L)												
Arsenic	10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dis. Total Chromium (filtered)	100	10	470	594	560	399	583	565	577	485	398	426
Total Chromium (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	0.53	0.57	0.52	0.31	0.54	0.43	0.28	0.28	0.37	<0.37
Lead	15	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Nickel (filtered)	100	20	1,750	876	1,290	966	528	434	324	300	441	325
Nickel (Unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered) ^z	300	150	<15.5	<15.5	<35.4	37.4 ^j	58.2 ^j	173	152	<56.7	<56.7	119
Dissolved Manganese (filtered)	300	60	38.2	29.5	42.0	40.6	22.4	16.9	9.5	9.7	6.2	9.0
Inorganics (mg/L)												
Nitrate Nitrogen	10	2	12.1	40.4	28.4	9.5	8.8	7.5	6.0	12.2	10.4	7.3
Sulfate ^z	250	125	8.8 ^j	14.2 ^j	20.3	27.5	18.8 ^j	22.3	18.3	11.8	6	14.4
Field Measurements												
Temperature (°F)	--	--	60.50	59.54	54.68	46.50	52.80	50.0	51.5	59.2	57.2	58.0
Conductivity (ms/cm)	--	--	695	747	563.2	1454	256.6	282.3	252.6	724.1	571.8	272.7
Dissolved Oxygen (mg/L)	--	--	3.66	4.60	7.25	7.66	5.75	8.12	7.32	5.54	8.76	5.2
pH	--	--	6.15	5.42	5.79	NA	5.97	6.11	6.73	6.81	6.6	5.7
Redox Potential (mV)	--	--	167.9	271.6	-40.7	177.7	202	150.3	171.8	189.1	200.1	190.4

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD = Exceeds Enforcement Standard
Italic = Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

-- = No NR140 Standard

J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

pH electrode malfunction 4/30/2019

^z = NR140 Table 2 Public Welfare Groundwater Quality Standard

TABLE 31
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
MW9

PARAMETER	ES	PAL	2/19/2013	3/5/2013	5/8/2013	8/12/2013	11/12/2013	2/12/2014	6/2/2014	8/5/2014	11/5/2014	2/10/2015	5/4/2015	8/4/2015	11/3/2015	2/22/2016	8/31/2016	2/14/2017
Metals (ug/L)																		
Arsenic	10	1	<4.4	<4.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	214	150	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	0.63 ^J	15.0	3.0 ^J	NA	NA	NA	NA	NA	NA	NA						
Dis. Total Chromium (filtered)	100	10	2,160	862	499	539	1,120	2,580	279	2,270	545	682	1,000	679	905	938	361	1,270
Total Chromium (unfiltered)	--	--	NA	NA	NA	1,190	1,520	6,000	1,350	2,370	1,720	621	1,060	1,450	1,480	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	2.3	0.85	<0.086	0.51	2.7	3.4	0.27	1.6	0.56	0.49	0.63	0.6	0.92	0.86	0.4	1.1
Lead	15	1.5	3.1 ^J	4.8 ^J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	<0.10	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Nickel (filtered)	100	20	65.8	17.8	1,790	647	273	190	1,290	292	280	1,020	656	279	298	173	229	222
Nickel (Unfiltered)	--	--	NA	NA	NA	723	370	762	1,430	366	582	1,100	756	534	519	NA	NA	NA
Selenium	50	10	<6.6	<6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	<1.4	<1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Manganese (filtered)	300	60	NA	NA	NA	182	152	261	334	87.4	92.9	311	524	223	287	130	134	124
Manganese (unfiltered)	--	--	NA	NA	NA	1,020	554	5,190	1,420	518	2,050	550	1,220	1,930	1,750	NA	NA	NA
Dissolved Iron (filtered) ²	300	150	NA	NA	NA	16.4 ^J	38.1 ^J	25.9 ^J	28.2 ^J	16.4 ^J	37.9 ^J	31.0 ^J	<12.9	<12.9	<12.9	<12.9	<12.9	<15.5
Iron (unfiltered)	--	--	NA	NA	NA	37,900	15,600	194,000	62,200	20,100	102,000	11,100	40,500	91,400	136,000	NA	NA	NA
Inorganics (mg/L)																		
Nitrate Nitrogen	10	2	NA	NA	NA	11.2	9.9	12	8.4	7.7	8.2	28.9	22.4	11.9	12.3	8.7	6.9	9.4
Sulfate ²	250	125	NA	NA	NA	85.8	147	161	79.6	91.9	77.8	1,010	614	113	85	63.6	50.1	56.9
Field Measurements																		
Temperature (°F)	--	--	NA	NA	NA	53.27	55.25	50.41	51.48	53.67	53.46	50.01	48.83	53.18	55.77	48.75	55.18	50.79
Conductivity (ms/cm)	--	--	NA	NA	NA	3,254	2,045	2,602	6,191	2,984	1,982	3,304	4,095	2,088	1,834	1,880	1,481	1,932
Dissolved Oxygen (mg/L)	--	--	NA	NA	NA	1.18	1.81	6.90	3.98	2.61	0.53	5.16	2.44	2.02	0.17	0.52	0.17	5.81
pH	--	--	NA	NA	NA	6.25	7.44	4.75	5.45	6.31	6.82	5.98	6.63	6.89	6.60	7.24	7.20	6.18
Redox Potential (mV)	--	--	NA	NA	NA	156.1	2.6	237.6	119.8	52.1	155.6	198.5	198.2	175.9	289.7	262.7	122.5	200.5

PARAMETER	ES	PAL	8/29/2017	7/11/2018	12/11/2018	4/30/2019	11/13/2019	2/10/2020	3/3/2021	8/25/2021	6/8/2022	11/1/2022
Metals (ug/L)												
Arsenic	10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dis. Total Chromium (filtered)	100	10	366	238	478	604	590	647	782	337	243	435
Total Chromium (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	0.36 ^J	0.24	0.35	0.54	0.32	0.4	<0.073	0.33	0.11 ^J	<0.37
Lead	15	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Nickel (filtered)	100	20	423	555	536	341	586	564	666	435	674	789
Nickel (Unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Manganese (filtered)	300	60	198	250	162	238	103	331	322	60.8	111	100
Manganese (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered) ²	300	150	<15.5	<15.5	<35.4	919	<29.6	1170	5,510	110	<56.7	<56.7
Iron (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics (mg/L)												
Nitrate Nitrogen	10	2	8.6	8.4	10.6	8.3	8.4	11.2	8.4	8.6	8.4	10.4
Sulfate ²	250	125	65.4	49.8	73.7	79.8	58.3	89.9	75.2	67.2	48.2	55.8
Field Measurements												
Temperature (°F)	--	--	55.35	51.62	52.52	47.40	52.20	49.1	49.2	55.2	48.7	54.9
Conductivity (ms/cm)	--	--	2,064	3,								

TABLE 3j
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
MW10

Laboratory		Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS
PARAMETER	ES	PAL	7/15/2013	7/15/2013	8/12/2013	11/12/2013	11/12/2013	2/12/2014	2/12/2014	6/2/2014	6/2/2014	8/5/2014	8/5/2014	11/5/2014	11/5/2014	11/5/2014	2/10/2015	2/5/2015	5/4/2015	5/4/2015	
Metals (ug/L)																					
Arsenic	10	1	<4.4	<0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	101	110	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	<0.38	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dis. Total Chromium (filtered)	100	10	79.2	130	59.6	228	230	124	120	346	290	172	170	244	240	126	120	995	960		
Total Chromium (unfiltered)	--	--	NA	NA	120	254	NA	177	190	318	320	493	490	121	140	176	190	799	750		
Chromium, Hexavalent (mg/L)	--	--	0.14	0.28	0.045	0.13	0.27	0.36	0.23	0.26	0.33	0.096	0.17	0.21	0.23	0.37	0.46	0.6	0.27		
Lead	15	1.5	2.5 ^j	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	<0.10	<0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Nickel (filtered)	100	20	38.4	44	22.6	97.2	93.0	19.7	19	110	85	27.4	25	81.6	71	35.8	36	261	270		
Nickel (Unfiltered)	--	--	NA	NA	79.2	141.0	NA	60.8	61	158	99	215	220	36.8	41	67.2	80	194	170		
Selenium	50	10	<6.6	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	<1.4	<0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Manganese (filtered)	300	60	NA	NA	40.4	5.7	NA	3.2 ^j	NA	6.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese (unfiltered)	--	--	NA	NA	1,010	825	NA	594	NA	841	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered) ²	300	150	NA	NA	19.8 ^j	31.4 ^j	NA	24.1 ^j	NA	32.5 ^j	NA	27.1 ^j	NA	34.6 ^j	NA	26.7 ^j	NA	<12.9	NA		
Iron (unfiltered)	--	--	NA	NA	21,700	17,500	NA	13,900	NA	23,200	NA	16,700	NA	6,700	NA	6,110	NA	9,070	NA		
Inorganics (mg/L)																					
Nitrate Nitrogen	10	2	NA	NA	4.3	3.4	NA	3.2	NA	2.6	NA	2.4	NA	2	NA	3.2	NA	1.6	NA		
Sulfate ²	250	125	NA	NA	41.4	36.8	NA	69.1	NA	52	NA	36.7	NA	34.1	NA	57.5	NA	30.7	NA		
Field Measurements																					
Temperature (°F)	--	--	NA	NA	55.68	52.95		47.61		50.87		55.51		52.16		48.96		47.45			
Conductivity (ms/cm)	--	--	NA	NA	1,010	408		737		320		469		550		1,007		564			
Dissolved Oxygen (mg/L)	--	--	NA	NA	7.77	4.63		5.91		3.06		3.61		6.11		4.57		5.65			
pH	--	--	NA	NA	6.24	7.27		5.68		6.26		6.72		6.44		6.26		6.49			
Redox Potential (mV)	--	--	NA	NA	142.5	16.40		225.30		57.40		29.9		116		187		170.3			

Laboratory		Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS
PARAMETER	ES	PAL	8/4/2015	8/4/2015	11/3/2015	11/3/2015	2/22/2016	2/22/2016	8/31/2016	8/31/2016	2/14/2017	2/14/2017	8/29/2017	8/29/2017	8/29/2017	7/11/2018	7/11/2018	7/11/2018	12/11/2018	12/11/2018	
Metals (ug/L)																					
Arsenic	10	1	NA	NA	<7.2	NA	NA	NA	NA	NA	NA	NA									
Barium	2000	400	NA	NA	69.8	NA	NA	NA	NA	NA	NA	NA									
Cadmium	5	0.5	NA	NA	<0.60	NA	NA	NA	NA	NA	NA	NA									
Dis. Total Chromium (filtered)	100	10	633	650	196	210	724	730	217	240	652	670	317	330	12.5	21	50.0	57			
Total Chromium (unfiltered)	--	--	412	520	234	230	NA	NA	NA	NA	NA	NA	NA								
Chromium, Hexavalent (mg/L)	--	--	0.63	0.61	0.43	0.47	0.74	0.66	0.65	0.58	0.58	0.25									

TABLE 3k
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
MW10 (continued)

Laboratory			Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	Pace
PARAMETER	ES	PAL	4/30/2019	4/30/2019	11/13/2019	11/13/2019	2/10/2020	2/10/2020	3/3/2021	3/3/2021	8/25/2021	8/25/2021	8/25/2021	6/8/2022	11/1/2022	
Metals (ug/L)																
Arsenic	10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Barium	2000	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Cadmium	5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dis. Total Chromium (filtered)	100	10	<2.5	3.3	112	150	113	56	206	200	311	200	165	120		
Total Chromium (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chromium, Hexavalent (mg/L)	--	--	<0.013	0.004	0.068	0.063	0.12	0.056	0.016 ^J	0.2	0.061	0.12	0.25	0.058 ^J		
Lead	15	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Mercury	2	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Nickel (filtered)	100	20	7.5 ^J	4.7	31.2	73	17.8	5.2	43.9	14	15.7	8.6 ^J	10.8	23.1		
Nickel (Unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Selenium	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Silver	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Manganese (filtered)	300	60	<1.1	NA	16.6	NA	2.8 ^J	NA	10.1	NA	<1.5	NA	<1.5	<1.5	<1.5	
Manganese (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Iron (filtered) ²	300	150	<35.4	NA	95.7 ^J	NA	<29.6	NA	180	NA	<56.7	NA	<56.7	<56.7	<56.7	
Iron (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Inorganics (mg/L)																
Nitrate Nitrogen	10	2	1.4	NA	0.85	NA	1.3	NA	0.89	NA	0.88	NA	2.8	1.3		
Sulfate ²	250	125	7.1	NA	14.9	NA	22.8	NA	18.7	NA	10.8	NA	22.7	12		
Field Measurements																
Temperature (°F)	--	--	42.0		50.4		45.6		45.8		54.4		47.7		54.8	
Conductivity (ms/cm)	--	--	199.8		461.3		468.6		456.2		724.2		601.8		518.5	
Dissolved Oxygen (mg/L)	--	--	6.28		6.56		5.56		6.04		4.98		8.05		5.55	
pH	--	--	NA		6.47		6.52		6.43		6.1		6.09		6.34	
Redox Potential (mV)	--	--	130.8		77.0		75.0		150.5		156.1		135.9		87.9	

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD	= Exceeds Enforcement Standard
<i>Italic</i>	= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

-- = No NR140 Standard

J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Pace = Lab analysis conducted by Pace Analytical Services

NLS = Lab analysis conducted by Northern Lake Service

pH electrode malfunction 4/30/2019

² = NR140 Table 2 Public Welfare Groundwater Quality Standard

TABLE 31
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
MW11

Laboratory			Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS
PARAMETER	ES	PAL	7/15/2013	7/15/2013	8/12/2013	11/12/2013	11/12/2013	2/12/2014	2/12/2014	6/2/2014	6/2/2014	8/5/2014	8/5/2014	11/5/2014	11/5/2014	2/10/2015	2/10/2015	5/4/2015	5/4/2015	
Metals (ug/L)																				
Arsenic	10	1	<4.4	<0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Barium	2000	400	331	320	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Cadmium	5	0.5	<0.38	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dis. Total Chromium (filtered)	100	10	<1.2	<0.5	<1.2	<1.2	[0.68]	<1.2	<1.0	<2.1	<0.5	<2.1	<0.5	<2.1	[0.47]	<2.1	<0.32	<2.1	[0.75]	
Total Chromium (unfiltered)	--	--	NA	NA	120	150	NA	46.8	110	63.1	<0.5	78.9	90	54.1	60	37.4	51	80.1	78	
Chromium, Hexavalent (mg/L)	--	--	<0.0086	<1.7	<0.0034	<0.017	<0.0017	<0.034	[0.0017]	<0.019	<0.0017	<0.039	<0.0017	<0.019	<0.0017	<0.019	<0.0023	<0.019	<0.0017	
Lead	15	1.5	4.6 ¹	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Mercury	2	0.2	<0.10	<0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Nickel (filtered)	100	20	2.3 ¹	2	1.1 ¹	1.1 ¹	[1.4]	<0.75	<1.0	<1.4	1.3	<1.4	[0.80]	<1.4	<1.3	<1.4	<1.3	<1.4	<1.3	
Nickel (Unfiltered)	--	--	NA	NA	82.4	106.0	NA	32.2	75	42.3	[0.69]	52.6	59	36.6	39	24.8	36	51	53	
Selenium	50	10	<6.6	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Silver	50	10	<1.4	<0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Iron (filtered) ²	300	150	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Manganese (filtered)	300	60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Inorganics (mg/L)																				
Nitrate Nitrogen	10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Sulfate ²	250	125	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Field Measurements																				
Temperature (°F)	--	--	NA	NA	58.01	57.33		48.49		44.33		55.7		55.98		48.01		44.09		
Conductivity (ms/cm)	--	--	NA	NA	883	738		749		411		935		613		692		618		
Dissolved Oxygen (mg/L)	--	--	NA	NA	3.16	2.28		2.71		1.27		1.01		0.58		0.78		2.08		
pH	--	--	NA	NA	6.10	7.03		5.55		5.58		6.43		6.17		6.29		6.06		
Redox Potential (mV)	--	--	NA	NA	109.1	3.1		247.8		102.1		-7.4		111.1		184.4		134.1		

PAL = Preventive Action Limit

ES = Enforcement Standards

B6

 = Exceeds Enforcement Standard

It

NA - Not Analyzed

< - Concentration less than

-- = No NR140 Standard

j = estimated concentration above the adjusted method detection limit, $\mu\text{g/L}$; k = total sample volume, mL

NLS = Lab analysis conducted by Northwell Labs Services

NLS = Lab analysis conducted by Northern Lake Service
Values in brackets are NLS margin of "H" amplification

Values in brackets are NLS version of "J" qualifier

TABLE 3m
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
MW11 (continued)

Laboratory			Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	Pace
PARAMETER	ES	PAL	4/30/2019	4/30/2019	11/13/2019	11/13/2019	2/10/2020	2/10/2020	3/3/2021	3/3/2021	8/25/2021	8/25/2021	8/25/2021	6/8/2022	11/1/2022	
Metals (ug/L)																
Arsenic	10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dis. Total Chromium (filtered)	100	10	<2.5	<0.58	<2.5	[1.0]	<2.5	<0.58	<2.5	<1.9	<2.5	<0.99	<2.5	<2.5	<2.5	
Total Chromium (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	<0.051	0.0023	<0.073	[0.00082]	<0.073	[1.1]	<0.073	[0.0014]	<0.073	<0.00052	<0.073	<0.073	<0.073	
Lead	15	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Nickel (filtered)	100	20	<1.9	<0.94	<3.0	<0.94	<3.0	[1.6]	7.8 ^J	4.4	<2.6	<3.5	<2.6	<2.6	<2.6	
Nickel (Unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered) ²	300	150	50.5 ^J	NA	112	NA	1460	NA	159	NA	<56.7	NA	219	100		
Dissolved Manganese (filtered)	300	60	53.3	NA	144	NA	514	NA	94.3	NA	132	NA	165	234		
Inorganics (mg/L)																
Nitrate Nitrogen	10	2	5.6	NA	4.8	NA	6.8	NA	5.3	NA	6.3	NA	5.1	4.3		
Sulfate ²	250	125	16.4	NA	16.4	NA	21.2	NA	16	NA	21.9	NA	18.8	23		
Field Measurements																
Temperature (°F)	--	--	41.4		54.5		45.9		43.2		59.7		46.2		57.3	
Conductivity (ms/cm)	--	--	883		850		913		861		723.7		984		1995	
Dissolved Oxygen (mg/L)	--	--	2.04		0.55		0.48		2.05		0.55		2.69		0.78	
pH	--	--	NA		6.07		6.20		6.42		6.07		6.03		5.80	
Redox Potential (mV)	--	--	211.3		210.5		166.0		112.8		203.7		169.1		196.5	

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD

= Exceeds Enforcement Standard

Italic

= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

-- = No NR140 Standard

J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Pace = Lab analysis conducted by Pace Analytical Services

NLS = Lab analysis conducted by Northern Lake Service

Values in brackets are NLS version of "J" qualifier

pH electrode malfunction 4/30/2019

² = NR140 Table 2 Public Welfare Groundwater Quality Standard

TABLE 3n
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
MW12

PARAMETER	ES	PAL	7/15/2013	8/12/2013	11/12/2013	2/12/2014	6/2/2014	8/5/2014	5/4/2015	8/4/2015	2/22/2016	8/31/2016	2/14/2017	8/29/2017	7/11/2018	12/11/2018	4/30/2019	11/13/2019
Metals (ug/L)																		
Arsenic	10	1	<4.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	195	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	<0.38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Chromium	100	10	<1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	15	1.5	<1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	--	--	1.4*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	50	10	<6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	<1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	<0.086	NA	NA	NA	NA	NA	NA	<0.019	<0.026	<0.026	<0.051	<0.051	<0.13	<0.13	<0.073	
Dis. Total Chromium (filtered)	100	10	NA	NA	NA	NA	NA	NA	NA	<2.1	<2.1	<2.1	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Dissolved Iron (filtered) ²	300	150	NA	NA	NA	NA	NA	NA	NA	<12.9	<12.9	16.9 ^J	<15.5	<15.5	<35.4	<35.4	<29.6	
Dissolved Manganese (filtered)	300	60	NA	NA	NA	NA	NA	NA	NA	<1.4	<1.4	<1.5 ^J	1.7 ^J	<1.1	<1.1	<1.1	<1.1	
Dissolved Nickel (filtered)	100	20	NA	NA	NA	NA	NA	NA	NA	<1.4	<1.4	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<3.0
Inorganics (mg/L)																		
Nitrate Nitrogen	10	2	NA	NA	NA	NA	NA	NA	NA	6.8	5.3	7.8	5.1	4.3	6.4	3.7	5.3	
Sulfate ²	250	125	NA	NA	NA	NA	NA	NA	NA	18.8	16.1 ^J	35.8	17.3	11.3 ^J	18.0	13.0 ^J	14.7	
Field Measurements																		
Temperature (°F)	--	--	NA	55.10	55.75	49.27	47.64	57.55	44.08	54.62	48.99	57.53	49.73	58.2	54.32	52.52	42.9	42.9
Conductivity (ms/cm)	--	--	NA	1,277	1,451	1,898	1,234	752	1,052	1,499	2,102	1,677	5,640	1,498	1,246	1,416	1,164	1,164
Dissolved Oxygen (mg/L)	--	--	NA	6.80	6.11	3.75	5.46	3.32	10.75	8.52	9.77	6.15	9.61	7.86	6.82	7.67	10.1	10.1
pH	--	--	NA	4.98	6.81	6.16	6.37	6.62	6.94	7.65	7.45	7.01	6.72	6.98	6.11	6.30	NA	NA
Redox Potential (mV)	--	--	NA	170.3	-11.40	259.80	36.7	31.2	138.8	105.4	234.2	96.4	174.5	84.8	216.2	-9.2	194.7	195.7

PARAMETER	ES	PAL	2/10/2020	3/3/2021	8/25/2021	6/8/2022	11/1/2022
Metals (ug/L)							
Arsenic	10	1	NA	NA	NA	NA	NA
Barium	2000	400	NA	NA	NA	NA	NA
Cadmium	5	0.5	NA	NA	NA	NA	NA
Total Chromium	100	10	NA	NA	NA	NA	NA
Lead	15	1.5	NA	NA	NA	NA	NA
Mercury	2	0.2	NA	NA	NA	NA	NA
Nickel	--	--	NA	NA	NA	NA	NA
Selenium	50	10	NA	NA	NA	NA	NA
Silver	50	10	NA	NA	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	<0.073	<0.073	<0.073	<0.073	<0.37
Dis. Total Chromium (filtered)	100	10	<2.5	<2.5	<2.5	<2.5	<2.5
Dissolved Iron (filtered) ²	300	150	<29.6	<56.7	68.8 ^J	<56.7	<56.7
Dissolved Manganese (filtered)	300	60	1.6 ^J	2.0 ^J	2.4 ^J	<1.5	<1.5
Dissolved Nickel (filtered)	100	20	<3.0	3.9 ^J	<2.6	<2.6	<2.6
Inorganics (mg/L)							
Nitrate Nitrogen	10	2	6.3	6.0	4.5	4.8	7.3
Sulfate ²	250	125	19.5	21.4	13.6	10.7	25.0
Field Measurements							
Temperature (°F)	--	--	48.7	48.8	58.2	48	54.8
Conductivity (ms/cm)	--	--	1,853	2,719	723.4	800.0	2,833.0
Dissolved Oxygen (mg/L)	--	--	9.62	7.76	6.95	11.32	6.79
pH	--	--	6.54	6.82	6.33	6.89	5.62
Redox Potential (mV)	--	--	159.9	183.6	200.3	115.0	211.5

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD	= Exceeds Enforcement Standard
<i>Italic</i>	= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

-- = No NR140 Standard

J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

pH electrode malfunction 4/30/2019

² = NR140 Table 2 Public Welfare Groundwater Quality Standard

TABLE 3o
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
MW13

Laboratory		Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	
PARAMETER	ES	PAL	7/11/2018	7/11/2018	12/11/2018	12/11/2018	4/30/2019	4/30/2019	11/13/2019	11/13/2019	2/10/2020	2/10/2020	3/3/2021	3/3/2021	8/25/2021	8/25/2021	8/25/2021	6/8/2022	11/1/2022
Metals (ug/L)																			
Arsenic	10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Barium	2000	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Cadmium	5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dis. Total Chromium (filtered)	100	10	<2.5	2.7	<2.5	2.7	<2.5	5	5.3 ^J	6.2	6.0 ^J	3.8	6.9 ^J	9.1	5.3 ^J	12	4.4 ^J	5.0 ^J	
Total Chromium (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chromium, Hexavalent (mg/L)	--	--	<0.051	<0.0011	<0.26	0.0093	<0.26	0.0066	<0.37	[0.0013]	<0.18	0.002	0.69	[0.00092]	<0.37	[0.00068]	<0.18	0.39 ^J	
Lead	15	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Mercury	2	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Nickel (filtered)	100	20	<1.9	[2.7]	1.9 ^J	[2.5]	3.6 ^J	[3.2]	<3.0	[2.0]	<3.0	[1.4]	<2.6	[1.3]	<2.6	<3.5	<2.6	<2.6	
Nickel (Unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Selenium	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Silver	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Manganese (filtered)	300	60	799	NA	2,110	NA	1,620	NA	2,400	NA	2,230	NA	2,050	NA	2,300	NA	2,730	3,030	
Manganese (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Iron (filtered) ²	300	150	375	NA	5,460	NA	3,270	NA	11,700	NA	10,800	NA	11,300	NA	12,400	NA	14,100	16,800	
Iron (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Inorganics (mg/L)																			
Nitrate Nitrogen	10	2	<0.38	NA	<0.38	NA	<0.38	NA	<0.22	NA	<0.22	NA	<0.044	NA	<0.22	NA	<0.044	<0.22	
Sulfate ²	250	125	7.2 ^J	NA	<5.0	NA	<5.0	NA	2.6 ^J	NA	<2.2	NA	5.5	NA	2.2	NA	0.70 ^J	2.2 ^J	
Field Measurements																			
Temperature (°F)	--	--	51.26		50.54		45.6		50.8		48.0		46.6		50.7		47.4	51.4	
Conductivity (ms/cm)	--	--	344.2		652.6		443.8		752		930		606.1		723.1		239.0	923.0	
Dissolved Oxygen (mg/L)	--	--	1.27		0.91		1.04		0.55		0.25		3.12		5.6		5.09	1.4	
pH	--	--	5.89		6.58		NA		6.56		6.51		6.96		851		6.43	5.91	
Redox Potential (mV)	--	--	105.2		-110.2		-56.1		-82.2		-53.9		-82.2		612		84.9	-30.1	

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD	= Exceeds Enforcement Standard
<i>Italic</i>	= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

-- = No NR140 Standard

J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Pace = Lab analysis conducted by Pace Analytical Services

NLS = Lab analysis conducted by Northern Lake Service

Values in brackets are NLS version of "J" qualifier

pH electrode malfunction 4/30/2019

² = NR140 Table 2 Public Welfare Groundwater Quality Standard

TABLE 3p
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
MW14

Laboratory		Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	
PARAMETER	ES	PAL	7/11/2018	7/11/2018	12/11/2018	12/11/2018	4/30/2019	4/30/2019	11/13/2019	11/13/2019	2/10/2020	2/10/2020	3/3/2021	3/3/2021	8/25/2021	8/25/2021	8/25/2021	6/8/2022	11/1/2022
Metals (ug/L)																			
Arsenic	10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Barium	2000	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Cadmium	5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dis. Total Chromium (filtered)	100	10	<2.5	<0.58	<2.5	<0.58	<2.5	<0.58	<2.5	<0.58	<2.5	<0.58	<2.5	<1.9	<2.5	<0.99	<2.5	<2.5	
Total Chromium (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chromium, Hexavalent (mg/L)	--	--	<0.051	<0.0011	<0.026	[0.0012]	<0.26	0.0037	<0.37	[0.00058]	<0.18	[1.3]	<0.37	<0.0017	<0.37	<0.00052	<0.37	<1.8	
Lead	15	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Mercury	2	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Nickel (filtered)	100	20	<1.9	<0.94	<1.9	<0.94	<1.9	<0.94	<3.0	<0.94	<3.0	<0.94	<2.6	<3.2	<2.6	<3.5	<2.6	<2.6	
Nickel (Unfiltered)	100	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Selenium	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Silver	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Manganese (filtered)	300	60	849	NA	522	NA	252	NA	268	NA	402	NA	276	NA	259	NA	480	174	
Manganese (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Iron (filtered) ²	300	150	5,480	NA	7,100	NA	3,960	NA	4,740	NA	6,710	NA	4,680	NA	4,370	NA	7,980	3,690	
Iron (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Inorganics (mg/L)																			
Nitrate Nitrogen	10	2	<0.38	NA	<0.38	NA	<0.38	NA	<0.22	NA	<0.22	NA	<0.22	NA	<0.22	NA	<0.044	<0.22	
Sulfate ²	250	125	12.9 ^j	NA	9.1 ^j	NA	6.9 ^j	NA	6.4 ^j	NA	8.3 ^j	NA	4.6 ^j	NA	6.4 ^j	NA	12.6	4.7 ^j	
Field Measurements																			
Temperature (°F)	--	--	52.16		48.2		42.3		50.7		44.5		44.7		54.4		47.7	53.7	
Conductivity (ms/cm)	--	--	627.3		510.7		427.3		468.7		538.9		466.5		724.2		543.7	396.7	
Dissolved Oxygen (mg/L)	--	--	1.38		0.83		0.66		0.30		0.26		1.05		0.57		2.09	1.50	
pH	--	--	6.35		6.63		NA		6.60		6.51		7.17		6.12		5.98	1.50	
Redox Potential (mV)	--	--	-27.1		-97.4		20.0		-32.0		1.3		-49.5		-13.0		0.50	21.20	

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD	= Exceeds Enforcement Standard
<i>Italic</i>	= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

-- = No NR140 Standard

J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Pace = Lab analysis conducted by Pace Analtyical Servcies

NLS = Lab analysis conducted by Northern Lake Service

Values in brackets are NLS version of "J" qualifier

pH electrode malfunction 4/30/2019

² = NR140 Table 2 Public Welfare Groundwater Quality Standard

TABLE 3q
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
MW15

Laboratory		Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	
PARAMETER	ES	PAL	7/11/2018	7/11/2018	12/11/2018	12/11/2018	4/30/2019	4/30/2019	11/13/2019	11/13/2019	2/10/2020	2/10/2020	3/3/2021	3/3/2021	8/25/2021	8/25/2021	8/25/2021	6/8/2022	11/1/2022
Metals (ug/L)																			
Arsenic	10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Barium	2000	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Cadmium	5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dis. Total Chromium (filtered)	100	10	<2.5	[1.1]	<2.5	[1.5]	<2.5	<0.58	<2.5	[1.0]	<2.5	[0.76]	<2.5	[0.62]	<2.5	[1.4]	<2.5	<2.5	
Total Chromium (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chromium, Hexavalent (mg/L)	--	--	<0.13	<0.0011	<0.26	[0.0029]	<0.26	0.0027	<0.37	[0.0013]	<0.18	[0.0011]	<0.18	[0.00092]	<0.37	0.0022	<0.18	<0.37	
Lead	15	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Mercury	2	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Nickel (filtered)	100	20	6.9 ^J	6.2	5.1 ^J	4.8	4.0 ^J	[2.5]	<3.0	[1.8]	<3.0	4.5	32.0	[3.0]	<2.6	<3.5	<2.6	<2.6	
Nickel (Unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Selenium	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Silver	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Manganese (filtered)	300	60	1,800	NA	1,480	NA	70	NA	150	NA	544	NA	646	NA	21.4	NA	30.6	93.6	
Manganese (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Iron (filtered) ²	300	150	3,490	NA	4,360	NA	559	NA	2,050	NA	137	NA	3,780	NA	427	NA	566	1,650	
Iron (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Inorganics (mg/L)																			
Nitrate Nitrogen	10	2	<0.38	NA	<0.38	NA	<0.38	NA	<0.22	NA	<0.22	NA	<0.044	NA	<0.22	NA	0.14 ^J	0.36 ^J	
Sulfate ²	250	125	<5.0	NA	<5.0	NA	<5.0	NA	2.2	NA	<2.2	NA	0.75 ^J	NA	<2.2	NA	2.6	3.2 ^J	
Field Measurements																			
Temperature (°F)	--	--	60.62		50.54		39.6		54.9		43.5		45.3		61.8		48.2	56.6	
Conductivity (ms/cm)	--	--	286.5		152.1		287.7		187.4		231.9		252.9		724		192.6	111.7	
Dissolved Oxygen (mg/L)	--	--	1.26		0.39		3.61		0.54		1.02		1.00		2.42		2.16	3.36	
pH	--	--	5.29		5.94		NA		5.80		6.05		6.66		5.68		5.88	5.33	
Redox Potential (mV)	--	--	121.7		-91.8		158.2		132.4		133.0		82.1		131.5		167.5	206.3	

PAL = Preventive Action Limit

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BOLD	= Exceeds Enforcement Standard
<i>Italic</i>	= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

-- = No NR140 Standard

J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Pace = Lab analysis conducted by Pace Analytical Services

NLS = Lab analysis conducted by Northern Lake Service

Values in brackets are NLS version of "J" qualifier

pH electrode malfunction 4/30/2019

² = NR140 Table 2 Public Welfare Groundwater Quality Standard

TABLE 3r
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
PZ1

PARAMETER	ES	PAL	7/15/2013	8/12/2013	11/12/2013	2/12/2014	6/2/2014	8/5/2014	11/5/2014	2/10/2015	5/4/2015	8/4/2015	11/3/2015	2/22/2016	8/31/2016	2/14/2017	8/29/2017	7/11/2018
Metals (ug/L)																		
Arsenic	10	1	<4.4	NA	NA	NA												
Barium	2000	400	101	NA	NA	NA												
Cadmium	5	0.5	<0.38	NA	NA	NA												
Dis. Total Chromium (filtered)	100	10	5,980	1,590	810	1,310	652	1,640	1,090	1,950	1,420	1,220	1,470	1,740	1,650	1,730	1,480	1,350
Total Chromium (unfiltered)	--	--	NA	2,910	1,610	1,490	1,520	1,760	2,040	1,660	2,130	2,790	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	5.6	1.6	1.0	1.1	0.41	1.60	1	2	2	1	1.7	1.9	1.9	1.9	1.1	1.2
Lead	15	1.5	2.9*	NA	NA	NA												
Mercury	2	0.2	<0.10	NA	NA	NA												
Dissolved Nickel (filtered)	100	20	4.8	4.1 ^J	3.5 ^J	3.8 ^J	3.1 ^J	2.9 ^J	2.4 ^J	3.9 ^J	2.0 ^J	2.1 ^J	2.1 ^J	1.7 ^J	2.0 ^J	3.7 ^J	<1.9	<1.9
Nickel (Unfiltered)	--	--	NA	269	108	24.8	87	14.9	81.2	18.1	15	73.2	108	NA	NA	NA	NA	NA
Selenium	50	10	<6.6	NA	NA	NA												
Silver	50	10	<1.4	NA	NA	NA												
Dissolved Manganese (filtered)	300	60	NA	124	154	61.5	45	14.9	102	5.0 ^J	9.7	22	28.9	16.6	11.1	19.5	15.7	21.6
Manganese (unfiltered)	--	--	NA	4,400	1,900	362	1,320	179	1,220	223	216	1,210	1,590	NA	NA	NA	NA	NA
Dissolved Iron (filtered) ²	300	150	NA	<14.0	<14.0	<14.0	<12.9	<12.9	<12.9	<12.9	<12.9	<12.9	<12.9	<12.9	<12.9	<15.5	<15.5	<15.5
Iron (unfiltered)	--	--	NA	301,000	99,600	27,700	104,000	14,900	103,000	16,100	15,700	95,300	74,500	NA	NA	NA	NA	NA
Inorganics (mg/L)																		
Nitrate Nitrogen	10	2	NA	4.3	3.4	3.9	3.1	3.8	3.4	4.2	4	3.8	4.3	4.3	3.8	4.1	4.0	5.1
Sulfate ²	250	125	NA	62.8	55.6	58.4	51.9	49.7	44.3	48.6	45.2	43.1	41.8	44.0	39.3	42.0	39.7	40.8
Field Measurements																		
Temperature (°F)	--	--	NA	56.79	58.5	55.4	55.31	56.97	57.56	55.45	53.91	55.55	57.92	54.77	57.6	54.58	58.02	55.58
Conductivity (ms/cm)	--	--	NA	6.14	595	681	784	747	585	565	554	548	549	515	526	565	444	531.7
Dissolved Oxygen (mg/L)	--	--	NA	0.61	2.55	4.72	0.38	1.07	0.72	2.51	2.37	1.21	0.16	2.01	0.67	1.07	2.04	1.06
pH	--	--	NA	6.45	7.79	5.98	7.3	7.62	7.28	7.46	7.38	7.2	7.3	7.62	7.71	7.07	7.28	7.04
Redox Potential (mV)	--	--	NA	141.1	-27.5	177.0	-11.3	-13.3	147.4	148	171.6	127.7	270.9	246.1	81.1	167.3	105.9	234

PARAMETER	ES	PAL	12/11/2018	4/30/2019	11/13/2019	2/10/2020	3/3/2021	8/25/2021	6/8/2022	11/1/2022
Metals (ug/L)										
Arsenic	10	1	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	NA	NA	NA	NA	NA	NA	NA	NA
Dis. Total Chromium (filtered)	100	10	1,500	1,130	888	800	544	403	369	369
Total Chromium (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	1.5	1.2	0.94	0.87	0.50	0.41	<0.037	410.0
Lead	15	1.5	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Nickel (filtered)	100	20	<1.9	<1.9	<3.0	<3.0	34.6	<2.6	3.2 ^J	<2.6
Nickel (Unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	50	10	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Manganese (filtered)	300	60	9.2	8.4	13.6	<1.1	44.5	<1.5	9.9	<1.5
Manganese (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered) ²	300	150	<35.4	121	<29.6	<29.6	367	<56.7	345	<56.7
Iron (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics (mg/L)										
Nitrate Nitrogen	10	2	6.3	5.5	4.8	5.0	4.7	4.8	4.9	19.2
Sulfate ²	250	125	45.9	46.5	41.4	47.1	45.0	51.6	53.5	297.0
Field Measurements										
Temperature (°F)	--	--	55.4	54.3	54.3	53.0	54.7	59.2	54.1	56.9
Conductivity (ms/cm)	--	--	517.3	512.4	512.4	526.1	511.1	724.3	601.3	543.5
Dissolved Oxygen (mg/L)	--	--	1.69	2.64	2.64	2.61	3.08	6.17	5.93	2.83
pH	--	--	7.41	NA	NA	7.01	7.25	7.08	6.18	6.24
Redox Potential (mV)	--	--	-50.3	194.1	195.1	128.6	150.1	138.0	131.2</td	

TABLE 3s
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
PZ2

Laboratory		Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	
PARAMETER	ES	PAL	7/11/2018	7/11/2018	12/11/2018	12/11/2018	4/30/2019	4/30/2019	11/13/2019	11/13/2019	2/10/2020	2/10/2020	3/3/2021	3/3/2021	8/25/2021	8/25/2021	8/25/2021	6/8/2022	11/1/2022
Metals (ug/L)																			
Arsenic	10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Barium	2000	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Cadmium	5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dis. Total Chromium (filtered)	100	10	<2.5	<0.58	<2.5	<0.58	<2.5	[0.62]	<2.5	[0.70]	<2.5	<0.58	<2.5	<1.9	<2.5	<0.99	<2.5	<2.5	
Total Chromium (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chromium, Hexavalent (mg/L)	--	--	<0.51	<0.0011	<1.3	[0.0029]	<0.026	[0.001]	<0.0073	[0.00058]	<0.037	[0.0011]	<0.037	[0.00068]	<0.037	[0.0012]	0.37	<0.073	
Lead	15	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Mercury	2	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Nickel (filtered)	100	20	<1.9	[2.6]	<1.9	<0.94	<1.9	<0.94	<3.0	<0.94	<3.0	<0.94	7.8 ^j	<3.2	<2.6	<3.5	<2.6	<2.6	
Nickel (Unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Selenium	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Silver	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Manganese (filtered)	300	60	684	NA	709	NA	591	NA	68.5	NA	300	NA	758	NA	<1.5	NA	200	787	
Manganese (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Iron (filtered) ²	300	150	298	NA	1450	NA	384	NA	1,020	NA	47.6 ^j	NA	3,550	NA	<56.7	NA	390	725	
Iron (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Inorganics (mg/L)																			
Nitrate Nitrogen	10	2	<0.38	NA	<0.38	NA	<0.075	NA	<0.22	NA	0.13 ^j	NA	<0.044	NA	0.51 ^j	NA	<0.044	0.25 ^j	
Sulfate ²	250	125	15.2	NA	<5.0	NA	5.6	NA	5.6 ^j	NA	6.4	NA	8.5	NA	6.1 ^j	NA	9.4	13.8	
Field Measurements																			
Temperature (°F)	--	--	51.08		49.82		46.4		50.0		48.1		47.9		51.7		46.6	52.0	
Conductivity (ms/cm)	--	--	373		323.7		265.9		253.9		275.6		208.3		724		601.3	237.6	
Dissolved Oxygen (mg/L)	--	--	2.1		0.80		0.32		1.76		1.18		2.51		5.15		5.93	3.17	
pH	--	--	6.93		6.98		NA		6.73		6.77		7.25		6.21		6.18	5.73	
Redox Potential (mV)	--	--	-141.4		-103.7		24.2		57.4		68.0		-23.3		129.7		131.2	127.6	

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD	= Exceeds Enforcement Standard
<i>Italic</i>	= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

-- = No NR140 Standard

J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Pace = Lab analysis conducted by Pace Analytical Services

NLS = Lab analysis conducted by Northern Lake Service

Values in brackets are NLS version of "J" qualifier

pH electrode malfunction 4/30/2019

² = NR140 Table 2 Public Welfare Groundwater Quality Standard

TABLE 3t
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
PZ3

Laboratory		Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	
PARAMETER	ES	PAL	7/11/2018	7/11/2018	12/11/2018	12/11/2018	4/30/2019	4/30/2019	11/13/2019	11/13/2019	2/10/2020	2/10/2020	3/3/2021	3/3/2021	8/25/2021	8/25/2021	8/25/2021	6/8/2022	11/1/2022
Metals (ug/L)																			
Arsenic	10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Barium	2000	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Cadmium	5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dis. Total Chromium (filtered)	100	10	1,510	1,300	1,150	1,000	789	800	1,260	1,200	665	200	940	920	1,400	1,500	484	1,080	
Total Chromium (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chromium, Hexavalent (mg/L)	--	--	1.6	1.3	1.2	0.98	0.7	0.091	1.1	1.1	0.16	0.23	0.67	0.58	1.4	1.40	0.59	<1/8	
Lead	15	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Mercury	2	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Nickel (filtered)	100	20	4,040	3,800	3,260	3,200	2,660	3,000	2,720	2,600	786	250	1,190	1,200	1,420	1,500	939	1,750	
Nickel (Unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Selenium	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Silver	50	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Manganese (filtered)	300	60	410	NA	272	NA	239	NA	225	NA	54.0	NA	83.6	NA	105.0	NA	51.0	110.0	
Manganese (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Iron (filtered) ²	300	150	22.3 ^j	NA	<35.4	NA	<35.4	NA	<29.6	NA	146	NA	<56.7	NA	<56.7	NA	<56.7	<56.7	
Iron (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Inorganics (mg/L)																			
Nitrate Nitrogen	10	2	7.8	NA	7.1	NA	6.6	NA	9.5	NA	1.5	NA	5	NA	8.7	NA	5.1	7.6	
Sulfate ²	250	125	51.4	NA	60.5	NA	50.2	NA	52.4	NA	11.8	NA	36.8	NA	53.6	NA	30.2	48	
Field Measurements																			
Temperature (°F)	--	--	56.48		49.28		43.4		52.0		47.4		45.9		57.6		49.1	55.2	
Conductivity (ms/cm)	--	--	651		700.5		434.4		485.6		467.0		549.5		724.3		224.3	204.0	
Dissolved Oxygen (mg/L)	--	--	5.15		6.17		1.78		3.50		7.43		7.16		6.70		13.41	8.38	
pH	--	--	6.36		6.79		NA		7.00		6.79		6.82		6.29		6.24	5.77	
Redox Potential (mV)	--	--	179.8		-74.0		119.2		57.2		37.0		125.2		118.4		114.6	108.4	

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD	= Exceeds Enforcement Standard
<i>Italic</i>	= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

-- = No NR140 Standard

J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Pace = Lab analysis conducted by Pace Analtyical Servcies

NLS = Lab analysis conducted by Northern Lake Service

Values in brackets are NLS version of "J" qualifier

pH electrode malfunction 4/30/2019

² = NR140 Table 2 Public Welfare Groundwater Quality Standard

TABLE 3u
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
PZ4

Laboratory			Pace	Pace
PARAMETER	ES	PAL	6/9/2022	11/1/2022
Metals (ug/L)				
Arsenic	10	1	NA	NA
Barium	2000	400	NA	NA
Cadmium	5	0.5	NA	NA
Dis. Total Chromium (filtered)	100	10	<2.5	<2.5
Total Chromium (unfiltered)	--	--	NA	NA
Chromium, Hexavalent (mg/L)	--	--	<0.037	<0.018
Lead	15	1.5	NA	NA
Mercury	2	0.2	NA	NA
Dissolved Nickel (filtered)	100	20	<2.6	<2.6
Nickel (Unfiltered)	--	--	NA	NA
Selenium	50	10	NA	NA
Silver	50	10	NA	NA
Dissolved Manganese (filtered)	300	60	<i>148</i>	7.1
Manganese (unfiltered)	--	--	NA	NA
Dissolved Iron (filtered) ²	300	150	<56.7	<56.7
Iron (unfiltered)	--	--	NA	NA
Inorganics (mg/L)				
Nitrate Nitrogen	10	2	0.51	0.3
Sulfate ²	250	125	13.6	16.2
Field Measurements				
Temperature (°F)	--	--	51.7	52.1
Conductivity (ms/cm)	--	--	578.4	499.2
Dissolved Oxygen (mg/L)	--	--	9.02	4.04
pH	--	--	6.35	6.12
Redox Potential (mV)	--	--	66.5	168.1

PAL = Preventive Action Limit

ES = Enforcement Standards

BOLD

= Exceeds Enforcement Standard

Italic

= Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

-- = No NR140 Standard

J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Pace = Lab analysis conducted by Pace Analytical Services

² = NR140 Table 2 Public Welfare Groundwater Quality Standard

Table 4
Effluent PFAS Sample Results
Phillips Platting
384 N Lake Avenue
Phillips, WI
BRRTS# 02-51-559634



PFAS's (ng/L)	CAS Number	Proposed NR140 Enforcement Standard (ES)	Proposed NR140 Preventive Action Limit (PAL)	EPA Interim Screening Level	EPA Interim Preliminary Remediation Goal (PRG)	Collected By-->	WDNR
						Date-->	44666
						Sample-->	Industry 12
Associated QA/QC Sample-->						-	
Perfluoro-n-butanoic acid (PFBA)	375-22-4	10,000 ²	2,000 ²	--	--	<2.53	
Perfluoro-n-pentanoic acid (PPPeA)	2706-90-3	--	--	--	--	0.529	
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	150,000 ²	30,000 ²	--	--	11.5	
Perfluoro-n-hexadecanoic acid (PFHxDA)	67905-19-5	--	--	--	--	-	
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	--	--	--	--	2.08	
Perfluoro-n-octadecanoic acid (PFODA)	16517-11-6	400,000 ²	80,000 ²	--	--	-	
Perfluoro-n-octanoic acid (PFOA)	335-67-1	20 ^{1,3}	2 ^{1,3}	40 ⁵	70 ⁵	<0.176	
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	30 ²	3 ²	--	--	<0.141	
Perfluoro-n-decanoic acid (PFDA)	335-76-2	300 ²	60 ²	--	--	<0.137	
Perfluoro-n-undecanoic acid (PFUdA)	2058-94-8	3,000 ²	600 ²	--	--	<0.0171	
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	500 ²	100 ²	--	--	<0.232	
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	--	--	--	--	<0.222	
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	10,000 ²	2,000 ²	--	--	<0.449	
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	450,000 ²	90,000 ²	--	--	1.23	
Perfluoro-1-pentanesulfonic acid (PPPes)	2706-91-4	--	--	--	--	<0.0765	
Perfluoro-1-hexamersulfonic acid (PFHxS)	355-46-4	40 ²	4 ²	--	--	<0.0844	
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	--	--	--	--	0.283	
Perfluoro-1-octanesulfonic acid (PFOS)	1763-23-1	20 ^{1,3}	2 ^{1,3}	40 ⁵	70 ⁵	<0.791	
Perfluoro-1-nananesulfonic acid (PFNS)	68259-12-1	--	--	--	--	<0.173	
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	--	--	--	--	<0.179	
Perfluoro-1-dodecanesulfonic acid (PFDDOS)	79780-39-5	--	--	--	--	<0.812	
1H, 1H, 2H, 2H-perfluorohexane sulfonic acid (4:2 FTS)	757124-72-4	--	--	--	--	7.21	
1H, 1H, 2H, 2H-perfluoroctane sulfonic acid (6:2 FTS)	27619-97-2	--	--	--	--	977	
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	--	--	--	--	<0.120	
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	--	--	--	--	-	
Perfluoroctanesulfonamide (PFOSA)	754-91-6	20 ^{2,3}	2 ^{2,3}	--	--	0.885	
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	--	--	--	--	<0.421	
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	20 ^{2,3}	2 ^{2,3}	--	--	<0.286	
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	--	--	--	--	<0.177	
N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	20 ^{2,3}	2 ^{2,3}	--	--	<0.269	
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	--	--	--	--	<0.392	
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	20 ^{2,3}	2 ^{2,3}	--	--	<0.444	
Hexafluoropropylene oxide dimer acid (HPFO-DA; Gen X ⁵)	13252-13-6	3,000 ²	600 ²	--	--	<0.133	
4, 8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	300 ²	60 ²	--	--	<0.0922	
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CI-PF3ONS)	756426-58-1	--	--	--	--	<0.130	
11-chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3OUDS)	763051-92-9	--	--	--	--	<0.128	
Combined Standard ¹ (PFOA and PFOS)	--	20 ¹	2 ¹	--	70 ⁵	-	
Combined Standard ³ (EtFOSA, EtFOSAA, EtFOSE, PFOSA, PFOA, and PFOS)	--	20 ^{2,3}	2 ^{2,3}	--	--	0.9	
Hazard Index	--	1 ²	--	--	--	0.0	

Notes:

ng/L - Parts Per Trillion (ppt)

< = Concentration Below Laboratory Detection Limit

- = Not Sampled

-- = No Standard/Not Applicable

^j = Estimated concentration at or above the Limit of Detection (LOD) and below the Limit of Quantitation (LOQ)

¹ = WI DHS proposed groundwater standards for the protection of human health (Cycle 10 - June 21, 2019)

² = WI DHS proposed groundwater standards for the protection of human health (Cycle 11 - November 6, 2020)

³ = WI DHS recommends a combined standard for EtFOSA, EtFOSAA, EtFOSE, PFOSA, PFOA, and PFOS (Cycle 11 - November 6, 2020)

⁴ = ERP Interim Recommendations to Address Groundwater Contaminated with PFOA and PFOS (December 19, 2019)

⁵ = Gen X is a trade name for Hexafluoropropylene oxide dimer acid (HPFO-DA)

Bold	= Exceeds Proposed NR140.10 Enforcement Standard
<i>Italic</i>	= Exceeds Proposed NR140.10 Preventive Action Limit

Table 5
City of Phillips Municipal
Water Sampling Results – PFAS Compounds
Unique Well Numbers YP891 and BG722

Sample Group	Per/Poly-Fluoroalkyls (PFAS Form)	Sample ID	630421001
Source ID	7	Well #	YP891
Sample Date	7/12/2022	Sample Time	1145
Site ID	YP891	Sample Description	
Sample Type	Investigation	Reported Date	7/25/2022
Sample Source	Entry Point	# Taken	1
Sample Collector	TODD TOELLE	Lab Name	Wisconsin State Laboratory of Hygiene
Lab ID	113133790	Lab Comment	
Reason for No Results			

Sampling Results

Show 10 entries

Filter:

Store Code	Description	Result	Units	Qualifier	MCL	MCL Units	Labslip Order
X123	11CL-PF30UDS	0	NG/L	Non-detect		NG/L	1
X128	9CL-PF3ONS	0	NG/L	Non-detect		NG/L	2
X124	ADONA	0	NG/L	Non-detect		NG/L	3
X129	HFPO-DA	0	NG/L	Non-detect		NG/L	4
X131	NETFOSAA	0	NG/L	Non-detect		NG/L	5
X134	NMEOFSA	0	NG/L	Non-detect		NG/L	6
X137	PFBS	0	NG/L	Non-detect		NG/L	7
X140	PFDA	0	NG/L	Non-detect		NG/L	8
X141	PFDOA	0	NG/L	Non-detect		NG/L	9
X143	PFHPA	0	NG/L	Non-detect		NG/L	10

Sample Group	Per/Poly-Fluoroalkyls (PFAS Form)	Sample ID	630421001
Source ID	7	Well #	YP891
Sample Date	7/12/2022	Sample Time	1145
Site ID	YP891	Sample Description	
Sample Type	Investigation	Reported Date	7/25/2022
Sample Source	Entry Point	# Taken	1
Sample Collector	TODD TOELLE	Lab Name	Wisconsin State Laboratory of Hygiene
Lab ID	113133790	Lab Comment	
Reason for No Results			

Sampling Results

Show 10 entries

Filter:

Store Code	Description	Result	Units	Qualifier	MCL	MCL Units	Labslip Order
X146	PFHxA	0	NG/L	Non-detect		NG/L	11
X145	PFHxS	0	NG/L	Non-detect		NG/L	12
X147	PFNA	0	NG/L	Non-detect		NG/L	13
X150	PFOA	0	NG/L	Non-detect	70	NG/L	14
X149	PFOS	0	NG/L	Non-detect	70	NG/L	15
X153	PFTA	0	NG/L	Non-detect		NG/L	16
X154	PFTraDA	0	NG/L	Non-detect		NG/L	17
X155	PFUNA	0	NG/L	Non-detect		NG/L	18

Table 5
City of Phillips Municipal
Water Sampling Results – PFAS Compounds
Unique Well Numbers YP891 and BG722

Sample Group	Per/Poly-Fluoroalkyls (PFAS Form)	Sample ID	630417001
Source ID	6	Well #	BG722
Sample Date	7/12/2022	Sample Time	1130
Site ID	BG722	Sample Description	
Sample Type	Investigation	Reported Date	7/25/2022
Sample Source	Entry Point	# Taken	1
Sample Collector	TODD TOELLE	Lab Name	Wisconsin State Laboratory of Hygiene
Lab ID	11313790	Lab Comment	
Reason for No Results			

Sampling Results

Show 10 entries

Filter:

Store Code	Description	Result	Units	Qualifier	MCL	MCL Units	Labslip Order
X146	PFHXA	0	NG/L	Non-detect		NG/L	11
X145	PFHXS	0	NG/L	Non-detect		NG/L	12
X147	PFNA	0	NG/L	Non-detect		NG/L	13
X150	PFOA	0	NG/L	Non-detect	70	NG/L	14
X149	PFOS	0	NG/L	Non-detect	70	NG/L	15
X153	PFTA	0	NG/L	Non-detect		NG/L	16
X154	PFTrDA	0	NG/L	Non-detect		NG/L	17
X155	PFUNA	0	NG/L	Non-detect		NG/L	18

Sample Group	Per/Poly-Fluoroalkyls (PFAS Form)	Sample ID	630417001
Source ID	6	Well #	BG722
Sample Date	7/12/2022	Sample Time	1130
Site ID	BG722	Sample Description	
Sample Type	Investigation	Reported Date	7/25/2022
Sample Source	Entry Point	# Taken	1
Sample Collector	TODD TOELLE	Lab Name	Wisconsin State Laboratory of Hygiene
Lab ID	11313790	Lab Comment	
Reason for No Results			

Sampling Results

Show 10 entries

Filter:

Store Code	Description	Result	Units	Qualifier	MCL	MCL Units	Labslip Order
X123	11CL-PF3OUDS	0	NG/L	Non-detect		NG/L	1
X128	9CL-PF3ONS	0	NG/L	Non-detect		NG/L	2
X124	ADONA	0	NG/L	Non-detect		NG/L	3
X129	HFPO-DA	0	NG/L	Non-detect		NG/L	4
X131	NETFOSAA	0	NG/L	Non-detect		NG/L	5
X134	NMEFOSAA	0	NG/L	Non-detect		NG/L	6
X137	PFBS	0	NG/L	Non-detect		NG/L	7
X140	PFDA	0	NG/L	Non-detect		NG/L	8
X141	PFDOA	0	NG/L	Non-detect		NG/L	9
X143	PFHPA	0	NG/L	Non-detect		NG/L	10



DRAWING FILE: P:\6\00-6999\6\34B-PHILIPS PLATING\PWG\634B-VICN.DWG LAYOUT: VICN PLOTTED: JAN 19, 2017 - 8:31AM PLOTTED BY: NATHANP

SCALE 1:24 000

The scale bar diagram consists of three horizontal bars. The top bar represents distance in feet, ranging from 0 to 7000 with major tick marks every 1000 feet. The middle bar represents distance in feet, ranging from 0 to 7000 with major tick marks every 1000 feet. The bottom bar represents distance in kilometers, ranging from 0 to 1 with major tick marks at .5 and 1. Above the top bar, the text "1 MILE" is written. Below the bottom bar, the text "CONTOUR INTERVAL 10 FEET" and "NATIONAL GEODETIC VERTICAL DATUM OF 1929" are written.

1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

**UTM GRID AND 1984 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET**

PHILLIPS, WIS.
NW/4 PHILLIPS 15' QUADRANGLE
45090-F4-TF-024

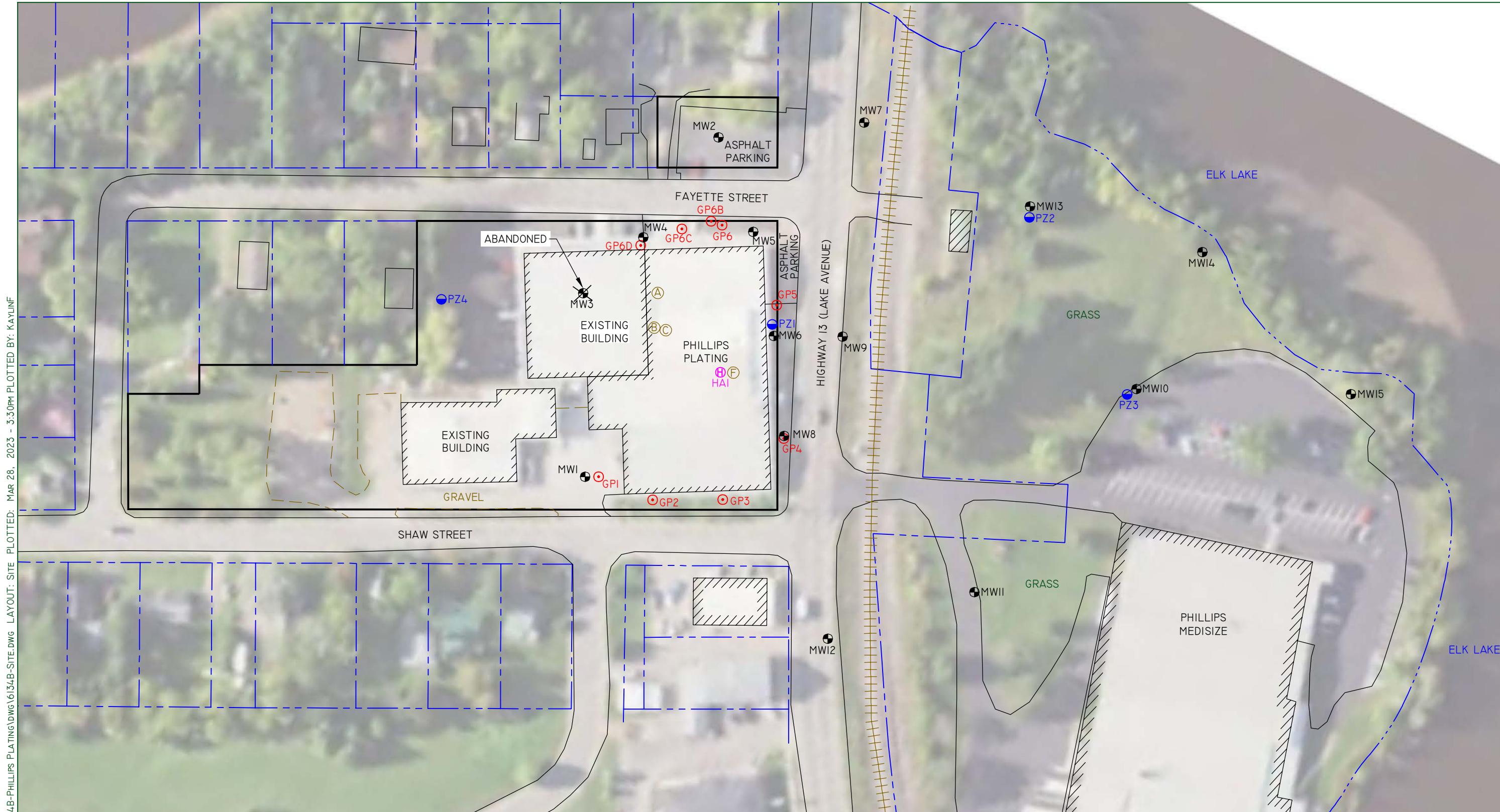
DMA 2975 III NW-SERIES V861



QUADRANGLE LOCATION

REI Engineering, INC.

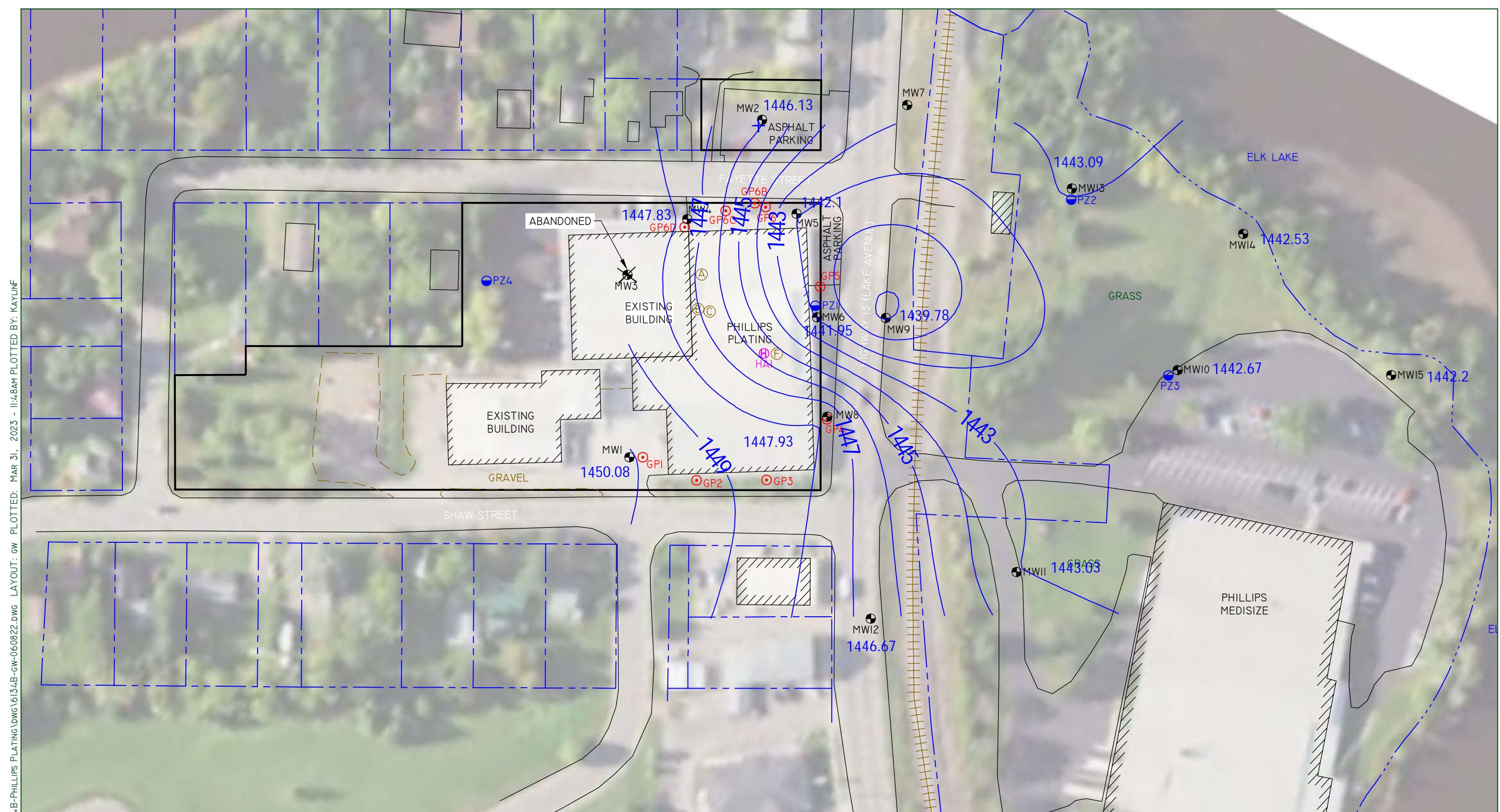
DRAWING F	<p>PHILLIPS PLATING CORP. 984 N LAKE AVENUE PHILLIPS, WISCONSIN</p>	<p>RE: Engineering, Inc.</p> <p>FIGURE 1 : SITE VICINITY MAP</p>
	PROJECT NO.	DRAWN BY:
	6134B	NAP
		DATE: 12/13/12



PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 2 : SITE MAP

PROJECT No.	DRAWN BY:	DATE:
6134B	KDF	03/28/2023



NOTES:

1. ELEVATION DATA IS PRESENTED IN FEET MEAN SEA LEVEL (MSL).
2. GROUNDWATER CONTOUR MAP IS BASED ON DEPTH TO GROUNDWATER MEASUREMENTS COLLECTED FROM WATER TABLE OBSERVATION WELLS DURING THE JUNE 8, 2022 GROUNDWATER MONITORING EVENT.

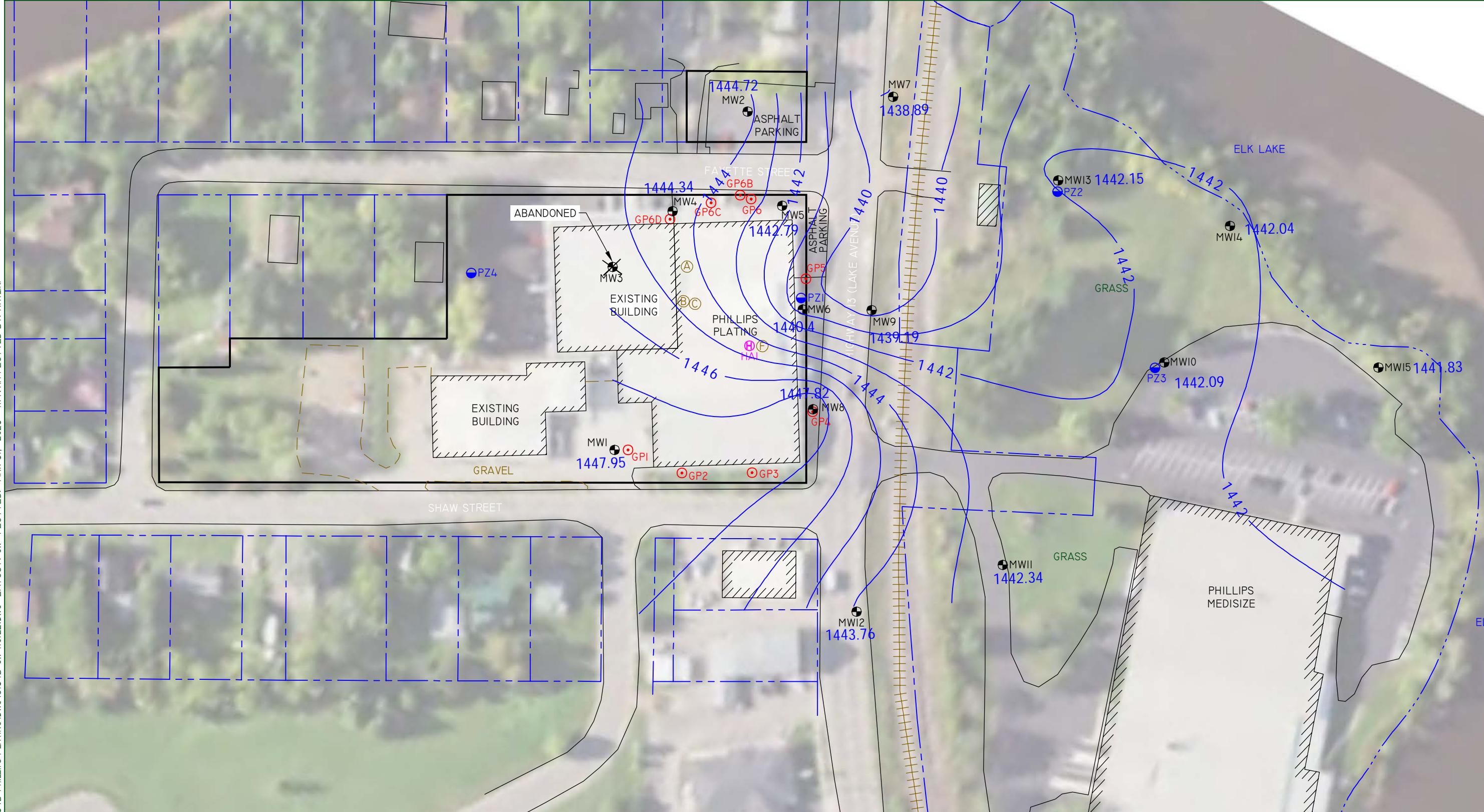


PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 3a : GROUNDWATER CONTOUR MAP (06/08/2022)

PROJECT No.	DRAWN BY:	DATE:
6134B	KDF	03/28/2023

REI Engineering, INC.

**NOTES:**

1. ELEVATION DATA IS PRESENTED IN FEET MEAN SEA LEVEL (MSL).
2. GROUNDWATER CONTOUR MAP IS BASED ON DEPTH TO GROUNDWATER MEASUREMENTS COLLECTED FROM WATER TABLE OBSERVATION WELLS DURING THE NOVEMBER 1, 2022 GROUNDWATER MONITORING EVENT.



PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 3b : GROUNDWATER CONTOUR MAP (11/01/2022)

PROJECT No.	DRAWN BY:	DATE:
6134B	KDF	03/28/2023



NOTES:

- ELEVATION DATA IS PRESENTED IN FEET MEAN SEA LEVEL (MSL).
- PIEZOMETRIC CONTOUR MAP IS BASED ON DEPTH TO GROUNDWATER MEASUREMENTS COLLECTED FROM PIEZOMETER WELLS DURING THE JUNE 8, 2022 GROUNDWATER MONITORING EVENT.

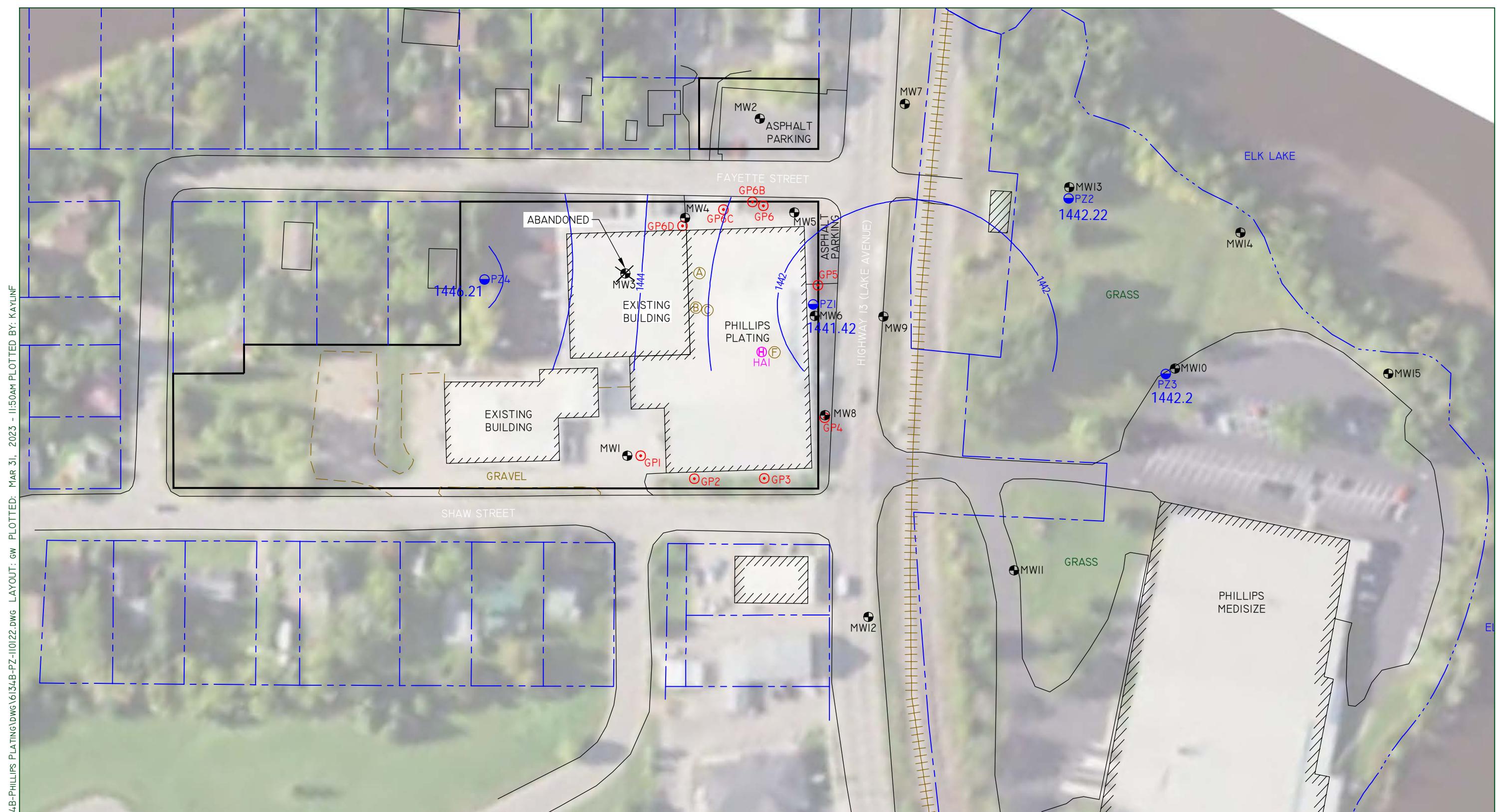


PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 4A : PIEZOMETRIC CONTOUR MAP (06/08/22)

PROJECT No. 6134B	DRAWN BY: KDF	DATE: 03/27/2023
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REI Engineering, Inc.

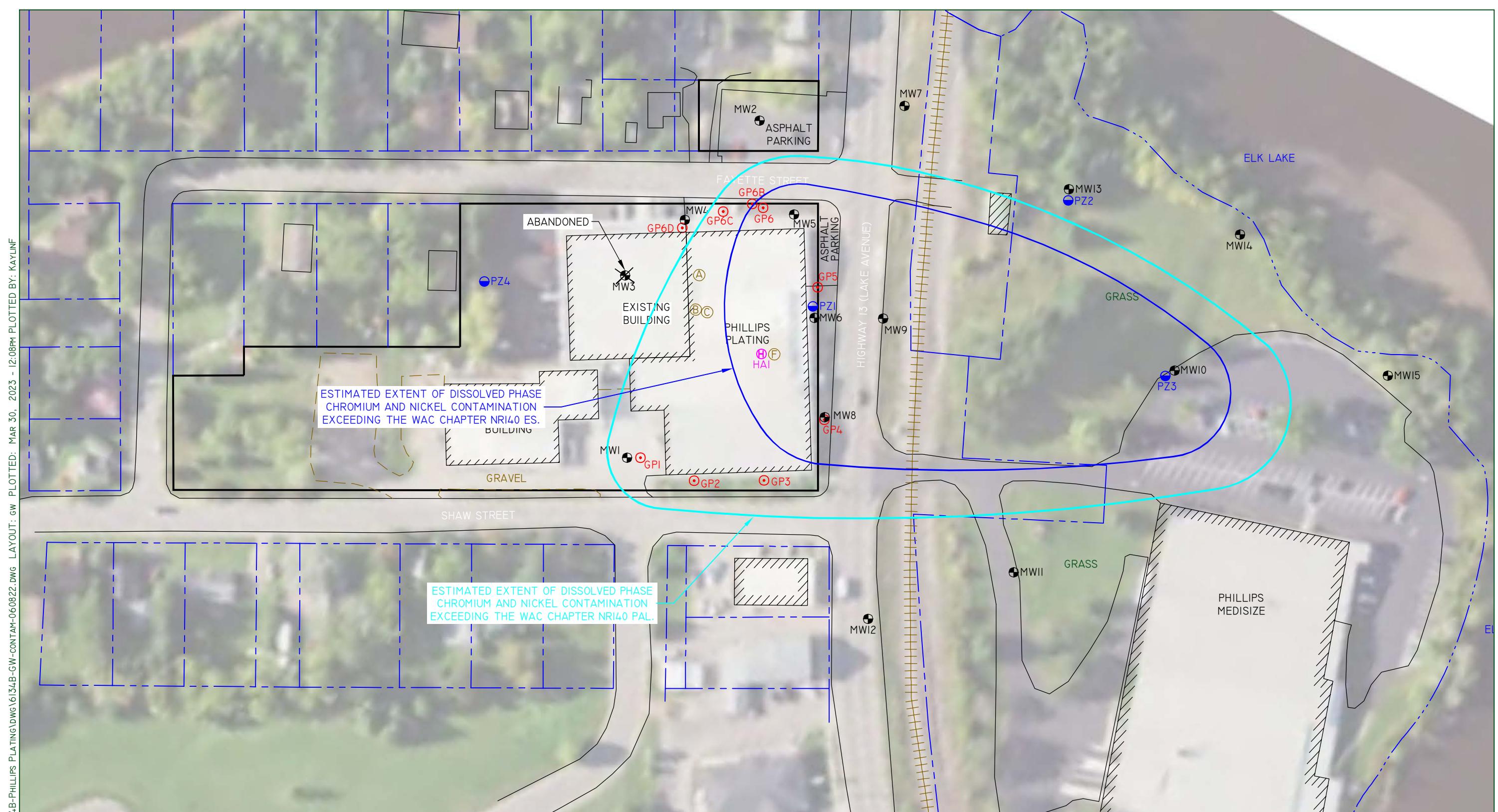


PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 4B : PIEZOMETRIC CONTOUR MAP (11/01/22)

PROJECT No.	DRAWN BY:	DATE:
6134B	KDF	03/27/2023

REI Engineering, Inc.



SCALE		LEGEND
0	50	100
(○)	GEOPROBE SOIL BORING	
(●)	MONITORING WELL	
(●)	PIEZOMETER	
(—)	PROPERTY BOUNDARY	
(—)	PHILLIPS PLATING PROPERTY	
(A)	550 GALLON SPILL CATCH TANK	
(B)	5500 GALLON WASTE TREATMENT PROCESS TANK (STORAGE TANK)	
(C)	1500 GALLON WASTE TREATMENT PROCESS TANK (WASTE TREATMENT COLLECTION TANK)	
(F)	600 GALLON WASTE TREATMENT PROCESS TANK (PLATING LINE COLLECTION TANK)	

NOTES:
I. GROUNDWATER ISOCONCENTRATIONS ARE BASED ON LABORATORY ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED DURING THE JUNE 8 & 9, 2022 GROUNDWATER MONITORING EVENT COMPARED TO WISCONSIN ADMINISTRATIVE CODE (WAC) CHAPTER NRI40 ENFORCEMENT STANDARDS (ES) AND PREVENTIVE ACTION LIMITS (PAL).

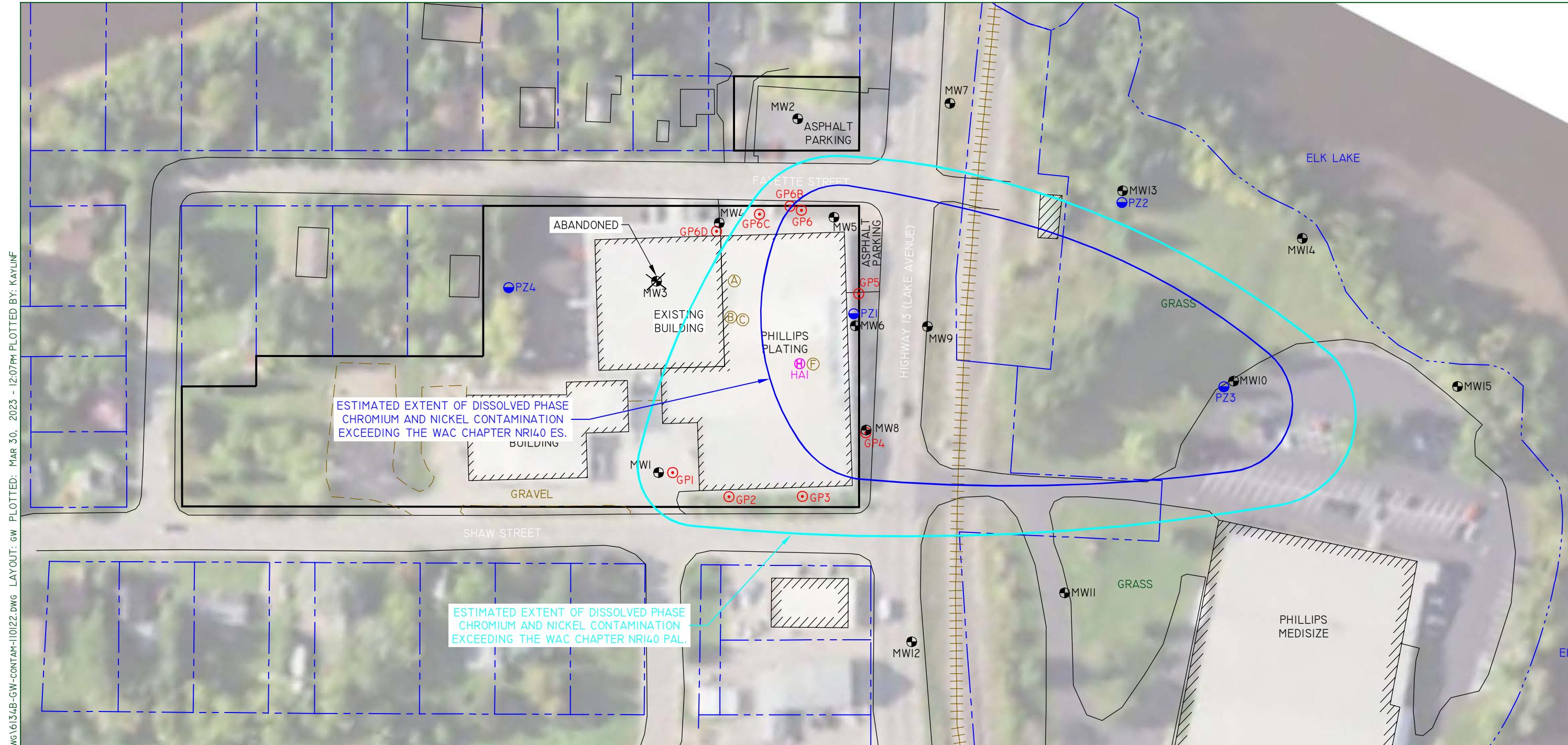


PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 5a : GROUNDWATER ISOCONCENTRATION (06/08/2022)

PROJECT No.	DRAWN BY:	DATE:
6134B	KDF	03/28/2023

REI Engineering, Inc.



SCALE		LEGEND
0	50	100
(○)	GEOPROBE SOIL BORING	
(●)	MONITORING WELL	
(●)	PIEZOMETER	
(—)	PROPERTY BOUNDARY	
(—)	PHILLIPS PLATING PROPERTY	
(A)	550 GALLON SPILL CATCH TANK	
(B)	5500 GALLON WASTE TREATMENT PROCESS TANK (STORAGE TANK)	
(C)	1500 GALLON WASTE TREATMENT PROCESS TANK (WASTE TREATMENT COLLECTION TANK)	
(F)	600 GALLON WASTE TREATMENT PROCESS TANK (PLATING LINE COLLECTION TANK)	

NOTES:
I. GROUNDWATER ISOCONCENTRATIONS ARE BASED ON LABORATORY ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED DURING THE NOVEMBER 1, 2022 GROUNDWATER MONITORING EVENT COMPARED TO WISCONSIN ADMINISTRATIVE CODE (WAC) CHAPTER NRI40 ENFORCEMENT STANDARDS (ES) AND PREVENTIVE ACTION LIMITS (PAL).



PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 5b : GROUNDWATER ISOCONCENTRATION (11/01/2022)

PROJECT No.	DRAWN BY:	DATE:
6134B	KDF	03/30/2023

REI Engineering, Inc.

ATTACHMENT A

LABORATORY ANALYTICAL REPORTS



June 23, 2022

Ken Lassa
REI
4080 North 20th Avenue
Wausau, WI 54401

RE: Project: 6134B PHILLIPS PLATING
Pace Project No.: 40246195

Dear Ken Lassa:

Enclosed are the analytical results for sample(s) received by the laboratory on June 09, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Kaylin Felix, REI



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40246195

Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150

Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40246195

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40246195001	MW-1	Water	06/08/22 07:05	06/09/22 08:45
40246195002	MW-2	Water	06/08/22 07:30	06/09/22 08:45
40246195003	MW-4	Water	06/08/22 07:50	06/09/22 08:45
40246195004	MW-5	Water	06/08/22 12:00	06/09/22 08:45
40246195005	MW-6	Water	06/08/22 13:20	06/09/22 08:45
40246195006	MW-8	Water	06/08/22 13:40	06/09/22 08:45
40246195007	MW-9	Water	06/08/22 08:45	06/09/22 08:45
40246195008	MW-10	Water	06/08/22 10:45	06/09/22 08:45
40246195009	MW-11	Water	06/08/22 09:00	06/09/22 08:45
40246195010	MW-12	Water	06/08/22 08:15	06/09/22 08:45
40246195011	MW-13	Water	06/08/22 10:30	06/09/22 08:45
40246195012	MW-14	Water	06/08/22 10:00	06/09/22 08:45
40246195013	MW-15	Water	06/08/22 09:30	06/09/22 08:45
40246195014	PZ-1	Water	06/08/22 13:00	06/09/22 08:45
40246195015	PZ-2	Water	06/08/22 10:25	06/09/22 08:45
40246195016	PZ-3	Water	06/08/22 11:00	06/09/22 08:45

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SAMPLE ANALYTE COUNT

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40246195

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40246195001	MW-1	EPA 6010D	TXW	4
		SM 3500-Cr B	HNT	1
		EPA 300.0	HMB	2
40246195002	MW-2	EPA 6010D	TXW	4
		SM 3500-Cr B	HNT	1
		EPA 300.0	HMB	2
40246195003	MW-4	EPA 6010D	TXW	4
		SM 3500-Cr B	HNT	1
		EPA 300.0	HMB	2
40246195004	MW-5	EPA 6010D	TXW	4
		SM 3500-Cr B	HNT	1
		EPA 300.0	HMB	2
40246195005	MW-6	EPA 6010D	TXW	4
		SM 3500-Cr B	HNT	1
		EPA 300.0	HMB	2
40246195006	MW-8	EPA 6010D	TXW	4
		SM 3500-Cr B	HNT	1
		EPA 300.0	HMB	2
40246195007	MW-9	EPA 6010D	TXW	4
		SM 3500-Cr B	HNT	1
		EPA 300.0	HMB	2
40246195008	MW-10	EPA 6010D	TXW	4
		SM 3500-Cr B	HNT	1
		EPA 300.0	HMB	2
40246195009	MW-11	EPA 6010D	TXW	4
		SM 3500-Cr B	HNT	1
		EPA 300.0	HMB	2
40246195010	MW-12	EPA 6010D	TXW	4
		SM 3500-Cr B	HNT	1
		EPA 300.0	HMB	2
40246195011	MW-13	EPA 6010D	TXW	4
		SM 3500-Cr B	HNT	1
		EPA 300.0	HMB	2
40246195012	MW-14	EPA 6010D	TXW	4
		SM 3500-Cr B	HNT	1
		EPA 300.0	HMB	2
40246195013	MW-15	EPA 6010D	TXW	4

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SAMPLE ANALYTE COUNT

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40246195

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40246195014	PZ-1	SM 3500-Cr B	HNT	1
		EPA 300.0	HMB	2
	PZ-2	EPA 6010D	TXW	4
		SM 3500-Cr B	HNT	1
40246195015	PZ-3	EPA 300.0	HMB	2
		EPA 6010D	TXW	4
	PZ-4	SM 3500-Cr B	HNT	1
		EPA 300.0	HMB	2
40246195016	PZ-5	EPA 6010D	TXW	4
		SM 3500-Cr B	HNT	1
	PZ-6	EPA 300.0	HMB	2
		EPA 6010D	TXW	4

PASI-G = Pace Analytical Services - Green Bay

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40246195

Sample: MW-1	Lab ID: 40246195001	Collected: 06/08/22 07:05	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	06/10/22 06:25	06/10/22 20:04	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	06/10/22 06:25	06/10/22 20:04	7439-89-6	
Manganese, Dissolved	<1.5	ug/L	5.0	1.5	1	06/10/22 06:25	06/10/22 20:04	7439-96-5	
Nickel, Dissolved	23.5	ug/L	10.0	2.6	1	06/10/22 06:25	06/10/22 20:04	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.018	mg/L	0.061	0.018	2.5		06/20/22 15:08		D3,H2
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	10.9	mg/L	0.75	0.22	5		06/09/22 11:34	14797-55-8	
Sulfate	38.0	mg/L	10.0	2.2	5		06/09/22 11:34	14808-79-8	
Sample: MW-2	Lab ID: 40246195002	Collected: 06/08/22 07:30	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	06/10/22 06:25	06/10/22 20:06	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	06/10/22 06:25	06/10/22 20:06	7439-89-6	
Manganese, Dissolved	27.9	ug/L	5.0	1.5	1	06/10/22 06:25	06/10/22 20:06	7439-96-5	
Nickel, Dissolved	7.2J	ug/L	10.0	2.6	1	06/10/22 06:25	06/10/22 20:06	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		06/20/22 15:08		D3,H2
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	28.4	mg/L	3.0	0.88	20		06/09/22 22:33	14797-55-8	
Sulfate	23.5	mg/L	10.0	2.2	5		06/09/22 12:18	14808-79-8	
Sample: MW-4	Lab ID: 40246195003	Collected: 06/08/22 07:50	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	06/10/22 06:25	06/10/22 20:09	7440-47-3	

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ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40246195

Sample: MW-4	Lab ID: 40246195003	Collected: 06/08/22 07:50	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Iron, Dissolved	<56.7	ug/L	100	56.7	1	06/10/22 06:25	06/10/22 20:09	7439-89-6	
Manganese, Dissolved	7.9	ug/L	5.0	1.5	1	06/10/22 06:25	06/10/22 20:09	7439-96-5	
Nickel, Dissolved	4.3J	ug/L	10.0	2.6	1	06/10/22 06:25	06/10/22 20:09	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.037	mg/L	0.12	0.037	5		06/20/22 15:08		D3,H2
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	3.5	mg/L	0.75	0.22	5		06/09/22 12:33	14797-55-8	
Sulfate	11.5	mg/L	10.0	2.2	5		06/09/22 12:33	14808-79-8	
Sample: MW-5	Lab ID: 40246195004	Collected: 06/08/22 12:00	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	105	ug/L	10.0	2.5	1	06/10/22 06:25	06/10/22 20:11	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	06/10/22 06:25	06/10/22 20:11	7439-89-6	
Manganese, Dissolved	212	ug/L	5.0	1.5	1	06/10/22 06:25	06/10/22 20:11	7439-96-5	
Nickel, Dissolved	4920	ug/L	10.0	2.6	1	06/10/22 06:25	06/10/22 20:11	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.073	mg/L	0.24	0.073	10		06/20/22 15:09		D3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	7.5	mg/L	0.75	0.22	5		06/09/22 12:48	14797-55-8	
Sulfate	35.3	mg/L	10.0	2.2	5		06/09/22 12:48	14808-79-8	
Sample: MW-6	Lab ID: 40246195005	Collected: 06/08/22 13:20	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	301	ug/L	10.0	2.5	1	06/10/22 06:25	06/10/22 20:14	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	06/10/22 06:25	06/10/22 20:14	7439-89-6	

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ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40246195

Sample: MW-6	Lab ID: 40246195005	Collected: 06/08/22 13:20	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Manganese, Dissolved	4.2J	ug/L	5.0	1.5	1	06/10/22 06:25	06/10/22 20:14	7439-96-5	
Nickel, Dissolved	313	ug/L	10.0	2.6	1	06/10/22 06:25	06/10/22 20:14	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		06/20/22 15:10		D3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	11.4	mg/L	1.5	0.44	10		06/09/22 13:03	14797-55-8	
Sulfate	5.5J	mg/L	20.0	4.4	10		06/09/22 13:03	14808-79-8	D3
Sample: MW-8	Lab ID: 40246195006	Collected: 06/08/22 13:40	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	5880	ug/L	100	25.5	10	06/10/22 06:25	06/13/22 18:28	7440-47-3	
Iron, Dissolved	<567	ug/L	1000	567	10	06/10/22 06:25	06/13/22 18:28	7439-89-6	D3
Manganese, Dissolved	1430	ug/L	50.0	15.4	10	06/10/22 06:25	06/13/22 18:28	7439-96-5	
Nickel, Dissolved	15300	ug/L	100	26.2	10	06/10/22 06:25	06/13/22 18:28	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	3.4	mg/L	0.24	0.073	10		06/20/22 15:11		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	11.7	mg/L	0.75	0.22	5		06/09/22 13:17	14797-55-8	
Sulfate	234	mg/L	10.0	2.2	5		06/09/22 13:17	14808-79-8	
Sample: MW-9	Lab ID: 40246195007	Collected: 06/08/22 08:45	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	243	ug/L	10.0	2.5	1	06/10/22 06:25	06/10/22 20:23	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	06/10/22 06:25	06/10/22 20:23	7439-89-6	
Manganese, Dissolved	111	ug/L	5.0	1.5	1	06/10/22 06:25	06/10/22 20:23	7439-96-5	

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ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40246195

Sample: MW-9	Lab ID: 40246195007	Collected: 06/08/22 08:45	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Nickel, Dissolved	674	ug/L	10.0	2.6	1	06/10/22 06:25	06/10/22 20:23	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	0.11J	mg/L	0.24	0.073	10		06/20/22 15:12		D3,H2
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	8.4	mg/L	0.75	0.22	5		06/09/22 14:17	14797-55-8	
Sulfate	48.2	mg/L	10.0	2.2	5		06/09/22 14:17	14808-79-8	
Sample: MW-10	Lab ID: 40246195008	Collected: 06/08/22 10:45	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	165	ug/L	10.0	2.5	1	06/10/22 06:25	06/10/22 20:26	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	06/10/22 06:25	06/10/22 20:26	7439-89-6	
Manganese, Dissolved	<1.5	ug/L	5.0	1.5	1	06/10/22 06:25	06/10/22 20:26	7439-96-5	
Nickel, Dissolved	10.8	ug/L	10.0	2.6	1	06/10/22 06:25	06/10/22 20:26	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	0.25	mg/L	0.024	0.0073	1		06/20/22 15:12		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	2.8	mg/L	0.15	0.044	1		06/09/22 14:32	14797-55-8	
Sulfate	22.7	mg/L	2.0	0.44	1		06/09/22 14:32	14808-79-8	
Sample: MW-11	Lab ID: 40246195009	Collected: 06/08/22 09:00	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	06/10/22 06:25	06/10/22 20:28	7440-47-3	
Iron, Dissolved	219	ug/L	100	56.7	1	06/10/22 06:25	06/10/22 20:28	7439-89-6	
Manganese, Dissolved	165	ug/L	5.0	1.5	1	06/10/22 06:25	06/10/22 20:28	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	06/10/22 06:25	06/10/22 20:28	7440-02-0	

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ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40246195

Sample: MW-11	Lab ID: 40246195009	Collected: 06/08/22 09:00	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.073	mg/L	0.24	0.073	10		06/20/22 15:12		D3,H2
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	5.1	mg/L	0.75	0.22	5		06/09/22 14:47	14797-55-8	
Sulfate	18.8	mg/L	10.0	2.2	5		06/09/22 14:47	14808-79-8	
Sample: MW-12	Lab ID: 40246195010	Collected: 06/08/22 08:15	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	06/10/22 06:25	06/10/22 20:31	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	06/10/22 06:25	06/10/22 20:31	7439-89-6	
Manganese, Dissolved	<1.5	ug/L	5.0	1.5	1	06/10/22 06:25	06/10/22 20:31	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	06/10/22 06:25	06/10/22 20:31	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.073	mg/L	0.24	0.073	10		06/21/22 13:26		D3,H2, H3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	4.8	mg/L	0.75	0.22	5		06/09/22 15:01	14797-55-8	
Sulfate	10.7	mg/L	10.0	2.2	5		06/09/22 15:01	14808-79-8	
Sample: MW-13	Lab ID: 40246195011	Collected: 06/08/22 10:30	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	4.4J	ug/L	10.0	2.5	1	06/10/22 06:25	06/10/22 20:33	7440-47-3	
Iron, Dissolved	14100	ug/L	100	56.7	1	06/10/22 06:25	06/10/22 20:33	7439-89-6	
Manganese, Dissolved	2730	ug/L	5.0	1.5	1	06/10/22 06:25	06/10/22 20:33	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	06/10/22 06:25	06/10/22 20:33	7440-02-0	

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ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40246195

Sample: MW-13	Lab ID: 40246195011	Collected: 06/08/22 10:30	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.18	mg/L	0.61	0.18	25		06/21/22 13:26		D3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	<0.044	mg/L	0.15	0.044	1		06/09/22 15:16	14797-55-8	
Sulfate	0.70J	mg/L	2.0	0.44	1		06/09/22 15:16	14808-79-8	
Sample: MW-14	Lab ID: 40246195012	Collected: 06/08/22 10:00	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	06/10/22 06:25	06/10/22 20:36	7440-47-3	
Iron, Dissolved	7940	ug/L	100	56.7	1	06/10/22 06:25	06/10/22 20:36	7439-89-6	
Manganese, Dissolved	480	ug/L	5.0	1.5	1	06/10/22 06:25	06/10/22 20:36	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	06/10/22 06:25	06/10/22 20:36	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		06/21/22 13:27		D3,H2
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	<0.044	mg/L	0.15	0.044	1		06/09/22 15:31	14797-55-8	
Sulfate	12.6	mg/L	2.0	0.44	1		06/09/22 15:31	14808-79-8	
Sample: MW-15	Lab ID: 40246195013	Collected: 06/08/22 09:30	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	06/10/22 06:25	06/10/22 20:38	7440-47-3	
Iron, Dissolved	566	ug/L	100	56.7	1	06/10/22 06:25	06/10/22 20:38	7439-89-6	
Manganese, Dissolved	30.6	ug/L	5.0	1.5	1	06/10/22 06:25	06/10/22 20:38	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	06/10/22 06:25	06/10/22 20:38	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.18	mg/L	0.61	0.18	25		06/21/22 13:27		D3,H2

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40246195

Sample: MW-15	Lab ID: 40246195013	Collected: 06/08/22 09:30	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	0.14J	mg/L	0.15	0.044	1		06/09/22 15:46	14797-55-8	
Sulfate	2.6	mg/L	2.0	0.44	1		06/09/22 15:46	14808-79-8	
Sample: PZ-1	Lab ID: 40246195014	Collected: 06/08/22 13:00	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	369	ug/L	10.0	2.5	1	06/10/22 06:25	06/10/22 20:41	7440-47-3	
Iron, Dissolved	345	ug/L	100	56.7	1	06/10/22 06:25	06/10/22 20:41	7439-89-6	
Manganese, Dissolved	9.9	ug/L	5.0	1.5	1	06/10/22 06:25	06/10/22 20:41	7439-96-5	
Nickel, Dissolved	3.2J	ug/L	10.0	2.6	1	06/10/22 06:25	06/10/22 20:41	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.037	mg/L	0.12	0.037	5		06/21/22 13:28		D3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	4.9	mg/L	0.75	0.22	5		06/09/22 16:07	14797-55-8	
Sulfate	53.5	mg/L	10.0	2.2	5		06/09/22 16:07	14808-79-8	
Sample: PZ-2	Lab ID: 40246195015	Collected: 06/08/22 10:25	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	06/17/22 05:46	06/20/22 20:29	7440-47-3	
Iron, Dissolved	390	ug/L	100	56.7	1	06/17/22 05:46	06/20/22 20:29	7439-89-6	
Manganese, Dissolved	200	ug/L	5.0	1.5	1	06/17/22 05:46	06/20/22 20:29	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	06/17/22 05:46	06/20/22 20:29	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	0.37	mg/L	0.12	0.037	5		06/21/22 13:28		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	<0.044	mg/L	0.15	0.044	1		06/09/22 16:21	14797-55-8	

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ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40246195

Sample: PZ-2	Lab ID: 40246195015	Collected: 06/08/22 10:25	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Sulfate	9.4	mg/L		2.0	0.44	1		06/09/22 16:21	14808-79-8
Sample: PZ-3	Lab ID: 40246195016	Collected: 06/08/22 11:00	Received: 06/09/22 08:45	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	484	ug/L		10.0	2.5	1	06/17/22 05:46	06/20/22 20:31	7440-47-3
Iron, Dissolved	<56.7	ug/L		100	56.7	1	06/17/22 05:46	06/20/22 20:31	7439-89-6
Manganese, Dissolved	51.0	ug/L		5.0	1.5	1	06/17/22 05:46	06/20/22 20:31	7439-96-5
Nickel, Dissolved	939	ug/L		10.0	2.6	1	06/17/22 05:46	06/20/22 20:31	7440-02-0
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	0.59	mg/L		0.12	0.037	5		06/21/22 13:28	
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	5.1	mg/L		0.75	0.22	5		06/09/22 16:36	14797-55-8
Sulfate	30.2	mg/L		10.0	2.2	5		06/09/22 16:36	14808-79-8

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40246195

QC Batch: 417945 Analysis Method: EPA 6010D

QC Batch Method: EPA 3010A Analysis Description: 6010D MET Dissolved

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40246195001, 40246195002, 40246195003, 40246195004, 40246195005, 40246195006, 40246195007,
40246195008, 40246195009, 40246195010, 40246195011, 40246195012, 40246195013, 40246195014

METHOD BLANK: 2407038 Matrix: Water

Associated Lab Samples: 40246195001, 40246195002, 40246195003, 40246195004, 40246195005, 40246195006, 40246195007,
40246195008, 40246195009, 40246195010, 40246195011, 40246195012, 40246195013, 40246195014

Parameter	Units	Blank		Reporting		Qualifiers
		Result	Limit	Analyzed		
Chromium, Dissolved	ug/L	<2.5	10.0	06/10/22 19:30		
Iron, Dissolved	ug/L	<56.7	100	06/10/22 19:30		
Manganese, Dissolved	ug/L	<1.5	5.0	06/10/22 19:30		
Nickel, Dissolved	ug/L	<2.6	10.0	06/10/22 19:30		

LABORATORY CONTROL SAMPLE: 2407039

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Chromium, Dissolved	ug/L	250	251	100	80-120	
Iron, Dissolved	ug/L	10000	9840	98	80-120	
Manganese, Dissolved	ug/L	250	251	100	80-120	
Nickel, Dissolved	ug/L	250	254	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2407040 2407041

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	Limits	RPD	Max
		40246106001	Spike	Spike	Result	Result	% Rec	% Rec	RPD	RPD	Qual
Chromium, Dissolved	ug/L	250	250	252	259	100	103	75-125	3	20	
Iron, Dissolved	ug/L	10000	10000	10000	10300	100	103	75-125	3	20	
Manganese, Dissolved	ug/L	250	250	246	252	98	101	75-125	2	20	
Nickel, Dissolved	ug/L	250	250	250	257	100	103	75-125	3	20	

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QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40246195

QC Batch: 418607 Analysis Method: EPA 6010D

QC Batch Method: EPA 3010A Analysis Description: 6010D MET Dissolved

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40246195015, 40246195016

METHOD BLANK: 2410827 Matrix: Water

Associated Lab Samples: 40246195015, 40246195016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Dissolved	ug/L	<2.5	10.0	06/21/22 10:43	
Iron, Dissolved	ug/L	<56.7	100	06/21/22 10:43	
Manganese, Dissolved	ug/L	<1.5	5.0	06/21/22 10:43	
Nickel, Dissolved	ug/L	<2.6	10.0	06/21/22 10:43	

LABORATORY CONTROL SAMPLE: 2410828

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	250	257	103	80-120	
Iron, Dissolved	ug/L	10000	10100	101	80-120	
Manganese, Dissolved	ug/L	250	260	104	80-120	
Nickel, Dissolved	ug/L	250	267	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2410829 2410830

Parameter	Units	40246647001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	RPD	Max Qual
Chromium, Dissolved	ug/L	<2.5	250	250	254	248	101	99	75-125	2	20	
Iron, Dissolved	ug/L	332	10000	10000	10300	10000	99	97	75-125	2	20	
Manganese, Dissolved	ug/L	160	250	250	419	406	104	99	75-125	3	20	
Nickel, Dissolved	ug/L	44.1	250	250	305	298	105	102	75-125	2	20	

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QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40246195

QC Batch:	418840	Analysis Method:	SM 3500-Cr B
QC Batch Method:	SM 3500-Cr B	Analysis Description:	Chromium, Hexavalent by 3500
		Laboratory:	Pace Analytical Services - Green Bay
Associated Lab Samples:	40246195001, 40246195002, 40246195003, 40246195004, 40246195005, 40246195006, 40246195007, 40246195008, 40246195009		

METHOD BLANK: 2411986 Matrix: Water

Associated Lab Samples: 40246195001, 40246195002, 40246195003, 40246195004, 40246195005, 40246195006, 40246195007, 40246195008, 40246195009

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
Chromium, Hexavalent	mg/L	<0.0073	0.024	06/20/22 15:06	

LABORATORY CONTROL SAMPLE: 2411987

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Chromium, Hexavalent	mg/L	0.3	0.31	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2411988 2411989

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	RPD	Max
		Result	Spike								
Chromium, Hexavalent	mg/L	40246449001	0.3	0.3	0.31	0.29	102	96	90-110	6	20

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QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40246195

QC Batch:	418917	Analysis Method:	SM 3500-Cr B
QC Batch Method:	SM 3500-Cr B	Analysis Description:	Chromium, Hexavalent by 3500
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40246195010, 40246195011, 40246195012, 40246195013, 40246195014, 40246195015, 40246195016

METHOD BLANK: 2412352 Matrix: Water

Associated Lab Samples: 40246195010, 40246195011, 40246195012, 40246195013, 40246195014, 40246195015, 40246195016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.0073	0.024	06/21/22 13:25	

LABORATORY CONTROL SAMPLE: 2412353

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.3	0.30	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2412383 2412384

Parameter	Units	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/L	40246467001	<0.0073	0.3	0.3	0.039	0.038	13	12	90-110	2 20 M0

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QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40246195

QC Batch: 417868 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40246195001, 40246195002, 40246195003, 40246195004, 40246195005, 40246195006, 40246195007,
40246195008, 40246195009, 40246195010, 40246195011, 40246195012, 40246195013, 40246195014,
40246195015, 40246195016

METHOD BLANK: 2406481 Matrix: Water

Associated Lab Samples: 40246195001, 40246195002, 40246195003, 40246195004, 40246195005, 40246195006, 40246195007,
40246195008, 40246195009, 40246195010, 40246195011, 40246195012, 40246195013, 40246195014,
40246195015, 40246195016

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
Nitrate as N	mg/L	<0.044	0.15	06/09/22 11:04	
Sulfate	mg/L	<0.44	2.0	06/09/22 11:04	

LABORATORY CONTROL SAMPLE: 2406482

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Nitrate as N	mg/L	1.5	1.5	102	90-110	
Sulfate	mg/L	20	20.4	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2406483 2406484

Parameter	Units	40246195001	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	RPD	Max
		Result	Spike	Spike								
Nitrate as N	mg/L	10.9	7.5	7.5	18.2	18.1	98	96	90-110	90-110	1	15
Sulfate	mg/L	38.0	100	100	145	144	107	106	90-110	90-110	1	15

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2406485 2406486

Parameter	Units	40246195016	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	RPD	Max
		Result	Spike	Spike								
Nitrate as N	mg/L	5.1	7.5	7.5	12.8	12.7	102	100	90-110	90-110	1	15
Sulfate	mg/L	30.2	100	100	138	135	107	105	90-110	90-110	2	15

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QUALIFIERS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40246195

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

H2 Extraction or preparation was conducted outside of the recognized method holding time.

H3 Sample was received or analysis requested beyond the recognized method holding time.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40246195

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40246195001	MW-1	EPA 3010A	417945	EPA 6010D	418026
40246195002	MW-2	EPA 3010A	417945	EPA 6010D	418026
40246195003	MW-4	EPA 3010A	417945	EPA 6010D	418026
40246195004	MW-5	EPA 3010A	417945	EPA 6010D	418026
40246195005	MW-6	EPA 3010A	417945	EPA 6010D	418026
40246195006	MW-8	EPA 3010A	417945	EPA 6010D	418026
40246195007	MW-9	EPA 3010A	417945	EPA 6010D	418026
40246195008	MW-10	EPA 3010A	417945	EPA 6010D	418026
40246195009	MW-11	EPA 3010A	417945	EPA 6010D	418026
40246195010	MW-12	EPA 3010A	417945	EPA 6010D	418026
40246195011	MW-13	EPA 3010A	417945	EPA 6010D	418026
40246195012	MW-14	EPA 3010A	417945	EPA 6010D	418026
40246195013	MW-15	EPA 3010A	417945	EPA 6010D	418026
40246195014	PZ-1	EPA 3010A	417945	EPA 6010D	418026
40246195015	PZ-2	EPA 3010A	418607	EPA 6010D	418703
40246195016	PZ-3	EPA 3010A	418607	EPA 6010D	418703
40246195001	MW-1	SM 3500-Cr B	418840		
40246195002	MW-2	SM 3500-Cr B	418840		
40246195003	MW-4	SM 3500-Cr B	418840		
40246195004	MW-5	SM 3500-Cr B	418840		
40246195005	MW-6	SM 3500-Cr B	418840		
40246195006	MW-8	SM 3500-Cr B	418840		
40246195007	MW-9	SM 3500-Cr B	418840		
40246195008	MW-10	SM 3500-Cr B	418840		
40246195009	MW-11	SM 3500-Cr B	418840		
40246195010	MW-12	SM 3500-Cr B	418917		
40246195011	MW-13	SM 3500-Cr B	418917		
40246195012	MW-14	SM 3500-Cr B	418917		
40246195013	MW-15	SM 3500-Cr B	418917		
40246195014	PZ-1	SM 3500-Cr B	418917		
40246195015	PZ-2	SM 3500-Cr B	418917		
40246195016	PZ-3	SM 3500-Cr B	418917		
40246195001	MW-1	EPA 300.0	417868		
40246195002	MW-2	EPA 300.0	417868		
40246195003	MW-4	EPA 300.0	417868		
40246195004	MW-5	EPA 300.0	417868		
40246195005	MW-6	EPA 300.0	417868		
40246195006	MW-8	EPA 300.0	417868		
40246195007	MW-9	EPA 300.0	417868		
40246195008	MW-10	EPA 300.0	417868		
40246195009	MW-11	EPA 300.0	417868		
40246195010	MW-12	EPA 300.0	417868		
40246195011	MW-13	EPA 300.0	417868		
40246195012	MW-14	EPA 300.0	417868		
40246195013	MW-15	EPA 300.0	417868		
40246195014	PZ-1	EPA 300.0	417868		
40246195015	PZ-2	EPA 300.0	417868		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40246195

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40246195016	PZ-3	EPA 300.0	417868		

REPORT OF LABORATORY ANALYSIS

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(Please Print Clearly)

Company Name:	REI Engineering	
Branch/Location:	Wausau, WI	
Project Contact:	Kaylin Felix	
Phone:	715-675-9784	
Project Number:	6134B	
Project Name:	Phillips Plating	
Project State:	WI	
Sampled By (Print):	Kaylin Felix	
Sampled By (Sign):		
PO #:		Regulatory Program: WDNR

Data Package Options

(billable)

EPA Level III

EPA Level IV

MS/MSD

Matrix Codes

On your sample
(billable)

A = Air
B = Biota
C = Charcoal
O = Oil
S = Soil
Sl = Sludge

W = Water
DW = Drinking Water
GW = Ground Water
SW = Surface Water
WW = Waste Water
WP = Wipe

NOT needed on
your sample

*Preservation Codes
 A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
 H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

FILTERED?
(YES/NO)

PRESERVATION
(CODE)*

Y/N

Pick
Letter

Analyses Requested

Y Y Y N N N

D D D A A A

Dissolved Chromium
Dissolved Nickel
Dissolved Manganese
Dissolved Iron
Hex Chromium
Nitrate
Sulfate

PACE LAB # **CLIENT FIELD ID**

COLLECTION

MATRIX

DATE

TIME

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	MATRIX TIME	Dissolved Chromium	Dissolved Nickel	Dissolved Manganese	Dissolved Iron	Hex Chromium	Nitrate	Sulfate
001	MW-1	6/8	7:05	X	X	X	X	X	X	X
002	MW-2		7:30							
003	MW-4		7:50							
004	MW-5		12:00							
005	MW-6		1:20							
006	MW-8		1:40							
007	MW-9		8:45							
008	MW-10		10:45							
009	MW-11		9:00							
010	MW-12		8:15							
011	MW-13		10:30							
012	MW-14		10:00							
013	MW-15		9:30							

Rush Turnaround Time Requested - Prelims

(Rush TAT subject to approval/surcharge)

Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:

Email #2:

Telephone:

Fax:

Samples on HOLD are subject to
special pricing and release of liability

Relinquished By: 	Date/Time: 6/8/22 3:30	Received By: 	Date/Time: 8:45	PACE Project No. 402460195
Relinquished By: 	Date/Time: 6/9/22 8:45	Received By: 	Date/Time: 8:45	Receipt Temp = 6 °C
Relinquished By: 	Date/Time: 6/9/22 8:45	Received By: 	Date/Time: 8:45	Sample Receipt pH OK / Adjusted
Relinquished By: 	Date/Time: 6/9/22 8:45	Received By: 	Date/Time: 8:45	Cooler Custody Seal Present / Not Present Intact / Not Intact

UPPER MIDWEST REGION

MN: 612-607-1700 WI: 920-469-2436



402460195

Quote #:		
Mail To Contact:	Kaylin Felix	
Mail To Company:	REI Engineering	
Mail To Address:	Kfelix@reiengineering.com	
Invoice To Contact:		
Invoice To Company:	SAME	
Invoice To Address:	SAME	
Invoice To Phone:		
CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #

(Please Print Clearly)

Company Name:	REI Engineering
Branch/Location:	Wausau, WI
Project Contact:	Kaylyn Felix
Phone:	715-678-9784
Project Number:	6134B
Project Name:	Phillips Plating
Project State:	WI
Sampled By (Print):	Kaylyn Felix
Sampled By (Sign):	
PO #:	
Regulatory Program:	WQNR

Data Package Options

(billable)

 EPA Level III

 EPA Level IV

MS/MSD

(billable)

 On your sample

(billable)

 NOT needed on

your sample

Matrix Codes

A = Air	W = Water
B = Biota	DW = Drinking Water
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
Si = Sludge	WP = Wipe

PACE LAB #

CLIENT FIELD ID

014 PZ-1

6/8 1:00 GW

Analyses Requested

Y/N	Y	Y	Y	Y	N	N	n
Pick Letter	D	D	D	D	A	A	A

Y/N	Chromium	Nickel	Manganese	Titanium	Iron	Chromium	Nitrate	Sulfate
Pick Letter	D	D	D	D	A	A	A	A

COLLECTION

MATRIX

DATE

TIME

015 PZ-2

10:25

016 PZ-3

11:00

PACE Project No.

Rush Turnaround Time Requested - Prelims

(Rush TAT subject to approval/surcharge)

Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:

Email #2:

Telephone:

Fax:

Relinquished By:

Date/Time:

Date/Time:

Received By:

Date/Time:

PACE Project No.

Relinquished By:

Date/Time:

Date/Time:

Received By:

Date/Time:

Date/Time:

Relinquished By:

Date/Time:

Date/Time:

Received By:

Date/Time:

Relinquished By:

Date/Time:

Date/Time:

Received By:

Date/Time:

Date/Time:

Relinquished By:

Date/Time:

Date/Time:

Received By:

Date/Time:

Date/Time:

Samples on HOLD are subject to
special pricing and release of liability

Relinquished By:

Date/Time:

Date/Time:

Received By:

Date/Time:

Date/Time:

Page 2 of 2

UPPER MIDWEST REGION

MN: 612-607-1700 WI: 920-469-2436

40246195



CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Quote #:							
Mail To Contact:							
Mail To Company:							
Mail To Address:							
Invoice To Contact:							
Invoice To Company:							
Invoice To Address:							
Invoice To Phone:							
CLIENT COMMENTS (Lab Use Only)	LAB COMMENTS		Profile #				

Client Name: REI Engineering Project # 40246195

All containers needing preservation have been checked and noted below: Yes No N/A

Lab Lot# of pH paper: 100312

Lab Std #ID of preservation (if pH adjusted):

Initial when completed: mp Date/
 Time:

Pace Lab #	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤ 2	NaOH+Zn Act. pH ≥ 9	NaOH pH ≥ 12	HNO3 pH ≤ 2	pH after adjusted	Volume (mL)
001																												X		2.5 / 5 / 10			
002																													X	2.5 / 5 / 10			
003																													X	2.5 / 5 / 10			
004																													X	2.5 / 5 / 10			
005																													X	2.5 / 5 / 10			
006																													X	2.5 / 5 / 10			
007																													X	2.5 / 5 / 10			
008																													X	2.5 / 5 / 10			
009																													X	2.5 / 5 / 10			
010																													X	2.5 / 5 / 10			
011																													X	2.5 / 5 / 10			
012																													X	2.5 / 5 / 10			
013																													X	2.5 / 5 / 10			
014																													X	2.5 / 5 / 10			
015																													X	2.5 / 5 / 10			
016																													X	2.5 / 5 / 10			
017																													X	2.5 / 5 / 10			
018																													Col 9 22 mp	2.5 / 5 / 10			
019																															2.5 / 5 / 10		
020																															2.5 / 5 / 10		

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : Yes No N/A *If yes look in headspace column

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9A	40 mL clear ascorbic	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG5U	100 mL amber glass unpres			VG9D	40 mL clear vial DI	ZPLC	ziploc bag
AG2S	500 mL amber glass H2SO4					GN	
BG3U	250 mL clear glass unpres						

Page 1 of 2

Sample Condition Upon Receipt Form (SCUR)

Project #:

Client Name: REI Engineering

Courier: CS Logistics Fed Ex Speedee UPS Waltco
 Client Pace Other: _____

Tracking #: 3243442-1

WO# : 40246195



40246195

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Custody Seal on Samples Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used SR - 116 Type of Ice: Wet Blue Dry None Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 0.5 /Corr: 0.6

Temp Blank Present: Yes no

Biological Tissue is Frozen: yes no

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Person examining contents:

Date: 6/9/22 Initials: MP

Labeled By Initials: MPA

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: - VOA Samples frozen upon receipt	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Date/Time:
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. 6/9/22 MP
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Correct Containers Used: -Pace Containers Used: -Pace IR Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. 003 " MW-5 " 6/9/22 MP
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

If checked, see attached form for additional comments

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample login

Page 2 of 2

June 23, 2022

Ken Lassa
REI
4080 North 20th Avenue
Wausau, WI 54401

RE: Project: 6134B PHILLIPS PLATING
Pace Project No.: 40246297

Dear Ken Lassa:

Enclosed are the analytical results for sample(s) received by the laboratory on June 10, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Kaylin Felix, REI



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40246297

Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150

Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40246297

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40246297001	PZ-4	Water	06/09/22 11:45	06/10/22 08:30

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40246297

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40246297001	PZ-4	EPA 6010D	TXW	4	PASI-G
		SM 3500-Cr B	HNT	1	PASI-G
		EPA 300.0	HMB	2	PASI-G

PASI-G = Pace Analytical Services - Green Bay

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40246297

Sample: PZ-4	Lab ID: 40246297001	Collected: 06/09/22 11:45	Received: 06/10/22 08:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	06/17/22 05:46	06/20/22 20:33	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	06/17/22 05:46	06/20/22 20:33	7439-89-6	
Manganese, Dissolved	148	ug/L	5.0	1.5	1	06/17/22 05:46	06/20/22 20:33	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	06/17/22 05:46	06/20/22 20:33	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.037	mg/L	0.12	0.037	5		06/21/22 13:31		D3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	0.51	mg/L	0.15	0.044	1		06/10/22 12:05	14797-55-8	
Sulfate	13.6	mg/L	2.0	0.44	1		06/10/22 12:05	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40246297

QC Batch: 418607 Analysis Method: EPA 6010D

QC Batch Method: EPA 3010A Analysis Description: 6010D MET Dissolved

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40246297001

METHOD BLANK: 2410827 Matrix: Water

Associated Lab Samples: 40246297001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Dissolved	ug/L	<2.5	10.0	06/21/22 10:43	
Iron, Dissolved	ug/L	<56.7	100	06/21/22 10:43	
Manganese, Dissolved	ug/L	<1.5	5.0	06/21/22 10:43	
Nickel, Dissolved	ug/L	<2.6	10.0	06/21/22 10:43	

LABORATORY CONTROL SAMPLE: 2410828

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	250	257	103	80-120	
Iron, Dissolved	ug/L	10000	10100	101	80-120	
Manganese, Dissolved	ug/L	250	260	104	80-120	
Nickel, Dissolved	ug/L	250	267	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2410829 2410830

Parameter	Units	40246647001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	RPD	Max Qual
Chromium, Dissolved	ug/L	<2.5	250	250	254	248	101	99	75-125	2	20	
Iron, Dissolved	ug/L	332	10000	10000	10300	10000	99	97	75-125	2	20	
Manganese, Dissolved	ug/L	160	250	250	419	406	104	99	75-125	3	20	
Nickel, Dissolved	ug/L	44.1	250	250	305	298	105	102	75-125	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40246297

QC Batch:	418917	Analysis Method:	SM 3500-Cr B
QC Batch Method:	SM 3500-Cr B	Analysis Description:	Chromium, Hexavalent by 3500
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40246297001

METHOD BLANK: 2412352 Matrix: Water

Associated Lab Samples: 40246297001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.0073	0.024	06/21/22 13:25	

LABORATORY CONTROL SAMPLE: 2412353

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.3	0.30	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2412383 2412384

Parameter	Units	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/L	40246467001	<0.0073	0.3	0.3	0.039	0.038	13	12	90-110	2 20 M0

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40246297

QC Batch:	418007	Analysis Method:	EPA 300.0
QC Batch Method:	EPA 300.0	Analysis Description:	300.0 IC Anions
		Laboratory:	Pace Analytical Services - Green Bay
Associated Lab Samples: 40246297001			

METHOD BLANK: 2407329 Matrix: Water

Associated Lab Samples: 40246297001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate as N	mg/L	<0.044	0.15	06/10/22 11:20	
Sulfate	mg/L	<0.44	2.0	06/10/22 11:20	

LABORATORY CONTROL SAMPLE: 2407330

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.5	1.6	108	90-110	
Sulfate	mg/L	20	20.8	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2407331 2407332

Parameter	Units	40246297001 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	Spike Conc.								
Nitrate as N	mg/L	0.51	1.5	1.5	2.1	2.1	106	106	90-110	0	15	
Sulfate	mg/L	13.6	20	20	34.5	34.3	105	104	90-110	1	15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40246297

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40246297

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40246297001	PZ-4	EPA 3010A	418607	EPA 6010D	418703
40246297001	PZ-4	SM 3500-Cr B	418917		
40246297001	PZ-4	EPA 300.0	418007		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
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(Please Print Clearly)

Company Name: RET Engineering
 Branch/Location: Warsaw
 Project Contact: Kaylyn Felix
 Phone: 715-675-9784
 Project Number: 6134B
 Project Name: Phillips Plating
 Project State: WI
 Sampled By (Print): Kaylyn Felix
 Sampled By (Sign): *Kaylyn Felix*
 PO #: *Kaylyn Felix* Regulatory Program: WDNR



UPPER MIDWEST REGION

MN: 612-607-1700 WI: 920-469-2436

Page 1 of 1

40246297

CHAIN OF CUSTODY

*Preservation Codes
 A=None B=HCl C=H₂SO₄ D=HNO₃ E=DI Water F=Methanol G=NaOH
 H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

FILTERED?
(YES/NO)

PRESERVATION
(CODE)*

Y/N	Y	Y	Y	Y	N	N	N
Pick Letter	D	D	D	D	A	A	A

Analyses Requested

Chromium
Dissolved Nickel
Dissolved Manganese
Dissolved Iron
Hex Chromium
Nitrate
Sulfate

Data Package Options
(billable)

- EPA Level III
- EPA Level IV

MS/MSD

- On your sample (billable)
- NOT needed on your sample

Matrix Codes

A = Air	W = Water
B = Biota	DW = Drinking Water
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
SI = Sludge	WP = Wipe

PACE LAB #

CLIENT FIELD ID

COLLECTION	MATRIX
DATE	TIME

601

PZ-4

6/9

11:45

6W

X

X

X

X

X

X

X

X

X

LAB COMMENTS
(Lab Use Only)

Profile #

Rush Turnaround Time Requested - Prelims
 (Rush TAT subject to approval/surcharge)

Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:

Email #2:

Telephone:

Fax:

Samples on HOLD are subject to
 special pricing and release of liability

Relinquished By:

Relinquished By:

Relinquished By:

Relinquished By:

Relinquished By:

Kaylyn Felix 6/9/22 3:00 PM

WATCO 6/10/22 0830

Kaylyn Felix 6/10/22 0830

Kendra Space 6/10/22 0830

Kaylyn Felix 6/10/22 0830

Received By:

Received By:

Received By:

Received By:

Received By:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

PACE Project No.

40246297

Receipt Temp = 0.6 °C

Sample Receipt pH

OK / Adjusted

Cougar Custody Seal

Present Not Present

Intact Not Intact

Version 6.0 06/14/06

Page 11 of 13

Sample Preservation Receipt Form

Project # 10246297

Client Name: RGJ

All containers needing preservation have been checked and noted below: Yes No N/A

Lab Lot# of pH paper: 10D3111 Lab Std #ID of preservation (if pH adjusted):

Initial when completed: ✓ Date/
Time:

Pace Lab #	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN	VOA Vials (>6mm)*	H2SO4 dH ≥2	NaOH+Zn Act dH ≥9	NaOH dH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001																														2.5 / 5 / 10			
002																														2.5 / 5 / 10			
003																														2.5 / 5 / 10			
004																														2.5 / 5 / 10			
005																														2.5 / 5 / 10			
006																														2.5 / 5 / 10			
007																														2.5 / 5 / 10			
008																														2.5 / 5 / 10			
009																														2.5 / 5 / 10			
010																														2.5 / 5 / 10			
011																														2.5 / 5 / 10			
012																														2.5 / 5 / 10			
013																														2.5 / 5 / 10			
014																														2.5 / 5 / 10			
015																														2.5 / 5 / 10			
016																														2.5 / 5 / 10			
017																														2.5 / 5 / 10			
018																														2.5 / 5 / 10			
019																														2.5 / 5 / 10			
020																														2.5 / 5 / 10			

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm): Yes No N/A *If yes look in headspace column

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9A	40 mL clear ascorbic	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCl	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCl	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG5U	100 mL amber glass unpres			VG9D	40 mL clear vial DI	ZPLC	ziploc bag
AG2S	500 mL amber glass H2SO4					GN	
BG3U	250 mL clear glass unpres						

DC# Title: ENV-FRM-GBAY-0014 v02_SCUR
Revision: 3 | Effective Date: | Issued by: Green Bay

Sample Condition Upon Receipt Form (SCUR)

Project #:

Client Name: **REI**

WO# : **40246297**

Courier: CS Logistics Fed Ex Speedee UPS Waltco
 Client Pace Other: _____

Tracking #: **3245445-1**



40246297

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Custody Seal on Samples Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used **SR - 90** Type of Ice: **Wet** Blue Dry None

Cooler Temperature Uncorr: **1** /Corr: **0.10** Samples on ice, cooling process has begun

Temp Blank Present: yes no

Biological Tissue is Frozen: yes no

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Person examining contents:

Date: **11/16/27** Initials: **CD**

Labeled By Initials: **mH**

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: - VOA Samples frozen upon receipt	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	5. Date/Time:
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		8.
Correct Containers Used: -Pace Containers Used: -Pace IR Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	9.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A W	12.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

If checked, see attached form for additional comments

Person Contacted: _____ Date/Time: _____
Comments/ Resolution: _____

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample login

Page **2** of **2**

July 08, 2022

Ken Lassa
REI
4080 North 20th Avenue
Wausau, WI 54401

RE: Project: 613413 PHILLIPS PLATING
Pace Project No.: 40247330

Dear Ken Lassa:

Enclosed are the analytical results for sample(s) received by the laboratory on June 29, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Kaylin Felix, REI



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 613413 PHILLIPS PLATING
Pace Project No.: 40247330

Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150

Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 613413 PHILLIPS PLATING

Pace Project No.: 40247330

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40247330001	MW6	Water	06/28/22 09:35	06/29/22 08:15
40247330002	MW8	Water	06/28/22 09:45	06/29/22 08:15

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SAMPLE ANALYTE COUNT

Project: 613413 PHILLIPS PLATING
Pace Project No.: 40247330

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40247330001	MW6	EPA 6010D	TXW	4	PASI-G
		SM 3500-Cr B	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40247330002	MW8	EPA 6010D	TXW	4	PASI-G
		SM 3500-Cr B	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G

PASI-G = Pace Analytical Services - Green Bay

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ANALYTICAL RESULTS

Project: 613413 PHILLIPS PLATING
Pace Project No.: 40247330

Sample: MW6	Lab ID: 40247330001	Collected: 06/28/22 09:35	Received: 06/29/22 08:15	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	6260	ug/L	50.0	12.7	5	06/29/22 12:55	07/06/22 11:37	7440-47-3	
Iron, Dissolved	<284	ug/L	500	284	5	06/29/22 12:55	07/06/22 11:37	7439-89-6	D3
Manganese, Dissolved	1660	ug/L	25.0	7.7	5	06/29/22 12:55	07/06/22 11:37	7439-96-5	
Nickel, Dissolved	11800	ug/L	50.0	13.1	5	06/29/22 12:55	07/06/22 11:37	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	6.1	mg/L	1.2	0.37	50		07/07/22 11:34		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	8.1	mg/L	0.75	0.22	5		06/29/22 12:19	14797-55-8	
Sulfate	326	mg/L	40.0	8.9	20		06/30/22 02:27	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 613413 PHILLIPS PLATING
Pace Project No.: 40247330

Sample: MW8	Lab ID: 40247330002	Collected: 06/28/22 09:45	Received: 06/29/22 08:15	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	398	ug/L	10.0	2.5	1	06/29/22 12:55	07/01/22 14:45	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	06/29/22 12:55	07/01/22 14:45	7439-89-6	
Manganese, Dissolved	6.2	ug/L	5.0	1.5	1	06/29/22 12:55	07/01/22 14:45	7439-96-5	
Nickel, Dissolved	441	ug/L	10.0	2.6	1	06/29/22 12:55	07/01/22 14:45	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	0.37	mg/L	0.24	0.073	10		07/07/22 11:34		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	10.4	mg/L	1.5	0.44	10		06/30/22 03:56	14797-55-8	
Sulfate	6.0	mg/L	2.0	0.44	1		06/29/22 13:04	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 613413 PHILLIPS PLATING

Pace Project No.: 40247330

QC Batch: 419724 Analysis Method: EPA 6010D

QC Batch Method: EPA 3010A Analysis Description: 6010D MET Dissolved

Associated Lab Samples: 40247330001, 40247330002 Laboratory: Pace Analytical Services - Green Bay

METHOD BLANK: 2417201 Matrix: Water

Associated Lab Samples: 40247330001, 40247330002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Dissolved	ug/L	<2.5	10.0	07/01/22 13:37	
Iron, Dissolved	ug/L	<56.7	100	07/01/22 13:37	
Manganese, Dissolved	ug/L	<1.5	5.0	07/01/22 13:37	
Nickel, Dissolved	ug/L	<2.6	10.0	07/01/22 13:37	

LABORATORY CONTROL SAMPLE: 2417202

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	250	248	99	80-120	
Iron, Dissolved	ug/L	10000	10000	100	80-120	
Manganese, Dissolved	ug/L	250	249	100	80-120	
Nickel, Dissolved	ug/L	250	254	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2417203 2417204

Parameter	Units	40246890001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	RPD	Max Qual
Chromium, Dissolved	ug/L	<2.5	250	250	250	250	100	100	75-125	0	20	
Iron, Dissolved	ug/L	<56.7	10000	10000	10000	10200	100	102	75-125	2	20	
Manganese, Dissolved	ug/L	138	250	250	386	386	99	99	75-125	0	20	
Nickel, Dissolved	ug/L	<2.6	250	250	253	254	100	101	75-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 613413 PHILLIPS PLATING
Pace Project No.: 40247330

QC Batch:	420263	Analysis Method:	SM 3500-Cr B
QC Batch Method:	SM 3500-Cr B	Analysis Description:	Chromium, Hexavalent by 3500
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40247330001, 40247330002

METHOD BLANK: 2420390 Matrix: Water

Associated Lab Samples: 40247330001, 40247330002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.0073	0.024	07/07/22 11:28	

LABORATORY CONTROL SAMPLE: 2420391

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.3	0.32	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2420392 2420393

Parameter	Units	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/L	0.37	3	3	3.6	3.6	108	107	90-110	1	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 613413 PHILLIPS PLATING
Pace Project No.: 40247330

QC Batch:	419758	Analysis Method:	EPA 300.0
QC Batch Method:	EPA 300.0	Analysis Description:	300.0 IC Anions
		Laboratory:	Pace Analytical Services - Green Bay
Associated Lab Samples:	40247330001, 40247330002		

METHOD BLANK: 2417363 Matrix: Water

Associated Lab Samples: 40247330001, 40247330002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate as N	mg/L	<0.044	0.15	06/29/22 11:50	
Sulfate	mg/L	<0.44	2.0	06/29/22 11:50	

LABORATORY CONTROL SAMPLE: 2417364

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.5	1.4	93	90-110	
Sulfate	mg/L	20	18.8	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2417365 2417366

Parameter	Units	MS		MSD		MS		MSD		% Rec		Max RPD	RPD Qual
		40247330001	Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits			
Nitrate as N	mg/L	8.1	7.5	7.5	16.0	16.2	105	108	90-110	1	15		
Sulfate	mg/L	326	400	400	761	758	109	108	90-110	0	15		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 613413 PHILLIPS PLATING
Pace Project No.: 40247330

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

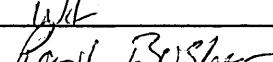
Project: 613413 PHILLIPS PLATING
Pace Project No.: 40247330

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40247330001	MW6	EPA 3010A	419724	EPA 6010D	419824
40247330002	MW8	EPA 3010A	419724	EPA 6010D	419824
40247330001	MW6	SM 3500-Cr B	420263		
40247330002	MW8	SM 3500-Cr B	420263		
40247330001	MW6	EPA 300.0	419758		
40247330002	MW8	EPA 300.0	419758		

REPORT OF LABORATORY ANALYSIS

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(Please Print Clearly)

Company Name:	R.E.T.
Branch/Location:	Winnipeg
Project Contact:	Ken Lassie
Phone:	715 675 9784
Project Number:	613473
Project Name:	Phillips Painting
Project State:	WY
Sampled By (Print):	Fayl Bushier
Sampled By (Sign):	
PO #:	
	Regulatory Program:



UPPER MIDWEST REGION

MN: 612-607-1700 WI: 920-469-2436

Page 1 of

402417336

CHAIN OF CUSTODY

*Preservation Codes						
A=None	B=HCl	C=H ₂ SO ₄	D=HNO ₃	E=DI Water	F=Methanol	G=NaOH
H=Sodium Bisulfate Solution	I=Sodium Thiosulfate	J=Other				

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)

Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:

Email #2:

Telephone:

Fax:

**Samples on HOLD are subject to
special pricing and release of liability**

Relinquished By: <i>Ruth</i>	Date/Time: 6-28- 3102	Received By:	Date/Time:
Relinquished By: <i>Waldo</i>	Date/Time: 6/29/22 0815	Received By: <i>Anthony Wendell</i>	Date/Time: 6/29/22 0815
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:

PACE Project No.

Receipt Temp = 16 °C

Sample Receipt pH
OK Adjusted

Cooler Custody Seal
Present / Not Present
Intact / Not Intact

Sample Preservation Receipt Form

Client Name: REI

Project # 104730

All containers needing preservation have been checked and noted below: Yes No N/A

Lab Lot# of pH paper: 1003112 Lab Std #ID of preservation (if pH adjusted):

Initial when completed: 12 Date/
Time:

Pace Lab #	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JGU	WGFU	WPFU	SP5T	ZPLC	GN	VOA Vials (~6mm)*	H2SO4 pH 2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001									/	/	/																		2.5 / 10				
002									/	/	/																		2.5 / 10				
003																														2.5 / 10			
004																														2.5 / 10			
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018																														2.5 / 10			
019																														2.5 / 10			
020																														2.5 / 10			

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm): Yes No N/A *If yes look in headspace column

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9A	40 mL clear ascorbic	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG5U	100 mL amber glass unpres			VG9D	40 mL clear vial DI	ZPLC	ziploc bag
AG2S	500 mL amber glass H2SO4					GN	
BG3U	250 mL clear glass unpres						

DC#_Title: ENV-FRM-GBAY-0014 v02_SCUR
Revision: 3 | Effective Date: | Issued by: Green Bay

Sample Condition Upon Receipt Form (SCUR)

Project #:

Client Name: REI

WO# : **40247330**

Courier: CS Logistics Fed Ex Speedee UPS Waltco

Client Pace Other: _____

Tracking #: 3262423-1



40247330

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Custody Seal on Samples Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used SR -AD Type of Ice: Wet Blue Dry None

Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 2 /Corr: 1.6

Person examining contents:

Date: 6/29/22 Initials: CH

Temp Blank Present: yes no

Biological Tissue is Frozen: yes no

Labeled By Initials: MH

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	<u>no part</u> <u>6/29/22 CH</u>
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<u>no part</u> <u>6/29/22 CH</u>
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: - VOA Samples frozen upon receipt	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Date/Time:
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used: -Pace Containers Used: -Pace IR Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

If checked, see attached form for additional comments

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample login

Page 2 of 2

November 15, 2022

Ken Lassa
REI
4080 North 20th Avenue
Wausau, WI 54401

RE: Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Dear Ken Lassa:

Enclosed are the analytical results for sample(s) received by the laboratory on November 02, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Kaylin Felix, REI



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150

South Carolina Certification #: 83006001
Texas Certification #: T104704529-21-8
Virginia VELAP Certification ID: 11873
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-21-00008
Federal Fish & Wildlife Permit #: 51774A

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 6134 BG2 PHILLIPS PLATING
 Pace Project No.: 40254067

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40254067001	MW1	Water	11/01/22 08:20	11/02/22 08:50
40254067002	MW2	Water	11/01/22 08:35	11/02/22 08:50
40254067003	MW4	Water	11/01/22 09:00	11/02/22 08:50
40254067004	MW5	Water	11/01/22 13:15	11/02/22 08:50
40254067005	MW6	Water	11/01/22 12:45	11/02/22 08:50
40254067006	MW7	Water	11/01/22 14:00	11/02/22 08:50
40254067007	MW8	Water	11/01/22 13:00	11/02/22 08:50
40254067008	MW9	Water	11/01/22 09:30	11/02/22 08:50
40254067009	MW10	Water	11/01/22 12:30	11/02/22 08:50
40254067010	MW11	Water	11/01/22 10:30	11/02/22 08:50
40254067011	MW12	Water	11/01/22 10:00	11/02/22 08:50
40254067012	MW13	Water	11/01/22 11:45	11/02/22 08:50
40254067013	MW14	Water	11/01/22 11:30	11/02/22 08:50
40254067014	MW15	Water	11/01/22 11:00	11/02/22 08:50
40254067015	PZ1	Water	11/01/22 12:35	11/02/22 08:50
40254067016	PZ2	Water	11/01/22 12:00	11/02/22 08:50
40254067017	PZ3	Water	11/01/22 12:15	11/02/22 08:50
40254067018	PZ4	Water	11/01/22 13:45	11/02/22 08:50

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SAMPLE ANALYTE COUNT

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40254067001	MW1	EPA 6010D	SIS	4	PASI-G
		SM 3500-Cr B	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40254067002	MW2	EPA 6010D	SIS	4	PASI-G
		SM 3500-Cr B	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40254067003	MW4	EPA 6010D	SIS	4	PASI-G
		SM 3500-Cr B	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40254067004	MW5	EPA 6010D	SIS	4	PASI-G
		SM 3500-Cr B	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40254067005	MW6	EPA 6010D	SIS	4	PASI-G
		SM 3500-Cr B	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40254067006	MW7	EPA 6010D	SIS	4	PASI-G
		SM 3500-Cr B	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40254067007	MW8	EPA 6010D	SIS	4	PASI-G
		SM 3500-Cr B	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40254067008	MW9	EPA 6010D	SIS	4	PASI-G
		SM 3500-Cr B	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40254067009	MW10	EPA 6010D	SIS	4	PASI-G
		SM 3500-Cr B	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40254067010	MW11	EPA 6010D	SIS	4	PASI-G
		SM 3500-Cr B	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40254067011	MW12	EPA 6010D	SIS	4	PASI-G
		SM 3500-Cr B	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40254067012	MW13	EPA 6010D	SIS	4	PASI-G
		SM 3500-Cr B	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40254067013	MW14	EPA 6010D	SIS	4	PASI-G
		SM 3500-Cr B	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G

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SAMPLE ANALYTE COUNT

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40254067014	MW15	SM 3500-Cr B	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
	PZ1	EPA 6010D	SIS	4	PASI-G
		SM 3500-Cr B	EXM	1	PASI-G
40254067015	PZ1	EPA 300.0	HMB	2	PASI-G
		EPA 6010D	SIS	4	PASI-G
	PZ2	SM 3500-Cr B	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40254067016	PZ2	EPA 6010D	SIS	4	PASI-G
		SM 3500-Cr B	EXM	1	PASI-G
	PZ3	EPA 300.0	HMB	2	PASI-G
		EPA 6010D	SIS	4	PASI-G
40254067017	PZ3	SM 3500-Cr B	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
	PZ4	EPA 6010D	SIS	4	PASI-G
		SM 3500-Cr B	EXM	1	PASI-G
40254067018	PZ4	EPA 300.0	HMB	2	PASI-G
		EPA 6010D	SIS	4	PASI-G

PASI-G = Pace Analytical Services - Green Bay

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Sample: MW1	Lab ID: 40254067001	Collected: 11/01/22 08:20	Received: 11/02/22 08:50	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	11/03/22 06:25	11/03/22 20:23	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	11/03/22 06:25	11/03/22 20:23	7439-89-6	
Manganese, Dissolved	<1.5	ug/L	5.0	1.5	1	11/03/22 06:25	11/03/22 20:23	7439-96-5	
Nickel, Dissolved	22.3	ug/L	10.0	2.6	1	11/03/22 06:25	11/03/22 20:23	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.018	mg/L	0.061	0.018	2.5		11/08/22 13:48		D3,H2, H3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	10.5	mg/L	1.5	0.44	10		11/03/22 12:58	14797-55-8	H5,M0
Sulfate	32.8	mg/L	2.0	0.44	1		11/02/22 15:14	14808-79-8	

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ANALYTICAL RESULTS

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Sample: MW2	Lab ID: 40254067002	Collected: 11/01/22 08:35	Received: 11/02/22 08:50	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	11/03/22 06:25	11/03/22 20:33	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	11/03/22 06:25	11/03/22 20:33	7439-89-6	
Manganese, Dissolved	43.8	ug/L	5.0	1.5	1	11/03/22 06:25	11/03/22 20:33	7439-96-5	
Nickel, Dissolved	5.3J	ug/L	10.0	2.6	1	11/03/22 06:25	11/03/22 20:33	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		11/08/22 13:48		D3,H2, H3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	28.3	mg/L	3.0	0.88	20		11/03/22 13:42	14797-55-8	H5
Sulfate	23.6	mg/L	10.0	2.2	5		11/02/22 15:59	14808-79-8	

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ANALYTICAL RESULTS

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Sample: MW4	Lab ID: 40254067003	Collected: 11/01/22 09:00	Received: 11/02/22 08:50	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	11/03/22 06:25	11/03/22 20:38	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	11/03/22 06:25	11/03/22 20:38	7439-89-6	
Manganese, Dissolved	<1.5	ug/L	5.0	1.5	1	11/03/22 06:25	11/03/22 20:38	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	11/03/22 06:25	11/03/22 20:38	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.037	mg/L	0.12	0.037	5		11/08/22 13:48		D3,H1, H2
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	3.9	mg/L	0.75	0.22	5		11/02/22 16:14	14797-55-8	
Sulfate	13.5	mg/L	10.0	2.2	5		11/02/22 16:14	14808-79-8	

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ANALYTICAL RESULTS

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Sample: MW5	Lab ID: 40254067004	Collected: 11/01/22 13:15	Received: 11/02/22 08:50	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	171	ug/L	10.0	2.5	1	11/03/22 06:25	11/03/22 20:40	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	11/03/22 06:25	11/03/22 20:40	7439-89-6	
Manganese, Dissolved	156	ug/L	5.0	1.5	1	11/03/22 06:25	11/03/22 20:40	7439-96-5	
Nickel, Dissolved	4310	ug/L	10.0	2.6	1	11/03/22 06:25	11/03/22 20:40	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		11/08/22 13:48		D3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	6.2	mg/L	0.75	0.22	5		11/02/22 16:29	14797-55-8	
Sulfate	28.8	mg/L	10.0	2.2	5		11/02/22 16:29	14808-79-8	

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ANALYTICAL RESULTS

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Sample: MW6	Lab ID: 40254067005	Collected: 11/01/22 12:45	Received: 11/02/22 08:50	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	6430	ug/L	100	25.5	10	11/03/22 06:25	11/04/22 18:52	7440-47-3	
Iron, Dissolved	<567	ug/L	1000	567	10	11/03/22 06:25	11/04/22 18:52	7439-89-6	D3
Manganese, Dissolved	1300	ug/L	50.0	15.4	10	11/03/22 06:25	11/04/22 18:52	7439-96-5	
Nickel, Dissolved	17400	ug/L	100	26.2	10	11/03/22 06:25	11/04/22 18:52	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	0.35	mg/L	0.061	0.018	2.5		11/08/22 13:49		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	4.2	mg/L	0.15	0.044	1		11/02/22 16:43	14797-55-8	
Sulfate	53.0	mg/L	2.0	0.44	1		11/02/22 16:43	14808-79-8	

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ANALYTICAL RESULTS

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Sample: MW7	Lab ID: 40254067006	Collected: 11/01/22 14:00	Received: 11/02/22 08:50	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	11/03/22 06:25	11/03/22 20:50	7440-47-3	
Iron, Dissolved	2460	ug/L	100	56.7	1	11/03/22 06:25	11/03/22 20:50	7439-89-6	
Manganese, Dissolved	267	ug/L	5.0	1.5	1	11/03/22 06:25	11/03/22 20:50	7439-96-5	
Nickel, Dissolved	3.6J	ug/L	10.0	2.6	1	11/03/22 06:25	11/03/22 20:50	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		11/08/22 13:49		D3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	3.0	mg/L	0.75	0.22	5		11/02/22 16:58	14797-55-8	
Sulfate	32.4	mg/L	10.0	2.2	5		11/02/22 16:58	14808-79-8	

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ANALYTICAL RESULTS

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Sample: MW8	Lab ID: 40254067007	Collected: 11/01/22 13:00	Received: 11/02/22 08:50	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	426	ug/L	10.0	2.5	1	11/03/22 06:25	11/03/22 20:53	7440-47-3	
Iron, Dissolved	119	ug/L	100	56.7	1	11/03/22 06:25	11/03/22 20:53	7439-89-6	
Manganese, Dissolved	9.0	ug/L	5.0	1.5	1	11/03/22 06:25	11/03/22 20:53	7439-96-5	
Nickel, Dissolved	325	ug/L	10.0	2.6	1	11/03/22 06:25	11/03/22 20:53	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		11/08/22 13:49		D3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	7.3	mg/L	0.75	0.22	5		11/02/22 17:58	14797-55-8	
Sulfate	14.4	mg/L	10.0	2.2	5		11/02/22 17:58	14808-79-8	

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ANALYTICAL RESULTS

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Sample: MW9	Lab ID: 40254067008	Collected: 11/01/22 09:30	Received: 11/02/22 08:50	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	435	ug/L	10.0	2.5	1	11/03/22 06:25	11/03/22 20:55	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	11/03/22 06:25	11/03/22 20:55	7439-89-6	
Manganese, Dissolved	100	ug/L	5.0	1.5	1	11/03/22 06:25	11/03/22 20:55	7439-96-5	
Nickel, Dissolved	789	ug/L	10.0	2.6	1	11/03/22 06:25	11/03/22 20:55	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		11/08/22 13:49		D3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	10.4	mg/L	0.75	0.22	5		11/02/22 18:13	14797-55-8	
Sulfate	55.8	mg/L	10.0	2.2	5		11/02/22 18:13	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Sample: MW10	Lab ID: 40254067009	Collected: 11/01/22 12:30	Received: 11/02/22 08:50	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	120	ug/L	10.0	2.5	1	11/03/22 06:25	11/03/22 20:58	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	11/03/22 06:25	11/03/22 20:58	7439-89-6	
Manganese, Dissolved	<1.5	ug/L	5.0	1.5	1	11/03/22 06:25	11/03/22 20:58	7439-96-5	
Nickel, Dissolved	23.1	ug/L	10.0	2.6	1	11/03/22 06:25	11/03/22 20:58	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	0.058J	mg/L	0.061	0.018	2.5		11/08/22 13:50		D3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	1.3	mg/L	0.75	0.22	5		11/02/22 18:27	14797-55-8	
Sulfate	12.0	mg/L	10.0	2.2	5		11/02/22 18:27	14808-79-8	

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ANALYTICAL RESULTS

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Sample: MW11	Lab ID: 40254067010	Collected: 11/01/22 10:30	Received: 11/02/22 08:50	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	11/03/22 06:25	11/03/22 21:00	7440-47-3	
Iron, Dissolved	100	ug/L	100	56.7	1	11/03/22 06:25	11/03/22 21:00	7439-89-6	
Manganese, Dissolved	234	ug/L	5.0	1.5	1	11/03/22 06:25	11/03/22 21:00	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	11/03/22 06:25	11/03/22 21:00	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.073	mg/L	0.24	0.073	10		11/08/22 13:50		D3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	4.3	mg/L	0.75	0.22	5		11/02/22 18:42	14797-55-8	
Sulfate	23.0	mg/L	10.0	2.2	5		11/02/22 18:42	14808-79-8	

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ANALYTICAL RESULTS

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Sample: MW12	Lab ID: 40254067011	Collected: 11/01/22 10:00	Received: 11/02/22 08:50	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	11/03/22 06:25	11/03/22 21:03	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	11/03/22 06:25	11/03/22 21:03	7439-89-6	
Manganese, Dissolved	<1.5	ug/L	5.0	1.5	1	11/03/22 06:25	11/03/22 21:03	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	11/03/22 06:25	11/03/22 21:03	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		11/08/22 13:50		D3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	7.3	mg/L	0.75	0.22	5		11/02/22 18:57	14797-55-8	
Sulfate	25.0	mg/L	10.0	2.2	5		11/02/22 18:57	14808-79-8	

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ANALYTICAL RESULTS

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Sample: MW13	Lab ID: 40254067012	Collected: 11/01/22 11:45	Received: 11/02/22 08:50	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	5.0J	ug/L	10.0	2.5	1	11/03/22 06:25	11/03/22 21:06	7440-47-3	
Iron, Dissolved	16800	ug/L	100	56.7	1	11/03/22 06:25	11/03/22 21:06	7439-89-6	
Manganese, Dissolved	3030	ug/L	5.0	1.5	1	11/03/22 06:25	11/03/22 21:06	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	11/03/22 06:25	11/03/22 21:06	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	0.39J	mg/L	1.2	0.37	50		11/08/22 13:51		D3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	<0.22	mg/L	0.75	0.22	5		11/02/22 19:12	14797-55-8	D3
Sulfate	2.2J	mg/L	10.0	2.2	5		11/02/22 19:12	14808-79-8	D3

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ANALYTICAL RESULTS

Project: 6134 BG2 PHILLIPS PLATING

Pace Project No.: 40254067

Sample: MW14	Lab ID: 40254067013	Collected: 11/01/22 11:30	Received: 11/02/22 08:50	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	11/03/22 06:25	11/03/22 21:08	7440-47-3	
Iron, Dissolved	3690	ug/L	100	56.7	1	11/03/22 06:25	11/03/22 21:08	7439-89-6	
Manganese, Dissolved	174	ug/L	5.0	1.5	1	11/03/22 06:25	11/03/22 21:08	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	11/03/22 06:25	11/03/22 21:08	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<1.8	mg/L	6.1	1.8	250		11/08/22 13:51		D3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	<0.22	mg/L	0.75	0.22	5		11/02/22 20:10	14797-55-8	D3
Sulfate	4.7J	mg/L	10.0	2.2	5		11/02/22 20:10	14808-79-8	D3

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ANALYTICAL RESULTS

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Sample: MW15	Lab ID: 40254067014	Collected: 11/01/22 11:00	Received: 11/02/22 08:50	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	11/03/22 06:25	11/03/22 21:11	7440-47-3	
Iron, Dissolved	1650	ug/L	100	56.7	1	11/03/22 06:25	11/03/22 21:11	7439-89-6	
Manganese, Dissolved	93.6	ug/L	5.0	1.5	1	11/03/22 06:25	11/03/22 21:11	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	11/03/22 06:25	11/03/22 21:11	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		11/08/22 13:51		D3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	0.36J	mg/L	0.75	0.22	5		11/02/22 20:25	14797-55-8	D3
Sulfate	3.2J	mg/L	10.0	2.2	5		11/02/22 20:25	14808-79-8	D3

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ANALYTICAL RESULTS

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Sample: PZ1	Lab ID: 40254067015	Collected: 11/01/22 12:35	Received: 11/02/22 08:50	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	410	ug/L	10.0	2.5	1	11/03/22 06:25	11/03/22 21:18	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	11/03/22 06:25	11/03/22 21:18	7439-89-6	
Manganese, Dissolved	<1.5	ug/L	5.0	1.5	1	11/03/22 06:25	11/03/22 21:18	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	11/03/22 06:25	11/03/22 21:18	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	5.8	mg/L	1.2	0.37	50		11/08/22 13:51		
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	19.2	mg/L	0.75	0.22	5		11/02/22 20:39	14797-55-8	
Sulfate	297	mg/L	10.0	2.2	5		11/02/22 20:39	14808-79-8	

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ANALYTICAL RESULTS

Project: 6134 BG2 PHILLIPS PLATING

Pace Project No.: 40254067

Sample: PZ2	Lab ID: 40254067016	Collected: 11/01/22 12:00	Received: 11/02/22 08:50	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	11/03/22 06:25	11/03/22 21:21	7440-47-3	
Iron, Dissolved	725	ug/L	100	56.7	1	11/03/22 06:25	11/03/22 21:21	7439-89-6	
Manganese, Dissolved	787	ug/L	5.0	1.5	1	11/03/22 06:25	11/03/22 21:21	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	11/03/22 06:25	11/03/22 21:21	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.073	mg/L	0.24	0.073	10		11/08/22 13:52		D3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	0.25J	mg/L	0.75	0.22	5		11/02/22 20:54	14797-55-8	D3
Sulfate	13.8	mg/L	10.0	2.2	5		11/02/22 20:54	14808-79-8	

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ANALYTICAL RESULTS

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Sample: PZ3	Lab ID: 40254067017	Collected: 11/01/22 12:15	Received: 11/02/22 08:50	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	1080	ug/L	10.0	2.5	1	11/03/22 06:25	11/03/22 21:23	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	11/03/22 06:25	11/03/22 21:23	7439-89-6	
Manganese, Dissolved	110	ug/L	5.0	1.5	1	11/03/22 06:25	11/03/22 21:23	7439-96-5	
Nickel, Dissolved	1750	ug/L	10.0	2.6	1	11/03/22 06:25	11/03/22 21:23	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<1.8	mg/L	6.1	1.8	250		11/08/22 13:52		D3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	7.6	mg/L	0.75	0.22	5		11/02/22 21:54	14797-55-8	
Sulfate	48.0	mg/L	10.0	2.2	5		11/02/22 21:54	14808-79-8	

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ANALYTICAL RESULTS

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

Sample: PZ4	Lab ID: 40254067018	Collected: 11/01/22 13:45	Received: 11/02/22 08:50	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	11/03/22 06:25	11/03/22 21:26	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	11/03/22 06:25	11/03/22 21:26	7439-89-6	
Manganese, Dissolved	7.1	ug/L	5.0	1.5	1	11/03/22 06:25	11/03/22 21:26	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	11/03/22 06:25	11/03/22 21:26	7440-02-0	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	<0.018	mg/L	0.061	0.018	2.5		11/08/22 13:52		D3
300.0 IC Anions	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Nitrate as N	0.30	mg/L	0.15	0.044	1		11/02/22 22:09	14797-55-8	
Sulfate	16.2	mg/L	2.0	0.44	1		11/02/22 22:09	14808-79-8	

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QUALITY CONTROL DATA

Project: 6134 BG2 PHILLIPS PLATING

Pace Project No.: 40254067

QC Batch: 430493 Analysis Method: EPA 6010D

QC Batch Method: EPA 3010A Analysis Description: 6010D MET Dissolved

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40254067001, 40254067002, 40254067003, 40254067004, 40254067005, 40254067006, 40254067007,
40254067008, 40254067009, 40254067010, 40254067011, 40254067012, 40254067013, 40254067014,
40254067015, 40254067016, 40254067017, 40254067018

METHOD BLANK: 2479208 Matrix: Water

Associated Lab Samples: 40254067001, 40254067002, 40254067003, 40254067004, 40254067005, 40254067006, 40254067007,
40254067008, 40254067009, 40254067010, 40254067011, 40254067012, 40254067013, 40254067014,
40254067015, 40254067016, 40254067017, 40254067018

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Chromium, Dissolved	ug/L	<2.5	10.0	11/03/22 20:18	
Iron, Dissolved	ug/L	<56.7	100	11/03/22 20:18	
Manganese, Dissolved	ug/L	<1.5	5.0	11/03/22 20:18	
Nickel, Dissolved	ug/L	<2.6	10.0	11/03/22 20:18	

LABORATORY CONTROL SAMPLE: 2479209

Parameter	Units	Spike	LCS	LCS	% Rec	Limits	Qualifiers
		Conc.	Result	% Rec			
Chromium, Dissolved	ug/L	250	264	106	80-120		
Iron, Dissolved	ug/L	10000	10600	106	80-120		
Manganese, Dissolved	ug/L	250	256	102	80-120		
Nickel, Dissolved	ug/L	250	272	109	80-120		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2479210 2479211

Parameter	Units	40254067001	MS	MSD	MS	MSD	% Rec	MSD % Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	Spike Conc.	Spike Conc.									
Chromium, Dissolved	ug/L	<2.5	250	250	265	267	106	106	75-125	1	20		
Iron, Dissolved	ug/L	<56.7	10000	10000	10600	10700	106	106	75-125	1	20		
Manganese, Dissolved	ug/L	<1.5	250	250	254	254	101	101	75-125	0	20		
Nickel, Dissolved	ug/L	22.3	250	250	290	290	107	107	75-125	0	20		

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QUALITY CONTROL DATA

Project: 6134 BG2 PHILLIPS PLATING

Pace Project No.: 40254067

QC Batch: 430894 Analysis Method: SM 3500-Cr B

QC Batch Method: SM 3500-Cr B Analysis Description: Chromium, Hexavalent by 3500

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40254067001, 40254067002, 40254067003, 40254067004, 40254067005, 40254067006, 40254067007,
40254067008, 40254067009, 40254067010, 40254067011, 40254067012, 40254067013, 40254067014,
40254067015, 40254067016, 40254067017, 40254067018

METHOD BLANK: 2481344 Matrix: Water

Associated Lab Samples: 40254067001, 40254067002, 40254067003, 40254067004, 40254067005, 40254067006, 40254067007,
40254067008, 40254067009, 40254067010, 40254067011, 40254067012, 40254067013, 40254067014,
40254067015, 40254067016, 40254067017, 40254067018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.0073	0.024	11/08/22 13:46	

LABORATORY CONTROL SAMPLE: 2481345

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.3	0.30	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2481379 2481380

Parameter	Units	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Max Qual
Chromium, Hexavalent	mg/L	<0.073	3	3	2.9	2.9	96	95	90-110	0	20

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QUALITY CONTROL DATA

Project: 6134 BG2 PHILLIPS PLATING

Pace Project No.: 40254067

QC Batch: 430427 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40254067001, 40254067002, 40254067003, 40254067004, 40254067005, 40254067006, 40254067007,
40254067008, 40254067009, 40254067010, 40254067011, 40254067012, 40254067013, 40254067014,
40254067015, 40254067016, 40254067017, 40254067018

METHOD BLANK: 2478787 Matrix: Water

Associated Lab Samples: 40254067001, 40254067002, 40254067003, 40254067004, 40254067005, 40254067006, 40254067007,
40254067008, 40254067009, 40254067010, 40254067011, 40254067012, 40254067013, 40254067014,
40254067015, 40254067016, 40254067017, 40254067018

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Nitrate as N	mg/L	<0.044	0.15	11/02/22 11:31	
Sulfate	mg/L	<0.44	2.0	11/02/22 11:31	

LABORATORY CONTROL SAMPLE: 2478788

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Nitrate as N	mg/L	1.5	1.5	101	90-110	
Sulfate	mg/L	20	20.1	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2478789 2478790

Parameter	Units	40254067001	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	RPD	Max
		Result	Spike	Spike								
Nitrate as N	mg/L	10.5	15	15	26.8	23.2	109	85	90-110	14	15	M0
Sulfate	mg/L	32.8	20	20	53.6	53.9	104	105	90-110	1	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2478791 2478792

Parameter	Units	40254067018	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	RPD	Max
		Result	Spike	Spike								
Nitrate as N	mg/L	0.30	1.5	1.5	1.9	1.9	106	105	90-110	0	15	
Sulfate	mg/L	16.2	20	20	37.5	37.4	106	106	90-110	0	15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 6134 BG2 PHILLIPS PLATING
Pace Project No.: 40254067

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

H1 Analysis conducted outside the recognized method holding time.

H2 Extraction or preparation was conducted outside of the recognized method holding time.

H3 Sample was received or analysis requested beyond the recognized method holding time.

H5 Reanalysis conducted in excess of EPA method holding time. Results confirm original analysis performed in hold time.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6134 BG2 PHILLIPS PLATING

Pace Project No.: 40254067

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40254067001	MW1	EPA 3010A	430493	EPA 6010D	430591
40254067002	MW2	EPA 3010A	430493	EPA 6010D	430591
40254067003	MW4	EPA 3010A	430493	EPA 6010D	430591
40254067004	MW5	EPA 3010A	430493	EPA 6010D	430591
40254067005	MW6	EPA 3010A	430493	EPA 6010D	430591
40254067006	MW7	EPA 3010A	430493	EPA 6010D	430591
40254067007	MW8	EPA 3010A	430493	EPA 6010D	430591
40254067008	MW9	EPA 3010A	430493	EPA 6010D	430591
40254067009	MW10	EPA 3010A	430493	EPA 6010D	430591
40254067010	MW11	EPA 3010A	430493	EPA 6010D	430591
40254067011	MW12	EPA 3010A	430493	EPA 6010D	430591
40254067012	MW13	EPA 3010A	430493	EPA 6010D	430591
40254067013	MW14	EPA 3010A	430493	EPA 6010D	430591
40254067014	MW15	EPA 3010A	430493	EPA 6010D	430591
40254067015	PZ1	EPA 3010A	430493	EPA 6010D	430591
40254067016	PZ2	EPA 3010A	430493	EPA 6010D	430591
40254067017	PZ3	EPA 3010A	430493	EPA 6010D	430591
40254067018	PZ4	EPA 3010A	430493	EPA 6010D	430591
40254067001	MW1	SM 3500-Cr B	430894		
40254067002	MW2	SM 3500-Cr B	430894		
40254067003	MW4	SM 3500-Cr B	430894		
40254067004	MW5	SM 3500-Cr B	430894		
40254067005	MW6	SM 3500-Cr B	430894		
40254067006	MW7	SM 3500-Cr B	430894		
40254067007	MW8	SM 3500-Cr B	430894		
40254067008	MW9	SM 3500-Cr B	430894		
40254067009	MW10	SM 3500-Cr B	430894		
40254067010	MW11	SM 3500-Cr B	430894		
40254067011	MW12	SM 3500-Cr B	430894		
40254067012	MW13	SM 3500-Cr B	430894		
40254067013	MW14	SM 3500-Cr B	430894		
40254067014	MW15	SM 3500-Cr B	430894		
40254067015	PZ1	SM 3500-Cr B	430894		
40254067016	PZ2	SM 3500-Cr B	430894		
40254067017	PZ3	SM 3500-Cr B	430894		
40254067018	PZ4	SM 3500-Cr B	430894		
40254067001	MW1	EPA 300.0	430427		
40254067002	MW2	EPA 300.0	430427		
40254067003	MW4	EPA 300.0	430427		
40254067004	MW5	EPA 300.0	430427		
40254067005	MW6	EPA 300.0	430427		
40254067006	MW7	EPA 300.0	430427		
40254067007	MW8	EPA 300.0	430427		
40254067008	MW9	EPA 300.0	430427		
40254067009	MW10	EPA 300.0	430427		
40254067010	MW11	EPA 300.0	430427		
40254067011	MW12	EPA 300.0	430427		
40254067012	MW13	EPA 300.0	430427		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6134 BG2 PHILLIPS PLATING
 Pace Project No.: 40254067

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40254067013	MW14	EPA 300.0	430427		
40254067014	MW15	EPA 300.0	430427		
40254067015	PZ1	EPA 300.0	430427		
40254067016	PZ2	EPA 300.0	430427		
40254067017	PZ3	EPA 300.0	430427		
40254067018	PZ4	EPA 300.0	430427		

REPORT OF LABORATORY ANALYSIS

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(Please Print Clearly)

Company Name:	REI Engineering, Inc.
Branch/Location:	Wausau, WI
Project Contact:	Ken Lassau
Phone:	715-675-9784
Project Number:	6134 BG 2
Project Name:	Phillips Flating
Project State:	WI
Sampled By (Print):	RJTS

PO #: _____ **Regulatory Program:** WDR

Data Package Options (billable)	MS/MSD	Matrix Codes
<input type="checkbox"/> EPA Level III	<input type="checkbox"/> On your sample (billable)	A = Air B = Biota C = Charcoal O = Oil S = Soil SI = Sludge
<input type="checkbox"/> EPA Level IV	<input type="checkbox"/> NOT needed on your sample	W = Water DW = Drinking W GW = Ground W SW = Surface W WW = Waste W WP = Wipe

PAC LAB #	CLIENT FIELD ID	COLLECTION	
		DATE	TIME
001	MW1	11-1	8:20
002	MW2		8:35
003	MW4		9:00
004	MW5		11:15
005	MW6		12:45
006	MW7		2:00
007	MW8		4:00
008	MW9		9:30
009	MW10		12:30
010	MW11		10:30
011	MW12		10:00
012	MW13		11:45
013	MW14		11:30

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:

Email #2:

Telephone:

Fax:

5

**Samples on HOLD are subject to
special pricing and release of liability**



UPPER MIDWEST REGION

MN: 612-607-1700 **WI:** 920-469-2436

Page 1 of 2

CHAIN OF CUSTODY

*Preservation Codes							
A=None	B=HCl	C=H ₂ SO ₄	D=HNO ₃	E=DI Water	F=Methanol	G=NaOH	H=Sodium Bisulfate Solution
I=Sodium Thiosulfate	J=Other						

PRESERVATION (CODE)*		Y / N						
		Pick Letter						
			Analyses Requested					
			Nitrate	Sulfate	Dissolved Chromium	Dissolved Nickel	Dissolved Manganese	Dissolved Iron
WDNR								
x Codes								
V = Water								
DW = Drinking Water								
GW = Ground Water								
SW = Surface Water								
WW = Waste Water								
WP = Wipe								
SECTION	MATRIX							
TIME								
8:20	6W							
8:35								
9:00								
1:15								
12:45								
2:00								
1:00								
9:30								
12:30								
10:30								
10:00								
11:45								
11:30	W							

Received By:	Date/Time:	PACE Project No.
<i>Susan Miller</i>	11/2/22	0850 4054067
Received By:	Date/Time:	Receipt Temp = <u>2</u> °C
<i>Susan Miller</i>		
Received By:	Date/Time:	Sample Receipt pH OK / Adjusted
<i>Susan Miller</i>		
Received By:	Date/Time:	Cooler Custody Seal Present / Not Present
<i>Susan Miller</i>		
Received By:	Date/Time:	Intact / Not Intact
<i>Susan Miller</i>		

(Please Print Clearly)

Company Name:	REI Engineering, Inc
Branch/Location:	Wausau, WI
Project Contact:	Ken Lassar
Phone:	715-675-9784
Project Number:	60134B B62
Project Name:	Phillips Plating
Project State:	WI
Sampled By (Print):	Paul Busker
Sampled By (Sign):	
PO #:	
Regulatory Program:	WDNR



UPPER MIDWEST REGION

MN: 612-607-1700 WI: 920-469-2436

Page 1 of 2

40254067

CHAIN OF CUSTODY

*Preservation Codes							
A=None	B=HCL	C=H ₂ SO ₄	D=HNO ₃	E=DI Water	F=Methanol	G=NaOH	
H=Sodium Bisulfate Solution	I=Sodium Thiosulfate	J=Other					

FILTERED?
(YES/NO)

PRESERVATION
(CODE)*

Y/N							

Analyses Requested

Pick Letter

Matrix Codes

A = Air	W = Water
B = Biota	DW = Drinking Water
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
Si = Sludge	WP = Wipe

COLLECTION

DATE

TIME

MATRIX

Effective Date: 8/16/2022

Client Name: REI

All containers needing preservation have been checked and noted below:

Lab Lot# of pH paper:

Sample Preservation Receipt Form

Project #

40254067 Yes No N/ALab Std #ID of preservation (if pH adjusted):
1000722Initial when completed:
SkewDate/
Time:

Pace Lab #	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2	VOA Vials (>6mm)*	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	-HNO3 pH ≤2	pH after adjusted	Volume (mL)
001								/	/																					2.5/5				
002								/	/																					2.5/5				
003								/	/																					2.5/5				
004																															2.5/5			
005								/	/																					2.5/5				
006																															2.5/5			
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018																															2.5/5			
019																															2.5/5			
020																															2.5/5			

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other:

Headspace in VOA Vials (>6mm) : Yes No N/A

*If yes look in headspace column

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9C	40 mL clear ascorbic w/ HCl	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
AG5U	100 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH + Zn	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres					GN 1	
						GN 2	

Page 1 of

Sample Condition Upon Receipt Form (SCUR)

Project #:

Client Name: REI

Courier: CS Logistics FedEx Speedee UPS Waltco
 Client Pace Other: _____

Tracking #: 3381275

WO# : **40254067**



40254067

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Custody Seal on Samples Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used SR - 117 Type of Ice: Wet Blue Dry None Meltwater Only

Cooler Temperature Uncorr: 1.5 /Corr: 2

Temp Blank Present: yes no

Biological Tissue is Frozen: yes no

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Person examining contents:

11/2/22 /Initials: SKW

Labeled By Initials: SG

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	<u>Taker, Preserve</u> <u>11/2/22 SKW</u>
Chain of Custody Relinquished:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<u>11/2/22 SG</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- DI VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. <u>Per PM ANO3 is Filtered</u> <u>11/2/22 SG</u>
Correct Type <u>Pace Green Bay</u> , Pace IR, Non-Pace		
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. <u>1-BP3U added to each sample</u>
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11. <u>for dissolved test</u> <u>11/2/22 SG</u>
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>005 time 1235; 015- time 1245</u> <u>11/2/22 SG</u>
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

If checked, see attached form for additional comments

Person Contacted: _____ Date/Time: _____
Comments/ Resolution: _____

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample log.

Page 2 of 2

Wisconsin Department of Natural Resources

Laboratory Report

Page 1 of 3

9/14/2021

Lab FID: 113133790

Sample ID: 556763001

Laboratory: Wisconsin State Laboratory of Hygiene
PO Box 7996
2601 Agriculture Dr
Madison WI 53718

DNR ID: 113133790

Phone: 608-224-6203 Fax: 608-224-6213

Sample:

Field #: IND12EFF

Sample #: 556763001

Collection Start: 4/15/2021 7:56:00 AM

Collection End: 4/15/2021 7:59:00 AM

Collected By: JORDAN ENGLEBERT

ID #:

Waterbody/Outfall Id:

County:

ID Point #: IN PLANT SP
101

Sample Location: INDUSTRY 12

Account #: WQ033

Sample Description: INDUSTRY 12 EFFLUENT GRAB
SAMPLE

Sample Source: Effluent

Sample Depth:

Date Reported: 6/15/2021

Sample Status: COMPLETE

Project No:

Sample Reason:

Comment: Analyzed past the 30 days holding time: Method WSLH PFAS in Water analyzed on 06/02/21 1411 The data for 6:2 FTSA is the only data that comes from outside the 30 day hold time. All other compounds were analyzed within the hold time. Initial analysis of the sample indicated 6:2 FTSA concentration was determined to be higher than the calibration curve and higher than the software could calculate an approximate value for. Analysis of a dilution of the sample extract was necessary to accurately determine the concentration for 6:2 FTSA.

Analyses and Results:

Analysis Method		Analysis Date		Lab Comment			Sample ID: 556763001
WSLH PFAS in Water		5/4/2021					
Code	Description	Result	Units	LOD	Report Limit	LOQ	
99994	PERFLUORO-N-HEPTANOIC ACID	2.08	ng/L	0.0940		0.904	
99993	PERFLUORO-N-HEXANOIC ACID	11.5	ng/L	0.122		0.904	
97415	4:2 Fluorotelomer sulfonic acid	7.21	ng/L	0.200		0.904	
99987	Perfluoro-n-butanesulfonic acid	1.23	ng/L	0.141		0.904	
99924	PERFLOURO-N-TETRADECANOIC ACID	<0.449	ng/L	0.449		0.904	
97416	N-Ethyl perfluoroctanesulfonamid oethanol	<0.444	ng/L	0.444		0.904	
97420	N-ethyl perfluoroctanesulfonamide	<0.286	ng/L	0.286		0.904	

Wisconsin Department of Natural Resources
Laboratory Report

Page 2 of 3

97417	N-Methyl perfluoroctanesulfonamidoethanol	<0.392	ng/L	0.392		0.904
97421	N-methyl perfluoroctanesulfonamide	<0.421	ng/L	0.421		0.904
99923	PERFLOURO-N-TRIDECANOIC ACID	<0.222	ng/L	0.222		0.904
97423	Perfluorododecanesulfonic acid	<0.812	ng/L	0.812		3.62
99998	PERFLUORO-N-DODECANOIC ACID	<0.232	ng/L	0.232		0.904
97433	11-chloroeicosfluoro-3-oxaundecane-1-sulfonic acid	<0.128	ng/L	0.128		0.904
99990	Perfluoro-n-decanesulfonic acid	<0.179	ng/L	0.179		0.904
99997	PERFLUORO-N-UNDECANOIC ACID	<0.171	ng/L	0.171		0.904
97422	Perfluoroctanesulfonamide	<0.791	ng/L	0.791		3.62
97436	N-ethyl perfluoroctanesulfonamidoacetic acid	<0.269	ng/L	0.269		0.904
97437	N-methyl perfluoroctanesulfonamidoacetic acid	<0.177	ng/L	0.177		0.904
97424	Perfluorononanesulfonic acid	<0.173	ng/L	0.173		0.904
99996	PERFLUORO-N-DECANOIC ACID	<0.137	ng/L	0.137		0.904
97413	8:2 Fluorotelomer sulfonic acid	<0.120	ng/L	0.120		0.904
97432	9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid	<0.130	ng/L	0.130		0.904
99995	PERFLUORO-N-NONANOIC ACID	<0.141	ng/L	0.141		0.904
99597	Perfluoro-n-octanoic acid	<0.176	ng/L	0.176		0.904
97434	4,8-Dioxa-3H-perfluorononanoic acid	<0.0922	ng/L	0.0922		0.904
99988	Perfluoro-n-hexanesulfonic acid	<0.0844	ng/L	0.0844		0.904
97435	Hexafluoropropylene oxide dimer acid	<0.133	ng/L	0.133		0.904
97425	Perfluoropentanesulfonic acid	<0.0765	ng/L	0.0765		0.904
99991	PERFLUORO-N-BUTANOIC ACID	<2.53	ng/L	2.53		7.23
99598	Perfluoro-n-octanesulfonic acid	0.885	ng/L	0.118		0.904
99989	Perfluoro-n-heptanesulfonic acid	0.283	ng/L	0.101		0.904
99992	PERFLUORO-N-PENTANOIC ACID	0.529	ng/L	0.218		0.904

Wisconsin Department of Natural Resources
Laboratory Report

Page 3 of 3

Analysis Method		Analysis Date		Lab Comment			Sample ID: 556763001
WSLH PFAS in Water		6/2/2021		Analyzed past the 30 days holding time.			
Code	Description	Result	Units	LOD	Report Limit	LOQ	
97414	6:2 Fluorotelomer sulfonic acid	977	ng/L	1.51		9.04	

Comment: The Laboratory Control Spike (LCS) does not meet the upper QC limit.

ATTACHMENT B

WELL FORMS



Route To: Watershed/Wastewater
 Remediation/Redevelopment
 Other

Page 1 of 1

Facility/Project Name Phillips Plating Corporation			License/Permit/Monitoring Number BRRTS #02-51-559634			Boring Number PZ4						
Boring Drilled By: Name of crew chief (first, last) and Firm Giles Engineering (Keith Flowers)			Date Drilling Started 5/3/22		Date Drilling Completed 5/3/22	Drilling Method Hollow Stem Auger						
WI Unique Well No.	DNR Well ID No.	Common Well Name PZ3	Final Static Water Level	Surface Elevation 0	Borehole Diameter 8.25"	4						
Local Grid Origin <input type="checkbox"/> (estimated) <input type="checkbox"/> or Boring Location <input checked="" type="checkbox"/>			Lat Long	Local Grid Location N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/>								
Facility ID 851030070		County Price	County Code 51	Civil Town/City/or Village Phillips								
Sample		Blow Counts	Depth In Feet	Soil Properties					RQD/ Comments			
Number	Type			Length Att. & Recovered (in)	U.S.C.S.	Graphic	Well	PID/FID		Compressive Strength	Moisture Content	Liquid Limit
			Soil/ Rock Description And Geologic Origin For Each Major Unit									
			Blind Drilled to 36 feet with Hollow Stem Auger.									
			1									
			2									
			3									
			4									
			5									
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			34									
			35									
			36		End of Boring at 36 feet							
			37									

I hereby certify that the information on this form is true and the correct to the best of my knowledge

Signature <i>Kaylin Felix</i>	Firm REI Engineering, Inc. 4080 North 20th Avenue, Wausau, WI
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This form is authorized by Chapters 281,283,289,292,293,295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Route to: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name Phillips Plating	County Name Price	Well Name PZ-4
Facility License, Permit or Monitoring Number	County Code 50	Wis. Unique Well Number -----
DNR Well ID Number -----		
1. Can this well be purged dry? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Before Development After Development	
2. Well development method	11. Depth to Water (from top of well casing)	
surged with bailer and bailed <input type="checkbox"/> 4 1	a. <u>15.71</u>	ft. <u>35.48</u> ft.
surged with bailer and pumped <input type="checkbox"/> 6 1	b. <u>05</u> / <u>08</u> / <u>2022</u>	<u>05</u> / <u>08</u> / <u>2022</u>
surged with block and bailed <input type="checkbox"/> 4 2	Date <u>m m d d y y y y</u>	
surged with block and pumped <input checked="" type="checkbox"/> 6 2	Time <u>12 : 00</u> <input type="checkbox"/> a.m. <u>1 : 00</u> <input checked="" type="checkbox"/> p.m.	
surged with block, bailed and pumped <input type="checkbox"/> 7 0		
compressed air <input type="checkbox"/> 2 0		
bailed only <input type="checkbox"/> 1 0		
pumped only <input type="checkbox"/> 5 1		
pumped slowly <input type="checkbox"/> 5 0		
Other _____ <input type="checkbox"/> 		
3. Time spent developing well <u>60</u> min.	12. Sediment in well bottom	
4. Depth of well (from top of well casisng) <u>36</u> ft.	13. Water clarity	
5. Inside diameter of well <u>2</u> in.	Clear <input type="checkbox"/> 1 0	Clear <input checked="" type="checkbox"/> 2 0
6. Volume of water in filter pack and well casing <u> </u> gal.	Turbid <input checked="" type="checkbox"/> 1 5	Turbid <input type="checkbox"/> 2 5
7. Volume of water removed from well <u>45</u> gal.	(Describe) <u>Medium Turbidity</u>	(Describe) <u>Low Turbidity</u>
8. Volume of water added (if any) <u> </u> gal.	No Odor	No Odor
9. Source of water added _____	Brown	Tan/Clear
10. Analysis performed on water added? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If yes, attach results)	Fill in if drilling fluids were used and well is at solid waste facility:	
11. Total suspended solids <u> </u> mg/l <u> </u> mg/l	14. COD <u> </u> mg/l <u> </u> mg/l	
12. Well developed by: Name (first, last) and Firm First Name: Kaylin Last Name: Felix Firm: REI Engineering.	15. Well developed by: Name (first, last) and Firm First Name: Kaylin Last Name: Felix Firm: REI Engineering.	
13. Additional comments on development: Well purged dry. Surged and purged with pump and block.		

Name and Address of Facility Contact /Owner/Responsible Party
First Name: <u>Darin</u> Last Name: <u>Baratka</u>
Facility/Firm: <u>Phillips Plating</u>
Street: <u>984 North Lake Avenue</u>
City/State/Zip: <u>Phillips, WI 54555</u>

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: <u>Kaylin Felix</u>
Print Name: <u>Kaylin Felix</u>
Firm: <u>REI Engineering.</u>

NOTE: See instructions for more information including a list of county codes and well type codes.

Facility/Project Name Phillips Plating Corporation	Local Grid Location of Well ft. N. <input type="checkbox"/> S. ft. E. <input type="checkbox"/> W.	Well Name PZ4
Facility License, Permit or Monitoring No. BRRTS #02-51-559634	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input type="checkbox"/> Lat. _____ " Long. _____ " or	Wis. Unique Well No. _____ DNR Well ID No. _____
Facility ID	St. Plane _____ ft. N. _____ ft. E. _____ S/C/N _____	Date Well Installed 05 / 03 / 2022 m m d d y y y y
Type of Well Well Code 12 / pz	Section Location of Waste/Source 1/4 of _____ 1/4 of Sec. _____ T. _____ N. R. <input type="checkbox"/> E <input type="checkbox"/> W u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Well Installed By: Name (first, last) and Firm Giles Engineering (Keith Flowers)
Distance from Waste/ Source ft.	Enf. Stds. Apply <input type="checkbox"/>	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known Gov. Lot Number
<p>A. Protective pipe, top elevation 1462.93 ft. MSL</p> <p>B. Well casing, top elevation 1462.63 ft. MSL</p> <p>C. Land surface elevation 1462.93 ft. MSL</p> <p>D. Surface seal, bottom 0.5 ft. MSL or _____ ft.</p> <p>12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input checked="" type="checkbox"/> SP <input type="checkbox"/> SM <input checked="" type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/></p> <p>13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/></p> <p>15. Drilling fluid used: Water <input type="checkbox"/> 0.2 Air <input type="checkbox"/> 0.1 Drilling Mud <input type="checkbox"/> 0.3 None <input checked="" type="checkbox"/> 9.9</p> <p>16. Drilling additives used? <input type="checkbox"/> Yes <input type="checkbox"/> No Describe _____</p> <p>17. Source of water (attach analysis, if required): _____</p> <p>E. Bentonite seal, top _____ ft. MSL or 0.5 ft.</p> <p>F. Fine sand, top _____ ft. MSL or 39 ft.</p> <p>G. Filter pack, top _____ ft. MSL or 40 ft.</p> <p>H. Screen joint, top _____ ft. MSL or 41 ft.</p> <p>I. Well bottom _____ ft. MSL or 46 ft.</p> <p>J. Filter pack, bottom _____ ft. MSL or 46 ft.</p> <p>K. Borehole, bottom _____ ft. MSL or 46 ft.</p> <p>L. Borehole, diameter 8.25 in.</p> <p>M. O.D. well casing 2.32 in.</p> <p>N. I.D. well casing 2.07 in.</p> <p>1. Cap and lock? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>2. Protective cover pipe: a. Inside diameter: 8 in. b. Length: 1 ft. c. Material: Steel <input checked="" type="checkbox"/> 0.4 Other <input type="checkbox"/> d. Additional protection? If yes, describe: _____</p> <p>3. Surface seal: Bentonite <input type="checkbox"/> 3.0 Concrete <input checked="" type="checkbox"/> 0.1 Other <input type="checkbox"/></p> <p>4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 3.0 Other <input type="checkbox"/></p> <p>5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 3.3 b. Lbs/gal mud weight... Bentonite-sand slurry <input type="checkbox"/> 3.5 c. Lbs/gal mud weight.... Bentonite slurry <input type="checkbox"/> 3.1 d. % Bentonite Bentonite-cement grout <input type="checkbox"/> 5.0 e. Ft³ volume added for any of the above _____</p> <p>f. How installed: Tremie <input type="checkbox"/> 0.1 Tremie pumped <input type="checkbox"/> 0.2 Gravity <input checked="" type="checkbox"/> 0.8</p> <p>6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 3.3 b. 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 3.2 Other <input type="checkbox"/></p> <p>7. Fine sand material: Manufacturer, product name & mesh size a. #15 b. Volume added 0.34 ft³</p> <p>8. Filter pack material: Manufacturer, product name & mesh size a. #40 b. Volume added 2.05 ft³</p> <p>9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 2.3 Flush threaded PVC schedule 80 <input type="checkbox"/> 2.4 Other <input type="checkbox"/></p> <p>10. Screen material: PVC a. Screen type: Factory cut <input checked="" type="checkbox"/> 1.1 Continuous slot <input type="checkbox"/> 0.1 Other <input type="checkbox"/> b. Manufacturer US Filter c. Slot size: 0.10 in. d. Slotted length: 5 ft.</p> <p>11. Backfill material (below filter pack): None <input type="checkbox"/> 1.4 Other <input type="checkbox"/></p>		

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Kaylin Felix

Firm REI Engineering, Inc

ATTACHMENT C

DISPOSAL DOCUMENTATION



LINCOLN COUNTY LANDFILL 715-536-9636
Site: N4750 Landfill Lane, Merrill, WI 54452
Mailing: 801 N Sales St, Ste 201, Merrill, WI 54452
OPERATING HOURS:
Monday-Friday
SUMMER (May 1 - Sept. 30) 7:00 am - 4:00 pm
WINTER (Oct. 1 - Apr. 30) 8:00 am - 4:00 pm
1st and 3rd Sat. 8:00 am - Noon

DATE: 6/15/2022
Time In: 12:46 PM

TICKET #: 320769 Vehicle #:
Time Out: 12:51 PM Trailer #:

BILL TO: R.E.I.
HAULER: R.E.I.

JOB : 22 - 24 G - REI #6134B Phillips Plating, Phillips
PO# : REI job #6134B
Garbage (GAR1) 0.90 tn
Gross: 10140 Tare: 8340 Net Weight: 1800

Scale Notes: Charge Transaction
PAUL

CLOSED THE FOLLOWING DAY: MONDAY, 7/4

Customer Signature *Paul Dorn as agent of generator*
Weighed By: Administrator

I certify that the waste in this vehicle complies with the Wisconsin Recycling law and the landfill bans. I also agree to pay 1.5% per month Late payment charge after 30 days.