



CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING

December 6, 2021

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 activities associated with the above referenced site. The site location is shown on Figure 1. The COVID-19 pandemic did cause a temporary reduction of sampling activities in 2020 as was documented through WDNR processes.

BACKGROUND

This site is in the NW $\frac{1}{4}$, SW $\frac{1}{4}$, Section 7, T37N, R01E in the City of Phillips, Price County. A site vicinity map is included as attachment (Figure 1). The facility is an operating plating facility which specializes in metallic plating of various plastic components.

SUMMARY OF DATES AND WORK COMPLETED

- **November 13, 2019** – REI onsite to sample all monitoring wells and piezometers.
- **February 10, 2020** – REI onsite to sample all monitoring wells and piezometers.
- **March 3, 2021** – REI onsite to sample all monitoring wells and piezometers.
- **August 25, 2021** – REI onsite to sample all monitoring wells and piezometers.

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, and September 5, 2019. 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



RESPONSIVE. EFFICIENT. INNOVATIVE.

4080 N. 20th Avenue Wausau, WI 54401
715-675-9784 REIengineering.com

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.

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 November 2019, February 2020, March 2021, and August 2021 sample events along with location of all monitoring wells and piezometers are depicted in Figures 3a, 3b, 3c, and 3d. Piezometric flow maps for the November 2019, February 2020, March 2021, and August 2021 sample events along with location of all monitoring wells and piezometers are depicted in Figures 4a, 4b, 4c, and 4d.

Historically, groundwater has been documented in a northeasterly flow direction. The expansion of the well network on the Phillips Medsize property revealed higher groundwater elevations in the monitoring wells near Elk Lake (WBIC 2240000) compared to elevations in monitoring wells near the source area. Elk Lake is part of the Phillips Chain of Lakes, expanded by the impoundment of the Elk River. The hydrologic lake type of Elk Lake is a drainage lake which means it has an inlet and an outlet and the main water source is stream drainage. Based on depth to groundwater and underlying geologic conditions, Elk Lake is likely fed from both groundwater and surface water sources. Increased elevations in monitoring wells closer to the lake are likely a product of a hydraulic connection between the groundwater and the lake. Groundwater flow direction may also be influenced near Elk Lake which has a westerly flow direction as it approaches the outlet into Long Lake (WBIC 2239300) at the STH 13 bridge.

REI previously researched water elevation recordings at the dam for the impoundment of Elk Lake. However, significant water elevation detail is not recorded on a regular basis to make any connections to the local groundwater at the site.

Based on groundwater elevation data collected from the three (3) piezometers, groundwater flow deeper in the aquifer appears to flow towards the west. Based on the nested monitoring well MW6 and piezometer PZ1, groundwater within the aquifer has a downward flow direction 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 seven (7) rounds of groundwater monitoring conducted with two (2) rounds identifying an upward flow gradient. The well nest of monitoring well MW13 and piezometer PZ2 has shown an upward flow gradient for five (5) of the seven (7) rounds of groundwater monitoring conducted with two (2) rounds identifying a downward flow gradient.

GROUNDWATER ANALYTICAL RESULTS

Upgradient monitoring wells

MW1 identified concentrations of dissolved Nickel exceeding the Wisconsin Administrative Code (WAC) Chapter NR140 Preventive Action Limit (PAL) during the November 2019, February 2020, March 2021, and August 2021 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 ten (10) rounds of groundwater monitoring.

Side-gradient monitoring wells

Samples collected from MW2 identified low-level detections of dissolved Nickel for the last eleven (11) 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 eleven (11) rounds of groundwater monitoring.

MW4 is an up/side-gradient monitoring well. Samples collected from MW4 reveal low-level detections of dissolved Nickel during the November 2019 and August 2021 sampling events were identified. 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.

Samples collected from MW7 reveal low-level detections of dissolved Nickel during the November 2019 and March 2021 sampling events. However, concentrations have remained below the WAC Chapter NR140 state groundwater standards. Concentrations of dissolved Chromium identified an exceedance of the WAC Chapter NR140 PAL during the November 2019 sampling event. Low-level detections of dissolved Chromium were identified during the February 2020 and March 2021 sampling events and concentrations remained below the laboratory method limit of detection during the August 2021 sampling event. Dissolved Chromium and dissolved Nickel have demonstrated an overall stable/decreasing trend since 2016.

Downgradient monitoring wells

Samples collected from MW5 identified concentrations of dissolved Chromium and dissolved Nickel exceeding the WAC Chapter NR140 Enforcement Standards (ES) during the November 2019, February 2020, March 2021, and August 2021 sampling event. Dissolved Chromium has demonstrated a stable/decreasing trend at this location. Conversely, dissolved Nickel has demonstrated an increasing trend since 2015. Laboratory analytical results identified notable increases in concentration during the March 2021 groundwater monitoring event. However, laboratory analytical results from the August 2021 groundwater monitoring event identified concentrations similar to the four (4) rounds preceding the March 2021 sampling event.

MW6 is directly down gradient of the Phillips Plating facility. Samples collected from MW6 identified concentrations of dissolved Chromium and dissolved Nickel exceeding the WAC Chapter NR140 Enforcement Standards (ES) during the November 2019, February 2020, March 2021, and August 2021 sampling events. Nickel has demonstrated a stable/decreasing trend since 2014. Conversely, chromium has demonstrated an increasing trend since 2015.

Samples collected from monitoring well MW8 identified concentrations of dissolved Chromium and dissolved Nickel exceeding the WAC Chapter NR140 ES during the November 2019, February 2020, March 2021, and August 2021 sampling event. Dissolved Chromium and dissolved Nickel have demonstrated a stable/decreasing trend since 2014.

Samples collected from monitoring well MW9 identified concentrations of dissolved Chromium and dissolved Nickel exceeding the WAC Chapter NR140 ES during the November 2019, February 2020, March 2021, and August 2021 sampling event. Dissolved Chromium and dissolved Nickel have demonstrated a stable/decreasing trend since 2014.

Samples collected from monitoring well MW10 identified concentrations of dissolved Chromium exceeding the WAC Chapter NR140 ES during the November 2019, February 2020, March 2021, and August 2021 sampling event. Dissolved Nickel exceeding the WAC Chapter NR140 PAL during the November 2019 and March 2021 sampling events. Overall, a stable to decreasing trend continues in MW10 since May 2015 to present.

MW11 is a down/side-gradient monitoring well. Analytical results have identified a low-level detection of dissolved Chromium during the November 2019 and dissolved Nickel during the February 2020 and March 2021 sampling events. However, the concentrations were below the WAC Chapter NR140 state groundwater standards. 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 2013.

MW12 is a down/side-gradient monitoring well. Analytical results identified no detections of dissolved Chromium or dissolved Nickel except for a low-level detection of Dissolved Nickel during the March 2021. This detection remained below the WAC Chapter NR140 state groundwater standard. 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 2013.

MW13 is a down/side-gradient monitoring well. Analytical results identified low-level detections of dissolved Chromium during the November 2019, February 2020, March 2021, and August 2021 sampling events. However, the concentrations are below the WAC Chapter NR140 state groundwater standards. Concentrations of dissolved Nickel have fluctuated between low-level detections and remaining below the laboratory method limit of detections during the last four (4) rounds of groundwater sampling. 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.

MW14 is a downgradient monitoring well. Analytical results identified concentrations of dissolved Chromium and dissolved Nickel below the laboratory method limit of detection during the November 2019, February 2020, March 2021, and August 2021 sampling events. Concentrations of dissolved Nickel have fluctuated between low-level detections and remaining below the laboratory method limit of detections during the last four (4) rounds of groundwater sampling. 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.

MW14 is a downgradient monitoring well. Analytical results indicate concentrations of dissolved Chromium and dissolved Nickel fluctuating between low-level detections and below the laboratory method limit of detection during the November 2019, February 2020, March 2021, and August 2021 sampling events except for the concentration of dissolved Nickel identified during the March 2021 sampling event which exceeded the WAC Chapter NR140 PAL. 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 except as noted above.

Piezometer PZ1 is a downgradient piezometer and adjacent to monitoring well MW6. Samples collected from PZ1 identify concentrations of dissolved Chromium exceeding the WAC Chapter NR140 ES during the November 2019, February 2020, March 2021, and August 2021 sampling events. During the March 2021 sampling event the concentration of dissolved Nickel exceeded the WAC Chapter NR140 PAL. Dissolved Chromium and dissolved Nickel have demonstrated a stable/decreasing trend since 2013.

Piezometer PZ2 is downgradient piezometer and located on the Phillips Medisize property. Analytical results from samples collected from PZ2 reveal a low-level concentration of dissolved Chromium during the November 2019 sampling event. 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 is the furthest downgradient piezometer from the source. Analytical results identified concentrations of dissolved Chromium and dissolved Nickel during the November 2019,

February 2020, March 2021, and August 2021 sampling events exceeding the WAC Chapter NR140 ES. Dissolved Chromium and dissolved Nickel have demonstrated a stable/decreasing trend since 2018.

Groundwater samples were collected, and split samples were submitted to Pace Analytical Services and Northern Lake Service, Inc. for wells located off site and on the Phillips Medisize property. These include MW10, MW11, MW13, MW14, MW15, PZ2, and PZ3. In the event of variance in laboratory analytical results between the two (2) labs, the higher reported concentration was utilized to determine compliance with WAC Chapter NR140 state groundwater standards.

Groundwater field monitoring and laboratory analytical results are summarized on Tables 3a-3t. Groundwater Isoconcentration maps based on the laboratory analytical results for the November 2019, February 2020, March 2021, and August 2021 groundwater monitoring events are included as Figures 5a, 5b, 5c, and 5d.

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. Analytical results have not been shared with Phillips Plating as of the date of this report. These results will be shared once received from WDNR.

CONCLUSIONS AND RECOMMENDATIONS

REI has conducted ongoing groundwater monitoring to demonstrate stable or decreasing contaminant trends. Such trends have been identified in many of the Phillips Plating monitoring wells. However, increasing chromium concentration trends in MW6 since 2015 and increasing nickel concentration trends in MW5 since 2015 suggest groundwater monitoring should be continued with a discussion of potential changes in frequency in select source area wells/piezometers and a continued semi-annual monitoring schedule in the remaining well network.

Downward vertical flow gradients have been identified in well nests MW6/PZ1, MW10/PZ3, and MW13/PZ2. Based on these downward gradients, contaminants may be sinking in the formation which may suggest consideration for the installation of additional piezometers at greater depths to aid in vertical definition of the groundwater contamination. However, drilling conditions were extremely challenging in these saturated soils for the installation of the existing piezometers and would likely not be successful using traditional drilling methodologies.

Please contact our office at (715) 675-9784 or electronically at klassa@reiengineering.com upon you review and questions.

Sincerely,
REI Engineering, Inc.



Kenneth J. Lassa, P.S.
Senior Consultant



Matthew Michalski, P.G.
Hydrogeologist

Attachments

Table 1 – Groundwater Elevation Summary
Table 2a-2c – Vertical Gradient Calculations
Table 3a-3t – Groundwater Analytical Results Summary
Figure 1 – Site Vicinity Map
Figure 2 – Site Map
Figure 3a-3d – Groundwater Flow Maps
Figure 4a-4d – Piezometric Flow Maps
Figure 4a-4b – Groundwater Isoconcentrations Maps
Attachment A – Laboratory Analytical Reports

Cc: Mr. Darin Baratka, Phillips Plating Corp. (electronic copy)
Mr. Dan Anderson, Phillips Medisize (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
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
Depth to Water (from TOC)																		
12/12/2012	12.76	12.58	15.43	13.79	15.70	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
1/3/2013	13.06	12.83	15.74	14.02	15.77	16.76	15.04	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
2/6/2013	13.49	13.24	16.08	14.19	15.84	16.85	15.19	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
2/19/2013	NC	NC	NC	NC	NC	NC	NC	9.78	17.39	NI	NI	NI	NI	NI	NI	NI	NI	NI
3/5/2013	13.76	13.50	16.33	14.46	15.74	16.76	15.12	9.78	17.37	NI	NI	NI	NI	NI	NI	NI	NI	NI
5/8/2013	10.38	9.83	9.72	9.79	11.38	15.75	13.07	9.39	14.86	NI	NI	NI	NI	NI	NI	NI	NI	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
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
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
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
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
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
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
Average Depth to Water (feet bls)	11.21	12.15	13.02	12.52	15.77	16.90	15.05	10.29	16.86	8.79	10.95	14.80	15.04	7.06	7.99	17.88	15.87	9.09
Minimum Depth to Water (feet bls)	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	8.47
Maximum Depth to Water (feet bls)	14.16	13.84	16.59	14.79	16.33	17.37	15.91	13.84	17.81	9.61	11.93	18.28	16.41	7.53	8.45	18.67	16.33	9.48

NI = Not Installed
NC = Not Collected
bls = below land surface

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	
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	
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	
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	
Water Elevation																			
12/12/2012	1,447.06	1,444.66	1,445.90	1,445.40	1,441.81	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	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	NI	NI	NI	NI	NI	NI	NI	NI	NI	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	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
2/19/2013	NC	NC	NC	NC	NC	NC	NC	1,448.45	1,438.94	NI	NI	NI	NI	NI	NI	NI	NI	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	NI	NI	NI	NI	NI	NI	NI	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	NI	NI	NI	NI	NI	NI	NI	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	
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	
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	
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	
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	
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	
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	
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	
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	
8/4/2015	1,449.88	1,446.13	Well Abandoned	1,447.92	1,442.27	1,441.98	1,439.19	1,448.53	1,439.89	1,442.52	1,442.75	1,445.89	NI	NI	NI	1,440.71	NI	NI	
11/3/2015	1,449.61	1,445.46		1,446.63	1,442.10	1,441.84	1,439.05	1,448.34	1,439.49	1,442.32	1,442.62	1,445.37	NI	NI	NI	1,440.36	NI	NI	
2/22/2016	1,448.96	1,445.18		NC	1,441.99	1,441.80	1,438.41	1,448.51	1,438.84	1,441.78	1,441.91	1,443.73	NI	NI	NI	1,439.90	NI	NI	
8/31/2016	1,449.50	1,445.69		1,446.81	NC	1,441.84	1,439.31	1,448.14	1,439.82	1,442.64	1,442.92	1,444.05	NI	NI	NI	1,440.80	NI	NI	
2/14/2017	1,448.14	1,444.34		1,446.07	1,441.75	1,441.61	1,438.49	1,448.16	1,438.82	1,441.78	1,441.93	1,443.69	NI	NI	NI	1,439.76	NI	NI	
8/29/2017	1,450.11	1,445.53		1,447.29	1,442.09	NC	1,439.43	1,447.75	1,439.72	1,442.64	1,442.92	1,445.84	NI	NI	NI	1,440.83	NI	NI	
7/11/2018	1,448.92	1,445.89		1,447.43	1,442.10	1,441.81	1,439.36	1,447.71	1,439.87	1,442.70	1,442.98	1,446.25	1,442.63	1,442.48	1,442.14	1,440.81	1,442.61	1,442.69	
12/11/2018	1,448.80	1,445.24		1,446.79	1,441.85	1,441.55	1,438.60	1,446.93	1,438.96	1,441.86	1,442.03	1,444.16	1,441.83	1,441.73	1,441.44	1,439.91	1,441.89	1,441.85	
4/30/2019	1,450.44	1,445.04		1,447.64	1,442.23	1,441.94	1,439.75	1,447.89	1,440.22	1,443.04	1,443.49	1,447.23	1,448.59	1,442.88	1,442.60	1,440.81	1,443.10	1,441.68	
11/13/2019	1,449.58	1,445.85		1,447.39	1,442.02	1,441.76	1,438.87	1,447.91	1,439.31	1,442.13	1,442.38	1,445.65	1,442.13	1,442.01	1,441.67	1,440.69	1,442.15	1,442.10	
2/10/2020	1,448.31	1,444.90		1,446.49	1,442.03	1,441.57	1,438.65	1,447.67	1,438.94	1,441.89	1,442.08	1,443.80	1,441.91	1,441.83	1,441.62	1,440.10	1,441.99	1,441.90	
3/3/2021	1,447.11	1,444.26		1,445.81	1,441.66	1,441.30	1,438.44	1,444.39	1,438.66	1,441.66	1,441.84	1,443.35	1,441.68	1,441.68	1,441.68	1,441.58	1,439.75	1,442.05	1,441.68
8/25/2021	1,449.87	1,445.79		1,446.94	1,442.20	1,441.92	1,439.42	1,448.20	1,439.79	1,442.59	1,442.84	1,446.20	1,442.61	1,442.47	1,442.22	1,440.78	1,442.64	1,442.58	
Average Elevation of Water (at Groundwater Surface)	1,449.01	1,445.43	1,448.57	1,447.00	1,442.22	1,441.77	1,438.97	1,447.95	1,439.49	1,442.32	1,442.56	1,445.18	1,443.05	1,442.15	1,441.90	1,440.48	1,442.35	1,442.07	
Minimum Elevation of Water (at Groundwater Surface)	1,446.06	1,443.74	1,445.00	1,444.73	1,441.66	1,441.30	1,438.11	1,444.39	1,438.54	1,441.50	1,441.58	1,441.70	1,441.68	1,441.68	1,441.44	1,439.69	1,441.89	1,441.68	
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	1,442.69	

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

NI = Not Installed

NC = Not Collected

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	PZ1	Mid-Point to Mid-Point	
	Groundwater Elevation (feet MSL)	Groundwater Elevation (feet MSL)	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	1441.55	1439.91	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
			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

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

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 ^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	--	--	5.5	7.7 ^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)	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
Nitrate Nitrogen (mg/L)	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 (mg/L)	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
Metals (ug/L)						
Arsenic	10	1	NA	NA	NA	NA
Barium	2000	400	NA	NA	NA	NA
Cadmium	5	0.5	NA	NA	NA	NA
Total Chromium	--	--	NA	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	<0.037	<0.018	<0.018	<0.018
Lead	15	1.5	NA	NA	NA	NA
Mercury	2	0.2	NA	NA	NA	NA
Nickel	--	--	NA	NA	NA	NA
Selenium	50	10	NA	NA	NA	NA
Silver	50	10	NA	NA	NA	NA
Dis. Total Chromium (filtered)	100	10	<2.5	<2.5	<2.5	<2.5
Dissolved Iron (filtered)	300	150	<29.6	<29.6	<56.7	<56.7
Dissolved Manganese (filtered)	300	60	<1.1	<1.1	1.6 ^J	<1.5
Dissolved Nickel (filtered)	100	20	35.4	33.4	30.8	22.1
Nitrate Nitrogen (mg/L)	10	2	8.8	10.2	8.1	9.3
Sulfate (mg/L)	250	125	20.4	24.8	23.6	35.7
Field Measurements						
Temperature (°F)	--	--	54.60	49.7	49.7	59.7
Conductivity (ms/cm)	--	--	1,209	3,295	721	723
Dissolved Oxygen (mg/L)	--	--	5.32	5.31	5.17	6.31
pH	--	--	8.70	7.22	7.08	8.35
Redox Potential (mV)	--	--	77.1	130.8	2719.0	161.4

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

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)	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
Nitrate Nitrogen (mg/L)	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 (mg/L)	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
Metals (ug/L)						
Arsenic	10	1	NA	NA	NA	NA
Barium	2000	400	NA	NA	NA	NA
Cadmium	5	0.5	NA	NA	NA	NA
Total Chromium	--	--	NA	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	<0.37	<0.18	<0.37	<0.37
Lead	15	1.5	NA	NA	NA	NA
Mercury	2	0.2	NA	NA	NA	NA
Nickel	--	--	NA	NA	NA	NA
Selenium	50	10	NA	NA	NA	NA
Silver	50	10	NA	NA	NA	NA
Dis. Total Chromium (filtered)	100	10	<2.5	<2.4	<2.5	<2.5
Dissolved Iron (filtered)	300	150	<29.6	<29.6	<56.7	<56.7
Dissolved Manganese (filtered)	300	60	22.4	85.1	48.9	20.1
Dissolved Nickel (filtered)	100	20	6.4 ^J	5.7 ^J	11.2	10 ^J
Nitrate Nitrogen (mg/L)	10	2	21	24	11.5	31.8
Sulfate (mg/L)	250	125	14.7 ^J	15.9	15.5	26.6
Field Measurements						
Temperature (°F)	--	--	55.1	47.5	47.3	60.9
Conductivity (ms/cm)	--	--	321.4	815	842	723.2
Dissolved Oxygen (mg/L)	--	--	3.69	3.1	6.72	2.4
pH	--	--	5.79	5.74	6.01	7.61
Redox Potential (mV)	--	--	208.6	183.0	1929.0	197.4

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

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	
Barium	2000	400	25	57.2	NA	NA	NA	NA	NA	NA	NA	NA	
Cadmium	5	0.5	<0.10	<0.38	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	
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	
Mercury	2	0.2	<0.025	<0.10	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	
Silver	50	10	<0.13	<1.4	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 Total Iron (filtered)	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	
Nitrate Nitrogen (mg/L)	10	2	NA	NA	2.3	3.1	3.4	5	2.1	2.2 ^J	2.8	3.2	
Sulfate (mg/L)	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	

Well Abandoned - Following Sample Collection

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.

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	NA	<2.1	<2.5	<2.5	<2.5	<2.5	<2.5
Chromium, Hexavalent (mg/L)	--	--	<0.0017	<0.0034	NA	NA	NA	NA	NA	NA	NA	NA	<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	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	NA	<1.4	<1.1	<1.1	<1.1	<1.1	<1.1
Dissolved Iron (filtered)	300	150	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<15.5	<15.5	<15.5	<35.4	<35.4
Nitrate Nitrogen (mg/L)	10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1	2.8	3.5	2.4	2.3	2.0
Sulfate (mg/L)	250	125	NA	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
Metals (ug/L)						
Arsenic	10	1	NA	NA	NA	NA
Barium	2000	400	NA	NA	NA	NA
Cadmium	5	0.5	NA	NA	NA	NA
Total Chromium (dissolved)	100	10	<2.5	2.9 ^J	<2.5	<2.5
Chromium, Hexavalent (mg/L)	--	--	<0.037	<0.037	<0.037	<0.037
Lead	15	1.5	NA	NA	NA	NA
Mercury	2	0.2	NA	NA	NA	NA
Nickel (dissolved)	100	20	<3.0	4.7 ^J	7.1 ^J	<2.6
Selenium	50	10	NA	NA	NA	NA
Silver	50	10	NA	NA	NA	NA
Manganese (dissolved)	300	60	<1.1	29.1	2.1 ^J	<1.5
Dissolved Iron (filtered)	300	150	<29.6	502	<56.7	<56.7
Nitrate Nitrogen (mg/L)	10	2	2.3	2.9	3.0	3.0
Sulfate (mg/L)	250	125	9.0 ^J	10.6	9.4	9.2 ^J
Field Measurements						
Temperature (°F)	--	--	54.3	49.1	51.1	56.4
Conductivity (ms/cm)	--	--	795	954	1382	724.3
Dissolved Oxygen (mg/L)	--	--	0.26	0.72	0.95	0.50
pH	--	--	7.81	7.55	7.32	6.92
Redox Potential (mV)	--	--	178.0	138.3	192.9	137.5

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

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	3/5/2013	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	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)	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
Nitrate Nitrogen (mg/L)	10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3	4.4
Sulfate (mg/L)	250	125	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	30.1	24.1
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
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	365	195	306	160	209	196	494	104
Total Chromium (unfiltered)	--	--	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
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	922	3,040	1,830	2,120	2,010	2,990	7,280	2,610
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 Iron (filtered)	0.3	0.15	<15.5	<15.5	<35.4	<35.4	<29.6	<29.6	50,000	276
Dissolved Manganese (filtered)	300	60	11	54.2	21.6	32.9	31.6	41.3	1,460	113
Nitrate Nitrogen (mg/L)	10	2	5.0	7.5	6.7	6.2	6.6	6.6	5.2	5.7
Sulfate (mg/L)	250	125	24.4	37.1	33.9	38.8	26.1	23.0	19.5	26.4
Field Measurements										
Temperature (°F)	--	--	55.42	53.78	52.16	47.20	49.70	50.6	50.8	56.0
Conductivity (ms/cm)	--	--	1,009	3,496	1,478	4,393	1,688	1,796	232.7	724.3
Dissolved Oxygen (mg/L)	--	--	6.61	5.03	4.98	8.06	5.00	5.68	5.15	5.58
pH	--	--	6.69	5.87	5.93	NA	6.10	6.20	5.93	6.35
Redox Potential (mV)	--	--	120.0	243.5	-67.9	234.5	167.6	176.3	234.4	151.6

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.

pH electrode malfunction 4/30/2019

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	7,770	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)	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
Nitrate Nitrogen (mg/L)	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 (mg/L)	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
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	5,800	11,500	13,200	14,300	9,660	10,100	8,480	5,270
Total Chromium (unfiltered)	--	--	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
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	4,140	6,030	6,560	6,680	6,710	6,580	7,730	6,910
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	922	1,220	1,290	1,060	1,080	1,220	1,390	1,040
Manganese (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered)	300	150	<15.5	<31.0	<35.4	<35.4	<29.6	<29.6	<56.7	<113
Iron (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen (mg/L)	10	2	6.7	12.5	11	13.9	13.1	11.6	8.5	11.2
Sulfate (mg/L)	250	125	251	302	334	439	213	337	285	226
Field Measurements										
Temperature (°F)	--	--	57.06	55.94	55.4	54.10	55.30	51.6	53.3	58.4
Conductivity (ms/cm)	--	--	1,241	1,517	1,779	1,862	1,684	1,841	2,186	724.2
Dissolved Oxygen (mg/L)	--	--	0.80	0.42	0.28	0.48	2.69	0.98	0.91	6.36
pH	--	--	6.95	6.62	6.67	NA	6.64	6.65	6.6	6.42
Redox Potential (mV)	--	--	118.8	242.4	-40.0	210.7	150.5	151.3	183.0	176.4

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

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	<i>841</i>	<i>661</i>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	<0.39	<i>0.58^J</i>	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	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)	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
Nitrate Nitrogen (mg/L)	10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2	3.4	3.8	2.8
Sulfate (mg/L)	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	7.45	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
Metals (ug/L)									
Arsenic	10	1	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	NA	NA	NA	NA	NA	NA	NA
Total Chromium	--	--	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
Chromium, Hexavalent (mg/L)	--	--	<0.013	<0.26	<0.13	<0.73	<0.37	<0.37	<0.37
Lead	15	1.5	NA	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	NA	NA	NA	NA	NA	NA	NA
Nickel	--	--	NA	NA	NA	NA	NA	NA	NA
Selenium	50	10	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered)	300	150	293	46.8 ^J	85.9 ^J	4000	75.4 ^J	74.1 ^J	125
Dissolved Manganese (filtered)	300	60	7.4	1.6 ^J	3.7 ^J	233	8.9	5.0	6.1
Dissolved Nickel (filtered)	100	20	<1.9	<1.9	7.2 ^J	13.8	<3.0	3.6 ^J	<2.6
Nitrate Nitrogen (mg/L)	10	2	3.2	3.3	2.5	2.3	2.6	3	2.8
Sulfate (mg/L)	250	125	34.3	44.8	23.6	20.4	22.3	33.3	27.9
Field Measurements									
Temperature (°F)	--	--	53.96	50.90	45.20	53.10	41.3	47.9	54.7
Conductivity (ms/cm)	--	--	3,595	2,369	2,678	1,207	1,258	2,425	723.1
Dissolved Oxygen (mg/L)	--	--	6.95	7.44	8.85	6.09	8.56	5.07	7.92
pH	--	--	6.24	6.72	NA	6.68	6.78	7.63	7.01
Redox Potential (mV)	--	--	229.2	-15.1	195.0	180.7	154.2	155.0	191.6

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.

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	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)	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
Nitrate Nitrogen (mg/L)	10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5	6.6	14.7
Sulfate (mg/L)	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
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	470	594	560	399	583	565	577	485
Total Chromium (unfiltered)	--	--	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
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	1,750	876	1,290	966	528	434	324	300
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 Iron (filtered)	300	150	<15.5	<15.5	<35.4	37.4 ^J	58.2 ^J	173	152	<56.7
Dissolved Manganese (filtered)	300	60	38.2	29.5	42.0	40.6	22.4	16.9	9.5	9.7
Nitrate Nitrogen (mg/L)	10	2	12.1	40.4	28.4	9.5	8.8	7.5	6.0	12.2
Sulfate (mg/L)	250	125	8.8 ^J	14.2 ^J	20.3	27.5	18.8 ^J	22.3	18.3	11.8
Field Measurements										
Temperature (°F)	--	--	60.50	59.54	54.68	46.50	52.80	50.0	51.5	59.2
Conductivity (ms/cm)	--	--	695	747	563.2	1454	256.6	282.3	252.6	724.1
Dissolved Oxygen (mg/L)	--	--	3.66	4.60	7.25	7.66	5.75	8.12	7.32	5.54
pH	--	--	6.15	5.42	5.79	NA	5.97	6.11	6.73	6.81
Redox Potential (mV)	--	--	167.9	271.6	-40.7	177.7	202	150.3	171.8	189.1

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.

pH electrode malfunction 4/30/2019

TABLE 3i
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	NA	NA	NA	NA	NA	NA
Dis. Total Chromium (filtered)	100	10	2,160	862	499	539	1,120	2,580	279	2,770	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)	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
Nitrate Nitrogen (mg/L)	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 (mg/L)	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
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	366	238	478	604	590	647	782	337
Total Chromium (unfiltered)	--	--	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
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	423	555	536	341	586	564	666	435
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	198	250	162	238	103	331	322	60.8
Manganese (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered)	300	150	<15.5	<15.5	<35.4	919	<29.6	1170	5,510	110
Iron (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen (mg/L)	10	2	8.6	8.4	10.6	8.3	8.4	11.2	8.4	8.6
Sulfate (mg/L)	250	125	65.4	49.8	73.7	79.8	58.3	89.9	75.2	67.2
Field Measurements										
Temperature (°F)	--	--	55.35	51.62	52.52	47.40	52.20	49.1	49.2	55.2
Conductivity (ms/cm)	--	--	2,064	3,541	2,690	2,163	2,786	2,903	2,758	723
Dissolved Oxygen (mg/L)	--	--	6.50	5.74	3.83	7.29	6.09	5.05	6.65	2.70
pH	--	--	6.52	5.79	5.80	NA	5.90	5.93	6.45	6.47
Redox Potential (mV)	--	--	150.6	263.4	-44.9	184.2	222.1	135.1	204.5	207.8

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

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

Laboratory			Pace	NLS	Pace	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	2/5/2015	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
Barium	2000	400	101	110	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	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
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	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
Silver	50	10	<1.4	<0.13	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
Manganese (unfiltered)	--	--	NA	NA	1,010	825	NA	594	NA	841	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered)	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
Nitrate Nitrogen (mg/L)	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 (mg/L)	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
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	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	NA	NA	NA	NA	NA	NA
Barium	2000	400	NA	NA	69.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	5	0.5	NA	NA	<0.60	NA	NA	NA	NA	NA	NA	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	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	0.49	0.44	0.029	0.017	0.017	0.021
Lead	15	1.5	NA	NA	<3	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	167	180	33.2	41	171	170	47.4	53	229	270	118	130	43.8	130	77.3	110
Nickel (Unfiltered)	--	--	101	120	67.8	69	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	50	10	NA	NA	<6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50	10	NA	NA	<2.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Manganese (filtered)	300	60	NA	NA	NA	NA	3.5 ^J	NA	1.8 ^J	NA	6.8	NA	3.2 ^J	NA	54.9	NA	15.3	NA
Manganese (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered)	300	150	<12.9	NA	NA	NA	<12.9	NA	17.3 ^J	NA	<15.5	NA	<15.5	NA	<15.5	NA	<35.4	NA
Iron (unfiltered)	--	--	8,320	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen (mg/L)	10	2	3.8	NA	4.3	NA	4.2	NA	3	NA	3.4	NA	3.0	NA	<0.38	NA	1.2	NA
Sulfate (mg/L)	250	125	38.9	NA	50.8	NA	60.7	NA	70.3	NA	44.9	NA	31.9	NA	38.6	NA	14.3	NA
Field Measurements																		
Temperature (°F)	--	--	56.66		55.96		45.32		58.16		49.57		59.23		54.86		48.56	
Conductivity (ms/cm)	--	--	427		450		444		374		879		345		331.7		307.6	
Dissolved Oxygen (mg/L)	--	--	7.13		6.95		4.18		6.85		4.63		8.92		5.69		6.01	
pH	--	--	7.1		6.66		7.04		7.03		6.49		6.96		6.23		6.44	
Redox Potential (mV)	--	--	135.9		298.3		259.4		116.4		135.1		104.4		196.1		-76.2	

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

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

Laboratory			Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS
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
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	<2.5	3.3	112	150	113	56	206	200	311	200
Total Chromium (unfiltered)	--	--	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
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	7.5 ^J	4.7	31.2	73	17.8	5.2	43.9	14	15.7	[8.6]
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	<1.1	NA	16.6	NA	2.8 ^J	NA	10.1	NA	<1.5	NA
Manganese (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered)	300	150	<35.4	NA	95.7 ^J	NA	<29.6	NA	180	NA	<56.7	NA
Iron (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen (mg/L)	10	2	1.4	NA	0.85	NA	1.3	NA	0.89	NA	0.88	NA
Sulfate (mg/L)	250	125	7.1	NA	14.9	NA	22.8	NA	18.7	NA	10.8	NA
Field Measurements												
Temperature (°F)	--	--	42.0		50.4		45.6		45.8		54.4	
Conductivity (ms/cm)	--	--	199.8		461.3		468.6		456.2		724.2	
Dissolved Oxygen (mg/L)	--	--	6.28		6.56		5.56		6.04		4.98	
pH	--	--	NA		6.47		6.52		6.43		6.1	
Redox Potential (mV)	--	--	130.8		77.0		75.0		150.5		156.1	

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 Servcies

NLS = Lab analysis conducted by Northern Lake Service

Values in brackets are NLS version of "J" qualifier

pH electrode malfunction 4/30/2019

TABLE 3I
GROUNDWATER ANALYTICAL RESULTS SUM MARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
MW11

Laboratory			Pace	NLS	Pace	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 ^J	<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 ^J	2	1.1 ^J	1.1 ^J	[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)	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
Nitrate Nitrogen (mg/L)	10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate (mg/L)	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	

Laboratory			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	7/11/2018	7/11/2018	12/11/2018	12/11/2018
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	<2.1	<1.0	<2.1	<0.5	<2.1	<0.5	<2.1	[0.88]	<2.5	<0.67	<2.5	<0.50	<2.5	<0.58	<2.5	<0.58
Total Chromium (unfiltered)	--	--	37.6	36	17.6	7.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	<0.019	<0.005	<0.019	<0.0011	<0.019	[1.2]	<0.026	<1.1	<0.026	[0.0025]	<0.026	<0.0011	<0.026	<0.0011	<0.051	<0.0011
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	<1.4	<1.0	<1.4	[0.52]	<1.4	[0.81]	<1.4	<1.3	<1.9	<1.1	<1.9	[0.53]	<1.9	[1.3]	<1.9	<0.94
Nickel (Unfiltered)	--	--	25.1	25	12.9	6.5	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 Iron (filtered)	300	150	NA	NA	NA	NA	674	NA	272	NA	266	NA	166	NA	29.6	NA	50.2 ^J	NA
Dissolved Manganese (filtered)	300	60	NA	NA	NA	NA	130	NA	64.8	NA	48.3	NA	37.2	NA	18.2	NA	55.7	NA
Nitrate Nitrogen (mg/L)	10	2	NA	NA	NA	NA	8.2	NA	5.4	NA	5.2	NA	5.8	NA	7.3	NA	7.9	NA
Sulfate (mg/L)	250	125	NA	NA	NA	NA	15.7	NA	15.7 ^J	NA	14.9 ^J	NA	17	NA	15.2	NA	18.7	NA
Field Measurements																		
Temperature (°F)	--	--	56.89		59.4		47.24		62.04		50.95		59.69		56.12		52.16	
Conductivity (ms/cm)	--	--	619		586		708		659		829		688		739		760	
Dissolved Oxygen (mg/L)	--	--	2.03		0.46		0.75		0.3		0.42		2.01		0.89		1.08	
pH	--	--	6.58		6.1		6.37		6.35		6.1		6.34		5.87		6.1	
Redox Potential (mV)	--	--	144.6		271.6		274.1		120.5		160.6		80.4		207.1		-75.6	

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

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
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
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	<2.5	<0.58	<2.5	[1.0]	<2.5	<0.58	<2.5	<1.9	<2.5	<0.99
Total Chromium (unfiltered)	--	--	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
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	<1.9	<0.94	<3.0	<0.94	<3.0	[1.6]	7.8 ^J	4.4	<2.6	<3.5
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)	300	150	50.5 ^J	NA	112	NA	1460	NA	159	NA	<56.7	NA
Dissolved Manganese (filtered)	300	60	53.3	NA	144	NA	514	NA	94.3	NA	132	NA
Nitrate Nitrogen (mg/L)	10	2	5.6	NA	4.8	NA	6.8	NA	5.3	NA	6.3	NA
Sulfate (mg/L)	250	125	16.4	NA	16.4	NA	21.2	NA	16	NA	21.9	NA
Field Measurements												
Temperature (°F)	--	--	41.4		54.5		45.9		43.2		59.7	
Conductivity (ms/cm)	--	--	883		850		913		861		723.7	
Dissolved Oxygen (mg/L)	--	--	2.04		0.55		0.48		2.05		0.55	
pH	--	--	NA		6.07		6.20		6.42		6.07	
Redox Potential (mV)	--	--	211.3		210.5		166.0		112.8		203.7	

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

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	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	NA	<2.1	<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	<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	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	NA	<1.4	<1.4	<1.9	<1.9	<1.9	<1.9	<1.9	<3.0
Nitrate Nitrogen (mg/L)	10	2	NA	NA	NA	NA	NA	NA	NA	NA	6.8	5.3	7.8	5.1	4.3	6.4	3.7	5.3
Sulfate (mg/L)	250	125	NA	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
Metals (ug/L)					
Arsenic	10	1	NA	NA	NA
Barium	2000	400	NA	NA	NA
Cadmium	5	0.5	NA	NA	NA
Total Chromium	100	10	NA	NA	NA
Lead	15	1.5	NA	NA	NA
Mercury	2	0.2	NA	NA	NA
Nickel	--	--	NA	NA	NA
Selenium	50	10	NA	NA	NA
Silver	50	10	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	<0.073	<0.073	<0.073
Dis. Total Chromium (filtered)	100	10	<2.5	<2.5	<2.5
Dissolved Iron (filtered)	300	150	<29.6	<56.7	68.8 ^J
Dissolved Manganese (filtered)	300	60	1.6 ^J	2.0 ^J	2.4 ^J
Dissolved Nickel (filtered)	100	20	<3.0	3.9 ^J	<2.6
Nitrate Nitrogen (mg/L)	10	2	6.3	6.0	4.5
Sulfate (mg/L)	250	125	19.5	21.4	13.6
Field Measurements					
Temperature (°F)	--	--	48.7	48.8	58.2
Conductivity (ms/cm)	--	--	1,853	2,719	723.4
Dissolved Oxygen (mg/L)	--	--	9.62	7.76	6.95
pH	--	--	6.54	6.82	6.33
Redox Potential (mV)	--	--	159.9	183.6	200.3

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

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
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
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	2.7	<2.5	2.7	<2.5	5	5.3'	6.2	6.0'	3.8	6.9'	9.1	5.3'	12
Total Chromium (unfiltered)	--	--	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]
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	[2.7]	1.9'	[2.5]	3.6'	[3.2]	<3.0	[2.0]	<3.0	[1.4]	<2.6	[1.3]	<2.6	<3.5
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 Manganese (filtered)	300	60	799	NA	2,110	NA	1,620	NA	2,400	NA	2,230	NA	2,050	NA	2,300	NA
Manganese (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered)	300	150	375	NA	5,460	NA	3,270	NA	11,700	NA	10,800	NA	11,300	NA	12,400	NA
Iron (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen (mg/L)	10	2	<0.38	NA	<0.38	NA	<0.38	NA	<0.22	NA	<0.22	NA	<0.044	NA	<0.22	NA
Sulfate (mg/L)	250	125	7.2'	NA	<5.0	NA	<5.0	NA	2.6'	NA	<2.2	NA	5.5	NA	2.2	NA
Field Measurements																
Temperature (°F)	--	--	51.26		50.54		45.6		50.8		48.0		46.6		50.7	
Conductivity (ms/cm)	--	--	344.2		652.6		443.8		752		930		606.1		723.1	
Dissolved Oxygen (mg/L)	--	--	1.27		0.91		1.04		0.55		0.25		3.12		5.6	
pH	--	--	5.89		6.58		NA		6.56		6.51		6.96		851	
Redox Potential (mV)	--	--	105.2		-110.2		-56.1		-82.2		-53.9		-82.2		612	

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

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
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
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	<0.58	<2.5	<0.58	<2.5	<0.58	<2.5	<0.58	<2.5	<1.9	<2.5	<0.99
Total Chromium (unfiltered)	--	--	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
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	<1.9	<0.94	<1.9	<0.94	<3.0	<0.94	<3.0	<0.94	<2.6	<3.2	<2.6	<3.5
Nickel (Unfiltered)	100	20	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 Manganese (filtered)	300	60	849	NA	522	NA	252	NA	268	NA	402	NA	276	NA	259	NA
Manganese (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered)	300	150	5,480	NA	7,100	NA	3,960	NA	4,740	NA	6,710	NA	4,680	NA	4,370	NA
Iron (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen (mg/L)	10	2	<0.38	NA	<0.38	NA	<0.38	NA	<0.22	NA	<0.22	NA	<0.22	NA	<0.22	NA
Sulfate (mg/L)	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
Field Measurements																
Temperature (°F)	--	--	52.16		48.2		42.3		50.7		44.5		44.7		54.4	
Conductivity (ms/cm)	--	--	627.3		510.7		427.3		468.7		538.9		466.5		724.2	
Dissolved Oxygen (mg/L)	--	--	1.38		0.83		0.66		0.30		0.26		1.05		0.57	
pH	--	--	6.35		6.63		NA		6.60		6.51		7.17		6.12	
Redox Potential (mV)	--	--	-27.1		-97.4		20.0		-32.0		1.3		-49.5		-13.0	

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

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
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
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	[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]
Total Chromium (unfiltered)	--	--	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
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	6.9'	6.2	5.1'	4.8	4.0'	[2.5]	<3.0	[1.8]	<3.0	4.5	32.0	[3.0]	<2.6	<3.5
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 Manganese (filtered)	300	60	1,800	NA	1,480	NA	70	NA	150	NA	544	NA	646	NA	21.4	NA
Manganese (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered)	300	150	3,490	NA	4,360	NA	559	NA	2,050	NA	137	NA	3,780	NA	427	NA
Iron (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen (mg/L)	10	2	<0.38	NA	<0.38	NA	<0.38	NA	<0.22	NA	<0.22	NA	<0.044	NA	<0.22	NA
Sulfate (mg/L)	250	125	<5.0	NA	<5.0	NA	<5.0	NA	2.2	NA	<2.2	NA	0.75'	NA	<2.2	NA
Field Measurements																
Temperature (°F)	--	--	60.62		50.54		39.6		54.9		43.5		45.3		61.8	
Conductivity (ms/cm)	--	--	286.5		152.1		287.7		187.4		231.9		252.9		724	
Dissolved Oxygen (mg/L)	--	--	1.26		0.39		3.61		0.54		1.02		1.00		2.42	
pH	--	--	5.29		5.94		NA		5.80		6.05		6.66		5.68	
Redox Potential (mV)	--	--	121.7		-91.8		158.2		132.4		133.0		82.1		131.5	

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.

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

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	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	2000	400	101	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
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	2,040	1,660	2,130	2,790	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	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
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	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
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)	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
Nitrate Nitrogen (mg/L)	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 (mg/L)	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
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
Dis. Total Chromium (filtered)	100	10	1,500	1,130	888	800	544	403
Total Chromium (unfiltered)	--	--	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (mg/L)	--	--	1.5	1.2	0.94	0.87	0.50	0.41
Lead	15	1.5	NA	NA	NA	NA	NA	NA
Mercury	2	0.2	NA	NA	NA	NA	NA	NA
Dissolved Nickel (filtered)	100	20	<1.9	<1.9	<3.0	<3.0	34.6	<2.6
Nickel (Unfiltered)	--	--	NA	NA	NA	NA	NA	NA
Selenium	50	10	NA	NA	NA	NA	NA	NA
Silver	50	10	NA	NA	NA	NA	NA	NA
Dissolved Manganese (filtered)	300	60	9.2	8.4	13.6	<1.1	44.5	<1.5
Manganese (unfiltered)	--	--	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered)	300	150	<35.4	121	<29.6	<29.6	367	<56.7
Iron (unfiltered)	--	--	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen (mg/L)	10	2	6.3	5.5	4.8	5.0	4.7	4.8
Sulfate (mg/L)	250	125	45.9	46.5	41.4	47.1	45.0	51.6
Field Measurements								
Temperature (°F)	--	--	55.4	54.3	54.3	53.0	54.7	59.2
Conductivity (ms/cm)	--	--	517.3	512.4	512.4	526.1	511.1	724.3
Dissolved Oxygen (mg/L)	--	--	1.69	2.64	2.64	2.61	3.08	6.17
pH	--	--	7.41	NA	NA	7.01	7.25	7.08
Redox Potential (mV)	--	--	-50.3	194.1	195.1	128.6	150.1	138.0

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

TABLE 3s
GROUNDWATER ANALYTICAL RESULTS SUMMARY
PHILLIPS PLATING CORPORATION
984 N. LAKE AVENUE, PHILLIPS, WI
P22

Laboratory			Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS	Pace	NLS
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
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	<0.58	<2.5	[0.62]	<2.5	[0.70]	<2.5	<0.58	<2.5	<1.9	<2.5	<0.99
Total Chromium (unfiltered)	--	--	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]
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	[2.6]	<1.9	<0.94	<1.9	<0.94	<3.0	<0.94	<3.0	<0.94	7.8'	<3.2	<2.6	<3.5
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 Manganese (filtered)	300	60	684	NA	709	NA	591	NA	68.5	NA	300	NA	758	NA	<1.5	NA
Manganese (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered)	300	150	298	NA	1450	NA	384	NA	1,020	NA	47.6	NA	3,550	NA	<56.7	NA
Iron (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen (mg/L)	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
Sulfate (mg/L)	250	125	15.2	NA	<5.0	NA	5.6	NA	5.6'	NA	6.4	NA	8.5	NA	6.1'	NA
Field Measurements																
Temperature (°F)	--	--	51.08		49.82		46.4		50.0		48.1		47.9		51.7	
Conductivity (ms/cm)	--	--	373		323.7		265.9		253.9		275.6		208.3		724	
Dissolved Oxygen (mg/L)	--	--	2.1		0.80		0.32		1.76		1.18		2.51		5.15	
pH	--	--	6.93		6.98		NA		6.73		6.77		7.25		6.21	
Redox Potential (mV)	--	--	-141.4		-103.7		24.2		57.4		68.0		-23.3		129.7	

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

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
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
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	1,510	1,300	1,150	1,000	789	800	1,260	1,200	665	200	940	920	1,400	1,500
Total Chromium (unfiltered)	--	--	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
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	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
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 Manganese (filtered)	300	60	410	NA	272	NA	239	NA	225	NA	54.0	NA	83.6	NA	105.0	NA
Manganese (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Iron (filtered)	300	150	22.3 ^J	NA	<35.4	NA	<35.4	NA	<29.6	NA	146	NA	<56.7	NA	<56.7	NA
Iron (unfiltered)	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate Nitrogen (mg/L)	10	2	7.8	NA	7.1	NA	6.6	NA	9.5	NA	1.5	NA	5	NA	8.7	NA
Sulfate (mg/L)	250	125	51.4	NA	60.5	NA	50.2	NA	52.4	NA	11.8	NA	36.8	NA	53.6	NA
Field Measurements																
Temperature (°F)	--	--	56.48		49.28		43.4		52.0		47.4		45.9		57.6	
Conductivity (ms/cm)	--	--	651		700.5		434.4		485.6		467.0		549.5		724.3	
Dissolved Oxygen (mg/L)	--	--	5.15		6.17		1.78		3.50		7.43		7.16		6.70	
pH	--	--	6.36		6.79		NA		7.00		6.79		6.82		6.29	
Redox Potential (mV)	--	--	179.8		-74.0		119.2		57.2		37.0		125.2		118.4	

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

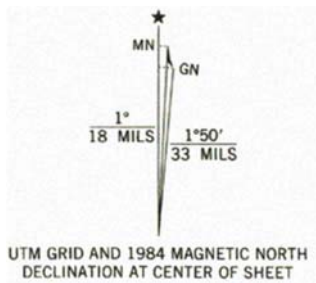
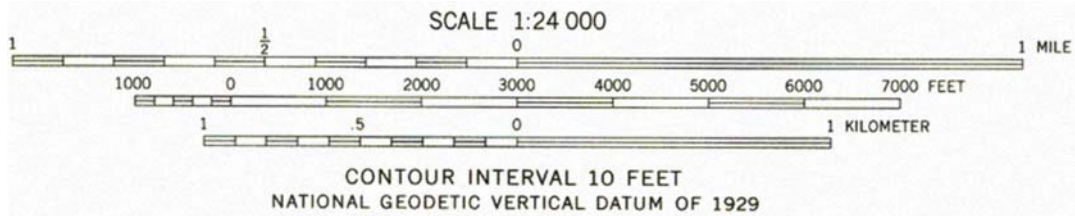
J = estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Pace = Lab analysis conducted by Pace 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



PHILLIPS, WIS.
NW/4 PHILLIPS 15' QUADRANGLE
45090-F4-TF-024
1984
DMA 2975 III NW-SERIES V861



REI Engineering, INC.

PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 1 : SITE VICINITY MAP

PROJECT NO.

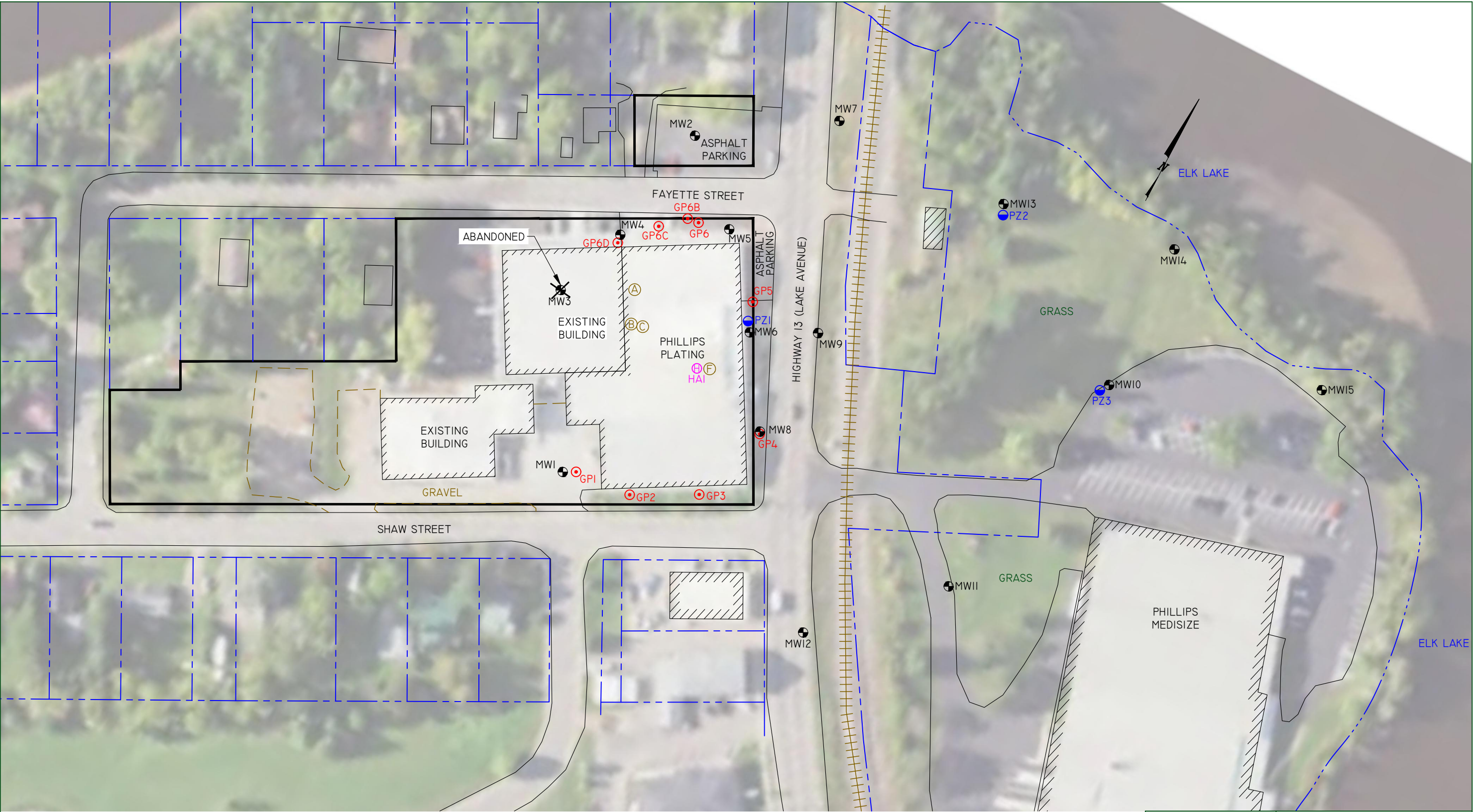
6134B

DRAWN BY:
NAP

DATE:
12/13/12

DRAWING FILE: P:\6100-6199\6134B-PHILLIPS PLATING\dwg\6134B-VICN.DWG LAYOUT: VICINITY PLOTTED: JAN 19, 2017 - 8:31AM PLOTTED BY: NATHANP

DRAWING FILE: P:\6100-6199\6134B-PHILLIPS PLATING\DWG\6134B-SITE.DWG LAYOUT: SITE PLOTTED: Aug 07, 2019 - 5:26PM PLOTTED BY: ToddW



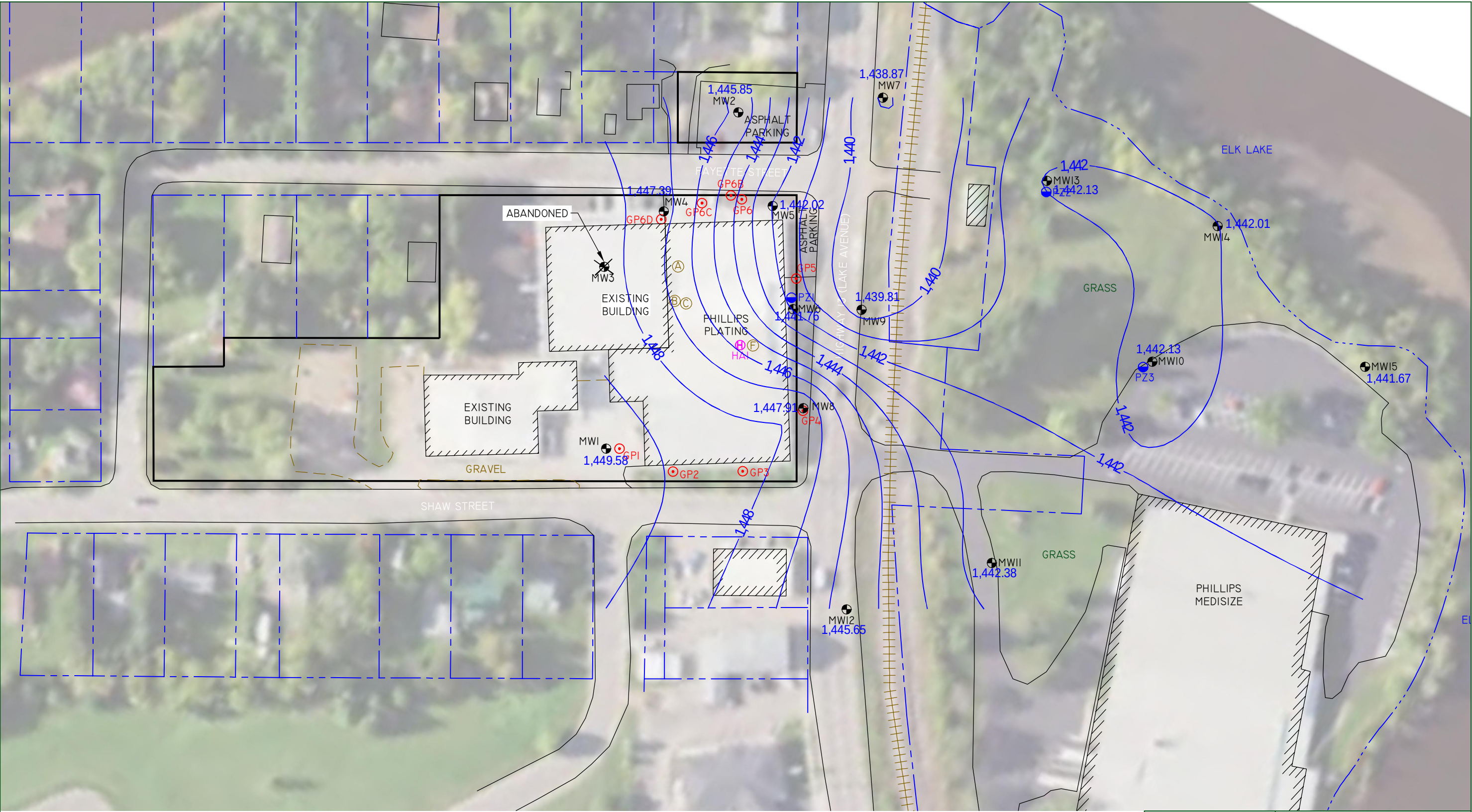
LEGEND	



		PHILLIPS PLATING CORP. 984 N LAKE AVENUE PHILLIPS, WISCONSIN	
FIGURE 2 : SITE MAP			
PROJECT No. 6134B	DRAWN BY: TAW	DATE: 8/7/2019	

REI Engineering, INC.

DRAWING FILE: P:\6100-6199\6134B-PHILLIPS PLATING\dwg\6134B-gw-111319.dwg LAYOUT: gw PLOTTED: Oct 20, 2021 - 3:52pm PLOTTED BY: MATTM



LEGEND	
	HAND AUGER SOIL BORING
	PROPERTY BOUNDARY
	PHILLIPS PLATING PROPERTY
	550 GALLON SPILL CATCH TANK
	5500 GALLON WASTE TREATMENT PROCESS TANK (STORAGE TANK)
	1500 GALLON WASTE TREATMENT PROCESS TANK (WASTE TREATMENT COLLECTION TANK)
	600 GALLON WASTE TREATMENT PROCESS TANK (PLATING LINE COLLECTION TANK)

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 13, 2019 GROUNDWATER MONITORING EVENT.



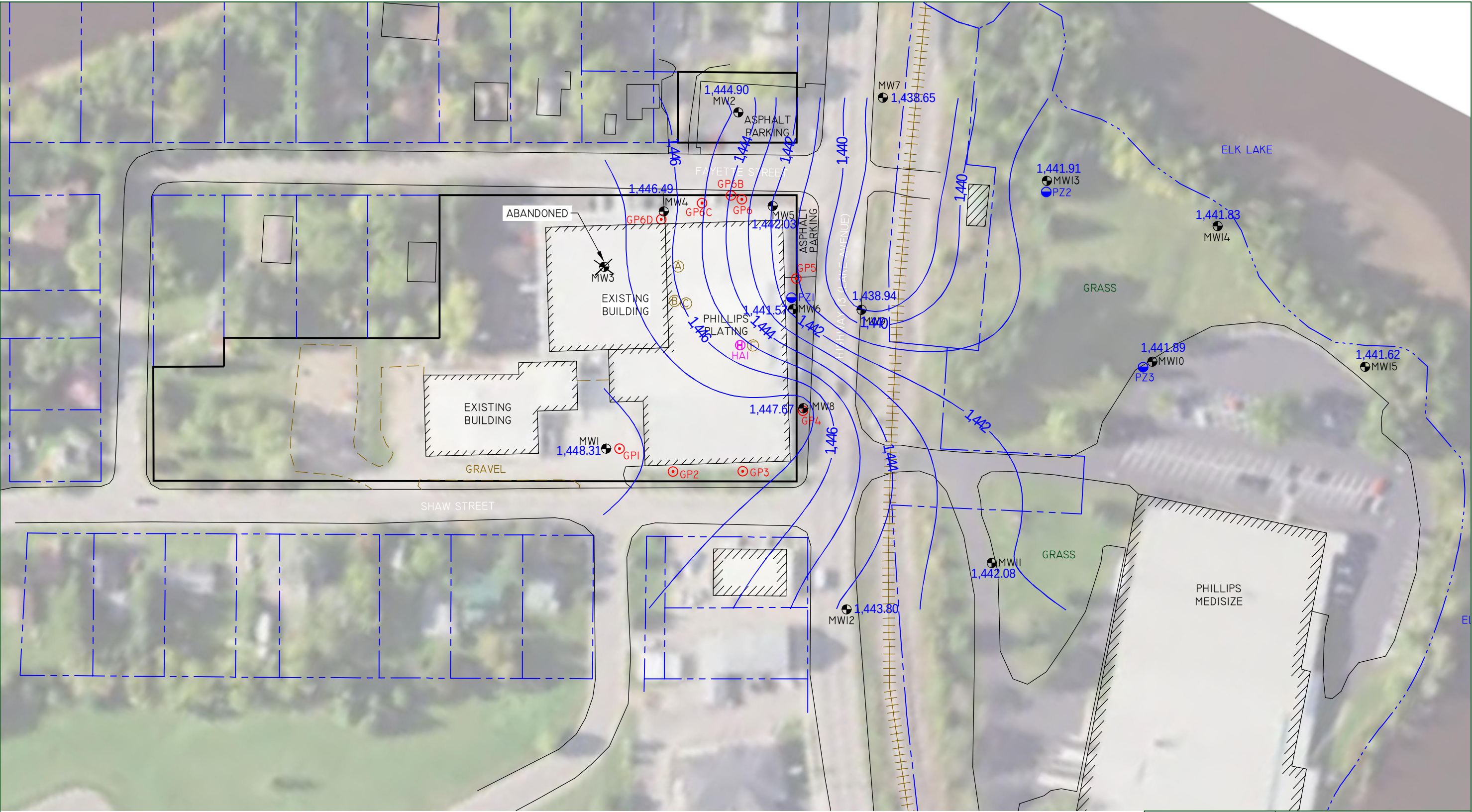
PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 3a : GROUNDWATER CONTOUR MAP (11/13/2019)

PROJECT No. 6134B	DRAWN BY: MCM	DATE: 10/11/2021
----------------------	------------------	---------------------

REI Engineering, INC.

DRAWING FILE: P:\6100-6199\6134B-PHILLIPS PLATING\dwg\6134B-gw-021020.dwg LAYOUT: gw PLOTTED: OCT 20, 2021 - 3:51PM PLOTTED BY: MATTM



LEGEND	
	HAND AUGER SOIL BORING
	PROPERTY BOUNDARY
	PHILLIPS PLATING PROPERTY
	550 GALLON SPILL CATCH TANK
	5500 GALLON WASTE TREATMENT PROCESS TANK (STORAGE TANK)
	1500 GALLON WASTE TREATMENT PROCESS TANK (WASTE TREATMENT COLLECTION TANK)
	600 GALLON WASTE TREATMENT PROCESS TANK (PLATING LINE COLLECTION TANK)

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 FEBRUARY 10, 2020 GROUNDWATER MONITORING EVENT.



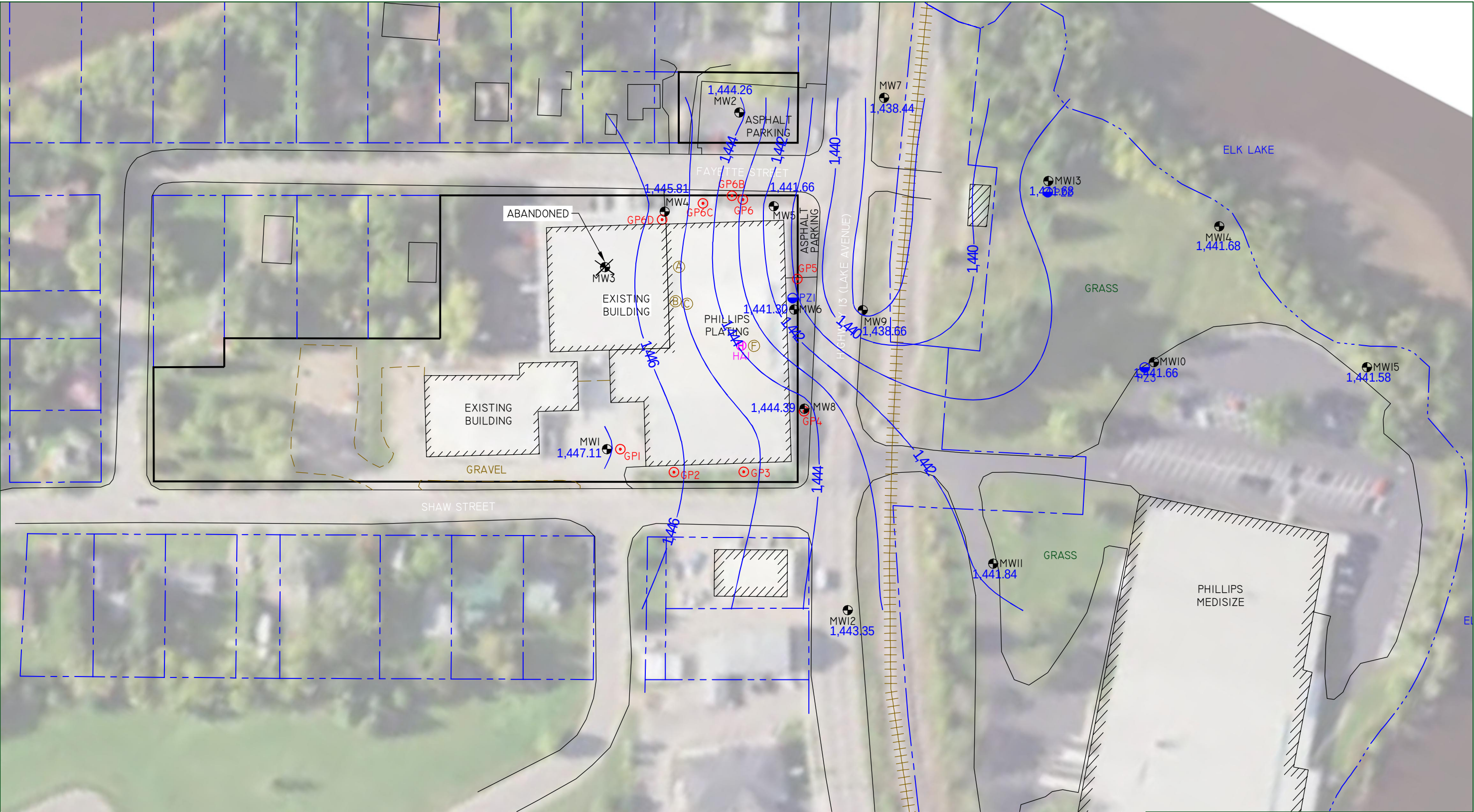
PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 3b : GROUNDWATER CONTOUR MAP (02/10/2020)

PROJECT No. 6134B	DRAWN BY: MCM	DATE: 10/11/2021
----------------------	------------------	---------------------

REI Engineering, INC.

DRAWING FILE: P:\6100-6199\6134B-PHILLIPS PLATING\dwg\6134B-gw-030321.dwg LAYOUT: gw PLOTTED: Oct 20, 2021 - 3:54PM PLOTTED BY: MATTM



LEGEND	
	HAND AUGER SOIL BORING
	PROPERTY BOUNDARY
	PHILLIPS PLATING PROPERTY
	550 GALLON SPILL CATCH TANK
	5500 GALLON WASTE TREATMENT PROCESS TANK (STORAGE TANK)
	1500 GALLON WASTE TREATMENT PROCESS TANK (WASTE TREATMENT COLLECTION TANK)
	600 GALLON WASTE TREATMENT PROCESS TANK (PLATING LINE COLLECTION TANK)



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 MARCH 3, 2021 GROUNDWATER MONITORING EVENT.



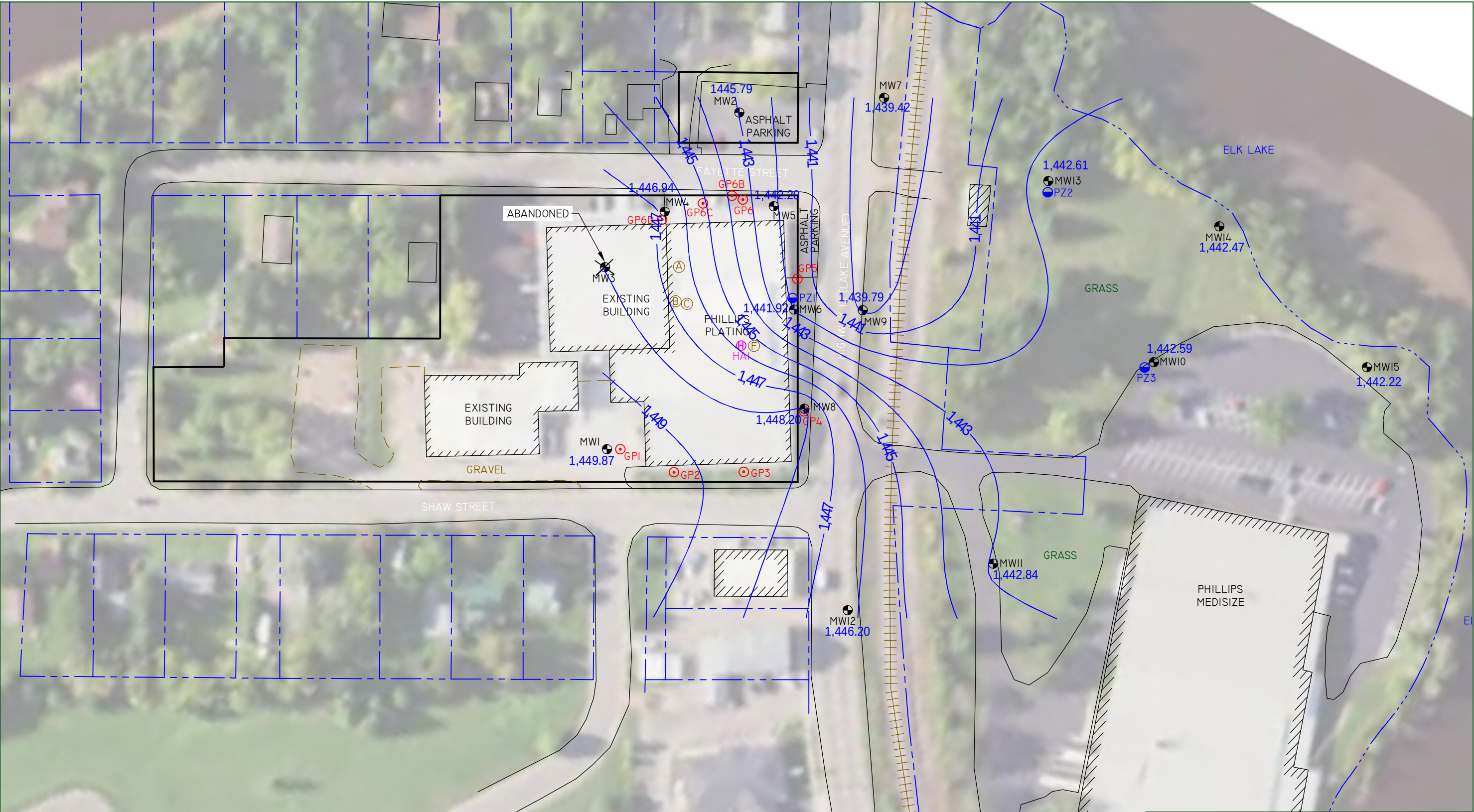
PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 3c : GROUNDWATER CONTOUR MAP (03/03/2021)

PROJECT No. 6134B	DRAWN BY: MCM	DATE: 10/11/2021
----------------------	------------------	---------------------

REI Engineering, INC.

DRAWING FILE: P:\6100-6199\6134B-PHILLIPS PLATING\dwg\6134B-gw-082521.dwg PLOTTED: Oct 20, 2021 - 3:53PM PLOTTED BY: MATTH



LEGEND	
	HAND AUGER SOIL BORING
	PROPERTY BOUNDARY
	PHILLIPS PLATING PROPERTY
	550 GALLON SPILL CATCH TANK
	5500 GALLON WASTE TREATMENT PROCESS TANK (STORAGE TANK)
	1500 GALLON WASTE TREATMENT PROCESS TANK (WASTE TREATMENT COLLECTION TANK)
	600 GALLON WASTE TREATMENT PROCESS TANK (PLATING LINE COLLECTION TANK)

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 AUGUST 25, 2021 GROUNDWATER MONITORING EVENT.



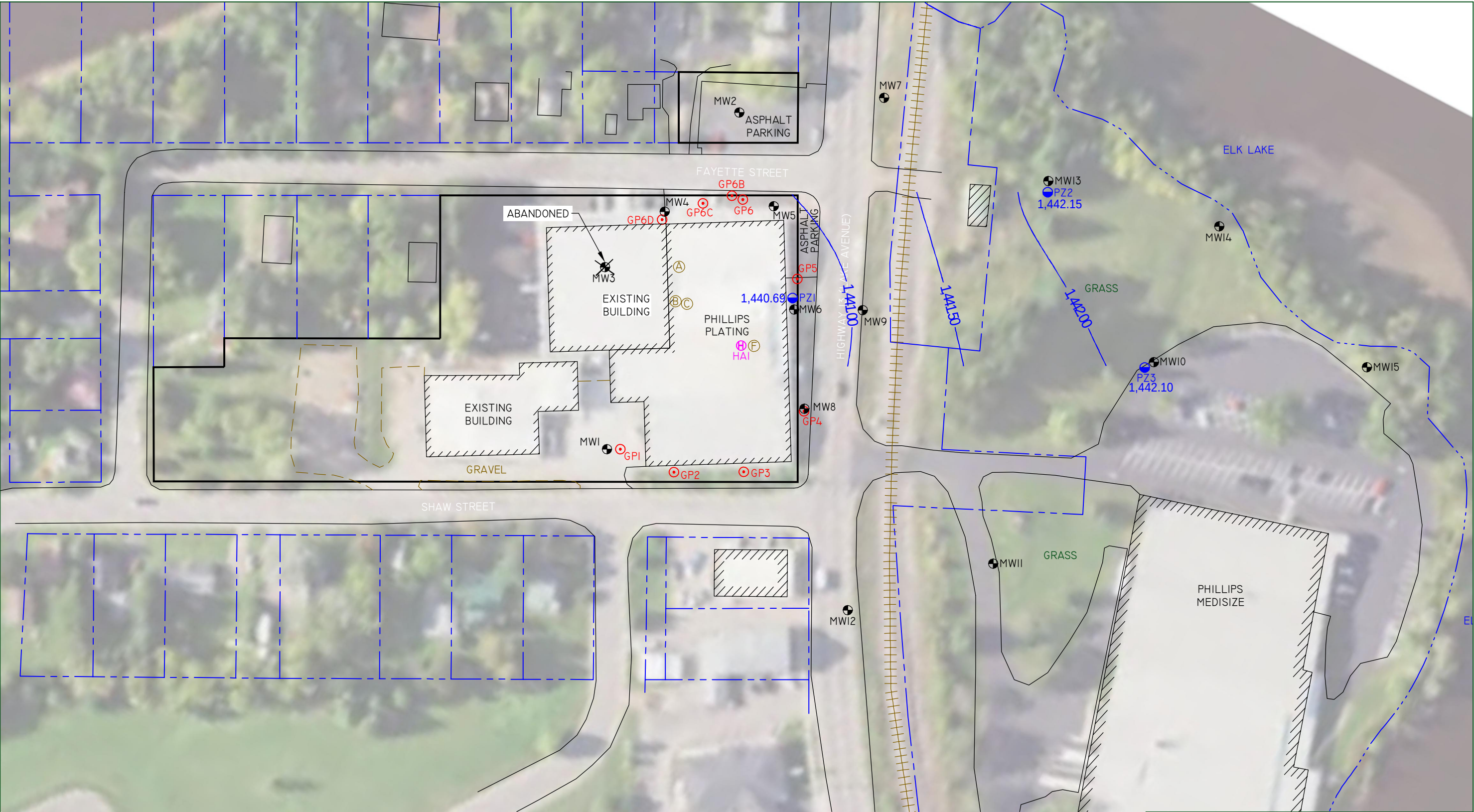
PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 3d : GROUNDWATER CONTOUR MAP (08/25/2021)

PROJECT No. 6134B	DRAWN BY: MCM	DATE: 10/11/2021
----------------------	------------------	---------------------

REI Engineering, INC.

DRAWING FILE: P:\6100-6199\6134B-PHILLIPS PLATING\dwg\6134B-PZ-111319.dwg LAYOUT: gw PLOTTED: Oct 20, 2021 - 3:49pm PLOTTED BY: MATTM



LEGEND	
	HAND AUGER SOIL BORING
	PROPERTY BOUNDARY
	PHILLIPS PLATING PROPERTY
	550 GALLON SPILL CATCH TANK
	5500 GALLON WASTE TREATMENT PROCESS TANK (STORAGE TANK)
	1500 GALLON WASTE TREATMENT PROCESS TANK (WASTE TREATMENT COLLECTION TANK)
	600 GALLON WASTE TREATMENT PROCESS TANK (PLATING LINE COLLECTION TANK)



NOTES:
1. ELEVATION DATA IS PRESENTED IN FEET MEAN SEA LEVEL (MSL).
2. PIEZOMETRIC CONTOUR MAP IS BASED ON DEPTH TO GROUNDWATER MEASUREMENTS COLLECTED FROM PIEZOMETER WELLS DURING THE NOVEMBER 13, 2019 GROUNDWATER MONITORING EVENT.



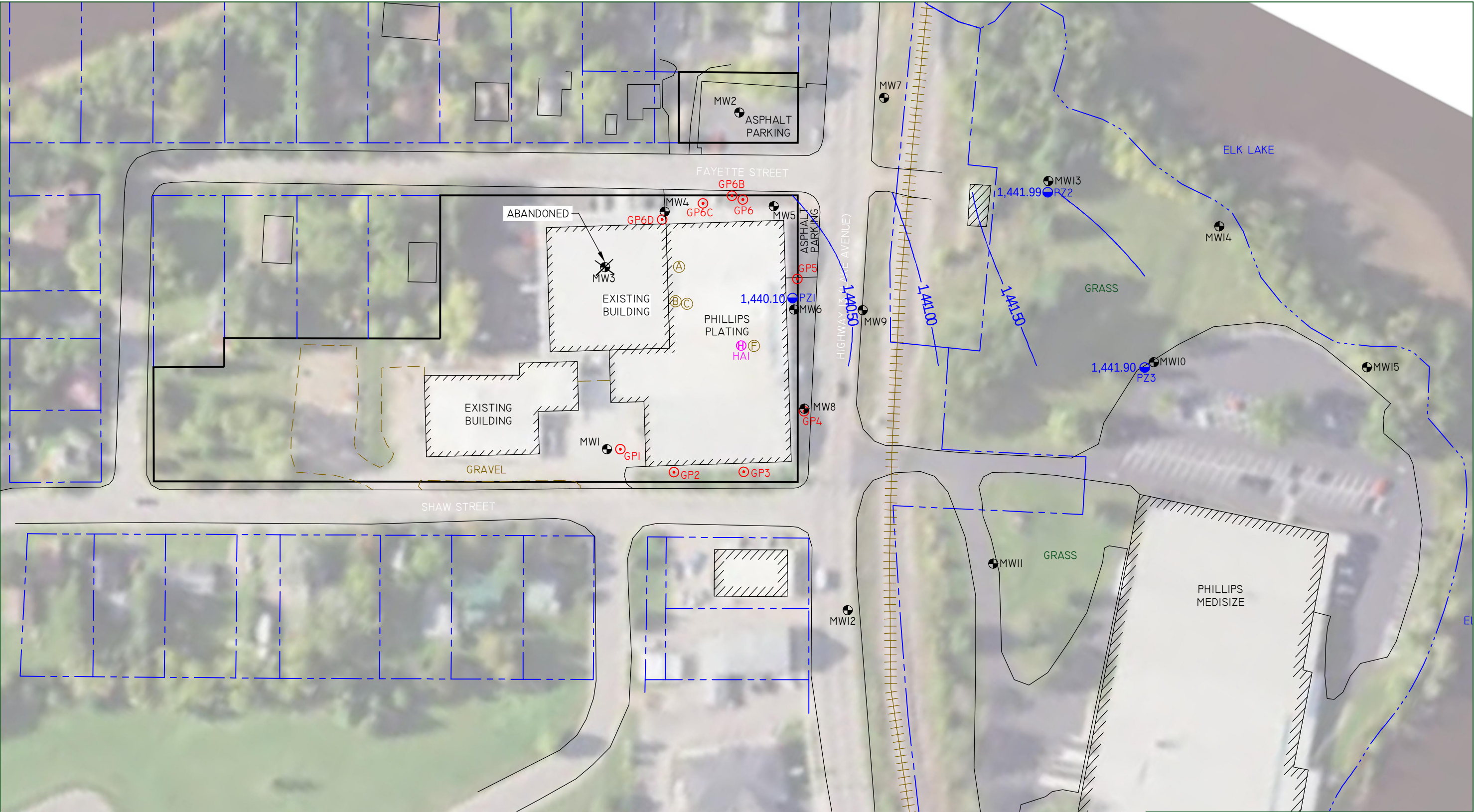
PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 4a : PIEZOMETRIC CONTOUR MAP (11/13/2019)

PROJECT No. 6134B	DRAWN BY: MCM	DATE: 10/20/2021
----------------------	------------------	---------------------

REI Engineering, INC.

DRAWING FILE: P:\6100-6199\6134B-PHILLIPS PLATING\dwg\6134B-PZ-021020.dwg LAYOUT: gw PLOTTED: OCT 20, 2021 - 4:08PM PLOTTED BY: MATTH



LEGEND	

NOTES:
1. ELEVATION DATA IS PRESENTED IN FEET MEAN SEA LEVEL (MSL).
2. PIEZOMETRIC CONTOUR MAP IS BASED ON DEPTH TO GROUNDWATER MEASUREMENTS COLLECTED FROM PIEZOMETER WELLS DURING THE FEBRUARY 10, 2020 GROUNDWATER MONITORING EVENT.



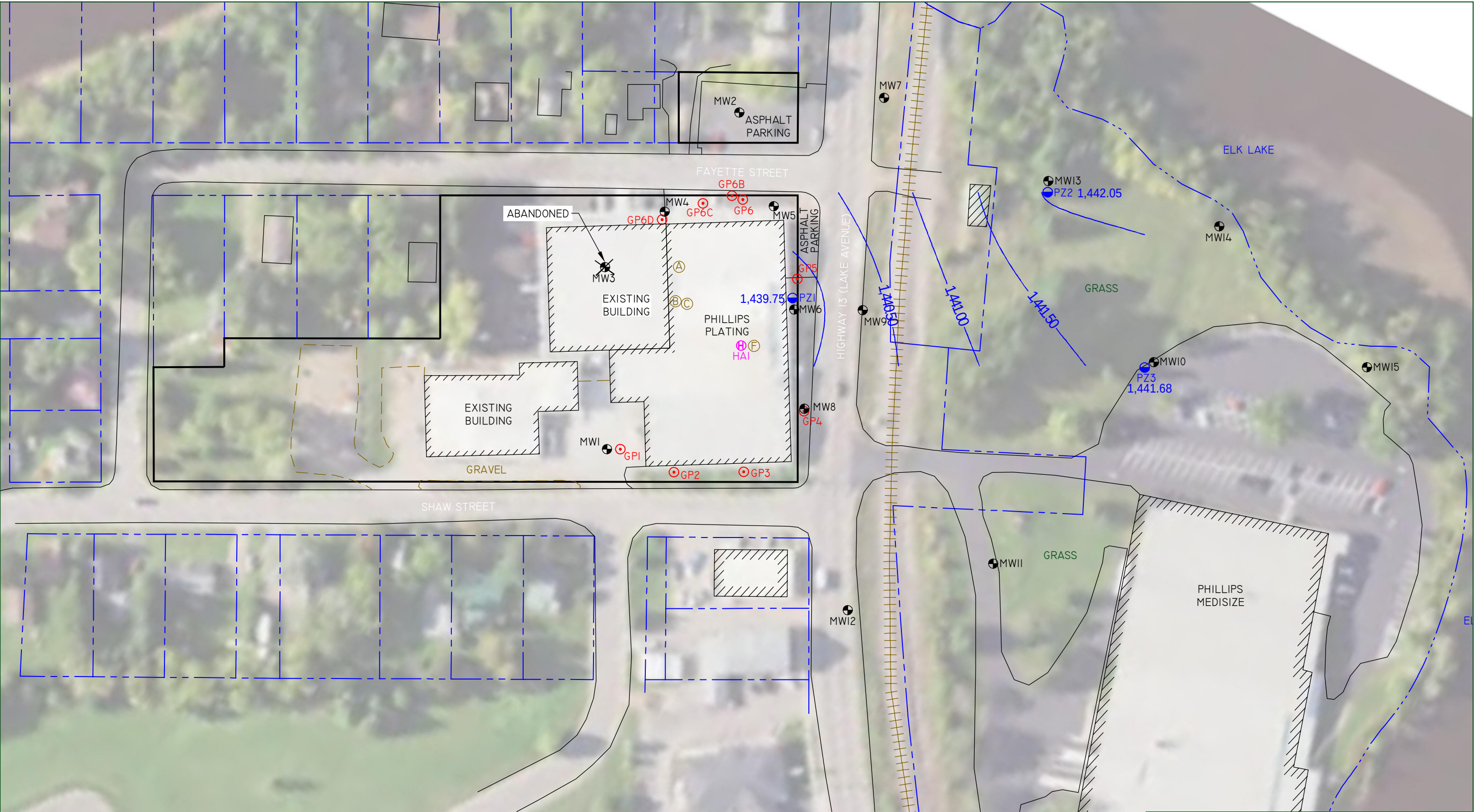
PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 4b : PIEZOMETRIC CONTOUR MAP (02/10/2020)

PROJECT No. 6134B	DRAWN BY: MCM	DATE: 10/20/2021
----------------------	------------------	---------------------

REI Engineering, INC.

DRAWING FILE: P:\6100-6199\6134B-PHILLIPS PLATING\dwg\6134B-PZ-030321.dwg LAYOUT: gw PLOTTED: Oct 20, 2021 - 4:13PM PLOTTED BY: MATTM



LEGEND	
	HAND AUGER SOIL BORING
	PROPERTY BOUNDARY
	PHILLIPS PLATING PROPERTY
	550 GALLON SPILL CATCH TANK
	5500 GALLON WASTE TREATMENT PROCESS TANK (STORAGE TANK)
	1500 GALLON WASTE TREATMENT PROCESS TANK (WASTE TREATMENT COLLECTION TANK)
	600 GALLON WASTE TREATMENT PROCESS TANK (PLATING LINE COLLECTION TANK)



- NOTES:
1. ELEVATION DATA IS PRESENTED IN FEET MEAN SEA LEVEL (MSL).
 2. PIEZOMETRIC CONTOUR MAP IS BASED ON DEPTH TO GROUNDWATER MEASUREMENTS COLLECTED FROM PIEZOMETER WELLS DURING THE MARCH 3, 2021 GROUNDWATER MONITORING EVENT.



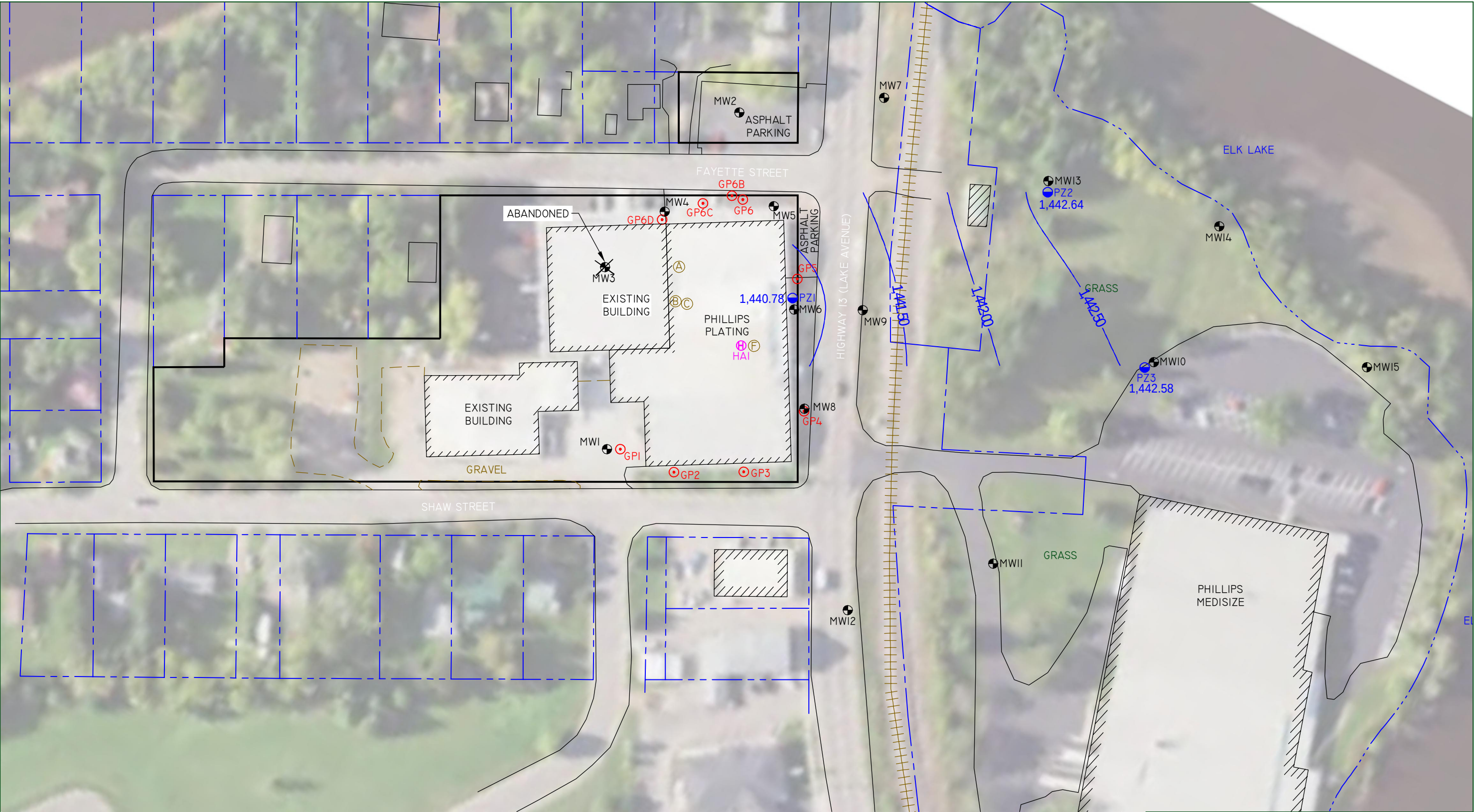
PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 4c : PIEZOMETRIC CONTOUR MAP (03/03/2021)

PROJECT No. 6134B	DRAWN BY: MCM	DATE: 10/20/2021
----------------------	------------------	---------------------

REI Engineering, INC.

DRAWING FILE: P:\6100-6199\6134B-PHILLIPS PLATING\dwg\6134B-PZ-082521.dwg LAYOUT: gw PLOTTED BY: MATTM



LEGEND	
	HAND AUGER SOIL BORING
	PROPERTY BOUNDARY
	PHILLIPS PLATING PROPERTY
	550 GALLON SPILL CATCH TANK
	5500 GALLON WASTE TREATMENT PROCESS TANK (STORAGE TANK)
	1500 GALLON WASTE TREATMENT PROCESS TANK (WASTE TREATMENT COLLECTION TANK)
	600 GALLON WASTE TREATMENT PROCESS TANK (PLATING LINE COLLECTION TANK)



NOTES:
1. ELEVATION DATA IS PRESENTED IN FEET MEAN SEA LEVEL (MSL).
2. PIEZOMETRIC CONTOUR MAP IS BASED ON DEPTH TO GROUNDWATER MEASUREMENTS COLLECTED FROM PIEZOMETER WELLS DURING THE AUGUST 25, 2021 GROUNDWATER MONITORING EVENT.



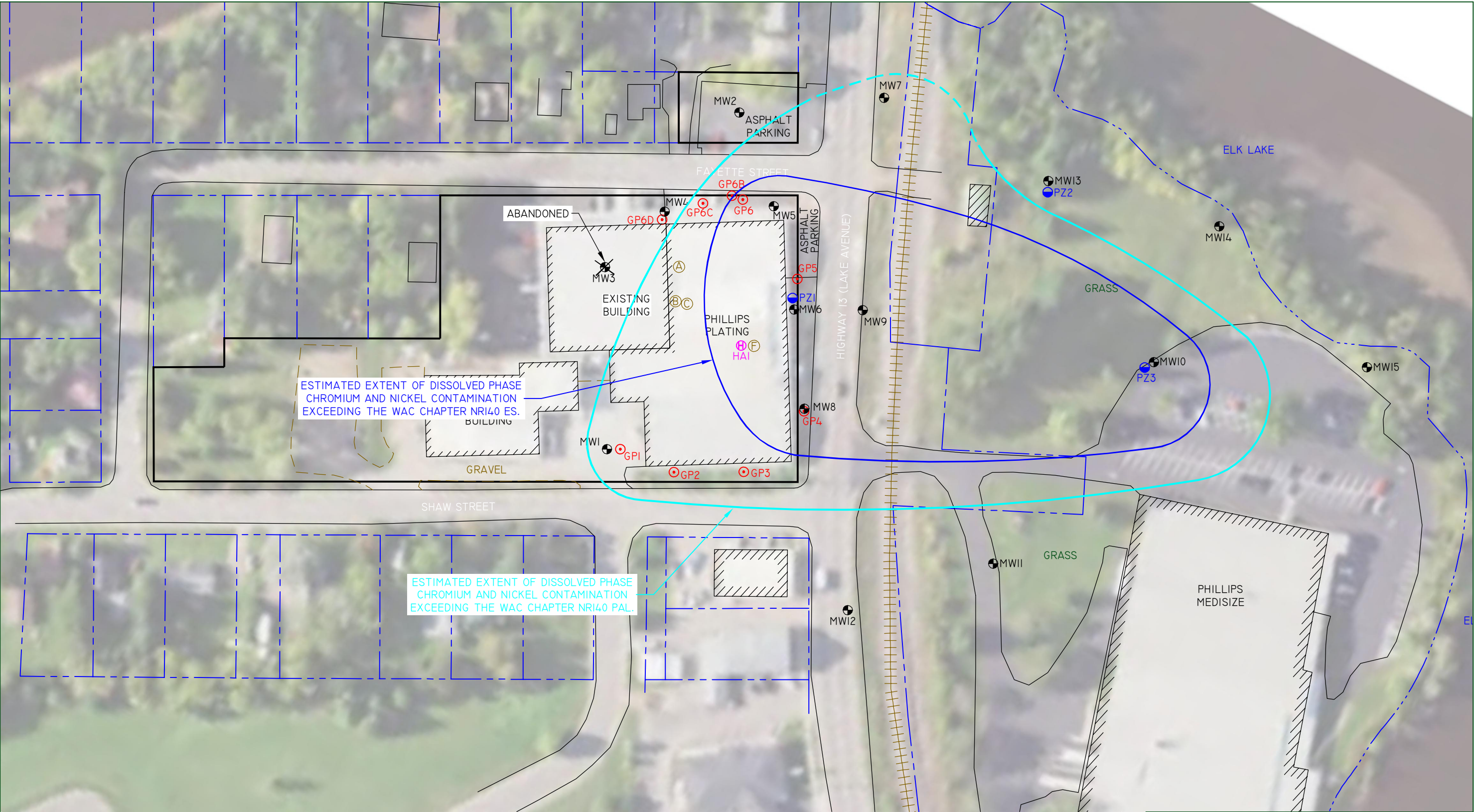
PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 4d : PIEZOMETRIC CONTOUR MAP (08/25/2021)

PROJECT No. 6134B	DRAWN BY: MCM	DATE: 10/20/2021
----------------------	------------------	---------------------

REI Engineering, INC.

DRAWING FILE: P:\6100-6199\6134B-PHILLIPS PLATING\dwg\6134B-GW-contam-111319.dwg LAYOUT: gw PLOTTED: OCT 25, 2021 - 11:17AM PLOTTED BY: MATTM



LEGEND	



NOTES:
I. GROUNDWATER ISOCONCENTRATIONS ARE BASED ON LABORATORY ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED DURING THE NOVEMBER 13, 2019 GROUNDWATER MONITORING EVENT COMPARED TO WISCONSIN ADMINISTRATIVE CODE (WAC) CHAPTER NRI40 ENFORCEMENT STANDARDS (ES) AND PREVENTIVE ACTION LIMITS (PAL).



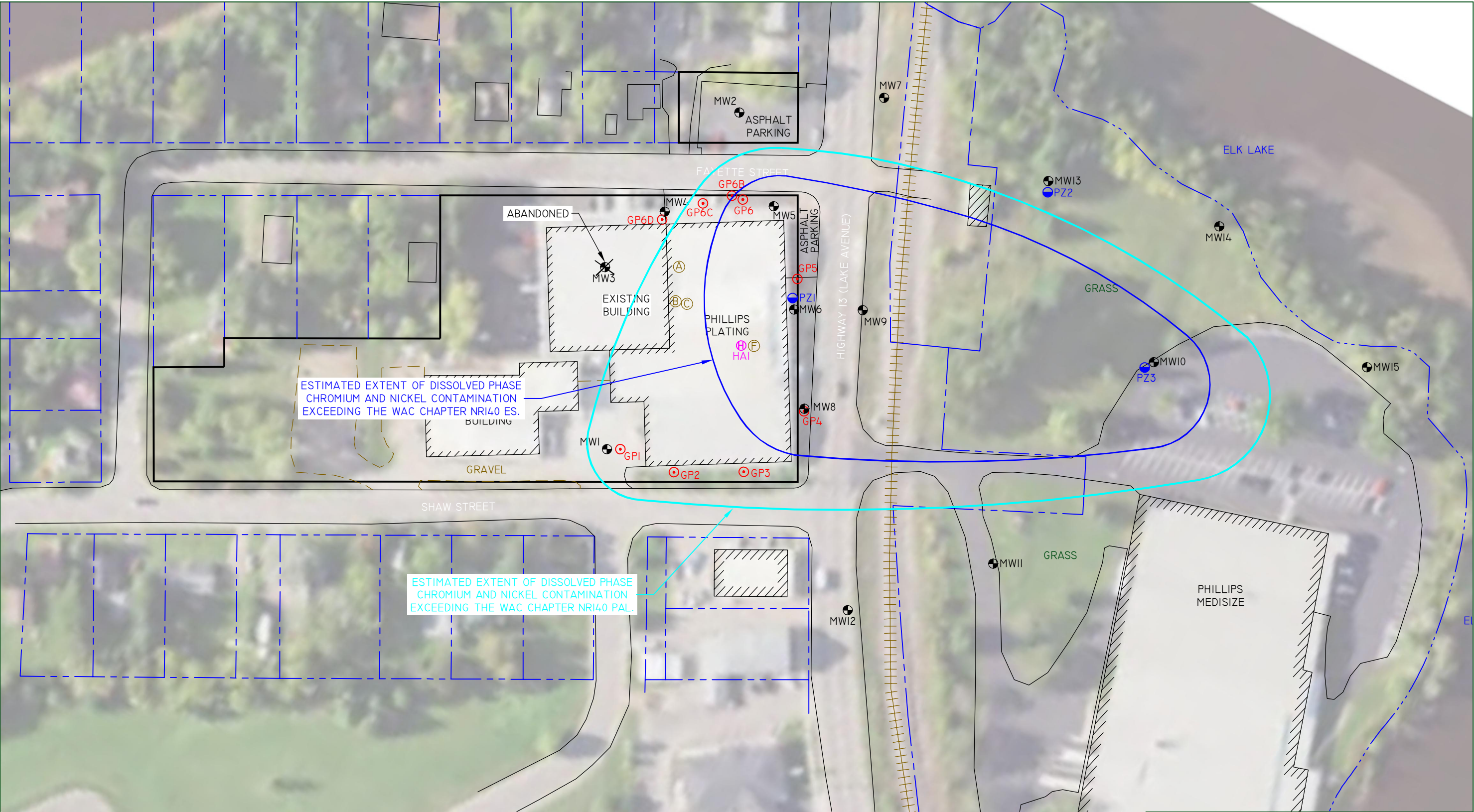
PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 5a : GROUNDWATER ISOCONCENTRATION (11/13/2019)

PROJECT No. 6134B	DRAWN BY: MCM	DATE: 10/25/2021
----------------------	------------------	---------------------

REI Engineering, INC.

DRAWING FILE: P:\6100-6199\6134B-PHILLIPS PLATING\dwg\6134B-GW-contam-021020.dwg LAYOUT: gw PLOTTED: Oct 25, 2021 - 10:55AM PLOTTED BY: MATTH



LEGEND	



NOTES:
I. GROUNDWATER ISOCONCENTRATIONS ARE BASED ON LABORATORY ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED DURING THE FEBRUARY 10, 2020 GROUNDWATER MONITORING EVENT COMPARED TO WISCONSIN ADMINISTRATIVE CODE (WAC) CHAPTER NRI40 ENFORCEMENT STANDARDS (ES) AND PREVENTIVE ACTION LIMITS (PAL).



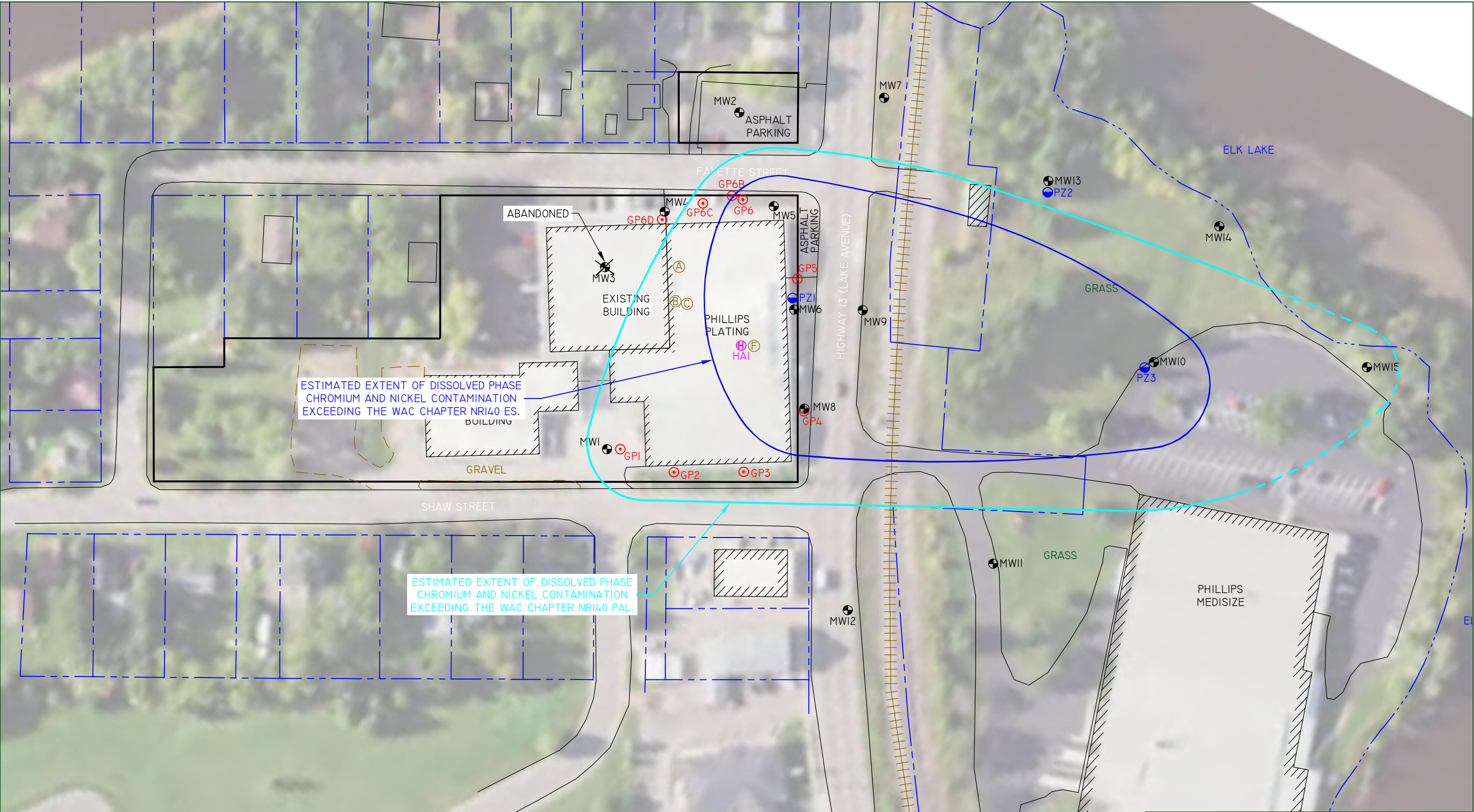
PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 5b : GROUNDWATER ISOCONCENTRATION (02/10/2020)

PROJECT No. 6134B	DRAWN BY: MCM	DATE: 10/25/2021
----------------------	------------------	---------------------

REI Engineering, INC.

DRAWING FILE: P:\6100-6199\6134B-PHILLIPS PLATING\dwg\6134B-GW-contam-030321.dwg LAYOUT: gw PLOTTED: Oct 25, 2021 - 10:25AM PLOTTED BY: MATTM



LEGEND	



NOTES:
I. GROUNDWATER ISOCONCENTRATIONS ARE BASED ON LABORATORY ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED DURING THE MARCH 3, 2021 GROUNDWATER MONITORING EVENT COMPARED TO WISCONSIN ADMINISTRATIVE CODE (WAC) CHAPTER NRI40 ENFORCEMENT STANDARDS (ES) AND PREVENTIVE ACTION LIMITS (PAL).



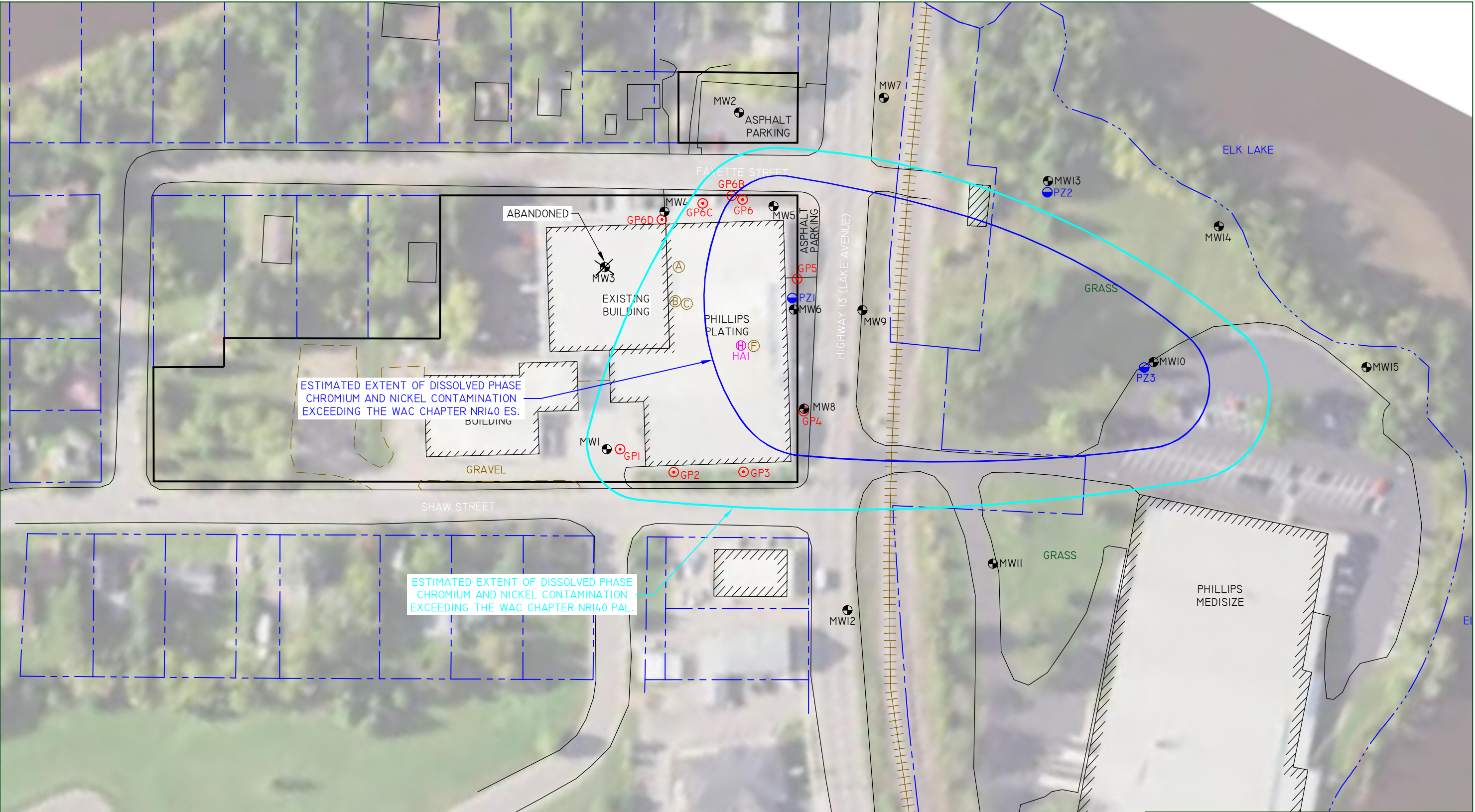
PHILLIPS PLATING CORP.
984 N LAKE AVENUE
PHILLIPS, WISCONSIN

FIGURE 5c : GROUNDWATER ISOCONCENTRATION (03/03/2021)

PROJECT No. 6134B	DRAWN BY: MCM	DATE: 10/25/2021
----------------------	------------------	---------------------

REI Engineering, INC.

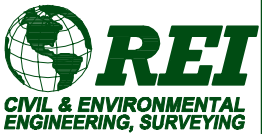
DRAWING FILE: P:\6100-6199\6134B-PHILLIPS PLATING\dwg\6134B-GW-contam-082521.dwg LAYOUT: gw PLOTTED: Oct 25, 2021 - 10:15AM PLOTTED BY: MATTM



LEGEND	



NOTES:
I. GROUNDWATER ISOCONCENTRATIONS ARE BASED ON LABORATORY ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED DURING THE AUGUST 25, 2021 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 5d : GROUNDWATER ISOCONCENTRATION (08/25/2021)

PROJECT No. 6134B	DRAWN BY: MCM	DATE: 10/25/2021
----------------------	------------------	---------------------

REI Engineering, INC.

November 25, 2019

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

RE: Project: 6134B PHILLIPS PLATING
Pace Project No.: 40199134

Dear Ken Lassa:

Enclosed are the analytical results for sample(s) received by the laboratory on November 14, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40199134001	MW1	Water	11/13/19 10:00	11/14/19 08:45
40199134002	MW2	Water	11/13/19 12:00	11/14/19 08:45
40199134003	MW4	Water	11/13/19 12:30	11/14/19 08:45
40199134004	MW5	Water	11/13/19 13:00	11/14/19 08:45
40199134005	MW6	Water	11/13/19 16:20	11/14/19 08:45
40199134006	MW7	Water	11/13/19 11:00	11/14/19 08:45
40199134007	MW8	Water	11/13/19 16:00	11/14/19 08:45
40199134008	MW9	Water	11/13/19 15:50	11/14/19 08:45
40199134009	MW10	Water	11/13/19 15:30	11/14/19 08:45
40199134010	MW11	Water	11/13/19 13:30	11/14/19 08:45
40199134011	MW12	Water	11/13/19 10:30	11/14/19 08:45
40199134012	MW13	Water	11/13/19 15:00	11/14/19 08:45
40199134013	MW14	Water	11/13/19 14:30	11/14/19 08:45
40199134014	MW15	Water	11/13/19 14:00	11/14/19 08:45
40199134015	PZ1	Water	11/13/19 16:10	11/14/19 08:45
40199134016	PZ2	Water	11/13/19 14:45	11/14/19 08:45
40199134017	PZ3	Water	11/13/19 15:45	11/14/19 08:45

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40199134001	MW1	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40199134002	MW2	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40199134003	MW4	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40199134004	MW5	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40199134005	MW6	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40199134006	MW7	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40199134007	MW8	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40199134008	MW9	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40199134009	MW10	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40199134010	MW11	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40199134011	MW12	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40199134012	MW13	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40199134013	MW14	EPA 6010	TXW	4	PASI-G

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40199134014	MW15	SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
		EPA 6010	TXW	4	PASI-G
40199134015	PZ1	SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
		EPA 6010	TXW	4	PASI-G
40199134016	PZ2	SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
		EPA 6010	TXW	4	PASI-G
40199134017	PZ3	SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
		EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Sample: MW1 Lab ID: 40199134001 Collected: 11/13/19 10:00 Received: 11/14/19 08:45 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1		11/18/19 16:41	7440-47-3	
Iron, Dissolved	<29.6	ug/L	100	29.6	1		11/18/19 16:41	7439-89-6	
Manganese, Dissolved	<1.1	ug/L	5.0	1.1	1		11/18/19 16:41	7439-96-5	
Nickel, Dissolved	35.4	ug/L	10.0	3.0	1		11/18/19 16:41	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	<0.037	mg/L	0.12	0.037	5		11/14/19 09:50		D3
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	8.8	mg/L	0.75	0.22	5		11/14/19 18:55	14797-55-8	M0
Sulfate	20.4	mg/L	10.0	2.2	5		11/14/19 18:55	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Sample: MW2 Lab ID: 40199134002 Collected: 11/13/19 12:00 Received: 11/14/19 08:45 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1		11/18/19 16:48	7440-47-3	
Iron, Dissolved	<29.6	ug/L	100	29.6	1		11/18/19 16:48	7439-89-6	
Manganese, Dissolved	22.4	ug/L	5.0	1.1	1		11/18/19 16:48	7439-96-5	
Nickel, Dissolved	6.4J	ug/L	10.0	3.0	1		11/18/19 16:48	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		11/14/19 09:50		D3
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	21.0	mg/L	1.5	0.44	10		11/14/19 19:35	14797-55-8	
Sulfate	14.7J	mg/L	20.0	4.4	10		11/14/19 19:35	14808-79-8	D3

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Sample: MW4 Lab ID: 40199134003 Collected: 11/13/19 12:30 Received: 11/14/19 08:45 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1		11/18/19 16:51	7440-47-3	
Iron, Dissolved	<29.6	ug/L	100	29.6	1		11/18/19 16:51	7439-89-6	
Manganese, Dissolved	<1.1	ug/L	5.0	1.1	1		11/18/19 16:51	7439-96-5	
Nickel, Dissolved	<3.0	ug/L	10.0	3.0	1		11/18/19 16:51	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	<0.037	mg/L	0.12	0.037	5		11/14/19 09:50		D3
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	2.3	mg/L	0.75	0.22	5		11/14/19 19:48	14797-55-8	
Sulfate	9.0J	mg/L	10.0	2.2	5		11/14/19 19:48	14808-79-8	D3

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Sample: MW5 Lab ID: 40199134004 Collected: 11/13/19 13:00 Received: 11/14/19 08:45 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	209	ug/L	10.0	2.5	1		11/18/19 16:53	7440-47-3	
Iron, Dissolved	<29.6	ug/L	100	29.6	1		11/18/19 16:53	7439-89-6	
Manganese, Dissolved	31.6	ug/L	5.0	1.1	1		11/18/19 16:53	7439-96-5	
Nickel, Dissolved	2010	ug/L	10.0	3.0	1		11/18/19 16:53	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	0.13	mg/L	0.12	0.037	5		11/14/19 09:50		
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	6.6	mg/L	1.5	0.44	10		11/14/19 20:01	14797-55-8	
Sulfate	26.1	mg/L	20.0	4.4	10		11/14/19 20:01	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Sample: MW6 Lab ID: 40199134005 Collected: 11/13/19 16:20 Received: 11/14/19 08:45 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	9660	ug/L	10.0	2.5	1		11/18/19 16:56	7440-47-3	
Iron, Dissolved	<29.6	ug/L	100	29.6	1		11/18/19 16:56	7439-89-6	
Manganese, Dissolved	1080	ug/L	5.0	1.1	1		11/18/19 16:56	7439-96-5	
Nickel, Dissolved	6710	ug/L	10.0	3.0	1		11/18/19 16:56	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	8.6	mg/L	1.2	0.37	50		11/14/19 09:50		
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	13.1	mg/L	1.5	0.44	10		11/14/19 20:14	14797-55-8	
Sulfate	213	mg/L	20.0	4.4	10		11/14/19 20:14	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Sample: MW7 Lab ID: 40199134006 Collected: 11/13/19 11:00 Received: 11/14/19 08:45 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	42.7	ug/L	10.0	2.5	1		11/18/19 16:58	7440-47-3	
Iron, Dissolved	4000	ug/L	100	29.6	1		11/18/19 16:58	7439-89-6	
Manganese, Dissolved	233	ug/L	5.0	1.1	1		11/18/19 16:58	7439-96-5	
Nickel, Dissolved	13.8	ug/L	10.0	3.0	1		11/18/19 16:58	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	<0.73	mg/L	2.4	0.73	100		11/14/19 09:50		D3
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	2.3	mg/L	0.75	0.22	5		11/14/19 20:28	14797-55-8	
Sulfate	20.4	mg/L	10.0	2.2	5		11/14/19 20:28	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Sample: MW8 Lab ID: 40199134007 Collected: 11/13/19 16:00 Received: 11/14/19 08:45 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	583	ug/L	10.0	2.5	1		11/18/19 17:05	7440-47-3	
Iron, Dissolved	58.2J	ug/L	100	29.6	1		11/18/19 17:05	7439-89-6	
Manganese, Dissolved	22.4	ug/L	5.0	1.1	1		11/18/19 17:05	7439-96-5	
Nickel, Dissolved	528	ug/L	10.0	3.0	1		11/18/19 17:05	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	0.54	mg/L	0.12	0.037	5		11/14/19 09:50		
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	8.8	mg/L	1.5	0.44	10		11/14/19 20:41	14797-55-8	
Sulfate	18.8J	mg/L	20.0	4.4	10		11/14/19 20:41	14808-79-8	D3

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Sample: MW9 Lab ID: 40199134008 Collected: 11/13/19 15:50 Received: 11/14/19 08:45 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	590	ug/L	10.0	2.5	1		11/18/19 17:08	7440-47-3	
Iron, Dissolved	<29.6	ug/L	100	29.6	1		11/18/19 17:08	7439-89-6	
Manganese, Dissolved	103	ug/L	5.0	1.1	1		11/18/19 17:08	7439-96-5	
Nickel, Dissolved	586	ug/L	10.0	3.0	1		11/18/19 17:08	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	0.32	mg/L	0.24	0.073	10		11/14/19 09:50		
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	8.4	mg/L	1.5	0.44	10		11/14/19 20:54	14797-55-8	
Sulfate	58.3	mg/L	20.0	4.4	10		11/14/19 20:54	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Sample: MW10 Lab ID: 40199134009 Collected: 11/13/19 15:30 Received: 11/14/19 08:45 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	112	ug/L	10.0	2.5	1		11/18/19 17:10	7440-47-3	
Iron, Dissolved	95.7J	ug/L	100	29.6	1		11/18/19 17:10	7439-89-6	
Manganese, Dissolved	16.6	ug/L	5.0	1.1	1		11/18/19 17:10	7439-96-5	
Nickel, Dissolved	31.2	ug/L	10.0	3.0	1		11/18/19 17:10	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	0.068	mg/L	0.061	0.018	2.5		11/14/19 09:50		
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	0.85	mg/L	0.75	0.22	5		11/14/19 21:47	14797-55-8	
Sulfate	14.9	mg/L	10.0	2.2	5		11/14/19 21:47	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Sample: MW11		Lab ID: 40199134010		Collected: 11/13/19 13:30		Received: 11/14/19 08:45		Matrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved		Analytical Method: EPA 6010							
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1		11/18/19 17:13	7440-47-3	
Iron, Dissolved	112	ug/L	100	29.6	1		11/18/19 17:13	7439-89-6	
Manganese, Dissolved	144	ug/L	5.0	1.1	1		11/18/19 17:13	7439-96-5	
Nickel, Dissolved	<3.0	ug/L	10.0	3.0	1		11/18/19 17:13	7440-02-0	
Chromium, Hexavalent		Analytical Method: SM 3500-Cr B (Online)							
Chromium, Hexavalent	<0.073	mg/L	0.24	0.073	10		11/14/19 09:50		D3
300.0 IC Anions		Analytical Method: EPA 300.0							
Nitrate as N	4.8	mg/L	0.75	0.22	5		11/14/19 22:00	14797-55-8	
Sulfate	16.4	mg/L	10.0	2.2	5		11/14/19 22:00	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Sample: MW12 Lab ID: 40199134011 Collected: 11/13/19 10:30 Received: 11/14/19 08:45 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1		11/18/19 17:15	7440-47-3	
Iron, Dissolved	<29.6	ug/L	100	29.6	1		11/18/19 17:15	7439-89-6	
Manganese, Dissolved	<1.1	ug/L	5.0	1.1	1		11/18/19 17:15	7439-96-5	
Nickel, Dissolved	<3.0	ug/L	10.0	3.0	1		11/18/19 17:15	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	<0.073	mg/L	0.24	0.073	10		11/14/19 09:50		D3
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	5.3	mg/L	0.75	0.22	5		11/14/19 22:13	14797-55-8	
Sulfate	14.7	mg/L	10.0	2.2	5		11/14/19 22:13	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Sample: MW13		Lab ID: 40199134012		Collected: 11/13/19 15:00		Received: 11/14/19 08:45		Matrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved		Analytical Method: EPA 6010							
Chromium, Dissolved	5.3J	ug/L	10.0	2.5	1		11/18/19 17:18	7440-47-3	
Iron, Dissolved	11700	ug/L	100	29.6	1		11/18/19 17:18	7439-89-6	
Manganese, Dissolved	2400	ug/L	5.0	1.1	1		11/18/19 17:18	7439-96-5	
Nickel, Dissolved	<3.0	ug/L	10.0	3.0	1		11/18/19 17:18	7440-02-0	
Chromium, Hexavalent		Analytical Method: SM 3500-Cr B (Online)							
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		11/14/19 09:50		D3
300.0 IC Anions		Analytical Method: EPA 300.0							
Nitrate as N	<0.22	mg/L	0.75	0.22	5		11/14/19 22:26	14797-55-8	D3
Sulfate	2.6J	mg/L	10.0	2.2	5		11/14/19 22:26	14808-79-8	D3

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Sample: MW14 Lab ID: 40199134013 Collected: 11/13/19 14:30 Received: 11/14/19 08:45 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1		11/18/19 17:20	7440-47-3	
Iron, Dissolved	4740	ug/L	100	29.6	1		11/18/19 17:20	7439-89-6	
Manganese, Dissolved	268	ug/L	5.0	1.1	1		11/18/19 17:20	7439-96-5	
Nickel, Dissolved	<3.0	ug/L	10.0	3.0	1		11/18/19 17:20	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		11/14/19 09:50		D3
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	<0.22	mg/L	0.75	0.22	5		11/14/19 22:40	14797-55-8	D3
Sulfate	6.4J	mg/L	10.0	2.2	5		11/14/19 22:40	14808-79-8	D3

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Sample: MW15 Lab ID: 40199134014 Collected: 11/13/19 14:00 Received: 11/14/19 08:45 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1		11/18/19 17:23	7440-47-3	
Iron, Dissolved	2050	ug/L	100	29.6	1		11/18/19 17:23	7439-89-6	
Manganese, Dissolved	150	ug/L	5.0	1.1	1		11/18/19 17:23	7439-96-5	
Nickel, Dissolved	<3.0	ug/L	10.0	3.0	1		11/18/19 17:23	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		11/14/19 09:50		D3
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	<0.22	mg/L	0.75	0.22	5		11/14/19 22:53	14797-55-8	D3
Sulfate	<2.2	mg/L	10.0	2.2	5		11/14/19 22:53	14808-79-8	D3

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Sample: PZ1 Lab ID: 40199134015 Collected: 11/13/19 16:10 Received: 11/14/19 08:45 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	888	ug/L	10.0	2.5	1		11/18/19 17:25	7440-47-3	
Iron, Dissolved	<29.6	ug/L	100	29.6	1		11/18/19 17:25	7439-89-6	
Manganese, Dissolved	13.6	ug/L	5.0	1.1	1		11/18/19 17:25	7439-96-5	
Nickel, Dissolved	<3.0	ug/L	10.0	3.0	1		11/18/19 17:25	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	0.94	mg/L	0.24	0.073	10		11/14/19 09:50		
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	4.8	mg/L	0.75	0.22	5		11/14/19 23:06	14797-55-8	
Sulfate	41.4	mg/L	10.0	2.2	5		11/14/19 23:06	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Sample: PZ2 Lab ID: 40199134016 Collected: 11/13/19 14:45 Received: 11/14/19 08:45 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1		11/18/19 17:28	7440-47-3	
Iron, Dissolved	1020	ug/L	100	29.6	1		11/18/19 17:28	7439-89-6	
Manganese, Dissolved	68.5	ug/L	5.0	1.1	1		11/18/19 17:28	7439-96-5	
Nickel, Dissolved	<3.0	ug/L	10.0	3.0	1		11/18/19 17:28	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	<0.073	mg/L	0.24	0.073	10		11/14/19 09:50		D3
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	<0.22	mg/L	0.75	0.22	5		11/14/19 23:19	14797-55-8	D3
Sulfate	5.6J	mg/L	10.0	2.2	5		11/14/19 23:19	14808-79-8	D3

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Sample: PZ3 Lab ID: 40199134017 Collected: 11/13/19 15:45 Received: 11/14/19 08:45 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	1260	ug/L	10.0	2.5	1		11/18/19 17:35	7440-47-3	
Iron, Dissolved	<29.6	ug/L	100	29.6	1		11/18/19 17:35	7439-89-6	
Manganese, Dissolved	225	ug/L	5.0	1.1	1		11/18/19 17:35	7439-96-5	
Nickel, Dissolved	2720	ug/L	10.0	3.0	1		11/18/19 17:35	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	1.1	mg/L	0.61	0.18	25		11/14/19 09:50		
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	9.5	mg/L	0.75	0.22	5		11/14/19 23:32	14797-55-8	
Sulfate	52.4	mg/L	10.0	2.2	5		11/14/19 23:32	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40199134

QC Batch:	341093	Analysis Method:	EPA 6010
QC Batch Method:	EPA 6010	Analysis Description:	ICP Metals, Trace, Dissolved
Associated Lab Samples:	40199134001, 40199134002, 40199134003, 40199134004, 40199134005, 40199134006, 40199134007, 40199134008, 40199134009, 40199134010, 40199134011, 40199134012, 40199134013, 40199134014, 40199134015, 40199134016, 40199134017		

METHOD BLANK:	1980619	Matrix:	Water
Associated Lab Samples:	40199134001, 40199134002, 40199134003, 40199134004, 40199134005, 40199134006, 40199134007, 40199134008, 40199134009, 40199134010, 40199134011, 40199134012, 40199134013, 40199134014, 40199134015, 40199134016, 40199134017		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Dissolved	ug/L	<2.5	10.0	11/18/19 16:36	
Iron, Dissolved	ug/L	<29.6	100	11/18/19 16:36	
Manganese, Dissolved	ug/L	<1.1	5.0	11/18/19 16:36	
Nickel, Dissolved	ug/L	<3.0	10.0	11/18/19 16:36	

LABORATORY CONTROL SAMPLE: 1980620						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	500	463	93	80-120	
Iron, Dissolved	ug/L	5000	4800	96	80-120	
Manganese, Dissolved	ug/L	500	470	94	80-120	
Nickel, Dissolved	ug/L	500	493	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 19806211980622												
Parameter	Units	40199134001	MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual	
		Result	Spike	Spike								Result
Chromium, Dissolved	ug/L	<2.5	500	500	461	470	92	94	75-125	2	20	
Iron, Dissolved	ug/L	<29.6	5000	5000	4630	4680	93	94	75-125	1	20	
Manganese, Dissolved	ug/L	<1.1	500	500	467	469	93	94	75-125	0	20	
Nickel, Dissolved	ug/L	35.4	500	500	500	505	93	94	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

QC Batch:	340745	Analysis Method:	SM 3500-Cr B (Online)
QC Batch Method:	SM 3500-Cr B (Online)	Analysis Description:	Chromium, Hexavalent by 3500
Associated Lab Samples:	40199134001, 40199134002, 40199134003, 40199134004, 40199134005, 40199134006, 40199134007, 40199134008, 40199134009, 40199134010, 40199134011, 40199134012, 40199134013, 40199134014, 40199134015, 40199134016, 40199134017		

METHOD BLANK: 1978509

Matrix: Water

Associated Lab Samples: 40199134001, 40199134002, 40199134003, 40199134004, 40199134005, 40199134006, 40199134007, 40199134008, 40199134009, 40199134010, 40199134011, 40199134012, 40199134013, 40199134014, 40199134015, 40199134016, 40199134017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.0073	0.024	11/14/19 09:50	

LABORATORY CONTROL SAMPLE: 1978510

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.3	0.27	91	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1978511 1978512

Parameter	Units	40199134001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/L	<0.037	1.5	1.5	1.5	1.5	103	99	90-110	4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1978513 1978514

Parameter	Units	40199134011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/L	<0.073	3	3	2.9	2.8	97	92	90-110	6	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40199134

QC Batch:	340741	Analysis Method:	EPA 300.0
QC Batch Method:	EPA 300.0	Analysis Description:	300.0 IC Anions
Associated Lab Samples:	40199134001, 40199134002, 40199134003, 40199134004, 40199134005, 40199134006, 40199134007, 40199134008, 40199134009, 40199134010, 40199134011, 40199134012, 40199134013, 40199134014, 40199134015, 40199134016, 40199134017		

METHOD BLANK:	1978481	Matrix:	Water
Associated Lab Samples:	40199134001, 40199134002, 40199134003, 40199134004, 40199134005, 40199134006, 40199134007, 40199134008, 40199134009, 40199134010, 40199134011, 40199134012, 40199134013, 40199134014, 40199134015, 40199134016, 40199134017		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate as N	mg/L	<0.044	0.15	11/14/19 17:49	
Sulfate	mg/L	<0.44	2.0	11/14/19 17:49	

LABORATORY CONTROL SAMPLE:		1978482				
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.5	1.5	102	90-110	
Sulfate	mg/L	20	20.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:				1978483		1978484						
Parameter	Units	40199134001	MS	MSD	MS	MSD	MS	MSD	% Rec	Max		
		Result	Spike	Spike								
Nitrate as N	mg/L	8.8	7.5	7.5	16.7	17.6	105	118	90-110	5	15	M0
Sulfate	mg/L	20.4	100	100	122	127	102	106	90-110	3	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:			1978485		1978486							
Parameter	Units	40199134017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	9.5	7.5	7.5	17.5	17.4	106	105	90-110	1	15	
Sulfate	mg/L	52.4	100	100	157	155	104	103	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40199134

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.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40199134001	MW1	EPA 6010	341093		
40199134002	MW2	EPA 6010	341093		
40199134003	MW4	EPA 6010	341093		
40199134004	MW5	EPA 6010	341093		
40199134005	MW6	EPA 6010	341093		
40199134006	MW7	EPA 6010	341093		
40199134007	MW8	EPA 6010	341093		
40199134008	MW9	EPA 6010	341093		
40199134009	MW10	EPA 6010	341093		
40199134010	MW11	EPA 6010	341093		
40199134011	MW12	EPA 6010	341093		
40199134012	MW13	EPA 6010	341093		
40199134013	MW14	EPA 6010	341093		
40199134014	MW15	EPA 6010	341093		
40199134015	PZ1	EPA 6010	341093		
40199134016	PZ2	EPA 6010	341093		
40199134017	PZ3	EPA 6010	341093		
40199134001	MW1	SM 3500-Cr B (Online)	340745		
40199134002	MW2	SM 3500-Cr B (Online)	340745		
40199134003	MW4	SM 3500-Cr B (Online)	340745		
40199134004	MW5	SM 3500-Cr B (Online)	340745		
40199134005	MW6	SM 3500-Cr B (Online)	340745		
40199134006	MW7	SM 3500-Cr B (Online)	340745		
40199134007	MW8	SM 3500-Cr B (Online)	340745		
40199134008	MW9	SM 3500-Cr B (Online)	340745		
40199134009	MW10	SM 3500-Cr B (Online)	340745		
40199134010	MW11	SM 3500-Cr B (Online)	340745		
40199134011	MW12	SM 3500-Cr B (Online)	340745		
40199134012	MW13	SM 3500-Cr B (Online)	340745		
40199134013	MW14	SM 3500-Cr B (Online)	340745		
40199134014	MW15	SM 3500-Cr B (Online)	340745		
40199134015	PZ1	SM 3500-Cr B (Online)	340745		
40199134016	PZ2	SM 3500-Cr B (Online)	340745		
40199134017	PZ3	SM 3500-Cr B (Online)	340745		
40199134001	MW1	EPA 300.0	340741		
40199134002	MW2	EPA 300.0	340741		
40199134003	MW4	EPA 300.0	340741		
40199134004	MW5	EPA 300.0	340741		
40199134005	MW6	EPA 300.0	340741		
40199134006	MW7	EPA 300.0	340741		
40199134007	MW8	EPA 300.0	340741		
40199134008	MW9	EPA 300.0	340741		
40199134009	MW10	EPA 300.0	340741		
40199134010	MW11	EPA 300.0	340741		
40199134011	MW12	EPA 300.0	340741		
40199134012	MW13	EPA 300.0	340741		
40199134013	MW14	EPA 300.0	340741		
40199134014	MW15	EPA 300.0	340741		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40199134

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40199134015	PZ1	EPA 300.0	340741		
40199134016	PZ2	EPA 300.0	340741		
40199134017	PZ3	EPA 300.0	340741		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

40,99134

[illegible]

Sample Preservation Receipt Form

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Client Name: REI

Project # 40199134

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

Lab Lot# of pH paper: 10453581

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

Initial when completed: [Signature]

Date/Time:

Pace Lab #	Glass						Plastic						Vials					Jars			General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)			
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3B	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU								SP5T	ZPLC	GN
001											-		-																	X		2.5 / 5 / 10	
002											-		-																	+		2.5 / 5 / 10	
003											-		-																	X		2.5 / 5 / 10	
004											-		-																	X		2.5 / 5 / 10	
005											-		-																	X		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											-		-																	X		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	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact	VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL	SP5T 120 mL plastic Na Thiosulfate ZPLC ziploc bag GN:	
AG5U	100 mL amber glass unpres	BP3B	250 mL plastic NaOH	VG9M	40 mL clear vial MeOH		
AG2S	500 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9D	40 mL clear vial DI		
BG3U	250 mL clear glass unpres	BP3S	250 mL plastic H2SO4				

 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 25Apr2018
	Document No.: F-GB-C-031-Rev.07	Issuing Authority: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Client Name: REI

Project #

WO#: 40199134

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco

☒ Client ☐ Pace Other: _____



40199134

Tracking #: _____

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 - N/A Type of Ice: ☒ Wet ☐ Blue ☐ Dry ☐ None

☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: R2 ICorr: _____

Temp Blank Present: ☐ yes ☒ no

Biological Tissue is Frozen: ☐ yes ☐ no

Person examining contents:

Date: 11/13/19

Initials: 11/13/19

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C.

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

Project Manager Review: _____

Date: 11-14-19

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Printed: 11/19/19 Page 1 of 2

Client: REI Engineering Inc
Attn: Ryan Resch
4080 North 20th Avenue
Wausau, WI 54401 8846

NLS Project: 334897

NLS Customer: 29027

Fax: 715 675 4060 Phone: 715 675 9784

Project: Phillips Plating 16134B

MW 10 NLS ID: 1160684

COC: :1 Matrix: GW

Collected: 11/13/19 15:30 Received: 11/14/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	150	ug/L	1	0.58	1.9	11/15/19	SW846 6010	721026460
Chromium, Hex. as Cr+6	63	ug/L	5	2.6	8.5	11/14/19	3500-Cr B-2009	721026460

The sample was analyzed and spiked at both a 5x dilution and a 10x dilution. The method required matrix spike recovery range is 85%-115%. The 5x and 10X dilution spike recoveries were outside of the method required limits at 11% and 10%.

Nickel, dis. as Ni by ICP	73	ug/L	1	0.94	3.2	11/15/19	SW846 6010	721026460
Lab filtration	yes					11/14/19	NA	721026460

MW 11 NLS ID: 1160685

COC: :2 Matrix: GW

Collected: 11/13/19 13:30 Received: 11/14/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	[1.0]	ug/L	1	0.58	1.9	11/15/19	SW846 6010	721026460
Chromium, Hex. as Cr+6	[0.82]	ug/L	1	0.52	1.7	11/14/19	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	ND	ug/L	1	0.94	3.2	11/15/19	SW846 6010	721026460
Lab filtration	yes					11/14/19	NA	721026460

MW 13 NLS ID: 1160686

COC: :3 Matrix: GW

Collected: 11/13/19 15:00 Received: 11/14/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	6.2	ug/L	1	0.58	1.9	11/15/19	SW846 6010	721026460
Chromium, Hex. as Cr+6	[1.3]	ug/L	1	0.52	1.7	11/14/19	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	[2.0]	ug/L	1	0.94	3.2	11/15/19	SW846 6010	721026460
Lab filtration	yes					11/14/19	NA	721026460

MW 14 NLS ID: 1160687

COC: :4 Matrix: GW

Collected: 11/13/19 14:30 Received: 11/14/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	ND	ug/L	1	0.58	1.9	11/15/19	SW846 6010	721026460
Chromium, Hex. as Cr+6	[0.58]	ug/L	1	0.52	1.7	11/14/19	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	ND	ug/L	1	0.94	3.2	11/15/19	SW846 6010	721026460
Lab filtration	yes					11/14/19	NA	721026460

MW 15 NLS ID: 1160688

COC: :5 Matrix: GW

Collected: 11/13/19 14:00 Received: 11/14/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	[1.0]	ug/L	1	0.58	1.9	11/15/19	SW846 6010	721026460
Chromium, Hex. as Cr+6	[1.3]	ug/L	1	0.52	1.7	11/14/19	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	[1.8]	ug/L	1	0.94	3.2	11/15/19	SW846 6010	721026460
Lab filtration	yes					11/14/19	NA	721026460

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Printed: 11/19/19 Page 2 of 2

Client: REI Engineering Inc
Attn: Ryan Resch
4080 North 20th Avenue
Wausau, WI 54401 8846

NLS Project: 334897

NLS Customer: 29027

Fax: 715 675 4060 Phone: 715 675 9784

Project: Phillips Plating 16134B

PZ2 NLS ID: 1160689

COC: :6 Matrix: GW

Collected: 11/13/19 14:45 Received: 11/14/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	[0.70]	ug/L	1	0.58	1.9	11/15/19	SW846 6010	721026460
Chromium, Hex. as Cr+6	[0.58]	ug/L	1	0.52	1.7	11/14/19	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	ND	ug/L	1	0.94	3.2	11/15/19	SW846 6010	721026460
Lab filtration	yes					11/14/19	NA	721026460

PZ3 NLS ID: 1160690

COC: :7 Matrix: GW

Collected: 11/13/19 15:45 Received: 11/14/19

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	1200	ug/L	1	0.58	1.9	11/15/19	SW846 6010	721026460
Chromium, Hex. as Cr+6	1100	ug/L	100	52	170	11/14/19	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	2600	ug/L	1	0.94	3.2	11/15/19	SW846 6010	721026460
Lab filtration	yes					11/14/19	NA	721026460

Values in brackets represent results greater than or equal to the LOD but less than the LOQ and are within a region of "Less-Certain Quantitation". Results greater than or equal to the LOQ are considered to be in the region of "Certain Quantitation". LOD and/or LOQ tagged with an asterisk(*) are considered Reporting Limits. All LOD/LOQs adjusted to reflect dilution and/or solids content.

ND = Not Detected (< LOD) LOD = Limit of Detection LOQ = Limit of Quantitation NA = Not Applicable

DWB = Dry Weight Basis %DWB = (mg/kg DWB) / 10000 1000 ug/L = 1 mg/L

MCL = Maximum Contaminant Levels for Drinking Water Samples. Shaded results indicate >MCL.

Reviewed by:



Authorized by:
R. T. Krueger
President

February 25, 2020

Ryan Resch
REI
4080 North 20th Ave
Wausau, WI 54401

RE: Project: 6134B PHILLIPS PLATING
Pace Project No.: 40203171

Dear Ryan Resch:

Enclosed are the analytical results for sample(s) received by the laboratory on February 11, 2020. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40203171001	MW1	Water	02/10/20 09:30	02/11/20 09:20
40203171002	MW2	Water	02/10/20 10:15	02/11/20 09:20
40203171003	MW4	Water	02/10/20 10:30	02/11/20 09:20
40203171004	MW5	Water	02/10/20 11:00	02/11/20 09:20
40203171005	MW6	Water	02/10/20 15:15	02/11/20 09:20
40203171006	MW7	Water	02/10/20 11:15	02/11/20 09:20
40203171007	MW8	Water	02/10/20 14:45	02/11/20 09:20
40203171008	MW9	Water	02/10/20 14:00	02/11/20 09:20
40203171009	MW10	Water	02/10/20 13:45	02/11/20 09:20
40203171010	MW11	Water	02/10/20 11:45	02/11/20 09:20
40203171011	MW12	Water	02/10/20 09:45	02/11/20 09:20
40203171012	MW13	Water	02/10/20 13:00	02/11/20 09:20
40203171013	MW14	Water	02/10/20 12:30	02/11/20 09:20
40203171014	MW15	Water	02/10/20 12:00	02/11/20 09:20
40203171015	PZ1	Water	02/10/20 15:00	02/11/20 09:20
40203171016	PZ2	Water	02/10/20 12:45	02/11/20 09:20
40203171017	PZ3	Water	02/10/20 13:30	02/11/20 09:20

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40203171001	MW1	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40203171002	MW2	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40203171003	MW4	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40203171004	MW5	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40203171005	MW6	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40203171006	MW7	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40203171007	MW8	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40203171008	MW9	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40203171009	MW10	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40203171010	MW11	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40203171011	MW12	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40203171012	MW13	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40203171013	MW14	EPA 6010	TXW	4	PASI-G

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40203171014	MW15	SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
		EPA 6010	TXW	4	PASI-G
40203171015	PZ1	SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
		EPA 6010	TXW	4	PASI-G
40203171016	PZ2	SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
		EPA 6010	TXW	4	PASI-G
40203171017	PZ3	SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
		EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	2	PASI-G

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Sample: MW1 Lab ID: 40203171001 Collected: 02/10/20 09:30 Received: 02/11/20 09:20 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1		02/12/20 18:13	7440-47-3	
Iron, Dissolved	<29.6	ug/L	100	29.6	1		02/12/20 18:13	7439-89-6	
Manganese, Dissolved	<1.1	ug/L	5.0	1.1	1		02/12/20 18:13	7439-96-5	
Nickel, Dissolved	33.4	ug/L	10.0	3.0	1		02/12/20 18:13	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	<0.018	mg/L	0.061	0.018	2.5		02/11/20 09:25		D3
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	10.2	mg/L	0.75	0.22	5		02/11/20 15:44	14797-55-8	
Sulfate	24.8	mg/L	10.0	2.2	5		02/11/20 15:44	14808-79-8	M0

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Sample: MW2 Lab ID: 40203171002 Collected: 02/10/20 10:15 Received: 02/11/20 09:20 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1		02/12/20 18:19	7440-47-3	
Iron, Dissolved	<29.6	ug/L	100	29.6	1		02/12/20 18:19	7439-89-6	
Manganese, Dissolved	85.1	ug/L	5.0	1.1	1		02/12/20 18:19	7439-96-5	
Nickel, Dissolved	5.7J	ug/L	10.0	3.0	1		02/12/20 18:19	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	<0.18	mg/L	0.61	0.18	25		02/11/20 09:25		D3
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	24.0	mg/L	3.0	0.88	20		02/12/20 11:07	14797-55-8	H5
Sulfate	15.9	mg/L	10.0	2.2	5		02/11/20 16:29	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Sample: MW4 Lab ID: 40203171003 Collected: 02/10/20 10:30 Received: 02/11/20 09:20 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	2.9J	ug/L	10.0	2.5	1		02/12/20 18:22	7440-47-3	
Iron, Dissolved	502	ug/L	100	29.6	1		02/12/20 18:22	7439-89-6	
Manganese, Dissolved	29.1	ug/L	5.0	1.1	1		02/12/20 18:22	7439-96-5	
Nickel, Dissolved	4.7J	ug/L	10.0	3.0	1		02/12/20 18:22	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	<0.037	mg/L	0.12	0.037	5		02/11/20 09:25		D3
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	2.9	mg/L	0.75	0.22	5		02/11/20 17:27	14797-55-8	
Sulfate	10.6	mg/L	10.0	2.2	5		02/11/20 17:27	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Sample: MW5 Lab ID: 40203171004 Collected: 02/10/20 11:00 Received: 02/11/20 09:20 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	196	ug/L	10.0	2.5	1		02/12/20 18:29	7440-47-3	
Iron, Dissolved	<29.6	ug/L	100	29.6	1		02/12/20 18:29	7439-89-6	
Manganese, Dissolved	41.3	ug/L	5.0	1.1	1		02/12/20 18:29	7439-96-5	
Nickel, Dissolved	2990	ug/L	10.0	3.0	1		02/12/20 18:29	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	0.19	mg/L	0.12	0.037	5		02/11/20 09:25		
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	6.6	mg/L	0.75	0.22	5		02/11/20 17:41	14797-55-8	
Sulfate	23.0	mg/L	10.0	2.2	5		02/11/20 17:41	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Sample: MW6 Lab ID: 40203171005 Collected: 02/10/20 15:15 Received: 02/11/20 09:20 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	10100	ug/L	10.0	2.5	1		02/12/20 18:31	7440-47-3	
Iron, Dissolved	<29.6	ug/L	100	29.6	1		02/12/20 18:31	7439-89-6	
Manganese, Dissolved	1220	ug/L	5.0	1.1	1		02/12/20 18:31	7439-96-5	
Nickel, Dissolved	6580	ug/L	10.0	3.0	1		02/12/20 18:31	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	10.0	mg/L	1.2	0.37	50		02/11/20 09:25		
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	11.6	mg/L	0.75	0.22	5		02/11/20 17:55	14797-55-8	
Sulfate	337	mg/L	40.0	8.9	20		02/12/20 11:22	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Sample: MW7 Lab ID: 40203171006 Collected: 02/10/20 11:15 Received: 02/11/20 09:20 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	4.3J	ug/L	10.0	2.5	1		02/12/20 18:34	7440-47-3	
Iron, Dissolved	75.4J	ug/L	100	29.6	1		02/12/20 18:34	7439-89-6	
Manganese, Dissolved	8.9	ug/L	5.0	1.1	1		02/12/20 18:34	7439-96-5	
Nickel, Dissolved	<3.0	ug/L	10.0	3.0	1		02/12/20 18:34	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		02/11/20 09:25		D3
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	2.6	mg/L	0.75	0.22	5		02/11/20 18:10	14797-55-8	
Sulfate	22.3	mg/L	10.0	2.2	5		02/11/20 18:10	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Sample: MW8 Lab ID: 40203171007 Collected: 02/10/20 14:45 Received: 02/11/20 09:20 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	565	ug/L	10.0	2.5	1		02/12/20 18:36	7440-47-3	
Iron, Dissolved	173	ug/L	100	29.6	1		02/12/20 18:36	7439-89-6	
Manganese, Dissolved	16.9	ug/L	5.0	1.1	1		02/12/20 18:36	7439-96-5	
Nickel, Dissolved	434	ug/L	10.0	3.0	1		02/12/20 18:36	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	0.43	mg/L	0.24	0.073	10		02/11/20 09:25		
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	7.5	mg/L	0.75	0.22	5		02/11/20 18:24	14797-55-8	
Sulfate	22.3	mg/L	10.0	2.2	5		02/11/20 18:24	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Sample: MW9 Lab ID: 40203171008 Collected: 02/10/20 14:00 Received: 02/11/20 09:20 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	647	ug/L	10.0	2.5	1		02/12/20 18:39	7440-47-3	
Iron, Dissolved	1170	ug/L	100	29.6	1		02/12/20 18:39	7439-89-6	
Manganese, Dissolved	331	ug/L	5.0	1.1	1		02/12/20 18:39	7439-96-5	
Nickel, Dissolved	564	ug/L	10.0	3.0	1		02/12/20 18:39	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	0.40	mg/L	0.24	0.073	10		02/11/20 09:25		
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	11.2	mg/L	0.75	0.22	5		02/11/20 18:38	14797-55-8	
Sulfate	89.8	mg/L	10.0	2.2	5		02/11/20 18:38	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Sample: MW10		Lab ID: 40203171009		Collected: 02/10/20 13:45		Received: 02/11/20 09:20		Matrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved		Analytical Method: EPA 6010							
Chromium, Dissolved	113	ug/L	10.0	2.5	1		02/12/20 18:41	7440-47-3	
Iron, Dissolved	<29.6	ug/L	100	29.6	1		02/12/20 18:41	7439-89-6	
Manganese, Dissolved	2.8J	ug/L	5.0	1.1	1		02/12/20 18:41	7439-96-5	
Nickel, Dissolved	17.8	ug/L	10.0	3.0	1		02/12/20 18:41	7440-02-0	
Chromium, Hexavalent		Analytical Method: SM 3500-Cr B (Online)							
Chromium, Hexavalent	0.12	mg/L	0.024	0.0073	1		02/11/20 09:25		
300.0 IC Anions		Analytical Method: EPA 300.0							
Nitrate as N	1.3	mg/L	0.15	0.044	1		02/11/20 18:53	14797-55-8	
Sulfate	22.8	mg/L	2.0	0.44	1		02/11/20 18:53	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Sample: MW11		Lab ID: 40203171010		Collected: 02/10/20 11:45		Received: 02/11/20 09:20		Matrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved		Analytical Method: EPA 6010							
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1		02/12/20 18:44	7440-47-3	
Iron, Dissolved	1460	ug/L	100	29.6	1		02/12/20 18:44	7439-89-6	
Manganese, Dissolved	514	ug/L	5.0	1.1	1		02/12/20 18:44	7439-96-5	
Nickel, Dissolved	<3.0	ug/L	10.0	3.0	1		02/12/20 18:44	7440-02-0	
Chromium, Hexavalent		Analytical Method: SM 3500-Cr B (Online)							
Chromium, Hexavalent	<0.073	mg/L	0.24	0.073	10		02/11/20 09:25		D3
300.0 IC Anions		Analytical Method: EPA 300.0							
Nitrate as N	6.8	mg/L	0.75	0.22	5		02/11/20 19:07	14797-55-8	
Sulfate	21.2	mg/L	10.0	2.2	5		02/11/20 19:07	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Sample: MW12 Lab ID: 40203171011 Collected: 02/10/20 09:45 Received: 02/11/20 09:20 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1		02/12/20 18:46	7440-47-3	
Iron, Dissolved	<29.6	ug/L	100	29.6	1		02/12/20 18:46	7439-89-6	
Manganese, Dissolved	1.6J	ug/L	5.0	1.1	1		02/12/20 18:46	7439-96-5	
Nickel, Dissolved	<3.0	ug/L	10.0	3.0	1		02/12/20 18:46	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	<0.073	mg/L	0.24	0.073	10		02/11/20 09:25		D3
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	6.3	mg/L	0.75	0.22	5		02/11/20 19:21	14797-55-8	
Sulfate	19.5	mg/L	10.0	2.2	5		02/11/20 19:21	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Sample: MW13 Lab ID: 40203171012 Collected: 02/10/20 13:00 Received: 02/11/20 09:20 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	6.0J	ug/L	10.0	2.5	1		02/12/20 18:49	7440-47-3	
Iron, Dissolved	10800	ug/L	100	29.6	1		02/12/20 18:49	7439-89-6	
Manganese, Dissolved	2230	ug/L	5.0	1.1	1		02/12/20 18:49	7439-96-5	
Nickel, Dissolved	<3.0	ug/L	10.0	3.0	1		02/12/20 18:49	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	<0.18	mg/L	0.61	0.18	25		02/11/20 09:25		D3
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	<0.22	mg/L	0.75	0.22	5		02/11/20 19:36	14797-55-8	D3
Sulfate	<2.2	mg/L	10.0	2.2	5		02/11/20 19:36	14808-79-8	D3

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Sample: MW14 Lab ID: 40203171013 Collected: 02/10/20 12:30 Received: 02/11/20 09:20 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1		02/12/20 18:51	7440-47-3	
Iron, Dissolved	6710	ug/L	100	29.6	1		02/12/20 18:51	7439-89-6	
Manganese, Dissolved	402	ug/L	5.0	1.1	1		02/12/20 18:51	7439-96-5	
Nickel, Dissolved	<3.0	ug/L	10.0	3.0	1		02/12/20 18:51	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	<0.18	mg/L	0.61	0.18	25		02/11/20 09:25		D3
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	<0.22	mg/L	0.75	0.22	5		02/11/20 20:33	14797-55-8	D3
Sulfate	8.3J	mg/L	10.0	2.2	5		02/11/20 20:33	14808-79-8	D3

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Sample: MW15 Lab ID: 40203171014 Collected: 02/10/20 12:00 Received: 02/11/20 09:20 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1		02/12/20 18:58	7440-47-3	
Iron, Dissolved	137	ug/L	100	29.6	1		02/12/20 18:58	7439-89-6	
Manganese, Dissolved	544	ug/L	5.0	1.1	1		02/12/20 18:58	7439-96-5	
Nickel, Dissolved	<3.0	ug/L	10.0	3.0	1		02/12/20 18:58	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	<0.18	mg/L	0.61	0.18	25		02/11/20 09:25		D3
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	<0.22	mg/L	0.75	0.22	5		02/11/20 20:48	14797-55-8	D3
Sulfate	<2.2	mg/L	10.0	2.2	5		02/11/20 20:48	14808-79-8	D3

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Sample: PZ1 Lab ID: 40203171015 Collected: 02/10/20 15:00 Received: 02/11/20 09:20 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	800	ug/L	10.0	2.5	1		02/12/20 19:01	7440-47-3	
Iron, Dissolved	<29.6	ug/L	100	29.6	1		02/12/20 19:01	7439-89-6	
Manganese, Dissolved	<1.1	ug/L	5.0	1.1	1		02/12/20 19:01	7439-96-5	
Nickel, Dissolved	<3.0	ug/L	10.0	3.0	1		02/12/20 19:01	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	0.87	mg/L	0.12	0.037	5		02/11/20 09:25		
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	5.0	mg/L	0.75	0.22	5		02/12/20 11:36	14797-55-8	
Sulfate	47.1	mg/L	2.0	0.44	1		02/11/20 21:02	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Sample: PZ2 Lab ID: 40203171016 Collected: 02/10/20 12:45 Received: 02/11/20 09:20 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1		02/12/20 19:03	7440-47-3	
Iron, Dissolved	47.6J	ug/L	100	29.6	1		02/12/20 19:03	7439-89-6	
Manganese, Dissolved	300	ug/L	5.0	1.1	1		02/12/20 19:03	7439-96-5	
Nickel, Dissolved	<3.0	ug/L	10.0	3.0	1		02/12/20 19:03	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	<0.037	mg/L	0.12	0.037	5		02/11/20 09:25		D3
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	0.13J	mg/L	0.15	0.044	1		02/11/20 21:16	14797-55-8	
Sulfate	6.4	mg/L	2.0	0.44	1		02/11/20 21:16	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Sample: PZ3 Lab ID: 40203171017 Collected: 02/10/20 13:30 Received: 02/11/20 09:20 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved Analytical Method: EPA 6010									
Chromium, Dissolved	665	ug/L	10.0	2.5	1		02/12/20 19:05	7440-47-3	
Iron, Dissolved	146	ug/L	100	29.6	1		02/12/20 19:05	7439-89-6	
Manganese, Dissolved	54.0	ug/L	5.0	1.1	1		02/12/20 19:05	7439-96-5	
Nickel, Dissolved	786	ug/L	10.0	3.0	1		02/12/20 19:05	7440-02-0	
Chromium, Hexavalent Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	0.16	mg/L	0.061	0.018	2.5		02/11/20 09:25		
300.0 IC Anions Analytical Method: EPA 300.0									
Nitrate as N	1.5	mg/L	0.15	0.044	1		02/11/20 21:31	14797-55-8	
Sulfate	11.8	mg/L	2.0	0.44	1		02/11/20 21:31	14808-79-8	M0

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

QC Batch:	347675	Analysis Method:	EPA 6010
QC Batch Method:	EPA 6010	Analysis Description:	ICP Metals, Trace, Dissolved
Associated Lab Samples:	40203171001, 40203171002, 40203171003, 40203171004, 40203171005, 40203171006, 40203171007, 40203171008, 40203171009, 40203171010, 40203171011, 40203171012, 40203171013, 40203171014, 40203171015, 40203171016, 40203171017		

METHOD BLANK: 2016039 Matrix: Water

Associated Lab Samples: 40203171001, 40203171002, 40203171003, 40203171004, 40203171005, 40203171006, 40203171007, 40203171008, 40203171009, 40203171010, 40203171011, 40203171012, 40203171013, 40203171014, 40203171015, 40203171016, 40203171017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Dissolved	ug/L	<2.5	10.0	02/12/20 18:08	
Iron, Dissolved	ug/L	<29.6	100	02/12/20 18:08	
Manganese, Dissolved	ug/L	<1.1	5.0	02/12/20 18:08	
Nickel, Dissolved	ug/L	<3.0	10.0	02/12/20 18:08	

LABORATORY CONTROL SAMPLE: 2016040

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	500	486	97	80-120	
Iron, Dissolved	ug/L	5000	4930	99	80-120	
Manganese, Dissolved	ug/L	500	482	96	80-120	
Nickel, Dissolved	ug/L	500	470	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2016041 2016042

Parameter	Units	40203171001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Dissolved	ug/L	<2.5	500	500	491	489	98	98	75-125	0	20	
Iron, Dissolved	ug/L	<29.6	5000	5000	4880	4890	97	98	75-125	0	20	
Manganese, Dissolved	ug/L	<1.1	500	500	481	481	96	96	75-125	0	20	
Nickel, Dissolved	ug/L	33.4	500	500	507	516	95	97	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

QC Batch:	347495	Analysis Method:	SM 3500-Cr B (Online)
QC Batch Method:	SM 3500-Cr B (Online)	Analysis Description:	Chromium, Hexavalent by 3500
Associated Lab Samples:	40203171001, 40203171002, 40203171003, 40203171004, 40203171005, 40203171006, 40203171007, 40203171008, 40203171009, 40203171010, 40203171011, 40203171012, 40203171013, 40203171014, 40203171015, 40203171016, 40203171017		

METHOD BLANK: 2015106

Matrix: Water

Associated Lab Samples: 40203171001, 40203171002, 40203171003, 40203171004, 40203171005, 40203171006, 40203171007, 40203171008, 40203171009, 40203171010, 40203171011, 40203171012, 40203171013, 40203171014, 40203171015, 40203171016, 40203171017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.0073	0.024	02/11/20 09:25	

LABORATORY CONTROL SAMPLE: 2015107

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.3	0.30	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2015108 2015109

Parameter	Units	40203168001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/L	<0.0073	0.3	0.3	0.30	0.28	99	93	90-110	5	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2015110 2015111

Parameter	Units	40203171008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/L	0.40	3	3	3.5	3.5	104	104	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

QC Batch:	347502	Analysis Method:	EPA 300.0
QC Batch Method:	EPA 300.0	Analysis Description:	300.0 IC Anions
Associated Lab Samples:	40203171001, 40203171002, 40203171003, 40203171004, 40203171005, 40203171006, 40203171007, 40203171008, 40203171009, 40203171010, 40203171011, 40203171012, 40203171013, 40203171014, 40203171015, 40203171016, 40203171017		

METHOD BLANK:	2015123	Matrix:	Water
Associated Lab Samples:	40203171001, 40203171002, 40203171003, 40203171004, 40203171005, 40203171006, 40203171007, 40203171008, 40203171009, 40203171010, 40203171011, 40203171012, 40203171013, 40203171014, 40203171015, 40203171016, 40203171017		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate as N	mg/L	<0.044	0.15	02/11/20 15:15	
Sulfate	mg/L	<0.44	2.0	02/11/20 15:15	

LABORATORY CONTROL SAMPLE: 2015124

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.5	1.6	106	90-110	
Sulfate	mg/L	20	21.7	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:				2015125		2015126						
Parameter	Units	40203171001	MS	MSD	MS	MSD	MS	MSD	% Rec	RPD	Max	Qual
		Result	Spike Conc.	Spike Conc.								
Nitrate as N	mg/L	10.2	7.5	7.5	18.2	18.0	105	103	90-110	1	15	
Sulfate	mg/L	24.8	100	100	140	139	116	115	90-110	1	15 M0	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:					2015127		2015128						
Parameter	Units	40203171017	MS	MSD	MS	MSD	MS	MSD	% Rec	RPD	Max	Qual	
		Result	Spike Conc.	Spike Conc.									Result
Nitrate as N	mg/L	1.5	1.5	1.5	3.1	3.1	109	108	90-110	1	15		
Sulfate	mg/L	11.8	20	20	34.8	34.6	115	114	90-110	0	15 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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40203171

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.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

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

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40203171001	MW1	EPA 6010	347675		
40203171002	MW2	EPA 6010	347675		
40203171003	MW4	EPA 6010	347675		
40203171004	MW5	EPA 6010	347675		
40203171005	MW6	EPA 6010	347675		
40203171006	MW7	EPA 6010	347675		
40203171007	MW8	EPA 6010	347675		
40203171008	MW9	EPA 6010	347675		
40203171009	MW10	EPA 6010	347675		
40203171010	MW11	EPA 6010	347675		
40203171011	MW12	EPA 6010	347675		
40203171012	MW13	EPA 6010	347675		
40203171013	MW14	EPA 6010	347675		
40203171014	MW15	EPA 6010	347675		
40203171015	PZ1	EPA 6010	347675		
40203171016	PZ2	EPA 6010	347675		
40203171017	PZ3	EPA 6010	347675		
40203171001	MW1	SM 3500-Cr B (Online)	347495		
40203171002	MW2	SM 3500-Cr B (Online)	347495		
40203171003	MW4	SM 3500-Cr B (Online)	347495		
40203171004	MW5	SM 3500-Cr B (Online)	347495		
40203171005	MW6	SM 3500-Cr B (Online)	347495		
40203171006	MW7	SM 3500-Cr B (Online)	347495		
40203171007	MW8	SM 3500-Cr B (Online)	347495		
40203171008	MW9	SM 3500-Cr B (Online)	347495		
40203171009	MW10	SM 3500-Cr B (Online)	347495		
40203171010	MW11	SM 3500-Cr B (Online)	347495		
40203171011	MW12	SM 3500-Cr B (Online)	347495		
40203171012	MW13	SM 3500-Cr B (Online)	347495		
40203171013	MW14	SM 3500-Cr B (Online)	347495		
40203171014	MW15	SM 3500-Cr B (Online)	347495		
40203171015	PZ1	SM 3500-Cr B (Online)	347495		
40203171016	PZ2	SM 3500-Cr B (Online)	347495		
40203171017	PZ3	SM 3500-Cr B (Online)	347495		
40203171001	MW1	EPA 300.0	347502		
40203171002	MW2	EPA 300.0	347502		
40203171003	MW4	EPA 300.0	347502		
40203171004	MW5	EPA 300.0	347502		
40203171005	MW6	EPA 300.0	347502		
40203171006	MW7	EPA 300.0	347502		
40203171007	MW8	EPA 300.0	347502		
40203171008	MW9	EPA 300.0	347502		
40203171009	MW10	EPA 300.0	347502		
40203171010	MW11	EPA 300.0	347502		
40203171011	MW12	EPA 300.0	347502		
40203171012	MW13	EPA 300.0	347502		
40203171013	MW14	EPA 300.0	347502		
40203171014	MW15	EPA 300.0	347502		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40203171

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40203171015	PZ1	EPA 300.0	347502		
40203171016	PZ2	EPA 300.0	347502		
40203171017	PZ3	EPA 300.0	347502		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

4020317

[illegible]

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

PAGE LAB #	CLIENT FIELD ID	COLLECTION		MATRIX
		DATE	TIME	
001	MW1	2/10/20	9:30	GW
002	MW2		10:15	
003	MW4		10:30	
004	MW5		11:00	
005	MW6		3:15	
006	MW7		11:15	
007	MW8		2:45	
008	MW9		2:00	
009	MW10		1:45	
010	MW11		11:45	
011	MW12		9:45	
012	MW13		1:00	
013	MW14		12:30	

Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge) Date Needed:		Relinquished By: <i>[Signature]</i> Date/Time: <i>2/10/2020 5:40 pm</i> Relinquished By: <i>Walter</i> Date/Time: <i>2/11/20 0920</i> Relinquished By: _____ Date/Time: _____ Relinquished By: _____ Date/Time: _____	Received By: _____ Date/Time: _____ Received By: <i>[Signature]</i> Date/Time: <i>2/11/20 0920</i> Received By: _____ Date/Time: _____ Received By: _____ Date/Time: _____	PACE Project No. <i>40203171</i> Receipt Temp = <i>20.5</i> °C Sample Receipt pH <i>7.0</i> / <i>Adjusted</i> Cooler Custody Seal Present / Not Present <i>Intact / Not Intact</i>
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		

(Please Print Clearly)

Company Name: REI
Branch/Location: Warsaw
Project Contact: Ryan Resch
Phone: 715-675-9784
Project Number: 6134B
Project Name: Phillips Plating
Project State: WI
Sampled By (Print): Ryan Resch
Sampled By (Sign): *[Signature]*

PO #: Regulatory Program:

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



UPPER MIDWEST REGION

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

Page 2 of 2

40203171

Page 30 of 32

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	Pick Letter	Analyses Requested	DATE	TIME	MATRIX
Y	D	TOTAL DISSOLVED Cr, Ni, Mn, Fe	2/10/20	12:00	GW
N	A	H2S		3:00	
N	A	Nitrate		12:45	
N	A	Sulfate		1:30	

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 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:

Date/Time:

Relinquished By:

Date/Time:

Relinquished By:

Date/Time:

Relinquished By:

Date/Time:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Received By:

Date/Time:

Received By:

Date/Time:

Received By:

Date/Time:

Received By:

Date/Time:

PACE Project No.

Receipt Temp = 68°F °C

Sample Receipt pH

6.5 / Adjusted

Cooler Custody Seal

Present / Not Present
Intact / Not Intact

Sample Preservation Receipt Form

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 900
Green Bay, WI 54302

Client Name: RGI

Project # 40203171

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

Lab Lot# of pH paper: 10052791

Lab Std #ID of preservation (if pH adjusted): 405439

Initial when completed: MP

Date/Time: 2/11/20
1500

Page 31 of 32

Pace Lab #	Glass						Plastic						Vials					Jars			General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)	
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3B	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU								SP5T
001											-		-															X		2.5 / 5 / 10	
002											-		-															X ^{2.5/5}		2.5 / 5 / 10	
003											-		-															X		2.5 / 5 / 10	
004											-		-															X		2.5 / 5 / 10	
005											-		-															7	2	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																															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, WIDRO, 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	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact	VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL	SP5T 120 mL plastic Na Thiosulfate ZPLC ziploc bag GN:	
AG5U	100 mL amber glass unpres	BP3B	250 mL plastic NaOH	VG9M	40 mL clear vial MeOH		
AG2S	500 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9D	40 mL clear vial DI		
BG3U	250 mL clear glass unpres	BP3S	250 mL plastic H2SO4				

 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 25Apr2018
	Document No.: F-GB-C-031-Rev.07	Issuing Authority: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

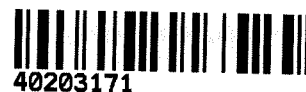
Client Name: R61

Project #:

WO#: 40203171

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

Tracking #: 2335028-1



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 - NA Type of Ice: ☒ Wet ☐ Blue ☐ Dry ☐ None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: LOX /Corr: _____

Temp Blank Present: ☐ yes ☒ no

Biological Tissue is Frozen: ☐ yes ☐ no

Person examining contents:

Date: 2/11/20

Initials: WJ

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C.

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

Project Manager Review: _____

Date: 2-11-20

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Printed: 02/13/20 Page 1 of 2

Client: REI Engineering Inc
Attn: Ken Lassa
4080 North 20th Avenue
Wausau, WI 54401 8846

NLS Project: 339299

NLS Customer: 29027

Fax: 715 675 4060 Phone: 715 675 9784

Project: Phillips Plating / 6134B

MW10 NLS ID: 1172900

COC: :1 Matrix: GW

Collected: 02/10/20 13:45 Received: 02/11/20

Notes: Not NLS bottles

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	56	ug/L	1	0.58	1.9	02/12/20	SW846 6010	721026460
Chromium, Hex. as Cr+6	56	ug/L	5	2.6	8.5	02/11/20	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	5.2	ug/L	1	0.94	3.2	02/12/20	SW846 6010	721026460
Lab filtration	yes					02/12/20	NA	721026460

MW11 NLS ID: 1172901

COC: :2 Matrix: GW

Collected: 02/10/20 11:45 Received: 02/11/20

Notes: Not NLS bottles

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	ND	ug/L	1	0.58	1.9	02/12/20	SW846 6010	721026460
Chromium, Hex. as Cr+6	[1.1]	ug/L	1	0.52	1.7	02/11/20	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	[1.6]	ug/L	1	0.94	3.2	02/12/20	SW846 6010	721026460
Lab filtration	yes					02/12/20	NA	721026460

MW13 NLS ID: 1172902

COC: :4 Matrix: GW

Collected: 02/10/20 13:00 Received: 02/11/20

Notes: Not NLS bottles

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	3.8	ug/L	1	0.58	1.9	02/12/20	SW846 6010	721026460
Chromium, Hex. as Cr+6	2.0	ug/L	1	0.52	1.7	02/11/20	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	[1.4]	ug/L	1	0.94	3.2	02/12/20	SW846 6010	721026460
Lab filtration	yes					02/12/20	NA	721026460

MW14 NLS ID: 1172903

COC: :5 Matrix: GW

Collected: 02/10/20 12:30 Received: 02/11/20

Notes: Not NLS bottles

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	ND	ug/L	1	0.58	1.9	02/12/20	SW846 6010	721026460
Chromium, Hex. as Cr+6	[1.3]	ug/L	1	0.52	1.7	02/11/20	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	ND	ug/L	1	0.94	3.2	02/12/20	SW846 6010	721026460
Lab filtration	yes					02/12/20	NA	721026460

MW15 NLS ID: 1172904

COC: :5 Matrix: GW

Collected: 02/10/20 12:00 Received: 02/11/20

Notes: Not NLS bottles

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	[0.76]	ug/L	1	0.58	1.9	02/12/20	SW846 6010	721026460
Chromium, Hex. as Cr+6	[1.1]	ug/L	1	0.52	1.7	02/11/20	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	4.5	ug/L	1	0.94	3.2	02/12/20	SW846 6010	721026460
Lab filtration	yes					02/12/20	NA	721026460

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Printed: 02/13/20 Page 2 of 2

Client: REI Engineering Inc
Attn: Ken Lassa
4080 North 20th Avenue
Wausau, WI 54401 8846

NLS Project: 339299

NLS Customer: 29027

Fax: 715 675 4060 Phone: 715 675 9784

Project: Phillips Plating / 6134B

PZ2 NLS ID: 1172905

COC: :6 Matrix: GW

Collected: 02/10/20 12:45 Received: 02/11/20

Notes: Not NLS bottles

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	ND	ug/L	1	0.58	1.9	02/12/20	SW846 6010	721026460
Chromium, Hex. as Cr+6	[1.1]	ug/L	1	0.52	1.7	02/11/20	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	ND	ug/L	1	0.94	3.2	02/12/20	SW846 6010	721026460
Lab filtration	yes					02/12/20	NA	721026460

PZ3 NLS ID: 1172906

COC: :7 Matrix: GW

Collected: 02/10/20 13:30 Received: 02/11/20

Notes: Not NLS bottles

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	200	ug/L	1	0.58	1.9	02/12/20	SW846 6010	721026460
Chromium, Hex. as Cr+6	230	ug/L	100	52	170	02/11/20	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	250	ug/L	1	0.94	3.2	02/12/20	SW846 6010	721026460
Lab filtration	yes					02/12/20	NA	721026460

Values in brackets represent results greater than or equal to the LOD but less than the LOQ and are within a region of "Less-Certain Quantitation". Results greater than or equal to the LOQ are considered to be in the region of "Certain Quantitation". LOD and/or LOQ tagged with an asterisk(*) are considered Reporting Limits. All LOD/LOQs adjusted to reflect dilution and/or solids content.

ND = Not Detected (< LOD) LOD = Limit of Detection LOQ = Limit of Quantitation NA = Not Applicable

DWB = Dry Weight Basis %DWB = (mg/kg DWB) / 10000 1000 ug/L = 1 mg/L

MCL = Maximum Contaminant Levels for Drinking Water Samples. Shaded results indicate >MCL.

Reviewed by:



Authorized by:
R. T. Krueger
President

March 12, 2021

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

RE: Project: 6134B PHILLIPS PLATING
Pace Project No.: 40222850

Dear Ken Lassa:

Enclosed are the analytical results for sample(s) received by the laboratory on March 04, 2021. 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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40222850001	MW1	Water	03/03/21 08:00	03/04/21 09:00
40222850002	MW2	Water	03/03/21 08:20	03/04/21 09:00
40222850003	MW4	Water	03/03/21 08:50	03/04/21 09:00
40222850004	MW5	Water	03/03/21 08:40	03/04/21 09:00
40222850005	MW6	Water	03/03/21 13:15	03/04/21 09:00
40222850006	MW7	Water	03/03/21 09:20	03/04/21 09:00
40222850007	MW8	Water	03/03/21 13:00	03/04/21 09:00
40222850008	MW9	Water	03/03/21 09:30	03/04/21 09:00
40222850009	MW10	Water	03/03/21 12:30	03/04/21 09:00
40222850010	MW11	Water	03/03/21 10:15	03/04/21 09:00
40222850011	MW12	Water	03/03/21 10:00	03/04/21 09:00
40222850012	MW13	Water	03/03/21 11:15	03/04/21 09:00
40222850013	MW14	Water	03/03/21 10:45	03/04/21 09:00
40222850014	MW15	Water	03/03/21 11:50	03/04/21 09:00
40222850015	PZ1	Water	03/03/21 13:30	03/04/21 09:00
40222850016	PZ2	Water	03/03/21 11:30	03/04/21 09:00
40222850017	PZ3	Water	03/03/21 12:45	03/04/21 09:00

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40222850001	MW1	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	HNT	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40222850002	MW2	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	HNT	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40222850003	MW4	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	HNT	1	PASI-G
		EPA 300.0	HMB, TMK	2	PASI-G
40222850004	MW5	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	HNT	1	PASI-G
		EPA 300.0	HMB, TMK	2	PASI-G
40222850005	MW6	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	HNT	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40222850006	MW7	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	HNT	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40222850007	MW8	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	HNT	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40222850008	MW9	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	HNT	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40222850009	MW10	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	HNT	1	PASI-G
		EPA 300.0	TMK	2	PASI-G
40222850010	MW11	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	HNT	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40222850011	MW12	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	HNT	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40222850012	MW13	EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	HNT	1	PASI-G
		EPA 300.0	TMK	2	PASI-G
40222850013	MW14	EPA 6010	TXW	4	PASI-G

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40222850014	MW15	SM 3500-Cr B (Online)	HNT	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
		EPA 6010	TXW	4	PASI-G
40222850015	PZ1	SM 3500-Cr B (Online)	HNT	1	PASI-G
		EPA 300.0	TMK	2	PASI-G
		EPA 6010	TXW	4	PASI-G
40222850016	PZ2	SM 3500-Cr B (Online)	HNT	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
		EPA 6010	TXW	4	PASI-G
40222850017	PZ3	SM 3500-Cr B (Online)	HNT	1	PASI-G
		EPA 300.0	TMK	2	PASI-G
		EPA 6010	TXW	4	PASI-G
		SM 3500-Cr B (Online)	HNT	1	PASI-G
		EPA 300.0	HMB	2	PASI-G

PASI-G = Pace Analytical Services - Green Bay

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Sample: MW1 Lab ID: 40222850001 Collected: 03/03/21 08:00 Received: 03/04/21 09:00 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Pace Analytical Services - Green Bay									
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	03/05/21 05:56	03/10/21 18:21	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	03/05/21 05:56	03/10/21 18:21	7439-89-6	
Manganese, Dissolved	1.6J	ug/L	5.0	1.5	1	03/05/21 05:56	03/10/21 18:21	7439-96-5	
Nickel, Dissolved	30.8	ug/L	10.0	2.6	1	03/05/21 05:56	03/10/21 18:21	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online)									
Pace Analytical Services - Green Bay									
Chromium, Hexavalent	<0.018	mg/L	0.061	0.018	2.5		03/04/21 11:40		D3,H3
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		03/04/21 13:57	14797-55-8	
Sulfate	23.6	mg/L	10.0	2.2	5		03/04/21 13:57	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Sample: MW2		Lab ID: 40222850002		Collected: 03/03/21 08:20		Received: 03/04/21 09:00		Matrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay							
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	03/05/21 05:56	03/10/21 18:30	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	03/05/21 05:56	03/10/21 18:30	7439-89-6	
Manganese, Dissolved	48.9	ug/L	5.0	1.5	1	03/05/21 05:56	03/10/21 18:30	7439-96-5	
Nickel, Dissolved	11.2	ug/L	10.0	2.6	1	03/05/21 05:56	03/10/21 18:30	7440-02-0	
Chromium, Hexavalent		Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay							
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		03/04/21 12:22		D3,H3
300.0 IC Anions		Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay							
Nitrate as N	11.5	mg/L	0.75	0.22	5		03/04/21 14:41	14797-55-8	
Sulfate	15.5	mg/L	10.0	2.2	5		03/04/21 14:41	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Sample: MW4 Lab ID: 40222850003 Collected: 03/03/21 08:50 Received: 03/04/21 09:00 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Pace Analytical Services - Green Bay									
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	03/05/21 05:56	03/10/21 18:35	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	03/05/21 05:56	03/10/21 18:35	7439-89-6	
Manganese, Dissolved	2.1J	ug/L	5.0	1.5	1	03/05/21 05:56	03/10/21 18:35	7439-96-5	
Nickel, Dissolved	7.1J	ug/L	10.0	2.6	1	03/05/21 05:56	03/10/21 18:35	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online)									
Pace Analytical Services - Green Bay									
Chromium, Hexavalent	<0.037	mg/L	0.12	0.037	5		03/04/21 11:41		D3,H3
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		03/04/21 14:55	14797-55-8	
Sulfate	9.4	mg/L	2.0	0.44	1		03/05/21 13:13	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Sample: MW5 Lab ID: 40222850004 Collected: 03/03/21 08:40 Received: 03/04/21 09:00 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Pace Analytical Services - Green Bay									
Chromium, Dissolved	494	ug/L	10.0	2.5	1	03/05/21 05:56	03/10/21 18:38	7440-47-3	
Iron, Dissolved	50000	ug/L	100	56.7	1	03/05/21 05:56	03/10/21 18:38	7439-89-6	
Manganese, Dissolved	1460	ug/L	5.0	1.5	1	03/05/21 05:56	03/10/21 18:38	7439-96-5	
Nickel, Dissolved	7280	ug/L	10.0	2.6	1	03/05/21 05:56	03/10/21 18:38	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online)									
Pace Analytical Services - Green Bay									
Chromium, Hexavalent	<0.073	mg/L	0.24	0.073	10		03/04/21 12:24		D3,H3
300.0 IC Anions									
Analytical Method: EPA 300.0									
Pace Analytical Services - Green Bay									
Nitrate as N	5.2	mg/L	1.5	0.44	10		03/04/21 15:09	14797-55-8	
Sulfate	19.5	mg/L	2.0	0.44	1		03/05/21 13:27	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Sample: MW6 Lab ID: 40222850005 Collected: 03/03/21 13:15 Received: 03/04/21 09:00 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Pace Analytical Services - Green Bay									
Chromium, Dissolved	8480	ug/L	10.0	2.5	1	03/05/21 05:56	03/10/21 18:40	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	03/05/21 05:56	03/10/21 18:40	7439-89-6	
Manganese, Dissolved	1390	ug/L	5.0	1.5	1	03/05/21 05:56	03/10/21 18:40	7439-96-5	
Nickel, Dissolved	7730	ug/L	10.0	2.6	1	03/05/21 05:56	03/10/21 18:40	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online)									
Pace Analytical Services - Green Bay									
Chromium, Hexavalent	7.9	mg/L	1.2	0.37	50		03/04/21 11:43		
300.0 IC Anions									
Analytical Method: EPA 300.0									
Pace Analytical Services - Green Bay									
Nitrate as N	8.5	mg/L	1.5	0.44	10		03/04/21 15:24	14797-55-8	
Sulfate	285	mg/L	20.0	4.4	10		03/04/21 15:24	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Sample: MW7 Lab ID: 40222850006 Collected: 03/03/21 09:20 Received: 03/04/21 09:00 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Pace Analytical Services - Green Bay									
Chromium, Dissolved	2.8J	ug/L	10.0	2.5	1	03/05/21 05:56	03/10/21 18:42	7440-47-3	
Iron, Dissolved	74.1J	ug/L	100	56.7	1	03/05/21 05:56	03/10/21 18:42	7439-89-6	
Manganese, Dissolved	5.0	ug/L	5.0	1.5	1	03/05/21 05:56	03/10/21 18:42	7439-96-5	
Nickel, Dissolved	3.6J	ug/L	10.0	2.6	1	03/05/21 05:56	03/10/21 18:42	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online)									
Pace Analytical Services - Green Bay									
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		03/04/21 11:44		D3,H1
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		03/04/21 15:38	14797-55-8	
Sulfate	33.3	mg/L	10.0	2.2	5		03/04/21 15:38	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Sample: MW8		Lab ID: 40222850007		Collected: 03/03/21 13:00		Received: 03/04/21 09:00		Matrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay							
Chromium, Dissolved	577	ug/L	10.0	2.5	1	03/05/21 05:56	03/10/21 18:50	7440-47-3	
Iron, Dissolved	152	ug/L	100	56.7	1	03/05/21 05:56	03/10/21 18:50	7439-89-6	
Manganese, Dissolved	9.5	ug/L	5.0	1.5	1	03/05/21 05:56	03/10/21 18:50	7439-96-5	
Nickel, Dissolved	324	ug/L	10.0	2.6	1	03/05/21 05:56	03/10/21 18:50	7440-02-0	
Chromium, Hexavalent		Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay							
Chromium, Hexavalent	0.28	mg/L	0.24	0.073	10		03/04/21 11:45		
300.0 IC Anions		Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay							
Nitrate as N	6.0	mg/L	0.75	0.22	5		03/04/21 15:52	14797-55-8	
Sulfate	18.3	mg/L	10.0	2.2	5		03/04/21 15:52	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Sample: MW9 Lab ID: 40222850008 Collected: 03/03/21 09:30 Received: 03/04/21 09:00 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Pace Analytical Services - Green Bay									
Chromium, Dissolved	782	ug/L	10.0	2.5	1	03/05/21 05:56	03/10/21 18:52	7440-47-3	
Iron, Dissolved	5510	ug/L	100	56.7	1	03/05/21 05:56	03/10/21 18:52	7439-89-6	
Manganese, Dissolved	322	ug/L	5.0	1.5	1	03/05/21 05:56	03/10/21 18:52	7439-96-5	
Nickel, Dissolved	666	ug/L	10.0	2.6	1	03/05/21 05:56	03/10/21 18:52	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online)									
Pace Analytical Services - Green Bay									
Chromium, Hexavalent	<0.073	mg/L	0.24	0.073	10		03/04/21 11:45		D3,H1
300.0 IC Anions									
Analytical Method: EPA 300.0									
Pace Analytical Services - Green Bay									
Nitrate as N	8.4	mg/L	1.5	0.44	10		03/04/21 16:07	14797-55-8	
Sulfate	75.2	mg/L	20.0	4.4	10		03/04/21 16:07	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Sample: MW10		Lab ID: 40222850009		Collected: 03/03/21 12:30		Received: 03/04/21 09:00		Matrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay							
Chromium, Dissolved	206	ug/L	10.0	2.5	1	03/05/21 05:56	03/10/21 18:54	7440-47-3	
Iron, Dissolved	180	ug/L	100	56.7	1	03/05/21 05:56	03/10/21 18:54	7439-89-6	
Manganese, Dissolved	10.1	ug/L	5.0	1.5	1	03/05/21 05:56	03/10/21 18:54	7439-96-5	
Nickel, Dissolved	43.9	ug/L	10.0	2.6	1	03/05/21 05:56	03/10/21 18:54	7440-02-0	
Chromium, Hexavalent		Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay							
Chromium, Hexavalent	0.016J	mg/L	0.024	0.0073	1		03/04/21 11:45		
300.0 IC Anions		Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay							
Nitrate as N	0.89	mg/L	0.15	0.044	1		03/05/21 13:41	14797-55-8	H5
Sulfate	18.7	mg/L	2.0	0.44	1		03/05/21 13:41	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Sample: MW11		Lab ID: 40222850010		Collected: 03/03/21 10:15		Received: 03/04/21 09:00		Matrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay							
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	03/05/21 05:56	03/10/21 18:57	7440-47-3	
Iron, Dissolved	159	ug/L	100	56.7	1	03/05/21 05:56	03/10/21 18:57	7439-89-6	
Manganese, Dissolved	94.3	ug/L	5.0	1.5	1	03/05/21 05:56	03/10/21 18:57	7439-96-5	
Nickel, Dissolved	7.8J	ug/L	10.0	2.6	1	03/05/21 05:56	03/10/21 18:57	7440-02-0	
Chromium, Hexavalent		Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay							
Chromium, Hexavalent	<0.073	mg/L	0.24	0.073	10		03/04/21 11:46		D3,H1
300.0 IC Anions		Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay							
Nitrate as N	5.3	mg/L	0.75	0.22	5		03/04/21 17:19	14797-55-8	
Sulfate	16.0	mg/L	10.0	2.2	5		03/04/21 17:19	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Sample: MW12		Lab ID: 40222850011		Collected: 03/03/21 10:00		Received: 03/04/21 09:00		Matrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay							
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	03/05/21 05:56	03/10/21 18:59	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	03/05/21 05:56	03/10/21 18:59	7439-89-6	
Manganese, Dissolved	2.0J	ug/L	5.0	1.5	1	03/05/21 05:56	03/10/21 18:59	7439-96-5	
Nickel, Dissolved	3.9J	ug/L	10.0	2.6	1	03/05/21 05:56	03/10/21 18:59	7440-02-0	
Chromium, Hexavalent		Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay							
Chromium, Hexavalent	<0.073	mg/L	0.24	0.073	10		03/04/21 11:46		D3,H1
300.0 IC Anions		Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay							
Nitrate as N	6.0	mg/L	0.75	0.22	5		03/04/21 17:33	14797-55-8	
Sulfate	21.4	mg/L	10.0	2.2	5		03/04/21 17:33	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Sample: MW13		Lab ID: 40222850012		Collected: 03/03/21 11:15		Received: 03/04/21 09:00		Matrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay							
Chromium, Dissolved	6.9J	ug/L	10.0	2.5	1	03/05/21 05:56	03/10/21 19:02	7440-47-3	
Iron, Dissolved	11300	ug/L	100	56.7	1	03/05/21 05:56	03/10/21 19:02	7439-89-6	
Manganese, Dissolved	2050	ug/L	5.0	1.5	1	03/05/21 05:56	03/10/21 19:02	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	03/05/21 05:56	03/10/21 19:02	7440-02-0	
Chromium, Hexavalent		Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay							
Chromium, Hexavalent	0.69	mg/L	0.61	0.18	25		03/04/21 11:47		H1
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		03/05/21 13:56	14797-55-8	H5
Sulfate	5.5	mg/L	2.0	0.44	1		03/05/21 13:56	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Sample: MW14		Lab ID: 40222850013		Collected: 03/03/21 10:45		Received: 03/04/21 09:00		Matrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay							
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	03/05/21 05:56	03/10/21 19:04	7440-47-3	
Iron, Dissolved	4680	ug/L	100	56.7	1	03/05/21 05:56	03/10/21 19:04	7439-89-6	
Manganese, Dissolved	276	ug/L	5.0	1.5	1	03/05/21 05:56	03/10/21 19:04	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	03/05/21 05:56	03/10/21 19:04	7440-02-0	
Chromium, Hexavalent		Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay							
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		03/04/21 12:24		D3,H1
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		03/04/21 18:02	14797-55-8	D3
Sulfate	4.6J	mg/L	10.0	2.2	5		03/04/21 18:02	14808-79-8	D3

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Sample: MW15		Lab ID: 40222850014		Collected: 03/03/21 11:50		Received: 03/04/21 09:00		Matrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay							
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	03/05/21 05:56	03/10/21 19:07	7440-47-3	
Iron, Dissolved	3780	ug/L	100	56.7	1	03/05/21 05:56	03/10/21 19:07	7439-89-6	
Manganese, Dissolved	646	ug/L	5.0	1.5	1	03/05/21 05:56	03/10/21 19:07	7439-96-5	
Nickel, Dissolved	32.0	ug/L	10.0	2.6	1	03/05/21 05:56	03/10/21 19:07	7440-02-0	
Chromium, Hexavalent		Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay							
Chromium, Hexavalent	<0.18	mg/L	0.61	0.18	25		03/04/21 11:47		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		03/05/21 14:10	14797-55-8	H5
Sulfate	0.75J	mg/L	2.0	0.44	1		03/05/21 14:10	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Sample: PZ1 Lab ID: 40222850015 Collected: 03/03/21 13:30 Received: 03/04/21 09:00 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Pace Analytical Services - Green Bay									
Chromium, Dissolved	544	ug/L	10.0	2.5	1	03/05/21 05:56	03/10/21 19:09	7440-47-3	
Iron, Dissolved	367	ug/L	100	56.7	1	03/05/21 05:56	03/10/21 19:09	7439-89-6	
Manganese, Dissolved	44.5	ug/L	5.0	1.5	1	03/05/21 05:56	03/10/21 19:09	7439-96-5	
Nickel, Dissolved	34.6	ug/L	10.0	2.6	1	03/05/21 05:56	03/10/21 19:09	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online)									
Pace Analytical Services - Green Bay									
Chromium, Hexavalent	0.50	mg/L	0.024	0.0073	1		03/04/21 11:48		
300.0 IC Anions									
Analytical Method: EPA 300.0									
Pace Analytical Services - Green Bay									
Nitrate as N	4.7	mg/L	0.75	0.22	5		03/04/21 18:30	14797-55-8	
Sulfate	45.0	mg/L	10.0	2.2	5		03/04/21 18:30	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Sample: PZ2 Lab ID: 40222850016 Collected: 03/03/21 11:30 Received: 03/04/21 09:00 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Pace Analytical Services - Green Bay									
Chromium, Dissolved	<2.5	ug/L	10.0	2.5	1	03/05/21 05:56	03/10/21 19:11	7440-47-3	
Iron, Dissolved	3550	ug/L	100	56.7	1	03/05/21 05:56	03/10/21 19:11	7439-89-6	
Manganese, Dissolved	758	ug/L	5.0	1.5	1	03/05/21 05:56	03/10/21 19:11	7439-96-5	
Nickel, Dissolved	7.8J	ug/L	10.0	2.6	1	03/05/21 05:56	03/10/21 19:11	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online)									
Pace Analytical Services - Green Bay									
Chromium, Hexavalent	<0.037	mg/L	0.12	0.037	5		03/04/21 11:49		D3,H1
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		03/05/21 14:24	14797-55-8	H5
Sulfate	8.5	mg/L	2.0	0.44	1		03/05/21 14:24	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Sample: PZ3 Lab ID: 40222850017 Collected: 03/03/21 12:45 Received: 03/04/21 09:00 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Pace Analytical Services - Green Bay									
Chromium, Dissolved	940	ug/L	10.0	2.5	1	03/05/21 05:56	03/10/21 19:19	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	03/05/21 05:56	03/10/21 19:19	7439-89-6	
Manganese, Dissolved	83.6	ug/L	5.0	1.5	1	03/05/21 05:56	03/10/21 19:19	7439-96-5	
Nickel, Dissolved	1190	ug/L	10.0	2.6	1	03/05/21 05:56	03/10/21 19:19	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online)									
Pace Analytical Services - Green Bay									
Chromium, Hexavalent	0.67	mg/L	0.61	0.18	25		03/04/21 11:49		
300.0 IC Anions									
Analytical Method: EPA 300.0									
Pace Analytical Services - Green Bay									
Nitrate as N	5.0	mg/L	0.75	0.22	5		03/04/21 18:59	14797-55-8	
Sulfate	36.8	mg/L	10.0	2.2	5		03/04/21 18:59	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

QC Batch:	379011	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3010	Analysis Description:	6010 MET Dissolved
		Laboratory:	Pace Analytical Services - Green Bay
Associated Lab Samples:	40222850001, 40222850002, 40222850003, 40222850004, 40222850005, 40222850006, 40222850007, 40222850008, 40222850009, 40222850010, 40222850011, 40222850012, 40222850013, 40222850014, 40222850015, 40222850016, 40222850017		

METHOD BLANK: 2186392 Matrix: Water

Associated Lab Samples: 40222850001, 40222850002, 40222850003, 40222850004, 40222850005, 40222850006, 40222850007, 40222850008, 40222850009, 40222850010, 40222850011, 40222850012, 40222850013, 40222850014, 40222850015, 40222850016, 40222850017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Dissolved	ug/L	<2.5	10.0	03/10/21 18:12	
Iron, Dissolved	ug/L	<56.7	100	03/10/21 18:12	
Manganese, Dissolved	ug/L	<1.5	5.0	03/10/21 18:12	
Nickel, Dissolved	ug/L	<2.6	10.0	03/10/21 18:12	

LABORATORY CONTROL SAMPLE: 2186393

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	500	497	99	80-120	
Iron, Dissolved	ug/L	5000	5090	102	80-120	
Manganese, Dissolved	ug/L	500	478	96	80-120	
Nickel, Dissolved	ug/L	500	498	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2186394 2186395

Parameter	Units	40222850001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Dissolved	ug/L	<2.5	500	500	505	506	101	101	75-125	0	20	
Iron, Dissolved	ug/L	<56.7	5000	5000	5120	5150	102	102	75-125	0	20	
Manganese, Dissolved	ug/L	1.6J	500	500	489	489	98	97	75-125	0	20	
Nickel, Dissolved	ug/L	30.8	500	500	527	529	99	100	75-125	0	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40222850

QC Batch:	378946	Analysis Method:	SM 3500-Cr B (Online)
QC Batch Method:	SM 3500-Cr B (Online)	Analysis Description:	Chromium, Hexavalent by 3500
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40222850001, 40222850002, 40222850003, 40222850004, 40222850005, 40222850006, 40222850007, 40222850008, 40222850009, 40222850010, 40222850011, 40222850012, 40222850013, 40222850014, 40222850015, 40222850016, 40222850017

METHOD BLANK: 2185982 Matrix: Water

Associated Lab Samples: 40222850001, 40222850002, 40222850003, 40222850004, 40222850005, 40222850006, 40222850007, 40222850008, 40222850009, 40222850010, 40222850011, 40222850012, 40222850013, 40222850014, 40222850015, 40222850016, 40222850017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.0073	0.024	03/04/21 11:39	

LABORATORY CONTROL SAMPLE: 2185983

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.3	0.31	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2185984 2185985

Parameter	Units	40222850001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/L	<0.018	0.75	0.75	0.70	0.73	94	97	90-110	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2185986 2185987

Parameter	Units	40222850009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/L	0.016J	0.3	0.3	0.32	0.33	103	104	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 6134B PHILLIPS PLATING
Pace Project No.: 40222850

QC Batch:	378958	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:	40222850001, 40222850002, 40222850003, 40222850004, 40222850005, 40222850006, 40222850007, 40222850008, 40222850009, 40222850010, 40222850011, 40222850012, 40222850013, 40222850014, 40222850015, 40222850016, 40222850017		

METHOD BLANK:	2186078	Matrix:	Water
Associated Lab Samples:	40222850001, 40222850002, 40222850003, 40222850004, 40222850005, 40222850006, 40222850007, 40222850008, 40222850009, 40222850010, 40222850011, 40222850012, 40222850013, 40222850014, 40222850015, 40222850016, 40222850017		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate as N	mg/L	<0.044	0.15	03/04/21 10:51	
Sulfate	mg/L	<0.44	2.0	03/04/21 10:51	

LABORATORY CONTROL SAMPLE: 2186079

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.5	1.5	98	90-110	
Sulfate	mg/L	20	19.6	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2186080 2186081

Parameter	Units	40222850001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	8.1	7.5	7.5	15.9	15.7	105	102	90-110	1	15	
Sulfate	mg/L	23.6	100	100	130	128	106	105	90-110	1	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2186082 2186083

Parameter	Units	40222850017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	5.0	7.5	7.5	12.4	12.4	100	99	90-110	1	15	
Sulfate	mg/L	36.8	100	100	140	139	103	102	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

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.

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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40222850001	MW1	EPA 3010	379011	EPA 6010	379093
40222850002	MW2	EPA 3010	379011	EPA 6010	379093
40222850003	MW4	EPA 3010	379011	EPA 6010	379093
40222850004	MW5	EPA 3010	379011	EPA 6010	379093
40222850005	MW6	EPA 3010	379011	EPA 6010	379093
40222850006	MW7	EPA 3010	379011	EPA 6010	379093
40222850007	MW8	EPA 3010	379011	EPA 6010	379093
40222850008	MW9	EPA 3010	379011	EPA 6010	379093
40222850009	MW10	EPA 3010	379011	EPA 6010	379093
40222850010	MW11	EPA 3010	379011	EPA 6010	379093
40222850011	MW12	EPA 3010	379011	EPA 6010	379093
40222850012	MW13	EPA 3010	379011	EPA 6010	379093
40222850013	MW14	EPA 3010	379011	EPA 6010	379093
40222850014	MW15	EPA 3010	379011	EPA 6010	379093
40222850015	PZ1	EPA 3010	379011	EPA 6010	379093
40222850016	PZ2	EPA 3010	379011	EPA 6010	379093
40222850017	PZ3	EPA 3010	379011	EPA 6010	379093
40222850001	MW1	SM 3500-Cr B (Online)	378946		
40222850002	MW2	SM 3500-Cr B (Online)	378946		
40222850003	MW4	SM 3500-Cr B (Online)	378946		
40222850004	MW5	SM 3500-Cr B (Online)	378946		
40222850005	MW6	SM 3500-Cr B (Online)	378946		
40222850006	MW7	SM 3500-Cr B (Online)	378946		
40222850007	MW8	SM 3500-Cr B (Online)	378946		
40222850008	MW9	SM 3500-Cr B (Online)	378946		
40222850009	MW10	SM 3500-Cr B (Online)	378946		
40222850010	MW11	SM 3500-Cr B (Online)	378946		
40222850011	MW12	SM 3500-Cr B (Online)	378946		
40222850012	MW13	SM 3500-Cr B (Online)	378946		
40222850013	MW14	SM 3500-Cr B (Online)	378946		
40222850014	MW15	SM 3500-Cr B (Online)	378946		
40222850015	PZ1	SM 3500-Cr B (Online)	378946		
40222850016	PZ2	SM 3500-Cr B (Online)	378946		
40222850017	PZ3	SM 3500-Cr B (Online)	378946		
40222850001	MW1	EPA 300.0	378958		
40222850002	MW2	EPA 300.0	378958		
40222850003	MW4	EPA 300.0	378958		
40222850004	MW5	EPA 300.0	378958		
40222850005	MW6	EPA 300.0	378958		
40222850006	MW7	EPA 300.0	378958		
40222850007	MW8	EPA 300.0	378958		
40222850008	MW9	EPA 300.0	378958		
40222850009	MW10	EPA 300.0	378958		
40222850010	MW11	EPA 300.0	378958		
40222850011	MW12	EPA 300.0	378958		
40222850012	MW13	EPA 300.0	378958		
40222850013	MW14	EPA 300.0	378958		
40222850014	MW15	EPA 300.0	378958		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6134B PHILLIPS PLATING

Pace Project No.: 40222850

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40222850015	PZ1	EPA 300.0	378958		
40222850016	PZ2	EPA 300.0	378958		
40222850017	PZ3	EPA 300.0	378958		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

(Please Print Clearly)

Company Name: **REI**

Branch/Location: **New Sam**

Project Contact: **Ken Lesser**

Phone: **715 675 9784**

Project Number: **612413**

Project Name: **PHILLIPS Planting**

Project State: **WI**

Sampled By (Print): **Paul Busher**

Sampled By (Sign): *[Signature]*

PO #: _____ Regulatory Program: _____



UPPER MIDWEST REGION

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

Page 1 of 2

40222850

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	Pick Letter	Analyses Requested	Matrix	DATE	TIME	MATRIX
Y	D	Total Dissolved CR, NO ₃ , NH ₄ , FE	Hex CR	3-3-20	8:00	GW
N	A		Nitrate		8:20	
N	A		Sulfate		8:50	
N	A				8:46	
					11:15	
					9:20	
					1:00	
					9:30	
					12:30	
					10:15	
					10:00	
					11:15	
					10:45	

Quote #: _____

Mail To Contact: **Ken Lesser**

Mail To Company: **REI**

Mail To Address: **Klass@REIengr.com**

Invoice To Contact: **SPH**

Invoice To Company: _____

Invoice To Address: _____

Invoice To Phone: **715 675 9784**

CLIENT COMMENTS

LAB COMMENTS (Lab Use Only)

Profile #

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 DATE	TIME	MATRIX
001	MW1	3-3-20	8:00	GW
002	MW2		8:20	
003	MW4		8:50	
004	MW5		8:46	
005	MW6		11:15	
006	MW7		9:20	
007	MW8		1:00	
008	MW9		9:30	
009	MW10		12:30	
010	MW11		10:15	
011	MW12		10:00	
012	MW13		11:15	
013	MW14		10:45	

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: *[Signature]* Date/Time: **3-3-20 3:35**

Relinquished By: **Walter** Date/Time: **3/4/21 0900**

Relinquished By: _____ Date/Time: _____

Relinquished By: _____ Date/Time: _____

Relinquished By: _____ Date/Time: _____

Received By: *[Signature]* Date/Time: **3/4/21 0900**

Received By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

PACE Project No. **40222850**

Receipt Temp = **120** °C

Sample Receipt pH **OK, Adjusted**

Cooler Custody Seal Present / Not Present **Intact / Not Intact**

(Please Print Clearly)

Company Name:	RET	
Branch/Location:	WWSW	
Project Contact:	Ken Lassa	
Phone:	715 675 9784	
Project Number:	613415	
Project Name:	Ph: 11.05 Plating	
Project State:	WI	
Sampled By (Print):	Paul Bush	
Sampled By (Sign):		
PO #:		Regulatory Program



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)*

Regulatory
Program:[illegible][illegible]

Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge) Date Needed:		Relinquished By: <i>Palk</i> Date/Time: <i>3-3-2021 3:35</i>	Received By: <i>[Signature]</i> Date/Time:	PACE Project No. <i>48272850</i>
Transmit Prelim Rush Results by (complete what you want):		Relinquished By: <i>Walker</i> Date/Time: <i>3/3/21 0900</i>	Received By: <i>[Signature]</i> Date/Time: <i>3/4/21 0900</i>	Receipt Temp = <i>R6L</i> °C
Email #1:		Relinquished By:	Received By:	Sample Receipt pH
Email #2:		Date/Time:	Date/Time:	<i>OK / Adjusted</i>
Telephone:		Relinquished By:	Received By:	Cooler Custody Seal Present / Not Present
Fax:		Date/Time:	Date/Time:	Intact / Not Intact
Samples on HOLD are subject to special pricing and release of liability		Relinquished By:	Received By:	
		Date/Time:	Date/Time:	

Sample Preservation Receipt Form

Client Name: REI

Project # 10222850

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

Lab Lot# of pH paper: 1004194

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

Initial when completed: [Signature] Date/Time:

Pace Lab #	Glass							Plastic					Vials					Jars				General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)	
	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
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																																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						

 Pace Analytical® 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 26Mar2020
	Document No.: ENV-FRM-GBAY-0014-Rev.00	Author: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Client Name: REI

Project #:

WO# : 40222850

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☒ Walco
☐ Client ☐ Pace Other: _____

Tracking #: 2766825-1



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 - N/A Type of Ice: ☒ Wet ☐ Blue ☐ Dry ☐ None

☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: ROI /Corr: _____

Person examining contents:

Temp Blank Present: ☐ yes ☒ no

Biological Tissue is Frozen: ☐ yes ☐ no

Date: 3/4/21 /Initials: [Signature]

Temp should be above freezing to 6°C.

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

Labeled By Initials: [Signature]

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

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Printed: 03/05/21 Page 1 of 2

Client: REI Engineering Inc
Attn: Ken Lassa
4080 North 20th Avenue
Wausau, WI 54401 8846

NLS Project: 362313

NLS Customer: 29027

Fax: 715 675 4060 Phone: 715 675 9784

Project: Phillips Plating/6134B

MW 10 NLS ID: 1242200

COC: :1 Matrix: GW

Collected: 03/03/21 12:30 Received: 03/04/21

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	200	ug/L	1	0.58	1.9	03/04/21	SW846 6010	721026460
Chromium, Hex. as Cr+6	200	ug/L	25	13	43	03/04/21	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	14	ug/L	1	0.94	3.2	03/04/21	SW846 6010	721026460
Lab filtration	yes					03/04/21	NA	721026460
Lab Filtration for Chromium, Hex. as Cr+6	yes					03/04/21	NA	721026460

MW 11 NLS ID: 1242201

COC: :2 Matrix: GW

Collected: 03/03/21 10:15 Received: 03/04/21

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	ND	ug/L	1	0.58	1.9	03/04/21	SW846 6010	721026460
Chromium, Hex. as Cr+6	[1.4]	ug/L	1	0.52	1.7	03/04/21	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	4.4	ug/L	1	0.94	3.2	03/04/21	SW846 6010	721026460
Lab filtration	yes					03/04/21	NA	721026460
Lab Filtration for Chromium, Hex. as Cr+6	yes					03/04/21	NA	721026460

MW 14 NLS ID: 1242202

COC: :3 Matrix: GW

Collected: 03/03/21 10:45 Received: 03/04/21

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	ND	ug/L	1	0.58	1.9	03/04/21	SW846 6010	721026460
Chromium, Hex. as Cr+6	ND	ug/L	1	0.52	1.7	03/04/21	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	ND	ug/L	1	0.94	3.2	03/04/21	SW846 6010	721026460
Lab filtration	yes					03/04/21	NA	721026460
Lab Filtration for Chromium, Hex. as Cr+6	yes					03/04/21	NA	721026460

MW 15 NLS ID: 1242203

COC: :4 Matrix: GW

Collected: 03/03/21 11:50 Received: 03/04/21

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	[0.62]	ug/L	1	0.58	1.9	03/04/21	SW846 6010	721026460
Chromium, Hex. as Cr+6	[0.92]	ug/L	1	0.52	1.7	03/04/21	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	[3.0]	ug/L	1	0.94	3.2	03/04/21	SW846 6010	721026460
Lab filtration	yes					03/04/21	NA	721026460
Lab Filtration for Chromium, Hex. as Cr+6	yes					03/04/21	NA	721026460

PZ2 NLS ID: 1242204

COC: :5 Matrix: GW

Collected: 03/03/21 11:30 Received: 03/04/21

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	ND	ug/L	1	0.58	1.9	03/04/21	SW846 6010	721026460
Chromium, Hex. as Cr+6	[0.68]	ug/L	1	0.52	1.7	03/04/21	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	ND	ug/L	1	0.94	3.2	03/04/21	SW846 6010	721026460
Lab filtration	yes					03/04/21	NA	721026460
Lab Filtration for Chromium, Hex. as Cr+6	yes					03/04/21	NA	721026460

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Printed: 03/05/21 Page 2 of 2

Client: REI Engineering Inc
Attn: Ken Lassa
4080 North 20th Avenue
Wausau, WI 54401 8846

NLS Project: 362313

NLS Customer: 29027

Fax: 715 675 4060 Phone: 715 675 9784

Project: Phillips Plating/6134B

PZ3 NLS ID: 1242205

COC: :6 Matrix: GW

Collected: 03/03/21 12:45 Received: 03/04/21

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	920	ug/L	1	0.58	1.9	03/04/21	SW846 6010	721026460
Chromium, Hex. as Cr+6	580	ug/L	100	52	170	03/04/21	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	1200	ug/L	1	0.94	3.2	03/04/21	SW846 6010	721026460
Lab filtration	yes					03/04/21	NA	721026460
Lab Filtration for Chromium, Hex. as Cr+6	yes					03/04/21	NA	721026460

MW 13 NLS ID: 1242206

COC: :7 Matrix: GW

Collected: 03/03/21 11:15 Received: 03/04/21

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	9.1	ug/L	1	0.58	1.9	03/04/21	SW846 6010	721026460
Chromium, Hex. as Cr+6	[0.92]	ug/L	1	0.52	1.7	03/04/21	3500-Cr B-2009	721026460
Nickel, dis. as Ni by ICP	[1.3]	ug/L	1	0.94	3.2	03/04/21	SW846 6010	721026460
Lab filtration	yes					03/04/21	NA	721026460
Lab Filtration for Chromium, Hex. as Cr+6	yes					03/04/21	NA	721026460

Values in brackets represent results greater than or equal to the LOD but less than the LOQ and are within a region of "Less-Certain Quantitation". Results greater than or equal to the LOQ are considered to be in the region of "Certain Quantitation". LOD and/or LOQ tagged with an asterisk(*) are considered Reporting Limits. All LOD/LOQs adjusted to reflect dilution and/or solids content.

ND = Not Detected (< LOD) LOD = Limit of Detection LOQ = Limit of Quantitation NA = Not Applicable

DWB = Dry Weight Basis %DWB = (mg/kg DWB) / 10000 1000 ug/L = 1 mg/L

MCL = Maximum Contaminant Levels for Drinking Water Samples. Shaded results indicate >MCL.

Reviewed by:



Authorized by:
R. T. Krueger
President

September 10, 2021

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

RE: Project: 613TB PHILLIPS PLATING
Pace Project No.: 40232281

Dear Ken Lassa:

Enclosed are the analytical results for sample(s) received by the laboratory on August 26, 2021. 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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40232281001	MW1	Water	08/25/21 08:00	08/26/21 09:05
40232281002	MW2	Water	08/25/21 08:20	08/26/21 09:05
40232281003	MW4	Water	08/25/21 12:45	08/26/21 09:05
40232281004	MW5	Water	08/25/21 12:30	08/26/21 09:05
40232281005	MW6	Water	08/25/21 13:15	08/26/21 09:05
40232281006	MW7	Water	08/25/21 09:00	08/26/21 09:05
40232281007	MW8	Water	08/25/21 13:30	08/26/21 09:05
40232281008	MW9	Water	08/25/21 09:30	08/26/21 09:05
40232281009	MW10	Water	08/25/21 12:00	08/26/21 09:05
40232281010	MW11	Water	08/25/21 10:30	08/26/21 09:05
40232281011	MW12	Water	08/25/21 10:00	08/26/21 09:05
40232281012	MW13	Water	08/25/21 11:30	08/26/21 09:05
40232281013	MW14	Water	08/25/21 11:15	08/26/21 09:05
40232281014	MW15	Water	08/25/21 11:00	08/26/21 09:05
40232281015	PZ1	Water	08/25/21 13:00	08/26/21 09:05
40232281016	PZ2	Water	08/25/21 11:45	08/26/21 09:05
40232281017	PZ3	Water	08/25/21 12:15	08/26/21 09:05

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40232281001	MW1	EPA 6010D	TXW	4	PASI-G
		SM 3500-Cr B (Online)	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40232281002	MW2	EPA 6010D	TXW	4	PASI-G
		SM 3500-Cr B (Online)	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40232281003	MW4	EPA 6010D	TXW	4	PASI-G
		SM 3500-Cr B (Online)	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40232281004	MW5	EPA 6010D	TXW	4	PASI-G
		SM 3500-Cr B (Online)	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40232281005	MW6	EPA 6010D	TXW	4	PASI-G
		SM 3500-Cr B (Online)	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40232281006	MW7	EPA 6010D	TXW	4	PASI-G
		SM 3500-Cr B (Online)	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40232281007	MW8	EPA 6010D	TXW	4	PASI-G
		SM 3500-Cr B (Online)	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40232281008	MW9	EPA 6010D	TXW	4	PASI-G
		SM 3500-Cr B (Online)	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40232281009	MW10	EPA 6010D	TXW	4	PASI-G
		SM 3500-Cr B (Online)	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40232281010	MW11	EPA 6010D	TXW	4	PASI-G
		SM 3500-Cr B (Online)	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40232281011	MW12	EPA 6010D	TXW	4	PASI-G
		SM 3500-Cr B (Online)	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40232281012	MW13	EPA 6010D	TXW	4	PASI-G
		SM 3500-Cr B (Online)	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
40232281013	MW14	EPA 6010D	TXW	4	PASI-G

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40232281014	MW15	SM 3500-Cr B (Online)	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
		EPA 6010D	TXW	4	PASI-G
40232281015	PZ1	SM 3500-Cr B (Online)	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
		EPA 6010D	TXW	4	PASI-G
40232281016	PZ2	SM 3500-Cr B (Online)	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
		EPA 6010D	TXW	4	PASI-G
40232281017	PZ3	SM 3500-Cr B (Online)	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G
		EPA 6010D	TXW	4	PASI-G
		SM 3500-Cr B (Online)	EXM	1	PASI-G
		EPA 300.0	HMB	2	PASI-G

PASI-G = Pace Analytical Services - Green Bay

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Sample: MW1 Lab ID: 40232281001 Collected: 08/25/21 08:00 Received: 08/26/21 09:05 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	08/30/21 13:31	08/31/21 18:29	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	08/30/21 13:31	08/31/21 18:29	7439-89-6	
Manganese, Dissolved	<1.5	ug/L	5.0	1.5	1	08/30/21 13:31	08/31/21 18:29	7439-96-5	
Nickel, Dissolved	22.1	ug/L	10.0	2.6	1	08/30/21 13:31	08/31/21 18:29	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay									
Chromium, Hexavalent	<0.018	mg/L	0.061	0.018	2.5		08/26/21 11:40		D3,H3
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Nitrate as N	9.3	mg/L	0.75	0.22	5		08/26/21 17:28	14797-55-8	
Sulfate	35.7	mg/L	10.0	2.2	5		08/26/21 17:28	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Sample: MW2 Lab ID: 40232281002 Collected: 08/25/21 08:20 Received: 08/26/21 09:05 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	08/30/21 13:31	08/31/21 18:43	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	08/30/21 13:31	08/31/21 18:43	7439-89-6	
Manganese, Dissolved	20.1	ug/L	5.0	1.5	1	08/30/21 13:31	08/31/21 18:43	7439-96-5	
Nickel, Dissolved	10J	ug/L	10.0	2.6	1	08/30/21 13:31	08/31/21 18:43	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay									
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		08/26/21 11:40		D3,H3
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Nitrate as N	31.8	mg/L	3.0	0.88	20		08/27/21 11:12	14797-55-8	H5
Sulfate	26.6	mg/L	10.0	2.2	5		08/26/21 18:57	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Sample: MW4 Lab ID: 40232281003 Collected: 08/25/21 12:45 Received: 08/26/21 09:05 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	08/30/21 13:31	08/31/21 18:47	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	08/30/21 13:31	08/31/21 18:47	7439-89-6	
Manganese, Dissolved	<1.5	ug/L	5.0	1.5	1	08/30/21 13:31	08/31/21 18:47	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	08/30/21 13:31	08/31/21 18:47	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online)									
Pace Analytical Services - Green Bay									
Chromium, Hexavalent	<0.037	mg/L	0.12	0.037	5		08/26/21 11:41		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		08/26/21 19:12	14797-55-8	
Sulfate	9.2J	mg/L	10.0	2.2	5		08/26/21 19:12	14808-79-8	D3

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Sample: MW5 Lab ID: 40232281004 Collected: 08/25/21 12:30 Received: 08/26/21 09:05 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	104	ug/L	10.0	2.5	1	08/30/21 13:31	08/31/21 18:50	7440-47-3	
Iron, Dissolved	276	ug/L	100	56.7	1	08/30/21 13:31	08/31/21 18:50	7439-89-6	
Manganese, Dissolved	113	ug/L	5.0	1.5	1	08/30/21 13:31	08/31/21 18:50	7439-96-5	
Nickel, Dissolved	2610	ug/L	10.0	2.6	1	08/30/21 13:31	08/31/21 18:50	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay									
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		08/26/21 11:41		D3
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Nitrate as N	5.7	mg/L	0.75	0.22	5		08/26/21 19:26	14797-55-8	
Sulfate	26.4	mg/L	10.0	2.2	5		08/26/21 19:26	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Sample: MW6 Lab ID: 40232281005 Collected: 08/25/21 13:15 Received: 08/26/21 09:05 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	5270	ug/L	20.0	5.1	2	08/30/21 13:31	09/01/21 14:44	7440-47-3	
Iron, Dissolved	<113	ug/L	200	113	2	08/30/21 13:31	09/01/21 14:44	7439-89-6	D3
Manganese, Dissolved	1040	ug/L	10.0	3.1	2	08/30/21 13:31	09/01/21 14:44	7439-96-5	
Nickel, Dissolved	6910	ug/L	20.0	5.2	2	08/30/21 13:31	09/01/21 14:44	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online)									
Pace Analytical Services - Green Bay									
Chromium, Hexavalent	5.8	mg/L	1.2	0.37	50		08/26/21 11:41		
300.0 IC Anions									
Analytical Method: EPA 300.0									
Pace Analytical Services - Green Bay									
Nitrate as N	11.2	mg/L	1.5	0.44	10		08/26/21 19:41	14797-55-8	
Sulfate	226	mg/L	20.0	4.4	10		08/26/21 19:41	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Sample: MW7 Lab ID: 40232281006 Collected: 08/25/21 09:00 Received: 08/26/21 09:05 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	08/30/21 13:31	08/31/21 18:55	7440-47-3	
Iron, Dissolved	125	ug/L	100	56.7	1	08/30/21 13:31	08/31/21 18:55	7439-89-6	
Manganese, Dissolved	6.1	ug/L	5.0	1.5	1	08/30/21 13:31	08/31/21 18:55	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	08/30/21 13:31	08/31/21 18:55	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay									
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		08/26/21 11:41		D3,H3
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Nitrate as N	2.8	mg/L	0.75	0.22	5		08/26/21 19:56	14797-55-8	
Sulfate	27.9	mg/L	10.0	2.2	5		08/26/21 19:56	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Sample: MW8		Lab ID: 40232281007		Collected: 08/25/21 13:30		Received: 08/26/21 09:05		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	485	ug/L	10.0	2.5	1	08/30/21 13:31	08/31/21 18:57	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	08/30/21 13:31	08/31/21 18:57	7439-89-6	
Manganese, Dissolved	9.7	ug/L	5.0	1.5	1	08/30/21 13:31	08/31/21 18:57	7439-96-5	
Nickel, Dissolved	300	ug/L	10.0	2.6	1	08/30/21 13:31	08/31/21 18:57	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online)									
Pace Analytical Services - Green Bay									
Chromium, Hexavalent	0.28	mg/L	0.24	0.073	10		08/26/21 11:42		
300.0 IC Anions									
Analytical Method: EPA 300.0									
Pace Analytical Services - Green Bay									
Nitrate as N	12.2	mg/L	0.75	0.22	5		08/26/21 20:11	14797-55-8	
Sulfate	11.8	mg/L	10.0	2.2	5		08/26/21 20:11	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Sample: MW9 Lab ID: 40232281008 Collected: 08/25/21 09:30 Received: 08/26/21 09:05 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	337	ug/L	10.0	2.5	1	08/30/21 13:31	08/31/21 19:04	7440-47-3	
Iron, Dissolved	110	ug/L	100	56.7	1	08/30/21 13:31	08/31/21 19:04	7439-89-6	
Manganese, Dissolved	60.8	ug/L	5.0	1.5	1	08/30/21 13:31	08/31/21 19:04	7439-96-5	
Nickel, Dissolved	435	ug/L	10.0	2.6	1	08/30/21 13:31	08/31/21 19:04	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online)									
Pace Analytical Services - Green Bay									
Chromium, Hexavalent	0.33	mg/L	0.24	0.073	10		08/26/21 11:42		H1
300.0 IC Anions									
Analytical Method: EPA 300.0									
Pace Analytical Services - Green Bay									
Nitrate as N	8.6	mg/L	1.5	0.44	10		08/26/21 20:26	14797-55-8	
Sulfate	67.2	mg/L	20.0	4.4	10		08/26/21 20:26	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Sample: MW10		Lab ID: 40232281009		Collected: 08/25/21 12:00		Received: 08/26/21 09:05		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	311	ug/L	10.0	2.5	1	08/30/21 13:31	08/31/21 19:07	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	08/30/21 13:31	08/31/21 19:07	7439-89-6	
Manganese, Dissolved	<1.5	ug/L	5.0	1.5	1	08/30/21 13:31	08/31/21 19:07	7439-96-5	
Nickel, Dissolved	15.7	ug/L	10.0	2.6	1	08/30/21 13:31	08/31/21 19:07	7440-02-0	
Chromium, Hexavalent		Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay							
Chromium, Hexavalent	0.061	mg/L	0.061	0.018	2.5		08/26/21 11:43		
300.0 IC Anions		Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay							
Nitrate as N	0.88	mg/L	0.15	0.044	1		08/26/21 20:41	14797-55-8	
Sulfate	10.8	mg/L	2.0	0.44	1		08/26/21 20:41	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Sample: MW11		Lab ID: 40232281010		Collected: 08/25/21 10:30		Received: 08/26/21 09:05		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	08/30/21 13:31	08/31/21 19:09	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	08/30/21 13:31	08/31/21 19:09	7439-89-6	
Manganese, Dissolved	132	ug/L	5.0	1.5	1	08/30/21 13:31	08/31/21 19:09	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	08/30/21 13:31	08/31/21 19:09	7440-02-0	
Chromium, Hexavalent		Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay							
Chromium, Hexavalent	<0.073	mg/L	0.24	0.073	10		08/26/21 11:43		D3,H1
300.0 IC Anions		Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay							
Nitrate as N	6.3	mg/L	0.75	0.22	5		08/26/21 21:40	14797-55-8	
Sulfate	21.9	mg/L	10.0	2.2	5		08/26/21 21:40	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Sample: MW12		Lab ID: 40232281011		Collected: 08/25/21 10:00		Received: 08/26/21 09:05		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	08/30/21 13:31	08/31/21 19:12	7440-47-3	
Iron, Dissolved	68.8J	ug/L	100	56.7	1	08/30/21 13:31	08/31/21 19:12	7439-89-6	
Manganese, Dissolved	2.4J	ug/L	5.0	1.5	1	08/30/21 13:31	08/31/21 19:12	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	08/30/21 13:31	08/31/21 19:12	7440-02-0	
Chromium, Hexavalent		Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay							
Chromium, Hexavalent	<0.073	mg/L	0.24	0.073	10		08/26/21 11:43		D3,H1
300.0 IC Anions		Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay							
Nitrate as N	4.5	mg/L	0.75	0.22	5		08/26/21 21:55	14797-55-8	
Sulfate	13.6	mg/L	10.0	2.2	5		08/26/21 21:55	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Sample: MW13 Lab ID: 40232281012 Collected: 08/25/21 11:30 Received: 08/26/21 09:05 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	5.3J	ug/L	10.0	2.5	1	08/30/21 13:31	08/31/21 19:14	7440-47-3	
Iron, Dissolved	12400	ug/L	100	56.7	1	08/30/21 13:31	08/31/21 19:14	7439-89-6	
Manganese, Dissolved	2300	ug/L	5.0	1.5	1	08/30/21 13:31	08/31/21 19:14	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	08/30/21 13:31	08/31/21 19:14	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay									
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		08/26/21 11:43		D3,H1
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		08/26/21 22:10	14797-55-8	D3
Sulfate	<2.2	mg/L	10.0	2.2	5		08/26/21 22:10	14808-79-8	D3

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Sample: MW14 Lab ID: 40232281013 Collected: 08/25/21 11:15 Received: 08/26/21 09:05 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	08/30/21 13:31	08/31/21 19:17	7440-47-3	
Iron, Dissolved	4370	ug/L	100	56.7	1	08/30/21 13:31	08/31/21 19:17	7439-89-6	
Manganese, Dissolved	259	ug/L	5.0	1.5	1	08/30/21 13:31	08/31/21 19:17	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	08/30/21 13:31	08/31/21 19:17	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay									
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		08/26/21 11:44		D3,H1
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		08/26/21 22:25	14797-55-8	D3
Sulfate	6.4J	mg/L	10.0	2.2	5		08/26/21 22:25	14808-79-8	D3

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Sample: MW15		Lab ID: 40232281014		Collected: 08/25/21 11:00		Received: 08/26/21 09:05		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	08/30/21 13:31	08/31/21 19:19	7440-47-3	
Iron, Dissolved	427	ug/L	100	56.7	1	08/30/21 13:31	08/31/21 19:19	7439-89-6	
Manganese, Dissolved	21.4	ug/L	5.0	1.5	1	08/30/21 13:31	08/31/21 19:19	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	08/30/21 13:31	08/31/21 19:19	7440-02-0	
Chromium, Hexavalent		Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay							
Chromium, Hexavalent	<0.37	mg/L	1.2	0.37	50		08/26/21 11:44		D3,H1
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		08/26/21 22:39	14797-55-8	D3
Sulfate	<2.2	mg/L	10.0	2.2	5		08/26/21 22:39	14808-79-8	D3

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Sample: PZ1		Lab ID: 40232281015		Collected: 08/25/21 13:00		Received: 08/26/21 09:05		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	403	ug/L	10.0	2.5	1	08/30/21 13:31	08/31/21 19:22	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	08/30/21 13:31	08/31/21 19:22	7439-89-6	
Manganese, Dissolved	<1.5	ug/L	5.0	1.5	1	08/30/21 13:31	08/31/21 19:22	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	08/30/21 13:31	08/31/21 19:22	7440-02-0	
Chromium, Hexavalent		Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay							
Chromium, Hexavalent	0.41	mg/L	0.12	0.037	5		08/26/21 11:44		
300.0 IC Anions		Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay							
Nitrate as N	4.8	mg/L	3.0	0.88	20		08/27/21 11:27	14797-55-8	
Sulfate	51.6	mg/L	2.0	0.44	1		08/26/21 22:54	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Sample: PZ2 Lab ID: 40232281016 Collected: 08/25/21 11:45 Received: 08/26/21 09:05 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	08/30/21 13:31	08/31/21 19:24	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	08/30/21 13:31	08/31/21 19:24	7439-89-6	
Manganese, Dissolved	<1.5	ug/L	5.0	1.5	1	08/30/21 13:31	08/31/21 19:24	7439-96-5	
Nickel, Dissolved	<2.6	ug/L	10.0	2.6	1	08/30/21 13:31	08/31/21 19:24	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online)									
Pace Analytical Services - Green Bay									
Chromium, Hexavalent	<0.037	mg/L	0.12	0.037	5		08/26/21 11:45		D3,H1
300.0 IC Anions									
Analytical Method: EPA 300.0									
Pace Analytical Services - Green Bay									
Nitrate as N	0.51J	mg/L	0.75	0.22	5		08/26/21 23:09	14797-55-8	D3
Sulfate	6.1J	mg/L	10.0	2.2	5		08/26/21 23:09	14808-79-8	D3

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Sample: PZ3 Lab ID: 40232281017 Collected: 08/25/21 12:15 Received: 08/26/21 09:05 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	1400	ug/L	10.0	2.5	1	08/30/21 13:31	08/31/21 19:27	7440-47-3	
Iron, Dissolved	<56.7	ug/L	100	56.7	1	08/30/21 13:31	08/31/21 19:27	7439-89-6	
Manganese, Dissolved	105	ug/L	5.0	1.5	1	08/30/21 13:31	08/31/21 19:27	7439-96-5	
Nickel, Dissolved	1420	ug/L	10.0	2.6	1	08/30/21 13:31	08/31/21 19:27	7440-02-0	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online) Pace Analytical Services - Green Bay									
Chromium, Hexavalent	1.4	mg/L	0.61	0.18	25		08/26/21 11:45		
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Nitrate as N	8.7	mg/L	0.75	0.22	5		08/26/21 23:24	14797-55-8	
Sulfate	53.6	mg/L	10.0	2.2	5		08/26/21 23:24	14808-79-8	M0

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

QC Batch:	394391	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D MET Dissolved
		Laboratory:	Pace Analytical Services - Green Bay
Associated Lab Samples:	40232281001, 40232281002, 40232281003, 40232281004, 40232281005, 40232281006, 40232281007, 40232281008, 40232281009, 40232281010, 40232281011, 40232281012, 40232281013, 40232281014, 40232281015, 40232281016, 40232281017		

METHOD BLANK: 2276068

Matrix: Water

Associated Lab Samples: 40232281001, 40232281002, 40232281003, 40232281004, 40232281005, 40232281006, 40232281007, 40232281008, 40232281009, 40232281010, 40232281011, 40232281012, 40232281013, 40232281014, 40232281015, 40232281016, 40232281017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Dissolved	ug/L	<2.5	10.0	08/31/21 18:24	
Iron, Dissolved	ug/L	<56.7	100	08/31/21 18:24	
Manganese, Dissolved	ug/L	<1.5	5.0	08/31/21 18:24	
Nickel, Dissolved	ug/L	<2.6	10.0	08/31/21 18:24	

LABORATORY CONTROL SAMPLE: 2276069

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	250	250	100	80-120	
Iron, Dissolved	ug/L	10000	10400	104	80-120	
Manganese, Dissolved	ug/L	250	255	102	80-120	
Nickel, Dissolved	ug/L	250	246	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2276070 2276071

Parameter	Units	40232281001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Dissolved	ug/L	<2.5	250	250	250	260	99	103	75-125	4	20	
Iron, Dissolved	ug/L	<56.7	10000	10000	10100	10500	101	105	75-125	4	20	
Manganese, Dissolved	ug/L	<1.5	250	250	252	260	100	104	75-125	3	20	
Nickel, Dissolved	ug/L	22.1	250	250	266	273	98	100	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 613TB PHILLIPS PLATING
Pace Project No.: 40232281

QC Batch:	394167	Analysis Method:	SM 3500-Cr B (Online)
QC Batch Method:	SM 3500-Cr B (Online)	Analysis Description:	Chromium, Hexavalent by 3500
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40232281001, 40232281002, 40232281003, 40232281004, 40232281005, 40232281006, 40232281007, 40232281008, 40232281009, 40232281010, 40232281011, 40232281012, 40232281013, 40232281014, 40232281015, 40232281016, 40232281017

METHOD BLANK: 2274470 Matrix: Water

Associated Lab Samples: 40232281001, 40232281002, 40232281003, 40232281004, 40232281005, 40232281006, 40232281007, 40232281008, 40232281009, 40232281010, 40232281011, 40232281012, 40232281013, 40232281014, 40232281015, 40232281016, 40232281017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.0073	0.024	08/26/21 11:40	

LABORATORY CONTROL SAMPLE: 2274471

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.3	0.30	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2274472 2274473

Parameter	Units	40232281001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/L	<0.018	0.75	0.75	0.71	0.71	95	95	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2274474 2274475

Parameter	Units	40232281009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/L	0.061	0.75	0.75	0.82	0.82	101	101	90-110	0	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: 613TB PHILLIPS PLATING
Pace Project No.: 40232281

QC Batch:	394171	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:	40232281001, 40232281002, 40232281003, 40232281004, 40232281005, 40232281006, 40232281007, 40232281008, 40232281009, 40232281010, 40232281011, 40232281012, 40232281013, 40232281014, 40232281015, 40232281016, 40232281017		

METHOD BLANK:	2274506	Matrix:	Water
Associated Lab Samples:	40232281001, 40232281002, 40232281003, 40232281004, 40232281005, 40232281006, 40232281007, 40232281008, 40232281009, 40232281010, 40232281011, 40232281012, 40232281013, 40232281014, 40232281015, 40232281016, 40232281017		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate as N	mg/L	<0.044	0.15	08/26/21 16:58	
Sulfate	mg/L	<0.44	2.0	08/26/21 16:58	

LABORATORY CONTROL SAMPLE: 2274507

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.5	1.6	104	90-110	
Sulfate	mg/L	20	21.1	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2274508 2274509

Parameter	Units	40232281001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	9.3	7.5	7.5	16.6	16.7	97	98	90-110	1	15	
Sulfate	mg/L	35.7	100	100	142	142	106	107	90-110	0	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2274510 2274511

Parameter	Units	40232281017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	8.7	7.5	7.5	16.5	16.4	104	104	90-110	0	15	
Sulfate	mg/L	53.6	100	100	164	164	111	111	90-110	0	15 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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

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.

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40232281001	MW1	EPA 3010A	394391	EPA 6010D	394570
40232281002	MW2	EPA 3010A	394391	EPA 6010D	394570
40232281003	MW4	EPA 3010A	394391	EPA 6010D	394570
40232281004	MW5	EPA 3010A	394391	EPA 6010D	394570
40232281005	MW6	EPA 3010A	394391	EPA 6010D	394570
40232281006	MW7	EPA 3010A	394391	EPA 6010D	394570
40232281007	MW8	EPA 3010A	394391	EPA 6010D	394570
40232281008	MW9	EPA 3010A	394391	EPA 6010D	394570
40232281009	MW10	EPA 3010A	394391	EPA 6010D	394570
40232281010	MW11	EPA 3010A	394391	EPA 6010D	394570
40232281011	MW12	EPA 3010A	394391	EPA 6010D	394570
40232281012	MW13	EPA 3010A	394391	EPA 6010D	394570
40232281013	MW14	EPA 3010A	394391	EPA 6010D	394570
40232281014	MW15	EPA 3010A	394391	EPA 6010D	394570
40232281015	PZ1	EPA 3010A	394391	EPA 6010D	394570
40232281016	PZ2	EPA 3010A	394391	EPA 6010D	394570
40232281017	PZ3	EPA 3010A	394391	EPA 6010D	394570
40232281001	MW1	SM 3500-Cr B (Online)	394167		
40232281002	MW2	SM 3500-Cr B (Online)	394167		
40232281003	MW4	SM 3500-Cr B (Online)	394167		
40232281004	MW5	SM 3500-Cr B (Online)	394167		
40232281005	MW6	SM 3500-Cr B (Online)	394167		
40232281006	MW7	SM 3500-Cr B (Online)	394167		
40232281007	MW8	SM 3500-Cr B (Online)	394167		
40232281008	MW9	SM 3500-Cr B (Online)	394167		
40232281009	MW10	SM 3500-Cr B (Online)	394167		
40232281010	MW11	SM 3500-Cr B (Online)	394167		
40232281011	MW12	SM 3500-Cr B (Online)	394167		
40232281012	MW13	SM 3500-Cr B (Online)	394167		
40232281013	MW14	SM 3500-Cr B (Online)	394167		
40232281014	MW15	SM 3500-Cr B (Online)	394167		
40232281015	PZ1	SM 3500-Cr B (Online)	394167		
40232281016	PZ2	SM 3500-Cr B (Online)	394167		
40232281017	PZ3	SM 3500-Cr B (Online)	394167		
40232281001	MW1	EPA 300.0	394171		
40232281002	MW2	EPA 300.0	394171		
40232281003	MW4	EPA 300.0	394171		
40232281004	MW5	EPA 300.0	394171		
40232281005	MW6	EPA 300.0	394171		
40232281006	MW7	EPA 300.0	394171		
40232281007	MW8	EPA 300.0	394171		
40232281008	MW9	EPA 300.0	394171		
40232281009	MW10	EPA 300.0	394171		
40232281010	MW11	EPA 300.0	394171		
40232281011	MW12	EPA 300.0	394171		
40232281012	MW13	EPA 300.0	394171		
40232281013	MW14	EPA 300.0	394171		
40232281014	MW15	EPA 300.0	394171		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 613TB PHILLIPS PLATING

Pace Project No.: 40232281

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40232281015	PZ1	EPA 300.0	394171		
40232281016	PZ2	EPA 300.0	394171		
40232281017	PZ3	EPA 300.0	394171		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

4023228



Pace Analytical®
www.pacelabs.com

***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

**PRESERVATION
(CODE)***

Y/N	Pick Letter	Analyses Requested
X	D	Total Dissolves CL, NI, MA, FE
N	A	Hex CR
N	A	Nitrate
N	A	Su Carb

[illegible]

Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge) Date Needed:		Relinquished By: <i>CC</i> Date/Time: <i>8/25/21 1500</i>	Received By: _____ Date/Time: _____	PACE Project No. <i>40252281</i> Receipt Temp = <i>1</i> °C Sample Receipt pH <i>OK</i> / Adjusted Cooler Custody Seal Present / Not Present Intact / Not Intact
Transmit Prelim Rush Results by (complete what you want):		Relinquished By: <i>Waltro</i> Date/Time: <i>8/26/21 0905</i>	Received By: <i>Susan K. Miller</i> Date/Time: <i>8/26/21 0905</i>	
Email #1:		Relinquished By: _____	Received By: _____	
Email #2:		Relinquished By: _____	Received By: _____	
Telephone:		Relinquished By: _____	Received By: _____	
Fax:		Relinquished By: _____	Received By: _____	
Samples on HOLD are subject to special pricing and release of liability		Relinquished By: _____ Date/Time: _____	Received By: _____ Date/Time: _____	Page 29 of 32

(Please Print Clearly)

Company Name: REE

Branch/Location: Waukegan

Project Contact: Ken Lassa

Phone: 715 675 9784

Project Number: 6174 B

Project Name: Phillips Plant

Project State: WI

Sampled By (Print): Paul Dush

Sampled By (Sign): [Signature]

PO #: _____ Regulatory Program: _____



UPPER MIDWEST REGION

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

Page 2 of 2

40232281

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	Pick Letter	Analyses Requested	Matrix
X	D	Total Dissolved ex. <u>PT, M, FE</u>	Water
N	A	HCL	Water
N	A	Nitrate	Water
N	A	Sulfate	Water

Quote #: _____

Mail To Contact: Ken Lassa

Mail To Company: REE

Mail To Address: Klassic REE engineering.com

Invoice To Contact: SAT

Invoice To Company: _____

Invoice To Address: _____

Invoice To Phone: _____

CLIENT COMMENTS

LAB COMMENTS (Lab Use Only)

Profile # _____

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	
014	MWIS	8-15	11:00	GW
015	PZ1	↓	1:00	↓
016	PZ2	↓	11:45	↓
017	PZ3	↓	12:15	↓

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: [Signature] Date/Time: 8/25/21 1500

Relinquished By: Walter Date/Time: 8/26/21 0905

Relinquished By: _____ Date/Time: _____

Relinquished By: _____ Date/Time: _____

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

Received By: Susan Kufny Date/Time: 8/26/21 0905

Received By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

PACE Project No.

40232281

Receipt Temp = 1 °C

Sample Receipt pH

OK / Adjusted

Cooler Custody Seal

Present / Not Present

Intact / Not Intact

Version 6.0 08/14/06

ORIGINAL

Sample Preservation Receipt Form

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Client Name: REI

Project # 40252281

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

Lab Lot# of pH paper: 10D3604

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

Initial when completed: SKW Date/Time:

Pace Lab #	Glass							Plastic				Vials				Jars			General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)			
	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U								WGFU	WPFU	SP5T
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						

 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 26Mar2020
	Document No.: ENV-FRM-GBAY-0014-Rev.00	Author: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Client Name: REI Project #: _____

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☒ ~~Waltco~~

☐ Client ☐ Pace Other: _____

Tracking #: 2946198

WO#: **40232281**



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 - 105 Type of Ice: ☒ Wet ☐ Blue ☐ Dry ☐ None

Cooler Temperature: Uncorr: 1.5 / Corr: 1 ☒ 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: 8/26/21 Initials: SKW

Labeled By Initials: SRK

Chain of Custody Present: ☒ Yes ☐ No ☐ N/A	1.
Chain of Custody Filled Out: <u>8/26/21</u> ☒ Yes ☐ No ☐ N/A	2. <u>No Collect Times--Filled in by Lab</u>
Chain of Custody Relinquished: ☒ Yes ☐ No ☐ N/A	3. <u>from sample labels</u>
Sampler Name & Signature on COC: ☒ Yes ☐ No ☐ N/A	4.
Samples Arrived within Hold Time: ☐ Yes ☒ No	5. <u>9/1,002,006 Received Crt6 pass</u>
- VOA Samples frozen upon receipt: ☐ Yes ☐ No	Date/Time: <u>hold. if times are AM. 8/26/21</u>
Short Hold Time Analysis (<72hr): ☒ Yes ☐ No	6.
Rush Turn Around Time Requested: ☐ Yes ☒ No	7.
Sufficient Volume:	8.
For Analysis: ☒ Yes ☐ No MS/MSD: ☐ Yes ☒ No ☐ N/A	
Correct Containers Used: ☒ Yes ☐ No	9.
-Pace Containers Used: ☒ Yes ☐ No ☐ N/A	
-Pace IR Containers Used: ☐ Yes ☐ No ☒ N/A	
Containers Intact: ☒ Yes ☐ No	10.
Filtered volume received for Dissolved tests: ☒ Yes ☐ No ☐ N/A	11.
Sample Labels match COC: ☒ Yes ☐ No ☐ N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>W</u>	
Trip Blank Present: ☐ Yes ☐ No ☒ N/A	13.
Trip Blank Custody Seals Present: ☐ Yes ☐ No ☒ 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 logir

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Printed: 08/27/21 Page 1 of 2

Client: REI Engineering Inc
Attn: Ken Lassa
4080 North 20th Avenue
Wausau, WI 54401 8846

NLS Project: 371923

NLS Customer: 29027

Fax: 715 675 4060 Phone: 715 675 9784

Project: Phillips Plating 6134B

MW 10 NLS ID: 1273682

Matrix: GW

Collected: 08/25/21 12:00 Received: 08/26/21

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	200	ug/L	1	0.99	3.3	08/26/21	SW846 6010	721026460
Chromium, Hex. as Cr+6	120	ug/L	25	13	43	08/26/21	3500-Cr B-2009	721026460
Sample was filtered in the laboratory and flagged per WDNR requirement.								
Nickel, dis. as Ni by ICP	[8.6]	ug/L	1	3.5	12	08/26/21	SW846 6010	721026460
Lab filtration	yes					08/26/21	NA	721026460
Lab Filtration for Chromium, Hex. as Cr+6	yes					08/26/21	NA	721026460

MW 11 NLS ID: 1273683

Matrix: GW

Collected: 08/25/21 10:30 Received: 08/26/21

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	ND	ug/L	1	0.99	3.3	08/26/21	SW846 6010	721026460
Chromium, Hex. as Cr+6	ND	ug/L	1	0.52	1.7	08/26/21	3500-Cr B-2009	721026460
Sample was filtered in the laboratory and flagged per WDNR requirement.								
Nickel, dis. as Ni by ICP	ND	ug/L	1	3.5	12	08/26/21	SW846 6010	721026460
Lab filtration	yes					08/26/21	NA	721026460
Lab Filtration for Chromium, Hex. as Cr+6	yes					08/26/21	NA	721026460

MW 14 NLS ID: 1273684

Matrix: GW

Collected: 08/25/21 11:15 Received: 08/26/21

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	ND	ug/L	1	0.99	3.3	08/26/21	SW846 6010	721026460
Chromium, Hex. as Cr+6	ND	ug/L	1	0.52	1.7	08/26/21	3500-Cr B-2009	721026460
Sample was filtered in the laboratory and flagged per WDNR requirement.								
Nickel, dis. as Ni by ICP	ND	ug/L	1	3.5	12	08/26/21	SW846 6010	721026460
Lab filtration	yes					08/26/21	NA	721026460
Lab Filtration for Chromium, Hex. as Cr+6	yes					08/26/21	NA	721026460

MW 15 NLS ID: 1273685

Matrix: GW

Collected: 08/25/21 11:00 Received: 08/26/21

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	[1.4]	ug/L	1	0.99	3.3	08/26/21	SW846 6010	721026460
Chromium, Hex. as Cr+6	2.2	ug/L	1	0.52	1.7	08/26/21	3500-Cr B-2009	721026460
Sample was filtered in the laboratory and flagged per WDNR requirement.								
Nickel, dis. as Ni by ICP	ND	ug/L	1	3.5	12	08/26/21	SW846 6010	721026460
Lab filtration	yes					08/26/21	NA	721026460
Lab Filtration for Chromium, Hex. as Cr+6	yes					08/26/21	NA	721026460

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Printed: 08/27/21 Page 2 of 2

Client: REI Engineering Inc
Attn: Ken Lassa
4080 North 20th Avenue
Wausau, WI 54401 8846

NLS Project: 371923

NLS Customer: 29027

Fax: 715 675 4060 Phone: 715 675 9784

Project: Phillips Plating 6134B

PZ 2 NLS ID: 1273686

Matrix: GW

Collected: 08/25/21 11:45 Received: 08/26/21

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	ND	ug/L	1	0.99	3.3	08/26/21	SW846 6010	721026460
Chromium, Hex. as Cr+6	[1.2]	ug/L	1	0.52	1.7	08/26/21	3500-Cr B-2009	721026460
Sample was filtered in the laboratory and flagged per WDNR requirement.								
Nickel, dis. as Ni by ICP	ND	ug/L	1	3.5	12	08/26/21	SW846 6010	721026460
Lab filtration	yes					08/26/21	NA	721026460
Lab Filtration for Chromium, Hex. as Cr+6	yes					08/26/21	NA	721026460

PZ 3 NLS ID: 1273687

Matrix: GW

Collected: 08/25/21 12:15 Received: 08/26/21

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	1500	ug/L	1	0.99	3.3	08/26/21	SW846 6010	721026460
Chromium, Hex. as Cr+6	1400	ug/L	50	26	85	08/26/21	3500-Cr B-2009	721026460
Sample was filtered in the laboratory and flagged per WDNR requirement.								
Nickel, dis. as Ni by ICP	1500	ug/L	1	3.5	12	08/26/21	SW846 6010	721026460
Lab filtration	yes					08/26/21	NA	721026460
Lab Filtration for Chromium, Hex. as Cr+6	yes					08/26/21	NA	721026460

MW 13 NLS ID: 1273688

Matrix: GW

Collected: 08/25/21 11:30 Received: 08/26/21

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Chromium, dis. as Cr by ICP	12	ug/L	1	0.99	3.3	08/26/21	SW846 6010	721026460
Chromium, Hex. as Cr+6	[0.68]	ug/L	1	0.52	1.7	08/26/21	3500-Cr B-2009	721026460
Sample was filtered in the laboratory and flagged per WDNR requirement.								
Nickel, dis. as Ni by ICP	ND	ug/L	1	3.5	12	08/26/21	SW846 6010	721026460
Lab filtration	yes					08/26/21	NA	721026460
Lab Filtration for Chromium, Hex. as Cr+6	yes					08/26/21	NA	721026460

Values in brackets represent results greater than or equal to the LOD but less than the LOQ and are within a region of "Less-Certain Quantitation". Results greater than or equal to the LOQ are considered to be in the region of "Certain Quantitation". LOD and/or LOQ tagged with an asterisk(*) are considered Reporting Limits. All LOD/LOQs adjusted to reflect dilution and/or solids content.

ND = Not Detected (< LOD) LOD = Limit of Detection LOQ = Limit of Quantitation NA = Not Applicable

DWB = Dry Weight Basis %DWB = (mg/kg DWB) / 10000 1000 ug/L = 1 mg/L

MCL = Maximum Contaminant Levels for Drinking Water Samples. Shaded results indicate >MCL.

Reviewed by:



Authorized by:
R. T. Krueger
President