



Prepared for

Georgia Power Company
241 Ralph McGill Blvd NE
Atlanta, Georgia 30308

2024 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

PLANT HAMMOND ASH POND 2 (AP-2)

Prepared by

Geosyntec 
consultants

engineers | scientists | innovators

1255 Roberts Boulevard, Suite 200
Kennesaw, Georgia 30144

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CERTIFICATION STATEMENT

This 2024 Semiannual Groundwater Monitoring and Corrective Action Report, Plant Hammond – Ash Pond 2 (AP-2) has been prepared in compliance with the United States Environmental Protection Agency Coal Combustion Residual Rule (40 Code of Federal Regulations [CFR] 257 Subpart D), specifically § 257.90(e), and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10 by a qualified groundwater scientist or engineer with Geosyntec Consultants, Inc. I hereby certify that I am a qualified groundwater scientist, in accordance with the Georgia Rules of Solid Waste Management 391-3-4-.01.



Whitney B. Law
Georgia Professional Engineer No. 36641

August 30, 2024
Date

SUMMARY

This summary of the *2024 Semiannual Groundwater Monitoring and Corrective Action Report* provides the status of the groundwater monitoring and corrective action program for the reporting period from January to July 2024 (referred to herein as the “semiannual reporting period”) at Georgia Power Company’s (Georgia Power’s) Plant Hammond Ash Pond 2 (AP-2) (the Site). This summary was prepared by Geosyntec Consultants, Inc. (Geosyntec) on behalf of Georgia Power to meet the requirements listed in Part A, Section 6¹ of the United States Environmental Protection Agency (USEPA) Coal Combustion Residual Rule (federal CCR Rule) (40 Code of Federal Regulations [CFR] 257 Subpart D).

Plant Hammond is located at 5963 Alabama Highway SW, approximately 10 miles west of Rome in Floyd County, Georgia. Dewatered ash from AP-2 is excavated and transported to the nearby Huffaker Road facility, a permitted solid waste disposal location owned and operated by Georgia Power. The Site is located on the southwestern portion of the



Plant Hammond and the Site

Plant Hammond property. The Georgia Environmental Protection Division (GA EPD) approved closure permit no. 057-024D(CCR) for AP-2 on June 22, 2020.

Groundwater at the Site is monitored using a comprehensive monitoring well network that meets federal and state monitoring requirements. Routine sampling and reporting began after the background groundwater conditions were established between May 2016 and May 2017. Based on groundwater conditions at the Site, an assessment monitoring program and assessment of corrective measures program were established in January 2018 and January 2019, respectively. A *Draft Remedy Selection Report*, which summarizes the evaluation and proposed selection of a corrective measure, or measures, was submitted to GA EPD on August 31, 2022. Following GA EPD’s approval of the *HGWC-18 Pilot Study Workplan* (Geosyntec, 2023a) and the *MW-33 and 35 Pilot Study Workplan* (Geosyntec, 2023b) on August 24, 2023, a pilot study was initiated at AP-2 in support of the ongoing remedy selection process.

¹ 80 FR 21468, Apr. 17, 2015, as amended at 81 FR 51807, Aug. 5, 2016; 83 FR 36452, July 30, 2018; 85 FR 53561, Aug. 28, 2020

During the semiannual reporting period, Geosyntec conducted one groundwater sampling event in February 2024 in support of the assessment monitoring program. Groundwater samples were submitted to Pace Analytical Services, LLC, for analysis. Per the federal CCR Rule, groundwater data from the semiannual assessment monitoring event conducted during the semiannual reporting period were evaluated in accordance with the certified statistical methods. That evaluation showed statistically significant values of Appendix III² and Appendix IV³ constituents in excess of established groundwater protection standards (GWPS) in select monitoring wells, as summarized in the table below for the 2024 semiannual reporting period.

Appendix III Constituent	February 2024
Boron	HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18
Calcium	HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18
Chloride	HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18
Sulfate	HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18
Total Dissolved Solids	HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18
Appendix IV Constituent⁴	February 2024
Cobalt	HGWC-18, MW-33, MW-35

Based on a review of the Appendix III and Appendix IV statistical results completed for the groundwater monitoring and corrective action program for the semiannual reporting period, the Site will continue in assessment monitoring. Georgia Power will continue routine groundwater monitoring and reporting at the Site. Reports will be posted to Georgia Power's CCR Rule Compliance website and provided to GA EPD semiannually.

² Boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids (TDS)

³ Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, selenium, thallium, and combined radium 226 + 228

⁴ A statistically significant level (SSL)-related constituent is determined by comparing the confidence intervals developed to either the constituent's MCL, if available; where an MCL has not been established, then a CCR-rule specific GWPS; or background concentrations for constituents where the concentration is greater than the MCL or rule specified GWPS.

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LIST OF ACRONYMS AND ABBREVIATIONS

ACM	Assessment of Corrective Measures
AP-2	Ash Pond 2
CCR	coal combustion residuals
CFR	Code of Federal Regulations
cm/sec	centimeters per second
DO	dissolved oxygen
ft/day	feet per day
ft/ft	feet per foot
GA-20	Georgia Highway 20
GA EPD	Georgia Environmental Protection Division
Georgia Power	Georgia Power Company
Geosyntec	Geosyntec Consultants, Inc.
GSC	Groundwater Stats Consulting
GWPS	groundwater protection standard
HAR	Hydrogeologic Assessment Report
i	horizontal hydraulic gradient
K _h	horizontal hydraulic conductivity
MCL	Maximum Contaminant Level
mg/L	milligram per liter
n _e	effective porosity
NELAP	National Environmental Laboratory Accreditation Program
NTU	nephelometric turbidity units
ORP	oxidation-reduction potential
Pace Analytical	Pace Analytical Services, LLC.
PE	professional engineer
PL	prediction limit
QA/QC	Quality Assurance/Quality Control
SSI	statistically significant increase
SSL	statistically significant level
s.u.	standard unit
Unified Guidance	Statistical Analysis of Groundwater Data at RCRA Facilities Unified Guidance
USEPA	United States Environmental Protection Agency

1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (USEPA) Coal Combustion Residual Rule (federal CCR Rule) (40 Code of Federal Regulations [CFR] Part 257, Subpart D) and the Georgia Environmental Protection Division (GA EPD) Rules for Solid Waste Management 391-3-4-.10, Geosyntec Consultants, Inc. (Geosyntec) has prepared this *2024 Semiannual Groundwater Monitoring and Corrective Action Report* to document groundwater monitoring activities conducted at Georgia Power Company (Georgia Power) Plant Hammond (Site) Ash Pond 2 (AP-2) for the reporting period of January through July 2024 (referred to herein as the “semiannual reporting period”).

Groundwater monitoring and reporting for the CCR unit is performed in accordance with the monitoring requirements of § 257.90 through 257.95 of the federal CCR Rule, and GA EPD Rules for Solid Waste Management 391-3-4-.10(6). To specify groundwater monitoring requirements, GA EPD rule 391-3-4-.10(6)(a) incorporates by reference the federal CCR Rule. For ease of reference, the federal CCR Rule is cited within this report in lieu of citing both sets of regulations. Also, the closure permit issued by GA EPD (i.e., no. 057-024D(CCR)) stipulates that groundwater monitoring is required while CCR waste remains in place at the CCR unit and for no less than 5-years after removal of the material.

Due to statistically significant levels (SSLs) of cobalt identified in the *2018 Annual Groundwater Monitoring and Corrective Action Report* (Geosyntec, 2019a), Georgia Power initiated an assessment of corrective measures (ACM) program for AP-2 in January 2019. Pursuant to § 257.96(b), Georgia Power continues to monitor groundwater associated with AP-2 in accordance with the assessment monitoring program established for the unit in 2018, including semiannual monitoring and reporting pursuant to § 257.90 through § 257.95 of the federal CCR Rule, and GA EPD Rules for Solid Waste Management 391-3-4-.10(6)(a). A *Draft Remedy Selection Report*, which summarizes the evaluation and proposed selection of a corrective measure, or measures, was submitted to GA EPD on August 31, 2022, (Geosyntec, 2022) and is currently under review.

The current reporting period groundwater data indicate that the SSLs for cobalt are horizontally and vertically delineated to below their corresponding groundwater protection standards (GWPS).

1.1 Site Description and Background

Plant Hammond is located in Floyd County, Georgia, approximately 10 miles west of Rome and is bordered by Georgia Highway 20 (GA-20) on the north, the Coosa River on the south, Cabin Creek and industrial land on the east, and sparsely populated, forested, rural and industrial land on the west (**Figure 1**). The physical address of the plant is 5963 Alabama Highway, Rome, Georgia, 30165.

Plant Hammond was a four-unit, coal-fired electric generating facility. All four units at Plant Hammond were retired on July 29, 2019 and no longer produce electricity.

AP-2 is a 21-acre surface impoundment. Dewatered ash from AP-2 is excavated and transported to the nearby Huffaker Road facility, a permitted solid waste disposal location owned and operated by Georgia Power. Georgia Power will close AP-2 through removal of the CCR material from the CCR unit. The Closure Plan submitted to GA EPD as part of the closure permit application package describes the closure activities and requirements in accordance with § 257.102. The proposed closure by removal approach provides a source control measure that reduces the potential for migration of CCR constituents to groundwater. Details of the closure approach are provided in the Written Closure Plan and published to Georgia Power's CCR Rule Compliance website. Closure permit no. 057-024D(CCR) was approved by GA EPD on June 22, 2020. CCR removal activities are substantially complete, and a certification will be submitted to GA EPD in 2024.

1.2 Regional Geology and Hydrogeologic Setting

The following section summarizes the geologic and hydrogeologic conditions at AP-2 as described in the *Hydrogeologic Assessment Report Revision 01 – AP-2* (HAR Rev 01) submitted to GA EPD in December 2019 in support of the AP-2 solid waste handling permit (Geosyntec, 2019c).

1.2.1 Regional and Site Geology

The Site is located within the Great Valley District of the Valley and Ridge Physiographic Province (Valley and Ridge) in northwest Georgia. The Valley and Ridge is characterized by Paleozoic sedimentary rocks that have been folded and faulted into the ridges and valleys that gave this region its name. Geologic mapping performed at the Site by Petrologic Solutions, Inc., under the direction of Golder (Golder, 2018), indicates that

AP-2 is underlain by the lower units of the Cambrian age Conasauga Formation, consisting of mostly calcareous shale. Based on review of subsurface investigations at AP-2, the bedrock was identified as predominantly calcareous shale and fissile black shale. AP-2 is underlain primarily by five lithologic units: (i) terrace alluvium; (ii) colluvium; (iii) residuum; (iv) partially weathered shale bedrock; and (v) unweathered shale bedrock.

Based on subsurface investigations, the alluvial deposits generally grade from a silt and silty clay to a clayey sand and silty sand to a sand and gravelly sand at depth. The colluvium consists of silty sand, silty clay with angular and sub-rounded chert fragments, and dolomite, sandstone, and shale fragments. Residual or native soils have been derived from the in-place weathering of the shale bedrock. The residuum is generally described as brown to yellow brown firm clayey silt with weathered shale fragments. The partially weathered shale zone occurs as an intermediate weathering stage between the residuum and the unweathered shale bedrock. The weathered material is described as black to dark gray to dark red hard, fissile shale and claystone. The unweathered shale bedrock was not encountered or directly observed in the historical borings advanced at the Site. However, based on geologic conditions in the region, weathering, fracturing and jointing decreases with depth, and the weathered rock material grades into competent bedrock.

1.2.2 Hydrogeologic Setting

The uppermost aquifer at AP-2 is a regional groundwater aquifer that occurs primarily in the alluvial, colluvial, and residuum and within the weathered and fractured bedrock. The movement of groundwater in the soil can be characterized as low-to moderate permeability, porous media flow based on hydraulic field testing at the Site (slug testing). The groundwater flow in the shallow underlying bedrock is characterized as fracture flow and is expected to be very low permeability due to the preponderance of shale beneath AP-2. The regional groundwater flow direction is expected to be from north to south; however, the local flow direction beneath AP-2 is predominantly east to west with an additional southerly component. Under post-closure conditions, the groundwater flow direction is anticipated to more closely resemble the regional flow regime (north to south toward the Coosa River). The February 2024 groundwater elevations are generally lower than those of prior monitoring events, likely due to site closure at AP-2.

1.3 Groundwater Monitoring Well Network

In accordance with § 257.91, a groundwater monitoring system was installed at AP-2 that consists of a sufficient number of wells installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer to represent the groundwater quality both upgradient of the units (i.e., background conditions) and passing the waste boundary of the units. The number, spacing, and depths of the groundwater monitoring wells were selected based on the characterization of site specific hydrogeologic conditions.

As part of the assessment monitoring program, assessment wells have been installed since 2018 to supplement the pre-existing detection monitoring wells and characterize the nature and extent of SSLs in groundwater downgradient of AP-2. Pursuant to § 257.95(g)(1)(iv), the wells classified as “assessment monitoring wells” will continue to be sampled concurrently with the detection monitoring well network as part of the ongoing assessment groundwater monitoring program.

An on-site network of piezometers is used in combination with the detection and assessment monitoring well networks to gauge water levels to define groundwater flow direction and gradients. The piezometers may be sampled as needed to support the ACM program.

The locations of the detection monitoring wells, assessment monitoring wells, and piezometers are shown on **Figure 2**; well and piezometer construction details are listed in **Table 1A** and **Table 1B**, respectively.

2.0 GROUNDWATER MONITORING ACTIVITIES

In accordance with § 257.90(e), the following describes monitoring-related activities performed during the semiannual reporting period and discusses any change in status of the monitoring program. Groundwater sampling was performed in accordance with § 257.93.

2.1 Monitoring Well Installation and Maintenance

No additional detection monitoring wells or piezometers were installed during this reporting period.

The well and piezometer networks are inspected semiannually to evaluate if any repairs or corrective actions are necessary to meet the requirements of the Georgia Water Well Standards Act (O.C.G.A. § 12-5-134(5)(d)(vii)). In February 2024, the networks were inspected, necessary corrective actions were identified and subsequently completed, as documented in **Appendix A**. This documentation was prepared under the direction of a professional geologist or engineer registered in the State of Georgia.

2.2 Assessment Monitoring

Georgia Power initiated an assessment monitoring program for groundwater at AP-2 in January 2018 based on statically significant increases (SSIs) of Appendix III constituents documented in the *2017 Annual Groundwater Monitoring and Corrective Action Report* (ERM, 2018). A notice of assessment monitoring was placed in the operating record on May 15, 2018. Currently, cobalt is the only Appendix IV constituent identified at SSLs in exceedance of the GWPS; SSLs of cobalt have been identified in HGWC-18, MW-33, and MW-35.

Pursuant to § 257.96, an ACM was initiated for AP-2 in January 2019. An *Assessment of Corrective Measures Report – Plant Hammond Ash Pond 2 (AP-2)* (ACM Report) was subsequently prepared for AP-2 (Geosyntec, 2019b) and submitted to GA EPD in June 2019 and posted to Georgia Power's CCR Rule Compliance website in July 2019. A *Draft Remedy Selection Report*, which summarizes the evaluation and proposed selection of a corrective measure, or measures, was submitted to GA EPD on August 31, 2022 (Geosyntec, 2022). In accordance with § 257.96(b), groundwater continues to be monitored at AP-2 under the assessment monitoring program while the ACM phase is implemented.

In support of the routine assessment monitoring program, the semiannual assessment monitoring event was conducted in February 2024. The wells sampled and the dates the samples were collected at AP-2 during the semiannual reporting period are summarized in **Table 2**. Details of these events and analytical results are discussed in Section 3.

2.3 Additional Groundwater and Surface Water Evaluations

Supplemental groundwater samples were collected from the entire AP-2 detection and assessment well networks during the February 2024 event and were analyzed for major cations, major anions, iron, and manganese. The data were collected in support of evaluating the geochemical composition of the groundwater in conjunction with the ACM activities.

Due to the presence of surface water features immediately downgradient of select wells reporting SSLs, Georgia Power proactively collected surface water samples in February 2024 from three locations in the unnamed creek west of AP-2 (AP2-Up, AP2-Mid, AP2-Down) and three locations in the Coosa River, as shown on **Figure 2** (i.e., H+0.25, H+0.35, H+0.75), to horizontally delineate identified SSLs of Appendix IV constituents in groundwater at AP-2. Georgia Power will continue collecting the surface water samples semiannually to support ACM efforts.

The laboratory reports associated with the additional evaluations are provided in **Appendix B**.

2.4 Assessment of Corrective Measures

As presented in the *Draft Remedy Selection Report* (Geosyntec, 2022), in-situ geochemical injections, coupled with monitored natural attenuation (MNA), have been proposed as corrective measures to address the SSLs of cobalt in detection monitoring well HGWC-18 and assessment monitoring wells MW-33 and MW-35. Design of in-situ geochemical injection corrective measures includes multiple assessment and design components, including pilot studies to evaluate injection delivery and the performance of injectates prior to implementing a full scale remedy. Georgia Power initiated a pilot study in vicinity of these wells in September 2023, as detailed in the *HGWC-18 Pilot Study Workplan* (Geosyntec, 2023a) and *MW-33 and MW-35 Pilot Study Workplan* (Geosyntec, 2023b). A post-injection performance monitoring program was initiated mid-September 2023 during which groundwater samples were collected from performance monitoring piezometers INW-01, INW-02, and PT-01 through PT-06; groundwater samples were

analyzed for the complete suite of Appendix III and Appendix IV constituents (except total radium), and select metals and inorganics necessary to evaluate the geochemistry of the groundwater. Post injection performance monitoring continued during the 2024 semiannual reporting period. Details of these events and analytical results between December 2023 and June 2024 are discussed in Section 6.

3.0 SAMPLING METHODOLOGY AND ANALYSES

The following section presents a summary of the field sampling procedures that were implemented, and the groundwater sampling results that were obtained, in connection with the assessment monitoring program conducted at AP-2 during the semiannual reporting period.

3.1 Groundwater and Surface Water Level Measurement

A synoptic round of depth-to-groundwater-level measurements were recorded from the AP-2 wells and piezometers during the February 2024 assessment monitoring event and used to calculate the corresponding groundwater elevations, which are presented in **Table 3**. While the February 2024 groundwater elevations are generally lower than those of prior monitoring years, they are generally similar to the previous gauging event in August 2023, likely due to site closure of AP-2.

Surface water elevations were recorded from a surveyed measuring point located midway across the service bridge, located midway along the unnamed creek west of AP-2 ('Unnamed Creek' location), and at the Coosa River staff gauge located downgradient of AP-1, as shown in **Figure 2**.

The groundwater and surface water elevation data were used to prepare a potentiometric surface map for the February 2024 gauging event, which is presented on **Figure 3**. Groundwater in the AP-2 area flows under the influence of topography from higher elevations on the northern and eastern side of the Site in a westerly direction beneath AP-2 with a southerly flow component. This groundwater flow pattern is consistent with previous observations.

3.2 Groundwater Gradient and Flow Velocity

The horizontal groundwater hydraulic gradients within the uppermost aquifer beneath AP-2 was calculated using the groundwater elevation data from the February 2024 gauging event. A horizontal hydraulic gradient is commonly calculated between two points along the groundwater flow path perpendicular to groundwater elevation contours. Ideally, this flow path originates and concludes with groundwater elevations reported for two wells, but this may not be feasible and still remain perpendicular to the contours. The horizontal hydraulic gradient in this report was calculated between upgradient and downgradient wells selected to provide the most accurate alignment possible relative to

the interpreted groundwater flow path. The horizontal hydraulic gradient was calculated across the central portion of AP-2 between MW-18 and HGWC-17. The supporting calculations are presented in **Table 4**. The general trajectory of the flow path used in the calculations and associated potentiometric contour lines are shown on **Figure 3**. The calculated hydraulic gradient along the westerly flow path line for the semiannual reporting period is 0.006 feet per foot (ft/ft).

The approximate horizontal flow velocity associated with AP-2 was calculated using the following derivative of Darcy's Law. The calculation is presented in **Table 4**.

$$V = \frac{K_h * i}{n_e}$$

where:

V = Groundwater flow velocity $\left(\frac{\text{feet}}{\text{day}}\right)$

K_h = Horizontal Hydraulic Conductivity $\left(\frac{\text{feet}}{\text{day}}\right)$

i = Horizontal hydraulic gradient $\left(\frac{\text{feet}}{\text{foot}}\right) = \frac{h_1 - h_2}{L}$

h_1 and h_2 = Groundwater elevation at location 1 and 2

L = distance between location 1 and 2

n_e = Effective porosity

The horizontal hydraulic conductivity (K_h) measurements were calculated from slug test data collected in AP-2 wells and piezometers. As presented in the HAR Rev 01, results were broadly grouped based on the lithology in which the wells or piezometers were screened. The geometric mean of the K_h values of the alluvium, colluvium, residuum, and partially weathered shale bedrock were used to represent the overall hydraulic conductivity at AP-2 of 5.17×10^{-4} centimeters per second (cm/sec) (1.47 feet per day [ft/day]) (Geosyntec, 2019c). An effective porosity value of 0.15 was used to represent average lithologic conditions at AP-2, derived based on review of literature (Kresic, 2007), observed site lithology, and professional judgement. Applying these values and the hydraulic gradient, the groundwater flow velocity underneath AP-2 for the semiannual reporting period was calculated to be 0.055 ft/day.

3.3 Groundwater Sampling Procedures

Groundwater samples were collected using low-flow sampling procedures in accordance with § 257.93(a). Purging and sampling was performed using dedicated bladder pumps with dedicated tubing, non-dedicated bladder pumps, and peristaltic pumps. For wells sampled with non-dedicated bladder pumps and peristaltic pumps, the pump intake was lowered to the midpoint of the well screen (or as appropriate based on the groundwater level). Non-dedicated bladder pump and peristaltic pump samples were collected using new disposable polyethylene tubing; all non-dedicated tubing was disposed of following the sampling event. All non-disposable equipment was decontaminated before use and between well locations.

An in-situ water quality field meter (Aqua TROLL 400) was used to monitor and record field water quality parameters [i.e., pH, conductivity, dissolved oxygen (DO), temperature, and oxidation reduction potential (ORP)] during well purging to verify stabilization prior to sampling. Turbidity was monitored using a portable turbidity meter (i.e., LaMotte 2020we or similar). Groundwater samples were collected once the following stabilization criteria were met:

- pH \pm 0.1 standard units (s.u.).
- Conductivity \pm 5%.
- \pm 0.2 milligram/liter (mg/L) or \pm 10%, whichever is greater for DO > 0.5 mg/L. No criterion applies if DO < 0.5 mg/L, record only.
- Turbidity measured less than 5 nephelometric turbidity units (NTU) or measured between 5 and 10 NTU following three hours of purging.

Following purging, and once stabilization was achieved, unfiltered samples were collected into appropriately preserved laboratory-supplied sample containers. Sample bottles were placed in ice-packed coolers and submitted to Pace Analytical Services, LLC (Pace Analytical) in Peachtree Corners, Georgia, following chain-of-custody protocol. The field sampling and equipment calibration forms generated during the semiannual reporting period are provided in **Appendix B**; forms generated during monitoring events associated with the pilot studies are provided in a subsequent appendix as discussed in Section 6.

3.4 Laboratory Analyses

Laboratory analyses were performed by Pace Analytical, which is accredited by the National Environmental Laboratory Accreditation Program (NELAP). Pace Analytical maintains a NELAP certification for the Appendix III and Appendix IV constituents analyzed for this project. Analytical methods used for groundwater and surface water sample analyses are listed in the analytical laboratory reports included in **Appendix B**. The groundwater results from the semiannual reporting period are summarized in **Table 5**; surface water analytical results are summarized in **Table 6**. The laboratory reports generated during monitoring events associated with the pilot studies are provided in a subsequent appendix as discussed in Section 6.

3.5 Quality Assurance and Quality Control Summary

Quality assurance/quality control (QA/QC) samples were collected during the groundwater monitoring events in accordance with the site's *Groundwater Monitoring Plan* (Geosyntec, 2021), and included the following: field duplicates, equipment blanks, and field blank samples. QA/QC samples were collected in appropriately preserved laboratory-provided containers and submitted under the same chain of custody as the primary samples for analysis of the same constituents by Pace Analytical.

In addition to collecting QA/QC samples, the data were validated based on the pertinent methods referenced in the laboratory reports, professional and technical judgment, and applicable federal guidance documents (USEPA, 2011; USEPA, 2017). Where necessary, the data were qualified with supporting documentation and justifications. The validated data are considered usable for meeting project objectives. The associated data validation reports are provided in **Appendix B**, along with the laboratory reports.

4.0 STATISTICAL ANALYSIS

The following section summarizes the statistical analysis of Appendix III groundwater monitoring data performed pursuant to § 257.93. In addition, pursuant to § 257.95(d)(2), Georgia Power established GWPS for the Appendix IV constituents and completed statistical analyses of the Appendix IV groundwater monitoring data obtained during the semiannual reporting period. The data were analyzed by Groundwater Stats Consulting (GSC); the report generated from the analyses are provided in **Appendix C**.

4.1 Statistical Methods

Groundwater data from the semiannual reporting period were statistically analyzed in accordance with the Professional Engineer-certified (PE-certified) Statistical Analysis Method Certification (October 2017, revised January 2020) (Environmental Resource Management, 2017 and Geosyntec, 2020). The Sanitas groundwater statistical software was used to perform the statistical analyses. Sanitas is a decision-support software package that incorporates the statistical tests required of Subtitle C and D facilities by USEPA regulations and guidance as recommended in the USEPA document *Statistical Analysis of Groundwater Data at RCRA Facilities Unified Guidance* (Unified Guidance) (USEPA, 2009).

Appendix III statistical analysis was performed to assess if Appendix III constituents have returned to background levels. Appendix IV constituents were evaluated to assess if concentrations statistically exceeded the established GWPS. Detailed statistical methods used for Appendix III and Appendix IV constituents are discussed in statistical analysis package provided in **Appendix C** and summarized in Sections 4.1.1 and 4.1.2. The GWPS were finalized pursuant to § 257.95(d)(2) and presented in **Table 7**.

4.1.1 Appendix III Statistical Methods

Based on guidance from GA EPD, statistical tests used to evaluate the groundwater monitoring data consist of interwell prediction limits (PLs) combined with a 1-of-2 verification resample plan for each of the Appendix III constituents. Interwell PLs pool upgradient well data to establish a background limit for an individual constituent, and the most recent sample from each downgradient well is compared to the same limit for each constituent. The most recent sample from each downgradient well is compared to the background limit to assess whether there are statistically significant increases (SSIs). An "initial exceedance" occurs when an Appendix III constituent reported in the groundwater

of a downgradient detection monitoring well exceeds the constituent's associated PL. The 1-of-2 resample plan allows for collection of an independent resample. A confirmed exceedance is noted only when the resample confirms the initial exceedance by also exceeding the statistical limit. If the resample falls within its respective prediction limit, no exceedance is declared.

4.1.2 Appendix IV Statistical Methods

To statistically compare groundwater data to GWPS, confidence intervals are constructed for each of the detected Appendix IV constituents in each downgradient detection and assessment monitoring well with a minimum of four samples. In accordance with Section 21.1.1 of the Unified Guidance (USEPA, 2009), four independent data are the minimum population size recommended to construct confidence intervals required to assess SSLs for Appendix IV constituents. Due to previous non-routine (or ACM investigation) sampling, some Appendix IV constituents at a well location have differing number of analytical data points.

The confidence intervals are compared to the GWPS. Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its GWPS. If a confidence interval exceeds a GWPS, an SSL exceedance is identified.

USEPA revised the federal CCR Rule on July 30, 2018, updating GWPS for cobalt, lead, lithium, and molybdenum. As described in § 257.95(h)(1-3), the GWPS is defined by the below criteria. These criteria were adopted into the GA EPD Rules for Solid Waste Management 391-3-4-.10 on February 22, 2022.

- (1) The maximum contaminant level (MCL) established under § 141.62 and § 141.66.
- (2) Where an MCL has not been established:
 - (i) Cobalt 0.006 mg/L;
 - (ii) Lead 0.015 mg/L;
 - (iii) Lithium 0.04 mg/L; and
 - (iv) Molybdenum 0.1 mg/L.

- (3) Background levels for constituents where the background level is higher than the MCL or rule-specified GWPS.

Following the above requirements, GWPS have been established for statistical comparison of Appendix IV constituents and are presented in **Table 7**.

4.2 Statistical Analyses Results

Based on review of the Appendix III statistical analyses presented in **Appendix C**, groundwater conditions have not returned to background and assessment monitoring should continue. Based on review of the statistical analyses, select Appendix IV constituents exceeded the GWPS during the semiannual reporting period:

4.2.1 February 2024 Data

- Cobalt: HGWC-18, MW-33, and MW-35

Wells with SSLs were further evaluated using the Sen's Slope/Mann Kendall trend test (**Appendix C**). A statistically significant decreasing trend of cobalt was identified in February 2024 in HGWC-18. No statistically significant trends of cobalt were identified for MW-33 and MW-35 for the February 2024 data.

4.2.2 Summary of Statistical Analyses

The SSLs identified for the semiannual reporting period are generally consistent with the 2023 annual reporting period.

5.0 NATURE AND EXTENT

Based on statistical analysis of the groundwater data presented herein, the cobalt SSLs are horizontally and vertically delineated to below the site specific GWPS (0.038 mg/L) in HGWC-18, MW-33, and MW-35. The groundwater data from the February 2024 semiannual assessment monitoring event were used to generate the cobalt iso-concentration map presented on **Figure 4**.

Delineation is determined by confidence intervals (statistical analysis) prepared for the assessment wells (**Appendix C**). On the northwest side of AP- 2, HGWC-18 is vertically delineated by MW-21D. The conceptual site model on the south side of the pond consists of southerly groundwater flow through alluvium toward the Coosa River. MW-33 is vertically delineated by MW-34D upgradient of the river. However, as groundwater nears the Coosa River, it begins to flow upward and join the Coosa River. As such, to properly characterize the deeper groundwater south of MW-34D as it migrates downgradient, MW-51 was installed with a shallower screen interval to not only horizontally delineate cobalt at MW-35 but also to account for the upward movement of groundwater adjacent to the river. Statistical analysis of the MW-51 groundwater data delineates the horizontal extent of the SSLs of cobalt in MW-33 and MW-35 and the vertical extent of cobalt in MW-35 to below the GWPS. The elevated cobalt concentration reported in February 2024 for MW-51 (0.046 mg/L) is suspected to be an anomaly relative to the overall dataset; Georgia Power will continue to monitor this well and adaptively manage the site accordingly.

Due to the presence of a surface water feature (unnamed creek) west of AP-2 in the downgradient direction of HGWC-18 (refer to **Figure 2**), installation of additional wells to horizontally characterize this area is infeasible. For this reason, Georgia Power proactively began collecting surface water samples in July 2020. Cobalt was not detected above the laboratory reporting limit (0.0050 mg/L) in surface water samples collected in February 2024 from the three locations in the unnamed creek (AP2-Up, AP2-Mid, and AP2-Down) shown on **Figure 2**. No cobalt impacts to surface water have been detected; and therefore, the cobalt SSL observed in HGWC-18 is horizontally delineated.

Surface water samples were also collected from the Coosa River in February 2024. Three sampling locations (i.e., H+0.25, H+0.35, H+0.75) are in the vicinity of MW-33 and MW- 35 and relevant to conditions at AP-2. These three locations are shown on **Figure 2**. Cobalt was not detected above the laboratory reporting limit (0.0050 mg/L) in any of the

Coosa River samples. The February 2024 data associated with the unnamed creek and the Coosa River surface water sampling events are presented in **Table 6** and the laboratory reports are included in **Appendix B**.

6.0 MONITORING PROGRAM STATUS

6.1 Assessment Monitoring Status

Pursuant to § 257.96(b), Georgia Power will continue to monitor the groundwater at AP-2 in accordance with the assessment monitoring program regulations of § 257.95 while ACM efforts are implemented to address SSLs of cobalt in select AP-2 wells. Pursuant to § 257.95(g)(1)(iv), the assessment monitoring wells will continue to be sampled as part of the ongoing assessment groundwater monitoring program.

6.2 Assessment of Corrective Measures

A *Draft Remedy Selection Report* was submitted to GA EPD on August 31, 2022 (Geosyntec, 2022). The *Draft Remedy Selection Report* was submitted under separate cover and is currently being reviewed by GA EPD. The report summarizes:

- The current groundwater conceptual site model applicable to evaluating groundwater corrective measures proposed in the ACM Report (Geosyntec, 2019b);
- An evaluation of each corrective measure retained for further consideration following the completed investigations; and
- An evaluation of corrective measure options using the comparative criteria such as long- and short-term effectiveness and protectiveness, source control effectiveness, and ease of implementation. The *Draft Remedy Selection Report* presents geochemical approaches (in-situ injections) coupled with monitored natural attenuation as the proposed groundwater remedy for AP-2.

In the interim of GA EPD's review of the *Draft Remedy Selection Report*, the state agency issued a letter on September 23, 2022, stating their support for Georgia Power to initiate a pilot study at AP-2 to facilitate further remedy design. In June 2023, Georgia Power submitted to GA EPD both a Pilot Test Notification Form and separate workplans outlining the design and implementation of a pilot study in vicinity of HGWC-18 and MW-33/MW-35 (Geosyntec, 2023a, 2023b). GA EPD's Underground Injection Control (UIC) Program approved the Pilot Test Notification Form on August 24, 2023; Geosyntec completed the pilot study injections activities in September 2023 (Geosyntec, 2023d). A post-injection performance monitoring program was initiated in 2023 and continued into

the current 2024 reporting period. The laboratory reports and field logs associated with post-injection performance monitoring events conducted through November 2023 were provided with the prior annual groundwater monitoring report (Geosyntec, 2024). The groundwater analytical results from the post-injection performance monitoring events between December 2023 and June 2024 are summarized in **Table 8**; the laboratory reports and field logs associated with these results, and time series data trend plots for the entire dataset are provided in **Appendix D**. Results received after June 2024 will be summarized in the next groundwater monitoring and corrective action report.

Updates concerning the pilot study results will be reported to GA EPD as brief summaries included as part of subsequent semiannual groundwater monitoring and corrective action reporting. A comprehensive technical memorandum will be prepared at the conclusion of the post-injection performance monitoring program associated with the pilot study and submitted as a stand-alone document. This technical memorandum will summarize pilot study results and provide recommendations for the design and implementation of the full-scale groundwater remedy. If pilot study results support full-scale implementation, Georgia Power anticipates receiving written authorization from GA EPD to hold the public meeting with the selected remedy of geochemical approaches (in-situ injection) and monitored natural attenuation (MNA). After the public meeting, Georgia Power will revise the *Draft Remedy Selection Report*, incorporating results of the pilot study and public meeting comments.

7.0 CONCLUSIONS AND FUTURE ACTIONS

This *2024 Semiannual Groundwater Monitoring and Corrective Action Report* for Plant Hammond AP-2 was prepared to fulfill the requirements of the federal CCR Rule and GA EPD Rules for Solid Waste Management 391-3-4-.10. Statistical analyses of the groundwater monitoring data for AP-2 for the semiannual reporting period identified the continued presence of SSLs of cobalt in HGWC-18, MW-33, and MW-35. Based on statistical analysis of the most current groundwater quality, the SSLs are vertically and horizontally delineated to below the site specific GWPS.

Georgia Power will continue to monitor AP-2 groundwater under the assessment monitoring program as aspects of the ACM program are implemented to address the Appendix IV SSLs. A *Draft Remedy Selection Report*, which summarizes the evaluation and proposed selection of a corrective measure, or measures, was submitted to GA EPD on August 31, 2022 (Geosyntec, 2022). The next routine semiannual assessment monitoring event for AP- 2 is tentatively scheduled for August 2024. Progress made regarding the pilot studies and corrective action design will be documented in the next groundwater monitoring and corrective action report. A comprehensive technical memorandum will be prepared at the conclusion of the post-injection performance monitoring program associated with the pilot study.

8.0 REFERENCES

- Environmental Resource Management, 2017. *Statistical Analysis Method Certification 40 CFR § 257.93 – Plant Hammond Ash Pond 1 (AP-2) – Georgia Power Company*. October 2017.
- Environmental Resources Management, 2018. *2017 Annual Groundwater Monitoring and Corrective Action Report - Plant Hammond Ash Ponds 1 & 2 (AP-1 and AP- 2)*. Atlanta, Georgia. January 2018.
- Geosyntec, 2019a. *2018 Annual Groundwater Monitoring and Corrective Action Report – Plant Hammond Ash Ponds 1 & 2 (AP-1 and AP-2)*. January 2019.
- Geosyntec, 2019b. *Assessment of Corrective Measures Report – Plant Hammond Ash Pond 2 (AP-2)*. June 2019.
- Geosyntec, 2019c. *Hydrogeologic Assessment Report (Revision 1) – Plant Hammond Ash Pond 2 (AP-2)*. December 2019.
- Geosyntec, 2020. *Statistical Analysis Method Certification (REV 01) – Georgia Rule 391-3-4-.10(6) and 40 CFR § 257.93(f) – Plant Hammond Ash Pond 2 – Georgia Power Company*. January 2020.
- Geosyntec, 2021. *Groundwater Monitoring Plan – Plant Hammond Ash Pond 2 (AP-2)*. September 2021 revision.
- Geosyntec, 2022. *Draft Remedy Selection Report – Georgia Power Company Plant Hammond Ash Pond 2 (AP-2)*. August 2022
- Geosyntec, 2023a. *HGWC-18 Pilot Study Workplan – Plant Hammond Ash Pond 2 (AP-2)*. June 2023
- Geosyntec, 2023b. *MW-33 and MW-35 Pilot Study Workplan – Plant Hammond Ash Pond 2 (AP-2)*. June 2023
- Geosyntec, 2023c. *2022 Annual Groundwater Monitoring and Corrective Action Report – Plant Hammond Ash Pond 2 (AP-2)*. January 2023.
- Geosyntec, 2023d. *Pilot Study Post-Injection Event Report*. October 2023.

- Geosyntec, 2024. *2023 Annual Groundwater Monitoring and Corrective Action Report – Plant Hammond Ash Pond 2 (AP-2)*. January 2024.
- Golder Associates, 2018. *Geologic and Hydrogeologic Report – Plant Hammond*. November 2018.
- Kresic, Neven, 2007. *Hydrogeology and Groundwater Modeling, Second Edition*. CRC Press.
- Sanitas: Groundwater Statistical Software, v. 9.6.05 (2018). Sanitas Technologies[®], Boulder, Colorado.
- USEPA, 2009. *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance*. Office of Resource Conservation and Recovery – Program Implementation and Information Division. March 2009.
- USEPA, 2011. *Region IV Data Validation Standard Operating Procedures*. Science and Ecosystem Support Division. Region IV. Athens, GA. September 2011.
- USEPA, 2017. *National Functional Guidelines for Inorganic Superfund Methods Data Review*. Office of Superfund Remediation and Technology Innovation. OLEM 9355.0-135 [EPA-540-R-2017-001]. Washington, DC. January 2017.

TABLES

Table 1A
Monitoring Well Network Summary
Plant Hammond AP-2, Floyd County, Georgia

Well ID	Hydraulic Location	Installation Date	Northing ⁽¹⁾	Easting ⁽¹⁾	Ground Surface Elevation (ft)	Top of Casing Elevation ⁽¹⁾ (ft)	Top of Screen Elevation ⁽¹⁾ (ft)	Bottom of Screen Elevation ⁽¹⁾ (ft)	Well Depth (ft BTOC) ⁽²⁾	Screen Interval Length (ft)
Detection Monitoring Well										
HGWA-1	Upgradient	12/3/2014	1550423.32	1940770.00	592.32	595.21	573.12	563.12	32.49	10
HGWA-2	Upgradient	12/2/2015	1549796.87	1939845.15	585.29	587.92	570.29	560.29	27.95	10
HGWA-3	Upgradient	12/2/2015	1549794.41	1939833.39	585.23	587.74	553.23	543.23	44.51	10
HGWA-4	Upgradient	12/3/2014	1549930.45	1939385.45	584.94	587.60	572.24	562.24	25.76	10
HGWA-5	Upgradient	12/10/2015	1548633.33	1937184.17	580.52	583.24	564.92	554.92	28.72	10
HGWA-6	Upgradient	12/11/2015	1548636.35	1937177.73	580.72	583.38	543.72	533.72	49.66	10
HGWA-42D	Upgradient	8/27/2020	1549363.72	1938443.86	583.39	586.17	528.39	518.39	68.03	10
HGWA-43D	Upgradient	8/26/2020	1550422.85	1940753.80	592.08	595.08	544.08	534.08	61.25	10
HGWA-44D	Upgradient	8/25/2020	1550409.13	1940756.18	592.01	594.79	491.76	481.76	113.28	10
HGWC-14	Downgradient	10/16/2014	1547998.96	1938406.27	594.67	597.25	564.67	554.67	42.98	10
HGWC-15	Downgradient	10/20/2014	1547875.33	1937854.92	578.73	581.49	553.93	543.93	37.96	10
HGWC-16	Downgradient	10/21/2014	1548209.83	1937540.33	577.36	580.02	557.36	547.36	33.06	10
HGWC-17	Downgradient	10/22/2014	1548449.71	1937538.98	581.51	584.30	566.91	556.91	27.79	10
HGWC-18	Downgradient	10/22/2014	1548821.27	1937558.32	581.36	584.18	566.86	556.86	27.71	10
Assessment Monitoring Well										
MW-21D	Downgradient	11/19/2018	1548814.86	1937555.78	581.16	583.84	542.36	532.36	51.88	10
MW-22	Downgradient	11/15/2018	1547854.68	1937832.04	576.05	578.51	551.45	541.45	37.47	10
MW-23D	Downgradient	11/15/2018	1547876.55	1937843.89	579.06	581.30	529.46	519.46	62.24	10
MW-33	Downgradient	11/21/2019	1547973.50	1938412.13	591.19	593.92	566.60	556.60	37.72	10
MW-34D	Downgradient	5/6/2020	1547996.82	1938392.20	593.83	596.51	530.48	520.48	73.68	10
MW-35	Downgradient	5/13/2020	1547905.33	1938417.82	571.88	574.40	558.70	548.70	23.52	10
MW-37D	Downgradient	5/8/2020	1548803.01	1937551.05	580.95	583.58	514.65	504.65	76.63	10
MW-51	Downgradient	7/22/2021	1547872.35	1938421.46	571.57	574.54	556.47	546.47	28.90	10

Notes:

ft = feet

BTOC = below top of casing

(1) Coordinates in North American Datum (NAD) 1983, State Plane, Georgia-West, feet. Elevations referenced to the North American Vertical Datum of 1988 (NAVD88). Survey completed by GEL Solutions dated May 19, 2020 and September 10, 2020 (for HGWA-42D, HGWA-43D, and HGWA-44D), September 8, 2021 (for MW-51), and April 11, 2022 (for MW-52).

(2) Total well depth accounts for sump if data provided on well construction logs.

Table 1B
Piezometer Network Summary
Plant Hammond AP-2, Floyd County, Georgia

Well ID	Hydraulic Location	Installation Date	Northing ⁽¹⁾	Easting ⁽¹⁾	Ground Surface Elevation (ft)	Top of Casing Elevation ⁽¹⁾ (ft)	Top of Screen Elevation ⁽¹⁾ (ft)	Bottom of Screen Elevation ⁽¹⁾ (ft)	Well Depth (ft BTOC) ⁽²⁾	Screen Interval Length (ft)
MW-8	Downgradient	10/29/2014	1548171.86	1940016.70	584.25	586.93	565.05	555.05	32.72	10
MW-9	Downgradient	10/29/2014	1548131.38	1938922.16	588.42	590.95	569.12	559.12	32.95	10
MW-12	Downgradient	10/21/2014	1547853.78	1937525.46	580.59	583.27	555.79	545.79	38.94	10
MW-16	Upgradient	10/27/2014	1549104.17	1937940.06	571.70	574.22	562.20	552.20	23.42	10
MW-17	Upgradient	10/28/2014	1549163.28	1938345.81	583.68	586.78	568.98	558.98	29.09	10
MW-18	Upgradient	10/29/2014	1548984.15	1938712.73	589.75	592.28	571.05	561.05	32.42	10
MW-36D	Downgradient	5/7/2020	1548435.43	1937538.19	581.44	584.10	534.12	524.12	57.65	10
MW-52	Upgradient	1/25/2022	1549277.59	1938398.82	583.25	586.11	573.29	563.29	20.29	10
MW-55	Downgradient	6/13/2023	1548823.40	1937575.72	582.78	582.49	566.88	556.88	26.20	10
MW-56	Downgradient	6/16/2023	1547906.81	1938260.81	570.60	573.47	559.60	549.60	24.27	10
MW-57	Downgradient	6/16/2023	1547895.53	1938349.49	571.30	574.28	560.30	550.30	24.18	10
MW-58	Downgradient	6/17/2023	1547931.46	1938592.55	572.96	575.87	559.46	549.46	26.81	10
MW-59	Downgradient	6/14/2023	1547971.14	1938344.65	589.52	592.20	559.52	549.52	42.58	10
INW-01	Downgradient	6/16/2023	1547921.52	1938350.62	571.04	573.90	561.04	551.04	23.26	10
INW-02	Downgradient	6/6/2023	1548915.00	1937643.89	580.78	580.56	555.78	545.78	35.40	10
PT-01	Downgradient	6/17/2023	1547916.85	1938348.81	571.14	574.13	561.24	551.24	23.29	10
PT-02	Downgradient	6/16/2023	1547917.68	1938353.52	571.10	574.06	561.10	551.10	23.36	10
PT-03	Downgradient	6/17/2023	1547910.57	1938352.13	571.10	574.09	559.10	549.10	23.39	10
PT-04	Downgradient	6/6/2023	1548918.26	1937641.91	580.50	580.26	556.70	546.70	34.21	10
PT-05	Downgradient	6/12/2023	1548913.06	1937638.48	580.83	580.54	555.73	545.73	35.50	10
PT-06	Downgradient	6/7/2023	1548916.95	1937634.25	580.68	580.36	555.18	545.18	35.39	10

Notes:

ft = feet

BTOC = below top of casing

(1) Coordinates in North American Datum (NAD) 1983, State Plane, Georgia-West, feet. Elevations referenced to the North American Vertical Datum of 1988 (NAVD88). Survey completed by GEL Solutions dated May 19, 2020 and April 11, 2022 (for MW-52), and July 17 and August 30, 2023 (for MW-55 through MW-59, INW-01, INW-02, PT-01 through PT-06).

(2) Total well depth accounts for sump if data provided on well construction logs.

Table 2
Groundwater Sampling Event Summary
Plant Hammond AP-2, Floyd County, Georgia

Well ID	Hydraulic Location	February 12 - 20, 2024	Status of Monitoring Well
Purpose of Sampling Event:		Assessment	
<i>Detection Monitoring Well</i>			
HGWA-1	Upgradient	X	Assessment
HGWA-2	Upgradient	X	Assessment
HGWA-3	Upgradient	X	Assessment
HGWA-4	Upgradient	X	Assessment
HGWA-5	Upgradient	X	Assessment
HGWA-6	Upgradient	X	Assessment
HGWA-42D	Upgradient	X	Assessment
HGWA-43D	Upgradient	X	Assessment
HGWA-44D	Upgradient	X	Assessment
HGWC-14	Downgradient	X	Assessment
HGWC-15	Downgradient	X	Assessment
HGWC-16	Downgradient	X	Assessment
HGWC-17	Downgradient	X	Assessment
HGWC-18	Downgradient	X	Assessment
<i>Assessment Monitoring Well</i>			
MW-21D	Downgradient	X	Assessment
MW-22	Downgradient	X	Assessment
MW-23D	Downgradient	X	Assessment
MW-33	Downgradient	X	Assessment
MW-34D	Downgradient	X	Assessment
MW-35	Downgradient	X	Assessment
MW-37D	Downgradient	X	Assessment
MW-51	Downgradient	X	Assessment

Table 3
Summary of Groundwater and Surface Water Elevations
Plant Hammond AP-2, Floyd County, Georgia

Well ID	Top of Casing Elevation (ft)	February 12, 2024	
		Depth to Water (ft BTOC)	Groundwater Elevation (ft)
Detection Monitoring Well			
HGWA-1	595.21	17.30	577.91
HGWA-2	587.92	14.21	573.71
HGWA-3	587.74	13.80	573.94
HGWA-4	587.60	7.75	579.85
HGWA-5	583.24	6.86	576.38
HGWA-6	583.38	5.64	577.74
HGWA-42D	586.17	9.25	576.92
HGWA-43D	595.08	17.35	577.73
HGWA-44D	594.79	18.48	576.31
HGWC-14	597.25	31.25	566.00
HGWC-15	581.49	15.83	565.66
HGWC-16	580.02	14.66	565.36
HGWC-17	584.30	19.40	564.90
HGWC-18	584.18	17.27	566.91
Piezometer			
MW-8	586.93	21.48	565.45
MW-9	590.95	21.44	569.51
MW-12	583.27	17.40	565.87
MW-16	574.22	4.45	569.77
MW-17	586.78	8.05	578.73
MW-18	592.28	19.87	572.41
MW-36D	584.10	18.47	566.55
MW-52	586.11	7.64	578.47
MW-55	582.49	16.27	566.22
MW-56	573.47	8.86	564.61
MW-57	574.28	9.34	564.94
MW-58	575.87	9.11	566.76
MW-59	592.20	27.15	565.05
INW-01	573.90	7.83	566.07
INW-02	580.56	12.21	568.35
PT-01	574.13	8.59	565.54
PT-02	574.06	8.91	565.15
PT-03	574.09	8.93	565.16
PT-04	580.26	11.88	568.38
PT-05	580.54	12.15	568.39
PT-06	580.36	11.81	568.55
Assessment Monitoring Well			
MW-21D	583.84	17.55	566.29
MW-22	578.51	14.24	564.27
MW-23D	581.30	17.65	563.65
MW-33	593.92	27.81	566.11
MW-34D	596.51	31.74	564.77
MW-35	574.40	7.87	566.53
MW-37D	583.58	17.25	566.33
MW-51	574.54	8.58	565.96
Surface Water Level Gauge Point			
Coosa River ⁽¹⁾	--	--	562.50
Unnamed Creek	580.14 ⁽²⁾	16.75	563.39

Notes:

-- = not measured or not applicable

ft = feet

BTOC = below top of casing

(1) Coosa River staff gauge located approximately 3,250 feet upstream of the confluence of the Unnamed Creek with the Coosa River.

(2) Surveyed reference point located midway across the service bridge located immediately west of AP-2 (Figure 3). The value presented in the "Depth to Water" column represents the measured distance from the bridge to the top of water, in feet.

Table 4
Horizontal Groundwater Gradient and Flow Velocity Calculations
Plant Hammond AP-2, Floyd County, Georgia

February 12, 2024				
Flow Path Direction ⁽¹⁾	h_1 (ft)	h_2 (ft)	L (ft)	i (ft/ft)
Westerly Flow Path (MW-18 to HGWC-17)	572.41	564.90	1,350	0.006

February 2024				
Flow Path Direction ⁽¹⁾	K_h (ft/d)	n_e	i (ft/ft)	V (ft/d) ⁽²⁾
Westerly Flow Path (MW-18 to HGWC-17)	1.47	0.15	0.006	0.055

Notes:

ft = feet

ft/day = feet per day

ft/ft = feet per foot

h_1 and h_2 = groundwater elevation at location 1 and 2

$i = h_1 - h_2 / L$ = horizontal hydraulic gradient

K_h = horizontal hydraulic conductivity

L = distance between location 1 and 2 along the flow path

n_e = effective porosity

V = groundwater flow velocity

(1) Flow path direction relative to the orientation of AP-2 and illustrated on Figures 3 of associated report.

(2) Groundwater flow velocity equation: $V = [K_h * i] / n_e$

Table 5
Summary of Assessment Monitoring Groundwater Analytical Data
Plant Hammond AP-2, Floyd County, Georgia

Well ID:		HGWA-1	HGWA-2	HGWA-3	HGWA-4	HGWA-5	HGWA-6	HGWA-42D	HGWA-43D	HGWA-44D	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D	MW-22
Sample Date:		2/13/2024	2/13/2024	2/13/2024	2/13/2024	2/13/2024	2/13/2024	2/13/2024	2/13/2024	2/13/2024	2/17/2024	2/17/2024	2/18/2024	2/17/2024	2/18/2024	2/18/2024	2/18/2024
APPENDIX III	Parameter ^(1,2,3)																
	Boron	0.02 J	0.051	<0.012	0.023 J	<0.012	0.015 J	0.045	0.037 J	0.49	7.3	1.8	2.3	5.7	7	2.3	2.2
	Calcium	116	38.8	83.6	31.1	20.6	55.4	47.7	53.3	9.9	418	175	199	199	347	104	186
	Chloride	10	6.3	5.3	1.4	1.8	1.4	4.1	3.9	27.7	88.9	70.2	87.5	81.7	99	29.7	98.8
	Fluoride	0.071 J	0.17	<0.05	0.13	0.06	0.065 J	0.087 J	0.2	1.5	0.065 J	0.064 J	<0.05	0.057 J	0.17	<0.05	<0.05
	pH	7.06	5.49	7.35	5.98	6.66	7.59	7.68	7.47	8.10	5.05	6.56	7.12	6.54	4.73	7.19	5.57
	Sulfate	50.4	93.9	35.5	64.6	21.8	35.3	17.1	28.9	2	898	305	220	260	755	150	427
	TDS	402	214	284	176	155	240	212	291	379	1720	830	755	815	1360	477	994
APPENDIX IV	Antimony	<0.00054	<0.00054	<0.00054	<0.00054	<0.00054	<0.00054	<0.00054	<0.00054	<0.00054	<0.00054	0.0014 J	<0.00054	<0.00054	<0.00054	<0.00054	<0.00054
	Arsenic	<0.00084	<0.00084	<0.00084	<0.00084	<0.00084	<0.00084	<0.00084	0.00097 J	0.0014 J	0.0026 J	<0.00084	<0.00084	<0.00084	0.0027 J	<0.00084	<0.00084
	Barium	0.039	0.062	0.13	0.054	0.048	0.19	0.23	0.28	0.12	0.02	0.017	0.098	0.023	0.02	0.034	0.012
	Beryllium	<0.000094	0.00022 J	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	0.00044 J	<0.000094	<0.000094	<0.000094	0.0022	<0.000094	<0.000094
	Cadmium	<0.0001	0.00027 J	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00084	<0.0001	<0.0001	0.0015	<0.0001	0.0018
	Chromium	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	0.01	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019
	Cobalt	<0.00032	0.022	<0.00032	0.00056 J	0.00039 J	<0.00032	<0.00032	<0.00032	<0.00032	0.038	0.0058	<0.00032	0.0036 J	0.15	<0.00032	0.019
	Fluoride	0.071 J	0.17	<0.05	0.13	0.059 J	0.065 J	0.087 J	0.2	1.5	0.065 J	0.064 J	<0.05	0.057 J	0.17	<0.05	<0.05
	Lead	<0.00016	0.00018 J	<0.00016	0.00019 J	<0.00016	<0.00016	0.00085 J	<0.00016	<0.00016	0.0012	<0.00016	<0.00016	<0.00016	0.0011	<0.00016	<0.00016
	Lithium	<0.0016	0.0017 J	0.0034 J	<0.0016	0.0032 J	0.01 J	0.011 J	0.0024 J	0.088	0.0029 J	0.014 J	0.003 J	<0.0016	0.0098 J	0.012 J	<0.0016
	Mercury	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
	Molybdenum	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	0.0021 J	0.0015 J	0.0018 J	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	0.015	<0.00062
	Comb. Radium 226/228	0.194 U	0.325 U	0.213 U	0.721 U	0.0243 U	0.153 U	0.168 U	0.86 U	0.909	0.439 U	0.576 U	0.248 U	0.633 U	0.757 U	0.127 U	0.471 U
	Selenium	<0.00096	0.002 J	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	0.0056	<0.00096	<0.00096	<0.00096	0.013	<0.00096	<0.00096
	Thallium	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038
GEOCHEM	Bicarbonate Alkalinity	303	42.6	213	28.2	91.1	157	152	231	292	<5	146	200	200	<5	127	32
	Iron	0.034 J	0.15	0.94	0.2	5.2 J	0.5	0.68	0.42	0.19	1.2	0.028 J	1.6	0.14	0.2	4.1	0.033 J
	Magnesium	4.8	4.4	5.3	6	1.2	10.1	7.3	17.9	4.5	36	28.6	15.4	22.8	29.5	17	37.1
	Manganese	0.12	0.78	0.26	0.036 J	0.065	<0.11	<0.056	0.017 J	<0.011	3.3	8.8	0.051	0.66	4.4	0.24	11
	Potassium	0.59	1.4	0.52	2.2	11.6	<1.5	0.45 J	0.89	3	10.9	1	0.77	2.2	9.5	0.74	0.76
	Sodium	21.2	11.6	6.2	3.6	4	8.4 J	8.8	20.6	140	9.4	11.3	9.9	11.3	10.2	8	12.4
	Sulfide	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	0.034 J	0.19	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022

Notes:
< = Indicates the parameter was not detected above the analytical MDL.
J = Indicates the parameter was estimated and detected between the MDL and the reporting limit (RL).
TDS = Total dissolved solids
U = Indicates the parameter was not detected above the analytical minimum detectable concentration (MDC) (Specific to combined radium 226/228).
(1) Appendix III/IV parameter per 40 CFR 257 Subpart D. Parameters are reported in units of milligrams per liter (mg/L), except for pH reported as s.u. (standard units) and combined radium reported as picocuries per liter (pCi/L).
(2) Metals were analyzed by EPA Methods 6010D, 6020B and 7470A, anions were analyzed by EPA Method 300.0 Rev 2.1, ions were analyzed by EPA Method 6010D, alkalinity was analyzed by SM2320B, sulfide was analyzed by SM4500-S2D, TDS was analyzed by SM2540C, and combined radium by EPA Methods 9315/9320.
(3) The pH value presented was recorded at the time of sample collection in the field.

Table 5
Summary of Assessment Monitoring Groundwater Analytical Data
Plant Hammond AP-2, Floyd County, Georgia

Well ID:		MW-23D	MW-33	MW-34D	MW-35	MW-37D	MW-51
Sample Date:		2/18/2024	2/18/2024	2/18/2024	2/19/2024	2/18/2024	2/19/2024
	Parameter ^(1,2,3)						
APPENDIX III	Boron	2.8	5.4	8.1	8.4	0.12	7.9
	Calcium	286	337	458	473	52.7	486
	Chloride	116	65.5	143	150	7.8	125
	Fluoride	<0.05	0.088 J	<0.05	0.16	0.05 J	0.12
	pH	6.92	4.74	7.02	5.51	7.65	6.08
	Sulfate	401	820	918	1060	30.4	1010
	TDS	1260	2160	2010	2120	269	2040
APPENDIX IV	Antimony	0.00057 J	<0.00054	<0.00054	<0.00054	<0.00054	<0.00054
	Arsenic	<0.00084	0.0024 J	0.00099 J	0.0073 J	<0.00084	0.0067 J
	Barium	0.041	0.016	0.033	0.021	0.15	0.028
	Beryllium	<0.000094	0.00059	<0.000094	0.00064	<0.000094	0.00047 J
	Cadmium	0.00017 J	0.00014 J	0.0008	0.0013	<0.0001	0.00067
	Chromium	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019
	Cobalt	0.00086 J	0.042	0.0067	0.084	<0.00032	0.046
	Fluoride	<0.05	0.088 J	<0.05	0.16	0.05 J	0.12
	Lead	<0.00016	0.00084 J	<0.00016	0.0006 J	<0.00016	<0.00016
	Lithium	0.0016 J	<0.0016	<0.0016	0.0031 J	0.021 J	0.0017 J
	Mercury	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
	Molybdenum	0.0047 J	<0.00062	<0.00062	<0.00062	0.0016 J	<0.00062
	Comb. Radium 226/228	0.339 U	0.552 U	0.515 U	1.43	0.535 U	0.995 U
	Selenium	<0.00096	0.011	<0.00096	0.0057	<0.00096	0.0019 J
	Thallium	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038
GEOCHEM	Bicarbonate Alkalinity	247	<5	96.1	9.6	163	56.1
	Iron	0.1	0.058	0.09	0.04 J	0.17	1.1
	Magnesium	28.4	30.9	41.6	54.7	10.9	48.3
	Manganese	5.2	3.6	3.7	8.2	0.015 J	7.2
	Potassium	1.9	9.3	9.2	7.4	0.69	8
	Sodium	12.1	13.5	11.2	18.5	11.3	14.3
	Sulfide	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022

Table 6
Summary of Surface Water Sampling Analytical Data
Plant Hammond AP-2, Floyd County, Georgia

		Unnamed Creek Sample Locations ⁽³⁾			Coosa River Sample Locations ⁽³⁾		
Sample ID:		HAM-AP2-Up	HAM-AP2-Mid	HAM-AP2-Down	HAM-H+0.25	HAM-H+0.35	HAM-H+0.75
Sample Date:		2/16/2024	2/16/2024	2/16/2024	2/16/2024	2/16/2024	2/16/2024
Parameter ^(1,2)							
APP. III	Boron	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
	Calcium	26.1	26.5	23.4	9.7	10.1	10.3
	Chloride	1.1	1.3	1.6	3.8	3.7	3.8
	Fluoride	1.2	<0.10	<0.10	<0.10	<0.10	<0.10
	Sulfate	6.3	8.1	7.9	5.4	5.5	6.2
	TDS	196	107	116	75.0	75.0	79.0
APP. IV	Cobalt	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
GEOCHEM	Bicarbonate Alkalinity	74.8	74.6	68.8	29.9	30.0	30.4
	Total Alkalinity	74.8	74.6	68.8	29.9	30.0	30.4
	Magnesium	2.9	2.9	2.9	2.5	2.6	2.6
	Potassium	0.68	0.75	0.99	2.8	1.9	1.9
	Sodium	1.6	1.6	1.9	3.3	3.5	3.9

Notes:

< = Indicates the parameter was not detected above the analytical reporting limit (RL).

TDS = Total dissolved solids

(1) Appendix III/IV parameter per 40 CFR 257 Subpart D. Parameters are reported in units of milligrams per liter (mg/L).

(2) Metals were analyzed by EPA Method 6010D/6020B, anions were analyzed by EPA Method 300.0, TDS was analyzed by SM2540C, and alkalinity by SM2320B-2011.

(3) Refer to Figure 2 for locations. Sample locations are presented as positioned relative to the plant, beginning with upstream locations.

Table 7
Summary of Background Concentrations and Groundwater Protection Standards
Plant Hammond AP-2, Floyd County, Georgia

Analyte	Units	MCL	CCR-Rule Specified ⁽¹⁾	Background Limit ⁽²⁾	GWPS ⁽³⁾
Antimony	mg/L	0.006	N/A	0.003	0.006
Arsenic	mg/L	0.01	N/A	0.005	0.01
Barium	mg/L	2	N/A	0.46	2
Beryllium	mg/L	0.004	N/A	0.0005	0.004
Cadmium	mg/L	0.005	N/A	0.0005	0.005
Chromium	mg/L	0.1	N/A	0.0019	0.1
Cobalt	mg/L	N/A	0.006	0.038	0.038
Fluoride	mg/L	4	N/A	1.5	4
Lead	mg/L	N/A	0.015	0.001	0.015
Lithium	mg/L	N/A	0.04	0.064	0.064
Mercury	mg/L	0.002	N/A	0.0002	0.002
Molybdenum	mg/L	N/A	0.1	0.01	0.1
Selenium	mg/L	0.05	N/A	0.005	0.05
Thallium	mg/L	0.002	N/A	0.001	0.002
Combined Radium-226/228	pCi/L	5	N/A	1.58	5

Notes:

mg/L = milligrams per liter

pCi/L = picocuries per liter

MCL = Maximum Contaminant Level

CCR = Coal Combustion Residuals

GWPS = Groundwater Protection Standard

N/A = Not Applicable

(1) On February 22, 2022, the Georgia Environmental Protection Division (GA EPD) adopted the federally promulgated GWPS for cobalt, lithium, lead, and molybdenum.

(2) The background limits were used when determining the GWPS under 40 CFR 257.95(h) and GA EPD Rule 391-3-4-.10(6)(a).

(3) Under 40 CFR 257.95(h)(1-3) the GWPS is: (i) the maximum contaminant level (MCL) established under §§141.62 and 141.66 of this title; (ii) where an MCL has not been established a rule-specific GWPS; or (iii) background levels for constituents where the background level is higher than the MCL or rule-specified GWPS.

Table 8
Summary of Pilot Study Groundwater Analytical Data
Plant Hammond AP-2, Floyd County, Georgia

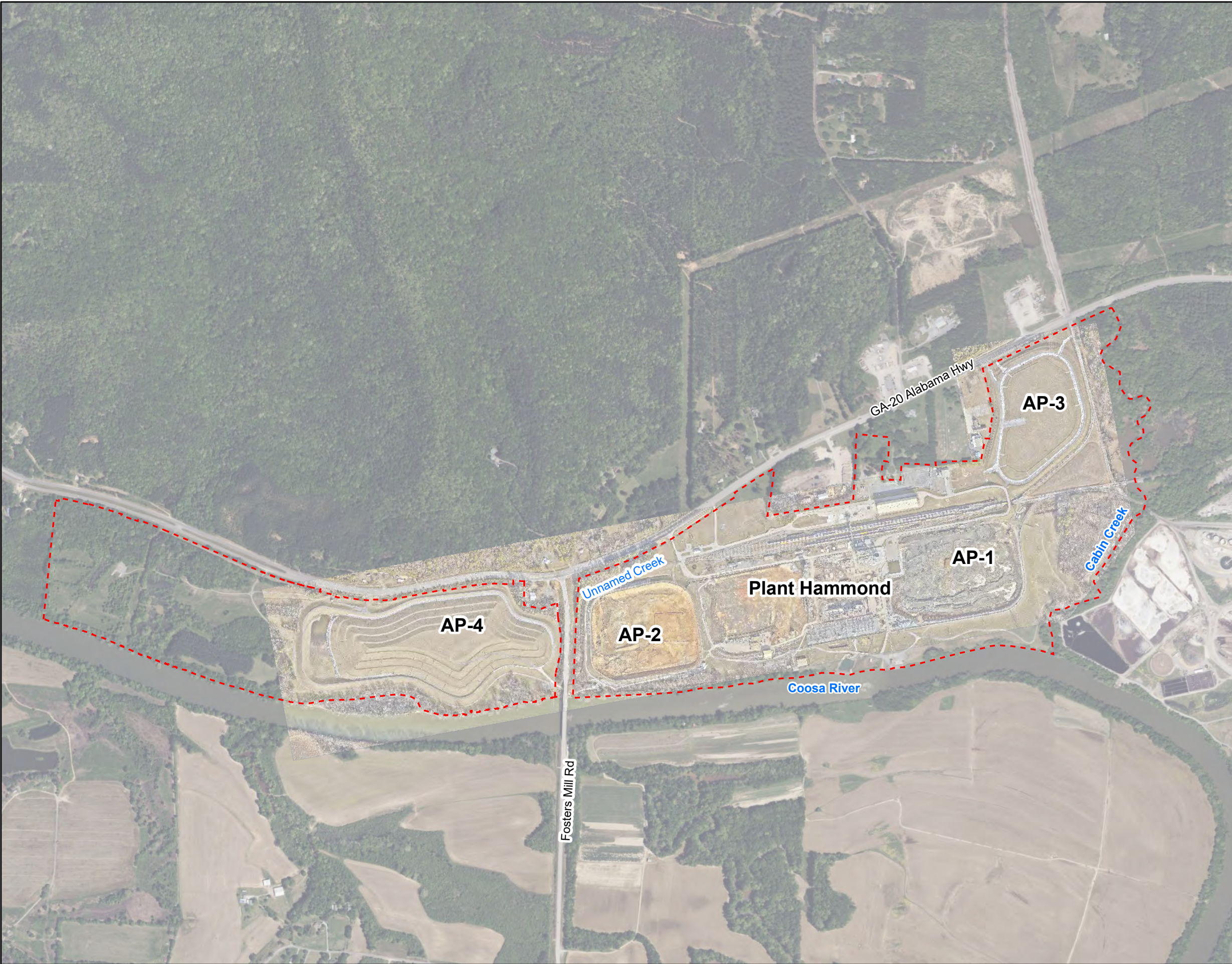
Well ID:		PT-01	PT-01	PT-01	PT-01	PT-02	PT-02	PT-02	PT-02	PT-03	PT-03	PT-03	PT-03	PT-04	PT-04	PT-04	PT-04
Sample Date:		12/20/2023	1/24/2024	2/19/2024	5/13/2024	12/20/2023	1/24/2024	2/20/2024	5/13/2024	12/20/2023	1/24/2024	2/20/2024	5/13/2024	12/20/2023	1/24/2024	2/21/2024	5/13/2024
Parameter ^(1,2,3)																	
APPENDIX III	Boron	6.8	3.5	2.3	1.8	4.2	5.3	4.0	5.4	7.0	7.8	6.0	5.9	5.5	6.8	6.2	6.6
	Calcium	--	--	96.6	63.3	--	--	158	218	--	--	275	242	--	--	244	257
	Chloride	--	--	53.0	13.5	--	--	87.3	112	--	--	96.0	91.0	--	--	113	123
	Fluoride	--	--	0.24	0.20	--	--	0.15	0.12	--	--	0.57	0.48	--	--	0.13	0.081 J
	pH (s.u.)	6.67	6.60	6.83	6.44	6.78	6.57	6.63	6.39	5.18	4.94	5.15	5.14	6.68	6.69	6.67	6.53
	Sulfate	--	--	279	134	--	--	516	690	--	--	758	656	--	--	451	462
	TDS	--	--	810	399	--	--	1820	1460	--	--	1480	1230	--	--	1370	1320
APPENDIX IV	Antimony	--	--	< 0.00054	< 0.00054	--	--	0.00060 J	0.0011 J	--	--	< 0.00054	< 0.00054	--	--	< 0.00054	< 0.00054
	Arsenic	--	--	0.0033 J	0.0017 J	--	--	0.0036 J	0.0016 J	--	--	0.0067	0.0028 J	--	--	0.0086	0.0058
	Barium	--	--	0.036	0.027	--	--	0.042	0.040	--	--	0.024	0.019	--	--	0.045	0.035
	Beryllium	--	--	< 0.000094	< 0.000094	--	--	< 0.000094	< 0.000094	--	--	0.0017	0.0015	--	--	< 0.000094	< 0.000094
	Cadmium	--	--	< 0.00010	< 0.00010	--	--	< 0.00010	< 0.00010	--	--	0.00058	0.00051	--	--	< 0.00010	< 0.00010
	Chromium	--	--	< 0.0019	< 0.0019	--	--	< 0.0019	< 0.0019	--	--	< 0.0019	< 0.0019	--	--	< 0.0019	< 0.0019
	Cobalt	0.020	0.0045 J	0.014	0.0051	0.012	0.0078	0.029	0.027	0.14	0.11	0.092	0.075	0.031	0.031	0.039	0.039
	Fluoride	--	--	0.24	0.20	--	--	0.15	0.12	--	--	0.57	0.48	--	--	0.13	0.081 J
	Lead	--	--	0.00020 J	< 0.00016	--	--	< 0.00016	< 0.00016	--	--	0.0012	0.0012	--	--	< 0.00016	< 0.00016
	Lithium	--	--	< 0.0016	< 0.0016	--	--	< 0.0016	< 0.0016	--	--	< 0.0016	< 0.0016	--	--	0.0031 J	0.0028 J
	Mercury	--	--	< 0.00013	< 0.00013	--	--	< 0.00013	< 0.00013	--	--	< 0.00013	< 0.00013	--	--	< 0.00013	< 0.00013
	Molybdenum	--	--	< 0.00062	< 0.00062	--	--	< 0.00062	< 0.00062	--	--	< 0.00062	< 0.00062	--	--	0.0011 J	0.00072 J
	Selenium	--	--	< 0.00096	< 0.00096	--	--	< 0.00096	< 0.00096	--	--	0.0085	0.0078	--	--	< 0.00096	< 0.00096
	Thallium	--	--	< 0.00038	< 0.00038	--	--	< 0.00038	< 0.00038	--	--	< 0.00038	< 0.00038	--	--	0.00053 J	0.00046 J
GEOCHEM	Alkalinity (Bicarbonate as CaCO3)	859	243	253	143	1290	680	355	263	13.5	11.3	9.8	9.2	551	462	412	343
	Alkalinity (Carbonate as CaCO3)	--	--	< 5.0	< 5.0	--	--	< 5.0	< 5.0	--	--	< 5.0	< 5.0	--	--	< 5.0	< 5.0
	Alkalinity (total) as CaCO3	859	243	253	143	1290	680	355	263	13.5	11.3	9.8	9.2	551	462	412	343
	Iron	--	--	10.1	4.1	--	--	13.2	7.9	--	--	0.075	< 0.025	--	--	4.6	5.2
	Magnesium	--	--	11.3	7.6	--	--	18.4	23.8	--	--	27.0	24.0	--	--	20.2	21.1
	Manganese	--	--	6.6	1.4	--	--	9.6	9.2	--	--	5.4	4.7	--	--	11.1	13.3
	Potassium	--	--	15.2	19.2	--	--	7.3	5.3	--	--	5.6	5.4	--	--	8.6	7.6
	Sodium	--	--	145	41.0	--	--	256	209	--	--	44.6	42.9	--	--	163	125
	Sulfide	--	--	< 0.022	0.044 J	--	--	< 0.022	< 0.022	--	--	< 0.022	< 0.022	--	--	< 0.022	< 0.022

Notes:
< = Indicates the parameter was not detected above the analytical Method Detection Limit (MDL).
J = Indicates the parameter was estimated and detected between the MDL and the reporting limit (RL).
TDS = Total dissolved solids
U = Indicates the parameter was not detected above the analytical minimum detectable concentration (MDC) (Specific to combined radium 226/228).
(1) Appendix III/IV parameter per 40 CFR 257 Subpart D. Parameters are reported in units of milligrams per liter (mg/L), except for pH reported as s.u. (standard units) and combined radium reported as picocuries per liter (pCi/L).
(2) Metals were analyzed by EPA Methods 6010D, 6020B and 7470A, anions were analyzed by EPA Method 300.0 Rev 2.1, ions were analyzed by EPA Method 6010D, alkalinity was analyzed by SM2320B, sulfide was analyzed by SM4500-S2D, TDS was analyzed by SM2540C, and combined radium by EPA Methods 9315/9320.
(3) The pH value presented was recorded at the time of sample collection in the field.


Table 8
Summary of Pilot Study Groundwater Analytical Data
Plant Hammond AP-2, Floyd County, Georgia

Well ID:		PT-05	PT-05	PT-05	PT-05	PT-06	PT-06	PT-06	PT-06
Sample Date:		12/20/2024	1/24/2024	2/20/2024	5/13/2024	12/20/2023	1/24/2024	2/21/2024	5/13/2024
Parameter ^(1,2,3)									
APPENDIX III	Boron	4.5	4.9	5.1	5.3	4.9	6.4	6.6	6.9
	Calcium	--	--	186	167	--	--	226	244
	Chloride	--	--	99.1	104	--	--	125	136
	Fluoride	--	--	0.060 J	0.079 J	--	--	< 0.050	0.063 J
	pH (s.u.)	7.00	6.84	6.70	6.62	6.79	6.64	6.63	6.43
	Sulfate	--	--	460	452	--	--	498	505
	TDS	--	--	1740	1600	--	--	1530	1420
APPENDIX IV	Antimony	--	--	< 0.00054	< 0.00054	--	--	< 0.00054	< 0.00054
	Arsenic	--	--	0.0025 J	< 0.00084	--	--	0.0052	0.0021 J
	Barium	--	--	0.042	0.034	--	--	0.036	0.030
	Beryllium	--	--	< 0.000094	< 0.000094	--	--	< 0.000094	< 0.000094
	Cadmium	--	--	0.00021 J	0.00010 J	--	--	0.00018 J	0.00015 J
	Chromium	--	--	< 0.0019	< 0.0019	--	--	< 0.0019	< 0.0019
	Cobalt	0.0066	0.0069	0.014	0.012	0.020	0.020	0.028	0.028
	Fluoride	--	--	0.060 J	0.079 J	--	--	< 0.050	0.063 J
	Lead	--	--	< 0.00016	< 0.00016	--	--	< 0.00016	< 0.00016
	Lithium	--	--	0.0031 J	0.0032 J	--	--	0.0040 J	0.0038 J
	Mercury	--	--	< 0.00013	< 0.00013	--	--	< 0.00013	< 0.00013
	Molybdenum	--	--	0.00097 J	0.00086 J	--	--	< 0.00062	< 0.00062
GEOCHEM	Selenium	--	--	< 0.00096	< 0.00096	--	--	< 0.00096	< 0.00096
	Thallium	--	--	< 0.00038	< 0.00038	--	--	0.00046 J	< 0.00038
	Alkalinity (Bicarbonate as CaCO3)	1260	1060	795	766	827	610	451	342
	Alkalinity (Carbonate as CaCO3)	--	--	< 5.0	< 5.0	--	--	< 5.0	< 5.0
	Alkalinity (total) as CaCO3	1260	1060	795	766	827	610	451	342
	Iron	--	--	0.21	0.40	--	--	1.4	0.94
	Magnesium	--	--	19.5	17.3	--	--	18.7	20.3
	Manganese	--	--	3.5	3.1	--	--	10.5	12.3
	Potassium	--	--	4.3	4.7	--	--	6.3	6.2
	Sodium	--	--	458	389	--	--	225	146
	Sulfide	--	--	< 0.022	< 0.022	--	--	< 0.022	< 0.022

FIGURES

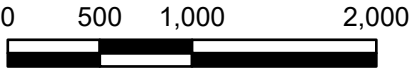


LEGEND

 Plant Hammond Property Boundary



Note:
1. Aerial photograph source: 2024 Microsoft Corporation,
2024 Maxar NES, Distribution Airbus DS,
and Georgia Power Company, January 2024.



SCALE IN FEET

SITE LOCATION MAP

GEORGIA POWER COMPANY
PLANT HAMMOND
ROME, FLOYD COUNTY, GEORGIA

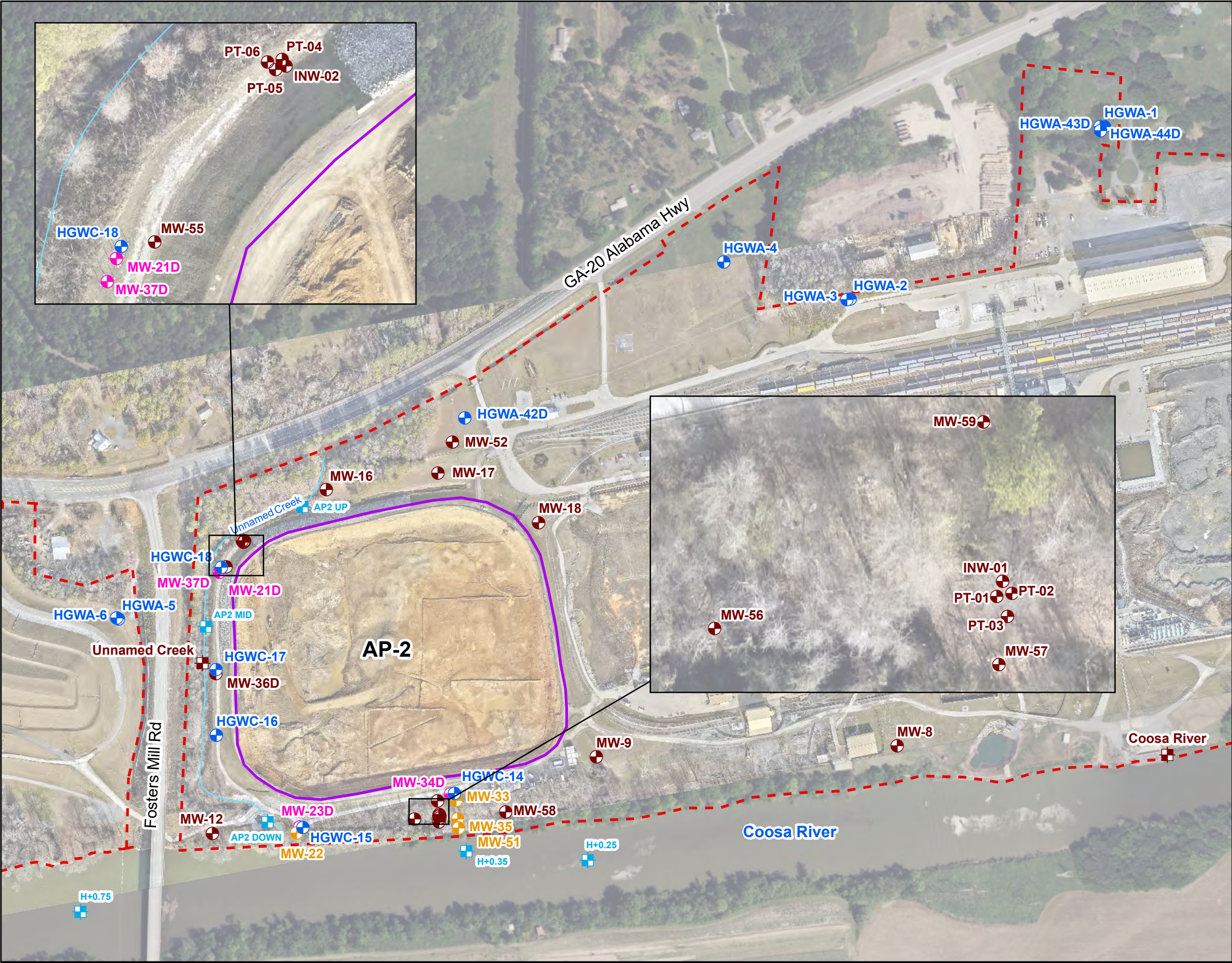
Prepared For:  **Georgia Power**

Prepared By: 

KENNESAW, GA

AUGUST 2024

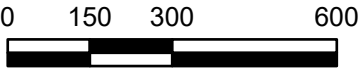
FIGURE
1



- LEGEND**
- Detection Monitoring Well
 - Horizontal Assessment Monitoring Well
 - Vertical Assessment Monitoring Well
 - Piezometer
 - Surface Water Level Gauge Point
 - Surface Water Sampling Point
 - Plant Hammond Property Boundary
 - Approximate AP-2 Boundary

Notes:

- Piezometers INW-01, INW-02, MW-55 through MW-59, and PT-01 through PT-06 were installed in support of an Assessment of Corrective Measures (ACM) geochemical injections pilot study and are not included in the routine semiannual sampling of the monitoring well network.
- Aerial photograph source: 2024 Microsoft Corporation, 2024 Maxar NES, Distribution Airbus DS, and Georgia Power Company, January 2024.



SCALE IN FEET

**MONITORING WELL NETWORK
AND SAMPLING LOCATION
MAP**

GEORGIA POWER COMPANY
PLANT HAMMOND AP-2
ROME, FLOYD COUNTY, GEORGIA

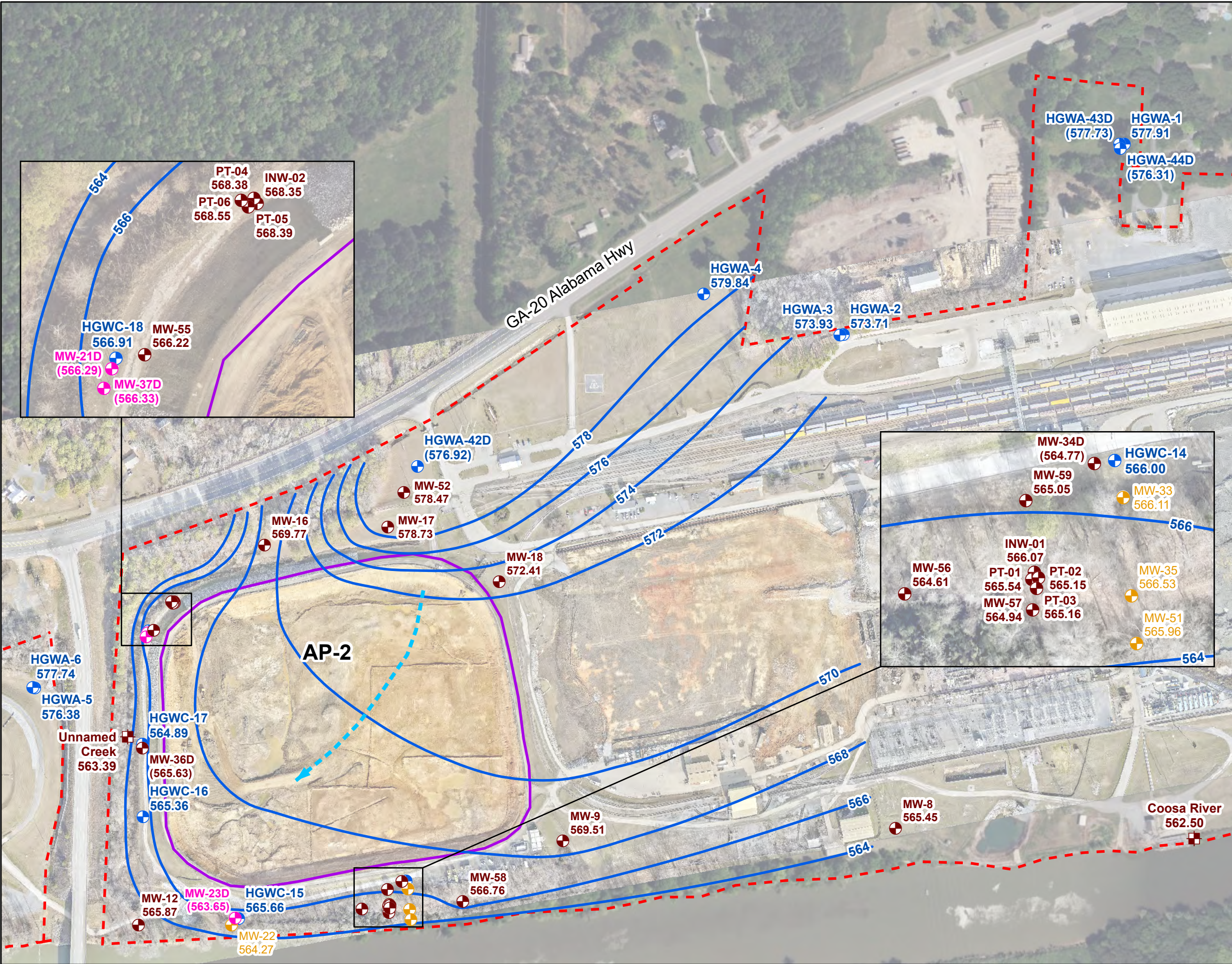
Prepared For: Georgia Power

Prepared By: Geosyntec
consultants

KENNESAW, GA

AUGUST 2024

**FIGURE
2**

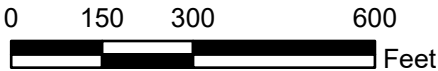


LEGEND

- Detection Monitoring Well
- Horizontal Assessment Monitoring Well
- Vertical Assessment Monitoring Well
- Piezometer
- Surface Water Level Gauge Point
- Groundwater Elevation Iso-Contour
- Approximate Groundwater Flow Direction
- Approximate AP-2 Boundary
- - - Plant Hammond Property Boundary



- Notes:
1. Water level elevation recorded on February 12, 2024. Elevation provided in feet (ft) referenced to the North American Vertical Datum of 1988 (NAVD 88).
 2. Groundwater elevations in parentheses were not used to make the groundwater contours because these wells are screened at a different elevation in the formation/aquifer.
 3. Aerial photograph source: 2024 Microsoft Corporation, 2024 Maxar NES, Distribution Airbus DS, and Georgia Power Company, January 2024.



SCALE IN FEET

**POTENTIOMETRIC SURFACE CONTOUR
MAP - FEBRUARY 2024**

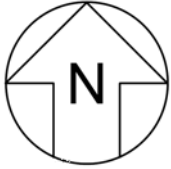
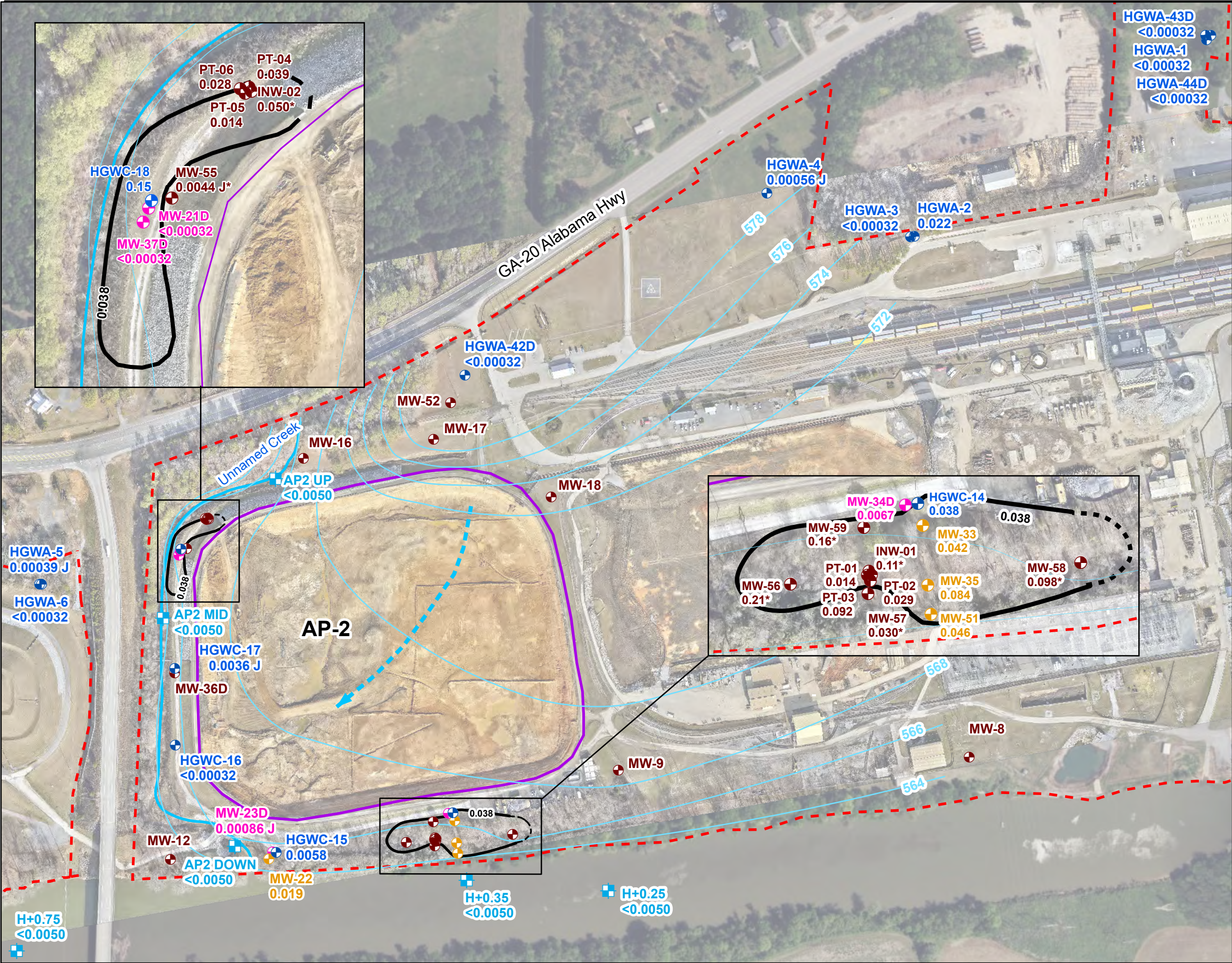
GEORGIA POWER COMPANY
PLANT HAMMOND AP-2
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec
consultants

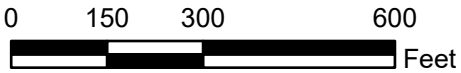
KENNESAW, GA AUGUST 2024

**FIGURE
3**



- LEGEND**
- Detection Monitoring Well
 - Horizontal Assessment Monitoring Well
 - Vertical Assessment Monitoring Well
 - Piezometer
 - Surface Water Sample Point
 - GWPS Cobalt Iso-Concentration Contour (mg/L) (dashed where inferred)
 - Groundwater Elevation Iso-Contour
 - Approximate Groundwater Flow Direction
 - Approximate AP-2 Boundary
 - Plant Hammond Property Boundary

- Notes:**
- Concentration data from groundwater samples collected during the February 2024 semiannual monitoring event. Data reported for wells screened deeper in the aquifer were not used to generate the iso-concentration contour (HGWA-42D, HGWA-43D, HGWA-44D, MW-21D, MW-34D, MW-37D). Concentrations are reported in mg/L.
 - Water level elevation recorded on February 12, 2024. Elevation provided in feet (ft) referenced to the North American Vertical Datum (NAVD) 88.
 - The Groundwater Protection Standard (GWPS) for cobalt is 0.038 mg/L.
 - Piezometers may be sampled as needed for constituent specific site characterization.
 - Aerial photograph source: 2024 Microsoft Corporation, 2024 Maxar NES, Distribution Airbus DS, and Georgia Power Company, January 2024.
 - *Analytical result is from the August 2023 semiannual monitoring event.



SCALE IN FEET

**ISO-CONCENTRATION MAP
COBALT - FEBRUARY 2024**

GEORGIA POWER COMPANY
PLANT HAMMOND AP-2
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA

AUGUST 2024

**FIGURE
4**

APPENDIX A

Well Maintenance and Repair Documentation Memorandum

MEMORANDUM

DATE: May 6, 2024

TO: Kristen Jurinko, P.G., Southern Company Services, Inc.

CC: Ben Hodges, P.G. Georgia Power Company

FROM: Geosyntec Consultants

SUBJECT: Plant Hammond Ash Pond 2 (AP-2) – Well Maintenance and Repair Documentation, Georgia Power Company

Geosyntec Consultants has prepared this memorandum to provide documentation of groundwater monitoring well maintenance and/or repair performed at Plant Hammond Ash Pond 2 (AP-2) during the February 2024 sampling event. All repairs and maintenance were completed in accordance with the Georgia Environmental Protection Division (GA EPD) guidance on routine visual inspections of groundwater monitoring wells. Documentation of the well inspections are provided as an attachment to this memorandum.

Georgia Power Site/Unit	Date Performed	Well ID	Maintenance/ Repair Performed
Hammond/AP-2	2/12/2024	All Wells	Checked and cleared weep holes of debris.

Attachment

Well Inspection Summary Table

Well Inspection

Site Name: Plant Hammond AP-2

Date: 02/12/2024

Permit Number:	Location/Identification			Field Conditions: Cloudy, 50° F
Well ID:	Visible and accessible	Properly identified with correct well ID	Located in high traffic area; does the well require protection from traffic	Acceptable drainage around well (no standing water, not located in obvious drainage flow path)
HGWA-1	Yes	Yes	No	Yes
HGWA-2	Yes	Yes	No	Yes
HGWA-3	Yes	Yes	No	Yes
HGWA-4	Yes	Yes	No	Yes
HGWA-5	Yes	Yes	No	Yes
HGWA_6	Yes	Yes	No	Yes
HGWA-42D	Yes	Yes	No	Yes
HGWA-43D	Yes	Yes	No	Yes
HGWA-44D	Yes	Yes	No	Yes
HGWC-14	Yes	Yes	No	Yes
HGWC-15	Yes	Yes	No	Yes
HGWC-16	Yes	Yes	No	Yes
HGWC-17	Yes	Yes	No	Yes
HGWC-18	Yes	Yes	No	Yes
MW-9	Yes	Yes	No	Yes
MW-12	Yes	Yes	No	Yes
MW-16	Yes	Yes	No	Yes
MW-17	Yes	Yes	No	Yes
MW-18	Yes	Yes	No	Yes
MW-21D	Yes	Yes	No	Yes
MW-22	Yes	Yes	No	Yes
MW-23D	Yes	Yes	No	Yes
MW-33	Yes	Yes	No	Yes
MW-34D	Yes	Yes	No	Yes
MW-35	Yes	Yes	No	Yes
MW-36D	Yes	Yes	No	Yes
MW-37D	Yes	Yes	No	Yes
MW-51	Yes	Yes	No	Yes
MW-52	Yes	Yes	No	Yes
MW-55	Yes	Yes	No	Yes
MW-56	Yes	Yes	No	Yes
MW-57	Yes	Yes	No	Yes
MW-58	Yes	Yes	No	Yes
MW-59	Yes	Yes	No	Yes
PT-01	Yes	Yes	No	Yes
PT-02	Yes	Yes	No	Yes
PT-03	Yes	Yes	No	Yes
PT-04	Yes	Yes	No	Yes
PT-05	Yes	Yes	No	Yes
PT-06	Yes	Yes	No	Yes
INW-01	Yes	Yes	No	Yes
INW-02	Yes	Yes	No	Yes

Well Inspection

Site Name: Plant Hammond AP-2

Date: 02/12/2024

Permit Number:	Protective Casing				Field Conditions: Cloudy, 50° F
Well ID:	Free from apparent damage and able to be secured	No degradation or deterioration	Functioning weep hole	Annular space clear of debris and water, or filled with pea gravel/sand	Locked and is the lock in good condition
HGWA-1	Yes	Yes	Yes	Yes	Yes
HGWA-2	Yes	Yes	Yes	Yes	Yes
HGWA-3	Yes	Yes	Yes	Yes	Yes
HGWA-4	Yes	Yes	Yes	Yes	Yes
HGWA-5	Yes	Yes	Yes	Yes	Yes
HGWA_6	Yes	Yes	Yes	Yes	Yes
HGWA-42D	Yes	Yes	Yes	Yes	Yes
HGWA-43D	Yes	Yes	Yes	Yes	Yes
HGWA-44D	Yes	Yes	Yes	Yes	Yes
HGWC-14	Yes	Yes	Yes	Yes	Yes
HGWC-15	Yes	Yes	Yes	Yes	Yes
HGWC-16	Yes	Yes	Yes	Yes	Yes
HGWC-17	Yes	Yes	Yes	Yes	Yes
HGWC-18	Yes	Yes	Yes	Yes	Yes
MW-9	Yes	Yes	Yes	Yes	Yes
MW-12	Yes	Yes	Yes	Yes	Yes
MW-16	Yes	Yes	Yes	Yes	Yes
MW-17	Yes	Yes	Yes	Yes	Yes
MW-18	Yes	Yes	Yes	Yes	Yes
MW-21D	Yes	Yes	Yes	Yes	Yes
MW-22	Yes	Yes	Yes	Yes	Yes
MW-23D	Yes	Yes	Yes	Yes	Yes
MW-33	Yes	Yes	Yes	Yes	Yes
MW-34D	Yes	Yes	Yes	Yes	Yes
MW-35	Yes	Yes	Yes	Yes	Yes
MW-36D	Yes	Yes	Yes	Yes	Yes
MW-37D	Yes	Yes	Yes	Yes	Yes
MW-51	Yes	Yes	Yes	Yes	Yes
MW-52	Yes	Yes	Yes	Yes	Yes
MW-55	Yes	Yes	Yes	Yes	Yes
MW-56	Yes	Yes	Yes	Yes	Yes
MW-57	Yes	Yes	Yes	Yes	Yes
MW-58	Yes	Yes	Yes	Yes	Yes
MW-59	Yes	Yes	Yes	Yes	Yes
PT-01	Yes	Yes	Yes	Yes	Yes
PT-02	Yes	Yes	Yes	Yes	Yes
PT-03	Yes	Yes	Yes	Yes	Yes
PT-04	Yes	Yes	Yes	Yes	Yes
PT-05	Yes	Yes	Yes	Yes	Yes
PT-06	Yes	Yes	Yes	Yes	Yes
INW-01	Yes	Yes	Yes	Yes	Yes
INW-02	Yes	Yes	Yes	Yes	Yes

Well Inspection

Site Name: Plant Hammond AP-2

Date: 02/12/2024

Permit Number:	057-024D(CCR)	Surface Pad			Internal Casing		Conditions: Cloudy, 50° F
Well ID:	Good condition (not cracked/ broken)	Sloped away from the protective casing	In complete contact with the ground surface and stable	Cap prevents entry of foreign material into the well	Free of kinks/bends, or any obstructions from foreign objects (such as bailers)	Properly vented for equilibration of air pressure	
HGWA-1	Yes	Yes	Yes	Yes	Yes	Yes	
HGWA-2	Yes	Yes	Yes	Yes	Yes	Yes	
HGWA-3	Yes	Yes	Yes	Yes	Yes	Yes	
HGWA-4	Yes	Yes	Yes	Yes	Yes	Yes	
HGWA-5	Yes	Yes	Yes	Yes	Yes	Yes	
HGWA_6	Yes	Yes	Yes	Yes	Yes	Yes	
HGWA-42D	Yes	Yes	Yes	Yes	Yes	Yes	
HGWA-43D	Yes	Yes	Yes	Yes	Yes	Yes	
HGWA-44D	Yes	Yes	Yes	Yes	Yes	Yes	
HGWC-14	Yes	Yes	Yes	Yes	Yes	Yes	
HGWC-15	Yes	Yes	Yes	Yes	Yes	Yes	
HGWC-16	Yes	Yes	Yes	Yes	Yes	Yes	
HGWC-17	Yes	Yes	Yes	Yes	Yes	Yes	
HGWC-18	Yes	Yes	Yes	Yes	Yes	Yes	
MW-9	Yes	Yes	Yes	Yes	Yes	Yes	
MW-12	Yes	Yes	Yes	Yes	Yes	Yes	
MW-16	Yes	Yes	Yes	Yes	Yes	Yes	
MW-17	Yes	Yes	Yes	Yes	Yes	Yes	
MW-18	Yes	Yes	Yes	Yes	Yes	Yes	
MW-21D	Yes	Yes	Yes	Yes	Yes	Yes	
MW-22	Yes	Yes	Yes	Yes	Yes	Yes	
MW-23D	Yes	Yes	Yes	Yes	Yes	Yes	
MW-33	Yes	Yes	Yes	Yes	Yes	Yes	
MW-34D	Yes	Yes	Yes	Yes	Yes	Yes	
MW-35	Yes	Yes	Yes	Yes	Yes	Yes	
MW-36D	Yes	Yes	Yes	Yes	Yes	Yes	
MW-37D	Yes	Yes	Yes	Yes	Yes	Yes	
MW-51	Yes	Yes	Yes	Yes	Yes	Yes	
MW-52	Yes	Yes	Yes	Yes	Yes	Yes	
MW-56	Yes	Yes	Yes	Yes	Yes	Yes	
MW-57	Yes	Yes	Yes	Yes	Yes	Yes	
MW-58	Yes	Yes	Yes	Yes	Yes	Yes	
MW-59	Yes	Yes	Yes	Yes	Yes	Yes	
PT-01	Yes	Yes	Yes	Yes	Yes	Yes	
PT-02	Yes	Yes	Yes	Yes	Yes	Yes	
PT-03	Yes	Yes	Yes	Yes	Yes	Yes	
PT-04	Yes	Yes	Yes	Yes	Yes	Yes	
PT-05	Yes	Yes	Yes	Yes	Yes	Yes	
PT-06	Yes	Yes	Yes	Yes	Yes	Yes	
INW-01	Yes	Yes	Yes	Yes	Yes	Yes	
INW-02	Yes	Yes	Yes	Yes	Yes	Yes	

Well Inspection

Site Name: Plant Hammond AP-2

Date: 02/12/2024

Permit Number: <u>057-024D(CCR)</u>	Field Conditions: <u>Cloudy, 50° F</u>
Corrective actions as needed, by date:	
Well ID:	
HGWA-1	N/A
HGWA-2	N/A
HGWA-3	N/A
HGWA-4	N/A
HGWA-5	N/A
HGWA_6	N/A
HGWA-42D	N/A
HGWA-43D	N/A
HGWA-44D	N/A
HGWC-14	N/A
HGWC-15	N/A
HGWC-16	N/A
HGWC-17	N/A
HGWC-18	N/A
MW-9	N/A
MW-12	N/A
MW-16	N/A
MW-17	N/A
MW-18	N/A
MW-21D	N/A
MW-22	N/A
MW-23D	N/A
MW-33	N/A
MW-34D	N/A
MW-35	N/A
MW-36D	N/A
MW-37D	N/A
MW-51	N/A
MW-52	N/A
MW-56	N/A
MW-57	N/A
MW-58	N/A
MW-59	N/A
PT-01	N/A
PT-02	N/A
PT-03	N/A
PT-04	N/A
PT-05	N/A
PT-06	N/A
INW-01	N/A
INW-02	N/A

APPENDIX B

Laboratory Analytical and Field Sampling Reports

LABORATORY ANALYTICAL RESULTS

February 2024



May 08, 2024

Kristen Jurinko
Southern Company
241 Ralph McGill Blvd NE
Bin 10160
Atlanta, GA 30308

RE: Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92713556

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on February 14, 2024. 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 - Asheville
- Pace Analytical Services - Peachtree Corners, GA

Revision 1: Arsenic RDL limit was updated to report 0.005 mg/L.

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

Sincerely,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Kip Gray, Geosyntec
Christine Hug, Geosyntec Consultants, Inc.
Thomas Kessler, Geosyntec Consultants
Whitney Law, Geosyntec Consultants
Laura Midkiff, Southern Company
Caroline Nelson, Geosyntec Consultants, Inc
Anthony Szwast, Geosyntec Consultants



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Laboratory ID: 99030

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92713556001	HAM-HGWA-1	Water	02/13/24 18:38	02/14/24 14:50
92713556002	HAM-HGWA-2	Water	02/13/24 15:30	02/14/24 14:50
92713556003	HAM-HGWA-3	Water	02/13/24 13:58	02/14/24 14:50
92713556004	HAM-HGWA-43D	Water	02/13/24 11:09	02/14/24 14:50
92713556005	HAM-HGWA-44D	Water	02/13/24 11:51	02/14/24 14:50
92713556006	HAM-UGRD-FD-01	Water	02/13/24 00:00	02/14/24 14:50
92713556007	HAM-UGRD-EB-01	Water	02/13/24 13:05	02/14/24 14:50
92713556008	HAM-UGRD-FB-01	Water	02/13/24 13:10	02/14/24 14:50

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SAMPLE ANALYTE COUNT

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92713556001	HAM-HGWA-1	EPA 6010D	AJM, DRB	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92713556002	HAM-HGWA-2	EPA 6010D	AJM	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92713556003	HAM-HGWA-3	EPA 6010D	AJM	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92713556004	HAM-HGWA-43D	EPA 6010D	AJM	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92713556005	HAM-HGWA-44D	EPA 6010D	AJM	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92713556006	HAM-UGRD-FD-01	EPA 6010D	AJM	6
		EPA 6020B	MT1	13

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SAMPLE ANALYTE COUNT

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92713556007	HAM-UGRD-EB-01	EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	AJM	1
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	JAY	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92713556008	HAM-UGRD-FB-01	EPA 6010D	AJM	1
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	JAY	1
		EPA 300.0 Rev 2.1 1993	JCM	3

PASI-A = Pace Analytical Services - Asheville

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713556001	HAM-HGWA-1					
EPA 6010D	Iron	0.034J	mg/L	0.040	02/28/24 08:42	
EPA 6010D	Manganese	0.12	mg/L	0.040	02/26/24 00:58	
EPA 6010D	Potassium	0.59	mg/L	0.50	02/26/24 00:58	
EPA 6010D	Sodium	21.2	mg/L	1.0	02/26/24 00:58	M1
EPA 6010D	Calcium	116	mg/L	1.0	02/26/24 00:58	M1
EPA 6010D	Magnesium	4.8	mg/L	0.050	02/26/24 00:58	M1
EPA 6020B	Barium	0.039	mg/L	0.0050	02/20/24 15:38	
EPA 6020B	Boron	0.020J	mg/L	0.040	02/20/24 15:38	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	303	mg/L	5.0	02/19/24 15:52	
SM 2320B-2011	Alkalinity, Total as CaCO3	303	mg/L	5.0	02/19/24 15:52	
SM 2540C-2015	Total Dissolved Solids	402	mg/L	25.0	02/18/24 14:54	
EPA 300.0 Rev 2.1 1993	Chloride	10.0	mg/L	1.0	02/16/24 01:37	
EPA 300.0 Rev 2.1 1993	Fluoride	0.071J	mg/L	0.10	02/16/24 01:37	M1
EPA 300.0 Rev 2.1 1993	Sulfate	50.4	mg/L	1.0	02/16/24 01:37	M1
92713556002	HAM-HGWA-2					
EPA 6010D	Iron	0.15	mg/L	0.040	02/26/24 01:17	
EPA 6010D	Manganese	0.78	mg/L	0.040	02/26/24 01:17	
EPA 6010D	Potassium	1.4	mg/L	0.50	02/26/24 01:17	
EPA 6010D	Sodium	11.6	mg/L	1.0	02/26/24 01:17	
EPA 6010D	Calcium	38.8	mg/L	1.0	02/26/24 01:17	
EPA 6010D	Magnesium	4.4	mg/L	0.050	02/26/24 01:17	
EPA 6020B	Barium	0.062	mg/L	0.0050	02/20/24 15:42	
EPA 6020B	Beryllium	0.00022J	mg/L	0.00050	02/20/24 15:42	
EPA 6020B	Boron	0.051	mg/L	0.040	02/20/24 15:42	
EPA 6020B	Cadmium	0.00027J	mg/L	0.00050	02/20/24 15:42	
EPA 6020B	Cobalt	0.022	mg/L	0.0050	02/20/24 15:42	
EPA 6020B	Lead	0.00018J	mg/L	0.0010	02/20/24 15:42	
EPA 6020B	Lithium	0.0017J	mg/L	0.030	02/20/24 15:42	
EPA 6020B	Selenium	0.0020J	mg/L	0.0050	02/20/24 15:42	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	42.6	mg/L	5.0	02/19/24 16:10	
SM 2320B-2011	Alkalinity, Total as CaCO3	42.6	mg/L	5.0	02/19/24 16:10	
SM 2540C-2015	Total Dissolved Solids	214	mg/L	25.0	02/18/24 14:54	
EPA 300.0 Rev 2.1 1993	Chloride	6.3	mg/L	1.0	02/16/24 02:20	
EPA 300.0 Rev 2.1 1993	Fluoride	0.17	mg/L	0.10	02/16/24 02:20	
EPA 300.0 Rev 2.1 1993	Sulfate	93.9	mg/L	1.0	02/16/24 02:20	
92713556003	HAM-HGWA-3					
EPA 6010D	Iron	0.94	mg/L	0.040	02/26/24 01:22	
EPA 6010D	Manganese	0.26	mg/L	0.040	02/26/24 01:22	
EPA 6010D	Potassium	0.52	mg/L	0.50	02/26/24 01:22	
EPA 6010D	Sodium	6.2	mg/L	1.0	02/26/24 01:22	
EPA 6010D	Calcium	83.6	mg/L	1.0	02/26/24 01:22	
EPA 6010D	Magnesium	5.3	mg/L	0.050	02/26/24 01:22	
EPA 6020B	Barium	0.13	mg/L	0.0050	02/20/24 15:45	
EPA 6020B	Lithium	0.0034J	mg/L	0.030	02/20/24 15:45	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	213	mg/L	5.0	02/19/24 16:18	
SM 2320B-2011	Alkalinity, Total as CaCO3	213	mg/L	5.0	02/19/24 16:18	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713556003	HAM-HGWA-3					
SM 2540C-2015	Total Dissolved Solids	284	mg/L	25.0	02/18/24 14:54	
EPA 300.0 Rev 2.1 1993	Chloride	5.3	mg/L	1.0	02/16/24 02:35	
EPA 300.0 Rev 2.1 1993	Sulfate	35.5	mg/L	1.0	02/16/24 02:35	
92713556004	HAM-HGWA-43D					
EPA 6010D	Iron	0.42	mg/L	0.040	02/26/24 01:27	
EPA 6010D	Manganese	0.017J	mg/L	0.040	02/26/24 01:27	
EPA 6010D	Potassium	0.89	mg/L	0.50	02/26/24 01:27	
EPA 6010D	Sodium	20.6	mg/L	1.0	02/26/24 01:27	
EPA 6010D	Calcium	53.3	mg/L	1.0	02/26/24 01:27	
EPA 6010D	Magnesium	17.9	mg/L	0.050	02/26/24 01:27	
EPA 6020B	Arsenic	0.00097J	mg/L	0.0050	02/20/24 15:49	
EPA 6020B	Barium	0.28	mg/L	0.0050	02/20/24 15:49	
EPA 6020B	Boron	0.037J	mg/L	0.040	02/20/24 15:49	
EPA 6020B	Lithium	0.0024J	mg/L	0.030	02/20/24 15:49	
EPA 6020B	Molybdenum	0.0015J	mg/L	0.010	02/20/24 15:49	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	231	mg/L	5.0	02/19/24 16:26	
SM 2320B-2011	Alkalinity, Total as CaCO3	231	mg/L	5.0	02/19/24 16:26	
SM 2540C-2015	Total Dissolved Solids	291	mg/L	25.0	02/18/24 14:54	
SM 4500-S2D-2011	Sulfide	0.034J	mg/L	0.10	02/17/24 01:55	
EPA 300.0 Rev 2.1 1993	Chloride	3.9	mg/L	1.0	02/16/24 02:49	
EPA 300.0 Rev 2.1 1993	Fluoride	0.20	mg/L	0.10	02/16/24 02:49	
EPA 300.0 Rev 2.1 1993	Sulfate	28.9	mg/L	1.0	02/16/24 02:49	
92713556005	HAM-HGWA-44D					
EPA 6010D	Iron	0.19	mg/L	0.040	02/26/24 01:32	
EPA 6010D	Potassium	3.0	mg/L	0.50	02/26/24 01:32	
EPA 6010D	Sodium	140	mg/L	1.0	02/26/24 01:32	
EPA 6010D	Calcium	9.9	mg/L	1.0	02/26/24 01:32	
EPA 6010D	Magnesium	4.5	mg/L	0.050	02/26/24 01:32	
EPA 6020B	Arsenic	0.0014J	mg/L	0.0050	02/20/24 15:53	
EPA 6020B	Barium	0.12	mg/L	0.0050	02/20/24 15:53	
EPA 6020B	Boron	0.49	mg/L	0.040	02/20/24 15:53	
EPA 6020B	Lithium	0.088	mg/L	0.030	02/20/24 15:53	
EPA 6020B	Molybdenum	0.0018J	mg/L	0.010	02/20/24 15:53	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	292	mg/L	5.0	02/19/24 16:34	
SM 2320B-2011	Alkalinity, Total as CaCO3	292	mg/L	5.0	02/19/24 16:34	
SM 2540C-2015	Total Dissolved Solids	379	mg/L	25.0	02/18/24 14:55	
SM 4500-S2D-2011	Sulfide	0.19	mg/L	0.10	02/17/24 01:55	
EPA 300.0 Rev 2.1 1993	Chloride	27.7	mg/L	1.0	02/16/24 03:47	
EPA 300.0 Rev 2.1 1993	Fluoride	1.5	mg/L	0.10	02/16/24 03:47	
EPA 300.0 Rev 2.1 1993	Sulfate	2.0	mg/L	1.0	02/16/24 03:47	
92713556006	HAM-UGRD-FD-01					
EPA 6010D	Iron	0.17	mg/L	0.040	02/26/24 01:46	
EPA 6010D	Potassium	2.9	mg/L	0.50	02/26/24 01:46	
EPA 6010D	Sodium	134	mg/L	1.0	02/26/24 01:46	
EPA 6010D	Calcium	10.0	mg/L	1.0	02/26/24 01:46	
EPA 6010D	Magnesium	4.5	mg/L	0.050	02/26/24 01:46	

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SUMMARY OF DETECTION

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713556006	HAM-UGRD-FD-01					
EPA 6020B	Arsenic	0.0010J	mg/L	0.0050	02/20/24 16:17	
EPA 6020B	Barium	0.13	mg/L	0.0050	02/20/24 16:17	
EPA 6020B	Boron	0.51	mg/L	0.040	02/20/24 16:17	
EPA 6020B	Lithium	0.092	mg/L	0.030	02/20/24 16:17	
EPA 6020B	Molybdenum	0.0021J	mg/L	0.010	02/20/24 16:17	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	286	mg/L	5.0	02/19/24 18:47	
SM 2320B-2011	Alkalinity, Total as CaCO3	286	mg/L	5.0	02/19/24 18:47	
SM 2540C-2015	Total Dissolved Solids	382	mg/L	25.0	02/18/24 14:55	
SM 4500-S2D-2011	Sulfide	0.24	mg/L	0.10	02/17/24 01:55	
EPA 300.0 Rev 2.1 1993	Chloride	27.8	mg/L	1.0	02/16/24 04:01	
EPA 300.0 Rev 2.1 1993	Fluoride	1.5	mg/L	0.10	02/16/24 04:01	
EPA 300.0 Rev 2.1 1993	Sulfate	2.6	mg/L	1.0	02/16/24 04:01	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Sample: HAM-HGWA-1		Lab ID: 92713556001		Collected: 02/13/24 18:38		Received: 02/14/24 14:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Iron	0.034J	mg/L	0.040	0.025	1	02/16/24 19:24	02/28/24 08:42	7439-89-6	
Manganese	0.12	mg/L	0.040	0.011	1	02/16/24 19:24	02/26/24 00:58	7439-96-5	
Potassium	0.59	mg/L	0.50	0.15	1	02/16/24 19:24	02/26/24 00:58	7440-09-7	
Sodium	21.2	mg/L	1.0	0.58	1	02/16/24 19:24	02/26/24 00:58	7440-23-5	M1
Calcium	116	mg/L	1.0	0.12	1	02/16/24 19:24	02/26/24 00:58	7440-70-2	M1
Magnesium	4.8	mg/L	0.050	0.012	1	02/16/24 19:24	02/26/24 00:58	7439-95-4	M1
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/17/24 05:35	02/20/24 15:38	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/17/24 05:35	02/20/24 15:38	7440-38-2	
Barium	0.039	mg/L	0.0050	0.00047	1	02/17/24 05:35	02/20/24 15:38	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/17/24 05:35	02/20/24 15:38	7440-41-7	
Boron	0.020J	mg/L	0.040	0.012	1	02/17/24 05:35	02/20/24 15:38	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/17/24 05:35	02/20/24 15:38	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/17/24 05:35	02/20/24 15:38	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/17/24 05:35	02/20/24 15:38	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/17/24 05:35	02/20/24 15:38	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/17/24 05:35	02/20/24 15:38	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/17/24 05:35	02/20/24 15:38	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/17/24 05:35	02/20/24 15:38	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/17/24 05:35	02/20/24 15:38	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 14:16	7439-97-6	
2320B Alkalinity									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	303	mg/L	5.0	5.0	1		02/19/24 15:52		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/19/24 15:52		
Alkalinity, Total as CaCO3	303	mg/L	5.0	5.0	1		02/19/24 15:52		
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Asheville									
Total Dissolved Solids	402	mg/L	25.0	25.0	1		02/18/24 14:54		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/17/24 01:53	18496-25-8	R1
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	10.0	mg/L	1.0	0.60	1		02/16/24 01:37	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Sample: HAM-HGWA-1		Lab ID: 92713556001		Collected: 02/13/24 18:38		Received: 02/14/24 14:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.071J	mg/L	0.10	0.050	1		02/16/24 01:37	16984-48-8	M1
Sulfate	50.4	mg/L	1.0	0.50	1		02/16/24 01:37	14808-79-8	M1

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Sample: HAM-HGWA-2		Lab ID: 92713556002		Collected: 02/13/24 15:30		Received: 02/14/24 14:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	0.15	mg/L	0.040	0.025	1	02/16/24 19:24	02/26/24 01:17	7439-89-6	
Manganese	0.78	mg/L	0.040	0.011	1	02/16/24 19:24	02/26/24 01:17	7439-96-5	
Potassium	1.4	mg/L	0.50	0.15	1	02/16/24 19:24	02/26/24 01:17	7440-09-7	
Sodium	11.6	mg/L	1.0	0.58	1	02/16/24 19:24	02/26/24 01:17	7440-23-5	
Calcium	38.8	mg/L	1.0	0.12	1	02/16/24 19:24	02/26/24 01:17	7440-70-2	
Magnesium	4.4	mg/L	0.050	0.012	1	02/16/24 19:24	02/26/24 01:17	7439-95-4	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/17/24 05:35	02/20/24 15:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/17/24 05:35	02/20/24 15:42	7440-38-2	
Barium	0.062	mg/L	0.0050	0.00047	1	02/17/24 05:35	02/20/24 15:42	7440-39-3	
Beryllium	0.00022J	mg/L	0.00050	0.000094	1	02/17/24 05:35	02/20/24 15:42	7440-41-7	
Boron	0.051	mg/L	0.040	0.012	1	02/17/24 05:35	02/20/24 15:42	7440-42-8	
Cadmium	0.00027J	mg/L	0.00050	0.00010	1	02/17/24 05:35	02/20/24 15:42	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/17/24 05:35	02/20/24 15:42	7440-47-3	
Cobalt	0.022	mg/L	0.0050	0.00032	1	02/17/24 05:35	02/20/24 15:42	7440-48-4	
Lead	0.00018J	mg/L	0.0010	0.00016	1	02/17/24 05:35	02/20/24 15:42	7439-92-1	
Lithium	0.0017J	mg/L	0.030	0.0016	1	02/17/24 05:35	02/20/24 15:42	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/17/24 05:35	02/20/24 15:42	7439-98-7	
Selenium	0.0020J	mg/L	0.0050	0.00096	1	02/17/24 05:35	02/20/24 15:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/17/24 05:35	02/20/24 15:42	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 14:27	7439-97-6	
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	42.6	mg/L	5.0	5.0	1		02/19/24 16:10		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/19/24 16:10		
Alkalinity, Total as CaCO3	42.6	mg/L	5.0	5.0	1		02/19/24 16:10		
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville									
Total Dissolved Solids	214	mg/L	25.0	25.0	1		02/18/24 14:54		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/17/24 01:54	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	6.3	mg/L	1.0	0.60	1		02/16/24 02:20	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Sample: HAM-HGWA-2		Lab ID: 92713556002		Collected: 02/13/24 15:30		Received: 02/14/24 14:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.17	mg/L	0.10	0.050	1		02/16/24 02:20	16984-48-8	
Sulfate	93.9	mg/L	1.0	0.50	1		02/16/24 02:20	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Sample: HAM-HGWA-3		Lab ID: 92713556003		Collected: 02/13/24 13:58		Received: 02/14/24 14:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Iron	0.94	mg/L	0.040	0.025	1	02/16/24 19:24	02/26/24 01:22	7439-89-6	
Manganese	0.26	mg/L	0.040	0.011	1	02/16/24 19:24	02/26/24 01:22	7439-96-5	
Potassium	0.52	mg/L	0.50	0.15	1	02/16/24 19:24	02/26/24 01:22	7440-09-7	
Sodium	6.2	mg/L	1.0	0.58	1	02/16/24 19:24	02/26/24 01:22	7440-23-5	
Calcium	83.6	mg/L	1.0	0.12	1	02/16/24 19:24	02/26/24 01:22	7440-70-2	
Magnesium	5.3	mg/L	0.050	0.012	1	02/16/24 19:24	02/26/24 01:22	7439-95-4	
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Antimony	ND	mg/L	0.0030	0.00054	1	02/17/24 05:35	02/20/24 15:45	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/17/24 05:35	02/20/24 15:45	7440-38-2	
Barium	0.13	mg/L	0.0050	0.00047	1	02/17/24 05:35	02/20/24 15:45	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/17/24 05:35	02/20/24 15:45	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	02/17/24 05:35	02/20/24 15:45	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/17/24 05:35	02/20/24 15:45	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/17/24 05:35	02/20/24 15:45	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/17/24 05:35	02/20/24 15:45	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/17/24 05:35	02/20/24 15:45	7439-92-1	
Lithium	0.0034J	mg/L	0.030	0.0016	1	02/17/24 05:35	02/20/24 15:45	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/17/24 05:35	02/20/24 15:45	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/17/24 05:35	02/20/24 15:45	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/17/24 05:35	02/20/24 15:45	7440-28-0	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA							
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 14:38	7439-97-6	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	213	mg/L	5.0	5.0	1		02/19/24 16:18		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/19/24 16:18		
Alkalinity, Total as CaCO3	213	mg/L	5.0	5.0	1		02/19/24 16:18		
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville							
Total Dissolved Solids	284	mg/L	25.0	25.0	1		02/18/24 14:54		
4500S2D Sulfide Water		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		02/17/24 01:54	18496-25-8	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	5.3	mg/L	1.0	0.60	1		02/16/24 02:35	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Sample: HAM-HGWA-3		Lab ID: 92713556003		Collected: 02/13/24 13:58		Received: 02/14/24 14:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	ND	mg/L	0.10	0.050	1		02/16/24 02:35	16984-48-8	
Sulfate	35.5	mg/L	1.0	0.50	1		02/16/24 02:35	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Sample: HAM-HGWA-43D		Lab ID: 92713556004		Collected: 02/13/24 11:09		Received: 02/14/24 14:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Iron	0.42	mg/L	0.040	0.025	1	02/16/24 19:24	02/26/24 01:27	7439-89-6	
Manganese	0.017J	mg/L	0.040	0.011	1	02/16/24 19:24	02/26/24 01:27	7439-96-5	
Potassium	0.89	mg/L	0.50	0.15	1	02/16/24 19:24	02/26/24 01:27	7440-09-7	
Sodium	20.6	mg/L	1.0	0.58	1	02/16/24 19:24	02/26/24 01:27	7440-23-5	
Calcium	53.3	mg/L	1.0	0.12	1	02/16/24 19:24	02/26/24 01:27	7440-70-2	
Magnesium	17.9	mg/L	0.050	0.012	1	02/16/24 19:24	02/26/24 01:27	7439-95-4	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/17/24 05:35	02/20/24 15:49	7440-36-0	
Arsenic	0.00097J	mg/L	0.0050	0.00084	1	02/17/24 05:35	02/20/24 15:49	7440-38-2	
Barium	0.28	mg/L	0.0050	0.00047	1	02/17/24 05:35	02/20/24 15:49	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/17/24 05:35	02/20/24 15:49	7440-41-7	
Boron	0.037J	mg/L	0.040	0.012	1	02/17/24 05:35	02/20/24 15:49	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/17/24 05:35	02/20/24 15:49	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/17/24 05:35	02/20/24 15:49	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/17/24 05:35	02/20/24 15:49	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/17/24 05:35	02/20/24 15:49	7439-92-1	
Lithium	0.0024J	mg/L	0.030	0.0016	1	02/17/24 05:35	02/20/24 15:49	7439-93-2	
Molybdenum	0.0015J	mg/L	0.010	0.00062	1	02/17/24 05:35	02/20/24 15:49	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/17/24 05:35	02/20/24 15:49	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/17/24 05:35	02/20/24 15:49	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 14:40	7439-97-6	
2320B Alkalinity									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	231	mg/L	5.0	5.0	1		02/19/24 16:26		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/19/24 16:26		
Alkalinity, Total as CaCO3	231	mg/L	5.0	5.0	1		02/19/24 16:26		
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Asheville									
Total Dissolved Solids	291	mg/L	25.0	25.0	1		02/18/24 14:54		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	0.034J	mg/L	0.10	0.022	1		02/17/24 01:55	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	3.9	mg/L	1.0	0.60	1		02/16/24 02:49	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Sample: HAM-HGWA-43D		Lab ID: 92713556004		Collected: 02/13/24 11:09		Received: 02/14/24 14:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.20	mg/L	0.10	0.050	1		02/16/24 02:49	16984-48-8	
Sulfate	28.9	mg/L	1.0	0.50	1		02/16/24 02:49	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Sample: HAM-HGWA-44D Lab ID: 92713556005 Collected: 02/13/24 11:51 Received: 02/14/24 14:50 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	0.19	mg/L	0.040	0.025	1	02/16/24 19:24	02/26/24 01:32	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	02/16/24 19:24	02/26/24 01:32	7439-96-5	
Potassium	3.0	mg/L	0.50	0.15	1	02/16/24 19:24	02/26/24 01:32	7440-09-7	
Sodium	140	mg/L	1.0	0.58	1	02/16/24 19:24	02/26/24 01:32	7440-23-5	
Calcium	9.9	mg/L	1.0	0.12	1	02/16/24 19:24	02/26/24 01:32	7440-70-2	
Magnesium	4.5	mg/L	0.050	0.012	1	02/16/24 19:24	02/26/24 01:32	7439-95-4	
6020 MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/17/24 05:35	02/20/24 15:53	7440-36-0	
Arsenic	0.0014J	mg/L	0.0050	0.00084	1	02/17/24 05:35	02/20/24 15:53	7440-38-2	
Barium	0.12	mg/L	0.0050	0.00047	1	02/17/24 05:35	02/20/24 15:53	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/17/24 05:35	02/20/24 15:53	7440-41-7	
Boron	0.49	mg/L	0.040	0.012	1	02/17/24 05:35	02/20/24 15:53	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/17/24 05:35	02/20/24 15:53	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/17/24 05:35	02/20/24 15:53	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/17/24 05:35	02/20/24 15:53	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/17/24 05:35	02/20/24 15:53	7439-92-1	
Lithium	0.088	mg/L	0.030	0.0016	1	02/17/24 05:35	02/20/24 15:53	7439-93-2	
Molybdenum	0.0018J	mg/L	0.010	0.00062	1	02/17/24 05:35	02/20/24 15:53	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/17/24 05:35	02/20/24 15:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/17/24 05:35	02/20/24 15:53	7440-28-0	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 14:43	7439-97-6	
2320B Alkalinity Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	292	mg/L	5.0	5.0	1		02/19/24 16:34		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/19/24 16:34		
Alkalinity, Total as CaCO3	292	mg/L	5.0	5.0	1		02/19/24 16:34		
2540C Total Dissolved Solids Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville									
Total Dissolved Solids	379	mg/L	25.0	25.0	1		02/18/24 14:55		
4500S2D Sulfide Water Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	0.19	mg/L	0.10	0.022	1		02/17/24 01:55	18496-25-8	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	27.7	mg/L	1.0	0.60	1		02/16/24 03:47	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92713556

Sample: HAM-HGWA-44D		Lab ID: 92713556005		Collected: 02/13/24 11:51		Received: 02/14/24 14:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	1.5	mg/L	0.10	0.050	1		02/16/24 03:47	16984-48-8	
Sulfate	2.0	mg/L	1.0	0.50	1		02/16/24 03:47	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Sample: HAM-UGRD-FD-01 Lab ID: 92713556006 Collected: 02/13/24 00:00 Received: 02/14/24 14:50 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	0.17	mg/L	0.040	0.025	1	02/16/24 19:24	02/26/24 01:46	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	02/16/24 19:24	02/26/24 01:46	7439-96-5	
Potassium	2.9	mg/L	0.50	0.15	1	02/16/24 19:24	02/26/24 01:46	7440-09-7	
Sodium	134	mg/L	1.0	0.58	1	02/16/24 19:24	02/26/24 01:46	7440-23-5	
Calcium	10.0	mg/L	1.0	0.12	1	02/16/24 19:24	02/26/24 01:46	7440-70-2	
Magnesium	4.5	mg/L	0.050	0.012	1	02/16/24 19:24	02/26/24 01:46	7439-95-4	
6020 MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/17/24 05:35	02/20/24 16:17	7440-36-0	
Arsenic	0.0010J	mg/L	0.0050	0.00084	1	02/17/24 05:35	02/20/24 16:17	7440-38-2	
Barium	0.13	mg/L	0.0050	0.00047	1	02/17/24 05:35	02/20/24 16:17	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/17/24 05:35	02/20/24 16:17	7440-41-7	
Boron	0.51	mg/L	0.040	0.012	1	02/17/24 05:35	02/20/24 16:17	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/17/24 05:35	02/20/24 16:17	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/17/24 05:35	02/20/24 16:17	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/17/24 05:35	02/20/24 16:17	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/17/24 05:35	02/20/24 16:17	7439-92-1	
Lithium	0.092	mg/L	0.030	0.0016	1	02/17/24 05:35	02/20/24 16:17	7439-93-2	
Molybdenum	0.0021J	mg/L	0.010	0.00062	1	02/17/24 05:35	02/20/24 16:17	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/17/24 05:35	02/20/24 16:17	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/17/24 05:35	02/20/24 16:17	7440-28-0	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 14:45	7439-97-6	
2320B Alkalinity Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	286	mg/L	5.0	5.0	1		02/19/24 18:47		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/19/24 18:47		
Alkalinity, Total as CaCO3	286	mg/L	5.0	5.0	1		02/19/24 18:47		
2540C Total Dissolved Solids Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville									
Total Dissolved Solids	382	mg/L	25.0	25.0	1		02/18/24 14:55		
4500S2D Sulfide Water Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	0.24	mg/L	0.10	0.022	1		02/17/24 01:55	18496-25-8	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	27.8	mg/L	1.0	0.60	1		02/16/24 04:01	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Sample: HAM-UGRD-FD-01		Lab ID: 92713556006		Collected: 02/13/24 00:00		Received: 02/14/24 14:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	1.5	mg/L	0.10	0.050	1		02/16/24 04:01	16984-48-8	
Sulfate	2.6	mg/L	1.0	0.50	1		02/16/24 04:01	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Sample: HAM-UGRD-EB-01		Lab ID: 92713556007		Collected: 02/13/24 13:05		Received: 02/14/24 14:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	ND	mg/L	1.0	0.12	1	02/16/24 19:24	02/26/24 01:51	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/17/24 05:35	02/20/24 16:20	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/17/24 05:35	02/20/24 16:20	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	02/17/24 05:35	02/20/24 16:20	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/17/24 05:35	02/20/24 16:20	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	02/17/24 05:35	02/20/24 16:20	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/17/24 05:35	02/20/24 16:20	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/17/24 05:35	02/20/24 16:20	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/17/24 05:35	02/20/24 16:20	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/17/24 05:35	02/20/24 16:20	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/17/24 05:35	02/20/24 16:20	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/17/24 05:35	02/20/24 16:20	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/17/24 05:35	02/20/24 16:20	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/17/24 05:35	02/20/24 16:20	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 14:48	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Asheville									
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		02/18/24 14:55		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	ND	mg/L	1.0	0.60	1		02/15/24 23:28	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/15/24 23:28	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/15/24 23:28	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Sample: HAM-UGRD-FB-01		Lab ID: 92713556008		Collected: 02/13/24 13:10		Received: 02/14/24 14:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Calcium	ND	mg/L	1.0	0.12	1	02/16/24 19:24	02/26/24 01:56	7440-70-2	
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Antimony	ND	mg/L	0.0030	0.00054	1	02/17/24 05:35	02/20/24 16:24	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/17/24 05:35	02/20/24 16:24	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	02/17/24 05:35	02/20/24 16:24	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/17/24 05:35	02/20/24 16:24	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	02/17/24 05:35	02/20/24 16:24	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/17/24 05:35	02/20/24 16:24	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/17/24 05:35	02/20/24 16:24	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/17/24 05:35	02/20/24 16:24	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/17/24 05:35	02/20/24 16:24	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/17/24 05:35	02/20/24 16:24	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/17/24 05:35	02/20/24 16:24	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/17/24 05:35	02/20/24 16:24	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/17/24 05:35	02/20/24 16:24	7440-28-0	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA							
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 14:56	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville							
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		02/18/24 14:55		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	ND	mg/L	1.0	0.60	1		02/15/24 23:43	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/15/24 23:43	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/15/24 23:43	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

QC Batch: 833074

Analysis Method: EPA 6010D

QC Batch Method: EPA 3010A

Analysis Description: 6010D ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92713556001, 92713556002, 92713556003, 92713556004, 92713556005, 92713556006, 92713556007, 92713556008

METHOD BLANK: 4305116

Matrix: Water

Associated Lab Samples: 92713556001, 92713556002, 92713556003, 92713556004, 92713556005, 92713556006, 92713556007, 92713556008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/26/24 00:48	
Iron	mg/L	ND	0.040	0.025	02/26/24 00:48	
Magnesium	mg/L	ND	0.050	0.012	02/26/24 00:48	
Manganese	mg/L	ND	0.040	0.011	02/26/24 00:48	
Potassium	mg/L	ND	0.50	0.15	02/26/24 00:48	
Sodium	mg/L	ND	1.0	0.58	02/26/24 00:48	

LABORATORY CONTROL SAMPLE: 4305117

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.97J	97	80-120	
Iron	mg/L	1	1.1	106	80-120	
Magnesium	mg/L	1	1.0	102	80-120	
Manganese	mg/L	1	1.0	103	80-120	
Potassium	mg/L	1	1.0	104	80-120	
Sodium	mg/L	1	1.0	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305118 4305119

Parameter	Units	92713556001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	116	1	1	111	111	-492	-467	75-125	0	20	M1
Iron	mg/L	0.034J	1	1	1.0	1.0	100	99	75-125	0	20	
Magnesium	mg/L	4.8	1	1	5.5	5.6	72	77	75-125	1	20	M1
Manganese	mg/L	0.12	1	1	1.1	1.1	100	99	75-125	0	20	
Potassium	mg/L	0.59	1	1	1.6	1.7	106	107	75-125	1	20	
Sodium	mg/L	21.2	1	1	21.2	21.2	-6	0	75-125	0	20	M1

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QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

QC Batch:	833075	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92713556001, 92713556002, 92713556003, 92713556004, 92713556005, 92713556006, 92713556007, 92713556008		

METHOD BLANK: 4305133

Matrix: Water

Associated Lab Samples: 92713556001, 92713556002, 92713556003, 92713556004, 92713556005, 92713556006, 92713556007, 92713556008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	02/20/24 15:31	
Arsenic	mg/L	ND	0.0050	0.00084	02/20/24 15:31	
Barium	mg/L	ND	0.0050	0.00047	02/20/24 15:31	
Beryllium	mg/L	ND	0.00050	0.000094	02/20/24 15:31	
Boron	mg/L	ND	0.040	0.012	02/20/24 15:31	
Cadmium	mg/L	ND	0.00050	0.00010	02/20/24 15:31	
Chromium	mg/L	ND	0.0050	0.0019	02/20/24 15:31	
Cobalt	mg/L	ND	0.0050	0.00032	02/20/24 15:31	
Lead	mg/L	ND	0.0010	0.00016	02/20/24 15:31	
Lithium	mg/L	ND	0.030	0.0016	02/20/24 15:31	
Molybdenum	mg/L	ND	0.010	0.00062	02/20/24 15:31	
Selenium	mg/L	ND	0.0050	0.00096	02/20/24 15:31	
Thallium	mg/L	ND	0.0010	0.00038	02/20/24 15:31	

LABORATORY CONTROL SAMPLE: 4305134

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	105	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.10	100	80-120	
Boron	mg/L	1	0.98	98	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.10	104	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.10	100	80-120	
Thallium	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305135 4305136

Parameter	Units	92713556005	MS	MSD	MS	MSD	MS	MSD	% Rec	RPD	Max	Qual
		Result	Spike Conc.	Spike Conc.								
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	105	105	75-125	0	20	

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QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305135				4305136								
Parameter	Units	92713556005	MS	MSD	MS	MSD	MS	MSD	% Rec	RPD	Max	Qual
		Result	Spike	Spike								
Arsenic	mg/L	0.0014J	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Barium	mg/L	0.12	0.1	0.1	0.21	0.22	94	94	75-125	0	20	
Beryllium	mg/L	ND	0.1	0.1	0.095	0.095	95	95	75-125	0	20	
Boron	mg/L	0.49	1	1	1.5	1.5	98	99	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.098	101	98	75-125	3	20	
Lead	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	1	20	
Lithium	mg/L	0.088	0.1	0.1	0.18	0.19	95	97	75-125	1	20	
Molybdenum	mg/L	0.0018J	0.1	0.1	0.10	0.10	102	102	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.098	0.099	98	99	75-125	0	20	
Thallium	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

QC Batch:	834203	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92713556001, 92713556002, 92713556003, 92713556004, 92713556005, 92713556006, 92713556007, 92713556008		

METHOD BLANK:	4310145	Matrix:	Water
Associated Lab Samples:	92713556001, 92713556002, 92713556003, 92713556004, 92713556005, 92713556006, 92713556007, 92713556008		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/22/24 14:11	

LABORATORY CONTROL SAMPLE:	4310146					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	4310147			4310148								
Parameter	Units	92713556002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0024	95	95	75-125	0	20	

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QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

QC Batch: 833295

Analysis Method: SM 2320B-2011

QC Batch Method: SM 2320B-2011

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92713556001, 92713556002, 92713556003, 92713556004, 92713556005, 92713556006

METHOD BLANK: 4305949

Matrix: Water

Associated Lab Samples: 92713556001, 92713556002, 92713556003, 92713556004, 92713556005, 92713556006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	ND	5.0	5.0	02/19/24 15:03	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	5.0	5.0	02/19/24 15:03	
Alkalinity,Carbonate (CaCO ₃)	mg/L	ND	5.0	5.0	02/19/24 15:03	

LABORATORY CONTROL SAMPLE: 4305950

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	50.6	101	80-120	

LABORATORY CONTROL SAMPLE: 4305951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	52.1	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305952 4305953

Parameter	Units	92713311035 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	ND	50	50	51.1	51.1	101	101	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305954 4305955

Parameter	Units	92713311036 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	ND	50	50	51.9	50.2	103	99	80-120	3	25	

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QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

QC Batch: 833242

Analysis Method: SM 2540C-2015

QC Batch Method: SM 2540C-2015

Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92713556001, 92713556002, 92713556003, 92713556004, 92713556005, 92713556006, 92713556007, 92713556008

METHOD BLANK: 4305777

Matrix: Water

Associated Lab Samples: 92713556001, 92713556002, 92713556003, 92713556004, 92713556005, 92713556006, 92713556007, 92713556008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/18/24 14:53	

LABORATORY CONTROL SAMPLE: 4305778

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	268	107	90-110	

SAMPLE DUPLICATE: 4305779

Parameter	Units	92713311026 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	531	523	2	25	

SAMPLE DUPLICATE: 4305780

Parameter	Units	92713556001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	402	402	0	25	

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QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

QC Batch: 833117

Analysis Method: SM 4500-S2D-2011

QC Batch Method: SM 4500-S2D-2011

Analysis Description: 4500S2D Sulfide Water

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92713556001, 92713556002, 92713556003, 92713556004, 92713556005, 92713556006

METHOD BLANK: 4305491

Matrix: Water

Associated Lab Samples: 92713556001, 92713556002, 92713556003, 92713556004, 92713556005, 92713556006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/17/24 01:52	

LABORATORY CONTROL SAMPLE: 4305492

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.52	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305493 4305494

Parameter	Units	92713556001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.47	0.55	94	111	80-120	16	10	R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305519 4305520

Parameter	Units	92713565004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.49	0.54	98	107	80-120	9	10	

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QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

QC Batch:	832724	Analysis Method:	EPA 300.0 Rev 2.1 1993
QC Batch Method:	EPA 300.0 Rev 2.1 1993	Analysis Description:	300.0 IC Anions
		Laboratory:	Pace Analytical Services - Asheville
Associated Lab Samples:	92713556001, 92713556002, 92713556003, 92713556004, 92713556005, 92713556006, 92713556007, 92713556008		

METHOD BLANK:	4303397	Matrix:	Water
Associated Lab Samples:	92713556001, 92713556002, 92713556003, 92713556004, 92713556005, 92713556006, 92713556007, 92713556008		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/15/24 22:02	
Fluoride	mg/L	ND	0.10	0.050	02/15/24 22:02	
Sulfate	mg/L	ND	1.0	0.50	02/15/24 22:02	

LABORATORY CONTROL SAMPLE: 4303398						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.8	100	90-110	
Fluoride	mg/L	2.5	2.6	103	90-110	
Sulfate	mg/L	50	50.4	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4303399 4303400												
Parameter	Units	92713556001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	10.0	50	50	59.2	60.8	98	102	90-110	3	10	
Fluoride	mg/L	0.071J	2.5	2.5	2.9	3.0	114	118	90-110	3	10	M1
Sulfate	mg/L	50.4	50	50	92.0	94.1	83	87	90-110	2	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4303401 4303402												
Parameter	Units	92713556002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.8	50	50	51.5	53.2	99	103	90-110	3	10	
Fluoride	mg/L	0.059J	2.5	2.5	2.8	2.9	111	115	90-110	4	10	M1
Sulfate	mg/L	21.8	50	50	72.4	74.0	101	104	90-110	2	10	

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QUALIFIERS

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92713556

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 adjusted reporting limit.
TNTC - Too Numerous To Count
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
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.
Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.
A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92713556

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92713556001	HAM-HGWA-1	EPA 3010A	833074	EPA 6010D	833112
92713556002	HAM-HGWA-2	EPA 3010A	833074	EPA 6010D	833112
92713556003	HAM-HGWA-3	EPA 3010A	833074	EPA 6010D	833112
92713556004	HAM-HGWA-43D	EPA 3010A	833074	EPA 6010D	833112
92713556005	HAM-HGWA-44D	EPA 3010A	833074	EPA 6010D	833112
92713556006	HAM-UGRD-FD-01	EPA 3010A	833074	EPA 6010D	833112
92713556007	HAM-UGRD-EB-01	EPA 3010A	833074	EPA 6010D	833112
92713556008	HAM-UGRD-FB-01	EPA 3010A	833074	EPA 6010D	833112
92713556001	HAM-HGWA-1	EPA 3005A	833075	EPA 6020B	833154
92713556002	HAM-HGWA-2	EPA 3005A	833075	EPA 6020B	833154
92713556003	HAM-HGWA-3	EPA 3005A	833075	EPA 6020B	833154
92713556004	HAM-HGWA-43D	EPA 3005A	833075	EPA 6020B	833154
92713556005	HAM-HGWA-44D	EPA 3005A	833075	EPA 6020B	833154
92713556006	HAM-UGRD-FD-01	EPA 3005A	833075	EPA 6020B	833154
92713556007	HAM-UGRD-EB-01	EPA 3005A	833075	EPA 6020B	833154
92713556008	HAM-UGRD-FB-01	EPA 3005A	833075	EPA 6020B	833154
92713556001	HAM-HGWA-1	EPA 7470A	834203	EPA 7470A	834267
92713556002	HAM-HGWA-2	EPA 7470A	834203	EPA 7470A	834267
92713556003	HAM-HGWA-3	EPA 7470A	834203	EPA 7470A	834267
92713556004	HAM-HGWA-43D	EPA 7470A	834203	EPA 7470A	834267
92713556005	HAM-HGWA-44D	EPA 7470A	834203	EPA 7470A	834267
92713556006	HAM-UGRD-FD-01	EPA 7470A	834203	EPA 7470A	834267
92713556007	HAM-UGRD-EB-01	EPA 7470A	834203	EPA 7470A	834267
92713556008	HAM-UGRD-FB-01	EPA 7470A	834203	EPA 7470A	834267
92713556001	HAM-HGWA-1	SM 2320B-2011	833295		
92713556002	HAM-HGWA-2	SM 2320B-2011	833295		
92713556003	HAM-HGWA-3	SM 2320B-2011	833295		
92713556004	HAM-HGWA-43D	SM 2320B-2011	833295		
92713556005	HAM-HGWA-44D	SM 2320B-2011	833295		
92713556006	HAM-UGRD-FD-01	SM 2320B-2011	833295		
92713556001	HAM-HGWA-1	SM 2540C-2015	833242		
92713556002	HAM-HGWA-2	SM 2540C-2015	833242		
92713556003	HAM-HGWA-3	SM 2540C-2015	833242		
92713556004	HAM-HGWA-43D	SM 2540C-2015	833242		
92713556005	HAM-HGWA-44D	SM 2540C-2015	833242		
92713556006	HAM-UGRD-FD-01	SM 2540C-2015	833242		
92713556007	HAM-UGRD-EB-01	SM 2540C-2015	833242		
92713556008	HAM-UGRD-FB-01	SM 2540C-2015	833242		
92713556001	HAM-HGWA-1	SM 4500-S2D-2011	833117		
92713556002	HAM-HGWA-2	SM 4500-S2D-2011	833117		
92713556003	HAM-HGWA-3	SM 4500-S2D-2011	833117		
92713556004	HAM-HGWA-43D	SM 4500-S2D-2011	833117		
92713556005	HAM-HGWA-44D	SM 4500-S2D-2011	833117		
92713556006	HAM-UGRD-FD-01	SM 4500-S2D-2011	833117		
92713556001	HAM-HGWA-1	EPA 300.0 Rev 2.1 1993	832724		
92713556002	HAM-HGWA-2	EPA 300.0 Rev 2.1 1993	832724		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92713556

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92713556003	HAM-HGWA-3	EPA 300.0 Rev 2.1 1993	832724		
92713556004	HAM-HGWA-43D	EPA 300.0 Rev 2.1 1993	832724		
92713556005	HAM-HGWA-44D	EPA 300.0 Rev 2.1 1993	832724		
92713556006	HAM-UGRD-FD-01	EPA 300.0 Rev 2.1 1993	832724		
92713556007	HAM-UGRD-EB-01	EPA 300.0 Rev 2.1 1993	832724		
92713556008	HAM-UGRD-FB-01	EPA 300.0 Rev 2.1 1993	832724		

REPORT OF LABORATORY ANALYSIS

face
FACED SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

story receiving samples:

ville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒ Kernersville ☐

Sample Condition
Upon Receipt

Client Name:

Project #:

WO#: 92713556



er: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client
Commercial ☒ Pace ☐ Other:

dy Seal Present? ☒ Yes ☐ No Seals Intact? ☒ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: 2/14/23

ng Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen?

☐ Yes ☐ No ☒ N/A

nometer:

☒ IR Gun ID:

Type of Ice:

☒ Wet ☐ Blue ☐ None

er Temp:

Correction Factor:

Add/Subtract (°C)

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

er Temp Corrected (°C):

Regulated Soil (☐ N/A, water sample)

id samples originate in a quarantine zone within the United States: CA, NY, or SC

check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: 2/14/23				
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	

MENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

T NOTIFICATION/RESOLUTION

son contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:

Effective Date: 12/01/2023

Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Project #

WO# : 92713556

PM: BV

Due Date: 02/29/24

CLIENT: 92- GP-HAM

ptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

ottom half of box is to list number of bottles

Check all unpreserved Nitrates for chlorine

[illegible]

pH Adjustment Log for Preserved Samples

sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	lot #

REMARKS: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. : of hold, incorrect preservative, out of temp, incorrect containers).

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information: Company: GA Power Address: Atlanta, GA Email To: SCS Contacts Phone: _____ Fax: _____ Requested Due Date/TAT: 10 Day		Section B Required Project Information: Report To: SCS Contacts Copy To: Geosyntec Contacts Purchase Order No.: _____ Project Name: Plant Hammond Pooled Upgradient Project Number: _____		Section C Invoice Information: Attention: Southern Co. Company Name: Address: Pace Quota Reference: Pace Project Manager: Bonnie Vang Pace Profile #: 10839	
REGULATORY AGENCY <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> OTHER CCR—		Site Location STATE: GA			

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE		COLLECTED		SAMPLE TYPE (G=GRAB C=COMP)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE		TIME	# OF CONTAINERS	Preservatives										Analysis Test †	Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Major Ions (Profile 10839-2)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
		DRINKING WATER WATER WASTE WATER PRODUCT SOILSOLID OIL WIPE AIR OTHER TISSUE	DW WT WW P SL OL WP AR TS	COMPOSITE	COMPOSITE				Unpreserved	H ₂ SO ₄			HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other													
1		HAM-HGWA-1				G	WG	G	2/13/24	1838		15	7	3	3										X	X	X	X	N	001	
2		HAM-HGWA-2				G	WG	G	2/13/24	1530	TH 2/13/24	17	7	3	3										X	X	X	X	N	002	
3		HAM-HGWA-3				G	WG	G	2/13/24	1358		17	7	3	3										X	X	X	X	N	003	
4		HAM-HGWA-43D				G	WG	G	02/13/24	1109		18	7	3	3										X	X	X	X	N	004	
5		HAM-HGWA-44D				G	WG	G	2/13/24	1151		16	7	3	3										X	X	X	X	N	005	
6		HAM-UGRD-FD-01				G	WG	G	2/13/24	0000		16	7	3	3										X	X	X	X	N	006	
7		HAM-UGRD-EB-01				G	WG	G	2/13/24	1305		16	5:28 PM	3	3										X	X	X	X	N	007	
8		HAM-UGRD-FB-01				G	WG	G	2/13/24	1310		16	5:42 PM	3	3										X	X	X	X	N	008	
9											TK 2/13/24																			Last Sample	
10																															
11																															
12																															

ADDITIONAL COMMENTS Task Code: HAM-CCR-ASSMT-2024S1 Anthony Goss / Geosyntec Ryan Williams / Pace		RELINQUISHED BY / AFFILIATION DATE 2-14-2024 2/14/2024	TIME 1230 1450	ACCEPTED BY / AFFILIATION DATE Ryan Williams / Pace 2/14/2024	TEMP IN °C Received on Sealed Cooler Custody Samples Intact
SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: Anthony Goss / Geosyntec SIGNATURE of SAMPLER: [Signature] PRINT Name of SAMPLER: Ryan Williams / Pace SIGNATURE of SAMPLER: [Signature]		DATE Signed (MM/DD/YY): 2/14/2024			



March 07, 2024

Kristen Jurinko
Southern Company
241 Ralph McGill Blvd NE
Bin 10160
Atlanta, GA 30308

RE: Project: Plant Hammond Pooled Upgra-RAD
Pace Project No.: 92713558

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on February 14, 2024. 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 - Greensburg

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

Sincerely,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Kip Gray, Geosyntec
Christine Hug, Geosyntec Consultants, Inc.
Thomas Kessler, Geosyntec Consultants
Whitney Law, Geosyntec Consultants
Laura Midkiff, Southern Company
Caroline Nelson, Geosyntec Consultants, Inc
Anthony Szwast, Geosyntec Consultants



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Plant Hammond Pooled Upgra-RAD
Pace Project No.: 92713558

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Plant Hammond Pooled Upgra-RAD

Pace Project No.: 92713558

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92713558001	HAM-HGWA-1	Water	02/13/24 18:38	02/14/24 14:50
92713558002	HAM-HGWA-2	Water	02/13/24 15:30	02/14/24 14:50
92713558003	HAM-HGWA-3	Water	02/13/24 13:58	02/14/24 14:50
92713558004	HAM-HGWA-43D	Water	02/13/24 11:09	02/14/24 14:50
92713558005	HAM-HGWA-44D	Water	02/13/24 11:51	02/14/24 14:50
92713558006	HAM-UGRD-FD-01	Water	02/13/24 00:00	02/14/24 14:50
92713558007	HAM-UGRD-EB-01	Water	02/13/24 13:05	02/14/24 14:50
92713558008	HAM-UGRD-FB-01	Water	02/13/24 13:10	02/14/24 14:50

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SAMPLE ANALYTE COUNT

Project: Plant Hammond Pooled Upgra-RAD

Pace Project No.: 92713558

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92713558001	HAM-HGWA-1	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92713558002	HAM-HGWA-2	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92713558003	HAM-HGWA-3	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92713558004	HAM-HGWA-43D	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92713558005	HAM-HGWA-44D	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92713558006	HAM-UGRD-FD-01	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92713558007	HAM-UGRD-EB-01	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92713558008	HAM-UGRD-FB-01	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Hammond Pooled Upgra-RAD
Pace Project No.: 92713558

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713558001	HAM-HGWA-1					
EPA 9315	Radium-226	0.00587U ± 0.107 (0.279) C:91% T:NA	pCi/L		02/29/24 08:30	
EPA 9320	Radium-228	0.188U ± 0.381 (0.841) C:78% T:82%	pCi/L		03/05/24 16:04	
Total Radium Calculation	Total Radium	0.194U ± 0.488 (1.12)	pCi/L		03/07/24 09:58	
92713558002	HAM-HGWA-2					
EPA 9315	Radium-226	0.207U ± 0.151 (0.265) C:91% T:NA	pCi/L		02/29/24 08:30	
EPA 9320	Radium-228	0.118U ± 0.325 (0.731) C:78% T:85%	pCi/L		03/05/24 16:02	
Total Radium Calculation	Total Radium	0.325U ± 0.476 (0.996)	pCi/L		03/07/24 09:58	
92713558003	HAM-HGWA-3					
EPA 9315	Radium-226	0.165U ± 0.135 (0.249) C:92% T:NA	pCi/L		02/29/24 08:30	
EPA 9320	Radium-228	0.0480U ± 0.300 (0.695) C:74% T:86%	pCi/L		03/05/24 16:02	
Total Radium Calculation	Total Radium	0.213U ± 0.435 (0.944)	pCi/L		03/07/24 09:58	
92713558004	HAM-HGWA-43D					
EPA 9315	Radium-226	0.0527U ± 0.103 (0.238) C:95% T:NA	pCi/L		02/29/24 08:30	
EPA 9320	Radium-228	0.807 ± 0.405 (0.675) C:73% T:84%	pCi/L		03/05/24 16:02	
Total Radium Calculation	Total Radium	0.860U ± 0.508 (0.913)	pCi/L		03/07/24 09:58	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Hammond Pooled Upgra-RAD
Pace Project No.: 92713558

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713558005	HAM-HGWA-44D					
EPA 9315	Radium-226	0.176U ± 0.127 (0.217) C:100% T:NA	pCi/L		02/29/24 08:30	
EPA 9320	Radium-228	0.733 ± 0.387 (0.666) C:74% T:88%	pCi/L		03/05/24 16:02	
Total Radium Calculation	Total Radium	0.909 ± 0.514 (0.883)	pCi/L		03/07/24 09:58	
92713558006	HAM-UGRD-FD-01					
EPA 9315	Radium-226	0.0330U ± 0.0940 (0.229) C:98% T:NA	pCi/L		02/29/24 08:30	
EPA 9320	Radium-228	0.257U ± 0.448 (0.977) C:76% T:85%	pCi/L		03/05/24 16:02	
Total Radium Calculation	Total Radium	0.290U ± 0.542 (1.21)	pCi/L		03/07/24 09:58	
92713558007	HAM-UGRD-EB-01					
EPA 9315	Radium-226	0.0289U ± 0.0927 (0.231) C:86% T:NA	pCi/L		02/29/24 08:31	
EPA 9320	Radium-228	-0.252U ± 0.385 (0.946) C:73% T:88%	pCi/L		03/05/24 16:02	
Total Radium Calculation	Total Radium	0.0289U ± 0.478 (1.18)	pCi/L		03/07/24 09:58	
92713558008	HAM-UGRD-FB-01					
EPA 9315	Radium-226	-0.0148U ± 0.100 (0.275) C:91% T:NA	pCi/L		02/29/24 08:31	
EPA 9320	Radium-228	0.405U ± 0.426 (0.891) C:78% T:93%	pCi/L		03/05/24 16:02	
Total Radium Calculation	Total Radium	0.405U ± 0.526 (1.17)	pCi/L		03/07/24 09:58	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgra-RAD

Pace Project No.: 92713558

Sample: HAM-HGWA-1		Lab ID: 92713558001	Collected: 02/13/24 18:38	Received: 02/14/24 14:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 9315	0.00587U ± 0.107 (0.279) C:91% T:NA		pCi/L	02/29/24 08:30	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 9320	0.188U ± 0.381 (0.841) C:78% T:82%		pCi/L	03/05/24 16:04	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.194U ± 0.488 (1.12)		pCi/L	03/07/24 09:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgra-RAD

Pace Project No.: 92713558

Sample: HAM-HGWA-2		Lab ID: 92713558002	Collected: 02/13/24 15:30	Received: 02/14/24 14:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 9315	0.207U ± 0.151 (0.265) C:91% T:NA		pCi/L	02/29/24 08:30	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 9320	0.118U ± 0.325 (0.731) C:78% T:85%		pCi/L	03/05/24 16:02	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.325U ± 0.476 (0.996)		pCi/L	03/07/24 09:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgra-RAD

Pace Project No.: 92713558

Sample: HAM-HGWA-3		Lab ID: 92713558003	Collected: 02/13/24 13:58	Received: 02/14/24 14:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 9315	0.165U ± 0.135 (0.249) C:92% T:NA		pCi/L	02/29/24 08:30	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 9320	0.0480U ± 0.300 (0.695) C:74% T:86%		pCi/L	03/05/24 16:02	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.213U ± 0.435 (0.944)		pCi/L	03/07/24 09:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgra-RAD

Pace Project No.: 92713558

Sample: HAM-HGWA-43D		Lab ID: 92713558004	Collected: 02/13/24 11:09	Received: 02/14/24 14:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 9315	0.0527U ± 0.103 (0.238) C:95% T:NA		pCi/L	02/29/24 08:30	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 9320	0.807 ± 0.405 (0.675) C:73% T:84%		pCi/L	03/05/24 16:02	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.860U ± 0.508 (0.913)		pCi/L	03/07/24 09:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgra-RAD

Pace Project No.: 92713558

Sample: HAM-HGWA-44D		Lab ID: 92713558005	Collected: 02/13/24 11:51	Received: 02/14/24 14:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	Pace Analytical Services - Greensburg			pCi/L	02/29/24 08:30	13982-63-3	
	EPA 9315	0.176U ± 0.127 (0.217) C:100% T:NA					
Radium-228	Pace Analytical Services - Greensburg			pCi/L	03/05/24 16:02	15262-20-1	
	EPA 9320	0.733 ± 0.387 (0.666) C:74% T:88%					
Total Radium	Pace Analytical Services - Greensburg			pCi/L	03/07/24 09:58	7440-14-4	
	Total Radium Calculation	0.909 ± 0.514 (0.883)					

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgra-RAD

Pace Project No.: 92713558

Sample: HAM-UGRD-FD-01		Lab ID: 92713558006	Collected: 02/13/24 00:00	Received: 02/14/24 14:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	Pace Analytical Services - Greensburg			pCi/L	02/29/24 08:30	13982-63-3	
	EPA 9315	0.0330U ± 0.0940 (0.229) C:98% T:NA					
Radium-228	Pace Analytical Services - Greensburg			pCi/L	03/05/24 16:02	15262-20-1	
	EPA 9320	0.257U ± 0.448 (0.977) C:76% T:85%					
Total Radium	Pace Analytical Services - Greensburg			pCi/L	03/07/24 09:58	7440-14-4	
	Total Radium Calculation	0.290U ± 0.542 (1.21)					

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgra-RAD

Pace Project No.: 92713558

Sample: HAM-UGRD-EB-01 Lab ID: 92713558007 Collected: 02/13/24 13:05 Received: 02/14/24 14:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.0289U ± 0.0927 (0.231) C:86% T:NA	pCi/L	02/29/24 08:31	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	-0.252U ± 0.385 (0.946) C:73% T:88%	pCi/L	03/05/24 16:02	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.0289U ± 0.478 (1.18)	pCi/L	03/07/24 09:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgra-RAD

Pace Project No.: 92713558

Sample: HAM-UGRD-FB-01		Lab ID: 92713558008	Collected: 02/13/24 13:10	Received: 02/14/24 14:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	Pace Analytical Services - Greensburg			pCi/L	02/29/24 08:31	13982-63-3	
	EPA 9315	-0.0148U ± 0.100 (0.275) C:91% T:NA					
Radium-228	Pace Analytical Services - Greensburg			pCi/L	03/05/24 16:02	15262-20-1	
	EPA 9320	0.405U ± 0.426 (0.891) C:78% T:93%					
Total Radium	Pace Analytical Services - Greensburg			pCi/L	03/07/24 09:58	7440-14-4	
	Total Radium Calculation	0.405U ± 0.526 (1.17)					

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgra-RAD

Pace Project No.: 92713558

QC Batch:	650440	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg
Associated Lab Samples:	92713558001, 92713558002, 92713558003, 92713558004, 92713558005, 92713558006, 92713558007, 92713558008		

METHOD BLANK: 3169529 Matrix: Water

Associated Lab Samples: 92713558001, 92713558002, 92713558003, 92713558004, 92713558005, 92713558006, 92713558007, 92713558008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0170 ± 0.309 (0.718) C:80% T:91%	pCi/L	03/05/24 16:04	

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.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgra-RAD

Pace Project No.: 92713558

QC Batch:	649569	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg
Associated Lab Samples:	92713558001, 92713558002, 92713558003, 92713558004, 92713558005, 92713558006, 92713558007, 92713558008		

METHOD BLANK: 3165288 Matrix: Water

Associated Lab Samples: 92713558001, 92713558002, 92713558003, 92713558004, 92713558005, 92713558006, 92713558007, 92713558008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0147 ± 0.129 (0.325) C:96% T:NA	pCi/L	02/28/24 07:38	

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.

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QUALIFIERS

Project: Plant Hammond Pooled Upgra-RAD
Pace Project No.: 92713558

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 adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Hammond Pooled Upgra-RAD
Pace Project No.: 92713558

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92713558001	HAM-HGWA-1	EPA 9315	649569		
92713558002	HAM-HGWA-2	EPA 9315	649569		
92713558003	HAM-HGWA-3	EPA 9315	649569		
92713558004	HAM-HGWA-43D	EPA 9315	649569		
92713558005	HAM-HGWA-44D	EPA 9315	649569		
92713558006	HAM-UGRD-FD-01	EPA 9315	649569		
92713558007	HAM-UGRD-EB-01	EPA 9315	649569		
92713558008	HAM-UGRD-FB-01	EPA 9315	649569		
92713558001	HAM-HGWA-1	EPA 9320	650440		
92713558002	HAM-HGWA-2	EPA 9320	650440		
92713558003	HAM-HGWA-3	EPA 9320	650440		
92713558004	HAM-HGWA-43D	EPA 9320	650440		
92713558005	HAM-HGWA-44D	EPA 9320	650440		
92713558006	HAM-UGRD-FD-01	EPA 9320	650440		
92713558007	HAM-UGRD-EB-01	EPA 9320	650440		
92713558008	HAM-UGRD-FB-01	EPA 9320	650440		
92713558001	HAM-HGWA-1	Total Radium Calculation	653389		
92713558002	HAM-HGWA-2	Total Radium Calculation	653389		
92713558003	HAM-HGWA-3	Total Radium Calculation	653389		
92713558004	HAM-HGWA-43D	Total Radium Calculation	653389		
92713558005	HAM-HGWA-44D	Total Radium Calculation	653389		
92713558006	HAM-UGRD-FD-01	Total Radium Calculation	653389		
92713558007	HAM-UGRD-EB-01	Total Radium Calculation	653389		
92713558008	HAM-UGRD-FB-01	Total Radium Calculation	653389		

REPORT OF LABORATORY ANALYSIS

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2
ace
ATION SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

atory receiving samples:

ville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒ Kernersville ☐

Sample Condition
Upon Receipt

Client Name:

Low Power

Project #:

WO#: 92713558



92713558

er: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client
ommercial ☒ Pace ☐ Other: _____

dy Seal Present? ☒ Yes ☐ No Seals Intact? ☒ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: *7/14/23*

ng Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen?

☐ Yes ☐ No ☒ N/A

nometer:

☒ IR Gun ID: *730*

Type of Ice: ☒ Wet ☐ Blue ☐ None

er Temp:

33

Correction Factor:

Add/Subtract (°C) *+0.1*

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling proce
has begun

er Temp Corrected (°C): *3.4*

Regulated Soil (☐ N/A, water sample)

id samples originate in a quarantine zone within the United States: CA, NY, or SC

heck maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally,
including Hawaii and Puerto Rico)? ☐ Yes ☐ No

		Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <i>Low</i>		
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

MENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

T NOTIFICATION/RESOLUTION

son contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____

Date: _____

Project Manager SRF Review: _____

Date: _____

Effective Date: 12/01/2023

check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

ptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

ottom half of box is to list number of bottles

Check all unpreserved Nitrates for chlorine

Project #

WO# : 92713558

PM: BV

Due Date: 03/07/24

CLIENT: 92- GP-HAM

[illegible]

pH Adjustment Log for Preserved Samples

sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	lot #

RE: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. of hold, incorrect preservative, out of temp, incorrect containers).

[illegible]



Quality Control Sample Performance Assessment

Test: Ra-228
Analyst: JJS1
Date: 2/27/2024
Worklist: 77792
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment		
MB Sample ID	3169529	
MB concentration:	0.017	
M/B 2 Sigma CSU:	0.309	
MB MDC:	0.718	
MB Numerical Performance Indicator:	0.11	
MB Status vs Numerical Indicator:	Pass	
MB Status vs. MDC:	Pass	

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77792	LCSD77792
Count Date:	3/5/2024	3/5/2024
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	37.615	37.615
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.815	0.816
Target Conc. (pCi/L, g, F):	4.615	4.611
Uncertainty (Calculated):	0.226	0.226
Result (pCi/L, g, F):	4.279	3.981
LCSD/LCSD 2 Sigma CSU (pCi/L, g, F):	1.004	0.939
Numerical Performance Indicator:	-0.64	-1.28
Percent Recovery:	92.71%	86.33%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc. (pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	LCS77792	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.:	LCSD77792	
Sample Result (pCi/L, g, F):	4.279	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.004	
Sample Duplicate Result (pCi/L, g, F):	3.981	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.939	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.425	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	7.13%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:		
MS/MSD Duplicate Status vs Numerical Indicator:		
MS/MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

VAL
3/6/29

UAM 3/7/24



Quality Control Sample Performance Assessment

Test: Ra-226
Analyst: SLC
Date: 2/22/2024
Worklist: 77730
Matrix: WT

Method Blank Assessment		
MB Sample ID	3165288	
MB concentration:	0.015	
M/B 2 Sigma CSU:	0.129	
MB MDC:	0.325	
MB Numerical Performance Indicator:	0.22	
MB Status vs Numerical Indicator:	Pass	
MB Status vs. MDC:	N/A	

Laboratory Control Sample Assessment	LCS (Y or N)?	Y
	LCS77730	LCS77730
Count Date:	2/28/2024	2/28/2024
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.026	25.026
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.501	0.502
Target Conc. (pCi/L, g, F):	4.999	4.984
Uncertainty (Calculated):	0.235	0.234
Result (pCi/L, g, F):	5.396	4.938
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.973	0.894
Numerical Performance Indicator:	0.78	-0.10
Percent Recovery:	107.93%	99.07%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS77730	92713558008
Duplicate Sample I.D.:	LCS77730	92713558008DUP
Sample Result (pCi/L, g, F):	5.396	-0.015
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.973	0.100
Sample Duplicate Result (pCi/L, g, F):	4.938	-0.027
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.894	0.090
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	0.679	0.180
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	8.56%	-59.07%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	25%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.:		
Sample MS I.D.:		
Sample MSD I.D.:		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc. (pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.:		
Sample MS I.D.:		
Sample MSD I.D.:		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

LAM 3/5/24



May 07, 2024

Kristen Jurinko
Southern Company
241 Ralph McGill Blvd NE
Bin 10160
Atlanta, GA 30308

RE: Project: Plant Hammond AP-2
Pace Project No.: 92713565

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory between February 14, 2024 and February 22, 2024. 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 - Asheville
- Pace Analytical Services - Peachtree Corners, GA

Revision 1: Update sample ID HAM-MW-23 to HAM-MW-23D.

Revision 2: Arsenic RDL limit was updated to report 0.005 mg/L.

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

Sincerely,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Kip Gray, Geosyntec
Christine Hug, Geosyntec Consultants, Inc.
Thomas Kessler, Geosyntec Consultants
Whitney Law, Geosyntec Consultants
Laura Midkiff, Southern Company

Caroline Nelson, Geosyntec Consultants, Inc
Anthony Szwast, Geosyntec Consultants



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Laboratory ID: 99030

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92713565001	HAM-HGWA-4	Water	02/13/24 16:50	02/14/24 14:50
92713565002	HAM-HGWA-5	Water	02/13/24 16:54	02/14/24 14:50
92713565003	HAM-HGWA-6	Water	02/13/24 18:19	02/14/24 14:50
92713565004	HAM-HGWA-42D	Water	02/13/24 18:20	02/14/24 14:50
92713565005	HAM-HGWC-14	Water	02/17/24 12:25	02/19/24 13:25
92713565006	HAM-HGWC-15	Water	02/17/24 16:15	02/19/24 13:25
92713565007	HAM-HGWC-17	Water	02/17/24 14:50	02/19/24 13:25
92713565008	HAM-HGWC-16	Water	02/18/24 17:32	02/19/24 13:25
92713565009	HAM-HGWC-18	Water	02/18/24 10:05	02/19/24 13:25
92713565010	HAM-MW-21D	Water	02/18/24 13:30	02/19/24 13:25
92713565011	HAM-MW-22	Water	02/18/24 16:32	02/19/24 13:25
92713565012	HAM-MW-23D	Water	02/18/24 14:15	02/19/24 13:25
92713565013	HAM-MW-33	Water	02/18/24 11:55	02/19/24 13:25
92713565014	HAM-MW-34D	Water	02/18/24 10:30	02/19/24 13:25
92713565015	HAM-MW-37D	Water	02/18/24 15:52	02/19/24 13:25
92713565016	HAM-AP2-EB-01	Water	02/18/24 17:20	02/19/24 13:25
92713565017	HAM-AP2-FB-01	Water	02/18/24 17:15	02/19/24 13:25
92713565018	HAM-AP2-FD-01	Water	02/18/24 00:00	02/19/24 13:25
92713565019	HAM-AP2-FD-02	Water	02/18/24 00:00	02/19/24 13:25
92713565020	HAM-MW-35	Water	02/19/24 11:30	02/22/24 11:10
92713565021	HAM-MW-51	Water	02/19/24 13:25	02/22/24 11:10
92713565022	HAM-AP2-EB-02	Water	02/19/24 11:50	02/22/24 11:10
92713565023	HAM-AP2-FB-02	Water	02/19/24 11:55	02/22/24 11:10

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92713565001	HAM-HGWA-4	EPA 6010D	AJM	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92713565002	HAM-HGWA-5	EPA 6010D	AJM, DRB	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92713565003	HAM-HGWA-6	EPA 6010D	DRB	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92713565004	HAM-HGWA-42D	EPA 6010D	AJM, DRB	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92713565005	HAM-HGWC-14	EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92713565006	HAM-HGWC-15	EPA 6010D	DRB	6
		EPA 6020B	CW1	13

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92713565007	HAM-HGWC-17	EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
92713565008	HAM-HGWC-16	SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
92713565009	HAM-HGWC-18	EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
92713565010	HAM-MW-21D	SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92713565011	HAM-MW-22	EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1

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SAMPLE ANALYTE COUNT

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92713565012	HAM-MW-23D	SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
92713565013	HAM-MW-33	SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
92713565014	HAM-MW-34D	SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
92713565015	HAM-MW-37D	SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
92713565016	HAM-AP2-EB-01	SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
92713565017	HAM-AP2-FB-01	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	1

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SAMPLE ANALYTE COUNT

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92713565018	HAM-AP2-FD-01	EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
92713565019	HAM-AP2-FD-02	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	MT1	13
92713565020	HAM-MW-35	EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
92713565021	HAM-MW-51	SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	1
92713565022	HAM-AP2-EB-02	EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	1

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SAMPLE ANALYTE COUNT

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92713565023	HAM-AP2-FB-02	EPA 6010D	DRB	1
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3

PASI-A = Pace Analytical Services - Asheville

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713565001	HAM-HGWA-4					
EPA 6010D	Iron	0.20	mg/L	0.040	02/26/24 02:01	
EPA 6010D	Manganese	0.036J	mg/L	0.040	02/26/24 02:01	
EPA 6010D	Potassium	2.2	mg/L	0.50	02/26/24 02:01	
EPA 6010D	Sodium	3.6	mg/L	1.0	02/26/24 02:01	
EPA 6010D	Calcium	31.1	mg/L	1.0	02/26/24 02:01	
EPA 6010D	Magnesium	6.0	mg/L	0.050	02/26/24 02:01	
EPA 6020B	Barium	0.054	mg/L	0.0050	02/20/24 16:28	
EPA 6020B	Boron	0.023J	mg/L	0.040	02/20/24 16:28	
EPA 6020B	Cobalt	0.00056J	mg/L	0.0050	02/20/24 16:28	
EPA 6020B	Lead	0.00019J	mg/L	0.0010	02/20/24 16:28	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	28.2	mg/L	5.0	02/19/24 16:50	
SM 2320B-2011	Alkalinity, Total as CaCO3	28.2	mg/L	5.0	02/19/24 16:50	
SM 2540C-2015	Total Dissolved Solids	176	mg/L	25.0	02/18/24 14:55	
EPA 300.0 Rev 2.1 1993	Chloride	1.4	mg/L	1.0	02/16/24 04:16	
EPA 300.0 Rev 2.1 1993	Fluoride	0.13	mg/L	0.10	02/16/24 04:16	
EPA 300.0 Rev 2.1 1993	Sulfate	64.6	mg/L	1.0	02/16/24 04:16	
92713565002	HAM-HGWA-5					
EPA 6010D	Iron	5.2J	mg/L	8.0	02/28/24 08:49	D3
EPA 6010D	Manganese	0.065	mg/L	0.040	02/26/24 02:06	
EPA 6010D	Potassium	11.6	mg/L	0.50	02/26/24 02:06	
EPA 6010D	Sodium	4.0	mg/L	1.0	02/26/24 02:06	
EPA 6010D	Calcium	20.6	mg/L	1.0	02/26/24 02:06	
EPA 6010D	Magnesium	1.2	mg/L	0.050	02/26/24 02:06	
EPA 6020B	Barium	0.048	mg/L	0.0050	02/20/24 16:32	
EPA 6020B	Cobalt	0.00039J	mg/L	0.0050	02/20/24 16:32	
EPA 6020B	Lithium	0.0032J	mg/L	0.030	02/20/24 16:32	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	91.1	mg/L	5.0	02/19/24 16:56	
SM 2320B-2011	Alkalinity, Total as CaCO3	91.1	mg/L	5.0	02/19/24 16:56	
SM 2540C-2015	Total Dissolved Solids	155	mg/L	25.0	02/18/24 14:55	
EPA 300.0 Rev 2.1 1993	Chloride	1.8	mg/L	1.0	02/16/24 04:30	
EPA 300.0 Rev 2.1 1993	Fluoride	0.059J	mg/L	0.10	02/16/24 04:30	M1
EPA 300.0 Rev 2.1 1993	Sulfate	21.8	mg/L	1.0	02/16/24 04:30	
92713565003	HAM-HGWA-6					
EPA 6010D	Iron	0.50	mg/L	0.40	02/28/24 08:52	
EPA 6010D	Sodium	8.4J	mg/L	10.0	02/28/24 08:52	D3
EPA 6010D	Calcium	55.4	mg/L	10.0	02/28/24 08:52	
EPA 6010D	Magnesium	10.1	mg/L	0.50	02/28/24 08:52	
EPA 6020B	Barium	0.19	mg/L	0.0050	02/20/24 16:35	
EPA 6020B	Boron	0.015J	mg/L	0.040	02/20/24 16:35	
EPA 6020B	Lithium	0.010J	mg/L	0.030	02/20/24 16:35	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	157	mg/L	5.0	02/19/24 17:05	
SM 2320B-2011	Alkalinity, Total as CaCO3	157	mg/L	5.0	02/19/24 17:05	
SM 2540C-2015	Total Dissolved Solids	240	mg/L	25.0	02/20/24 11:28	
EPA 300.0 Rev 2.1 1993	Chloride	1.4	mg/L	1.0	02/16/24 05:13	
EPA 300.0 Rev 2.1 1993	Fluoride	0.065J	mg/L	0.10	02/16/24 05:13	
EPA 300.0 Rev 2.1 1993	Sulfate	35.3	mg/L	1.0	02/16/24 05:13	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713565004	HAM-HGWA-42D					
EPA 6010D	Iron	0.68	mg/L	0.040	02/26/24 02:15	
EPA 6010D	Potassium	0.45J	mg/L	0.50	02/26/24 02:15	
EPA 6010D	Sodium	8.8	mg/L	1.0	02/26/24 02:15	
EPA 6010D	Calcium	47.7	mg/L	1.0	02/26/24 02:15	
EPA 6010D	Magnesium	7.3	mg/L	0.050	02/26/24 02:15	
EPA 6020B	Barium	0.23	mg/L	0.0050	02/20/24 16:39	
EPA 6020B	Boron	0.045	mg/L	0.040	02/20/24 16:39	
EPA 6020B	Chromium	0.010	mg/L	0.0050	02/20/24 16:39	
EPA 6020B	Lead	0.00085J	mg/L	0.0010	02/20/24 16:39	
EPA 6020B	Lithium	0.011J	mg/L	0.030	02/20/24 16:39	
EPA 6020B	Molybdenum	0.0021J	mg/L	0.010	02/20/24 16:39	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	152	mg/L	5.0	02/19/24 17:15	
SM 2320B-2011	Alkalinity, Total as CaCO3	152	mg/L	5.0	02/19/24 17:15	
SM 2540C-2015	Total Dissolved Solids	212	mg/L	25.0	02/20/24 11:28	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	02/16/24 05:28	
EPA 300.0 Rev 2.1 1993	Fluoride	0.087J	mg/L	0.10	02/16/24 05:28	
EPA 300.0 Rev 2.1 1993	Sulfate	17.1	mg/L	1.0	02/16/24 05:28	
92713565005	HAM-HGWC-14					
EPA 6010D	Calcium	418	mg/L	5.0	03/01/24 15:39	
EPA 6010D	Iron	1.2	mg/L	0.040	03/01/24 15:37	
EPA 6010D	Manganese	3.3	mg/L	0.040	03/01/24 15:37	
EPA 6010D	Potassium	10.9	mg/L	0.50	03/01/24 15:37	
EPA 6010D	Sodium	9.4	mg/L	1.0	03/01/24 15:37	
EPA 6010D	Magnesium	36.0	mg/L	0.050	03/01/24 15:37	
EPA 6020B	Arsenic	0.0026J	mg/L	0.0050	02/26/24 17:02	
EPA 6020B	Barium	0.020	mg/L	0.0050	02/26/24 17:02	
EPA 6020B	Beryllium	0.00044J	mg/L	0.00050	02/26/24 17:02	
EPA 6020B	Boron	7.3	mg/L	0.040	02/26/24 17:02	
EPA 6020B	Cobalt	0.038	mg/L	0.0050	02/26/24 17:02	
EPA 6020B	Lead	0.0012	mg/L	0.0010	02/26/24 17:02	
EPA 6020B	Lithium	0.0029J	mg/L	0.030	02/26/24 17:02	
EPA 6020B	Selenium	0.0056	mg/L	0.0050	02/26/24 17:02	
SM 2540C-2015	Total Dissolved Solids	1720	mg/L	25.0	02/23/24 13:34	
EPA 300.0 Rev 2.1 1993	Chloride	88.9	mg/L	21.0	02/22/24 11:52	
EPA 300.0 Rev 2.1 1993	Fluoride	0.065J	mg/L	0.10	02/21/24 07:51	
EPA 300.0 Rev 2.1 1993	Sulfate	898	mg/L	21.0	02/22/24 11:52	
92713565006	HAM-HGWC-15					
EPA 6010D	Iron	0.028J	mg/L	0.040	03/01/24 15:42	
EPA 6010D	Manganese	8.8	mg/L	0.040	03/01/24 15:42	
EPA 6010D	Potassium	1.0	mg/L	0.50	03/01/24 15:42	
EPA 6010D	Sodium	11.3	mg/L	1.0	03/01/24 15:42	
EPA 6010D	Calcium	175	mg/L	1.0	03/01/24 15:42	
EPA 6010D	Magnesium	28.6	mg/L	0.050	03/01/24 15:42	
EPA 6020B	Antimony	0.0014J	mg/L	0.0030	02/26/24 17:14	
EPA 6020B	Barium	0.017	mg/L	0.0050	02/26/24 17:14	
EPA 6020B	Boron	1.8	mg/L	0.040	02/26/24 17:14	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713565006	HAM-HGWC-15					
EPA 6020B	Cadmium	0.00084	mg/L	0.00050	02/26/24 17:14	
EPA 6020B	Cobalt	0.0058	mg/L	0.0050	02/26/24 17:14	
EPA 6020B	Lithium	0.014J	mg/L	0.030	02/26/24 17:14	
SM 2540C-2015	Total Dissolved Solids	830	mg/L	25.0	02/23/24 13:35	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	146	mg/L	5.0	02/22/24 14:20	
SM 2320B-2011	Alkalinity, Total as CaCO3	146	mg/L	5.0	02/22/24 14:20	
EPA 300.0 Rev 2.1 1993	Chloride	70.2	mg/L	1.0	02/21/24 08:05	
EPA 300.0 Rev 2.1 1993	Fluoride	0.064J	mg/L	0.10	02/21/24 08:05	
EPA 300.0 Rev 2.1 1993	Sulfate	305	mg/L	7.0	02/22/24 12:07	
92713565007	HAM-HGWC-17					
EPA 6010D	Iron	0.14	mg/L	0.040	03/01/24 15:45	
EPA 6010D	Manganese	0.66	mg/L	0.040	03/01/24 15:45	
EPA 6010D	Potassium	2.2	mg/L	0.50	03/01/24 15:45	
EPA 6010D	Sodium	11.3	mg/L	1.0	03/01/24 15:45	
EPA 6010D	Calcium	199	mg/L	1.0	03/01/24 15:45	
EPA 6010D	Magnesium	22.8	mg/L	0.050	03/01/24 15:45	
EPA 6020B	Barium	0.023	mg/L	0.0050	02/26/24 17:18	
EPA 6020B	Boron	5.7	mg/L	0.040	02/26/24 17:18	
EPA 6020B	Cobalt	0.0036J	mg/L	0.0050	02/26/24 17:18	
SM 2540C-2015	Total Dissolved Solids	815	mg/L	25.0	02/23/24 13:35	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	200	mg/L	5.0	02/22/24 14:42	
SM 2320B-2011	Alkalinity, Total as CaCO3	200	mg/L	5.0	02/22/24 14:42	
EPA 300.0 Rev 2.1 1993	Chloride	81.7	mg/L	1.0	02/21/24 08:20	
EPA 300.0 Rev 2.1 1993	Fluoride	0.057J	mg/L	0.10	02/21/24 08:20	
EPA 300.0 Rev 2.1 1993	Sulfate	260	mg/L	6.0	02/22/24 12:37	
92713565008	HAM-HGWC-16					
EPA 6010D	Iron	1.6	mg/L	0.040	03/01/24 15:48	
EPA 6010D	Manganese	0.051	mg/L	0.040	03/01/24 15:48	
EPA 6010D	Potassium	0.77	mg/L	0.50	03/01/24 15:48	
EPA 6010D	Sodium	9.9	mg/L	1.0	03/01/24 15:48	
EPA 6010D	Calcium	199	mg/L	1.0	03/01/24 15:48	
EPA 6010D	Magnesium	15.4	mg/L	0.050	03/01/24 15:48	
EPA 6020B	Barium	0.098	mg/L	0.0050	02/26/24 17:21	
EPA 6020B	Boron	2.3	mg/L	0.040	02/26/24 17:21	
EPA 6020B	Lithium	0.0030J	mg/L	0.030	02/26/24 17:21	
SM 2540C-2015	Total Dissolved Solids	755	mg/L	25.0	02/23/24 13:36	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	200	mg/L	5.0	02/22/24 14:57	
SM 2320B-2011	Alkalinity, Total as CaCO3	200	mg/L	5.0	02/22/24 14:57	
EPA 300.0 Rev 2.1 1993	Chloride	87.5	mg/L	1.0	02/21/24 09:07	
EPA 300.0 Rev 2.1 1993	Sulfate	220	mg/L	5.0	02/22/24 12:53	
92713565009	HAM-HGWC-18					
EPA 6010D	Calcium	347	mg/L	5.0	03/01/24 15:53	
EPA 6010D	Iron	0.20	mg/L	0.040	02/28/24 15:42	
EPA 6010D	Manganese	4.4	mg/L	0.040	02/28/24 15:42	
EPA 6010D	Potassium	9.5	mg/L	0.50	02/28/24 15:42	
EPA 6010D	Sodium	10.2	mg/L	1.0	02/28/24 15:42	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713565009	HAM-HGWC-18					
EPA 6010D	Magnesium	29.5	mg/L	0.050	02/28/24 15:42	
EPA 6020B	Arsenic	0.0027J	mg/L	0.0050	02/26/24 17:25	
EPA 6020B	Barium	0.020	mg/L	0.0050	02/26/24 17:25	
EPA 6020B	Beryllium	0.0022	mg/L	0.00050	02/26/24 17:25	
EPA 6020B	Boron	7.0	mg/L	0.040	02/26/24 17:25	
EPA 6020B	Cadmium	0.0015	mg/L	0.00050	02/26/24 17:25	
EPA 6020B	Cobalt	0.15	mg/L	0.0050	02/26/24 17:25	
EPA 6020B	Lead	0.0011	mg/L	0.0010	02/26/24 17:25	
EPA 6020B	Lithium	0.0098J	mg/L	0.030	02/26/24 17:25	
EPA 6020B	Selenium	0.013	mg/L	0.0050	02/26/24 17:25	
SM 2540C-2015	Total Dissolved Solids	1360	mg/L	25.0	02/23/24 13:37	
EPA 300.0 Rev 2.1 1993	Chloride	99.0	mg/L	17.0	02/22/24 13:38	
EPA 300.0 Rev 2.1 1993	Fluoride	0.17	mg/L	0.10	02/21/24 09:22	
EPA 300.0 Rev 2.1 1993	Sulfate	755	mg/L	17.0	02/22/24 13:38	
92713565010	HAM-MW-21D					
EPA 6010D	Iron	4.1	mg/L	0.040	03/01/24 15:55	
EPA 6010D	Manganese	0.24	mg/L	0.040	03/01/24 15:55	
EPA 6010D	Potassium	0.74	mg/L	0.50	03/01/24 15:55	
EPA 6010D	Sodium	8.0	mg/L	1.0	03/01/24 15:55	
EPA 6010D	Calcium	104	mg/L	1.0	03/01/24 15:55	
EPA 6010D	Magnesium	17.0	mg/L	0.050	03/01/24 15:55	
EPA 6020B	Barium	0.034	mg/L	0.0050	02/26/24 17:29	
EPA 6020B	Boron	2.3	mg/L	0.040	02/26/24 17:29	
EPA 6020B	Lithium	0.012J	mg/L	0.030	02/26/24 17:29	
EPA 6020B	Molybdenum	0.015	mg/L	0.010	02/26/24 17:29	
SM 2540C-2015	Total Dissolved Solids	477	mg/L	25.0	02/23/24 15:15	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	127	mg/L	5.0	02/22/24 15:16	
SM 2320B-2011	Alkalinity, Total as CaCO3	127	mg/L	5.0	02/22/24 15:16	
EPA 300.0 Rev 2.1 1993	Chloride	29.7	mg/L	1.0	02/21/24 09:38	
EPA 300.0 Rev 2.1 1993	Sulfate	150	mg/L	3.0	02/22/24 13:54	
92713565011	HAM-MW-22					
EPA 6010D	Manganese	11.0	mg/L	0.040	02/28/24 15:47	
EPA 6010D	Iron	0.033J	mg/L	0.040	03/01/24 15:58	
EPA 6010D	Potassium	0.76	mg/L	0.50	03/01/24 15:58	
EPA 6010D	Sodium	12.4	mg/L	1.0	03/01/24 15:58	
EPA 6010D	Calcium	186	mg/L	1.0	03/01/24 15:58	
EPA 6010D	Magnesium	37.1	mg/L	0.050	03/01/24 15:58	
EPA 6020B	Barium	0.012	mg/L	0.0050	02/26/24 18:19	
EPA 6020B	Boron	2.2	mg/L	0.040	02/26/24 18:19	
EPA 6020B	Cadmium	0.0018	mg/L	0.00050	02/26/24 18:19	
EPA 6020B	Cobalt	0.019	mg/L	0.0050	02/26/24 18:19	
SM 2540C-2015	Total Dissolved Solids	994	mg/L	25.0	02/23/24 15:15	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	32.0	mg/L	5.0	02/22/24 15:26	
SM 2320B-2011	Alkalinity, Total as CaCO3	32.0	mg/L	5.0	02/22/24 15:26	
EPA 300.0 Rev 2.1 1993	Chloride	98.8	mg/L	2.0	02/22/24 14:39	
EPA 300.0 Rev 2.1 1993	Sulfate	427	mg/L	10.0	02/22/24 19:08	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713565012	HAM-MW-23D					
EPA 6010D	Iron	0.10	mg/L	0.040	03/01/24 16:14	
EPA 6010D	Manganese	5.2	mg/L	0.040	03/01/24 16:14	
EPA 6010D	Potassium	1.9	mg/L	0.50	03/01/24 16:14	
EPA 6010D	Sodium	12.1	mg/L	1.0	03/01/24 16:14	M1
EPA 6010D	Calcium	286	mg/L	1.0	03/01/24 16:14	M1
EPA 6010D	Magnesium	28.4	mg/L	0.050	03/01/24 16:14	M1
EPA 6020B	Antimony	0.00057J	mg/L	0.0030	02/26/24 18:33	
EPA 6020B	Barium	0.041	mg/L	0.0050	02/26/24 18:33	
EPA 6020B	Boron	2.8	mg/L	0.040	02/26/24 18:33	
EPA 6020B	Cadmium	0.00017J	mg/L	0.00050	02/26/24 18:33	
EPA 6020B	Cobalt	0.00086J	mg/L	0.0050	02/26/24 18:33	
EPA 6020B	Lithium	0.0016J	mg/L	0.030	02/26/24 18:33	
EPA 6020B	Molybdenum	0.0047J	mg/L	0.010	02/26/24 18:33	
SM 2540C-2015	Total Dissolved Solids	1260	mg/L	25.0	02/23/24 15:16	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	247	mg/L	5.0	02/22/24 16:39	
SM 2320B-2011	Alkalinity, Total as CaCO3	247	mg/L	5.0	02/22/24 16:39	
EPA 300.0 Rev 2.1 1993	Chloride	116	mg/L	9.0	02/22/24 14:54	
EPA 300.0 Rev 2.1 1993	Sulfate	401	mg/L	9.0	02/22/24 14:54	
92713565013	HAM-MW-33					
EPA 6010D	Iron	0.058	mg/L	0.040	03/01/24 16:24	
EPA 6010D	Manganese	3.6	mg/L	0.040	03/01/24 16:24	
EPA 6010D	Potassium	9.3	mg/L	0.50	03/01/24 16:24	
EPA 6010D	Sodium	13.5	mg/L	1.0	03/01/24 16:24	
EPA 6010D	Magnesium	30.9	mg/L	0.050	03/01/24 16:24	
EPA 6010D	Calcium	337	mg/L	5.0	03/01/24 16:26	
EPA 6020B	Arsenic	0.0024J	mg/L	0.0050	02/26/24 18:37	
EPA 6020B	Barium	0.016	mg/L	0.0050	02/26/24 18:37	
EPA 6020B	Beryllium	0.00059	mg/L	0.00050	02/26/24 18:37	
EPA 6020B	Boron	5.4	mg/L	0.040	02/26/24 18:37	
EPA 6020B	Cadmium	0.00014J	mg/L	0.00050	02/26/24 18:37	
EPA 6020B	Cobalt	0.042	mg/L	0.0050	02/26/24 18:37	
EPA 6020B	Lead	0.00084J	mg/L	0.0010	02/26/24 18:37	
EPA 6020B	Selenium	0.011	mg/L	0.0050	02/26/24 18:37	
SM 2540C-2015	Total Dissolved Solids	2160	mg/L	25.0	02/23/24 15:16	1g
EPA 300.0 Rev 2.1 1993	Chloride	65.5	mg/L	1.0	02/21/24 10:55	
EPA 300.0 Rev 2.1 1993	Fluoride	0.088J	mg/L	0.10	02/21/24 10:55	
EPA 300.0 Rev 2.1 1993	Sulfate	820	mg/L	19.0	02/22/24 15:09	
92713565014	HAM-MW-34D					
EPA 6010D	Iron	0.090	mg/L	0.040	03/01/24 16:29	
EPA 6010D	Manganese	3.7	mg/L	0.040	03/01/24 16:29	
EPA 6010D	Potassium	9.2	mg/L	0.50	03/01/24 16:29	
EPA 6010D	Sodium	11.2	mg/L	1.0	03/01/24 16:29	
EPA 6010D	Magnesium	41.6	mg/L	0.050	03/01/24 16:29	
EPA 6010D	Calcium	458	mg/L	5.0	03/01/24 16:32	
EPA 6020B	Arsenic	0.00099J	mg/L	0.0050	02/26/24 18:41	
EPA 6020B	Barium	0.033	mg/L	0.0050	02/26/24 18:41	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713565014	HAM-MW-34D					
EPA 6020B	Boron	8.1	mg/L	0.040	02/26/24 18:41	
EPA 6020B	Cadmium	0.00080	mg/L	0.00050	02/26/24 18:41	
EPA 6020B	Cobalt	0.0067	mg/L	0.0050	02/26/24 18:41	
SM 2540C-2015	Total Dissolved Solids	2010	mg/L	25.0	02/23/24 15:16	1g
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	96.1	mg/L	5.0	02/22/24 15:59	
SM 2320B-2011	Alkalinity, Total as CaCO3	96.1	mg/L	5.0	02/22/24 15:59	
EPA 300.0 Rev 2.1 1993	Chloride	143	mg/L	22.0	02/22/24 15:29	
EPA 300.0 Rev 2.1 1993	Sulfate	918	mg/L	22.0	02/22/24 15:29	
92713565015	HAM-MW-37D					
EPA 6010D	Iron	0.17	mg/L	0.040	03/01/24 16:45	
EPA 6010D	Manganese	0.015J	mg/L	0.040	03/01/24 16:45	
EPA 6010D	Potassium	0.69	mg/L	0.50	03/01/24 16:45	
EPA 6010D	Sodium	11.3	mg/L	1.0	03/01/24 16:45	
EPA 6010D	Calcium	52.7	mg/L	1.0	03/01/24 16:45	
EPA 6010D	Magnesium	10.9	mg/L	0.050	03/01/24 16:45	
EPA 6020B	Barium	0.15	mg/L	0.0050	02/26/24 18:45	
EPA 6020B	Boron	0.12	mg/L	0.040	02/26/24 18:45	BC
EPA 6020B	Lithium	0.021J	mg/L	0.030	02/26/24 18:45	
EPA 6020B	Molybdenum	0.0016J	mg/L	0.010	02/26/24 18:45	
SM 2540C-2015	Total Dissolved Solids	269	mg/L	25.0	02/23/24 15:18	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	163	mg/L	5.0	02/22/24 21:03	
SM 2320B-2011	Alkalinity, Total as CaCO3	163	mg/L	5.0	02/22/24 21:03	
EPA 300.0 Rev 2.1 1993	Chloride	7.8	mg/L	1.0	02/21/24 11:25	
EPA 300.0 Rev 2.1 1993	Fluoride	0.050J	mg/L	0.10	02/21/24 11:25	
EPA 300.0 Rev 2.1 1993	Sulfate	30.4	mg/L	1.0	02/21/24 11:25	
92713565016	HAM-AP2-EB-01					
EPA 6020B	Boron	0.015J	mg/L	0.040	02/26/24 18:56	
EPA 6020B	Molybdenum	0.0016J	mg/L	0.010	02/26/24 18:56	
SM 2540C-2015	Total Dissolved Solids	64.0	mg/L	25.0	02/23/24 15:18	
92713565017	HAM-AP2-FB-01					
EPA 6020B	Molybdenum	0.0016J	mg/L	0.010	02/26/24 19:00	
SM 2540C-2015	Total Dissolved Solids	387	mg/L	25.0	02/23/24 15:18	
92713565018	HAM-AP2-FD-01					
EPA 6010D	Iron	1.6	mg/L	0.040	02/28/24 16:48	
EPA 6010D	Manganese	0.051	mg/L	0.040	02/28/24 16:48	
EPA 6010D	Potassium	0.87	mg/L	0.50	02/28/24 16:48	
EPA 6010D	Sodium	10.2	mg/L	1.0	02/28/24 16:48	
EPA 6010D	Calcium	190	mg/L	1.0	02/28/24 16:48	
EPA 6010D	Magnesium	15.4	mg/L	0.050	02/28/24 16:48	
EPA 6020B	Barium	0.089	mg/L	0.0050	02/26/24 19:03	
EPA 6020B	Boron	2.1	mg/L	0.040	02/26/24 19:03	
EPA 6020B	Lithium	0.0028J	mg/L	0.030	02/26/24 19:03	
SM 2540C-2015	Total Dissolved Solids	818	mg/L	25.0	02/23/24 15:19	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	197	mg/L	5.0	02/22/24 21:28	
SM 2320B-2011	Alkalinity, Total as CaCO3	197	mg/L	5.0	02/22/24 21:28	

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SUMMARY OF DETECTION

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713565018	HAM-AP2-FD-01					
EPA 300.0 Rev 2.1 1993	Chloride	86.8	mg/L	1.0	02/21/24 12:12	
EPA 300.0 Rev 2.1 1993	Sulfate	222	mg/L	5.0	02/22/24 15:44	
92713565019	HAM-AP2-FD-02					
EPA 6010D	Iron	0.085	mg/L	0.040	03/01/24 16:48	
EPA 6010D	Manganese	3.4	mg/L	0.040	03/01/24 16:48	
EPA 6010D	Potassium	9.5	mg/L	0.50	03/01/24 16:48	
EPA 6010D	Sodium	12.9	mg/L	1.0	03/01/24 16:48	
EPA 6010D	Magnesium	30.8	mg/L	0.050	03/01/24 16:48	
EPA 6010D	Calcium	329	mg/L	5.0	03/01/24 16:51	
EPA 6020B	Arsenic	0.0021J	mg/L	0.0050	02/26/24 19:07	
EPA 6020B	Barium	0.016	mg/L	0.0050	02/26/24 19:07	
EPA 6020B	Beryllium	0.00053	mg/L	0.00050	02/26/24 19:07	
EPA 6020B	Boron	5.2	mg/L	0.040	02/26/24 19:07	
EPA 6020B	Cadmium	0.00014J	mg/L	0.00050	02/26/24 19:07	
EPA 6020B	Cobalt	0.039	mg/L	0.0050	02/26/24 19:07	
EPA 6020B	Lead	0.00077J	mg/L	0.0010	02/26/24 19:07	
EPA 6020B	Selenium	0.0097	mg/L	0.0050	02/26/24 19:07	
SM 2540C-2015	Total Dissolved Solids	1430	mg/L	25.0	02/23/24 15:19	
EPA 300.0 Rev 2.1 1993	Chloride	60.9	mg/L	1.0	02/21/24 12:27	
EPA 300.0 Rev 2.1 1993	Fluoride	0.079J	mg/L	0.10	02/21/24 12:27	
EPA 300.0 Rev 2.1 1993	Sulfate	808	mg/L	18.0	02/22/24 15:59	
92713565020	HAM-MW-35					
EPA 6010D	Calcium	473	mg/L	5.0	03/04/24 08:58	
EPA 6010D	Iron	0.040J	mg/L	0.040	03/02/24 09:09	
EPA 6010D	Manganese	8.2	mg/L	0.040	03/02/24 09:09	
EPA 6010D	Potassium	7.4	mg/L	0.50	03/02/24 09:09	
EPA 6010D	Sodium	18.5	mg/L	1.0	03/02/24 09:09	
EPA 6010D	Magnesium	54.7	mg/L	0.050	03/02/24 09:09	
EPA 6020B	Arsenic	0.0073	mg/L	0.0050	02/29/24 16:45	
EPA 6020B	Barium	0.021	mg/L	0.0050	02/29/24 16:45	
EPA 6020B	Beryllium	0.00064	mg/L	0.00050	02/28/24 19:15	
EPA 6020B	Boron	8.4	mg/L	0.040	02/28/24 19:15	M1
EPA 6020B	Cadmium	0.0013	mg/L	0.00050	02/29/24 16:45	
EPA 6020B	Cobalt	0.084	mg/L	0.0050	02/28/24 19:15	
EPA 6020B	Lead	0.00060J	mg/L	0.0010	02/29/24 16:45	
EPA 6020B	Lithium	0.0031J	mg/L	0.030	02/28/24 19:15	
EPA 6020B	Selenium	0.0057	mg/L	0.0050	02/29/24 16:45	
SM 2540C-2015	Total Dissolved Solids	2120	mg/L	25.0	02/23/24 15:20	1g
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	9.6	mg/L	5.0	02/27/24 19:39	
SM 2320B-2011	Alkalinity, Total as CaCO3	9.6	mg/L	5.0	02/27/24 19:39	
EPA 300.0 Rev 2.1 1993	Chloride	150	mg/L	25.0	02/25/24 05:07	M1
EPA 300.0 Rev 2.1 1993	Fluoride	0.16	mg/L	0.10	02/24/24 16:13	
EPA 300.0 Rev 2.1 1993	Sulfate	1060	mg/L	25.0	02/25/24 05:07	M1
92713565021	HAM-MW-51					
EPA 6010D	Iron	1.1	mg/L	0.040	03/02/24 09:12	
EPA 6010D	Manganese	7.2	mg/L	0.040	03/02/24 09:12	

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SUMMARY OF DETECTION

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713565021	HAM-MW-51					
EPA 6010D	Potassium	8.0	mg/L	0.50	03/02/24 09:12	
EPA 6010D	Sodium	14.3	mg/L	1.0	03/02/24 09:12	
EPA 6010D	Magnesium	48.3	mg/L	0.050	03/02/24 09:12	
EPA 6010D	Calcium	486	mg/L	5.0	03/04/24 09:01	
EPA 6020B	Arsenic	0.0067	mg/L	0.0050	02/29/24 16:56	
EPA 6020B	Barium	0.028	mg/L	0.0050	02/29/24 16:56	
EPA 6020B	Beryllium	0.00047J	mg/L	0.00050	02/28/24 19:30	
EPA 6020B	Boron	7.9	mg/L	0.040	02/28/24 19:30	
EPA 6020B	Cadmium	0.00067	mg/L	0.00050	02/29/24 16:56	
EPA 6020B	Cobalt	0.046	mg/L	0.0050	02/28/24 19:30	
EPA 6020B	Lithium	0.0017J	mg/L	0.030	02/28/24 19:30	
EPA 6020B	Selenium	0.0019J	mg/L	0.0050	02/29/24 16:56	
SM 2540C-2015	Total Dissolved Solids	2040	mg/L	25.0	02/23/24 15:21	1g
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	56.1	mg/L	5.0	02/27/24 19:55	
SM 2320B-2011	Alkalinity, Total as CaCO3	56.1	mg/L	5.0	02/27/24 19:55	
EPA 300.0 Rev 2.1 1993	Chloride	125	mg/L	24.0	02/25/24 05:51	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	02/24/24 17:28	
EPA 300.0 Rev 2.1 1993	Sulfate	1010	mg/L	24.0	02/25/24 05:51	
92713565022	HAM-AP2-EB-02					
EPA 6010D	Calcium	15.3	mg/L	1.0	03/02/24 09:15	
92713565023	HAM-AP2-FB-02					
SM 2540C-2015	Total Dissolved Solids	32.0	mg/L	25.0	02/23/24 15:23	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-HGWA-4 Lab ID: 92713565001 Collected: 02/13/24 16:50 Received: 02/14/24 14:50 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	0.20	mg/L	0.040	0.025	1	02/16/24 19:24	02/26/24 02:01	7439-89-6	
Manganese	0.036J	mg/L	0.040	0.011	1	02/16/24 19:24	02/26/24 02:01	7439-96-5	
Potassium	2.2	mg/L	0.50	0.15	1	02/16/24 19:24	02/26/24 02:01	7440-09-7	
Sodium	3.6	mg/L	1.0	0.58	1	02/16/24 19:24	02/26/24 02:01	7440-23-5	
Calcium	31.1	mg/L	1.0	0.12	1	02/16/24 19:24	02/26/24 02:01	7440-70-2	
Magnesium	6.0	mg/L	0.050	0.012	1	02/16/24 19:24	02/26/24 02:01	7439-95-4	
6020 MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/17/24 05:35	02/20/24 16:28	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/17/24 05:35	02/20/24 16:28	7440-38-2	
Barium	0.054	mg/L	0.0050	0.00047	1	02/17/24 05:35	02/20/24 16:28	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/17/24 05:35	02/20/24 16:28	7440-41-7	
Boron	0.023J	mg/L	0.040	0.012	1	02/17/24 05:35	02/20/24 16:28	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/17/24 05:35	02/20/24 16:28	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/17/24 05:35	02/20/24 16:28	7440-47-3	
Cobalt	0.00056J	mg/L	0.0050	0.00032	1	02/17/24 05:35	02/20/24 16:28	7440-48-4	
Lead	0.00019J	mg/L	0.0010	0.00016	1	02/17/24 05:35	02/20/24 16:28	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/17/24 05:35	02/20/24 16:28	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/17/24 05:35	02/20/24 16:28	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/17/24 05:35	02/20/24 16:28	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/17/24 05:35	02/20/24 16:28	7440-28-0	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 14:58	7439-97-6	
2320B Alkalinity Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	28.2	mg/L	5.0	5.0	1		02/19/24 16:50		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/19/24 16:50		
Alkalinity, Total as CaCO3	28.2	mg/L	5.0	5.0	1		02/19/24 16:50		
2540C Total Dissolved Solids Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville									
Total Dissolved Solids	176	mg/L	25.0	25.0	1		02/18/24 14:55		
4500S2D Sulfide Water Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/17/24 01:56	18496-25-8	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	1.4	mg/L	1.0	0.60	1		02/16/24 04:16	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Sample: HAM-HGWA-4		Lab ID: 92713565001		Collected: 02/13/24 16:50		Received: 02/14/24 14:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.13	mg/L	0.10	0.050	1		02/16/24 04:16	16984-48-8	
Sulfate	64.6	mg/L	1.0	0.50	1		02/16/24 04:16	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-HGWA-5 Lab ID: 92713565002 Collected: 02/13/24 16:54 Received: 02/14/24 14:50 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	5.2J	mg/L	8.0	5.0	200	02/16/24 19:24	02/28/24 08:49	7439-89-6	D3
Manganese	0.065	mg/L	0.040	0.011	1	02/16/24 19:24	02/26/24 02:06	7439-96-5	
Potassium	11.6	mg/L	0.50	0.15	1	02/16/24 19:24	02/26/24 02:06	7440-09-7	
Sodium	4.0	mg/L	1.0	0.58	1	02/16/24 19:24	02/26/24 02:06	7440-23-5	
Calcium	20.6	mg/L	1.0	0.12	1	02/16/24 19:24	02/26/24 02:06	7440-70-2	
Magnesium	1.2	mg/L	0.050	0.012	1	02/16/24 19:24	02/26/24 02:06	7439-95-4	
6020 MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/17/24 05:35	02/20/24 16:32	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/17/24 05:35	02/20/24 16:32	7440-38-2	
Barium	0.048	mg/L	0.0050	0.00047	1	02/17/24 05:35	02/20/24 16:32	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/17/24 05:35	02/20/24 16:32	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	02/17/24 05:35	02/20/24 16:32	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/17/24 05:35	02/20/24 16:32	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/17/24 05:35	02/20/24 16:32	7440-47-3	
Cobalt	0.00039J	mg/L	0.0050	0.00032	1	02/17/24 05:35	02/20/24 16:32	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/17/24 05:35	02/20/24 16:32	7439-92-1	
Lithium	0.0032J	mg/L	0.030	0.0016	1	02/17/24 05:35	02/20/24 16:32	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/17/24 05:35	02/20/24 16:32	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/17/24 05:35	02/20/24 16:32	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/17/24 05:35	02/20/24 16:32	7440-28-0	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 15:01	7439-97-6	
2320B Alkalinity Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	91.1	mg/L	5.0	5.0	1		02/19/24 16:56		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/19/24 16:56		
Alkalinity, Total as CaCO3	91.1	mg/L	5.0	5.0	1		02/19/24 16:56		
2540C Total Dissolved Solids Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville									
Total Dissolved Solids	155	mg/L	25.0	25.0	1		02/18/24 14:55		
4500S2D Sulfide Water Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/17/24 01:57	18496-25-8	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	1.8	mg/L	1.0	0.60	1		02/16/24 04:30	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Sample: HAM-HGWA-5		Lab ID: 92713565002		Collected: 02/13/24 16:54		Received: 02/14/24 14:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.059J	mg/L	0.10	0.050	1		02/16/24 04:30	16984-48-8	M1
Sulfate	21.8	mg/L	1.0	0.50	1		02/16/24 04:30	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-HGWA-6 Lab ID: 92713565003 Collected: 02/13/24 18:19 Received: 02/14/24 14:50 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	0.50	mg/L	0.40	0.25	10	02/16/24 19:24	02/28/24 08:52	7439-89-6	
Manganese	ND	mg/L	0.40	0.11	10	02/16/24 19:24	02/28/24 08:52	7439-96-5	D3
Potassium	ND	mg/L	5.0	1.5	10	02/16/24 19:24	02/28/24 08:52	7440-09-7	D3
Sodium	8.4J	mg/L	10.0	5.8	10	02/16/24 19:24	02/28/24 08:52	7440-23-5	D3
Calcium	55.4	mg/L	10.0	1.2	10	02/16/24 19:24	02/28/24 08:52	7440-70-2	
Magnesium	10.1	mg/L	0.50	0.12	10	02/16/24 19:24	02/28/24 08:52	7439-95-4	
6020 MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/17/24 05:35	02/20/24 16:35	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/17/24 05:35	02/20/24 16:35	7440-38-2	
Barium	0.19	mg/L	0.0050	0.00047	1	02/17/24 05:35	02/20/24 16:35	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/17/24 05:35	02/20/24 16:35	7440-41-7	
Boron	0.015J	mg/L	0.040	0.012	1	02/17/24 05:35	02/20/24 16:35	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/17/24 05:35	02/20/24 16:35	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/17/24 05:35	02/20/24 16:35	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/17/24 05:35	02/20/24 16:35	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/17/24 05:35	02/20/24 16:35	7439-92-1	
Lithium	0.010J	mg/L	0.030	0.0016	1	02/17/24 05:35	02/20/24 16:35	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/17/24 05:35	02/20/24 16:35	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/17/24 05:35	02/20/24 16:35	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/17/24 05:35	02/20/24 16:35	7440-28-0	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 15:04	7439-97-6	
2320B Alkalinity Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	157	mg/L	5.0	5.0	1		02/19/24 17:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/19/24 17:05		
Alkalinity, Total as CaCO3	157	mg/L	5.0	5.0	1		02/19/24 17:05		
2540C Total Dissolved Solids Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville									
Total Dissolved Solids	240	mg/L	25.0	25.0	1		02/20/24 11:28		
4500S2D Sulfide Water Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/17/24 01:57	18496-25-8	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	1.4	mg/L	1.0	0.60	1		02/16/24 05:13	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Sample: HAM-HGWA-6		Lab ID: 92713565003		Collected: 02/13/24 18:19		Received: 02/14/24 14:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.065J	mg/L	0.10	0.050	1		02/16/24 05:13	16984-48-8	
Sulfate	35.3	mg/L	1.0	0.50	1		02/16/24 05:13	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-HGWA-42D Lab ID: 92713565004 Collected: 02/13/24 18:20 Received: 02/14/24 14:50 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Manganese	ND	mg/L	0.20	0.056	5	02/16/24 19:24	02/28/24 09:02	7439-96-5	D3
Iron	0.68	mg/L	0.040	0.025	1	02/16/24 19:24	02/26/24 02:15	7439-89-6	
Potassium	0.45J	mg/L	0.50	0.15	1	02/16/24 19:24	02/26/24 02:15	7440-09-7	
Sodium	8.8	mg/L	1.0	0.58	1	02/16/24 19:24	02/26/24 02:15	7440-23-5	
Calcium	47.7	mg/L	1.0	0.12	1	02/16/24 19:24	02/26/24 02:15	7440-70-2	
Magnesium	7.3	mg/L	0.050	0.012	1	02/16/24 19:24	02/26/24 02:15	7439-95-4	
6020 MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/17/24 05:35	02/20/24 16:39	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/17/24 05:35	02/20/24 16:39	7440-38-2	
Barium	0.23	mg/L	0.0050	0.00047	1	02/17/24 05:35	02/20/24 16:39	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/17/24 05:35	02/20/24 16:39	7440-41-7	
Boron	0.045	mg/L	0.040	0.012	1	02/17/24 05:35	02/20/24 16:39	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/17/24 05:35	02/20/24 16:39	7440-43-9	
Chromium	0.010	mg/L	0.0050	0.0019	1	02/17/24 05:35	02/20/24 16:39	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/17/24 05:35	02/20/24 16:39	7440-48-4	
Lead	0.00085J	mg/L	0.0010	0.00016	1	02/17/24 05:35	02/20/24 16:39	7439-92-1	
Lithium	0.011J	mg/L	0.030	0.0016	1	02/17/24 05:35	02/20/24 16:39	7439-93-2	
Molybdenum	0.0021J	mg/L	0.010	0.00062	1	02/17/24 05:35	02/20/24 16:39	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/17/24 05:35	02/20/24 16:39	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/17/24 05:35	02/20/24 16:39	7440-28-0	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 15:06	7439-97-6	
2320B Alkalinity Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	152	mg/L	5.0	5.0	1		02/19/24 17:15		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/19/24 17:15		
Alkalinity, Total as CaCO3	152	mg/L	5.0	5.0	1		02/19/24 17:15		
2540C Total Dissolved Solids Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville									
Total Dissolved Solids	212	mg/L	25.0	25.0	1		02/20/24 11:28		
4500S2D Sulfide Water Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/17/24 01:57	18496-25-8	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	4.1	mg/L	1.0	0.60	1		02/16/24 05:28	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Sample: HAM-HGWA-42D		Lab ID: 92713565004		Collected: 02/13/24 18:20		Received: 02/14/24 14:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.087J	mg/L	0.10	0.050	1		02/16/24 05:28	16984-48-8	
Sulfate	17.1	mg/L	1.0	0.50	1		02/16/24 05:28	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-HGWC-14 Lab ID: 92713565005 Collected: 02/17/24 12:25 Received: 02/19/24 13:25 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	418	mg/L	5.0	0.61	5	02/20/24 20:35	03/01/24 15:39	7440-70-2	
Iron	1.2	mg/L	0.040	0.025	1	02/20/24 20:35	03/01/24 15:37	7439-89-6	
Manganese	3.3	mg/L	0.040	0.011	1	02/20/24 20:35	03/01/24 15:37	7439-96-5	
Potassium	10.9	mg/L	0.50	0.15	1	02/20/24 20:35	03/01/24 15:37	7440-09-7	
Sodium	9.4	mg/L	1.0	0.58	1	02/20/24 20:35	03/01/24 15:37	7440-23-5	
Magnesium	36.0	mg/L	0.050	0.012	1	02/20/24 20:35	03/01/24 15:37	7439-95-4	
6020 MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/20/24 15:49	02/26/24 17:02	7440-36-0	
Arsenic	0.0026J	mg/L	0.0050	0.00084	1	02/20/24 15:49	02/26/24 17:02	7440-38-2	
Barium	0.020	mg/L	0.0050	0.00047	1	02/20/24 15:49	02/26/24 17:02	7440-39-3	
Beryllium	0.00044J	mg/L	0.00050	0.000094	1	02/20/24 15:49	02/26/24 17:02	7440-41-7	
Boron	7.3	mg/L	0.040	0.012	1	02/20/24 15:49	02/26/24 17:02	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/20/24 15:49	02/26/24 17:02	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/20/24 15:49	02/26/24 17:02	7440-47-3	
Cobalt	0.038	mg/L	0.0050	0.00032	1	02/20/24 15:49	02/26/24 17:02	7440-48-4	
Lead	0.0012	mg/L	0.0010	0.00016	1	02/20/24 15:49	02/26/24 17:02	7439-92-1	
Lithium	0.0029J	mg/L	0.030	0.0016	1	02/20/24 15:49	02/26/24 17:02	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/20/24 15:49	02/26/24 17:02	7439-98-7	
Selenium	0.0056	mg/L	0.0050	0.00096	1	02/20/24 15:49	02/26/24 17:02	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/20/24 15:49	02/26/24 17:02	7440-28-0	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 15:09	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1720	mg/L	25.0	25.0	1		02/23/24 13:34		
2320B Alkalinity Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/22/24 14:15		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/22/24 14:15		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		02/22/24 14:15		
4500S2D Sulfide Water Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/21/24 03:42	18496-25-8	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	88.9	mg/L	21.0	12.6	21		02/22/24 11:52	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Sample: HAM-HGWC-14		Lab ID: 92713565005		Collected: 02/17/24 12:25		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.065J	mg/L	0.10	0.050	1		02/21/24 07:51	16984-48-8	
Sulfate	898	mg/L	21.0	10.5	21		02/22/24 11:52	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Sample: HAM-HGWC-15 Lab ID: 92713565006 Collected: 02/17/24 16:15 Received: 02/19/24 13:25 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	0.028J	mg/L	0.040	0.025	1	02/20/24 20:35	03/01/24 15:42	7439-89-6	
Manganese	8.8	mg/L	0.040	0.011	1	02/20/24 20:35	03/01/24 15:42	7439-96-5	
Potassium	1.0	mg/L	0.50	0.15	1	02/20/24 20:35	03/01/24 15:42	7440-09-7	
Sodium	11.3	mg/L	1.0	0.58	1	02/20/24 20:35	03/01/24 15:42	7440-23-5	
Calcium	175	mg/L	1.0	0.12	1	02/20/24 20:35	03/01/24 15:42	7440-70-2	
Magnesium	28.6	mg/L	0.050	0.012	1	02/20/24 20:35	03/01/24 15:42	7439-95-4	
6020 MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	0.0014J	mg/L	0.0030	0.00054	1	02/20/24 15:49	02/26/24 17:14	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/20/24 15:49	02/26/24 17:14	7440-38-2	
Barium	0.017	mg/L	0.0050	0.00047	1	02/20/24 15:49	02/26/24 17:14	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/20/24 15:49	02/26/24 17:14	7440-41-7	
Boron	1.8	mg/L	0.040	0.012	1	02/20/24 15:49	02/26/24 17:14	7440-42-8	
Cadmium	0.00084	mg/L	0.00050	0.00010	1	02/20/24 15:49	02/26/24 17:14	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/20/24 15:49	02/26/24 17:14	7440-47-3	
Cobalt	0.0058	mg/L	0.0050	0.00032	1	02/20/24 15:49	02/26/24 17:14	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/20/24 15:49	02/26/24 17:14	7439-92-1	
Lithium	0.014J	mg/L	0.030	0.0016	1	02/20/24 15:49	02/26/24 17:14	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/20/24 15:49	02/26/24 17:14	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/20/24 15:49	02/26/24 17:14	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/20/24 15:49	02/26/24 17:14	7440-28-0	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 15:12	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	830	mg/L	25.0	25.0	1		02/23/24 13:35		
2320B Alkalinity Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	146	mg/L	5.0	5.0	1		02/22/24 14:20		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/22/24 14:20		
Alkalinity, Total as CaCO3	146	mg/L	5.0	5.0	1		02/22/24 14:20		
4500S2D Sulfide Water Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/21/24 03:42	18496-25-8	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	70.2	mg/L	1.0	0.60	1		02/21/24 08:05	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Sample: HAM-HGWC-15		Lab ID: 92713565006		Collected: 02/17/24 16:15		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.064J	mg/L	0.10	0.050	1		02/21/24 08:05	16984-48-8	
Sulfate	305	mg/L	7.0	3.5	7		02/22/24 12:07	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-HGWC-17 Lab ID: 92713565007 Collected: 02/17/24 14:50 Received: 02/19/24 13:25 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	0.14	mg/L	0.040	0.025	1	02/20/24 20:35	03/01/24 15:45	7439-89-6	
Manganese	0.66	mg/L	0.040	0.011	1	02/20/24 20:35	03/01/24 15:45	7439-96-5	
Potassium	2.2	mg/L	0.50	0.15	1	02/20/24 20:35	03/01/24 15:45	7440-09-7	
Sodium	11.3	mg/L	1.0	0.58	1	02/20/24 20:35	03/01/24 15:45	7440-23-5	
Calcium	199	mg/L	1.0	0.12	1	02/20/24 20:35	03/01/24 15:45	7440-70-2	
Magnesium	22.8	mg/L	0.050	0.012	1	02/20/24 20:35	03/01/24 15:45	7439-95-4	
6020 MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/20/24 15:49	02/26/24 17:18	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/20/24 15:49	02/26/24 17:18	7440-38-2	
Barium	0.023	mg/L	0.0050	0.00047	1	02/20/24 15:49	02/26/24 17:18	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/20/24 15:49	02/26/24 17:18	7440-41-7	
Boron	5.7	mg/L	0.040	0.012	1	02/20/24 15:49	02/26/24 17:18	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/20/24 15:49	02/26/24 17:18	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/20/24 15:49	02/26/24 17:18	7440-47-3	
Cobalt	0.0036J	mg/L	0.0050	0.00032	1	02/20/24 15:49	02/26/24 17:18	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/20/24 15:49	02/26/24 17:18	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/20/24 15:49	02/26/24 17:18	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/20/24 15:49	02/26/24 17:18	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/20/24 15:49	02/26/24 17:18	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/20/24 15:49	02/26/24 17:18	7440-28-0	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 15:14	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	815	mg/L	25.0	25.0	1		02/23/24 13:35		
2320B Alkalinity Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	200	mg/L	5.0	5.0	1		02/22/24 14:42		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/22/24 14:42		
Alkalinity, Total as CaCO3	200	mg/L	5.0	5.0	1		02/22/24 14:42		
4500S2D Sulfide Water Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/21/24 03:42	18496-25-8	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	81.7	mg/L	1.0	0.60	1		02/21/24 08:20	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Sample: HAM-HGWC-17		Lab ID: 92713565007		Collected: 02/17/24 14:50		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.057J	mg/L	0.10	0.050	1		02/21/24 08:20	16984-48-8	
Sulfate	260	mg/L	6.0	3.0	6		02/22/24 12:37	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-HGWC-16 Lab ID: 92713565008 Collected: 02/18/24 17:32 Received: 02/19/24 13:25 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	1.6	mg/L	0.040	0.025	1	02/20/24 20:35	03/01/24 15:48	7439-89-6	
Manganese	0.051	mg/L	0.040	0.011	1	02/20/24 20:35	03/01/24 15:48	7439-96-5	
Potassium	0.77	mg/L	0.50	0.15	1	02/20/24 20:35	03/01/24 15:48	7440-09-7	
Sodium	9.9	mg/L	1.0	0.58	1	02/20/24 20:35	03/01/24 15:48	7440-23-5	
Calcium	199	mg/L	1.0	0.12	1	02/20/24 20:35	03/01/24 15:48	7440-70-2	
Magnesium	15.4	mg/L	0.050	0.012	1	02/20/24 20:35	03/01/24 15:48	7439-95-4	
6020 MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/20/24 15:49	02/26/24 17:21	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/20/24 15:49	02/26/24 17:21	7440-38-2	
Barium	0.098	mg/L	0.0050	0.00047	1	02/20/24 15:49	02/26/24 17:21	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/20/24 15:49	02/26/24 17:21	7440-41-7	
Boron	2.3	mg/L	0.040	0.012	1	02/20/24 15:49	02/26/24 17:21	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/20/24 15:49	02/26/24 17:21	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/20/24 15:49	02/26/24 17:21	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/20/24 15:49	02/26/24 17:21	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/20/24 15:49	02/26/24 17:21	7439-92-1	
Lithium	0.0030J	mg/L	0.030	0.0016	1	02/20/24 15:49	02/26/24 17:21	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/20/24 15:49	02/26/24 17:21	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/20/24 15:49	02/26/24 17:21	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/20/24 15:49	02/26/24 17:21	7440-28-0	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 15:17	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	755	mg/L	25.0	25.0	1		02/23/24 13:36		
2320B Alkalinity Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	200	mg/L	5.0	5.0	1		02/22/24 14:57		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/22/24 14:57		
Alkalinity, Total as CaCO3	200	mg/L	5.0	5.0	1		02/22/24 14:57		
4500S2D Sulfide Water Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/21/24 03:46	18496-25-8	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	87.5	mg/L	1.0	0.60	1		02/21/24 09:07	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Sample: HAM-HGWC-16		Lab ID: 92713565008		Collected: 02/18/24 17:32		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	ND	mg/L	0.10	0.050	1		02/21/24 09:07	16984-48-8	
Sulfate	220	mg/L	5.0	2.5	5		02/22/24 12:53	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-HGWC-18		Lab ID: 92713565009		Collected: 02/18/24 10:05		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	347	mg/L	5.0	0.61	5	02/20/24 20:35	03/01/24 15:53	7440-70-2	
Iron	0.20	mg/L	0.040	0.025	1	02/20/24 20:35	02/28/24 15:42	7439-89-6	
Manganese	4.4	mg/L	0.040	0.011	1	02/20/24 20:35	02/28/24 15:42	7439-96-5	
Potassium	9.5	mg/L	0.50	0.15	1	02/20/24 20:35	02/28/24 15:42	7440-09-7	
Sodium	10.2	mg/L	1.0	0.58	1	02/20/24 20:35	02/28/24 15:42	7440-23-5	
Magnesium	29.5	mg/L	0.050	0.012	1	02/20/24 20:35	02/28/24 15:42	7439-95-4	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/20/24 15:49	02/26/24 17:25	7440-36-0	
Arsenic	0.0027J	mg/L	0.0050	0.00084	1	02/20/24 15:49	02/26/24 17:25	7440-38-2	
Barium	0.020	mg/L	0.0050	0.00047	1	02/20/24 15:49	02/26/24 17:25	7440-39-3	
Beryllium	0.0022	mg/L	0.00050	0.000094	1	02/20/24 15:49	02/26/24 17:25	7440-41-7	
Boron	7.0	mg/L	0.040	0.012	1	02/20/24 15:49	02/26/24 17:25	7440-42-8	
Cadmium	0.0015	mg/L	0.00050	0.00010	1	02/20/24 15:49	02/26/24 17:25	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/20/24 15:49	02/26/24 17:25	7440-47-3	
Cobalt	0.15	mg/L	0.0050	0.00032	1	02/20/24 15:49	02/26/24 17:25	7440-48-4	
Lead	0.0011	mg/L	0.0010	0.00016	1	02/20/24 15:49	02/26/24 17:25	7439-92-1	
Lithium	0.0098J	mg/L	0.030	0.0016	1	02/20/24 15:49	02/26/24 17:25	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/20/24 15:49	02/26/24 17:25	7439-98-7	
Selenium	0.013	mg/L	0.0050	0.00096	1	02/20/24 15:49	02/26/24 17:25	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/20/24 15:49	02/26/24 17:25	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 15:25	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1360	mg/L	25.0	25.0	1		02/23/24 13:37		
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/22/24 15:10		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/22/24 15:10		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		02/22/24 15:10		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/21/24 03:46	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	99.0	mg/L	17.0	10.2	17		02/22/24 13:38	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Sample: HAM-HGWC-18		Lab ID: 92713565009		Collected: 02/18/24 10:05		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.17	mg/L	0.10	0.050	1		02/21/24 09:22	16984-48-8	
Sulfate	755	mg/L	17.0	8.5	17		02/22/24 13:38	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-MW-21D		Lab ID: 92713565010		Collected: 02/18/24 13:30		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Iron	4.1	mg/L	0.040	0.025	1	02/20/24 20:35	03/01/24 15:55	7439-89-6	
Manganese	0.24	mg/L	0.040	0.011	1	02/20/24 20:35	03/01/24 15:55	7439-96-5	
Potassium	0.74	mg/L	0.50	0.15	1	02/20/24 20:35	03/01/24 15:55	7440-09-7	
Sodium	8.0	mg/L	1.0	0.58	1	02/20/24 20:35	03/01/24 15:55	7440-23-5	
Calcium	104	mg/L	1.0	0.12	1	02/20/24 20:35	03/01/24 15:55	7440-70-2	
Magnesium	17.0	mg/L	0.050	0.012	1	02/20/24 20:35	03/01/24 15:55	7439-95-4	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/20/24 15:49	02/26/24 17:29	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/20/24 15:49	02/26/24 17:29	7440-38-2	
Barium	0.034	mg/L	0.0050	0.00047	1	02/20/24 15:49	02/26/24 17:29	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/20/24 15:49	02/26/24 17:29	7440-41-7	
Boron	2.3	mg/L	0.040	0.012	1	02/20/24 15:49	02/26/24 17:29	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/20/24 15:49	02/26/24 17:29	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/20/24 15:49	02/26/24 17:29	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/20/24 15:49	02/26/24 17:29	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/20/24 15:49	02/26/24 17:29	7439-92-1	
Lithium	0.012J	mg/L	0.030	0.0016	1	02/20/24 15:49	02/26/24 17:29	7439-93-2	
Molybdenum	0.015	mg/L	0.010	0.00062	1	02/20/24 15:49	02/26/24 17:29	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/20/24 15:49	02/26/24 17:29	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/20/24 15:49	02/26/24 17:29	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 15:27	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	477	mg/L	25.0	25.0	1		02/23/24 15:15		
2320B Alkalinity									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	127	mg/L	5.0	5.0	1		02/22/24 15:16		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/22/24 15:16		
Alkalinity, Total as CaCO3	127	mg/L	5.0	5.0	1		02/22/24 15:16		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/21/24 03:47	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	29.7	mg/L	1.0	0.60	1		02/21/24 09:38	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-MW-21D		Lab ID: 92713565010		Collected: 02/18/24 13:30		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	ND	mg/L	0.10	0.050	1		02/21/24 09:38	16984-48-8	
Sulfate	150	mg/L	3.0	1.5	3		02/22/24 13:54	14808-79-8	

REPORT OF LABORATORY ANALYSIS



ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-MW-22		Lab ID: 92713565011		Collected: 02/18/24 16:32		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Manganese	11.0	mg/L	0.040	0.011	1	02/20/24 20:35	02/28/24 15:47	7439-96-5	
Iron	0.033J	mg/L	0.040	0.025	1	02/20/24 20:35	03/01/24 15:58	7439-89-6	
Potassium	0.76	mg/L	0.50	0.15	1	02/20/24 20:35	03/01/24 15:58	7440-09-7	
Sodium	12.4	mg/L	1.0	0.58	1	02/20/24 20:35	03/01/24 15:58	7440-23-5	
Calcium	186	mg/L	1.0	0.12	1	02/20/24 20:35	03/01/24 15:58	7440-70-2	
Magnesium	37.1	mg/L	0.050	0.012	1	02/20/24 20:35	03/01/24 15:58	7439-95-4	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/20/24 16:50	02/26/24 18:19	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/20/24 16:50	02/26/24 18:19	7440-38-2	
Barium	0.012	mg/L	0.0050	0.00047	1	02/20/24 16:50	02/26/24 18:19	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/20/24 16:50	02/26/24 18:19	7440-41-7	
Boron	2.2	mg/L	0.040	0.012	1	02/20/24 16:50	02/26/24 18:19	7440-42-8	
Cadmium	0.0018	mg/L	0.00050	0.00010	1	02/20/24 16:50	02/26/24 18:19	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/20/24 16:50	02/26/24 18:19	7440-47-3	
Cobalt	0.019	mg/L	0.0050	0.00032	1	02/20/24 16:50	02/26/24 18:19	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/20/24 16:50	02/26/24 18:19	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/20/24 16:50	02/26/24 18:19	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/20/24 16:50	02/26/24 18:19	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/20/24 16:50	02/26/24 18:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/20/24 16:50	02/26/24 18:19	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 15:30	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	994	mg/L	25.0	25.0	1		02/23/24 15:15		
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	32.0	mg/L	5.0	5.0	1		02/22/24 15:26		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/22/24 15:26		
Alkalinity, Total as CaCO3	32.0	mg/L	5.0	5.0	1		02/22/24 15:26		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/21/24 03:47	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	98.8	mg/L	2.0	1.2	2		02/22/24 14:39	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-MW-22		Lab ID: 92713565011		Collected: 02/18/24 16:32		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	ND	mg/L	0.10	0.050	1		02/21/24 10:24	16984-48-8	
Sulfate	427	mg/L	10.0	5.0	10		02/22/24 19:08	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-MW-23D Lab ID: 92713565012 Collected: 02/18/24 14:15 Received: 02/19/24 13:25 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	0.10	mg/L	0.040	0.025	1	02/20/24 21:17	03/01/24 16:14	7439-89-6	
Manganese	5.2	mg/L	0.040	0.011	1	02/20/24 21:17	03/01/24 16:14	7439-96-5	
Potassium	1.9	mg/L	0.50	0.15	1	02/20/24 21:17	03/01/24 16:14	7440-09-7	
Sodium	12.1	mg/L	1.0	0.58	1	02/20/24 21:17	03/01/24 16:14	7440-23-5	M1
Calcium	286	mg/L	1.0	0.12	1	02/20/24 21:17	03/01/24 16:14	7440-70-2	M1
Magnesium	28.4	mg/L	0.050	0.012	1	02/20/24 21:17	03/01/24 16:14	7439-95-4	M1
6020 MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	0.00057J	mg/L	0.0030	0.00054	1	02/20/24 16:50	02/26/24 18:33	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/20/24 16:50	02/26/24 18:33	7440-38-2	
Barium	0.041	mg/L	0.0050	0.00047	1	02/20/24 16:50	02/26/24 18:33	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/20/24 16:50	02/26/24 18:33	7440-41-7	
Boron	2.8	mg/L	0.040	0.012	1	02/20/24 16:50	02/26/24 18:33	7440-42-8	
Cadmium	0.00017J	mg/L	0.00050	0.00010	1	02/20/24 16:50	02/26/24 18:33	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/20/24 16:50	02/26/24 18:33	7440-47-3	
Cobalt	0.00086J	mg/L	0.0050	0.00032	1	02/20/24 16:50	02/26/24 18:33	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/20/24 16:50	02/26/24 18:33	7439-92-1	
Lithium	0.0016J	mg/L	0.030	0.0016	1	02/20/24 16:50	02/26/24 18:33	7439-93-2	
Molybdenum	0.0047J	mg/L	0.010	0.00062	1	02/20/24 16:50	02/26/24 18:33	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/20/24 16:50	02/26/24 18:33	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/20/24 16:50	02/26/24 18:33	7440-28-0	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/22/24 11:30	02/22/24 15:34	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1260	mg/L	25.0	25.0	1		02/23/24 15:16		
2320B Alkalinity Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	247	mg/L	5.0	5.0	1		02/22/24 16:39		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/22/24 16:39		
Alkalinity, Total as CaCO3	247	mg/L	5.0	5.0	1		02/22/24 16:39		
4500S2D Sulfide Water Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/21/24 03:49	18496-25-8	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	116	mg/L	9.0	5.4	9		02/22/24 14:54	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-MW-23D		Lab ID: 92713565012		Collected: 02/18/24 14:15		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	ND	mg/L	0.10	0.050	1		02/21/24 10:39	16984-48-8	
Sulfate	401	mg/L	9.0	4.5	9		02/22/24 14:54	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-MW-33		Lab ID: 92713565013		Collected: 02/18/24 11:55		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	0.058	mg/L	0.040	0.025	1	02/20/24 21:17	03/01/24 16:24	7439-89-6	
Manganese	3.6	mg/L	0.040	0.011	1	02/20/24 21:17	03/01/24 16:24	7439-96-5	
Potassium	9.3	mg/L	0.50	0.15	1	02/20/24 21:17	03/01/24 16:24	7440-09-7	
Sodium	13.5	mg/L	1.0	0.58	1	02/20/24 21:17	03/01/24 16:24	7440-23-5	
Magnesium	30.9	mg/L	0.050	0.012	1	02/20/24 21:17	03/01/24 16:24	7439-95-4	
Calcium	337	mg/L	5.0	0.61	5	02/20/24 21:17	03/01/24 16:26	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/20/24 16:50	02/26/24 18:37	7440-36-0	
Arsenic	0.0024J	mg/L	0.0050	0.00084	1	02/20/24 16:50	02/26/24 18:37	7440-38-2	
Barium	0.016	mg/L	0.0050	0.00047	1	02/20/24 16:50	02/26/24 18:37	7440-39-3	
Beryllium	0.00059	mg/L	0.00050	0.000094	1	02/20/24 16:50	02/26/24 18:37	7440-41-7	
Boron	5.4	mg/L	0.040	0.012	1	02/20/24 16:50	02/26/24 18:37	7440-42-8	
Cadmium	0.00014J	mg/L	0.00050	0.00010	1	02/20/24 16:50	02/26/24 18:37	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/20/24 16:50	02/26/24 18:37	7440-47-3	
Cobalt	0.042	mg/L	0.0050	0.00032	1	02/20/24 16:50	02/26/24 18:37	7440-48-4	
Lead	0.00084J	mg/L	0.0010	0.00016	1	02/20/24 16:50	02/26/24 18:37	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/20/24 16:50	02/26/24 18:37	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/20/24 16:50	02/26/24 18:37	7439-98-7	
Selenium	0.011	mg/L	0.0050	0.00096	1	02/20/24 16:50	02/26/24 18:37	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/20/24 16:50	02/26/24 18:37	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/23/24 07:00	02/23/24 09:38	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	2160	mg/L	25.0	25.0	1		02/23/24 15:16		1g
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/22/24 15:42		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/22/24 15:42		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		02/22/24 15:42		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/21/24 03:52	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	65.5	mg/L	1.0	0.60	1		02/21/24 10:55	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-MW-33		Lab ID: 92713565013		Collected: 02/18/24 11:55		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.088J	mg/L	0.10	0.050	1		02/21/24 10:55	16984-48-8	
Sulfate	820	mg/L	19.0	9.5	19		02/22/24 15:09	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-MW-34D		Lab ID: 92713565014		Collected: 02/18/24 10:30		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	0.090	mg/L	0.040	0.025	1	02/20/24 21:17	03/01/24 16:29	7439-89-6	
Manganese	3.7	mg/L	0.040	0.011	1	02/20/24 21:17	03/01/24 16:29	7439-96-5	
Potassium	9.2	mg/L	0.50	0.15	1	02/20/24 21:17	03/01/24 16:29	7440-09-7	
Sodium	11.2	mg/L	1.0	0.58	1	02/20/24 21:17	03/01/24 16:29	7440-23-5	
Magnesium	41.6	mg/L	0.050	0.012	1	02/20/24 21:17	03/01/24 16:29	7439-95-4	
Calcium	458	mg/L	5.0	0.61	5	02/20/24 21:17	03/01/24 16:32	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/20/24 16:50	02/26/24 18:41	7440-36-0	
Arsenic	0.00099J	mg/L	0.0050	0.00084	1	02/20/24 16:50	02/26/24 18:41	7440-38-2	
Barium	0.033	mg/L	0.0050	0.00047	1	02/20/24 16:50	02/26/24 18:41	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/20/24 16:50	02/26/24 18:41	7440-41-7	
Boron	8.1	mg/L	0.040	0.012	1	02/20/24 16:50	02/26/24 18:41	7440-42-8	
Cadmium	0.00080	mg/L	0.00050	0.00010	1	02/20/24 16:50	02/26/24 18:41	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/20/24 16:50	02/26/24 18:41	7440-47-3	
Cobalt	0.0067	mg/L	0.0050	0.00032	1	02/20/24 16:50	02/26/24 18:41	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/20/24 16:50	02/26/24 18:41	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/20/24 16:50	02/26/24 18:41	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/20/24 16:50	02/26/24 18:41	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/20/24 16:50	02/26/24 18:41	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/20/24 16:50	02/26/24 18:41	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/23/24 07:00	02/23/24 09:40	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	2010	mg/L	25.0	25.0	1		02/23/24 15:16		1g
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	96.1	mg/L	5.0	5.0	1		02/22/24 15:59		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/22/24 15:59		
Alkalinity, Total as CaCO3	96.1	mg/L	5.0	5.0	1		02/22/24 15:59		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/21/24 03:52	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	143	mg/L	22.0	13.2	22		02/22/24 15:29	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Sample: HAM-MW-34D		Lab ID: 92713565014		Collected: 02/18/24 10:30		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	ND	mg/L	0.10	0.050	1		02/21/24 11:10	16984-48-8	
Sulfate	918	mg/L	22.0	11.0	22		02/22/24 15:29	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-MW-37D		Lab ID: 92713565015		Collected: 02/18/24 15:52		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Iron	0.17	mg/L	0.040	0.025	1	02/20/24 21:17	03/01/24 16:45	7439-89-6	
Manganese	0.015J	mg/L	0.040	0.011	1	02/20/24 21:17	03/01/24 16:45	7439-96-5	
Potassium	0.69	mg/L	0.50	0.15	1	02/20/24 21:17	03/01/24 16:45	7440-09-7	
Sodium	11.3	mg/L	1.0	0.58	1	02/20/24 21:17	03/01/24 16:45	7440-23-5	
Calcium	52.7	mg/L	1.0	0.12	1	02/20/24 21:17	03/01/24 16:45	7440-70-2	
Magnesium	10.9	mg/L	0.050	0.012	1	02/20/24 21:17	03/01/24 16:45	7439-95-4	
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Antimony	ND	mg/L	0.0030	0.00054	1	02/20/24 16:50	02/26/24 18:45	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/20/24 16:50	02/26/24 18:45	7440-38-2	
Barium	0.15	mg/L	0.0050	0.00047	1	02/20/24 16:50	02/26/24 18:45	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/20/24 16:50	02/26/24 18:45	7440-41-7	
Boron	0.12	mg/L	0.040	0.012	1	02/20/24 16:50	02/26/24 18:45	7440-42-8	BC
Cadmium	ND	mg/L	0.00050	0.00010	1	02/20/24 16:50	02/26/24 18:45	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/20/24 16:50	02/26/24 18:45	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/20/24 16:50	02/26/24 18:45	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/20/24 16:50	02/26/24 18:45	7439-92-1	
Lithium	0.021J	mg/L	0.030	0.0016	1	02/20/24 16:50	02/26/24 18:45	7439-93-2	
Molybdenum	0.0016J	mg/L	0.010	0.00062	1	02/20/24 16:50	02/26/24 18:45	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/20/24 16:50	02/26/24 18:45	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/20/24 16:50	02/26/24 18:45	7440-28-0	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA							
Mercury	ND	mg/L	0.00020	0.00013	1	02/23/24 07:00	02/23/24 09:48	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	269	mg/L	25.0	25.0	1		02/23/24 15:18		
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	163	mg/L	5.0	5.0	1		02/22/24 21:03		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/22/24 21:03		
Alkalinity, Total as CaCO3	163	mg/L	5.0	5.0	1		02/22/24 21:03		
4500S2D Sulfide Water		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		02/21/24 03:53	18496-25-8	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	7.8	mg/L	1.0	0.60	1		02/21/24 11:25	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Sample: HAM-MW-37D		Lab ID: 92713565015		Collected: 02/18/24 15:52		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.050J	mg/L	0.10	0.050	1		02/21/24 11:25	16984-48-8	
Sulfate	30.4	mg/L	1.0	0.50	1		02/21/24 11:25	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-AP2-EB-01		Lab ID: 92713565016		Collected: 02/18/24 17:20		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Calcium	ND	mg/L	1.0	0.12	1	02/20/24 21:17	02/28/24 16:43	7440-70-2	
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Antimony	ND	mg/L	0.0030	0.00054	1	02/20/24 16:50	02/26/24 18:56	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/20/24 16:50	02/26/24 18:56	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	02/20/24 16:50	02/26/24 18:56	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/20/24 16:50	02/26/24 18:56	7440-41-7	
Boron	0.015J	mg/L	0.040	0.012	1	02/20/24 16:50	02/26/24 18:56	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/20/24 16:50	02/26/24 18:56	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/20/24 16:50	02/26/24 18:56	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/20/24 16:50	02/26/24 18:56	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/20/24 16:50	02/26/24 18:56	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/20/24 16:50	02/26/24 18:56	7439-93-2	
Molybdenum	0.0016J	mg/L	0.010	0.00062	1	02/20/24 16:50	02/26/24 18:56	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/20/24 16:50	02/26/24 18:56	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/20/24 16:50	02/26/24 18:56	7440-28-0	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA							
Mercury	ND	mg/L	0.00020	0.00013	1	02/23/24 07:00	02/23/24 09:51	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	64.0	mg/L	25.0	25.0	1		02/23/24 15:18		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	ND	mg/L	1.0	0.60	1		02/21/24 00:38	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/21/24 00:38	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/21/24 00:38	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-AP2-FB-01		Lab ID: 92713565017		Collected: 02/18/24 17:15		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Calcium	ND	mg/L	1.0	0.12	1	02/20/24 21:17	02/28/24 16:45	7440-70-2	
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Antimony	ND	mg/L	0.0030	0.00054	1	02/20/24 16:50	02/26/24 19:00	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/20/24 16:50	02/26/24 19:00	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	02/20/24 16:50	02/26/24 19:00	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/20/24 16:50	02/26/24 19:00	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	02/20/24 16:50	02/26/24 19:00	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/20/24 16:50	02/26/24 19:00	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/20/24 16:50	02/26/24 19:00	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/20/24 16:50	02/26/24 19:00	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/20/24 16:50	02/26/24 19:00	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/20/24 16:50	02/26/24 19:00	7439-93-2	
Molybdenum	0.0016J	mg/L	0.010	0.00062	1	02/20/24 16:50	02/26/24 19:00	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/20/24 16:50	02/26/24 19:00	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/20/24 16:50	02/26/24 19:00	7440-28-0	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA							
Mercury	ND	mg/L	0.00020	0.00013	1	02/23/24 07:00	02/23/24 09:53	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	387	mg/L	25.0	25.0	1		02/23/24 15:18		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	ND	mg/L	1.0	0.60	1		02/21/24 00:53	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/21/24 00:53	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/21/24 00:53	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-AP2-FD-01		Lab ID: 92713565018		Collected: 02/18/24 00:00		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Iron	1.6	mg/L	0.040	0.025	1	02/20/24 21:17	02/28/24 16:48	7439-89-6	
Manganese	0.051	mg/L	0.040	0.011	1	02/20/24 21:17	02/28/24 16:48	7439-96-5	
Potassium	0.87	mg/L	0.50	0.15	1	02/20/24 21:17	02/28/24 16:48	7440-09-7	
Sodium	10.2	mg/L	1.0	0.58	1	02/20/24 21:17	02/28/24 16:48	7440-23-5	
Calcium	190	mg/L	1.0	0.12	1	02/20/24 21:17	02/28/24 16:48	7440-70-2	
Magnesium	15.4	mg/L	0.050	0.012	1	02/20/24 21:17	02/28/24 16:48	7439-95-4	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/20/24 16:50	02/26/24 19:03	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/20/24 16:50	02/26/24 19:03	7440-38-2	
Barium	0.089	mg/L	0.0050	0.00047	1	02/20/24 16:50	02/26/24 19:03	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/20/24 16:50	02/26/24 19:03	7440-41-7	
Boron	2.1	mg/L	0.040	0.012	1	02/20/24 16:50	02/26/24 19:03	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/20/24 16:50	02/26/24 19:03	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/20/24 16:50	02/26/24 19:03	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/20/24 16:50	02/26/24 19:03	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/20/24 16:50	02/26/24 19:03	7439-92-1	
Lithium	0.0028J	mg/L	0.030	0.0016	1	02/20/24 16:50	02/26/24 19:03	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/20/24 16:50	02/26/24 19:03	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/20/24 16:50	02/26/24 19:03	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/20/24 16:50	02/26/24 19:03	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/23/24 07:00	02/23/24 09:56	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	818	mg/L	25.0	25.0	1		02/23/24 15:19		
2320B Alkalinity									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	197	mg/L	5.0	5.0	1		02/22/24 21:28		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/22/24 21:28		
Alkalinity, Total as CaCO3	197	mg/L	5.0	5.0	1		02/22/24 21:28		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/21/24 03:53	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	86.8	mg/L	1.0	0.60	1		02/21/24 12:12	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Sample: HAM-AP2-FD-01		Lab ID: 92713565018		Collected: 02/18/24 00:00		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	ND	mg/L	0.10	0.050	1		02/21/24 12:12	16984-48-8	
Sulfate	222	mg/L	5.0	2.5	5		02/22/24 15:44	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-AP2-FD-02		Lab ID: 92713565019		Collected: 02/18/24 00:00		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	0.085	mg/L	0.040	0.025	1	02/20/24 21:17	03/01/24 16:48	7439-89-6	
Manganese	3.4	mg/L	0.040	0.011	1	02/20/24 21:17	03/01/24 16:48	7439-96-5	
Potassium	9.5	mg/L	0.50	0.15	1	02/20/24 21:17	03/01/24 16:48	7440-09-7	
Sodium	12.9	mg/L	1.0	0.58	1	02/20/24 21:17	03/01/24 16:48	7440-23-5	
Magnesium	30.8	mg/L	0.050	0.012	1	02/20/24 21:17	03/01/24 16:48	7439-95-4	
Calcium	329	mg/L	5.0	0.61	5	02/20/24 21:17	03/01/24 16:51	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/20/24 16:50	02/26/24 19:07	7440-36-0	
Arsenic	0.0021J	mg/L	0.0050	0.00084	1	02/20/24 16:50	02/26/24 19:07	7440-38-2	
Barium	0.016	mg/L	0.0050	0.00047	1	02/20/24 16:50	02/26/24 19:07	7440-39-3	
Beryllium	0.00053	mg/L	0.00050	0.000094	1	02/20/24 16:50	02/26/24 19:07	7440-41-7	
Boron	5.2	mg/L	0.040	0.012	1	02/20/24 16:50	02/26/24 19:07	7440-42-8	
Cadmium	0.00014J	mg/L	0.00050	0.00010	1	02/20/24 16:50	02/26/24 19:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/20/24 16:50	02/26/24 19:07	7440-47-3	
Cobalt	0.039	mg/L	0.0050	0.00032	1	02/20/24 16:50	02/26/24 19:07	7440-48-4	
Lead	0.00077J	mg/L	0.0010	0.00016	1	02/20/24 16:50	02/26/24 19:07	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/20/24 16:50	02/26/24 19:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/20/24 16:50	02/26/24 19:07	7439-98-7	
Selenium	0.0097	mg/L	0.0050	0.00096	1	02/20/24 16:50	02/26/24 19:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/20/24 16:50	02/26/24 19:07	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/23/24 07:00	02/23/24 09:59	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1430	mg/L	25.0	25.0	1		02/23/24 15:19		
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/22/24 21:41		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/22/24 21:41		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		02/22/24 21:41		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/21/24 03:53	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	60.9	mg/L	1.0	0.60	1		02/21/24 12:27	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Sample: HAM-AP2-FD-02		Lab ID: 92713565019		Collected: 02/18/24 00:00		Received: 02/19/24 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.079J	mg/L	0.10	0.050	1		02/21/24 12:27	16984-48-8	
Sulfate	808	mg/L	18.0	9.0	18		02/22/24 15:59	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-MW-35		Lab ID: 92713565020		Collected: 02/19/24 11:30		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	473	mg/L	5.0	0.61	5	02/28/24 18:17	03/04/24 08:58	7440-70-2	
Iron	0.040J	mg/L	0.040	0.025	1	02/28/24 18:17	03/02/24 09:09	7439-89-6	
Manganese	8.2	mg/L	0.040	0.011	1	02/28/24 18:17	03/02/24 09:09	7439-96-5	
Potassium	7.4	mg/L	0.50	0.15	1	02/28/24 18:17	03/02/24 09:09	7440-09-7	
Sodium	18.5	mg/L	1.0	0.58	1	02/28/24 18:17	03/02/24 09:09	7440-23-5	
Magnesium	54.7	mg/L	0.050	0.012	1	02/28/24 18:17	03/02/24 09:09	7439-95-4	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/26/24 13:45	02/29/24 16:45	7440-36-0	
Arsenic	0.0073	mg/L	0.0050	0.00084	1	02/26/24 13:45	02/29/24 16:45	7440-38-2	
Barium	0.021	mg/L	0.0050	0.00047	1	02/26/24 13:45	02/29/24 16:45	7440-39-3	
Beryllium	0.00064	mg/L	0.00050	0.000094	1	02/26/24 13:45	02/28/24 19:15	7440-41-7	
Boron	8.4	mg/L	0.040	0.012	1	02/26/24 13:45	02/28/24 19:15	7440-42-8	M1
Cadmium	0.0013	mg/L	0.00050	0.00010	1	02/26/24 13:45	02/29/24 16:45	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/26/24 13:45	02/28/24 19:15	7440-47-3	
Cobalt	0.084	mg/L	0.0050	0.00032	1	02/26/24 13:45	02/28/24 19:15	7440-48-4	
Lead	0.00060J	mg/L	0.0010	0.00016	1	02/26/24 13:45	02/29/24 16:45	7439-92-1	
Lithium	0.0031J	mg/L	0.030	0.0016	1	02/26/24 13:45	02/28/24 19:15	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/26/24 13:45	02/29/24 16:45	7439-98-7	
Selenium	0.0057	mg/L	0.0050	0.00096	1	02/26/24 13:45	02/29/24 16:45	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/26/24 13:45	02/29/24 16:45	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/29/24 18:00	03/01/24 09:32	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	2120	mg/L	25.0	25.0	1		02/23/24 15:20		1g
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	9.6	mg/L	5.0	5.0	1		02/27/24 19:39		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/27/24 19:39		
Alkalinity, Total as CaCO3	9.6	mg/L	5.0	5.0	1		02/27/24 19:39		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/24/24 03:25	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	150	mg/L	25.0	15.0	25		02/25/24 05:07	16887-00-6	M1

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Sample: HAM-MW-35		Lab ID: 92713565020		Collected: 02/19/24 11:30		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.16	mg/L	0.10	0.050	1		02/24/24 16:13	16984-48-8	
Sulfate	1060	mg/L	25.0	12.5	25		02/25/24 05:07	14808-79-8	M1

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-MW-51		Lab ID: 92713565021		Collected: 02/19/24 13:25		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	1.1	mg/L	0.040	0.025	1	02/28/24 18:17	03/02/24 09:12	7439-89-6	
Manganese	7.2	mg/L	0.040	0.011	1	02/28/24 18:17	03/02/24 09:12	7439-96-5	
Potassium	8.0	mg/L	0.50	0.15	1	02/28/24 18:17	03/02/24 09:12	7440-09-7	
Sodium	14.3	mg/L	1.0	0.58	1	02/28/24 18:17	03/02/24 09:12	7440-23-5	
Magnesium	48.3	mg/L	0.050	0.012	1	02/28/24 18:17	03/02/24 09:12	7439-95-4	
Calcium	486	mg/L	5.0	0.61	5	02/28/24 18:17	03/04/24 09:01	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/26/24 13:45	02/29/24 16:56	7440-36-0	
Arsenic	0.0067	mg/L	0.0050	0.00084	1	02/26/24 13:45	02/29/24 16:56	7440-38-2	
Barium	0.028	mg/L	0.0050	0.00047	1	02/26/24 13:45	02/29/24 16:56	7440-39-3	
Beryllium	0.00047J	mg/L	0.00050	0.000094	1	02/26/24 13:45	02/28/24 19:30	7440-41-7	
Boron	7.9	mg/L	0.040	0.012	1	02/26/24 13:45	02/28/24 19:30	7440-42-8	
Cadmium	0.00067	mg/L	0.00050	0.00010	1	02/26/24 13:45	02/29/24 16:56	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/26/24 13:45	02/28/24 19:30	7440-47-3	
Cobalt	0.046	mg/L	0.0050	0.00032	1	02/26/24 13:45	02/28/24 19:30	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/26/24 13:45	02/29/24 16:56	7439-92-1	
Lithium	0.0017J	mg/L	0.030	0.0016	1	02/26/24 13:45	02/28/24 19:30	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/26/24 13:45	02/29/24 16:56	7439-98-7	
Selenium	0.0019J	mg/L	0.0050	0.00096	1	02/26/24 13:45	02/29/24 16:56	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/26/24 13:45	02/29/24 16:56	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/29/24 18:00	03/01/24 09:35	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	2040	mg/L	25.0	25.0	1		02/23/24 15:21		1g
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	56.1	mg/L	5.0	5.0	1		02/27/24 19:55		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/27/24 19:55		
Alkalinity, Total as CaCO3	56.1	mg/L	5.0	5.0	1		02/27/24 19:55		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/24/24 03:28	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	125	mg/L	24.0	14.4	24		02/25/24 05:51	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Sample: HAM-MW-51		Lab ID: 92713565021		Collected: 02/19/24 13:25		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.12	mg/L	0.10	0.050	1		02/24/24 17:28	16984-48-8	
Sulfate	1010	mg/L	24.0	12.0	24		02/25/24 05:51	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-AP2-EB-02		Lab ID: 92713565022		Collected: 02/19/24 11:50		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Calcium	15.3	mg/L	1.0	0.12	1	02/28/24 18:17	03/02/24 09:15	7440-70-2	
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Antimony	ND	mg/L	0.0030	0.00054	1	02/26/24 13:45	02/28/24 19:37	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/26/24 13:45	02/28/24 19:37	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	02/26/24 13:45	02/29/24 16:29	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/26/24 13:45	02/28/24 19:37	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	02/26/24 13:45	02/29/24 16:29	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/26/24 13:45	02/28/24 19:37	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/26/24 13:45	02/28/24 19:37	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/26/24 13:45	02/28/24 19:37	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/26/24 13:45	02/29/24 16:29	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/26/24 13:45	02/28/24 19:37	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/26/24 13:45	02/28/24 19:37	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/26/24 13:45	02/28/24 19:37	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/26/24 13:45	02/29/24 16:29	7440-28-0	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA							
Mercury	ND	mg/L	0.00020	0.00013	1	02/29/24 18:00	03/01/24 09:38	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		02/23/24 15:22		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	ND	mg/L	1.0	0.60	1		02/24/24 13:59	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/24/24 13:59	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/24/24 13:59	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Sample: HAM-AP2-FB-02		Lab ID: 92713565023		Collected: 02/19/24 11:55		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Calcium	ND	mg/L	1.0	0.12	1	02/28/24 18:17	03/02/24 09:17	7440-70-2	
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Antimony	ND	mg/L	0.0030	0.00054	1	02/26/24 13:45	02/28/24 19:41	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/26/24 13:45	02/28/24 19:41	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	02/26/24 13:45	02/29/24 16:33	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/26/24 13:45	02/28/24 19:41	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	02/26/24 13:45	02/29/24 16:33	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/26/24 13:45	02/28/24 19:41	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/26/24 13:45	02/28/24 19:41	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/26/24 13:45	02/28/24 19:41	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/26/24 13:45	02/29/24 16:33	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/26/24 13:45	02/28/24 19:41	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/26/24 13:45	02/28/24 19:41	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/26/24 13:45	02/28/24 19:41	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/26/24 13:45	02/29/24 16:33	7440-28-0	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA							
Mercury	ND	mg/L	0.00020	0.00013	1	02/29/24 18:00	03/01/24 09:40	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	32.0	mg/L	25.0	25.0	1		02/23/24 15:23		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	ND	mg/L	1.0	0.60	1		02/24/24 14:14	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/24/24 14:14	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/24/24 14:14	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch: 833074 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92713565001, 92713565002, 92713565003, 92713565004

METHOD BLANK: 4305116 Matrix: Water
Associated Lab Samples: 92713565001, 92713565002, 92713565003, 92713565004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/26/24 00:48	
Iron	mg/L	ND	0.040	0.025	02/26/24 00:48	
Magnesium	mg/L	ND	0.050	0.012	02/26/24 00:48	
Manganese	mg/L	ND	0.040	0.011	02/26/24 00:48	
Potassium	mg/L	ND	0.50	0.15	02/26/24 00:48	
Sodium	mg/L	ND	1.0	0.58	02/26/24 00:48	

LABORATORY CONTROL SAMPLE: 4305117

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.97J	97	80-120	
Iron	mg/L	1	1.1	106	80-120	
Magnesium	mg/L	1	1.0	102	80-120	
Manganese	mg/L	1	1.0	103	80-120	
Potassium	mg/L	1	1.0	104	80-120	
Sodium	mg/L	1	1.0	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305118 4305119

Parameter	Units	92713556001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	116	1	1	111	111	-492	-467	75-125	0	20	M1
Iron	mg/L	0.034J	1	1	1.0	1.0	100	99	75-125	0	20	
Magnesium	mg/L	4.8	1	1	5.5	5.6	72	77	75-125	1	20	M1
Manganese	mg/L	0.12	1	1	1.1	1.1	100	99	75-125	0	20	
Potassium	mg/L	0.59	1	1	1.6	1.7	106	107	75-125	1	20	
Sodium	mg/L	21.2	1	1	21.2	21.2	-6	0	75-125	0	20	M1

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch: 833756 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92713565005, 92713565006, 92713565007, 92713565008, 92713565009, 92713565010, 92713565011

METHOD BLANK: 4308339 Matrix: Water
Associated Lab Samples: 92713565005, 92713565006, 92713565007, 92713565008, 92713565009, 92713565010, 92713565011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/28/24 14:34	
Iron	mg/L	ND	0.040	0.025	02/28/24 14:34	
Magnesium	mg/L	ND	0.050	0.012	02/28/24 14:34	
Manganese	mg/L	ND	0.040	0.011	02/28/24 14:34	
Potassium	mg/L	ND	0.50	0.15	02/28/24 14:34	
Sodium	mg/L	ND	1.0	0.58	02/28/24 14:34	

LABORATORY CONTROL SAMPLE: 4308340

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.96J	96	80-120	
Iron	mg/L	1	0.98	98	80-120	
Magnesium	mg/L	1	1.0	104	80-120	
Manganese	mg/L	1	0.99	99	80-120	
Potassium	mg/L	1	1.0	104	80-120	
Sodium	mg/L	1	1.1	111	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4308341 4308342

Parameter	Units	92714171011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	68.1	1	1	67.5	68.8	-63	63	75-125	2	20	M1
Iron	mg/L	ND	1	1	0.98	0.98	97	97	75-125	0	20	
Magnesium	mg/L	36.0	1	1	36.0	36.6	-1	58	75-125	2	20	M1
Manganese	mg/L	ND	1	1	1.0	1.0	101	100	75-125	1	20	
Potassium	mg/L	0.87	1	1	1.8	1.8	94	92	75-125	1	20	
Sodium	mg/L	3.4	1	1	4.3	4.3	89	92	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch: 833757 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92713565012, 92713565013, 92713565014, 92713565015, 92713565016, 92713565017, 92713565018, 92713565019

METHOD BLANK: 4308343 Matrix: Water
Associated Lab Samples: 92713565012, 92713565013, 92713565014, 92713565015, 92713565016, 92713565017, 92713565018, 92713565019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	03/01/24 16:09	
Iron	mg/L	ND	0.040	0.025	03/01/24 16:09	
Magnesium	mg/L	ND	0.050	0.012	03/01/24 16:09	
Manganese	mg/L	ND	0.040	0.011	03/01/24 16:09	
Potassium	mg/L	ND	0.50	0.15	03/01/24 16:09	
Sodium	mg/L	ND	1.0	0.58	03/01/24 16:09	

LABORATORY CONTROL SAMPLE: 4308344

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	106	80-120	
Iron	mg/L	1	1.0	104	80-120	
Magnesium	mg/L	1	1.1	106	80-120	
Manganese	mg/L	1	1.0	100	80-120	
Potassium	mg/L	1	1.0	104	80-120	
Sodium	mg/L	1	1.0	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4308345 4308346

Parameter	Units	92713565012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	286	1	1	282	293	-458	645	75-125	4	20	M1
Iron	mg/L	0.10	1	1	1.1	1.1	101	105	75-125	3	20	
Magnesium	mg/L	28.4	1	1	28.5	29.8	16	146	75-125	4	20	M1
Manganese	mg/L	5.2	1	1	6.0	6.2	90	109	75-125	3	20	
Potassium	mg/L	1.9	1	1	2.7	2.8	81	96	75-125	5	20	
Sodium	mg/L	12.1	1	1	12.8	13.4	65	125	75-125	5	20	M1

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch: 835638 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92713565020, 92713565021, 92713565022, 92713565023

METHOD BLANK: 4317188 Matrix: Water
Associated Lab Samples: 92713565020, 92713565021, 92713565022, 92713565023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	03/02/24 08:40	
Iron	mg/L	ND	0.040	0.025	03/02/24 08:40	
Magnesium	mg/L	ND	0.050	0.012	03/02/24 08:40	
Manganese	mg/L	ND	0.040	0.011	03/02/24 08:40	
Potassium	mg/L	ND	0.50	0.15	03/02/24 08:40	
Sodium	mg/L	ND	1.0	0.58	03/02/24 08:40	

LABORATORY CONTROL SAMPLE: 4317189

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.99J	99	80-120	
Iron	mg/L	1	0.98	98	80-120	
Magnesium	mg/L	1	1.0	100	80-120	
Manganese	mg/L	1	0.95	95	80-120	
Potassium	mg/L	1	0.91	91	80-120	
Sodium	mg/L	1	0.97J	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4317190 4317191

Parameter	Units	92714723021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	2.2	1	1	3.2	3.2	100	101	75-125	0	20	
Iron	mg/L	0.69	1	1	1.7	1.7	101	102	75-125	1	20	
Magnesium	mg/L	1.0	1	1	2.0	2.1	100	104	75-125	2	20	
Manganese	mg/L	0.067	1	1	1.0	1.1	94	99	75-125	5	20	
Potassium	mg/L	2.2	1	1	3.1	3.2	97	106	75-125	3	20	
Sodium	mg/L	5.5	1	1	6.4	6.5	92	106	75-125	2	20	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch: 833075 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92713565001, 92713565002, 92713565003, 92713565004

METHOD BLANK: 4305133 Matrix: Water
Associated Lab Samples: 92713565001, 92713565002, 92713565003, 92713565004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	02/20/24 15:31	
Arsenic	mg/L	ND	0.0050	0.00084	02/20/24 15:31	
Barium	mg/L	ND	0.0050	0.00047	02/20/24 15:31	
Beryllium	mg/L	ND	0.00050	0.000094	02/20/24 15:31	
Boron	mg/L	ND	0.040	0.012	02/20/24 15:31	
Cadmium	mg/L	ND	0.00050	0.00010	02/20/24 15:31	
Chromium	mg/L	ND	0.0050	0.0019	02/20/24 15:31	
Cobalt	mg/L	ND	0.0050	0.00032	02/20/24 15:31	
Lead	mg/L	ND	0.0010	0.00016	02/20/24 15:31	
Lithium	mg/L	ND	0.030	0.0016	02/20/24 15:31	
Molybdenum	mg/L	ND	0.010	0.00062	02/20/24 15:31	
Selenium	mg/L	ND	0.0050	0.00096	02/20/24 15:31	
Thallium	mg/L	ND	0.0010	0.00038	02/20/24 15:31	

LABORATORY CONTROL SAMPLE: 4305134

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	105	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.10	100	80-120	
Boron	mg/L	1	0.98	98	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.10	104	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.10	100	80-120	
Thallium	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305135 4305136

Parameter	Units	92713556005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	105	105	75-125	0	20	
Arsenic	mg/L	0.0014J	0.1	0.1	0.10	0.10	101	100	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:												
4305135					4305136							
Parameter	Units	92713556005	MS	MSD	MS	MSD	MS	MSD	% Rec	RPD	Max	Qual
		Result	Spike Conc.	Spike Conc.								
Barium	mg/L	0.12	0.1	0.1	0.21	0.22	94	94	75-125	0	20	
Beryllium	mg/L	ND	0.1	0.1	0.095	0.095	95	95	75-125	0	20	
Boron	mg/L	0.49	1	1	1.5	1.5	98	99	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.098	101	98	75-125	3	20	
Lead	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	1	20	
Lithium	mg/L	0.088	0.1	0.1	0.18	0.19	95	97	75-125	1	20	
Molybdenum	mg/L	0.0018J	0.1	0.1	0.10	0.10	102	102	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.098	0.099	98	99	75-125	0	20	
Thallium	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch: 833653 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92713565005, 92713565006, 92713565007, 92713565008, 92713565009, 92713565010

METHOD BLANK: 4307698 Matrix: Water
Associated Lab Samples: 92713565005, 92713565006, 92713565007, 92713565008, 92713565009, 92713565010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	02/26/24 15:17	
Arsenic	mg/L	ND	0.0050	0.00084	02/26/24 15:17	
Barium	mg/L	ND	0.0050	0.00047	02/26/24 15:17	
Beryllium	mg/L	ND	0.00050	0.000094	02/26/24 15:17	
Boron	mg/L	ND	0.040	0.012	02/26/24 15:17	
Cadmium	mg/L	ND	0.00050	0.00010	02/26/24 15:17	
Chromium	mg/L	ND	0.0050	0.0019	02/26/24 15:17	
Cobalt	mg/L	ND	0.0050	0.00032	02/26/24 15:17	
Lead	mg/L	ND	0.0010	0.00016	02/26/24 15:17	
Lithium	mg/L	ND	0.030	0.0016	02/26/24 15:17	
Molybdenum	mg/L	ND	0.010	0.00062	02/26/24 15:17	
Selenium	mg/L	ND	0.0050	0.00096	02/26/24 15:17	
Thallium	mg/L	ND	0.0010	0.00038	02/26/24 15:17	

LABORATORY CONTROL SAMPLE: 4307699

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	101	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.1	105	80-120	
Cadmium	mg/L	0.1	0.098	98	80-120	
Chromium	mg/L	0.1	0.097	97	80-120	
Cobalt	mg/L	0.1	0.096	96	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.10	103	80-120	
Molybdenum	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.094	94	80-120	
Thallium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4307700 4307701

Parameter	Units	92714171010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.022	0.1	0.1	0.12	0.12	98	99	75-125	1	20	
Arsenic	mg/L	0.00097J	0.1	0.1	0.10	0.10	100	100	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2

Pace Project No.: 92713565

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4307700 4307701											
Parameter	Units	92714171010		MS		MSD		MS		MSD	
		Result		Spike Conc.		Spike Conc.		Result		Result	
Barium	mg/L	0.041		0.1		0.1		0.14		0.14	
Beryllium	mg/L	ND		0.1		0.1		0.090		0.092	
Boron	mg/L	0.013J		1		1		0.96		0.98	
Cadmium	mg/L	ND		0.1		0.1		0.10		0.10	
Chromium	mg/L	ND		0.1		0.1		0.10		0.10	
Cobalt	mg/L	ND		0.1		0.1		0.10		0.10	
Lead	mg/L	ND		0.1		0.1		0.096		0.096	
Lithium	mg/L	0.0067J		0.1		0.1		0.097		0.099	
Molybdenum	mg/L	0.0022J		0.1		0.1		0.099		0.10	
Selenium	mg/L	ND		0.1		0.1		0.10		0.099	
Thallium	mg/L	ND		0.1		0.1		0.095		0.096	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch:	833679	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92713565011, 92713565012, 92713565013, 92713565014, 92713565015, 92713565016, 92713565017, 92713565018, 92713565019

METHOD BLANK: 4307881 Matrix: Water
Associated Lab Samples: 92713565011, 92713565012, 92713565013, 92713565014, 92713565015, 92713565016, 92713565017, 92713565018, 92713565019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	02/26/24 18:11	
Arsenic	mg/L	ND	0.0050	0.00084	02/26/24 18:11	
Barium	mg/L	ND	0.0050	0.00047	02/26/24 18:11	
Beryllium	mg/L	ND	0.00050	0.000094	02/26/24 18:11	
Boron	mg/L	ND	0.040	0.012	02/26/24 18:11	
Cadmium	mg/L	ND	0.00050	0.00010	02/26/24 18:11	
Chromium	mg/L	ND	0.0050	0.0019	02/26/24 18:11	
Cobalt	mg/L	ND	0.0050	0.00032	02/26/24 18:11	
Lead	mg/L	ND	0.0010	0.00016	02/26/24 18:11	
Lithium	mg/L	ND	0.030	0.0016	02/26/24 18:11	
Molybdenum	mg/L	ND	0.010	0.00062	02/26/24 18:11	
Selenium	mg/L	ND	0.0050	0.00096	02/26/24 18:11	
Thallium	mg/L	ND	0.0010	0.00038	02/26/24 18:11	

LABORATORY CONTROL SAMPLE: 4307882

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.097	97	80-120	
Arsenic	mg/L	0.1	0.095	95	80-120	
Barium	mg/L	0.1	0.093	93	80-120	
Beryllium	mg/L	0.1	0.090	90	80-120	
Boron	mg/L	1	0.92	92	80-120	
Cadmium	mg/L	0.1	0.095	95	80-120	
Chromium	mg/L	0.1	0.096	96	80-120	
Cobalt	mg/L	0.1	0.093	93	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Lithium	mg/L	0.1	0.092	92	80-120	
Molybdenum	mg/L	0.1	0.093	93	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Thallium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4307883 4307884

Parameter	Units	92713565011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.099	0.096	99	96	75-125	4	20	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2

Pace Project No.: 92713565

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4307883 4307884												
Parameter	Units	92713565011	MS	MSD	MS	MSD	MS	MSD	% Rec	Limits	RPD	Max
		Result	Spike	Spike								
			Conc.	Conc.								RPD
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	103	100	75-125		3	20
Barium	mg/L	0.012	0.1	0.1	0.10	0.10	93	90	75-125		3	20
Beryllium	mg/L	ND	0.1	0.1	0.087	0.084	86	84	75-125		3	20
Boron	mg/L	2.2	1	1	3.1	3.1	90	91	75-125		0	20
Cadmium	mg/L	0.0018	0.1	0.1	0.10	0.097	98	95	75-125		3	20
Chromium	mg/L	ND	0.1	0.1	0.10	0.095	99	95	75-125		5	20
Cobalt	mg/L	0.019	0.1	0.1	0.12	0.11	97	93	75-125		3	20
Lead	mg/L	ND	0.1	0.1	0.094	0.090	94	90	75-125		4	20
Lithium	mg/L	ND	0.1	0.1	0.090	0.088	89	87	75-125		3	20
Molybdenum	mg/L	ND	0.1	0.1	0.095	0.091	95	91	75-125		4	20
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	104	102	75-125		2	20
Thallium	mg/L	ND	0.1	0.1	0.093	0.090	93	90	75-125		2	20

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch: 834994 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92713565020, 92713565021, 92713565022, 92713565023

METHOD BLANK: 4313799 Matrix: Water
Associated Lab Samples: 92713565020, 92713565021, 92713565022, 92713565023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	02/28/24 19:07	
Arsenic	mg/L	ND	0.0050	0.00084	02/28/24 19:07	
Barium	mg/L	ND	0.0050	0.00047	02/29/24 16:22	
Beryllium	mg/L	ND	0.00050	0.000094	02/28/24 19:07	
Boron	mg/L	ND	0.040	0.012	02/28/24 19:07	
Cadmium	mg/L	ND	0.00050	0.00010	02/28/24 19:07	
Chromium	mg/L	ND	0.0050	0.0019	02/28/24 19:07	
Cobalt	mg/L	ND	0.0050	0.00032	02/28/24 19:07	
Lead	mg/L	ND	0.0010	0.00016	02/29/24 16:22	
Lithium	mg/L	ND	0.030	0.0016	02/28/24 19:07	
Molybdenum	mg/L	ND	0.010	0.00062	02/28/24 19:07	
Selenium	mg/L	ND	0.0050	0.00096	02/28/24 19:07	
Thallium	mg/L	ND	0.0010	0.00038	02/29/24 16:22	

LABORATORY CONTROL SAMPLE: 4313800

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	106	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.11	105	80-120	
Beryllium	mg/L	0.1	0.11	105	80-120	
Boron	mg/L	1	0.98	98	80-120	
Cadmium	mg/L	0.1	0.11	106	80-120	
Chromium	mg/L	0.1	0.10	104	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.10	104	80-120	
Lithium	mg/L	0.1	0.11	107	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Thallium	mg/L	0.1	0.10	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4313801 4313802

Parameter	Units	92713565020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20	
Arsenic	mg/L	0.0073	0.1	0.1	0.12	0.12	111	112	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2

Pace Project No.: 92713565

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:												
4313801					4313802							
Parameter	Units	92713565020	MS	MSD	MS	MSD	MS	MSD	% Rec	RPD	Max	Qual
		Result	Spike Conc.	Spike Conc.								
Barium	mg/L	0.021	0.1	0.1	0.12	0.13	102	104	75-125	2	20	
Beryllium	mg/L	0.00064	0.1	0.1	0.087	0.091	86	90	75-125	4	20	
Boron	mg/L	8.4	1	1	8.8	9.1	43	70	75-125	3	20	M1
Cadmium	mg/L	0.0013	0.1	0.1	0.099	0.099	97	98	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Cobalt	mg/L	0.084	0.1	0.1	0.18	0.18	96	94	75-125	1	20	
Lead	mg/L	0.00060J	0.1	0.1	0.087	0.088	86	88	75-125	2	20	
Lithium	mg/L	0.0031J	0.1	0.1	0.092	0.097	89	93	75-125	4	20	
Molybdenum	mg/L	ND	0.1	0.1	0.097	0.099	97	99	75-125	2	20	
Selenium	mg/L	0.0057	0.1	0.1	0.12	0.12	112	113	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.088	0.090	88	90	75-125	2	20	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch:	834203	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92713565001, 92713565002, 92713565003, 92713565004, 92713565005, 92713565006, 92713565007, 92713565008, 92713565009, 92713565010, 92713565011, 92713565012		

METHOD BLANK:	4310145	Matrix:	Water
Associated Lab Samples:	92713565001, 92713565002, 92713565003, 92713565004, 92713565005, 92713565006, 92713565007, 92713565008, 92713565009, 92713565010, 92713565011, 92713565012		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/22/24 14:11	

LABORATORY CONTROL SAMPLE:	4310146					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	4310147			4310148								
Parameter	Units	92713556002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0024	95	95	75-125	0	20	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch: 834252 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92713565013, 92713565014, 92713565015, 92713565016, 92713565017, 92713565018, 92713565019

METHOD BLANK: 4310382 Matrix: Water
Associated Lab Samples: 92713565013, 92713565014, 92713565015, 92713565016, 92713565017, 92713565018, 92713565019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/23/24 08:53	

LABORATORY CONTROL SAMPLE: 4310383

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4310384 4310385

Parameter	Units	92713572001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0037	98	149	75-125	42	20	M1,R1

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch: 835931 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92713565020, 92713565021, 92713565022, 92713565023

METHOD BLANK: 4318673 Matrix: Water
Associated Lab Samples: 92713565020, 92713565021, 92713565022, 92713565023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	03/01/24 09:01	

LABORATORY CONTROL SAMPLE: 4318674

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0022	90	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4318675 4318676

Parameter	Units	92714717002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0016	0.0023	66	94	75-125	35	20	M1,R1

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2

Pace Project No.: 92713565

QC Batch: 834581

Analysis Method: SM 2540C-2015

QC Batch Method: SM 2540C-2015

Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92713565005, 92713565006, 92713565007, 92713565008, 92713565009

METHOD BLANK: 4311905

Matrix: Water

Associated Lab Samples: 92713565005, 92713565006, 92713565007, 92713565008, 92713565009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/23/24 13:29	

LABORATORY CONTROL SAMPLE: 4311906

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	394	98	80-120	

SAMPLE DUPLICATE: 4311908

Parameter	Units	92714158024 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	348	219	46	10	D6

SAMPLE DUPLICATE: 4311913

Parameter	Units	92713577008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	640	693	8	10	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch:	834650	Analysis Method:	SM 2540C-2015
QC Batch Method:	SM 2540C-2015	Analysis Description:	2540C Total Dissolved Solids
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92713565010, 92713565011, 92713565012, 92713565013, 92713565014, 92713565015, 92713565016, 92713565017, 92713565018, 92713565019, 92713565020, 92713565021, 92713565022, 92713565023		

METHOD BLANK:	4312258	Matrix:	Water
Associated Lab Samples:	92713565010, 92713565011, 92713565012, 92713565013, 92713565014, 92713565015, 92713565016, 92713565017, 92713565018, 92713565019, 92713565020, 92713565021, 92713565022, 92713565023		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/23/24 15:05	

LABORATORY CONTROL SAMPLE: 4312259						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	402	100	80-120	

SAMPLE DUPLICATE: 4312260						
Parameter	Units	92713577014 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	265	450	52	10	D6

SAMPLE DUPLICATE: 4312261						
Parameter	Units	92713565014 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2010	1900	6	10	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch: 833295 Analysis Method: SM 2320B-2011
QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713565001, 92713565002, 92713565003, 92713565004

METHOD BLANK: 4305949 Matrix: Water
Associated Lab Samples: 92713565001, 92713565002, 92713565003, 92713565004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	ND	5.0	5.0	02/19/24 15:03	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	5.0	5.0	02/19/24 15:03	
Alkalinity,Carbonate (CaCO ₃)	mg/L	ND	5.0	5.0	02/19/24 15:03	

LABORATORY CONTROL SAMPLE: 4305950

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	50.6	101	80-120	

LABORATORY CONTROL SAMPLE: 4305951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	52.1	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305952 4305953

Parameter	Units	92713311035 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	ND	50	50	51.1	51.1	101	101	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305954 4305955

Parameter	Units	92713311036 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	ND	50	50	51.9	50.2	103	99	80-120	3	25	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch: 834004 Analysis Method: SM 2320B-2011
QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713565005, 92713565006, 92713565007, 92713565008, 92713565009, 92713565010, 92713565011, 92713565012, 92713565013, 92713565014

METHOD BLANK: 4309373 Matrix: Water
Associated Lab Samples: 92713565005, 92713565006, 92713565007, 92713565008, 92713565009, 92713565010, 92713565011, 92713565012, 92713565013, 92713565014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	ND	5.0	5.0	02/22/24 13:11	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	5.0	5.0	02/22/24 13:11	
Alkalinity,Carbonate (CaCO ₃)	mg/L	ND	5.0	5.0	02/22/24 13:11	

LABORATORY CONTROL SAMPLE: 4309374

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	50.9	102	80-120	

LABORATORY CONTROL SAMPLE: 4309375

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	52.7	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4309376 4309377

Parameter	Units	92713565013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	ND	50	50	55.2	55.2	104	104	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4309378 4309379

Parameter	Units	92713565014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	96.1	50	50	148	147	103	101	80-120	1	25	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch: 834334 Analysis Method: SM 2320B-2011
QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713565015, 92713565018, 92713565019

METHOD BLANK: 4310874 Matrix: Water
Associated Lab Samples: 92713565015, 92713565018, 92713565019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	ND	5.0	5.0	02/22/24 19:23	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	5.0	5.0	02/22/24 19:23	
Alkalinity,Carbonate (CaCO ₃)	mg/L	ND	5.0	5.0	02/22/24 19:23	

LABORATORY CONTROL SAMPLE: 4310875

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	50.2	100	80-120	

LABORATORY CONTROL SAMPLE: 4310876

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	51.8	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4310877 4310878

Parameter	Units	92714468009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	10.2	50	50	61.3	61.6	102	103	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4310879 4310880

Parameter	Units	92713565015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	163	50	50	212	211	97	97	80-120	0	25	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch: 835156 Analysis Method: SM 2320B-2011
QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713565020, 92713565021

METHOD BLANK: 4314556 Matrix: Water
Associated Lab Samples: 92713565020, 92713565021

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	ND	5.0	5.0	02/27/24 19:22	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	5.0	5.0	02/27/24 19:22	
Alkalinity,Carbonate (CaCO ₃)	mg/L	ND	5.0	5.0	02/27/24 19:22	

LABORATORY CONTROL SAMPLE: 4314557

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	51.9	104	80-120	

LABORATORY CONTROL SAMPLE: 4314558

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	50.4	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4314559 4314560

Parameter	Units	92713565020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	9.6	50	50	61.8	61.2	104	103	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4314561 4314562

Parameter	Units	92713565021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	56.1	50	50	105	108	98	105	80-120	3	25	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2

Pace Project No.: 92713565

QC Batch: 833242

Analysis Method: SM 2540C-2015

QC Batch Method: SM 2540C-2015

Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92713565001, 92713565002

METHOD BLANK: 4305777

Matrix: Water

Associated Lab Samples: 92713565001, 92713565002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/18/24 14:53	

LABORATORY CONTROL SAMPLE: 4305778

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	268	107	90-110	

SAMPLE DUPLICATE: 4305779

Parameter	Units	92713311026 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	531	523	2	25	

SAMPLE DUPLICATE: 4305780

Parameter	Units	92713556001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	402	402	0	25	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2

Pace Project No.: 92713565

QC Batch: 833516

Analysis Method: SM 2540C-2015

QC Batch Method: SM 2540C-2015

Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92713565003, 92713565004

METHOD BLANK: 4306957

Matrix: Water

Associated Lab Samples: 92713565003, 92713565004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/20/24 11:28	

LABORATORY CONTROL SAMPLE: 4306958

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	268	107	90-110	

SAMPLE DUPLICATE: 4306959

Parameter	Units	92713565003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	240	239	0	25	

SAMPLE DUPLICATE: 4306960

Parameter	Units	92713542001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	116	117	1	25	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch: 833117 Analysis Method: SM 4500-S2D-2011
QC Batch Method: SM 4500-S2D-2011 Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713565001, 92713565002, 92713565003, 92713565004

METHOD BLANK: 4305491 Matrix: Water
Associated Lab Samples: 92713565001, 92713565002, 92713565003, 92713565004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/17/24 01:52	

LABORATORY CONTROL SAMPLE: 4305492

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.52	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305493 4305494

Parameter	Units	92713556001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.47	0.55	94	111	80-120	16	10	R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305519 4305520

Parameter	Units	92713565004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.49	0.54	98	107	80-120	9	10	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch: 833808 Analysis Method: SM 4500-S2D-2011
QC Batch Method: SM 4500-S2D-2011 Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713565005, 92713565006, 92713565007, 92713565008, 92713565009, 92713565010, 92713565011

METHOD BLANK: 4308452 Matrix: Water
Associated Lab Samples: 92713565005, 92713565006, 92713565007, 92713565008, 92713565009, 92713565010, 92713565011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/21/24 03:37	

LABORATORY CONTROL SAMPLE: 4308453

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.52	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4308454 4308455

Parameter	Units	92713572008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.50	0.53	100	106	80-120	6	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4308456 4308457

Parameter	Units	92713565007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.45	0.49	91	98	80-120	7	10	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch: 833809 Analysis Method: SM 4500-S2D-2011
QC Batch Method: SM 4500-S2D-2011 Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713565012, 92713565013, 92713565014, 92713565015, 92713565018, 92713565019

METHOD BLANK: 4308458 Matrix: Water
Associated Lab Samples: 92713565012, 92713565013, 92713565014, 92713565015, 92713565018, 92713565019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/21/24 03:48	

LABORATORY CONTROL SAMPLE: 4308459

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.51	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4308460 4308461

Parameter	Units	92713565012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.46	0.46	92	92	80-120	0	10	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2
Pace Project No.: 92713565

QC Batch: 834777 Analysis Method: SM 4500-S2D-2011
QC Batch Method: SM 4500-S2D-2011 Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713565020, 92713565021

METHOD BLANK: 4313100 Matrix: Water
Associated Lab Samples: 92713565020, 92713565021

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/24/24 03:24	

LABORATORY CONTROL SAMPLE: 4313101

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.52	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4313102 4313103

Parameter	Units	92713565020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.47	0.47	93	94	80-120	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4313118 4313119

Parameter	Units	92714717002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.50	0.52	101	105	80-120	4	10	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2

Pace Project No.: 92713565

QC Batch: 832724 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713565001, 92713565002, 92713565003, 92713565004

METHOD BLANK: 4303397 Matrix: Water
Associated Lab Samples: 92713565001, 92713565002, 92713565003, 92713565004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/15/24 22:02	
Fluoride	mg/L	ND	0.10	0.050	02/15/24 22:02	
Sulfate	mg/L	ND	1.0	0.50	02/15/24 22:02	

LABORATORY CONTROL SAMPLE: 4303398

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.8	100	90-110	
Fluoride	mg/L	2.5	2.6	103	90-110	
Sulfate	mg/L	50	50.4	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4303399 4303400

Parameter	Units	92713556001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	10.0	50	50	59.2	60.8	98	102	90-110	3	10	
Fluoride	mg/L	0.071J	2.5	2.5	2.9	3.0	114	118	90-110	3	10 M1	
Sulfate	mg/L	50.4	50	50	92.0	94.1	83	87	90-110	2	10 M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4303401 4303402

Parameter	Units	92713565002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.8	50	50	51.5	53.2	99	103	90-110	3	10	
Fluoride	mg/L	0.059J	2.5	2.5	2.8	2.9	111	115	90-110	4	10 M1	
Sulfate	mg/L	21.8	50	50	72.4	74.0	101	104	90-110	2	10	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2

Pace Project No.: 92713565

QC Batch: 833761 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713565005, 92713565006, 92713565007, 92713565008, 92713565009

METHOD BLANK: 4308355 Matrix: Water
Associated Lab Samples: 92713565005, 92713565006, 92713565007, 92713565008, 92713565009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/21/24 00:08	
Fluoride	mg/L	ND	0.10	0.050	02/21/24 00:08	
Sulfate	mg/L	ND	1.0	0.50	02/21/24 00:08	

LABORATORY CONTROL SAMPLE: 4308356

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.9	100	90-110	
Fluoride	mg/L	2.5	2.4	98	90-110	
Sulfate	mg/L	50	50.6	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4308357 4308358

Parameter	Units	92714433002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	37.0	50	50	84.5	87.0	95	100	90-110	3	10	
Fluoride	mg/L	1.1	2.5	2.5	3.8	3.9	106	112	90-110	4	10 M1	
Sulfate	mg/L	199	50	50	242	246	87	95	90-110	2	10 M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4308359 4308360

Parameter	Units	92714331001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	377	50	50	425	427	96	101	90-110	1	10	
Fluoride	mg/L	10.7	2.5	2.5	13.2	13.3	100	104	90-110	1	10	
Sulfate	mg/L	55.4	50	50	107	109	103	106	90-110	1	10	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2

Pace Project No.: 92713565

QC Batch:	833763	Analysis Method:	EPA 300.0 Rev 2.1 1993
QC Batch Method:	EPA 300.0 Rev 2.1 1993	Analysis Description:	300.0 IC Anions
		Laboratory:	Pace Analytical Services - Asheville
Associated Lab Samples:	92713565010, 92713565011, 92713565012, 92713565013, 92713565014, 92713565015, 92713565016, 92713565017, 92713565018, 92713565019		

METHOD BLANK:	4308361	Matrix:	Water
Associated Lab Samples:	92713565010, 92713565011, 92713565012, 92713565013, 92713565014, 92713565015, 92713565016, 92713565017, 92713565018, 92713565019		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/21/24 02:08	
Fluoride	mg/L	ND	0.10	0.050	02/21/24 02:08	
Sulfate	mg/L	ND	1.0	0.50	02/21/24 02:08	

LABORATORY CONTROL SAMPLE: 4308362						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.4	101	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	51.2	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4308363 4308364												
Parameter	Units	92713565010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	29.7	50	50	79.3	80.5	99	102	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.7	101	107	90-110	6	10	
Sulfate	mg/L	150	50	50	199	200	98	100	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4308365 4308366												
Parameter	Units	92713572008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.2	50	50	52.0	53.0	100	102	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.8	104	109	90-110	4	10	
Sulfate	mg/L	74.5	50	50	88.6	112	28	76	90-110	24	10	M1, R1

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2

Pace Project No.: 92713565

QC Batch: 834798 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713565020, 92713565021, 92713565022, 92713565023

METHOD BLANK: 4313142 Matrix: Water
Associated Lab Samples: 92713565020, 92713565021, 92713565022, 92713565023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/24/24 12:59	
Fluoride	mg/L	ND	0.10	0.050	02/24/24 12:59	
Sulfate	mg/L	ND	1.0	0.50	02/24/24 12:59	

LABORATORY CONTROL SAMPLE: 4313143

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.8	98	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	49.5	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4313144 4313145

Parameter	Units	92713565020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	150	50	50	190	191	80	81	90-110	1	10	M1
Fluoride	mg/L	0.16	2.5	2.5	2.8	2.7	104	103	90-110	1	10	
Sulfate	mg/L	1060	50	50	1100	1100	85	89	90-110	0	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4313146 4313147

Parameter	Units	92714999003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	96.0	50	50	136	135	79	79	90-110	0	10	M1
Fluoride	mg/L	0.57	2.5	2.5	3.1	3.2	102	105	90-110	2	10	
Sulfate	mg/L	758	50	50	787	780	58	45	90-110	1	10	M1

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QUALIFIERS

Project: Plant Hammond AP-2
Pace Project No.: 92713565

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 adjusted reporting limit.
TNTC - Too Numerous To Count
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
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.
Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.
A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1g	Sample residue exceeded method SM 2540C recommended 200 mg
BC	The same analyte was detected in an associated blank at a concentration above 1/2 the reporting limit but below the laboratory reporting limit.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92713565001	HAM-HGWA-4	EPA 3010A	833074	EPA 6010D	833112
92713565002	HAM-HGWA-5	EPA 3010A	833074	EPA 6010D	833112
92713565003	HAM-HGWA-6	EPA 3010A	833074	EPA 6010D	833112
92713565004	HAM-HGWA-42D	EPA 3010A	833074	EPA 6010D	833112
92713565005	HAM-HGWC-14	EPA 3010A	833756	EPA 6010D	833988
92713565006	HAM-HGWC-15	EPA 3010A	833756	EPA 6010D	833988
92713565007	HAM-HGWC-17	EPA 3010A	833756	EPA 6010D	833988
92713565008	HAM-HGWC-16	EPA 3010A	833756	EPA 6010D	833988
92713565009	HAM-HGWC-18	EPA 3010A	833756	EPA 6010D	833988
92713565010	HAM-MW-21D	EPA 3010A	833756	EPA 6010D	833988
92713565011	HAM-MW-22	EPA 3010A	833756	EPA 6010D	833988
92713565012	HAM-MW-23D	EPA 3010A	833757	EPA 6010D	833991
92713565013	HAM-MW-33	EPA 3010A	833757	EPA 6010D	833991
92713565014	HAM-MW-34D	EPA 3010A	833757	EPA 6010D	833991
92713565015	HAM-MW-37D	EPA 3010A	833757	EPA 6010D	833991
92713565016	HAM-AP2-EB-01	EPA 3010A	833757	EPA 6010D	833991
92713565017	HAM-AP2-FB-01	EPA 3010A	833757	EPA 6010D	833991
92713565018	HAM-AP2-FD-01	EPA 3010A	833757	EPA 6010D	833991
92713565019	HAM-AP2-FD-02	EPA 3010A	833757	EPA 6010D	833991
92713565020	HAM-MW-35	EPA 3010A	835638	EPA 6010D	835688
92713565021	HAM-MW-51	EPA 3010A	835638	EPA 6010D	835688
92713565022	HAM-AP2-EB-02	EPA 3010A	835638	EPA 6010D	835688
92713565023	HAM-AP2-FB-02	EPA 3010A	835638	EPA 6010D	835688
92713565001	HAM-HGWA-4	EPA 3005A	833075	EPA 6020B	833154
92713565002	HAM-HGWA-5	EPA 3005A	833075	EPA 6020B	833154
92713565003	HAM-HGWA-6	EPA 3005A	833075	EPA 6020B	833154
92713565004	HAM-HGWA-42D	EPA 3005A	833075	EPA 6020B	833154
92713565005	HAM-HGWC-14	EPA 3005A	833653	EPA 6020B	833767
92713565006	HAM-HGWC-15	EPA 3005A	833653	EPA 6020B	833767
92713565007	HAM-HGWC-17	EPA 3005A	833653	EPA 6020B	833767
92713565008	HAM-HGWC-16	EPA 3005A	833653	EPA 6020B	833767
92713565009	HAM-HGWC-18	EPA 3005A	833653	EPA 6020B	833767
92713565010	HAM-MW-21D	EPA 3005A	833653	EPA 6020B	833767
92713565011	HAM-MW-22	EPA 3005A	833679	EPA 6020B	833784
92713565012	HAM-MW-23D	EPA 3005A	833679	EPA 6020B	833784
92713565013	HAM-MW-33	EPA 3005A	833679	EPA 6020B	833784
92713565014	HAM-MW-34D	EPA 3005A	833679	EPA 6020B	833784
92713565015	HAM-MW-37D	EPA 3005A	833679	EPA 6020B	833784
92713565016	HAM-AP2-EB-01	EPA 3005A	833679	EPA 6020B	833784
92713565017	HAM-AP2-FB-01	EPA 3005A	833679	EPA 6020B	833784
92713565018	HAM-AP2-FD-01	EPA 3005A	833679	EPA 6020B	833784
92713565019	HAM-AP2-FD-02	EPA 3005A	833679	EPA 6020B	833784
92713565020	HAM-MW-35	EPA 3005A	834994	EPA 6020B	835069
92713565021	HAM-MW-51	EPA 3005A	834994	EPA 6020B	835069
92713565022	HAM-AP2-EB-02	EPA 3005A	834994	EPA 6020B	835069

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92713565023	HAM-AP2-FB-02	EPA 3005A	834994	EPA 6020B	835069
92713565001	HAM-HGWA-4	EPA 7470A	834203	EPA 7470A	834267
92713565002	HAM-HGWA-5	EPA 7470A	834203	EPA 7470A	834267
92713565003	HAM-HGWA-6	EPA 7470A	834203	EPA 7470A	834267
92713565004	HAM-HGWA-42D	EPA 7470A	834203	EPA 7470A	834267
92713565005	HAM-HGWC-14	EPA 7470A	834203	EPA 7470A	834267
92713565006	HAM-HGWC-15	EPA 7470A	834203	EPA 7470A	834267
92713565007	HAM-HGWC-17	EPA 7470A	834203	EPA 7470A	834267
92713565008	HAM-HGWC-16	EPA 7470A	834203	EPA 7470A	834267
92713565009	HAM-HGWC-18	EPA 7470A	834203	EPA 7470A	834267
92713565010	HAM-MW-21D	EPA 7470A	834203	EPA 7470A	834267
92713565011	HAM-MW-22	EPA 7470A	834203	EPA 7470A	834267
92713565012	HAM-MW-23D	EPA 7470A	834203	EPA 7470A	834267
92713565013	HAM-MW-33	EPA 7470A	834252	EPA 7470A	834511
92713565014	HAM-MW-34D	EPA 7470A	834252	EPA 7470A	834511
92713565015	HAM-MW-37D	EPA 7470A	834252	EPA 7470A	834511
92713565016	HAM-AP2-EB-01	EPA 7470A	834252	EPA 7470A	834511
92713565017	HAM-AP2-FB-01	EPA 7470A	834252	EPA 7470A	834511
92713565018	HAM-AP2-FD-01	EPA 7470A	834252	EPA 7470A	834511
92713565019	HAM-AP2-FD-02	EPA 7470A	834252	EPA 7470A	834511
92713565020	HAM-MW-35	EPA 7470A	835931	EPA 7470A	836064
92713565021	HAM-MW-51	EPA 7470A	835931	EPA 7470A	836064
92713565022	HAM-AP2-EB-02	EPA 7470A	835931	EPA 7470A	836064
92713565023	HAM-AP2-FB-02	EPA 7470A	835931	EPA 7470A	836064
92713565005	HAM-HGWC-14	SM 2540C-2015	834581		
92713565006	HAM-HGWC-15	SM 2540C-2015	834581		
92713565007	HAM-HGWC-17	SM 2540C-2015	834581		
92713565008	HAM-HGWC-16	SM 2540C-2015	834581		
92713565009	HAM-HGWC-18	SM 2540C-2015	834581		
92713565010	HAM-MW-21D	SM 2540C-2015	834650		
92713565011	HAM-MW-22	SM 2540C-2015	834650		
92713565012	HAM-MW-23D	SM 2540C-2015	834650		
92713565013	HAM-MW-33	SM 2540C-2015	834650		
92713565014	HAM-MW-34D	SM 2540C-2015	834650		
92713565015	HAM-MW-37D	SM 2540C-2015	834650		
92713565016	HAM-AP2-EB-01	SM 2540C-2015	834650		
92713565017	HAM-AP2-FB-01	SM 2540C-2015	834650		
92713565018	HAM-AP2-FD-01	SM 2540C-2015	834650		
92713565019	HAM-AP2-FD-02	SM 2540C-2015	834650		
92713565020	HAM-MW-35	SM 2540C-2015	834650		
92713565021	HAM-MW-51	SM 2540C-2015	834650		
92713565022	HAM-AP2-EB-02	SM 2540C-2015	834650		
92713565023	HAM-AP2-FB-02	SM 2540C-2015	834650		
92713565001	HAM-HGWA-4	SM 2320B-2011	833295		
92713565002	HAM-HGWA-5	SM 2320B-2011	833295		
92713565003	HAM-HGWA-6	SM 2320B-2011	833295		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Hammond AP-2
Pace Project No.: 92713565

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92713565004	HAM-HGWA-42D	SM 2320B-2011	833295		
92713565005	HAM-HGWC-14	SM 2320B-2011	834004		
92713565006	HAM-HGWC-15	SM 2320B-2011	834004		
92713565007	HAM-HGWC-17	SM 2320B-2011	834004		
92713565008	HAM-HGWC-16	SM 2320B-2011	834004		
92713565009	HAM-HGWC-18	SM 2320B-2011	834004		
92713565010	HAM-MW-21D	SM 2320B-2011	834004		
92713565011	HAM-MW-22	SM 2320B-2011	834004		
92713565012	HAM-MW-23D	SM 2320B-2011	834004		
92713565013	HAM-MW-33	SM 2320B-2011	834004		
92713565014	HAM-MW-34D	SM 2320B-2011	834004		
92713565015	HAM-MW-37D	SM 2320B-2011	834334		
92713565018	HAM-AP2-FD-01	SM 2320B-2011	834334		
92713565019	HAM-AP2-FD-02	SM 2320B-2011	834334		
92713565020	HAM-MW-35	SM 2320B-2011	835156		
92713565021	HAM-MW-51	SM 2320B-2011	835156		
92713565001	HAM-HGWA-4	SM 2540C-2015	833242		
92713565002	HAM-HGWA-5	SM 2540C-2015	833242		
92713565003	HAM-HGWA-6	SM 2540C-2015	833516		
92713565004	HAM-HGWA-42D	SM 2540C-2015	833516		
92713565001	HAM-HGWA-4	SM 4500-S2D-2011	833117		
92713565002	HAM-HGWA-5	SM 4500-S2D-2011	833117		
92713565003	HAM-HGWA-6	SM 4500-S2D-2011	833117		
92713565004	HAM-HGWA-42D	SM 4500-S2D-2011	833117		
92713565005	HAM-HGWC-14	SM 4500-S2D-2011	833808		
92713565006	HAM-HGWC-15	SM 4500-S2D-2011	833808		
92713565007	HAM-HGWC-17	SM 4500-S2D-2011	833808		
92713565008	HAM-HGWC-16	SM 4500-S2D-2011	833808		
92713565009	HAM-HGWC-18	SM 4500-S2D-2011	833808		
92713565010	HAM-MW-21D	SM 4500-S2D-2011	833808		
92713565011	HAM-MW-22	SM 4500-S2D-2011	833808		
92713565012	HAM-MW-23D	SM 4500-S2D-2011	833809		
92713565013	HAM-MW-33	SM 4500-S2D-2011	833809		
92713565014	HAM-MW-34D	SM 4500-S2D-2011	833809		
92713565015	HAM-MW-37D	SM 4500-S2D-2011	833809		
92713565018	HAM-AP2-FD-01	SM 4500-S2D-2011	833809		
92713565019	HAM-AP2-FD-02	SM 4500-S2D-2011	833809		
92713565020	HAM-MW-35	SM 4500-S2D-2011	834777		
92713565021	HAM-MW-51	SM 4500-S2D-2011	834777		
92713565001	HAM-HGWA-4	EPA 300.0 Rev 2.1 1993	832724		
92713565002	HAM-HGWA-5	EPA 300.0 Rev 2.1 1993	832724		
92713565003	HAM-HGWA-6	EPA 300.0 Rev 2.1 1993	832724		
92713565004	HAM-HGWA-42D	EPA 300.0 Rev 2.1 1993	832724		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Hammond AP-2

Pace Project No.: 92713565

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92713565005	HAM-HGWC-14	EPA 300.0 Rev 2.1 1993	833761		
92713565006	HAM-HGWC-15	EPA 300.0 Rev 2.1 1993	833761		
92713565007	HAM-HGWC-17	EPA 300.0 Rev 2.1 1993	833761		
92713565008	HAM-HGWC-16	EPA 300.0 Rev 2.1 1993	833761		
92713565009	HAM-HGWC-18	EPA 300.0 Rev 2.1 1993	833761		
92713565010	HAM-MW-21D	EPA 300.0 Rev 2.1 1993	833763		
92713565011	HAM-MW-22	EPA 300.0 Rev 2.1 1993	833763		
92713565012	HAM-MW-23D	EPA 300.0 Rev 2.1 1993	833763		
92713565013	HAM-MW-33	EPA 300.0 Rev 2.1 1993	833763		
92713565014	HAM-MW-34D	EPA 300.0 Rev 2.1 1993	833763		
92713565015	HAM-MW-37D	EPA 300.0 Rev 2.1 1993	833763		
92713565016	HAM-AP2-EB-01	EPA 300.0 Rev 2.1 1993	833763		
92713565017	HAM-AP2-FB-01	EPA 300.0 Rev 2.1 1993	833763		
92713565018	HAM-AP2-FD-01	EPA 300.0 Rev 2.1 1993	833763		
92713565019	HAM-AP2-FD-02	EPA 300.0 Rev 2.1 1993	833763		
92713565020	HAM-MW-35	EPA 300.0 Rev 2.1 1993	834798		
92713565021	HAM-MW-51	EPA 300.0 Rev 2.1 1993	834798		
92713565022	HAM-AP2-EB-02	EPA 300.0 Rev 2.1 1993	834798		
92713565023	HAM-AP2-FB-02	EPA 300.0 Rev 2.1 1993	834798		

REPORT OF LABORATORY ANALYSIS

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DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

Laboratory receiving samples:

heville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒ Kernersville ☐Sample Condition
Upon Receipt

Client Name:

Project #:

WO#: 92713565

Carrier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client
☒ Pace ☐ Other:Today Seal Present? ☒ Yes ☐ No Seals Intact? ☒ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: 2/14/22

Packaging Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen?

☐ Yes ☐ No ☒ N/A

Thermometer:

☒ IR Gun ID:

730

Type of Ice:

☒ Wet☐ Blue☐ None

Ambient Temp:

33

Correction Factor:

Add/Subtract (°C)

+0.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Ambient Temp Corrected (°C):

3.4

FDA Regulated Soil (☐ N/A, water sample)Did samples originate in a quarantine zone within the United States: CA, NY, or SC
(check maps)? ☐ Yes ☐ NoDid samples originate from a foreign source (internationally,
including Hawaii and Puerto Rico)? ☐ Yes ☐ No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: 2/14/22			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	

Comments/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:

Effective Date: 12/01/2023

check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

ptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

ottom half of box is to list number of bottles

Check all unpreserved Nitrates for chlorine

Project #

WO# : 92713565

PM: BV

Due Date: 02/29/24

CLIENT: 92- GP-HAM

[illegible]

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Notes: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).

Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Geosyntec Contacts	Company Name:	
Email To:	SCS Contacts	Purchase Order No.:		Address:	
Phone:		Project Name:	Hammond AP-2	Pico Quote Reference:	
Requested Due Date/AT:	Fax: 10 Day	Project Number:		Pico Project Manager:	Bonnie Vang
				Pico Profile #:	10839
			REGULATORY AGENCY <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> OTHER CCR		
			Site Location STATE: <u>GA</u>		
Download Analytical File and DVM					

[illegible]



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒ Kernersville ☐Sample Condition
Upon Receipt

Client Name:

Project #:

WO#: 92713565

Courier:
☐ Commercial☐ Fed Ex
☒ Pace☐ UPS☐ USPS
☐ Other:☐ Client

PM: BV

Due Date: 02/29/24

CLIENT: 92- GP-HAM

Custody Seal Present?

☒ Yes☐ No

Seals Intact?

☒ Yes☐ No☐ N/A

Date/Initials Person Examining Contents: 2/19/24 JH

Packing Material:

☒ Bubble Wrap☐ Bubble Bags☐ None☐ Other

Biological Tissue Frozen?

☐ Yes☐ No☒ N/A

Thermometer:

☒ IR Gun ID:

730

Type of Ice:

☒ Wet☐ Blue☐ None

Cooler Temp:

3.2

Correction Factor:

Add/Subtract (°C)

10.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

8.3

USDA Regulated Soil (☐ N/A, water sample)Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ NoDid samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

Comments/Discrepancy:

Chain of Custody Present?

☒ Yes☐ No☐ N/A

1.

Samples Arrived within Hold Time?

☒ Yes☐ No☐ N/A

2.

Short Hold Time Analysis (<72 hr.)?

☐ Yes☒ No☐ N/A

3.

Rush Turn Around Time Requested?

☐ Yes☐ No☐ N/A

4.

Sufficient Volume?

☒ Yes☐ No☐ N/A

5.

Correct Containers Used?

☒ Yes☐ No☐ N/A

6.

-Pace Containers Used?

☒ Yes☐ No☐ N/A

Containers Intact?

☒ Yes☐ No☐ N/A

7.

Dissolved analysis: Samples Field Filtered?

☐ Yes☐ No☒ N/A

8.

Sample Labels Match COC?

☒ Yes☐ No☐ N/A

9.

-Includes Date/Time/ID/Analysis Matrix:

101

Headspace in VOA Vials (>5-6mm)?

☐ Yes☐ No☒ N/A

10.

Trip Blank Present?

☐ Yes☐ No☒ N/A

11.

Trip Blank Custody Seals Present?

☐ Yes☐ No☐ N/A

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project:

W0#: 92713565

PM: BV

Due Date: 02/29/24

CLIENT: 92- GP-HAM

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	V5GU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		2	1			1	1																	2			
2		2	1			1	1																	2			
3		2	1			1	1																	2			
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

[illegible]

***Important Note:** By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒ Kernersville ☐Sample Condition
Upon Receipt

Client Name:

Project #:

WO#: 92713565

Courier:

☐ Commercial☐ Fed Ex☐ UPS☐ USPS☐ Client☒ Pace☐ Other:

PM: BV

Due Date: 02/29/24

CLIENT: 92- GP-HAM

Custody Seal Present?

☒ Yes☐ No

Seals Intact?

☒ Yes☐ No☐ N/A

Date/Initials Person Examining Contents: 7/19/24 JMC

Packing Material:

☒ Bubble Wrap☐ Bubble Bags☐ None☐ Other

Biological Tissue Frozen?

☐ Yes☐ No☒ N/A

Thermometer:

☒ IR Gun ID: 730

Type of Ice:

☒ Wet☐ Blue☐ None

Cooler Temp:

3.2

Correction Factor:

Add/Subtract (°C)

10.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

8.3

USDA Regulated Soil (☐ N/A, water sample)Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ NoDid samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: 6/2			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project #

W0#: 92713565

PM: BV

Due Date: 02/29/24

CLIENT: 92- GP-HAM

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2SO3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	V5GU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1		1	2																									
2		1	2																									
3		1	2																									
4		1	2																									
5		1	2																									
6		1	2																									
7		1	2																									
8		1	2																									
9		1	1																									
10		1	1																									
11		1	2																									
12		1	2																									

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

THE VENDOR'S CURSUSORY IS A LEGAL DOCUMENT. All financial records must be completed accurately

[illegible]

Important Note: By signing this form you are accepting Peacock's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-Feb-2007



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Geosyntec Contacts	Company Name:	
Email To:	SCS Contacts	Purchase Order No.:		Address:	
Phone:		Project Name:	Hammond AP-2	Reference:	Bonnie Vang
Requested Due Date/AT:	10 Day	Project Number:		Site Location:	GA

Section D Valid Matrix Codes		Section E Required Analysis Filtered (Y/N)		Section F Regulatory Agency	
DRINKING WATER	DW	NPDES		GROUND WATER	
WASTE WATER	WW	UST		RCRA	
PRODUCT	P	OTHER		OTHER	
SOIL/SOLID	SL	CCP			
OIL	OL				
WPE	WP				
AR	AR				
OTHER	OT				
TISSUE	TS				

Section D Required Client Information		Valid Matrix Codes		COLLECTED		Requested Analysis Filtered (Y/N)		Residual Chlorine (Y/N)							
ITEM #	SAMPLE ID (A-Z, 0-9, -) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	Preservatives	Analysis Test	Y/N	Y/N	Y/N	Y/N	
1	HAM-HGWC-16	WG	G	2/18/2024	1732	18	7	3	3	1	1	X	X	X	
2	HAM-HGWC-18	WG	G	2/18/2024	1005	11	7	3	3	1	1	X	X	X	
3	HAM-MW-21D	WG	G	2/18/2024	1330	17	7	3	3	1	1	X	X	X	
4	HAM-MW-22	WG	G	2/18/2024	1632	17	7	3	3	1	1	X	X	X	
5	HAM-MW-23	WG	G	2/18/2024	1415	17	7	3	3	1	1	X	X	X	
6	HAM-MW-33	WG	G	2/18/2024	1155	18	7	3	3	1	1	X	X	X	
7	HAM-MW-34D	WG	G	2/18/2024	1030	18	7	3	3	1	1	X	X	X	
8	HAM-MW-37D	WG	G	2/18/2024	1552	17	7	3	3	1	1	X	X	X	
9	HAM-AP2-EB-01	WG	G	2/18/2024	1720	17	5	2	3			X	X	X	
10	HAM-AP2-FB-01	WG	G	2/18/2024	1715	17	5	2	3			X	X	X	
11	HAM-AP2-FD-01	WG	G	2/18/2024	0000	17	7	3	3	1	1	X	X	X	
12	HAM-AP2-FD-02	WG	G	2/18/2024	0000	17	7	3	3	1	1	X	X	X	
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS	
Track Code: HAM-CCR-ASSMT-2024S1		Thomas Hester / Geosyntec		2/19/2024		1125		Kyan Williams / Pace		2/19/2024		1125		019	
		Kyan Williams / Pace		2/19/2024		1325		SCC		2/19/2024		1325		019	
SAMPLER NAME AND SIGNATURE		PRINT Name of SAMPLER: Thomas Hester, C. Ca. in		DATE Signed (MM/DD/YYYY): 02/18/2024		I Geosyntec Consultants, Inc		Temp in °C		Received on Ice (Y/N)		Custody Sealed Cooler (Y/N)		Samples Intact (Y/N)	
		SIGNATURE OF SAMPLER: [Signature]													

Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒ Kernersville ☐Sample Condition
Upon Receipt

Client Name:

Project #:

WO#: 92713565

PM: BV

Due Date: 02/29/24

CLIENT: 92- GP-HAM

Courier:

☐ Commercial☐ Fed Ex☒ Pace☐ UPS☐ USPS☐ Other: _____☐ Client

Custody Seal Present?

☒ Yes☐ No

Seals Intact?

☒ Yes☐ No☐ N/A

Date/Initials Person Examining Contents: 7/22/24 SM

Packing Material:

☐ Bubble Wrap☐ Bubble Bags☐ None☐ Other

Biological Tissue Frozen?

☐ Yes☐ No☒ N/A

Thermometer:

☒ 1R Gun ID:

230

Type of Ice:

☒ Wet☐ Blue☐ None

Cooler Temp:

3.1

Correction Factor:

Add/Subtract (°C)

0.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

3.2

USDA Regulated Soil (☐ N/A, water sample)Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ NoDid samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix:	EW		
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____

Date/Time: _____

Project Manager SCURF Review: _____

Date: _____

Project Manager SRF Review: _____

Date: _____



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project #

WO# : 92713565

PM: BV

Due Date: 02/29/24

CLIENT: 92- GP-HAM

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	IP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	V5GU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1		2	1			✓	✓																	BPW				
2		2	1			✓	✓																	2				
3		1	1			✓	✓																	2				
4		1	1			✓	✓																	2				
5						✓	✓																					
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



CHAIN-OF-CUSTODY / Analytical Request Document

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[illegible]



March 21, 2024

Kristen Jurinko
Southern Company
241 Ralph McGill Blvd NE
Bin 10160
Atlanta, GA 30308

RE: Project: Plant Hammond AP-2- RAD
Pace Project No.: 92713567

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory between February 14, 2024 and February 22, 2024. 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 - Greensburg

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

Sincerely,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Kip Gray, Geosyntec
Christine Hug, Geosyntec Consultants, Inc.
Thomas Kessler, Geosyntec Consultants
Whitney Law, Geosyntec Consultants
Laura Midkiff, Southern Company
Caroline Nelson, Geosyntec Consultants, Inc
Anthony Szwast, Geosyntec Consultants



REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.



CERTIFICATIONS

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417

ANABISO/IEC 17025:2017 Rad Cert#: L24170

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 2950

Colorado Certification #: PA01547

Connecticut Certification #: PH-0694

EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas Certification #: E-10358

Kentucky Certification #: KY90133

KY WW Permit #: KY0098221

KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA010

Louisiana DEQ/TNI Certification #: 04086

Maine Certification #: 2023021

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification #: 9991

Missouri Certification #: 235

Montana Certification #: Cert0082

Nebraska Certification #: NE-OS-29-14

Nevada Certification #: PA014572023-03

New Hampshire/TNI Certification #: 297622

New Jersey/TNI Certification #: PA051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Ohio EPA Rad Approval: #41249

Oregon/TNI Certification #: PA200002-015

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN02867

Texas/TNI Certification #: T104704188-22-18

Utah/TNI Certification #: PA014572223-14

USDA Soil Permit #: 525-23-67-77263

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.



SAMPLE SUMMARY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92713567001	HAM-HGWA-4	Water	02/13/24 16:50	02/14/24 14:50
92713567002	HAM-HGWA-5	Water	02/13/24 16:54	02/14/24 14:50
92713567003	HAM-HGWA-6	Water	02/13/24 18:19	02/14/24 14:50
92713567004	HAM-HGWA-42D	Water	02/13/24 18:20	02/14/24 14:50
92713567005	HAM-HGWC-14	Water	02/17/24 12:25	02/19/24 11:25
92713567006	HAM-HGWC-15	Water	02/17/24 16:15	02/19/24 11:25
92713567007	HAM-HGWC-17	Water	02/17/24 14:50	02/19/24 11:25
92713567008	HAM-HGWC-16	Water	02/18/24 17:32	02/19/24 11:25
92713567009	HAM-HGWC-18	Water	02/18/24 10:05	02/19/24 11:25
92713567010	HAM-MW-21D	Water	02/18/24 13:30	02/19/24 11:25
92713567011	HAM-MW-22	Water	02/18/24 16:32	02/19/24 11:25
92713567012	HAM-MW-23	Water	02/18/24 14:15	02/19/24 11:25
92713567013	HAM-MW-33	Water	02/18/24 11:55	02/19/24 11:25
92713567014	HAM-MW-34D	Water	02/18/24 10:30	02/19/24 11:25
92713567015	HAM-MW-37D	Water	02/18/24 15:52	02/19/24 11:25
92713567016	HAM-AP2-EB-01	Water	02/18/24 17:20	02/19/24 11:25
92713567017	HAM-AP2-FB-01	Water	02/18/24 17:15	02/19/24 11:25
92713567018	HAM-AP2-FD-01	Water	02/18/24 00:00	02/19/24 11:25
92713567019	HAM-AP2-FD-02	Water	02/18/24 00:00	02/19/24 11:25
92713567020	HAM-MW-35	Water	02/19/24 11:30	02/22/24 11:10
92713567021	HAM-MW-51	Water	02/19/24 13:25	02/22/24 11:10
92713567022	HAM-AP2-EB-02	Water	02/19/24 11:50	02/22/24 11:10
92713567023	HAM-AP2-FB-02	Water	02/19/24 11:55	02/22/24 11:10

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Plant Hammond AP-2- RAD
Pace Project No.: 92713567

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92713567001	HAM-HGWA-4	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92713567002	HAM-HGWA-5	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92713567003	HAM-HGWA-6	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92713567004	HAM-HGWA-42D	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92713567005	HAM-HGWC-14	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92713567006	HAM-HGWC-15	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92713567007	HAM-HGWC-17	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92713567008	HAM-HGWC-16	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92713567009	HAM-HGWC-18	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92713567010	HAM-MW-21D	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92713567011	HAM-MW-22	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92713567012	HAM-MW-23	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92713567013	HAM-MW-33	EPA 9315	SLC	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: Plant Hammond AP-2- RAD
Pace Project No.: 92713567

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92713567014	HAM-MW-34D	EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
92713567015	HAM-MW-37D	Total Radium Calculation	LAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92713567016	HAM-AP2-EB-01	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
92713567017	HAM-AP2-FB-01	EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
92713567018	HAM-AP2-FD-01	Total Radium Calculation	LAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92713567019	HAM-AP2-FD-02	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
92713567020	HAM-MW-35	EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
92713567021	HAM-MW-51	Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92713567022	HAM-AP2-EB-02	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
92713567023	HAM-AP2-FB-02	EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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SUMMARY OF DETECTION

Project: Plant Hammond AP-2- RAD
Pace Project No.: 92713567

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713567001	HAM-HGWA-4					
EPA 9315	Radium-226	0.161U ± 0.135 (0.248) C:92% T:NA	pCi/L		02/28/24 09:35	
EPA 9320	Radium-228	0.560U ± 0.418 (0.813) C:74% T:82%	pCi/L		03/04/24 16:36	
Total Radium Calculation	Total Radium	0.721U ± 0.553 (1.06)	pCi/L		03/05/24 14:33	
92713567002	HAM-HGWA-5					
EPA 9315	Radium-226	0.0243U ± 0.0772 (0.193) C:92% T:NA	pCi/L		02/28/24 09:35	
EPA 9320	Radium-228	-0.277U ± 0.334 (0.853) C:69% T:84%	pCi/L		03/04/24 16:36	
Total Radium Calculation	Total Radium	0.0243U ± 0.411 (1.05)	pCi/L		03/05/24 14:33	
92713567003	HAM-HGWA-6					
EPA 9315	Radium-226	0.153U ± 0.145 (0.277) C:77% T:NA	pCi/L		02/28/24 09:47	
EPA 9320	Radium-228	-0.00735U ± 0.316 (0.750) C:74% T:86%	pCi/L		03/04/24 16:36	
Total Radium Calculation	Total Radium	0.153U ± 0.461 (1.03)	pCi/L		03/05/24 14:33	
92713567004	HAM-HGWA-42D					
EPA 9315	Radium-226	0.168U ± 0.130 (0.228) C:91% T:NA	pCi/L		02/29/24 08:29	
EPA 9320	Radium-228	-0.0252U ± 0.328 (0.776) C:76% T:85%	pCi/L		03/04/24 16:36	
Total Radium Calculation	Total Radium	0.168U ± 0.458 (1.00)	pCi/L		03/05/24 14:33	

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SUMMARY OF DETECTION

Project: Plant Hammond AP-2- RAD
Pace Project No.: 92713567

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713567005	HAM-HGWC-14					
EPA 9315	Radium-226	0.330 ± 0.168 (0.234) C:97% T:NA	pCi/L		03/04/24 08:37	
EPA 9320	Radium-228	0.109U ± 0.383 (0.867) C:76% T:83%	pCi/L		03/04/24 16:36	
Total Radium Calculation	Total Radium	0.439U ± 0.551 (1.10)	pCi/L		03/13/24 09:27	
92713567006	HAM-HGWC-15					
EPA 9315	Radium-226	-0.0658U ± 0.0736 (0.260) C:94% T:NA	pCi/L		03/04/24 10:04	
EPA 9320	Radium-228	0.576U ± 0.450 (0.883) C:76% T:81%	pCi/L		03/04/24 16:36	
Total Radium Calculation	Total Radium	0.576U ± 0.524 (1.14)	pCi/L		03/13/24 09:27	
92713567007	HAM-HGWC-17					
EPA 9315	Radium-226	0.0860U ± 0.114 (0.242) C:98% T:NA	pCi/L		03/04/24 08:37	
EPA 9320	Radium-228	0.547U ± 0.408 (0.787) C:75% T:84%	pCi/L		03/04/24 16:36	
Total Radium Calculation	Total Radium	0.633U ± 0.522 (1.03)	pCi/L		03/13/24 09:27	
92713567008	HAM-HGWC-16					
EPA 9315	Radium-226	0.0790U ± 0.128 (0.287) C:93% T:NA	pCi/L		03/04/24 08:37	
EPA 9320	Radium-228	0.169U ± 0.354 (0.784) C:76% T:84%	pCi/L		03/04/24 16:36	
Total Radium Calculation	Total Radium	0.248U ± 0.482 (1.07)	pCi/L		03/13/24 09:27	

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SUMMARY OF DETECTION

Project: Plant Hammond AP-2- RAD
Pace Project No.: 92713567

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713567009	HAM-HGWC-18					
EPA 9315	Radium-226	0.512 ± 0.201 (0.235) C:102% T:NA	pCi/L		03/04/24 08:38	
EPA 9320	Radium-228	0.245U ± 0.351 (0.752) C:78% T:83%	pCi/L		03/04/24 16:37	
Total Radium Calculation	Total Radium	0.757U ± 0.552 (0.987)	pCi/L		03/13/24 09:27	
92713567010	HAM-MW-21D					
EPA 9315	Radium-226	0.127U ± 0.120 (0.225) C:91% T:NA	pCi/L		03/04/24 08:39	
EPA 9320	Radium-228	-0.192U ± 0.346 (0.861) C:72% T:81%	pCi/L		03/04/24 16:37	
Total Radium Calculation	Total Radium	0.127U ± 0.466 (1.09)	pCi/L		03/13/24 09:27	
92713567011	HAM-MW-22					
EPA 9315	Radium-226	0.110U ± 0.133 (0.281) C:97% T:NA	pCi/L		03/04/24 08:38	
EPA 9320	Radium-228	0.361U ± 0.372 (0.768) C:77% T:84%	pCi/L		03/04/24 16:37	
Total Radium Calculation	Total Radium	0.471U ± 0.505 (1.05)	pCi/L		03/13/24 09:27	
92713567012	HAM-MW-23					
EPA 9315	Radium-226	0.0259U ± 0.0791 (0.196) C:96% T:NA	pCi/L		03/04/24 08:38	
EPA 9320	Radium-228	0.313U ± 0.361 (0.756) C:77% T:84%	pCi/L		03/04/24 16:37	
Total Radium Calculation	Total Radium	0.339U ± 0.440 (0.952)	pCi/L		03/13/24 09:27	

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SUMMARY OF DETECTION

Project: Plant Hammond AP-2- RAD
Pace Project No.: 92713567

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713567013	HAM-MW-33					
EPA 9315	Radium-226	0.405 ± 0.175 (0.203) C:101% T:NA	pCi/L		03/04/24 08:38	
EPA 9320	Radium-228	0.147U ± 0.364 (0.815) C:72% T:82%	pCi/L		03/04/24 16:37	
Total Radium Calculation	Total Radium	0.552U ± 0.539 (1.02)	pCi/L		03/13/24 09:27	
92713567014	HAM-MW-34D					
EPA 9315	Radium-226	0.163U ± 0.139 (0.261) C:97% T:NA	pCi/L		03/04/24 08:33	
EPA 9320	Radium-228	0.352U ± 0.433 (0.912) C:76% T:69%	pCi/L		03/04/24 16:37	
Total Radium Calculation	Total Radium	0.515U ± 0.572 (1.17)	pCi/L		03/13/24 09:27	
92713567015	HAM-MW-37D					
EPA 9315	Radium-226	0.219U ± 0.144 (0.232) C:95% T:NA	pCi/L		03/04/24 08:33	
EPA 9320	Radium-228	0.316U ± 0.376 (0.790) C:77% T:80%	pCi/L		03/04/24 16:37	
Total Radium Calculation	Total Radium	0.535U ± 0.520 (1.02)	pCi/L		03/13/24 09:27	
92713567016	HAM-AP2-EB-01					
EPA 9315	Radium-226	-0.0253U ± 0.0845 (0.253) C:89% T:NA	pCi/L		03/04/24 08:33	
EPA 9320	Radium-228	0.349U ± 0.456 (0.973) C:79% T:77%	pCi/L		03/04/24 16:37	
Total Radium Calculation	Total Radium	0.349U ± 0.541 (1.23)	pCi/L		03/13/24 09:27	

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SUMMARY OF DETECTION

Project: Plant Hammond AP-2- RAD
Pace Project No.: 92713567

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713567017	HAM-AP2-FB-01					
EPA 9315	Radium-226	-0.000155U ± 0.0898 (0.246) C:92% T:NA	pCi/L		03/04/24 08:33	
EPA 9320	Radium-228	0.313U ± 0.337 (0.698) C:82% T:84%	pCi/L		03/04/24 16:37	
Total Radium Calculation	Total Radium	0.313U ± 0.427 (0.944)	pCi/L		03/13/24 09:27	
92713567018	HAM-AP2-FD-01					
EPA 9315	Radium-226	0.190U ± 0.132 (0.215) C:92% T:NA	pCi/L		03/04/24 08:34	
EPA 9320	Radium-228	0.644U ± 0.432 (0.819) C:79% T:78%	pCi/L		03/04/24 16:37	
Total Radium Calculation	Total Radium	0.834U ± 0.564 (1.03)	pCi/L		03/13/24 09:27	
92713567019	HAM-AP2-FD-02					
EPA 9315	Radium-226	0.151U ± 0.129 (0.231) C:88% T:NA	pCi/L		03/04/24 08:34	
EPA 9320	Radium-228	0.452U ± 0.398 (0.802) C:79% T:82%	pCi/L		03/04/24 16:38	
Total Radium Calculation	Total Radium	0.603U ± 0.527 (1.03)	pCi/L		03/13/24 09:27	
92713567020	HAM-MW-35					
EPA 9315	Radium-226	0.394U ± 0.257 (0.404) C:72% T:NA	pCi/L		03/11/24 08:28	
EPA 9320	Radium-228	1.04 ± 0.494 (0.826) C:70% T:81%	pCi/L		03/11/24 16:44	
Total Radium Calculation	Total Radium	1.43 ± 0.751 (1.23)	pCi/L		03/14/24 16:49	

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SUMMARY OF DETECTION

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713567021	HAM-MW-51					
EPA 9315	Radium-226	0.145U ± 0.203 (0.444) C:92% T:NA	pCi/L		03/11/24 08:29	
EPA 9320	Radium-228	0.850U ± 0.562 (1.10) C:70% T:88%	pCi/L		03/11/24 16:44	
Total Radium Calculation	Total Radium	0.995U ± 0.765 (1.54)	pCi/L		03/14/24 16:49	
92713567022	HAM-AP2-EB-02					
EPA 9315	Radium-226	0.260U ± 0.200 (0.348) C:82% T:NA	pCi/L		03/11/24 08:29	
EPA 9320	Radium-228	0.338U ± 0.340 (0.698) C:73% T:86%	pCi/L		03/12/24 12:54	
Total Radium Calculation	Total Radium	0.598U ± 0.540 (1.05)	pCi/L		03/13/24 15:11	
92713567023	HAM-AP2-FB-02					
EPA 9315	Radium-226	0.299U ± 0.226 (0.404) C:80% T:NA	pCi/L		03/11/24 08:29	
EPA 9320	Radium-228	0.185U ± 0.452 (1.00) C:72% T:87%	pCi/L		03/12/24 12:54	
Total Radium Calculation	Total Radium	0.484U ± 0.678 (1.40)	pCi/L		03/13/24 15:11	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-HGWA-4		Lab ID: 92713567001	Collected: 02/13/24 16:50	Received: 02/14/24 14:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 9315	0.161U ± 0.135 (0.248) C:92% T:NA		pCi/L	02/28/24 09:35	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 9320	0.560U ± 0.418 (0.813) C:74% T:82%		pCi/L	03/04/24 16:36	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.721U ± 0.553 (1.06)		pCi/L	03/05/24 14:33	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-HGWA-5		Lab ID: 92713567002	Collected: 02/13/24 16:54	Received: 02/14/24 14:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	Pace Analytical Services - Greensburg			pCi/L	02/28/24 09:35	13982-63-3	
	EPA 9315	0.0243U ± 0.0772 (0.193) C:92% T:NA					
Radium-228	Pace Analytical Services - Greensburg			pCi/L	03/04/24 16:36	15262-20-1	
	EPA 9320	-0.277U ± 0.334 (0.853) C:69% T:84%					
Total Radium	Pace Analytical Services - Greensburg			pCi/L	03/05/24 14:33	7440-14-4	
	Total Radium Calculation	0.0243U ± 0.411 (1.05)					

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-HGWA-6		Lab ID: 92713567003	Collected: 02/13/24 18:19	Received: 02/14/24 14:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 9315	0.153U ± 0.145 (0.277) C:77% T:NA		pCi/L	02/28/24 09:47	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 9320	-0.00735U ± 0.316 (0.750) C:74% T:86%		pCi/L	03/04/24 16:36	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.153U ± 0.461 (1.03)		pCi/L	03/05/24 14:33	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-HGWA-42D		Lab ID: 92713567004	Collected: 02/13/24 18:20	Received: 02/14/24 14:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 9315	0.168U ± 0.130 (0.228) C:91% T:NA		pCi/L	02/29/24 08:29	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 9320	-0.0252U ± 0.328 (0.776) C:76% T:85%		pCi/L	03/04/24 16:36	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.168U ± 0.458 (1.00)		pCi/L	03/05/24 14:33	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-HGWC-14		Lab ID: 92713567005	Collected: 02/17/24 12:25	Received: 02/19/24 11:25	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	Pace Analytical Services - Greensburg			pCi/L	03/04/24 08:37	13982-63-3	
	EPA 9315	0.330 ± 0.168 (0.234) C:97% T:NA					
Radium-228	Pace Analytical Services - Greensburg			pCi/L	03/04/24 16:36	15262-20-1	
	EPA 9320	0.109U ± 0.383 (0.867) C:76% T:83%					
Total Radium	Pace Analytical Services - Greensburg			pCi/L	03/13/24 09:27	7440-14-4	
	Total Radium Calculation	0.439U ± 0.551 (1.10)					

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-HGWC-15		Lab ID: 92713567006	Collected: 02/17/24 16:15	Received: 02/19/24 11:25	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 9315	-0.0658U ± 0.0736 (0.260) C:94% T:NA		pCi/L	03/04/24 10:04	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 9320	0.576U ± 0.450 (0.883) C:76% T:81%		pCi/L	03/04/24 16:36	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.576U ± 0.524 (1.14)		pCi/L	03/13/24 09:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-HGWC-17		Lab ID: 92713567007	Collected: 02/17/24 14:50	Received: 02/19/24 11:25	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 9315	0.0860U ± 0.114 (0.242) C:98% T:NA		pCi/L	03/04/24 08:37	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 9320	0.547U ± 0.408 (0.787) C:75% T:84%		pCi/L	03/04/24 16:36	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.633U ± 0.522 (1.03)		pCi/L	03/13/24 09:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-HGWC-16		Lab ID: 92713567008	Collected: 02/18/24 17:32	Received: 02/19/24 11:25	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	Pace Analytical Services - Greensburg			pCi/L	03/04/24 08:37	13982-63-3	
	EPA 9315	0.0790U ± 0.128 (0.287) C:93% T:NA					
Radium-228	Pace Analytical Services - Greensburg			pCi/L	03/04/24 16:36	15262-20-1	
	EPA 9320	0.169U ± 0.354 (0.784) C:76% T:84%					
Total Radium	Pace Analytical Services - Greensburg			pCi/L	03/13/24 09:27	7440-14-4	
	Total Radium Calculation	0.248U ± 0.482 (1.07)					

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-HGWC-18		Lab ID: 92713567009	Collected: 02/18/24 10:05	Received: 02/19/24 11:25	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	Pace Analytical Services - Greensburg			pCi/L	03/04/24 08:38	13982-63-3	
	EPA 9315	0.512 ± 0.201 (0.235) C:102% T:NA					
Radium-228	Pace Analytical Services - Greensburg			pCi/L	03/04/24 16:37	15262-20-1	
	EPA 9320	0.245U ± 0.351 (0.752) C:78% T:83%					
Total Radium	Pace Analytical Services - Greensburg			pCi/L	03/13/24 09:27	7440-14-4	
	Total Radium Calculation	0.757U ± 0.552 (0.987)					

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-MW-21D		Lab ID: 92713567010	Collected: 02/18/24 13:30	Received: 02/19/24 11:25	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 9315	0.127U ± 0.120 (0.225) C:91% T:NA		pCi/L	03/04/24 08:39	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 9320	-0.192U ± 0.346 (0.861) C:72% T:81%		pCi/L	03/04/24 16:37	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.127U ± 0.466 (1.09)		pCi/L	03/13/24 09:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-MW-22		Lab ID: 92713567011	Collected: 02/18/24 16:32	Received: 02/19/24 11:25	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 9315	0.110U ± 0.133 (0.281) C:97% T:NA		pCi/L	03/04/24 08:38	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 9320	0.361U ± 0.372 (0.768) C:77% T:84%		pCi/L	03/04/24 16:37	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.471U ± 0.505 (1.05)		pCi/L	03/13/24 09:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-MW-23		Lab ID: 92713567012	Collected: 02/18/24 14:15	Received: 02/19/24 11:25	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	Pace Analytical Services - Greensburg			pCi/L	03/04/24 08:38	13982-63-3	
	EPA 9315	0.0259U ± 0.0791 (0.196) C:96% T:NA					
Radium-228	Pace Analytical Services - Greensburg			pCi/L	03/04/24 16:37	15262-20-1	
	EPA 9320	0.313U ± 0.361 (0.756) C:77% T:84%					
Total Radium	Pace Analytical Services - Greensburg			pCi/L	03/13/24 09:27	7440-14-4	
	Total Radium Calculation	0.339U ± 0.440 (0.952)					

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-MW-33		Lab ID: 92713567013	Collected: 02/18/24 11:55	Received: 02/19/24 11:25	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	Pace Analytical Services - Greensburg			pCi/L	03/04/24 08:38	13982-63-3	
	EPA 9315	0.405 ± 0.175 (0.203) C:101% T:NA					
Radium-228	Pace Analytical Services - Greensburg			pCi/L	03/04/24 16:37	15262-20-1	
	EPA 9320	0.147U ± 0.364 (0.815) C:72% T:82%					
Total Radium	Pace Analytical Services - Greensburg			pCi/L	03/13/24 09:27	7440-14-4	
	Total Radium Calculation	0.552U ± 0.539 (1.02)					

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-MW-34D		Lab ID: 92713567014	Collected: 02/18/24 10:30	Received: 02/19/24 11:25	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	Pace Analytical Services - Greensburg			pCi/L	03/04/24 08:33	13982-63-3	
	EPA 9315	0.163U ± 0.139 (0.261) C:97% T:NA					
Radium-228	Pace Analytical Services - Greensburg			pCi/L	03/04/24 16:37	15262-20-1	
	EPA 9320	0.352U ± 0.433 (0.912) C:76% T:69%					
Total Radium	Pace Analytical Services - Greensburg			pCi/L	03/13/24 09:27	7440-14-4	
	Total Radium Calculation	0.515U ± 0.572 (1.17)					

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-MW-37D		Lab ID: 92713567015	Collected: 02/18/24 15:52	Received: 02/19/24 11:25	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 9315	0.219U ± 0.144 (0.232) C:95% T:NA		pCi/L	03/04/24 08:33	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 9320	0.316U ± 0.376 (0.790) C:77% T:80%		pCi/L	03/04/24 16:37	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.535U ± 0.520 (1.02)		pCi/L	03/13/24 09:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-AP2-EB-01		Lab ID: 92713567016	Collected: 02/18/24 17:20	Received: 02/19/24 11:25	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	Pace Analytical Services - Greensburg			pCi/L	03/04/24 08:33	13982-63-3	
	EPA 9315	-0.0253U ± 0.0845 (0.253) C:89% T:NA					
Radium-228	Pace Analytical Services - Greensburg			pCi/L	03/04/24 16:37	15262-20-1	
	EPA 9320	0.349U ± 0.456 (0.973) C:79% T:77%					
Total Radium	Pace Analytical Services - Greensburg			pCi/L	03/13/24 09:27	7440-14-4	
	Total Radium Calculation	0.349U ± 0.541 (1.23)					

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-AP2-FB-01		Lab ID: 92713567017	Collected: 02/18/24 17:15	Received: 02/19/24 11:25	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	Pace Analytical Services - Greensburg			pCi/L	03/04/24 08:33	13982-63-3	
	EPA 9315	-0.000155U ± 0.0898 (0.246) C:92% T:NA					
Radium-228	Pace Analytical Services - Greensburg			pCi/L	03/04/24 16:37	15262-20-1	
	EPA 9320	0.313U ± 0.337 (0.698) C:82% T:84%					
Total Radium	Pace Analytical Services - Greensburg			pCi/L	03/13/24 09:27	7440-14-4	
	Total Radium Calculation	0.313U ± 0.427 (0.944)					

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-AP2-FD-01		Lab ID: 92713567018	Collected: 02/18/24 00:00	Received: 02/19/24 11:25	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	Pace Analytical Services - Greensburg			pCi/L	03/04/24 08:34	13982-63-3	
	EPA 9315	0.190U ± 0.132 (0.215) C:92% T:NA					
Radium-228	Pace Analytical Services - Greensburg			pCi/L	03/04/24 16:37	15262-20-1	
	EPA 9320	0.644U ± 0.432 (0.819) C:79% T:78%					
Total Radium	Pace Analytical Services - Greensburg			pCi/L	03/13/24 09:27	7440-14-4	
	Total Radium Calculation	0.834U ± 0.564 (1.03)					

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-AP2-FD-02		Lab ID: 92713567019	Collected: 02/18/24 00:00	Received: 02/19/24 11:25	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 9315	0.151U ± 0.129 (0.231) C:88% T:NA		pCi/L	03/04/24 08:34	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 9320	0.452U ± 0.398 (0.802) C:79% T:82%		pCi/L	03/04/24 16:38	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.603U ± 0.527 (1.03)		pCi/L	03/13/24 09:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-MW-35		Lab ID: 92713567020	Collected: 02/19/24 11:30	Received: 02/22/24 11:10	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 9315	0.394U ± 0.257 (0.404) C:72% T:NA		pCi/L	03/11/24 08:28	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 9320	1.04 ± 0.494 (0.826) C:70% T:81%		pCi/L	03/11/24 16:44	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	1.43 ± 0.751 (1.23)		pCi/L	03/14/24 16:49	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-MW-51		Lab ID: 92713567021	Collected: 02/19/24 13:25	Received: 02/22/24 11:10	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 9315	0.145U ± 0.203 (0.444) C:92% T:NA		pCi/L	03/11/24 08:29	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 9320	0.850U ± 0.562 (1.10) C:70% T:88%		pCi/L	03/11/24 16:44	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.995U ± 0.765 (1.54)		pCi/L	03/14/24 16:49	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-AP2-EB-02		Lab ID: 92713567022	Collected: 02/19/24 11:50	Received: 02/22/24 11:10	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 9315	0.260U ± 0.200 (0.348) C:82% T:NA		pCi/L	03/11/24 08:29	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 9320	0.338U ± 0.340 (0.698) C:73% T:86%		pCi/L	03/12/24 12:54	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.598U ± 0.540 (1.05)		pCi/L	03/13/24 15:11	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Sample: HAM-AP2-FB-02		Lab ID: 92713567023	Collected: 02/19/24 11:55	Received: 02/22/24 11:10	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	Pace Analytical Services - Greensburg			pCi/L	03/11/24 08:29	13982-63-3	
	EPA 9315	0.299U ± 0.226 (0.404) C:80% T:NA					
Radium-228	Pace Analytical Services - Greensburg			pCi/L	03/12/24 12:54	15262-20-1	
	EPA 9320	0.185U ± 0.452 (1.00) C:72% T:87%					
Total Radium	Pace Analytical Services - Greensburg			pCi/L	03/13/24 15:11	7440-14-4	
	Total Radium Calculation	0.484U ± 0.678 (1.40)					

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

QC Batch: 651836

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92713567022, 92713567023

METHOD BLANK: 3175611

Matrix: Water

Associated Lab Samples: 92713567022, 92713567023

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.173 ± 0.373 (0.826) C:73% T:85%	pCi/L	03/12/24 12:53	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

QC Batch:	650487	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg
Associated Lab Samples:	92713567005, 92713567006, 92713567007, 92713567008, 92713567009, 92713567010, 92713567011, 92713567012, 92713567013, 92713567014, 92713567015, 92713567016, 92713567017, 92713567018, 92713567019		

METHOD BLANK:	3169758	Matrix:	Water
Associated Lab Samples:	92713567005, 92713567006, 92713567007, 92713567008, 92713567009, 92713567010, 92713567011, 92713567012, 92713567013, 92713567014, 92713567015, 92713567016, 92713567017, 92713567018, 92713567019		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0267 ± 0.104 (0.260) C:93% T:NA	pCi/L	03/04/24 08:31	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

QC Batch:	650435	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg
Associated Lab Samples:	92713567001, 92713567002, 92713567003, 92713567004, 92713567005, 92713567006, 92713567007, 92713567008, 92713567009, 92713567010, 92713567011, 92713567012, 92713567013, 92713567014, 92713567015, 92713567016, 92713567017, 92713567018, 92713567019		

METHOD BLANK: 3169514 Matrix: Water

Associated Lab Samples: 92713567001, 92713567002, 92713567003, 92713567004, 92713567005, 92713567006, 92713567007, 92713567008, 92713567009, 92713567010, 92713567011, 92713567012, 92713567013, 92713567014, 92713567015, 92713567016, 92713567017, 92713567018, 92713567019

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0285 ± 0.329 (0.768) C:71% T:85%	pCi/L	03/04/24 16:38	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

QC Batch: 649569

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92713567001, 92713567002, 92713567003, 92713567004

METHOD BLANK: 3165288

Matrix: Water

Associated Lab Samples: 92713567001, 92713567002, 92713567003, 92713567004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0147 ± 0.129 (0.325) C:96% T:NA	pCi/L	02/28/24 07:38	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

QC Batch:	651197	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92713567020, 92713567021, 92713567022, 92713567023

METHOD BLANK: 3172766 Matrix: Water

Associated Lab Samples: 92713567020, 92713567021, 92713567022, 92713567023

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0136 ± 0.137 (0.359) C:89% T:NA	pCi/L	03/11/24 10:01	

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

QC Batch: 651359

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92713567020, 92713567021

METHOD BLANK: 3173423

Matrix: Water

Associated Lab Samples: 92713567020, 92713567021

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.310 ± 0.405 (0.865) C:73% T:92%	pCi/L	03/11/24 16:47	

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.

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QUALIFIERS

Project: Plant Hammond AP-2- RAD
Pace Project No.: 92713567

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 adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92713567001	HAM-HGWA-4	EPA 9315	649569		
92713567002	HAM-HGWA-5	EPA 9315	649569		
92713567003	HAM-HGWA-6	EPA 9315	649569		
92713567004	HAM-HGWA-42D	EPA 9315	649569		
92713567005	HAM-HGWC-14	EPA 9315	650487		
92713567006	HAM-HGWC-15	EPA 9315	650487		
92713567007	HAM-HGWC-17	EPA 9315	650487		
92713567008	HAM-HGWC-16	EPA 9315	650487		
92713567009	HAM-HGWC-18	EPA 9315	650487		
92713567010	HAM-MW-21D	EPA 9315	650487		
92713567011	HAM-MW-22	EPA 9315	650487		
92713567012	HAM-MW-23	EPA 9315	650487		
92713567013	HAM-MW-33	EPA 9315	650487		
92713567014	HAM-MW-34D	EPA 9315	650487		
92713567015	HAM-MW-37D	EPA 9315	650487		
92713567016	HAM-AP2-EB-01	EPA 9315	650487		
92713567017	HAM-AP2-FB-01	EPA 9315	650487		
92713567018	HAM-AP2-FD-01	EPA 9315	650487		
92713567019	HAM-AP2-FD-02	EPA 9315	650487		
92713567020	HAM-MW-35	EPA 9315	651197		
92713567021	HAM-MW-51	EPA 9315	651197		
92713567022	HAM-AP2-EB-02	EPA 9315	651197		
92713567023	HAM-AP2-FB-02	EPA 9315	651197		
92713567001	HAM-HGWA-4	EPA 9320	650435		
92713567002	HAM-HGWA-5	EPA 9320	650435		
92713567003	HAM-HGWA-6	EPA 9320	650435		
92713567004	HAM-HGWA-42D	EPA 9320	650435		
92713567005	HAM-HGWC-14	EPA 9320	650435		
92713567006	HAM-HGWC-15	EPA 9320	650435		
92713567007	HAM-HGWC-17	EPA 9320	650435		
92713567008	HAM-HGWC-16	EPA 9320	650435		
92713567009	HAM-HGWC-18	EPA 9320	650435		
92713567010	HAM-MW-21D	EPA 9320	650435		
92713567011	HAM-MW-22	EPA 9320	650435		
92713567012	HAM-MW-23	EPA 9320	650435		
92713567013	HAM-MW-33	EPA 9320	650435		
92713567014	HAM-MW-34D	EPA 9320	650435		
92713567015	HAM-MW-37D	EPA 9320	650435		
92713567016	HAM-AP2-EB-01	EPA 9320	650435		
92713567017	HAM-AP2-FB-01	EPA 9320	650435		
92713567018	HAM-AP2-FD-01	EPA 9320	650435		
92713567019	HAM-AP2-FD-02	EPA 9320	650435		
92713567020	HAM-MW-35	EPA 9320	651359		
92713567021	HAM-MW-51	EPA 9320	651359		
92713567022	HAM-AP2-EB-02	EPA 9320	651836		
92713567023	HAM-AP2-FB-02	EPA 9320	651836		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Hammond AP-2- RAD

Pace Project No.: 92713567

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92713567001	HAM-HGWA-4	Total Radium Calculation	652896		
92713567002	HAM-HGWA-5	Total Radium Calculation	652896		
92713567003	HAM-HGWA-6	Total Radium Calculation	652896		
92713567004	HAM-HGWA-42D	Total Radium Calculation	652896		
92713567005	HAM-HGWC-14	Total Radium Calculation	654749		
92713567006	HAM-HGWC-15	Total Radium Calculation	654749		
92713567007	HAM-HGWC-17	Total Radium Calculation	654749		
92713567008	HAM-HGWC-16	Total Radium Calculation	654749		
92713567009	HAM-HGWC-18	Total Radium Calculation	654749		
92713567010	HAM-MW-21D	Total Radium Calculation	654749		
92713567011	HAM-MW-22	Total Radium Calculation	654749		
92713567012	HAM-MW-23	Total Radium Calculation	654749		
92713567013	HAM-MW-33	Total Radium Calculation	654749		
92713567014	HAM-MW-34D	Total Radium Calculation	654749		
92713567015	HAM-MW-37D	Total Radium Calculation	654749		
92713567016	HAM-AP2-EB-01	Total Radium Calculation	654749		
92713567017	HAM-AP2-FB-01	Total Radium Calculation	654749		
92713567018	HAM-AP2-FD-01	Total Radium Calculation	654749		
92713567019	HAM-AP2-FD-02	Total Radium Calculation	654749		
92713567020	HAM-MW-35	Total Radium Calculation	655250		
92713567021	HAM-MW-51	Total Radium Calculation	655250		
92713567022	HAM-AP2-EB-02	Total Radium Calculation	654918		
92713567023	HAM-AP2-FB-02	Total Radium Calculation	654918		

REPORT OF LABORATORY ANALYSIS

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DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

Laboratory receiving samples:

Nashville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒Sample Condition
Upon Receipt

Client Name:

Project #:

WO#: 92713567

Carrier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client
Commercial ☒ Pace ☐ Other:Today Seal Present? ☒ Yes ☐ No Seals Intact? ☒ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: 2/14/2

Packaging Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen?

☐ Yes ☐ No ☒ N/A

Thermometer:

☒ IR Gun ID:

730

Type of Ice:

☒ Wet☐ Blue☐ None

Ambient Temp:

33

Correction Factor:

Add/Subtract (°C)

+0.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Ambient Temp Corrected (°C):

3.4

FDA Regulated Soil (☐ N/A, water sample)Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ NoDid samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: 2/14/2			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A	

Comments/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:

Effective Date: 12/01/2023

check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

ptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

ottom half of box is to list number of bottles

Check all unpreserved Nitrates for chlorine

Project #

WO# : 92713567

PM: BV

Due Date: 03/07/24

CLIENT: 92- GP-HAM

[illegible]

pH Adjustment Log for Preserved Samples

sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

re: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Geosyntec Contacts	Company Name:	
Email To:	SCS Contacts	Purchase Order No.:		Address:	
Phone:		Project Name:	Hammond AP-2	Pace Quote Reference:	
Requested Due Date/TAT:	10 Day	Pace Project Manager:	Bonnie Vang	Pace Project Reference:	
		Project Number:	10839		

Section D Required Client Information		Valid Matrix Codes		COLLECTED		SAMPLE TYPE (G=GRAB C=COMP)		MATRIX CODE (see valid codes to left)		SAMPLE TEMP AT COLLECTION		# OF CONTAINERS		Preservatives		Analysis Test		Requested Analysis Filtered (Y/N)		Pace Project No./ Lab I.D.	
ITEM #	Required Client Information	MATRIX CODE	Valid Matrix Codes	COMPOSITE	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	
1	HAM-HGWA-4	WG G	2/13/24	1650	TK	2/13/24	15	7	3	3	3	3	3	3	3	3	3	3	3	3	
2	HAM-HGWA-5	WG G	2/13/24	1654			17	7	3	3	3	3	3	3	3	3	3	3	3	3	
3	HAM-HGWA-6	WG G	2/13/24	1819			16	7	3	3	3	3	3	3	3	3	3	3	3	3	
4	HAM-HGWA-42D	WG G	2/13/24	1820			17	7	3	3	3	3	3	3	3	3	3	3	3	3	
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒ Kernersville ☐Sample Condition
Upon Receipt

Client Name:

Project #:

WO#: 92713567

Courier:
☐ Commercial☐ Fed Ex
☒ Pace☐ UPS☐ USPS☐ Other:☐ Client

PM: BV

Due Date: 03/07/24

CLIENT: 92- GP-HAM

Custody Seal Present?

☒ Yes☐ No

Seals Intact?

☒ Yes☐ No☐ N/A

Date/Initials Person Examining Contents: 2/19/24 JMA

Packing Material:

☒ Bubble Wrap☐ Bubble Bags☐ None☐ Other

Biological Tissue Frozen?

☐ Yes ☐ No ☒ N/A

Thermometer:

☐ IR Gun ID:

730

Type of Ice:

☒ Wet☐ Blue☐ None

Cooler Temp:

3.2

Correction Factor:

Add/Subtract (°C)

10.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

8.3

USDA Regulated Soil (☐ N/A, water sample)Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ NoDid samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

Comments/Discrepancy:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: 101				
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project #

WO#: 92713567

PM: BV

Due Date: 03/07/24

CLIENT: 92- GP-HAM

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		2	1																								
2		2	1																								
3		2	1																								
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A

Required Client Information:

Company: GA Power
Address: Atlanta, GA
Email To: SCS Contacts
Phone:
Requested Due Date/TAT: 10 Day

Section B

Required Project Information:

Report To: SCS Contacts
Copy To: Geosyntec Contacts
Purchase Order No.:
Project Name: Hammond AP-2
Project Number:

Section C

Invoice Information:

Attention: Southern Co.
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Bonnie Vang
Pace Profile #: 10839

Page: 1 of 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER CCR
Site Location: GA
STATE:

Section D

Valid Matrix Codes

SAMPLE ID
(A-Z, 0-9 / -)
Sample IDs MUST BE UNIQUE

- MATRIX CODE (see valid codes to left)
- | | |
|----------------|-----|
| DRAINAGE WATER | DRY |
| WASTE WATER | WV |
| WASTE WATER | WV |
| PRODUCT | P |
| SOIL/SOLID | SL |
| OE | OL |
| WIPE | WP |
| AIR | AR |
| OTHER | OT |
| TISSUE | TS |

ITEM #	SAMPLE ID (A-Z, 0-9 / .)										Sample IDs MUST BE UNIQUE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION

DATE

TIME

ACCEPTED BY / AFFILIATION

DATE

TIME

SAMPLE CONDITIONS

Task Code: HAM-CCR-ASSMT-2024S1

PRINT Name of SAMPLER: C. G. W. / Pace
SIGNATURE of SAMPLER: [Signature]
DATE Signed (MM/DD/YYYY): 2/17/2024
/ Geosyntec Consultants, Inc.

Temp in °C
Received on Ice (Y/N)
Custody Sealed Cooler (Y/N)
Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒ Kernersville ☐Sample Condition
Upon Receipt

Client Name:

Project #:

WO#: 92713567

Courier:

☐ Commercial☐ Fed Ex☐ UPS☐ USPS☐ Client☒ Pace☐ Other: _____

PM: BV

Due Date: 03/07/24

CLIENT: 92- GP-HAM

Custody Seal Present?

☒ Yes☐ No

Seals Intact?

☒ Yes☐ No☐ N/A

Date/Initials Person Examining Contents: 7/19/24 JMA

Packing Material:

☒ Bubble Wrap☐ Bubble Bags☐ None☐ Other

Biological Tissue Frozen?

☐ Yes☐ No☒ N/A

Thermometer:

☒ IR Gun ID:

736

Type of Ice:

☒ Wet☐ Blue☐ None

Cooler Temp:

3.2

Correction Factor:

Add/Subtract (°C)

10.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

8.3

USDA Regulated Soil (☐ N/A, water sample)Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ NoDid samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: 101			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project #

WO#: 92713567

PM: BV

Due Date: 03/07/24

CLIENT: 92- GP-HAM

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	V5GU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	2																								
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3		1	2																								
4		1	2																								
5		1	2																								
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10		1	1																								
11		1	2																								
12		1	2																								

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Geosynthetic Contacts	Company Name:	
Email To:	SCS Contacts	Purchase Order No.:		Address:	
Phone:		Project Name:	Hammond AP-2	Price Quote	
Requested Due Date/TAT:	10 Day	Project Number:		Price Project Manager:	Bonnie Vang
				Price Profile #:	10839

REGULATORY AGENCY	
<input type="checkbox"/> NPDES	<input type="checkbox"/> GROUND WATER
<input type="checkbox"/> UST	<input type="checkbox"/> RCRA
<input checked="" type="checkbox"/> OTHER	CCR

Site Location	
STATE:	GA

Page: 1 of 1

[illegible]

***Important Note:** By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒ Kernersville ☐Sample Condition
Upon Receipt

Client Name:

Project #:

WO#: 92713567

PM: BV

Due Date: 03/07/24

CLIENT: 92- GP-HAM

Courier:

☐ Commercial☐ Fed Ex☐ UPS☐ USPS☐ Client☒ Pace☐ Other:

Custody Seal Present?

☒ Yes☐ No

Seals Intact?

☒ Yes☐ No☐ N/A

Date/Initials Person Examining Contents: 7/22/24 SM

Packing Material:

☐ Bubble Wrap☐ Bubble Bags☐ None☐ Other

Biological Tissue Frozen?

☐ Yes☐ No☒ N/A

Thermometer:

☒ IR Gun ID:

230

Type of Ice:

☒ Wet☐ Blue☐ None

Cooler Temp:

3.1

Correction Factor:

Add/Subtract (°C)

0.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

3.2

USDA Regulated Soil (☐ N/A, water sample)Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ NoDid samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: 2W			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project #

WO#: 92713567

PM: BV

Due Date: 03/07/24

CLIENT: 92- GP-HAM

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	V5GU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1			2	1																								
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pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

[illegible]



Quality Control Sample Performance Assessment

Test: Ra-228
Analyst: ZPC
Date: 2/26/2024
Worklist: 77790
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3169514
MB concentration:	0.028
M/B 2 Sigma CSU:	0.329
MB MDC:	0.768
MB Numerical Performance Indicator:	0.17
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCSD77790	LCSD77790
Count Date:	3/4/2024	3/4/2024
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	37.627	37.627
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.816	0.818
Target Conc. (pCi/L, g, F):	4.613	4.599
Uncertainty (Calculated):	0.226	0.225
Result (pCi/L, g, F):	3.378	2.769
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.857	0.733
Numerical Performance Indicator:	-2.73	-4.68
Percent Recovery:	73.22%	60.22%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.:		
Sample MS I.D.:		
Sample MSD I.D.:		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc. (pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment	
Sample I.D.:	LCSD77790
Duplicate Sample I.D.:	LCSD77790
Sample Result (pCi/L, g, F):	3.378
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.857
Sample Duplicate Result (pCi/L, g, F):	2.769
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.733
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	1.057
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	19.49%
Duplicate Status vs Numerical Indicator:	Pass
Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	
% RPD Limit:	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

VAL
3-5-24
3/5/24



Quality Control Sample Performance Assessment

Test: Ra-228
Analyst: JJS1
Date: 3/5/2024
Worklist: 77864
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment		
MB Sample ID	3173423	
MB concentration:	0.310	
M/B 2 Sigma CSU:	0.405	
MB MDC:	0.865	
MB Numerical Performance Indicator:	1.50	
MB Status vs Numerical Indicator:	Pass	
MB Status vs. MDC:	Pass	

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77864	LCS77864
Count Date:	3/11/2024	1/0/1900
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	37.540	119275490.841
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.820	0.822
Target Conc. (pCi/L, g, F):	4.575	14511106.482
Uncertainty (Calculated):	0.224	711044.218
Result (pCi/L, g, F):	4.580	#NUM!
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.069	#NUM!
Numerical Performance Indicator:	0.01	#NUM!
Percent Recovery:	100.11%	#NUM!
Status vs Numerical Indicator:	N/A	#NUM!
Status vs Recovery:	Pass	#NUM!
Upper % Recovery Limits:	135%	#NUM!
Lower % Recovery Limits:	60%	#NUM!

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.:		
Sample MS I.D.:		
Sample MSD I.D.:		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc. (pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	LCS77864	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.:	LCS77864	
Sample Result (pCi/L, g, F):	4.580	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.069	
Sample Duplicate Result (pCi/L, g, F):	#NUM!	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	#NUM!	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	#NUM!	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	#NUM!	
Duplicate Status vs Numerical Indicator:	#NUM!	
Duplicate Status vs RPD:	#NUM!	
% RPD Limit:	#NUM!	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.:		
Sample MS I.D.:		
Sample MSD I.D.:		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:		
MS/MSD Duplicate Status vs Numerical Indicator:		
MS/MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

#NUM!
#NUM!

VAZ
3/12/24

On 3/14/24
RE LCSD - pellet last



Quality Control Sample Performance Assessment

Test: Ra-228
Analyst: ZPC
Date: 3/6/2024
Worklist: 77912
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment		
MB Sample ID	3175611	
MB concentration:	0.173	
M/B 2 Sigma CSU:	0.373	
MB MDC:	0.826	
MB Numerical Performance Indicator:	0.91	
MB Status vs Numerical Indicator:	Pass	
MB Status vs. MDC:	Pass	

Laboratory Control Sample Assessment	LCS/D (Y or N)?	Y
	LCS77912	LCS77912
Count Date:	3/12/2024	3/12/2024
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	37.530	37.530
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.816
Target Conc. (pCi/L, g, F):	4.596	4.601
Uncertainty (Calculated):	0.225	0.225
Result (pCi/L, g, F):	3.126	3.675
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.801	0.884
Numerical Performance Indicator:	-3.46	-1.99
Percent Recovery:	68.02%	79.86%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.:		
Sample MS I.D.:		
Sample MSD I.D.:		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc. (pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	LCS77912	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.:	LCS77912	
Sample Result (pCi/L, g, F):	3.126	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.801	
Sample Duplicate Result (pCi/L, g, F):	3.675	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.884	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.902	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	16.01%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.:		
Sample MS I.D.:		
Sample MSD I.D.:		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:		
MS/MSD Duplicate Status vs Numerical Indicator:		
MS/MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

VAL
3/13/24

UAM 3/13/24



Quality Control Sample Performance Assessment

Test: Ra-226
Analyst: SLC
Date: 2/22/2024
Worklist: 77730
Matrix: WT

Method Blank Assessment		
MB Sample ID	3165288	
MB concentration:	0.015	
M/B 2 Sigma CSU:	0.129	
MB MDC:	0.325	
MB Numerical Performance Indicator:	0.22	
MB Status vs Numerical Indicator:	Pass	
MB Status vs. MDC:	N/A	

Laboratory Control Sample Assessment	LCS (Y or N)?	Y
	LCS77730	LCS77730
Count Date:	2/28/2024	2/28/2024
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.026	25.026
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.501	0.502
Target Conc. (pCi/L, g, F):	4.999	4.984
Uncertainty (Calculated):	0.235	0.234
Result (pCi/L, g, F):	5.396	4.938
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.973	0.894
Numerical Performance Indicator:	0.78	-0.10
Percent Recovery:	107.93%	99.07%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS77730	92713558008
Duplicate Sample I.D.:	LCS77730	92713558008DUP
Sample Result (pCi/L, g, F):	5.396	-0.015
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.973	0.100
Sample Duplicate Result (pCi/L, g, F):	4.938	-0.027
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.894	0.090
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	0.679	0.180
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	8.56%	-59.07%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	25%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.:		
Sample MS I.D.:		
Sample MSD I.D.:		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc. (pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.:		
Sample MS I.D.:		
Sample MSD I.D.:		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

LAM 3/5/24



Quality Control Sample Performance Assessment

Test: Ra-226
Analyst: SLC
Date: 2/27/2024
Worklist: 77798
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment		
MB Sample ID	3169758	
MB concentration:	0.027	
M/B 2 Sigma CSU:	0.104	
MB MDC:	0.260	
MB Numerical Performance Indicator:	0.50	
MB Status vs Numerical Indicator:	Pass	
MB Status vs. MDC:	N/A	

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77798	LCSD77798
Count Date:	3/4/2024	3/4/2024
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.026	25.026
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.506	0.500
Target Conc. (pCi/L, g, F):	4.948	5.003
Uncertainty (Calculated):	0.233	0.235
Result (pCi/L, g, F):	4.751	5.629
LCSD/LCSD 2 Sigma CSU (pCi/L, g, F):	0.865	1.013
Numerical Performance Indicator:	-0.43	1.18
Percent Recovery:	96.02%	112.50%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc. (pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	LCS77798	92713567019
Duplicate Sample I.D.:	LCSD77798	92713567019DUP
Sample Result (pCi/L, g, F):	4.751	0.151
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.865	0.129
Sample Duplicate Result (pCi/L, g, F):	5.629	0.004
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.013	0.093
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-1.291	1.813
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	15.81%	189.19%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	25%

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:



Quality Control Sample Performance Assessment

Test: Ra-226
Analyst: SLC
Date: 3/8/2024
Worklist: 77855
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment		
MB Sample ID	3172766	
MB concentration:	0.014	
M/B 2 Sigma CSU:	0.137	
MB MDC:	0.359	
MB Numerical Performance Indicator:	0.19	
MB Status vs Numerical Indicator:	Pass	
MB Status vs. MDC:	N/A	

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77855	LCSD77855
Count Date:	3/11/2024	3/11/2024
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.025	25.025
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.503	0.503
Target Conc. (pCi/L, g, F):	4.974	4.978
Uncertainty (Calculated):	0.234	0.234
Result (pCi/L, g, F):	4.446	4.338
LCSD/LCSD 2 Sigma CSU (pCi/L, g, F):	0.883	0.869
Numerical Performance Indicator:	-1.13	-1.39
Percent Recovery:	89.38%	87.15%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.:		
Sample MS I.D.:		
Sample MSD I.D.:		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment	LCSD	Y
	LCS77855	92714725002
Sample I.D.:	LCS77855	92714725002DUP
Duplicate Sample I.D.:	LCSD77855	
Sample Result (pCi/L, g, F):	4.446	0.039
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.883	0.133
Sample Duplicate Result (pCi/L, g, F):	4.338	0.033
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.869	0.130
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	0.170	0.069
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.52%	18.09%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	25%

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.:		
Sample MS I.D.:		
Sample MSD I.D.:		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

ET
3-12-24

WAM 3/11/24



February 26, 2024

Kelley Sharpe
ARCADIS - Atlanta
2839 Paces Ferry Rd
STE 900
Atlanta, GA 30339

RE: Project: Plant Hammond-CCR Ash Pond
Pace Project No.: 92714026

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on February 16, 2024. 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 - Asheville
- Pace Analytical Services - Peachtree Corners, GA

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

Sincerely,

Maiya Parks
maiya.parks@pacelabs.com
770-734-4205
Project Manager

Enclosures

cc: Jordan Gamble, ARCADIS - Atlanta
Ben Hodges, Georgia Power-CCR
Christine Hug, Geosyntec Consultants, Inc.
Warren Johnson, ARCADIS - Atlanta
Allison Keefer, Southern Company
Laura Midkiff, Southern Company
Caroline Nelson, Geosyntec Consultants, Inc
Noelia Muskus Ruiz, Georgia Power
Tina Sullivan, ERM



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92714026

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Laboratory ID: 99030

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92714026

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92714026001	HAM-H+0.25	Water	02/16/24 12:12	02/16/24 15:55

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92714026

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92714026001	HAM-H+0.25	EPA 6010D	AJM	5	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	3	PASI-A
		EPA 9056A	JCM	3	PASI-A

PASI-A = Pace Analytical Services - Asheville

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92714026

Sample: HAM-H+0.25		Lab ID: 92714026001		Collected: 02/16/24 12:12		Received: 02/16/24 15:55		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/17/24 08:52	02/25/24 23:50	7440-42-8		
Potassium	1.9	mg/L	0.50	1	02/17/24 08:52	02/25/24 23:50	7440-09-7		
Sodium	3.3	mg/L	1.0	1	02/17/24 08:52	02/25/24 23:50	7440-23-5		
Calcium	9.7	mg/L	1.0	1	02/17/24 08:52	02/25/24 23:50	7440-70-2		
Magnesium	2.5	mg/L	0.050	1	02/17/24 08:52	02/25/24 23:50	7439-95-4		
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Cobalt	ND	mg/L	0.0050	1	02/17/24 06:56	02/20/24 13:05	7440-48-4		
Molybdenum	ND	mg/L	0.010	1	02/17/24 06:56	02/20/24 13:05	7439-98-7		
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	75.0	mg/L	25.0	1		02/19/24 15:47			
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	29.9	mg/L	5.0	1		02/19/24 12:56			
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		02/19/24 12:56			
Alkalinity, Total as CaCO3	29.9	mg/L	5.0	1		02/19/24 12:56			
9056 IC anions 28 Days		Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	3.8	mg/L	1.0	1		02/18/24 21:52	16887-00-6		
Fluoride	ND	mg/L	0.10	1		02/18/24 21:52	16984-48-8		
Sulfate	5.4	mg/L	1.0	1		02/18/24 21:52	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Hammond-CCR Ash Pond
Pace Project No.: 92714026

QC Batch: 833152 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92714026001

METHOD BLANK: 4305559 Matrix: Water

Associated Lab Samples: 92714026001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	02/25/24 23:16	
Calcium	mg/L	ND	1.0	02/25/24 23:16	
Magnesium	mg/L	ND	0.050	02/25/24 23:16	
Potassium	mg/L	ND	0.50	02/25/24 23:16	
Sodium	mg/L	ND	1.0	02/25/24 23:16	

LABORATORY CONTROL SAMPLE: 4305560

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	1.0	100	80-120	
Calcium	mg/L	1	.95J	95	80-120	
Magnesium	mg/L	1	1.0	100	80-120	
Potassium	mg/L	1	0.93	93	80-120	
Sodium	mg/L	1	.94J	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305561 4305562

Parameter	Units	92714025001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	ND	1	1	1.1	1.1	103	104	75-125	1	20	
Calcium	mg/L	11.1	1	1	12.1	12.3	106	127	75-125	2	20	M1
Magnesium	mg/L	2.2	1	1	3.3	3.3	106	110	75-125	1	20	
Potassium	mg/L	0.95	1	1	1.9	1.9	94	96	75-125	1	20	
Sodium	mg/L	1.5	1	1	2.5	2.5	104	106	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Hammond-CCR Ash Pond
Pace Project No.: 92714026

QC Batch:	833135	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92714026001

METHOD BLANK: 4305529 Matrix: Water
Associated Lab Samples: 92714026001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cobalt	mg/L	ND	0.0050	02/20/24 12:48	
Molybdenum	mg/L	ND	0.010	02/20/24 12:48	

LABORATORY CONTROL SAMPLE: 4305530

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cobalt	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305531 4305532

Parameter	Units	92713838027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cobalt	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.098	0.099	98	99	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Hammond-CCR Ash Pond
Pace Project No.: 92714026

QC Batch:	833306	Analysis Method:	SM 2540C-2015
QC Batch Method:	SM 2540C-2015	Analysis Description:	2540C Total Dissolved Solids
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92714026001

METHOD BLANK: 4306003 Matrix: Water
Associated Lab Samples: 92714026001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	02/19/24 15:42	

LABORATORY CONTROL SAMPLE: 4306004

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	390	98	80-120	

SAMPLE DUPLICATE: 4306005

Parameter	Units	92713562001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	66.0	70.0	6	10	

SAMPLE DUPLICATE: 4306006

Parameter	Units	92714026001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	75.0	82.0	9	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Hammond-CCR Ash Pond
Pace Project No.: 92714026

QC Batch: 833280 Analysis Method: SM 2320B-2011
QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92714026001

METHOD BLANK: 4305898 Matrix: Water
Associated Lab Samples: 92714026001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	ND	5.0	02/19/24 11:38	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	5.0	02/19/24 11:38	
Alkalinity,Carbonate (CaCO ₃)	mg/L	ND	5.0	02/19/24 11:38	

LABORATORY CONTROL SAMPLE: 4305899

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	50.9	102	80-120	

LABORATORY CONTROL SAMPLE: 4305900

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	51.5	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305901 4305902

Parameter	Units	92714030002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	74.6	50	50	123	123	97	96	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305903 4305904

Parameter	Units	92714030003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	68.8	50	50	116	117	95	96	80-120	0	25	

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QUALITY CONTROL DATA

Project: Plant Hammond-CCR Ash Pond
Pace Project No.: 92714026

QC Batch:	833254	Analysis Method:	EPA 9056A
QC Batch Method:	EPA 9056A	Analysis Description:	9056 IC anions 28 Days
		Laboratory:	Pace Analytical Services - Asheville

Associated Lab Samples: 92714026001

METHOD BLANK: 4305830 Matrix: Water
Associated Lab Samples: 92714026001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	02/19/24 17:36	
Fluoride	mg/L	ND	0.10	02/19/24 17:36	
Sulfate	mg/L	ND	1.0	02/19/24 17:36	

LABORATORY CONTROL SAMPLE: 4305831

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.2	100	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	50.1	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305832 4305833

Parameter	Units	92714025002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.3	50	50	53.7	54.4	105	106	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.6	98	100	90-110	2	10	
Sulfate	mg/L	9.2	50	50	62.0	62.7	106	107	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305834 4305835

Parameter	Units	92713850001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	42.4	50	50	94.1	95.9	103	107	90-110	2	10	
Fluoride	mg/L	0.29	2.5	2.5	2.8	2.9	100	104	90-110	3	10	
Sulfate	mg/L	26.6	50	50	78.9	80.4	105	108	90-110	2	10	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant Hammond-CCR Ash Pond
Pace Project No.: 92714026

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 adjusted reporting limit.
TNTC - Too Numerous To Count
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
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.
Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.
A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92714026

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92714026001	HAM-H+0.25	EPA 3010A	833152	EPA 6010D	833185
92714026001	HAM-H+0.25	EPA 3005A	833135	EPA 6020B	833184
92714026001	HAM-H+0.25	SM 2540C-2015	833306		
92714026001	HAM-H+0.25	SM 2320B-2011	833280		
92714026001	HAM-H+0.25	EPA 9056A	833254		

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY / Analytical
The Chain-of-Custody is a LEGAL DOCUMENT. All r

WO#: 92714026



f 1

Section A

Required Client Information:

Company: ARCADIS - Atlanta
Address: 2839 Paces Ferry Rd
Atlanta, GA 30339
Email: warren.johnson@arcadis.com
Phone: 678.485.5298
Fax: 678.485.5298
Requested Due Date: 5 day TAT

Section B

Required Project Information:

Report To: Kristen Junkko
Copy To: Warren Johnson
Purchase Order #: GPC11066180
Project Name: Plant Hammond/CCR Ash Pond Closure
Project #:

Section C

Invoice Information:

Attention: Kristen Junkko
Company Name: GPC
Address:
Pace Quote:
Pace Project Manager: Maya Parks@pacelabs.com.
Pace Profile #: 12500

Regulatory Agency

State / Location
GA

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 /, -) Sample IDs must be unique	MATRIX		CODE		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS										Residual Chlorine (Y/N)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
		Drinking Water	DW	WWT	WV			Product	P	SL	OL		W/P	AR	OT	TS	Preservatives																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
		Waste Water	WW	Waste Water	WW			Soil/Solid	SL	OL	W/P		AR	OT	TS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol		Other	Analyses Test	Y/N																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: *Garrett G*
SIGNATURE of SAMPLER: *Garrett G*
DATE Signed: 2-16-24

TEMP in C
Received on Ice (Y/N)
Custody Sealed Cooler (Y/N)
Samples Intact (Y/N)



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechar:Sample Condition
Upon Receipt

Client Name:

Project #:

WO# : 92714026

PM: MP

Due Date: 02/26/24

CLIENT: GA-ArcadAt1

Courier:

☐ Commercial☐ Fed Ex☐ UPS☐ USPS☒ Client☒ Pace☐ Other:

Custody Seal Present?

☒ Yes☐ No

Seals Intact?

☒ Yes☐ No☐ N/A

Date/Initials Person Examining Contents:

Packing Material:

☒ Bubble Wrap☐ Bubble Bags☐ None☐ Other

Biological Tissue Frozen?

☐ Yes☐ No☐ N/A

Thermometer:

☒ TR Gun ID:

230

Type of Ice:

☒ Wet☐ Blue☐ None

Cooler Temp:

3.0

Correction Factor:

Add/Subtract (°C)

10.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

3.1

USDA Regulated Soil (☐ N/A, water sample)Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ NoDid samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	7.
Containers Intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	8.
Dissolved analysis: Samples Field Filtered?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	9.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>				
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project #

WO#: 92714026

Due Date: 02/26/24

PM: IIP

CLIENT: GA-ArcadAtI

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1			2																									
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



February 27, 2024

Kelley Sharpe
ARCADIS - Atlanta
2839 Paces Ferry Rd
STE 900
Atlanta, GA 30339

RE: Project: Plant Hammond-CCR Ash Pond-Revised Report
Pace Project No.: 92714030

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on February 16, 2024. 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 - Asheville
- Pace Analytical Services - Peachtree Corners, GA

Rev. 1 - Updated sample ID's for GA Power EQUIS uploading.

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

Sincerely,

Maiya Parks
maiya.parks@pacelabs.com
770-734-4205
Project Manager

Enclosures

cc: Jordan Gamble, ARCADIS - Atlanta
Ben Hodges, Georgia Power-CCR
Christine Hug, Geosyntec Consultants, Inc.
Warren Johnson, ARCADIS - Atlanta
Allison Keefer, Southern Company
Laura Midkiff, Southern Company
Caroline Nelson, Geosyntec Consultants, Inc
Noelia Muskus Ruiz, Georgia Power

Tina Sullivan, ERM



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92714030

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Laboratory ID: 99030

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

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SAMPLE SUMMARY

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92714030

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92714030001	HAM-AP2-Up	Water	02/16/24 09:45	02/16/24 15:55
92714030002	HAM-AP2-Mid	Water	02/16/24 09:15	02/16/24 15:55
92714030003	HAM-AP2-Down	Water	02/16/24 11:55	02/16/24 15:55
92714030004	HAM-H+0.35	Water	02/16/24 12:10	02/16/24 15:55
92714030005	HAM-H+0.75	Water	02/16/24 12:00	02/16/24 15:55

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SAMPLE ANALYTE COUNT

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92714030

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92714030001	HAM-AP2-Up	EPA 6010D	AJM	5	PASI-GA
		EPA 6020B	CW1	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	3	PASI-A
		EPA 9056A	JCM	3	PASI-A
92714030002	HAM-AP2-Mid	EPA 6010D	AJM	5	PASI-GA
		EPA 6020B	CW1	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	3	PASI-A
		EPA 9056A	JCM	3	PASI-A
92714030003	HAM-AP2-Down	EPA 6010D	AJM	5	PASI-GA
		EPA 6020B	CW1	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	3	PASI-A
		EPA 9056A	JCM	3	PASI-A
92714030004	HAM-H+0.35	EPA 6010D	AJM	5	PASI-GA
		EPA 6020B	CW1	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	3	PASI-A
		EPA 9056A	JCM	3	PASI-A
92714030005	HAM-H+0.75	EPA 6010D	AJM	5	PASI-GA
		EPA 6020B	CW1	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	3	PASI-A
		EPA 9056A	JCM	3	PASI-A

PASI-A = Pace Analytical Services - Asheville

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92714030

Sample: HAM-AP2-Up		Lab ID: 92714030001		Collected: 02/16/24 09:45		Received: 02/16/24 15:55		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/17/24 08:52	02/25/24 23:55	7440-42-8		
Potassium	0.68	mg/L	0.50	1	02/17/24 08:52	02/25/24 23:55	7440-09-7		
Sodium	1.6	mg/L	1.0	1	02/17/24 08:52	02/25/24 23:55	7440-23-5		
Calcium	26.1	mg/L	1.0	1	02/17/24 08:52	02/25/24 23:55	7440-70-2		
Magnesium	2.9	mg/L	0.050	1	02/17/24 08:52	02/25/24 23:55	7439-95-4		
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Cobalt	ND	mg/L	0.0050	1	02/17/24 06:56	02/20/24 13:09	7440-48-4		
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	196	mg/L	25.0	1		02/19/24 15:47			
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	74.8	mg/L	5.0	1		02/19/24 13:03			
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		02/19/24 13:03			
Alkalinity, Total as CaCO3	74.8	mg/L	5.0	1		02/19/24 13:03			
9056 IC anions 28 Days		Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	1.2	mg/L	1.0	1		02/18/24 22:08	16887-00-6		
Fluoride	ND	mg/L	0.10	1		02/18/24 22:08	16984-48-8		
Sulfate	6.3	mg/L	1.0	1		02/18/24 22:08	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92714030

Sample: HAM-AP2-Mid		Lab ID: 92714030002		Collected: 02/16/24 09:15		Received: 02/16/24 15:55		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/17/24 08:52	02/26/24 00:00	7440-42-8		
Potassium	0.75	mg/L	0.50	1	02/17/24 08:52	02/26/24 00:00	7440-09-7		
Sodium	1.6	mg/L	1.0	1	02/17/24 08:52	02/26/24 00:00	7440-23-5		
Calcium	26.5	mg/L	1.0	1	02/17/24 08:52	02/26/24 00:00	7440-70-2		
Magnesium	2.9	mg/L	0.050	1	02/17/24 08:52	02/26/24 00:00	7439-95-4		
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Cobalt	ND	mg/L	0.0050	1	02/17/24 06:56	02/20/24 13:13	7440-48-4		
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	107	mg/L	25.0	1		02/19/24 15:48			
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	74.6	mg/L	5.0	1		02/19/24 13:11			
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		02/19/24 13:11			
Alkalinity, Total as CaCO3	74.6	mg/L	5.0	1		02/19/24 13:11			
9056 IC anions 28 Days		Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	1.3	mg/L	1.0	1		02/18/24 22:23	16887-00-6		
Fluoride	ND	mg/L	0.10	1		02/18/24 22:23	16984-48-8		
Sulfate	8.1	mg/L	1.0	1		02/18/24 22:23	14808-79-8		

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ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92714030

Sample: HAM-AP2-Down		Lab ID: 92714030003		Collected: 02/16/24 11:55		Received: 02/16/24 15:55		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/17/24 08:52	02/26/24 00:14	7440-42-8		
Potassium	0.99	mg/L	0.50	1	02/17/24 08:52	02/26/24 00:14	7440-09-7		
Sodium	1.9	mg/L	1.0	1	02/17/24 08:52	02/26/24 00:14	7440-23-5		
Calcium	23.4	mg/L	1.0	1	02/17/24 08:52	02/26/24 00:14	7440-70-2		
Magnesium	2.9	mg/L	0.050	1	02/17/24 08:52	02/26/24 00:14	7439-95-4		
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Cobalt	ND	mg/L	0.0050	1	02/17/24 06:56	02/20/24 13:17	7440-48-4		
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	116	mg/L	25.0	1		02/19/24 15:48			
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	68.8	mg/L	5.0	1		02/19/24 13:33			
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		02/19/24 13:33			
Alkalinity, Total as CaCO3	68.8	mg/L	5.0	1		02/19/24 13:33			
9056 IC anions 28 Days		Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	1.6	mg/L	1.0	1		02/18/24 23:29	16887-00-6		
Fluoride	ND	mg/L	0.10	1		02/18/24 23:29	16984-48-8		
Sulfate	7.9	mg/L	1.0	1		02/18/24 23:29	14808-79-8		

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ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92714030

Sample: HAM-H+0.35		Lab ID: 92714030004		Collected: 02/16/24 12:10		Received: 02/16/24 15:55		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/17/24 08:52	02/26/24 00:19	7440-42-8		
Potassium	1.9	mg/L	0.50	1	02/17/24 08:52	02/26/24 00:19	7440-09-7		
Sodium	3.5	mg/L	1.0	1	02/17/24 08:52	02/26/24 00:19	7440-23-5		
Calcium	10.1	mg/L	1.0	1	02/17/24 08:52	02/26/24 00:19	7440-70-2		
Magnesium	2.6	mg/L	0.050	1	02/17/24 08:52	02/26/24 00:19	7439-95-4		
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Cobalt	ND	mg/L	0.0050	1	02/17/24 06:56	02/20/24 13:21	7440-48-4		
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	75.0	mg/L	25.0	1		02/19/24 15:48			
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	30.0	mg/L	5.0	1		02/19/24 13:54			
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		02/19/24 13:54			
Alkalinity, Total as CaCO3	30.0	mg/L	5.0	1		02/19/24 13:54			
9056 IC anions 28 Days		Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	3.7	mg/L	1.0	1		02/18/24 23:44	16887-00-6		
Fluoride	ND	mg/L	0.10	1		02/18/24 23:44	16984-48-8		
Sulfate	5.5	mg/L	1.0	1		02/18/24 23:44	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92714030

Sample: HAM-H+0.75		Lab ID: 92714030005		Collected: 02/16/24 12:00		Received: 02/16/24 15:55		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/17/24 08:52	02/26/24 00:24	7440-42-8		
Potassium	1.9	mg/L	0.50	1	02/17/24 08:52	02/26/24 00:24	7440-09-7		
Sodium	3.9	mg/L	1.0	1	02/17/24 08:52	02/26/24 00:24	7440-23-5		
Calcium	10.3	mg/L	1.0	1	02/17/24 08:52	02/26/24 00:24	7440-70-2		
Magnesium	2.6	mg/L	0.050	1	02/17/24 08:52	02/26/24 00:24	7439-95-4		
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Cobalt	ND	mg/L	0.0050	1	02/17/24 06:56	02/20/24 13:26	7440-48-4		
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	79.0	mg/L	25.0	1		02/19/24 15:48			
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	30.4	mg/L	5.0	1		02/19/24 14:10			
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		02/19/24 14:10			
Alkalinity, Total as CaCO3	30.4	mg/L	5.0	1		02/19/24 14:10			
9056 IC anions 28 Days		Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	3.8	mg/L	1.0	1		02/19/24 00:00	16887-00-6		
Fluoride	ND	mg/L	0.10	1		02/19/24 00:00	16984-48-8		
Sulfate	6.2	mg/L	1.0	1		02/19/24 00:00	14808-79-8		

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QUALITY CONTROL DATA

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92714030

QC Batch: 833152 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92714030001, 92714030002, 92714030003, 92714030004, 92714030005

METHOD BLANK: 4305559 Matrix: Water
Associated Lab Samples: 92714030001, 92714030002, 92714030003, 92714030004, 92714030005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	02/25/24 23:16	
Calcium	mg/L	ND	1.0	02/25/24 23:16	
Magnesium	mg/L	ND	0.050	02/25/24 23:16	
Potassium	mg/L	ND	0.50	02/25/24 23:16	
Sodium	mg/L	ND	1.0	02/25/24 23:16	

LABORATORY CONTROL SAMPLE: 4305560

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	1.0	100	80-120	
Calcium	mg/L	1	.95J	95	80-120	
Magnesium	mg/L	1	1.0	100	80-120	
Potassium	mg/L	1	0.93	93	80-120	
Sodium	mg/L	1	.94J	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305561 4305562

Parameter	Units	92714025001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	ND	1	1	1.1	1.1	103	104	75-125	1	20	
Calcium	mg/L	11.1	1	1	12.1	12.3	106	127	75-125	2	20	M1
Magnesium	mg/L	2.2	1	1	3.3	3.3	106	110	75-125	1	20	
Potassium	mg/L	0.95	1	1	1.9	1.9	94	96	75-125	1	20	
Sodium	mg/L	1.5	1	1	2.5	2.5	104	106	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92714030

QC Batch: 833135

Analysis Method: EPA 6020B

QC Batch Method: EPA 3005A

Analysis Description: 6020 MET

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92714030001, 92714030002, 92714030003, 92714030004, 92714030005

METHOD BLANK: 4305529

Matrix: Water

Associated Lab Samples: 92714030001, 92714030002, 92714030003, 92714030004, 92714030005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cobalt	mg/L	ND	0.0050	02/20/24 12:48	

LABORATORY CONTROL SAMPLE: 4305530

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cobalt	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305531 4305532

Parameter	Units	92713838027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cobalt	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92714030

QC Batch: 833306

Analysis Method: SM 2540C-2015

QC Batch Method: SM 2540C-2015

Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92714030001, 92714030002, 92714030003, 92714030004, 92714030005

METHOD BLANK: 4306003

Matrix: Water

Associated Lab Samples: 92714030001, 92714030002, 92714030003, 92714030004, 92714030005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	02/19/24 15:42	

LABORATORY CONTROL SAMPLE: 4306004

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	390	98	80-120	

SAMPLE DUPLICATE: 4306005

Parameter	Units	92713562001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	66.0	70.0	6	10	

SAMPLE DUPLICATE: 4306006

Parameter	Units	92714026001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	75.0	82.0	9	10	

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QUALITY CONTROL DATA

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92714030

QC Batch: 833280

Analysis Method: SM 2320B-2011

QC Batch Method: SM 2320B-2011

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92714030001, 92714030002, 92714030003, 92714030004, 92714030005

METHOD BLANK: 4305898

Matrix: Water

Associated Lab Samples: 92714030001, 92714030002, 92714030003, 92714030004, 92714030005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	ND	5.0	02/19/24 11:38	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	5.0	02/19/24 11:38	
Alkalinity,Carbonate (CaCO ₃)	mg/L	ND	5.0	02/19/24 11:38	

LABORATORY CONTROL SAMPLE: 4305899

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	50.9	102	80-120	

LABORATORY CONTROL SAMPLE: 4305900

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	51.5	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305901 4305902

Parameter	Units	92714030002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	74.6	50	50	123	123	97	96	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305903 4305904

Parameter	Units	92714030003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	68.8	50	50	116	117	95	96	80-120	0	25	

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92714030

QC Batch: 833254 Analysis Method: EPA 9056A
QC Batch Method: EPA 9056A Analysis Description: 9056 IC anions 28 Days
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92714030001, 92714030002, 92714030003, 92714030004, 92714030005

METHOD BLANK: 4305830 Matrix: Water
Associated Lab Samples: 92714030001, 92714030002, 92714030003, 92714030004, 92714030005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	02/19/24 17:36	
Fluoride	mg/L	ND	0.10	02/19/24 17:36	
Sulfate	mg/L	ND	1.0	02/19/24 17:36	

LABORATORY CONTROL SAMPLE: 4305831

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.2	100	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	50.1	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305832 4305833

Parameter	Units	92714025002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.3	50	50	53.7	54.4	105	106	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.6	98	100	90-110	2	10	
Sulfate	mg/L	9.2	50	50	62.0	62.7	106	107	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305834 4305835

Parameter	Units	92713850001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	42.4	50	50	94.1	95.9	103	107	90-110	2	10	
Fluoride	mg/L	0.29	2.5	2.5	2.8	2.9	100	104	90-110	3	10	
Sulfate	mg/L	26.6	50	50	78.9	80.4	105	108	90-110	2	10	

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

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant Hammond-CCR Ash Pond-Revised Report
Pace Project No.: 92714030

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 adjusted reporting limit.
TNTC - Too Numerous To Count
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
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.
Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.
A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92714030

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92714030001	HAM-AP2-Up	EPA 3010A	833152	EPA 6010D	833185
92714030002	HAM-AP2-Mid	EPA 3010A	833152	EPA 6010D	833185
92714030003	HAM-AP2-Down	EPA 3010A	833152	EPA 6010D	833185
92714030004	HAM-H+0.35	EPA 3010A	833152	EPA 6010D	833185
92714030005	HAM-H+0.75	EPA 3010A	833152	EPA 6010D	833185
92714030001	HAM-AP2-Up	EPA 3005A	833135	EPA 6020B	833184
92714030002	HAM-AP2-Mid	EPA 3005A	833135	EPA 6020B	833184
92714030003	HAM-AP2-Down	EPA 3005A	833135	EPA 6020B	833184
92714030004	HAM-H+0.35	EPA 3005A	833135	EPA 6020B	833184
92714030005	HAM-H+0.75	EPA 3005A	833135	EPA 6020B	833184
92714030001	HAM-AP2-Up	SM 2540C-2015	833306		
92714030002	HAM-AP2-Mid	SM 2540C-2015	833306		
92714030003	HAM-AP2-Down	SM 2540C-2015	833306		
92714030004	HAM-H+0.35	SM 2540C-2015	833306		
92714030005	HAM-H+0.75	SM 2540C-2015	833306		
92714030001	HAM-AP2-Up	SM 2320B-2011	833280		
92714030002	HAM-AP2-Mid	SM 2320B-2011	833280		
92714030003	HAM-AP2-Down	SM 2320B-2011	833280		
92714030004	HAM-H+0.35	SM 2320B-2011	833280		
92714030005	HAM-H+0.75	SM 2320B-2011	833280		
92714030001	HAM-AP2-Up	EPA 9056A	833254		
92714030002	HAM-AP2-Mid	EPA 9056A	833254		
92714030003	HAM-AP2-Down	EPA 9056A	833254		
92714030004	HAM-H+0.35	EPA 9056A	833254		
92714030005	HAM-H+0.75	EPA 9056A	833254		

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY / Analytical Request
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed.

MO#: 92714030



Section A

Required Client Information:

Company:	ARCADIS - Atlanta
Address:	2839 Paces Ferry Rd Atlanta, GA 30339
Email:	warren.johnson@arcadis.com
Phone:	678.485.5298
Requested Due Date:	5 day TAT

Section B

Required Project Information:

Report To:	Kristen Jurinko, Noelia Gangi, Ben Hodges
Copy To:	Warren Johnson
Purchase Order #:	GPC11066190
Project Name:	Plant Hammond/CCR Ash Pond Closure
Project #:	

Section C

Invoice Information:

Attention:	Kristen Jurinko
Company Name:	GPC
Address:	
Pace Quote:	
Pace Project Manager:	Maya.Parks@pacelabs.com
Pace Profile #:	12500

Page: 1

Regulatory Agency

State / Location

GA

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 /, -) Sample IDs must be unique	MATRIX Drinking Water Waste Water Process Water Product Soil/Solid Oil Wipe Air Other Tissue	CODE DW WT VW P SL CL WP AR OT TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analyses Test	Y/N	Residual Chlorine (Y/N)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
						DATE	TIME	DATE	TIME			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol				Other																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
1	HAM-AP2-Up			WS	G	2/16/24	0945				3	X		X									X	X	X	X	X	X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														

SAMPLER NAME AND SIGNATURE		PRINT Name of SAMPLER:		SIGNATURE of SAMPLER:		DATE Signed:		TEMP in C		Received on Ice (Y/N)		Custody Sealed Cooler (Y/N)		Samples Intact (Y/N)	
JPL Arcadis		JPL Arcadis		JPL Arcadis		2/16/24									

Page : 1 3

Page : 1 3

[REDACTED]

Company:	ARCADIS - Atlanta		Report To:	Kristen Jurnko, Noelia Gargi, Ben Hodges		Attention:	Kristen Jurnko	
Address:	2839 Paces Ferry Rd Atlanta, GA 30339		Copy To:	Warren Johnson		Company Name:	GPC	
Email:	warren.johnson@arcadis.com		Purchase Order #:	GPC11066180		Address:	Pace Quote:	
Phone:	678.485.5298		Project Name:	Plant Hammond/CCR Ash Pond Closure		Pace Project Manager:	Mayla.Parks@pacelabs.com,	
Requested Due Date:	5 day TAT		Project #:			Pace Profile #:	12500	
						Requested Analysis Filtered (Y/N)		
						Regulatory Agency		
						State / Location		
						GA		

[illegible]



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐Sample Condition
Upon Receipt

Client Name:

Project #

WO#: 92714030

PM: MP

Due Date: 02/26/24

CLIENT: GA-ArcadAtI

Courier:

☐ Commercial☐ Fed Ex☐ UPS☐ USPS☒ Client☐ Other:

Custody Seal Present?

☒ Yes☐ No

Seals Intact?

☒ Yes☐ No☐ N/A

Date/Initials Person Examining Contents: 2/16/24

Packing Material:

☒ Bubble Wrap☐ Bubble Bags☐ None☐ Other

Biological Tissue Frozen?

☐ Yes☐ No☐ N/A

Thermometer:

☒ IR Gun ID:

230

Type of Ice:

☒ Wet☐ Blue☐ None

Cooler Temp:

3.0

Correction Factor:

Add/Subtract (°C)

10.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

3.1

USDA Regulated Soil (☐ N/A, water sample)Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ NoDid samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

Comments/Discrepancy:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Dissolved analysis: Samples Field Filtered?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Includes Date/Time/ID/Analysis Matrix:	2	
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Field Data Required? ☐ Yes ☐ No

COMMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project #

WO#: 92714030

PM: MP

Due Date: 02/26/24

CLIENT: GA-ArcadAt1

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2SO3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1			2			1																							
2			2			1																							
3			2			1																							
4			2			1																							
5			2			1																							
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

VALIDATION REPORTS

Memorandum

Date: 24 May 2024
To: Caroline Nelson
Christine Hug
From: Ashley Wilson
CC: Kristoffer Henderson
Subject: **Stage 2A Data Validation - Level II Data Deliverables – Pace Analytical Project Services, Project Numbers: 92713556 Revision 1 and 92713565 Revision 2**

SITE: Plant Hammond AP-2

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of twenty-two aqueous samples, three field duplicates, three field blanks and three equipment blanks, collected 13 and 16-19 February 2024, as part of the Plant Hammond sampling event.

The samples were analyzed at Pace Analytical Services – Peachtree Corners, Peachtree Corners, Georgia, for the following analytical tests:

- Metals by United States (US) Environmental Protection Agency (EPA) Methods 3005A/6020B
- Metals by US EPA Method 3010A/6010D
- Mercury by US EPA Method 7470A
- Total Dissolved Solids (TDS) by Standard Method (SM) 2540C-2015

The samples were analyzed at Pace Analytical Services - Asheville, Asheville, North Carolina, for the following analytical tests:

- Anions (chloride, fluoride and sulfate) by US EPA Method 300.0 Rev 2.1 1993
- Alkalinity as CaCO₃ (total, bicarbonate and carbonate) by SM 2320B-2011
- Sulfide by SM 4500-S2D-2011

EXECUTIVE SUMMARY

Overall, based on this Stage 2A data validation covering the quality control (QC) parameters listed below and based on the information provided, the data as qualified are usable for

supporting project objectives. The qualified data should be used within the limitations of the qualifications. If there are results with two or more different qualifications due to multiple QC failures, the final qualification is reconciled in the electronic data deliverable (EDD) with qualifications.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment, and the following documents:

- US EPA Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011);
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, November 2020 (EPA 542-R-20-006); and
- American National Standard, Verification and Validation of Radiological Data for use in Waste Management and Environmental Remediation, February 15, 2012 (ANSI/ANS- 41.5-2012).

The following samples were analyzed and reported in the laboratory report:

Laboratory IDs	Client IDs
92713556001	HAM-HGWA-1
92713556002	HAM-HGWA-2
92713556003	HAM-HGWA-3
92713556004	HAM-HGWA-43D
92713556005	HAM-HGWA-44D
92713556006	HAM-UGRD-FD-01
92713556007	HAM-UGRD-EB-01
92713556008	HAM-UGRD-FB-01
92713565001	HAM-HGWA-4
92713565002	HAM-HGWA-5
92713565003	HAM-HGWA-6
92713565004	HAM-HGWA-42D
92713565005	HAM-HGWC-14
92713565006	HAM-HGWC-15
92713565007	HAM-HGWC-17
92713565008	HAM-HGWC-16

Laboratory IDs	Client IDs
92713565009	HAM-HGWC-18
92713565010	HAM-MW-21D
92713565011	HAM-MW-22
92713565012	HAM-MW-23D
92713565013	HAM-MW-33
92713565014	HAM-MW-34D
92713565015	HAM-MW-37D
92713565016	HAM-AP2-EB-01
92713565017	HAM-AP2-FB-01
92713565018	HAM-AP2-FD-01
92713565019	HAM-AP2-FD-02
92713565020	HAM-MW-35
92713565021	HAM-MW-51
92713565022	HAM-AP2-EB-02
92713565023	HAM-AP2-FB-02

The chain of custody (COC) indicates the samples were received between 0-6 °C. No preservation issues were noted by the laboratory.

Radium 226/228 was requested on the COC. However, this data was reported separately.

Laboratory report 92713556 was revised on May 8, 2024, to update the reporting limit (RL) for arsenic. The revised report was identified as 92713556 Revision 1.

Laboratory report 92713565 was revised on May 7, 2024, to update the RL for arsenic and previously revised to update sample ID HAM-MW-23 to HAM-MW-23D on April 18, 2024. The revised report was identified as 92713565 Revision 2.

1.0 METALS

The samples were analyzed for metals by US EPA methods 3005A/6020B and 3010A/6010D.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ⊗ Overall Assessment
- ✓ Holding Time
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ⊗ Equipment Blank
- ⊗ Field Blank
- ⊗ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

1.1 Overall Assessment

The metals data reported in this data package are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this dataset is 100%.

1.1.1 Analysis Anomaly

The laboratory flagged the boron concentration in sample HAM-MW-37D with “BC” due to a detection in an associated blank at a concentration above 1/2 the RL but below the laboratory RL. Therefore, the concentration of boron in sample HAM-MW-37D was J+ qualified as estimated.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
HAM-MW-37D	Boron	0.12	BC	0.12	J+	BC

mg/L- milligram per liter

BC- detection in an associated blank at a concentration above 1/2 the RL but below the laboratory RL

* Validation qualifiers are defined in Attachment 1 at the end of this report

**Reason codes are defined in Attachment 2 at the end of this report

1.2 Holding Time

The holding time for the metals analysis of a water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). The metals were not detected in the method blanks at or above the method detection limits (MDLs).

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Sample set specific MS/MSD pairs were reported for metals by US EPA methods 6020B and 6010D, using samples HAM-HGWA-1, HAM-HGWA-44D, HAM-MW-23, HAM-MW-22 and HAM-MW-35. The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria, with the following exceptions.

One or both recoveries of calcium, magnesium and sodium in the MS/MSD pair using sample HAM-HGWA-1 were low and outside of laboratory specified acceptance criteria. Since the calcium, magnesium and sodium concentrations in sample HAM-HGWA-1 were greater than four times the spiked concentrations, no qualifications were applied to the data based on the MS/MSD recovery results.

The recoveries of calcium, magnesium and sodium in the MS/MSD pair using sample HAM-MW-23 were high or low and outside of laboratory specified acceptance criteria. Since the calcium, magnesium and sodium concentrations in sample HAM-MW-23 were greater than four times the spiked concentrations, no qualifications were applied to the data based on the MS/MSD recovery results.

The recoveries of boron in the MS/MSD pair using sample HAM-MW-35 were low and outside of laboratory specified acceptance criteria. Since the boron concentration in sample HAM-MW-

35 were greater than four times the spiked concentrations, no qualifications were applied to the data based on the MS/MSD recovery results.

Batch MS/MSDs were also reported for both methods. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

1.5 **Laboratory Control Sample (LCS)**

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). LCSs were reported with each batch. The recovery results were within the laboratory specified acceptance criteria.

1.6 **Equipment Blank**

Three equipment blanks were collected with the sample set, HAM-UGRD-EB-01, HAM-AP2-EB-01 and HAM-AP2-EB-02. Metals were not detected in the equipment blanks at or above the MDLs, with the following exception.

Molybdenum (0.0016 mg/L) was detected at an estimated concentration greater than the MDL and less than the RL in HAM-AP2-EB-01. Since molybdenum was previously qualified due to field blank contamination, no further qualifications were applied to the data.

Boron (0.015 mg/L) was detected at an estimated concentration greater than the MDL and less than the RL in HAM-AP2-EB-01. Therefore, the estimated concentrations of boron in samples HAM-HGWA-4 and HAM-HGWA-6 were U qualified as not detected above the RL, and the concentrations in samples HAM-HGWA-42D and HAM-MW-37D were J+ qualified as estimated with a high bias.

Calcium (15.3 mg/L) was detected at a concentration greater than the RL in HAM-AP2-EB-02. Therefore, the concentrations of calcium in samples HAM-HGWA-4, HAM-HGWA-42D, HAM-HGWA-5, HAM-HGWA-6, HAM-MW-21D and HAM-MW-37D were J+ qualified as estimated with a high bias.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
HAM-HGWA-4	Boron	0.023	J	0.04	U	BEL
HAM-HGWA-42D	Boron	0.045	NA	0.045	J+	BEL
HAM-HGWA-6	Boron	0.015	J	0.04	U	BEL
HAM-MW-37D	Boron	0.12	BC	0.12	J+	BEL
HAM-HGWA-4	Calcium	31.1	NA	31.1	J+	BEL
HAM-HGWA-42D	Calcium	47.7	NA	47.7	J+	BEL
HAM-HGWA-5	Calcium	20.6	NA	20.6	J+	BEL

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
HAM-HGWA-6	Calcium	55.4	NA	55.4	J+	BEL
HAM-MW-21D	Calcium	104	NA	104	J+	BEL
HAM-MW-37D	Calcium	52.7	NA	52.7	J+	BEL

mg/L- milligram per liter

BC-The same analyte was detected in an associated blank at a concentration above 1/2 the RL but below the laboratory RL.

J-estimated concentration greater than the MDL and less than the RL

NA-not applicable

* Validation qualifiers are defined in Attachment 1 at the end of this report

**Reason codes are defined in Attachment 2 at the end of this report

1.7 Field Blank

Three field blanks were collected with the sample set, HAM-UGRD-FB-01, HAM-AP2-FB-01 and HAM-AP2-FB-02. Metals were not detected in the field blanks above the MDLs, with the following exception.

Molybdenum (0.0016 mg/L) was detected at an estimated concentration greater than the MDL and less than the RL in HAM-AP2-FB-01. Therefore, the estimated concentrations of molybdenum on samples HAM-AP2-EB-01, HAM-HGWA-42D, HAM-MW-23 and HAM-MW-37D were U qualified as not detected above the RL.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
HAM-AP2-EB-01	Molybdenum	0.0016	J	0.010	U	BFL
HAM-HGWA-42D	Molybdenum	0.0021	J	0.010	U	BFL
HAM-MW-23	Molybdenum	0.0047	J	0.010	U	BFL
HAM-MW-37D	Molybdenum	0.0016	J	0.010	U	BFL

mg/L- milligram per liter

J-estimated concentration greater than the MDL and less than the RL

1.8 Field Duplicate

Three field duplicate samples were collected with the sample set, HAM-UGRD-FD-01, HAM-AP2-FD-01 and HAM-AP2-FD-02. Acceptable precision (RPD < 30%) was demonstrated between the field duplicate and the original samples, HAM-HGWA-44D, HAM-HGWC-16 and HAM-MW-33, respectively, with the following exception.

The iron RPD for field duplicate pair HAM-AP2-FD-02/HAM-MW-33 was greater than 30%. Therefore, the concentrations of iron in this field duplicate pair were J qualified as estimated.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	RPD	Validation Result (mg/L)	Validation Qualifier	Reason Code
HAM-AP2-FD-02	Iron	0.085	NA	38	0.085	J	RPDF1
HAM-MW-33	Iron	0.058	NA		0.058	J	RPDF1

mg/L-milligram per liter

NA-not applicable

1.9 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported due to dilutions analyzed.

1.10 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

2.0 MERCURY

The samples were analyzed for mercury by US EPA method 7470A.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Time
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Equipment Blank
- ✓ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

2.1 Overall Assessment

The mercury data reported in this data package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to

the total number of analytical results requested on samples submitted for this analysis, for this dataset is 100%.

2.2 Holding Time

The holding time for the mercury analysis of a water sample is 28 days from sample collection to analysis. The holding times were met for the sample analyses.

2.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Mercury was not detected in the method blank at or above the MDL.

2.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples).

One sample set specific MS/MSD pair was reported, using sample HAM-HGWA-2. The recovery and RPD results were within laboratory specified acceptance criteria.

Batch MS/MSDs were also reported for mercury. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). The recovery results were within the laboratory specified acceptance criteria.

2.6 Equipment Blank

Three equipment blanks were collected with the sample set, HAM-UGRD-EB-01, HAM-AP2-EB-01 and HAM-AP2-EB-02. Mercury was not detected in the equipment blanks at or above the MDLs.

2.7 Field Blank

Three field blanks were collected with the sample set, HAM-UGRD-FB-01, HAM-AP2-FB-01 and HAM-AP2-FB-02. Mercury not detected in the field blanks above the MDLs.

2.8 Field Duplicate

Three field duplicate samples were collected with the sample set, HAM-UGRD-FD-01, HAM-AP2-FD-01 and HAM-AP2-FD-02. Acceptable precision ($RPD < 30\%$) was demonstrated between the field duplicate and the original samples, HAM-HGWA-44D, HAM-HGWC-16 and HAM-MW-33, respectively.

2.9 Sensitivity

The samples were reported to the MDL. Elevated non-detect results were not reported.

2.10 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

3.0 WET CHEMISTRY

The samples were analyzed for chloride, fluoride and sulfate by US EPA method 300.0 Rev 2.1 1993, TDS by SM 2540C-2015, alkalinity as CaCO_3 (total, bicarbonate and carbonate) by SM 2320B-2011 and sulfide by SM 4500-S2D-2011.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ⊗ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ⊗ Laboratory Duplicate
- ✓ Equipment Blank
- ⊗ Field Blank
- ⊗ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

3.1 Overall Assessment

3.1.1 Completeness

The wet chemistry data reported in this data package are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for these analyses, for this dataset is 100%.

3.1.2 Analysis Anomaly

The laboratory noted that sample residue exceeded the recommended 200 mg for TDS method 2540C. Therefore, the concentrations of TDS in samples HAM-MW-33, HAM-MW-34D, HAM-MW-35 and HAM-MW-51 were J qualified as estimated.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
HAM-MW-33	Total Dissolved Solids	2160	1g	2160	J	OT1
HAM-MW-34D	Total Dissolved Solids	2010	1g	2010	J	OT1
HAM-MW-35	Total Dissolved Solids	2120	1g	2120	J	OT1
HAM-MW-51	Total Dissolved Solids	2040	1g	2040	J	OT1

mg/L- milligram per liter

1g- Sample residue exceeded method SM 2540C recommended 200 mg

3.2 Holding Times

The holding times for water samples are listed below. The holding times were met for the sample analyses.

Analysis	Holding Time
Anions (fluoride, chloride and sulfate)	28 days from collection to analysis
TDS	7 days from collection to analysis
Alkalinity	14 days from collection to analysis
Sulfide	28 days from collection to analysis

3.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). The wet chemistry parameters were not detected in the method blanks above the MDLs.

3.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two sample set specific MS/MSD pairs were reported for chloride, fluoride and sulfate using samples HAM-HGWA-1, HAM-HGWA-5, HAM-MW-21D and HAM-MW-35. Two sample set specific MS/MSD pairs were reported for sulfide using samples HAM-HGWA-1, HAM-HGWA-42D, HAM-HGWC-17, HAM-MW-23D and HAM-MW-35. Five sample set specific MS/MSD pairs were reported for alkalinity using samples HAM-MW-33, HAM-MW-34D, HAM-MW-37D, HAM-MW-35 and HAM-MW-51. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

The RPD of sulfide in the MS/MSD pair using sample HAM-HGWA-1 was high and outside of laboratory specified acceptance criteria. Since sulfide was not detected in sample HAM-HGWA-1, no qualifications were applied to the data.

The recoveries of fluoride and sulfate in the MS/MSD pair using sample HAM-HGWA-1 were high and low, respectively, and outside of laboratory specified acceptance criteria. Therefore, the estimated concentration of fluoride in sample HAM-HGWA-1 was J qualified as estimated and the sulfate concentration was J- qualified as estimated with low bias.

The recoveries of chloride and sulfate in the MS/MSD pair using sample HAM-MW-35 were low and outside of laboratory specified acceptance criteria. Therefore, the concentration of chloride in sample HAM-MW-35 was J- qualified as estimated with a low bias. Since sulfate concentration in sample HAM-MW-35 was greater than four times the spiked concentration, no qualifications were applied to the sulfate data.

The recoveries of fluoride in the MS/MSD pair using sample HAM-HGWA-5 were high and outside of laboratory specified acceptance criteria. Therefore, the estimated concentration of fluoride in sample HAM-HGWA-5 was J qualified as estimated.

Batch MS/MSD pairs were also reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
HAM-HGWA-1	Fluoride	0.071	J	0.071	J	MS1
HAM-HGWA-1	Sulfate	50.4	M1	50.4	J-	MS1
HAM-MW-1	Sulfate	50.4	M1	50.4	J	MS1
HAM-MW-35	Chloride	150	M1	150	J-	MS1
HAM-HGWA-5	Fluoride	0.059	J,M1	0.059	J	MS1

mg/L- milligram per liter

J-the result is less than RL but greater than the MDL and the concentration is an approximate value

M1-Matrix spike recovery exceeded QC limits

3.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). LCSs were reported for each analysis and batch. The recovery results were within the laboratory specified acceptance criteria.

3.6 Laboratory Duplicate

Four laboratory duplicates were reported for TDS using samples HAM-HGWA-1, HAM-MW-34D and HAM-HGWA-6. The RPD results were within the laboratory specified acceptance criteria.

Batch laboratory duplicates were also reported for TDS. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

3.7 Equipment Blank

Three equipment blanks were collected with the sample set, HAM-UGRD-EB-01, HAM-AP2-EB-01 and HAM-AP2-EB-02. The wet chemistry parameters were not detected in the equipment blank at or above the MDLs, with the following exceptions.

TDS (64.0 mg/L) was detected in HAM-AP2-EB-01 at a concentration greater than the RL. Since TDS was previously qualified due to field blank contamination, no additional qualifications were applied to the data.

3.8 Field Blank

Three field blanks were collected with the sample set, HAM-UGRD-FB-01, HAM-AP1-FB-01 and HAM-AP1-FB-02. The wet chemistry parameters were not detected in the field blank at or above the MDLs, with the following exception.

TDS (387 and 32.0 mg/L) was detected in HAM-AP2-FB-01 and HAM-AP2-FB-02, respectively, at concentrations greater than the RL. Therefore, the concentrations of TDS in samples HAM-AP2-FD-01, HAM-AP2-FD-02, HAM-HGWC-15, HAM-HGWC-16, HAM-HGWC-17, HAM-HGWC-18, HAM-MW-21D, HAM-MW-22 and HAM-MW-23 were J+ qualified as estimated with a high bias. The concentrations in samples HAM-AP2-EB-01, HAM-HGWA-4, HAM-HGWA-42D, HAM-HGWA-5, HAM-HGWA-6 and HAM-MW-37D were U qualified as not detected above the equipment blank concentration.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
HAM-AP2-EB-01	Total Dissolved Solids	64.0	NA	64.0	U	BFH
HAM-AP2-FD-01	Total Dissolved Solids	818	NA	818	J+	BFH
HAM-AP2-FD-02	Total Dissolved Solids	1430	NA	1430	J+	BFH
HAM-HGWA-4	Total Dissolved Solids	176	NA	176	U	BFH
HAM-HGWA-42D	Total Dissolved Solids	212	NA	212	U	BFH
HAM-HGWA-5	Total Dissolved Solids	155	NA	155	U	BFH
HAM-HGWA-6	Total Dissolved Solids	240	NA	240	U	BFH
HAM-HGWC-14	Total Dissolved Solids	1720	NA	1720	J+	BFH
HAM-HGWC-15	Total Dissolved Solids	830	NA	830	J+	BFH
HAM-HGWC-16	Total Dissolved Solids	755	NA	755	J+	BFH
HAM-HGWC-17	Total Dissolved Solids	815	NA	815	J+	BFH
HAM-HGWC-18	Total Dissolved Solids	1360	NA	1360	J+	BFH
HAM-MW-21D	Total Dissolved Solids	477	NA	477	J+	BFH
HAM-MW-22	Total Dissolved Solids	994	NA	994	J+	BFH
HAM-MW-23	Total Dissolved Solids	1260	NA	1260	J+	BFH
HAM-MW-33	Total Dissolved Solids	2160	NA	2160	J+	BFH
HAM-MW-34D	Total Dissolved Solids	2010	NA	2010	J+	BFH
HAM-MW-35	Total Dissolved Solids	2120	NA	2120	J+	BFH
HAM-MW-51	Total Dissolved Solids	2040	NA	2040	J+	BFH
HAM-MW-37D	Total Dissolved Solids	269	NA	269	U	BFH

mg/L- milligram per liter

NA-not applicable

3.9 Field Duplicate

Three field duplicate samples were collected with the sample set, HAM-UGRD-FD-01, HAM-AP2-FD-01 and HAM-AP2-FD-02. Acceptable precision (RPD < 30%) was demonstrated between the field duplicate and the original samples, HAM-HGWA-44D, HAM-HGWC-16 and HAM-MW-33, respectively, with the following exception.

The TDS RPD for field duplicate pair HAM-AP2-FD-02/HAM-MW-33 was greater than 30%. Therefore, the concentrations of TDS in this field duplicate pair were J qualified as estimated.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	RPD	Validation Result (mg/L)	Validation Qualifier	Reason Code
HAM-AP2-FD-02	Total Dissolved Solids	1430	NA	41	1430	J	RPDF1
HAM-MW-33	Total Dissolved Solids	2160	NA		2130	J	RPDF1

mg/L-milligram per liter

NA-not applicable

3.10 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported due to dilutions analyzed.

3.11 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

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ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

- U The analyte was analyzed for but was not detected at or above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to “not detected at or above the reported result.”
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.
- J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

DQM Reason Code	Description
AB1	> Samples in batch
AB2	QC sample missing
AB3	Batch analysis time exceeded
BAH	Contamination detected in the Ambient Blank greater than or equal to the Quantitation Limit.
BAL	Contamination detected in the Ambient Blank less than the Quantitation Limit.
BC	Calibration blank contamination
BC1	assoc. result < RL
BC2	assoc. result > RL < mult.
BC3	assoc. result > RL > mult.
BEH	Contamination detected in the Equipment Blank greater than or equal to the Quantitation Limit.
BEL	Contamination detected in the Equipment Blank less than the Quantitation Limit.
BF	Field blank contamination
BF1	assoc. result < RL
BF2	assoc. result > RL < mult.
BF3	assoc. result > RL > mult.
BFH	Contamination detected in the Field Blank greater than or equal to the Quantitation Limit.
BFL	Contamination detected in the Field Blank less than the Quantitation Limit.
BL	Laboratory blank contamination
BL1	assoc. result < RL
BL2	assoc. result > RL < mult.
BL3	assoc. result > RL > mult.
BLH	Contamination detected in the Lab Blank greater than or equal to the Quantitation Limit.
BLL	Contamination detected in the Lab Blank less than the Quantitation Limit.
BT	Trip blank contamination
BT1	assoc. result < RL
BT2	assoc. result > RL < mult.
BT3	assoc. result > RL > mult.
BTH	Contamination detected in the Trip Blank greater than or equal to the Quantitation Limit.
BTL	Contamination detected in the Trip Blank less than the Quantitation Limit.
CA1	Column difference
CC1	CCV %D
CC2	CCV %R
CC3	CCV RRF
CI1	IC RSD
CI2	IC RRF
CR1	Calibration range

DQM Reason Code	Description
CV1	ICV or CCV %D
CV2	ICV or CCV %R
CV3	ICV CCV RRF
DF1	Dilution Factor > 1
DL	Dilution Factor > 1
DVT1	The Dissolved Result > Total Result and the absolute difference > the AD MULTIPLIER CL * Detection Limit
DVT2	The Dissolved Result > Total Result and the absolute difference > AD MULTIPLIER UCO * Detection Limit
DVT3	The Dissolved Result > Total Result and the relative percent difference (RPD) > RPD CL
DVT4	The Dissolved Result > Total Result and the relative percent difference (RPD) > RPD UCO
ER1	MDL=<RESULT<RL (INORGANIC)
ER2	MDL=<RESULT<RL (ORGANIC)
FBC1	BLANK CONTAMINATION
FBC2	RESULT < BLANK * MULTIPLIER
FBC3	RESULT > BLANK * MULTIPLIER
FD1	Field duplicate RPD
FD2	Field duplicate abs. diff.
GHT1	GROSS QUALIFIER HIT
GHT2	GROSS QUALIFIER NON DETECT
HP1	Hydrocarbon pattern
HT1	Holding time samp. to preservation
HT2	Holding time samp. to analysis
HT3	Holding time gros. samp. to pres.
HT4	Holding time gros. samp. to analysis
IS1	Internal standard
LBC1	BLANK CONTAMINATION
LBC2	RESULT < BLANK * MULTIPLIER
LBC3	RESULT > BLANK * MULTIPLIER
LD1	Lab duplicate RPD
LD2	Lab duplicate abs. diff.
LS1	LS %R
LS2	LS RPD
MS1	MS %R
MS2	MS RPD
MS3	Parent >4x spike
MS4	Spike diluted out

DQM Reason Code	Description
NP1	Non-Preferred Result
NR1	NUMERIC RESULTS
OT1	Other quality issue
PS1	BETWEEN CONTROL AND WARNING LIMITS
PS2	INVALID
PS3	LESS THAN LOWER CONTROL LIMIT
PS4	LESS THAN LOWER WARNING LIMIT
PT1	The preservative for this test id does not match the required preservative in RT_HOLDING_TIME.
RDL1	EXCEEDS REQUIRED DETECTION LIMIT
RL1	ND > project limit
RO1	Other rad. issue
RPD1	LCS/LCSD
RPD2	LCS/LCSD_NON_DETECT
RPD3	MS/MSD
RPD4	MS/MSD_NON_DETECT
RPD5	Orig/Dup
RPD6	Orig/Dup_NON_DETECT
RPDF1	FIELD DUPLICATE
RPDF2	FIELD DUPLICATE_NON_DETECT
RQ1	Rad. quantitation issue
RR1	Repeated result same method
RR2	Repeated result diff. method
RSD1	RSD exceeds CL for LCS sample
RSD2	RSD exceeds CL for MS sample
RSD3	RSD exceeds CL for Lab sample
RSD4	RSD exceeds CL for Field sample
RY1	Tracer or carrier
SD1	Serial dilution
SO1	High moisture
SO2	Wet weight
SP1	Preservation, temp
SP2	Preservation, pH
SP3	Preservation, headspace
SPR1	BLANK SPIKE > UCL
SPR10	EarthSoft.DQM.SpikeRecovery2
SPR11	EarthSoft.DQM.SpikeRecovery2
SPR12	EarthSoft.DQM.SpikeRecovery2
SPR2	INORGANIC SPIKE > UCL

DQM Reason Code	Description
SPR3	ORGANIC SPIKE > UCL
SPR4	LCL > BLANK > LOW_CUTOFF
SPR5	LCL > INORG > LOW_CUTOFF
SPR6	LCL > ORG > LOW_CUTOFF
SPR7	BLANK SPIKE < LOW_CUTOFF
SPR8	INORGANIC SPIKE < LOW_CUTOFF
SPR9	ORGANIC SPIKE < LOW_CUTOFF
SU	Surrogate outlier
SU1	Surrogate
SU2	Surrogate diluted out
SURR1	ASSO. DETECTS OF LCL > REC > LOW_CUTOFF
SURR10	EarthSoft.DQM.SurrogateRecovery
SURR11	EarthSoft.DQM.SurrogateRecovery
SURR12	EarthSoft.DQM.SurrogateRecovery
SURR2	ASSO. DETECTS OF REC < LOW_CUTOFF
SURR3	ASSO. DETECTS OF REC > UCL
SURR4	ASSO. NDS OF LCL > REC > LOW_CUTOFF
SURR5	ASSO. NDS OF REC < LOW_CUTOFF
SURR6	ASSO. NDS OF REC > UCL
SURR7	LCL > REC > LOW_CUTOFF
SURR8	REC < LOW_CUTOFF
SURR9	REC > UCL
TBC1	BLANK CONTAMINATION
TBC2	RESULT < BLANK * MULTIPLIER
TBC3	RESULT > BLANK * MULTIPLIER
TR	Trace Detection
TR1	Trace detection
TRA1	Tracer is outside of UCL or LCL
TRA2	Associated result of a tracer less than the LCL
TRA3	Associated detect result of a tracer greater than the UCL
VC1	Canister vacuum
VC2	Canister contamination
VSU1	INVALID SAMPLE UNIT TYPE
VSU2	MISSING SAMPLE UNIT TYPE
VSU3	NON-DEFAULT RESULT UNIT

Memorandum

Date: 30 May 2024
To: Whitney Law
From: Ashley Wilson
CC: Kristoffer Henderson
Subject: **Stage 2A Data Validation - Level II Data Deliverables – Pace Analytical Services, LLC Project Numbers 92713558 and 92713567**

SITE: Plant Hammond AP-2

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of twenty-two aqueous samples, three field duplicates, three field blanks and three equipment blanks, collected 13 and 17-19 February 2024, as part of the Plant Hammond AP on-site sampling event.

The samples were analyzed at Pace Analytical Services, LLC, Greensburg, Pennsylvania, for the following analytical tests:

- Radium-226 by United States (US) Environmental Protection Agency (EPA) Method 903.1
- Radium-228 by US EPA Method 904.0
- Total Radium by Calculation

EXECUTIVE SUMMARY

Overall, based on this Stage 2A data validation covering the quality control (QC) parameters listed below and based on the information provided, the data are usable for supporting project objectives.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment, and the following documents:

- US EPA Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011);
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, November 2020 (EPA 542-R-20-006); and
- American National Standard, Verification and Validation of Radiological Data for use in Waste Management and Environmental Remediation, February 15, 2012 (ANSI/ANS-41.5-2012).

The following samples were analyzed and reported in the laboratory reports:

Laboratory IDs	Client IDs
92713558001	HAM-HGWA-1
92713558002	HAM-HGWA-2
92713558003	HAM-HGWA-3
92713558004	HAM-HGWA-43D
92713558005	HAM-HGWA-44D
92713558006	HAM-UGRD-FD-01
92713558007	HAM-UGRD-EB-01
92713558008	HAM-UGRD-FB-01
92713567001	HAM-HGWA-4
92713567002	HAM-HGWA-5
92713567003	HAM-HGWA-6
92713567004	HAM-HGWA-42D
92713567005	HAM-HGWC-14
92713567006	HAM-HGWC-15
92713567007	HAM-HGWC-17
92713567008	HAM-HGWC-16

Laboratory IDs	Client IDs
92713567009	HAM-HGWC-18
92713567010	HAM-MW-21D
92713567011	HAM-MW-22
92713567012	HAM-MW-23D
92713567013	HAM-MW-33
92713567014	HAM-MW-34D
92713567015	HAM-MW-37D
92713567016	HAM-AP2-EB-01
92713567017	HAM-AP2-FB-01
92713567018	HAM-AP2-FD-01
92713567019	HAM-AP2-FD-02
92713567020	HAM-MW-35
92713567021	HAM-MW-51
92713567022	HAM-AP2-EB-02
92713567023	HAM-AP2-FB-02

The samples were received within 0-6 degrees Celsius (°C). No sample preservation issues were noted by the laboratory.

1.0 RADIOCHEMISTRY

The samples were analyzed for radium-226 by US EPA method 903.1, radium-228 by US EPA method 904.0 and total radium by calculation.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ⊗ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Laboratory Duplicate
- ✓ Tracers and Carriers
- ✓ Equipment Blank
- ✓ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverables Review

1.1 Overall Assessment

The radium-226 and radium-228 data reported in this data set are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

1.1.1 Analysis Anomaly

92713558: Total radium was reported at the minimum detectable concentration (MDC) for radium-226 and total radium-228 was detected greater than the MDC in sample HAM-HGWA-43D. Since total radium is calculated from radium-226 and radium-228, and radium-226 was greater than the MDC, and based on professional and technical judgment, the total radium concentrations for this sample was reported with no qualifications.

92713567: Total radium was reported at the minimum detectable concentration (MDC) for radium-226 and total radium-228 was detected greater than the MDC in samples HAM-HGWA-43D, HAM-HGWC-14, HAM-HGWC-18 and HAM-MW-33. Since total radium is calculated from radium-226 and radium-228, and radium-226 was greater than the MDC, and based on professional and technical judgment, the total radium concentrations for this sample was reported with no qualifications.

Sample ID	Compound	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier*	Reason Code**
HAM-HGWA-43D	Combined Radium 226 + 228	0.860	U	0.860	NA	RO1
HAM-HGWC-14	Combined Radium 226 + 228	0.439	U	0.439	NA	RO1
HAM-HGWC-18	Combined Radium 226 + 228	0.757	U	0.757	NA	RO1
HAM-MW-33	Combined Radium 226 + 228	0.552	U	0.552	NA	RO1

pCi/L-picocuries per liter

U-not detected at or above the MDC

* Validation qualifiers are defined in Attachment 1 at the end of this report

**Reason codes are defined in Attachment 2 at the end of this report

1.2 Holding Times

The holding times for the radium-226 and radium-228 analyses of a water sample are 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Method blanks were reported for the radium-228 and radium-226 data. Radium-226 and radium-228 were not detected in the method blanks at or above the minimum detectable concentrations (MDCs).

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD pairs were not reported with the data.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). The recovery and replicate error ratio (RER) [1 sigma (1σ)] results were within the laboratory specified acceptance criteria.

1.6 Laboratory Duplicate

Two sample set specific laboratory duplicates were reported for radium-226 using samples HAM-UGRD-FB-01 and HAM-AP2-FD-02. The RER results were within the laboratory specified acceptance criteria.

One batch laboratory duplicate was reported for radium-226. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

1.7 Tracers and Carriers

Carriers were reported for the radium-226 and radium-228 analyses and a tracer was reported for the radium-228 analyses. The recovery results were within the laboratory specified acceptance criteria.

1.8 Equipment Blank

Three equipment blanks, HAM-UGRD-EB-01, HAM-AP2-EB-01 and HAM-AP2-EB-02, were collected with the sample set. Radium-226 and radium-228 were not detected in the equipment blank at or above the MDCs.

1.9 Field Blank

Three field blanks, HAM-UGRD-FB-01, HAM-AP2-FB-01 and HAM-AP2-FB-02, were collected with the sample set. Radium-226 and radium-228 were not detected in the field blank at or above the MDCs.

1.10 Field Duplicate

Two field duplicate samples were collected with the sample set, HAM-UGRD-FD-01, HAM-AP2-FD-01 and HAM-AP2-FD-02. Acceptable precision ($RER (1\sigma) < 3$) was demonstrated between the field duplicates and the original samples, HAM-HGWA-44D, HAM-HGWC-16 and HAM-MW-33, respectively.

However, radium-228 and combined radium-226 and radium-228 were detected in sample HAM-HGWA-44D at a concentration greater than the MDC and not detected in field duplicate sample HAM-UGRD-FD-01, resulting in noncalculable RPDs. Since the RERs were less than three, no qualifications were applied to the data.

Radium-226 was detected in sample HAM-MW-33 at a concentration greater than the MDC and not detected in field duplicate sample HAM-AP2-FD-02, resulting in noncalculable RPDs. Since the RERs were less than three, no qualifications were applied to the data.

1.11 Sensitivity

The samples were reported to the MDCs. No elevated non-detect results were reported.

1.12 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

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ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

- U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to “not detected at or above the reported result.”
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.
- J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

DQM Reason Code	Description
AB1	> Samples in batch
AB2	QC sample missing
AB3	Batch analysis time exceeded
BAH	Contamination detected in the Ambient Blank greater than or equal to the Quantitation Limit.
BAL	Contamination detected in the Ambient Blank less than the Quantitation Limit.
BC	Calibration blank contamination
BC1	assoc. result < RL
BC2	assoc. result > RL < mult.
BC3	assoc. result > RL > mult.
BEH	Contamination detected in the Equipment Blank greater than or equal to the Quantitation Limit.
BEL	Contamination detected in the Equipment Blank less than the Quantitation Limit.
BF	Field blank contamination
BF1	assoc. result < RL
BF2	assoc. result > RL < mult.
BF3	assoc. result > RL > mult.
BFH	Contamination detected in the Field Blank greater than or equal to the Quantitation Limit.
BFL	Contamination detected in the Field Blank less than the Quantitation Limit.
BL	Laboratory blank contamination
BL1	assoc. result < RL
BL2	assoc. result > RL < mult.

DQM Reason Code	Description
BL3	assoc. result > RL > mult.
BLH	Contamination detected in the Lab Blank greater than or equal to the Quantitation Limit.
BLL	Contamination detected in the Lab Blank less than the Quantitation Limit.
BT	Trip blank contamination
BT1	assoc. result < RL
BT2	assoc. result > RL < mult.
BT3	assoc. result > RL > mult.
BTH	Contamination detected in the Trip Blank greater than or equal to the Quantitation Limit.
BTL	Contamination detected in the Trip Blank less than the Quantitation Limit.
CA1	Column difference
CC1	CCV %D
CC2	CCV %R
CC3	CCV RRF
CI1	IC RSD
CI2	IC RRF
CR1	Calibration range
CV1	ICV or CCV %D
CV2	ICV or CCV %R
CV3	ICV CCV RRF
DF1	Dilution Factor > 1
DL	Dilution Factor > 1

DQM Reason Code	Description
DVT1	The Dissolved Result > Total Result and the absolute difference > the AD_MULTIPLIER_CL * Detection Limit
DVT2	The Dissolved Result > Total Result and the absolute difference > AD_MULTIPLIER_UCO * Detection Limit
DVT3	The Dissolved Result > Total Result and the relative percent difference (RPD) > RPD_CL
DVT4	The Dissolved Result > Total Result and the relative percent difference (RPD) > RPD_UCO
ER1	MDL=<RESULT<RL (INORGANIC)
ER2	MDL=<RESULT<RL (ORGANIC)
FBC1	BLANK CONTAMINATION
FBC2	RESULT < BLANK * MULTIPLIER
FBC3	RESULT > BLANK * MULTIPLIER
FD1	Field duplicate RPD
FD2	Field duplicate abs. diff.
GHT1	GROSS_QUALIFIER_HIT
GHT2	GROSS_QUALIFIER_NON_DETECT
HP1	Hydrocarbon pattern
HT1	Holding time samp. to preservation
HT2	Holding time samp. to analysis
HT3	Holding time gros. samp. to pres.
HT4	Holding time gros. samp. to analysis
IS1	Internal standard
LBC1	BLANK CONTAMINATION

DQM Reason Code	Description
LBC2	RESULT < BLANK * MULTIPLIER
LBC3	RESULT > BLANK * MULTIPLIER
LD1	Lab duplicate RPD
LD2	Lab duplicate abs. diff.
LS1	LS %R
LS2	LS RPD
MS1	MS %R
MS2	MS RPD
MS3	Parent >4x spike
MS4	Spike diluted out
NP1	Non-Preferred Result
NR1	NUMERIC RESULTS
OT1	Other quality issue
PS1	BETWEEN CONTROL AND WARNING LIMITS
PS2	INVALID
PS3	LESS THAN LOWER CONTROL LIMIT
PS4	LESS THAN LOWER WARNING LIMIT
PT1	The preservative for this test id does not match the required preservative in RT_HOLDING_TIME.
RDL1	EXCEEDS REQUIRED DETECTION LIMIT
RL1	ND > project limit
RO1	Other rad. issue
RPD1	LCS/LCSD
RPD2	LCS/LCSD_NON_DETECT
RPD3	MS/MSD
RPD4	MS/MSD_NON_DETECT

DQM Reason Code	Description
RPD5	Orig/Dup
RPD6	Orig/Dup_NON_DETECT
RPDF1	FIELD DUPLICATE
RPDF2	FIELD DUPLICATE NON_DETECT
RQ1	Rad. quantitation issue
RR1	Repeated result same method
RR2	Repeated result diff. method
RSD1	RSD exceeds CL for LCS sample
RSD2	RSD exceeds CL for MS sample
RSD3	RSD exceeds CL for Lab sample
RSD4	RSD exceeds CL for Field sample
RY1	Tracer or carrier
SD1	Serial dilution
SO1	High moisture
SO2	Wet weight
SP1	Preservation, temp
SP2	Preservation, pH
SP3	Preservation, headspace
SPR1	BLANK SPIKE > UCL
SPR10	EarthSoft.DQM.SpikeRecovery2
SPR11	EarthSoft.DQM.SpikeRecovery2
SPR12	EarthSoft.DQM.SpikeRecovery2
SPR2	INORGANIC SPIKE > UCL
SPR3	ORGANIC SPIKE > UCL
SPR4	LCL > BLANK > LOW_CUTOFF
SPR5	LCL > INORG > LOW_CUTOFF
SPR6	LCL > ORG > LOW_CUTOFF
SPR7	BLANK SPIKE < LOW_CUTOFF

DQM Reason Code	Description
SPR8	INORGANIC SPIKE < LOW_CUTOFF
SPR9	ORGANIC SPIKE < LOW_CUTOFF
SU	Surrogate outlier
SU1	Surrogate
SU2	Surrogate diluted out
SURR1	ASSO. DETECTS OF LCL > REC > LOW_CUTOFF
SURR10	EarthSoft.DQM.SurrogateRecovery
SURR11	EarthSoft.DQM.SurrogateRecovery
SURR12	EarthSoft.DQM.SurrogateRecovery
SURR2	ASSO. DETECTS OF REC < LOW_CUTOFF
SURR3	ASSO. DETECTS OF REC > UCL
SURR4	ASSO. NDS OF LCL > REC > LOW_CUTOFF
SURR5	ASSO. NDS OF REC < LOW_CUTOFF
SURR6	ASSO. NDS OF REC > UCL
SURR7	LCL > REC > LOW_CUTOFF
SURR8	REC < LOW_CUTOFF
SURR9	REC > UCL
TBC1	BLANK CONTAMINATION
TBC2	RESULT < BLANK * MULTIPLIER
TBC3	RESULT > BLANK * MULTIPLIER
TR	Trace Detection
TR1	Trace detection
TRA1	Tracer is outside of UCL or LCL
TRA2	Associated result of a tracer less than the LCL
TRA3	Associated detect result of a tracer greater than the UCL
VC1	Canister vacuum
VC2	Canister contamination

DQM Reason Code	Description
VSU1	INVALID SAMPLE UNIT TYPE
VSU2	MISSING SAMPLE UNIT TYPE

AD-Absolute Difference
CCV-Continuous Calibration Verification
CL-Control Limit
%D-Percent Difference
IC-Initial Calibration
ICV-Initial Calibration Verification
INORG-Inorganic
LCL-Lower Control Limit
LCS-Laboratory Control Spike
LCSD-Laboratory Control Spike Duplicate
LS-Laboratory Spike
MDL-Method Detection Limit
MS-Matrix Spike
MSD-Matrix Spike Duplicate
ND-Not Detected
ORG-Organic
QC-Quality Control
%R-Percent Recovery
REC-Recovery
RL-Reporting Limit
RPD-Relative Percent Difference
RRF-Relative Response Factor
RSD-Relative Standard Deviation
UCL-Upper Control Limit
UCO-Upper Cut Off

DQM Reason Code	Description
VSU3	NON-DEFAULT RESULT UNIT

FIELD SAMPLING REPORTS

Low-Flow Test Report:

Test Date / Time: 2/13/2024 12:57:39 PM
Project: GP-Plant Hammond
Operator Name: Jamie Newsome

Location Name: HGWA-1 Latitude: 34.256433919104055 Longitude: -85.34424464226267 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 22.49 ft Total Depth: 32.49 ft Initial Depth to Water: 14.39ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 27.49 ft Estimated Total Volume Pumped: 34 liter Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: -0.56 ft	Instrument Used: Aqua TROLL 400 Serial Number: 968202
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Test Notes:
Seven bottles; Full App III and IV and Major Ions

Weather Conditions:
Clear, 60 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/13/2024 12:57 PM	00:00	7.07 pH	16.78 °C	645.62 µS/cm	7.46 mg/L	7.45 NTU	66.0 mV	14.38 ft	100.00 ml/min
2/13/2024 1:02 PM	05:00	7.07 pH	16.82 °C	651.00 µS/cm	7.48 mg/L	2.55 NTU	56.9 mV	14.38 ft	100.00 ml/min
2/13/2024 1:07 PM	10:00	7.06 pH	16.86 °C	650.81 µS/cm	6.98 mg/L	3.24 NTU	67.9 mV	14.38 ft	100.00 ml/min
2/13/2024 1:12 PM	15:00	7.07 pH	17.00 °C	647.36 µS/cm	6.59 mg/L	1.87 NTU	56.1 mV	14.83 ft	100.00 ml/min
2/13/2024 1:17 PM	20:00	7.06 pH	17.10 °C	652.83 µS/cm	3.39 mg/L	1.96 NTU	69.0 mV	14.83 ft	100.00 ml/min
2/13/2024 1:22 PM	25:00	7.07 pH	17.12 °C	650.24 µS/cm	1.65 mg/L	1.45 NTU	59.7 mV	14.83 ft	100.00 ml/min
2/13/2024 1:27 PM	30:00	7.06 pH	17.17 °C	651.15 µS/cm	6.15 mg/L	1.20 NTU	59.1 mV	14.92 ft	100.00 ml/min
2/13/2024 1:32 PM	35:00	7.06 pH	17.16 °C	650.80 µS/cm	6.37 mg/L	1.40 NTU	59.3 mV	14.92 ft	100.00 ml/min
2/13/2024 1:37 PM	40:00	7.05 pH	16.99 °C	648.49 µS/cm	6.29 mg/L	1.71 NTU	74.7 mV	14.95 ft	100.00 ml/min
2/13/2024 1:42 PM	45:00	7.07 pH	16.91 °C	649.61 µS/cm	6.11 mg/L	1.47 NTU	72.5 mV	14.95 ft	100.00 ml/min
2/13/2024 1:47 PM	50:00	7.05 pH	16.75 °C	651.68 µS/cm	5.83 mg/L	1.12 NTU	75.0 mV	14.95 ft	100.00 ml/min
2/13/2024 1:52 PM	55:00	7.06 pH	16.91 °C	646.34 µS/cm	5.57 mg/L	1.81 NTU	72.1 mV	14.95 ft	100.00 ml/min

2/13/2024 1:57 PM	01:00:00	7.04 pH	16.91 °C	649.15 µS/cm	5.23 mg/L	1.08 NTU	74.8 mV	14.95 ft	100.00 ml/min
2/13/2024 2:02 PM	01:05:00	7.06 pH	16.76 °C	650.75 µS/cm	5.24 mg/L	1.71 NTU	73.4 mV	14.95 ft	100.00 ml/min
2/13/2024 2:07 PM	01:10:00	7.05 pH	16.78 °C	648.87 µS/cm	6.98 mg/L	1.39 NTU	70.8 mV	14.95 ft	100.00 ml/min
2/13/2024 2:12 PM	01:15:00	7.04 pH	16.90 °C	648.63 µS/cm	7.14 mg/L	1.15 NTU	69.5 mV	14.95 ft	100.00 ml/min
2/13/2024 2:17 PM	01:20:00	7.06 pH	16.69 °C	647.19 µS/cm	6.93 mg/L	0.99 NTU	66.1 mV	14.95 ft	100.00 ml/min
2/13/2024 2:22 PM	01:25:00	7.04 pH	16.77 °C	648.84 µS/cm	6.64 mg/L	1.03 NTU	64.6 mV	14.95 ft	100.00 ml/min
2/13/2024 2:27 PM	01:30:00	7.05 pH	16.91 °C	647.38 µS/cm	6.36 mg/L	1.11 NTU	63.3 mV	14.95 ft	100.00 ml/min
2/13/2024 2:32 PM	01:35:00	7.05 pH	16.82 °C	644.57 µS/cm	6.06 mg/L	1.59 NTU	63.8 mV	14.95 ft	100.00 ml/min
2/13/2024 2:37 PM	01:40:00	7.06 pH	16.91 °C	647.70 µS/cm	6.32 mg/L	1.11 NTU	62.3 mV	14.95 ft	100.00 ml/min
2/13/2024 2:42 PM	01:45:00	7.06 pH	16.70 °C	649.51 µS/cm	6.08 mg/L	0.95 NTU	49.6 mV	14.95 ft	100.00 ml/min
2/13/2024 2:47 PM	01:50:00	7.07 pH	16.71 °C	647.00 µS/cm	6.01 mg/L	1.04 NTU	57.5 mV	14.95 ft	100.00 ml/min
2/13/2024 2:52 PM	01:55:00	7.05 pH	17.00 °C	637.29 µS/cm	5.61 mg/L	1.07 NTU	55.5 mV	14.95 ft	100.00 ml/min
2/13/2024 2:57 PM	02:00:00	7.05 pH	17.30 °C	639.30 µS/cm	5.33 mg/L	0.83 NTU	51.7 mV	14.95 ft	100.00 ml/min
2/13/2024 3:02 PM	02:05:00	7.04 pH	17.40 °C	634.47 µS/cm	5.07 mg/L	0.84 NTU	50.1 mV	14.95 ft	100.00 ml/min
2/13/2024 3:07 PM	02:10:00	7.05 pH	17.75 °C	636.34 µS/cm	4.79 mg/L	0.90 NTU	48.4 mV	14.95 ft	100.00 ml/min
2/13/2024 3:12 PM	02:15:00	7.05 pH	17.65 °C	639.95 µS/cm	4.51 mg/L	0.75 NTU	49.5 mV	14.95 ft	100.00 ml/min
2/13/2024 3:17 PM	02:20:00	7.04 pH	17.76 °C	639.72 µS/cm	4.22 mg/L	1.11 NTU	50.3 mV	14.95 ft	100.00 ml/min
2/13/2024 3:22 PM	02:25:00	7.04 pH	18.07 °C	636.83 µS/cm	3.95 mg/L	0.81 NTU	47.4 mV	14.95 ft	100.00 ml/min
2/13/2024 3:27 PM	02:30:00	7.05 pH	17.98 °C	635.30 µS/cm	3.75 mg/L	1.15 NTU	46.3 mV	14.95 ft	100.00 ml/min
2/13/2024 3:32 PM	02:35:00	7.04 pH	17.94 °C	635.55 µS/cm	3.56 mg/L	0.93 NTU	39.4 mV	14.95 ft	100.00 ml/min
2/13/2024 3:37 PM	02:40:00	7.04 pH	17.90 °C	635.73 µS/cm	3.35 mg/L	0.97 NTU	47.2 mV	14.95 ft	100.00 ml/min
2/13/2024 3:42 PM	02:45:00	7.04 pH	18.04 °C	634.90 µS/cm	3.14 mg/L	0.94 NTU	45.9 mV	14.95 ft	100.00 ml/min
2/13/2024 3:47 PM	02:50:00	7.04 pH	17.98 °C	637.31 µS/cm	1.91 mg/L	0.79 NTU	44.8 mV	14.95 ft	100.00 ml/min
2/13/2024 3:52 PM	02:55:00	6.78 pH	18.03 °C	634.61 µS/cm	1.79 mg/L	1.00 NTU	43.8 mV	14.95 ft	100.00 ml/min
2/13/2024 3:57 PM	03:00:00	7.05 pH	17.50 °C	639.26 µS/cm	3.71 mg/L	0.89 NTU	37.1 mV	14.95 ft	100.00 ml/min
2/13/2024 4:02 PM	03:05:00	7.04 pH	17.48 °C	642.22 µS/cm	5.18 mg/L	0.96 NTU	37.2 mV	14.95 ft	100.00 ml/min
2/13/2024 4:07 PM	03:10:00	7.04 pH	17.37 °C	642.20 µS/cm	1.76 mg/L	0.84 NTU	38.4 mV	14.95 ft	100.00 ml/min
2/13/2024 4:12 PM	03:15:00	7.05 pH	17.36 °C	650.99 µS/cm	2.87 mg/L	1.10 NTU	35.0 mV	14.95 ft	100.00 ml/min
2/13/2024 4:17 PM	03:20:00	7.05 pH	17.13 °C	644.47 µS/cm	2.75 mg/L	0.84 NTU	35.5 mV	14.95 ft	100.00 ml/min

2/13/2024 4:22 PM	03:25:00	7.06 pH	17.00 °C	642.12 µS/cm	2.37 mg/L	0.98 NTU	36.3 mV	14.95 ft	100.00 ml/min
2/13/2024 4:27 PM	03:30:00	7.04 pH	17.02 °C	641.14 µS/cm	2.71 mg/L	0.63 NTU	30.7 mV	14.95 ft	100.00 ml/min
2/13/2024 4:32 PM	03:35:00	7.04 pH	17.27 °C	665.65 µS/cm	2.66 mg/L	0.89 NTU	30.1 mV	14.95 ft	100.00 ml/min
2/13/2024 4:37 PM	03:40:00	7.05 pH	17.00 °C	642.56 µS/cm	1.98 mg/L	0.96 NTU	27.9 mV	14.95 ft	100.00 ml/min
2/13/2024 4:42 PM	03:45:00	7.12 pH	16.77 °C	642.67 µS/cm	3.20 mg/L	1.09 NTU	30.0 mV	14.95 ft	100.00 ml/min
2/13/2024 4:47 PM	03:50:00	7.02 pH	16.77 °C	639.12 µS/cm	4.50 mg/L	0.79 NTU	28.4 mV	14.95 ft	100.00 ml/min
2/13/2024 4:52 PM	03:55:00	7.06 pH	16.77 °C	639.65 µS/cm	3.87 mg/L	0.93 NTU	24.9 mV	14.95 ft	100.00 ml/min
2/13/2024 4:57 PM	04:00:00	7.04 pH	16.79 °C	642.52 µS/cm	2.28 mg/L	0.78 NTU	25.2 mV	14.95 ft	100.00 ml/min
2/13/2024 5:02 PM	04:05:00	7.06 pH	16.80 °C	640.68 µS/cm	4.50 mg/L	0.77 NTU	21.3 mV	14.95 ft	100.00 ml/min
2/13/2024 5:07 PM	04:10:00	7.06 pH	16.75 °C	641.64 µS/cm	3.33 mg/L	0.81 NTU	21.2 mV	14.95 ft	100.00 ml/min
2/13/2024 5:12 PM	04:15:00	7.05 pH	16.64 °C	640.72 µS/cm	4.07 mg/L	0.77 NTU	22.7 mV	14.95 ft	100.00 ml/min
2/13/2024 5:17 PM	04:20:00	6.97 pH	16.64 °C	640.14 µS/cm	2.18 mg/L	1.17 NTU	22.5 mV	14.95 ft	100.00 ml/min
2/13/2024 5:22 PM	04:25:00	7.05 pH	16.56 °C	641.60 µS/cm	4.42 mg/L	0.75 NTU	21.5 mV	14.95 ft	100.00 ml/min
2/13/2024 5:27 PM	04:30:00	7.06 pH	16.57 °C	639.39 µS/cm	2.11 mg/L	0.81 NTU	21.4 mV	14.95 ft	100.00 ml/min
2/13/2024 5:32 PM	04:35:00	7.08 pH	16.51 °C	639.12 µS/cm	2.35 mg/L	1.75 NTU	21.0 mV	14.95 ft	100.00 ml/min
2/13/2024 5:37 PM	04:40:00	6.93 pH	16.42 °C	641.67 µS/cm	1.50 mg/L	1.97 NTU	22.4 mV	14.95 ft	100.00 ml/min
2/13/2024 5:42 PM	04:45:00	7.19 pH	16.52 °C	639.45 µS/cm	1.87 mg/L	2.14 NTU	22.9 mV	14.95 ft	100.00 ml/min
2/13/2024 5:47 PM	04:50:00	7.07 pH	16.48 °C	640.83 µS/cm	1.25 mg/L	1.52 NTU	21.9 mV	14.95 ft	100.00 ml/min
2/13/2024 5:52 PM	04:55:00	7.01 pH	16.46 °C	638.32 µS/cm	1.31 mg/L	1.16 NTU	22.5 mV	14.95 ft	100.00 ml/min
2/13/2024 5:57 PM	05:00:00	7.09 pH	16.45 °C	639.79 µS/cm	4.06 mg/L	1.38 NTU	21.5 mV	14.95 ft	100.00 ml/min
2/13/2024 6:02 PM	05:05:00	6.79 pH	16.38 °C	638.49 µS/cm	1.17 mg/L	1.16 NTU	22.6 mV	14.95 ft	100.00 ml/min
2/13/2024 6:07 PM	05:10:00	7.00 pH	16.36 °C	634.24 µS/cm	1.08 mg/L	1.14 NTU	20.9 mV	14.95 ft	100.00 ml/min
2/13/2024 6:12 PM	05:15:00	7.06 pH	16.34 °C	637.11 µS/cm	3.94 mg/L	0.82 NTU	18.2 mV	14.95 ft	100.00 ml/min
2/13/2024 6:17 PM	05:20:00	7.02 pH	16.30 °C	631.22 µS/cm	2.04 mg/L	0.86 NTU	18.5 mV	14.95 ft	100.00 ml/min
2/13/2024 6:22 PM	05:25:00	7.06 pH	16.29 °C	637.40 µS/cm	2.21 mg/L	1.07 NTU	19.1 mV	14.95 ft	100.00 ml/min
2/13/2024 6:27 PM	05:30:00	7.06 pH	16.24 °C	635.47 µS/cm	1.16 mg/L	0.81 NTU	18.1 mV	14.95 ft	100.00 ml/min
2/13/2024 6:32 PM	05:35:00	6.97 pH	16.25 °C	635.47 µS/cm	1.10 mg/L	1.17 NTU	18.1 mV	14.95 ft	100.00 ml/min
2/13/2024 6:37 PM	05:40:00	7.06 pH	16.22 °C	635.33 µS/cm	1.14 mg/L	1.01 NTU	15.2 mV	14.95 ft	100.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-1	Grab.

Low-Flow Test Report:

Test Date / Time: 2/13/2024 2:30:03 PM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: HGWA-2 Latitude: 34.254757245103136 Longitude: -85.34727017403146 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 17.95 ft Total Depth: 27.95 ft Initial Depth to Water: 14.06 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 39.51 m Estimated Total Volume Pumped: 11 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.04 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850767
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Test Notes:
Seven bottles; Full App III and IV and Major Ions

Weather Conditions:
Sunny, 54F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/13/2024 2:30 PM	00:00	6.04 pH	17.92 °C	338.75 µS/cm	4.68 mg/L	46.30 NTU	80.4 mV	14.10 ft	200.00 ml/min
2/13/2024 2:35 PM	05:00	5.82 pH	17.64 °C	332.00 µS/cm	3.58 mg/L	25.30 NTU	56.1 mV	14.10 ft	200.00 ml/min
2/13/2024 2:40 PM	10:00	5.74 pH	17.64 °C	328.43 µS/cm	2.96 mg/L	17.40 NTU	44.4 mV	14.10 ft	200.00 ml/min
2/13/2024 2:45 PM	15:00	5.67 pH	17.61 °C	322.15 µS/cm	2.56 mg/L	11.00 NTU	36.8 mV	14.10 ft	200.00 ml/min
2/13/2024 2:50 PM	20:00	5.63 pH	17.63 °C	319.57 µS/cm	2.30 mg/L	7.97 NTU	31.6 mV	14.10 ft	200.00 ml/min
2/13/2024 2:55 PM	25:00	5.58 pH	17.62 °C	314.11 µS/cm	2.05 mg/L	5.86 NTU	27.1 mV	14.10 ft	200.00 ml/min
2/13/2024 3:00 PM	30:00	5.57 pH	17.32 °C	317.69 µS/cm	1.89 mg/L	5.22 NTU	23.5 mV	14.10 ft	200.00 ml/min
2/13/2024 3:05 PM	35:00	5.54 pH	17.11 °C	315.93 µS/cm	1.74 mg/L	4.75 NTU	21.2 mV	14.10 ft	200.00 ml/min
2/13/2024 3:10 PM	40:00	5.54 pH	17.08 °C	315.34 µS/cm	1.63 mg/L	3.61 NTU	19.1 mV	14.10 ft	200.00 ml/min
2/13/2024 3:15 PM	45:00	5.51 pH	17.00 °C	314.34 µS/cm	1.51 mg/L	3.43 NTU	17.5 mV	14.10 ft	200.00 ml/min
2/13/2024 3:20 PM	50:00	5.50 pH	16.93 °C	312.68 µS/cm	1.43 mg/L	2.99 NTU	14.9 mV	14.10 ft	200.00 ml/min
2/13/2024 3:25 PM	55:00	5.49 pH	16.92 °C	310.63 µS/cm	1.31 mg/L	2.81 NTU	13.2 mV	14.10 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-2	Grab

Low-Flow Test Report:

Test Date / Time: 2/13/2024 1:23:04 PM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: HGWA-3 Latitude: 34.254616722496465 Longitude: -85.34735751346251 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 34.51 ft Total Depth: 44.51 ft Initial Depth to Water: 13.6 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 39.51 ft Estimated Total Volume Pumped: 6 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.02 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850767
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Test Notes:
Seven bottles; Full App III and IV and Major Ions

Weather Conditions:
Sunny, 53 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/13/2024 1:23 PM	00:00	6.96 pH	17.66 °C	449.93 µS/cm	1.66 mg/L	21.10 NTU	-75.7 mV	13.62 ft	200.00 ml/min
2/13/2024 1:28 PM	05:00	7.19 pH	17.40 °C	451.07 µS/cm	0.93 mg/L	11.70 NTU	-74.7 mV	13.62 ft	200.00 ml/min
2/13/2024 1:33 PM	10:00	7.27 pH	17.32 °C	451.62 µS/cm	0.47 mg/L	10.10 NTU	-105.8 mV	13.62 ft	200.00 ml/min
2/13/2024 1:38 PM	15:00	7.30 pH	17.35 °C	450.04 µS/cm	0.27 mg/L	8.47 NTU	-81.3 mV	13.62 ft	200.00 ml/min
2/13/2024 1:43 PM	20:00	7.32 pH	17.39 °C	453.96 µS/cm	0.19 mg/L	5.08 NTU	-82.2 mV	13.62 ft	200.00 ml/min
2/13/2024 1:48 PM	25:00	7.33 pH	17.39 °C	453.08 µS/cm	0.15 mg/L	5.17 NTU	-82.4 mV	13.62 ft	200.00 ml/min
2/13/2024 1:53 PM	30:00	7.35 pH	17.32 °C	452.11 µS/cm	0.13 mg/L	2.93 NTU	-82.6 mV	13.62 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-3	Grab.

Low-Flow Test Report:

Test Date / Time: 2/13/2024 4:15:14 PM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: HGWA-4 Latitude: 34.254978527346864 Longitude: -85.34872476950785 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 15.76 ft Total Depth: 25.76 ft Initial Depth to Water: 7.38 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 20.76 m Estimated Total Volume Pumped: 6 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.4 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850767
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Test Notes:
Seven bottles; Full App III and IV and Major Ions

Weather Conditions:
Sunny, 54

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/13/2024 4:15 PM	00:00	6.15 pH	15.46 °C	245.84 µS/cm	8.55 mg/L	6.91 NTU	15.9 mV	7.75 ft	200.00 ml/min
2/13/2024 4:20 PM	05:00	6.06 pH	15.17 °C	247.61 µS/cm	8.49 mg/L	7.43 NTU	19.2 mV	7.75 ft	200.00 ml/min
2/13/2024 4:25 PM	10:00	6.01 pH	15.18 °C	247.79 µS/cm	8.44 mg/L	7.81 NTU	21.2 mV	7.78 ft	200.00 ml/min
2/13/2024 4:30 PM	15:00	5.99 pH	15.17 °C	246.86 µS/cm	8.42 mg/L	6.29 NTU	29.4 mV	7.78 ft	200.00 ml/min
2/13/2024 4:35 PM	20:00	5.98 pH	15.17 °C	246.32 µS/cm	8.40 mg/L	5.74 NTU	30.6 mV	7.78 ft	200.00 ml/min
2/13/2024 4:40 PM	25:00	5.98 pH	15.08 °C	247.14 µS/cm	8.37 mg/L	5.05 NTU	23.5 mV	7.78 ft	200.00 ml/min
2/13/2024 4:45 PM	30:00	5.98 pH	15.11 °C	246.70 µS/cm	8.34 mg/L	4.89 NTU	24.1 mV	7.78 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-4	Grab

Low-Flow Test Report:

Test Date / Time: 2/13/2024 2:53:47 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: HGWA-5 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 18.72 ft Total Depth: 28.72 ft Initial Depth to Water: 5.51 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 23.72 ft Estimated Total Volume Pumped: 12 liter Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 0.49 ft	Instrument Used: Aqua TROLL 400 Serial Number: 883530
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Test Notes:
Seven bottles; Full App III and IV and Major Ions

Weather Conditions:
Clear, 66 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/13/2024 2:53 PM	00:00	6.94 pH	18.52 °C	156.68 µS/cm	3.87 mg/L	27.80 NTU	76.1 mV	5.75 ft	100.00 ml/min
2/13/2024 2:58 PM	05:00	6.46 pH	17.55 °C	133.01 µS/cm	1.21 mg/L	25.20 NTU	142.7 mV	5.85 ft	100.00 ml/min
2/13/2024 3:03 PM	10:00	6.39 pH	17.52 °C	163.30 µS/cm	0.89 mg/L	13.70 NTU	79.6 mV	5.95 ft	100.00 ml/min
2/13/2024 3:08 PM	15:00	6.43 pH	17.59 °C	184.03 µS/cm	0.65 mg/L	10.90 NTU	68.2 mV	6.00 ft	100.00 ml/min
2/13/2024 3:13 PM	20:00	6.47 pH	17.73 °C	195.55 µS/cm	0.50 mg/L	15.10 NTU	71.2 mV	6.00 ft	100.00 ml/min
2/13/2024 3:18 PM	25:00	6.52 pH	17.46 °C	207.56 µS/cm	0.41 mg/L	17.40 NTU	65.8 mV	6.00 ft	100.00 ml/min
2/13/2024 3:23 PM	30:00	6.55 pH	17.42 °C	219.39 µS/cm	0.40 mg/L	16.90 NTU	54.1 mV	6.00 ft	100.00 ml/min
2/13/2024 3:28 PM	35:00	6.57 pH	17.51 °C	222.30 µS/cm	0.36 mg/L	15.80 NTU	54.3 mV	6.00 ft	100.00 ml/min
2/13/2024 3:33 PM	40:00	6.57 pH	17.55 °C	222.16 µS/cm	0.36 mg/L	17.60 NTU	54.4 mV	6.00 ft	100.00 ml/min
2/13/2024 3:38 PM	45:00	6.59 pH	17.44 °C	225.56 µS/cm	0.32 mg/L	18.00 NTU	50.5 mV	6.00 ft	100.00 ml/min
2/13/2024 3:43 PM	50:00	6.60 pH	17.55 °C	228.23 µS/cm	0.28 mg/L	19.70 NTU	48.0 mV	6.00 ft	100.00 ml/min
2/13/2024 3:48 PM	55:00	6.60 pH	17.42 °C	226.89 µS/cm	0.26 mg/L	16.80 NTU	50.6 mV	6.00 ft	100.00 ml/min
2/13/2024 3:53 PM	01:00:00	6.61 pH	17.41 °C	230.38 µS/cm	0.22 mg/L	12.90 NTU	46.1 mV	6.00 ft	100.00 ml/min

2/13/2024 3:58 PM	01:05:00	6.61 pH	17.37 °C	228.42 µS/cm	0.23 mg/L	10.00 NTU	48.5 mV	6.00 ft	100.00 ml/min
2/13/2024 4:03 PM	01:10:00	6.61 pH	17.20 °C	229.88 µS/cm	0.19 mg/L	10.90 NTU	47.5 mV	6.00 ft	100.00 ml/min
2/13/2024 4:08 PM	01:15:00	6.61 pH	17.31 °C	230.76 µS/cm	0.17 mg/L	11.00 NTU	44.8 mV	6.00 ft	100.00 ml/min
2/13/2024 4:13 PM	01:20:00	6.63 pH	17.35 °C	231.08 µS/cm	0.29 mg/L	9.80 NTU	43.8 mV	6.00 ft	100.00 ml/min
2/13/2024 4:18 PM	01:25:00	6.64 pH	17.42 °C	235.42 µS/cm	0.18 mg/L	11.00 NTU	40.3 mV	6.00 ft	100.00 ml/min
2/13/2024 4:23 PM	01:30:00	6.64 pH	17.46 °C	234.60 µS/cm	0.16 mg/L	9.50 NTU	41.6 mV	6.00 ft	100.00 ml/min
2/13/2024 4:28 PM	01:35:00	6.64 pH	17.32 °C	232.68 µS/cm	0.16 mg/L	13.80 NTU	46.8 mV	6.00 ft	100.00 ml/min
2/13/2024 4:33 PM	01:40:00	6.65 pH	17.23 °C	234.05 µS/cm	0.16 mg/L	12.00 NTU	45.4 mV	6.00 ft	100.00 ml/min
2/13/2024 4:38 PM	01:45:00	6.67 pH	17.04 °C	233.04 µS/cm	0.17 mg/L	7.00 NTU	45.2 mV	6.00 ft	100.00 ml/min
2/13/2024 4:43 PM	01:50:00	6.65 pH	17.12 °C	235.32 µS/cm	0.18 mg/L	6.5 NTU	40.1 mV	6.00 ft	100.00 ml/min
2/13/2024 4:48 PM	01:55:00	6.66 pH	16.92 °C	230.23 µS/cm	0.18 mg/L	9.81 NTU	43.9 mV	6.00 ft	100.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-5	Grab.

Low-Flow Test Report:

Test Date / Time: 2/13/2024 5:29:54 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: HGWA-6 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 39.66 ft Total Depth: 49.66 ft Initial Depth to Water: 5.45 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 44.66 ft Estimated Total Volume Pumped: 9.2 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.45 ft	Instrument Used: Aqua TROLL 400 Serial Number: 883530
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Test Notes:
Seven bottles; Full App III and IV and Major Ions

Weather Conditions:
Clear, 60 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
2/13/2024 5:29 PM	00:00	6.95 pH	17.49 °C	359.49 µS/cm	4.87 mg/L	8.19 NTU	4.9 mV	5.90 ft	200.00 ml/min
2/13/2024 5:31 PM	01:38	7.20 pH	16.61 °C	371.65 µS/cm	4.01 mg/L	8.19 NTU	-57.9 mV	5.90 ft	200.00 ml/min
2/13/2024 5:36 PM	06:38	7.44 pH	16.27 °C	371.04 µS/cm	1.23 mg/L	3.01 NTU	-89.3 mV	5.90 ft	200.00 ml/min
2/13/2024 5:41 PM	11:38	7.51 pH	16.29 °C	371.04 µS/cm	1.64 mg/L	4.10 NTU	-88.7 mV	5.90 ft	200.00 ml/min
2/13/2024 5:46 PM	16:38	7.55 pH	16.34 °C	356.11 µS/cm	1.32 mg/L	2.90 NTU	-99.6 mV	5.90 ft	200.00 ml/min
2/13/2024 5:51 PM	21:38	7.57 pH	16.39 °C	371.07 µS/cm	1.30 mg/L	1.80 NTU	-104.0 mV	5.90 ft	200.00 ml/min
2/13/2024 5:56 PM	26:38	7.58 pH	16.25 °C	371.00 µS/cm	1.03 mg/L	1.75 NTU	-105.5 mV	5.90 ft	200.00 ml/min
2/13/2024 6:01 PM	31:38	7.59 pH	16.25 °C	371.71 µS/cm	0.43 mg/L	2.11 NTU	-107.5 mV	5.90 ft	200.00 ml/min
2/13/2024 6:06 PM	36:38	7.59 pH	16.23 °C	371.37 µS/cm	0.32 mg/L	2.90 NTU	-108.3 mV	5.90 ft	200.00 ml/min
2/13/2024 6:11 PM	41:38	7.59 pH	16.20 °C	371.47 µS/cm	0.29 mg/L	1.81 NTU	-108.9 mV	5.90 ft	200.00 ml/min

Samples

Sample ID:	Description:
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HAM-HGWA-6	Grab.
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Low-Flow Test Report:

Test Date / Time: 2/13/2024 5:40:05 PM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: HGWA-42D Latitude: 34.25341710451455 Longitude: -85.35186161295077 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 58.03 ft Total Depth: 68.03 ft Initial Depth to Water: 5.52 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 63.03 ft Estimated Total Volume Pumped: 7 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 4.74 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850767
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Test Notes:
Seven bottles; Full App III and IV and Major Ions

Weather Conditions:
Sunny, 52 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/13/2024 5:40 PM	00:00	7.15 pH	17.01 °C	320.76 µS/cm	0.61 mg/L	113.00 NTU	-122.1 mV	9.80 ft	200.00 ml/min
2/13/2024 5:45 PM	05:00	7.37 pH	16.94 °C	322.12 µS/cm	0.42 mg/L	77.80 NTU	-151.8 mV	10.02 ft	200.00 ml/min
2/13/2024 5:50 PM	10:00	7.51 pH	16.97 °C	320.91 µS/cm	0.34 mg/L	15.50 NTU	-116.9 mV	10.24 ft	200.00 ml/min
2/13/2024 5:55 PM	15:00	7.58 pH	16.81 °C	322.11 µS/cm	0.33 mg/L	10.50 NTU	-156.6 mV	10.26 ft	200.00 ml/min
2/13/2024 6:00 PM	20:00	7.63 pH	17.05 °C	320.89 µS/cm	0.28 mg/L	9.35 NTU	-113.7 mV	10.26 ft	200.00 ml/min
2/13/2024 6:05 PM	25:00	7.65 pH	17.04 °C	327.38 µS/cm	0.25 mg/L	6.17 NTU	-154.6 mV	10.26 ft	200.00 ml/min
2/13/2024 6:10 PM	30:00	7.67 pH	17.06 °C	328.88 µS/cm	0.22 mg/L	5.44 NTU	-113.2 mV	10.26 ft	200.00 ml/min
2/13/2024 6:15 PM	35:00	7.68 pH	16.72 °C	330.78 µS/cm	0.23 mg/L	4.12 NTU	-110.7 mV	10.26 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-42D	Grab.

Low-Flow Test Report:

Test Date / Time: 2/13/2024 9:49:08 AM
Project: GP-Plant Hammond
Operator Name: Jamie Newsome

Location Name: HGWA-43D Latitude: 34.25639674536349 Longitude: -85.34432334833345 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 51.25 ft Total Depth: 61.25 ft Initial Depth to Water: 14.69 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 56.25 ft Estimated Total Volume Pumped: 8 liter Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 1.46 ft	Instrument Used: Aqua TROLL 400 Serial Number: 968202
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Test Notes:
7 bottles; Full App III and IV and Major Ions

Weather Conditions:
Clear, 55 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/13/2024 9:49 AM	00:00	7.49 pH	16.54 °C	493.67 µS/cm	3.98 mg/L	5.79 NTU	-92.9 mV	15.95 ft	100.00 ml/min
2/13/2024 9:54 AM	05:00	7.48 pH	16.67 °C	489.96 µS/cm	3.49 mg/L	5.59 NTU	-88.6 mV	16.07 ft	100.00 ml/min
2/13/2024 9:59 AM	10:00	7.45 pH	16.79 °C	487.62 µS/cm	3.00 mg/L	3.79 NTU	-85.2 mV	16.10 ft	100.00 ml/min
2/13/2024 10:04 AM	15:00	7.47 pH	16.82 °C	470.23 µS/cm	3.04 mg/L	3.52 NTU	-111.0 mV	16.12 ft	100.00 ml/min
2/13/2024 10:09 AM	20:00	7.49 pH	16.73 °C	479.92 µS/cm	3.12 mg/L	3.25 NTU	-107.1 mV	16.15 ft	100.00 ml/min
2/13/2024 10:14 AM	25:00	7.49 pH	16.80 °C	474.96 µS/cm	2.81 mg/L	3.15 NTU	-109.3 mV	16.15 ft	100.00 ml/min
2/13/2024 10:19 AM	30:00	7.47 pH	16.89 °C	473.52 µS/cm	2.43 mg/L	2.03 NTU	-105.2 mV	16.15 ft	100.00 ml/min
2/13/2024 10:24 AM	35:00	7.49 pH	16.91 °C	475.84 µS/cm	2.77 mg/L	3.17 NTU	-96.8 mV	16.15 ft	100.00 ml/min
2/13/2024 10:29 AM	40:00	7.48 pH	16.91 °C	468.90 µS/cm	3.30 mg/L	1.83 NTU	-100.9 mV	16.15 ft	100.00 ml/min
2/13/2024 10:34 AM	45:00	7.47 pH	16.91 °C	468.49 µS/cm	3.29 mg/L	1.78 NTU	-77.2 mV	16.15 ft	100.00 ml/min
2/13/2024 10:39 AM	50:00	7.47 pH	17.04 °C	465.19 µS/cm	2.99 mg/L	1.91 NTU	-76.7 mV	16.15 ft	100.00 ml/min
2/13/2024 10:44 AM	55:00	7.47 pH	17.05 °C	467.39 µS/cm	3.45 mg/L	1.47 NTU	-97.1 mV	16.15 ft	100.00 ml/min
2/13/2024 10:49 AM	01:00:00	7.48 pH	17.04 °C	462.51 µS/cm	2.88 mg/L	1.44 NTU	-99.5 mV	16.15 ft	100.00 ml/min

2/13/2024 10:54 AM	01:05:00	7.48 pH	17.09 °C	461.49 µS/cm	3.71 mg/L	2.62 NTU	-100.3 mV	16.15 ft	100.00 ml/min
2/13/2024 10:59 AM	01:10:00	7.47 pH	17.40 °C	457.81 µS/cm	3.54 mg/L	1.11 NTU	-97.2 mV	16.15 ft	100.00 ml/min
2/13/2024 11:04 AM	01:15:00	7.47 pH	17.72 °C	460.60 µS/cm	3.65 mg/L	1.17 NTU	-74.8 mV	16.15 ft	100.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-43D	Grab.

Low-Flow Test Report:

Test Date / Time: 2/13/2024 9:56:10 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: HGWA-44D Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 103.5 ft Total Depth: 113.5 ft Initial Depth to Water: 16.34 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 108.5 ft Estimated Total Volume Pumped: 11 liter Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 3.08 ft	Instrument Used: Aqua TROLL 400 Serial Number: 883530
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Test Notes:
Seven bottles; Full App III and IV and Major Ions.

Weather Conditions:
Clear, 50 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/13/2024 9:56 AM	00:00	7.44 pH	16.88 °C	625.20 µS/cm	5.77 mg/L	45.10 NTU	11.0 mV	17.18 ft	100.00 ml/min
2/13/2024 10:01 AM	05:00	7.78 pH	16.49 °C	618.64 µS/cm	3.36 mg/L	42.60 NTU	44.9 mV	16.34 ft	100.00 ml/min
2/13/2024 10:06 AM	10:00	7.85 pH	16.39 °C	618.31 µS/cm	5.25 mg/L	39.80 NTU	51.6 mV	17.52 ft	100.00 ml/min
2/13/2024 10:11 AM	15:00	7.88 pH	16.53 °C	613.57 µS/cm	2.20 mg/L	37.10 NTU	57.6 mV	17.81 ft	100.00 ml/min
2/13/2024 10:16 AM	20:00	7.87 pH	16.44 °C	611.35 µS/cm	3.42 mg/L	35.70 NTU	44.2 mV	17.90 ft	100.00 ml/min
2/13/2024 10:21 AM	25:00	7.89 pH	16.47 °C	606.78 µS/cm	5.45 mg/L	22.50 NTU	44.3 mV	18.27 ft	100.00 ml/min
2/13/2024 10:26 AM	30:00	7.90 pH	16.50 °C	604.50 µS/cm	5.04 mg/L	20.90 NTU	39.8 mV	18.43 ft	100.00 ml/min
2/13/2024 10:31 AM	35:00	7.91 pH	16.54 °C	559.53 µS/cm	5.52 mg/L	23.60 NTU	31.2 mV	18.60 ft	100.00 ml/min
2/13/2024 10:36 AM	40:00	7.91 pH	16.65 °C	603.12 µS/cm	4.87 mg/L	22.10 NTU	23.0 mV	18.90 ft	100.00 ml/min
2/13/2024 10:41 AM	45:00	7.92 pH	16.74 °C	597.94 µS/cm	2.56 mg/L	21.30 NTU	24.8 mV	18.85 ft	100.00 ml/min
2/13/2024 10:46 AM	50:00	7.92 pH	17.08 °C	599.69 µS/cm	5.69 mg/L	20.80 NTU	25.8 mV	18.90 ft	100.00 ml/min
2/13/2024 10:51 AM	55:00	7.93 pH	16.83 °C	612.72 µS/cm	0.38 mg/L	20.10 NTU	23.1 mV	18.95 ft	100.00 ml/min
2/13/2024 10:56 AM	01:00:00	7.94 pH	16.79 °C	614.58 µS/cm	0.84 mg/L	18.90 NTU	19.6 mV	18.97 ft	100.00 ml/min

2/13/2024 11:01 AM	01:05:00	7.94 pH	16.75 °C	623.69 µS/cm	0.61 mg/L	17.50 NTU	-7.1 mV	19.10 ft	100.00 ml/min
2/13/2024 11:06 AM	01:10:00	7.97 pH	16.86 °C	611.03 µS/cm	0.27 mg/L	17.31 NTU	-22.0 mV	19.15 ft	100.00 ml/min
2/13/2024 11:11 AM	01:15:00	7.97 pH	16.81 °C	599.23 µS/cm	0.52 mg/L	16.10 NTU	-47.1 mV	19.30 ft	100.00 ml/min
2/13/2024 11:16 AM	01:20:00	7.99 pH	16.49 °C	608.14 µS/cm	0.25 mg/L	15.60 NTU	-81.9 mV	19.40 ft	100.00 ml/min
2/13/2024 11:21 AM	01:25:00	8.01 pH	16.30 °C	621.74 µS/cm	0.28 mg/L	14.90 NTU	-107.9 mV	19.42 ft	100.00 ml/min
2/13/2024 11:26 AM	01:30:00	8.04 pH	16.02 °C	620.32 µS/cm	0.31 mg/L	13.20 NTU	-124.1 mV	19.42 ft	100.00 ml/min
2/13/2024 11:31 AM	01:35:00	8.06 pH	15.97 °C	619.14 µS/cm	0.71 mg/L	18.60 NTU	-136.8 mV	19.42 ft	100.00 ml/min
2/13/2024 11:36 AM	01:40:00	8.08 pH	15.96 °C	621.94 µS/cm	0.31 mg/L	12.00 NTU	-141.5 mV	19.42 ft	100.00 ml/min
2/13/2024 11:41 AM	01:45:00	8.10 pH	15.94 °C	618.93 µS/cm	0.38 mg/L	7.72 NTU	-146.7 mV	19.42 ft	100.00 ml/min
2/13/2024 11:46 AM	01:50:00	8.10 pH	15.89 °C	619.47 µS/cm	0.42 mg/L	4.84 NTU	-151.4 mV	19.42 ft	100.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-44D	Grab.
HAM-HGWA-FD-01	Grab.

Low-Flow Test Report:

Test Date / Time: 2/17/2024 11:50:30 AM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: HGWC-14 Latitude: 34.249697048248954 Longitude: -85.35189765513441 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 32.98 ft Total Depth: 42.98 ft Initial Depth to Water: 29.6 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 37.98 ft Estimated Total Volume Pumped: 7 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.1 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850767
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Test Notes:
Seven bottles; Full App III and IV and Major Ions

Weather Conditions:
Cloudy, 40 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/17/2024 11:50 AM	00:00	5.19 pH	17.56 °C	1,988.5 µS/cm	0.21 mg/L	23.00 NTU	104.8 mV	29.70 ft	200.00 ml/min
2/17/2024 11:55 AM	05:00	5.17 pH	17.79 °C	1,990.0 µS/cm	0.17 mg/L	19.00 NTU	81.6 mV	29.70 ft	200.00 ml/min
2/17/2024 12:00 PM	10:00	5.10 pH	17.81 °C	1,989.6 µS/cm	0.14 mg/L	11.60 NTU	75.7 mV	29.70 ft	200.00 ml/min
2/17/2024 12:05 PM	15:00	5.06 pH	18.08 °C	1,982.6 µS/cm	0.12 mg/L	7.21 NTU	74.4 mV	29.70 ft	200.00 ml/min
2/17/2024 12:10 PM	20:00	5.05 pH	17.92 °C	1,983.2 µS/cm	0.11 mg/L	5.75 NTU	96.4 mV	29.70 ft	200.00 ml/min
2/17/2024 12:15 PM	25:00	5.04 pH	18.10 °C	1,990.6 µS/cm	0.11 mg/L	4.40 NTU	70.6 mV	29.70 ft	200.00 ml/min
2/17/2024 12:20 PM	30:00	5.05 pH	17.97 °C	1,988.4 µS/cm	0.11 mg/L	4.03 NTU	68.1 mV	29.70 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-14	Grab.

Low-Flow Test Report:

Test Date / Time: 2/17/2024 3:40:21 PM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: HGWC-15 Latitude: 34.249343541482695 Longitude: -85.35380210735403 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 27.96 ft Total Depth: 37.96 ft Initial Depth to Water: 15.84 ft	Pump Type: Peri Tubing Type: Poly Pump Intake From TOC: 32.96 ft Estimated Total Volume Pumped: 6 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.48 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850767
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Test Notes:
Seven bottles; Full App III and IV and Major Ions

Weather Conditions:
Cloudy, 45 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/17/2024 3:40 PM	00:00	6.73 pH	16.20 °C	1,184.6 µS/cm	2.34 mg/L	4.88 NTU	163.4 mV	16.30 ft	200.00 ml/min
2/17/2024 3:45 PM	05:00	6.68 pH	16.11 °C	1,155.5 µS/cm	2.00 mg/L	2.59 NTU	159.9 mV	16.32 ft	200.00 ml/min
2/17/2024 3:50 PM	10:00	6.63 pH	16.33 °C	1,144.9 µS/cm	1.40 mg/L	2.52 NTU	182.5 mV	16.32 ft	200.00 ml/min
2/17/2024 3:55 PM	15:00	6.61 pH	16.47 °C	1,139.6 µS/cm	1.44 mg/L	2.78 NTU	125.6 mV	16.32 ft	200.00 ml/min
2/17/2024 4:00 PM	20:00	6.61 pH	16.24 °C	1,140.2 µS/cm	1.37 mg/L	2.52 NTU	133.1 mV	16.32 ft	200.00 ml/min
2/17/2024 4:05 PM	25:00	6.58 pH	16.52 °C	1,136.5 µS/cm	1.35 mg/L	2.59 NTU	127.4 mV	16.32 ft	200.00 ml/min
2/17/2024 4:10 PM	30:00	6.56 pH	16.65 °C	1,135.0 µS/cm	1.27 mg/L	2.62 NTU	112.8 mV	16.32 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-15	Grab.

Low-Flow Test Report:

Test Date / Time: 2/18/2024 4:46:55 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: HGWC-16 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 23.06 ft Total Depth: 33.06 ft Initial Depth to Water: 14.58 ft	Pump Type: Peri Tubing Type: Poly Pump Intake From TOC: 28.06 ft Estimated Total Volume Pumped: 7 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.77 ft	Instrument Used: Aqua TROLL 400 Serial Number: 883530
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Test Notes:
Seven bottles; Full App III and IV and Major Ions

Weather Conditions:
Clear, 50 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/18/2024 4:46 PM	00:00	7.14 pH	18.08 °C	1,056.0 µS/cm	0.43 mg/L	2.59 NTU	-46.5 mV	15.19 ft	200.00 ml/min
2/18/2024 4:51 PM	05:00	7.12 pH	18.17 °C	1,045.5 µS/cm	0.35 mg/L	1.41 NTU	-31.8 mV	15.25 ft	200.00 ml/min
2/18/2024 4:56 PM	10:00	7.12 pH	18.13 °C	1,054.8 µS/cm	0.32 mg/L	1.45 NTU	-32.8 mV	15.32 ft	200.00 ml/min
2/18/2024 5:01 PM	15:00	7.12 pH	18.04 °C	1,035.0 µS/cm	0.38 mg/L	1.25 NTU	-33.2 mV	15.40 ft	200.00 ml/min
2/18/2024 5:06 PM	20:00	7.12 pH	18.08 °C	1,055.5 µS/cm	0.33 mg/L	0.52 NTU	-33.7 mV	15.35 ft	200.00 ml/min
2/18/2024 5:11 PM	25:00	7.11 pH	18.17 °C	1,048.8 µS/cm	0.36 mg/L	1.21 NTU	-33.7 mV	15.35 ft	200.00 ml/min
2/18/2024 5:16 PM	30:00	7.12 pH	17.90 °C	1,068.9 µS/cm	0.32 mg/L	0.65 NTU	-33.1 mV	15.35 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-16	Grab.
HAM-AP2-FD-01	Grab.

Low-Flow Test Report:

Test Date / Time: 2/17/2024 1:30:34 PM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: HGWC-17 Latitude: 34.250903246024855 Longitude: -85.35485303037368 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 17.79 ft Total Depth: 27.79 ft Initial Depth to Water: 18.9 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 22.79 ft Estimated Total Volume Pumped: 16 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.36 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850767
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Test Notes:
Seven bottles; Full App III and IV and Major Ions

Weather Conditions:
Cloudy, 40 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/17/2024 1:30 PM	00:00	6.54 pH	17.32 °C	1,040.1 µS/cm	0.95 mg/L	57.10 NTU	97.2 mV	19.22 ft	200.00 ml/min
2/17/2024 1:35 PM	05:00	6.52 pH	17.20 °C	1,036.7 µS/cm	0.65 mg/L	74.80 NTU	31.5 mV	19.22 ft	200.00 ml/min
2/17/2024 1:40 PM	10:00	6.53 pH	17.37 °C	1,043.5 µS/cm	0.50 mg/L	61.60 NTU	14.7 mV	19.26 ft	200.00 ml/min
2/17/2024 1:45 PM	15:00	6.53 pH	17.22 °C	1,048.3 µS/cm	0.40 mg/L	34.00 NTU	6.4 mV	19.26 ft	200.00 ml/min
2/17/2024 1:50 PM	20:00	6.53 pH	17.38 °C	1,058.8 µS/cm	0.35 mg/L	17.50 NTU	3.9 mV	19.26 ft	200.00 ml/min
2/17/2024 1:55 PM	25:00	6.53 pH	17.45 °C	1,061.8 µS/cm	0.32 mg/L	15.40 NTU	3.0 mV	19.26 ft	200.00 ml/min
2/17/2024 2:00 PM	30:00	6.53 pH	17.35 °C	1,065.0 µS/cm	0.28 mg/L	12.20 NTU	1.5 mV	19.26 ft	200.00 ml/min
2/17/2024 2:05 PM	35:00	6.53 pH	17.22 °C	1,067.8 µS/cm	0.27 mg/L	28.00 NTU	0.9 mV	19.26 ft	200.00 ml/min
2/17/2024 2:10 PM	40:00	6.53 pH	17.27 °C	1,064.8 µS/cm	0.25 mg/L	23.40 NTU	0.8 mV	19.26 ft	200.00 ml/min
2/17/2024 2:15 PM	45:00	6.53 pH	17.32 °C	1,079.5 µS/cm	0.24 mg/L	17.30 NTU	-0.2 mV	19.26 ft	200.00 ml/min
2/17/2024 2:20 PM	50:00	6.53 pH	17.46 °C	1,079.2 µS/cm	0.22 mg/L	22.10 NTU	-0.8 mV	19.26 ft	200.00 ml/min
2/17/2024 2:25 PM	55:00	6.53 pH	17.41 °C	1,083.5 µS/cm	0.22 mg/L	17.40 NTU	-1.3 mV	19.26 ft	200.00 ml/min
2/17/2024 2:30 PM	01:00:00	6.53 pH	17.29 °C	1,085.6 µS/cm	0.21 mg/L	10.60 NTU	-1.4 mV	19.26 ft	200.00 ml/min

2/17/2024 2:35 PM	01:05:00	6.53 pH	17.44 °C	1,086.7 µS/cm	0.21 mg/L	8.54 NTU	-1.7 mV	19.26 ft	200.00 ml/min
2/17/2024 2:40 PM	01:10:00	6.53 pH	17.43 °C	1,092.2 µS/cm	0.21 mg/L	6.24 NTU	-2.0 mV	19.26 ft	200.00 ml/min
2/17/2024 2:45 PM	01:15:00	6.54 pH	17.51 °C	1,093.1 µS/cm	0.20 mg/L	4.88 NTU	-2.3 mV	19.26 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-17	Grab.

Low-Flow Test Report:

Test Date / Time: 2/18/2024 9:30:47 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: HGWC-18 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 17.71 ft Total Depth: 27.71 ft Initial Depth to Water: 17.7 ft	Pump Type: Peri Tubing Type: Poly Pump Intake From TOC: 22.71 ft Estimated Total Volume Pumped: 3.5 liter Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 0.1 ft	Instrument Used: Aqua TROLL 400 Serial Number: 883530
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Test Notes:
Seven bottles; Full App III and IV and Major Ions

Weather Conditions:
Clear, 40 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/18/2024 9:30 AM	00:00	4.58 pH	10.77 °C	1,771.6 µS/cm	1.49 mg/L	4.76 NTU	219.2 mV	17.79 ft	100.00 ml/min
2/18/2024 9:35 AM	05:00	4.67 pH	11.38 °C	1,727.0 µS/cm	0.91 mg/L	4.26 NTU	285.3 mV	17.79 ft	100.00 ml/min
2/18/2024 9:40 AM	10:00	4.71 pH	11.29 °C	1,727.6 µS/cm	0.87 mg/L	4.30 NTU	238.8 mV	17.79 ft	100.00 ml/min
2/18/2024 9:45 AM	15:00	4.69 pH	11.48 °C	1,719.2 µS/cm	0.94 mg/L	4.23 NTU	301.7 mV	17.79 ft	100.00 ml/min
2/18/2024 9:50 AM	20:00	4.72 pH	11.29 °C	1,702.4 µS/cm	0.93 mg/L	4.11 NTU	246.3 mV	17.80 ft	100.00 ml/min
2/18/2024 9:55 AM	25:00	4.73 pH	11.14 °C	1,707.3 µS/cm	0.91 mg/L	4.02 NTU	241.8 mV	17.80 ft	100.00 ml/min
2/18/2024 10:00 AM	30:00	4.73 pH	11.35 °C	1,718.2 µS/cm	0.90 mg/L	3.26 NTU	243.2 mV	17.80 ft	100.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-18	Grab.

Low-Flow Test Report:

Test Date / Time: 2/18/2024 10:55:14 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-21D Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 41.88 ft Total Depth: 51.88 ft Initial Depth to Water: 17.68 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 46.88 ft Estimated Total Volume Pumped: 30 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.22 ft	Instrument Used: Aqua TROLL 400 Serial Number: 883530
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Test Notes:
Seven bottles; Full App III and IV and Major Ions

Weather Conditions:
Clear, 45 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/18/2024 10:55 AM	00:00	6.78 pH	15.52 °C	720.00 µS/cm	0.48 mg/L	827.00 NTU	-123.4 mV	17.90 ft	200.00 ml/min
2/18/2024 11:00 AM	05:00	6.90 pH	15.76 °C	700.58 µS/cm	0.35 mg/L	417.00 NTU	-112.9 mV	17.90 ft	200.00 ml/min
2/18/2024 11:05 AM	10:00	6.98 pH	15.85 °C	669.54 µS/cm	0.17 mg/L	387.00 NTU	-107.3 mV	17.90 ft	200.00 ml/min
2/18/2024 11:10 AM	15:00	7.03 pH	16.16 °C	657.73 µS/cm	0.11 mg/L	351.00 NTU	-107.8 mV	17.90 ft	200.00 ml/min
2/18/2024 11:15 AM	20:00	7.05 pH	16.26 °C	650.35 µS/cm	0.10 mg/L	120.00 NTU	-106.9 mV	17.90 ft	200.00 ml/min
2/18/2024 11:20 AM	25:00	7.08 pH	16.47 °C	648.71 µS/cm	0.10 mg/L	108.00 NTU	-105.8 mV	17.90 ft	200.00 ml/min
2/18/2024 11:25 AM	30:00	7.09 pH	16.74 °C	647.58 µS/cm	0.10 mg/L	69.40 NTU	-108.9 mV	17.90 ft	200.00 ml/min
2/18/2024 11:30 AM	35:00	7.11 pH	16.73 °C	646.39 µS/cm	0.10 mg/L	51.50 NTU	-103.4 mV	17.90 ft	200.00 ml/min
2/18/2024 11:35 AM	40:00	7.12 pH	16.74 °C	645.48 µS/cm	0.10 mg/L	37.20 NTU	-101.4 mV	17.90 ft	200.00 ml/min
2/18/2024 11:40 AM	45:00	7.12 pH	16.83 °C	646.65 µS/cm	0.11 mg/L	21.30 NTU	-100.1 mV	17.90 ft	200.00 ml/min
2/18/2024 11:45 AM	50:00	7.13 pH	17.05 °C	647.37 µS/cm	0.11 mg/L	23.90 NTU	-99.1 mV	17.90 ft	200.00 ml/min
2/18/2024 11:50 AM	55:00	7.14 pH	17.01 °C	647.24 µS/cm	0.11 mg/L	20.10 NTU	-96.9 mV	17.90 ft	200.00 ml/min
2/18/2024 11:55 AM	01:00:00	7.14 pH	17.08 °C	647.20 µS/cm	0.11 mg/L	17.10 NTU	-95.4 mV	17.90 ft	200.00 ml/min

2/18/2024 12:00 PM	01:05:00	7.14 pH	17.19 °C	647.80 µS/cm	0.11 mg/L	18.30 NTU	-93.5 mV	17.90 ft	200.00 ml/min
2/18/2024 12:05 PM	01:10:00	7.15 pH	17.23 °C	648.76 µS/cm	0.11 mg/L	13.80 NTU	-91.6 mV	17.90 ft	200.00 ml/min
2/18/2024 12:10 PM	01:15:00	7.15 pH	17.32 °C	648.72 µS/cm	0.11 mg/L	10.90 NTU	-89.8 mV	17.90 ft	200.00 ml/min
2/18/2024 12:15 PM	01:20:00	7.16 pH	17.25 °C	649.22 µS/cm	0.11 mg/L	12.40 NTU	-87.8 mV	17.90 ft	200.00 ml/min
2/18/2024 12:20 PM	01:25:00	7.16 pH	16.98 °C	649.69 µS/cm	0.12 mg/L	10.90 NTU	-86.7 mV	17.90 ft	200.00 ml/min
2/18/2024 12:25 PM	01:30:00	7.17 pH	16.94 °C	648.16 µS/cm	0.12 mg/L	9.81 NTU	-85.4 mV	17.90 ft	200.00 ml/min
2/18/2024 12:30 PM	01:35:00	7.17 pH	16.91 °C	651.33 µS/cm	0.13 mg/L	9.50 NTU	-84.6 mV	17.90 ft	200.00 ml/min
2/18/2024 12:35 PM	01:40:00	7.18 pH	16.79 °C	648.85 µS/cm	0.13 mg/L	8.73 NTU	-82.0 mV	17.90 ft	200.00 ml/min
2/18/2024 12:40 PM	01:45:00	7.17 pH	17.01 °C	652.07 µS/cm	0.14 mg/L	7.67 NTU	-82.3 mV	17.90 ft	200.00 ml/min
2/18/2024 12:45 PM	01:50:00	7.17 pH	17.19 °C	652.04 µS/cm	0.14 mg/L	7.37 NTU	-80.1 mV	17.90 ft	200.00 ml/min
2/18/2024 12:50 PM	01:55:00	7.18 pH	17.20 °C	652.80 µS/cm	0.13 mg/L	6.92 NTU	-74.7 mV	17.90 ft	200.00 ml/min
2/18/2024 12:55 PM	02:00:00	7.18 pH	17.03 °C	652.57 µS/cm	0.14 mg/L	6.76 NTU	-71.6 mV	17.90 ft	200.00 ml/min
2/18/2024 1:00 PM	02:05:00	7.18 pH	17.01 °C	653.55 µS/cm	0.14 mg/L	6.50 NTU	-70.9 mV	17.90 ft	200.00 ml/min
2/18/2024 1:05 PM	02:10:00	7.18 pH	17.30 °C	654.89 µS/cm	0.14 mg/L	5.81 NTU	-71.6 mV	17.90 ft	200.00 ml/min
2/18/2024 1:10 PM	02:15:00	7.19 pH	17.10 °C	653.50 µS/cm	0.14 mg/L	5.22 NTU	-69.4 mV	17.90 ft	200.00 ml/min
2/18/2024 1:15 PM	02:20:00	7.19 pH	16.98 °C	654.68 µS/cm	0.14 mg/L	5.17 NTU	-70.8 mV	17.90 ft	200.00 ml/min
2/18/2024 1:20 PM	02:25:00	7.19 pH	17.15 °C	656.26 µS/cm	0.14 mg/L	5.12 NTU	-73.1 mV	17.90 ft	200.00 ml/min
2/18/2024 1:25 PM	02:30:00	7.19 pH	17.25 °C	656.84 µS/cm	0.14 mg/L	4.23 NTU	-72.9 mV	17.90 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-21D	Grab.

Low-Flow Test Report:

Test Date / Time: 2/18/2024 2:57:18 PM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: MW-22 Latitude: 34.24929643518687 Longitude: -85.3537930548986 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 27.47 ft Total Depth: 37.47 ft Initial Depth to Water: 14.31 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 32.47 ft Estimated Total Volume Pumped: 14.5 liter Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 10.49 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850767
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Test Notes:
Seven bottles; Full App III and IV and Major Ions

Weather Conditions:
Sunny, 50 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/18/2024 2:57 PM	00:00	6.10 pH	18.07 °C	1,272.7 µS/cm	4.05 mg/L	26.60 NTU	123.9 mV	15.52 ft	200.00 ml/min
2/18/2024 3:02 PM	05:00	5.65 pH	17.85 °C	1,270.5 µS/cm	3.58 mg/L	27.60 NTU	223.5 mV	16.19 ft	200.00 ml/min
2/18/2024 3:07 PM	10:00	5.61 pH	17.68 °C	1,253.0 µS/cm	3.55 mg/L	14.00 NTU	371.3 mV	17.34 ft	200.00 ml/min
2/18/2024 3:12 PM	15:00	5.59 pH	17.63 °C	1,261.2 µS/cm	3.42 mg/L	8.08 NTU	411.1 mV	18.60 ft	200.00 ml/min
2/18/2024 3:17 PM	20:00	5.59 pH	17.73 °C	1,262.6 µS/cm	3.23 mg/L	6.75 NTU	309.7 mV	19.53 ft	200.00 ml/min
2/18/2024 3:22 PM	25:00	5.58 pH	17.72 °C	1,259.8 µS/cm	3.07 mg/L	4.65 NTU	425.0 mV	20.46 ft	200.00 ml/min
2/18/2024 3:27 PM	30:00	5.57 pH	17.74 °C	1,261.8 µS/cm	2.93 mg/L	4.00 NTU	437.9 mV	21.42 ft	200.00 ml/min
2/18/2024 3:32 PM	35:00	5.57 pH	17.67 °C	1,260.9 µS/cm	2.79 mg/L	3.34 NTU	446.1 mV	22.18 ft	200.00 ml/min
2/18/2024 3:37 PM	40:00	5.57 pH	17.73 °C	1,263.4 µS/cm	2.68 mg/L	2.50 NTU	448.6 mV	22.91 ft	200.00 ml/min
2/18/2024 3:42 PM	45:00	5.57 pH	17.72 °C	1,267.8 µS/cm	2.54 mg/L	2.93 NTU	333.2 mV	23.61 ft	200.00 ml/min
2/18/2024 3:47 PM	50:00	5.57 pH	17.59 °C	1,263.0 µS/cm	2.45 mg/L	2.42 NTU	304.8 mV	24.29 ft	100.00 ml/min
2/18/2024 3:52 PM	55:00	5.56 pH	17.54 °C	1,260.3 µS/cm	2.22 mg/L	2.42 NTU	407.8 mV	24.36 ft	100.00 ml/min
2/18/2024 3:57 PM	01:00:00	5.56 pH	17.26 °C	1,265.8 µS/cm	1.92 mg/L	2.64 NTU	422.0 mV	24.44 ft	100.00 ml/min

2/18/2024 4:02 PM	01:05:00	5.56 pH	17.23 °C	1,268.5 µS/cm	1.61 mg/L	2.75 NTU	419.6 mV	24.58 ft	100.00 ml/min
2/18/2024 4:07 PM	01:10:00	5.56 pH	17.33 °C	1,269.3 µS/cm	1.40 mg/L	2.68 NTU	404.8 mV	24.70 ft	100.00 ml/min
2/18/2024 4:12 PM	01:15:00	5.56 pH	17.36 °C	1,270.5 µS/cm	1.28 mg/L	2.85 NTU	400.5 mV	24.80 ft	100.00 ml/min
2/18/2024 4:17 PM	01:20:00	5.56 pH	17.46 °C	1,272.7 µS/cm	1.15 mg/L	2.67 NTU	278.7 mV	24.86 ft	100.00 ml/min
2/18/2024 4:22 PM	01:25:00	5.56 pH	17.48 °C	1,265.6 µS/cm	1.04 mg/L	2.24 NTU	365.3 mV	24.94 ft	100.00 ml/min
2/18/2024 4:27 PM	01:30:00	5.57 pH	17.10 °C	1,273.8 µS/cm	0.96 mg/L	2.24 NTU	370.7 mV	24.98 ft	100.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-22	Grab.

Low-Flow Test Report:

Test Date / Time: 2/18/2024 1:40:14 PM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: MW-23D Latitude: 34.24936445433111 Longitude: -85.3537848406335 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 52.24 ft Total Depth: 62.24 ft Initial Depth to Water: 17.62 ft	Pump Type: Peri Tubing Type: Poly Pump Intake From TOC: 57.24 ft Estimated Total Volume Pumped: 6 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.12 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850767
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Test Notes:
Seven bottles; Full App III and IV and Major Ions

Weather Conditions:
Sunny, 48 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/18/2024 1:40 PM	00:00	6.86 pH	16.84 °C	1,558.5 µS/cm	0.42 mg/L	3.91 NTU	-101.3 mV	17.74 ft	200.00 ml/min
2/18/2024 1:45 PM	05:00	6.92 pH	16.45 °C	1,544.1 µS/cm	0.29 mg/L	1.31 NTU	-126.9 mV	17.74 ft	200.00 ml/min
2/18/2024 1:50 PM	10:00	6.94 pH	16.44 °C	1,556.7 µS/cm	0.25 mg/L	1.11 NTU	-82.4 mV	17.74 ft	200.00 ml/min
2/18/2024 1:55 PM	15:00	6.94 pH	17.10 °C	1,573.9 µS/cm	0.23 mg/L	0.68 NTU	-73.6 mV	17.74 ft	200.00 ml/min
2/18/2024 2:00 PM	20:00	6.94 pH	17.15 °C	1,570.5 µS/cm	0.21 mg/L	1.22 NTU	-65.9 mV	17.74 ft	200.00 ml/min
2/18/2024 2:05 PM	25:00	6.92 pH	17.38 °C	1,569.0 µS/cm	0.19 mg/L	0.71 NTU	-56.7 mV	17.74 ft	200.00 ml/min
2/18/2024 2:10 PM	30:00	6.92 pH	16.92 °C	1,565.0 µS/cm	0.18 mg/L	1.21 NTU	-52.5 mV	17.74 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-23D	Grab.

Low-Flow Test Report:

Test Date / Time: 2/18/2024 11:20:29 AM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: MW-33 Latitude: 34.2496022908336 Longitude: -85.35197619356713 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 27.72 ft Total Depth: 37.72 ft Initial Depth to Water: 26.37 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 32.72 ft Estimated Total Volume Pumped: 7 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.23 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850767
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Test Notes:
Seven bottles; Full App III and IV and Major Ions

Weather Conditions:
Sunny, 40 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/18/2024 11:20 AM	00:00	4.69 pH	17.95 °C	1,959.3 µS/cm	0.63 mg/L	52.30 NTU	408.1 mV	26.58 ft	200.00 ml/min
2/18/2024 11:25 AM	05:00	4.69 pH	17.99 °C	1,930.3 µS/cm	0.42 mg/L	36.30 NTU	487.2 mV	26.58 ft	200.00 ml/min
2/18/2024 11:30 AM	10:00	4.69 pH	18.18 °C	1,913.0 µS/cm	0.33 mg/L	14.90 NTU	338.8 mV	26.60 ft	200.00 ml/min
2/18/2024 11:35 AM	15:00	4.70 pH	18.31 °C	1,883.1 µS/cm	0.28 mg/L	10.90 NTU	293.3 mV	26.60 ft	200.00 ml/min
2/18/2024 11:40 AM	20:00	4.71 pH	18.38 °C	1,862.4 µS/cm	0.23 mg/L	5.69 NTU	265.3 mV	26.60 ft	200.00 ml/min
2/18/2024 11:45 AM	25:00	4.72 pH	18.19 °C	1,842.6 µS/cm	0.21 mg/L	4.42 NTU	235.5 mV	26.60 ft	200.00 ml/min
2/18/2024 11:50 AM	30:00	4.73 pH	18.34 °C	1,813.5 µS/cm	0.19 mg/L	3.91 NTU	200.8 mV	26.60 ft	200.00 ml/min
2/18/2024 11:55 AM	35:00	4.74 pH	18.04 °C	1,818.5 µS/cm	0.18 mg/L	2.96 NTU	167.5 mV	26.60 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-33	Grab.

Low-Flow Test Report:

Test Date / Time: 2/18/2024 9:55:24 AM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: MW-34D Latitude: 34.24967810514779 Longitude: -85.3520773631384 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 63.68 ft Total Depth: 73.68 ft Initial Depth to Water: 31.79 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 68.68 ft Estimated Total Volume Pumped: 7 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.1 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850767
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Test Notes:
Seven bottles; Full App III and IV and Major Ions

Weather Conditions:
Sunny, 31 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/18/2024 9:55 AM	00:00	7.08 pH	17.75 °C	2,380.5 µS/cm	0.42 mg/L	7.87 NTU	26.7 mV	31.89 ft	200.00 ml/min
2/18/2024 10:00 AM	05:00	7.03 pH	17.68 °C	2,300.9 µS/cm	0.48 mg/L	5.70 NTU	0.1 mV	31.89 ft	200.00 ml/min
2/18/2024 10:05 AM	10:00	7.00 pH	18.03 °C	2,293.9 µS/cm	0.45 mg/L	4.45 NTU	-5.9 mV	31.89 ft	200.00 ml/min
2/18/2024 10:10 AM	15:00	7.00 pH	18.04 °C	2,288.7 µS/cm	0.44 mg/L	2.99 NTU	-9.4 mV	31.89 ft	200.00 ml/min
2/18/2024 10:15 AM	20:00	7.01 pH	18.07 °C	2,297.2 µS/cm	0.44 mg/L	3.45 NTU	-10.7 mV	31.89 ft	200.00 ml/min
2/18/2024 10:20 AM	25:00	7.02 pH	18.11 °C	2,311.8 µS/cm	0.44 mg/L	2.89 NTU	-12.0 mV	31.89 ft	200.00 ml/min
2/18/2024 10:25 AM	30:00	7.02 pH	18.12 °C	2,310.7 µS/cm	0.51 mg/L	3.30 NTU	-16.9 mV	31.89 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-34D	Grab.

Low-Flow Test Report:

Test Date / Time: 2/19/2024 10:56:15 AM
Project: GP-Plant Hammond
Operator Name: Jacob Tracy

Location Name: MW-35 Latitude: 34.24943113237084 Longitude: -85.35191081472239 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 13.52 ft Total Depth: 23.52 ft Initial Depth to Water: 9.58 ft	Pump Type: Peri Tubing Type: Poly Pump Intake From TOC: 18.52 ft Estimated Total Volume Pumped: 8 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 2.99 ft	Instrument Used: Aqua TROLL 400 Serial Number: 968202
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Test Notes:
Seven bottles; Full App III and IV and Major Ions

Weather Conditions:
Sunny, 52 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/19/2024 10:56 AM	00:00	5.59 pH	15.42 °C	2,380.4 µS/cm	1.26 mg/L	0.63 NTU	161.8 mV	11.50 ft	200.00 ml/min
2/19/2024 11:01 AM	05:00	5.60 pH	15.70 °C	2,342.8 µS/cm	1.16 mg/L	0.69 NTU	131.8 mV	11.65 ft	200.00 ml/min
2/19/2024 11:06 AM	10:00	5.60 pH	16.10 °C	2,289.5 µS/cm	0.92 mg/L	0.50 NTU	119.5 mV	11.87 ft	200.00 ml/min
2/19/2024 11:11 AM	15:00	5.58 pH	16.37 °C	2,302.4 µS/cm	0.85 mg/L	0.55 NTU	113.4 mV	12.11 ft	200.00 ml/min
2/19/2024 11:16 AM	20:00	5.58 pH	16.48 °C	2,298.6 µS/cm	0.71 mg/L	0.43 NTU	108.6 mV	12.27 ft	200.00 ml/min
2/19/2024 11:21 AM	25:00	5.55 pH	16.28 °C	2,324.9 µS/cm	0.88 mg/L	0.39 NTU	143.9 mV	12.36 ft	200.00 ml/min
2/19/2024 11:26 AM	30:00	5.53 pH	16.16 °C	2,320.2 µS/cm	0.98 mg/L	0.26 NTU	106.5 mV	12.44 ft	200.00 ml/min
2/19/2024 11:31 AM	35:00	5.51 pH	16.10 °C	2,401.1 µS/cm	0.86 mg/L	0.31 NTU	98.4 mV	12.57 ft	200.00 ml/min

Samples

Sample ID:	Description:
MW-35	Grab.

Low-Flow Test Report:

Test Date / Time: 2/18/2024 2:12:04 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-37D Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 66.63 ft Total Depth: 76.63 ft Initial Depth to Water: 17.37 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 71.63 ft Estimated Total Volume Pumped: 19.75 liter Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 23.47 ft	Instrument Used: Aqua TROLL 400 Serial Number: 883530
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Test Notes:
Seven bottles; Full App. III and IV and Major Ions

Weather Conditions:
Clear, 50 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/18/2024 2:12 PM	00:00	7.47 pH	18.13 °C	373.89 µS/cm	0.32 mg/L	16.10 NTU	-39.9 mV	20.80 ft	250.00 ml/min
2/18/2024 2:17 PM	05:00	7.51 pH	17.89 °C	369.50 µS/cm	0.33 mg/L	15.20 NTU	341.7 mV	22.30 ft	250.00 ml/min
2/18/2024 2:22 PM	10:00	7.55 pH	17.91 °C	367.98 µS/cm	0.37 mg/L	10.80 NTU	419.0 mV	24.20 ft	250.00 ml/min
2/18/2024 2:27 PM	15:00	7.57 pH	17.87 °C	367.89 µS/cm	0.41 mg/L	9.51 NTU	457.7 mV	26.11 ft	250.00 ml/min
2/18/2024 2:32 PM	20:00	7.56 pH	18.04 °C	367.71 µS/cm	0.47 mg/L	7.52 NTU	480.9 mV	28.00 ft	250.00 ml/min
2/18/2024 2:37 PM	25:00	7.57 pH	18.06 °C	367.49 µS/cm	0.53 mg/L	6.70 NTU	504.0 mV	29.00 ft	250.00 ml/min
2/18/2024 2:42 PM	30:00	7.58 pH	17.99 °C	368.06 µS/cm	0.62 mg/L	5.12 NTU	521.9 mV	30.13 ft	250.00 ml/min
2/18/2024 2:47 PM	35:00	7.59 pH	18.05 °C	370.03 µS/cm	0.73 mg/L	3.63 NTU	426.3 mV	31.80 ft	250.00 ml/min
2/18/2024 2:52 PM	40:00	7.59 pH	18.03 °C	370.74 µS/cm	0.83 mg/L	2.99 NTU	437.2 mV	32.57 ft	250.00 ml/min
2/18/2024 2:57 PM	45:00	7.60 pH	18.00 °C	370.69 µS/cm	0.90 mg/L	3.12 NTU	439.0 mV	33.70 ft	250.00 ml/min
2/18/2024 3:02 PM	50:00	7.60 pH	17.93 °C	368.70 µS/cm	0.94 mg/L	2.91 NTU	563.9 mV	34.81 ft	250.00 ml/min
2/18/2024 3:07 PM	55:00	7.61 pH	17.86 °C	370.46 µS/cm	0.98 mg/L	1.71 NTU	465.8 mV	35.53 ft	250.00 ml/min
2/18/2024 3:12 PM	01:00:00	7.61 pH	17.69 °C	369.82 µS/cm	1.02 mg/L	2.51 NTU	578.1 mV	37.50 ft	250.00 ml/min

2/18/2024 3:17 PM	01:05:00	7.61 pH	17.66 °C	369.96 µS/cm	1.08 mg/L	1.53 NTU	581.0 mV	40.00 ft	250.00 ml/min
2/18/2024 3:22 PM	01:10:00	7.62 pH	17.26 °C	368.47 µS/cm	1.14 mg/L	2.14 NTU	585.5 mV	40.15 ft	250.00 ml/min
2/18/2024 3:27 PM	01:15:00	7.63 pH	17.04 °C	368.08 µS/cm	1.04 mg/L	3.11 NTU	547.7 mV	40.29 ft	250.00 ml/min
2/18/2024 3:32 PM	01:20:00	7.63 pH	17.10 °C	366.45 µS/cm	0.78 mg/L	2.11 NTU	483.4 mV	40.40 ft	250.00 ml/min
2/18/2024 3:37 PM	01:25:00	7.65 pH	16.56 °C	368.09 µS/cm	0.62 mg/L	0.75 NTU	341.6 mV	40.55 ft	250.00 ml/min
2/18/2024 3:42 PM	01:30:00	7.64 pH	16.58 °C	368.93 µS/cm	0.55 mg/L	1.51 NTU	265.9 mV	40.70 ft	250.00 ml/min
2/18/2024 3:47 PM	01:35:00	7.65 pH	16.54 °C	369.35 µS/cm	0.53 mg/L	1.38 NTU	199.6 mV	40.84 ft	250.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-37D	Grab.

Low-Flow Test Report:

Test Date / Time: 2/19/2024 12:45:33 PM
Project: GP-Plant Hammond
Operator Name: Jacob Tracy

Location Name: MW-51 Latitude: 34.24938549290807 Longitude: -85.35193763681254 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 18.9 ft Total Depth: 28.9 ft Initial Depth to Water: 9.97 ft	Pump Type: Peri Tubing Type: Poly Pump Intake From TOC: 23.9 ft Estimated Total Volume Pumped: 10 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 1.03 ft	Instrument Used: Aqua TROLL 400 Serial Number: 968202
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Test Notes:
Seven bottles; Full App. III and IV and Major Ions

Weather Conditions:
Sunny, 52 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/19/2024 12:45 PM	00:00	6.22 pH	16.59 °C	2,278.3 µS/cm	0.32 mg/L	16.40 NTU	79.7 mV	10.89 ft	200.00 ml/min
2/19/2024 12:50 PM	05:00	6.21 pH	16.64 °C	2,327.8 µS/cm	0.46 mg/L	13.40 NTU	62.6 mV	10.93 ft	200.00 ml/min
2/19/2024 12:55 PM	10:00	6.20 pH	16.73 °C	2,163.9 µS/cm	0.70 mg/L	11.20 NTU	62.2 mV	10.95 ft	200.00 ml/min
2/19/2024 1:00 PM	15:00	6.16 pH	16.73 °C	2,271.0 µS/cm	0.43 mg/L	7.82 NTU	93.6 mV	11.00 ft	200.00 ml/min
2/19/2024 1:05 PM	20:00	6.12 pH	16.91 °C	2,302.3 µS/cm	0.63 mg/L	4.09 NTU	68.4 mV	11.00 ft	200.00 ml/min
2/19/2024 1:10 PM	25:00	6.13 pH	16.92 °C	2,269.6 µS/cm	0.70 mg/L	2.93 NTU	70.0 mV	11.00 ft	200.00 ml/min
2/19/2024 1:15 PM	30:00	6.11 pH	16.98 °C	2,255.1 µS/cm	0.50 mg/L	2.01 NTU	71.5 mV	11.00 ft	200.00 ml/min
2/19/2024 1:20 PM	35:00	6.11 pH	17.14 °C	2,204.4 µS/cm	0.38 mg/L	3.13 NTU	72.1 mV	11.00 ft	200.00 ml/min
2/19/2024 1:25 PM	40:00	6.08 pH	17.04 °C	2,261.4 µS/cm	0.45 mg/L	1.22 NTU	72.4 mV	11.00 ft	200.00 ml/min

Samples

Sample ID:	Description:
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MW-51	Grab.
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CALIBRATION REPORTS

Site Name: GP Hammond

Field Instrumentation Calibration Form

Date: 2/13/24Calibrated By: C. CAINField Conditions: Cloudy 35

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>Hantrill</u>	<u>850767</u>
Turbidity Meter	<u>2400</u>	<u>2209000008x</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (μS/cm)	4,490	<u>24000244</u>	<u>5/24</u>	<u>Zn-Situ</u>
pH (SU)	4.00	<u>24000044</u>	<u>6/24</u>	<u>Zn-Situ</u>
pH (SU)	7.00	<u>22290139</u>	<u>4/24</u>	<u>Zn-Situ</u>
pH (SU)	10.00	<u>22110130</u>	<u>4/24</u>	<u>Zn-Situ</u>
D.O. (%)	N/A			
ORP (mV)	228.0	<u>24002258</u>	<u>6/24</u>	<u>Zn-Situ</u>

Calibration					
Time Start <u>0745</u>		Time Finish <u>0820</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (μS/cm)	4,490	<u>4490</u>	<u>10.64</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.0</u>	<u>10.64</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.0</u>	<u>7.0</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10</u>	<u>10.0</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100</u>	<u>100</u>	± 10%	NA
ORP (mV)	228.0	<u>228</u>	<u>228</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>20</u>	<u>20</u>	± 10% of standard	EPA 2023
	<u>100</u>	<u>100</u>		
	<u>800</u>	<u>800</u>		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (μS/cm)	4,490	<u>4490</u>	<u>19.6</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.0</u>	<u>20.3</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.0</u>	<u>18.7</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.0</u>	<u>18.9</u>	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>20</u>	<u>20</u>	± 10% of standard	EPA 2023
	<u>100</u>	<u>100</u>		
	<u>800</u>	<u>800</u>		

Notes:

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 2/13/2024Calibrated By: TKField Conditions: Clear, 40°F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>Agilent, W1142</u>	<u>8563530</u>
Turbidity Meter	<u>hach</u>	<u>220500043</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance ($\mu\text{S}/\text{cm}$)	4,490	<u>24050004</u>	<u>5/20/24</u>	<u>1172114</u>
pH (SU)	4.00	<u>↓</u>	<u>↓</u>	<u>↓</u>
pH (SU)	7.00	<u>22290139</u>	<u>4/20/24</u>	<u>↓</u>
pH (SU)	10.00	<u>22110130</u>	<u>4/7/24</u>	<u>↓</u>
D.O. (%)	N/A	<u>↓</u>	<u>↓</u>	<u>↓</u>
ORP (mV)	228.0	<u>22100756</u>	<u>6/1/24</u>	<u>↓</u>

Calibration					
Time Start	<u>0730</u>	Time Finish	<u>0800</u>		
Parameter	Standard	Calibration Value	Calibration Solution Temperature ($^{\circ}\text{C}$)	Acceptance Criteria	Reference
Specific Conductance ($\mu\text{S}/\text{cm}$)	4,490	<u>4490</u>	<u>11.1</u>	$\pm 10\%$ of standard	EPA 2023
pH (SU)	4.00	<u>4.00</u>	<u>11.23</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>11.35</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>11.50</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100</u>	<u>10.40</u>	$\pm 10\%$	NA
ORP (mV)	228.0	<u>228</u>	<u>11.32</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>20</u>	<u>20</u>	$\pm 10\%$ of standard	EPA 2023
	<u>100</u>	<u>100</u>		
	<u>500</u>	<u>500</u>		
	<u>1000</u>	<u>1000</u>		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature ($^{\circ}\text{C}$)	Acceptance Criteria	Reference
Specific Conductance ($\mu\text{S}/\text{cm}$)	4,490	<u>4461</u>	<u>14.65</u>	$\pm 10\%$ of standard	EPA 2023
pH (SU)	4.00	<u>4.01</u>	<u>18.01</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.03</u>	<u>18.91</u>	± 0.1	GWMP
pH (SU)	10.00		<u>9.91</u>	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>10</u>	<u>9.99</u>	$\pm 10\%$ of standard	EPA 2023
	<u>20</u>	<u>19.98</u>		
	<u>200</u>	<u>199.1</u>		
	<u>500</u>	<u>500</u>		

Notes:

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 2/13/24Calibrated By: J. NewcomeField Conditions: Murky, Clear Skies

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>Aquatrol</u>	<u>85672</u>
Turbidity Meter	<u>2100Q</u>	<u>220800000</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance ($\mu\text{S}/\text{cm}$)	4,490	<u>24080004</u>	<u>06/24</u>	<u>In Situ</u>
pH (SU)	4.00	<u>24080004</u>	<u>05/24</u>	<u>In Situ</u>
pH (SU)	7.00	<u>22210137</u>	<u>04/24</u>	<u>In Situ</u>
pH (SU)	10.00	<u>22110130</u>	<u>04/24</u>	<u>In Situ</u>
D.O. (%)	N/A	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
ORP (mV)	228.0	<u>2472265</u>	<u>06/24</u>	<u>In Situ</u>

Calibration					
Time Start	Time Finish				
Parameter	Standard	Calibration Value	Calibration Solution Temperature ($^{\circ}\text{C}$)	Acceptance Criteria	Reference
Specific Conductance ($\mu\text{S}/\text{cm}$)	4,490	<u>4490</u>	<u>8.12</u>	$\pm 10\%$ of standard	EPA 2023
pH (SU)	4.00	<u>4</u>	<u>9.13</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7</u>	<u>9.00</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10</u>	<u>9.33</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100</u>	<u>8.42</u>	$\pm 10\%$	NA
ORP (mV)	228.0	<u>228</u>	<u>1.55</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>10 NTU</u>	<u>9.8</u>		
	<u>20 NTU</u>	<u>19.7</u>		
	<u>100 NTU</u>	<u>94.3</u>		
	<u>500 NTU</u>	<u>465</u>	$\pm 10\%$ of standard	EPA 2023

Calibration Check					
Time Start	Time Finish				
Parameter	Standard	Calibration Value	Calibration Solution Temperature ($^{\circ}\text{C}$)	Acceptance Criteria	Reference
Specific Conductance ($\mu\text{S}/\text{cm}$)	4,490	<u>4490</u>	<u>9.70</u>	$\pm 10\%$ of standard	EPA 2023
pH (SU)	4.00	<u>4</u>	<u>9.32</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7</u>	<u>9.21</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10</u>	<u>10.10</u>	± 0.1	GWMP

Turbidity (NTU)	Standard (NTU)	Calibration Value	Acceptance Criteria	Reference
	<u>10</u>	<u>9.9</u>		
	<u>20</u>	<u>19.7</u>		
	<u>100</u>	<u>93.1</u>		
	<u>500</u>	<u>465</u>	$\pm 10\%$ of standard	EPA 2023

Notes:

Site Name: GP Plant Hammond

Field Instrumentation Calibration Form

Date: 2/17/24Calibrated By: C. CHINField Conditions: cloudy 32F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>Hanna HI9141</u>	<u>880767</u>
Turbidity Meter	<u>21918</u>	<u>22090000000000000000</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	<u>24000044</u>	<u>5/24</u>	<u>In-site</u>
pH (SU)	4.00	<u>24000044</u>	<u>5/24</u>	<u>In-site</u>
pH (SU)	7.00	<u>22290139</u>	<u>4/24</u>	<u>In-site</u>
pH (SU)	10.00	<u>22110130</u>	<u>4/24</u>	<u>In-site</u>
D.O. (%)	N/A	<u>—</u>	<u>—</u>	<u>—</u>
ORP (mV)	228.0	<u>24002258</u>	<u>6/24</u>	<u>In-site</u>

Calibration					
Time Start <u>0800</u>		Time Finish <u>0835</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	<u>4490</u>	<u>12.76</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.0</u>	<u>13.17</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.0</u>	<u>13.67</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.0</u>	<u>13.86</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100</u>	<u>13.95</u>	± 10%	NA
ORP (mV)	228.0	<u>228.0</u>	<u>13.81</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>20</u>	<u>20</u>	± 10% of standard	EPA 2023
	<u>100</u>	<u>100</u>		
	<u>800</u>	<u>800</u>		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	<u>4472</u>	<u>13.79</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.01</u>	<u>13.79</u>	± 0.1	GWMP
pH (SU)	7.00	<u>6.97</u>	<u>13.84</u>	± 0.1	GWMP
pH (SU)	10.00	<u>9.94</u>	<u>14.01</u>	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>20</u>	<u>19.7</u>	± 10% of standard	EPA 2023
	<u>100</u>	<u>102</u>		
	<u>800</u>	<u>815</u>		

Notes:

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 2/18/24Calibrated By: L. CHINField Conditions: Cloudy 28

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>2m-situ</u>	<u>816763</u>
Turbidity Meter	<u>2K00</u>	<u>2204000000</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance ($\mu\text{S}/\text{cm}$)	4.490	<u>24000044</u>	<u>5/24</u>	<u>2m-situ</u>
pH (SU)	4.00	<u>24000044</u>	<u>6/24</u>	<u>2m-situ</u>
pH (SU)	7.00	<u>22290139</u>	<u>4/24</u>	<u>2m-situ</u>
pH (SU)	10.00	<u>22110130</u>	<u>4/24</u>	<u>2m-situ</u>
D.O. (%)	N/A			
ORP (mV)	228.0	<u>24002258</u>	<u>6/24</u>	<u>2m-situ</u>

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature ($^{\circ}\text{C}$)	Acceptance Criteria	Reference
Specific Conductance ($\mu\text{S}/\text{cm}$)	4.490	<u>4490</u>	<u>7.0</u>	$\pm 10\%$ of standard	EPA 2023
pH (SU)	4.00	<u>4.0</u>	<u>7.7</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.0</u>	<u>7.99</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.0</u>	<u>8.34</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100</u>	<u>-</u>	$\pm 10\%$	NA
ORP (mV)	228.0	<u>228.0</u>	<u>8.57</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>20</u>	<u>20</u>	$\pm 10\%$ of standard	EPA 2023
	<u>100</u>	<u>100</u>		
	<u>800</u>	<u>800</u>		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature ($^{\circ}\text{C}$)	Acceptance Criteria	Reference
Specific Conductance ($\mu\text{S}/\text{cm}$)	4.490	<u>4479</u>	<u>13.71</u>	$\pm 10\%$ of standard	EPA 2023
pH (SU)	4.00	<u>4.03</u>	<u>12.98</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.01</u>	<u>13.23</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.06</u>	<u>13.04</u>	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>20</u>	<u>19</u>	$\pm 10\%$ of standard	EPA 2023
	<u>100</u>	<u>103</u>		
	<u>800</u>	<u>814</u>		

Notes:

Site Name: Dkatt Hammond

Field Instrumentation Calibration Form

Date: 2/18/2024Calibrated By: f. GusslerField Conditions: cloudy, 35°

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>AquaPro/1400</u>	<u>883529</u>
Turbidity Meter	<u>Acch</u>	<u>2000000123</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance ($\mu\text{S}/\text{cm}$)	4.490	<u>24000044</u>	<u>5/24</u>	<u>msf4</u>
pH (SU)	4.00	<u>22240139</u>	<u>4/24</u>	
pH (SU)	7.00	<u>22110130</u>	<u>4/24</u>	
pH (SU)	10.00			
D.O. (%)	N/A			
ORP (mV)	228.0			

Calibration					
Time Start <u>0730</u>		Time Finish <u>0810</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature ($^{\circ}\text{C}$)	Acceptance Criteria	Reference
Specific Conductance ($\mu\text{S}/\text{cm}$)	4.490	<u>4.490</u>	<u>6.13</u>	$\pm 10\%$ of standard	EPA 2023
pH (SU)	4.00	<u>4.00</u>	<u>5.71</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>6.74</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.0</u>	<u>7.71</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100</u>		$\pm 10\%$	NA
ORP (mV)	228.0	<u>228</u>	<u>8.00</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>20</u>	<u>20</u>	$\pm 10\%$ of standard	EPA 2023
	<u>100</u>	<u>110</u>		
	<u>800</u>	<u>811</u>		
	<u>10</u>	<u>4.98</u>		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature ($^{\circ}\text{C}$)	Acceptance Criteria	Reference
Specific Conductance ($\mu\text{S}/\text{cm}$)	4.490	<u>4500</u>	<u>15.81</u>	$\pm 10\%$ of standard	EPA 2023
pH (SU)	4.00	<u>3.91</u>	<u>16.82</u>	± 0.1	GWMP
pH (SU)	7.00	<u>6.93</u>	<u>15.41</u>	± 0.1	GWMP
pH (SU)	10.00	<u>9.97</u>	<u>16.00</u>	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>10</u>	<u>9.95</u>	$\pm 10\%$ of standard	EPA 2023
	<u>20</u>	<u>19.10</u>		
	<u>100</u>	<u>95.3</u>		
	<u>800</u>	<u>782</u>		

Notes:

Site Name: Plant Hammond
 Calibrated By: Jacob Tracy

Field Instrumentation Calibration Form

Date: 02/19/2024
 Field Conditions: Sunny, 11°C

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>10-SIU</u>	<u>968302</u>
Turbidity Meter	<u>HACH</u>	<u>220960000239</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	<u>24000044</u>	<u>05/24</u>	<u>AJR</u>
pH (SU)	4.00	<u>+</u>	<u>✓</u>	
pH (SU)	7.00	<u>22290139</u>	<u>04/24</u>	<u>AJR</u>
pH (SU)	10.00	<u>22110130</u>	<u>04/24</u>	<u>AJR</u>
D.O. (%)	N/A			
ORP (mV)	228.0	<u>24002258</u>	<u>06/24</u>	<u>AJR</u>

Calibration					
Time Start	Time Finish				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	<u>14490</u>	<u>1.68</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.0</u>	<u>1.58</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.0</u>	<u>1.60</u>	± 0.1	GWMP
pH (SU)	10.00	<u>7.0</u>	<u>2.13</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100%</u>	<u>3.24</u>	± 10%	NA
ORP (mV)	228.0	<u>228.0</u>	<u>2.14</u>	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	<u>2.0</u>	<u>2.14</u>	± 10% of standard	EPA 2023
	<u>1.0</u>	<u>1.05</u>		
	<u>0.1</u>	<u>0.1</u>		
	<u>0.0</u>	<u>0.0</u>		

Calibration Check					
Time Start	Time Finish				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)			± 10% of standard	EPA 2023

Notes:

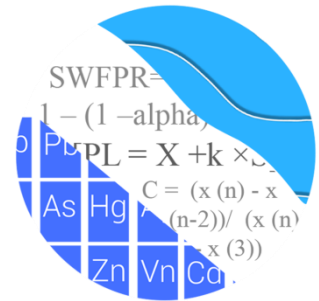
APPENDIX C

Statistical Analysis Report

GROUNDWATER STATS CONSULTING

August 30, 2024

Southern Company Services
Attn: Ms. Kristen Jurinko
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia 30308



Re: Plant Hammond Ash Pond 2 (AP-2)
Statistical Analysis – February 2024 Sample Event

Dear Ms. Jurinko,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the February 2024 Semi-Annual Groundwater Detection and Assessment Monitoring Statistical summary of groundwater data for Georgia Power Company's Plant Hammond AP-2. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management Chapter 391-3-4-.10 and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began for the Coal Combustion Residuals (CCR) program in 2016 for all wells except those noted below, and at least 8 samples were collected at all wells. Sampling began in 2019 for assessment wells MW-21D, MW-22, and MW-23D; and in 2020 for upgradient wells HGWA-42D, HGWA-43D, HGWA-44D, assessment well MW-37D, and piezometers MW-33, MW-34D, and MW-35; and in 2021 for piezometer MW-51.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient well:** HGWA-1, HGWA-2, HGWA-3, HGWA-4, HGWA-5, HGWA-6, HGWA-42D, HGWA-43D, and HGWA-44D
- **Downgradient wells:** HGWC-14, HGWC-15, HGWC-16, HGWC-17, and HGWC-18
- **Assessment wells:** MW-21D, MW-22, MW-23D, and MW-37D

- **Piezometers:** MW-33, MW-34D, MW-35, and MW-51

Assessment wells and piezometers are included on time series and box plots for all parameters. When a minimum of 4 samples is available, downgradient wells, assessment wells, and piezometers are evaluated using confidence intervals for the Appendix IV constituents.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Andrew Collins, Project Manager for Groundwater Stats Consulting. The statistical analysis was performed according to the groundwater data screening that was performed in April 2018 by GSC and approved by Dr. Cameron, PhD Statistician with MacStat Consulting and primary author of the USEPA Unified Guidance.

The CCR program consists of the constituents listed below. The terms “parameters” and “constituents” are used interchangeably.

- **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **Appendix IV** (Assessment Monitoring) – arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of well/constituent pairs containing 100% non-detects follows this letter.

For all constituents, a substitution of the most recent reporting limit is used for non-detect data. In the case of lithium, historical reporting limits vary among the wells. Therefore, the reporting limit of 0.030 mg/L was substituted across all wells, which is the most recent reporting limit provided by the laboratory. Note that due to elevated historic reporting limits, the current reporting limit for arsenic of 0.005 mg/L was substituted across all wells in order to maintain statistical limits that are conservative from a regulatory perspective.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. When values in background are flagged as outliers, the measurements may be

seen in a lighter font and as a disconnected symbol on the graphs. No values were flagged as outliers (Figure C).

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves were provided to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests that the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations.

Statistical Methods – Appendix III Parameters

Appendix III parameters are evaluated using Interwell Prediction Limits combined with 1-of-2 resamples for all constituents: boron, calcium, chloride, fluoride, pH, sulfate, and TDS.

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the false positive rate associated with the parametric limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data for parametric limits. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.

- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In some cases, an earlier portion of data may require deselection prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs. When this step is required, a summary of any adjusted records will be provided.

Statistical Evaluation of Appendix III Parameters – February 2024

All Appendix III parameters were analyzed using interwell prediction limits. Background (upgradient) well data were reassessed for potential outliers during this analysis. When values in background are flagged as outliers, the measurements may be seen in a lighter font and as a disconnected symbol on the graphs. No Appendix III values have been flagged as outliers (Figure C).

Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed for Appendix III parameters using all historical upgradient well data through February 2024 (Figure D). Downgradient measurements were compared to these interwell background limits. Interwell prediction limits use all available upgradient well data to establish a background limit for an individual constituent. The February 2024 sample from each downgradient well is compared to the background limit to determine whether any initial exceedances are present.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirm the initial exceedance, a statistically significant increase (SSI) is identified and further research would be required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary. If no resample is collected, the initial exceedance is automatically confirmed.

A summary table of these findings is provided along with the prediction limits. When the February 2024 compliance data from downgradient wells were compared to interwell prediction limits, exceedances were noted for the following well/constituent pairs:

- Boron: HGWC-14, HGWC-15, HGWC-16, HGWC-17, and HGWC-18
- Calcium: HGWC-14, HGWC-15, HGWC-16, HGWC-17, and HGWC-18
- Chloride: HGWC-14, HGWC-15, HGWC-16, HGWC-17, and HGWC-18
- Sulfate: HGWC-14, HGWC-15, HGWC-16, HGWC-17, and HGWC-18
- TDS: HGWC-14, HGWC-15, HGWC-16, HGWC-17, and HGWC-18

Trend Test Evaluation – Appendix III

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test at the 99% confidence level to determine whether concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient well data are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. Upgradient trends are an indication of variability in groundwater unrelated to practices at the site. A summary of the trend test results follows this letter. Statistically significant trends were noted for the following well/constituent pairs:

Increasing trends:

- Boron: HGWA-2, HGWA-44D (both upgradient) and HGWC-16
- Calcium: HGWA-2, HGWA-3 (both upgradient) and HGWC-16
- Chloride: HGWA-44D (upgradient) and HGWC-16
- Sulfate: HGWA-2 (upgradient)
- TDS: HGWC-16 and HGWC-17

Decreasing trends:

- Boron: HGWA-43D (upgradient) and HGWC-14
- Calcium: HGWA-4 and HGWA-44D (both upgradient)
- Chloride: HGWA-3, HGWA-4 (both upgradient), HGWC-14, HGWC-15, and HGWC-18
- Sulfate: HGWA-43D (upgradient) and HGWC-15
- TDS: HGWA-4 (upgradient), HGWC-14, HGWC-15 and HGWC-18

Statistical Methods – Appendix IV Parameters

Appendix IV parameters are evaluated by statistically comparing the mean or median of each downgradient well/constituent pair against corresponding Groundwater Protection

Standards (GWPS). The GWPS may be either regulatory (MCL or CCR rule-specified limits) or site-specific limits that are based on upgradient background groundwater quality. Site-specific background limits are determined using tolerance limits, and the comparison of downgradient means or medians to GWPS is performed using confidence intervals. Confidence intervals are provided for Appendix IV well/constituent pairs with detections and with current reported data. The methods are described below.

Statistical Evaluation of Appendix IV Parameters – February 2024

For Appendix IV parameters, confidence intervals for each downgradient well, assessment well, and piezometer/constituent pair were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Well/constituent pairs that contain 100% non-detects do not require analysis. Data from upgradient wells for Appendix IV parameters are reassessed for outliers during each analysis. The most recent value for lithium at upgradient well HGWA-44D was flagged in order to maintain conservative (i.e., lower) limits from a regulatory perspective. No other values were flagged as outliers during this analysis and a list of all flagged values follows this letter (Figure C).

Interwell Upper Tolerance Limits

Site specific background limits were calculated as upper one-sided tolerance limits (UTLs) on pooled upgradient interwell data through February 2024 for each of the Appendix IV constituents (Figure F). Parametric tolerance limits are calculated, with a target of 95% confidence and 95% coverage, when data follow a normal or transformed-normal distribution. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used. As mentioned above, reporting limits of 0.005 mg/L and 0.030 mg/L were substituted across all wells for arsenic and lithium, respectively.

Groundwater Protection Standards

The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a). On July 30, 2018, US EPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Effective on February 22, 2022, Georgia EPD incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a). In accordance with the updated Rules, the GWPS is:

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, Federal and State CCR Rules specify levels for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule identified GWPS

Following Georgia EPD Rule requirements and the Federal CCR requirements, GWPS were established for statistical comparison of Appendix IV constituents for this sample event (Figure G).

Confidence Intervals

To complete the statistical comparison to GWPS, confidence intervals were constructed for the Appendix IV constituents in each downgradient wells, assessment wells, and piezometers with 4 or more samples through February 2024 (Figure H).

The Sanitas software was used to calculate the confidence intervals, either parametric or nonparametric, depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals, which use the highest and lowest values in background as interval limits, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. The lower confidence limit, which is constructed with 99% confidence for parametric confidence intervals, is compared to the GWPS prepared as described above. The confidence level associated with nonparametric confidence intervals is dependent upon the number samples available.

Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified. Summaries of the confidence interval results, along with graphical comparison against GWPS follow this letter. Exceedances were noted for the following well/constituent pairs:

- Cobalt: HGWC-18, MW-33, and MW-35

Trend Test Evaluation – Appendix IV

Data at wells with confidence interval exceedances are further evaluated using the Sen's Slope/Mann Kendall trend test at the 95% confidence level to determine whether concentrations are statistically increasing, decreasing, or stable (Figure I). Although the trend tests for Assessment monitoring pairs were previously evaluated using 99% confidence, the 95% confidence level more rapidly identifies statistically significant trends. Additionally, the 95% confidence level is recommended in cases with limited sample sizes and, particularly, for new assessment wells. Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site for the same constituents. When trends are present in upgradient wells, it is an indication of variability in groundwater quality unrelated to practices at the site. A summary of the Appendix IV trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing trends:

- None

Decreasing trends:

- Cobalt: HGWA-4 (upgradient) and HGWC-18

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Hammond AP-2. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Easton Rayner
Groundwater Analyst



Andrew T. Collins
Project Manager

100% Non-Detects: Appendix IV Downgradient, Assessment, and Piezometers

Analysis Run 4/23/2024 5:38 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Antimony (mg/L)

HGWC-16, HGWC-17, MW-21D, MW-51

Beryllium (mg/L)

HGWC-15, HGWC-16, MW-21D, MW-23D

Cadmium (mg/L)

HGWC-16, MW-21D, MW-37D

Chromium (mg/L)

MW-51

Lead (mg/L)

MW-51

Mercury (mg/L)

HGWC-14, HGWC-15, HGWC-16, HGWC-17, MW-21D, MW-33, MW-34D, MW-37D

Molybdenum (mg/L)

HGWC-14, HGWC-16, HGWC-17, HGWC-18, MW-33, MW-34D, MW-35, MW-51

Selenium (mg/L)

MW-21D, MW-23D, MW-37D

Thallium (mg/L)

HGWC-16, MW-21D, MW-22, MW-23D, MW-37D, MW-51

Appendix III Interwell Prediction Limits - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 4/18/2024, 10:37 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	HGWC-14	0.55	n/a	2/17/2024	7.3	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-15	0.55	n/a	2/17/2024	1.8	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-16	0.55	n/a	2/18/2024	2.3	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-17	0.55	n/a	2/17/2024	5.7	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-18	0.55	n/a	2/18/2024	7	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-14	138	n/a	2/17/2024	418	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-15	138	n/a	2/17/2024	175	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-16	138	n/a	2/18/2024	199	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-17	138	n/a	2/17/2024	199	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-18	138	n/a	2/18/2024	347	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-14	44.8	n/a	2/17/2024	88.9	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-15	44.8	n/a	2/17/2024	70.2	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-16	44.8	n/a	2/18/2024	87.5	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-17	44.8	n/a	2/17/2024	81.7	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-18	44.8	n/a	2/18/2024	99	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-14	93.9	n/a	2/17/2024	898	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-15	93.9	n/a	2/17/2024	305	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-16	93.9	n/a	2/18/2024	220	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-17	93.9	n/a	2/17/2024	260	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-18	93.9	n/a	2/18/2024	755	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-14	496	n/a	2/17/2024	1720	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-15	496	n/a	2/17/2024	830	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-16	496	n/a	2/18/2024	755	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-17	496	n/a	2/17/2024	815	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-18	496	n/a	2/18/2024	1360	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2

Appendix III Interwell Prediction Limits - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 4/18/2024, 10:37 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	HGWC-14	0.55	n/a	2/17/2024	7.3	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-15	0.55	n/a	2/17/2024	1.8	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-16	0.55	n/a	2/18/2024	2.3	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-17	0.55	n/a	2/17/2024	5.7	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-18	0.55	n/a	2/18/2024	7	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-14	138	n/a	2/17/2024	418	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-15	138	n/a	2/17/2024	175	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-16	138	n/a	2/18/2024	199	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-17	138	n/a	2/17/2024	199	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-18	138	n/a	2/18/2024	347	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-14	44.8	n/a	2/17/2024	88.9	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-15	44.8	n/a	2/17/2024	70.2	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-16	44.8	n/a	2/18/2024	87.5	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-17	44.8	n/a	2/17/2024	81.7	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-18	44.8	n/a	2/18/2024	99	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-14	8.25	4.57	2/17/2024	5.05	No	192	n/a	n/a	0	n/a	n/a	0.0001076	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-15	8.25	4.57	2/17/2024	6.56	No	192	n/a	n/a	0	n/a	n/a	0.0001076	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-16	8.25	4.57	2/18/2024	7.12	No	192	n/a	n/a	0	n/a	n/a	0.0001076	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-17	8.25	4.57	2/17/2024	6.54	No	192	n/a	n/a	0	n/a	n/a	0.0001076	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-18	8.25	4.57	2/18/2024	4.73	No	192	n/a	n/a	0	n/a	n/a	0.0001076	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-14	1.5	n/a	2/17/2024	0.065J	No	192	n/a	n/a	28.65	n/a	n/a	0.00005378	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-15	1.5	n/a	2/17/2024	0.064J	No	192	n/a	n/a	28.65	n/a	n/a	0.00005378	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-16	1.5	n/a	2/18/2024	0.1ND	No	192	n/a	n/a	28.65	n/a	n/a	0.00005378	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-17	1.5	n/a	2/17/2024	0.057J	No	192	n/a	n/a	28.65	n/a	n/a	0.00005378	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-18	1.5	n/a	2/18/2024	0.17	No	192	n/a	n/a	28.65	n/a	n/a	0.00005378	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-14	93.9	n/a	2/17/2024	898	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-15	93.9	n/a	2/17/2024	305	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-16	93.9	n/a	2/18/2024	220	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-17	93.9	n/a	2/17/2024	260	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-18	93.9	n/a	2/18/2024	755	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-14	496	n/a	2/17/2024	1720	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-15	496	n/a	2/17/2024	830	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-16	496	n/a	2/18/2024	755	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-17	496	n/a	2/17/2024	815	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-18	496	n/a	2/18/2024	1360	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2

Appendix III Prediction Limit Exceedances - Trend Tests - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 4/18/2024, 10:40 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	HGWA-2 (bg)	0.002545	157	92	Yes	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-43D (bg)	-0.007036	-40	-34	Yes	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-44D (bg)	0.06801	37	34	Yes	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-14	-1.391	-135	-92	Yes	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-16	0.1931	142	92	Yes	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-2 (bg)	1.322	101	92	Yes	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-3 (bg)	1.924	119	92	Yes	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-4 (bg)	-6.83	-106	-92	Yes	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-44D (bg)	-7.33	-39	-34	Yes	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-16	11.38	165	92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-3 (bg)	-0.1508	-124	-92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-4 (bg)	-0.4101	-184	-92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-44D (bg)	6.844	39	34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-14	-67.48	-168	-92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-15	-22.07	-161	-92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-16	11.41	187	92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-18	-31.83	-145	-92	Yes	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-2 (bg)	2.951	159	92	Yes	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-43D (bg)	-3.197	-43	-34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-15	-20.14	-100	-92	Yes	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-4 (bg)	-20.44	-104	-92	Yes	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-14	-192.6	-163	-92	Yes	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-15	-53.04	-130	-92	Yes	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-16	49.17	173	92	Yes	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-17	42.2	103	92	Yes	22	4.545	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-18	-42.27	-99	-92	Yes	22	0	n/a	n/a	0.01	NP

Appendix III Prediction Limit Exceedances - Trend Tests - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 4/18/2024, 10:40 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	-0.0001808	-14	-92	No	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-2 (bg)	0.002545	157	92	Yes	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-3 (bg)	0.0004332	39	92	No	22	22.73	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-4 (bg)	0.0007863	33	92	No	22	4.545	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-42D (bg)	-0.001093	-7	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-43D (bg)	-0.007036	-40	-34	Yes	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-44D (bg)	0.06801	37	34	Yes	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-5 (bg)	0.0007363	67	92	No	22	22.73	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-6 (bg)	-0.0003862	-54	-92	No	22	4.545	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-14	-1.391	-135	-92	Yes	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-15	-0.01741	-23	-92	No	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-16	0.1931	142	92	Yes	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-17	0.0633	24	92	No	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-18	-0.329	-85	-92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	2.05	80	92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-2 (bg)	1.322	101	92	Yes	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-3 (bg)	1.924	119	92	Yes	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-4 (bg)	-6.83	-106	-92	Yes	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-42D (bg)	0.069	1	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-43D (bg)	-2.939	-33	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-44D (bg)	-7.33	-39	-34	Yes	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-5 (bg)	0.0662	4	92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-6 (bg)	0.3288	47	92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-14	-15.65	-90	-92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-15	-1.875	-33	-92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-16	11.38	165	92	Yes	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-17	9.114	52	92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-18	-1.029	-4	-92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-1 (bg)	0.6486	82	92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-2 (bg)	0.02731	14	92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-3 (bg)	-0.1508	-124	-92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-4 (bg)	-0.4101	-184	-92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-42D (bg)	0.08286	9	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-43D (bg)	-0.1067	-16	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-44D (bg)	6.844	39	34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-5 (bg)	-0.05028	-68	-92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-6 (bg)	-0.03467	-51	-92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-14	-67.48	-168	-92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-15	-22.07	-161	-92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-16	11.41	187	92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-17	4.477	49	92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-18	-31.83	-145	-92	Yes	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-1 (bg)	0.6377	32	92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-2 (bg)	2.951	159	92	Yes	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-3 (bg)	-0.08595	-11	-92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-4 (bg)	0	5	92	No	22	13.64	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-42D (bg)	0.2824	16	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-43D (bg)	-3.197	-43	-34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-44D (bg)	0.3314	1	34	No	11	9.091	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-5 (bg)	-0.05287	-13	-92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-6 (bg)	-0.2147	-67	-92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-14	-37.37	-51	-92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-15	-20.14	-100	-92	Yes	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-16	1.071	30	92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-17	-6.088	-32	-92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-18	0.7194	3	92	No	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-1 (bg)	4.065	35	92	No	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-2 (bg)	5.374	56	92	No	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-3 (bg)	0.8552	21	92	No	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-4 (bg)	-20.44	-104	-92	Yes	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-42D (bg)	3.025	6	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-43D (bg)	-1.506	-5	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-44D (bg)	31.45	31	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-5 (bg)	0.4698	11	92	No	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-6 (bg)	-1.193	-33	-92	No	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-14	-192.6	-163	-92	Yes	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-15	-53.04	-130	-92	Yes	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-16	49.17	173	92	Yes	22	0	n/a	n/a	0.01	NP

Appendix III Prediction Limit Exceedances - Trend Tests - All Results

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Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 4/18/2024, 10:40 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Total Dissolved Solids (mg/L)	HGWC-17	42.2	103	92	Yes	22	4.545	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-18	-42.27	-99	-92	Yes	22	0	n/a	n/a	0.01	NP

Upper Tolerance Limits Summary Table

Plant Hammond Data: Hammond AP-2 Printed 5/29/2024, 4:55 PM

<u>Constituent</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	0.003	n/a	153	n/a	n/a	83.01	n/a	n/a	0.0003906	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	186	n/a	n/a	81.72	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	0.46	n/a	186	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	0.0005	n/a	174	n/a	n/a	82.76	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	186	n/a	n/a	91.94	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	0.019	n/a	174	n/a	n/a	86.21	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	0.038	n/a	186	n/a	n/a	69.35	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.578	n/a	185	0.7496	0.2747	0	None	sqrt(x)	0.05	Inter
Fluoride (mg/L)	1.5	n/a	192	n/a	n/a	28.65	n/a	n/a	NaN	NP Inter(normality)
Lead (mg/L)	0.001	n/a	174	n/a	n/a	75.86	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	0.064	n/a	182	n/a	n/a	18.13	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	130	n/a	n/a	93.85	n/a	n/a	0.001271	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	172	n/a	n/a	82.56	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	186	n/a	n/a	97.31	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	186	n/a	n/a	98.92	n/a	n/a	NaN	NP Inter(NDs)

PLANT HAMMOND AP-2 GWPS				
Constituent Name	MCL	CCR-Rule Specified	Background Limit	GWPS
Antimony, Total (mg/L)	0.006		0.003	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01
Barium, Total (mg/L)	2		0.46	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.019	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.038	0.038
Combined Radium, Total (pCi/L)	5		1.58	5
Fluoride, Total (mg/L)	4		1.5	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.064	0.064
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

*Grey cell indicates background is higher than MCL or CCR-Rule

*MCL = Maximum Contaminant Level

*CCR = Coal Combustion Residuals

*GWPS = Groundwater Protection Standard

Confidence Interval Summary Table - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/21/2024, 8:28 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	HGWC-18	0.1816	0.1552	0.038	Yes	25	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-33	0.05654	0.04463	0.038	Yes	12	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-35	0.09341	0.08279	0.038	Yes	10	0	None	No	0.01	Param.

Confidence Interval Summary Table - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/21/2024, 8:28 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	HGWC-14	0.0032	0.001	0.006	No	19	78.95	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-15	0.003	0.0021	0.006	No	19	73.68	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-18	0.003	0.0008	0.006	No	19	94.74	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-22	0.003	0.003	0.006	No	10	90	None	No	0.011	NP (NDs)
Antimony (mg/L)	MW-23D	0.003	0.003	0.006	No	10	90	None	No	0.011	NP (NDs)
Antimony (mg/L)	MW-33	0.003	0.00046	0.006	No	8	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-34D	0.003	0.0018	0.006	No	6	83.33	None	No	0.0155	NP (NDs)
Antimony (mg/L)	MW-35	0.003	0.00041	0.006	No	8	75	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-37D	0.003	0.00079	0.006	No	8	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	HGWC-14	0.005508	0.00373	0.01	No	25	12	None	No	0.01	Param.
Arsenic (mg/L)	HGWC-15	0.005	0.0008	0.01	No	25	88	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-16	0.005	0.0012	0.01	No	25	84	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-17	0.005	0.0028	0.01	No	25	72	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-18	0.006543	0.004708	0.01	No	25	0	None	No	0.01	Param.
Arsenic (mg/L)	MW-21D	0.005	0.0013	0.01	No	15	73.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-22	0.005	0.00045	0.01	No	14	92.86	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-23D	0.005	0.001	0.01	No	14	85.71	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-33	0.006668	0.003405	0.01	No	11	9.091	None	No	0.01	Param.
Arsenic (mg/L)	MW-34D	0.004857	0.001316	0.01	No	8	12.5	None	No	0.01	Param.
Arsenic (mg/L)	MW-35	0.006343	0.004337	0.01	No	10	20	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	MW-37D	0.005	0.0021	0.01	No	10	70	Kaplan-Meier	No	0.011	NP (NDs)
Arsenic (mg/L)	MW-51	0.006226	0.002258	0.01	No	6	16.67	Kaplan-Meier	No	0.01	Param.
Barium (mg/L)	HGWC-14	0.022	0.018	2	No	25	4	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-15	0.02587	0.01753	2	No	25	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-16	0.1103	0.1004	2	No	25	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-17	0.02618	0.02361	2	No	25	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-18	0.032	0.026	2	No	25	4	None	No	0.01	NP (normality)
Barium (mg/L)	MW-21D	0.06246	0.03874	2	No	15	0	None	No	0.01	Param.
Barium (mg/L)	MW-22	0.02721	0.01486	2	No	14	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	MW-23D	0.06348	0.04823	2	No	14	0	None	No	0.01	Param.
Barium (mg/L)	MW-33	0.02608	0.01955	2	No	11	0	None	No	0.01	Param.
Barium (mg/L)	MW-34D	0.04375	0.0335	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	MW-35	0.02828	0.02152	2	No	10	0	None	No	0.01	Param.
Barium (mg/L)	MW-37D	0.1575	0.1145	2	No	10	0	None	No	0.01	Param.
Barium (mg/L)	MW-51	0.04199	0.02312	2	No	6	0	None	sqrt(x)	0.01	Param.
Beryllium (mg/L)	HGWC-14	0.00056	0.0004	0.004	No	23	8.696	None	No	0.01	NP (normality)
Beryllium (mg/L)	HGWC-17	0.0005	0.0001	0.004	No	23	78.26	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-18	0.00331	0.002697	0.004	No	23	4.348	None	No	0.01	Param.
Beryllium (mg/L)	MW-22	0.0005	0.00007	0.004	No	14	57.14	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-33	0.001053	0.000716	0.004	No	11	0	None	x^2	0.01	Param.
Beryllium (mg/L)	MW-34D	0.0005	0.000065	0.004	No	8	75	None	No	0.004	NP (NDs)
Beryllium (mg/L)	MW-35	0.0006594	0.0004286	0.004	No	10	0	None	No	0.01	Param.
Beryllium (mg/L)	MW-37D	0.0005	0.0005	0.004	No	10	90	None	No	0.011	NP (NDs)
Beryllium (mg/L)	MW-51	0.0004839	0.00007606	0.004	No	6	0	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-14	0.0005	0.00012	0.005	No	25	56	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-15	0.002071	0.001313	0.005	No	25	0	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-17	0.0005	0.00007	0.005	No	25	96	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-18	0.0024	0.0016	0.005	No	25	4	None	No	0.01	NP (normality)
Cadmium (mg/L)	MW-22	0.002066	0.001671	0.005	No	14	0	None	x^4	0.01	Param.
Cadmium (mg/L)	MW-23D	0.0025	0.00015	0.005	No	14	35.71	None	No	0.01	NP (normality)
Cadmium (mg/L)	MW-33	0.00022	0.00014	0.005	No	11	9.091	None	No	0.006	NP (normality)
Cadmium (mg/L)	MW-34D	0.00147	0.0002074	0.005	No	8	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Cadmium (mg/L)	MW-35	0.001694	0.001012	0.005	No	10	0	None	No	0.01	Param.
Cadmium (mg/L)	MW-51	0.001409	0	0.005	No	6	0	None	No	0.01	Param.
Chromium (mg/L)	HGWC-14	0.005	0.00066	0.1	No	23	91.3	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-15	0.005	0.0012	0.1	No	23	86.96	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-16	0.005	0.0021	0.1	No	23	86.96	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-17	0.005	0.0018	0.1	No	23	86.96	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-18	0.005	0.00063	0.1	No	23	86.96	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-21D	0.005	0.00074	0.1	No	15	86.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-22	0.005	0.00075	0.1	No	14	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-23D	0.005	0.00086	0.1	No	14	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-33	0.005	0.005	0.1	No	11	90.91	None	No	0.006	NP (NDs)
Chromium (mg/L)	MW-34D	0.0059	0.005	0.1	No	8	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-35	0.005	0.00083	0.1	No	10	80	None	No	0.011	NP (NDs)
Chromium (mg/L)	MW-37D	0.005	0.0048	0.1	No	10	80	None	No	0.011	NP (NDs)
Cobalt (mg/L)	HGWC-14	0.034	0.0253	0.038	No	25	4	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-15	0.04029	0.02179	0.038	No	25	0	None	No	0.01	Param.

Confidence Interval Summary Table - All Results

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Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/21/2024, 8:28 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	HGWC-16	0.005	0.00037	0.038	No	25	92	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-17	0.01544	0.01252	0.038	No	25	0	None	x^2	0.01	Param.
Cobalt (mg/L)	HGWC-18	0.1816	0.1552	0.038	Yes	25	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-21D	0.005	0.00034	0.038	No	15	93.33	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-22	0.03437	0.02062	0.038	No	14	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-23D	0.001104	0.000883	0.038	No	14	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-33	0.05654	0.04463	0.038	Yes	12	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-34D	0.009192	0.005521	0.038	No	8	0	None	x^(1/3)	0.01	Param.
Cobalt (mg/L)	MW-35	0.09341	0.08279	0.038	Yes	10	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-37D	0.005	0.0015	0.038	No	10	80	None	No	0.011	NP (NDs)
Cobalt (mg/L)	MW-51	0.04193	0.01707	0.038	No	6	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-14	1.507	1.037	5	No	25	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-15	0.8591	0.4811	5	No	25	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-16	0.8822	0.4816	5	No	25	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-17	0.9603	0.6466	5	No	25	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-18	2.082	1.49	5	No	25	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-21D	0.9196	0.3722	5	No	15	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-22	0.9711	0.3989	5	No	14	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-23D	0.9587	0.4479	5	No	14	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-33	2.103	0.9052	5	No	11	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-34D	1.081	0.3795	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-35	2.325	0.9014	5	No	10	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-37D	1.147	0.2094	5	No	10	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-51	1.099	0.3869	5	No	6	0	None	x^2	0.01	Param.
Fluoride (mg/L)	HGWC-14	0.1626	0.07728	4	No	26	19.23	Kaplan-Meier	ln(x)	0.01	Param.
Fluoride (mg/L)	HGWC-15	0.12	0.09	4	No	26	38.46	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-16	0.1078	0.04179	4	No	26	50	Kaplan-Meier	ln(x)	0.01	Param.
Fluoride (mg/L)	HGWC-17	0.1331	0.05794	4	No	26	26.92	Kaplan-Meier	ln(x)	0.01	Param.
Fluoride (mg/L)	HGWC-18	0.5828	0.3657	4	No	26	3.846	None	No	0.01	Param.
Fluoride (mg/L)	MW-21D	0.1	0.1	4	No	15	80	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-22	0.13	0.064	4	No	14	64.29	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-23D	0.14	0.074	4	No	14	64.29	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-33	0.257	0.1222	4	No	12	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-34D	0.08583	0.05783	4	No	8	25	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	MW-35	0.1112	0.05279	4	No	10	10	None	No	0.01	Param.
Fluoride (mg/L)	MW-37D	0.0936	0.0552	4	No	10	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-51	0.1634	0.05656	4	No	6	0	None	No	0.01	Param.
Lead (mg/L)	HGWC-14	0.001627	0.0012	0.015	No	23	8.696	None	No	0.01	Param.
Lead (mg/L)	HGWC-15	0.001	0.001	0.015	No	23	78.26	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-16	0.001	0.0001	0.015	No	23	60.87	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-17	0.001	0.0001	0.015	No	23	60.87	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-18	0.001367	0.001027	0.015	No	23	8.696	None	No	0.01	Param.
Lead (mg/L)	MW-21D	0.001	0.000073	0.015	No	15	73.33	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-22	0.001	0.0001	0.015	No	14	78.57	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-23D	0.001	0.00016	0.015	No	14	85.71	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-33	0.001623	0	0.015	No	11	18.18	Kaplan-Meier	x^6	0.01	Param.
Lead (mg/L)	MW-34D	0.001	0.00087	0.015	No	8	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	MW-35	0.001	0.00035	0.015	No	10	40	None	No	0.011	NP (normality)
Lead (mg/L)	MW-37D	0.001	0.00039	0.015	No	10	70	None	No	0.011	NP (NDs)
Lithium (mg/L)	HGWC-14	0.03	0.0029	0.064	No	25	96	None	No	0.01	NP (NDs)
Lithium (mg/L)	HGWC-15	0.006913	0.002454	0.064	No	25	24	Kaplan-Meier	ln(x)	0.01	Param.
Lithium (mg/L)	HGWC-16	0.0041	0.0029	0.064	No	24	4.167	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-17	0.03	0.0012	0.064	No	24	45.83	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-18	0.01402	0.01183	0.064	No	24	0	None	No	0.01	Param.
Lithium (mg/L)	MW-21D	0.0243	0.01876	0.064	No	15	0	None	No	0.01	Param.
Lithium (mg/L)	MW-22	0.0015	0.0011	0.064	No	14	7.143	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-23D	0.002491	0.001966	0.064	No	14	0	None	No	0.01	Param.
Lithium (mg/L)	MW-33	0.03	0.00086	0.064	No	10	20	None	No	0.011	NP (normality)
Lithium (mg/L)	MW-34D	0.015	0.001	0.064	No	7	14.29	None	No	0.008	NP (normality)
Lithium (mg/L)	MW-35	0.0046	0.0031	0.064	No	10	10	None	No	0.011	NP (normality)
Lithium (mg/L)	MW-37D	0.03521	0.02234	0.064	No	9	0	None	No	0.01	Param.
Lithium (mg/L)	MW-51	0.002094	0.0008331	0.064	No	6	0	None	No	0.01	Param.
Mercury (mg/L)	HGWC-18	0.0002	0.00008	0.002	No	16	68.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	MW-22	0.0002	0.00016	0.002	No	8	87.5	None	No	0.004	NP (NDs)
Mercury (mg/L)	MW-23D	0.0002	0.00017	0.002	No	8	87.5	None	No	0.004	NP (NDs)
Mercury (mg/L)	MW-35	0.00084	0.00014	0.002	No	6	50	None	No	0.0155	NP (normality)
Mercury (mg/L)	MW-51	0.0002	0.00013	0.002	No	5	80	None	No	0.031	NP (NDs)
Molybdenum (mg/L)	HGWC-15	0.01	0.0007	0.1	No	23	95.65	None	No	0.01	NP (NDs)

Confidence Interval Summary Table - All Results

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Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/21/2024, 8:28 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	MW-21D	0.02886	0.01764	0.1	No	15	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	MW-22	0.01	0.00013	0.1	No	14	92.86	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-23D	0.004132	0.002811	0.1	No	14	7.143	None	No	0.01	Param.
Molybdenum (mg/L)	MW-37D	0.01788	0.003694	0.1	No	9	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-14	0.01139	0.006143	0.05	No	25	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-15	0.005	0.0041	0.05	No	25	84	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-16	0.005	0.000089	0.05	No	25	96	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-17	0.005	0.0023	0.05	No	25	88	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-18	0.03214	0.01464	0.05	No	25	4	None	sqrt(x)	0.01	Param.
Selenium (mg/L)	MW-22	0.005	0.002	0.05	No	14	92.86	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-33	0.02152	0.0078	0.05	No	11	0	None	x^(1/3)	0.01	Param.
Selenium (mg/L)	MW-34D	0.005	0.0016	0.05	No	8	75	None	No	0.004	NP (NDs)
Selenium (mg/L)	MW-35	0.01866	0.006011	0.05	No	10	0	None	x^(1/3)	0.01	Param.
Selenium (mg/L)	MW-51	0.003691	0.001565	0.05	No	6	33.33	Kaplan-Meier	sqrt(x)	0.01	Param.
Thallium (mg/L)	HGWC-14	0.000306	0.00027	0.002	No	25	4	None	No	0.01	NP (normality)
Thallium (mg/L)	HGWC-15	0.001	0.00022	0.002	No	25	96	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-17	0.001	0.00014	0.002	No	25	68	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-18	0.001	0.00016	0.002	No	25	52	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-33	0.001	0.00022	0.002	No	11	18.18	None	No	0.006	NP (normality)
Thallium (mg/L)	MW-34D	0.001	0.00015	0.002	No	8	87.5	None	No	0.004	NP (NDs)
Thallium (mg/L)	MW-35	0.001	0.001	0.002	No	10	90	None	No	0.011	NP (NDs)

Confidence Interval Exceedances - Trend Tests - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 4/25/2024, 9:36 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	HGWA-4 (bg)	-0.000465	-161	-85	Yes	25	60	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWC-18	-0.007543	-147	-85	Yes	25	0	n/a	n/a	0.05	NP

Confidence Interval Exceedances - Trend Tests - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 4/25/2024, 9:36 AM

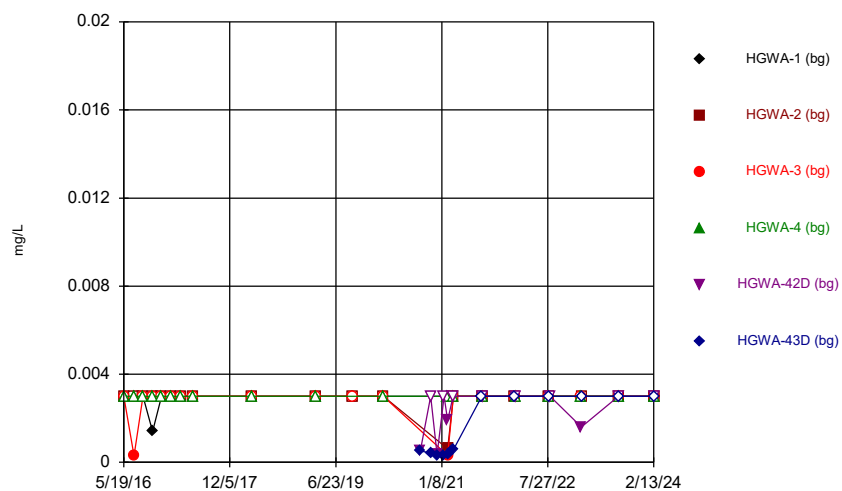
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	HGWA-1 (bg)	0	-15	-85	No	25	88	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-2 (bg)	-0.0001971	-23	-85	No	25	0	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-3 (bg)	0	0	85	No	25	100	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-4 (bg)	-0.000465	-161	-85	Yes	25	60	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-42D (bg)	0	7	30	No	12	91.67	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-43D (bg)	0	0	30	No	12	100	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-44D (bg)	0	0	30	No	12	100	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-5 (bg)	0	-16	-85	No	25	28	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-6 (bg)	0	0	85	No	25	100	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWC-18	-0.007543	-147	-85	Yes	25	0	n/a	n/a	0.05	NP
Cobalt (mg/L)	MW-33	-0.002928	-18	-30	No	12	0	n/a	n/a	0.05	NP
Cobalt (mg/L)	MW-35	-0.002039	-17	-23	No	10	0	n/a	n/a	0.05	NP

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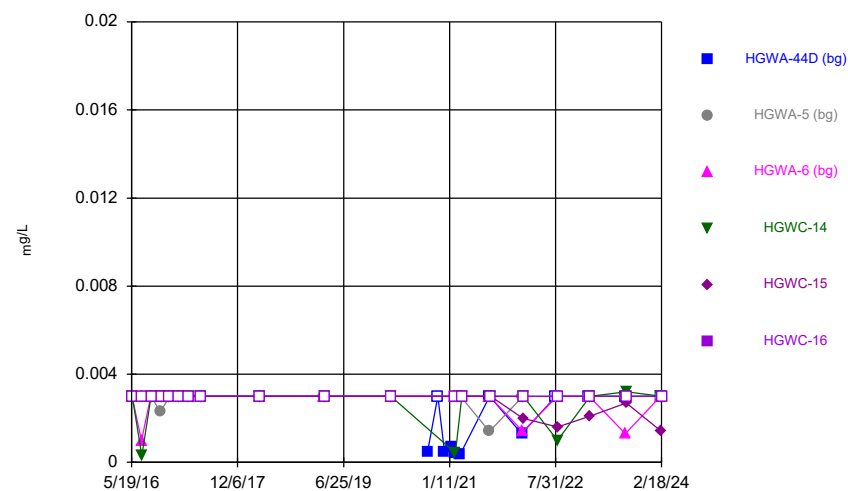
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FIGURE A.

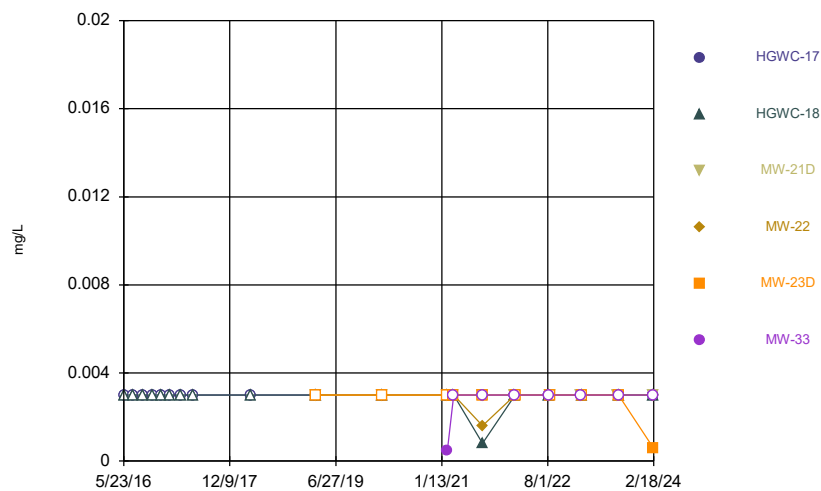
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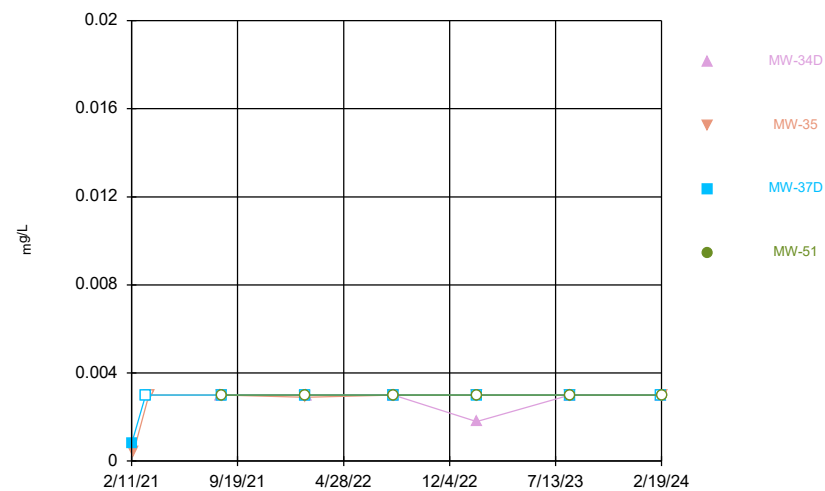
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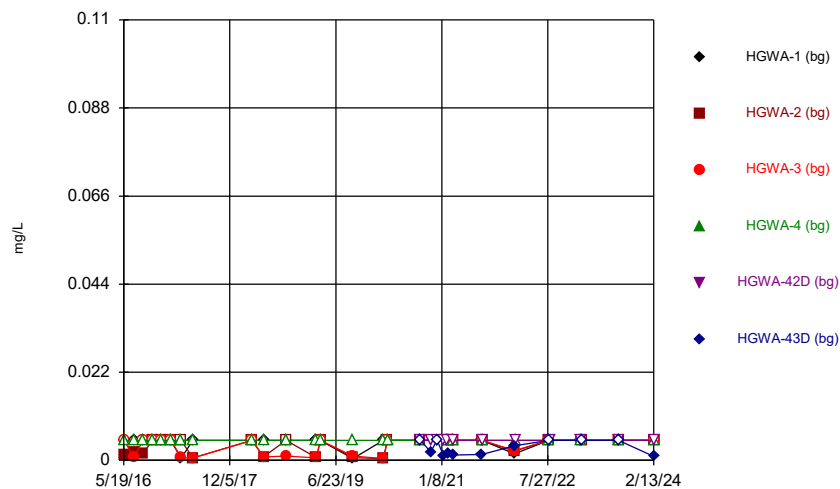
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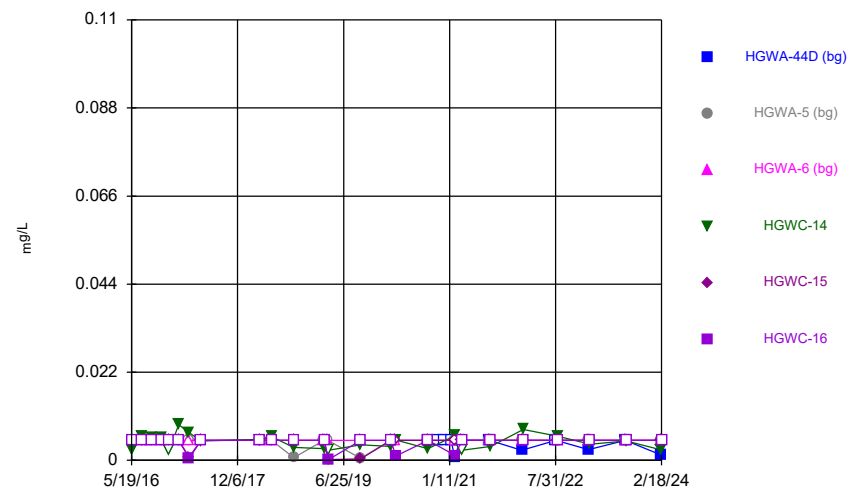


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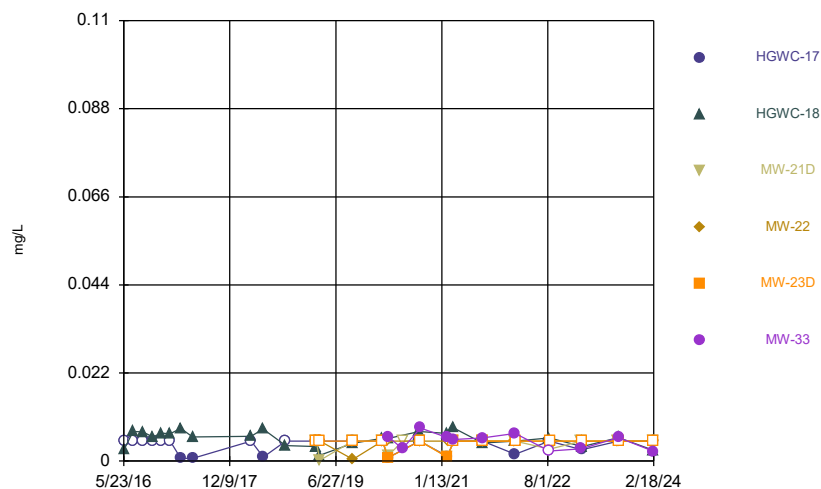
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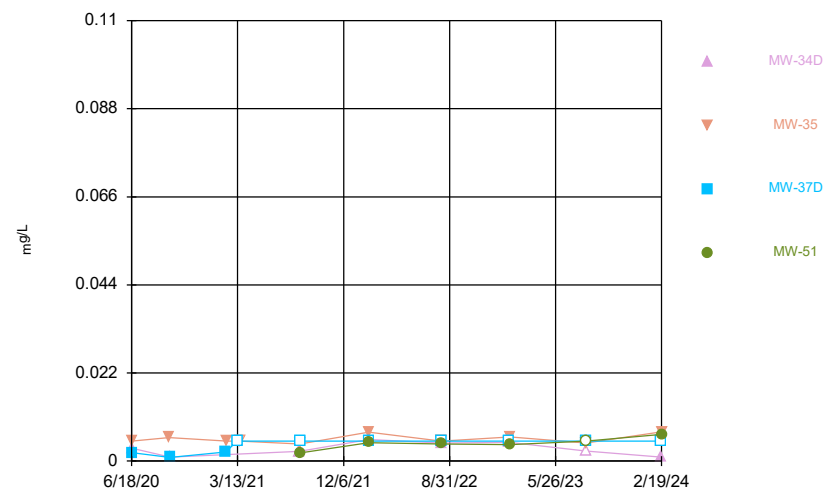
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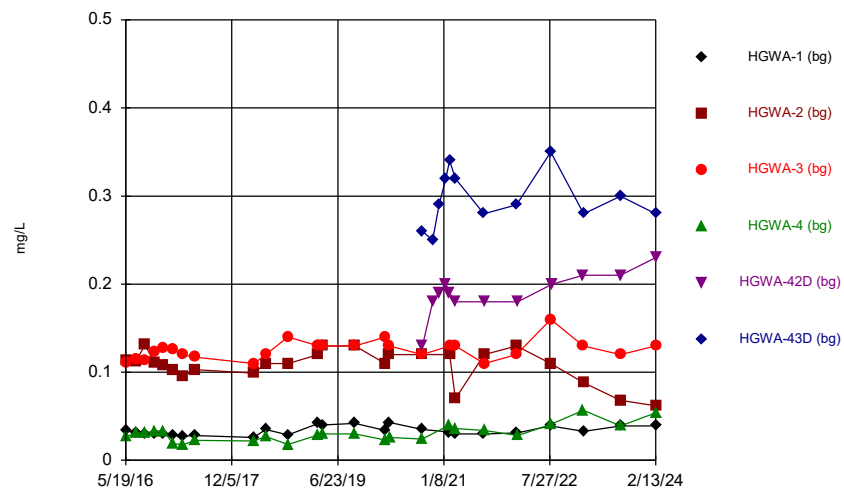
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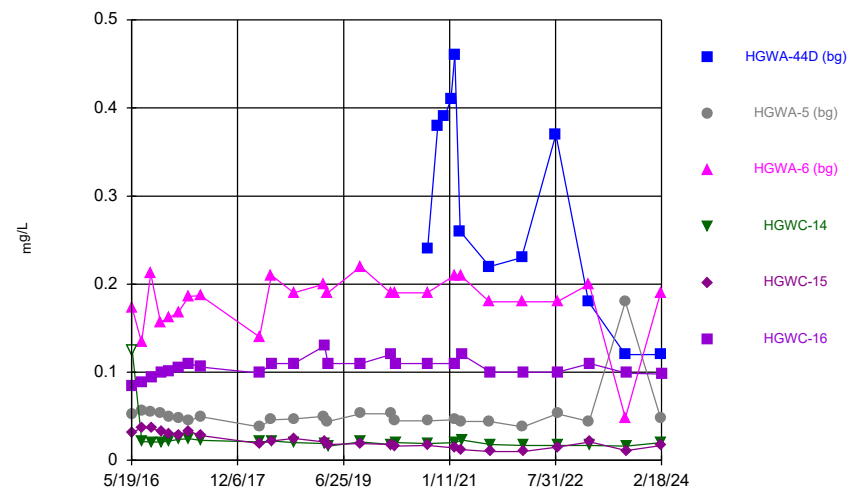


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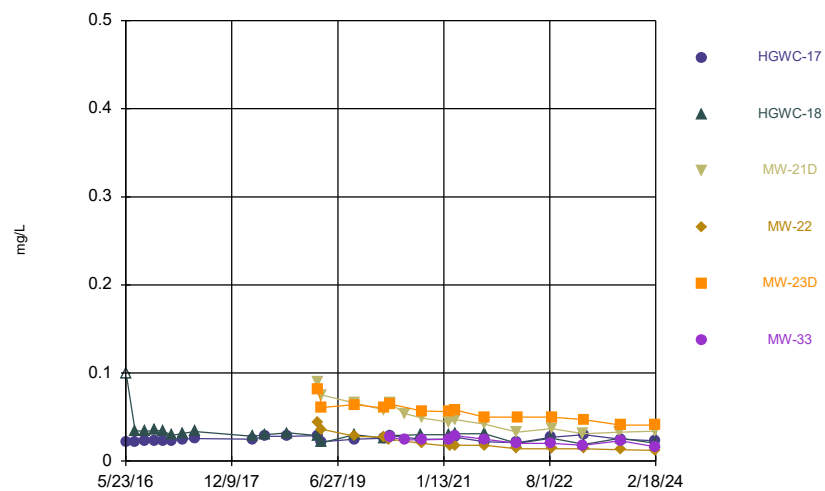
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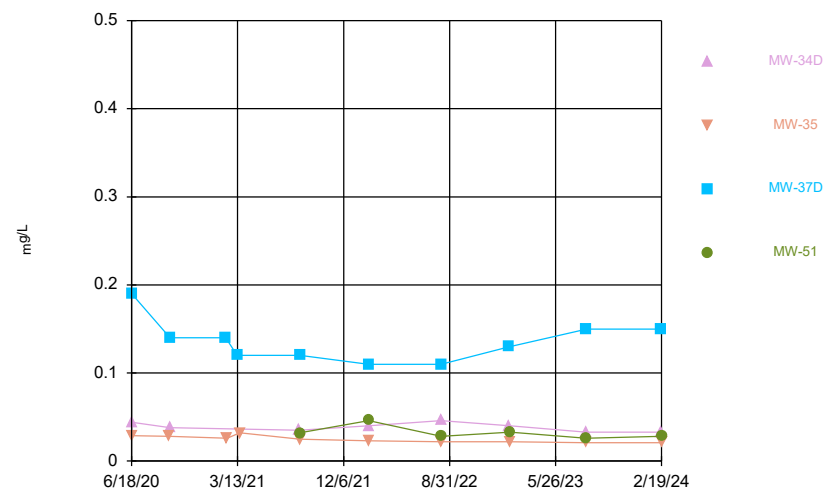
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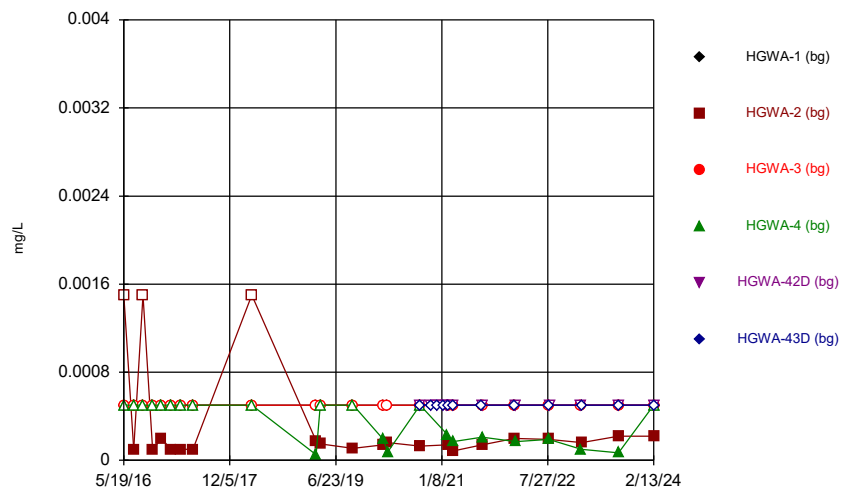
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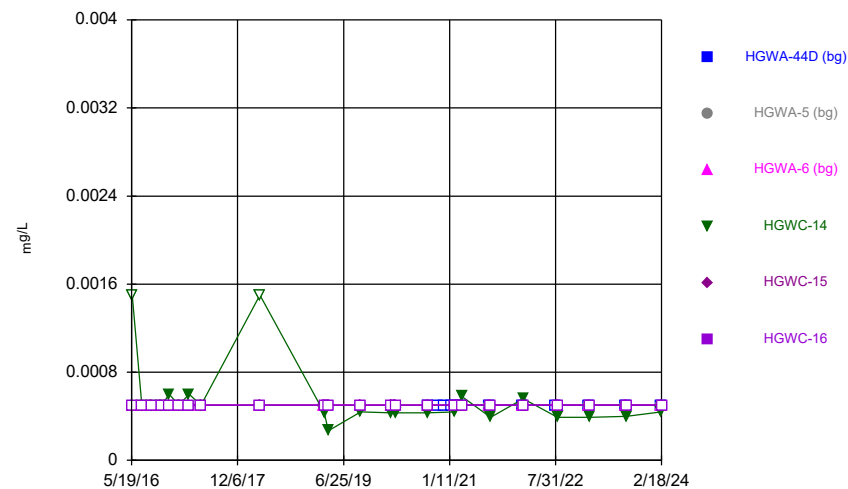
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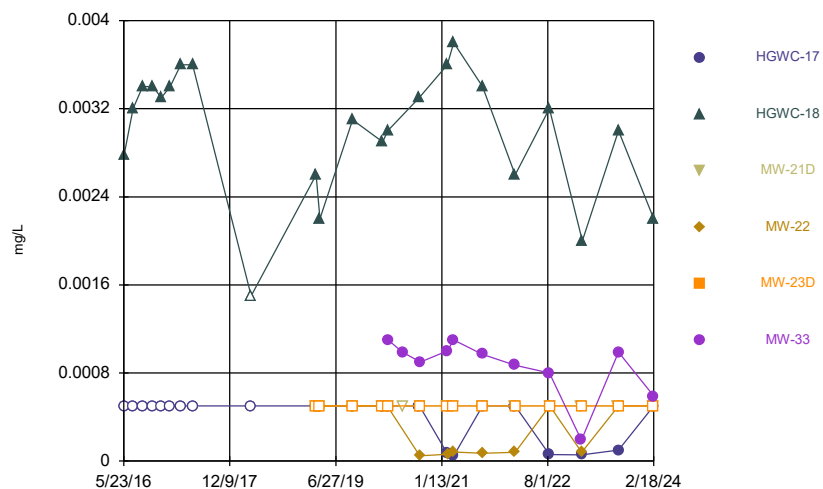
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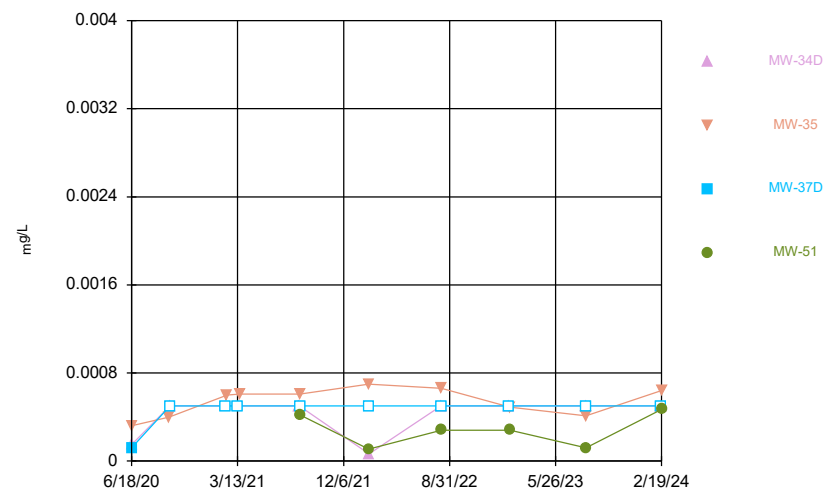
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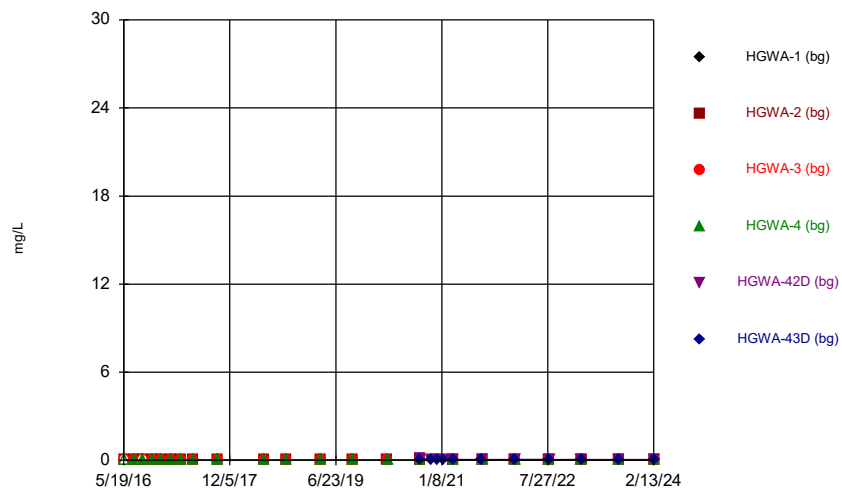
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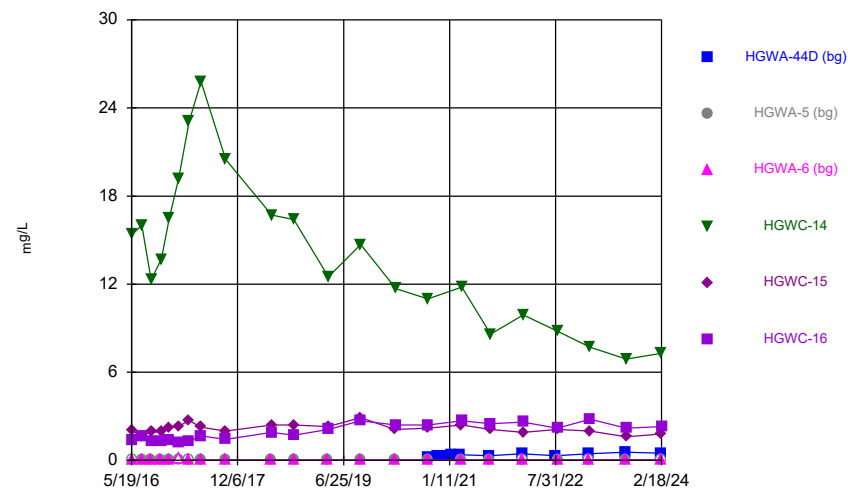
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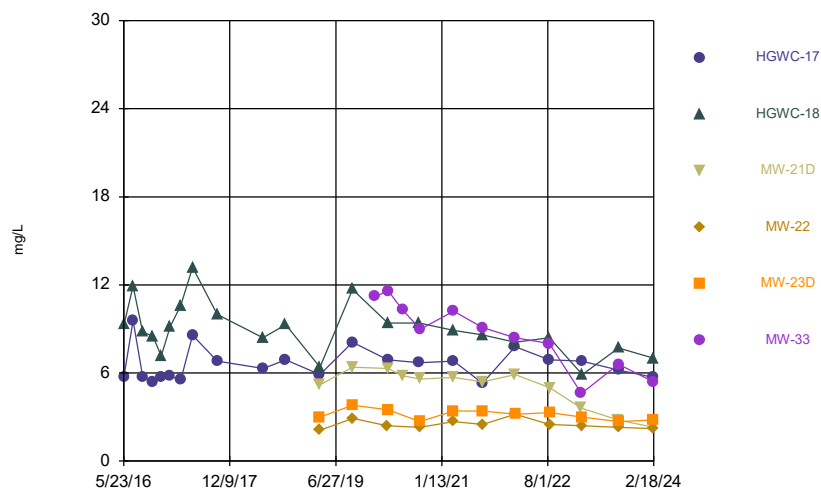
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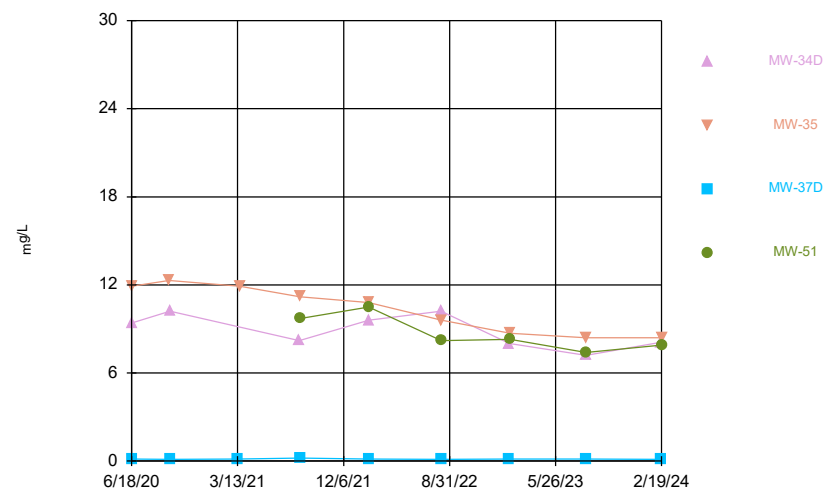
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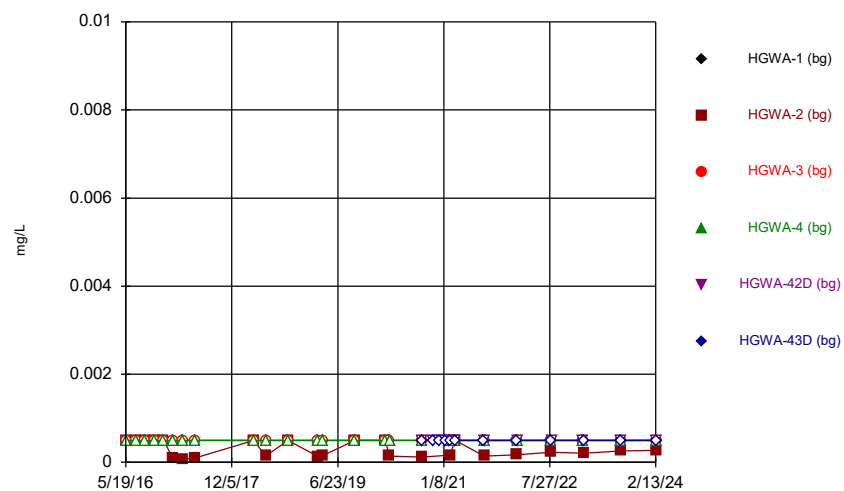
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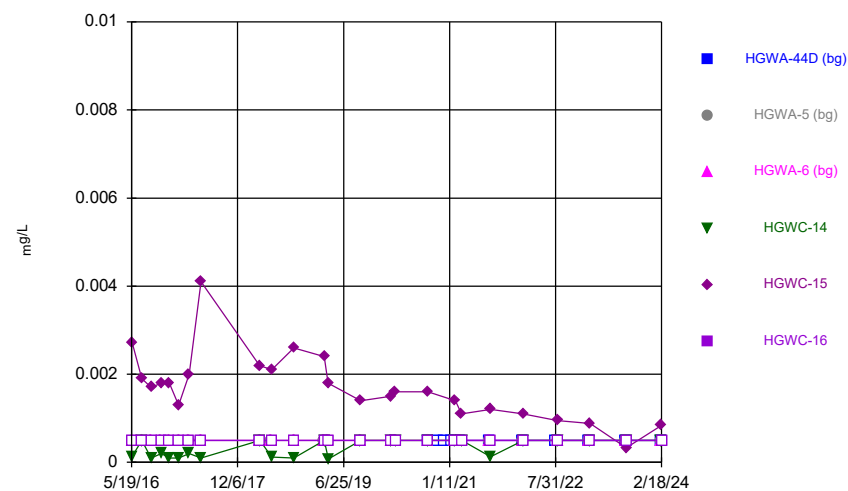
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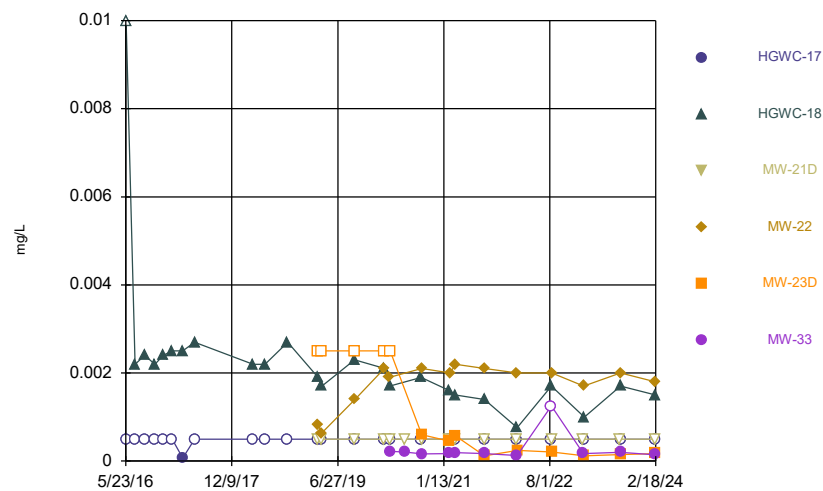
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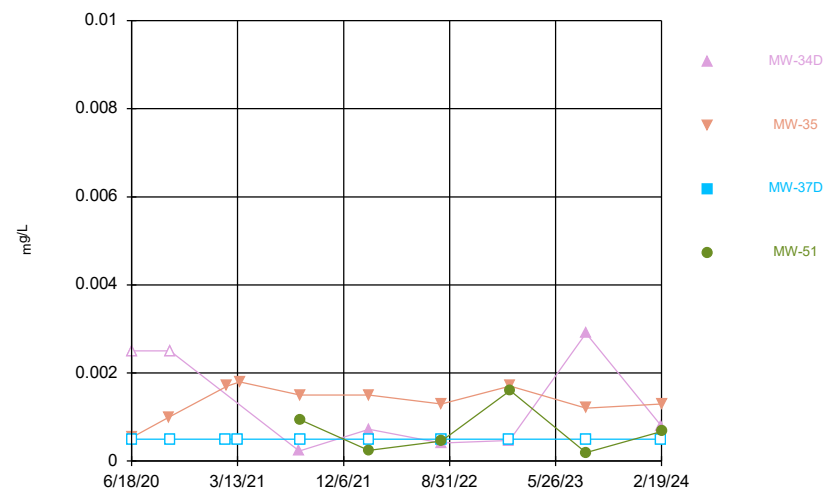
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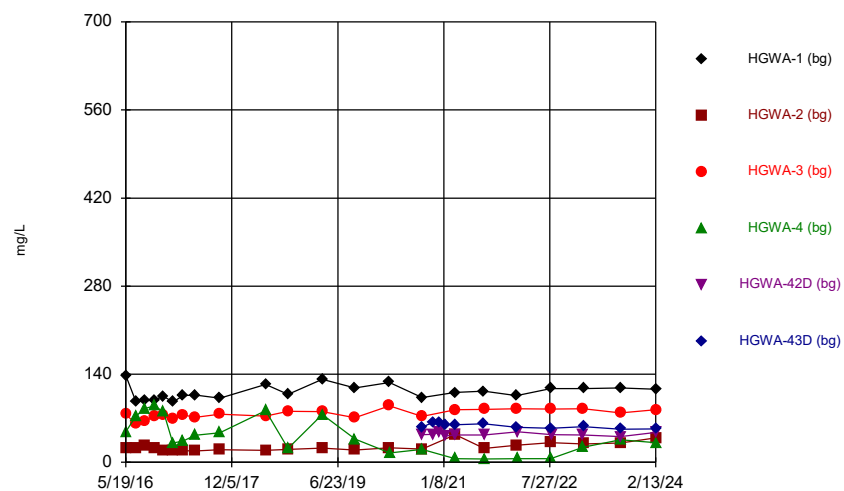
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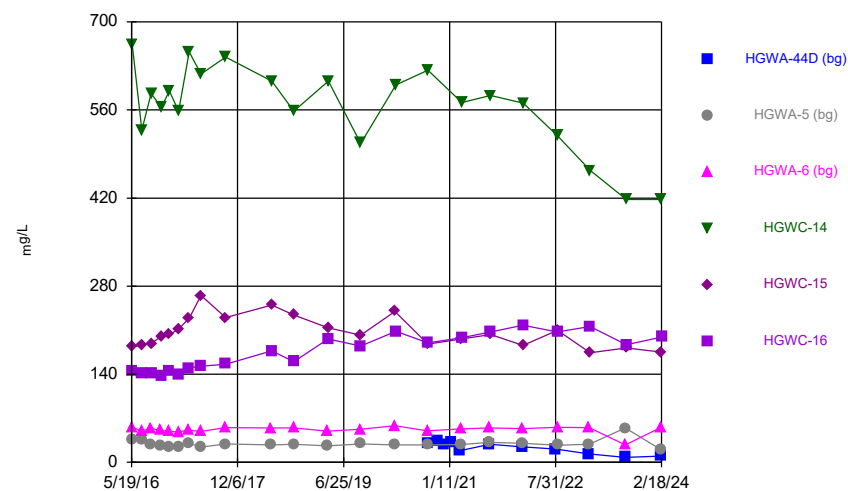
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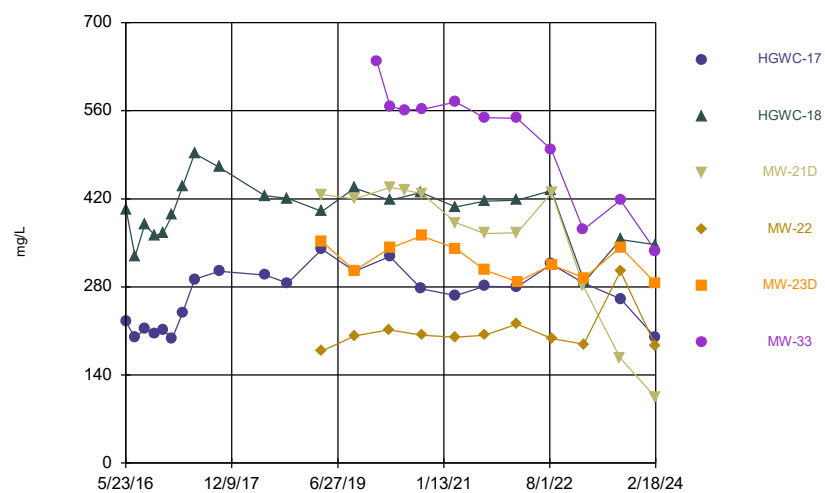
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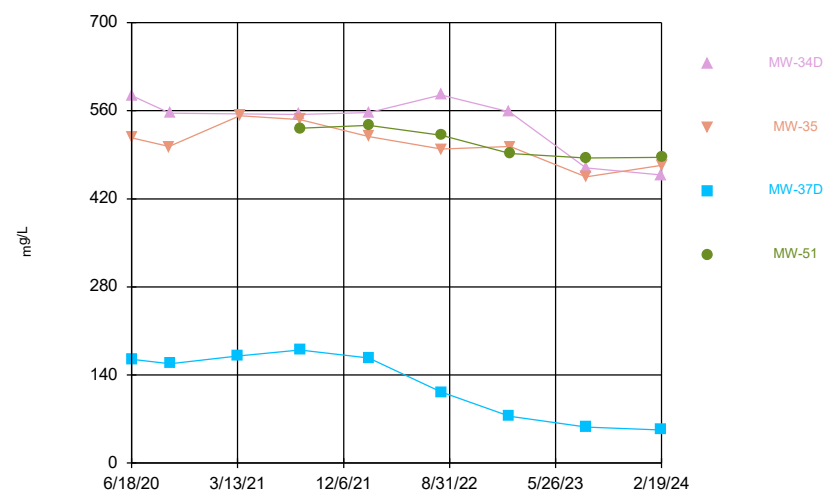
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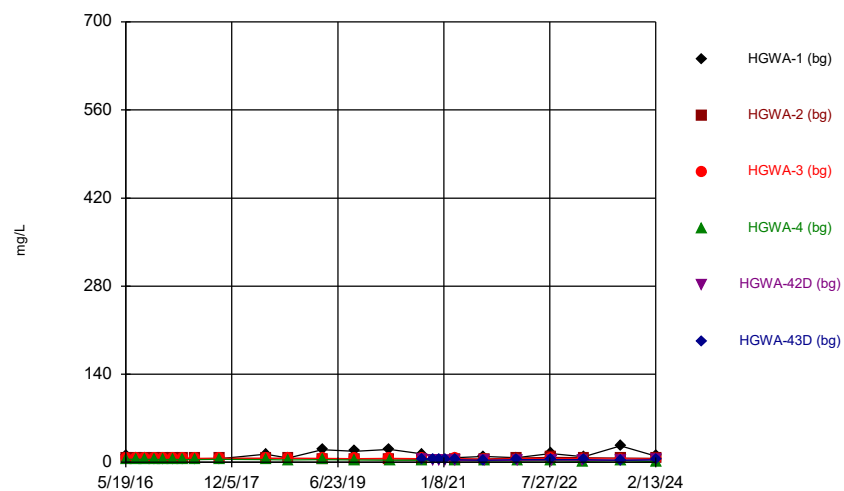
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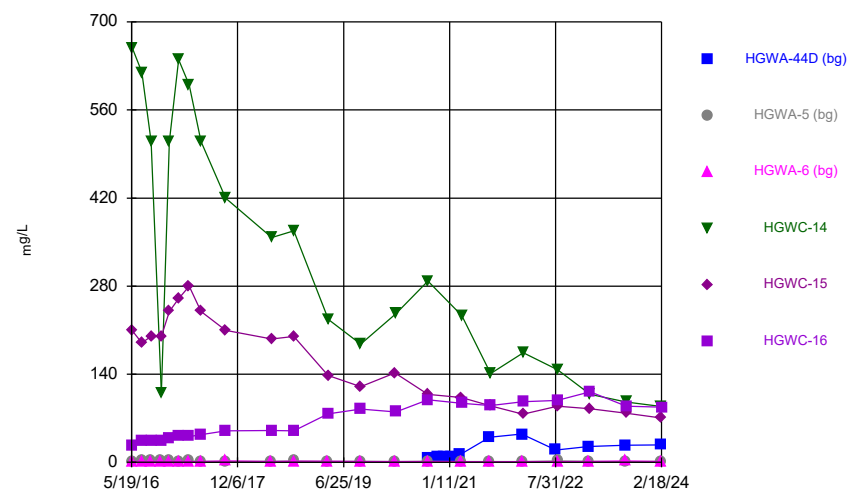
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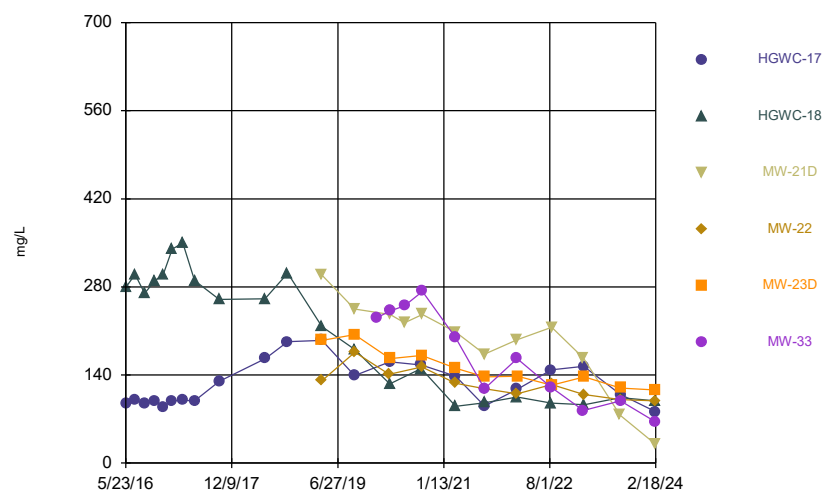
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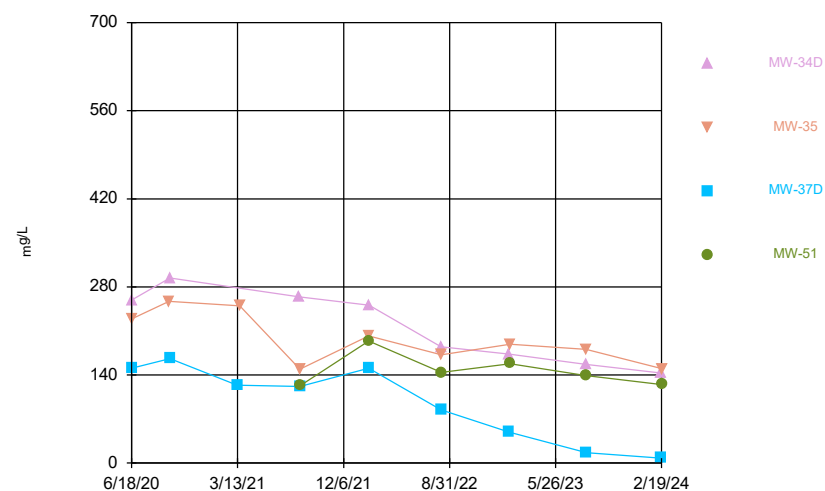
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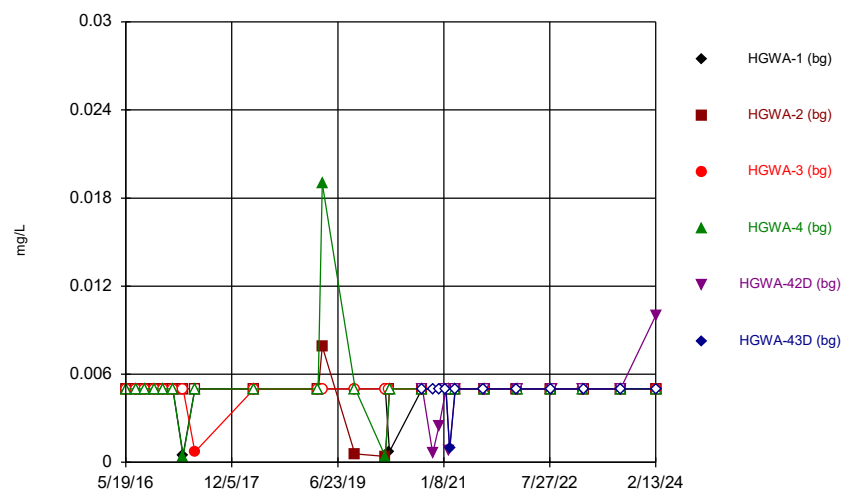
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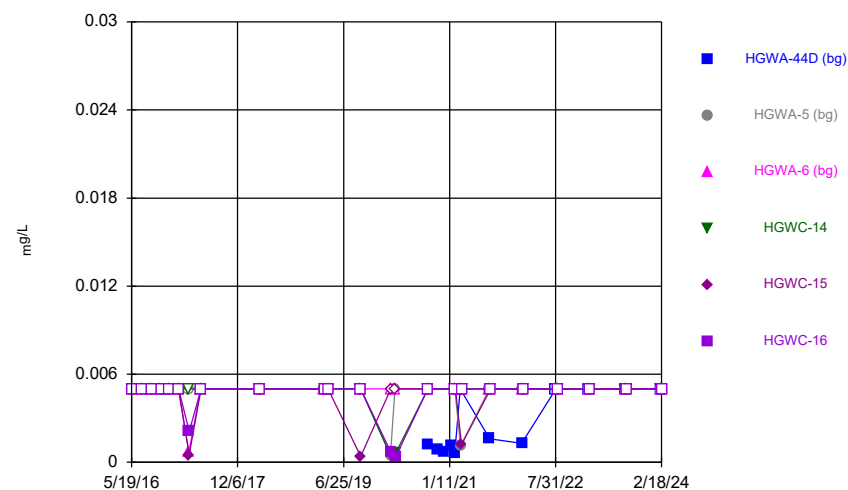


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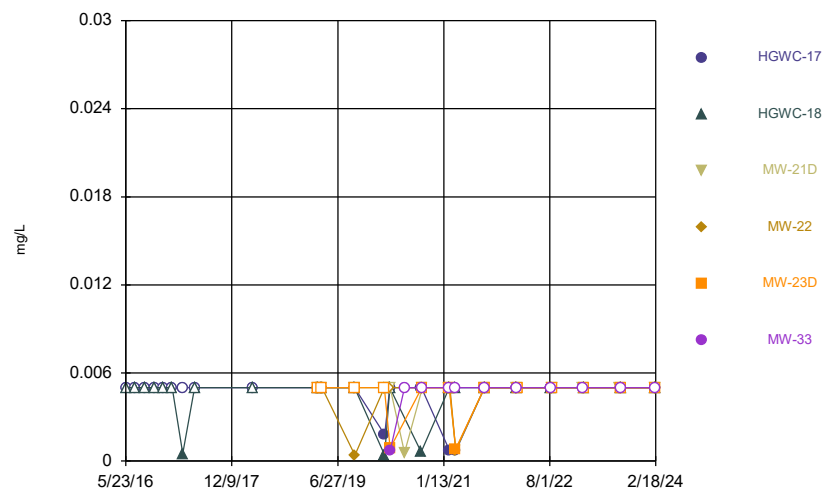
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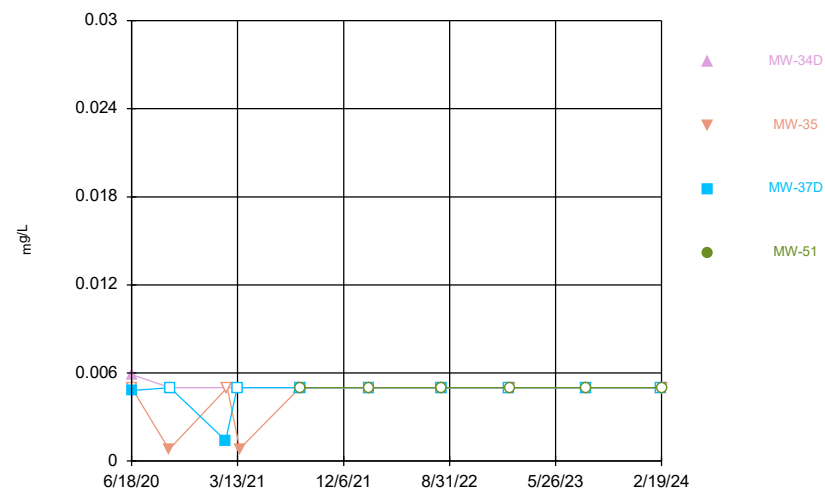
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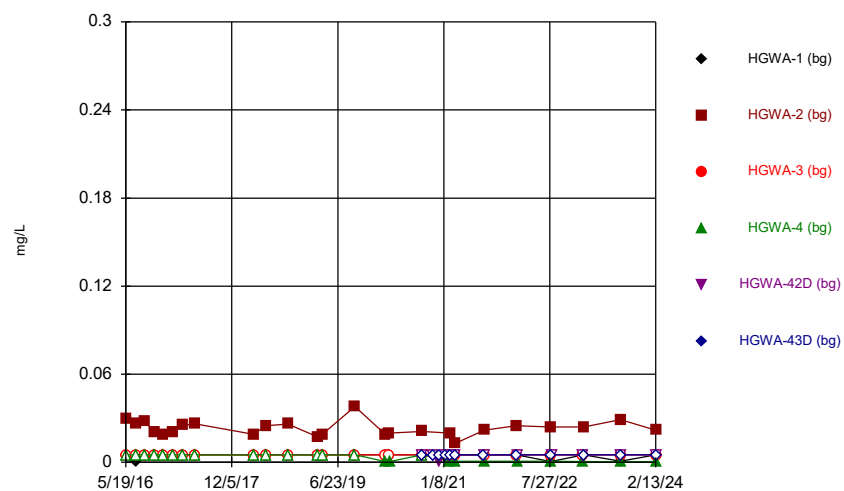
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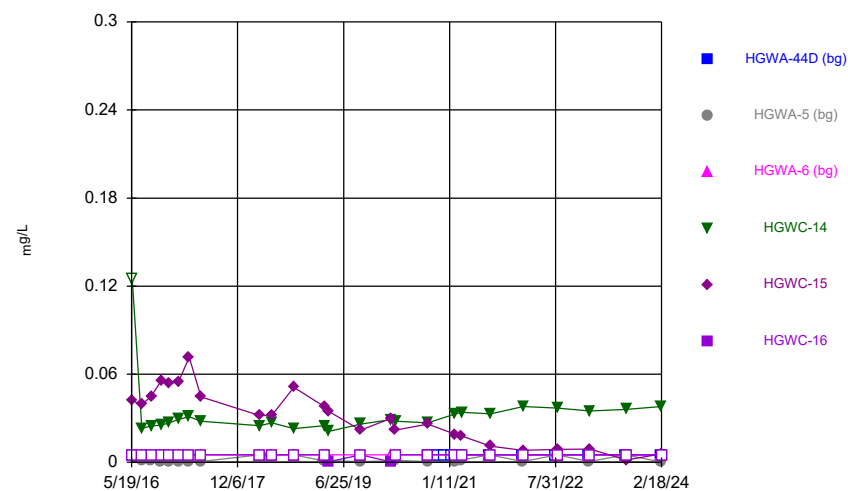
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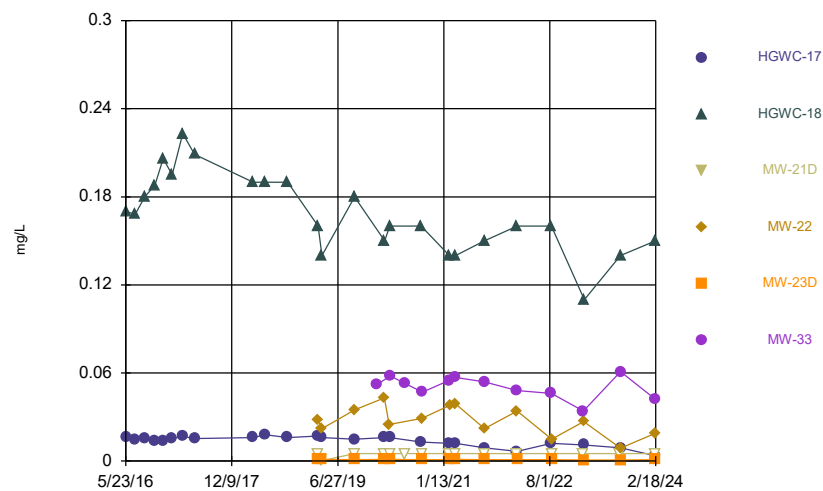
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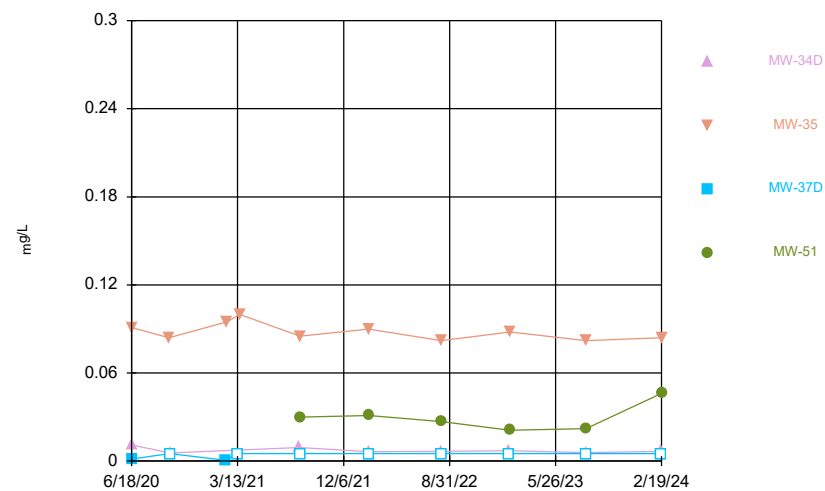
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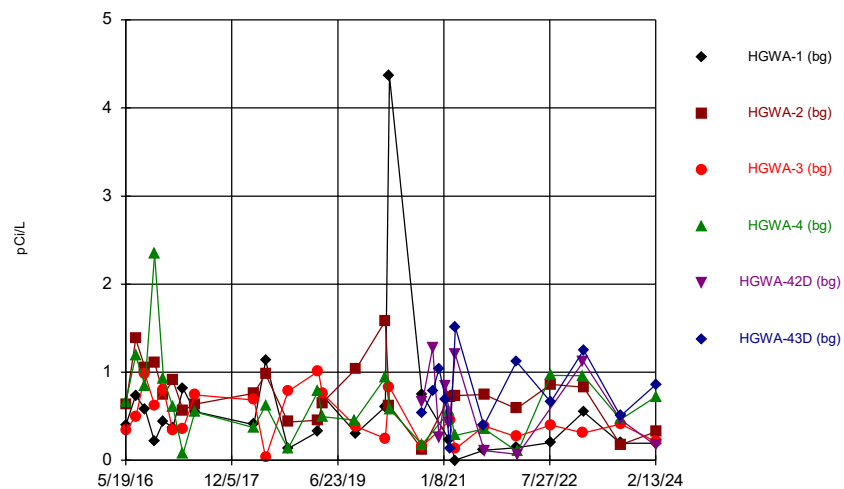
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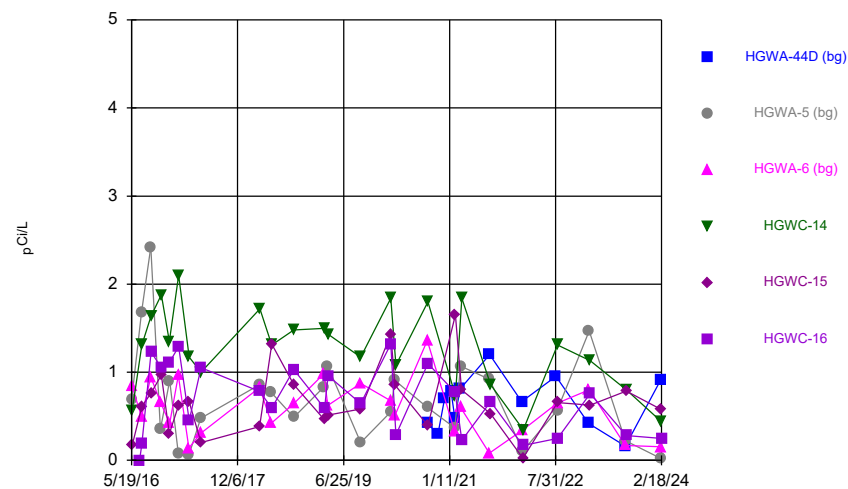
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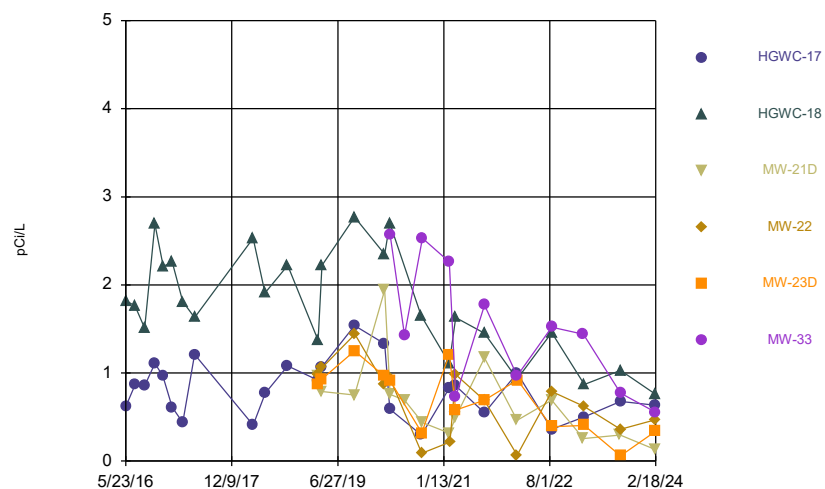
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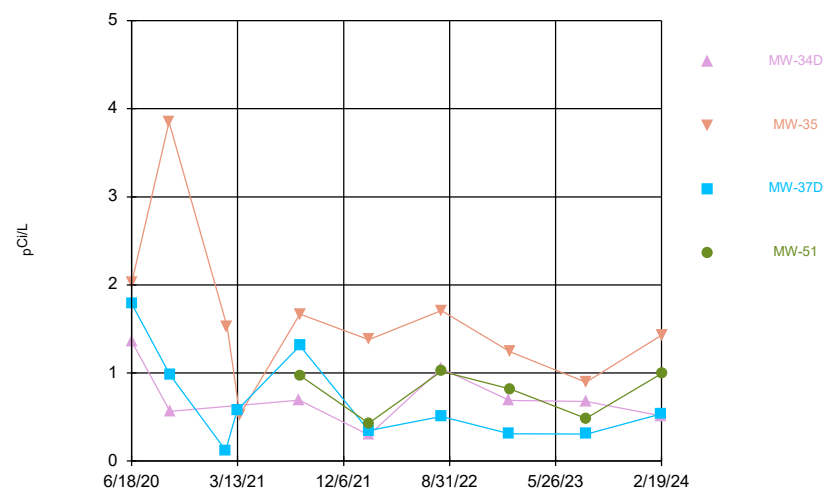
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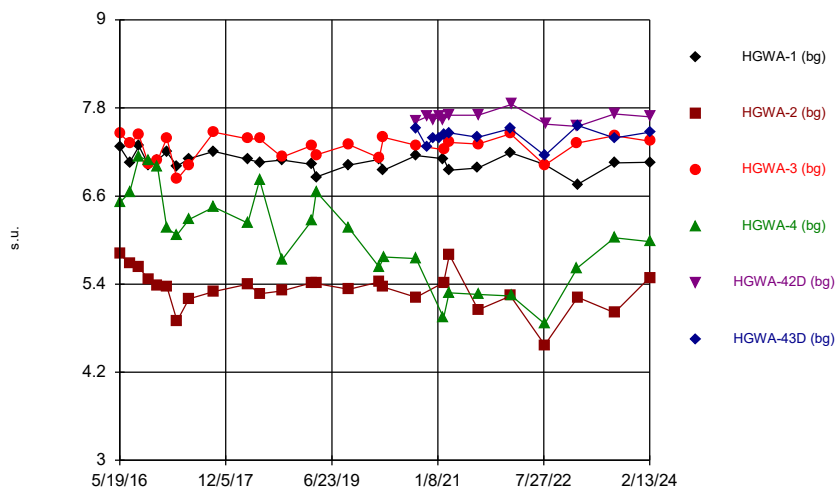
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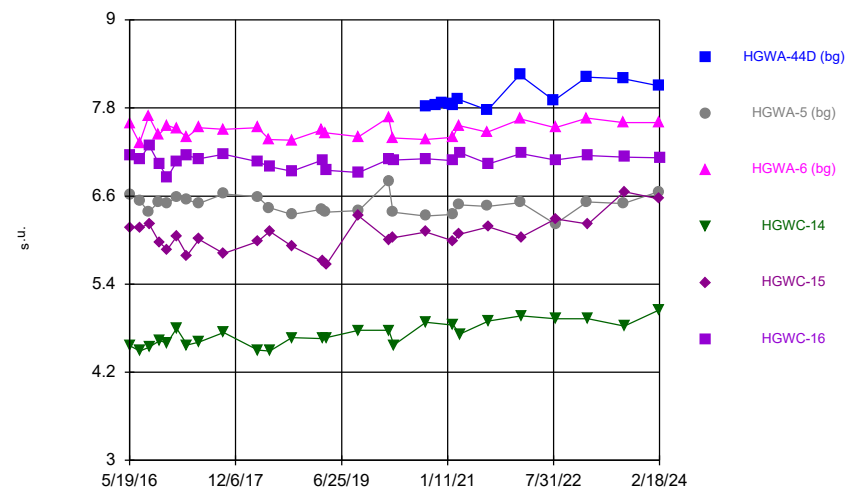
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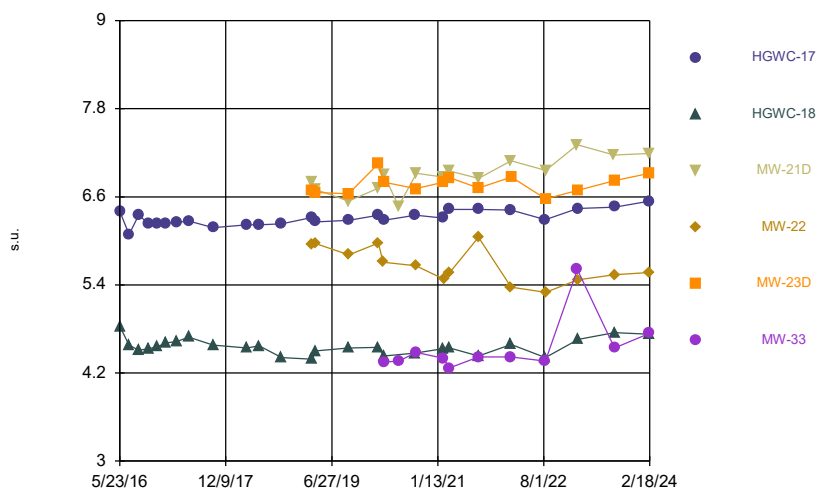
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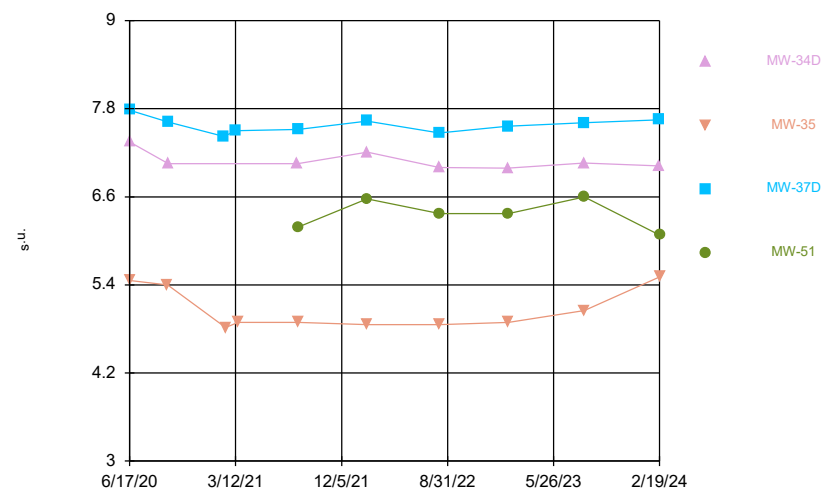
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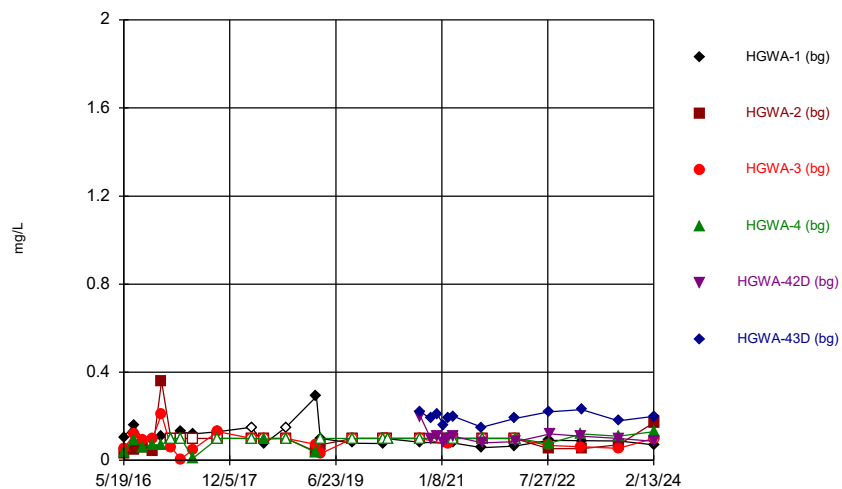
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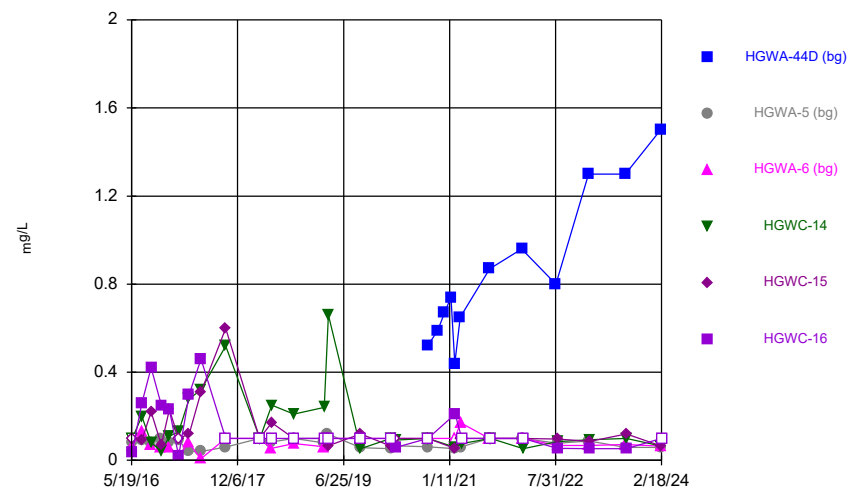


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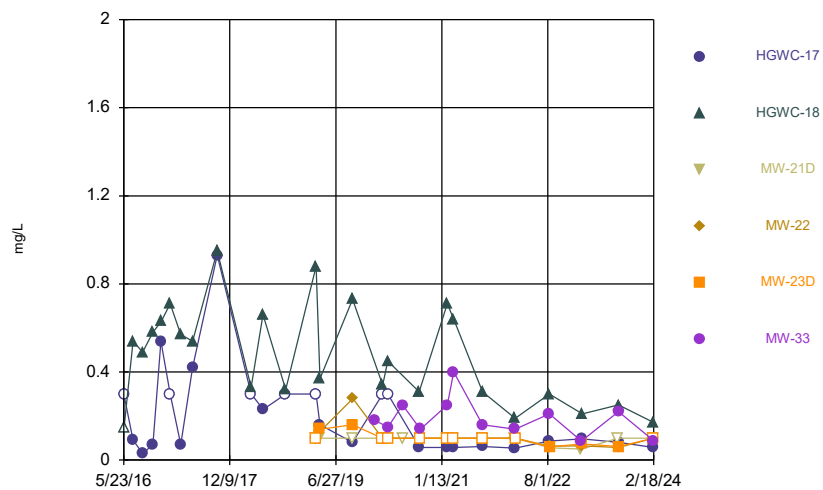
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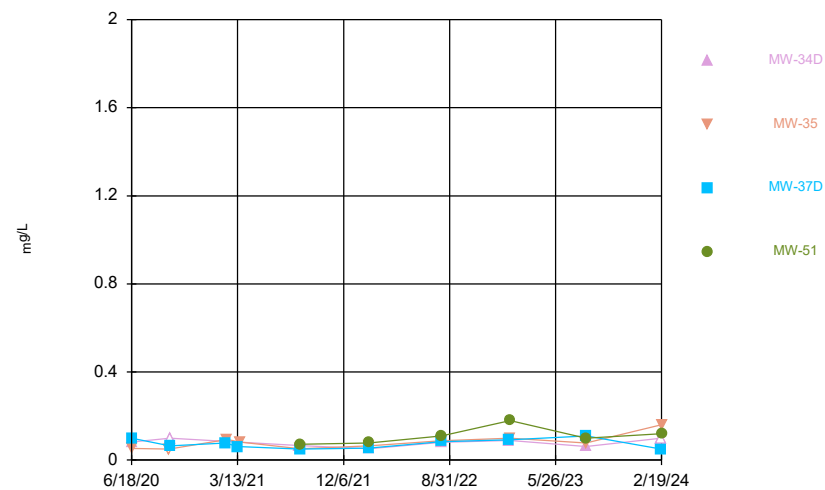
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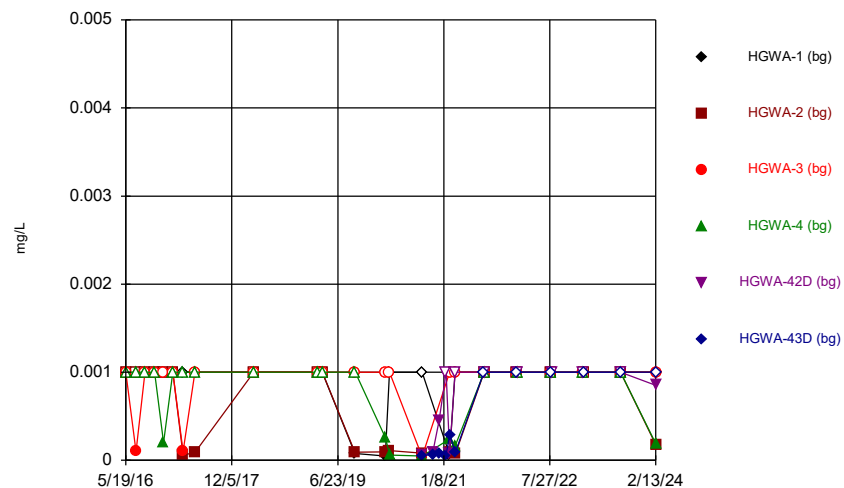
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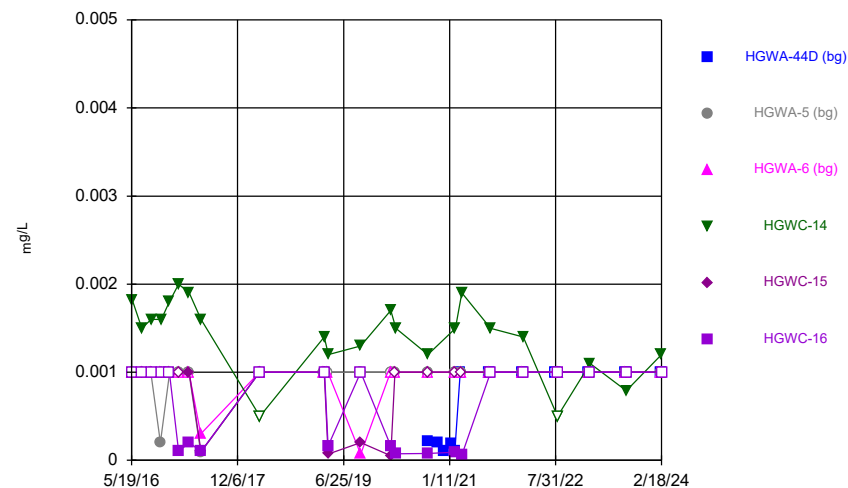
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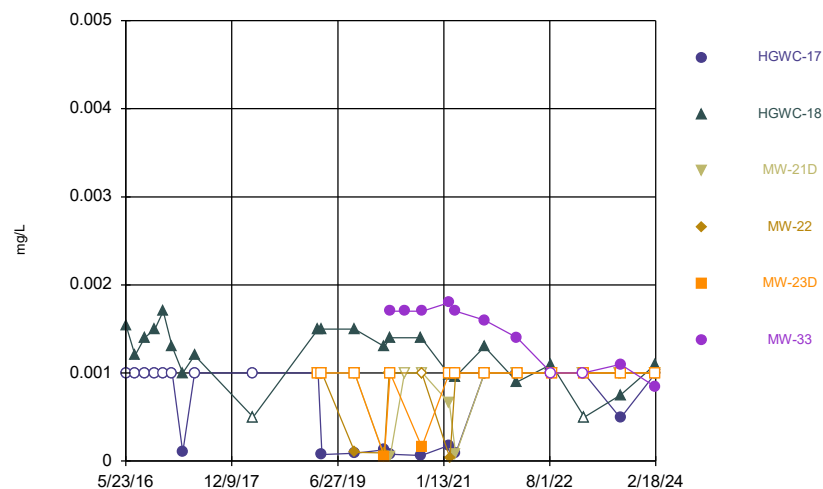
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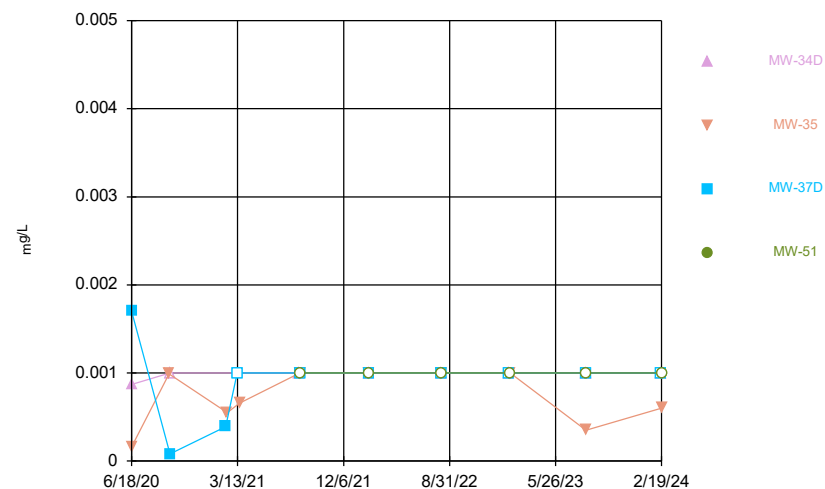
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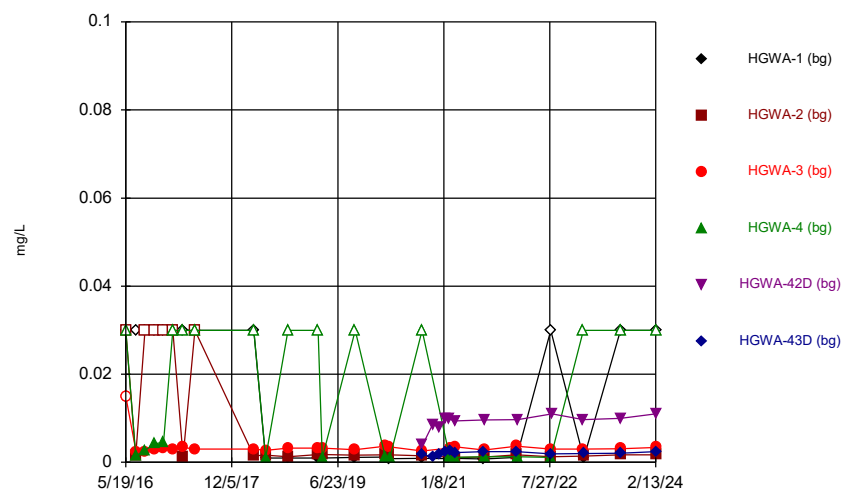
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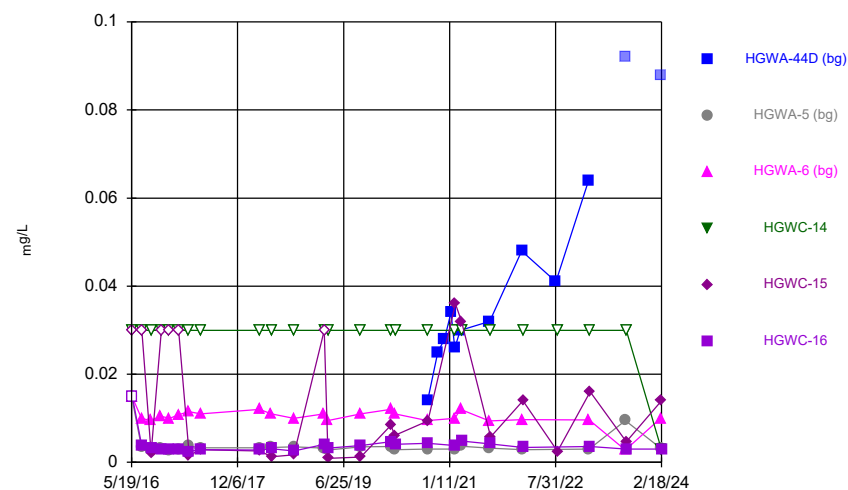
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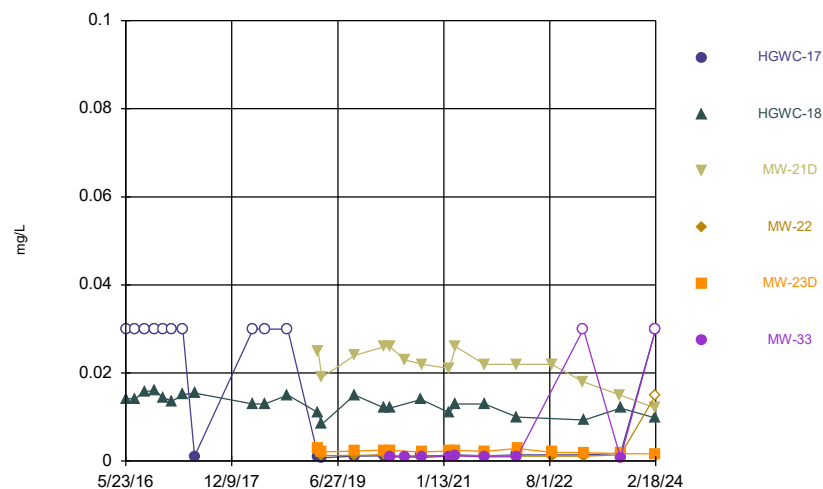
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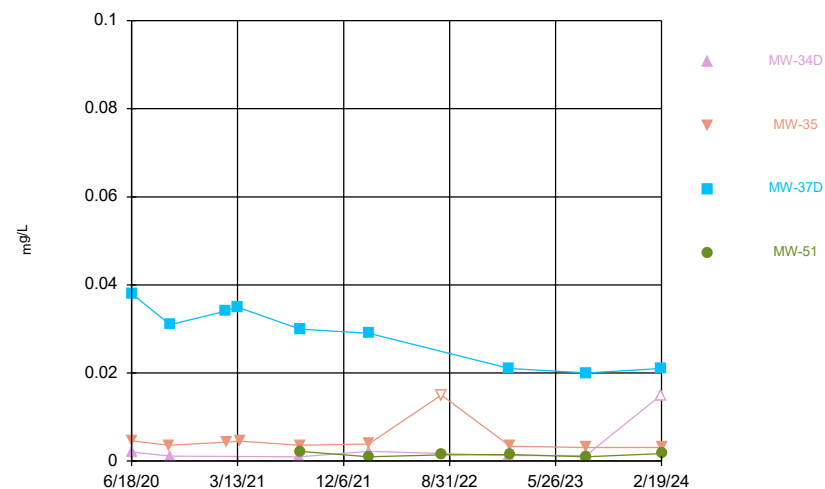
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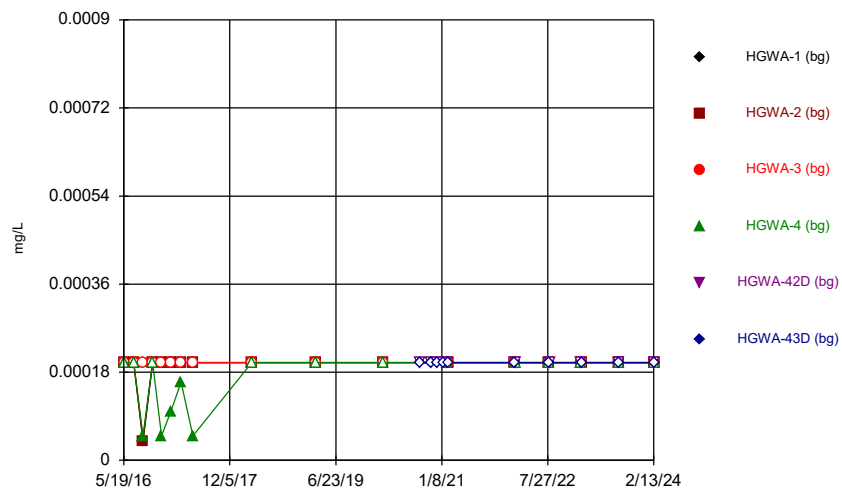
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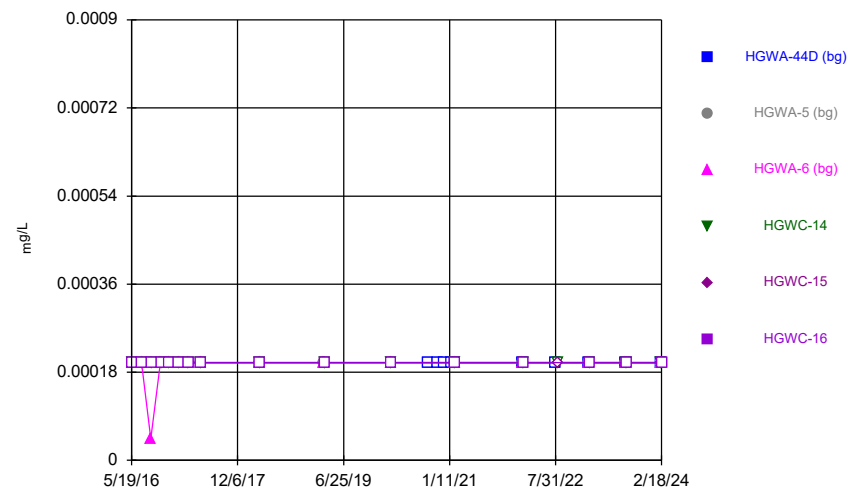
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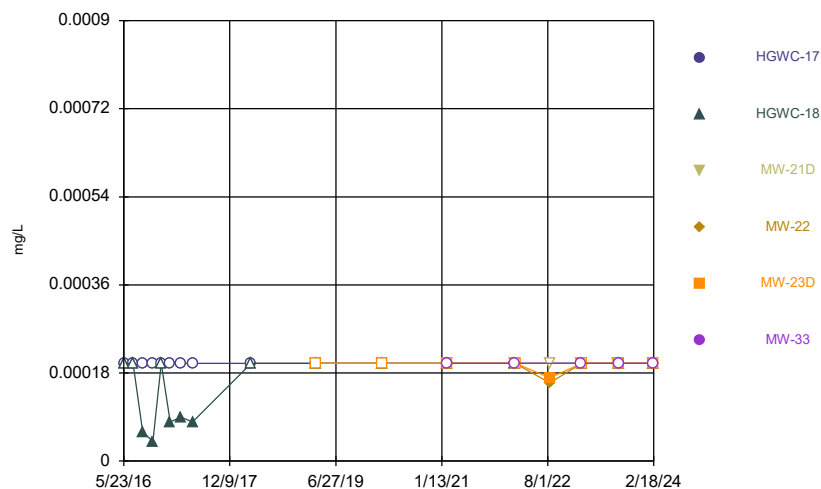
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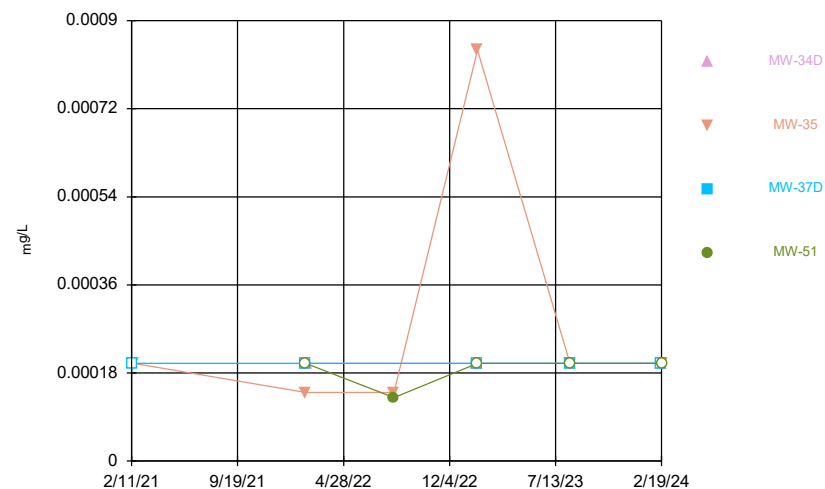
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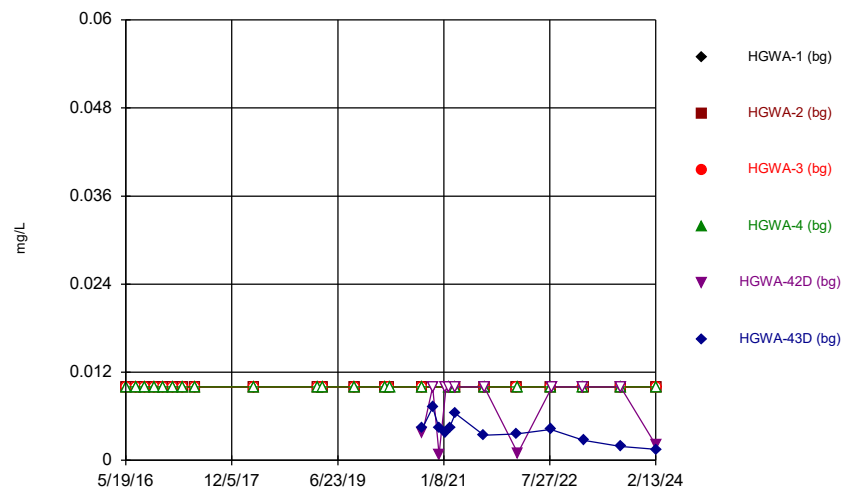
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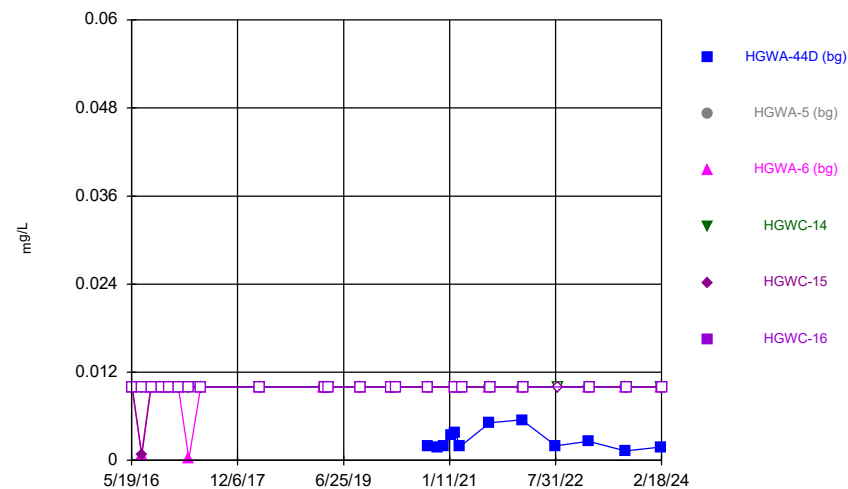
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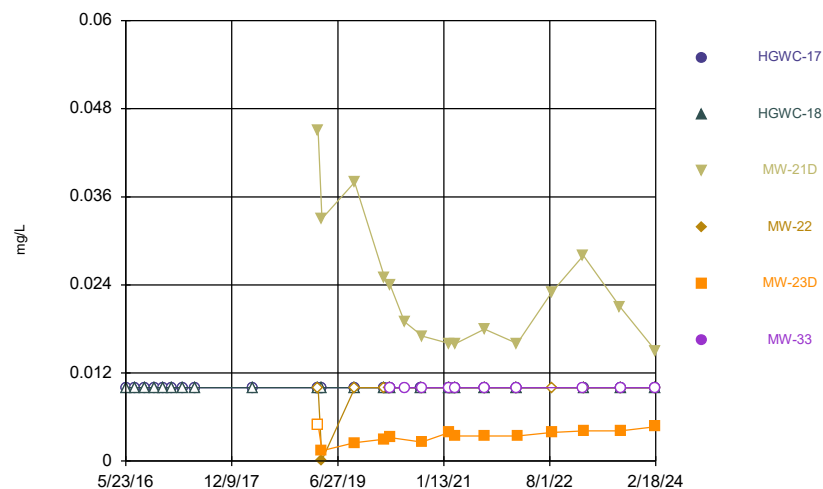
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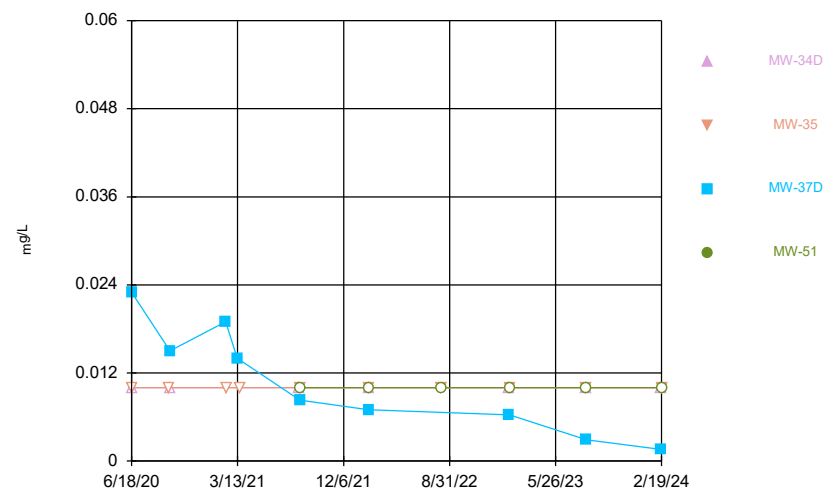
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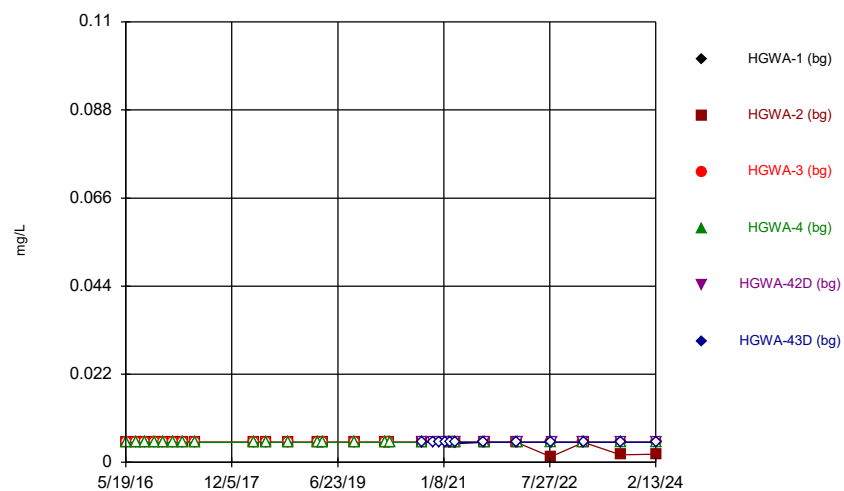
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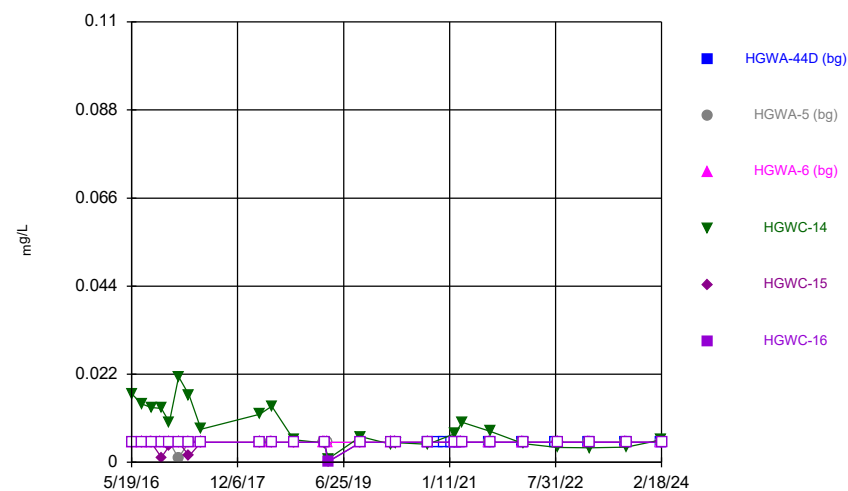


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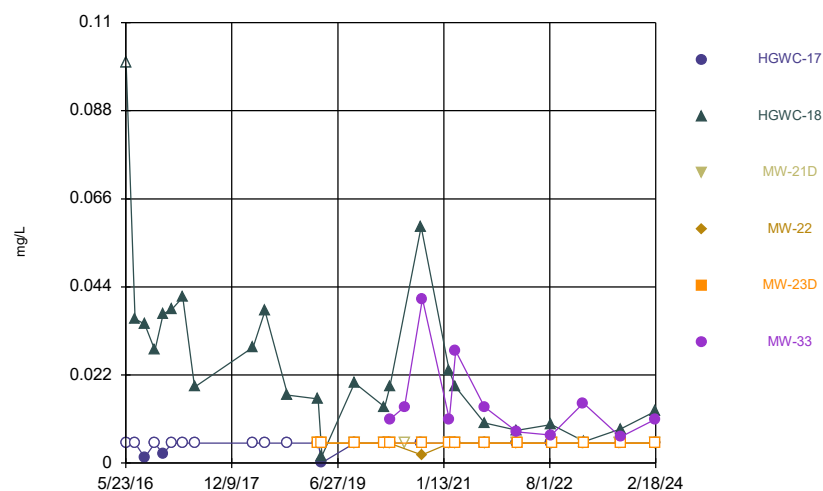
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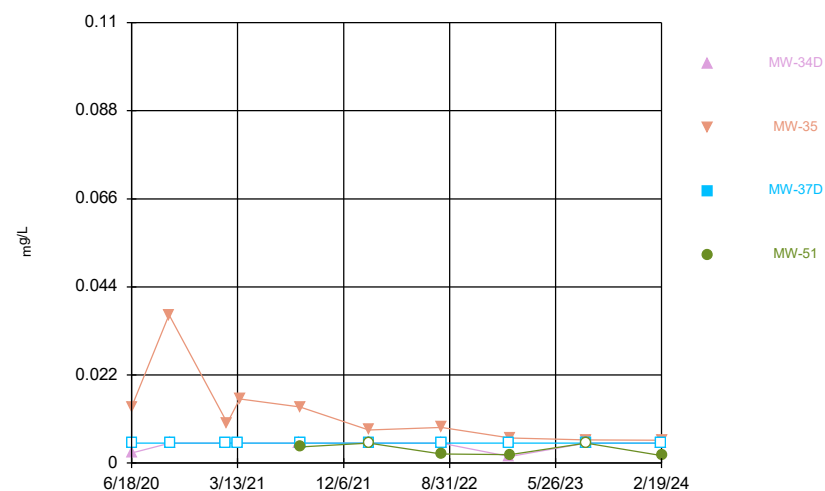
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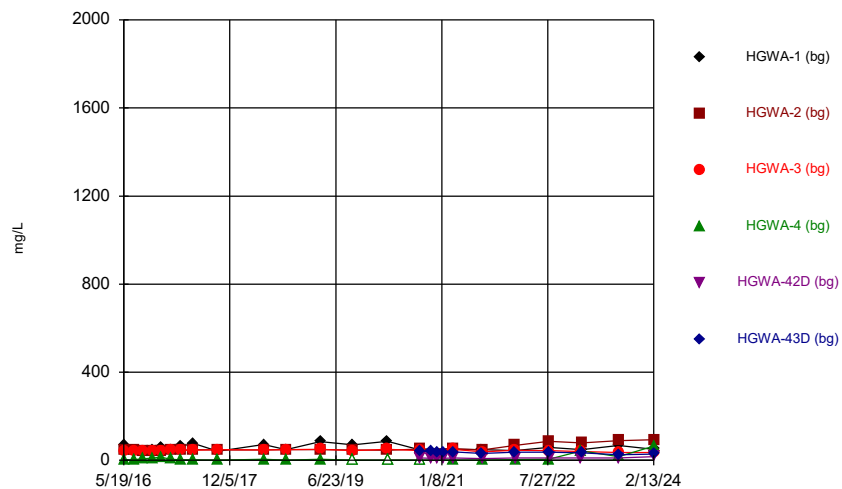
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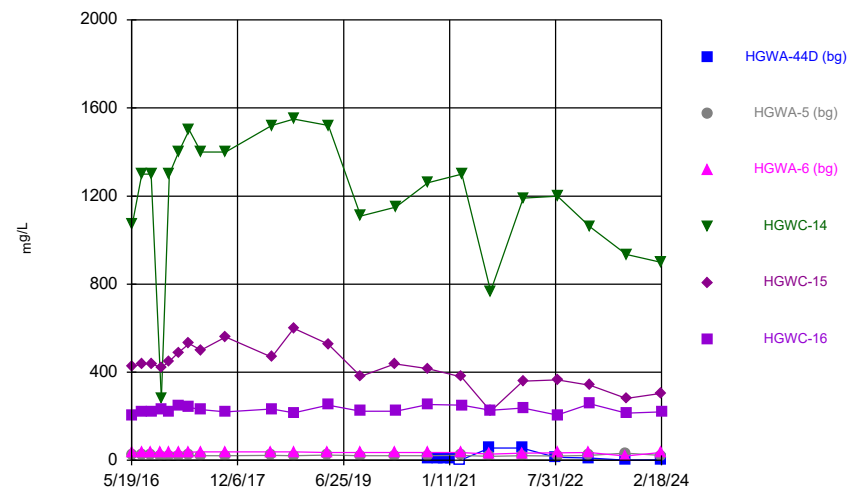
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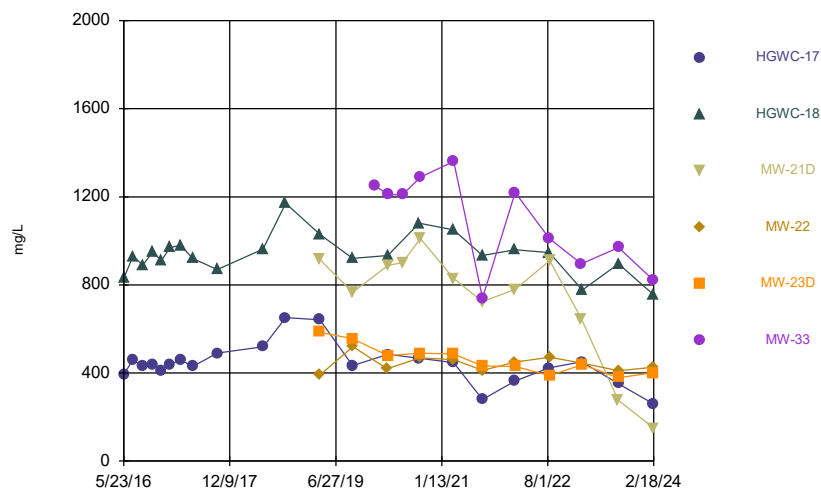
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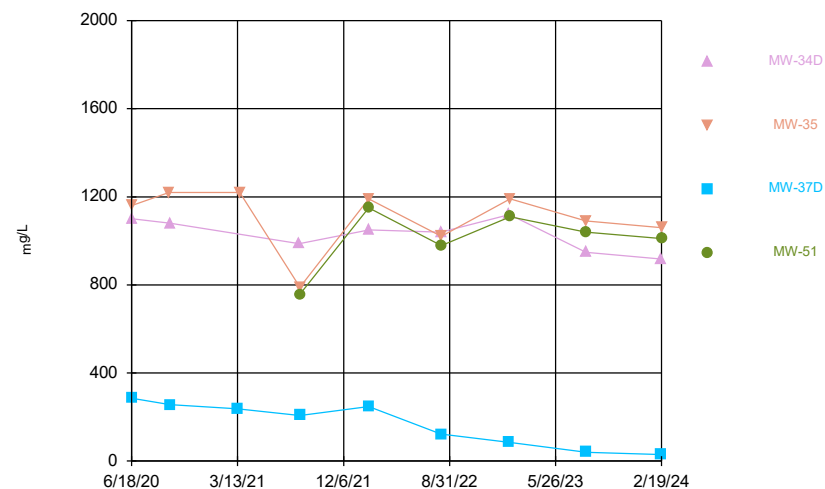
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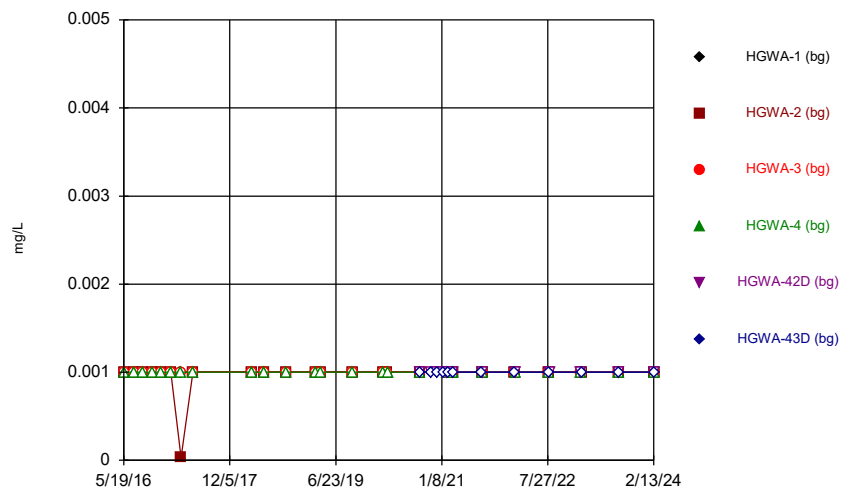
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Time Series



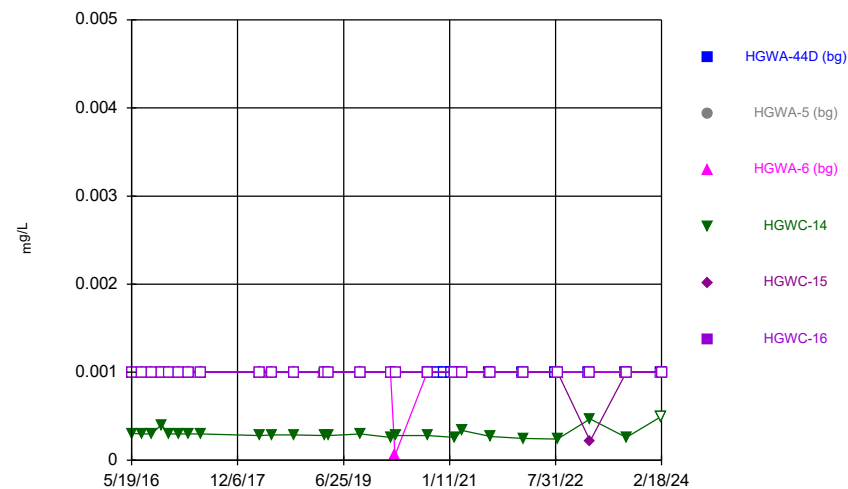
Constituent: Sulfate Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



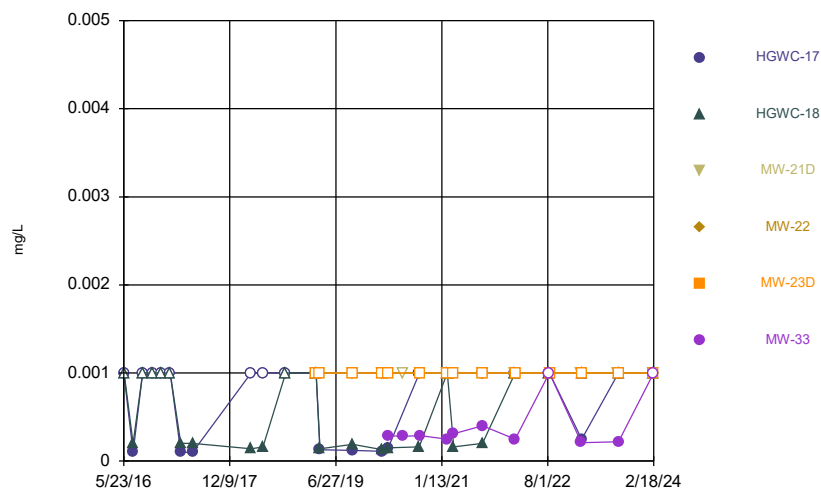
Constituent: Thallium Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



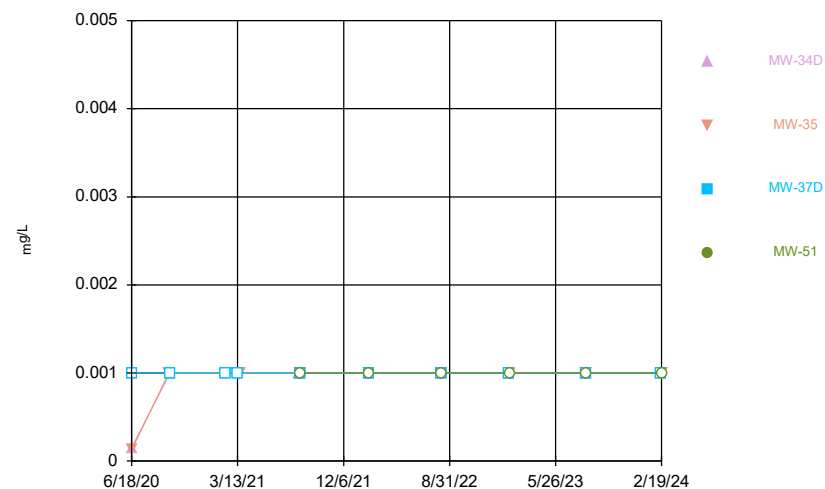
Constituent: Thallium Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



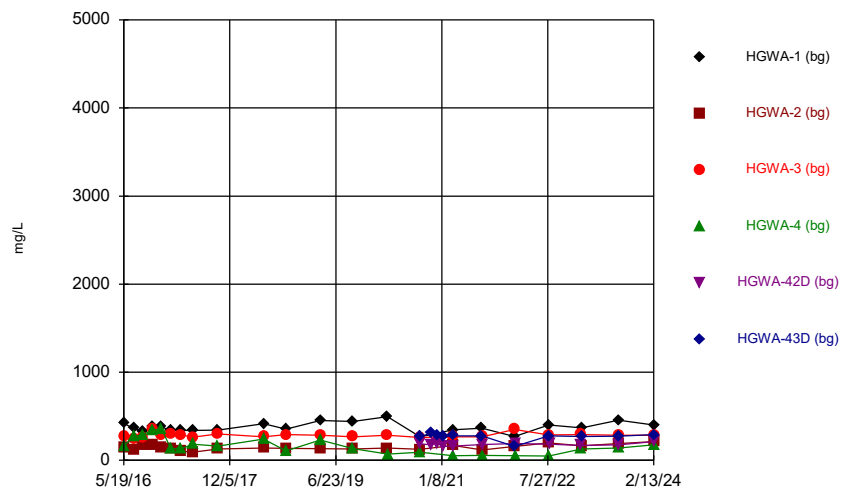
Constituent: Thallium Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series

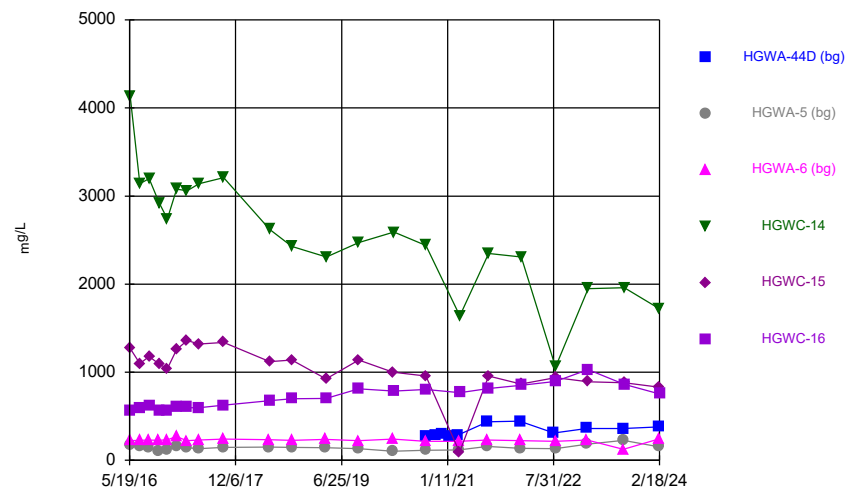


Constituent: Thallium Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

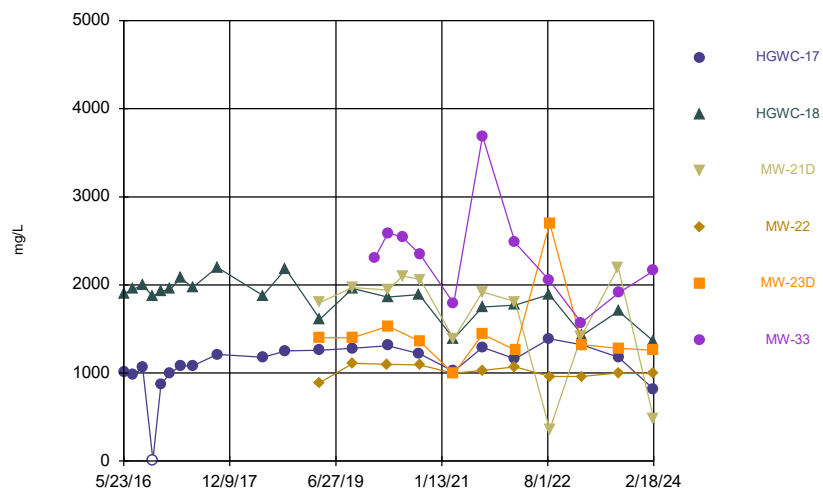
Time Series



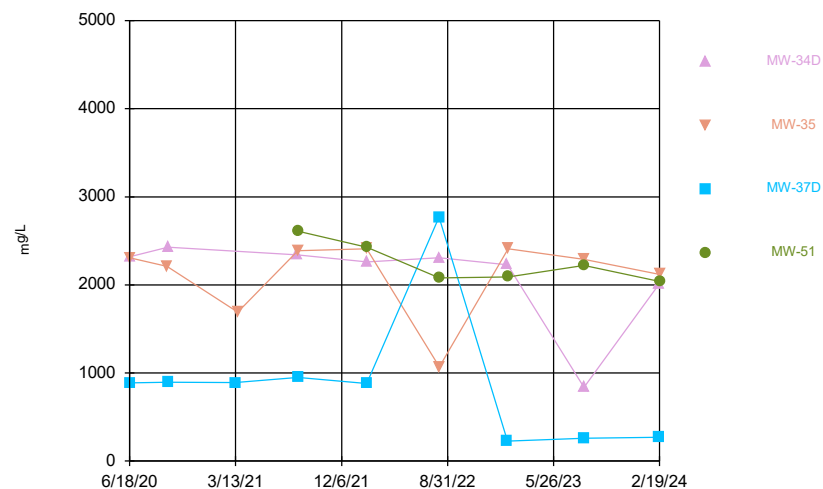
Time Series



Time Series



Time Series



Time Series

Constituent: Antimony (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.003	<0.003	<0.003	<0.003		
7/11/2016	<0.003	<0.003		<0.003		
7/12/2016			0.0003 (J)			
8/30/2016	<0.003	<0.003	<0.003	<0.003		
10/19/2016	0.0014 (J)	<0.003	<0.003	<0.003		
12/6/2016	<0.003	<0.003	<0.003	<0.003		
1/24/2017	<0.003	<0.003	<0.003	<0.003		
3/21/2017	<0.003	<0.003	<0.003	<0.003		
5/22/2017	<0.003	<0.003	<0.003			
5/23/2017				<0.003		
4/2/2018	<0.003	<0.003		<0.003		
4/3/2018			<0.003			
3/11/2019				<0.003		
3/12/2019	<0.003	<0.003	<0.003			
9/23/2019	<0.003	<0.003	<0.003			
3/2/2020	<0.003	<0.003	<0.003	<0.003		
9/16/2020						0.00051 (J)
9/17/2020					0.00055 (J)	
11/10/2020						0.00043 (J)
11/11/2020				<0.003		
12/15/2020					0.00035 (J)	0.00031 (J)
1/19/2021						0.00029 (J)
1/20/2021					<0.003	
2/8/2021	<0.003			<0.003	0.0019 (J)	
2/9/2021		0.00062 (J)	0.00031 (J)			0.00037 (J)
3/10/2021	<0.003			<0.003	<0.003	
3/11/2021		<0.003	<0.003			0.00057 (J)
8/11/2021	<0.003					<0.003
8/12/2021		<0.003	<0.003	<0.003	<0.003	
2/1/2022	<0.003	<0.003	<0.003			<0.003
2/7/2022				<0.003	<0.003	
8/2/2022	<0.003	<0.003	<0.003	<0.003		<0.003
8/9/2022					<0.003	
1/23/2023			<0.003	<0.003	0.0016 (J)	
1/24/2023	<0.003	<0.003				<0.003
8/8/2023	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
2/13/2024	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.003				
5/20/2016			<0.003			
5/23/2016				<0.003	<0.003	<0.003
7/11/2016		<0.003	0.001 (J)			
7/12/2016				0.0003 (J)	<0.003	<0.003
8/30/2016		<0.003	<0.003			
9/1/2016				<0.003	<0.003	<0.003
10/20/2016		0.0023 (J)	<0.003			
10/24/2016				<0.003	<0.003	
10/25/2016						<0.003
12/7/2016				<0.003	<0.003	<0.003
12/8/2016		<0.003	<0.003			
1/24/2017		<0.003	<0.003			
1/26/2017				<0.003	<0.003	<0.003
3/21/2017		<0.003	<0.003			
3/22/2017						<0.003
3/23/2017				<0.003	<0.003	
5/23/2017		<0.003	<0.003			
5/24/2017				<0.003	<0.003	<0.003
4/3/2018		<0.003	<0.003		<0.003	<0.003
4/4/2018				<0.003		
3/12/2019		<0.003	<0.003			
3/14/2019				<0.003	<0.003	
3/15/2019						<0.003
3/2/2020		<0.003	<0.003			
3/3/2020				<0.003	<0.003	<0.003
9/16/2020	0.00049 (J)					
11/10/2020	<0.003					
12/15/2020	0.00047 (J)					
1/19/2021	0.00067 (J)					
2/9/2021	0.00042 (J)	<0.003	<0.003			
2/10/2021						<0.003
2/11/2021				0.00043 (J)		
2/12/2021					<0.003	
3/10/2021	0.00037 (J)					
3/11/2021		<0.003	<0.003			
3/16/2021					<0.003	
3/17/2021				<0.003		<0.003
8/12/2021		0.0014 (J)	<0.003			
8/13/2021	<0.003					
8/18/2021				<0.003		
8/19/2021					<0.003	<0.003
2/1/2022	0.0013 (J)					
2/7/2022		<0.003	0.0014 (J)			
2/8/2022					0.002 (J)	<0.003
2/9/2022				<0.003		
8/2/2022	<0.003					
8/10/2022		<0.003	<0.003			<0.003
8/11/2022				0.001 (J)	0.0016 (J)	
1/24/2023	<0.003					
1/27/2023		<0.003	<0.003			
2/1/2023				<0.003	0.0021 (J)	<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/8/2023	<0.003	0.003	0.0013 (J)			
8/13/2023				0.0032	0.0027 (J)	<0.003
2/13/2024	<0.003	<0.003	<0.003			
2/17/2024				<0.003	0.0014 (J)	
2/18/2024						<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.003					
5/24/2016		<0.003				
7/12/2016	<0.003	<0.003				
9/1/2016	<0.003	<0.003				
10/25/2016	<0.003	<0.003				
12/7/2016	<0.003					
12/8/2016		<0.003				
1/26/2017	<0.003	<0.003				
3/22/2017	<0.003					
3/23/2017		<0.003				
5/25/2017	<0.003	<0.003				
4/3/2018	<0.003	<0.003				
3/14/2019		<0.003			<0.003	
3/15/2019	<0.003		<0.003	<0.003		
3/2/2020				<0.003	<0.003	
3/3/2020	<0.003	<0.003	<0.003			
2/11/2021	<0.003	<0.003	<0.003			
2/12/2021					<0.003	0.00046 (J)
2/15/2021				<0.003		
3/17/2021				<0.003	<0.003	
3/18/2021	<0.003	<0.003	<0.003			<0.003
8/18/2021	<0.003					<0.003
8/19/2021		0.0008 (J)	<0.003	0.0016 (J)	<0.003	
2/8/2022	<0.003	<0.003	<0.003	<0.003		<0.003
2/10/2022					<0.003	
8/10/2022	<0.003	<0.003				<0.003
8/11/2022			<0.003	<0.003	<0.003	
1/27/2023			<0.003			<0.003
1/30/2023	<0.003			<0.003		
2/1/2023		<0.003			<0.003	
8/12/2023			<0.003			
8/13/2023	<0.003	<0.003		<0.003	<0.003	<0.003
2/17/2024	<0.003					
2/18/2024		<0.003	<0.003	<0.003	0.00057 (J)	<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
2/11/2021			0.00079 (J)	
2/15/2021		0.00041 (J)		
3/12/2021			<0.003	
3/19/2021		<0.003		
8/16/2021	<0.003			
8/18/2021		<0.003	<0.003	<0.003
2/8/2022		0.0029 (J)	<0.003	<0.003
2/9/2022	<0.003			
8/10/2022	<0.003		<0.003	
8/11/2022		<0.003		<0.003
1/30/2023	0.0018 (J)		<0.003	
2/1/2023		<0.003		<0.003
8/12/2023	<0.003	<0.003		<0.003
8/13/2023			<0.003	
2/18/2024	<0.003		<0.003	
2/19/2024		<0.003		<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.005	0.00127 (J)	<0.005	<0.005		
7/11/2016	<0.005	0.002 (J)		<0.005		
7/12/2016			0.0008 (J)			
8/30/2016	<0.005	0.0017 (J)	<0.005	<0.005		
10/19/2016	<0.005	<0.005	<0.005	<0.005		
12/6/2016	<0.005	<0.005	<0.005	<0.005		
1/24/2017	<0.005	<0.005	<0.005	<0.005		
3/21/2017	0.0005 (J)	<0.005	0.0007 (J)	<0.005		
5/22/2017	<0.005	0.0006 (J)	0.0006 (J)			
5/23/2017				<0.005		
4/2/2018	<0.005	<0.005		<0.005		
4/3/2018			<0.005			
6/4/2018	<0.005	0.00088 (J)	0.0008 (J)	<0.005		
10/1/2018	<0.005	<0.005	0.0011 (J)	<0.005		
3/11/2019				<0.005		
3/12/2019	<0.005	0.00069 (J)	0.00063 (J)			
4/1/2019			<0.005			
4/2/2019	<0.005	<0.005		<0.005		
9/23/2019	0.00046 (J)	0.00067 (J)	0.0011 (J)			
9/24/2019				<0.005		
3/2/2020	<0.005	0.00043 (J)	0.0004 (J)	<0.005		
3/25/2020	<0.005	<0.005	<0.005			
3/26/2020				<0.005		
9/15/2020	<0.005	<0.005	<0.005	<0.005		
9/16/2020						<0.005
9/17/2020				<0.005		
11/10/2020						0.0021 (J)
11/11/2020				<0.005		
12/15/2020				<0.005		<0.005
1/19/2021						0.0011 (J)
1/20/2021				<0.005		
2/8/2021	<0.005			<0.005	<0.005	
2/9/2021		<0.005	<0.005			0.0017 (J)
3/10/2021	<0.005			<0.005	<0.005	
3/11/2021		<0.005	<0.005			0.0013 (J)
8/11/2021	<0.005					0.0015 (J)
8/12/2021		<0.005	<0.005	<0.005	<0.005	
2/1/2022	0.0016 (J)	0.0023 (J)	0.0024 (J)			0.0036 (J)
2/7/2022				<0.005	<0.005	
8/2/2022	<0.005	<0.005	<0.005	<0.005		<0.005
8/9/2022					<0.005	
1/23/2023			<0.005	<0.005	<0.005	
1/24/2023	<0.005	<0.005				<0.005
8/8/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2/13/2024	<0.005	<0.005	<0.005	<0.005	<0.005	0.00097 (J)

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.005				
5/20/2016			<0.005			
5/23/2016				0.00268 (J)	<0.005	<0.005
7/11/2016		<0.005	<0.005			
7/12/2016				0.0059	<0.005	<0.005
8/30/2016		<0.005	<0.005			
9/1/2016				0.0056	<0.005	<0.005
10/20/2016		<0.005	<0.005			
10/24/2016				0.0058	<0.005	
10/25/2016						<0.005
12/7/2016				<0.005	<0.005	<0.005
12/8/2016		<0.005	<0.005			
1/24/2017		<0.005	<0.005			
1/26/2017				0.0089	<0.005	<0.005
3/21/2017		<0.005	<0.005			
3/22/2017						0.0005 (J)
3/23/2017				0.0069	0.0008 (J)	
5/23/2017		<0.005	<0.005			
5/24/2017				0.0048 (J)	<0.005	<0.005
4/3/2018		<0.005	<0.005		<0.005	<0.005
4/4/2018				0.0052		
6/5/2018		<0.005	<0.005			
6/6/2018				0.0059	<0.005	<0.005
10/2/2018		0.00064 (J)	<0.005			
10/3/2018				0.0032 (J)	<0.005	<0.005
3/12/2019		<0.005	<0.005			
3/14/2019				0.0029 (J)	<0.005	
3/15/2019						<0.005
4/2/2019		<0.005	<0.005			
4/4/2019					0.00017 (J)	0.0001 (J)
4/5/2019				<0.005		
9/24/2019		0.00055 (J)	<0.005	0.0039 (J)	0.00037 (J)	
9/25/2019						<0.005
3/2/2020		<0.005	<0.005			
3/3/2020				0.0035 (J)	<0.005	<0.005
3/25/2020			<0.005			
3/26/2020		<0.005			<0.005	
3/30/2020				0.0051		0.0011 (J)
9/15/2020		<0.005	<0.005			
9/16/2020	<0.005					
9/17/2020					<0.005	<0.005
9/18/2020				0.0029 (J)		
11/10/2020	<0.005					
12/15/2020	<0.005					
1/19/2021	<0.005					
2/9/2021	0.00083 (J)	<0.005	<0.005			
2/10/2021						0.0012 (J)
2/11/2021				0.0062		
2/12/2021					<0.005	
3/10/2021	<0.005					
3/11/2021		<0.005	<0.005			
3/16/2021					<0.005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				<0.005		<0.005
8/12/2021		<0.005	<0.005			
8/13/2021	<0.005					
8/18/2021				0.0035 (J)		
8/19/2021					<0.005	<0.005
2/1/2022	0.0025 (J)					
2/7/2022		<0.005	<0.005			
2/8/2022					<0.005	<0.005
2/9/2022				0.0077		
8/2/2022	<0.005					
8/10/2022		<0.005	<0.005			<0.005
8/11/2022				0.006	<0.005	
1/24/2023	0.0027 (J)					
1/27/2023		<0.005	<0.005			
2/1/2023				0.004 (J)	<0.005	<0.005
8/8/2023	<0.005	<0.005	<0.005			
8/13/2023				0.0048 (J)	<0.005	<0.005
2/13/2024	0.0014 (J)	<0.005	<0.005			
2/17/2024				0.0026 (J)	<0.005	
2/18/2024						<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.005					
5/24/2016		0.00294 (J)				
7/12/2016	<0.005	0.0074				
9/1/2016	<0.005	0.0073				
10/25/2016	<0.005	0.006				
12/7/2016	<0.005					
12/8/2016		0.007				
1/26/2017	<0.005	0.0068				
3/22/2017	0.0007 (J)					
3/23/2017		0.0082				
5/25/2017	0.0007 (J)	0.006				
4/3/2018	<0.005	0.0062				
6/5/2018		0.008				
6/6/2018	0.00097 (J)					
10/3/2018	<0.005	0.0039 (J)				
3/14/2019		0.0036 (J)			<0.005	
3/15/2019	<0.005		<0.005	<0.005		
4/4/2019			0.00019 (J)			
4/5/2019	<0.005	0.0015 (J)		<0.005	<0.005	
9/25/2019	<0.005	0.0044 (J)	<0.005			
9/26/2019					<0.005	
9/27/2019				0.00045 (J)		
3/2/2020				<0.005	<0.005	
3/3/2020	<0.005	0.0057	<0.005			
3/27/2020				<0.005		
3/31/2020	0.0008 (J)	0.0056				
4/1/2020			0.0013 (J)		0.00082 (J)	0.0061
6/17/2020			<0.005			0.0031 (J)
9/15/2020		0.0074				
9/16/2020	<0.005					
9/17/2020				<0.005	<0.005	
9/21/2020			<0.005			0.0083
2/11/2021	0.0012 (J)	0.0069 (B)	0.001 (J)			
2/12/2021					0.001 (J)	0.0059
2/15/2021				<0.005		
3/17/2021				<0.005	<0.005	
3/18/2021	<0.005	0.0083 (J)	<0.005			0.0054 (J)
8/18/2021	<0.005					0.0058
8/19/2021		0.0045 (J)	<0.005	<0.005	<0.005	
2/8/2022	0.0017 (J)	0.005 (J)	<0.005	<0.005		0.0069
2/10/2022					<0.005	
8/10/2022	<0.005	0.0058				<0.005
8/11/2022			0.003 (J)	<0.005	<0.005	
1/27/2023			<0.005			0.0031 (J)
1/30/2023	0.0028 (J)			<0.005		
2/1/2023		0.0036 (J)			<0.005	
8/12/2023			<0.005			
8/13/2023	<0.005	0.0059 (J)		<0.005	<0.005	0.0059 (J)
2/17/2024	<0.005					
2/18/2024		0.0027 (J)	<0.005	<0.005	<0.005	0.0024 (J)

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.0032 (J)	0.005 (J)	0.0021 (J)	
9/21/2020		0.0059		
9/23/2020	0.001 (J)		0.00095 (J)	
2/11/2021			0.0023 (J)	
2/15/2021		0.005		
3/12/2021			<0.005	
3/19/2021		<0.005		
8/16/2021	0.0024 (J)			
8/18/2021		0.0043 (J)	<0.005	0.002 (J)
2/8/2022		0.0072	<0.005	0.0046 (J)
2/9/2022	0.0054			
8/10/2022	0.0045 (J)		<0.005	
8/11/2022		<0.005		0.0043 (J)
1/30/2023	0.0047 (J)		<0.005	
2/1/2023		0.006		0.0041 (J)
8/12/2023	<0.005	0.0045 (J)		<0.005
8/13/2023			<0.005	
2/18/2024	0.00099 (J)		<0.005	
2/19/2024		0.0073		0.0067

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	0.0346	0.114	0.111	0.0266		
7/11/2016	0.0311	0.112		0.0309		
7/12/2016			0.115			
8/30/2016	0.0293	0.131	0.113	0.031		
10/19/2016	0.0293	0.111	0.123	0.0332		
12/6/2016	0.0304	0.108	0.127	0.0334		
1/24/2017	0.028	0.102	0.126	0.0192		
3/21/2017	0.0275	0.095	0.12	0.0175		
5/22/2017	0.0281	0.103	0.117			
5/23/2017				0.0227		
4/2/2018	0.026	0.099		0.022		
4/3/2018			0.11			
6/4/2018	0.035	0.11	0.12	0.027		
10/1/2018	0.029	0.11	0.14	0.018		
3/11/2019				0.029		
3/12/2019	0.042	0.12	0.13			
4/1/2019			0.13			
4/2/2019	0.04	0.13		0.03		
9/23/2019	0.042	0.13	0.13			
9/24/2019				0.03		
3/2/2020	0.034	0.11	0.14	0.023		
3/25/2020	0.043	0.12	0.13			
3/26/2020				0.026		
9/15/2020	0.035	0.12	0.12	0.024		
9/16/2020						0.26
9/17/2020				0.13		
11/10/2020						0.25
11/11/2020				0.18		
12/15/2020				0.19		0.29
1/19/2021						0.32
1/20/2021					0.2	
2/8/2021	0.032			0.04	0.19	
2/9/2021		0.12	0.13			0.34
3/10/2021	0.03			0.036	0.18	
3/11/2021		0.07	0.13			0.32
8/11/2021	0.03					0.28
8/12/2021		0.12	0.11	0.034	0.18	
2/1/2022	0.031	0.13	0.12			0.29
2/7/2022				0.028	0.18	
8/2/2022	0.039	0.11	0.16	0.041		0.35
8/9/2022					0.2	
1/23/2023			0.13	0.057	0.21	
1/24/2023	0.033	0.088				0.28
8/8/2023	0.039	0.068	0.12	0.039	0.21	0.3
2/13/2024	0.039	0.062	0.13	0.054	0.23	0.28

Time Series

Constituent: Barium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		0.0519				
5/20/2016			0.174			
5/23/2016				<0.25	0.0315 (J)	0.0841
7/11/2016		0.0565	0.134			
7/12/2016				0.0214	0.0372	0.0886
8/30/2016		0.0548	0.212			
9/1/2016				0.0208	0.0364	0.0934
10/20/2016		0.0539	0.157			
10/24/2016				0.0208	0.0326	
10/25/2016						0.0991
12/7/2016				0.022	0.0301	0.101
12/8/2016		0.0496	0.162			
1/24/2017		0.0478	0.168			
1/26/2017				0.0238	0.0287	0.105
3/21/2017		0.0453	0.186			
3/22/2017						0.11
3/23/2017				0.0244	0.0329	
5/23/2017		0.0496	0.187			
5/24/2017				0.0228	0.0283	0.106
4/3/2018		0.038	0.14		0.019	0.099
4/4/2018				0.021		
6/5/2018		0.046	0.21			
6/6/2018				0.022	0.022	0.11
10/2/2018		0.047	0.19			
10/3/2018				0.02	0.025	0.11
3/12/2019		0.05	0.2			
3/14/2019				0.019	0.021	
3/15/2019						0.13
4/2/2019		0.044	0.19			
4/4/2019					0.018	0.11
4/5/2019				0.016		
9/24/2019		0.053	0.22	0.021	0.019	
9/25/2019						0.11
3/2/2020		0.053	0.19			
3/3/2020				0.018	0.018	0.12
3/25/2020			0.19			
3/26/2020		0.045			0.016	
3/30/2020				0.02		0.11
9/15/2020		0.045	0.19			
9/16/2020	0.24					
9/17/2020					0.017	0.11
9/18/2020				0.019		
11/10/2020	0.38					
12/15/2020	0.39					
1/19/2021	0.41					
2/9/2021	0.46	0.046	0.21			
2/10/2021						0.11
2/11/2021				0.02		
2/12/2021					0.014	
3/10/2021	0.26					
3/11/2021		0.044	0.21			
3/16/2021					0.012	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				0.023		0.12
8/12/2021		0.044	0.18			
8/13/2021	0.22					
8/18/2021				0.018		
8/19/2021					0.01	0.1
2/1/2022	0.23					
2/7/2022		0.038	0.18			
2/8/2022					0.0098	0.1
2/9/2022				0.017		
8/2/2022	0.37					
8/10/2022		0.053	0.18			0.1
8/11/2022				0.017	0.015	
1/24/2023	0.18					
1/27/2023		0.044	0.2			
2/1/2023				0.017	0.021	0.11
8/8/2023	0.12	0.18	0.048			
8/13/2023				0.016	0.011	0.099
2/13/2024	0.12	0.048	0.19			
2/17/2024				0.02	0.017	
2/18/2024						0.098

Time Series

Constituent: Barium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	0.0222 (J)					
5/24/2016		<0.2				
7/12/2016	0.0221	0.0346				
9/1/2016	0.0227	0.0336				
10/25/2016	0.0225	0.0349				
12/7/2016	0.0227					
12/8/2016		0.0339				
1/26/2017	0.0229	0.0293				
3/22/2017	0.0248					
3/23/2017		0.0313				
5/25/2017	0.0255	0.0336				
4/3/2018	0.025	0.028				
6/5/2018		0.03				
6/6/2018	0.028					
10/3/2018	0.028	0.032				
3/14/2019		0.029			0.082	
3/15/2019	0.029		0.09	0.044		
4/4/2019			0.075			
4/5/2019	0.022	0.021		0.036	0.061	
9/25/2019	0.025	0.03	0.066			
9/26/2019					0.064	
9/27/2019				0.028		
3/2/2020				0.027	0.06	
3/3/2020	0.026	0.026	0.058			
3/27/2020				0.025		
3/31/2020	0.029	0.029				
4/1/2020			0.066		0.065	0.027
6/17/2020			0.054			0.024
9/15/2020		0.03				
9/16/2020	0.025					
9/17/2020				0.02	0.057	
9/21/2020			0.049			0.024
2/11/2021	0.025	0.03	0.044			
2/12/2021					0.056	0.025
2/15/2021				0.017		
3/17/2021				0.018	0.058	
3/18/2021	0.027	0.031	0.047			0.029
8/18/2021	0.022					0.025
8/19/2021		0.031	0.042	0.018	0.05	
2/8/2022	0.021	0.02	0.033	0.014		0.02
2/10/2022					0.05	
8/10/2022	0.027	0.026				0.02 (J)
8/11/2022			0.037	0.014	0.05	
1/27/2023			0.031			0.018
1/30/2023	0.03			0.014		
2/1/2023		0.019			0.047	
8/12/2023			0.033			
8/13/2023	0.025	0.026		0.013	0.041	0.023
2/17/2024	0.023					
2/18/2024		0.02	0.034	0.012	0.041	0.016

Time Series

Constituent: Barium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.044	0.029	0.19	
9/21/2020		0.028		
9/23/2020	0.038		0.14	
2/11/2021			0.14	
2/15/2021		0.026		
3/12/2021			0.12	
3/19/2021		0.032		
8/16/2021	0.035			
8/18/2021		0.025	0.12	0.032
2/8/2022		0.023	0.11	0.046
2/9/2022	0.04			
8/10/2022	0.046		0.11	
8/11/2022		0.022 (J)		0.028
1/30/2023	0.04		0.13	
2/1/2023		0.022		0.033
8/12/2023	0.033	0.021		0.026
8/13/2023			0.15	
2/18/2024	0.033		0.15	
2/19/2024		0.021		0.028

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.0005	<0.003	<0.0005	<0.0005		
7/11/2016	<0.0005	0.0001 (J)		<0.0005		
7/12/2016			<0.0005			
8/30/2016	<0.0005	<0.003	<0.0005	<0.0005		
10/19/2016	<0.0005	0.0001 (J)	<0.0005	<0.0005		
12/6/2016	<0.0005	0.0002 (J)	<0.0005	<0.0005		
1/24/2017	<0.0005	0.0001 (J)	<0.0005	<0.0005		
3/21/2017	<0.0005	0.0001 (J)	<0.0005	<0.0005		
5/22/2017	<0.0005	0.0001 (J)	<0.0005			
5/23/2017				<0.0005		
4/2/2018	<0.0005	<0.003		<0.0005		
4/3/2018			<0.0005			
3/11/2019				5E-05 (J)		
3/12/2019	<0.0005	0.00017 (J)	<0.0005			
4/1/2019			<0.0005			
4/2/2019	<0.0005	0.00015 (J)		<0.0005		
9/23/2019	<0.0005	0.00011 (J)	<0.0005			
9/24/2019				<0.0005		
3/2/2020	<0.0005	0.00014 (J)	<0.0005	0.00019 (J)		
3/25/2020	<0.0005	0.00016 (J)	<0.0005			
3/26/2020				7.6E-05 (J)		
9/15/2020	<0.0005	0.00013 (J)	<0.0005	<0.0005		
9/16/2020						<0.0005
9/17/2020				<0.0005		
11/10/2020						<0.0005
11/11/2020				<0.0005		
12/15/2020				<0.0005		<0.0005
1/19/2021						<0.0005
1/20/2021				<0.0005		
2/8/2021	<0.0005			0.00023 (J)	<0.0005	
2/9/2021		0.00014 (J)	<0.0005			<0.0005
3/10/2021	<0.0005			0.00017 (J)	<0.0005	
3/11/2021		8.6E-05 (J)	<0.0005			<0.0005
8/11/2021	<0.0005					<0.0005
8/12/2021		0.00014 (J)	<0.0005	0.00021 (J)	<0.0005	
2/1/2022	<0.0005	0.0002 (J)	<0.0005			<0.0005
2/7/2022				0.00017 (J)	<0.0005	
8/2/2022	<0.0005	0.00019 (J)	<0.0005	0.00019 (J)		<0.0005
8/9/2022				<0.0005		
1/23/2023			<0.0005	0.0001 (J)	<0.0005	
1/24/2023	<0.0005	0.00016 (J)				<0.0005
8/8/2023	<0.0005	0.00022 (J)	<0.0005	6.7E-05 (J)	<0.0005	<0.0005
2/13/2024	<0.0005	0.00022 (J)	<0.0005	<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.0005				
5/20/2016			<0.0005			
5/23/2016				<0.003	<0.0005	<0.0005
7/11/2016		<0.0005	<0.0005			
7/12/2016				0.0005 (J)	<0.0005	<0.0005
8/30/2016		<0.0005	<0.0005			
9/1/2016				0.0005 (J)	<0.0005	<0.0005
10/20/2016		<0.0005	<0.0005			
10/24/2016				0.0005 (J)	<0.0005	
10/25/2016						<0.0005
12/7/2016				0.0006 (J)	<0.0005	<0.0005
12/8/2016		<0.0005	<0.0005			
1/24/2017		<0.0005	<0.0005			
1/26/2017				0.0005 (J)	<0.0005	<0.0005
3/21/2017		<0.0005	<0.0005			
3/22/2017						<0.0005
3/23/2017				0.0006 (J)	<0.0005	
5/23/2017		<0.0005	<0.0005			
5/24/2017				0.0005 (J)	<0.0005	<0.0005
4/3/2018		<0.0005	<0.0005		<0.0005	<0.0005
4/4/2018				<0.003		
3/12/2019		<0.0005	<0.0005			
3/14/2019				0.00043 (J)	<0.0005	
3/15/2019						<0.0005
4/2/2019		<0.0005	<0.0005			
4/4/2019					<0.0005	<0.0005
4/5/2019				0.00027 (J)		
9/24/2019		<0.0005	<0.0005	0.00044 (J)	<0.0005	
9/25/2019						<0.0005
3/2/2020		<0.0005	<0.0005			
3/3/2020				0.00043 (J)	<0.0005	<0.0005
3/25/2020			<0.0005			
3/26/2020		<0.0005			<0.0005	
3/30/2020				0.00043 (J)		<0.0005
9/15/2020		<0.0005	<0.0005			
9/16/2020	<0.0005					
9/17/2020					<0.0005	<0.0005
9/18/2020				0.00043 (J)		
11/10/2020	<0.0005					
12/15/2020	<0.0005					
1/19/2021	<0.0005					
2/9/2021	<0.0005	<0.0005	<0.0005			
2/10/2021						<0.0005
2/11/2021				0.00044 (J)		
2/12/2021					<0.0005	
3/10/2021	<0.0005					
3/11/2021		<0.0005	<0.0005			
3/16/2021					<0.0005	
3/17/2021				0.00058		<0.0005
8/12/2021		<0.0005	<0.0005			
8/13/2021	<0.0005					
8/18/2021				0.00039 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/19/2021					<0.0005	<0.0005
2/1/2022	<0.0005					
2/7/2022		<0.0005	<0.0005			
2/8/2022					<0.0005	<0.0005
2/9/2022				0.00056		
8/2/2022	<0.0005					
8/10/2022		<0.0005	<0.0005			<0.0005
8/11/2022				0.00039 (J)	<0.0005	
1/24/2023	<0.0005					
1/27/2023		<0.0005	<0.0005			
2/1/2023				0.00039 (J)	<0.0005	<0.0005
8/8/2023	<0.0005	<0.0005	<0.0005			
8/13/2023				0.0004 (J)	<0.0005	<0.0005
2/13/2024	<0.0005	<0.0005	<0.0005			
2/17/2024				0.00044 (J)	<0.0005	
2/18/2024						<0.0005

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.0005					
5/24/2016		0.00278 (J)				
7/12/2016	<0.0005	0.0032				
9/1/2016	<0.0005	0.0034				
10/25/2016	<0.0005	0.0034				
12/7/2016	<0.0005					
12/8/2016		0.0033				
1/26/2017	<0.0005	0.0034				
3/22/2017	<0.0005					
3/23/2017		0.0036				
5/25/2017	<0.0005	0.0036				
4/3/2018	<0.0005	<0.003				
3/14/2019		0.0026 (J)			<0.0005	
3/15/2019	<0.0005		<0.0005	<0.0005		
4/4/2019			<0.0005			
4/5/2019	<0.0005	0.0022 (J)		<0.0005	<0.0005	
9/25/2019	<0.0005	0.0031	<0.0005			
9/26/2019					<0.0005	
9/27/2019				<0.0005		
3/2/2020				<0.0005	<0.0005	
3/3/2020	<0.0005	0.0029 (J)	<0.0005			
3/27/2020				<0.0005		
3/31/2020	<0.0005	0.003				
4/1/2020			<0.0005		<0.0005	0.0011 (J)
6/17/2020			<0.0005			0.00099 (J)
9/15/2020		0.0033				
9/16/2020	<0.0005					
9/17/2020				4.7E-05 (J)	<0.0005	
9/21/2020			<0.0005			0.0009 (J)
2/11/2021	6.7E-05 (J)	0.0036	<0.0005			
2/12/2021					<0.0005	0.001 (J)
2/15/2021				6.2E-05 (J)		
3/17/2021				8.2E-05 (J)	<0.0005	
3/18/2021	4.8E-05 (J)	0.0038	<0.0005			0.0011
8/18/2021	<0.0005					0.00097
8/19/2021		0.0034	<0.0005	7E-05 (J)	<0.0005	
2/8/2022	<0.0005	0.0026	<0.0005	7.9E-05 (J)		0.00087 (J)
2/10/2022					<0.0005	
8/10/2022	6E-05 (J)	0.0032				0.0008
8/11/2022			<0.0005	<0.0005	<0.0005	
1/27/2023			<0.0005			0.00019 (J)
1/30/2023	5.7E-05 (J)			8.1E-05 (J)		
2/1/2023		0.002			<0.0005	
8/12/2023			<0.0005			
8/13/2023	0.0001 (J)	0.003		<0.0005	<0.0005	0.00099
2/17/2024	<0.0005					
2/18/2024		0.0022	<0.0005	<0.0005	<0.0005	0.00059

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.00015 (J)	0.00032 (J)	0.00012 (J)	
9/21/2020		0.0004 (J)		
9/23/2020	<0.0005		<0.0005	
2/11/2021			<0.0005	
2/15/2021		0.0006 (J)		
3/12/2021			<0.0005	
3/19/2021		0.00061		
8/16/2021	<0.0005			
8/18/2021		0.00061	<0.0005	0.00042 (J)
2/8/2022		0.0007 (J)	<0.0005	0.00011 (J)
2/9/2022	6.5E-05 (J)			
8/10/2022	<0.0005		<0.0005	
8/11/2022		0.00066 (J)		0.00028 (J)
1/30/2023	<0.0005		<0.0005	
2/1/2023		0.00049 (J)		0.00028 (J)
8/12/2023	<0.0005	0.00041 (J)		0.00012 (J)
8/13/2023			<0.0005	
2/18/2024	<0.0005		<0.0005	
2/19/2024		0.00064		0.00047 (J)

Time Series

Constituent: Boron (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	0.0214 (J)	0.0321 (J)	<0.04	<0.1		
7/11/2016	0.0142 (J)	0.0337 (J)		0.0175 (J)		
7/12/2016			0.0074 (J)			
8/30/2016	0.0074 (J)	0.0173 (J)	<0.04	0.0072 (J)		
10/19/2016	0.0224 (J)	0.0341 (J)	0.0085 (J)	0.018 (J)		
12/6/2016	0.0211 (J)	0.0326 (J)	0.0085 (J)	0.0158 (J)		
1/24/2017	0.0165 (J)	0.0365 (J)	0.01 (J)	0.0145 (J)		
3/21/2017	0.0187 (J)	0.0349 (J)	0.0079 (J)	0.0101 (J)		
5/22/2017	0.0782	0.0475	0.0131 (J)			
5/23/2017				0.0159 (J)		
10/3/2017	0.0198 (J)	0.0386 (J)	0.0097 (J)	0.0162 (J)		
6/4/2018	0.02 (J)	0.036 (J)	0.017 (J)	0.014 (J)		
10/1/2018	0.013 (J)	0.035 (J)	0.0061 (J)	0.0093 (J)		
4/1/2019			0.0066 (J)			
4/2/2019	0.016 (J)	0.034 (J)		0.01 (J)		
9/23/2019	0.021 (J)	0.04 (J)	0.0081 (J)			
9/24/2019				0.013 (J)		
3/25/2020	0.025 (J)	0.039 (J)	0.0096 (J)			
3/26/2020				0.012 (J)		
9/15/2020	0.017 (J)	0.044 (J)	0.0071 (J)	0.013 (J)		
9/16/2020						0.061 (J)
9/17/2020				0.098 (J)		
11/10/2020						0.057 (J)
11/11/2020				0.058 (J)		
12/15/2020				0.043 (J)		0.052 (J)
1/19/2021						0.049 (J)
1/20/2021				0.045 (J)		
3/10/2021	0.015 (J)			0.012 (J)	0.048	
3/11/2021		0.056	0.015 (J)			0.06
8/11/2021	0.02 (J)					0.042
8/12/2021		0.044	<0.04	0.014 (J)	0.044	
2/1/2022	0.016 (J)	0.056	0.011 (J)			0.05
2/7/2022				0.017 (J)	0.047	
8/2/2022	0.012 (J)	0.047	<0.04	0.02 (J)		0.043
8/9/2022					0.055	
1/23/2023			0.012 (J)	0.023 (J)	0.052	
1/24/2023	0.015 (J)	0.046				0.037 (J)
8/8/2023	0.023 (J)	0.06	0.011 (J)	0.029 (J)	0.048	0.038 (J)
2/13/2024	0.02 (J)	0.051	<0.04	0.023 (J)	0.045	0.037 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.04				
5/20/2016			0.0363 (J)			
5/23/2016				15.4	2.02	1.36
7/11/2016		0.0052 (J)	0.0179 (J)			
7/12/2016				16	1.65	1.62
8/30/2016		0.0068 (J)	0.014 (J)			
9/1/2016				12.3	1.93	1.31
10/20/2016		0.0135 (J)	0.0197 (J)			
10/24/2016				13.7	1.93	
10/25/2016						1.27
12/7/2016				16.5	2.23	1.42
12/8/2016		0.0083 (J)	0.0159 (J)			
1/24/2017		0.0072 (J)	<0.2			
1/26/2017				19.2	2.31	1.19
3/21/2017		<0.04	0.0166 (J)			
3/22/2017						1.32
3/23/2017				23.1	2.72	
5/23/2017		0.0095 (J)	0.0167 (J)			
5/24/2017				25.8	2.26	1.67
10/3/2017		0.0071 (J)	0.017 (J)			
10/4/2017				20.5	2	1.43
6/5/2018		0.0066 (J)	0.016 (J)			
6/6/2018				16.7	2.4	1.9
10/2/2018		0.0081 (J)	0.014 (J)			
10/3/2018				16.4	2.4	1.7
4/2/2019		0.0052 (J)	0.013 (J)			
4/4/2019					2.3	2.1
4/5/2019				12.5		
9/24/2019		0.0088 (J)	0.016 (J)	14.7	2.9	
9/25/2019						2.7
3/25/2020			0.021 (J)			
3/26/2020		0.0072 (J)			2.1	
3/30/2020				11.7		2.4
9/15/2020		0.012 (J)	0.016 (J)			
9/16/2020	0.23					
9/17/2020					2.2	2.4
9/18/2020				11		
11/10/2020	0.29					
12/15/2020	0.31					
1/19/2021	0.4					
3/10/2021	0.39					
3/11/2021		0.0075 (J)	0.018 (J)			
3/16/2021					2.4	
3/17/2021				11.8		2.7
8/12/2021		0.0092 (J)	0.014 (J)			
8/13/2021	0.31					
8/18/2021				8.6		
8/19/2021					2.1	2.5
2/1/2022	0.44					
2/7/2022		<0.04	0.019 (J)			
2/8/2022					1.9	2.6
2/9/2022				9.9		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/2/2022	0.31					
8/10/2022		0.011 (J)	0.015 (J)			2.2
8/11/2022				8.8	2.1	
1/24/2023	0.44					
1/27/2023		<0.04	0.013 (J)			
2/1/2023				7.7	2	2.8
8/8/2023	0.55	0.025 (J)	0.017 (J)			
8/13/2023				6.9	1.6	2.2
2/13/2024	0.49	<0.04	0.015 (J)			
2/17/2024				7.3	1.8	
2/18/2024						2.3

Time Series

Constituent: Boron (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	5.7					
5/24/2016		9.33				
7/12/2016	9.58	11.9				
9/1/2016	5.76	8.8				
10/25/2016	5.38	8.5				
12/7/2016	5.74					
12/8/2016		7.15				
1/26/2017	5.78	9.17				
3/22/2017	5.52					
3/23/2017		10.6				
5/25/2017	8.58	13.2				
10/4/2017	6.8	10				
6/5/2018		8.4				
6/6/2018	6.3					
10/3/2018	6.9	9.3				
4/4/2019			5.2			
4/5/2019	5.9	6.4		2.1	3	
9/25/2019	8.1	11.7	6.4			
9/26/2019					3.8	
9/27/2019				2.9		
1/22/2020						11.2
3/27/2020				2.4		
3/31/2020	6.9	9.4				
4/1/2020			6.3		3.5	11.6
6/17/2020			5.8			10.3
9/15/2020		9.4				
9/16/2020	6.7					
9/17/2020				2.3	2.7	
9/21/2020			5.6			9
3/17/2021				2.7	3.4	
3/18/2021	6.8	8.9	5.7			10.2
8/18/2021	5.3					9.1
8/19/2021		8.6	5.4	2.5	3.4	
2/8/2022	7.8	8.1	5.9	3.2		8.4
2/10/2022					3.2	
8/10/2022	6.9	8.4				8
8/11/2022			5	2.5	3.3	
1/27/2023			3.6			4.6
1/30/2023	6.8			2.4		
2/1/2023		5.9			3	
8/12/2023			2.8			
8/13/2023	6.2	7.7		2.3	2.7	6.6
2/17/2024	5.7					
2/18/2024		7	2.3	2.2	2.8	5.4

Time Series

Constituent: Boron (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	9.4	11.9	0.14	
9/21/2020		12.3		
9/23/2020	10.2		0.12	
3/12/2021			0.15	
3/19/2021		11.9		
8/16/2021	8.2			
8/18/2021		11.2	0.2	9.7
2/8/2022		10.8	0.14	10.5
2/9/2022	9.6			
8/10/2022	10.2		0.11	
8/11/2022		9.6		8.2
1/30/2023	8		0.15	
2/1/2023		8.7		8.3
8/12/2023	7.2	8.4		7.4
8/13/2023			0.14	
2/18/2024	8.1		0.12	
2/19/2024		8.4		7.9

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.0005	<0.0005	<0.0005	<0.0005		
7/11/2016	<0.0005	<0.0005		<0.0005		
7/12/2016			<0.0005			
8/30/2016	<0.0005	<0.0005	<0.0005	<0.0005		
10/19/2016	<0.0005	<0.0005	<0.0005	<0.0005		
12/6/2016	<0.0005	<0.0005	<0.0005	<0.0005		
1/24/2017	<0.0005	0.0001 (J)	<0.0005	<0.0005		
3/21/2017	<0.0005	7E-05 (J)	<0.0005	<0.0005		
5/22/2017	<0.0005	0.0001 (J)	<0.0005			
5/23/2017				<0.0005		
4/2/2018	<0.0005	<0.0005		<0.0005		
4/3/2018			<0.0005			
6/4/2018	<0.0005	0.00014 (J)	<0.0005	<0.0005		
10/1/2018	<0.0005	<0.0005	<0.0005	<0.0005		
3/11/2019				<0.0005		
3/12/2019	<0.0005	0.00013 (J)	<0.0005			
4/1/2019			<0.0005			
4/2/2019	<0.0005	0.00015 (J)		<0.0005		
9/23/2019	<0.0005	<0.0005	<0.0005			
9/24/2019				<0.0005		
3/2/2020	<0.0005	<0.0005	<0.0005	<0.0005		
3/25/2020	<0.0005	0.00014 (J)	<0.0005			
3/26/2020				<0.0005		
9/15/2020	<0.0005	0.00012 (J)	<0.0005	<0.0005		
9/16/2020						<0.0005
9/17/2020				<0.0005		
11/10/2020						<0.0005
11/11/2020				<0.0005		
12/15/2020				<0.0005		<0.0005
1/19/2021						<0.0005
1/20/2021					<0.0005	
2/8/2021	<0.0005			<0.0005	<0.0005	
2/9/2021		0.00016 (J)	<0.0005			<0.0005
3/10/2021	<0.0005			<0.0005	<0.0005	
3/11/2021		<0.0005	<0.0005			<0.0005
8/11/2021	<0.0005					<0.0005
8/12/2021		0.00014 (J)	<0.0005	<0.0005	<0.0005	
2/1/2022	<0.0005	0.00017 (J)	<0.0005			<0.0005
2/7/2022				<0.0005	<0.0005	
8/2/2022	<0.0005	0.00023 (J)	<0.0005	<0.0005		<0.0005
8/9/2022					<0.0005	
1/23/2023			<0.0005	<0.0005	<0.0005	
1/24/2023	<0.0005	0.00021 (J)				<0.0005
8/8/2023	<0.0005	0.00026 (J)	<0.0005	<0.0005	<0.0005	<0.0005
2/13/2024	<0.0005	0.00027 (J)	<0.0005	<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.0005				
5/20/2016			<0.0005			
5/23/2016				0.000139 (J)	0.00271 (J)	<0.0005
7/11/2016		<0.0005	<0.0005			
7/12/2016				<0.0005	0.0019	<0.0005
8/30/2016		<0.0005	<0.0005			
9/1/2016				0.0001 (J)	0.0017	<0.0005
10/20/2016		<0.0005	<0.0005			
10/24/2016				0.0002 (J)	0.0018	
10/25/2016						<0.0005
12/7/2016				0.0001 (J)	0.0018	<0.0005
12/8/2016		<0.0005	<0.0005			
1/24/2017		<0.0005	<0.0005			
1/26/2017				0.0001 (J)	0.0013	<0.0005
3/21/2017		<0.0005	<0.0005			
3/22/2017						<0.0005
3/23/2017				0.0002 (J)	0.002	
5/23/2017		<0.0005	<0.0005			
5/24/2017				0.0001 (J)	0.0041	<0.0005
4/3/2018		<0.0005	<0.0005		0.0022	<0.0005
4/4/2018				<0.0005		
6/5/2018		<0.0005	<0.0005			
6/6/2018				0.00012 (J)	0.0021	<0.0005
10/2/2018		<0.0005	<0.0005			
10/3/2018				0.0001 (J)	0.0026	<0.0005
3/12/2019		<0.0005	<0.0005			
3/14/2019				<0.0005	0.0024	
3/15/2019						<0.0005
4/2/2019		<0.0005	<0.0005			
4/4/2019					0.0018	<0.0005
4/5/2019				7.9E-05 (J)		
9/24/2019		<0.0005	<0.0005	<0.0005	0.0014 (J)	
9/25/2019						<0.0005
3/2/2020		<0.0005	<0.0005			
3/3/2020				<0.0005	0.0015 (J)	<0.0005
3/25/2020			<0.0005			
3/26/2020		<0.0005			0.0016 (J)	
3/30/2020				<0.0005		<0.0005
9/15/2020		<0.0005	<0.0005			
9/16/2020	<0.0005					
9/17/2020					0.0016 (J)	<0.0005
9/18/2020				<0.0005		
11/10/2020	<0.0005					
12/15/2020	<0.0005					
1/19/2021	<0.0005					
2/9/2021	<0.0005	<0.0005	<0.0005			
2/10/2021						<0.0005
2/11/2021				<0.0005		
2/12/2021					0.0014 (J)	
3/10/2021	<0.0005					
3/11/2021		<0.0005	<0.0005			
3/16/2021					0.0011	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				<0.0005		<0.0005
8/12/2021		<0.0005	<0.0005			
8/13/2021	<0.0005					
8/18/2021				0.00013 (J)		
8/19/2021					0.0012	<0.0005
2/1/2022	<0.0005					
2/7/2022		<0.0005	<0.0005			
2/8/2022					0.0011	<0.0005
2/9/2022				<0.0005		
8/2/2022	<0.0005					
8/10/2022		<0.0005	<0.0005			<0.0005
8/11/2022				<0.0005	0.00095	
1/24/2023	<0.0005					
1/27/2023		<0.0005	<0.0005			
2/1/2023				<0.0005	0.00088	<0.0005
8/8/2023	<0.0005	<0.0005	<0.0005			
8/13/2023				<0.0005	0.00033 (J)	<0.0005
2/13/2024	<0.0005	<0.0005	<0.0005			
2/17/2024				<0.0005	0.00084	
2/18/2024						<0.0005

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.0005					
5/24/2016		<0.02				
7/12/2016	<0.0005	0.0022				
9/1/2016	<0.0005	0.0024				
10/25/2016	<0.0005	0.0022				
12/7/2016	<0.0005					
12/8/2016		0.0024				
1/26/2017	<0.0005	0.0025				
3/22/2017	7E-05 (J)					
3/23/2017		0.0025				
5/25/2017	<0.0005	0.0027				
4/3/2018	<0.0005	0.0022				
6/5/2018		0.0022				
6/6/2018	<0.0005					
10/3/2018	<0.0005	0.0027				
3/14/2019		0.0019			<0.0025	
3/15/2019	<0.0005		<0.0005	0.00082 (J)		
4/4/2019			<0.0005			
4/5/2019	<0.0005	0.0017		0.00064 (J)	<0.0025	
9/25/2019	<0.0005	0.0023 (J)	<0.0005			
9/26/2019					<0.0025	
9/27/2019				0.0014 (J)		
3/2/2020				0.0021 (J)	<0.0025	
3/3/2020	<0.0005	0.0021 (J)	<0.0005			
3/27/2020				0.0019 (J)		
3/31/2020	<0.0005	0.0017 (J)				
4/1/2020			<0.0005		<0.0025	0.00022 (J)
6/17/2020			<0.0005			0.00021 (J)
9/15/2020		0.0019 (J)				
9/16/2020	<0.0005					
9/17/2020				0.0021 (J)	0.0006 (J)	
9/21/2020			<0.0005			0.00016 (J)
2/11/2021	<0.0005	0.0016 (J)	<0.0005			
2/12/2021					0.00045 (J)	0.00017 (J)
2/15/2021				0.002 (J)		
3/17/2021				0.0022	0.00057	
3/18/2021	<0.0005	0.0015	<0.0005			0.00019 (J)
8/18/2021	<0.0005					0.00017 (J)
8/19/2021		0.0014	<0.0005	0.0021	0.00012 (J)	
2/8/2022	<0.0005	0.00076	<0.0005	0.002		0.00013 (J)
2/10/2022					0.00024 (J)	
8/10/2022	<0.0005	0.0017				<0.0025
8/11/2022			<0.0005	0.002	0.00021 (J)	
1/27/2023			<0.0005			0.00017 (J)
1/30/2023	<0.0005			0.0017		
2/1/2023		0.001			0.00012 (J)	
8/12/2023			<0.0005			
8/13/2023	<0.0005	0.0017		0.002	0.00015 (J)	0.0002 (J)
2/17/2024	<0.0005					
2/18/2024		0.0015	<0.0005	0.0018	0.00017 (J)	0.00014 (J)

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	<0.0025	0.00053 (J)	<0.0005	
9/21/2020		0.001 (J)		
9/23/2020	<0.0025		<0.0005	
2/11/2021			<0.0005	
2/15/2021		0.0017 (J)		
3/12/2021			<0.0005	
3/19/2021		0.0018		
8/16/2021	0.00023 (J)			
8/18/2021		0.0015	<0.0005	0.00094
2/8/2022		0.0015	<0.0005	0.00024 (J)
2/9/2022	0.00072			
8/10/2022	0.00041 (J)		<0.0005	
8/11/2022		0.0013 (J)		0.00045 (J)
1/30/2023	0.00047 (J)		<0.0005	
2/1/2023		0.0017		0.0016
8/12/2023	0.0029	0.0012		0.00019 (J)
8/13/2023			<0.0005	
2/18/2024	0.0008		<0.0005	
2/19/2024		0.0013		0.00067

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	138	22.9	76.2	48.4		
7/11/2016	97.2	22.3		73		
7/12/2016			61.5			
8/30/2016	97.5	26.4	65.1	85.7		
10/19/2016	99.2	21.7	73.2	89.7		
12/6/2016	105	18.2	74.9	80		
1/24/2017	95.7	18.5	69.6	30.8		
3/21/2017	106	18.6	75.7	34		
5/22/2017	107	17.8	71.5			
5/23/2017				43		
10/3/2017	102	20.2	76.3	46.9		
6/4/2018	124	19.1	73.4	81.9		
10/1/2018	108	20.5 (J)	80.9	22 (J)		
4/1/2019			80.5			
4/2/2019	132	22.5 (J)		76		
9/23/2019	118	19.5	71			
9/24/2019				36.6		
3/25/2020	127	23	89.8			
3/26/2020				14.9		
9/15/2020	103	21.1	73.1	20.4		
9/16/2020						56
9/17/2020				43.8		
11/10/2020						63.3
11/11/2020				44.4		
12/15/2020				47.3		62.6
1/19/2021						60.1
1/20/2021				41.8		
3/10/2021	111			5.9	43.4	
3/11/2021		43.8	83.8			59.6
8/11/2021	113					61
8/12/2021		21.9	84	5.4	43.6	
2/1/2022	106	27.2	85.1			55.9
2/7/2022				5.9	48.7	
8/2/2022	117	31.2	84.6	6		54.1
8/9/2022					44.1	
1/23/2023			85	24	43.7	
1/24/2023	117	29.4				56.6
8/8/2023	118	30.7	78.3	35.7	40.7	52.8
2/13/2024	116	38.8	83.6	31.1	47.7	53.3

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		35.5				
5/20/2016			56.1			
5/23/2016				664	184	146
7/11/2016		35.4	49.3			
7/12/2016				528	186	142
8/30/2016		28	53.9			
9/1/2016				586	189	141
10/20/2016		26.7	50.7			
10/24/2016				564	200	
10/25/2016						138
12/7/2016				590	203	146
12/8/2016		23.5	49.2			
1/24/2017		24.5	48.3			
1/26/2017				558	212	139
3/21/2017		30.8	51.3			
3/22/2017						150
3/23/2017				652	229	
5/23/2017		24.2	49.1			
5/24/2017				617	265	153
10/3/2017		29	55.1			
10/4/2017				644	230	156
6/5/2018		27.8	54.5			
6/6/2018				606	250	177
10/2/2018		28.9	54.7			
10/3/2018				558	234	160
4/2/2019		26.3	49.7			
4/4/2019					214	196
4/5/2019				606		
9/24/2019		29.3	52.5	507	202	
9/25/2019						185
3/25/2020			58.1			
3/26/2020		27.8			240	
3/30/2020				600		208
9/15/2020		27.9	49.9			
9/16/2020	30					
9/17/2020					188	190
9/18/2020				623		
11/10/2020	33.6					
12/15/2020	28.7					
1/19/2021	33					
3/10/2021	18.3					
3/11/2021		28.3	53.1			
3/16/2021					196	
3/17/2021				572		198
8/12/2021		32	54.7			
8/13/2021	28.9					
8/18/2021				583		
8/19/2021					203	207
2/1/2022	24.8					
2/7/2022		30	53.4			
2/8/2022					186	218
2/9/2022				571		

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/2/2022	20.9					
8/10/2022		27.4	55.7			207
8/11/2022				519	210	
1/24/2023	13.2					
1/27/2023		28.5	55.4			
2/1/2023				464	174	216
8/8/2023	8.1	54.4	27.9			
8/13/2023				418	182	187
2/13/2024	9.9	20.6	55.4			
2/17/2024				418	175	
2/18/2024						199

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	225					
5/24/2016		403				
7/12/2016	199	328				
9/1/2016	213	379				
10/25/2016	206	362				
12/7/2016	212					
12/8/2016		366				
1/26/2017	198	394				
3/22/2017	239					
3/23/2017		440				
5/25/2017	292	492				
10/4/2017	305	470				
6/5/2018		425				
6/6/2018	299					
10/3/2018	286	421				
4/4/2019			427			
4/5/2019	340	400		178	352	
9/25/2019	305	437	420			
9/26/2019					306	
9/27/2019				202		
1/22/2020						638
3/27/2020				212		
3/31/2020	328	418				
4/1/2020			438		342	567
6/17/2020			434			561
9/15/2020		430				
9/16/2020	277					
9/17/2020				203	361	
9/21/2020			428			562
3/17/2021				200	341	
3/18/2021	266	407	382			574
8/18/2021	281					549
8/19/2021		416	365	203	307	
2/8/2022	280	418	366	221		548
2/10/2022					288	
8/10/2022	316	433				498
8/11/2022			430	198	315	
1/27/2023			281			371
1/30/2023	286			189		
2/1/2023		288			294	
8/12/2023			167			
8/13/2023	261	355		305	343	418
2/17/2024	199					
2/18/2024		347	104	186	286	337

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	584	517	165	
9/21/2020		503		
9/23/2020	556		158	
3/12/2021			170	
3/19/2021		552		
8/16/2021	554			
8/18/2021		546	180	532
2/8/2022		519	167	537
2/9/2022	557			
8/10/2022	585		113	
8/11/2022		499		521
1/30/2023	558		74.6	
2/1/2023		503		492
8/12/2023	469	455		485
8/13/2023			57	
2/18/2024	458		52.7	
2/19/2024		473		486

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	9.94	6.14	5.93	4.56		
7/11/2016	6.3	5.9		5		
7/12/2016			6.2			
8/30/2016	6	6.2	6.4	4.9		
10/19/2016	5.8	6.1	6.5	4.6		
12/6/2016	5.4	6	7.2	4.5		
1/24/2017	5.2	6.1	6.4	4.7		
3/21/2017	4.6	5.9	7.5	4.3		
5/22/2017	4.6	5.9	6.5			
5/23/2017				4.5		
10/3/2017	5.6	6.3	6.5	4.8		
6/4/2018	13.1	6.1	6.3	4.5		
10/1/2018	6.6	6.4	6.4	3.8		
4/1/2019			6.5			
4/2/2019	20.3	5.8		4.4		
9/23/2019	17.7	5.1	5.9			
9/24/2019				3.6		
3/25/2020	20.4	5.2	6.1			
3/26/2020				3.4		
9/15/2020	13.4	5	6	3.3		
9/16/2020						4.1
9/17/2020					5.8	
11/10/2020						4.4
11/11/2020					3.1	
12/15/2020					3.2	4.7
1/19/2021						4.1
1/20/2021					2.8	
3/10/2021	7.4			2.9	3	
3/11/2021		5.1	5.9			4.5
8/11/2021	9.6					3.5
8/12/2021		5.2	4.8	2.4	2.6	
2/1/2022	7.5	7	5.7			4.1
2/7/2022				2.4	3.1	
8/2/2022	14.1	7.8	5.9	2.9		4.3
8/9/2022					3.7	
1/23/2023			5.6	1.6	3.3	
1/24/2023	9	7.1				4.3
8/8/2023	26	6.6	5.3	2.6	3.2	3.5
2/13/2024	10	6.3	5.3	1.4	4.1	3.9

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		1.57				
5/20/2016			1.35			
5/23/2016				659	209	25.8
7/11/2016		2	1.7			
7/12/2016				620	190	34
8/30/2016		2	1.6			
9/1/2016				510	200	34
10/20/2016		2.2	1.6			
10/24/2016				110	200	
10/25/2016						35
12/7/2016				510	240	38
12/8/2016		2	1.6			
1/24/2017		1.6	1.9			
1/26/2017				640	260	41
3/21/2017		2	1.3			
3/22/2017						41
3/23/2017				600	280	
5/23/2017		1.7	1.2			
5/24/2017				510	240	44
10/3/2017		1.7	2.1			
10/4/2017				420	210	50
6/5/2018		1.6	1.2			
6/6/2018				357	196	50.6
10/2/2018		2.4	1.7			
10/3/2018				368	200	49.9
4/2/2019		1.7	1.6			
4/4/2019					138	76.8
4/5/2019				227		
9/24/2019		1.7	1.3	188	120	
9/25/2019						84.4
3/25/2020			1.2			
3/26/2020		1.4			142	
3/30/2020				236		80.2
9/15/2020		1.7	1.2			
9/16/2020	7.2					
9/17/2020					108	99.3
9/18/2020				288		
11/10/2020	7.8					
12/15/2020	9.4					
1/19/2021	9.5					
3/10/2021	12.3					
3/11/2021		1.4	1.2			
3/16/2021					103	
3/17/2021				233		93.8
8/12/2021		1.4	0.94 (J)			
8/13/2021	39.9					
8/18/2021				141		
8/19/2021					89.9	90.1
2/1/2022	44.8					
2/7/2022		1.4	1.1			
2/8/2022					76.6	96.4
2/9/2022				174		

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/2/2022	19.8					
8/10/2022		2.1	1.3			98.3
8/11/2022				147	89.2	
1/24/2023	24.9					
1/27/2023		1.6	1.4			
2/1/2023				108	85	112
8/8/2023	27	1.3	2.1			
8/13/2023				95.8	78.2	89.1
2/13/2024	27.7	1.8	1.4			
2/17/2024				88.9	70.2	
2/18/2024						87.5

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	94					
5/24/2016		280				
7/12/2016	100	300				
9/1/2016	95	270				
10/25/2016	98	290				
12/7/2016	89					
12/8/2016		300				
1/26/2017	99	340				
3/22/2017	100					
3/23/2017		350				
5/25/2017	99	290				
10/4/2017	130	260				
6/5/2018		261				
6/6/2018	166					
10/3/2018	193	302				
4/4/2019			299			
4/5/2019	195	217		131	195	
9/25/2019	139	181	245			
9/26/2019					204	
9/27/2019				176		
1/22/2020						231
3/27/2020				141		
3/31/2020	161	126				
4/1/2020			236		166	242
6/17/2020			223			250
9/15/2020		150				
9/16/2020	156					
9/17/2020				153	171	
9/21/2020			236			273
3/17/2021				127	151	
3/18/2021	138	90.2	208			199
8/18/2021	90.7					118
8/19/2021		95.8	173	118	137	
2/8/2022	117	105	196	110		166
2/10/2022					138	
8/10/2022	148	95.2				120
8/11/2022			216	125	124	
1/27/2023			167			83.4
1/30/2023	154			109		
2/1/2023		92.7			137	
8/12/2023			76.2			
8/13/2023	109	104		101	119	99
2/17/2024	81.7					
2/18/2024		99	29.7	98.8	116	65.5

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	259	229	151	
9/21/2020		257		
9/23/2020	294		166	
3/12/2021			124	
3/19/2021		250		
8/16/2021	264			
8/18/2021		149	122	123
2/8/2022		202	151	194
2/9/2022	251			
8/10/2022	185		84.8	
8/11/2022		172		144
1/30/2023	173		49.2	
2/1/2023		189		158
8/12/2023	157	181		139
8/13/2023			16.5	
2/18/2024	143		7.8	
2/19/2024		150		125

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.005	<0.005	<0.005	<0.005		
7/11/2016	<0.005	<0.005		<0.005		
7/12/2016			<0.005			
8/30/2016	<0.005	<0.005	<0.005	<0.005		
10/19/2016	<0.005	<0.005	<0.005	<0.005		
12/6/2016	<0.005	<0.005	<0.005	<0.005		
1/24/2017	<0.005	<0.005	<0.005	<0.005		
3/21/2017	0.0005 (J)	<0.005	<0.005	0.0004 (J)		
5/22/2017	<0.005	<0.005	0.0007 (J)			
5/23/2017				<0.005		
4/2/2018	<0.005	<0.005		<0.005		
4/3/2018			<0.005			
3/11/2019				<0.005		
3/12/2019	<0.005	<0.005	<0.005			
4/1/2019			<0.005			
4/2/2019	<0.005	0.0079 (J)		0.019		
9/23/2019	<0.005	0.00058 (J)	<0.005			
9/24/2019				<0.005		
3/2/2020	<0.005	0.00041 (J)	<0.005	0.0004 (J)		
3/25/2020	0.00072 (J)	<0.005	<0.005			
3/26/2020				<0.005		
9/15/2020	<0.005	<0.005	<0.005	<0.005		
9/16/2020						<0.005
9/17/2020					<0.005	
11/10/2020						<0.005
11/11/2020					0.00063 (J)	
12/15/2020					0.0025 (J)	<0.005
1/19/2021						<0.005
1/20/2021					<0.005	
2/8/2021	<0.005			<0.005	0.00078 (J)	
2/9/2021		<0.005	<0.005			0.00095 (J)
3/10/2021	<0.005			<0.005	<0.005	
3/11/2021		<0.005	<0.005			<0.005
8/11/2021	<0.005					<0.005
8/12/2021		<0.005	<0.005	<0.005	<0.005	
2/1/2022	<0.005	<0.005	<0.005			<0.005
2/7/2022				<0.005	<0.005	
8/2/2022	<0.005	<0.005	<0.005	<0.005		<0.005
8/9/2022					<0.005	
1/23/2023			<0.005	<0.005	<0.005	
1/24/2023	<0.005	<0.005				<0.005
8/8/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2/13/2024	<0.005	<0.005	<0.005	<0.005	0.01	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.005				
5/20/2016			<0.005			
5/23/2016				<0.005	<0.005	<0.005
7/11/2016		<0.005	<0.005			
7/12/2016				<0.005	<0.005	<0.005
8/30/2016		<0.005	<0.005			
9/1/2016				<0.005	<0.005	<0.005
10/20/2016		<0.005	<0.005			
10/24/2016				<0.005	<0.005	
10/25/2016						<0.005
12/7/2016				<0.005	<0.005	<0.005
12/8/2016		<0.005	<0.005			
1/24/2017		<0.005	<0.005			
1/26/2017				<0.005	<0.005	<0.005
3/21/2017		<0.005	0.0007 (J)			
3/22/2017						0.0021 (J)
3/23/2017				<0.005	0.0005 (J)	
5/23/2017		<0.005	<0.005			
5/24/2017				<0.005	<0.005	<0.005
4/3/2018		<0.005	<0.005		<0.005	<0.005
4/4/2018				<0.005		
3/12/2019		<0.005	<0.005			
3/14/2019				<0.005	<0.005	
3/15/2019						<0.005
4/2/2019		<0.005	<0.005			
4/4/2019					<0.005	<0.005
4/5/2019				<0.005		
9/24/2019		<0.005	<0.005	<0.005	0.00041 (J)	
9/25/2019						<0.005
3/2/2020		0.0005 (J)	<0.005			
3/3/2020				0.00042 (J)	<0.005	0.00071 (J)
3/25/2020			<0.005			
3/26/2020		<0.005			<0.005	
3/30/2020				0.00066 (J)		0.0004 (J)
9/15/2020		<0.005	<0.005			
9/16/2020	0.0012 (J)					
9/17/2020					<0.005	<0.005
9/18/2020				<0.005		
11/10/2020	0.00089 (J)					
12/15/2020	0.00072 (J)					
1/19/2021	0.0011 (J)					
2/9/2021	0.00066 (J)	<0.005	<0.005			
2/10/2021						<0.005
2/11/2021				<0.005		
2/12/2021					<0.005	
3/10/2021	<0.005					
3/11/2021		0.0011 (J)	<0.005			
3/16/2021					0.0012 (J)	
3/17/2021				<0.005		<0.005
8/12/2021		<0.005	<0.005			
8/13/2021	0.0016 (J)					
8/18/2021				<0.005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/19/2021					<0.005	<0.005
2/1/2022	0.0013 (J)					
2/7/2022		<0.005	<0.005			
2/8/2022					<0.005	<0.005
2/9/2022				<0.005		
8/2/2022	<0.005					
8/10/2022		<0.005	<0.005			<0.005
8/11/2022				<0.005	<0.005	
1/24/2023	<0.005					
1/27/2023		<0.005	<0.005			
2/1/2023				<0.005	<0.005	<0.005
8/8/2023	<0.005	<0.005	<0.005			
8/13/2023				<0.005	<0.005	<0.005
2/13/2024	<0.005	<0.005	<0.005			
2/17/2024				<0.005	<0.005	
2/18/2024						<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.005					
5/24/2016		<0.005				
7/12/2016	<0.005	<0.005				
9/1/2016	<0.005	<0.005				
10/25/2016	<0.005	<0.005				
12/7/2016	<0.005					
12/8/2016		<0.005				
1/26/2017	<0.005	<0.005				
3/22/2017	<0.005					
3/23/2017		0.0005 (J)				
5/25/2017	<0.005	<0.005				
4/3/2018	<0.005	<0.005				
3/14/2019		<0.005			<0.005	
3/15/2019	<0.005		<0.005	<0.005		
4/4/2019			<0.005			
4/5/2019	<0.005	<0.005		<0.005	<0.005	
9/25/2019	<0.005	<0.005	<0.005			
9/26/2019					<0.005	
9/27/2019				0.0004 (J)		
3/2/2020				<0.005	<0.005	
3/3/2020	0.0018 (J)	0.0004 (J)	<0.005			
3/27/2020				<0.005		
3/31/2020	<0.005	<0.005				
4/1/2020			<0.005		0.00086 (J)	0.00069 (J)
6/17/2020			0.00057 (J)			<0.005
9/15/2020		0.00063 (J)				
9/16/2020	<0.005					
9/17/2020				<0.005	<0.005	
9/21/2020			<0.005			<0.005
2/11/2021	0.00074 (J)	<0.005	<0.005			
2/12/2021					<0.005	<0.005
2/15/2021				<0.005		
3/17/2021				0.00075 (J)	0.00083 (J)	
3/18/2021	0.00069 (J)	<0.005	0.00074 (J)			<0.005
8/18/2021	<0.005					<0.005
8/19/2021		<0.005	<0.005	<0.005	<0.005	
2/8/2022	<0.005	<0.005	<0.005	<0.005		<0.005
2/10/2022					<0.005	
8/10/2022	<0.005	<0.005				<0.005
8/11/2022			<0.005	<0.005	<0.005	
1/27/2023			<0.005			<0.005
1/30/2023	<0.005			<0.005		
2/1/2023		<0.005			<0.005	
8/12/2023			<0.005			
8/13/2023	<0.005	<0.005		<0.005	<0.005	<0.005
2/17/2024	<0.005					
2/18/2024		<0.005	<0.005	<0.005	<0.005	<0.005

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.0059 (J)	<0.005	0.0048 (J)	
9/21/2020		0.00079 (J)		
9/23/2020	<0.005		<0.005	
2/11/2021			0.0014 (J)	
2/15/2021		<0.005		
3/12/2021			<0.005	
3/19/2021		0.00083 (J)		
8/16/2021	<0.005			
8/18/2021		<0.005	<0.005	<0.005
2/8/2022		<0.005	<0.005	<0.005
2/9/2022	<0.005			
8/10/2022	<0.005		<0.005	
8/11/2022		<0.005		<0.005
1/30/2023	<0.005		<0.005	
2/1/2023		<0.005		<0.005
8/12/2023	<0.005	<0.005		<0.005
8/13/2023			<0.005	
2/18/2024	<0.005		<0.005	
2/19/2024		<0.005		<0.005

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.005	0.0293	<0.005	<0.005		
7/11/2016	0.0004 (J)	0.0267		<0.005		
7/12/2016			<0.005			
8/30/2016	<0.005	0.028	<0.005	<0.005		
10/19/2016	<0.005	0.0201	<0.005	<0.005		
12/6/2016	<0.005	0.0184	<0.005	<0.005		
1/24/2017	<0.005	0.0206	<0.005	<0.005		
3/21/2017	<0.005	0.0251	<0.005	<0.005		
5/22/2017	<0.005	0.0263	<0.005			
5/23/2017				<0.005		
4/2/2018	<0.005	0.019		<0.005		
4/3/2018			<0.005			
6/4/2018	<0.005	0.025	<0.005	<0.005		
10/1/2018	<0.005	0.026	<0.005	<0.005		
3/11/2019				<0.005		
3/12/2019	<0.005	0.017	<0.005			
4/1/2019			<0.005			
4/2/2019	<0.005	0.019		<0.005		
9/23/2019	<0.005	0.038	<0.005			
9/24/2019				<0.005		
3/2/2020	<0.005	0.019	<0.005	0.00063 (J)		
3/25/2020	<0.005	0.02	<0.005			
3/26/2020				0.00058 (J)		
9/15/2020	<0.005	0.021	<0.005	<0.005		
9/16/2020						<0.005
9/17/2020				<0.005		
11/10/2020						<0.005
11/11/2020				<0.005		
12/15/2020				0.00049 (J)		<0.005
1/19/2021						<0.005
1/20/2021				<0.005		
2/8/2021	<0.005			0.00074 (J)	<0.005	
2/9/2021		0.02	<0.005			<0.005
3/10/2021	<0.005			0.00065 (J)	<0.005	
3/11/2021		0.013	<0.005			<0.005
8/11/2021	<0.005					<0.005
8/12/2021		0.022	<0.005	0.0007 (J)	<0.005	
2/1/2022	<0.005	0.025	<0.005			<0.005
2/7/2022				0.00068 (J)	<0.005	
8/2/2022	0.00054 (J)	0.024	<0.005	0.00066 (J)		<0.005
8/9/2022				<0.005		
1/23/2023			<0.005	0.00049 (J)	<0.005	
1/24/2023	<0.005	0.024				<0.005
8/8/2023	0.0008 (J)	0.029	<0.005	0.00041 (J)	<0.005	<0.005
2/13/2024	<0.005	0.022	<0.005	0.00056 (J)	<0.005	<0.005

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.005				
5/20/2016			<0.005			
5/23/2016				<0.25	0.0419 (J)	<0.005
7/11/2016		0.001 (J)	<0.005			
7/12/2016				0.0232	0.0393	<0.005
8/30/2016		0.001 (J)	<0.005			
9/1/2016				0.0248	0.045	<0.005
10/20/2016		0.0008 (J)	<0.005			
10/24/2016				0.0253	0.0557	
10/25/2016						<0.005
12/7/2016				0.0269	0.0536	<0.005
12/8/2016		0.0006 (J)	<0.005			
1/24/2017		0.0006 (J)	<0.005			
1/26/2017				0.0294	0.055	<0.005
3/21/2017		0.0008 (J)	<0.005			
3/22/2017						<0.005
3/23/2017				0.0311	0.0715	
5/23/2017		0.0006 (J)	<0.005			
5/24/2017				0.0279	0.0446	<0.005
4/3/2018		<0.005	<0.005		0.032	<0.005
4/4/2018				0.025		
6/5/2018		<0.005	<0.005			
6/6/2018				0.027	0.032	<0.005
10/2/2018		<0.005	<0.005			
10/3/2018				0.023	0.051	<0.005
3/12/2019		0.00099 (J)	<0.005			
3/14/2019				0.025	0.038	
3/15/2019						<0.005
4/2/2019		0.0012 (J)	<0.005			
4/4/2019					0.035	0.00028 (J)
4/5/2019				0.021		
9/24/2019		0.00063 (J)	<0.005	0.026	0.022	
9/25/2019						<0.005
3/2/2020		0.00093 (J)	<0.005			
3/3/2020				0.029	0.03	0.00037 (J)
3/25/2020			<0.005			
3/26/2020		0.0013 (J)			0.022	
3/30/2020				0.028		<0.005
9/15/2020		0.00047 (J)	<0.005			
9/16/2020	<0.005					
9/17/2020					0.026	<0.005
9/18/2020				0.027		
11/10/2020	<0.005					
12/15/2020	<0.005					
1/19/2021	<0.005					
2/9/2021	<0.005	0.00071 (J)	<0.005			
2/10/2021						<0.005
2/11/2021				0.033		
2/12/2021					0.019	
3/10/2021	<0.005					
3/11/2021		0.0013 (J)	<0.005			
3/16/2021					0.018	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				0.034		<0.005
8/12/2021		<0.005	<0.005			
8/13/2021	<0.005					
8/18/2021				0.033		
8/19/2021					0.011	<0.005
2/1/2022	<0.005					
2/7/2022		0.00055 (J)	<0.005			
2/8/2022					0.0081	<0.005
2/9/2022				0.038		
8/2/2022	<0.005					
8/10/2022		<0.005	<0.005			<0.005
8/11/2022				0.037	0.0088	
1/24/2023	<0.005					
1/27/2023		0.00063 (J)	<0.005			
2/1/2023				0.035	0.0091	<0.005
8/8/2023	<0.005	<0.005	<0.005			
8/13/2023				0.036	0.0016 (J)	<0.005
2/13/2024	<0.005	0.00039 (J)	<0.005			
2/17/2024				0.038	0.0058	
2/18/2024						<0.005

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	0.0167					
5/24/2016		0.17 (J)				
7/12/2016	0.0148	0.168				
9/1/2016	0.0151	0.18				
10/25/2016	0.0141	0.188				
12/7/2016	0.0141					
12/8/2016		0.206				
1/26/2017	0.0154	0.195				
3/22/2017	0.0169					
3/23/2017		0.223				
5/25/2017	0.0154	0.209				
4/3/2018	0.016	0.19				
6/5/2018		0.19				
6/6/2018	0.018					
10/3/2018	0.016	0.19				
3/14/2019		0.16			0.0013 (J)	
3/15/2019	0.017		<0.005	0.028		
4/4/2019			0.00034 (J)			
4/5/2019	0.016	0.14		0.022	0.0012 (J)	
9/25/2019	0.015	0.18	<0.005			
9/26/2019					0.00098 (J)	
9/27/2019				0.035		
1/22/2020						0.052
3/2/2020				0.043	0.0011 (J)	
3/3/2020	0.016	0.15	<0.005			
3/27/2020				0.025		
3/31/2020	0.016	0.16				
4/1/2020			<0.005		0.0011 (J)	0.058
6/17/2020			<0.005			0.053
9/15/2020		0.16				
9/16/2020	0.013					
9/17/2020				0.029	0.00096 (J)	
9/21/2020			<0.005			0.047
2/11/2021	0.012	0.14	<0.005			
2/12/2021					0.001 (J)	0.055
2/15/2021				0.038		
3/17/2021				0.039	0.0011 (J)	
3/18/2021	0.012	0.14	<0.005			0.057
8/18/2021	0.009					0.054
8/19/2021		0.15	<0.005	0.022	0.00089 (J)	
2/8/2022	0.0066	0.16	<0.005	0.034		0.048
2/10/2022					0.001 (J)	
8/10/2022	0.012	0.16				0.046
8/11/2022			<0.005	0.015	0.00088 (J)	
1/27/2023			<0.005			0.034
1/30/2023	0.011			0.027		
2/1/2023		0.11			0.00081 (J)	
8/12/2023			<0.005			
8/13/2023	0.009	0.14		0.0089	0.00073 (J)	0.061
2/17/2024	0.0036 (J)					
2/18/2024		0.15	<0.005	0.019	0.00086 (J)	0.042

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.011	0.091	0.0015 (J)	
9/21/2020		0.084		
9/23/2020	0.0056		<0.005	
2/11/2021			0.00048 (J)	
2/15/2021		0.095		
3/12/2021			<0.005	
3/19/2021		0.1		
8/16/2021	0.0093			
8/18/2021		0.085	<0.005	0.03
2/8/2022		0.09	<0.005	0.031
2/9/2022	0.0065			
8/10/2022	0.0066		<0.005	
8/11/2022		0.082		0.027
1/30/2023	0.0071		<0.005	
2/1/2023		0.088		0.021 (J)
8/12/2023	0.0058	0.082		0.022
8/13/2023			<0.005	
2/18/2024	0.0067		<0.005	
2/19/2024		0.084		0.046

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/21/2024 8:08 PM

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	0.397 (U)	0.627 (U)	0.342 (U)	0.662 (U)		
7/11/2016	0.738 (U)	1.38		1.19		
7/12/2016			0.499 (U)			
8/30/2016	0.581 (U)	1.05 (U)	0.976 (U)	0.847 (U)		
10/19/2016	0.213 (U)	1.11 (U)	0.626 (U)	2.34		
12/6/2016	0.444 (U)	0.741 (U)	0.805 (U)	0.925 (U)		
1/24/2017	0.373 (U)	0.908 (U)	0.336 (U)	0.607 (U)		
3/21/2017	0.816 (U)	0.567 (U)	0.358 (U)	0.074 (U)		
5/22/2017	0.554 (U)	0.638 (U)	0.744 (U)			
5/23/2017				0.55 (U)		
4/2/2018	0.405 (U)	0.761 (U)		0.371 (U)		
4/3/2018			0.684 (U)			
6/4/2018	1.13 (U)	0.975 (U)	0.0291 (U)	0.622 (U)		
10/1/2018	0.132 (U)	0.434 (U)	0.781 (U)	0.132 (U)		
3/11/2019				0.781 (U)		
3/12/2019	0.327 (U)	0.454 (U)	1.01 (U)			
4/1/2019			0.76 (U)			
4/2/2019	0.739 (U)	0.651 (U)		0.494 (U)		
9/24/2019				0.455 (U)		
9/30/2019	0.306 (U)	1.04 (U)	0.384 (U)			
3/2/2020	0.61 (U)	1.58	0.249 (U)	0.937 (U)		
3/25/2020	4.36	0.621 (U)	0.833 (U)			
3/26/2020				0.578 (U)		
9/15/2020	0.748 (U)	0.124 (U)	0.161 (U)	0.179 (U)		
9/16/2020						0.531 (U)
9/17/2020				0.665 (U)		
11/10/2020						0.788 (U)
11/11/2020				1.28		
12/15/2020				0.261 (U)		1.04 (U)
1/19/2021						0.685 (U)
1/20/2021				0.845 (U)		
2/8/2021	0.223 (U)			0.558 (U)	0.429 (U)	
2/9/2021		0.721 (U)	0.447 (U)			0.138 (U)
3/10/2021	0 (U)			0.281 (U)	1.21	
3/11/2021		0.737 (U)	0.128 (U)			1.51 (U)
8/11/2021	0.115 (U)					0.394 (U)
8/12/2021		0.746 (U)	0.389 (U)	0.359 (U)	0.11 (U)	
2/1/2022	0.143 (U)	0.588 (U)	0.266 (U)			1.12
2/7/2022				0.0978 (U)	0.066 (U)	
8/2/2022	0.203 (U)	0.861 (U)	0.4 (U)	0.963 (U)		0.662 (U)
1/23/2023			0.311 (U)	0.961	1.12	
1/24/2023	0.549 (U)	0.829 (U)				1.25
8/8/2023	0.195 (U)	0.175 (U)	0.411 (U)	0.463 (U)	0.463 (U)	0.503 (U)
2/13/2024	0.194 (U)	0.325 (U)	0.213 (U)	0.721 (U)	0.168 (U)	0.86 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		0.685 (U)				
5/20/2016			0.843 (U)			
5/23/2016				0.568 (U)	0.171 (U)	
7/1/2016						0 (U)
7/11/2016		1.68	0.494 (U)			
7/12/2016				1.31	0.611 (U)	0.182 (U)
8/30/2016		2.42	0.946 (U)			
9/1/2016				1.64	0.766 (U)	1.23
10/20/2016		0.351 (U)	0.664 (U)			
10/24/2016				1.88	0.969	
10/25/2016						1.05 (U)
12/7/2016				1.35	0.302 (U)	1.11 (U)
12/8/2016		0.905 (U)	0.421 (U)			
1/24/2017		0.0774 (U)	0.965 (U)			
1/26/2017				2.1	0.626 (U)	1.29 (U)
3/21/2017		0.0599 (U)	0.139 (U)			
3/22/2017						0.453 (U)
3/23/2017				1.17	0.662 (U)	
5/23/2017		0.477 (U)	0.308 (U)			
5/24/2017				1 (U)	0.202 (U)	1.05 (U)
4/3/2018		0.858 (U)	0.828 (U)		0.384 (U)	0.783 (U)
4/4/2018				1.72		
6/5/2018		0.767 (U)	0.424 (U)			
6/6/2018				1.31 (U)	1.32 (U)	0.595 (U)
10/2/2018		0.489 (U)	0.643 (U)			
10/3/2018				1.48	0.858 (U)	1.03 (U)
3/12/2019		0.833 (U)	0.982 (U)			
3/14/2019				1.5	0.462 (U)	
3/15/2019						0.591 (U)
4/2/2019		1.07 (U)	0.621 (U)			
4/4/2019					0.512 (U)	0.96 (U)
4/5/2019				1.43 (U)		
9/24/2019		0.201 (U)	0.874 (U)	1.17	0.582 (U)	
9/25/2019						0.643 (U)
3/2/2020		0.547 (U)	0.676 (U)			
3/3/2020				1.84	1.43	1.32 (U)
3/25/2020			0.509 (U)			
3/26/2020		0.907 (U)			0.855 (U)	
3/30/2020				1.08 (U)		0.288 (U)
9/15/2020		0.601 (U)	1.36 (U)			
9/16/2020	0.422 (U)					
9/17/2020					0.395 (U)	1.1 (U)
9/18/2020				1.8 (U)		
11/10/2020	0.293 (U)					
12/15/2020	0.7 (U)					
1/19/2021	0.79 (U)					
2/9/2021	0.486 (U)	0.37 (U)	0.324 (U)			
2/10/2021						0.773 (U)
2/11/2021				0.73 (U)		
2/12/2021					1.65	
3/10/2021	0.811 (U)					
3/11/2021		1.07 (U)	0.601 (U)			

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/16/2021					0.801 (U)	
3/17/2021				1.84		0.228 (U)
8/12/2021		0.922 (U)	0.0804 (U)			
8/13/2021	1.2					
8/18/2021				0.858 (U)		
8/19/2021					0.527 (U)	0.668 (U)
2/1/2022	0.665 (U)					
2/7/2022		0.106 (U)	0.346 (U)			
2/8/2022					0.0242 (U)	0.168 (U)
2/9/2022				0.346 (U)		
8/2/2022	0.952 (U)					
8/10/2022		0.568 (U)	0.648 (U)			
8/11/2022				1.31	0.656 (U)	0.249 (U)
1/24/2023	0.421 (U)					
1/27/2023		1.47 (U)	0.801 (U)			
2/1/2023				1.13	0.626 (U)	0.757 (U)
8/8/2023	0.163 (U)	0.222 (U)	0.168 (U)			
8/13/2023				0.801 (U)	0.785 (U)	0.281 (U)
2/13/2024	0.909	0.0243 (U)	0.153 (U)			
2/17/2024				0.439 (U)	0.576 (U)	
2/18/2024						0.248 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	0.618 (U)					
5/24/2016		1.82				
7/12/2016	0.867	1.76				
9/1/2016	0.857 (U)	1.51				
10/25/2016	1.11 (U)	2.69				
12/7/2016	0.964 (U)					
12/8/2016		2.21				
1/26/2017	0.612 (U)	2.26				
3/22/2017	0.437 (U)					
3/23/2017		1.81				
5/25/2017	1.21 (U)	1.63				
4/3/2018	0.409 (U)	2.53				
6/5/2018		1.91				
6/6/2018	0.772 (U)					
10/3/2018	1.08 (U)	2.22				
3/14/2019		1.37 (U)			0.872 (U)	
3/15/2019	0.917 (U)		0.972 (U)	0.977		
4/4/2019			0.791 (U)			
4/5/2019	1.07 (U)	2.22		1.06 (U)	0.932 (U)	
9/25/2019	1.54	2.77	0.751 (U)			
9/26/2019					1.25	
9/27/2019				1.44 (U)		
3/2/2020				0.872 (U)	0.964 (U)	
3/3/2020	1.33	2.35	1.94			
3/27/2020				0.96 (U)		
3/31/2020	0.591 (U)	2.7				
4/1/2020			0.758 (U)		0.914 (U)	2.57
6/17/2020			0.691 (U)			1.43 (U)
9/15/2020		1.65				
9/16/2020	0.295 (U)					
9/17/2020				0.0879 (U)	0.32 (U)	
9/21/2020			0.436 (U)			2.53
2/11/2021	0.831 (U)	1.11	0.317 (U)			
2/12/2021					1.21 (U)	2.26
2/15/2021				0.215 (U)		
3/17/2021				0.981 (U)	0.579 (U)	
3/18/2021	0.856 (U)	1.63	0.5 (U)			0.733 (U)
8/18/2021	0.548 (U)					1.77
8/19/2021		1.45	1.17	0.689 (U)	0.69 (U)	
2/8/2022	1 (U)	0.93 (U)	0.463 (U)	0.0657 (U)		0.967 (U)
2/10/2022					0.919 (U)	
8/11/2022	0.361 (U)	1.46	0.691 (U)	0.789 (U)	0.39 (U)	1.52
1/27/2023			0.256 (U)			1.44 (U)
1/30/2023	0.5 (U)			0.621 (U)		
2/1/2023		0.871			0.406 (U)	
8/12/2023			0.297 (U)			
8/13/2023	0.678 (U)	1.03		0.361 (U)	0.0608 (U)	0.773 (U)
2/17/2024	0.633 (U)					
2/18/2024		0.757 (U)	0.127 (U)	0.471 (U)	0.339 (U)	0.552 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	1.36	2.02	1.79	
9/21/2020		3.85		
9/23/2020	0.563 (U)		0.98 (U)	
2/11/2021			0.12 (U)	
2/15/2021		1.52		
3/12/2021			0.578 (U)	
3/19/2021		0.524 (U)		
8/16/2021	0.693 (U)			
8/18/2021		1.67	1.31	0.973 (U)
2/8/2022		1.38	0.345 (U)	0.431 (U)
2/9/2022	0.297 (U)			
8/11/2022	1.05	1.71	0.505 (U)	1.02
1/30/2023	0.689 (U)		0.309 (U)	
2/1/2023		1.24		0.82 (U)
8/12/2023	0.676 (U)	0.897 (U)		0.484 (U)
8/13/2023			0.308 (U)	
2/18/2024	0.515 (U)		0.535 (U)	
2/19/2024		1.43		0.995 (U)

Time Series

Constituent: Field pH (s.u.) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	7.27	5.81	7.45	6.51		
7/11/2016	7.06	5.68		6.65		
7/12/2016			7.32			
8/30/2016	7.28	5.63	7.43	7.14		
10/19/2016	7.02	5.46	7.03	7.08		
12/6/2016	7.09	5.38	7.08	7		
1/24/2017	7.2	5.37	7.39	6.16		
3/21/2017	7.01	4.9	6.83	6.07		
5/22/2017	7.11	5.2	7.02			
5/23/2017				6.28		
10/3/2017	7.21	5.3	7.47	6.45		
4/2/2018	7.1	5.4		6.23		
4/3/2018			7.38			
6/4/2018	7.06	5.27	7.38	6.82		
10/1/2018	7.09	5.31	7.13	5.73		
3/11/2019				6.27		
3/12/2019	7.03	5.42	7.29			
4/1/2019			7.16			
4/2/2019	6.86	5.41		6.66		
9/23/2019	7.02	5.33	7.3			
9/24/2019				6.16		
3/2/2020	7.1	5.43	7.12	5.63		
3/25/2020	6.95	5.36	7.4			
3/26/2020				5.77		
9/15/2020	7.15	5.22	7.29	5.75		
9/16/2020						7.52
9/17/2020				7.62		
11/10/2020						7.27
11/11/2020				7.68		
12/15/2020				7.64		7.39
1/19/2021						7.39
1/20/2021					7.68	
2/8/2021	7.11			4.94	7.64	
2/9/2021		5.42	7.23			7.44
3/10/2021	6.95			5.28	7.7	
3/11/2021		5.8	7.33			7.46
8/11/2021	6.98					7.4
8/12/2021		5.05	7.31	5.26	7.7	
2/1/2022	7.19	5.24	7.45			7.52
2/7/2022				5.24	7.85	
8/2/2022	7.03	4.57	7.02	4.86		7.15
8/9/2022					7.58	
1/23/2023			7.32	5.62	7.55	
1/24/2023	6.76	5.22				7.56
8/8/2023	7.05	5.01	7.42	6.03	7.72	7.39
2/13/2024	7.06	5.49	7.35	5.98	7.68	7.47

Time Series

Constituent: Field pH (s.u.) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		6.62				
5/20/2016			7.58			
5/23/2016				4.56	6.17	7.15
7/11/2016		6.54	7.32			
7/12/2016				4.49	6.17	7.1
8/30/2016		6.38	7.69			
9/1/2016				4.54	6.22	7.29
10/20/2016		6.52	7.43			
10/24/2016				4.63	5.97	
10/25/2016						7.03
12/7/2016				4.6	5.87	6.85
12/8/2016		6.5	7.56			
1/24/2017		6.59	7.52			
1/26/2017				4.8	6.05	7.07
3/21/2017		6.55	7.4			
3/22/2017						7.15
3/23/2017				4.57	5.79	
5/23/2017		6.5	7.53			
5/24/2017				4.61	6.01	7.11
10/3/2017		6.63	7.51			
10/4/2017				4.74	5.82	7.17
4/3/2018		6.59	7.53		5.98	7.07
4/4/2018				4.5		
6/5/2018		6.44	7.37			
6/6/2018				4.49	6.12	7
10/2/2018		6.35	7.36			
10/3/2018				4.67	5.92	6.94
3/12/2019		6.42	7.5			
3/14/2019				4.66	5.71	
3/15/2019						7.09
4/2/2019		6.38	7.46			
4/4/2019					5.66	6.95
4/5/2019				4.67		
9/24/2019		6.4	7.41	4.77	6.33	
9/25/2019						6.92
3/2/2020		6.8	7.67			
3/3/2020				4.77	6	7.1
3/25/2020			7.39			
3/26/2020		6.38			6.03	
3/30/2020				4.57		7.09
9/15/2020		6.33	7.37			
9/16/2020	7.83					
9/17/2020					6.11	7.11
9/18/2020				4.88		
11/10/2020	7.84					
12/15/2020	7.87					
1/19/2021	7.86					
2/9/2021	7.84	6.35	7.4			
2/10/2021						7.08
2/11/2021				4.84		
2/12/2021					5.99	
3/10/2021	7.92					

Time Series

Constituent: Field pH (s.u.) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/11/2021		6.48	7.56			
3/16/2021					6.08	
3/17/2021				4.72		7.19
8/12/2021		6.46	7.47			
8/13/2021	7.77					
8/18/2021				4.9		
8/19/2021					6.18	7.04
2/1/2022	8.25					
2/7/2022		6.51	7.65			
2/8/2022					6.04	7.18
2/9/2022				4.97		
8/2/2022	7.9					
8/10/2022		6.22	7.53			7.09
8/11/2022				4.93	6.29	
1/24/2023	8.22					
1/27/2023		6.52	7.66			
2/1/2023				4.93	6.22	7.15
8/8/2023	8.2	6.5	7.6			
8/13/2023				4.83	6.66	7.13
2/13/2024	8.1	6.66	7.6			
2/17/2024				5.05	6.56	
2/18/2024						7.12

Time Series

Constituent: Field pH (s.u.) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	6.4					
5/24/2016		4.83				
7/12/2016	6.09	4.58				
9/1/2016	6.35	4.51				
10/25/2016	6.23	4.53				
12/7/2016	6.23					
12/8/2016		4.56				
1/26/2017	6.24	4.61				
3/22/2017	6.25					
3/23/2017		4.63				
5/25/2017	6.27	4.69				
10/4/2017	6.18	4.58				
4/3/2018	6.22	4.54				
6/5/2018		4.57				
6/6/2018	6.22					
10/3/2018	6.23	4.41				
3/14/2019		4.39			6.68	
3/15/2019	6.32		6.81	5.95		
4/4/2019			6.7			
4/5/2019	6.26	4.5		5.96	6.66	
9/25/2019	6.28	4.54	6.54			
9/26/2019					6.64	
9/27/2019				5.81		
3/2/2020				5.97	7.05	
3/3/2020	6.35	4.55	6.72			
3/27/2020				5.71		
3/31/2020	6.28	4.43				
4/1/2020			6.9		6.8	4.35
6/17/2020			6.47			4.36
9/15/2020		4.47				
9/16/2020	6.35					
9/17/2020				5.66	6.71	
9/21/2020			6.92			4.48
2/11/2021	6.31	4.53	6.87			
2/12/2021					6.8	4.4
2/15/2021				5.48		
3/17/2021				5.57	6.86	
3/18/2021	6.43	4.54	6.95			4.27
8/18/2021	6.43					4.42
8/19/2021		4.43	6.85	6.05	6.72	
2/8/2022	6.42	4.59	7.09	5.37		4.42
2/10/2022					6.87	
8/10/2022	6.29	4.41				4.36
8/11/2022			6.96	5.3	6.57	
1/27/2023			7.31			5.61
1/30/2023	6.44			5.47		
2/1/2023		4.66			6.69	
8/12/2023			7.17			
8/13/2023	6.46	4.75		5.54	6.82	4.54
2/17/2024	6.54					
2/18/2024		4.73	7.19	5.57	6.92	4.74

Time Series

Constituent: Field pH (s.u.) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/17/2020	7.35	5.46	7.78	
9/21/2020		5.4		
9/23/2020	7.05		7.62	
2/11/2021			7.42	
2/15/2021		4.82		
3/12/2021			7.5	
3/19/2021		4.89		
8/16/2021	7.05			
8/18/2021		4.89	7.52	6.19
2/8/2022		4.86	7.63	6.57
2/9/2022	7.21			
8/10/2022	7		7.47	
8/11/2022		4.86		6.37
1/30/2023	6.99		7.56	
2/1/2023		4.89		6.37
8/12/2023	7.06	5.05		6.6
8/13/2023			7.61	
2/18/2024	7.02		7.65	
2/19/2024		5.51		6.08

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	0.105 (J)	0.0303 (J)	0.0513 (J)	0.036 (J)		
7/11/2016	0.16 (J)	0.05 (J)		0.09 (J)		
7/12/2016			0.12 (J)			
8/30/2016	0.09 (J)	0.06 (J)	0.09 (J)	0.06 (J)		
10/19/2016	0.1 (J)	0.04 (J)	0.1 (J)	0.07 (J)		
12/6/2016	0.11 (J)	0.36	0.21 (J)	0.07 (J)		
1/24/2017	0.09 (J)	<0.1	0.06 (J)	<0.1		
3/21/2017	0.13 (J)	<0.1	0.005 (J)	<0.1		
5/22/2017	0.12 (J)	<0.1	0.05 (J)			
5/23/2017				0.01 (J)		
10/3/2017	0.13 (J)	<0.1	0.13 (J)	<0.1		
4/2/2018	<0.3	<0.1		<0.1		
4/3/2018			<0.1			
6/4/2018	0.074 (J)	<0.1	<0.1	0.097 (J)		
10/1/2018	<0.3	<0.1	<0.1	<0.1		
3/11/2019				0.035 (J)		
3/12/2019	0.29 (J)	0.038 (J)	0.072 (J)			
4/1/2019			0.029 (J)			
4/2/2019	0.1 (J)	0.071 (J)		<0.1		
9/23/2019	0.078 (J)	<0.1	<0.1			
9/24/2019				<0.1		
3/2/2020	0.076 (J)	<0.1	<0.1	<0.1		
3/25/2020	0.098 (J)	<0.1	<0.1			
3/26/2020				<0.1		
9/15/2020	0.082 (J)	<0.1	<0.1	<0.1		
9/16/2020						0.22
9/17/2020				0.2		
11/10/2020						0.19
11/11/2020				0.1		
12/15/2020				0.11		0.21
1/19/2021						0.16
1/20/2021					0.082 (J)	
2/8/2021	0.078 (J)			<0.1	0.096 (J)	
2/9/2021		<0.1	0.074 (J)			0.19
3/10/2021	0.079 (J)			<0.1	0.11	
3/11/2021		0.1	<0.1			0.2
8/11/2021	0.058 (J)					0.15
8/12/2021		<0.1	<0.1	<0.1	0.079 (J)	
2/1/2022	0.064 (J)	<0.1	<0.1			0.19
2/7/2022				<0.1	0.085 (J)	
8/2/2022	0.09 (J)	0.053 (J)	0.067 (J)	0.076 (J)		0.22
8/9/2022					0.12	
1/23/2023			0.061 (J)	0.12	0.11	
1/24/2023	0.089 (J)	0.053 (J)				0.23
8/8/2023	0.088 (J)	0.07 (J)	0.055 (J)	0.11	0.1	0.18
2/13/2024	0.071 (J)	0.17	<0.1	0.13	0.087 (J)	0.2

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		0.08 (J)				
5/20/2016			0.065 (J)			
5/23/2016				<0.1	<0.1	0.038 (J)
7/11/2016		0.09 (J)	0.13 (J)			
7/12/2016				0.2 (J)	0.09 (J)	0.26 (J)
8/30/2016		0.08 (J)	0.07 (J)			
9/1/2016				0.08 (J)	0.22 (J)	0.42
10/20/2016		0.1 (J)	0.06 (J)			
10/24/2016				0.04 (J)	0.07 (J)	
10/25/2016						0.25 (J)
12/7/2016				0.11 (J)	0.23 (J)	0.23 (J)
12/8/2016		0.08 (J)	0.06 (J)			
1/24/2017		0.09 (J)	0.02 (J)			
1/26/2017				0.13 (J)	<0.1	0.02 (J)
3/21/2017		0.04 (J)	0.08 (J)			
3/22/2017						0.3
3/23/2017				0.28 (J)	0.12 (J)	
5/23/2017		0.04 (J)	0.006 (J)			
5/24/2017				0.32	0.31	0.46
10/3/2017		0.06 (J)	<0.1			
10/4/2017				0.52	0.6	<0.1
4/3/2018		<0.1	<0.1		<0.1	<0.1
4/4/2018				<0.1		
6/5/2018		0.083 (J)	0.055 (J)			
6/6/2018				0.25 (J)	0.17 (J)	<0.1
10/2/2018		<0.1	0.076 (J)			
10/3/2018				0.21 (J)	<0.1	<0.1
3/12/2019		0.079 (J)	0.061 (J)			
3/14/2019				0.24 (J)	<0.1	
3/15/2019						<0.1
4/2/2019		0.12 (J)	<0.1			
4/4/2019					0.066 (J)	<0.1
4/5/2019				0.66		
9/24/2019		0.058 (J)	<0.1	0.053 (J)	0.12 (J)	
9/25/2019						<0.1
3/2/2020		0.053 (J)	<0.1			
3/3/2020				<0.1	0.064 (J)	<0.1
3/25/2020			<0.1			
3/26/2020		0.066 (J)			<0.1	
3/30/2020				0.092 (J)		0.059 (J)
9/15/2020		0.061 (J)	<0.1			
9/16/2020	0.52					
9/17/2020					<0.1	<0.1
9/18/2020				<0.1		
11/10/2020	0.59					
12/15/2020	0.67					
1/19/2021	0.74					
2/9/2021	0.44	0.053 (J)	<0.1			
2/10/2021						0.21
2/11/2021				0.059 (J)		
2/12/2021					0.053 (J)	
3/10/2021	0.65					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

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Constituent: Fluoride (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/11/2021		0.06 (J)	0.17			
3/16/2021					<0.1	
3/17/2021				0.076 (J)		<0.1
8/12/2021		<0.1	<0.1			
8/13/2021	0.87					
8/18/2021				<0.1		
8/19/2021					<0.1	<0.1
2/1/2022	0.96					
2/7/2022		<0.1	<0.1			
2/8/2022					<0.1	<0.1
2/9/2022				0.053 (J)		
8/2/2022	0.8					
8/10/2022		0.078 (J)	0.067 (J)			0.054 (J)
8/11/2022				0.085 (J)	0.097 (J)	
1/24/2023	1.3					
1/27/2023		0.088 (J)	0.067 (J)			
2/1/2023				0.094 (J)	0.086 (J)	0.053 (J)
8/8/2023	1.3	0.059 (J)	0.072 (J)			
8/13/2023				0.1	0.12	0.053 (J)
2/13/2024	1.5	0.059 (J)	0.065 (J)			
2/17/2024				0.065 (J)	0.064 (J)	
2/18/2024						<0.1

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.3					
5/24/2016		<0.3				
7/12/2016	0.09 (J)	0.54				
9/1/2016	0.03 (J)	0.49				
10/25/2016	0.07 (J)	0.58				
12/7/2016	0.54					
12/8/2016		0.63				
1/26/2017	<0.3	0.71				
3/22/2017	0.07 (J)					
3/23/2017		0.57				
5/25/2017	0.42	0.54				
10/4/2017	0.93	0.95				
4/3/2018	<0.3	0.33				
6/5/2018		0.66				
6/6/2018	0.23 (J)					
10/3/2018	<0.3	0.32				
3/14/2019		0.88			<0.1	
3/15/2019	<0.3		<0.1	<0.1		
4/4/2019			0.1 (J)			
4/5/2019	0.16 (J)	0.37		0.13 (J)	0.14 (J)	
9/25/2019	0.081 (J)	0.73	<0.1			
9/26/2019					0.16 (J)	
9/27/2019				0.28 (J)		
1/22/2020						0.18 (J)
3/2/2020				<0.1	<0.1	
3/3/2020	<0.3	0.34	<0.1			
3/27/2020				<0.1		
3/31/2020	<0.3	0.45				
4/1/2020			<0.1		<0.1	0.15 (J)
6/17/2020			<0.1			0.25
9/15/2020		0.31				
9/16/2020	0.058 (J)					
9/17/2020				<0.1	<0.1	
9/21/2020			<0.1			0.14
2/11/2021	0.058 (J)	0.71	<0.1			
2/12/2021					<0.1	0.25
2/15/2021				<0.1		
3/17/2021				<0.1	<0.1	
3/18/2021	0.057 (J)	0.64	<0.1			0.4
8/18/2021	0.062 (J)					0.16
8/19/2021		0.31	<0.1	<0.1	<0.1	
2/8/2022	0.055 (J)	0.19	<0.1	<0.1		0.14
2/10/2022					<0.1	
8/10/2022	0.086 (J)	0.3				0.21
8/11/2022			0.056 (J)	0.063 (J)	0.06 (J)	
1/27/2023			0.05 (J)			0.087 (J)
1/30/2023	0.097 (J)			0.064 (J)		
2/1/2023		0.21			0.074 (J)	
8/12/2023			<0.1			
8/13/2023	0.081 (J)	0.25		0.057 (J)	0.061 (J)	0.22
2/17/2024	0.057 (J)					
2/18/2024		0.17	<0.1	<0.1	<0.1	0.088 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.082 (J)	0.053 (J)	0.1	
9/21/2020		<0.1		
9/23/2020	<0.1		0.065 (J)	
2/11/2021			0.077 (J)	
2/15/2021		0.093 (J)		
3/12/2021			0.061 (J)	
3/19/2021		0.082 (J)		
8/16/2021	0.066 (J)			
8/18/2021		0.052 (J)	0.05 (J)	0.072 (J)
2/8/2022		0.065 (J)	0.055 (J)	0.078 (J)
2/9/2022	0.051 (J)			
8/10/2022	0.081 (J)		0.084 (J)	
8/11/2022		0.088 (J)		0.11
1/30/2023	0.089 (J)		0.092 (J)	
2/1/2023		0.1		0.18
8/12/2023	0.062 (J)	0.077 (J)		0.1
8/13/2023			0.11	
2/18/2024	<0.1		0.05 (J)	
2/19/2024		0.16		0.12

Time Series

Constituent: Lead (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.001	<0.001	<0.001	<0.001		
7/11/2016	<0.001	<0.001		<0.001		
7/12/2016			0.0001 (J)			
8/30/2016	<0.001	<0.001	<0.001	<0.001		
10/19/2016	<0.001	<0.001	<0.001	<0.001		
12/6/2016	<0.001	<0.001	<0.001	0.0002 (J)		
1/24/2017	<0.001	<0.001	<0.001	<0.001		
3/21/2017	<0.001	6E-05 (J)	0.0001 (J)	<0.001		
5/22/2017	<0.001	9E-05 (J)	<0.001			
5/23/2017				<0.001		
4/2/2018	<0.001	<0.001		<0.001		
4/3/2018			<0.001			
3/11/2019				<0.001		
3/12/2019	<0.001	<0.001	<0.001			
4/1/2019			<0.001			
4/2/2019	<0.001	<0.001		<0.001		
9/23/2019	7.8E-05 (J)	9.2E-05 (J)	<0.001			
9/24/2019				<0.001		
3/2/2020	4.8E-05 (J)	9.5E-05 (J)	<0.001	0.00026 (J)		
3/25/2020	<0.001	0.00011 (J)	<0.001			
3/26/2020				5.9E-05 (J)		
9/15/2020	<0.001	8E-05 (J)	4.2E-05 (J)	4.9E-05 (J)		
9/16/2020						5E-05 (J)
9/17/2020					6.2E-05 (J)	
11/10/2020						6.9E-05 (J)
11/11/2020					8.4E-05 (J)	
12/15/2020					0.00045 (J)	8.2E-05 (J)
1/19/2021						4.4E-05 (J)
1/20/2021					<0.001	
2/8/2021	5.8E-05 (J)			0.00024 (J)	8.1E-05 (J)	
2/9/2021		9.4E-05 (J)	<0.001			0.00029 (J)
3/10/2021	<0.001			0.00016 (J)	<0.001	
3/11/2021		7.6E-05 (J)	<0.001			9.4E-05 (J)
8/11/2021	<0.001					<0.001
8/12/2021		<0.001	<0.001	<0.001	<0.001	
2/1/2022	<0.001	<0.001	<0.001			<0.001
2/7/2022				<0.001	<0.001	
8/2/2022	<0.001	<0.001	<0.001	<0.001		<0.001
8/9/2022					<0.001	
1/23/2023			<0.001	<0.001	<0.001	
1/24/2023	<0.001	<0.001				<0.001
8/8/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2/13/2024	<0.001	0.00018 (J)	<0.001	0.00019 (J)	0.00085 (J)	<0.001

Time Series

Constituent: Lead (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.001				
5/20/2016			<0.001			
5/23/2016				0.00182 (J)	<0.001	<0.001
7/11/2016		<0.001	<0.001			
7/12/2016				0.0015 (J)	<0.001	<0.001
8/30/2016		<0.001	<0.001			
9/1/2016				0.0016 (J)	<0.001	<0.001
10/20/2016		0.0002 (J)	<0.001			
10/24/2016				0.0016 (J)	<0.001	
10/25/2016						<0.001
12/7/2016				0.0018 (J)	<0.001	<0.001
12/8/2016		<0.001	<0.001			
1/24/2017		<0.001	<0.001			
1/26/2017				0.002 (J)	<0.001	0.0001 (J)
3/21/2017		<0.001	<0.001			
3/22/2017						0.0002 (J)
3/23/2017				0.0019 (J)	0.001 (J)	
5/23/2017		9E-05 (J)	0.0003 (J)			
5/24/2017				0.0016 (J)	0.0001 (J)	0.0001 (J)
4/3/2018		<0.001	<0.001		<0.001	<0.001
4/4/2018				<0.001		
3/12/2019		<0.001	<0.001			
3/14/2019				0.0014 (J)	<0.001	
3/15/2019						<0.001
4/2/2019		<0.001	<0.001			
4/4/2019					7.2E-05 (J)	0.00016 (J)
4/5/2019				0.0012 (J)		
9/24/2019		<0.001	7.1E-05 (J)	0.0013 (J)	0.0002 (J)	
9/25/2019						<0.001
3/2/2020		<0.001	<0.001			
3/3/2020				0.0017 (J)	5.3E-05 (J)	0.00016 (J)
3/25/2020			<0.001			
3/26/2020		<0.001			<0.001	
3/30/2020				0.0015 (J)		7.3E-05 (J)
9/15/2020		<0.001	<0.001			
9/16/2020	0.00021 (J)					
9/17/2020					<0.001	7.8E-05 (J)
9/18/2020				0.0012 (J)		
11/10/2020	0.0002 (J)					
12/15/2020	0.00011 (J)					
1/19/2021	0.00019 (J)					
2/9/2021	0.0001 (J)	<0.001	<0.001			
2/10/2021						9.4E-05 (J)
2/11/2021				0.0015 (J)		
2/12/2021					<0.001	
3/10/2021	<0.001					
3/11/2021		<0.001	<0.001			
3/16/2021					<0.001	
3/17/2021				0.0019		5.8E-05 (J)
8/12/2021		<0.001	<0.001			
8/13/2021	<0.001					
8/18/2021				0.0015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/19/2021					<0.001	<0.001
2/1/2022	<0.001					
2/7/2022		<0.001	<0.001			
2/8/2022					<0.001	<0.001
2/9/2022				0.0014		
8/2/2022	<0.001					
8/10/2022		<0.001	<0.001			<0.001
8/11/2022				<0.001	<0.001	
1/24/2023	<0.001					
1/27/2023		<0.001	<0.001			
2/1/2023				0.0011	<0.001	<0.001
8/8/2023	<0.001	<0.001	<0.001			
8/13/2023				0.00079 (J)	<0.001	<0.001
2/13/2024	<0.001	<0.001	<0.001			
2/17/2024				0.0012	<0.001	
2/18/2024						<0.001

Time Series

Constituent: Lead (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.001					
5/24/2016		0.00154 (J)				
7/12/2016	<0.001	0.0012 (J)				
9/1/2016	<0.001	0.0014 (J)				
10/25/2016	<0.001	0.0015 (J)				
12/7/2016	<0.001					
12/8/2016		0.0017 (J)				
1/26/2017	<0.001	0.0013 (J)				
3/22/2017	0.0001 (J)					
3/23/2017		0.001 (J)				
5/25/2017	<0.001	0.0012 (J)				
4/3/2018	<0.001	<0.001				
3/14/2019		0.0015 (J)			<0.001	
3/15/2019	<0.001		<0.001	<0.001		
4/4/2019			<0.001			
4/5/2019	7.6E-05 (J)	0.0015 (J)		<0.001	<0.001	
9/25/2019	8.9E-05 (J)	0.0015 (J)	<0.001			
9/26/2019					<0.001	
9/27/2019				0.0001 (J)		
3/2/2020				9.4E-05 (J)	5.1E-05 (J)	
3/3/2020	0.00013 (J)	0.0013 (J)	4.7E-05 (J)			
3/27/2020				<0.001		
3/31/2020	7.7E-05 (J)	0.0014 (J)				
4/1/2020			4.8E-05 (J)		<0.001	0.0017 (J)
6/17/2020			<0.001			0.0017 (J)
9/15/2020		0.0014 (J)				
9/16/2020	6.5E-05 (J)					
9/17/2020				<0.001	0.00016 (J)	
9/21/2020			<0.001			0.0017 (J)
2/11/2021	0.00018 (J)	0.00098 (J)	0.00066 (J)			
2/12/2021					<0.001	0.0018 (J)
2/15/2021				3.6E-05 (J)		
3/17/2021				<0.001	<0.001	
3/18/2021	8.8E-05 (J)	0.00096 (J)	7.3E-05 (J)			0.0017
8/18/2021	<0.001					0.0016
8/19/2021		0.0013	<0.001	<0.001	<0.001	
2/8/2022	<0.001	0.0009 (J)	<0.001	<0.001		0.0014
2/10/2022					<0.001	
8/10/2022	<0.001	0.0011				<0.001
8/11/2022			<0.001	<0.001	<0.001	
1/27/2023			<0.001			<0.001
1/30/2023	<0.001			<0.001		
2/1/2023		<0.001			<0.001	
8/12/2023			<0.001			
8/13/2023	0.00049 (J)	0.00075 (J)		<0.001	<0.001	0.0011
2/17/2024	<0.001					
2/18/2024		0.0011	<0.001	<0.001	<0.001	0.00084 (J)

Time Series

Constituent: Lead (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.00087 (J)	0.00016 (J)	0.0017 (J)	
9/21/2020		0.00099 (J)		
9/23/2020	<0.001		8.2E-05 (J)	
2/11/2021			0.00039 (J)	
2/15/2021		0.00055 (J)		
3/12/2021			<0.001	
3/19/2021		0.00066 (J)		
8/16/2021	<0.001			
8/18/2021		<0.001	<0.001	<0.001
2/8/2022		<0.001	<0.001	<0.001
2/9/2022	<0.001			
8/10/2022	<0.001		<0.001	
8/11/2022		<0.001		<0.001
1/30/2023	<0.001		<0.001	
2/1/2023		<0.001		<0.001
8/12/2023	<0.001	0.00035 (J)		<0.001
8/13/2023			<0.001	
2/18/2024	<0.001		<0.001	
2/19/2024		0.0006 (J)		<0.001

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.03	<0.03	<0.03	<0.03		
7/11/2016	<0.03	0.0014 (J)		0.0015 (J)		
7/12/2016			0.0024 (J)			
8/30/2016	<0.03	<0.03	0.0025 (J)	0.0027 (J)		
10/19/2016	<0.03	<0.03	0.003 (J)	0.0042 (J)		
12/6/2016	<0.03	<0.03	0.0033 (J)	0.0046 (J)		
1/24/2017	<0.03	<0.03	0.003 (J)	<0.03		
3/21/2017	<0.03	0.0012 (J)	0.0034 (J)	<0.03		
5/22/2017	<0.03	<0.03	0.003 (J)			
5/23/2017				<0.03		
4/2/2018	<0.03	0.0015 (J)		<0.03		
4/3/2018			0.003 (J)			
6/4/2018	0.001 (J)	0.0016 (J)	0.0027 (J)	0.00097 (J)		
10/1/2018	0.00099 (J)	0.0013 (J)	0.0032 (J)	<0.03		
3/11/2019				<0.03		
3/12/2019	0.001 (J)	0.0018 (J)	0.0032 (J)			
4/1/2019			0.0032 (J)			
4/2/2019	0.001 (J)	0.0018 (J)		0.00098 (J)		
9/23/2019	0.0011 (J)	0.0016 (J)	0.0029 (J)			
9/24/2019				<0.03		
3/2/2020	0.0012 (J)	0.0017 (J)	0.0037 (J)	0.0012 (J)		
3/25/2020	0.00083 (J)	0.0017 (J)	0.0035 (J)			
3/26/2020				0.00095 (J)		
9/15/2020	0.00087 (J)	0.0015 (J)	0.0026 (J)	<0.03		
9/16/2020						0.0018 (J)
9/17/2020				0.0039 (J)		
11/10/2020						0.0013 (J)
11/11/2020				0.0086 (J)		
12/15/2020				0.008 (J)		0.0019 (J)
1/19/2021						0.0025 (J)
1/20/2021					0.01 (J)	
2/8/2021	0.00086 (J)			0.0013 (J)	0.0098 (J)	
2/9/2021		0.0012 (J)	0.0032 (J)			0.0026 (J)
3/10/2021	0.0009 (J)			0.0011 (J)	0.0094 (J)	
3/11/2021		0.0011 (J)	0.0035 (J)			0.0022 (J)
8/11/2021	0.00078 (J)					0.0024 (J)
8/12/2021		0.0012 (J)	0.0028 (J)	0.0013 (J)	0.0096 (J)	
2/1/2022	0.0011 (J)	0.0017 (J)	0.0037 (J)			0.0024 (J)
2/7/2022				0.0013 (J)	0.0097 (J)	
8/2/2022	<0.03	0.0013 (J)	0.003 (J)	0.0011 (J)		0.0019 (J)
8/9/2022					0.011 (J)	
1/23/2023			0.003 (J)	<0.03	0.0097 (J)	
1/24/2023	0.00092 (J)	0.0014 (J)				0.002 (J)
8/8/2023	<0.03	0.0017 (J)	0.0031 (J)	<0.03	0.01 (J)	0.0021 (J)
2/13/2024	<0.03	0.0017 (J)	0.0034 (J)	<0.03	0.011 (J)	0.0024 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.03				
5/20/2016			<0.03			
5/23/2016				<0.03	<0.03	<0.03
7/11/2016		0.0034 (J)	0.01 (J)			
7/12/2016				<0.03	<0.03	0.0037 (J)
8/30/2016		0.003 (J)	0.0095 (J)			
9/1/2016				<0.03	0.0021 (J)	0.0033 (J)
10/20/2016		0.0031 (J)	0.0105 (J)			
10/24/2016				<0.03	<0.03	
10/25/2016						0.0029 (J)
12/7/2016				<0.03	<0.03	0.0029 (J)
12/8/2016		0.0027 (J)	0.01 (J)			
1/24/2017		0.0028 (J)	0.0108 (J)			
1/26/2017				<0.03	<0.03	0.0028 (J)
3/21/2017		0.0037 (J)	0.0115 (J)			
3/22/2017						0.0025 (J)
3/23/2017				<0.03	0.0016 (J)	
5/23/2017		0.0033 (J)	0.011 (J)			
5/24/2017				<0.03	0.0029 (J)	0.0029 (J)
4/3/2018		0.0033 (J)	0.012 (J)		0.0026 (J)	0.0028 (J)
4/4/2018				<0.03		
6/5/2018		0.0034 (J)	0.011 (J)			
6/6/2018				<0.03	0.0013 (J)	0.0031 (J)
10/2/2018		0.0035 (J)	0.01 (J)			
10/3/2018				<0.03	0.0017 (J)	0.0026 (J)
3/12/2019		0.0032 (J)	0.011 (J)			
3/14/2019				<0.03	<0.03	
3/15/2019						0.0041 (J)
4/2/2019		0.0028 (J)	0.0095 (J)			
4/4/2019					0.0009 (J)	0.0032 (J)
4/5/2019				<0.03		
9/24/2019		0.0035 (J)	0.011 (J)	<0.03	0.0012 (J)	
9/25/2019						0.0038 (J)
3/2/2020		0.0036 (J)	0.012			
3/3/2020				<0.03	0.0084 (J)	0.0047 (J)
3/25/2020			0.011 (J)			
3/26/2020		0.0029 (J)			0.0061 (J)	
3/30/2020				<0.03		0.0041 (J)
9/15/2020		0.003 (J)	0.0095 (J)			
9/16/2020	0.014 (J)					
9/17/2020					0.0094 (J)	0.0043 (J)
9/18/2020				<0.03		
11/10/2020	0.025 (J)					
12/15/2020	0.028 (J)					
1/19/2021	0.034					
2/9/2021	0.026 (J)	0.003 (J)	0.01 (J)			
2/10/2021						0.0038 (J)
2/11/2021				<0.03		
2/12/2021					0.036	
3/10/2021	0.03					
3/11/2021		0.0037 (J)	0.012 (J)			
3/16/2021					0.032	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				<0.03		0.0048 (J)
8/12/2021		0.0032 (J)	0.0094 (J)			
8/13/2021	0.032					
8/18/2021				<0.03		
8/19/2021					0.0058 (J)	0.0042 (J)
2/1/2022	0.048					
2/7/2022		0.0029 (J)	0.0097 (J)			
2/8/2022					0.014 (J)	0.0034 (J)
2/9/2022				<0.03		
8/2/2022	0.041					
8/11/2022				<0.03	0.0025 (J)	
1/24/2023	0.064					
1/27/2023		0.003 (J)	0.0096 (J)			
2/1/2023				<0.03	0.016 (J)	0.0036 (J)
8/8/2023	0.092 (o)	0.0095 (J)	0.0028 (J)			
8/13/2023				<0.03	0.0047 (J)	0.003 (J)
2/13/2024	0.088 (o)	0.0032 (J)	0.01 (J)			
2/17/2024				0.0029 (J)	0.014 (J)	
2/18/2024						0.003 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.03					
5/24/2016		0.0142 (J)				
7/12/2016	<0.03	0.0141 (J)				
9/1/2016	<0.03	0.0158 (J)				
10/25/2016	<0.03	0.016 (J)				
12/7/2016	<0.03					
12/8/2016		0.0144 (J)				
1/26/2017	<0.03	0.0136 (J)				
3/22/2017	<0.03					
3/23/2017		0.0151 (J)				
5/25/2017	0.0011 (J)	0.0154 (J)				
4/3/2018	<0.03	0.013 (J)				
6/5/2018		0.013 (J)				
6/6/2018	<0.03					
10/3/2018	<0.03	0.015 (J)				
3/14/2019		0.011 (J)			0.0028 (J)	
3/15/2019	0.0011 (J)		0.025 (J)	0.002 (J)		
4/4/2019			0.019 (J)			
4/5/2019	0.00074 (J)	0.0084 (J)		0.0013 (J)	0.0021 (J)	
9/25/2019	0.0011 (J)	0.015 (J)	0.024 (J)			
9/26/2019					0.0023 (J)	
9/27/2019				0.0013 (J)		
3/2/2020				0.0015 (J)	0.0025 (J)	
3/3/2020	0.0012 (J)	0.012 (J)	0.026 (J)			
3/27/2020				0.0013 (J)		
3/31/2020	0.0009 (J)	0.012 (J)				
4/1/2020			0.026 (J)		0.0024 (J)	0.0011 (J)
6/17/2020			0.023 (J)			0.00097 (J)
9/15/2020		0.014 (J)				
9/16/2020	0.0012 (J)					
9/17/2020				0.0011 (J)	0.0021 (J)	
9/21/2020			0.022 (J)			0.00086 (J)
2/11/2021	0.0013 (J)	0.011 (J)	0.021 (J)			
2/12/2021					0.0023 (J)	0.0011 (J)
2/15/2021				0.0011 (J)		
3/17/2021				0.0012 (J)	0.0024 (J)	
3/18/2021	0.0014 (J)	0.013 (J)	0.026 (J)			0.0012 (J)
8/18/2021	0.0012 (J)					0.00097 (J)
8/19/2021		0.013 (J)	0.022 (J)	0.0012 (J)	0.0022 (J)	
2/8/2022	0.0014 (J)	0.01 (J)	0.022 (J)	0.0011 (J)		0.001 (J)
2/10/2022					0.0029 (J)	
8/11/2022			0.022 (J)	0.0011 (J)	0.002 (J)	
1/27/2023			0.018 (J)			<0.03
1/30/2023	0.0014 (J)			0.0011 (J)		
2/1/2023		0.0093 (J)			0.0019 (J)	
8/12/2023			0.015 (J)			
8/13/2023	0.0018 (J)	0.012 (J)		0.0014 (J)	0.0017 (J)	0.00077 (J)
2/17/2024	<0.03					
2/18/2024		0.0098 (J)	0.012 (J)	<0.03	0.0016 (J)	<0.03

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.0021 (J)	0.0046 (J)	0.038 (J)	
9/21/2020		0.0036 (J)		
9/23/2020	0.0011 (J)		0.031	
2/11/2021			0.034	
2/15/2021		0.0043 (J)		
3/12/2021			0.035	
3/19/2021		0.0045 (J)		
8/16/2021	0.001 (J)			
8/18/2021		0.0036 (J)	0.03	0.0022 (J)
2/8/2022		0.0039 (J)	0.029 (J)	0.001 (J)
2/9/2022	0.0022 (J)			
8/11/2022		<0.03		0.0014 (J)
1/30/2023	0.0013 (J)		0.021 (J)	
2/1/2023		0.0034 (J)		0.0015 (J)
8/12/2023	0.0013 (J)	0.0031 (J)		0.00098 (J)
8/13/2023			0.02 (J)	
2/18/2024	<0.03		0.021 (J)	
2/19/2024		0.0031 (J)		0.0017 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.0002	<0.0002	<0.0002	<0.0002		
7/11/2016	<0.0002	<0.0002		<0.0002		
7/12/2016			<0.0002			
8/30/2016	4E-05 (J)	4E-05 (J)	<0.0002	5E-05 (J)		
10/19/2016	<0.0002	<0.0002	<0.0002	<0.0002		
12/6/2016	<0.0002	<0.0002	<0.0002	5E-05 (J)		
1/24/2017	<0.0002	<0.0002	<0.0002	0.0001 (J)		
3/21/2017	<0.0002	<0.0002	<0.0002	0.00016 (J)		
5/22/2017	<0.0002	<0.0002	<0.0002			
5/23/2017				5E-05 (J)		
4/2/2018	<0.0002	<0.0002		<0.0002		
4/3/2018			<0.0002			
3/11/2019				<0.0002		
3/12/2019	<0.0002	<0.0002	<0.0002			
3/2/2020	<0.0002	<0.0002	<0.0002	<0.0002		
9/16/2020						<0.0002
9/17/2020					<0.0002	
11/10/2020						<0.0002
11/11/2020				<0.0002		
12/15/2020				<0.0002		<0.0002
1/19/2021						<0.0002
1/20/2021					<0.0002	
2/8/2021	<0.0002			<0.0002	<0.0002	
2/9/2021		<0.0002	<0.0002			<0.0002
2/1/2022	<0.0002	<0.0002	<0.0002			<0.0002
2/7/2022				<0.0002	<0.0002	
8/2/2022	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
8/9/2022					<0.0002	
1/23/2023			<0.0002	<0.0002	<0.0002	
1/24/2023	<0.0002	<0.0002				<0.0002
8/8/2023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/13/2024	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.0002				
5/20/2016			<0.0002			
5/23/2016				<0.0002	<0.0002	<0.0002
7/11/2016		<0.0002	<0.0002			
7/12/2016				<0.0002	<0.0002	<0.0002
8/30/2016		<0.0002	4.4E-05 (J)			
9/1/2016				<0.0002	<0.0002	<0.0002
10/20/2016		<0.0002	<0.0002			
10/24/2016				<0.0002	<0.0002	
10/25/2016						<0.0002
12/7/2016				<0.0002	<0.0002	<0.0002
12/8/2016		<0.0002	<0.0002			
1/24/2017		<0.0002	<0.0002			
1/26/2017				<0.0002	<0.0002	<0.0002
3/21/2017		<0.0002	<0.0002			
3/22/2017						<0.0002
3/23/2017				<0.0002	<0.0002	
5/23/2017		<0.0002	<0.0002			
5/24/2017				<0.0002	<0.0002	<0.0002
4/3/2018		<0.0002	<0.0002		<0.0002	<0.0002
4/4/2018				<0.0002		
3/12/2019		<0.0002	<0.0002			
3/14/2019				<0.0002	<0.0002	
3/15/2019						<0.0002
3/2/2020		<0.0002	<0.0002			
3/3/2020				<0.0002	<0.0002	<0.0002
9/16/2020	<0.0002					
11/10/2020	<0.0002					
12/15/2020	<0.0002					
1/19/2021	<0.0002					
2/9/2021	<0.0002	<0.0002	<0.0002			
2/10/2021						<0.0002
2/11/2021				<0.0002		
2/12/2021					<0.0002	
2/1/2022	<0.0002					
2/7/2022		<0.0002	<0.0002			
2/8/2022					<0.0002	<0.0002
2/9/2022				<0.0002		
8/2/2022	<0.0002					
8/11/2022				<0.0002	<0.0002	
1/24/2023	<0.0002					
1/27/2023		<0.0002	<0.0002			
2/1/2023				<0.0002	<0.0002	<0.0002
8/8/2023	<0.0002	<0.0002	<0.0002			
8/13/2023				<0.0002	<0.0002	<0.0002
2/13/2024	<0.0002	<0.0002	<0.0002			
2/17/2024				<0.0002	<0.0002	
2/18/2024						<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.0002					
5/24/2016		<0.0002				
7/12/2016	<0.0002	<0.0002				
9/1/2016	<0.0002	6E-05 (J)				
10/25/2016	<0.0002	4E-05 (J)				
12/7/2016	<0.0002					
12/8/2016		<0.0002				
1/26/2017	<0.0002	8E-05 (J)				
3/22/2017	<0.0002					
3/23/2017		9E-05 (J)				
5/25/2017	<0.0002	8E-05 (J)				
4/3/2018	<0.0002	<0.0002				
3/14/2019		<0.0002			<0.0002	
3/15/2019	<0.0002		<0.0002	<0.0002		
3/2/2020				<0.0002	<0.0002	
3/3/2020	<0.0002	<0.0002	<0.0002			
2/11/2021	<0.0002	<0.0002	<0.0002			
2/12/2021					<0.0002	<0.0002
2/15/2021				<0.0002		
2/8/2022	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
2/10/2022					<0.0002	
8/11/2022			<0.0002	0.00016 (J)	0.00017 (J)	
1/27/2023			<0.0002			<0.0002
1/30/2023	<0.0002			<0.0002		
2/1/2023		<0.0002			<0.0002	
8/12/2023			<0.0002			
8/13/2023	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002
2/17/2024	<0.0002					
2/18/2024		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
2/11/2021			<0.0002	
2/15/2021		<0.0002		
2/8/2022		0.00014 (J)	<0.0002	<0.0002
2/9/2022	<0.0002			
8/11/2022		0.00014 (J)		0.00013 (J)
1/30/2023	<0.0002		<0.0002	
2/1/2023		0.00084		<0.0002
8/12/2023	<0.0002	<0.0002		<0.0002
8/13/2023			<0.0002	
2/18/2024	<0.0002		<0.0002	
2/19/2024		<0.0002		<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.01	<0.01	<0.01	<0.01		
7/11/2016	<0.01	<0.01		<0.01		
7/12/2016			<0.01			
8/30/2016	<0.01	<0.01	<0.01	<0.01		
10/19/2016	<0.01	<0.01	<0.01	<0.01		
12/6/2016	<0.01	<0.01	<0.01	<0.01		
1/24/2017	<0.01	<0.01	<0.01	<0.01		
3/21/2017	<0.01	<0.01	<0.01	<0.01		
5/22/2017	<0.01	<0.01	<0.01			
5/23/2017				<0.01		
4/2/2018	<0.01	<0.01		<0.01		
4/3/2018			<0.01			
3/11/2019				<0.01		
3/12/2019	<0.01	<0.01	<0.01			
4/1/2019			<0.01			
4/2/2019	<0.01	<0.01		<0.01		
9/23/2019	<0.01	<0.01	<0.01			
9/24/2019				<0.01		
3/2/2020	<0.01	<0.01	<0.01	<0.01		
3/25/2020	<0.01	<0.01	<0.01			
3/26/2020				<0.01		
9/15/2020	<0.01	<0.01	<0.01	<0.01		
9/16/2020						0.0044 (J)
9/17/2020					0.0037 (J)	
11/10/2020						0.0072 (J)
11/11/2020					<0.01	
12/15/2020					0.00082 (J)	0.0044 (J)
1/19/2021						0.0038 (J)
1/20/2021					<0.01	
2/8/2021	<0.01			<0.01	<0.01	
2/9/2021		<0.01	<0.01			0.0045 (J)
3/10/2021	<0.01			<0.01	<0.01	
3/11/2021		<0.01	<0.01			0.0064 (J)
8/11/2021	<0.01					0.0034 (J)
8/12/2021		<0.01	<0.01	<0.01	<0.01	
2/1/2022	<0.01	<0.01	<0.01			0.0036 (J)
2/7/2022				<0.01	0.00099 (J)	
8/2/2022	<0.01	<0.01	<0.01	<0.01		0.0042 (J)
8/9/2022					<0.01	
1/23/2023			<0.01	<0.01	<0.01	
1/24/2023	<0.01	<0.01				0.0027 (J)
8/8/2023	<0.01	<0.01	<0.01	<0.01	<0.01	0.0019 (J)
2/13/2024	<0.01	<0.01	<0.01	<0.01	0.0021 (J)	0.0015 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.01				
5/20/2016			<0.01			
5/23/2016				<0.01	<0.01	<0.01
7/11/2016		<0.01	0.0008 (J)			
7/12/2016				<0.01	0.0007 (J)	<0.01
8/30/2016		<0.01	<0.01			
9/1/2016				<0.01	<0.01	<0.01
10/20/2016		<0.01	<0.01			
10/24/2016				<0.01	<0.01	
10/25/2016						<0.01
12/7/2016				<0.01	<0.01	<0.01
12/8/2016		<0.01	<0.01			
1/24/2017		<0.01	<0.01			
1/26/2017				<0.01	<0.01	<0.01
3/21/2017		<0.01	0.0002 (J)			
3/22/2017						<0.01
3/23/2017				<0.01	<0.01	
5/23/2017		<0.01	<0.01			
5/24/2017				<0.01	<0.01	<0.01
4/3/2018		<0.01	<0.01		<0.01	<0.01
4/4/2018				<0.01		
3/12/2019		<0.01	<0.01			
3/14/2019				<0.01	<0.01	
3/15/2019						<0.01
4/2/2019		<0.01	<0.01			
4/4/2019					<0.01	<0.01
4/5/2019				<0.01		
9/24/2019		<0.01	<0.01	<0.01	<0.01	
9/25/2019						<0.01
3/2/2020		<0.01	<0.01			
3/3/2020				<0.01	<0.01	<0.01
3/25/2020			<0.01			
3/26/2020		<0.01			<0.01	
3/30/2020				<0.01		<0.01
9/15/2020		<0.01	<0.01			
9/16/2020	0.0019 (J)					
9/17/2020					<0.01	<0.01
9/18/2020				<0.01		
11/10/2020	0.0018 (J)					
12/15/2020	0.0019 (J)					
1/19/2021	0.0035 (J)					
2/9/2021	0.0038 (J)	<0.01	<0.01			
2/10/2021						<0.01
2/11/2021				<0.01		
2/12/2021					<0.01	
3/10/2021	0.0019 (J)					
3/11/2021		<0.01	<0.01			
3/16/2021					<0.01	
3/17/2021				<0.01		<0.01
8/12/2021		<0.01	<0.01			
8/13/2021	0.0051 (J)					
8/18/2021				<0.01		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/19/2021					<0.01	<0.01
2/1/2022	0.0055 (J)					
2/7/2022		<0.01	<0.01			
2/8/2022					<0.01	<0.01
2/9/2022				<0.01		
8/2/2022	0.002 (J)					
8/11/2022				<0.01	<0.01	
1/24/2023	0.0026 (J)					
1/27/2023		<0.01	<0.01			
2/1/2023				<0.01	<0.01	<0.01
8/8/2023	0.0013 (J)	<0.01	<0.01			
8/13/2023				<0.01	<0.01	<0.01
2/13/2024	0.0018 (J)	<0.01	<0.01			
2/17/2024				<0.01	<0.01	
2/18/2024						<0.01

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.01					
5/24/2016		<0.01				
7/12/2016	<0.01	<0.01				
9/1/2016	<0.01	<0.01				
10/25/2016	<0.01	<0.01				
12/7/2016	<0.01					
12/8/2016		<0.01				
1/26/2017	<0.01	<0.01				
3/22/2017	<0.01					
3/23/2017		<0.01				
5/25/2017	<0.01	<0.01				
4/3/2018	<0.01	<0.01				
3/14/2019		<0.01			<0.01	
3/15/2019	<0.01		0.045	<0.01		
4/4/2019			0.033			
4/5/2019	<0.01	<0.01		0.00013 (J)	0.0014 (J)	
9/25/2019	<0.01	<0.01	0.038			
9/26/2019					0.0025 (J)	
9/27/2019				<0.01		
3/2/2020				<0.01	0.003 (J)	
3/3/2020	<0.01	<0.01	0.025			
3/27/2020				<0.01		
3/31/2020	<0.01	<0.01				
4/1/2020			0.024		0.0032 (J)	<0.01
6/17/2020			0.019			<0.01
9/15/2020		<0.01				
9/16/2020	<0.01					
9/17/2020				<0.01	0.0026 (J)	
9/21/2020			0.017			<0.01
2/11/2021	<0.01	<0.01	0.016			
2/12/2021					0.0039 (J)	<0.01
2/15/2021				<0.01		
3/17/2021				<0.01	0.0034 (J)	
3/18/2021	<0.01	<0.01	0.016			<0.01
8/18/2021	<0.01					<0.01
8/19/2021		<0.01	0.018	<0.01	0.0034 (J)	
2/8/2022	<0.01	<0.01	0.016	<0.01		<0.01
2/10/2022					0.0034 (J)	
8/11/2022			0.023	<0.01	0.0039 (J)	
1/27/2023			0.028			<0.01
1/30/2023	<0.01			<0.01		
2/1/2023		<0.01			0.0041 (J)	
8/12/2023			0.021			
8/13/2023	<0.01	<0.01		<0.01	0.0041 (J)	<0.01
2/17/2024	<0.01					
2/18/2024		<0.01	0.015	<0.01	0.0047 (J)	<0.01

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	<0.01	<0.01	0.023	
9/21/2020		<0.01		
9/23/2020	<0.01		0.015	
2/11/2021			0.019	
2/15/2021		<0.01		
3/12/2021			0.014	
3/19/2021		<0.01		
8/16/2021	<0.01			
8/18/2021		<0.01	0.0083 (J)	<0.01
2/8/2022		<0.01	0.007 (J)	<0.01
2/9/2022	<0.01			
8/11/2022		<0.01		<0.01
1/30/2023	<0.01		0.0063 (J)	
2/1/2023		<0.01		<0.01
8/12/2023	<0.01	<0.01		<0.01
8/13/2023			0.0029 (J)	
2/18/2024	<0.01		0.0016 (J)	
2/19/2024		<0.01		<0.01

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.005	<0.005	<0.005	<0.005		
7/11/2016	<0.005	<0.005		<0.005		
7/12/2016			<0.005			
8/30/2016	<0.005	<0.005	<0.005	<0.005		
10/19/2016	<0.005	<0.005	<0.005	<0.005		
12/6/2016	<0.005	<0.005	<0.005	<0.005		
1/24/2017	<0.005	<0.005	<0.005	<0.005		
3/21/2017	<0.005	<0.005	<0.005	<0.005		
5/22/2017	<0.005	<0.005	<0.005			
5/23/2017				<0.005		
4/2/2018	<0.005	<0.005		<0.005		
4/3/2018			<0.005			
6/4/2018	<0.005	<0.005	<0.005	<0.005		
10/1/2018	<0.005	<0.005	<0.005	<0.005		
3/11/2019				<0.005		
3/12/2019	<0.005	<0.005	<0.005			
4/1/2019			<0.005			
4/2/2019	<0.005	<0.005		<0.005		
9/23/2019	<0.005	<0.005	<0.005			
9/24/2019				<0.005		
3/2/2020	<0.005	<0.005	<0.005	<0.005		
3/25/2020	<0.005	<0.005	<0.005			
3/26/2020				<0.005		
9/15/2020	<0.005	<0.005	<0.005	<0.005		
9/16/2020						<0.005
9/17/2020					<0.005	
11/10/2020						<0.005
11/11/2020					<0.005	
12/15/2020					<0.005	<0.005
1/19/2021						<0.005
1/20/2021					<0.005	
2/8/2021	<0.005			<0.005	<0.005	
2/9/2021		<0.005	<0.005			<0.005
3/10/2021	0.0047 (J)			<0.005	<0.005	
3/11/2021		<0.005	<0.005			<0.005
8/11/2021	<0.005					<0.005
8/12/2021		<0.005	<0.005	<0.005	<0.005	
2/1/2022	<0.005	<0.005	<0.005			<0.005
2/7/2022				<0.005	<0.005	
8/2/2022	<0.005	0.0014 (J)	<0.005	<0.005		<0.005
8/9/2022					<0.005	
1/23/2023			<0.005	<0.005	<0.005	
1/24/2023	<0.005	<0.005				<0.005
8/8/2023	<0.005	0.0019 (J)	<0.005	<0.005	<0.005	<0.005
2/13/2024	<0.005	0.002 (J)	<0.005	<0.005	<0.005	<0.005

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.005				
5/20/2016			<0.005			
5/23/2016				0.017	<0.005	<0.005
7/11/2016		<0.005	<0.005			
7/12/2016				0.0146	<0.005	<0.005
8/30/2016		<0.005	<0.005			
9/1/2016				0.0137	<0.005	<0.005
10/20/2016		<0.005	<0.005			
10/24/2016				0.0135	0.0012 (J)	
10/25/2016						<0.005
12/7/2016				0.01 (J)	0.0041 (J)	<0.005
12/8/2016		<0.005	<0.005			
1/24/2017		0.0011 (J)	<0.005			
1/26/2017				0.0214	<0.005	<0.005
3/21/2017		<0.005	<0.005			
3/22/2017						<0.005
3/23/2017				0.0167	0.0016 (J)	
5/23/2017		<0.005	<0.005			
5/24/2017				0.0083 (J)	<0.005	<0.005
4/3/2018		<0.005	<0.005		<0.005	<0.005
4/4/2018				0.012		
6/5/2018		<0.005	<0.005			
6/6/2018				0.014	<0.005	<0.005
10/2/2018		<0.005	<0.005			
10/3/2018				0.0056 (J)	<0.005	<0.005
3/12/2019		<0.005	<0.005			
3/14/2019				0.0048 (J)	<0.005	
3/15/2019						<0.005
4/2/2019		<0.005	<0.005			
4/4/2019					0.00021 (J)	8.9E-05 (J)
4/5/2019				0.00091 (J)		
9/24/2019		<0.005	<0.005	0.0064 (J)	<0.005	
9/25/2019						<0.005
3/2/2020		<0.005	<0.005			
3/3/2020				0.0045 (J)	<0.005	<0.005
3/25/2020			<0.005			
3/26/2020		<0.005			<0.005	
3/30/2020				0.0049 (J)		<0.005
9/15/2020		<0.005	<0.005			
9/16/2020	<0.005					
9/17/2020					<0.005	<0.005
9/18/2020				0.0045 (J)		
11/10/2020	<0.005					
12/15/2020	<0.005					
1/19/2021	<0.005					
2/9/2021	<0.005	<0.005	<0.005			
2/10/2021						<0.005
2/11/2021				0.0072 (J)		
2/12/2021					<0.005	
3/10/2021	<0.005					
3/11/2021		<0.005	<0.005			
3/16/2021					<0.005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				0.01 (J)		<0.005
8/12/2021		<0.005	<0.005			
8/13/2021	<0.005					
8/18/2021				0.0077		
8/19/2021					<0.005	<0.005
2/1/2022	<0.005					
2/7/2022		<0.005	<0.005			
2/8/2022					<0.005	<0.005
2/9/2022				0.0047 (J)		
8/2/2022	<0.005					
8/10/2022		<0.005	<0.005			<0.005
8/11/2022				0.0037 (J)	<0.005	
1/24/2023	<0.005					
1/27/2023		<0.005	<0.005			
2/1/2023				0.0036 (J)	<0.005	<0.005
8/8/2023	<0.005	<0.005	<0.005			
8/13/2023				0.0038 (J)	<0.005	<0.005
2/13/2024	<0.005	<0.005	<0.005			
2/17/2024				0.0056	<0.005	
2/18/2024						<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.005					
5/24/2016		<0.2				
7/12/2016	<0.005	0.036				
9/1/2016	0.0014 (J)	0.0347				
10/25/2016	<0.005	0.0282				
12/7/2016	0.0023 (J)					
12/8/2016		0.0373				
1/26/2017	<0.005	0.0385				
3/22/2017	<0.005					
3/23/2017		0.0414				
5/25/2017	<0.005	0.019				
4/3/2018	<0.005	0.029				
6/5/2018		0.038				
6/6/2018	<0.005					
10/3/2018	<0.005	0.017				
3/14/2019		0.016			<0.005	
3/15/2019	<0.005		<0.005	<0.005		
4/4/2019			<0.005			
4/5/2019	9.3E-05 (J)	0.0018 (J)		<0.005	<0.005	
9/25/2019	<0.005	0.02	<0.005			
9/26/2019					<0.005	
9/27/2019				<0.005		
3/2/2020				<0.005	<0.005	
3/3/2020	<0.005	0.014	<0.005			
3/27/2020				<0.005		
3/31/2020	<0.005	0.019				
4/1/2020			<0.005		<0.005	0.011
6/17/2020			<0.005			0.014
9/15/2020		0.059				
9/16/2020	<0.005					
9/17/2020				0.002 (J)	<0.005	
9/21/2020			<0.005			0.041
2/11/2021	<0.005	0.023	<0.005			
2/12/2021					<0.005	0.011
2/15/2021				<0.005		
3/17/2021				<0.005	<0.005	
3/18/2021	<0.005	0.019 (J)	<0.005			0.028
8/18/2021	<0.005					0.014
8/19/2021		0.01	<0.005	<0.005	<0.005	
2/8/2022	<0.005	0.0082	<0.005	<0.005		0.0078
2/10/2022					<0.005	
8/10/2022	<0.005	0.0096				0.007 (J)
8/11/2022			<0.005	<0.005	<0.005	
1/27/2023			<0.005			0.015
1/30/2023	<0.005			<0.005		
2/1/2023		0.0054			<0.005	
8/12/2023			<0.005			
8/13/2023	<0.005	0.0085		<0.005	<0.005	0.0065
2/17/2024	<0.005					
2/18/2024		0.013	<0.005	<0.005	<0.005	0.011

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.0025 (J)	0.014	<0.005	
9/21/2020		0.037		
9/23/2020	<0.005		<0.005	
2/11/2021			<0.005	
2/15/2021		0.01		
3/12/2021			<0.005	
3/19/2021		0.016 (J)		
8/16/2021	<0.005			
8/18/2021		0.014	<0.005	0.004 (J)
2/8/2022		0.0083	<0.005	<0.005
2/9/2022	<0.005			
8/10/2022	<0.005		<0.005	
8/11/2022		0.0089 (J)		0.0023 (J)
1/30/2023	0.0016 (J)		<0.005	
2/1/2023		0.0063		0.0021 (J)
8/12/2023	<0.005	0.0058		<0.005
8/13/2023			<0.005	
2/18/2024	<0.005		<0.005	
2/19/2024		0.0057		0.0019 (J)

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	66.9	48.6	42.3	1.22		
7/11/2016	41	45		3.7		
7/12/2016			44			
8/30/2016	36	42	40	6.8		
10/19/2016	46	44	43	11		
12/6/2016	59	44	43	13		
1/24/2017	46	46	48	5.7		
3/21/2017	63	46	45	1.7		
5/22/2017	77	48	46			
5/23/2017				1.5		
10/3/2017	42	47	48	1.3		
6/4/2018	71.8	47.8	46.6	4.9		
10/1/2018	49.1	48.1	48.6	0.59 (J)		
4/1/2019			50.4			
4/2/2019	84.3	48.7		4.9		
9/23/2019	70.2	47.2	43.9			
9/24/2019				<1		
3/25/2020	85.9	46.3	50.5			
3/26/2020				<1		
9/15/2020	47.3	51.5	44.7	<1		
9/16/2020						43
9/17/2020					10.9	
11/10/2020						39
11/11/2020					9.4	
12/15/2020					10.9	38.8
1/19/2021						37.3
1/20/2021					9.8	
3/10/2021	49.6			1.2	10.8	
3/11/2021		52.9	50.4			38.6
8/11/2021	48.9					30.5
8/12/2021		47.4	38.6	1.1	7.8	
2/1/2022	43.7	67.1	46			37.5
2/7/2022				2.9	10.4	
8/2/2022	58.1	86.9	43.5	4.9		37
8/9/2022					11.2	
1/23/2023			39.5	42.5	11.1	
1/24/2023	48.3	79.7				34.7
8/8/2023	67.7	89.9	35	16.8	10.5	25.6
2/13/2024	50.4	93.9	35.5	64.6	17.1	28.9

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		25				
5/20/2016			34.4			
5/23/2016				1070	424	203
7/11/2016		27	34			
7/12/2016				1300	440	220
8/30/2016		23	36			
9/1/2016				1300	440	220
10/20/2016		19	36			
10/24/2016				280	420	
10/25/2016						230
12/7/2016				1300	450	220
12/8/2016		20	36			
1/24/2017		20	37			
1/26/2017				1400	490	250
3/21/2017		23	37			
3/22/2017						240
3/23/2017				1500	530	
5/23/2017		21	38			
5/24/2017				1400	500	230
10/3/2017		21	38			
10/4/2017				1400	560	220
6/5/2018		22.9	38			
6/6/2018				1520	469	233
10/2/2018		20.3	38.5			
10/3/2018				1550	600	215
4/2/2019		23.8	35.5			
4/4/2019					528	251
4/5/2019				1520		
9/24/2019		20.7	35.4	1110	382	
9/25/2019						223
3/25/2020			35.1			
3/26/2020		21.6			438	
3/30/2020				1150		223
9/15/2020		21.2	35.3			
9/16/2020	6.9					
9/17/2020					416	254
9/18/2020				1260		
11/10/2020	6.3					
12/15/2020	6.7					
1/19/2021	7.4					
3/10/2021	<1					
3/11/2021		22.7	35.5			
3/16/2021					379	
3/17/2021				1300		250
8/12/2021		17.4	28.6			
8/13/2021	56.1					
8/18/2021				768		
8/19/2021					223	228
2/1/2022	56.3					
2/7/2022		20.6	33			
2/8/2022					360	238
2/9/2022				1190		

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/2/2022	13.2					
8/10/2022		19.7	34			206
8/11/2022				1200	365	
1/24/2023	10.1					
1/27/2023		22.7	35			
2/1/2023				1060	341	257
8/8/2023	1.3	32.7	18.8			
8/13/2023				935	281	214
2/13/2024	2	21.8	35.3			
2/17/2024				898	305	
2/18/2024						220

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	395					
5/24/2016		834				
7/12/2016	460	930				
9/1/2016	430	890				
10/25/2016	440	950				
12/7/2016	410					
12/8/2016		910				
1/26/2017	440	970				
3/22/2017	460					
3/23/2017		980				
5/25/2017	430	920				
10/4/2017	490	870				
6/5/2018		962				
6/6/2018	520					
10/3/2018	651	1170				
4/4/2019			915			
4/5/2019	642	1030		392	585	
9/25/2019	434	920	767			
9/26/2019					556	
9/27/2019				520		
1/22/2020						1250
3/27/2020				419		
3/31/2020	484	934				
4/1/2020			889		478	1210
6/17/2020			901			1210
9/15/2020		1080				
9/16/2020	467					
9/17/2020				468	490	
9/21/2020			1010			1290
3/17/2021				461	486	
3/18/2021	447	1050	829			1360
8/18/2021	280					740
8/19/2021		934	724	412 (M1)	432	
2/8/2022	364	960	779	449		1220
2/10/2022					430	
8/10/2022	423	946				1010
8/11/2022			910	472	389	
1/27/2023			646			895
1/30/2023	451			445		
2/1/2023		776			438	
8/12/2023			276			
8/13/2023	351	895		410	379	970
2/17/2024	260					
2/18/2024		755	150	427	401	820

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	1100	1160	286	
9/21/2020		1220		
9/23/2020	1080		256	
3/12/2021			237	
3/19/2021		1220		
8/16/2021	987			
8/18/2021		789	207	757
2/8/2022		1190	248	1150
2/9/2022	1050			
8/10/2022	1040		122	
8/11/2022		1020		979
1/30/2023	1120		85.2	
2/1/2023		1190		1110
8/12/2023	948	1090		1040
8/13/2023			39.2	
2/18/2024	918		30.4	
2/19/2024		1060		1010

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.001	<0.001	<0.001	<0.001		
7/11/2016	<0.001	<0.001		<0.001		
7/12/2016			<0.001			
8/30/2016	<0.001	<0.001	<0.001	<0.001		
10/19/2016	<0.001	<0.001	<0.001	<0.001		
12/6/2016	<0.001	<0.001	<0.001	<0.001		
1/24/2017	<0.001	<0.001	<0.001	<0.001		
3/21/2017	<0.001	3E-05 (J)	<0.001	<0.001		
5/22/2017	<0.001	<0.001	<0.001			
5/23/2017				<0.001		
4/2/2018	<0.001	<0.001		<0.001		
4/3/2018			<0.001			
6/4/2018	<0.001	<0.001	<0.001	<0.001		
10/1/2018	<0.001	<0.001	<0.001	<0.001		
3/11/2019				<0.001		
3/12/2019	<0.001	<0.001	<0.001			
4/1/2019			<0.001			
4/2/2019	<0.001	<0.001		<0.001		
9/23/2019	<0.001	<0.001	<0.001			
9/24/2019				<0.001		
3/2/2020	<0.001	<0.001	<0.001	<0.001		
3/25/2020	<0.001	<0.001	<0.001			
3/26/2020				<0.001		
9/15/2020	<0.001	<0.001	<0.001	<0.001		
9/16/2020						<0.001
9/17/2020					<0.001	
11/10/2020						<0.001
11/11/2020					<0.001	
12/15/2020					<0.001	<0.001
1/19/2021						<0.001
1/20/2021					<0.001	
2/8/2021	<0.001			<0.001	<0.001	
2/9/2021		<0.001	<0.001			<0.001
3/10/2021	<0.001			<0.001	<0.001	
3/11/2021		<0.001	<0.001			<0.001
8/11/2021	<0.001					<0.001
8/12/2021		<0.001	<0.001	<0.001	<0.001	
2/1/2022	<0.001	<0.001	<0.001			<0.001
2/7/2022				<0.001	<0.001	
8/2/2022	<0.001	<0.001	<0.001	<0.001		<0.001
8/9/2022					<0.001	
1/23/2023			<0.001	<0.001	<0.001	
1/24/2023	<0.001	<0.001				<0.001
8/8/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2/13/2024	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.001				
5/20/2016			<0.001			
5/23/2016				0.000306 (J)	<0.001	<0.001
7/11/2016		<0.001	<0.001			
7/12/2016				0.0003 (J)	<0.001	<0.001
8/30/2016		<0.001	<0.001			
9/1/2016				0.0003 (J)	<0.001	<0.001
10/20/2016		<0.001	<0.001			
10/24/2016				0.0004	<0.001	
10/25/2016						<0.001
12/7/2016				0.0003 (J)	<0.001	<0.001
12/8/2016		<0.001	<0.001			
1/24/2017		<0.001	<0.001			
1/26/2017				0.0003 (J)	<0.001	<0.001
3/21/2017		<0.001	<0.001			
3/22/2017						<0.001
3/23/2017				0.0003 (J)	<0.001	
5/23/2017		<0.001	<0.001			
5/24/2017				0.0003 (J)	<0.001	<0.001
4/3/2018		<0.001	<0.001		<0.001	<0.001
4/4/2018				0.00028 (J)		
6/5/2018		<0.001	<0.001			
6/6/2018				0.00029 (J)	<0.001	<0.001
10/2/2018		<0.001	<0.001			
10/3/2018				0.00029 (J)	<0.001	<0.001
3/12/2019		<0.001	<0.001			
3/14/2019				0.00028 (J)	<0.001	
3/15/2019						<0.001
4/2/2019		<0.001	<0.001			
4/4/2019					<0.001	<0.001
4/5/2019				0.00028 (J)		
9/24/2019		<0.001	<0.001	0.0003 (J)	<0.001	
9/25/2019						<0.001
3/2/2020		<0.001	<0.001			
3/3/2020				0.00026 (J)	<0.001	<0.001
3/25/2020			5.7E-05 (J)			
3/26/2020		<0.001			<0.001	
3/30/2020				0.00028 (J)		<0.001
9/15/2020		<0.001	<0.001			
9/16/2020	<0.001					
9/17/2020					<0.001	<0.001
9/18/2020				0.00028 (J)		
11/10/2020	<0.001					
12/15/2020	<0.001					
1/19/2021	<0.001					
2/9/2021	<0.001	<0.001	<0.001			
2/10/2021						<0.001
2/11/2021				0.00026 (J)		
2/12/2021					<0.001	
3/10/2021	<0.001					
3/11/2021		<0.001	<0.001			
3/16/2021					<0.001	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				0.00034 (J)		<0.001
8/12/2021		<0.001	<0.001			
8/13/2021	<0.001					
8/18/2021				0.00027 (J)		
8/19/2021					<0.001	<0.001
2/1/2022	<0.001					
2/7/2022		<0.001	<0.001			
2/8/2022					<0.001	<0.001
2/9/2022				0.00025 (J)		
8/2/2022	<0.001					
8/10/2022		<0.001	<0.001			<0.001
8/11/2022				0.00024 (J)	<0.001	
1/24/2023	<0.001					
1/27/2023		<0.001	<0.001			
2/1/2023				0.00047 (J)	0.00022 (J)	<0.001
8/8/2023	<0.001	<0.001	<0.001			
8/13/2023				0.00026 (J)	<0.001	<0.001
2/13/2024	<0.001	<0.001	<0.001			
2/17/2024				<0.001	<0.001	
2/18/2024						<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.001					
5/24/2016		<0.001				
7/12/2016	0.0001 (J)	0.0002 (J)				
9/1/2016	<0.001	<0.001				
10/25/2016	<0.001	<0.001				
12/7/2016	<0.001					
12/8/2016		<0.001				
1/26/2017	<0.001	<0.001				
3/22/2017	0.0001 (J)					
3/23/2017		0.0002 (J)				
5/25/2017	0.0001 (J)	0.0002 (J)				
4/3/2018	<0.001	0.00014 (J)				
6/5/2018		0.00016 (J)				
6/6/2018	<0.001					
10/3/2018	<0.001	<0.001				
3/14/2019		<0.001			<0.001	
3/15/2019	<0.001		<0.001	<0.001		
4/4/2019			<0.001			
4/5/2019	0.00013 (J)	0.00014 (J)		<0.001	<0.001	
9/25/2019	0.00012 (J)	0.00019 (J)	<0.001			
9/26/2019					<0.001	
9/27/2019				<0.001		
3/2/2020				<0.001	<0.001	
3/3/2020	0.00011 (J)	0.00013 (J)	<0.001			
3/27/2020				<0.001		
3/31/2020	0.00014 (J)	0.00015 (J)				
4/1/2020			<0.001		<0.001	0.00029 (J)
6/17/2020			<0.001			0.00028 (J)
9/15/2020		0.00016 (J)				
9/16/2020	<0.001					
9/17/2020				<0.001	<0.001	
9/21/2020			<0.001			0.00029 (J)
2/11/2021	<0.001	<0.001	<0.001			
2/12/2021					<0.001	0.00025 (J)
2/15/2021				<0.001		
3/17/2021				<0.001	<0.001	
3/18/2021	<0.001	0.00016 (J)	<0.001			0.00031 (J)
8/18/2021	<0.001					0.0004 (J)
8/19/2021		0.0002 (J)	<0.001	<0.001	<0.001	
2/8/2022	<0.001	<0.001	<0.001	<0.001		0.00025 (J)
2/10/2022					<0.001	
8/10/2022	<0.001	<0.001				<0.001
8/11/2022			<0.001	<0.001	<0.001	
1/27/2023			<0.001			0.00021 (J)
1/30/2023	0.00025 (J)			<0.001		
2/1/2023		<0.001			<0.001	
8/12/2023			<0.001			
8/13/2023	<0.001	<0.001		<0.001	<0.001	0.00022 (J)
2/17/2024	<0.001					
2/18/2024		<0.001	<0.001	<0.001	<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.00015 (J)	0.00013 (J)	<0.001	
9/21/2020		<0.001		
9/23/2020	<0.001		<0.001	
2/11/2021			<0.001	
2/15/2021		<0.001		
3/12/2021			<0.001	
3/19/2021		<0.001		
8/16/2021	<0.001			
8/18/2021		<0.001	<0.001	<0.001
2/8/2022		<0.001	<0.001	<0.001
2/9/2022	<0.001			
8/10/2022	<0.001		<0.001	
8/11/2022		<0.001		<0.001
1/30/2023	<0.001		<0.001	
2/1/2023		<0.001		<0.001
8/12/2023	<0.001	<0.001		<0.001
8/13/2023			<0.001	
2/18/2024	<0.001		<0.001	
2/19/2024		<0.001		<0.001

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	421	143	267	165		
7/11/2016	363	125		266		
7/12/2016			249			
8/30/2016	330	168	254	292		
10/19/2016	380	176	357	338		
12/6/2016	377	145	285	356		
1/24/2017	342	129	300	131		
3/21/2017	340	103	288	132		
5/22/2017	338	92	263			
5/23/2017				183		
10/3/2017	343	127	300	161		
6/4/2018	415	140	266	240		
10/1/2018	354	135	291	106		
4/1/2019			284			
4/2/2019	452	133		230		
9/23/2019	442	129	268			
9/24/2019				131		
3/25/2020	496	138	284			
3/26/2020				69		
9/15/2020	265	124	258	93		
9/16/2020						272
9/17/2020					188	
11/10/2020						307
11/11/2020					175	
12/15/2020					193	289
1/19/2021						270
1/20/2021					158	
3/10/2021	348			53	163	
3/11/2021		169	267			279
8/11/2021	366					277
8/12/2021		118	265	55	179	
2/1/2022	270	156	350			156
2/7/2022				54	190	
8/2/2022	400	196	287	48		278
8/9/2022					182	
1/23/2023			293	128	168	
1/24/2023	369	164				271
8/8/2023	457	189	285	141	175	274
2/13/2024	402	214	284	176	212	291

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		168				
5/20/2016			223			
5/23/2016				4130	1270	570
7/11/2016		158	225			
7/12/2016				3140	1100	585
8/30/2016		141	232			
9/1/2016				3200	1180	625
10/20/2016		99	225			
10/24/2016				2920	1090	
10/25/2016						563
12/7/2016				2740	1040	561
12/8/2016		116	235			
1/24/2017		156	272			
1/26/2017				3080	1260	608
3/21/2017		144	222			
3/22/2017						599
3/23/2017				3060	1360	
5/23/2017		134	231			
5/24/2017				3140	1320	598
10/3/2017		147	243			
10/4/2017				3210	1340	626
6/5/2018		152	235			
6/6/2018				2620	1120	678
10/2/2018		146	228			
10/3/2018				2430	1140	700
4/2/2019		144	238			
4/4/2019					926	704
4/5/2019				2310		
9/24/2019		133	222	2470	1140	
9/25/2019						813
3/25/2020			240			
3/26/2020		104			1000	
3/30/2020				2590		787
9/15/2020		116	217			
9/16/2020	270					
9/17/2020					956	804
9/18/2020				2440		
11/10/2020	287					
12/15/2020	295					
1/19/2021	278					
3/10/2021	289					
3/11/2021		118	215			
3/16/2021					92	
3/17/2021				1640		768
8/12/2021		158	229			
8/13/2021	436					
8/18/2021				2350		
8/19/2021					958	816
2/1/2022	444					
2/7/2022		135	224			
2/8/2022					866	852
2/9/2022				2310		

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/2/2022	311					
8/10/2022		134	217			894
8/11/2022				1060	940	
1/24/2023	363					
1/27/2023		182	229			
2/1/2023				1950	892	1030
8/8/2023	361	225	125			
8/13/2023				1960	881	861
2/13/2024	379	155	240			
2/17/2024				1720	830	
2/18/2024						755

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	1010					
5/24/2016		1900				
7/12/2016	976	1950				
9/1/2016	1060	2000				
10/25/2016	<25	1870				
12/7/2016	866					
12/8/2016		1930				
1/26/2017	1000	1950				
3/22/2017	1080					
3/23/2017		2080				
5/25/2017	1080	1970				
10/4/2017	1210	2200				
6/5/2018		1880				
6/6/2018	1180					
10/3/2018	1250	2180				
4/4/2019			1800			
4/5/2019	1260	1610		890	1400	
9/25/2019	1280	1960	1970			
9/26/2019					1400	
9/27/2019				1110		
1/22/2020						2310
3/27/2020				1100		
3/31/2020	1310	1860				
4/1/2020			1940		1530	2590
6/17/2020			2100			2540
9/15/2020		1890				
9/16/2020	1220					
9/17/2020				1090	1360	
9/21/2020			2060			2340
3/17/2021				998	990	
3/18/2021	1020	1390	1390			1790
8/18/2021	1290					3690
8/19/2021		1750	1920	1030	1440	
2/8/2022	1160	1770	1810	1070		2480
2/10/2022					1260	
8/10/2022	1390	1890				2050
8/11/2022			356	960	2700	
1/27/2023			1420			1570
1/30/2023	1320			961		
2/1/2023		1430			1320	
8/12/2023			2200			
8/13/2023	1180	1700		1000	1280	1910
2/17/2024	815					
2/18/2024		1360	477	994	1260	2160

ND substitution: RL or RL/2 if <15% NDs.

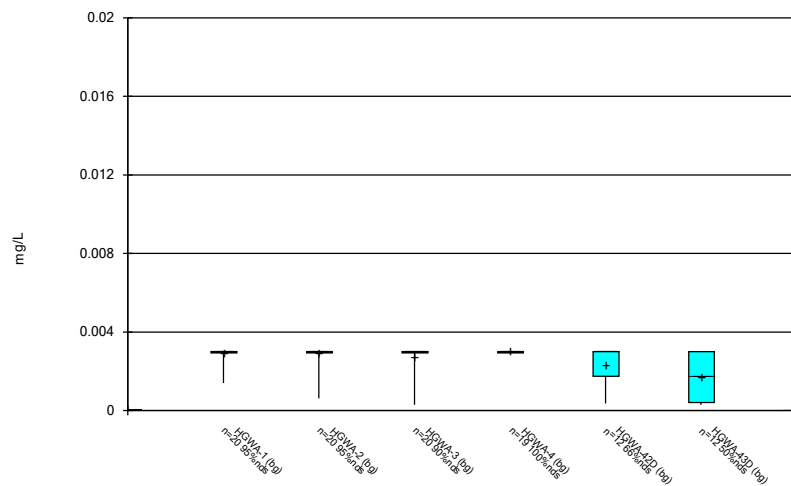
Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/21/2024 8:08 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	2320	2310	888	
9/21/2020		2210		
9/23/2020	2430		894	
3/12/2021			890	
3/19/2021		1690		
8/16/2021	2340			
8/18/2021		2390	950	2610
2/8/2022		2410	882	2430
2/9/2022	2260			
8/10/2022	2310		2770	
8/11/2022		1070		2080
1/30/2023	2230		226	
2/1/2023		2410		2090
8/12/2023	837	2290		2220
8/13/2023			258	
2/18/2024	2010		269	
2/19/2024		2120		2040

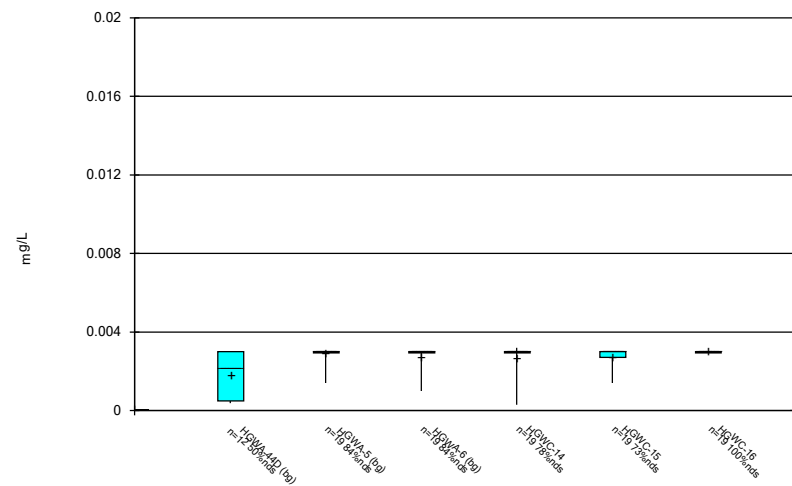
FIGURE B.

Box & Whiskers Plot



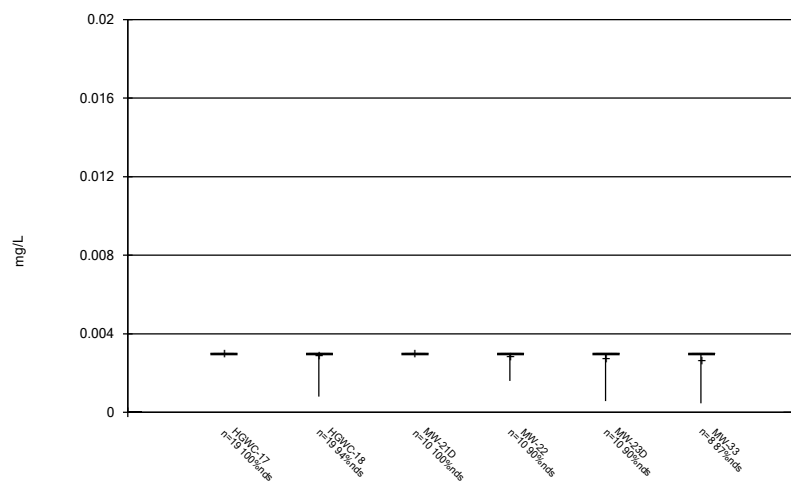
Constituent: Antimony Analysis Run 5/21/2024 8:10 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



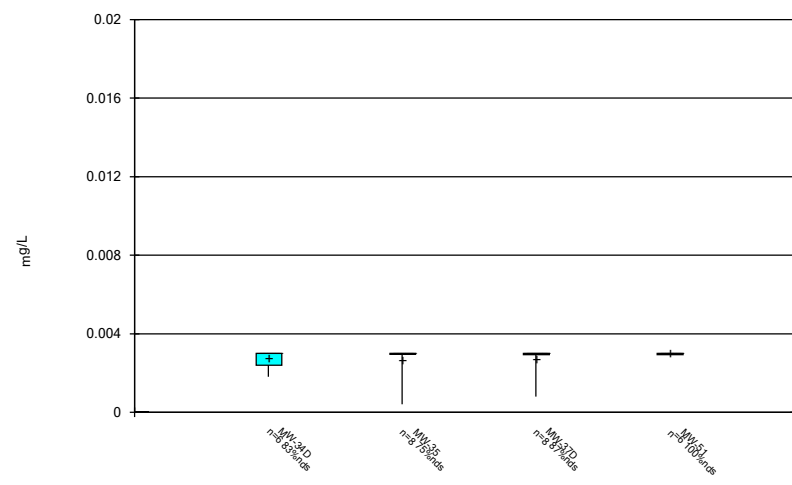
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



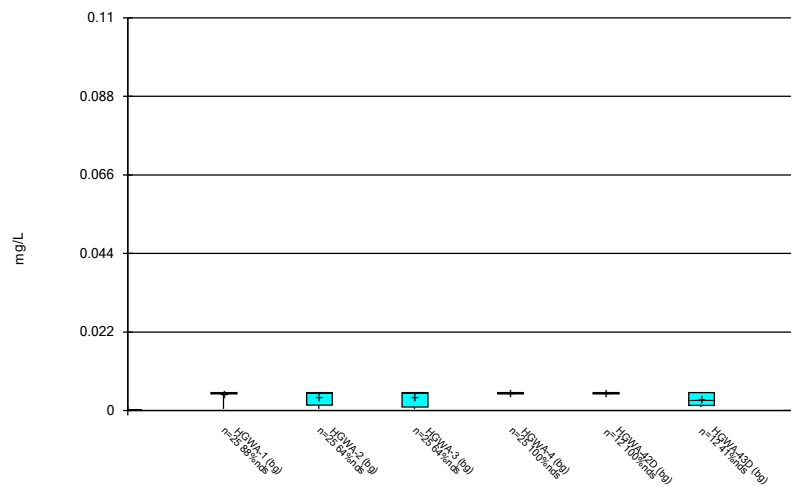
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Box & Whiskers Plot



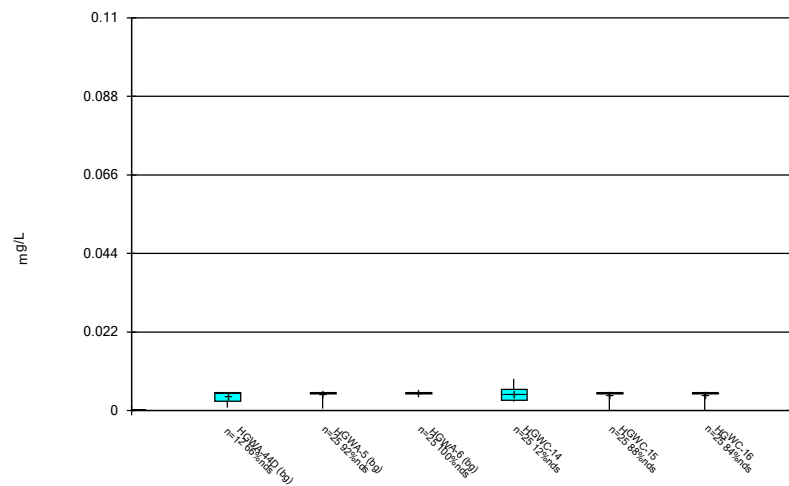
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Box & Whiskers Plot



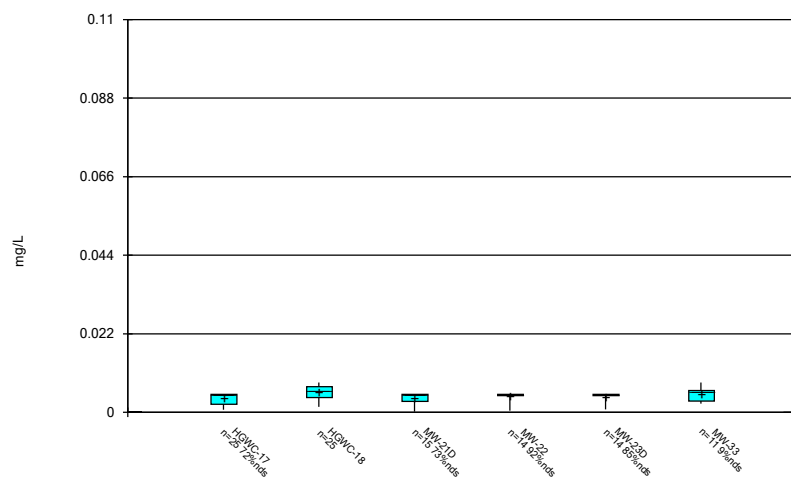
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Box & Whiskers Plot



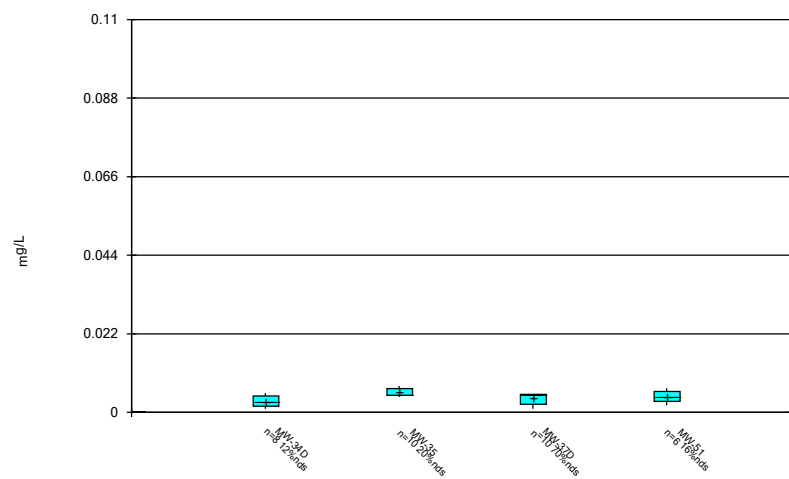
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Box & Whiskers Plot



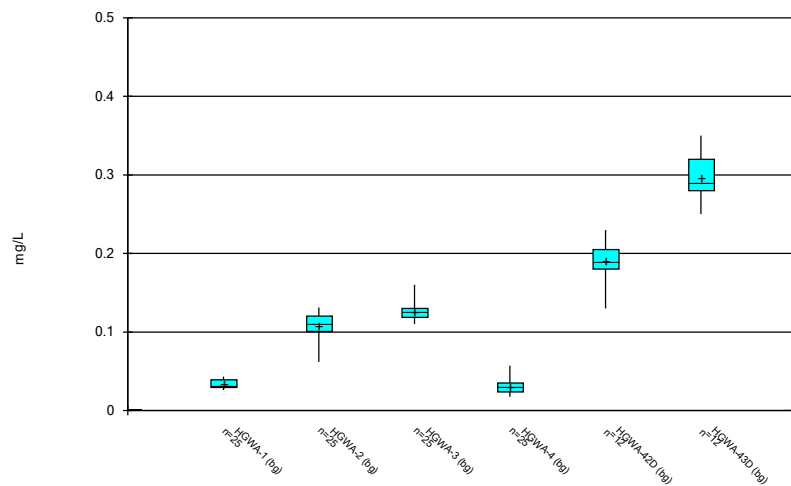
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Box & Whiskers Plot



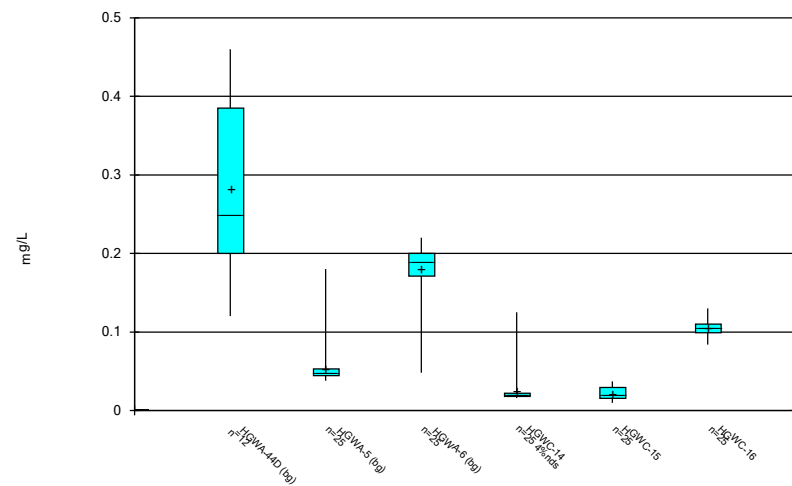
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Box & Whiskers Plot



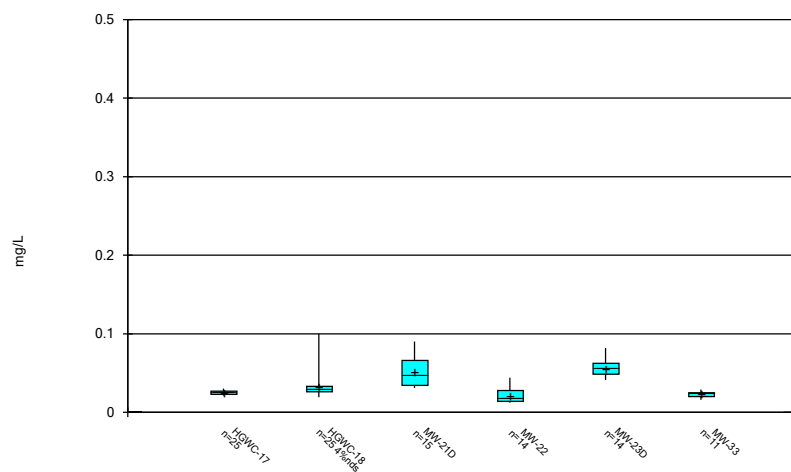
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Box & Whiskers Plot



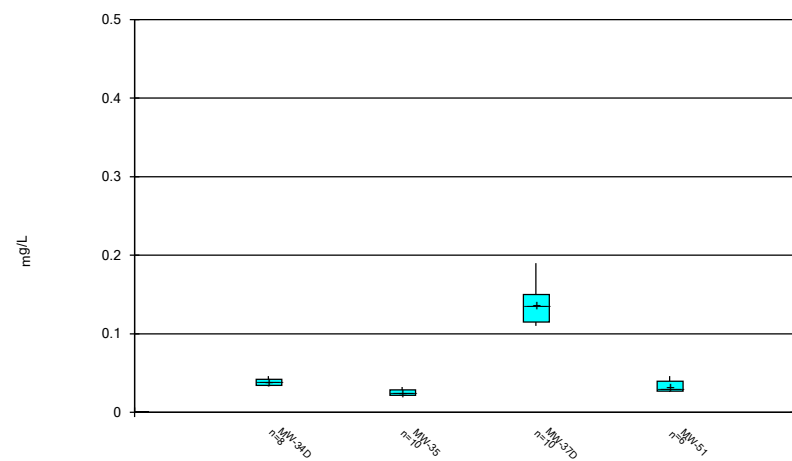
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Box & Whiskers Plot



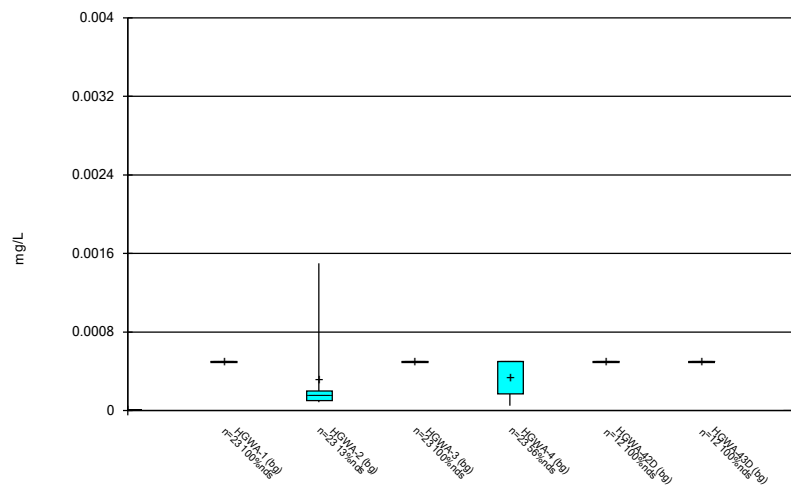
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Box & Whiskers Plot



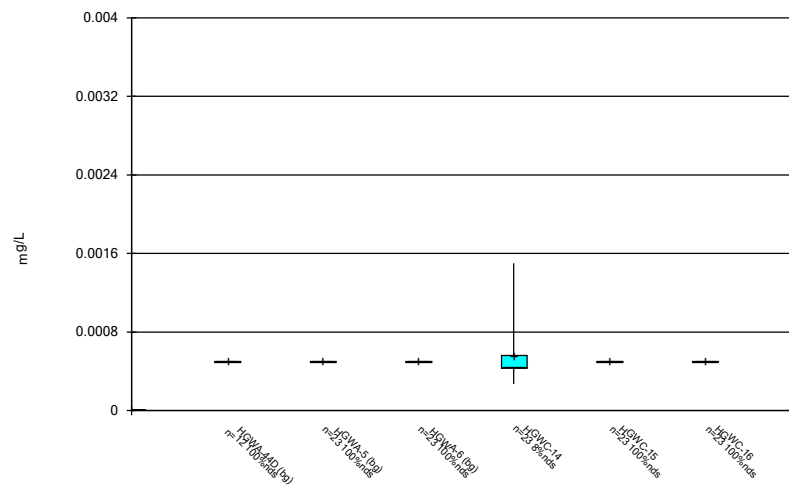
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Box & Whiskers Plot



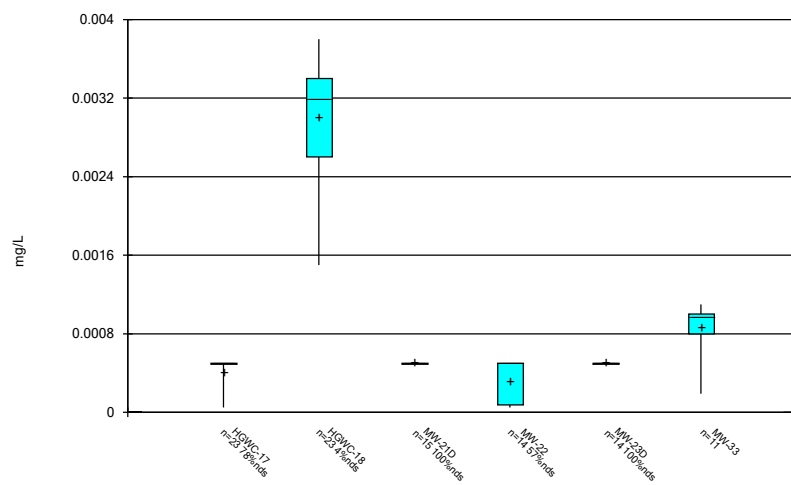
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Box & Whiskers Plot



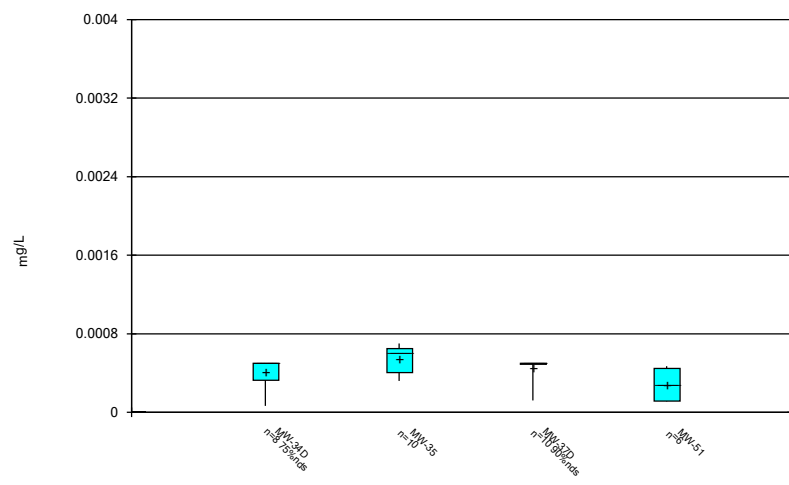
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Box & Whiskers Plot



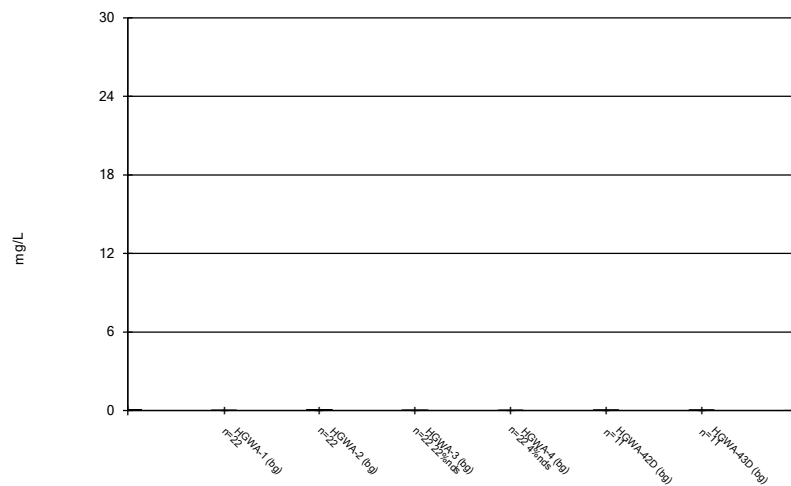
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Box & Whiskers Plot



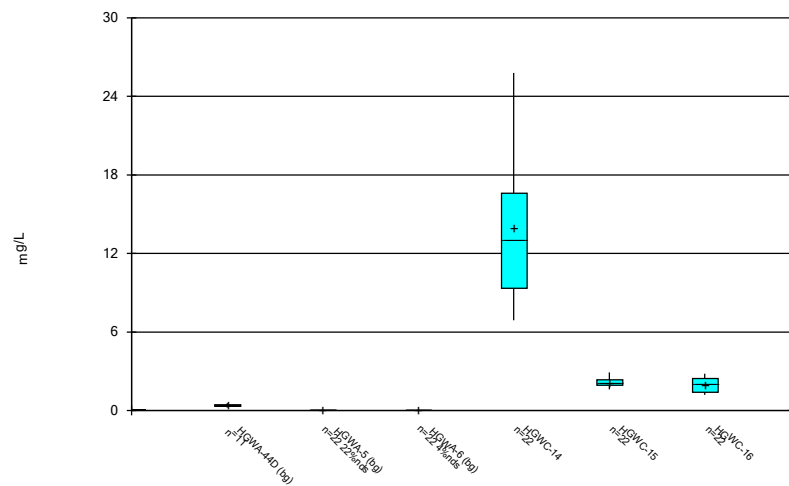
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Box & Whiskers Plot



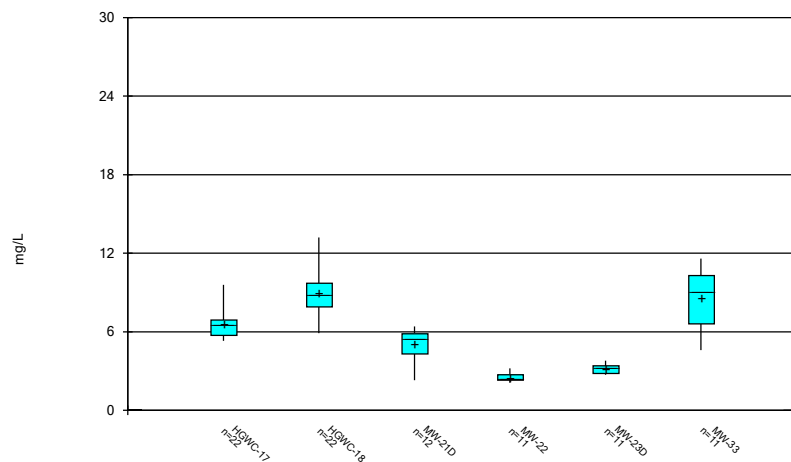
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Box & Whiskers Plot



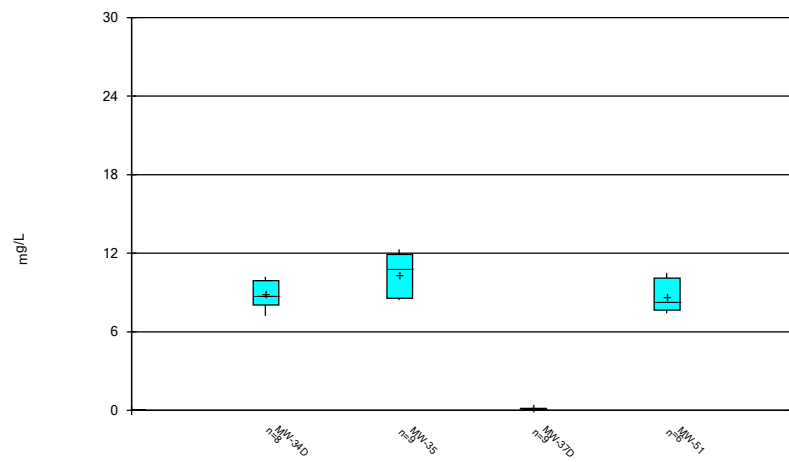
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Box & Whiskers Plot



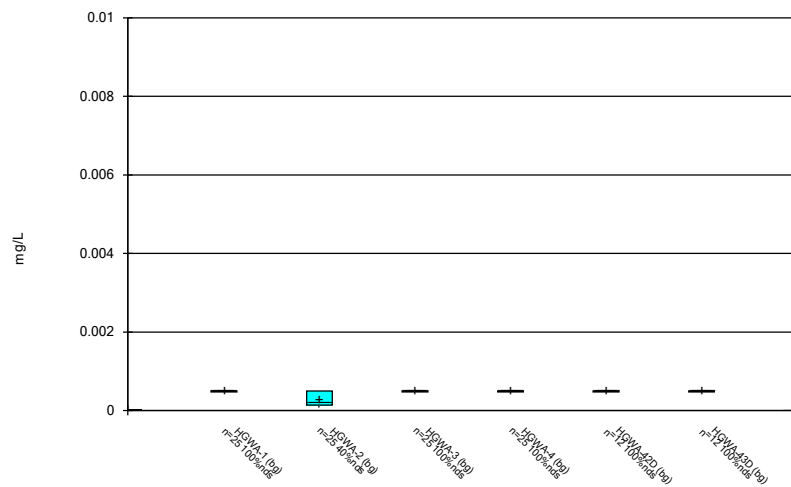
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Box & Whiskers Plot



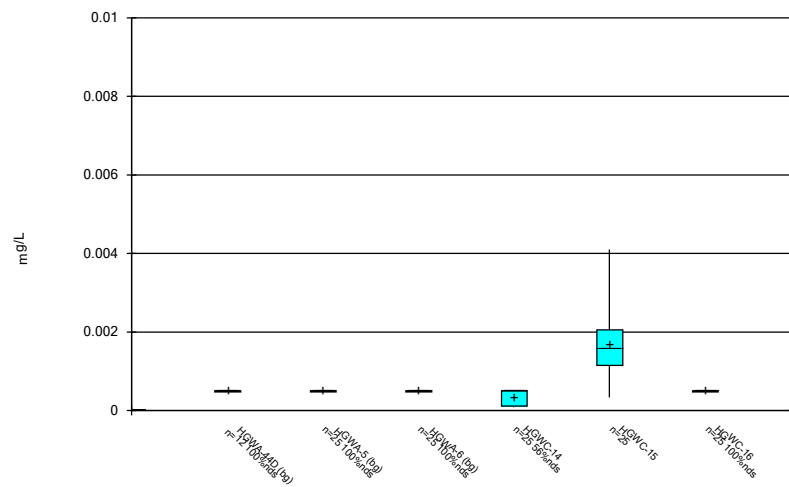
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Box & Whiskers Plot



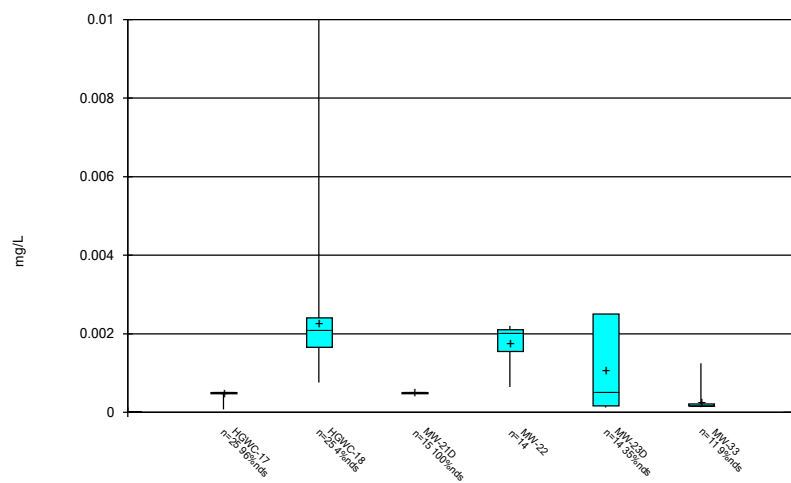
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Box & Whiskers Plot



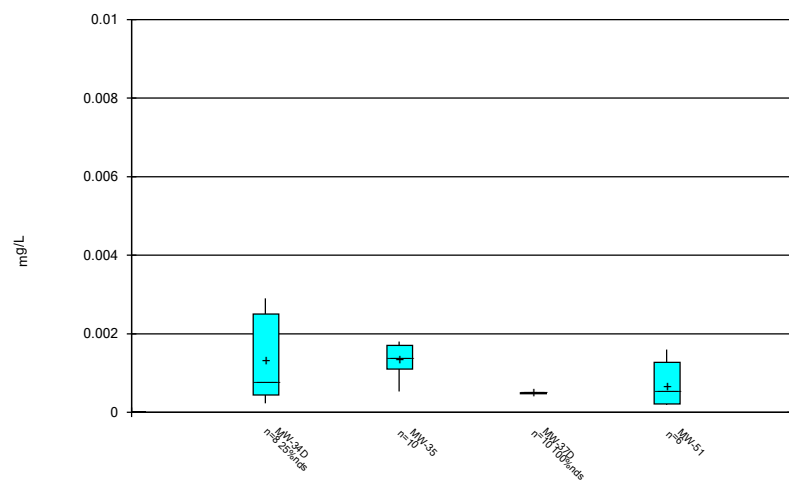
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Box & Whiskers Plot



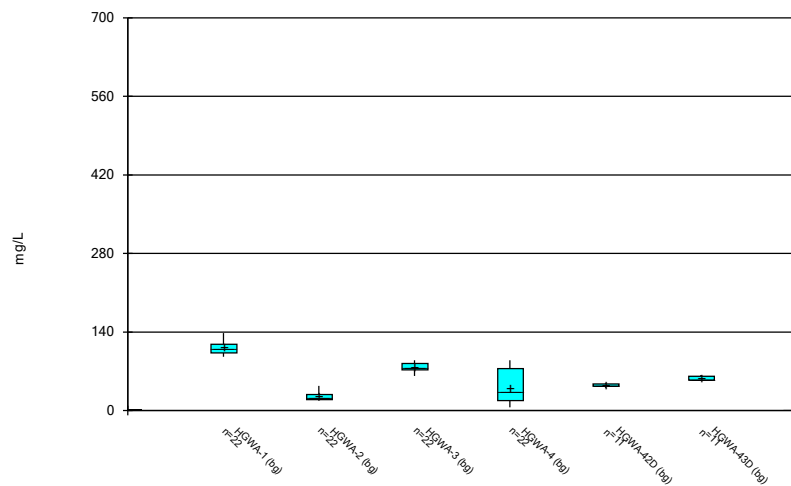
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Box & Whiskers Plot



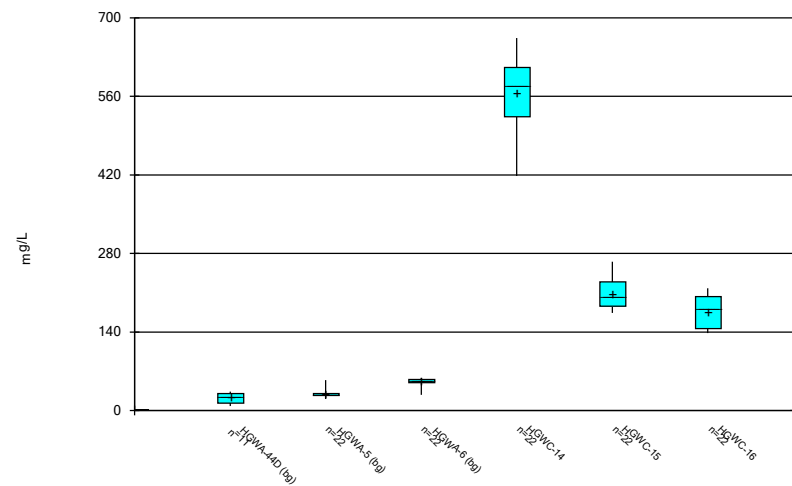
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Box & Whiskers Plot



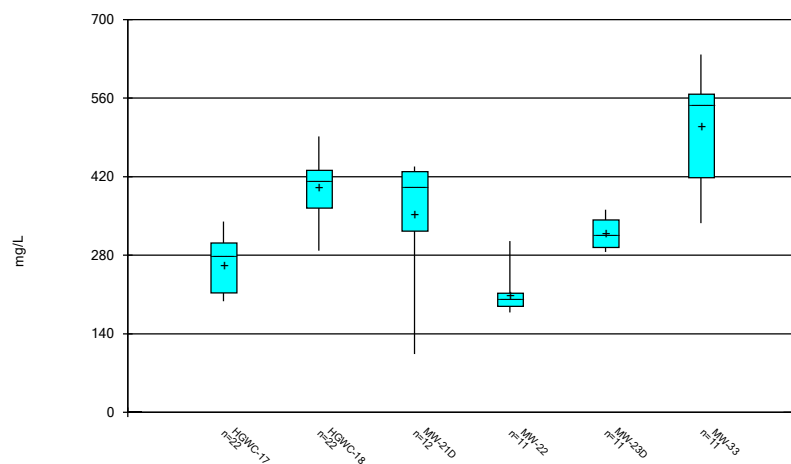
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Box & Whiskers Plot



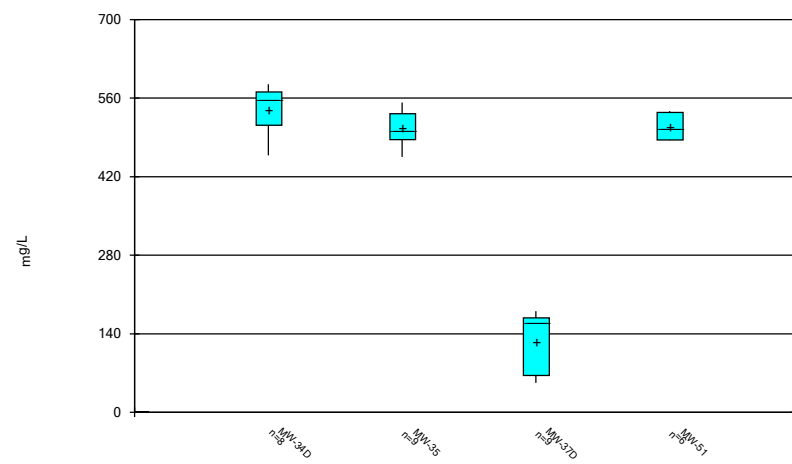
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Box & Whiskers Plot



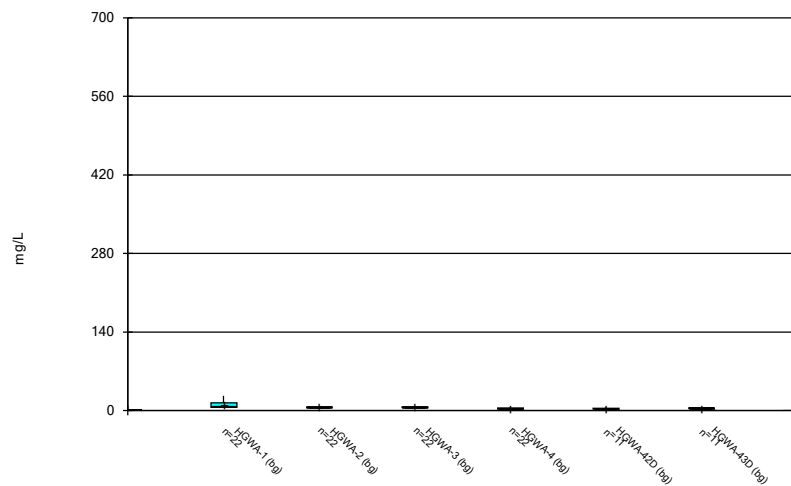
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Box & Whiskers Plot



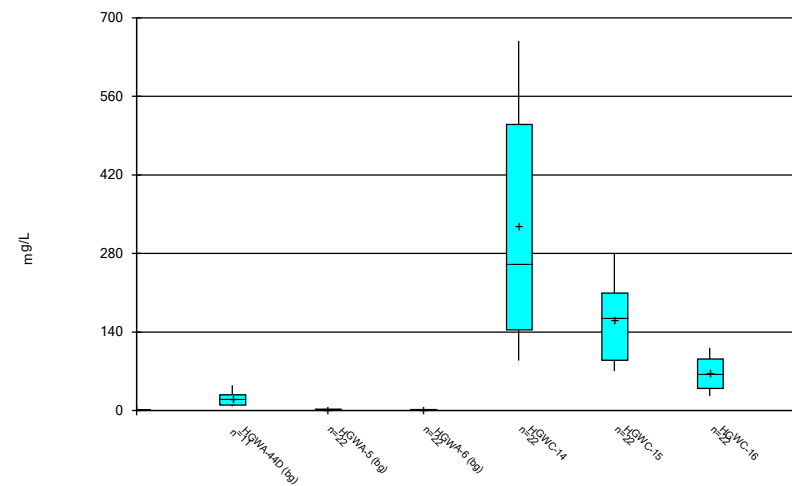
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Box & Whiskers Plot



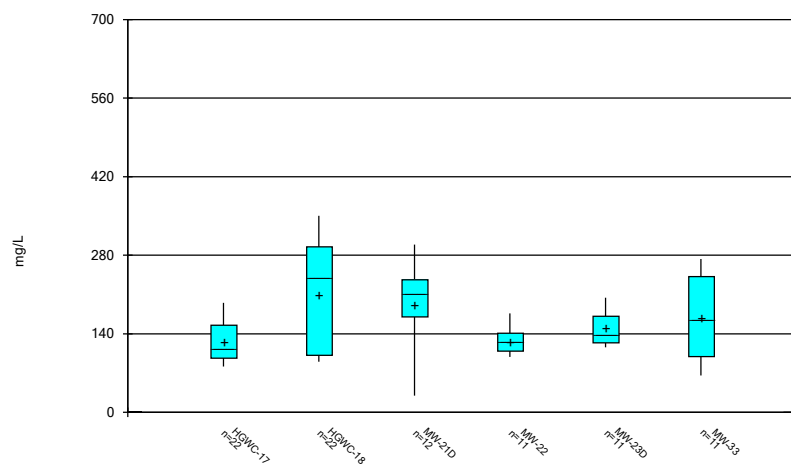
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Box & Whiskers Plot



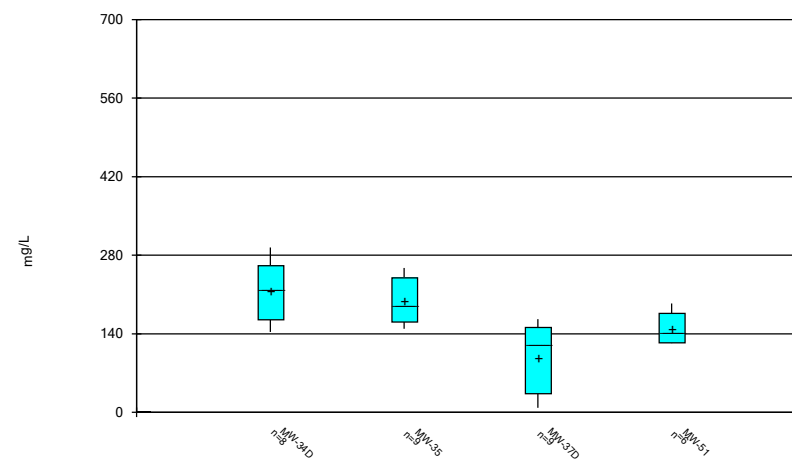
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Box & Whiskers Plot



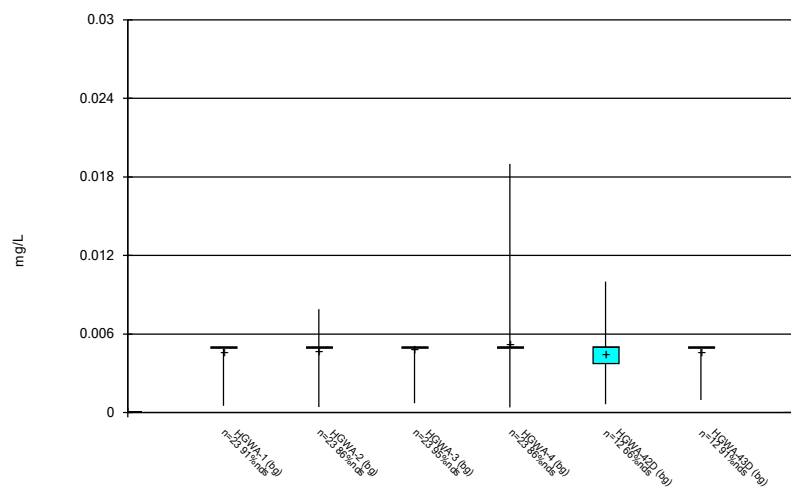
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Box & Whiskers Plot



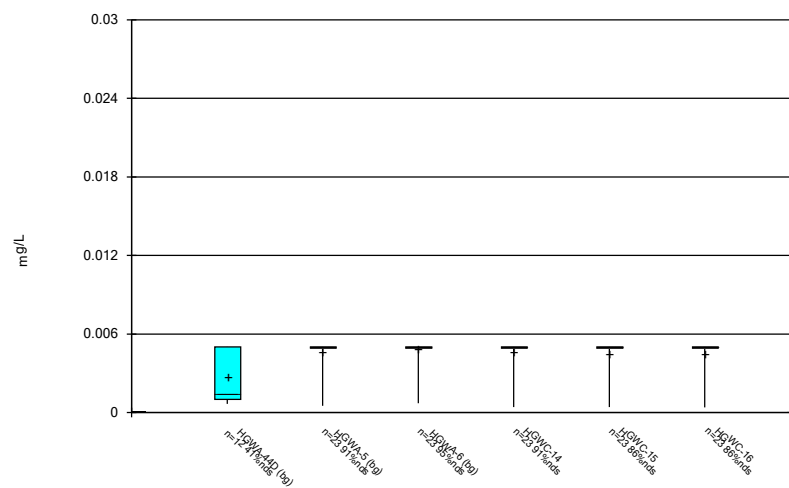
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Box & Whiskers Plot



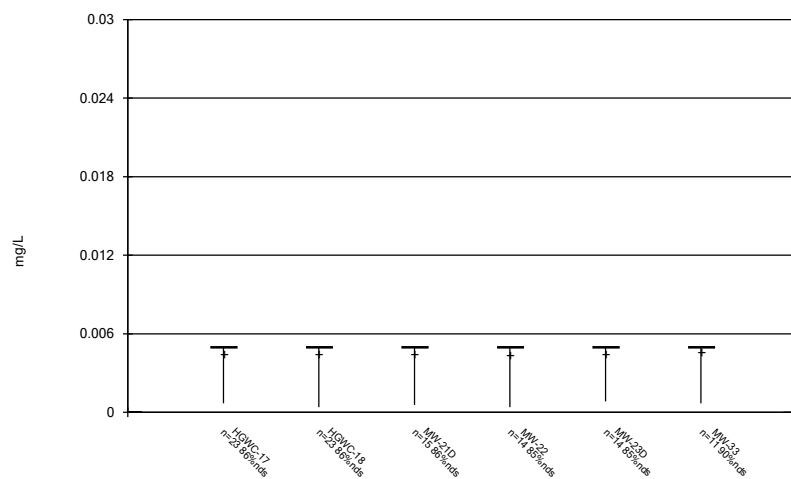
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Box & Whiskers Plot



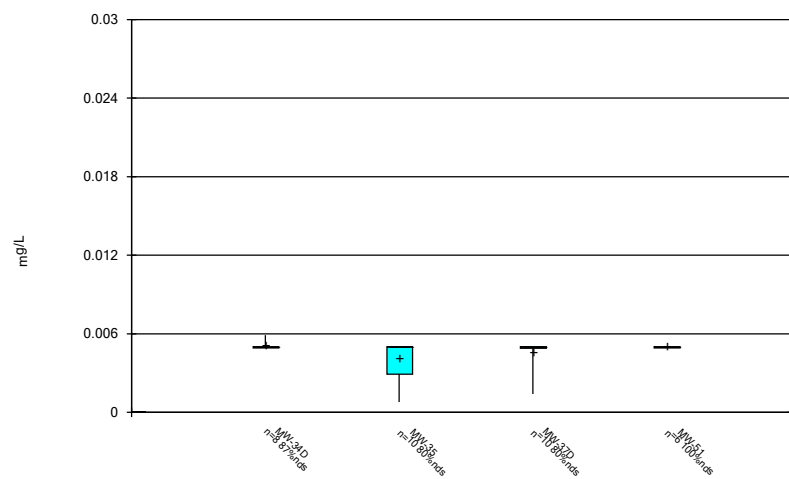
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Box & Whiskers Plot



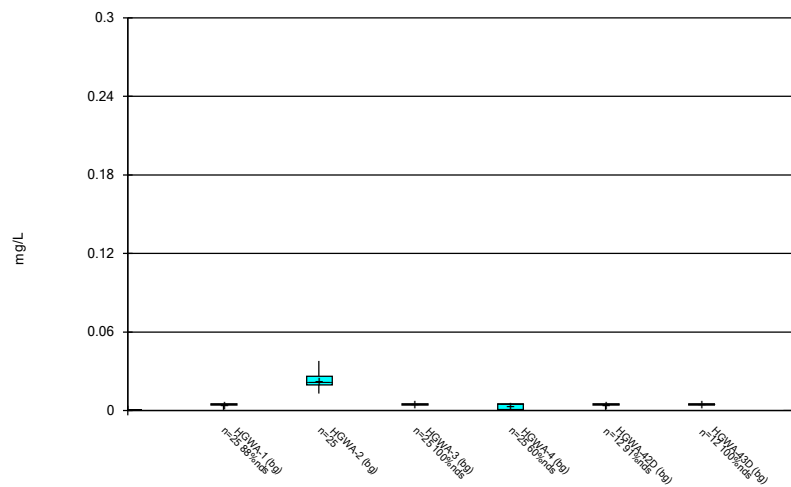
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Box & Whiskers Plot



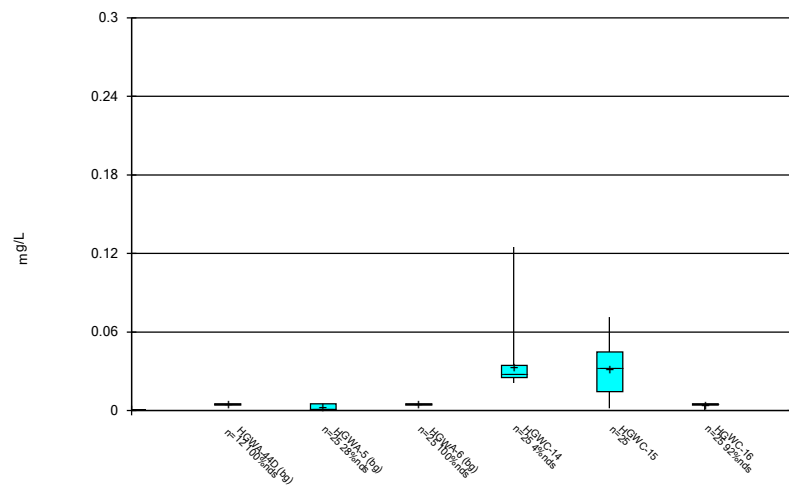
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Box & Whiskers Plot



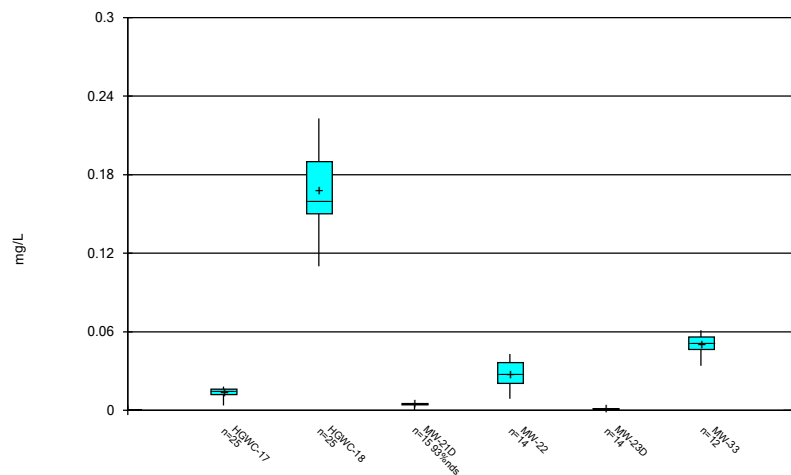
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Box & Whiskers Plot



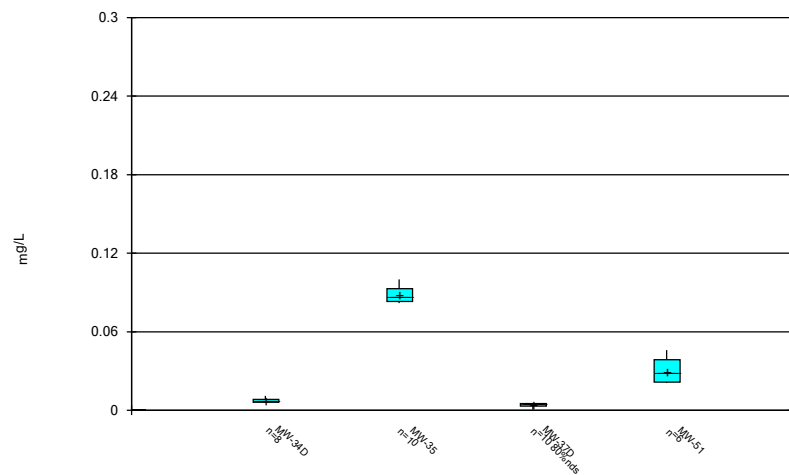
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Box & Whiskers Plot



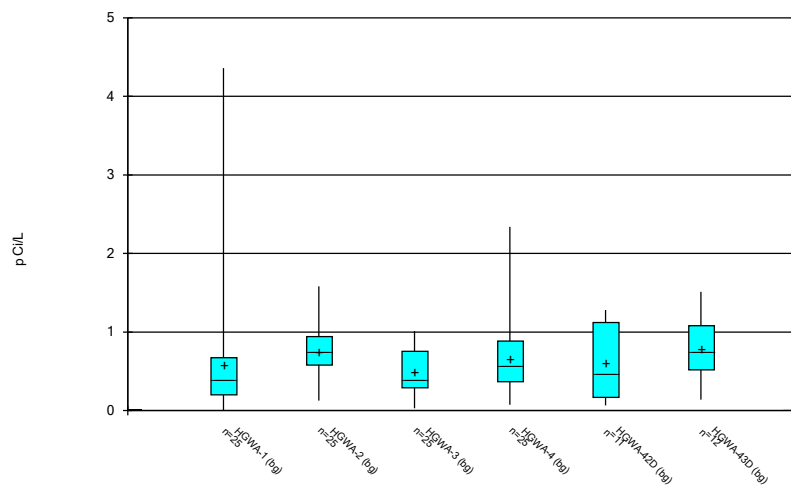
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Box & Whiskers Plot



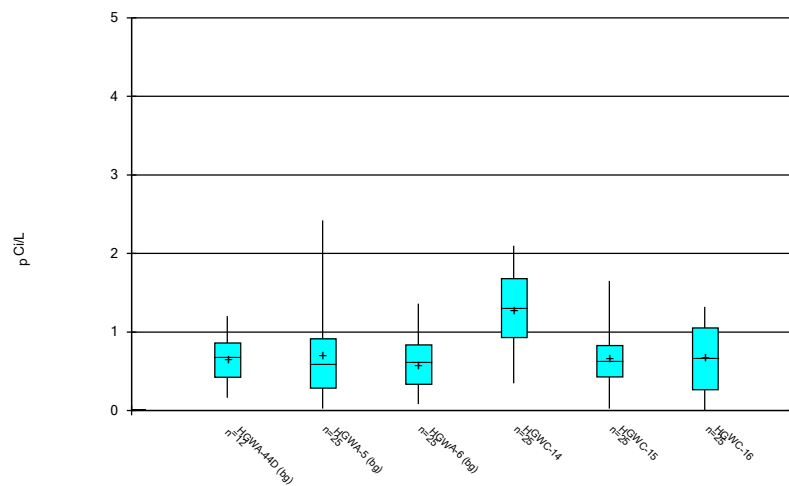
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Box & Whiskers Plot



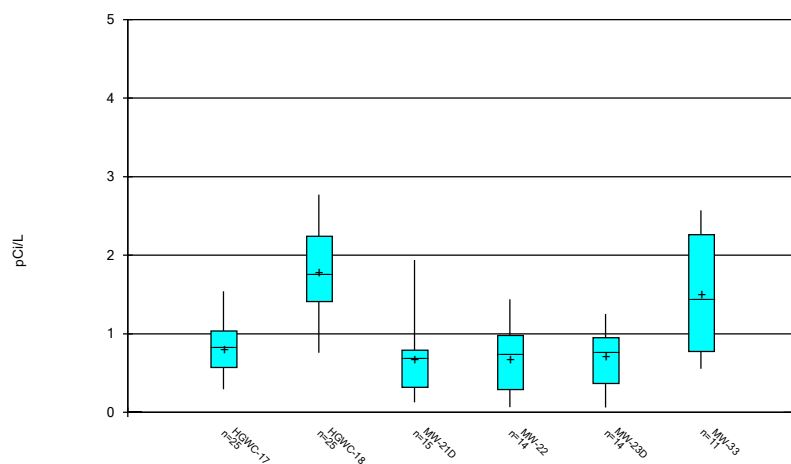
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Box & Whiskers Plot



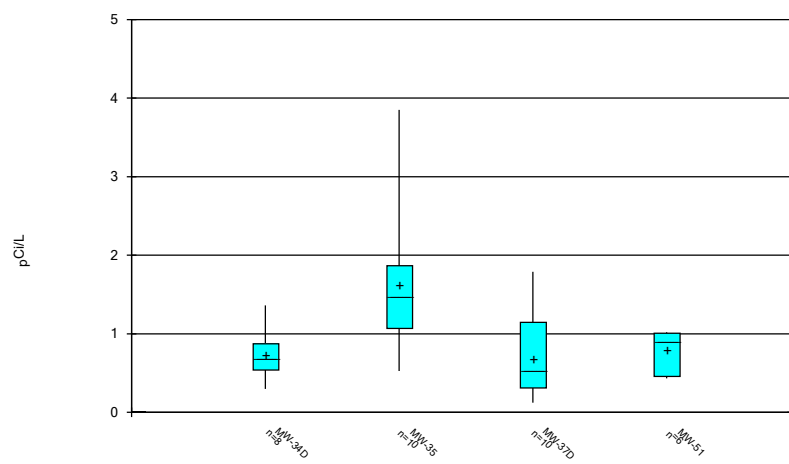
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Box & Whiskers Plot



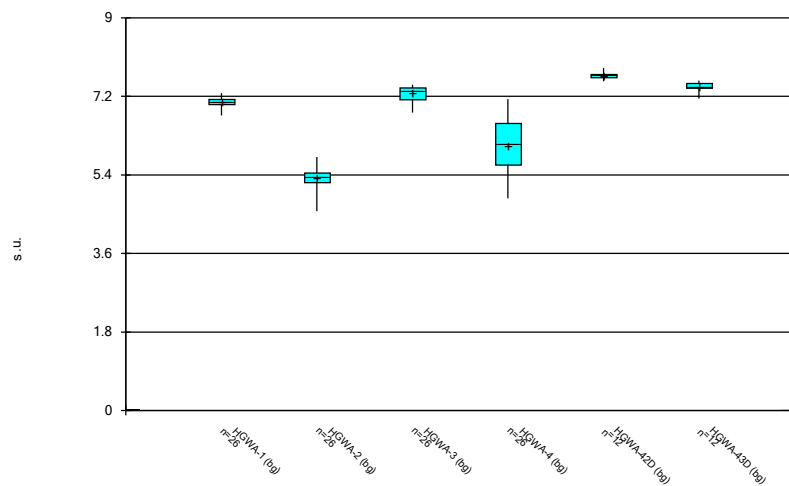
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Box & Whiskers Plot



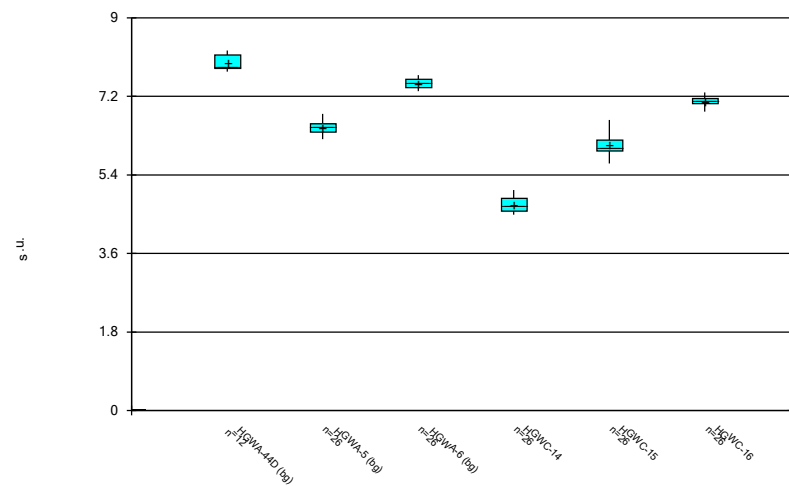
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Box & Whiskers Plot



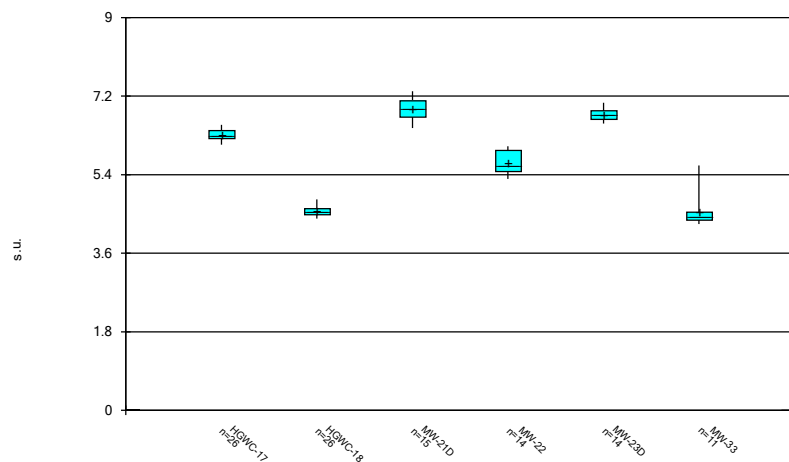
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Box & Whiskers Plot



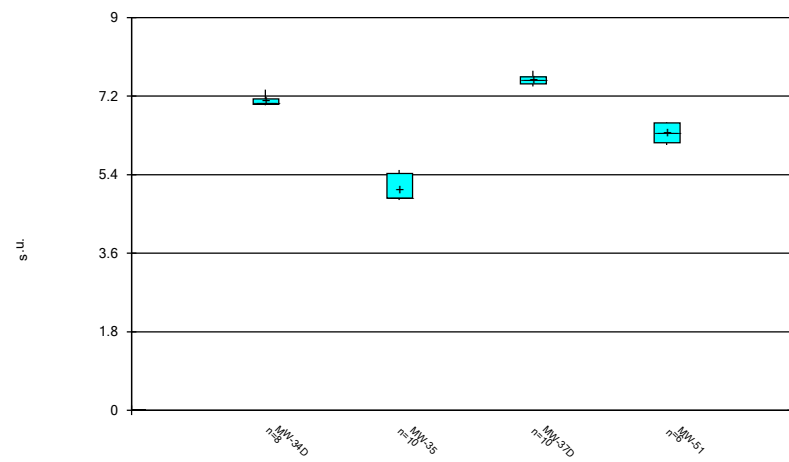
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Box & Whiskers Plot



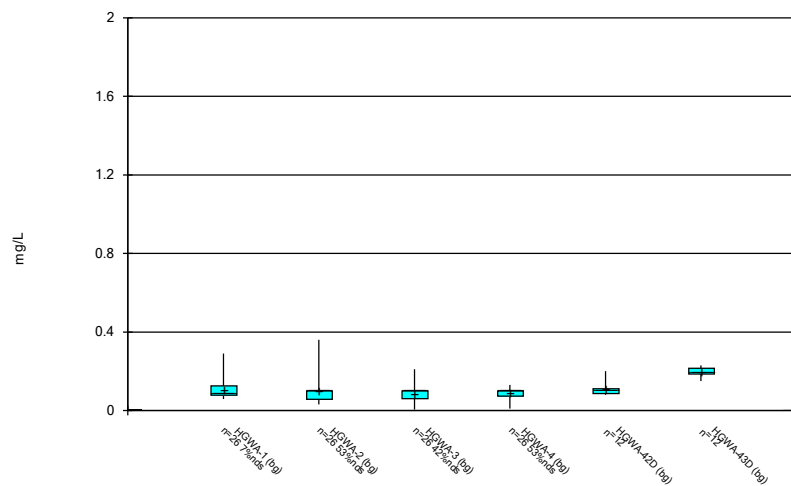
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Box & Whiskers Plot



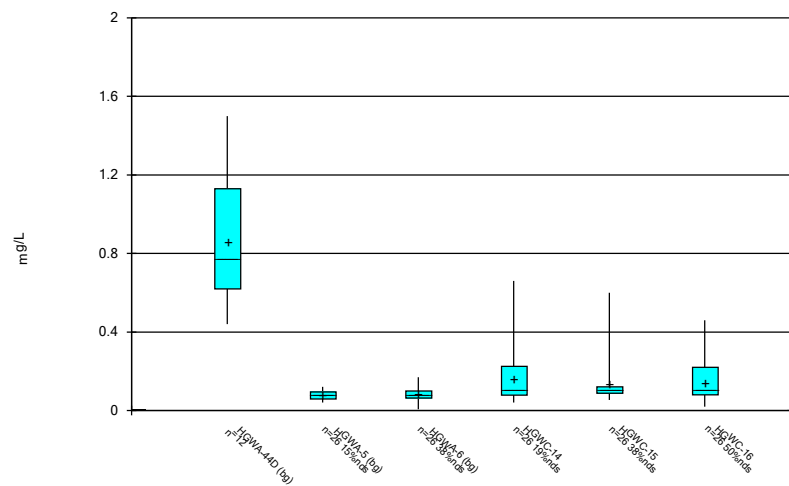
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Box & Whiskers Plot



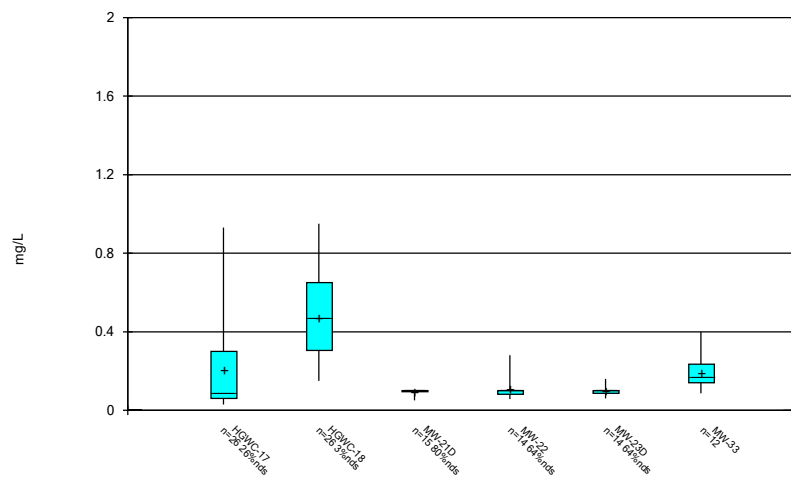
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Box & Whiskers Plot



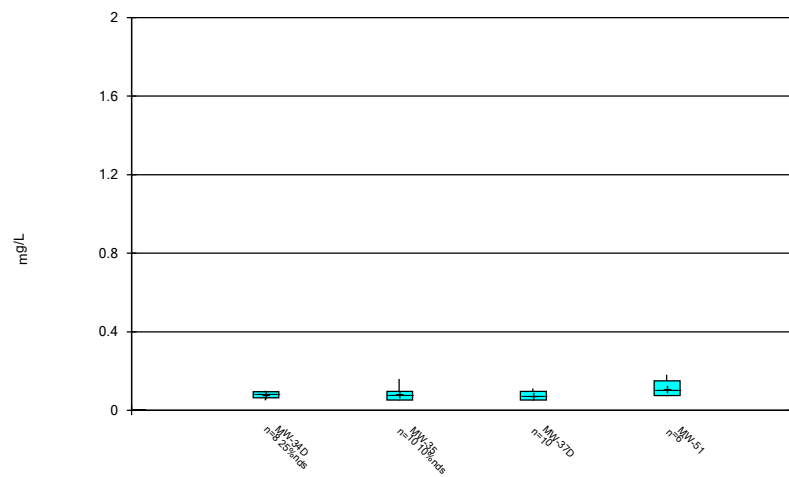
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Box & Whiskers Plot



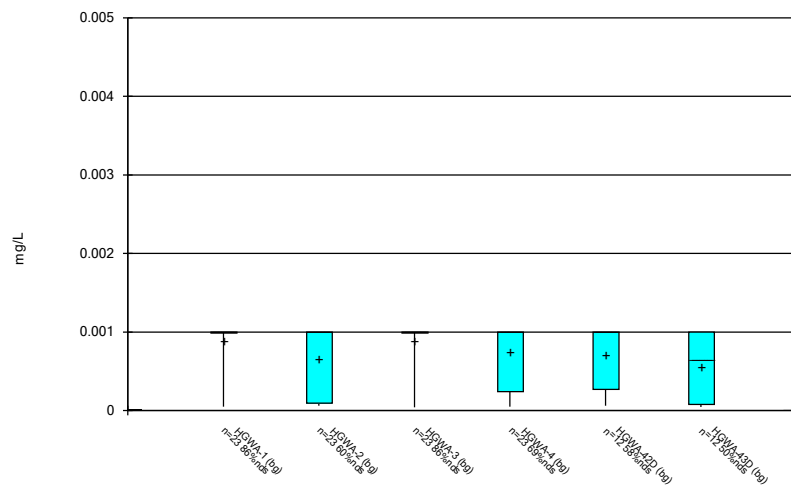
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Box & Whiskers Plot



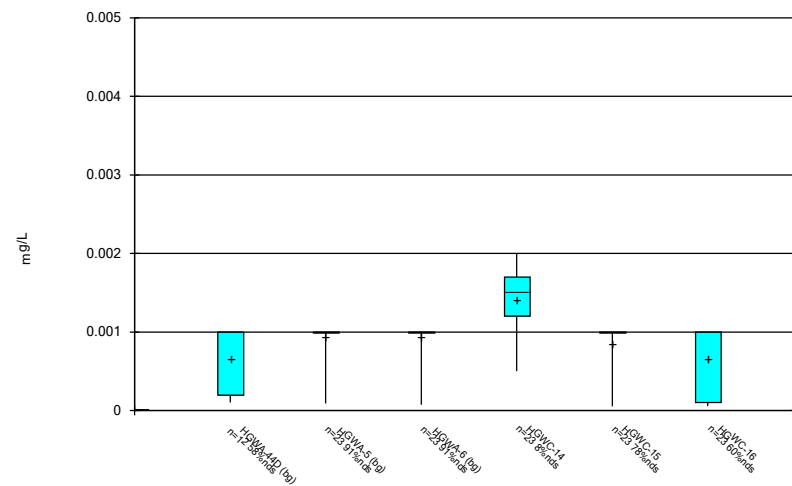
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Box & Whiskers Plot



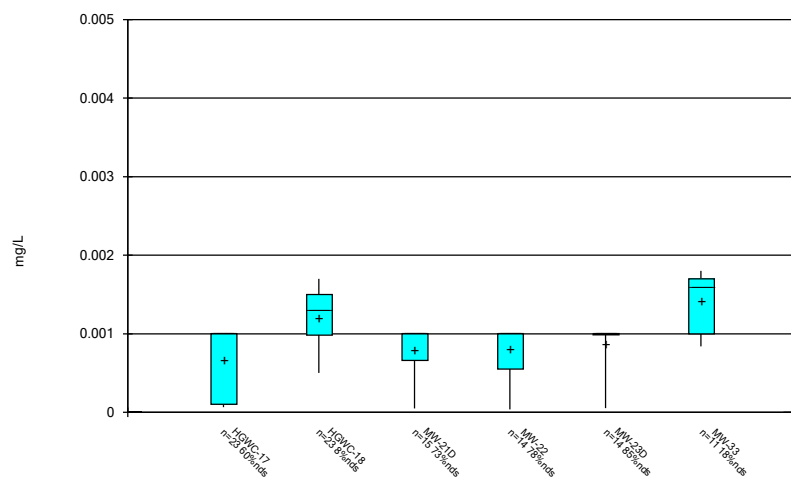
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Box & Whiskers Plot



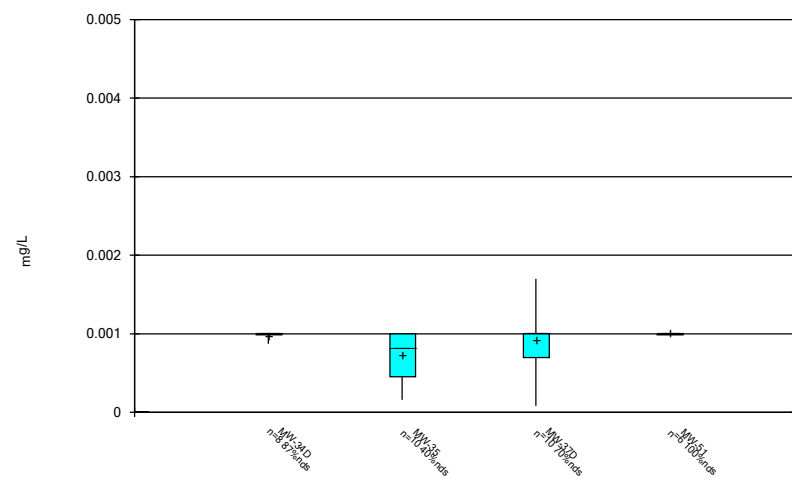
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Box & Whiskers Plot



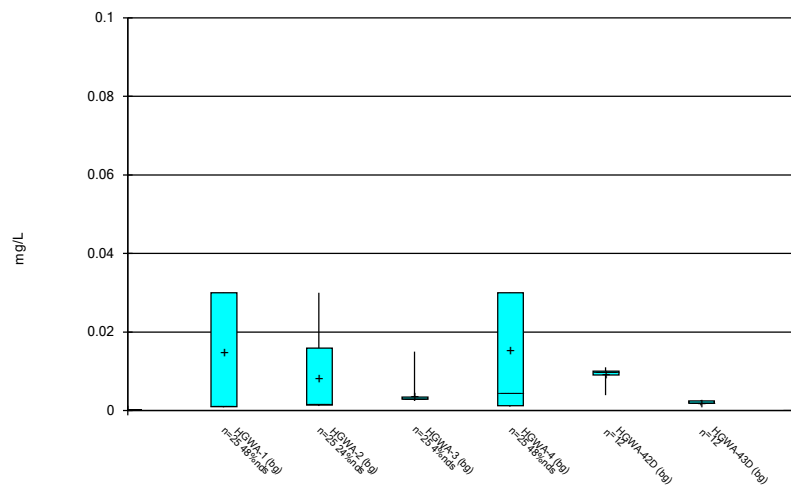
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Box & Whiskers Plot



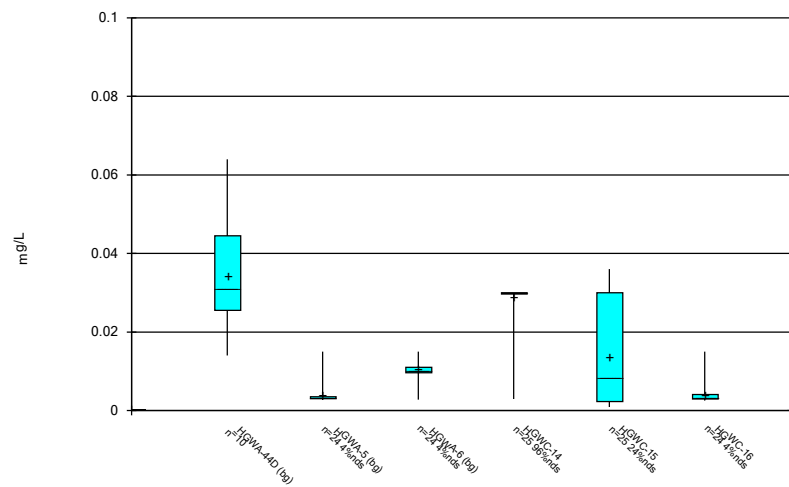
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Box & Whiskers Plot



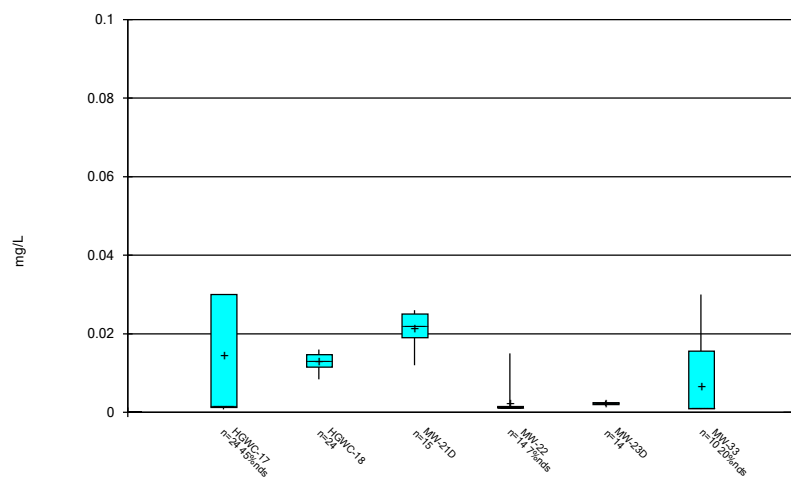
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Box & Whiskers Plot



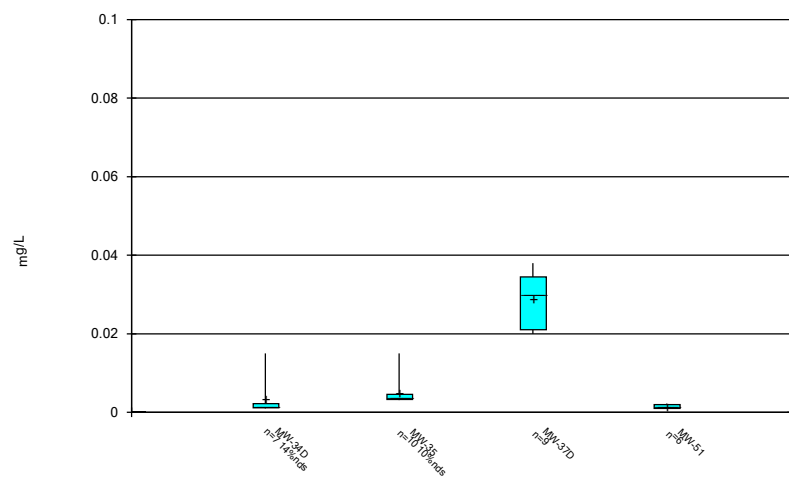
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Box & Whiskers Plot



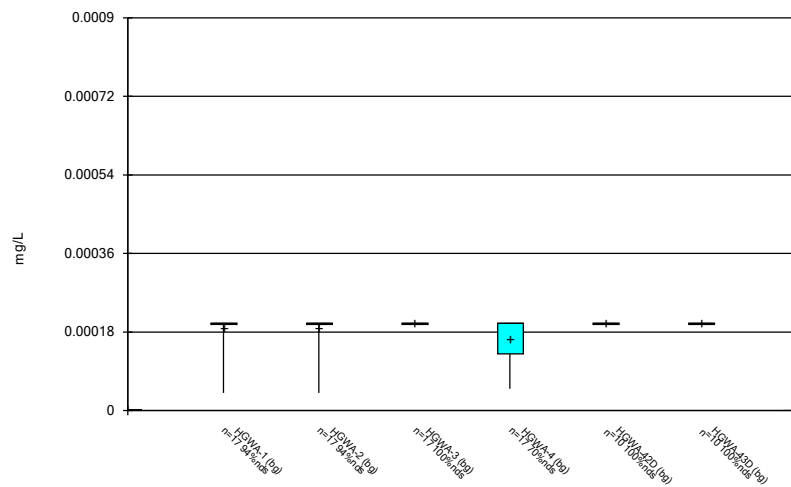
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Box & Whiskers Plot



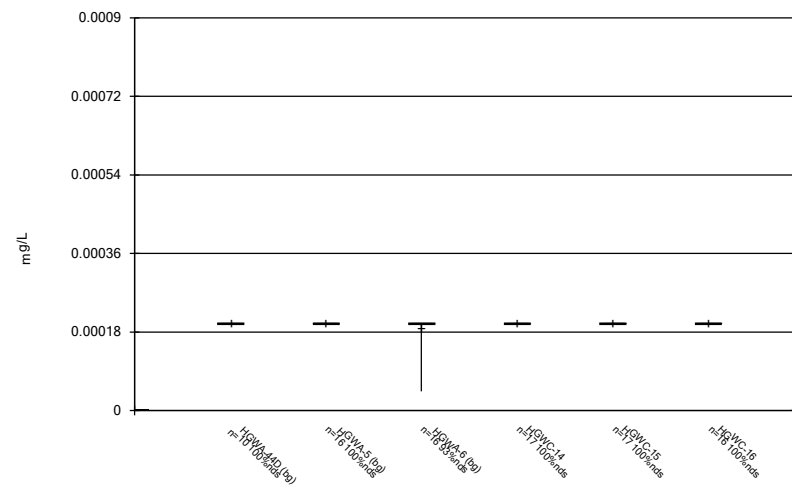
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Box & Whiskers Plot



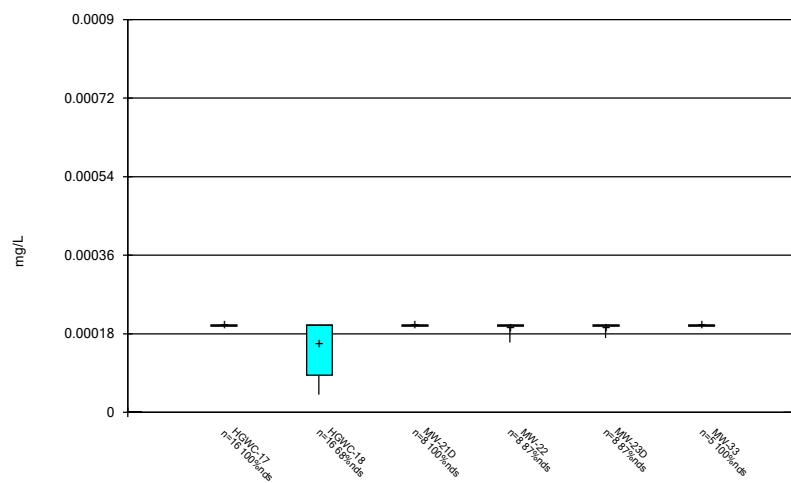
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Box & Whiskers Plot



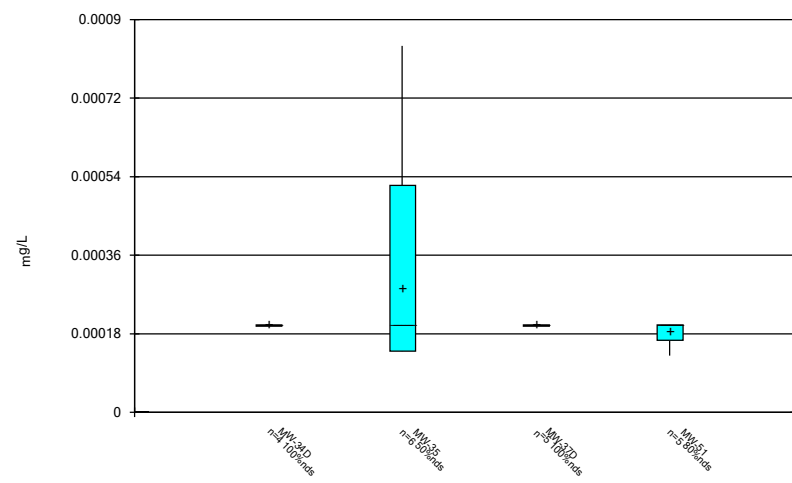
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Box & Whiskers Plot



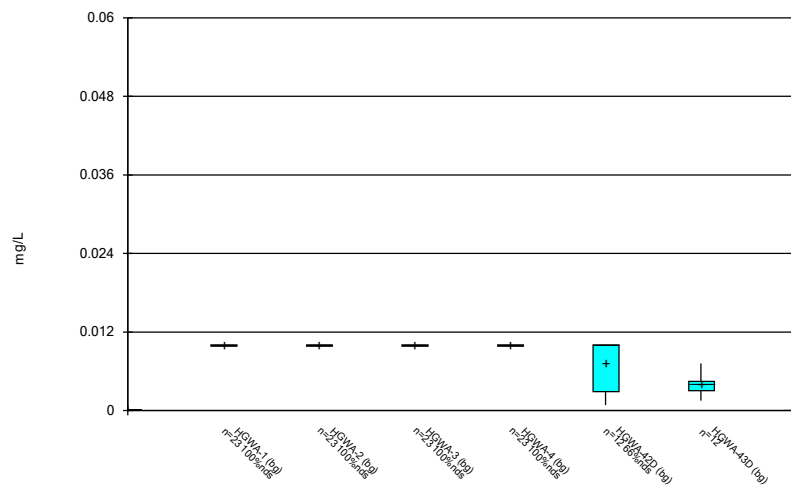
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Box & Whiskers Plot

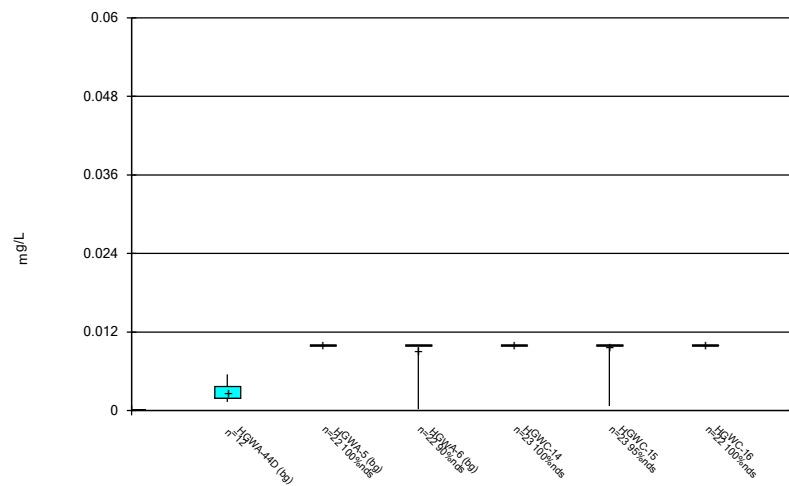


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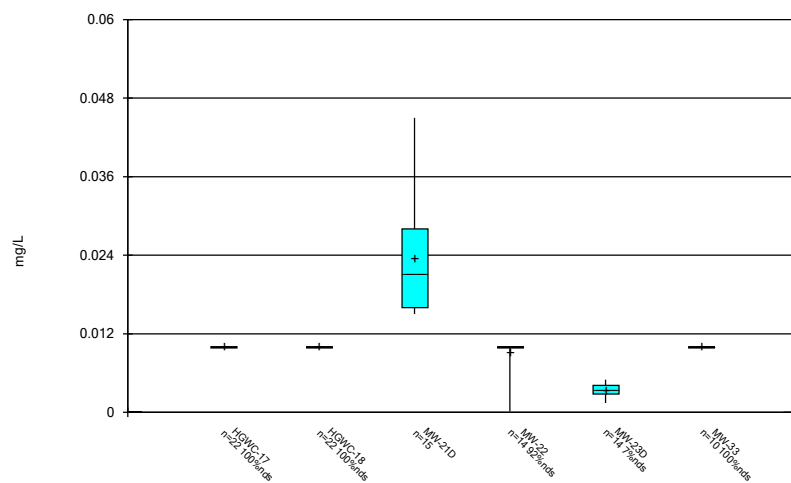
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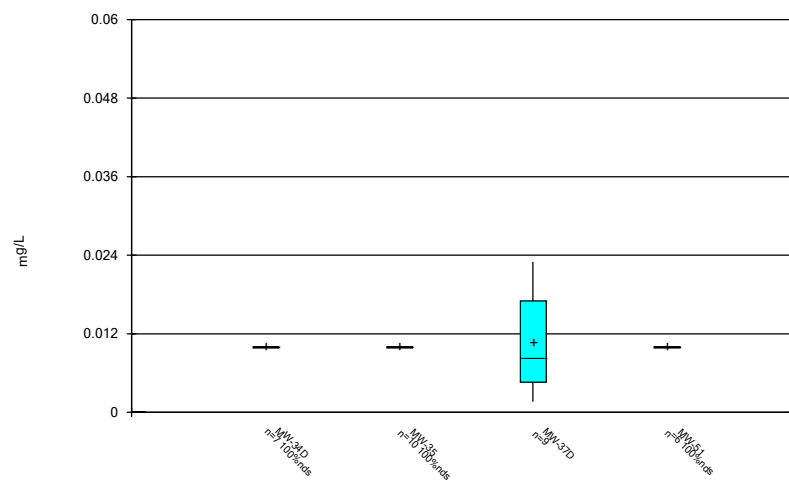
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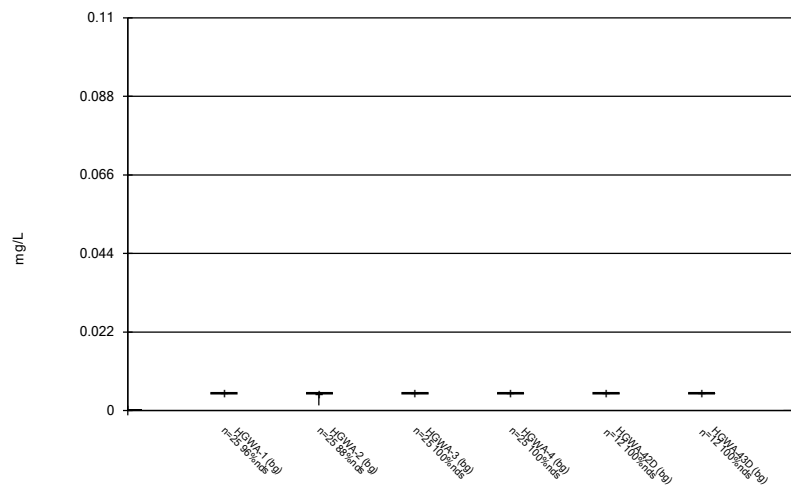
Box & Whiskers Plot



Box & Whiskers Plot

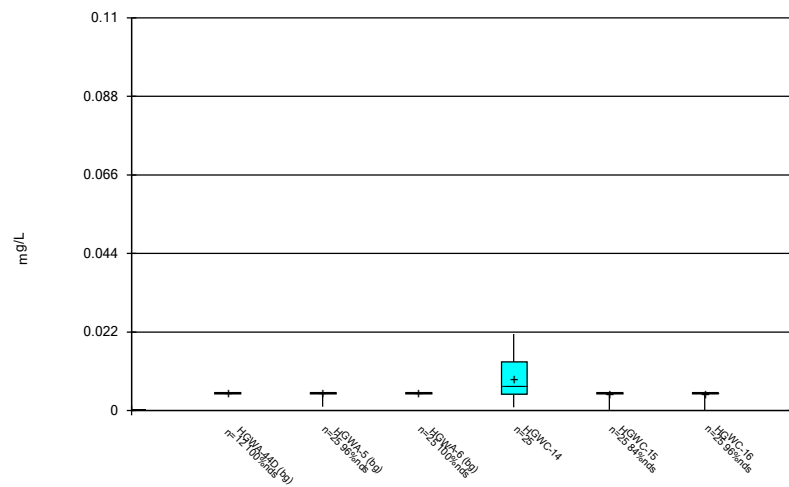


Box & Whiskers Plot



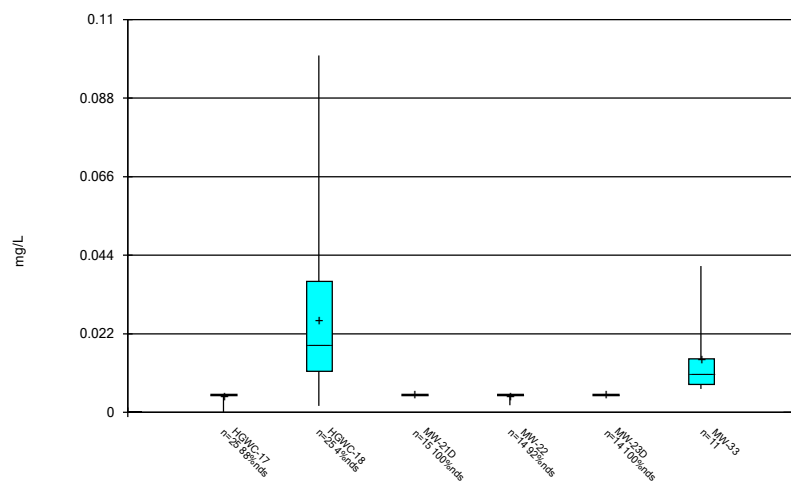
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



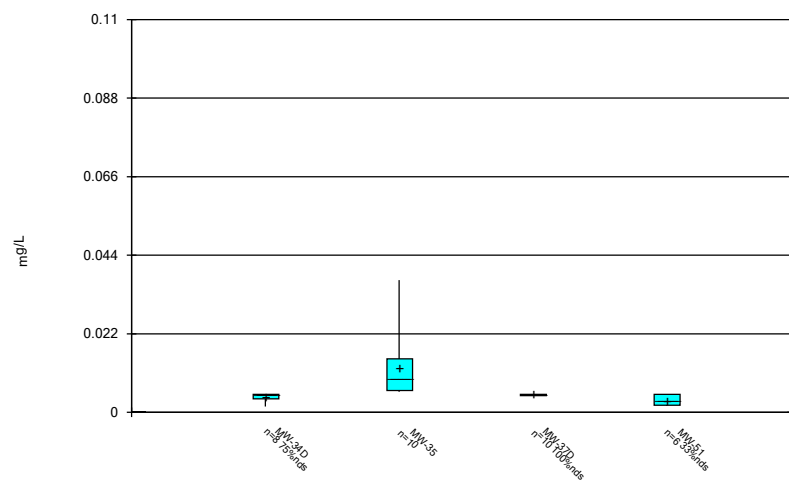
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Box & Whiskers Plot



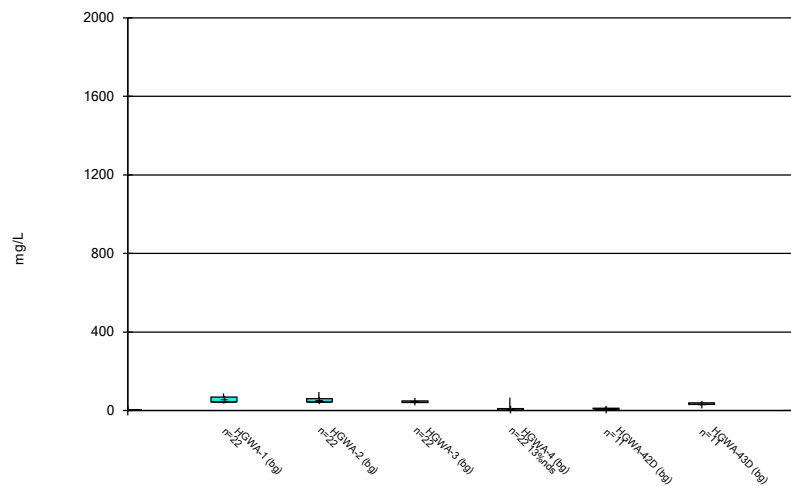
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Box & Whiskers Plot



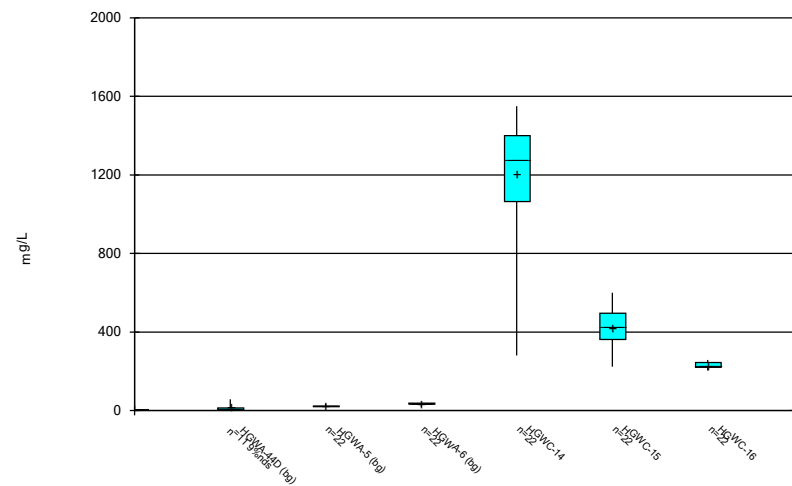
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Box & Whiskers Plot



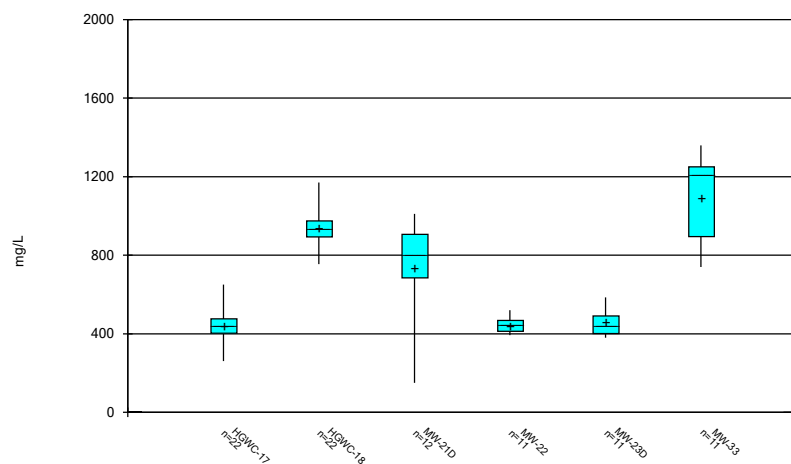
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Box & Whiskers Plot



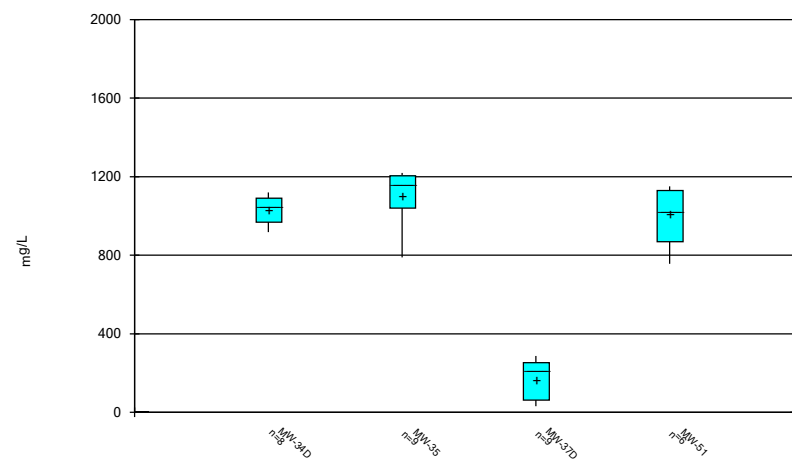
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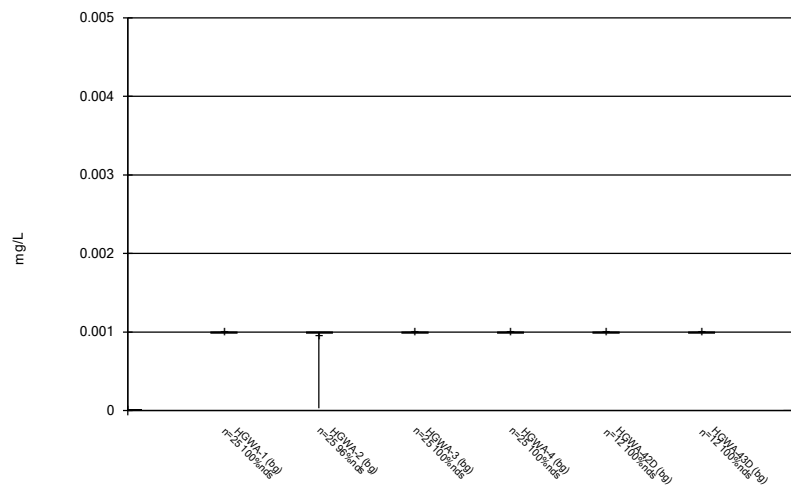
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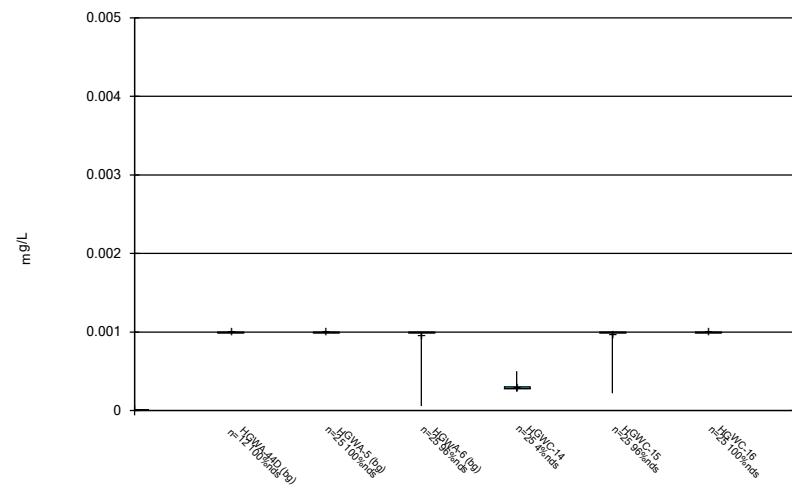
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Box & Whiskers Plot



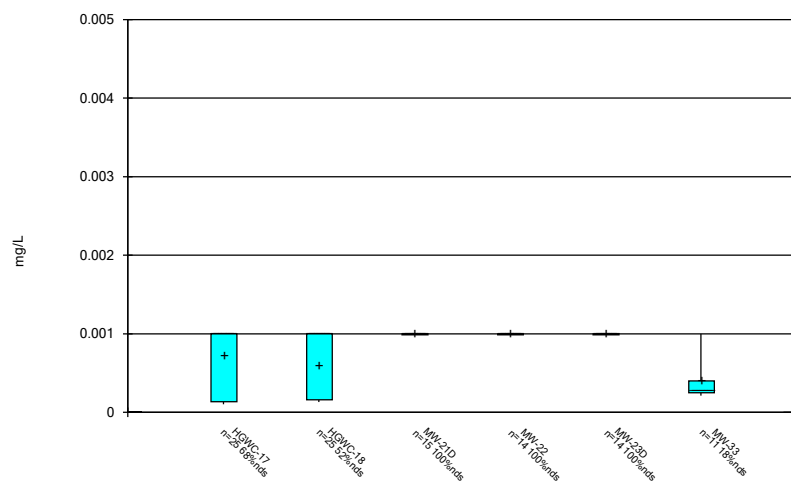
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Box & Whiskers Plot



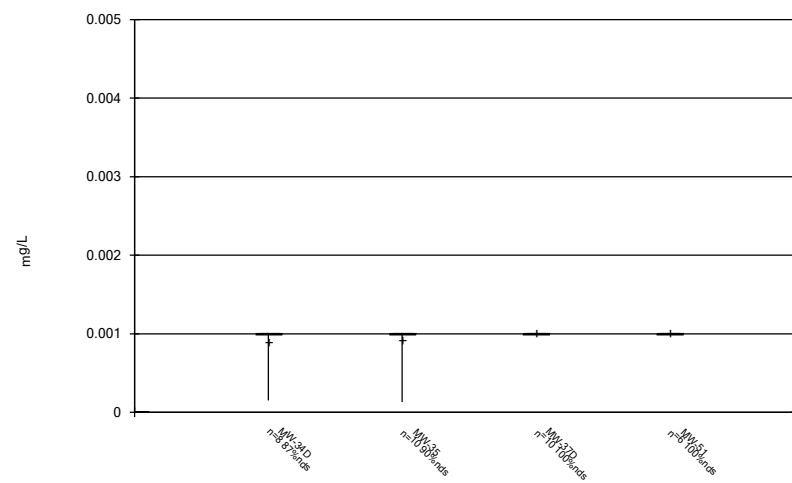
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Box & Whiskers Plot



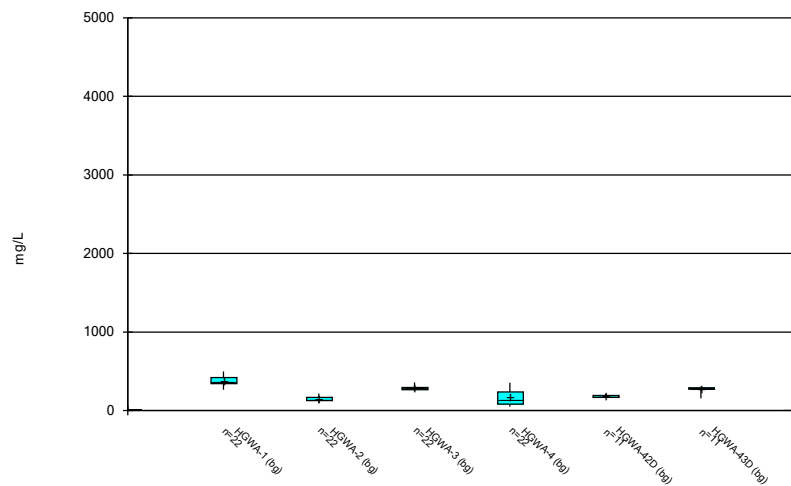
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Box & Whiskers Plot



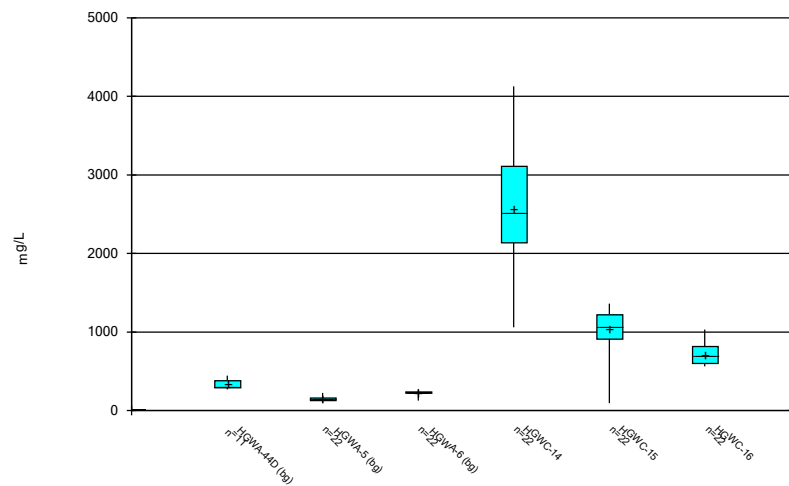
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



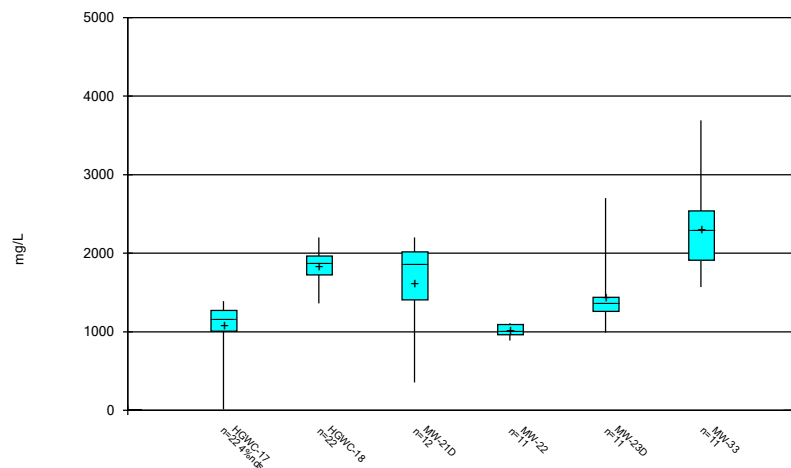
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Box & Whiskers Plot



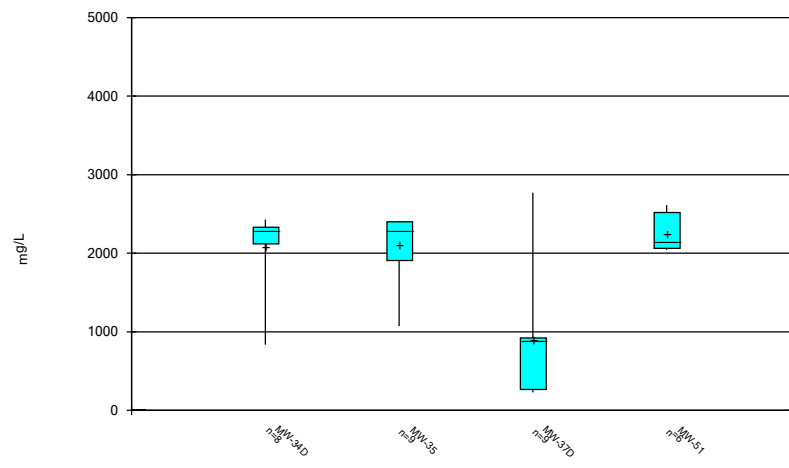
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/21/2024 8:11 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/21/2024 8:11 PM
Plant Hammond Client: Southern Company Data: Hammond AP-2

FIGURE C.

Outlier Summary

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 4/29/2024, 10:59 AM

HGWA-44D Lithium (mg/L)

8/8/2023	0.092 (o)
2/13/2024	0.088 (o)

FIGURE D.

Appendix III Interwell Prediction Limits - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 4/18/2024, 10:37 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	HGWC-14	0.55	n/a	2/17/2024	7.3	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-15	0.55	n/a	2/17/2024	1.8	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-16	0.55	n/a	2/18/2024	2.3	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-17	0.55	n/a	2/17/2024	5.7	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-18	0.55	n/a	2/18/2024	7	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-14	138	n/a	2/17/2024	418	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-15	138	n/a	2/17/2024	175	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-16	138	n/a	2/18/2024	199	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-17	138	n/a	2/17/2024	199	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-18	138	n/a	2/18/2024	347	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-14	44.8	n/a	2/17/2024	88.9	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-15	44.8	n/a	2/17/2024	70.2	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-16	44.8	n/a	2/18/2024	87.5	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-17	44.8	n/a	2/17/2024	81.7	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-18	44.8	n/a	2/18/2024	99	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-14	93.9	n/a	2/17/2024	898	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-15	93.9	n/a	2/17/2024	305	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-16	93.9	n/a	2/18/2024	220	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-17	93.9	n/a	2/17/2024	260	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-18	93.9	n/a	2/18/2024	755	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-14	496	n/a	2/17/2024	1720	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-15	496	n/a	2/17/2024	830	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-16	496	n/a	2/18/2024	755	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-17	496	n/a	2/17/2024	815	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-18	496	n/a	2/18/2024	1360	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2

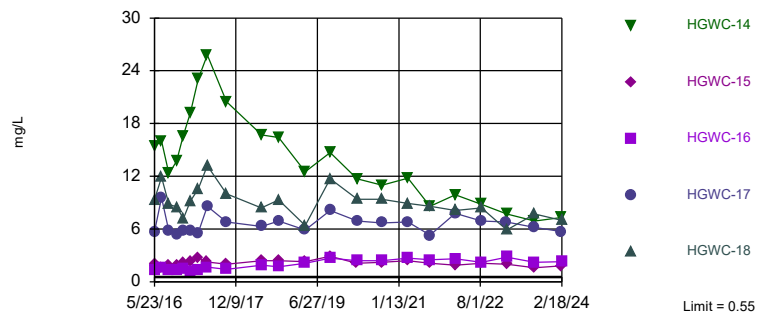
Appendix III Interwell Prediction Limits - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 4/18/2024, 10:37 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	HGWC-14	0.55	n/a	2/17/2024	7.3	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-15	0.55	n/a	2/17/2024	1.8	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-16	0.55	n/a	2/18/2024	2.3	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-17	0.55	n/a	2/17/2024	5.7	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-18	0.55	n/a	2/18/2024	7	Yes	165	n/a	n/a	7.273	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-14	138	n/a	2/17/2024	418	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-15	138	n/a	2/17/2024	175	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-16	138	n/a	2/18/2024	199	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-17	138	n/a	2/17/2024	199	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-18	138	n/a	2/18/2024	347	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-14	44.8	n/a	2/17/2024	88.9	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-15	44.8	n/a	2/17/2024	70.2	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-16	44.8	n/a	2/18/2024	87.5	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-17	44.8	n/a	2/17/2024	81.7	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-18	44.8	n/a	2/18/2024	99	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-14	8.25	4.57	2/17/2024	5.05	No	192	n/a	n/a	0	n/a	n/a	0.0001076	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-15	8.25	4.57	2/17/2024	6.56	No	192	n/a	n/a	0	n/a	n/a	0.0001076	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-16	8.25	4.57	2/18/2024	7.12	No	192	n/a	n/a	0	n/a	n/a	0.0001076	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-17	8.25	4.57	2/17/2024	6.54	No	192	n/a	n/a	0	n/a	n/a	0.0001076	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-18	8.25	4.57	2/18/2024	4.73	No	192	n/a	n/a	0	n/a	n/a	0.0001076	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-14	1.5	n/a	2/17/2024	0.065J	No	192	n/a	n/a	28.65	n/a	n/a	0.00005378	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-15	1.5	n/a	2/17/2024	0.064J	No	192	n/a	n/a	28.65	n/a	n/a	0.00005378	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-16	1.5	n/a	2/18/2024	0.1ND	No	192	n/a	n/a	28.65	n/a	n/a	0.00005378	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-17	1.5	n/a	2/17/2024	0.057J	No	192	n/a	n/a	28.65	n/a	n/a	0.00005378	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-18	1.5	n/a	2/18/2024	0.17	No	192	n/a	n/a	28.65	n/a	n/a	0.00005378	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-14	93.9	n/a	2/17/2024	898	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-15	93.9	n/a	2/17/2024	305	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-16	93.9	n/a	2/18/2024	220	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-17	93.9	n/a	2/17/2024	260	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-18	93.9	n/a	2/18/2024	755	Yes	165	n/a	n/a	2.424	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-14	496	n/a	2/17/2024	1720	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-15	496	n/a	2/17/2024	830	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-16	496	n/a	2/18/2024	755	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-17	496	n/a	2/17/2024	815	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-18	496	n/a	2/18/2024	1360	Yes	165	n/a	n/a	0	n/a	n/a	0.00007258	NP Inter (normality) 1 of 2

Exceeds Limit: HGWC-14, HGWC-15,
HGWC-16, HGWC-17, HGWC-18

Prediction Limit Interwell Non-parametric

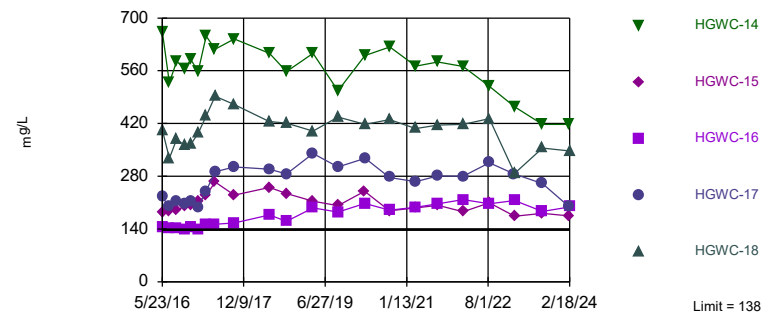


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 165 background values. 7.273% NDs. Annual per-constituent alpha = 0.0007255. Individual comparison alpha = 0.00007258 (1 of 2). Comparing 5 points to limit.

Constituent: Boron Analysis Run 4/18/2024 10:36 AM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-2

Exceeds Limit: HGWC-14, HGWC-15,
HGWC-16, HGWC-17, HGWC-18

Prediction Limit Interwell Non-parametric

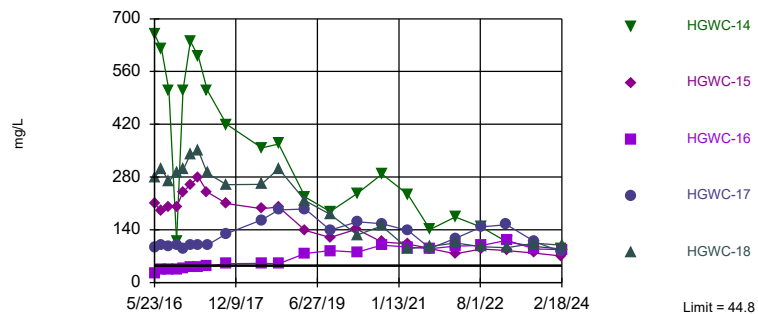


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 165 background values. Annual per-constituent alpha = 0.0007255. Individual comparison alpha = 0.00007258 (1 of 2). Comparing 5 points to limit.

Constituent: Calcium Analysis Run 4/18/2024 10:36 AM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-2

Exceeds Limit: HGWC-14, HGWC-15,
HGWC-16, HGWC-17, HGWC-18

Prediction Limit Interwell Non-parametric

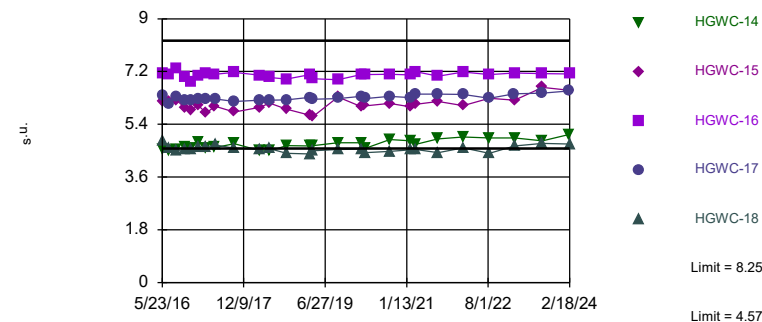


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 165 background values. Annual per-constituent alpha = 0.0007255. Individual comparison alpha = 0.00007258 (1 of 2). Comparing 5 points to limit.

Constituent: Chloride Analysis Run 4/18/2024 10:36 AM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-2

Within Limits

Prediction Limit Interwell Non-parametric

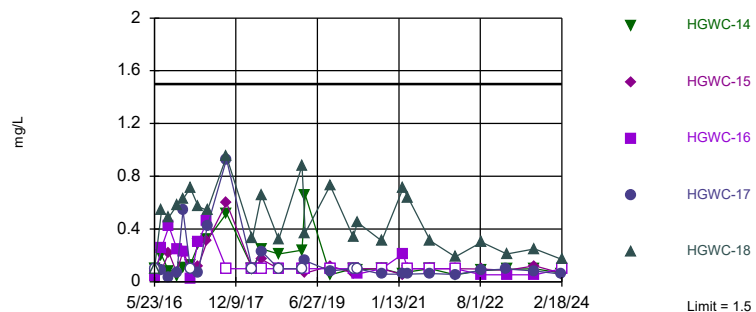


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 192 background values. Annual per-constituent alpha = 0.001075. Individual comparison alpha = 0.0001076 (1 of 2). Comparing 5 points to limit.

Constituent: Field pH Analysis Run 4/18/2024 10:36 AM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-2

Within Limit

Prediction Limit
Interwell Non-parametric

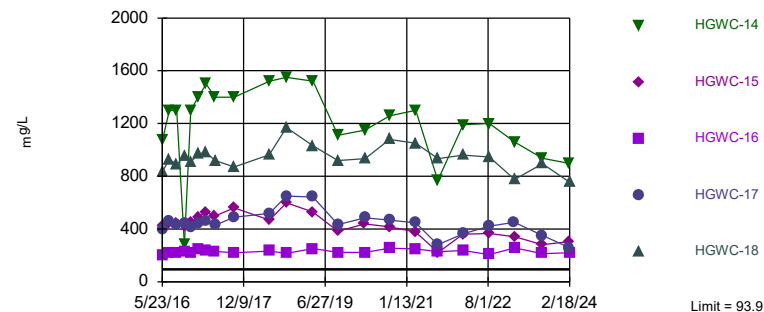


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 192 background values. 28.65% NDs. Annual per-constituent alpha = 0.0005376. Individual comparison alpha = 0.00005378 (1 of 2). Comparing 5 points to limit.

Constituent: Fluoride Analysis Run 4/18/2024 10:36 AM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-2

Exceeds Limit: HGWC-14, HGWC-15,
HGWC-16, HGWC-17, HGWC-18

Prediction Limit
Interwell Non-parametric

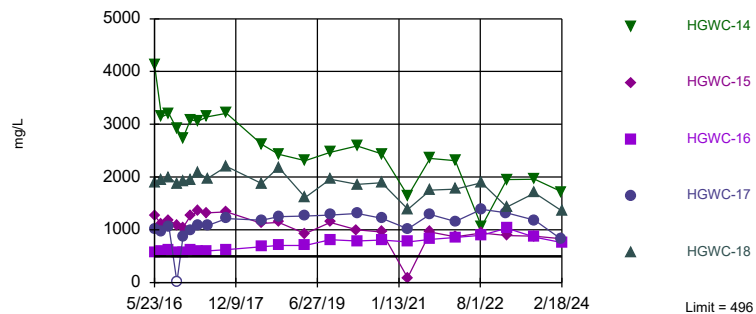


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 165 background values. 2.424% NDs. Annual per-constituent alpha = 0.0007255. Individual comparison alpha = 0.00007258 (1 of 2). Comparing 5 points to limit.

Constituent: Sulfate Analysis Run 4/18/2024 10:36 AM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-2

Exceeds Limit: HGWC-14, HGWC-15,
HGWC-16, HGWC-17, HGWC-18

Prediction Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 165 background values. Annual per-constituent alpha = 0.0007255. Individual comparison alpha = 0.00007258 (1 of 2). Comparing 5 points to limit.

Constituent: Total Dissolved Solids Analysis Run 4/18/2024 10:36 AM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-2

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/18/2024 10:37 AM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-5 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-6 (bg)	HGWC-15	HGWC-17	HGWC-14
5/19/2016	0.0214 (J)	0.0321 (J)	<0.04	<0.04	<0.04				
5/20/2016						0.0363 (J)			
5/23/2016							2.02	5.7	15.4
5/24/2016									
7/11/2016	0.0142 (J)	0.0337 (J)	0.0052 (J)		0.0175 (J)	0.0179 (J)			
7/12/2016				0.0074 (J)			1.65	9.58	16
8/30/2016	0.0074 (J)	0.0173 (J)	0.0068 (J)	<0.04	0.0072 (J)	0.014 (J)			
9/1/2016							1.93	5.76	12.3
10/19/2016	0.0224 (J)	0.0341 (J)		0.0085 (J)	0.018 (J)				
10/20/2016			0.0135 (J)			0.0197 (J)			
10/24/2016							1.93		13.7
10/25/2016								5.38	
12/6/2016	0.0211 (J)	0.0326 (J)		0.0085 (J)	0.0158 (J)				
12/7/2016							2.23	5.74	16.5
12/8/2016			0.0083 (J)			0.0159 (J)			
1/24/2017	0.0165 (J)	0.0365 (J)	0.0072 (J)	0.01 (J)	0.0145 (J)	<0.04			
1/26/2017							2.31	5.78	19.2
3/21/2017	0.0187 (J)	0.0349 (J)	<0.04	0.0079 (J)	0.0101 (J)	0.0166 (J)			
3/22/2017								5.52	
3/23/2017							2.72		23.1
5/22/2017	0.0782	0.0475		0.0131 (J)					
5/23/2017			0.0095 (J)		0.0159 (J)	0.0167 (J)			
5/24/2017							2.26		25.8
5/25/2017								8.58	
10/3/2017	0.0198 (J)	0.0386 (J)	0.0071 (J)	0.0097 (J)	0.0162 (J)	0.017 (J)			
10/4/2017							2	6.8	20.5
6/4/2018	0.02 (J)	0.036 (J)		0.017 (J)	0.014 (J)				
6/5/2018			0.0066 (J)			0.016 (J)			
6/6/2018							2.4	6.3	16.7
10/1/2018	0.013 (J)	0.035 (J)		0.0061 (J)	0.0093 (J)				
10/2/2018			0.0081 (J)			0.014 (J)			
10/3/2018							2.4	6.9	16.4
4/1/2019				0.0066 (J)					
4/2/2019	0.016 (J)	0.034 (J)	0.0052 (J)		0.01 (J)	0.013 (J)			
4/4/2019							2.3		
4/5/2019								5.9	12.5
9/23/2019	0.021 (J)	0.04 (J)		0.0081 (J)					
9/24/2019			0.0088 (J)		0.013 (J)	0.016 (J)	2.9		14.7
9/25/2019								8.1	
3/25/2020	0.025 (J)	0.039 (J)		0.0096 (J)		0.021 (J)			
3/26/2020			0.0072 (J)		0.012 (J)		2.1		
3/30/2020									11.7
3/31/2020								6.9	
9/15/2020	0.017 (J)	0.044 (J)	0.012 (J)	0.0071 (J)	0.013 (J)	0.016 (J)		6.7	
9/16/2020									
9/17/2020							2.2		
9/18/2020									11
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
1/20/2021									

Prediction Limit

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Constituent: Boron (mg/L) Analysis Run 4/18/2024 10:38 AM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-5 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-6 (bg)	HGWC-15	HGWC-17	HGWC-14
3/10/2021	0.015 (J)				0.012 (J)				
3/11/2021		0.056	0.0075 (J)	0.015 (J)		0.018 (J)			
3/16/2021							2.4		
3/17/2021									11.8
3/18/2021								6.8	
8/11/2021	0.02 (J)								
8/12/2021		0.044	0.0092 (J)	<0.04	0.014 (J)	0.014 (J)			
8/13/2021									
8/18/2021								5.3	8.6
8/19/2021							2.1		
2/1/2022	0.016 (J)	0.056		0.011 (J)					
2/7/2022			<0.04		0.017 (J)	0.019 (J)			
2/8/2022							1.9	7.8	
2/9/2022									9.9
8/2/2022	0.012 (J)	0.047		<0.04	0.02 (J)				
8/9/2022									
8/10/2022			0.011 (J)			0.015 (J)		6.9	
8/11/2022							2.1		8.8
1/23/2023				0.012 (J)	0.023 (J)				
1/24/2023	0.015 (J)	0.046							
1/27/2023			<0.04			0.013 (J)			
1/30/2023								6.8	
2/1/2023							2		7.7
8/8/2023	0.023 (J)	0.06	0.025 (J)	0.011 (J)	0.029 (J)	0.017 (J)			
8/13/2023							1.6	6.2	6.9
2/13/2024	0.02 (J)	0.051	<0.04	<0.04	0.023 (J)	0.015 (J)			
2/17/2024							1.8	5.7	7.3
2/18/2024									

Prediction Limit

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Constituent: Boron (mg/L) Analysis Run 4/18/2024 10:38 AM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-16	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	1.36				
5/24/2016		9.33			
7/11/2016					
7/12/2016	1.62	11.9			
8/30/2016					
9/1/2016	1.31	8.8			
10/19/2016					
10/20/2016					
10/24/2016					
10/25/2016	1.27	8.5			
12/6/2016					
12/7/2016	1.42				
12/8/2016		7.15			
1/24/2017					
1/26/2017	1.19	9.17			
3/21/2017					
3/22/2017	1.32				
3/23/2017		10.6			
5/22/2017					
5/23/2017					
5/24/2017	1.67				
5/25/2017		13.2			
10/3/2017					
10/4/2017	1.43	10			
6/4/2018					
6/5/2018		8.4			
6/6/2018	1.9				
10/1/2018					
10/2/2018					
10/3/2018	1.7	9.3			
4/1/2019					
4/2/2019					
4/4/2019	2.1				
4/5/2019		6.4			
9/23/2019					
9/24/2019					
9/25/2019	2.7	11.7			
3/25/2020					
3/26/2020					
3/30/2020	2.4				
3/31/2020		9.4			
9/15/2020		9.4			
9/16/2020			0.061 (J)	0.23	
9/17/2020	2.4				0.098 (J)
9/18/2020					
11/10/2020			0.057 (J)	0.29	
11/11/2020					0.058 (J)
12/15/2020			0.052 (J)	0.31	0.043 (J)
1/19/2021			0.049 (J)	0.4	
1/20/2021					0.045 (J)

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/18/2024 10:38 AM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-16	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
3/10/2021				0.39	0.048
3/11/2021			0.06		
3/16/2021					
3/17/2021	2.7				
3/18/2021		8.9			
8/11/2021			0.042		
8/12/2021					0.044
8/13/2021				0.31	
8/18/2021					
8/19/2021	2.5	8.6			
2/1/2022			0.05	0.44	
2/7/2022					0.047
2/8/2022	2.6	8.1			
2/9/2022					
8/2/2022			0.043	0.31	
8/9/2022					0.055
8/10/2022	2.2	8.4			
8/11/2022					
1/23/2023					0.052
1/24/2023			0.037 (J)	0.44	
1/27/2023					
1/30/2023					
2/1/2023	2.8	5.9			
8/8/2023			0.038 (J)	0.55	0.048
8/13/2023	2.2	7.7			
2/13/2024			0.037 (J)	0.49	0.045
2/17/2024					
2/18/2024	2.3	7			

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/18/2024 10:38 AM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-16	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	146				
5/24/2016		403			
7/11/2016					
7/12/2016	142	328			
8/30/2016					
9/1/2016	141	379			
10/19/2016					
10/20/2016					
10/24/2016					
10/25/2016	138	362			
12/6/2016					
12/7/2016	146				
12/8/2016		366			
1/24/2017					
1/26/2017	139	394			
3/21/2017					
3/22/2017	150				
3/23/2017		440			
5/22/2017					
5/23/2017					
5/24/2017	153				
5/25/2017		492			
10/3/2017					
10/4/2017	156	470			
6/4/2018					
6/5/2018		425			
6/6/2018	177				
10/1/2018					
10/2/2018					
10/3/2018	160	421			
4/1/2019					
4/2/2019					
4/4/2019	196				
4/5/2019		400			
9/23/2019					
9/24/2019					
9/25/2019	185	437			
3/25/2020					
3/26/2020					
3/30/2020	208				
3/31/2020		418			
9/15/2020		430			
9/16/2020			56	30	
9/17/2020	190				43.8
9/18/2020					
11/10/2020			63.3	33.6	
11/11/2020					44.4
12/15/2020			62.6	28.7	47.3
1/19/2021			60.1	33	
1/20/2021					41.8

Prediction Limit

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Constituent: Calcium (mg/L) Analysis Run 4/18/2024 10:38 AM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-16	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
3/10/2021				18.3	43.4
3/11/2021			59.6		
3/16/2021					
3/17/2021	198				
3/18/2021		407			
8/11/2021			61		
8/12/2021					43.6
8/13/2021				28.9	
8/18/2021					
8/19/2021	207	416			
2/1/2022			55.9	24.8	
2/7/2022					48.7
2/8/2022	218	418			
2/9/2022					
8/2/2022			54.1	20.9	
8/9/2022					44.1
8/10/2022	207	433			
8/11/2022					
1/23/2023					43.7
1/24/2023			56.6	13.2	
1/27/2023					
1/30/2023					
2/1/2023	216	288			
8/8/2023			52.8	8.1	40.7
8/13/2023	187	355			
2/13/2024			53.3	9.9	47.7
2/17/2024					
2/18/2024	199	347			

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Plant Hammond Client: Southern Company Data: Hammond AP-2

Prediction Limit

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Constituent: Chloride (mg/L) Analysis Run 4/18/2024 10:38 AM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-16	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	25.8				
5/24/2016		280			
7/11/2016					
7/12/2016	34	300			
8/30/2016					
9/1/2016	34	270			
10/19/2016					
10/20/2016					
10/24/2016					
10/25/2016	35	290			
12/6/2016					
12/7/2016	38				
12/8/2016		300			
1/24/2017					
1/26/2017	41	340			
3/21/2017					
3/22/2017	41				
3/23/2017		350			
5/22/2017					
5/23/2017					
5/24/2017	44				
5/25/2017		290			
10/3/2017					
10/4/2017	50	260			
6/4/2018					
6/5/2018		261			
6/6/2018	50.6				
10/1/2018					
10/2/2018					
10/3/2018	49.9	302			
4/1/2019					
4/2/2019					
4/4/2019	76.8				
4/5/2019		217			
9/23/2019					
9/24/2019					
9/25/2019	84.4	181			
3/25/2020					
3/26/2020					
3/30/2020	80.2				
3/31/2020		126			
9/15/2020		150			
9/16/2020			4.1	7.2	
9/17/2020	99.3				5.8
9/18/2020					
11/10/2020			4.4	7.8	
11/11/2020					3.1
12/15/2020			4.7	9.4	3.2
1/19/2021			4.1	9.5	
1/20/2021					2.8

Prediction Limit

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Constituent: Chloride (mg/L) Analysis Run 4/18/2024 10:38 AM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-16	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
3/10/2021				12.3	3
3/11/2021			4.5		
3/16/2021					
3/17/2021	93.8				
3/18/2021		90.2			
8/11/2021			3.5		
8/12/2021					2.6
8/13/2021				39.9	
8/18/2021					
8/19/2021	90.1	95.8			
2/1/2022			4.1	44.8	
2/7/2022					3.1
2/8/2022	96.4	105			
2/9/2022					
8/2/2022			4.3	19.8	
8/9/2022					3.7
8/10/2022	98.3	95.2			
8/11/2022					
1/23/2023					3.3
1/24/2023			4.3	24.9	
1/27/2023					
1/30/2023					
2/1/2023	112	92.7			
8/8/2023			3.5	27	3.2
8/13/2023	89.1	104			
2/13/2024			3.9	27.7	4.1
2/17/2024					
2/18/2024	87.5	99			

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Plant Hammond Client: Southern Company Data: Hammond AP-2

Prediction Limit

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Constituent: Field pH (s.u.) Analysis Run 4/18/2024 10:38 AM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-16	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	7.15				
5/24/2016		4.83			
7/11/2016					
7/12/2016	7.1	4.58			
8/30/2016					
9/1/2016	7.29	4.51			
10/19/2016					
10/20/2016					
10/24/2016					
10/25/2016	7.03	4.53			
12/6/2016					
12/7/2016	6.85				
12/8/2016		4.56			
1/24/2017					
1/26/2017	7.07	4.61			
3/21/2017					
3/22/2017	7.15				
3/23/2017		4.63			
5/22/2017					
5/23/2017					
5/24/2017	7.11				
5/25/2017		4.69			
10/3/2017					
10/4/2017	7.17	4.58			
4/2/2018					
4/3/2018	7.07	4.54			
4/4/2018					
6/4/2018					
6/5/2018		4.57			
6/6/2018	7				
10/1/2018					
10/2/2018					
10/3/2018	6.94	4.41			
3/11/2019					
3/12/2019					
3/14/2019		4.39			
3/15/2019	7.09				
4/1/2019					
4/2/2019					
4/4/2019	6.95				
4/5/2019		4.5			
9/23/2019					
9/24/2019					
9/25/2019	6.92	4.54			
3/2/2020					
3/3/2020	7.1	4.55			
3/25/2020					
3/26/2020					
3/30/2020	7.09				
3/31/2020		4.43			

Prediction Limit

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Constituent: Field pH (s.u.) Analysis Run 4/18/2024 10:38 AM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-16	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
9/15/2020		4.47			
9/16/2020			7.52	7.83	
9/17/2020	7.11				7.62
9/18/2020					
11/10/2020			7.27	7.84	
11/11/2020					7.68
12/15/2020			7.39	7.87	7.64
1/19/2021			7.39	7.86	
1/20/2021					7.68
2/8/2021					7.64
2/9/2021			7.44	7.84	
2/10/2021	7.08				
2/11/2021		4.53			
2/12/2021					
3/10/2021				7.92	7.7
3/11/2021			7.46		
3/16/2021					
3/17/2021	7.19				
3/18/2021		4.54			
8/11/2021			7.4		
8/12/2021					7.7
8/13/2021				7.77	
8/18/2021					
8/19/2021	7.04	4.43			
2/1/2022			7.52	8.25	
2/7/2022					7.85
2/8/2022	7.18	4.59			
2/9/2022					
8/2/2022			7.15	7.9	
8/9/2022					7.58
8/10/2022	7.09	4.41			
8/11/2022					
1/23/2023					7.55
1/24/2023			7.56	8.22	
1/27/2023					
1/30/2023					
2/1/2023	7.15	4.66			
8/8/2023			7.39	8.2	7.72
8/13/2023	7.13	4.75			
2/13/2024			7.47	8.1	7.68
2/17/2024					
2/18/2024	7.12	4.73			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/18/2024 10:38 AM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-5 (bg)	HGWA-4 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-6 (bg)	HGWC-15	HGWC-14	HGWC-17
5/19/2016	0.105 (J)	0.08 (J)	0.036 (J)	0.0513 (J)	0.0303 (J)				
5/20/2016						0.065 (J)			
5/23/2016							<0.1	<0.1	<0.1
5/24/2016									
7/11/2016	0.16 (J)	0.09 (J)	0.09 (J)		0.05 (J)	0.13 (J)			
7/12/2016				0.12 (J)			0.09 (J)	0.2 (J)	0.09 (J)
8/30/2016	0.09 (J)	0.08 (J)	0.06 (J)	0.09 (J)	0.06 (J)	0.07 (J)			
9/1/2016							0.22 (J)	0.08 (J)	0.03 (J)
10/19/2016	0.1 (J)		0.07 (J)	0.1 (J)	0.04 (J)				
10/20/2016		0.1 (J)				0.06 (J)			
10/24/2016							0.07 (J)	0.04 (J)	
10/25/2016									0.07 (J)
12/6/2016	0.11 (J)		0.07 (J)	0.21 (J)	0.36				
12/7/2016							0.23 (J)	0.11 (J)	0.54
12/8/2016		0.08 (J)				0.06 (J)			
1/24/2017	0.09 (J)	0.09 (J)	<0.1	0.06 (J)	<0.1	0.02 (J)			
1/26/2017							<0.1	0.13 (J)	<0.1
3/21/2017	0.13 (J)	0.04 (J)	<0.1	0.005 (J)	<0.1	0.08 (J)			
3/22/2017									0.07 (J)
3/23/2017							0.12 (J)	0.28 (J)	
5/22/2017	0.12 (J)			0.05 (J)	<0.1				
5/23/2017		0.04 (J)	0.01 (J)			0.006 (J)			
5/24/2017							0.31	0.32	
5/25/2017									0.42
10/3/2017	0.13 (J)	0.06 (J)	<0.1	0.13 (J)	<0.1	<0.1			
10/4/2017							0.6	0.52	0.93
4/2/2018	<0.1		<0.1		<0.1				
4/3/2018		<0.1		<0.1		<0.1	<0.1		<0.1
4/4/2018								<0.1	
6/4/2018	0.074 (J)		0.097 (J)	<0.1	<0.1				
6/5/2018		0.083 (J)				0.055 (J)			
6/6/2018							0.17 (J)	0.25 (J)	0.23 (J)
10/1/2018	<0.1		<0.1	<0.1	<0.1				
10/2/2018		<0.1				0.076 (J)			
10/3/2018							<0.1	0.21 (J)	<0.1
3/11/2019			0.035 (J)						
3/12/2019	0.29 (J)	0.079 (J)		0.072 (J)	0.038 (J)	0.061 (J)			
3/14/2019							<0.1	0.24 (J)	
3/15/2019									<0.1
4/1/2019				0.029 (J)					
4/2/2019	0.1 (J)	0.12 (J)	<0.1		0.071 (J)	<0.1			
4/4/2019							0.066 (J)		
4/5/2019								0.66	0.16 (J)
9/23/2019	0.078 (J)			<0.1	<0.1				
9/24/2019		0.058 (J)	<0.1			<0.1	0.12 (J)	0.053 (J)	
9/25/2019									0.081 (J)
3/2/2020	0.076 (J)	0.053 (J)	<0.1	<0.1	<0.1	<0.1			
3/3/2020							0.064 (J)	<0.1	<0.1
3/25/2020	0.098 (J)			<0.1	<0.1	<0.1			
3/26/2020		0.066 (J)	<0.1				<0.1		
3/30/2020								0.092 (J)	
3/31/2020									<0.1

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

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Constituent: Fluoride (mg/L) Analysis Run 4/18/2024 10:38 AM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-5 (bg)	HGWA-4 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-6 (bg)	HGWC-15	HGWC-14	HGWC-17
9/15/2020	0.082 (J)	0.061 (J)	<0.1	<0.1	<0.1	<0.1			
9/16/2020									0.058 (J)
9/17/2020							<0.1		
9/18/2020								<0.1	
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
1/20/2021									
2/8/2021	0.078 (J)		<0.1						
2/9/2021		0.053 (J)		0.074 (J)	<0.1	<0.1			
2/10/2021									
2/11/2021								0.059 (J)	0.058 (J)
2/12/2021							0.053 (J)		
3/10/2021	0.079 (J)		<0.1						
3/11/2021		0.06 (J)		<0.1	0.1	0.17			
3/16/2021							<0.1		
3/17/2021								0.076 (J)	
3/18/2021									0.057 (J)
8/11/2021	0.058 (J)								
8/12/2021		<0.1	<0.1	<0.1	<0.1	<0.1			
8/13/2021									
8/18/2021								<0.1	0.062 (J)
8/19/2021							<0.1		
2/1/2022	0.064 (J)			<0.1	<0.1				
2/7/2022		<0.1	<0.1			<0.1			
2/8/2022							<0.1		0.055 (J)
2/9/2022								0.053 (J)	
8/2/2022	0.09 (J)		0.076 (J)	0.067 (J)	0.053 (J)				
8/9/2022									
8/10/2022		0.078 (J)				0.067 (J)			0.086 (J)
8/11/2022							0.097 (J)	0.085 (J)	
1/23/2023			0.12	0.061 (J)					
1/24/2023	0.089 (J)				0.053 (J)				
1/27/2023		0.088 (J)				0.067 (J)			
1/30/2023									0.097 (J)
2/1/2023							0.086 (J)	0.094 (J)	
8/8/2023	0.088 (J)	0.059 (J)	0.11	0.055 (J)	0.07 (J)	0.072 (J)			
8/13/2023							0.12	0.1	0.081 (J)
2/13/2024	0.071 (J)	0.059 (J)	0.13	<0.1	0.17	0.065 (J)			
2/17/2024							0.064 (J)	0.065 (J)	0.057 (J)
2/18/2024									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/18/2024 10:38 AM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-16	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	0.038 (J)				
5/24/2016		<0.1			
7/11/2016					
7/12/2016	0.26 (J)	0.54			
8/30/2016					
9/1/2016	0.42	0.49			
10/19/2016					
10/20/2016					
10/24/2016					
10/25/2016	0.25 (J)	0.58			
12/6/2016					
12/7/2016	0.23 (J)				
12/8/2016		0.63			
1/24/2017					
1/26/2017	0.02 (J)	0.71			
3/21/2017					
3/22/2017	0.3				
3/23/2017		0.57			
5/22/2017					
5/23/2017					
5/24/2017	0.46				
5/25/2017		0.54			
10/3/2017					
10/4/2017	<0.1	0.95			
4/2/2018					
4/3/2018	<0.1	0.33			
4/4/2018					
6/4/2018					
6/5/2018		0.66			
6/6/2018	<0.1				
10/1/2018					
10/2/2018					
10/3/2018	<0.1	0.32			
3/11/2019					
3/12/2019					
3/14/2019		0.88			
3/15/2019	<0.1				
4/1/2019					
4/2/2019					
4/4/2019	<0.1				
4/5/2019		0.37			
9/23/2019					
9/24/2019					
9/25/2019	<0.1	0.73			
3/2/2020					
3/3/2020	<0.1	0.34			
3/25/2020					
3/26/2020					
3/30/2020	0.059 (J)				
3/31/2020		0.45			

Prediction Limit

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Constituent: Fluoride (mg/L) Analysis Run 4/18/2024 10:38 AM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-16	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
9/15/2020		0.31			
9/16/2020			0.22	0.52	
9/17/2020	<0.1				0.2
9/18/2020					
11/10/2020			0.19	0.59	
11/11/2020					0.1
12/15/2020			0.21	0.67	0.11
1/19/2021			0.16	0.74	
1/20/2021					0.082 (J)
2/8/2021					0.096 (J)
2/9/2021			0.19	0.44	
2/10/2021	0.21				
2/11/2021		0.71			
2/12/2021					
3/10/2021				0.65	0.11
3/11/2021			0.2		
3/16/2021					
3/17/2021	<0.1				
3/18/2021		0.64			
8/11/2021			0.15		
8/12/2021					0.079 (J)
8/13/2021				0.87	
8/18/2021					
8/19/2021	<0.1	0.31			
2/1/2022			0.19	0.96	
2/7/2022					0.085 (J)
2/8/2022	<0.1	0.19			
2/9/2022					
8/2/2022			0.22	0.8	
8/9/2022					0.12
8/10/2022	0.054 (J)	0.3			
8/11/2022					
1/23/2023					0.11
1/24/2023			0.23	1.3	
1/27/2023					
1/30/2023					
2/1/2023	0.053 (J)	0.21			
8/8/2023			0.18	1.3	0.1
8/13/2023	0.053 (J)	0.25			
2/13/2024			0.2	1.5	0.087 (J)
2/17/2024					
2/18/2024	<0.1	0.17			

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/18/2024 10:38 AM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-5 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-6 (bg)	HGWC-15	HGWC-17	HGWC-14
5/19/2016	66.9	48.6	25	42.3	1.22				
5/20/2016						34.4			
5/23/2016							424	395	1070
5/24/2016									
7/11/2016	41	45	27		3.7	34			
7/12/2016				44			440	460	1300
8/30/2016	36	42	23	40	6.8	36			
9/1/2016							440	430	1300
10/19/2016	46	44		43	11				
10/20/2016			19			36			
10/24/2016							420		280
10/25/2016								440	
12/6/2016	59	44		43	13				
12/7/2016							450	410	1300
12/8/2016			20			36			
1/24/2017	46	46	20	48	5.7	37			
1/26/2017							490	440	1400
3/21/2017	63	46	23	45	1.7	37			
3/22/2017								460	
3/23/2017							530		1500
5/22/2017	77	48		46					
5/23/2017			21		1.5	38			
5/24/2017							500		1400
5/25/2017								430	
10/3/2017	42	47	21	48	1.3	38			
10/4/2017							560	490	1400
6/4/2018	71.8	47.8		46.6	4.9				
6/5/2018			22.9			38			
6/6/2018							469	520	1520
10/1/2018	49.1	48.1		48.6	0.59 (J)				
10/2/2018			20.3			38.5			
10/3/2018							600	651	1550
4/1/2019				50.4					
4/2/2019	84.3	48.7	23.8		4.9	35.5			
4/4/2019							528		
4/5/2019								642	1520
9/23/2019	70.2	47.2		43.9					
9/24/2019			20.7		<1	35.4	382		1110
9/25/2019								434	
3/25/2020	85.9	46.3		50.5		35.1			
3/26/2020			21.6		<1		438		
3/30/2020									1150
3/31/2020								484	
9/15/2020	47.3	51.5	21.2	44.7	<1	35.3			
9/16/2020								467	
9/17/2020							416		
9/18/2020									1260
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
1/20/2021									

ND substitution: RL or RL/2 if <15% NDs.

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Constituent: Sulfate (mg/L) Analysis Run 4/18/2024 10:38 AM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-2

[illegible]

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/18/2024 10:38 AM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-16	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	203				
5/24/2016		834			
7/11/2016					
7/12/2016	220	930			
8/30/2016					
9/1/2016	220	890			
10/19/2016					
10/20/2016					
10/24/2016					
10/25/2016	230	950			
12/6/2016					
12/7/2016	220				
12/8/2016		910			
1/24/2017					
1/26/2017	250	970			
3/21/2017					
3/22/2017	240				
3/23/2017		980			
5/22/2017					
5/23/2017					
5/24/2017	230				
5/25/2017		920			
10/3/2017					
10/4/2017	220	870			
6/4/2018					
6/5/2018		962			
6/6/2018	233				
10/1/2018					
10/2/2018					
10/3/2018	215	1170			
4/1/2019					
4/2/2019					
4/4/2019	251				
4/5/2019		1030			
9/23/2019					
9/24/2019					
9/25/2019	223	920			
3/25/2020					
3/26/2020					
3/30/2020	223				
3/31/2020		934			
9/15/2020		1080			
9/16/2020			43	6.9	
9/17/2020	254				10.9
9/18/2020					
11/10/2020			39	6.3	
11/11/2020					9.4
12/15/2020			38.8	6.7	10.9
1/19/2021			37.3	7.4	
1/20/2021					9.8

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/18/2024 10:38 AM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-16	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
3/10/2021				<1	10.8
3/11/2021			38.6		
3/16/2021					
3/17/2021	250				
3/18/2021		1050			
8/11/2021			30.5		
8/12/2021					7.8
8/13/2021				56.1	
8/18/2021					
8/19/2021	228	934			
2/1/2022			37.5	56.3	
2/7/2022					10.4
2/8/2022	238	960			
2/9/2022					
8/2/2022			37	13.2	
8/9/2022					11.2
8/10/2022	206	946			
8/11/2022					
1/23/2023					11.1
1/24/2023			34.7	10.1	
1/27/2023					
1/30/2023					
2/1/2023	257	776			
8/8/2023			25.6	1.3	10.5
8/13/2023	214	895			
2/13/2024			28.9	2	17.1
2/17/2024					
2/18/2024	220	755			

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 4/18/2024 10:38 AM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-5 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-6 (bg)	HGWC-15	HGWC-17	HGWC-14
5/19/2016	421	143	168	267	165				
5/20/2016						223			
5/23/2016							1270	1010	4130
5/24/2016									
7/11/2016	363	125	158		266	225			
7/12/2016				249			1100	976	3140
8/30/2016	330	168	141	254	292	232			
9/1/2016							1180	1060	3200
10/19/2016	380	176		357	338				
10/20/2016			99			225			
10/24/2016							1090		2920
10/25/2016								<25	
12/6/2016	377	145		285	356				
12/7/2016							1040	866	2740
12/8/2016			116			235			
1/24/2017	342	129	156	300	131	272			
1/26/2017							1260	1000	3080
3/21/2017	340	103	144	288	132	222			
3/22/2017								1080	
3/23/2017							1360		3060
5/22/2017	338	92		263					
5/23/2017			134		183	231			
5/24/2017							1320		3140
5/25/2017								1080	
10/3/2017	343	127	147	300	161	243			
10/4/2017							1340	1210	3210
6/4/2018	415	140		266	240				
6/5/2018			152			235			
6/6/2018							1120	1180	2620
10/1/2018	354	135		291	106				
10/2/2018			146			228			
10/3/2018							1140	1250	2430
4/1/2019				284					
4/2/2019	452	133	144		230	238			
4/4/2019							926		
4/5/2019								1260	2310
9/23/2019	442	129		268					
9/24/2019			133		131	222	1140		2470
9/25/2019								1280	
3/25/2020	496	138		284		240			
3/26/2020			104		69		1000		
3/30/2020									2590
3/31/2020								1310	
9/15/2020	265	124	116	258	93	217			
9/16/2020								1220	
9/17/2020							956		
9/18/2020									2440
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
1/20/2021									

ND substitution: RL or RL/2 if <15% NDs.

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Plant Hammond Client: Southern Company Data: Hammond AP-2

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 4/18/2024 10:38 AM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-16	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	570				
5/24/2016		1900			
7/11/2016					
7/12/2016	585	1950			
8/30/2016					
9/1/2016	625	2000			
10/19/2016					
10/20/2016					
10/24/2016					
10/25/2016	563	1870			
12/6/2016					
12/7/2016	561				
12/8/2016		1930			
1/24/2017					
1/26/2017	608	1950			
3/21/2017					
3/22/2017	599				
3/23/2017		2080			
5/22/2017					
5/23/2017					
5/24/2017	598				
5/25/2017		1970			
10/3/2017					
10/4/2017	626	2200			
6/4/2018					
6/5/2018		1880			
6/6/2018	678				
10/1/2018					
10/2/2018					
10/3/2018	700	2180			
4/1/2019					
4/2/2019					
4/4/2019	704				
4/5/2019		1610			
9/23/2019					
9/24/2019					
9/25/2019	813	1960			
3/25/2020					
3/26/2020					
3/30/2020	787				
3/31/2020		1860			
9/15/2020		1890			
9/16/2020			272	270	
9/17/2020	804				188
9/18/2020					
11/10/2020			307	287	
11/11/2020					175
12/15/2020			289	295	193
1/19/2021			270	278	
1/20/2021					158

Prediction Limit

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Constituent: Total Dissolved Solids (mg/L) Analysis Run 4/18/2024 10:38 AM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-16	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
3/10/2021				289	163
3/11/2021			279		
3/16/2021					
3/17/2021	768				
3/18/2021		1390			
8/11/2021			277		
8/12/2021					179
8/13/2021				436	
8/18/2021					
8/19/2021	816	1750			
2/1/2022			156	444	
2/7/2022					190
2/8/2022	852	1770			
2/9/2022					
8/2/2022			278	311	
8/9/2022					182
8/10/2022	894	1890			
8/11/2022					
1/23/2023					168
1/24/2023			271	363	
1/27/2023					
1/30/2023					
2/1/2023	1030	1430			
8/8/2023			274	361	175
8/13/2023	861	1700			
2/13/2024			291	379	212
2/17/2024					
2/18/2024	755	1360			

FIGURE E.

Appendix III Prediction Limit Exceedances - Trend Tests - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 4/18/2024, 10:40 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	HGWA-2 (bg)	0.002545	157	92	Yes	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-43D (bg)	-0.007036	-40	-34	Yes	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-44D (bg)	0.06801	37	34	Yes	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-14	-1.391	-135	-92	Yes	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-16	0.1931	142	92	Yes	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-2 (bg)	1.322	101	92	Yes	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-3 (bg)	1.924	119	92	Yes	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-4 (bg)	-6.83	-106	-92	Yes	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-44D (bg)	-7.33	-39	-34	Yes	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-16	11.38	165	92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-3 (bg)	-0.1508	-124	-92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-4 (bg)	-0.4101	-184	-92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-44D (bg)	6.844	39	34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-14	-67.48	-168	-92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-15	-22.07	-161	-92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-16	11.41	187	92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-18	-31.83	-145	-92	Yes	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-2 (bg)	2.951	159	92	Yes	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-43D (bg)	-3.197	-43	-34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-15	-20.14	-100	-92	Yes	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-4 (bg)	-20.44	-104	-92	Yes	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-14	-192.6	-163	-92	Yes	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-15	-53.04	-130	-92	Yes	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-16	49.17	173	92	Yes	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-17	42.2	103	92	Yes	22	4.545	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-18	-42.27	-99	-92	Yes	22	0	n/a	n/a	0.01	NP

Appendix III Prediction Limit Exceedances - Trend Tests - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 4/18/2024, 10:40 AM

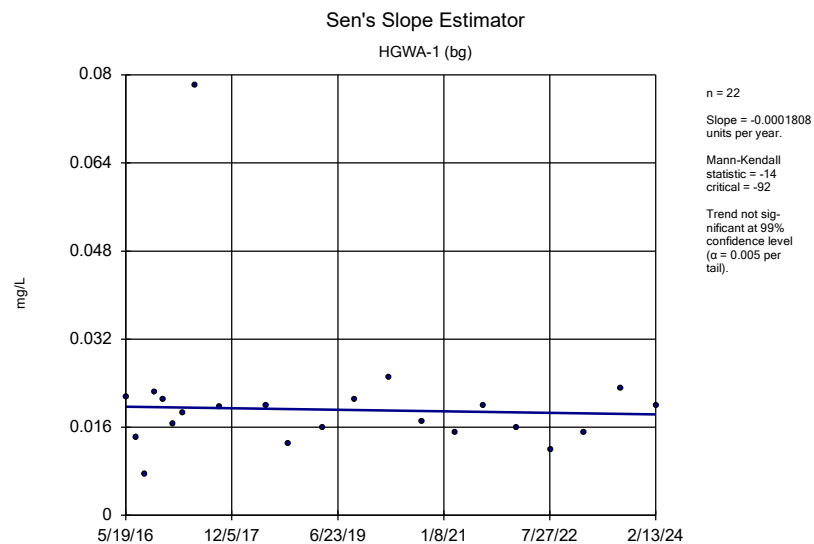
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	-0.0001808	-14	-92	No	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-2 (bg)	0.002545	157	92	Yes	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-3 (bg)	0.0004332	39	92	No	22	22.73	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-4 (bg)	0.0007863	33	92	No	22	4.545	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-42D (bg)	-0.001093	-7	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-43D (bg)	-0.007036	-40	-34	Yes	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-44D (bg)	0.06801	37	34	Yes	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-5 (bg)	0.0007363	67	92	No	22	22.73	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-6 (bg)	-0.0003862	-54	-92	No	22	4.545	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-14	-1.391	-135	-92	Yes	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-15	-0.01741	-23	-92	No	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-16	0.1931	142	92	Yes	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-17	0.0633	24	92	No	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-18	-0.329	-85	-92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	2.05	80	92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-2 (bg)	1.322	101	92	Yes	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-3 (bg)	1.924	119	92	Yes	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-4 (bg)	-6.83	-106	-92	Yes	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-42D (bg)	0.069	1	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-43D (bg)	-2.939	-33	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-44D (bg)	-7.33	-39	-34	Yes	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-5 (bg)	0.0662	4	92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-6 (bg)	0.3288	47	92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-14	-15.65	-90	-92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-15	-1.875	-33	-92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-16	11.38	165	92	Yes	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-17	9.114	52	92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-18	-1.029	-4	-92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-1 (bg)	0.6486	82	92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-2 (bg)	0.02731	14	92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-3 (bg)	-0.1508	-124	-92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-4 (bg)	-0.4101	-184	-92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-42D (bg)	0.08286	9	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-43D (bg)	-0.1067	-16	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-44D (bg)	6.844	39	34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-5 (bg)	-0.05028	-68	-92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-6 (bg)	-0.03467	-51	-92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-14	-67.48	-168	-92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-15	-22.07	-161	-92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-16	11.41	187	92	Yes	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-17	4.477	49	92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-18	-31.83	-145	-92	Yes	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-1 (bg)	0.6377	32	92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-2 (bg)	2.951	159	92	Yes	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-3 (bg)	-0.08595	-11	-92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-4 (bg)	0	5	92	No	22	13.64	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-42D (bg)	0.2824	16	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-43D (bg)	-3.197	-43	-34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-44D (bg)	0.3314	1	34	No	11	9.091	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-5 (bg)	-0.05287	-13	-92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-6 (bg)	-0.2147	-67	-92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-14	-37.37	-51	-92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-15	-20.14	-100	-92	Yes	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-16	1.071	30	92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-17	-6.088	-32	-92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-18	0.7194	3	92	No	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-1 (bg)	4.065	35	92	No	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-2 (bg)	5.374	56	92	No	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-3 (bg)	0.8552	21	92	No	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-4 (bg)	-20.44	-104	-92	Yes	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-42D (bg)	3.025	6	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-43D (bg)	-1.506	-5	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-44D (bg)	31.45	31	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-5 (bg)	0.4698	11	92	No	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-6 (bg)	-1.193	-33	-92	No	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-14	-192.6	-163	-92	Yes	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-15	-53.04	-130	-92	Yes	22	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-16	49.17	173	92	Yes	22	0	n/a	n/a	0.01	NP

Appendix III Prediction Limit Exceedances - Trend Tests - All Results

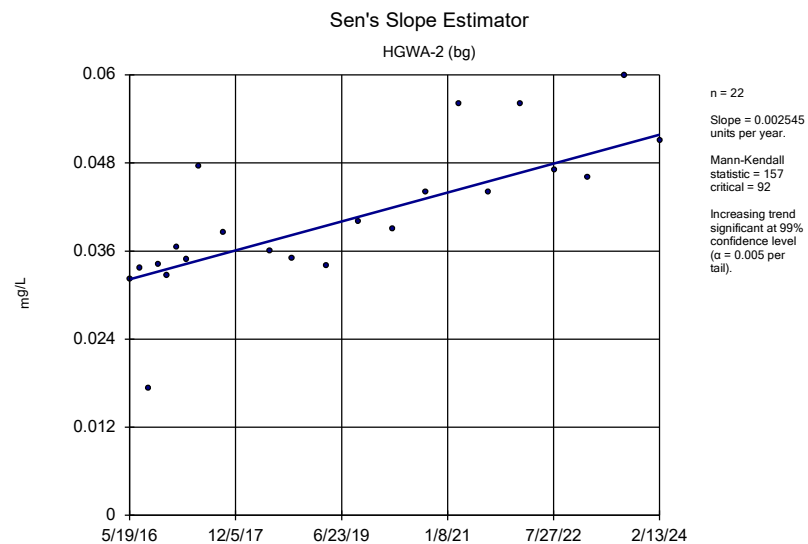
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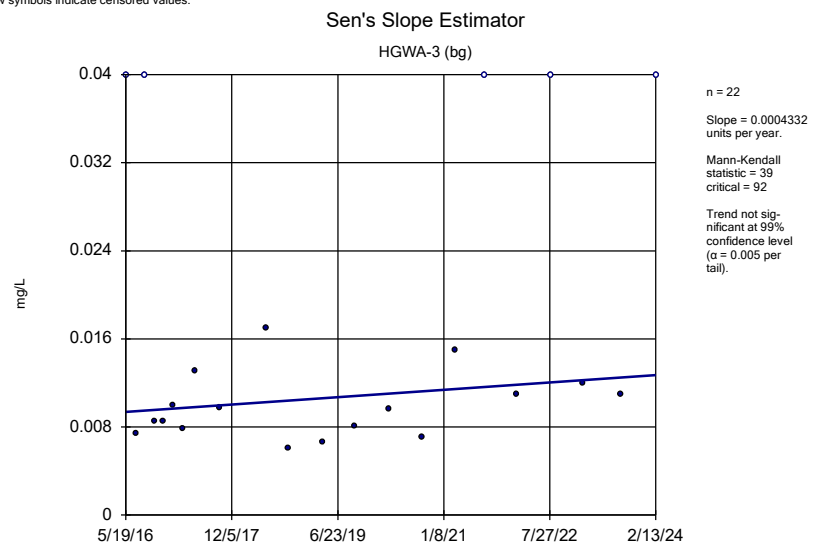
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Total Dissolved Solids (mg/L)	HGWC-17	42.2	103	92	Yes	22	4.545	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-18	-42.27	-99	-92	Yes	22	0	n/a	n/a	0.01	NP



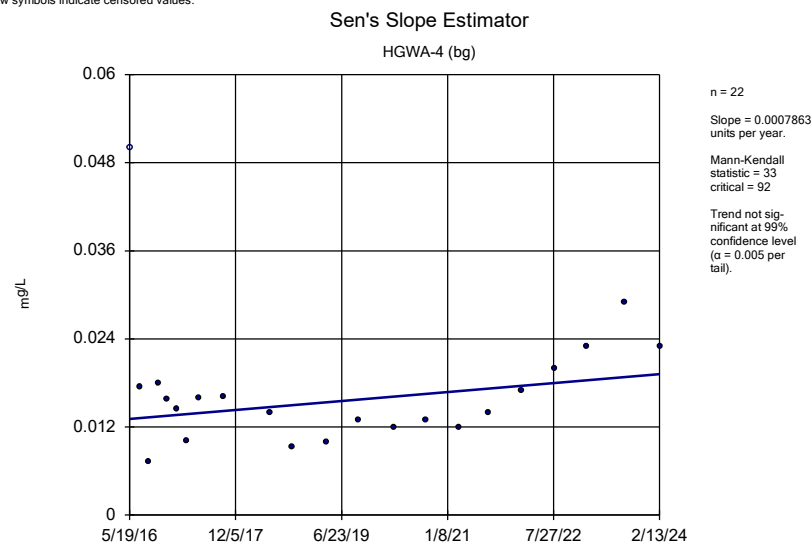
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Plant Hammond Client: Southern Company Data: Hammond AP-2



Constituent: Boron Analysis Run 4/18/2024 10:38 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-2



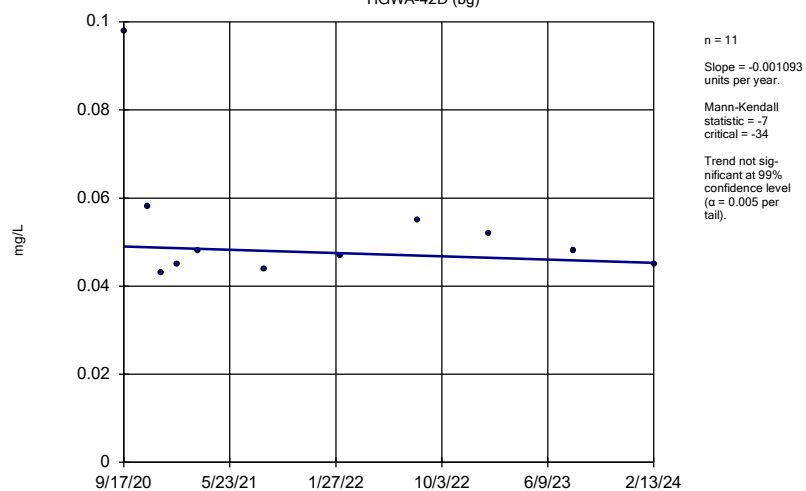
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Plant Hammond Client: Southern Company Data: Hammond AP-2



Constituent: Boron Analysis Run 4/18/2024 10:39 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-2

Sen's Slope Estimator

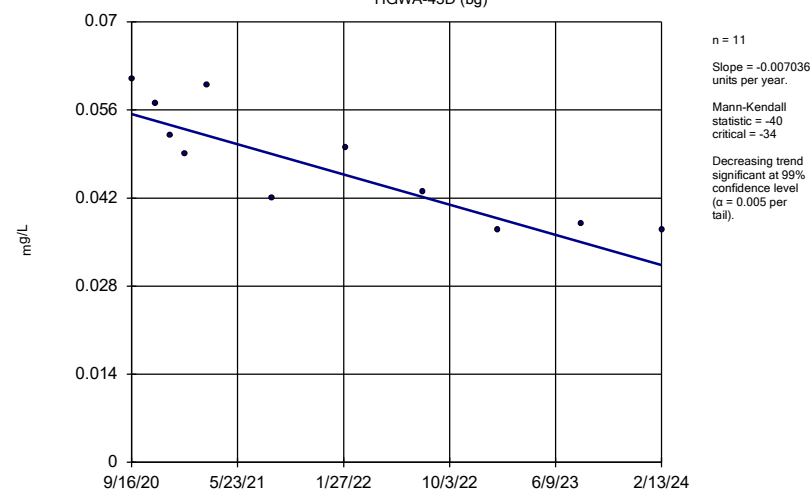
HGWA-42D (bg)



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Sen's Slope Estimator

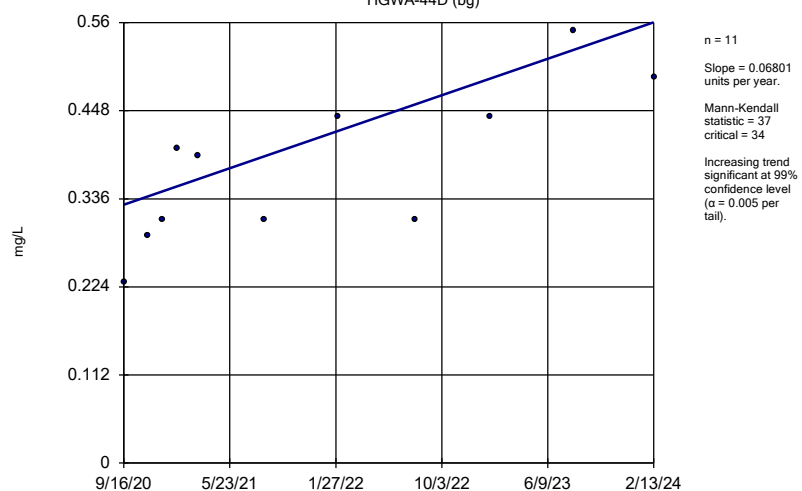
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Sen's Slope Estimator

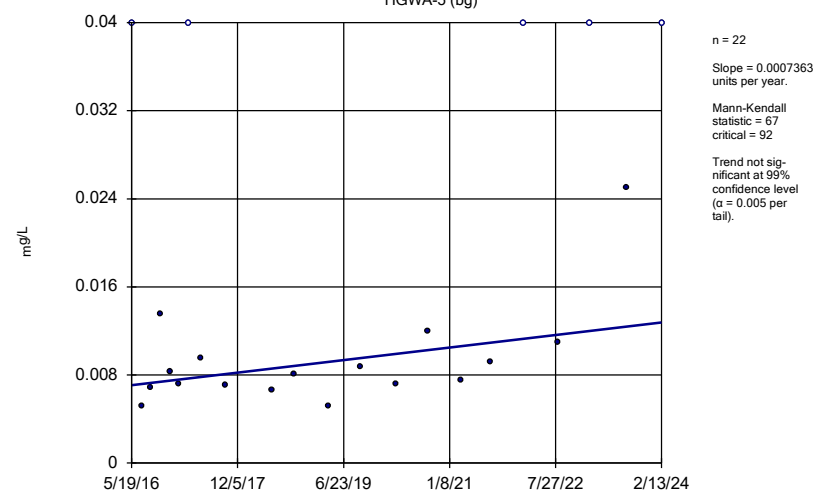
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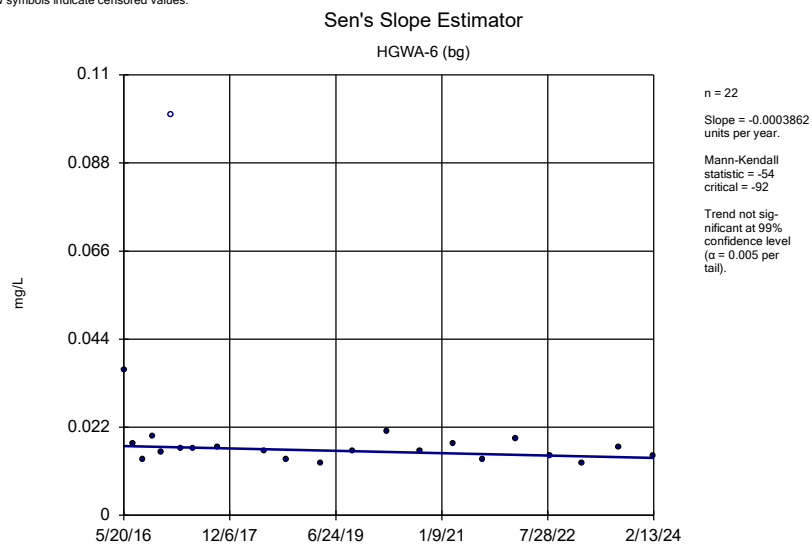


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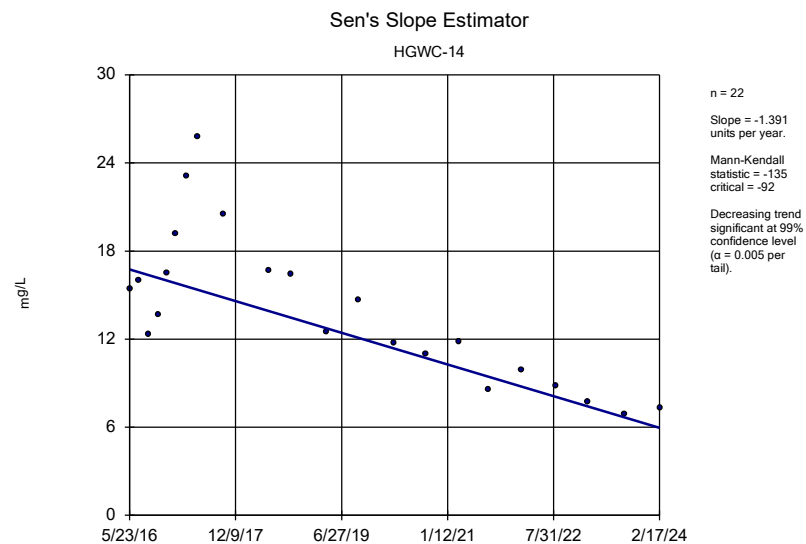
Sen's Slope Estimator

HGWA-5 (bg)

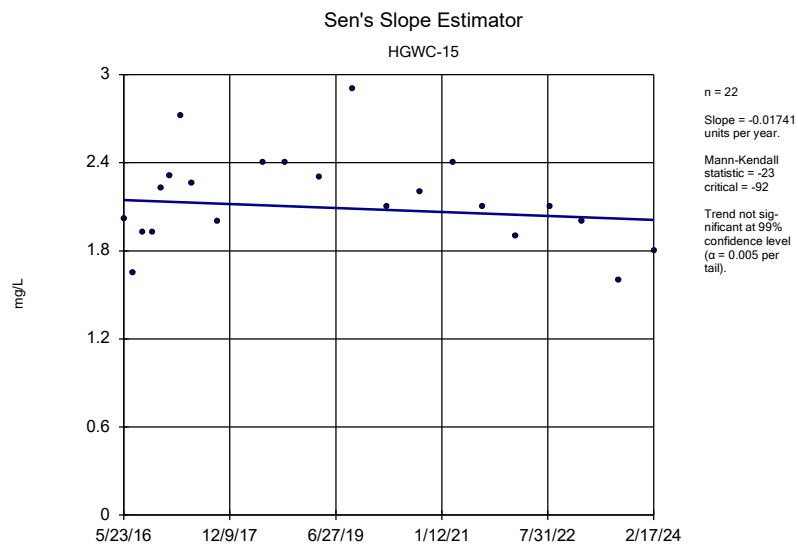




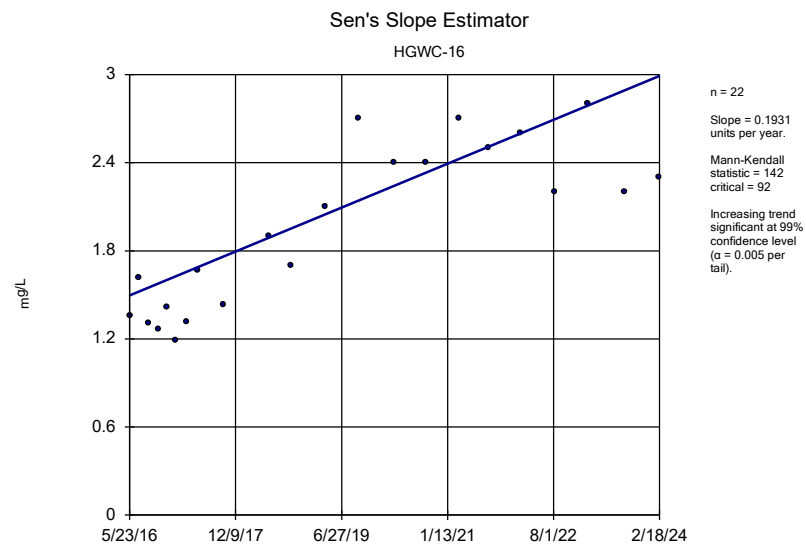
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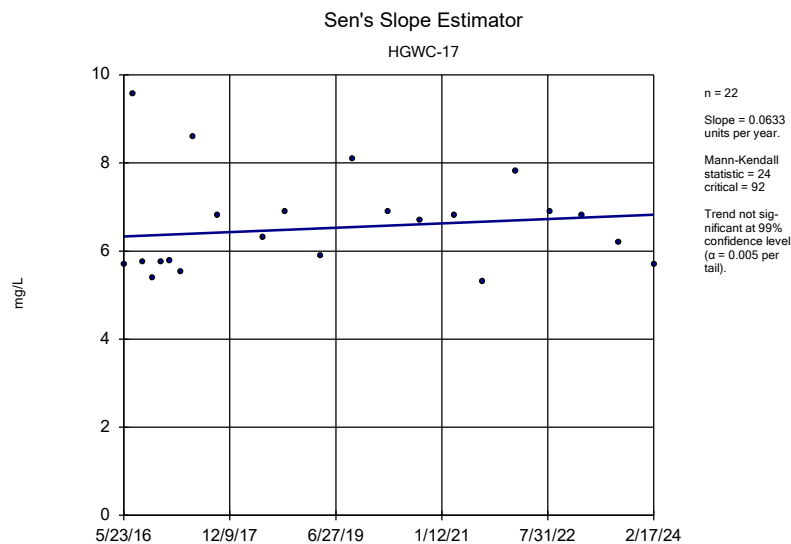
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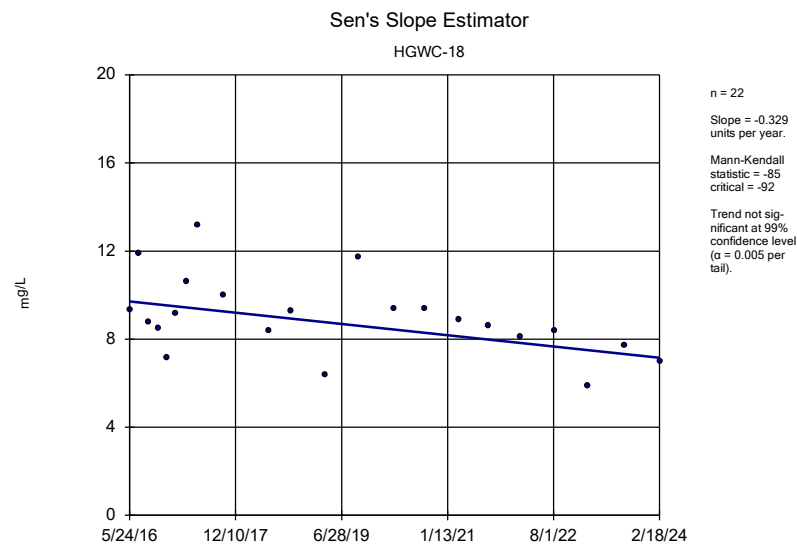
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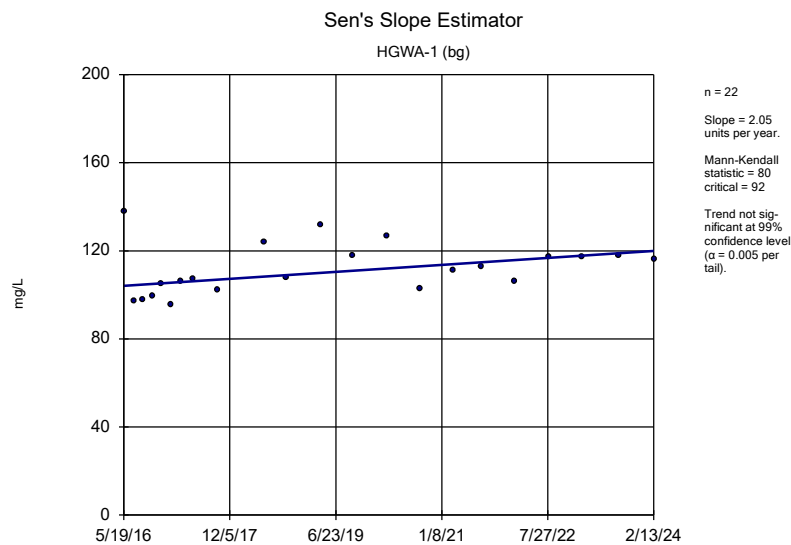
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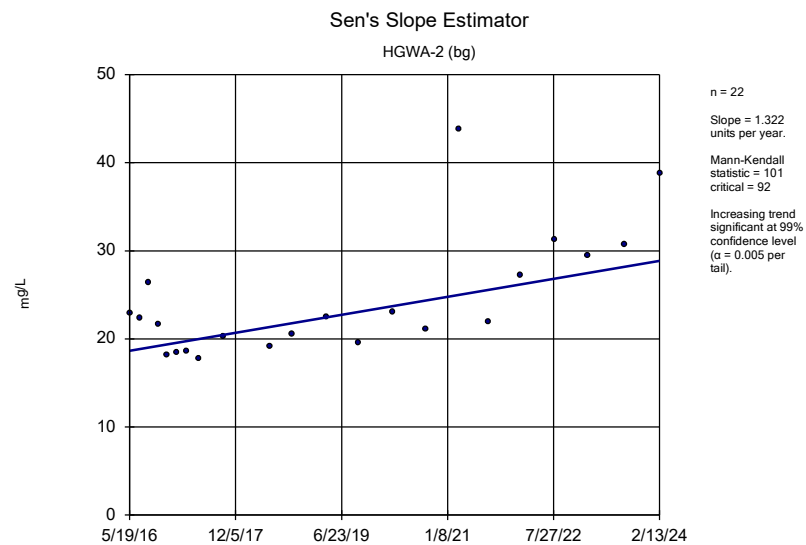
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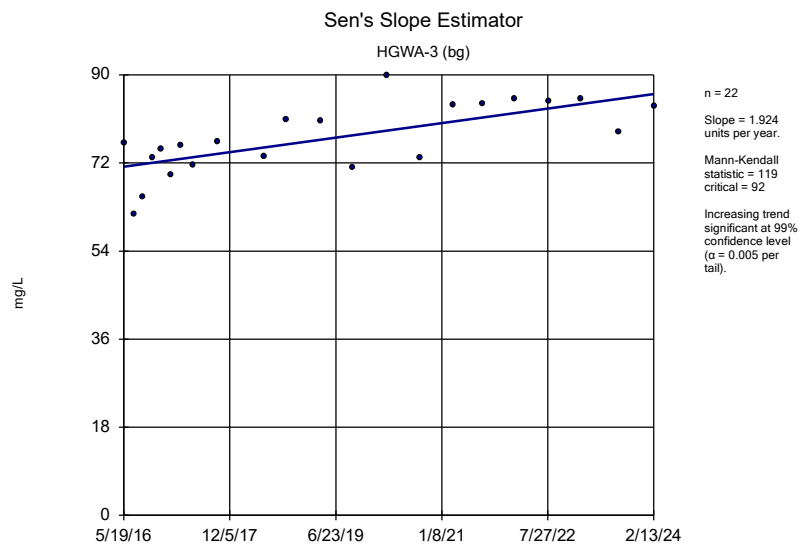
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Plant Hammond Client: Southern Company Data: Hammond AP-2



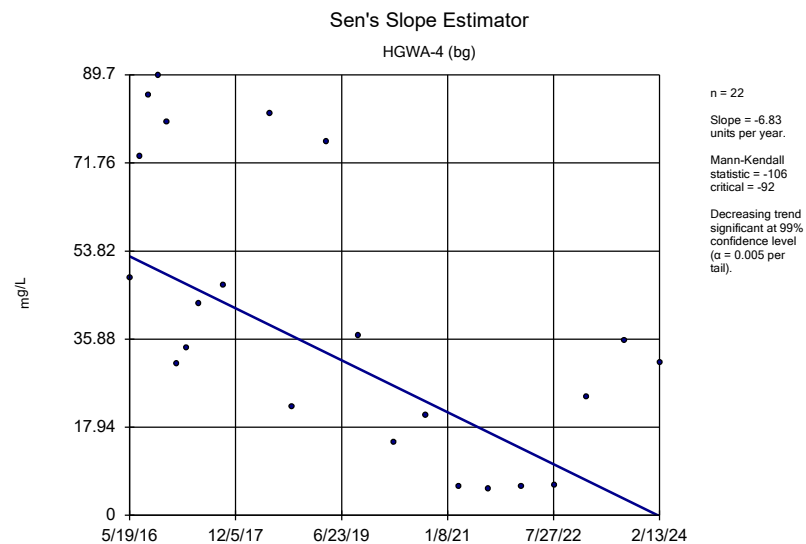
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Plant Hammond Client: Southern Company Data: Hammond AP-2



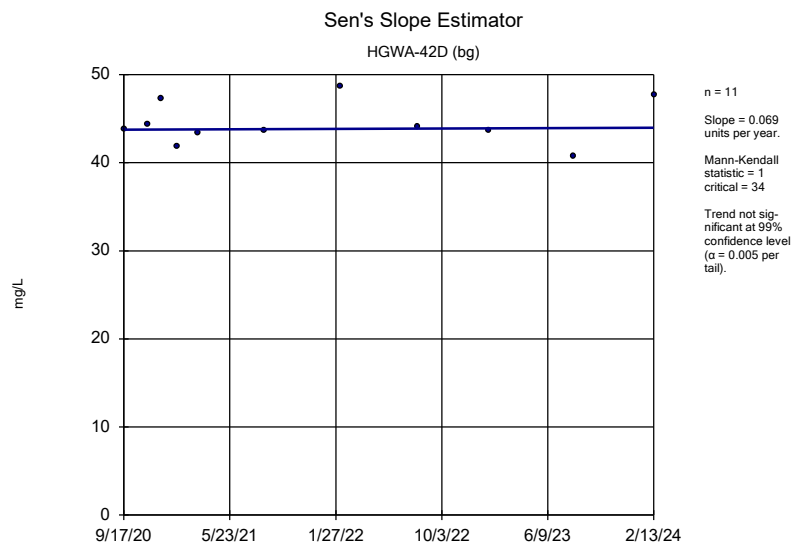
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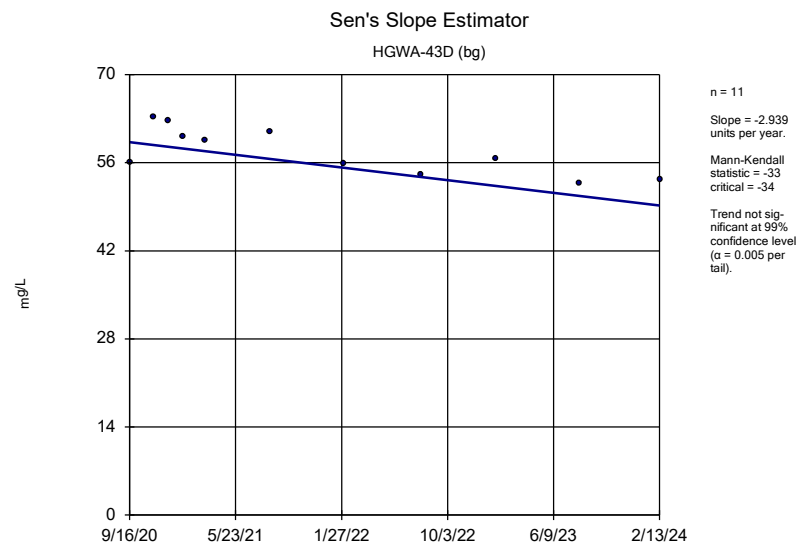
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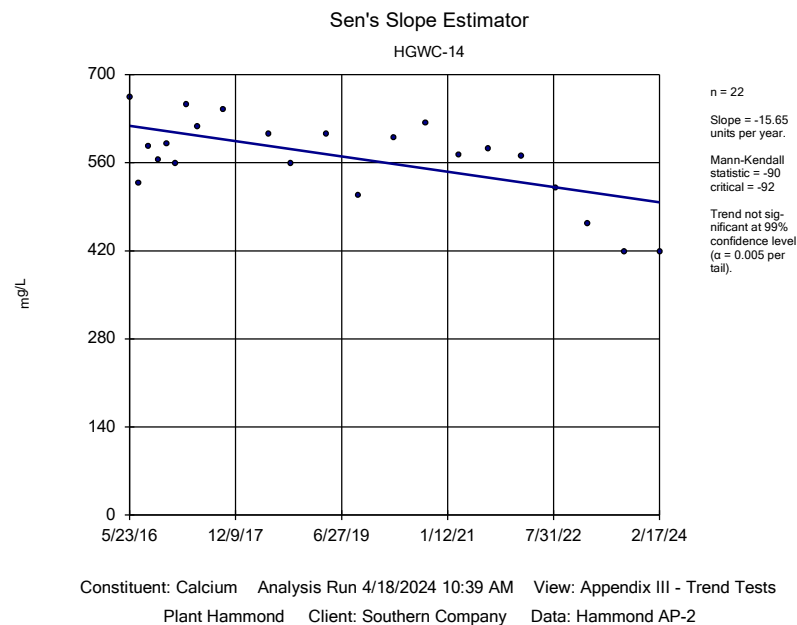
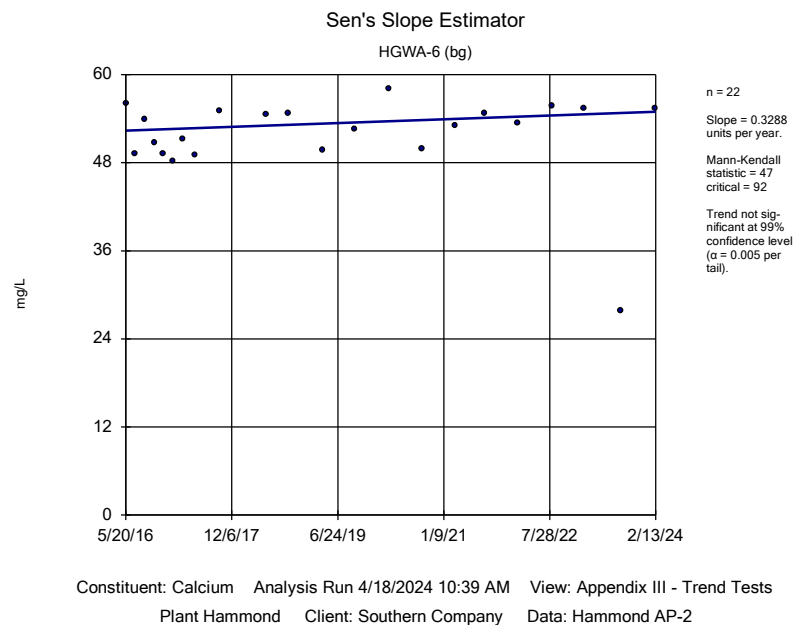
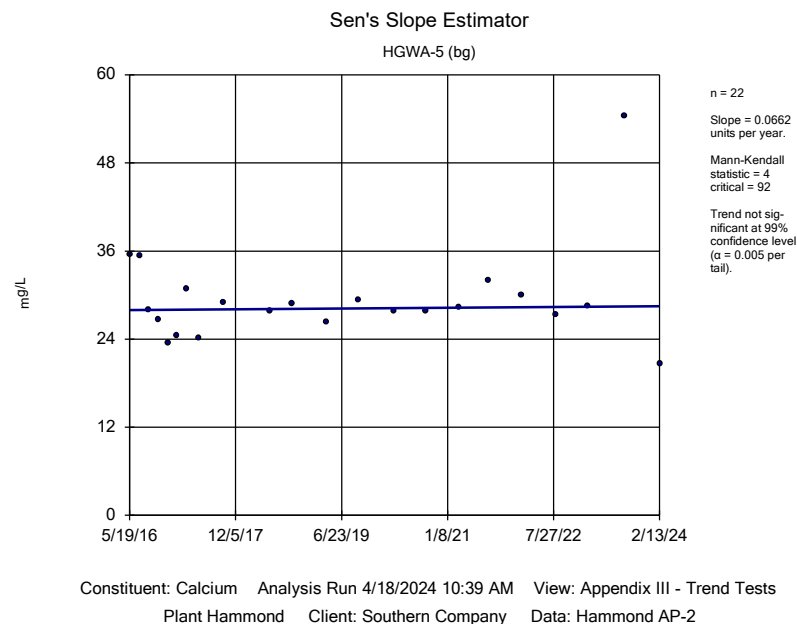
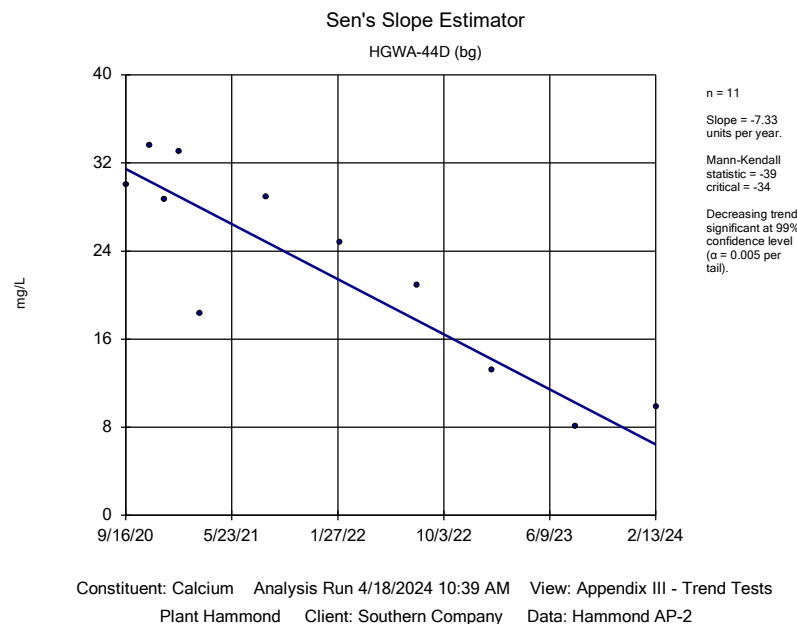
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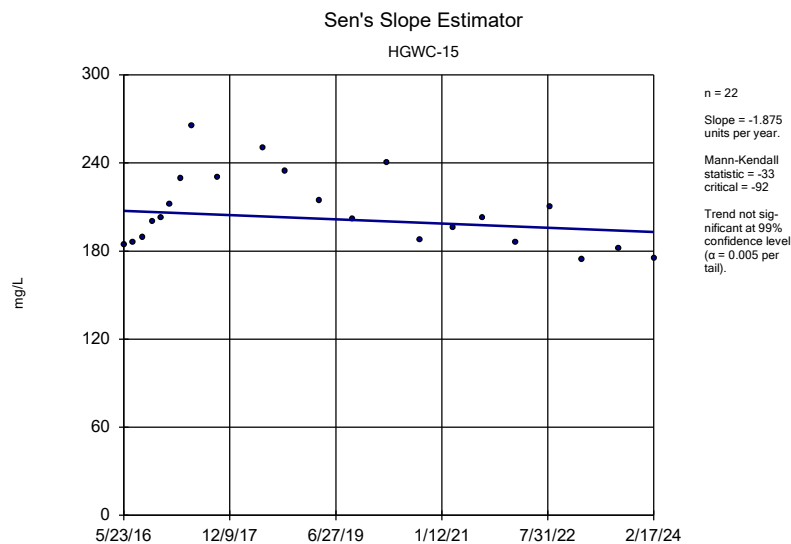


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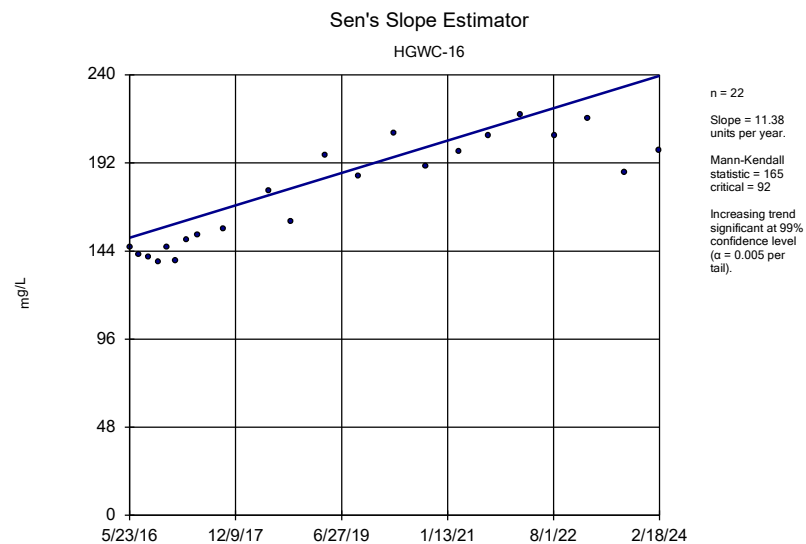


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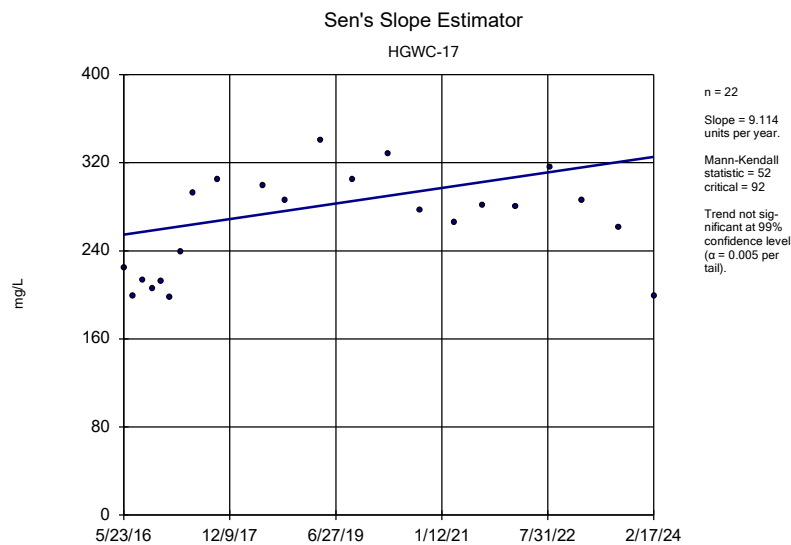




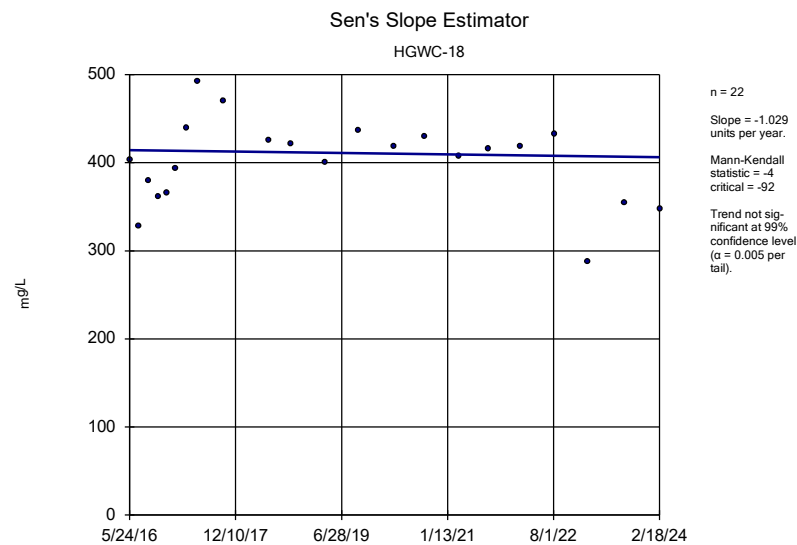
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Plant Hammond Client: Southern Company Data: Hammond AP-2



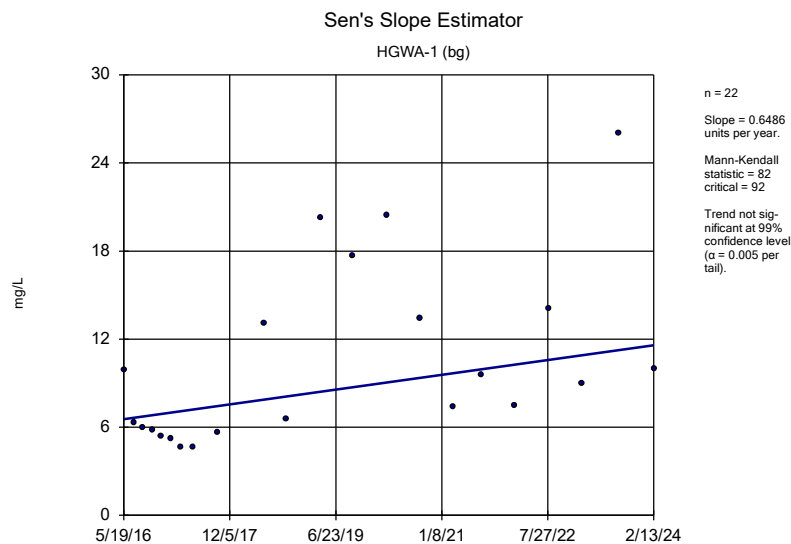
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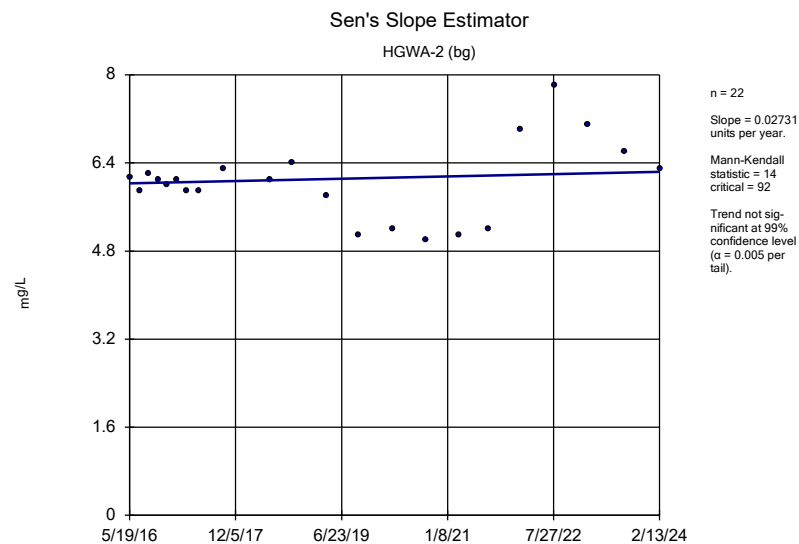
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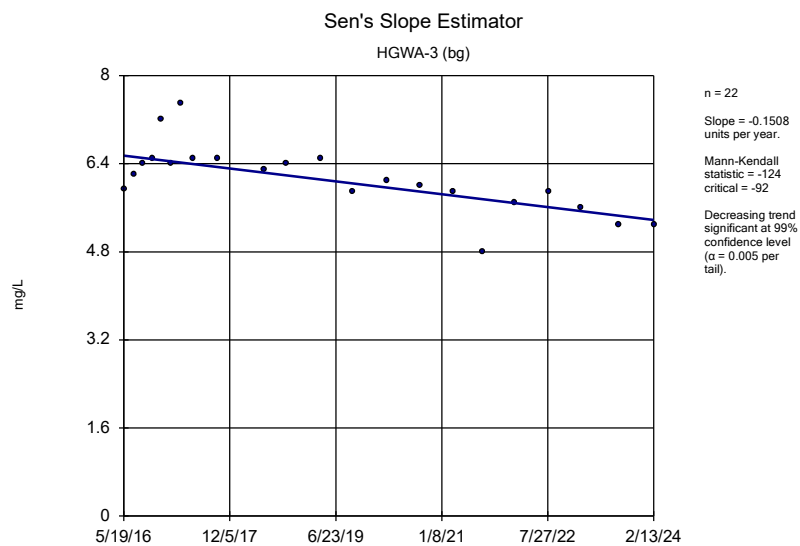
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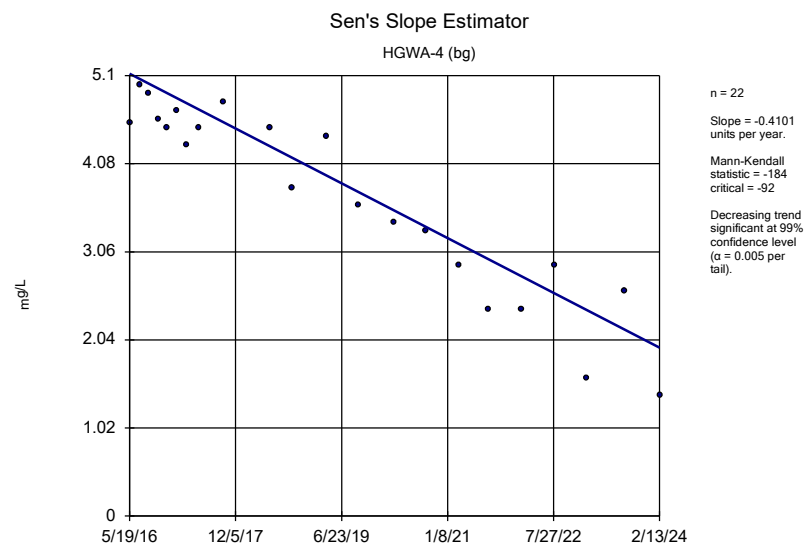
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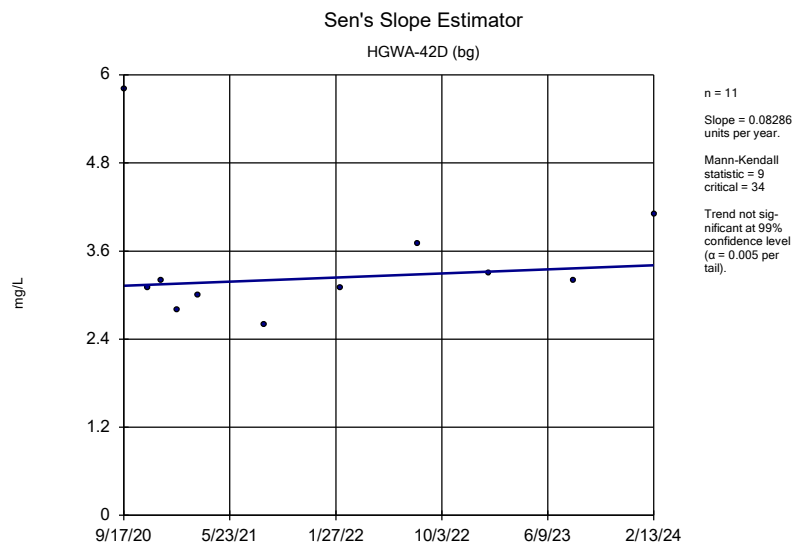
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Plant Hammond Client: Southern Company Data: Hammond AP-2



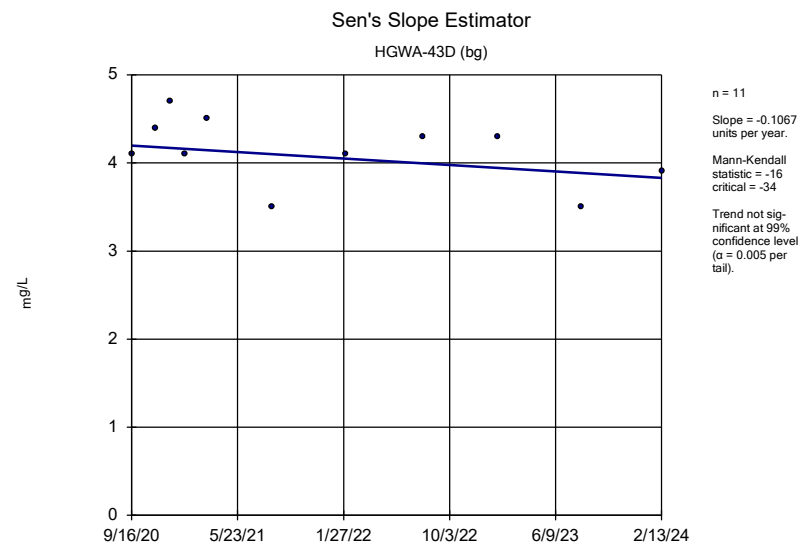
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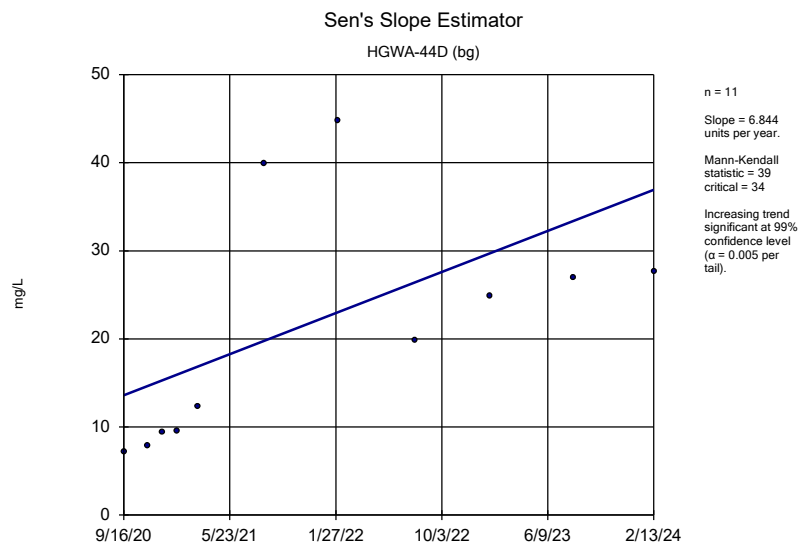
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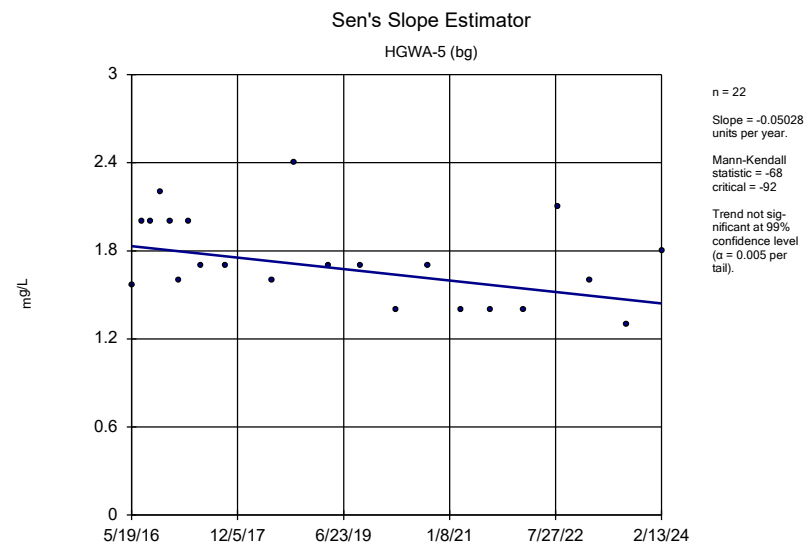
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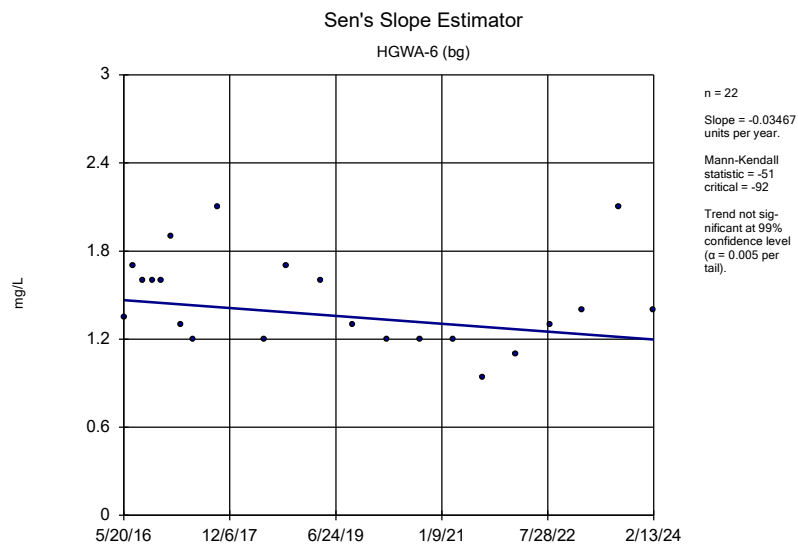
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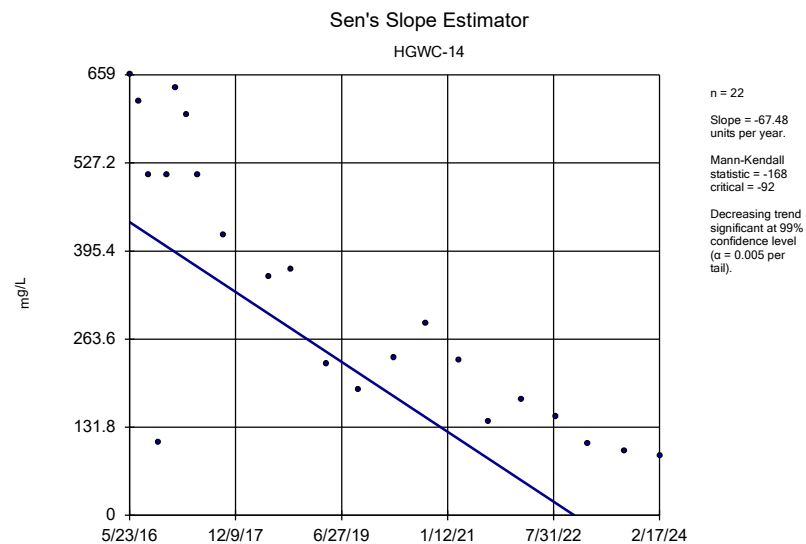
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Plant Hammond Client: Southern Company Data: Hammond AP-2



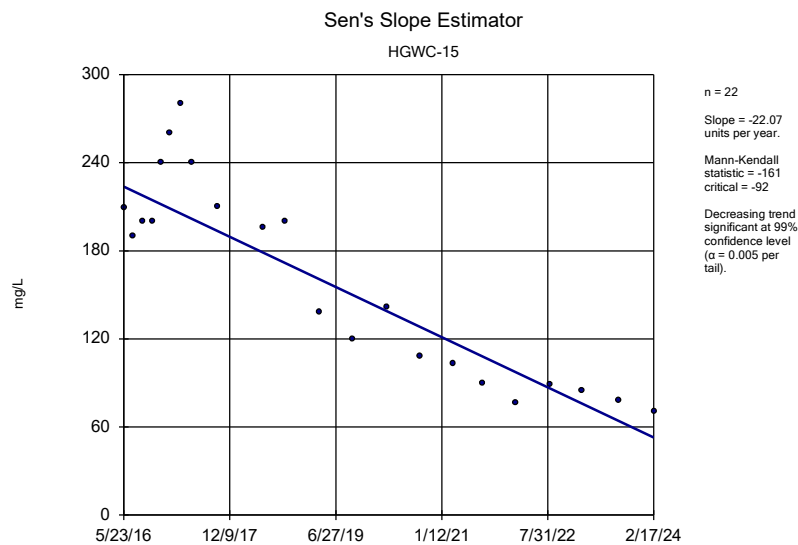
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Plant Hammond Client: Southern Company Data: Hammond AP-2



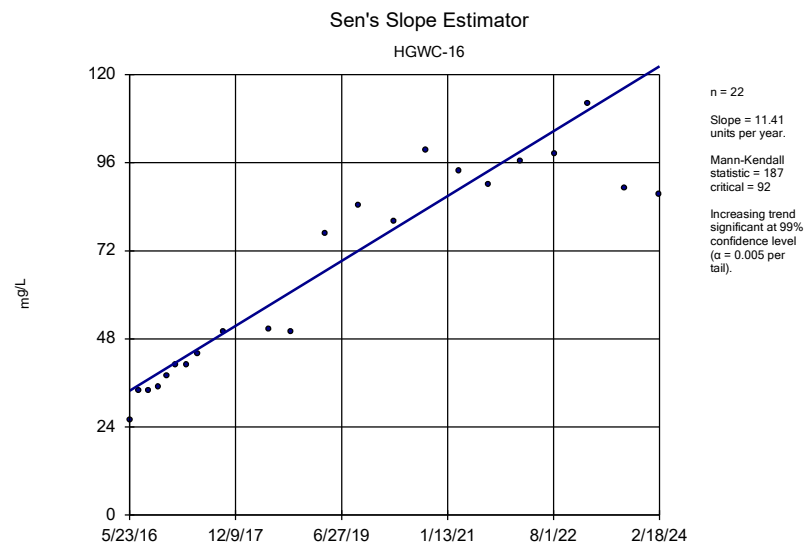
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Plant Hammond Client: Southern Company Data: Hammond AP-2



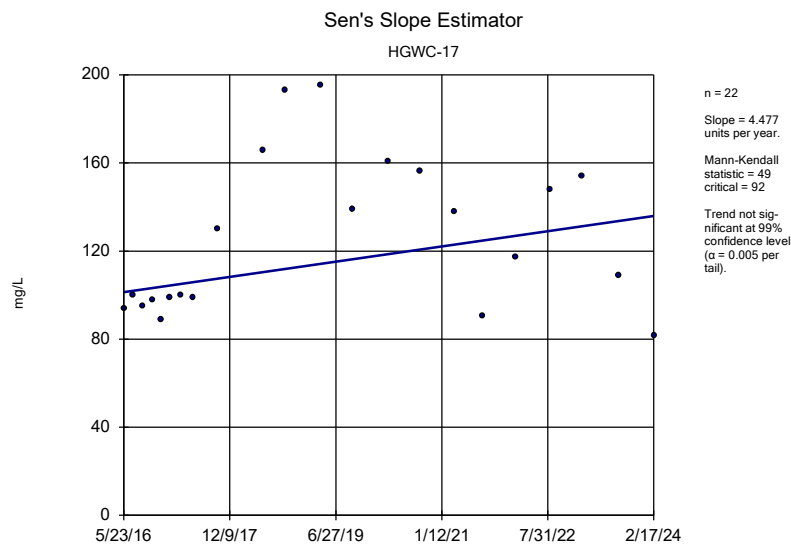
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Plant Hammond Client: Southern Company Data: Hammond AP-2



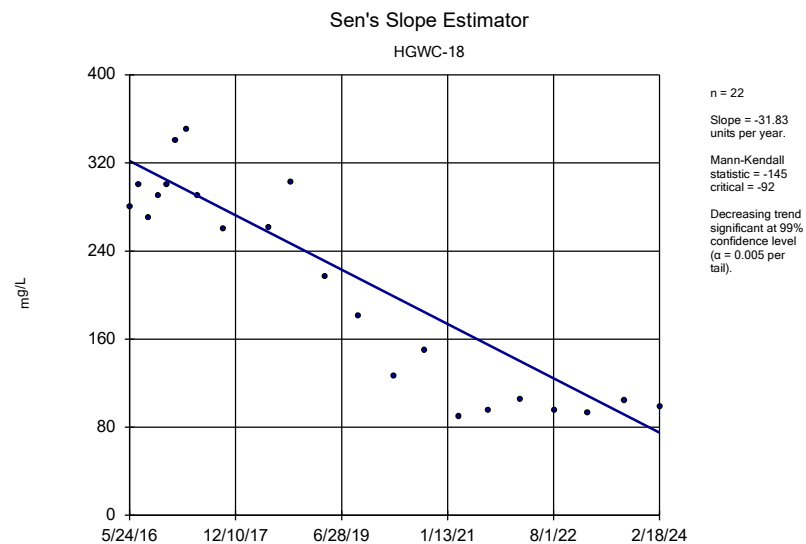
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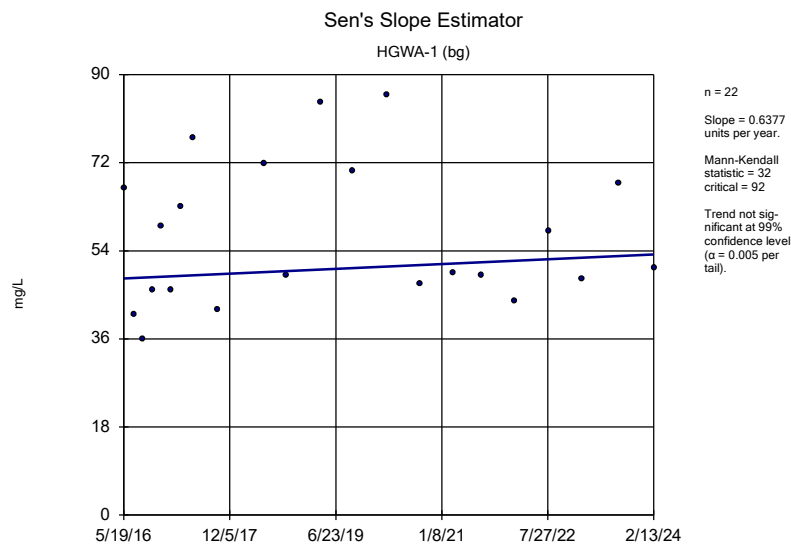
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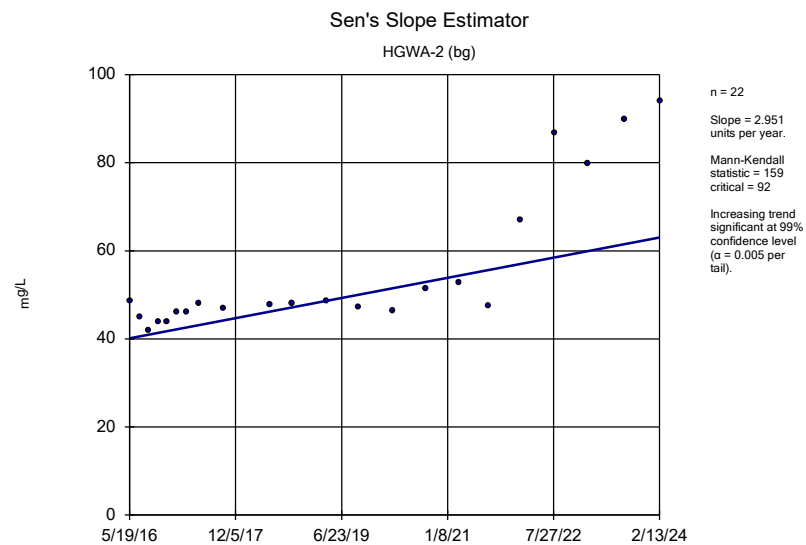
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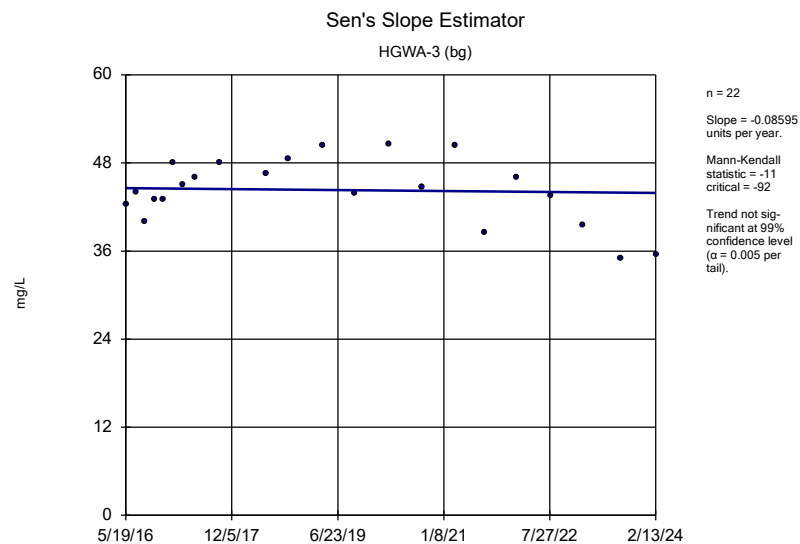
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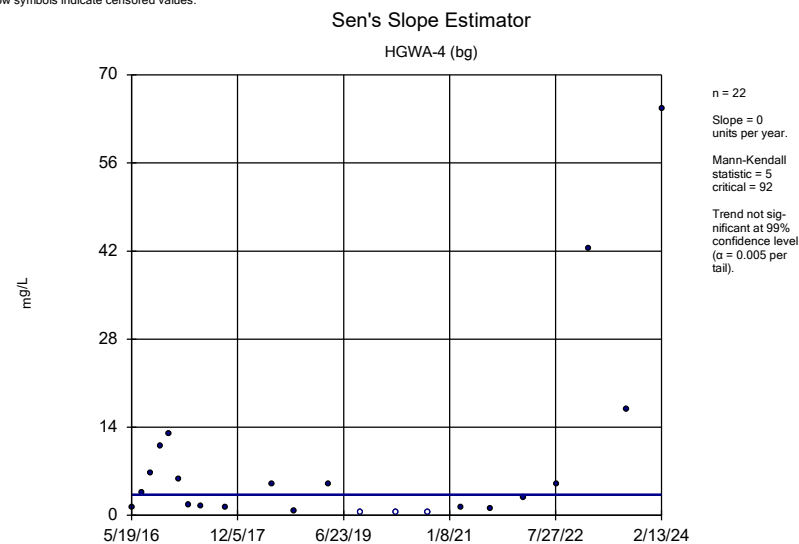
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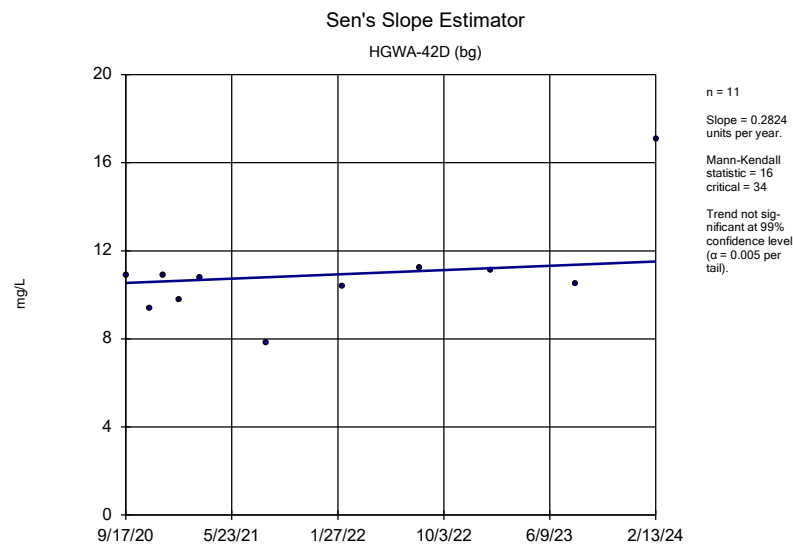
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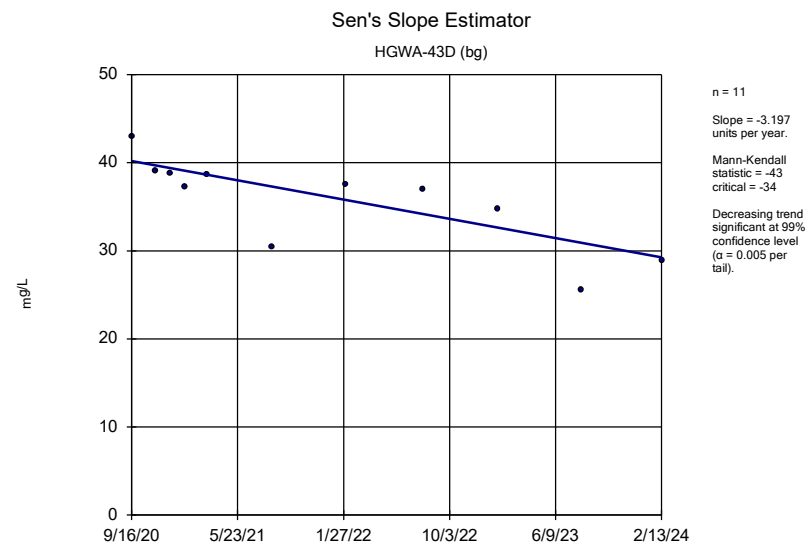
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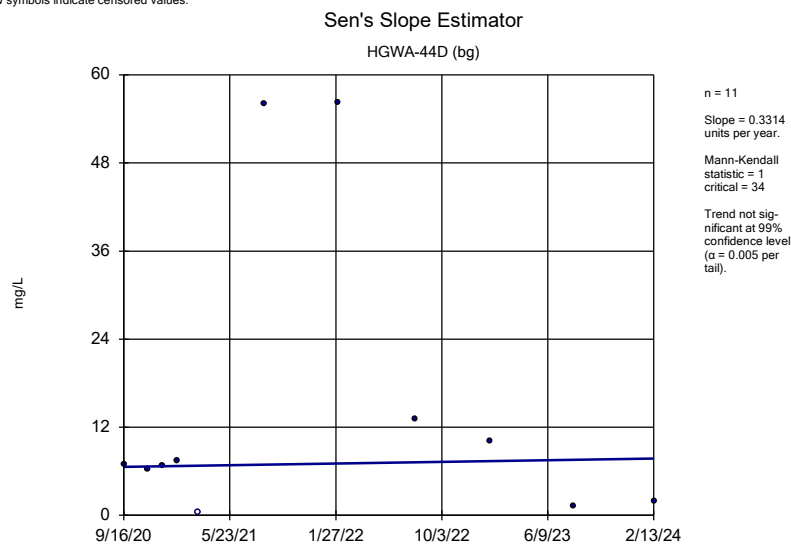
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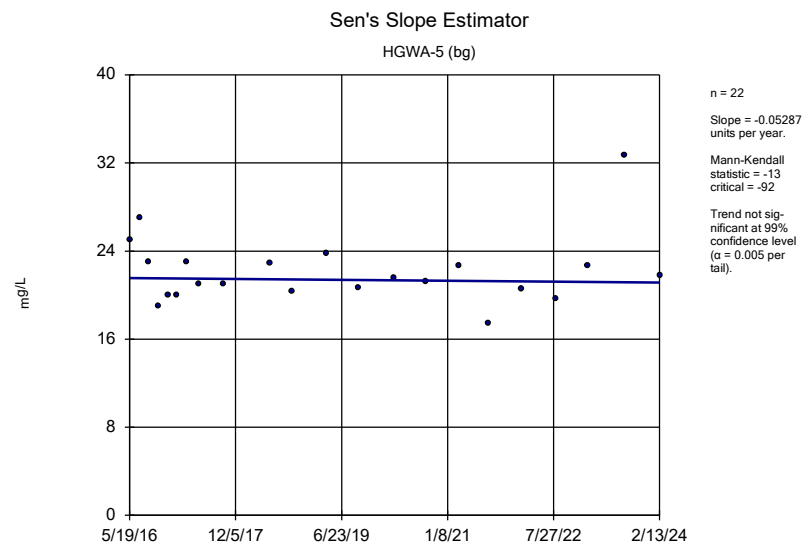
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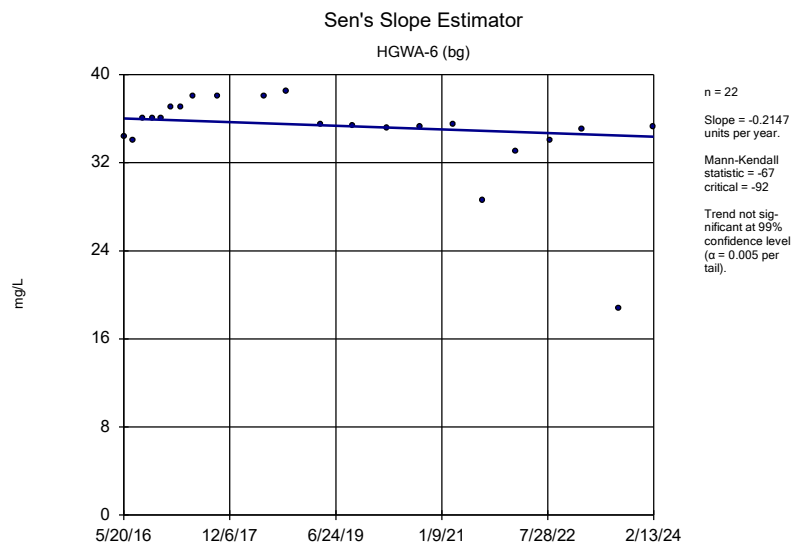
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Plant Hammond Client: Southern Company Data: Hammond AP-2



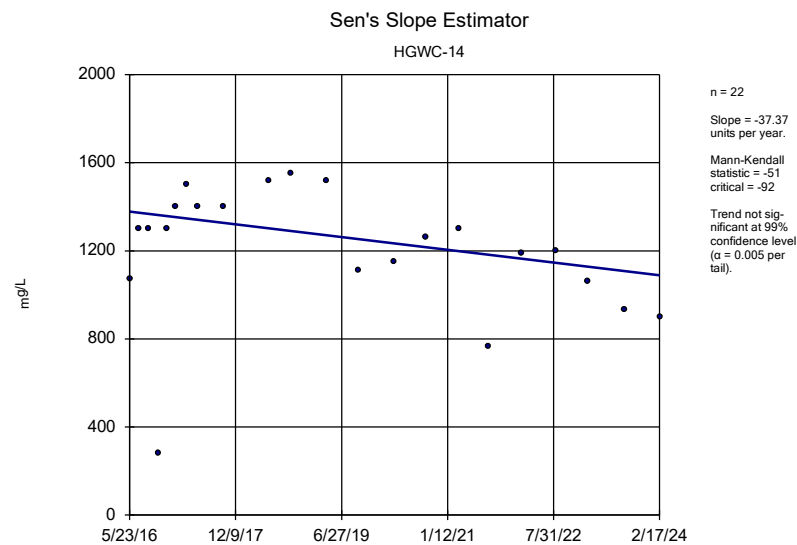
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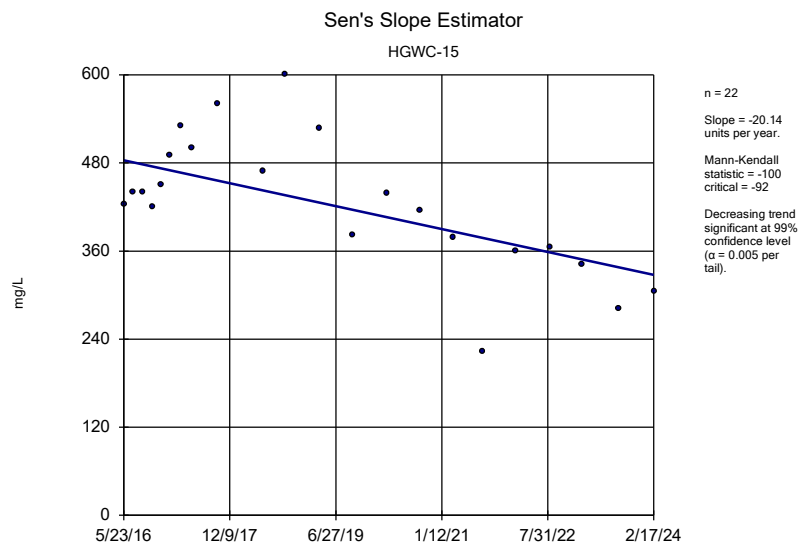
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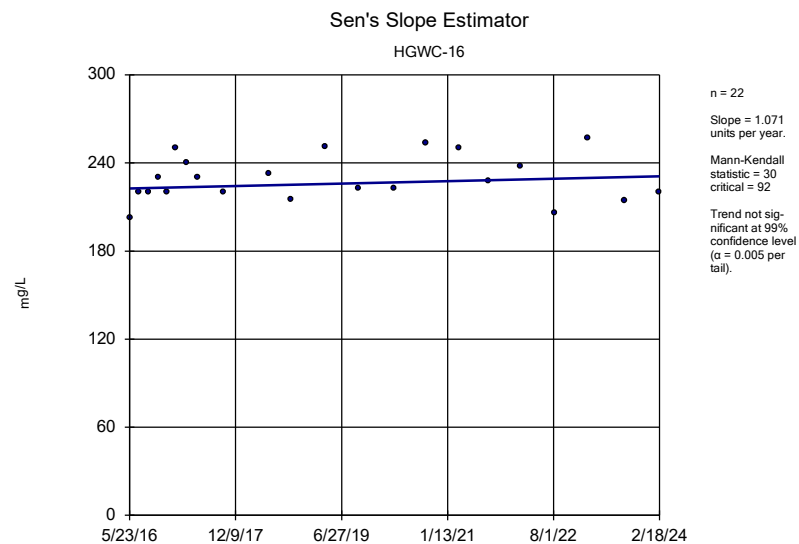
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Plant Hammond Client: Southern Company Data: Hammond AP-2



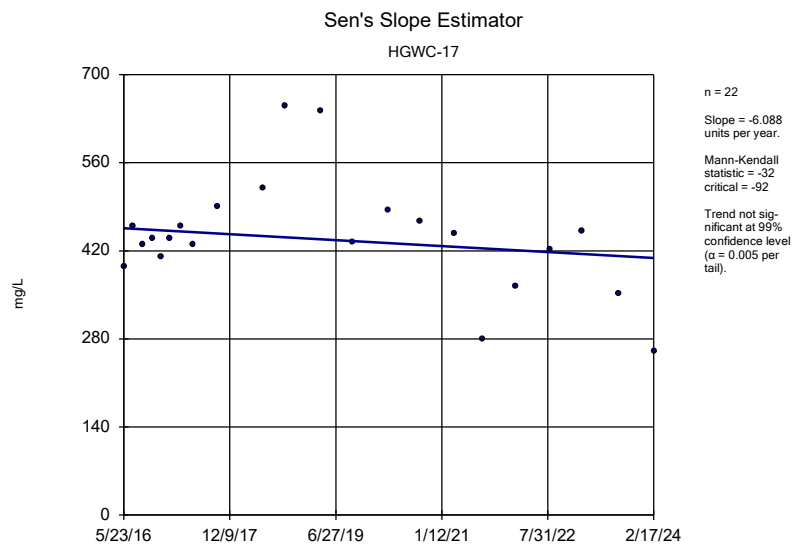
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Plant Hammond Client: Southern Company Data: Hammond AP-2



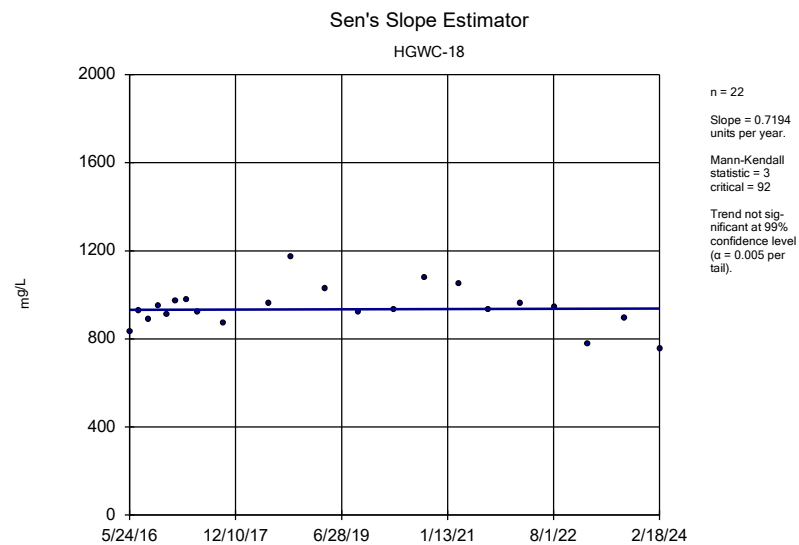
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Plant Hammond Client: Southern Company Data: Hammond AP-2



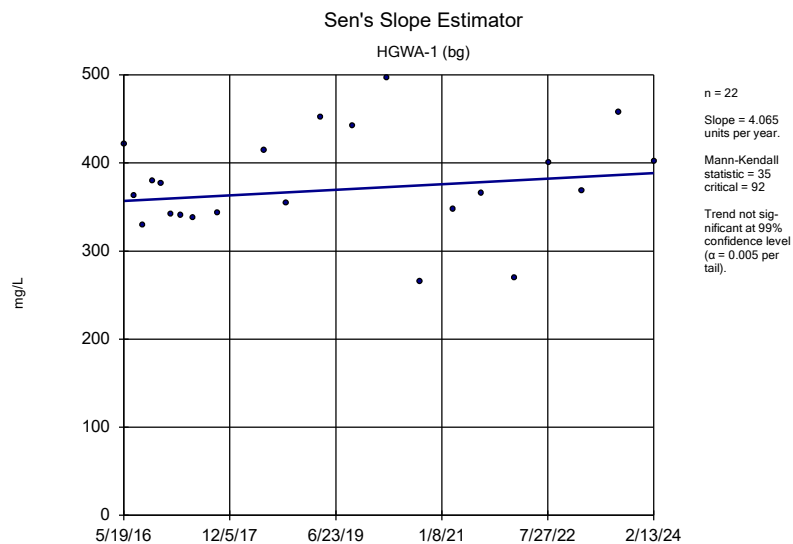
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Plant Hammond Client: Southern Company Data: Hammond AP-2



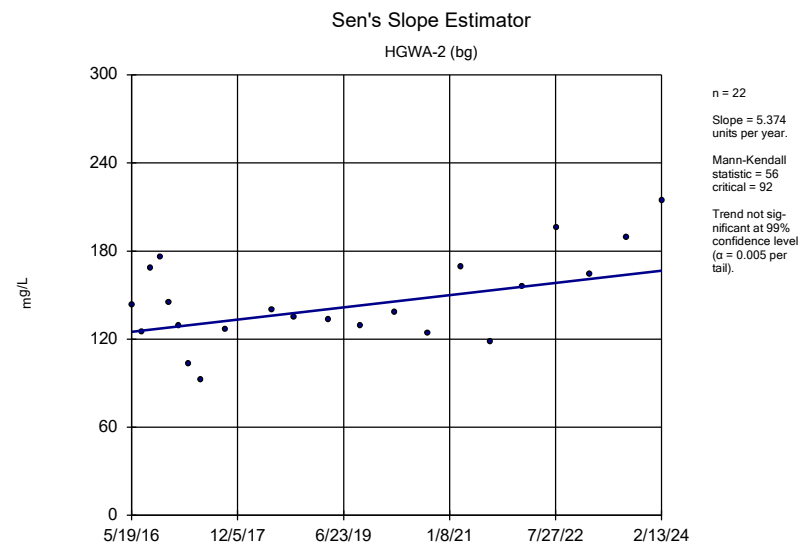
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Plant Hammond Client: Southern Company Data: Hammond AP-2



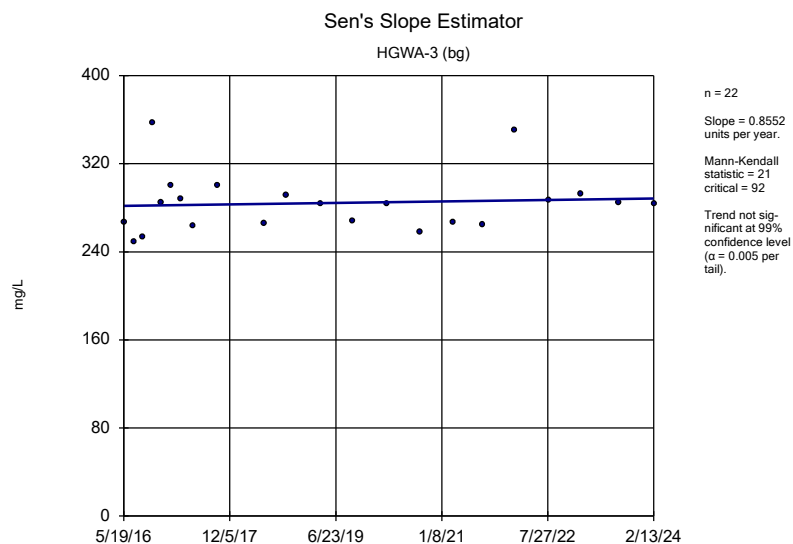
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Plant Hammond Client: Southern Company Data: Hammond AP-2



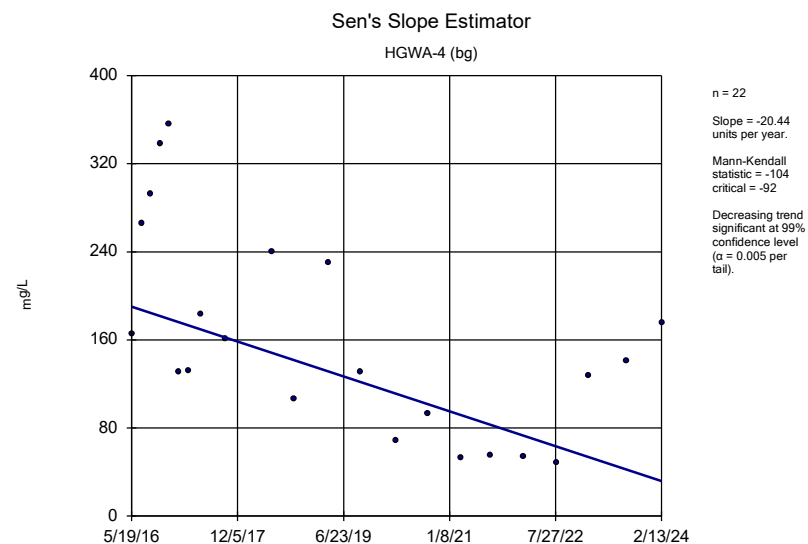
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Plant Hammond Client: Southern Company Data: Hammond AP-2



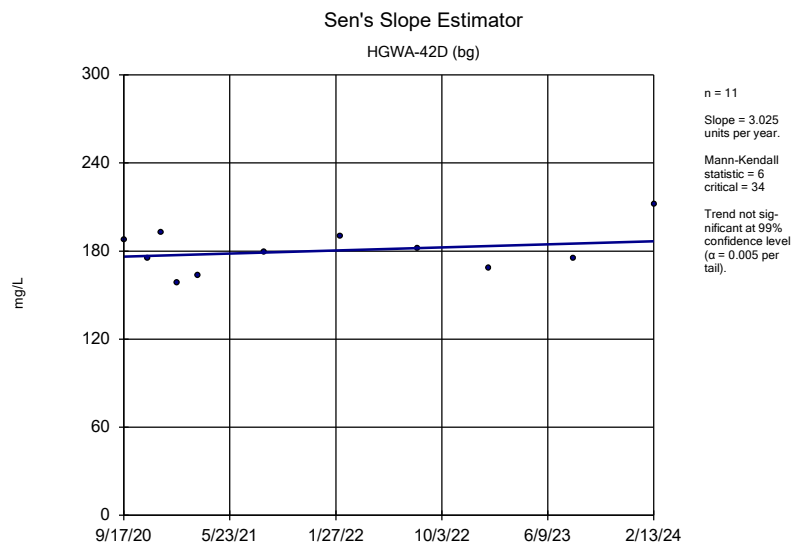
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Plant Hammond Client: Southern Company Data: Hammond AP-2



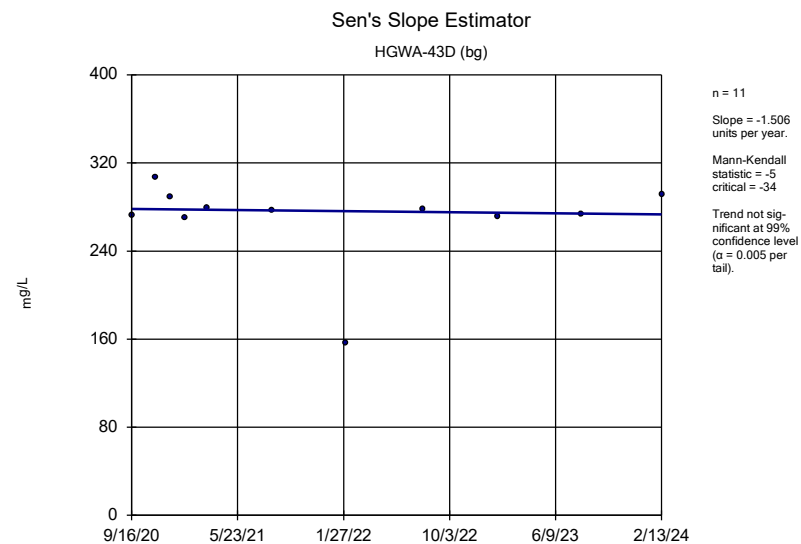
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Plant Hammond Client: Southern Company Data: Hammond AP-2



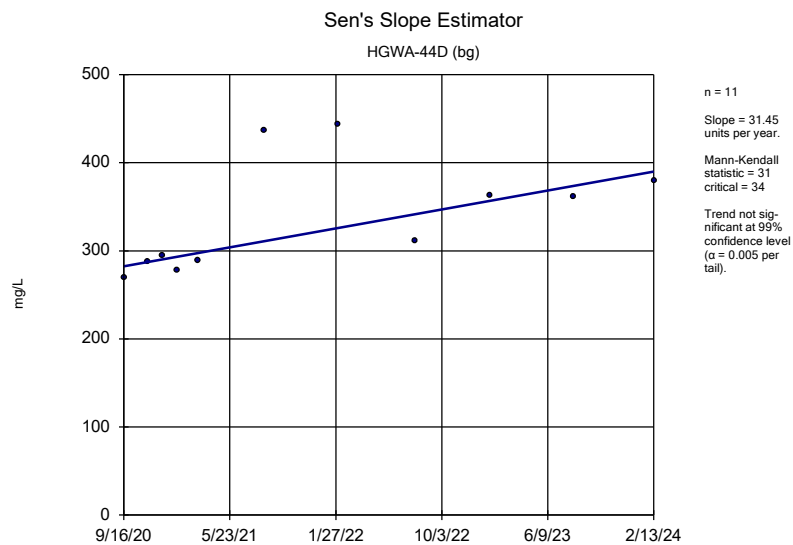
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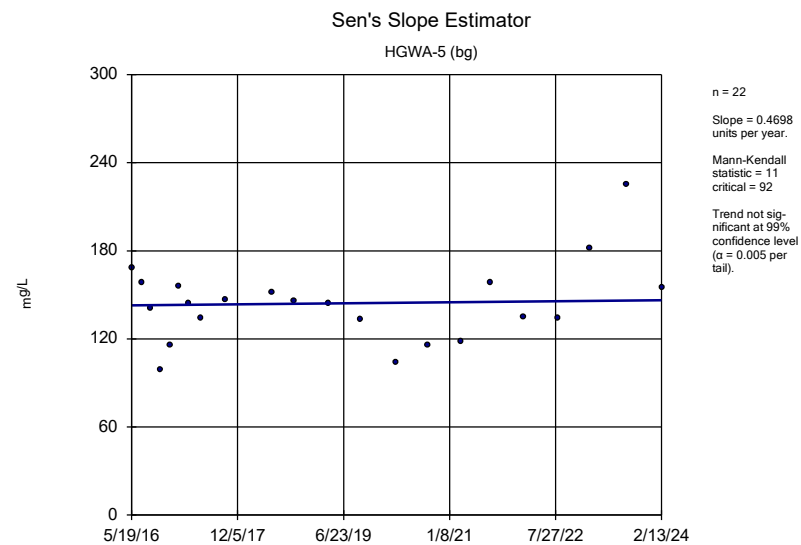
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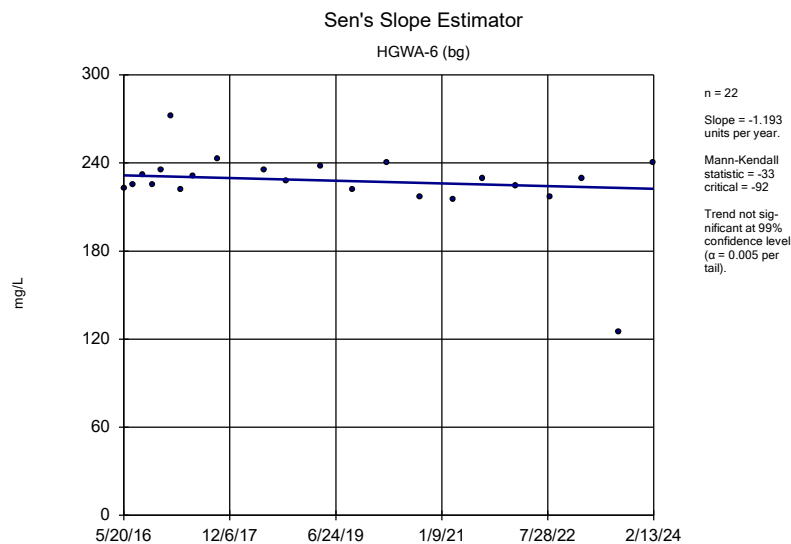
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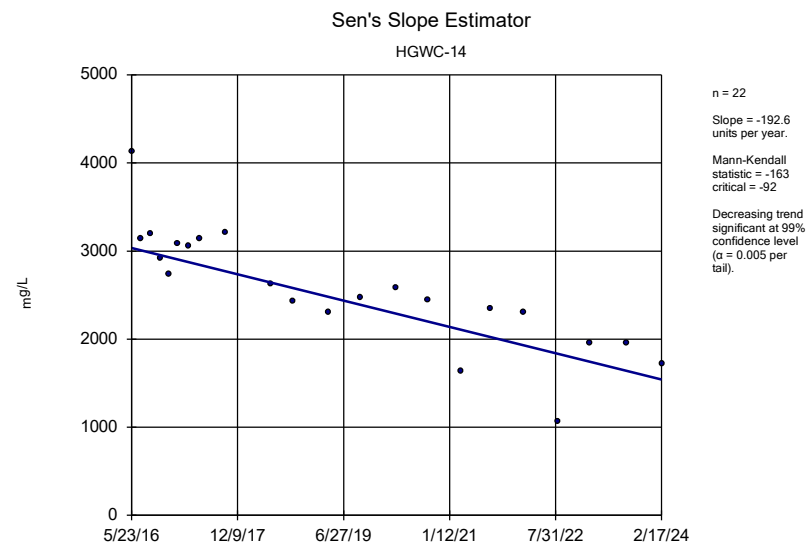
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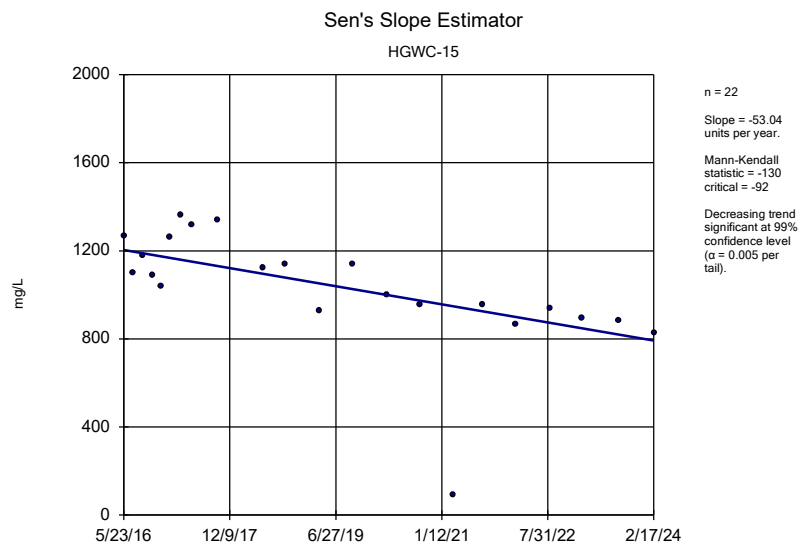
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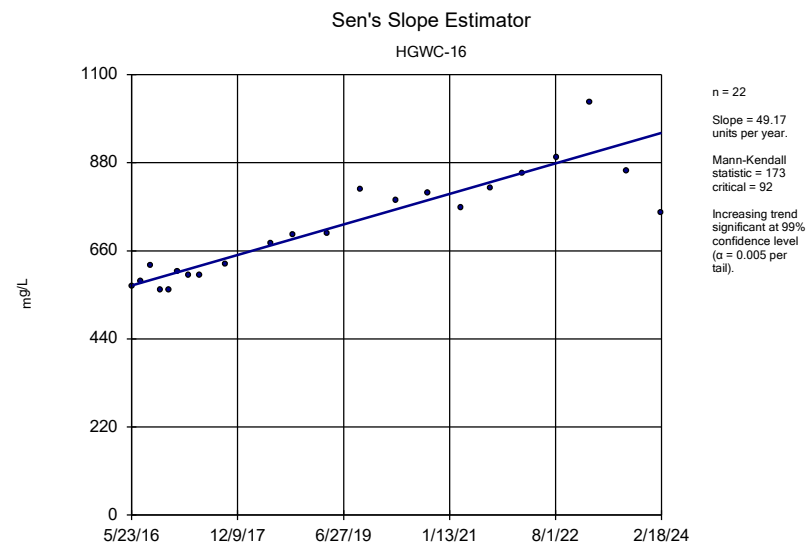
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Plant Hammond Client: Southern Company Data: Hammond AP-2



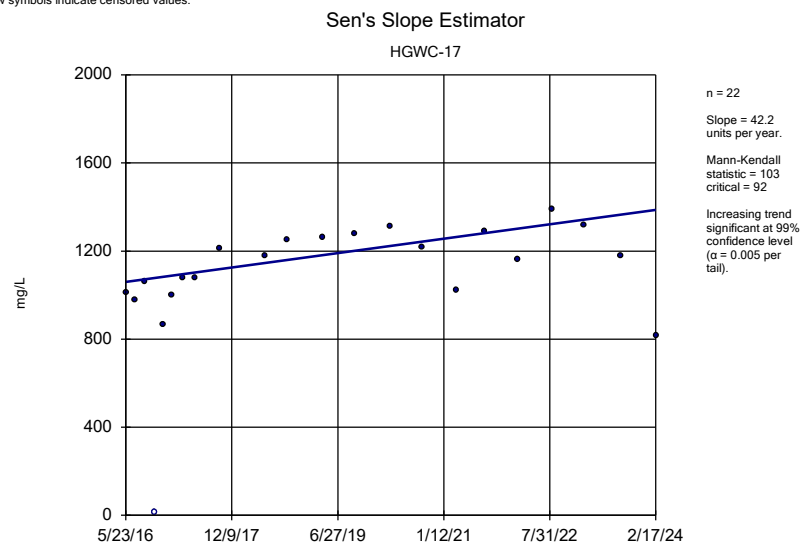
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Plant Hammond Client: Southern Company Data: Hammond AP-2



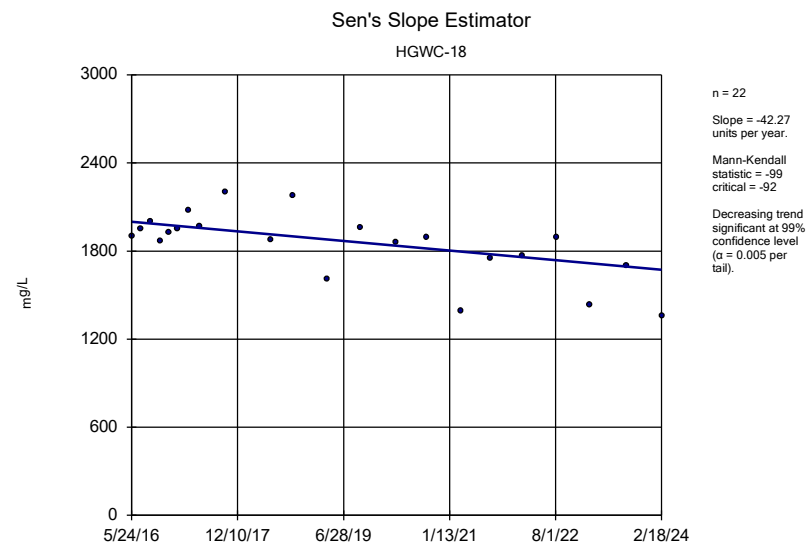
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Plant Hammond Client: Southern Company Data: Hammond AP-2



Constituent: Total Dissolved Solids Analysis Run 4/18/2024 10:39 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-2



Constituent: Total Dissolved Solids Analysis Run 4/18/2024 10:39 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-2



Constituent: Total Dissolved Solids Analysis Run 4/18/2024 10:39 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-2

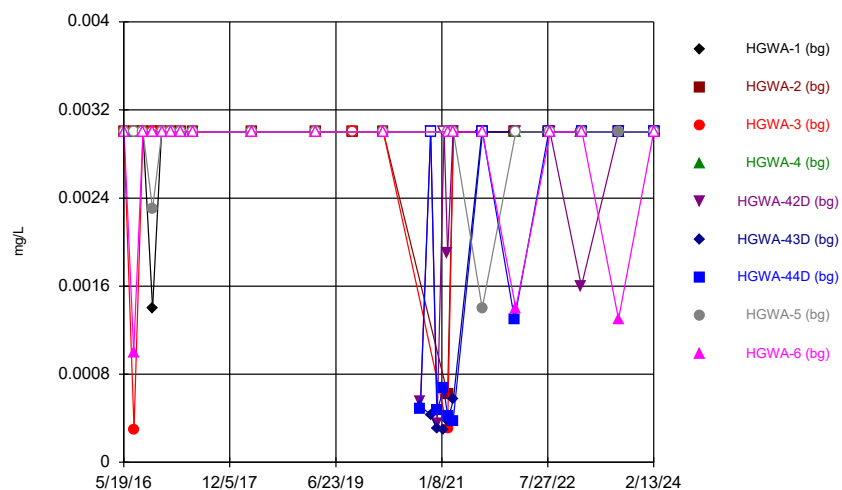
FIGURE F.

Upper Tolerance Limits Summary Table

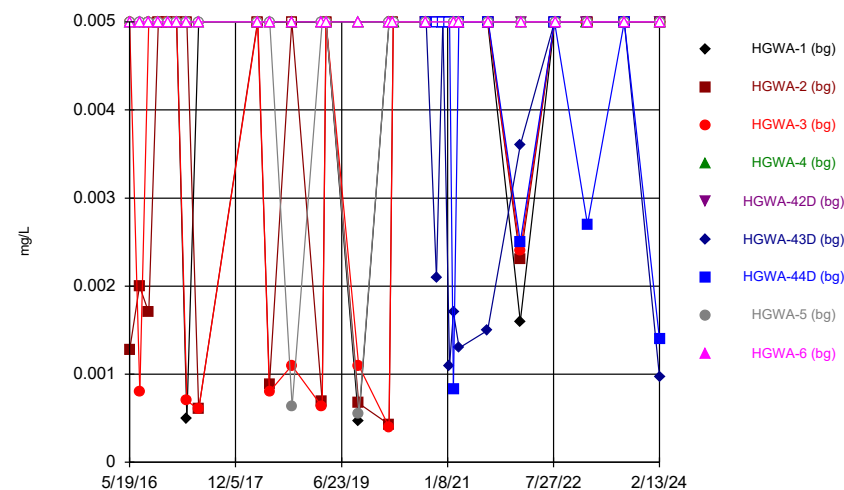
Plant Hammond Data: Hammond AP-2 Printed 5/29/2024, 4:55 PM

<u>Constituent</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	0.003	n/a	153	n/a	n/a	83.01	n/a	n/a	0.0003906	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	186	n/a	n/a	81.72	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	0.46	n/a	186	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	0.0005	n/a	174	n/a	n/a	82.76	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	186	n/a	n/a	91.94	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	0.019	n/a	174	n/a	n/a	86.21	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	0.038	n/a	186	n/a	n/a	69.35	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.578	n/a	185	0.7496	0.2747	0	None	sqrt(x)	0.05	Inter
Fluoride (mg/L)	1.5	n/a	192	n/a	n/a	28.65	n/a	n/a	NaN	NP Inter(normality)
Lead (mg/L)	0.001	n/a	174	n/a	n/a	75.86	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	0.064	n/a	182	n/a	n/a	18.13	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	130	n/a	n/a	93.85	n/a	n/a	0.001271	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	172	n/a	n/a	82.56	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	186	n/a	n/a	97.31	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	186	n/a	n/a	98.92	n/a	n/a	NaN	NP Inter(NDs)

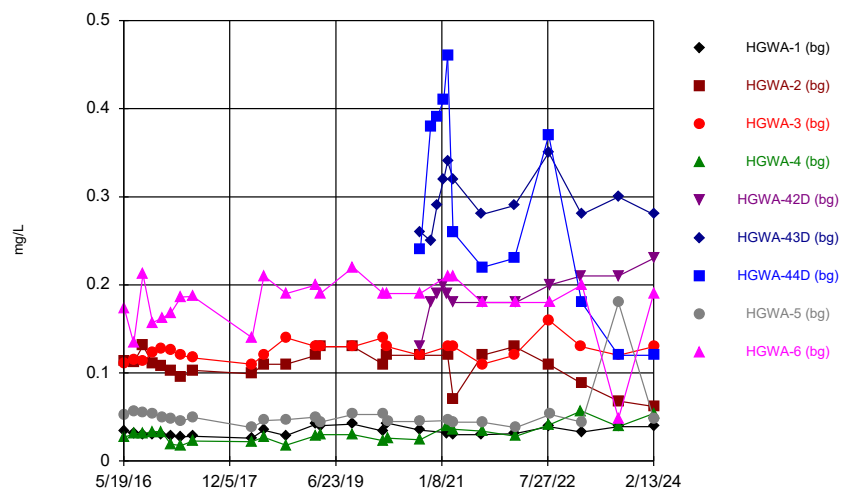
Time Series



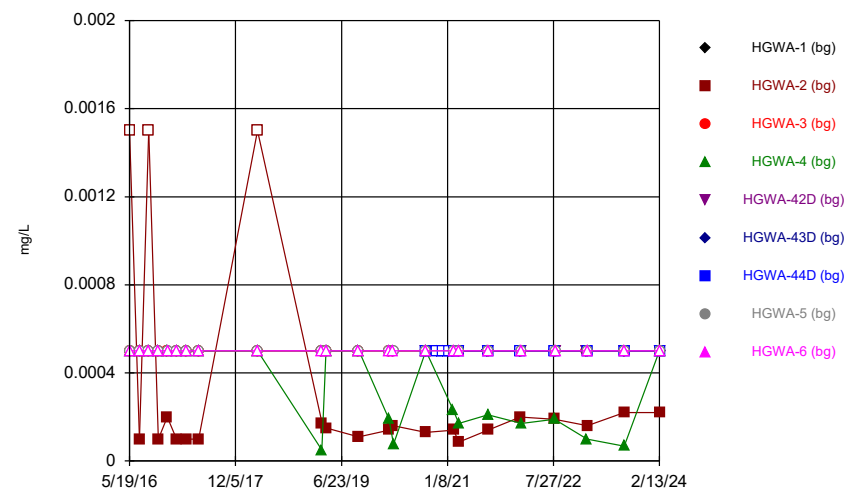
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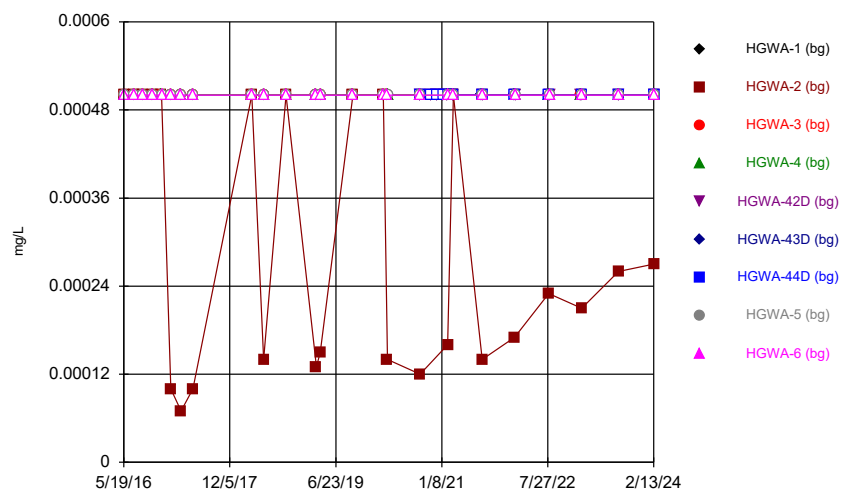
Time Series



Time Series

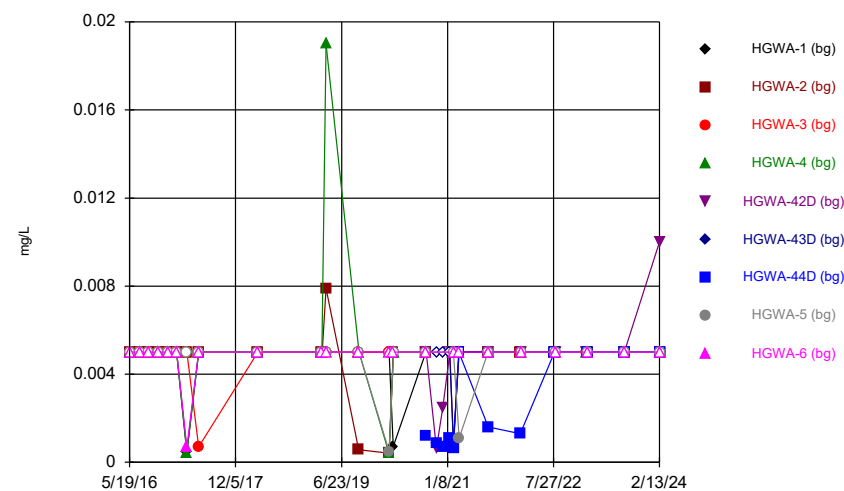


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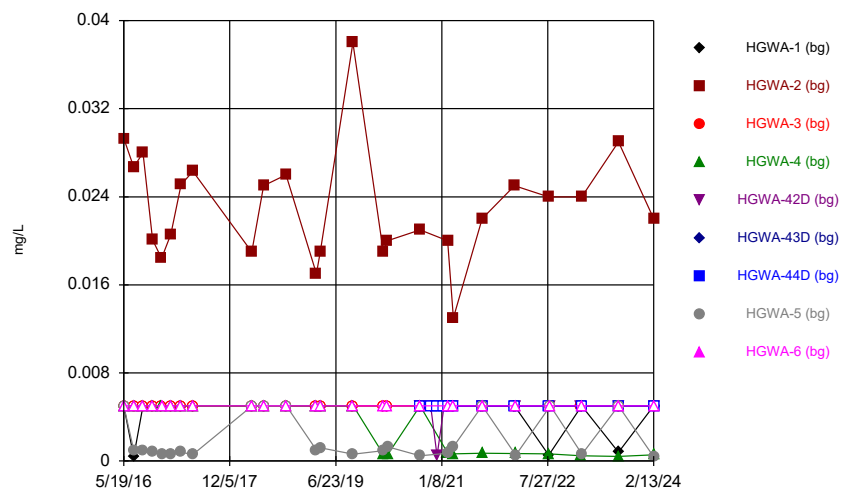
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Plant Hammond Data: Hammond AP-2

Time Series



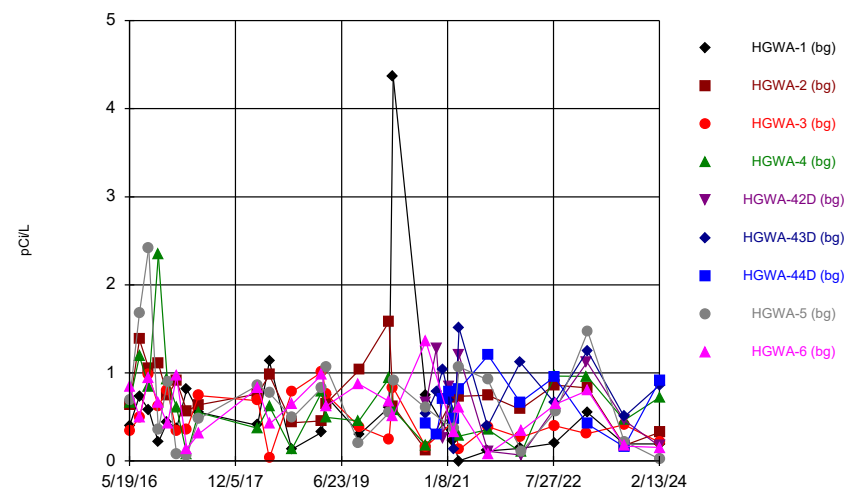
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Plant Hammond Data: Hammond AP-2

Time Series



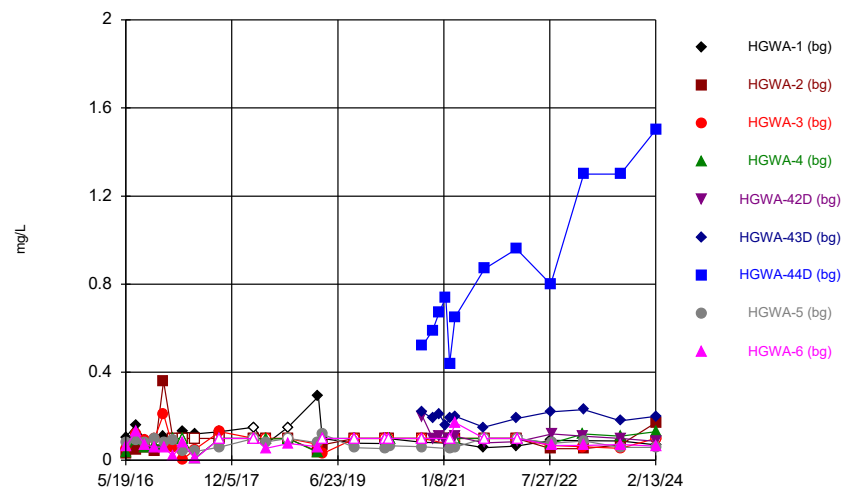
Constituent: Cobalt Analysis Run 5/29/2024 4:55 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2

Time Series



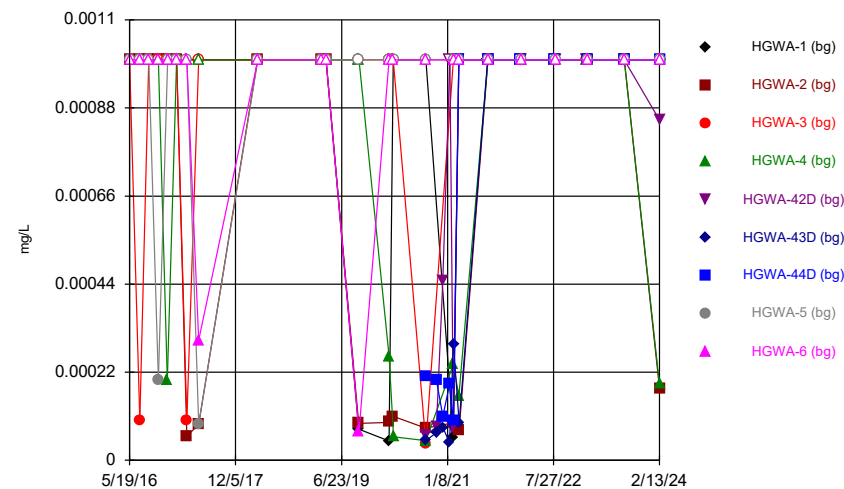
Constituent: Combined Radium 226 + 228 Analysis Run 5/29/2024 4:55 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2

Time Series



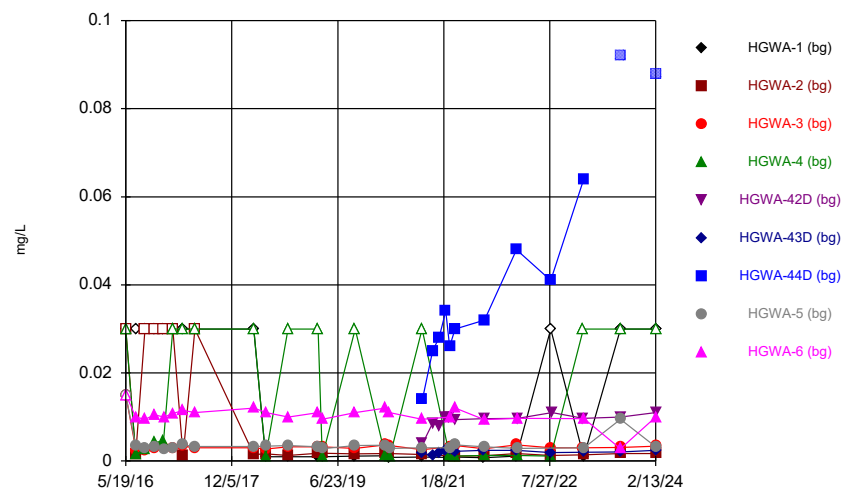
Constituent: Fluoride Analysis Run 5/29/2024 4:55 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2

Time Series



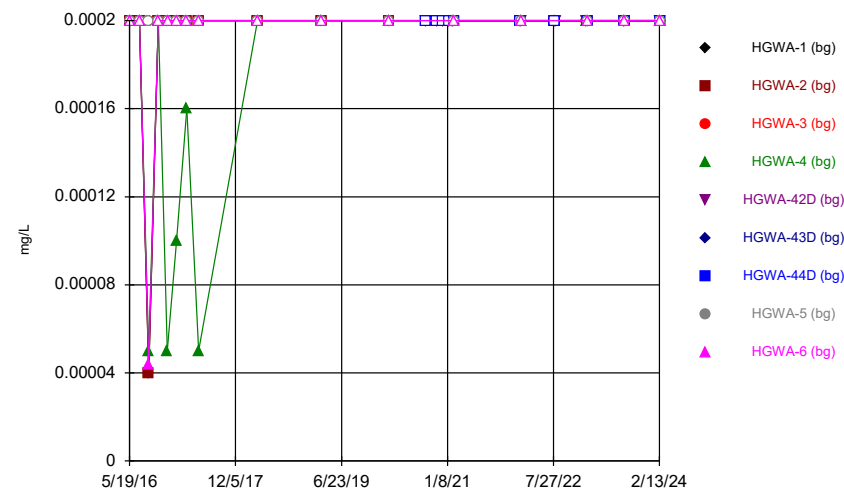
Constituent: Lead Analysis Run 5/29/2024 4:55 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2

Time Series



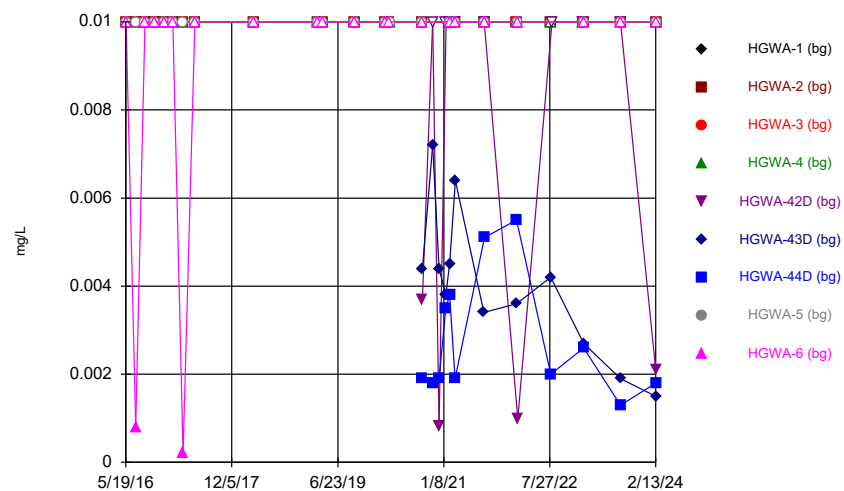
Constituent: Lithium Analysis Run 5/29/2024 4:55 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2

Time Series

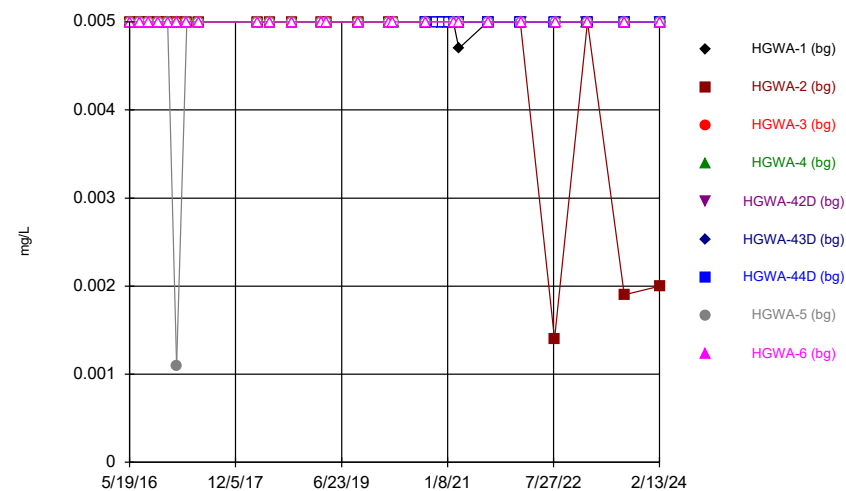


Constituent: Mercury Analysis Run 5/29/2024 4:55 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2

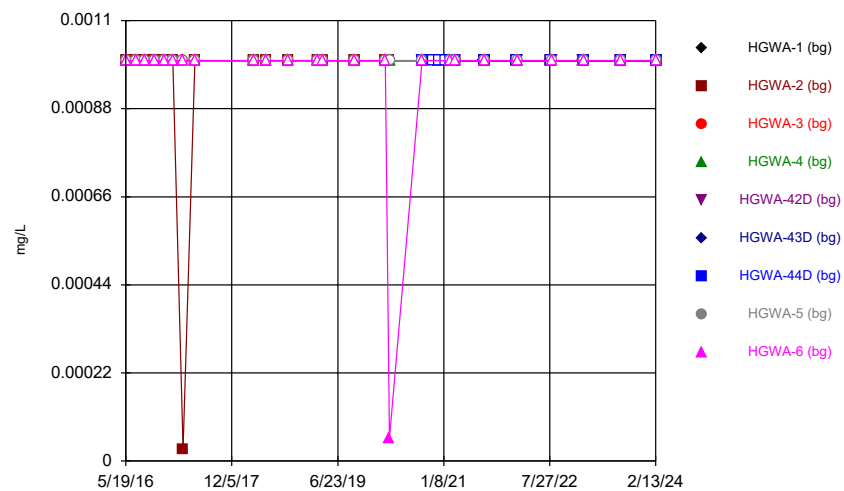
Time Series



Time Series

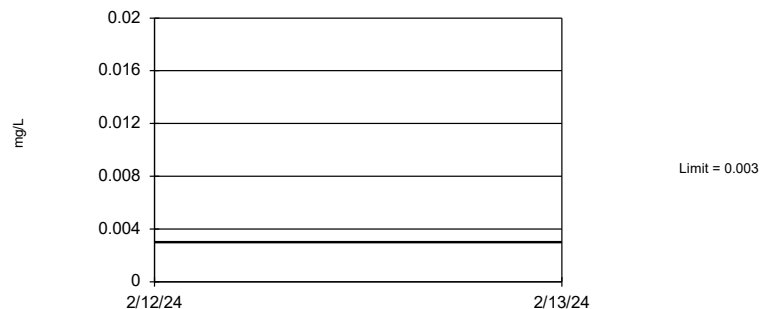


Time Series



Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 153 background values. 83.01% NDs. 97.07% coverage at alpha=0.01; 98.24% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.0003906.

Constituent: Antimony Analysis Run 5/29/2024 4:51 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2

Tolerance Limit

Interwell Non-parametric

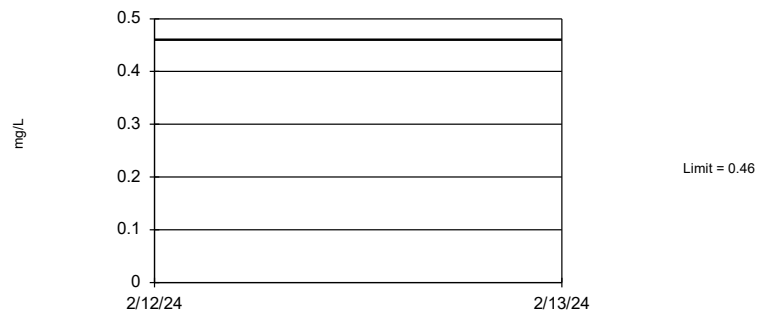


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 186 background values. 81.72% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Arsenic Analysis Run 5/29/2024 4:51 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2

Tolerance Limit

Interwell Non-parametric

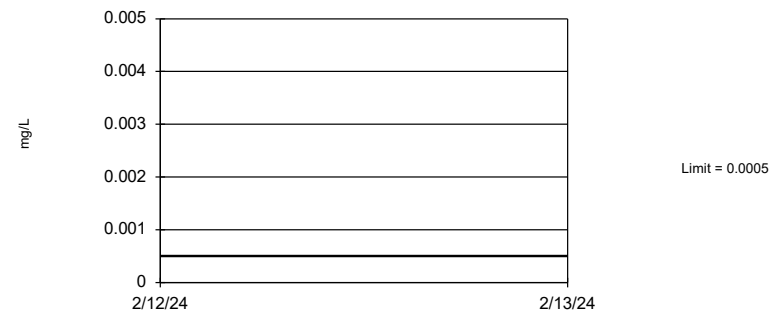


Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 186 background values. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Barium Analysis Run 5/29/2024 4:51 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2

Tolerance Limit

Interwell Non-parametric

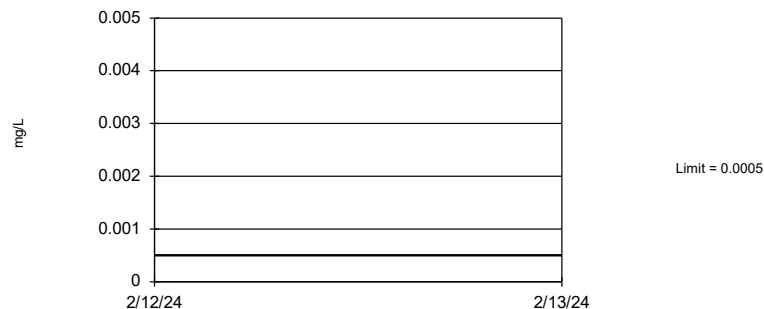


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 174 background values. 82.76% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Beryllium Analysis Run 5/29/2024 4:51 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2

Tolerance Limit

Interwell Non-parametric

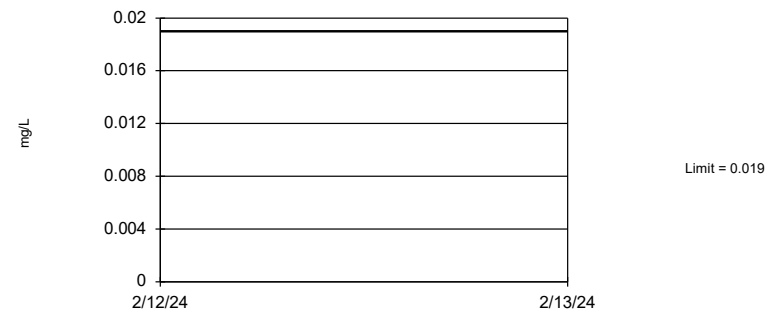


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 186 background values. 91.94% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Cadmium Analysis Run 5/29/2024 4:51 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2

Tolerance Limit

Interwell Non-parametric

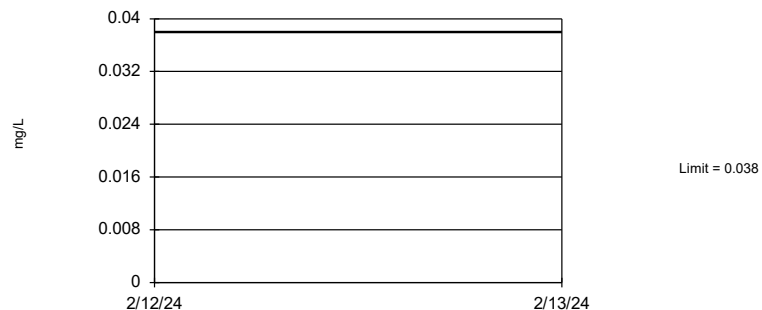


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 174 background values. 86.21% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Chromium Analysis Run 5/29/2024 4:51 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 186 background values. 69.35% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Cobalt Analysis Run 5/29/2024 4:51 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2

Tolerance Limit

Interwell Parametric

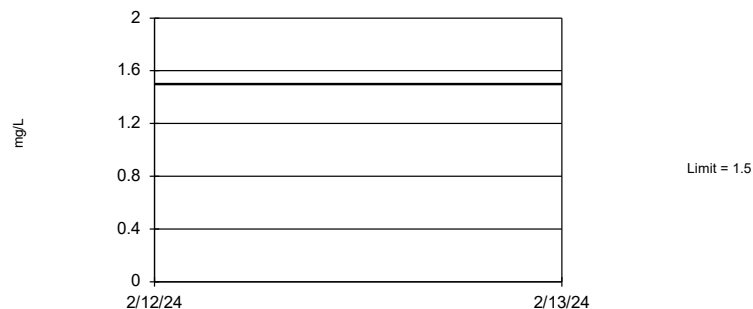


95% coverage. Background Data Summary (based on square root transformation): Mean=0.7496, Std. Dev.=0.2747, n=185. Normality test: Chi Squared @alpha = 0.01, calculated = 9.865, critical = 14.07. Report alpha = 0.05.

Constituent: Combined Radium 226 + 228 Analysis Run 5/29/2024 4:51 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 192 background values. 28.65% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Fluoride Analysis Run 5/29/2024 4:51 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 174 background values. 75.86% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Lead Analysis Run 5/29/2024 4:51 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2

Tolerance Limit

Interwell Non-parametric

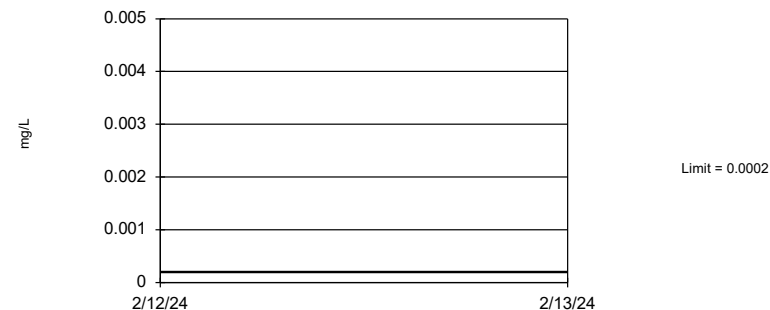


Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 182 background values. 18.13% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Lithium Analysis Run 5/29/2024 4:51 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2

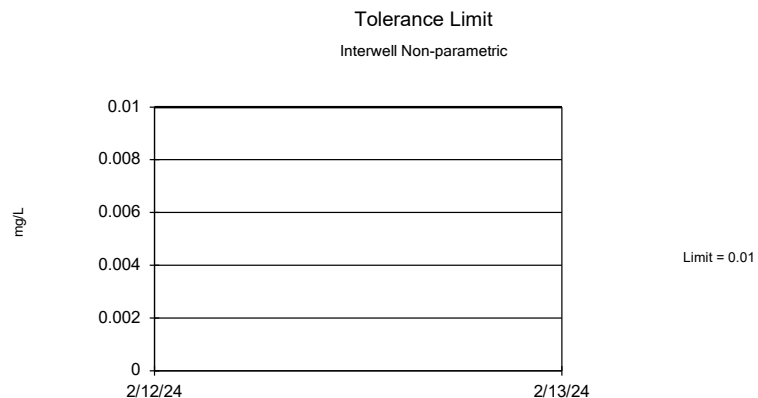
Tolerance Limit

Interwell Non-parametric



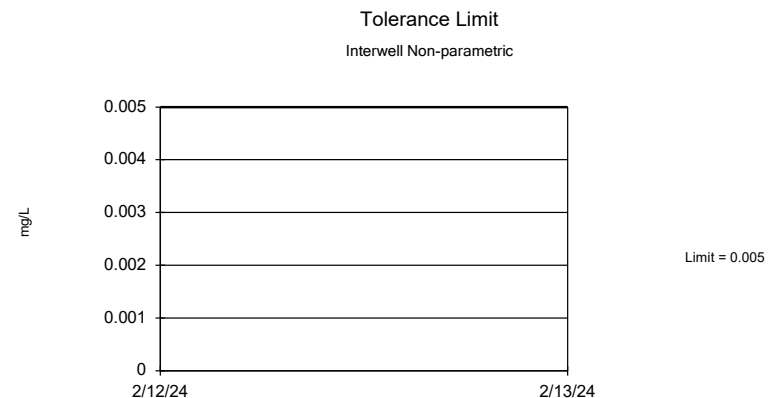
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 130 background values. 93.85% NDs. 96.68% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.001271.

Constituent: Mercury Analysis Run 5/29/2024 4:51 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2



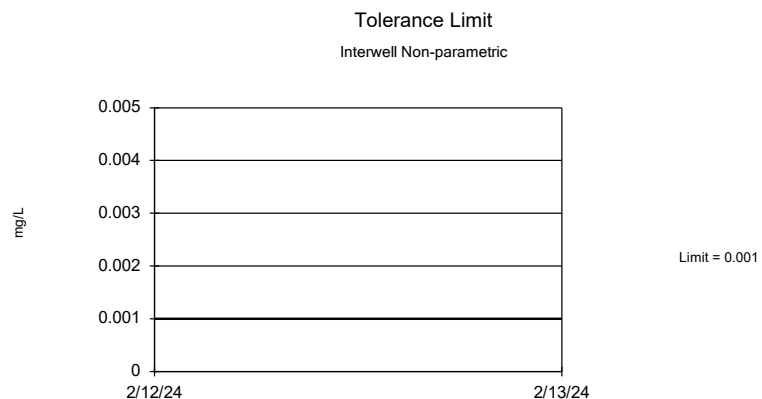
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 172 background values. 82.56% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Molybdenum Analysis Run 5/29/2024 4:51 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 186 background values. 97.31% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Selenium Analysis Run 5/29/2024 4:51 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 186 background values. 98.92% NDs. 99.8% coverage at alpha=0.01; 99.8% coverage at alpha=0.05; 99.8% coverage at alpha=0.5. Report alpha < 0.0001.

Constituent: Thallium Analysis Run 5/29/2024 4:51 PM View: Appendix IV - UTLs
Plant Hammond Data: Hammond AP-2

FIGURE G.

PLANT HAMMOND AP-2 GWPS				
Constituent Name	MCL	CCR-Rule Specified	Background Limit	GWPS
Antimony, Total (mg/L)	0.006		0.003	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01
Barium, Total (mg/L)	2		0.46	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.019	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.038	0.038
Combined Radium, Total (pCi/L)	5		1.58	5
Fluoride, Total (mg/L)	4		1.5	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.064	0.064
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Grey cell indicates background is higher than MCL or CCR-Rule*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Standard*

FIGURE H.

Confidence Interval Summary Table - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/21/2024, 8:28 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	HGWC-18	0.1816	0.1552	0.038	Yes	25	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-33	0.05654	0.04463	0.038	Yes	12	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-35	0.09341	0.08279	0.038	Yes	10	0	None	No	0.01	Param.

Confidence Interval Summary Table - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/21/2024, 8:28 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	HGWC-14	0.0032	0.001	0.006	No	19	78.95	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-15	0.003	0.0021	0.006	No	19	73.68	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-18	0.003	0.0008	0.006	No	19	94.74	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-22	0.003	0.003	0.006	No	10	90	None	No	0.011	NP (NDs)
Antimony (mg/L)	MW-23D	0.003	0.003	0.006	No	10	90	None	No	0.011	NP (NDs)
Antimony (mg/L)	MW-33	0.003	0.00046	0.006	No	8	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-34D	0.003	0.0018	0.006	No	6	83.33	None	No	0.0155	NP (NDs)
Antimony (mg/L)	MW-35	0.003	0.00041	0.006	No	8	75	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-37D	0.003	0.00079	0.006	No	8	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	HGWC-14	0.005508	0.00373	0.01	No	25	12	None	No	0.01	Param.
Arsenic (mg/L)	HGWC-15	0.005	0.0008	0.01	No	25	88	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-16	0.005	0.0012	0.01	No	25	84	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-17	0.005	0.0028	0.01	No	25	72	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-18	0.006543	0.004708	0.01	No	25	0	None	No	0.01	Param.
Arsenic (mg/L)	MW-21D	0.005	0.0013	0.01	No	15	73.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-22	0.005	0.00045	0.01	No	14	92.86	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-23D	0.005	0.001	0.01	No	14	85.71	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-33	0.006668	0.003405	0.01	No	11	9.091	None	No	0.01	Param.
Arsenic (mg/L)	MW-34D	0.004857	0.001316	0.01	No	8	12.5	None	No	0.01	Param.
Arsenic (mg/L)	MW-35	0.006343	0.004337	0.01	No	10	20	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	MW-37D	0.005	0.0021	0.01	No	10	70	Kaplan-Meier	No	0.011	NP (NDs)
Arsenic (mg/L)	MW-51	0.006226	0.002258	0.01	No	6	16.67	Kaplan-Meier	No	0.01	Param.
Barium (mg/L)	HGWC-14	0.022	0.018	2	No	25	4	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-15	0.02587	0.01753	2	No	25	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-16	0.1103	0.1004	2	No	25	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-17	0.02618	0.02361	2	No	25	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-18	0.032	0.026	2	No	25	4	None	No	0.01	NP (normality)
Barium (mg/L)	MW-21D	0.06246	0.03874	2	No	15	0	None	No	0.01	Param.
Barium (mg/L)	MW-22	0.02721	0.01486	2	No	14	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	MW-23D	0.06348	0.04823	2	No	14	0	None	No	0.01	Param.
Barium (mg/L)	MW-33	0.02608	0.01955	2	No	11	0	None	No	0.01	Param.
Barium (mg/L)	MW-34D	0.04375	0.0335	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	MW-35	0.02828	0.02152	2	No	10	0	None	No	0.01	Param.
Barium (mg/L)	MW-37D	0.1575	0.1145	2	No	10	0	None	No	0.01	Param.
Barium (mg/L)	MW-51	0.04199	0.02312	2	No	6	0	None	sqrt(x)	0.01	Param.
Beryllium (mg/L)	HGWC-14	0.00056	0.0004	0.004	No	23	8.696	None	No	0.01	NP (normality)
Beryllium (mg/L)	HGWC-17	0.0005	0.0001	0.004	No	23	78.26	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-18	0.00331	0.002697	0.004	No	23	4.348	None	No	0.01	Param.
Beryllium (mg/L)	MW-22	0.0005	0.00007	0.004	No	14	57.14	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-33	0.001053	0.000716	0.004	No	11	0	None	x^2	0.01	Param.
Beryllium (mg/L)	MW-34D	0.0005	0.000065	0.004	No	8	75	None	No	0.004	NP (NDs)
Beryllium (mg/L)	MW-35	0.0006594	0.0004286	0.004	No	10	0	None	No	0.01	Param.
Beryllium (mg/L)	MW-37D	0.0005	0.0005	0.004	No	10	90	None	No	0.011	NP (NDs)
Beryllium (mg/L)	MW-51	0.0004839	0.00007606	0.004	No	6	0	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-14	0.0005	0.00012	0.005	No	25	56	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-15	0.002071	0.001313	0.005	No	25	0	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-17	0.0005	0.00007	0.005	No	25	96	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-18	0.0024	0.0016	0.005	No	25	4	None	No	0.01	NP (normality)
Cadmium (mg/L)	MW-22	0.002066	0.001671	0.005	No	14	0	None	x^4	0.01	Param.
Cadmium (mg/L)	MW-23D	0.0025	0.00015	0.005	No	14	35.71	None	No	0.01	NP (normality)
Cadmium (mg/L)	MW-33	0.00022	0.00014	0.005	No	11	9.091	None	No	0.006	NP (normality)
Cadmium (mg/L)	MW-34D	0.00147	0.0002074	0.005	No	8	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Cadmium (mg/L)	MW-35	0.001694	0.001012	0.005	No	10	0	None	No	0.01	Param.
Cadmium (mg/L)	MW-51	0.001409	0	0.005	No	6	0	None	No	0.01	Param.
Chromium (mg/L)	HGWC-14	0.005	0.00066	0.1	No	23	91.3	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-15	0.005	0.0012	0.1	No	23	86.96	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-16	0.005	0.0021	0.1	No	23	86.96	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-17	0.005	0.0018	0.1	No	23	86.96	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-18	0.005	0.00063	0.1	No	23	86.96	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-21D	0.005	0.00074	0.1	No	15	86.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-22	0.005	0.00075	0.1	No	14	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-23D	0.005	0.00086	0.1	No	14	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-33	0.005	0.005	0.1	No	11	90.91	None	No	0.006	NP (NDs)
Chromium (mg/L)	MW-34D	0.0059	0.005	0.1	No	8	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-35	0.005	0.00083	0.1	No	10	80	None	No	0.011	NP (NDs)
Chromium (mg/L)	MW-37D	0.005	0.0048	0.1	No	10	80	None	No	0.011	NP (NDs)
Cobalt (mg/L)	HGWC-14	0.034	0.0253	0.038	No	25	4	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-15	0.04029	0.02179	0.038	No	25	0	None	No	0.01	Param.

Confidence Interval Summary Table - All Results

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Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/21/2024, 8:28 PM

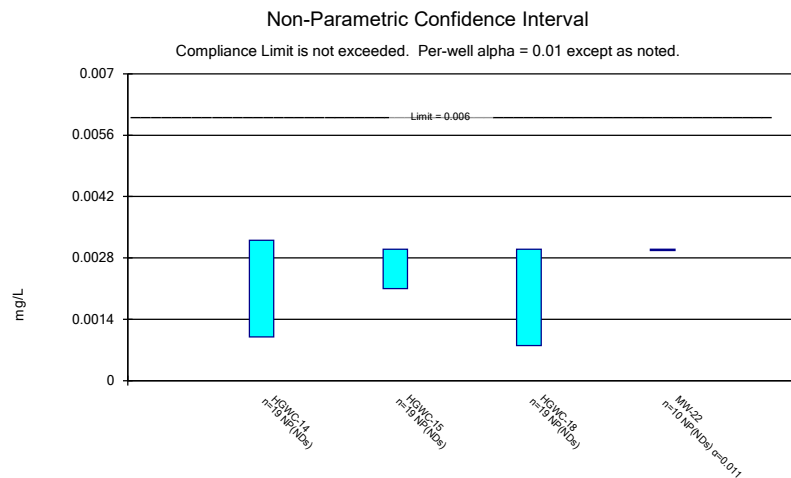
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	HGWC-16	0.005	0.00037	0.038	No	25	92	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-17	0.01544	0.01252	0.038	No	25	0	None	x^2	0.01	Param.
Cobalt (mg/L)	HGWC-18	0.1816	0.1552	0.038	Yes	25	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-21D	0.005	0.00034	0.038	No	15	93.33	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-22	0.03437	0.02062	0.038	No	14	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-23D	0.001104	0.000883	0.038	No	14	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-33	0.05654	0.04463	0.038	Yes	12	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-34D	0.009192	0.005521	0.038	No	8	0	None	x^(1/3)	0.01	Param.
Cobalt (mg/L)	MW-35	0.09341	0.08279	0.038	Yes	10	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-37D	0.005	0.0015	0.038	No	10	80	None	No	0.011	NP (NDs)
Cobalt (mg/L)	MW-51	0.04193	0.01707	0.038	No	6	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-14	1.507	1.037	5	No	25	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-15	0.8591	0.4811	5	No	25	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-16	0.8822	0.4816	5	No	25	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-17	0.9603	0.6466	5	No	25	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-18	2.082	1.49	5	No	25	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-21D	0.9196	0.3722	5	No	15	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-22	0.9711	0.3989	5	No	14	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-23D	0.9587	0.4479	5	No	14	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-33	2.103	0.9052	5	No	11	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-34D	1.081	0.3795	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-35	2.325	0.9014	5	No	10	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-37D	1.147	0.2094	5	No	10	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-51	1.099	0.3869	5	No	6	0	None	x^2	0.01	Param.
Fluoride (mg/L)	HGWC-14	0.1626	0.07728	4	No	26	19.23	Kaplan-Meier	ln(x)	0.01	Param.
Fluoride (mg/L)	HGWC-15	0.12	0.09	4	No	26	38.46	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-16	0.1078	0.04179	4	No	26	50	Kaplan-Meier	ln(x)	0.01	Param.
Fluoride (mg/L)	HGWC-17	0.1331	0.05794	4	No	26	26.92	Kaplan-Meier	ln(x)	0.01	Param.
Fluoride (mg/L)	HGWC-18	0.5828	0.3657	4	No	26	3.846	None	No	0.01	Param.
Fluoride (mg/L)	MW-21D	0.1	0.1	4	No	15	80	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-22	0.13	0.064	4	No	14	64.29	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-23D	0.14	0.074	4	No	14	64.29	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-33	0.257	0.1222	4	No	12	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-34D	0.08583	0.05783	4	No	8	25	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	MW-35	0.1112	0.05279	4	No	10	10	None	No	0.01	Param.
Fluoride (mg/L)	MW-37D	0.0936	0.0552	4	No	10	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-51	0.1634	0.05656	4	No	6	0	None	No	0.01	Param.
Lead (mg/L)	HGWC-14	0.001627	0.0012	0.015	No	23	8.696	None	No	0.01	Param.
Lead (mg/L)	HGWC-15	0.001	0.001	0.015	No	23	78.26	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-16	0.001	0.0001	0.015	No	23	60.87	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-17	0.001	0.0001	0.015	No	23	60.87	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-18	0.001367	0.001027	0.015	No	23	8.696	None	No	0.01	Param.
Lead (mg/L)	MW-21D	0.001	0.000073	0.015	No	15	73.33	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-22	0.001	0.0001	0.015	No	14	78.57	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-23D	0.001	0.00016	0.015	No	14	85.71	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-33	0.001623	0	0.015	No	11	18.18	Kaplan-Meier	x^6	0.01	Param.
Lead (mg/L)	MW-34D	0.001	0.00087	0.015	No	8	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	MW-35	0.001	0.00035	0.015	No	10	40	None	No	0.011	NP (normality)
Lead (mg/L)	MW-37D	0.001	0.00039	0.015	No	10	70	None	No	0.011	NP (NDs)
Lithium (mg/L)	HGWC-14	0.03	0.0029	0.064	No	25	96	None	No	0.01	NP (NDs)
Lithium (mg/L)	HGWC-15	0.006913	0.002454	0.064	No	25	24	Kaplan-Meier	ln(x)	0.01	Param.
Lithium (mg/L)	HGWC-16	0.0041	0.0029	0.064	No	24	4.167	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-17	0.03	0.0012	0.064	No	24	45.83	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-18	0.01402	0.01183	0.064	No	24	0	None	No	0.01	Param.
Lithium (mg/L)	MW-21D	0.0243	0.01876	0.064	No	15	0	None	No	0.01	Param.
Lithium (mg/L)	MW-22	0.0015	0.0011	0.064	No	14	7.143	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-23D	0.002491	0.001966	0.064	No	14	0	None	No	0.01	Param.
Lithium (mg/L)	MW-33	0.03	0.00086	0.064	No	10	20	None	No	0.011	NP (normality)
Lithium (mg/L)	MW-34D	0.015	0.001	0.064	No	7	14.29	None	No	0.008	NP (normality)
Lithium (mg/L)	MW-35	0.0046	0.0031	0.064	No	10	10	None	No	0.011	NP (normality)
Lithium (mg/L)	MW-37D	0.03521	0.02234	0.064	No	9	0	None	No	0.01	Param.
Lithium (mg/L)	MW-51	0.002094	0.0008331	0.064	No	6	0	None	No	0.01	Param.
Mercury (mg/L)	HGWC-18	0.0002	0.00008	0.002	No	16	68.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	MW-22	0.0002	0.00016	0.002	No	8	87.5	None	No	0.004	NP (NDs)
Mercury (mg/L)	MW-23D	0.0002	0.00017	0.002	No	8	87.5	None	No	0.004	NP (NDs)
Mercury (mg/L)	MW-35	0.00084	0.00014	0.002	No	6	50	None	No	0.0155	NP (normality)
Mercury (mg/L)	MW-51	0.0002	0.00013	0.002	No	5	80	None	No	0.031	NP (NDs)
Molybdenum (mg/L)	HGWC-15	0.01	0.0007	0.1	No	23	95.65	None	No	0.01	NP (NDs)

Confidence Interval Summary Table - All Results

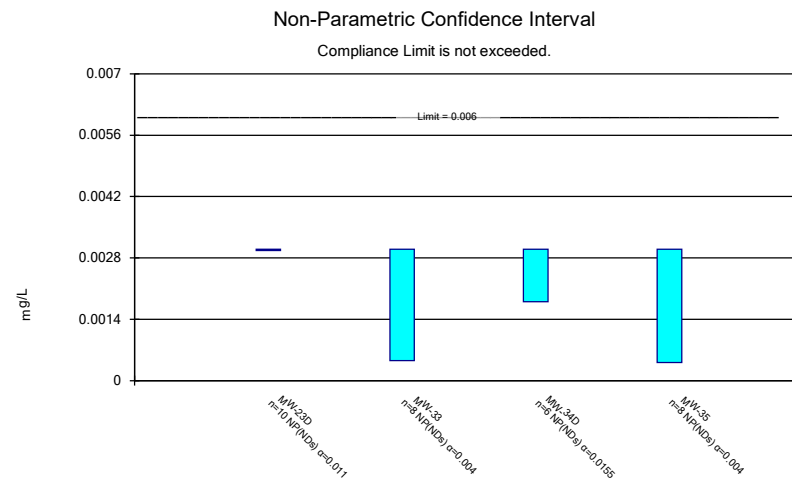
Page 3

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/21/2024, 8:28 PM

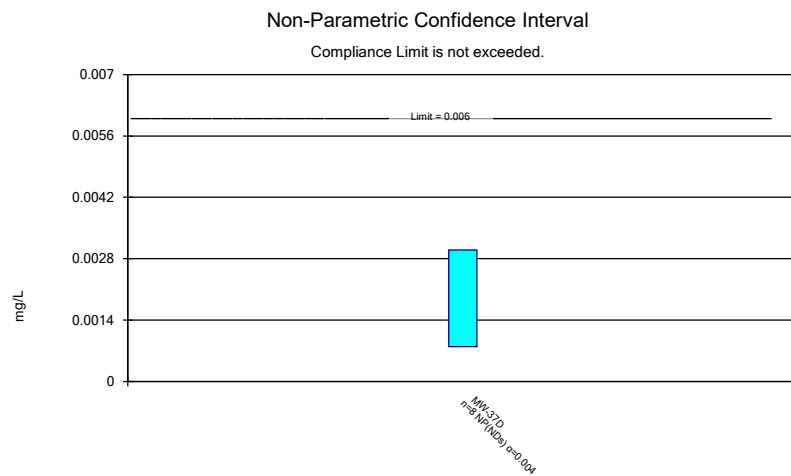
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	MW-21D	0.02886	0.01764	0.1	No	15	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	MW-22	0.01	0.00013	0.1	No	14	92.86	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-23D	0.004132	0.002811	0.1	No	14	7.143	None	No	0.01	Param.
Molybdenum (mg/L)	MW-37D	0.01788	0.003694	0.1	No	9	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-14	0.01139	0.006143	0.05	No	25	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-15	0.005	0.0041	0.05	No	25	84	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-16	0.005	0.000089	0.05	No	25	96	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-17	0.005	0.0023	0.05	No	25	88	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-18	0.03214	0.01464	0.05	No	25	4	None	sqrt(x)	0.01	Param.
Selenium (mg/L)	MW-22	0.005	0.002	0.05	No	14	92.86	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-33	0.02152	0.0078	0.05	No	11	0	None	x^(1/3)	0.01	Param.
Selenium (mg/L)	MW-34D	0.005	0.0016	0.05	No	8	75	None	No	0.004	NP (NDs)
Selenium (mg/L)	MW-35	0.01866	0.006011	0.05	No	10	0	None	x^(1/3)	0.01	Param.
Selenium (mg/L)	MW-51	0.003691	0.001565	0.05	No	6	33.33	Kaplan-Meier	sqrt(x)	0.01	Param.
Thallium (mg/L)	HGWC-14	0.000306	0.00027	0.002	No	25	4	None	No	0.01	NP (normality)
Thallium (mg/L)	HGWC-15	0.001	0.00022	0.002	No	25	96	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-17	0.001	0.00014	0.002	No	25	68	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-18	0.001	0.00016	0.002	No	25	52	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-33	0.001	0.00022	0.002	No	11	18.18	None	No	0.006	NP (normality)
Thallium (mg/L)	MW-34D	0.001	0.00015	0.002	No	8	87.5	None	No	0.004	NP (NDs)
Thallium (mg/L)	MW-35	0.001	0.001	0.002	No	10	90	None	No	0.011	NP (NDs)



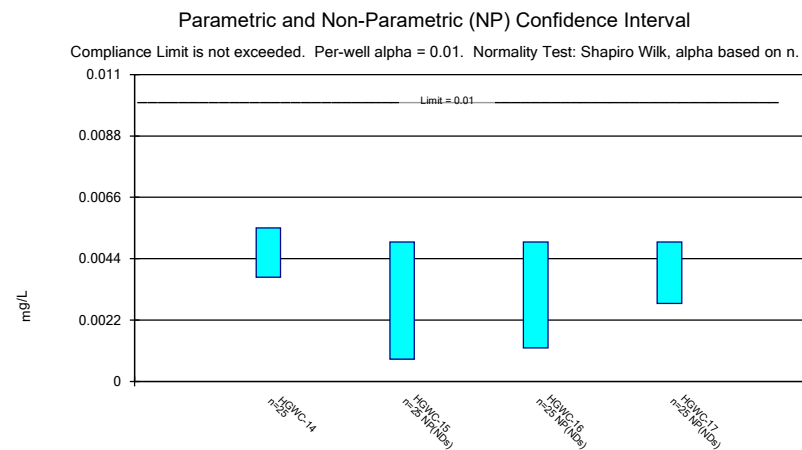
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Plant Hammond Client: Southern Company Data: Hammond AP-2



Constituent: Antimony Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2



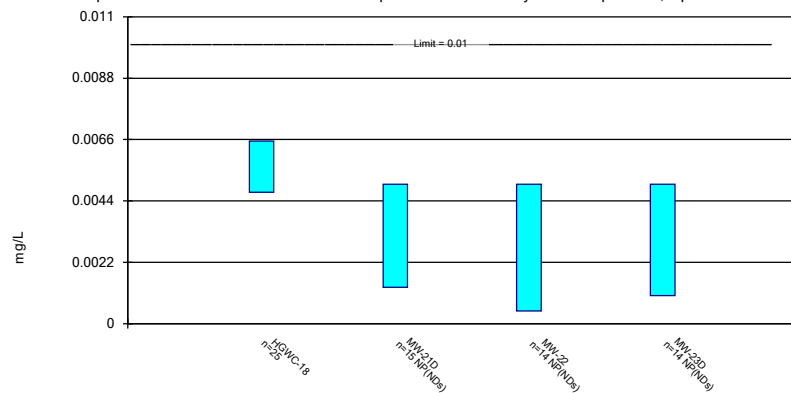
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Plant Hammond Client: Southern Company Data: Hammond AP-2



Constituent: Arsenic Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

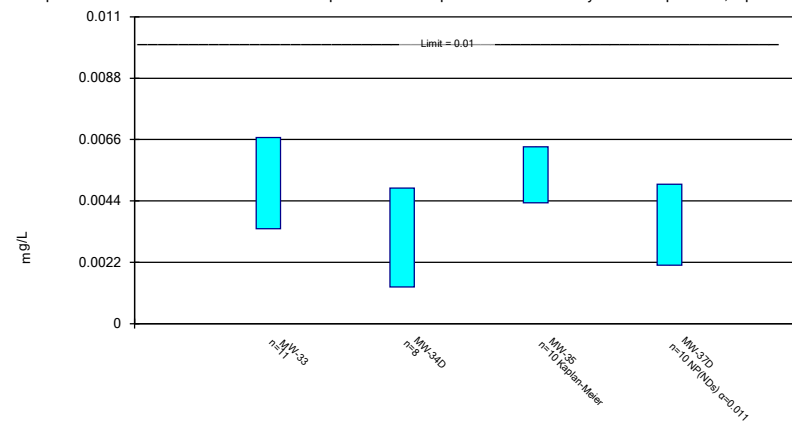
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

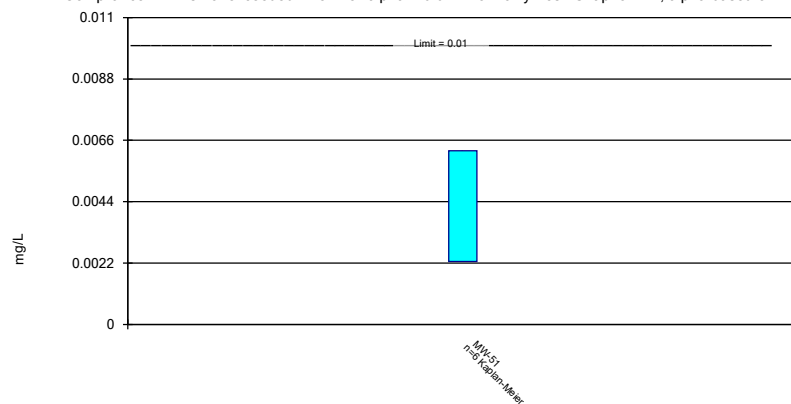
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric Confidence Interval

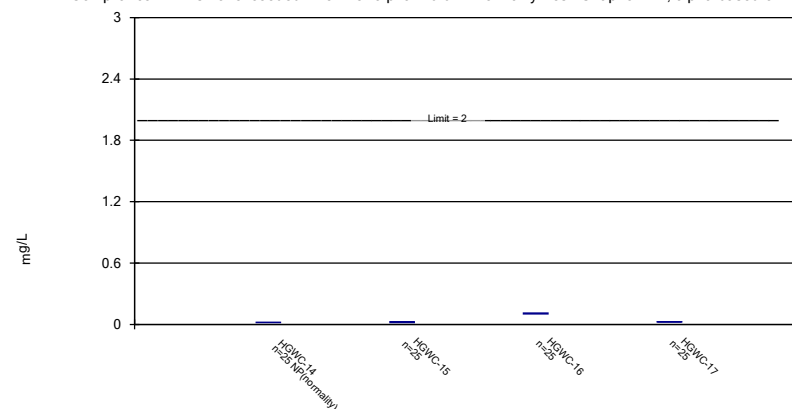
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

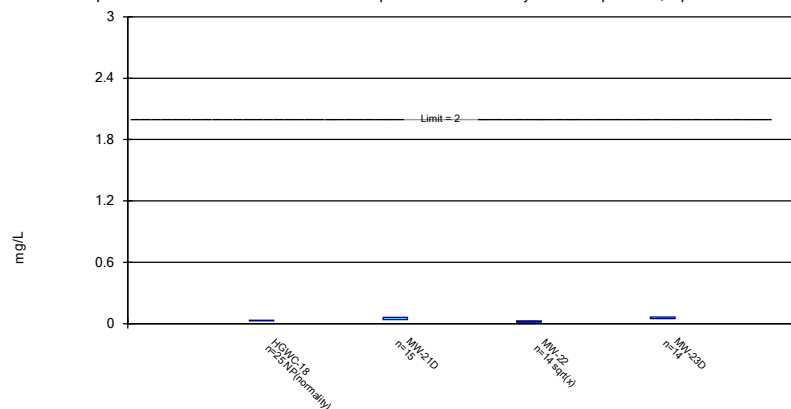
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Constituent: Barium Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

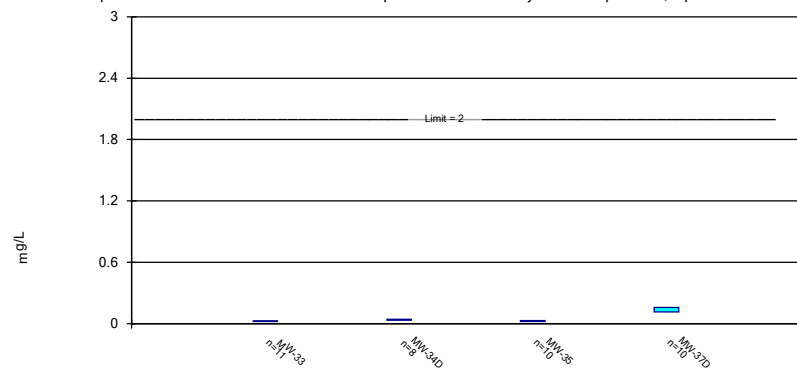
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Constituent: Barium Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric Confidence Interval

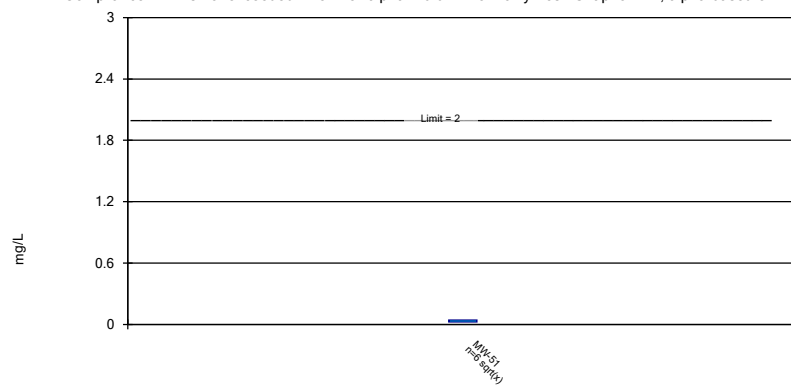
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric Confidence Interval

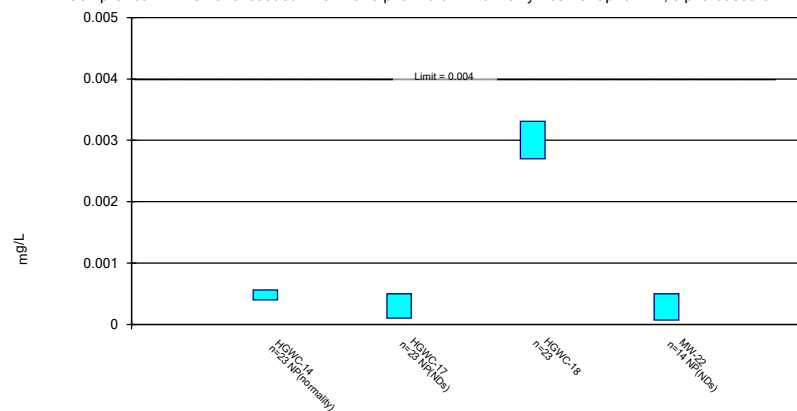
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

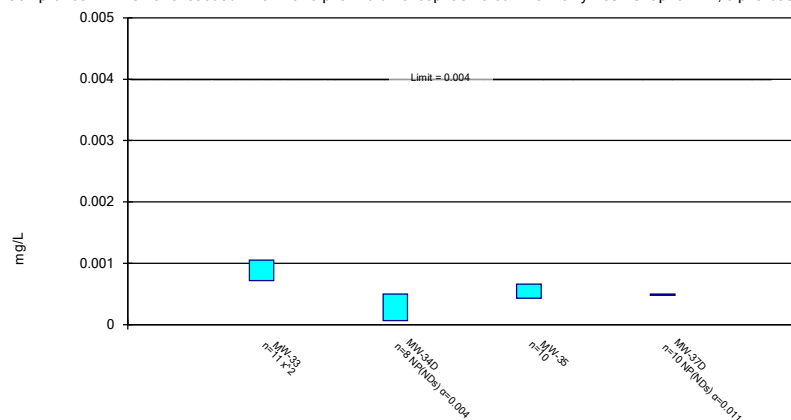
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Constituent: Beryllium Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric Confidence Interval

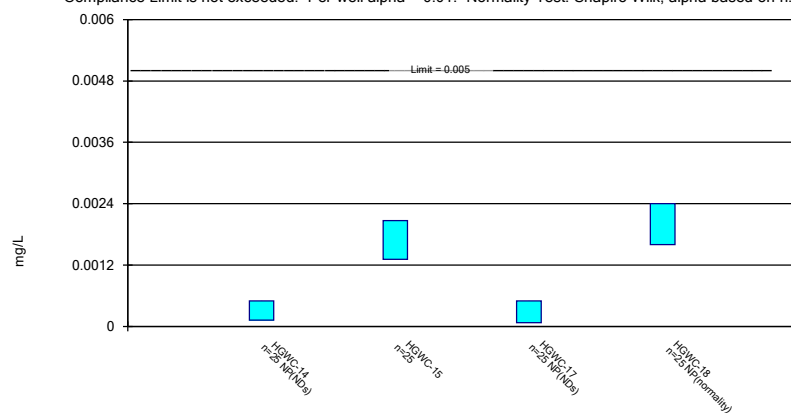
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Constituent: Beryllium Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

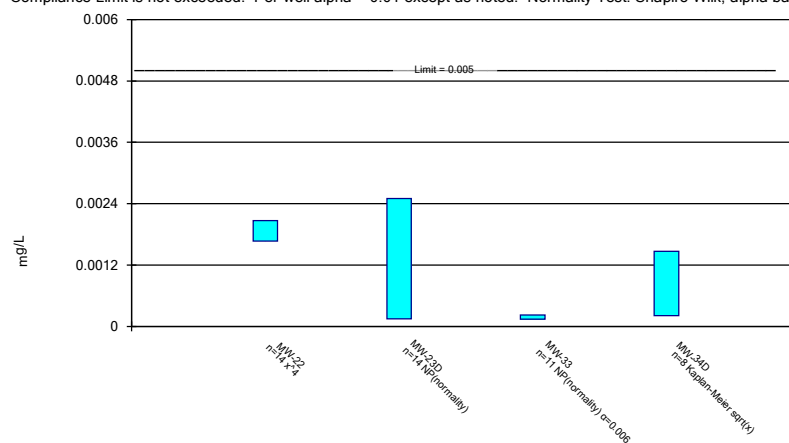
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Constituent: Cadmium Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

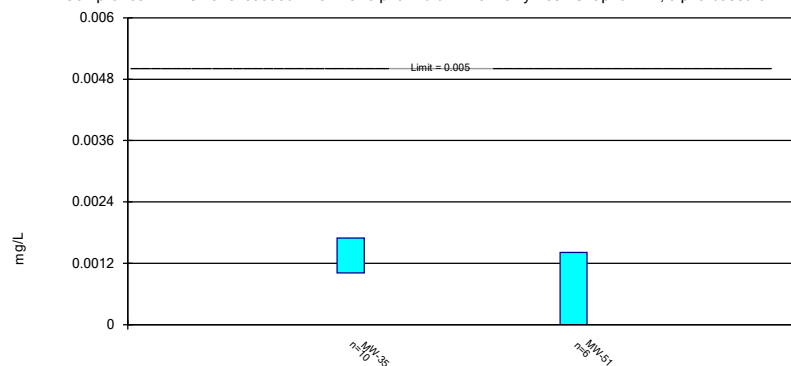
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Constituent: Cadmium Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric Confidence Interval

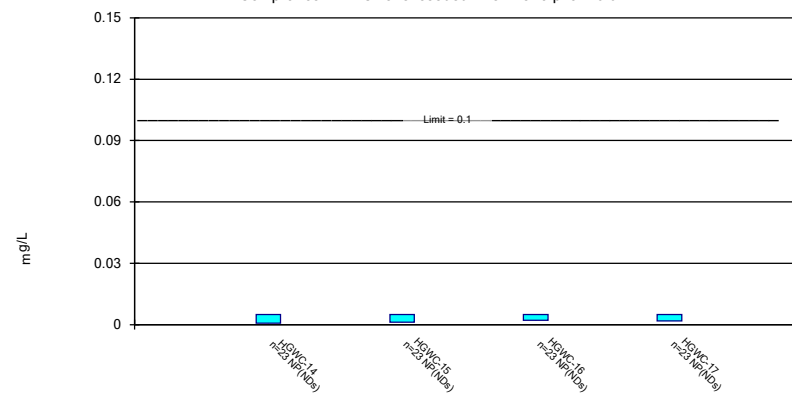
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Constituent: Cadmium Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Non-Parametric Confidence Interval

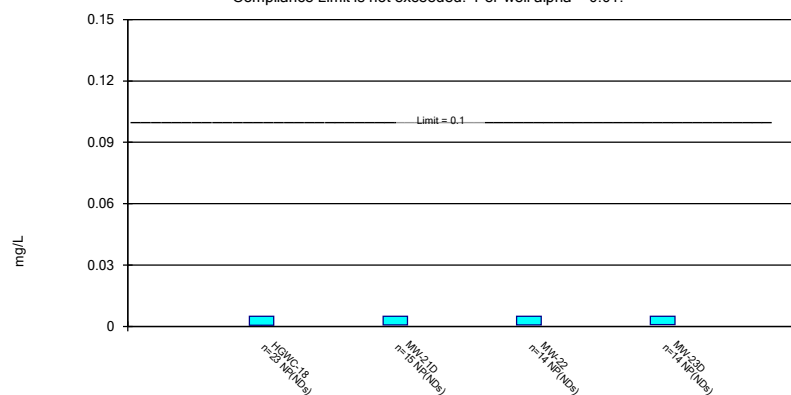
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Constituent: Chromium Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Non-Parametric Confidence Interval

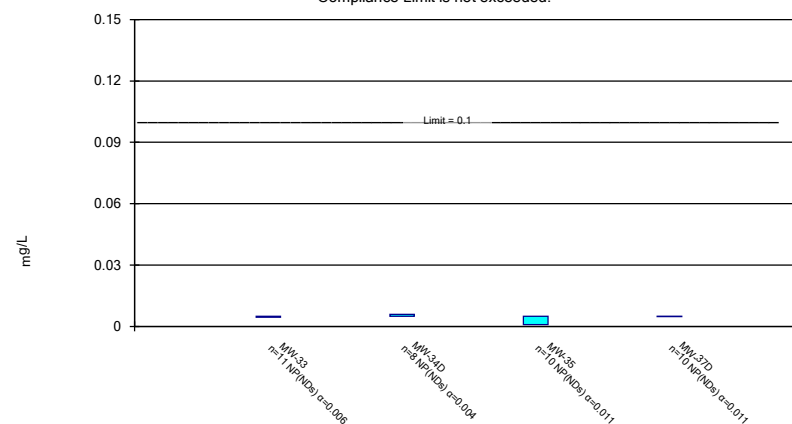
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Non-Parametric Confidence Interval

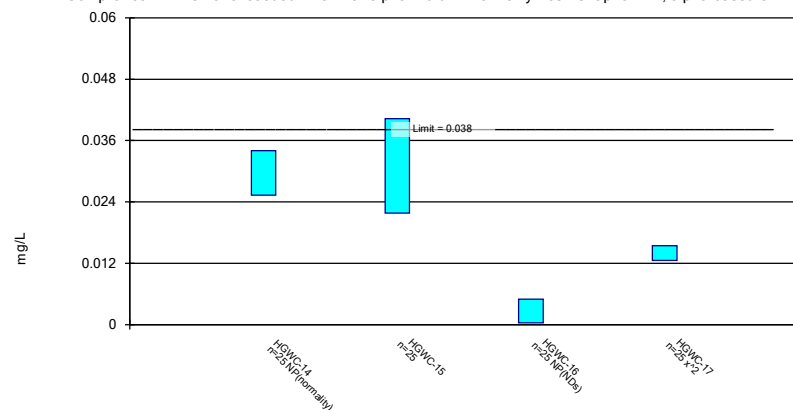
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Constituent: Chromium Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

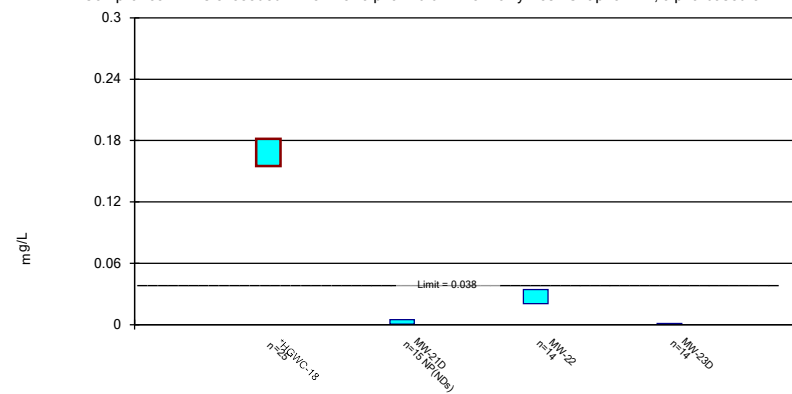
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Constituent: Cobalt Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

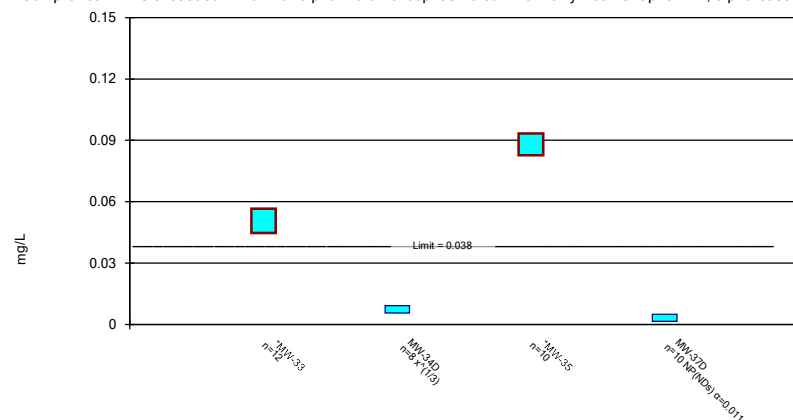
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Constituent: Cobalt Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

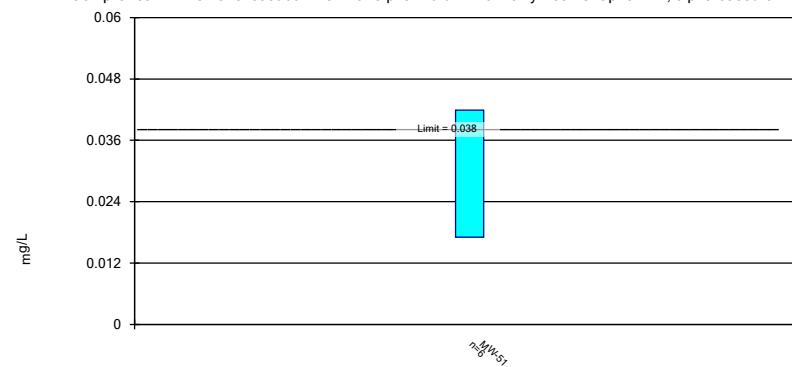
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Constituent: Cobalt Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric Confidence Interval

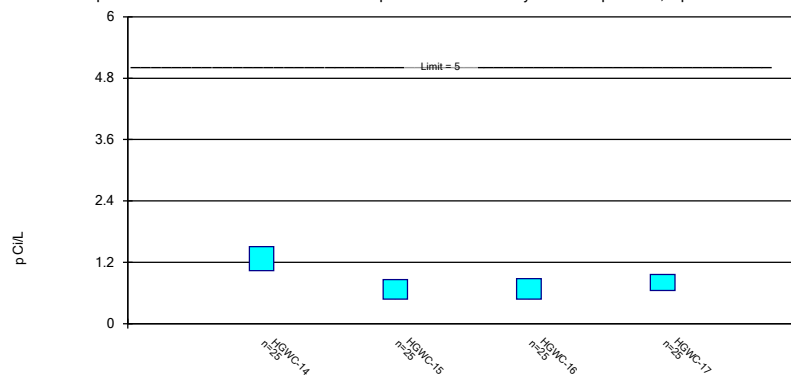
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Constituent: Cobalt Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric Confidence Interval

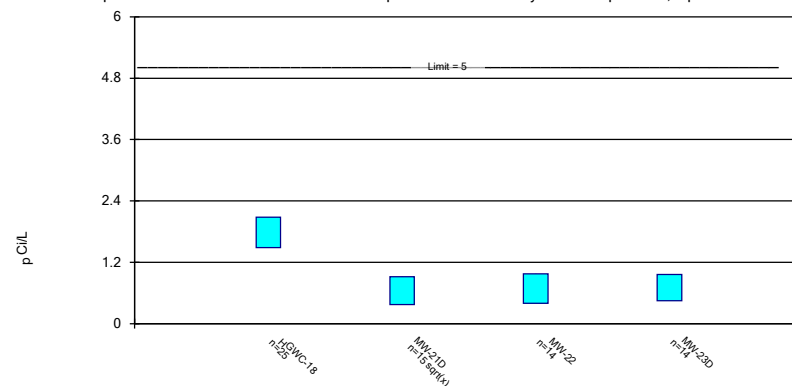
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Constituent: Combined Radium 226 + 228 Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confiden
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric Confidence Interval

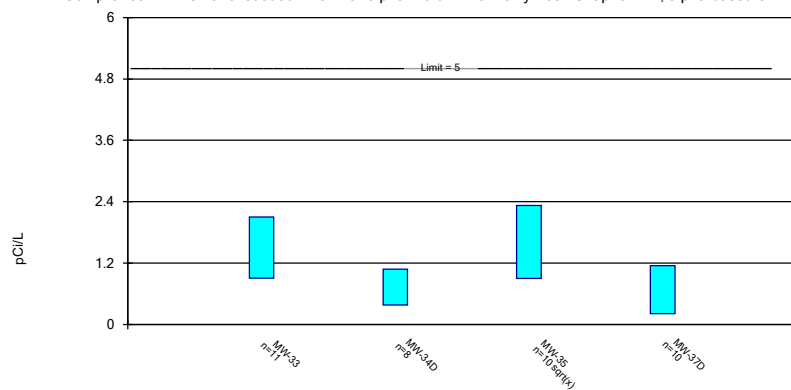
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Constituent: Combined Radium 226 + 228 Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confiden
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric Confidence Interval

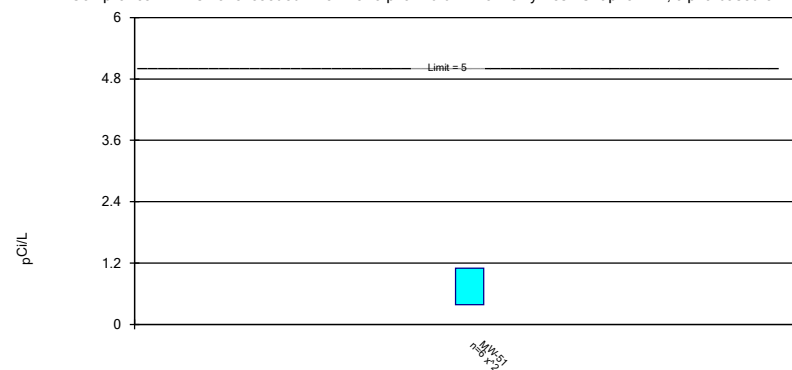
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Constituent: Combined Radium 226 + 228 Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confiden
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric Confidence Interval

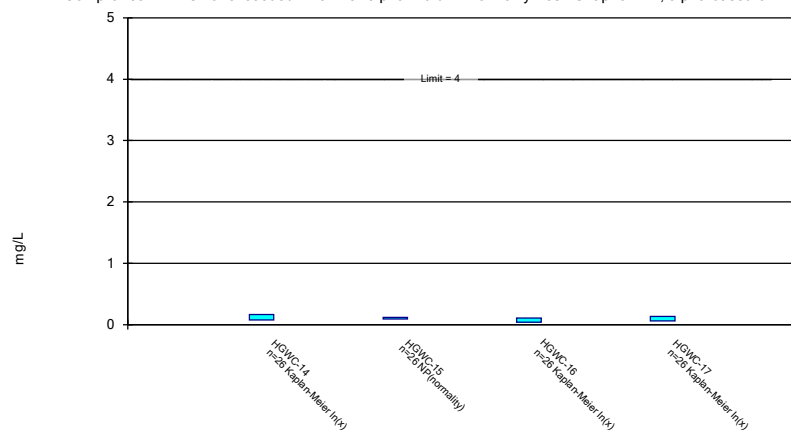
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Constituent: Combined Radium 226 + 228 Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confiden
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

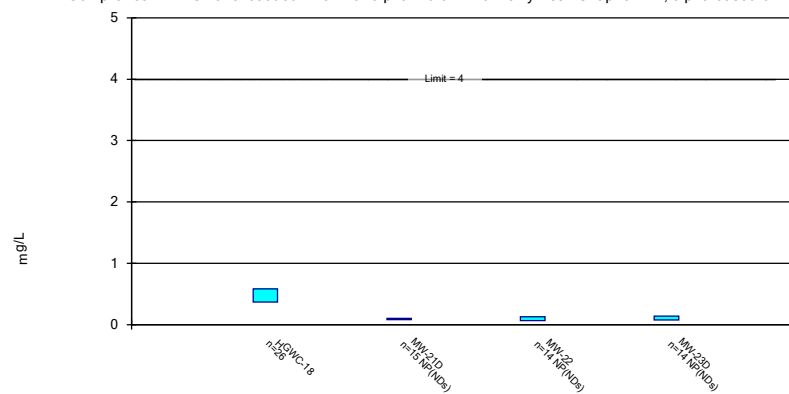
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Constituent: Fluoride Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

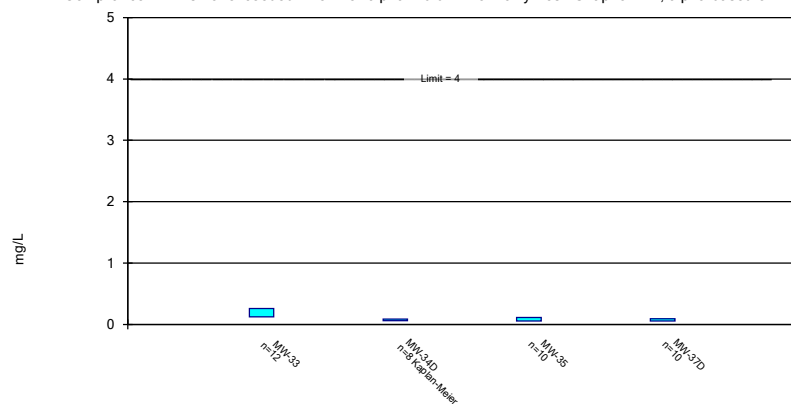
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Constituent: Fluoride Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric Confidence Interval

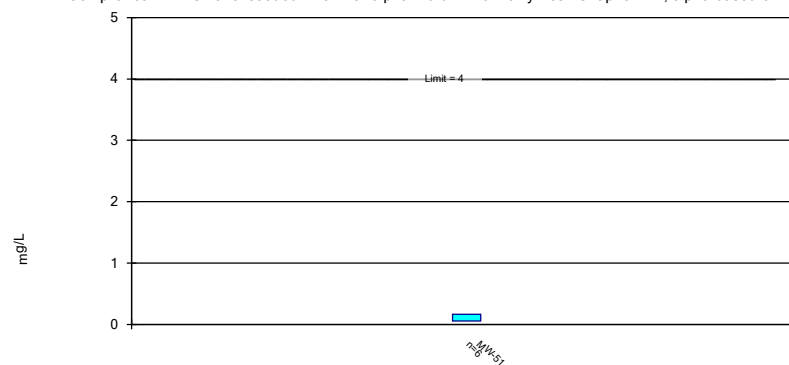
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Constituent: Fluoride Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric Confidence Interval

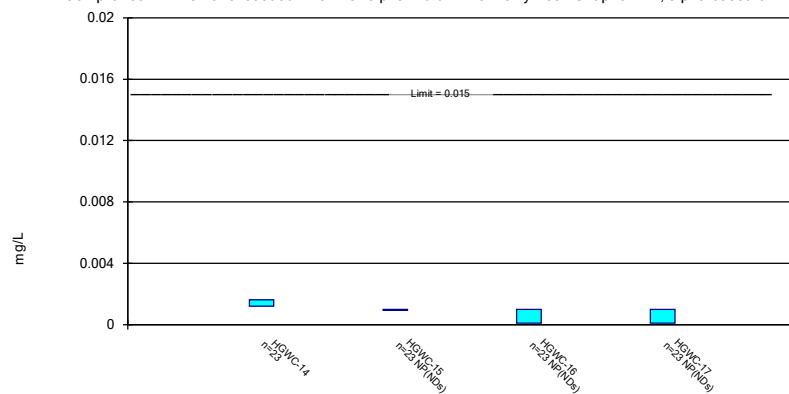
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Constituent: Fluoride Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

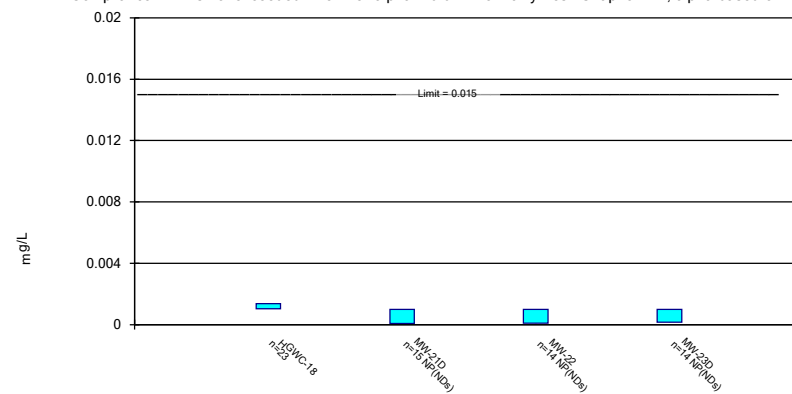
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Constituent: Lead Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

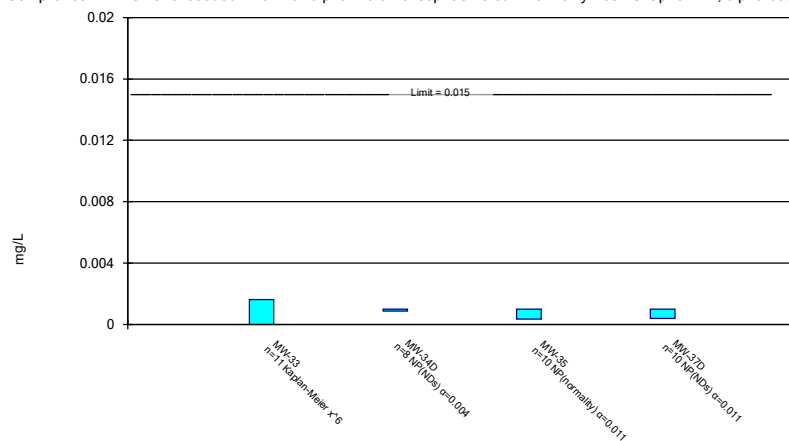
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Constituent: Lead Analysis Run 5/21/2024 8:26 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

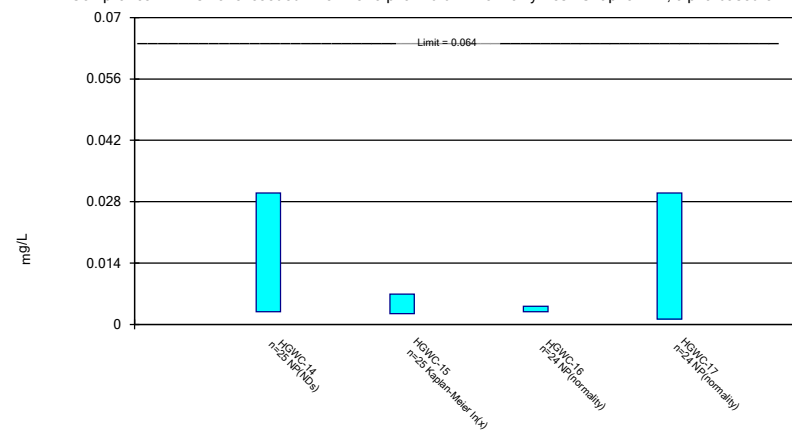
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Constituent: Lead Analysis Run 5/21/2024 8:27 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

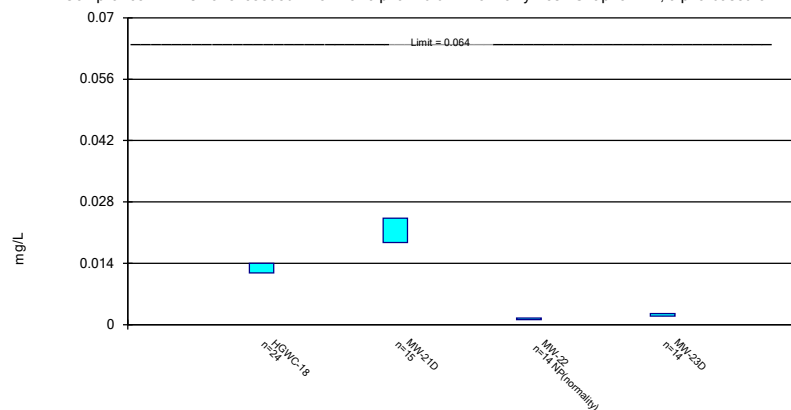
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Constituent: Lithium Analysis Run 5/21/2024 8:27 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

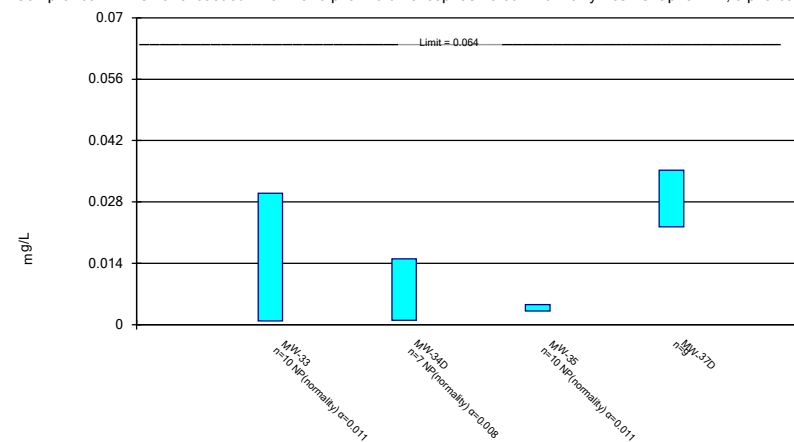
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Constituent: Lithium Analysis Run 5/21/2024 8:27 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

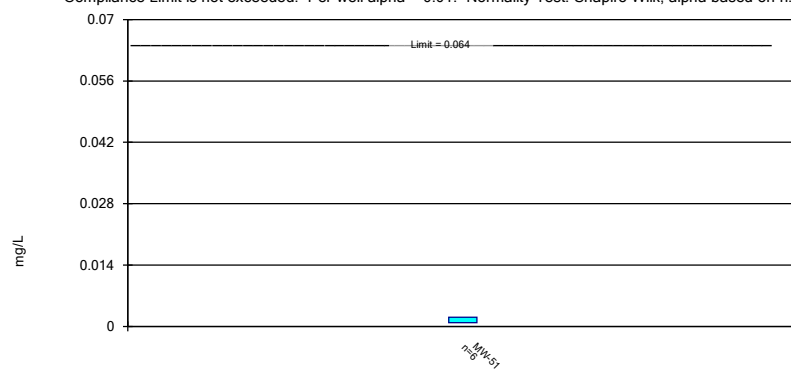
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Constituent: Lithium Analysis Run 5/21/2024 8:27 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric Confidence Interval

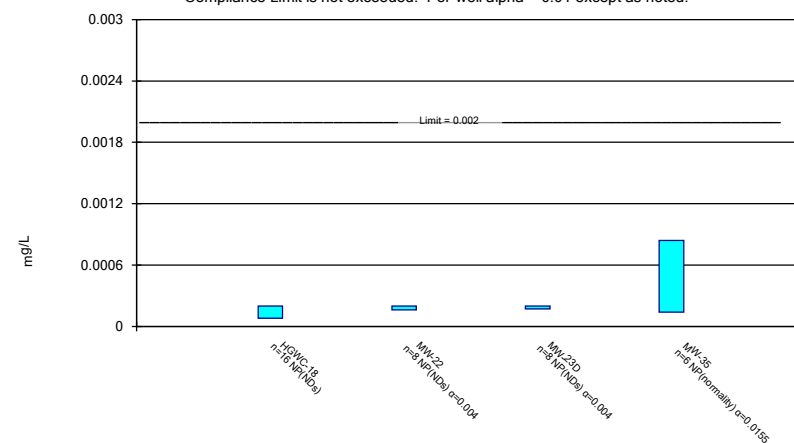
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 5/21/2024 8:27 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Non-Parametric Confidence Interval

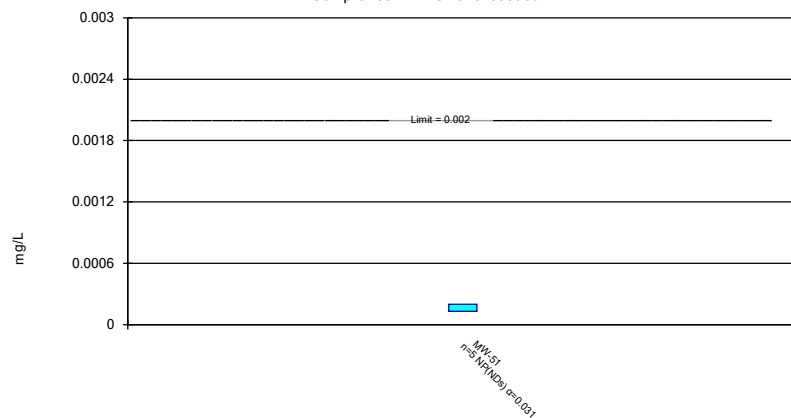
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Mercury Analysis Run 5/21/2024 8:27 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Non-Parametric Confidence Interval

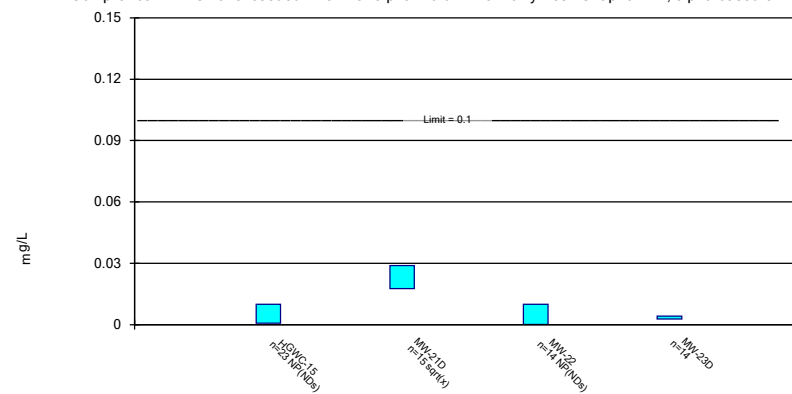
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 5/21/2024 8:27 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

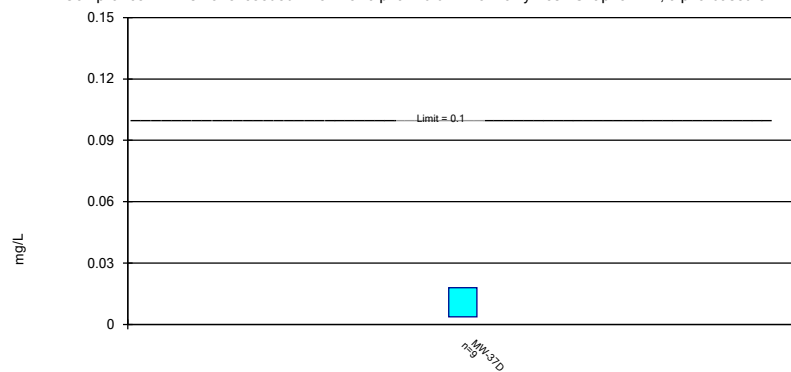
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 5/21/2024 8:27 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric Confidence Interval

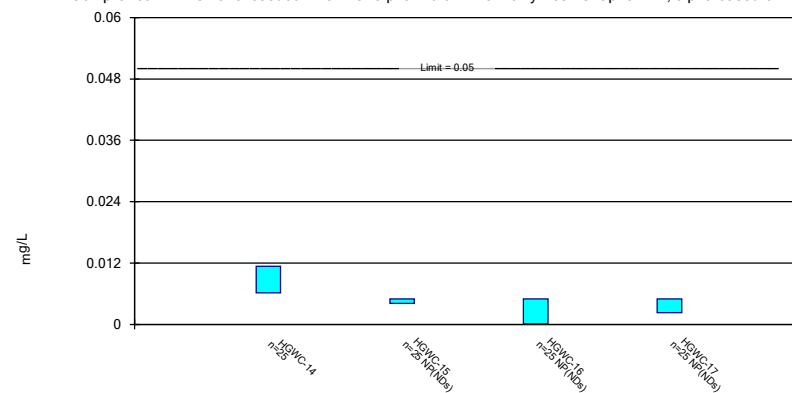
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 5/21/2024 8:27 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

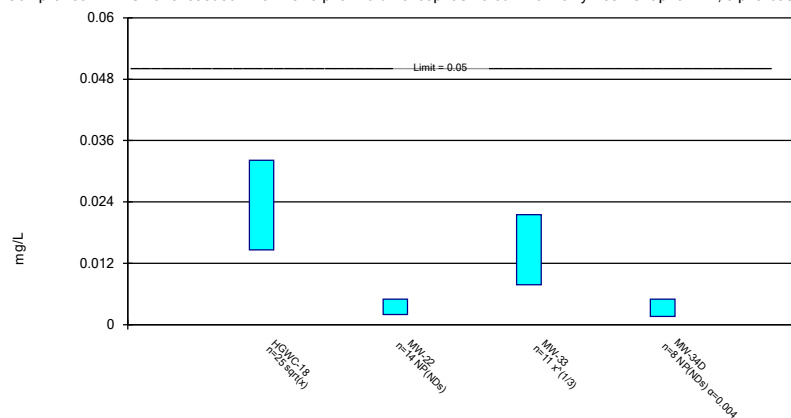
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 5/21/2024 8:27 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric and Non-Parametric (NP) Confidence Interval

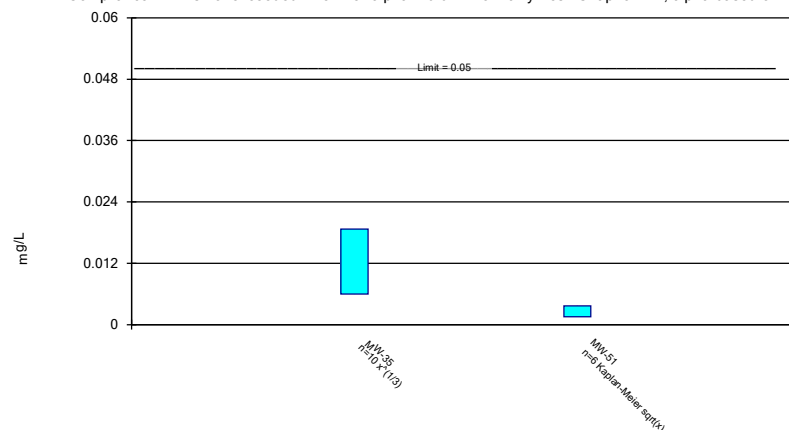
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 5/21/2024 8:27 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Parametric Confidence Interval

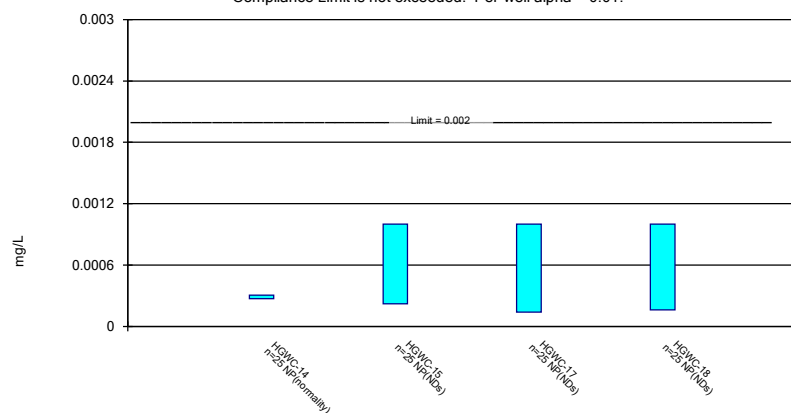
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 5/21/2024 8:27 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Non-Parametric Confidence Interval

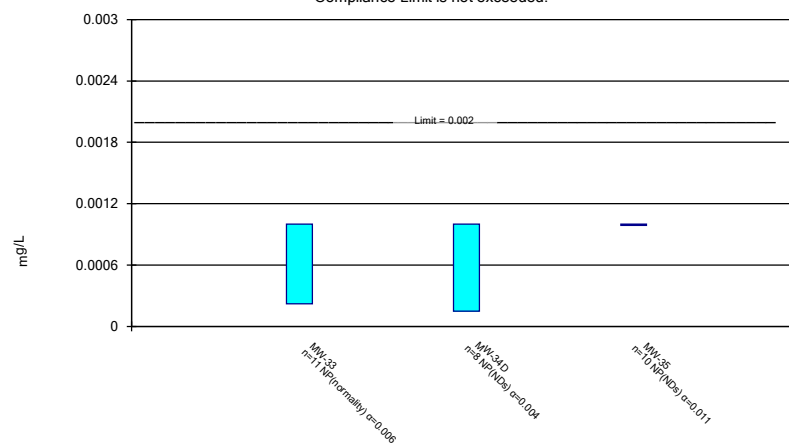
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 5/21/2024 8:27 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 5/21/2024 8:27 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-18	MW-22
5/23/2016	<0.003	<0.003		
5/24/2016			<0.003	
7/12/2016	0.0003 (J)	<0.003	<0.003	
9/1/2016	<0.003	<0.003	<0.003	
10/24/2016	<0.003	<0.003		
10/25/2016			<0.003	
12/7/2016	<0.003	<0.003		
12/8/2016			<0.003	
1/26/2017	<0.003	<0.003	<0.003	
3/23/2017	<0.003	<0.003	<0.003	
5/24/2017	<0.003	<0.003		
5/25/2017			<0.003	
4/3/2018		<0.003	<0.003	
4/4/2018	<0.003			
3/14/2019	<0.003	<0.003	<0.003	
3/15/2019				<0.003
3/2/2020				<0.003
3/3/2020	<0.003	<0.003	<0.003	
2/11/2021	0.00043 (J)		<0.003	
2/12/2021		<0.003		
2/15/2021				<0.003
3/16/2021		<0.003		
3/17/2021	<0.003			<0.003
3/18/2021			<0.003	
8/18/2021	<0.003			
8/19/2021		<0.003	0.0008 (J)	0.0016 (J)
2/8/2022		0.002 (J)	<0.003	<0.003
2/9/2022	<0.003			
8/10/2022			<0.003	
8/11/2022	0.001 (J)	0.0016 (J)		<0.003
1/30/2023				<0.003
2/1/2023	<0.003	0.0021 (J)	<0.003	
8/13/2023	0.0032	0.0027 (J)	<0.003	<0.003
2/17/2024	<0.003	0.0014 (J)		
2/18/2024			<0.003	<0.003
Mean	0.002628	0.002726	0.002884	0.00286
Std. Dev.	0.0009221	0.0005269	0.0005047	0.0004427
Upper Lim.	0.0032	0.003	0.003	0.003
Lower Lim.	0.001	0.0021	0.0008	0.003

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-23D	MW-33	MW-34D	MW-35
3/14/2019	<0.003			
3/2/2020	<0.003			
2/12/2021	<0.003	0.00046 (J)		
2/15/2021				0.00041 (J)
3/17/2021	<0.003			
3/18/2021		<0.003		
3/19/2021				<0.003
8/16/2021			<0.003	
8/18/2021		<0.003		<0.003
8/19/2021	<0.003			
2/8/2022		<0.003		0.0029 (J)
2/9/2022			<0.003	
2/10/2022	<0.003			
8/10/2022		<0.003	<0.003	
8/11/2022	<0.003			<0.003
1/27/2023		<0.003		
1/30/2023			0.0018 (J)	
2/1/2023	<0.003			<0.003
8/12/2023			<0.003	<0.003
8/13/2023	<0.003	<0.003		
2/18/2024	0.00057 (J)	<0.003	<0.003	
2/19/2024				<0.003
Mean	0.002757	0.002683	0.0028	0.002664
Std. Dev.	0.0007684	0.000898	0.0004899	0.0009113
Upper Lim.	0.003	0.003	0.003	0.003
Lower Lim.	0.003	0.00046	0.0018	0.00041

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-37D
2/11/2021	0.00079 (J)
3/12/2021	<0.003
8/18/2021	<0.003
2/8/2022	<0.003
8/10/2022	<0.003
1/30/2023	<0.003
8/13/2023	<0.003
2/18/2024	<0.003
Mean	0.002724
Std. Dev.	0.0007814
Upper Lim.	0.003
Lower Lim.	0.00079

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17
5/23/2016	0.00268 (J)	<0.005	<0.005	<0.005
7/12/2016	0.0059	<0.005	<0.005	<0.005
9/1/2016	0.0056	<0.005	<0.005	<0.005
10/24/2016	0.0058	<0.005		
10/25/2016			<0.005	<0.005
12/7/2016	<0.005	<0.005	<0.005	<0.005
1/26/2017	0.0089	<0.005	<0.005	<0.005
3/22/2017			0.0005 (J)	0.0007 (J)
3/23/2017	0.0069	0.0008 (J)		
5/24/2017	0.0048 (J)	<0.005	<0.005	
5/25/2017				0.0007 (J)
4/3/2018		<0.005	<0.005	<0.005
4/4/2018	0.0052			
6/6/2018	0.0059	<0.005	<0.005	0.00097 (J)
10/3/2018	0.0032 (J)	<0.005	<0.005	<0.005
3/14/2019	0.0029 (J)	<0.005		
3/15/2019			<0.005	<0.005
4/4/2019		0.00017 (J)	0.0001 (J)	
4/5/2019	<0.005			<0.005
9/24/2019	0.0039 (J)	0.00037 (J)		
9/25/2019			<0.005	<0.005
3/3/2020	0.0035 (J)	<0.005	<0.005	<0.005
3/26/2020		<0.005		
3/30/2020	0.0051		0.0011 (J)	
3/31/2020				0.0008 (J)
9/16/2020				<0.005
9/17/2020		<0.005	<0.005	
9/18/2020	0.0029 (J)			
2/10/2021			0.0012 (J)	
2/11/2021	0.0062			0.0012 (J)
2/12/2021		<0.005		
3/16/2021		<0.005		
3/17/2021	<0.005		<0.005	
3/18/2021				<0.005
8/18/2021	0.0035 (J)			<0.005
8/19/2021		<0.005	<0.005	
2/8/2022		<0.005	<0.005	0.0017 (J)
2/9/2022	0.0077			
8/10/2022			<0.005	<0.005
8/11/2022	0.006	<0.005		
1/30/2023				0.0028 (J)
2/1/2023	0.004 (J)	<0.005	<0.005	
8/13/2023	0.0048 (J)	<0.005	<0.005	<0.005
2/17/2024	0.0026 (J)	<0.005		<0.005
2/18/2024			<0.005	
Mean	0.004619	0.004454	0.004316	0.003955
Std. Dev.	0.001783	0.001513	0.00161	0.001753
Upper Lim.	0.005508	0.005	0.005	0.005
Lower Lim.	0.00373	0.0008	0.0012	0.0028

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-18	MW-21D	MW-22	MW-23D
5/24/2016	0.00294 (J)			
7/12/2016	0.0074			
9/1/2016	0.0073			
10/25/2016	0.006			
12/8/2016	0.007			
1/26/2017	0.0068			
3/23/2017	0.0082			
5/25/2017	0.006			
4/3/2018	0.0062			
6/5/2018	0.008			
10/3/2018	0.0039 (J)			
3/14/2019	0.0036 (J)			<0.005
3/15/2019		<0.005	<0.005	
4/4/2019		0.00019 (J)		
4/5/2019	0.0015 (J)		<0.005	<0.005
9/25/2019	0.0044 (J)	<0.005		
9/26/2019				<0.005
9/27/2019			0.00045 (J)	
3/2/2020			<0.005	<0.005
3/3/2020	0.0057	<0.005		
3/27/2020			<0.005	
3/31/2020	0.0056			
4/1/2020		0.0013 (J)		0.00082 (J)
6/17/2020		<0.005		
9/15/2020	0.0074			
9/17/2020			<0.005	<0.005
9/21/2020		<0.005		
2/11/2021	0.0069 (B)	0.001 (J)		
2/12/2021				0.001 (J)
2/15/2021			<0.005	
3/17/2021			<0.005	<0.005
3/18/2021	0.0083 (J)	<0.005		
8/19/2021	0.0045 (J)	<0.005	<0.005	<0.005
2/8/2022	0.005 (J)	<0.005	<0.005	
2/10/2022				<0.005
8/10/2022	0.0058			
8/11/2022		0.003 (J)	<0.005	<0.005
1/27/2023		<0.005		
1/30/2023			<0.005	
2/1/2023	0.0036 (J)			<0.005
8/12/2023		<0.005		
8/13/2023	0.0059 (J)		<0.005	<0.005
2/18/2024	0.0027 (J)	<0.005	<0.005	<0.005
Mean	0.005626	0.004033	0.004675	0.004416
Std. Dev.	0.00184	0.001748	0.001216	0.001486
Upper Lim.	0.006543	0.005	0.005	0.005
Lower Lim.	0.004708	0.0013	0.00045	0.001

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-33	MW-34D	MW-35	MW-37D
4/1/2020	0.0061			
6/17/2020	0.0031 (J)			
6/18/2020		0.0032 (J)	0.005 (J)	0.0021 (J)
9/21/2020	0.0083		0.0059	
9/23/2020		0.001 (J)		0.00095 (J)
2/11/2021				0.0023 (J)
2/12/2021	0.0059			
2/15/2021			0.005	
3/12/2021				<0.005
3/18/2021	0.0054 (J)			
3/19/2021			<0.005	
8/16/2021		0.0024 (J)		
8/18/2021	0.0058		0.0043 (J)	<0.005
2/8/2022	0.0069		0.0072	<0.005
2/9/2022		0.0054		
8/10/2022	<0.005	0.0045 (J)		<0.005
8/11/2022			<0.005	
1/27/2023	0.0031 (J)			
1/30/2023		0.0047 (J)		<0.005
2/1/2023			0.006	
8/12/2023		<0.005	0.0045 (J)	
8/13/2023	0.0059 (J)			<0.005
2/18/2024	0.0024 (J)	0.00099 (J)		<0.005
2/19/2024			0.0073	
Mean	0.005036	0.003086	0.00552	0.004035
Std. Dev.	0.001958	0.00167	0.001053	0.001591
Upper Lim.	0.006668	0.004857	0.006343	0.005
Lower Lim.	0.003405	0.001316	0.004337	0.0021

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-51
8/18/2021	0.002 (J)
2/8/2022	0.0046 (J)
8/11/2022	0.0043 (J)
2/1/2023	0.0041 (J)
8/12/2023	<0.005
2/19/2024	0.0067
Mean	0.00445
Std. Dev.	0.001519
Upper Lim.	0.006226
Lower Lim.	0.002258

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17
5/23/2016	<0.25	0.0315 (J)	0.0841	0.0222 (J)
7/12/2016	0.0214	0.0372	0.0886	0.0221
9/1/2016	0.0208	0.0364	0.0934	0.0227
10/24/2016	0.0208	0.0326		
10/25/2016			0.0991	0.0225
12/7/2016	0.022	0.0301	0.101	0.0227
1/26/2017	0.0238	0.0287	0.105	0.0229
3/22/2017			0.11	0.0248
3/23/2017	0.0244	0.0329		
5/24/2017	0.0228	0.0283	0.106	
5/25/2017				0.0255
4/3/2018		0.019	0.099	0.025
4/4/2018	0.021			
6/6/2018	0.022	0.022	0.11	0.028
10/3/2018	0.02	0.025	0.11	0.028
3/14/2019	0.019	0.021		
3/15/2019			0.13	0.029
4/4/2019		0.018	0.11	
4/5/2019	0.016			0.022
9/24/2019	0.021	0.019		
9/25/2019			0.11	0.025
3/3/2020	0.018	0.018	0.12	0.026
3/26/2020		0.016		
3/30/2020	0.02		0.11	
3/31/2020				0.029
9/16/2020				0.025
9/17/2020		0.017	0.11	
9/18/2020	0.019			
2/10/2021			0.11	
2/11/2021	0.02			0.025
2/12/2021		0.014		
3/16/2021		0.012		
3/17/2021	0.023		0.12	
3/18/2021				0.027
8/18/2021	0.018			0.022
8/19/2021		0.01	0.1	
2/8/2022		0.0098	0.1	0.021
2/9/2022	0.017			
8/10/2022			0.1	0.027
8/11/2022	0.017	0.015		
1/30/2023				0.03
2/1/2023	0.017	0.021	0.11	
8/13/2023	0.016	0.011	0.099	0.025
2/17/2024	0.02	0.017		0.023
2/18/2024			0.098	
Mean	0.0242	0.0217	0.1053	0.0249
Std. Dev.	0.02113	0.008371	0.00997	0.002578
Upper Lim.	0.022	0.02587	0.1103	0.02618
Lower Lim.	0.018	0.01753	0.1004	0.02361

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-18	MW-21D	MW-22	MW-23D
5/24/2016	<0.2			
7/12/2016	0.0346			
9/1/2016	0.0336			
10/25/2016	0.0349			
12/8/2016	0.0339			
1/26/2017	0.0293			
3/23/2017	0.0313			
5/25/2017	0.0336			
4/3/2018	0.028			
6/5/2018	0.03			
10/3/2018	0.032			
3/14/2019	0.029			0.082
3/15/2019		0.09	0.044	
4/4/2019		0.075		
4/5/2019	0.021		0.036	0.061
9/25/2019	0.03	0.066		
9/26/2019				0.064
9/27/2019			0.028	
3/2/2020			0.027	0.06
3/3/2020	0.026	0.058		
3/27/2020			0.025	
3/31/2020	0.029			
4/1/2020		0.066		0.065
6/17/2020		0.054		
9/15/2020	0.03			
9/17/2020			0.02	0.057
9/21/2020		0.049		
2/11/2021	0.03	0.044		
2/12/2021				0.056
2/15/2021			0.017	
3/17/2021			0.018	0.058
3/18/2021	0.031	0.047		
8/19/2021	0.031	0.042	0.018	0.05
2/8/2022	0.02	0.033	0.014	
2/10/2022				0.05
8/10/2022	0.026			
8/11/2022		0.037	0.014	0.05
1/27/2023		0.031		
1/30/2023			0.014	
2/1/2023	0.019			0.047
8/12/2023		0.033		
8/13/2023	0.026		0.013	0.041
2/18/2024	0.02	0.034	0.012	0.041
Mean	0.03157	0.0506	0.02143	0.05586
Std. Dev.	0.01498	0.0175	0.009525	0.01076
Upper Lim.	0.032	0.06246	0.02721	0.06348
Lower Lim.	0.026	0.03874	0.01486	0.04823

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-33	MW-34D	MW-35	MW-37D
4/1/2020	0.027			
6/17/2020	0.024			
6/18/2020		0.044	0.029	0.19
9/21/2020	0.024		0.028	
9/23/2020		0.038		0.14
2/11/2021				0.14
2/12/2021	0.025			
2/15/2021			0.026	
3/12/2021				0.12
3/18/2021	0.029			
3/19/2021			0.032	
8/16/2021		0.035		
8/18/2021	0.025		0.025	0.12
2/8/2022	0.02		0.023	0.11
2/9/2022		0.04		
8/10/2022	0.02 (J)	0.046		0.11
8/11/2022			0.022 (J)	
1/27/2023	0.018			
1/30/2023		0.04		0.13
2/1/2023			0.022	
8/12/2023		0.033	0.021	
8/13/2023	0.023			0.15
2/18/2024	0.016	0.033		0.15
2/19/2024			0.021	
Mean	0.02282	0.03863	0.0249	0.136
Std. Dev.	0.00392	0.004838	0.003784	0.02413
Upper Lim.	0.02608	0.04375	0.02828	0.1575
Lower Lim.	0.01955	0.0335	0.02152	0.1145

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

MW-51

8/18/2021	0.032
2/8/2022	0.046
8/11/2022	0.028
2/1/2023	0.033
8/12/2023	0.026
2/19/2024	0.028
Mean	0.03217
Std. Dev.	0.007278
Upper Lim.	0.04199
Lower Lim.	0.02312

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-17	HGWC-18	MW-22
5/23/2016	<0.003	<0.0005		
5/24/2016			0.00278 (J)	
7/12/2016	0.0005 (J)	<0.0005	0.0032	
9/1/2016	0.0005 (J)	<0.0005	0.0034	
10/24/2016	0.0005 (J)			
10/25/2016		<0.0005	0.0034	
12/7/2016	0.0006 (J)	<0.0005		
12/8/2016			0.0033	
1/26/2017	0.0005 (J)	<0.0005	0.0034	
3/22/2017		<0.0005		
3/23/2017	0.0006 (J)		0.0036	
5/24/2017	0.0005 (J)			
5/25/2017		<0.0005	0.0036	
4/3/2018		<0.0005	<0.003	
4/4/2018	<0.003			
3/14/2019	0.00043 (J)		0.0026 (J)	
3/15/2019		<0.0005		<0.0005
4/5/2019	0.00027 (J)	<0.0005	0.0022 (J)	<0.0005
9/24/2019	0.00044 (J)			
9/25/2019		<0.0005	0.0031	
9/27/2019				<0.0005
3/2/2020				<0.0005
3/3/2020	0.00043 (J)	<0.0005	0.0029 (J)	
3/27/2020				<0.0005
3/30/2020	0.00043 (J)			
3/31/2020		<0.0005	0.003	
9/15/2020			0.0033	
9/16/2020		<0.0005		
9/17/2020				4.7E-05 (J)
9/18/2020	0.00043 (J)			
2/11/2021	0.00044 (J)	6.7E-05 (J)	0.0036	
2/15/2021				6.2E-05 (J)
3/17/2021	0.00058			8.2E-05 (J)
3/18/2021		4.8E-05 (J)	0.0038	
8/18/2021	0.00039 (J)	<0.0005		
8/19/2021			0.0034	7E-05 (J)
2/8/2022		<0.0005	0.0026	7.9E-05 (J)
2/9/2022	0.00056			
8/10/2022		6E-05 (J)	0.0032	
8/11/2022	0.00039 (J)			<0.0005
1/30/2023		5.7E-05 (J)		8.1E-05 (J)
2/1/2023	0.00039 (J)		0.002	
8/13/2023	0.0004 (J)	0.0001 (J)	0.003	<0.0005
2/17/2024	0.00044 (J)	<0.0005		
2/18/2024			0.0022	<0.0005
Mean	0.000553	0.0004057	0.003003	0.0003158
Std. Dev.	0.0003086	0.0001831	0.0005854	0.0002209
Upper Lim.	0.00056	0.0005	0.00331	0.0005
Lower Lim.	0.0004	0.0001	0.002697	7E-05

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-33	MW-34D	MW-35	MW-37D
4/1/2020	0.0011 (J)			
6/17/2020	0.00099 (J)			
6/18/2020		0.00015 (J)	0.00032 (J)	0.00012 (J)
9/21/2020	0.0009 (J)		0.0004 (J)	
9/23/2020		<0.0005		<0.0005
2/11/2021				<0.0005
2/12/2021	0.001 (J)			
2/15/2021			0.0006 (J)	
3/12/2021				<0.0005
3/18/2021	0.0011			
3/19/2021			0.00061	
8/16/2021		<0.0005		
8/18/2021	0.00097		0.00061	<0.0005
2/8/2022	0.00087 (J)		0.0007 (J)	<0.0005
2/9/2022		6.5E-05 (J)		
8/10/2022	0.0008	<0.0005		<0.0005
8/11/2022			0.00066 (J)	
1/27/2023	0.00019 (J)			
1/30/2023		<0.0005		<0.0005
2/1/2023			0.00049 (J)	
8/12/2023		<0.0005	0.00041 (J)	
8/13/2023	0.00099			<0.0005
2/18/2024	0.00059	<0.0005		<0.0005
2/19/2024			0.00064	
Mean	0.0008636	0.0004019	0.000544	0.000462
Std. Dev.	0.000266	0.0001831	0.0001294	0.0001202
Upper Lim.	0.001053	0.0005	0.0006594	0.0005
Lower Lim.	0.000716	6.5E-05	0.0004286	0.0005

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

MW-51

8/18/2021	0.00042 (J)
2/8/2022	0.00011 (J)
8/11/2022	0.00028 (J)
2/1/2023	0.00028 (J)
8/12/2023	0.00012 (J)
2/19/2024	0.00047 (J)
Mean	0.00028
Std. Dev.	0.0001485
Upper Lim.	0.0004839
Lower Lim.	7.606E-05

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-17	HGWC-18
5/23/2016	0.000139 (J)	0.00271 (J)	<0.0005	
5/24/2016				<0.02
7/12/2016	<0.0005	0.0019	<0.0005	0.0022
9/1/2016	0.0001 (J)	0.0017	<0.0005	0.0024
10/24/2016	0.0002 (J)	0.0018		
10/25/2016			<0.0005	0.0022
12/7/2016	0.0001 (J)	0.0018	<0.0005	
12/8/2016				0.0024
1/26/2017	0.0001 (J)	0.0013	<0.0005	0.0025
3/22/2017			7E-05 (J)	
3/23/2017	0.0002 (J)	0.002		0.0025
5/24/2017	0.0001 (J)	0.0041		
5/25/2017			<0.0005	0.0027
4/3/2018		0.0022	<0.0005	0.0022
4/4/2018	<0.0005			
6/5/2018				0.0022
6/6/2018	0.00012 (J)	0.0021	<0.0005	
10/3/2018	0.0001 (J)	0.0026	<0.0005	0.0027
3/14/2019	<0.0005	0.0024		0.0019
3/15/2019			<0.0005	
4/4/2019		0.0018		
4/5/2019	7.9E-05 (J)		<0.0005	0.0017
9/24/2019	<0.0005	0.0014 (J)		
9/25/2019			<0.0005	0.0023 (J)
3/3/2020	<0.0005	0.0015 (J)	<0.0005	0.0021 (J)
3/26/2020		0.0016 (J)		
3/30/2020	<0.0005			
3/31/2020			<0.0005	0.0017 (J)
9/15/2020				0.0019 (J)
9/16/2020			<0.0005	
9/17/2020		0.0016 (J)		
9/18/2020	<0.0005			
2/11/2021	<0.0005		<0.0005	0.0016 (J)
2/12/2021		0.0014 (J)		
3/16/2021		0.0011		
3/17/2021	<0.0005			
3/18/2021			<0.0005	0.0015
8/18/2021	0.00013 (J)		<0.0005	
8/19/2021		0.0012		0.0014
2/8/2022		0.0011	<0.0005	0.00076
2/9/2022	<0.0005			
8/10/2022			<0.0005	0.0017
8/11/2022	<0.0005	0.00095		
1/30/2023			<0.0005	
2/1/2023	<0.0005	0.00088		0.001
8/13/2023	<0.0005	0.00033 (J)	<0.0005	0.0017
2/17/2024	<0.0005	0.00084	<0.0005	
2/18/2024				0.0015
Mean	0.0003347	0.001692	0.0004828	0.00227
Std. Dev.	0.0001921	0.0007602	8.6E-05	0.001685
Upper Lim.	0.0005	0.002071	0.0005	0.0024
Lower Lim.	0.00012	0.001313	7E-05	0.0016

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-22	MW-23D	MW-33	MW-34D
3/14/2019		<0.0025		
3/15/2019	0.00082 (J)			
4/5/2019	0.00064 (J)	<0.0025		
9/26/2019		<0.0025		
9/27/2019	0.0014 (J)			
3/2/2020	0.0021 (J)	<0.0025		
3/27/2020	0.0019 (J)			
4/1/2020		<0.0025	0.00022 (J)	
6/17/2020			0.00021 (J)	
6/18/2020				<0.0025
9/17/2020	0.0021 (J)	0.0006 (J)		
9/21/2020			0.00016 (J)	
9/23/2020				<0.0025
2/12/2021		0.00045 (J)	0.00017 (J)	
2/15/2021	0.002 (J)			
3/17/2021	0.0022	0.00057		
3/18/2021			0.00019 (J)	
8/16/2021				0.00023 (J)
8/18/2021			0.00017 (J)	
8/19/2021	0.0021	0.00012 (J)		
2/8/2022	0.002		0.00013 (J)	
2/9/2022				0.00072
2/10/2022		0.00024 (J)		
8/10/2022			<0.0025	0.00041 (J)
8/11/2022	0.002	0.00021 (J)		
1/27/2023			0.00017 (J)	
1/30/2023	0.0017			0.00047 (J)
2/1/2023		0.00012 (J)		
8/12/2023				0.0029
8/13/2023	0.002	0.00015 (J)	0.0002 (J)	
2/18/2024	0.0018	0.00017 (J)	0.00014 (J)	0.0008
Mean	0.001769	0.001081	0.0002736	0.001316
Std. Dev.	0.0004853	0.001108	0.000325	0.001112
Upper Lim.	0.002066	0.0025	0.00022	0.00147
Lower Lim.	0.001671	0.00015	0.00014	0.0002074

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-35	MW-51
6/18/2020	0.00053 (J)	
9/21/2020	0.001 (J)	
2/15/2021	0.0017 (J)	
3/19/2021	0.0018	
8/18/2021	0.0015	0.00094
2/8/2022	0.0015	0.00024 (J)
8/11/2022	0.0013 (J)	0.00045 (J)
2/1/2023	0.0017	0.0016
8/12/2023	0.0012	0.00019 (J)
2/19/2024	0.0013	0.00067
Mean	0.001353	0.0006817
Std. Dev.	0.0003822	0.0005293
Upper Lim.	0.001694	0.001409
Lower Lim.	0.001012	0

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17
5/23/2016	<0.005	<0.005	<0.005	<0.005
7/12/2016	<0.005	<0.005	<0.005	<0.005
9/1/2016	<0.005	<0.005	<0.005	<0.005
10/24/2016	<0.005	<0.005		
10/25/2016			<0.005	<0.005
12/7/2016	<0.005	<0.005	<0.005	<0.005
1/26/2017	<0.005	<0.005	<0.005	<0.005
3/22/2017			0.0021 (J)	<0.005
3/23/2017	<0.005	0.0005 (J)		
5/24/2017	<0.005	<0.005	<0.005	
5/25/2017				<0.005
4/3/2018		<0.005	<0.005	<0.005
4/4/2018	<0.005			
3/14/2019	<0.005	<0.005		
3/15/2019			<0.005	<0.005
4/4/2019		<0.005	<0.005	
4/5/2019	<0.005			<0.005
9/24/2019	<0.005	0.00041 (J)		
9/25/2019			<0.005	<0.005
3/3/2020	0.00042 (J)	<0.005	0.00071 (J)	0.0018 (J)
3/26/2020		<0.005		
3/30/2020	0.00066 (J)		0.0004 (J)	
3/31/2020				<0.005
9/16/2020				<0.005
9/17/2020		<0.005	<0.005	
9/18/2020	<0.005			
2/10/2021			<0.005	
2/11/2021	<0.005			0.00074 (J)
2/12/2021		<0.005		
3/16/2021		0.0012 (J)		
3/17/2021	<0.005		<0.005	
3/18/2021				0.00069 (J)
8/18/2021	<0.005			<0.005
8/19/2021		<0.005	<0.005	
2/8/2022		<0.005	<0.005	<0.005
2/9/2022	<0.005			
8/10/2022			<0.005	<0.005
8/11/2022	<0.005	<0.005		
1/30/2023				<0.005
2/1/2023	<0.005	<0.005	<0.005	
8/13/2023	<0.005	<0.005	<0.005	<0.005
2/17/2024	<0.005	<0.005		<0.005
2/18/2024			<0.005	
Mean	0.004612	0.00444	0.004487	0.004488
Std. Dev.	0.001285	0.001485	0.001381	0.001364
Upper Lim.	0.005	0.005	0.005	0.005
Lower Lim.	0.00066	0.0012	0.0021	0.0018

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-18	MW-21D	MW-22	MW-23D
5/24/2016	<0.005			
7/12/2016	<0.005			
9/1/2016	<0.005			
10/25/2016	<0.005			
12/8/2016	<0.005			
1/26/2017	<0.005			
3/23/2017	0.0005 (J)			
5/25/2017	<0.005			
4/3/2018	<0.005			
3/14/2019	<0.005			<0.005
3/15/2019		<0.005	<0.005	
4/4/2019		<0.005		
4/5/2019	<0.005		<0.005	<0.005
9/25/2019	<0.005	<0.005		
9/26/2019				<0.005
9/27/2019			0.0004 (J)	
3/2/2020			<0.005	<0.005
3/3/2020	0.0004 (J)	<0.005		
3/27/2020			<0.005	
3/31/2020	<0.005			
4/1/2020		<0.005		0.00086 (J)
6/17/2020		0.00057 (J)		
9/15/2020	0.00063 (J)			
9/17/2020			<0.005	<0.005
9/21/2020		<0.005		
2/11/2021	<0.005	<0.005		
2/12/2021				<0.005
2/15/2021			<0.005	
3/17/2021			0.00075 (J)	0.00083 (J)
3/18/2021	<0.005	0.00074 (J)		
8/19/2021	<0.005	<0.005	<0.005	<0.005
2/8/2022	<0.005	<0.005	<0.005	
2/10/2022				<0.005
8/10/2022	<0.005			
8/11/2022		<0.005	<0.005	<0.005
1/27/2023		<0.005		
1/30/2023			<0.005	
2/1/2023	<0.005			<0.005
8/12/2023		<0.005		
8/13/2023	<0.005		<0.005	<0.005
2/18/2024	<0.005	<0.005	<0.005	<0.005
Mean	0.004414	0.004421	0.004368	0.004406
Std. Dev.	0.001547	0.001529	0.001608	0.001509
Upper Lim.	0.005	0.005	0.005	0.005
Lower Lim.	0.00063	0.00074	0.00075	0.00086

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-33	MW-34D	MW-35	MW-37D
4/1/2020	0.00069 (J)			
6/17/2020	<0.005			
6/18/2020		0.0059 (J)	<0.005	0.0048 (J)
9/21/2020	<0.005		0.00079 (J)	
9/23/2020		<0.005		<0.005
2/11/2021				0.0014 (J)
2/12/2021	<0.005			
2/15/2021			<0.005	
3/12/2021				<0.005
3/18/2021	<0.005			
3/19/2021			0.00083 (J)	
8/16/2021		<0.005		
8/18/2021	<0.005		<0.005	<0.005
2/8/2022	<0.005		<0.005	<0.005
2/9/2022		<0.005		
8/10/2022	<0.005	<0.005		<0.005
8/11/2022			<0.005	
1/27/2023	<0.005			
1/30/2023		<0.005		<0.005
2/1/2023			<0.005	
8/12/2023		<0.005	<0.005	
8/13/2023	<0.005			<0.005
2/18/2024	<0.005	<0.005		<0.005
2/19/2024			<0.005	
Mean	0.004608	0.005112	0.004162	0.00462
Std. Dev.	0.0013	0.0003182	0.001767	0.001133
Upper Lim.	0.005	0.0059	0.005	0.005
Lower Lim.	0.005	0.005	0.00083	0.0048

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17
5/23/2016	<0.25	0.0419 (J)	<0.005	0.0167
7/12/2016	0.0232	0.0393	<0.005	0.0148
9/1/2016	0.0248	0.045	<0.005	0.0151
10/24/2016	0.0253	0.0557		
10/25/2016			<0.005	0.0141
12/7/2016	0.0269	0.0536	<0.005	0.0141
1/26/2017	0.0294	0.055	<0.005	0.0154
3/22/2017			<0.005	0.0169
3/23/2017	0.0311	0.0715		
5/24/2017	0.0279	0.0446	<0.005	
5/25/2017				0.0154
4/3/2018		0.032	<0.005	0.016
4/4/2018	0.025			
6/6/2018	0.027	0.032	<0.005	0.018
10/3/2018	0.023	0.051	<0.005	0.016
3/14/2019	0.025	0.038		
3/15/2019			<0.005	0.017
4/4/2019		0.035	0.00028 (J)	
4/5/2019	0.021			0.016
9/24/2019	0.026	0.022		
9/25/2019			<0.005	0.015
3/3/2020	0.029	0.03	0.00037 (J)	0.016
3/26/2020		0.022		
3/30/2020	0.028		<0.005	
3/31/2020				0.016
9/16/2020				0.013
9/17/2020		0.026	<0.005	
9/18/2020	0.027			
2/10/2021			<0.005	
2/11/2021	0.033			0.012
2/12/2021		0.019		
3/16/2021		0.018		
3/17/2021	0.034		<0.005	
3/18/2021				0.012
8/18/2021	0.033			0.009
8/19/2021		0.011	<0.005	
2/8/2022		0.0081	<0.005	0.0066
2/9/2022	0.038			
8/10/2022			<0.005	0.012
8/11/2022	0.037	0.0088		
1/30/2023				0.011
2/1/2023	0.035	0.0091	<0.005	
8/13/2023	0.036	0.0016 (J)	<0.005	0.009
2/17/2024	0.038	0.0058		0.0036 (J)
2/18/2024			<0.005	
Mean	0.03314	0.03104	0.004626	0.01363
Std. Dev.	0.01977	0.01856	0.001295	0.003529
Upper Lim.	0.034	0.04029	0.005	0.01544
Lower Lim.	0.0253	0.02179	0.00037	0.01252

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-18	MW-21D	MW-22	MW-23D
5/24/2016	0.17 (J)			
7/12/2016	0.168			
9/1/2016	0.18			
10/25/2016	0.188			
12/8/2016	0.206			
1/26/2017	0.195			
3/23/2017	0.223			
5/25/2017	0.209			
4/3/2018	0.19			
6/5/2018	0.19			
10/3/2018	0.19			
3/14/2019	0.16			0.0013 (J)
3/15/2019		<0.005	0.028	
4/4/2019		0.00034 (J)		
4/5/2019	0.14		0.022	0.0012 (J)
9/25/2019	0.18	<0.005		
9/26/2019				0.00098 (J)
9/27/2019			0.035	
3/2/2020			0.043	0.0011 (J)
3/3/2020	0.15	<0.005		
3/27/2020			0.025	
3/31/2020	0.16			
4/1/2020		<0.005		0.0011 (J)
6/17/2020		<0.005		
9/15/2020	0.16			
9/17/2020			0.029	0.00096 (J)
9/21/2020		<0.005		
2/11/2021	0.14	<0.005		
2/12/2021				0.001 (J)
2/15/2021			0.038	
3/17/2021			0.039	0.0011 (J)
3/18/2021	0.14	<0.005		
8/19/2021	0.15	<0.005	0.022	0.00089 (J)
2/8/2022	0.16	<0.005	0.034	
2/10/2022				0.001 (J)
8/10/2022	0.16			
8/11/2022		<0.005	0.015	0.00088 (J)
1/27/2023		<0.005		
1/30/2023			0.027	
2/1/2023	0.11			0.00081 (J)
8/12/2023		<0.005		
8/13/2023	0.14		0.0089	0.00073 (J)
2/18/2024	0.15	<0.005	0.019	0.00086 (J)
Mean	0.1684	0.004689	0.02749	0.0009936
Std. Dev.	0.02647	0.001203	0.009708	0.000156
Upper Lim.	0.1816	0.005	0.03437	0.001104
Lower Lim.	0.1552	0.00034	0.02062	0.000883

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-33	MW-34D	MW-35	MW-37D
1/22/2020	0.052			
4/1/2020	0.058			
6/17/2020	0.053			
6/18/2020		0.011	0.091	0.0015 (J)
9/21/2020	0.047		0.084	
9/23/2020		0.0056		<0.005
2/11/2021				0.00048 (J)
2/12/2021	0.055			
2/15/2021			0.095	
3/12/2021				<0.005
3/18/2021	0.057			
3/19/2021			0.1	
8/16/2021		0.0093		
8/18/2021	0.054		0.085	<0.005
2/8/2022	0.048		0.09	<0.005
2/9/2022		0.0065		
8/10/2022	0.046	0.0066		<0.005
8/11/2022			0.082	
1/27/2023	0.034			
1/30/2023		0.0071		<0.005
2/1/2023			0.088	
8/12/2023		0.0058	0.082	
8/13/2023	0.061			<0.005
2/18/2024	0.042	0.0067		<0.005
2/19/2024			0.084	
Mean	0.05058	0.007325	0.0881	0.004198
Std. Dev.	0.007585	0.001865	0.005953	0.001708
Upper Lim.	0.05654	0.009192	0.09341	0.005
Lower Lim.	0.04463	0.005521	0.08279	0.0015

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

MW-51

8/18/2021	0.03
2/8/2022	0.031
8/11/2022	0.027
2/1/2023	0.021 (J)
8/12/2023	0.022
2/19/2024	0.046
Mean	0.0295
Std. Dev.	0.00905
Upper Lim.	0.04193
Lower Lim.	0.01707

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17
5/23/2016	0.568 (U)	0.171 (U)		0.618 (U)
7/1/2016			0 (U)	
7/12/2016	1.31	0.611 (U)	0.182 (U)	0.867
9/1/2016	1.64	0.766 (U)	1.23	0.857 (U)
10/24/2016	1.88	0.969		
10/25/2016			1.05 (U)	1.11 (U)
12/7/2016	1.35	0.302 (U)	1.11 (U)	0.964 (U)
1/26/2017	2.1	0.626 (U)	1.29 (U)	0.612 (U)
3/22/2017			0.453 (U)	0.437 (U)
3/23/2017	1.17	0.662 (U)		
5/24/2017	1 (U)	0.202 (U)	1.05 (U)	
5/25/2017				1.21 (U)
4/3/2018		0.384 (U)	0.783 (U)	0.409 (U)
4/4/2018	1.72			
6/6/2018	1.31 (U)	1.32 (U)	0.595 (U)	0.772 (U)
10/3/2018	1.48	0.858 (U)	1.03 (U)	1.08 (U)
3/14/2019	1.5	0.462 (U)		
3/15/2019			0.591 (U)	0.917 (U)
4/4/2019		0.512 (U)	0.96 (U)	
4/5/2019	1.43 (U)			1.07 (U)
9/24/2019	1.17	0.582 (U)		
9/25/2019			0.643 (U)	1.54
3/3/2020	1.84	1.43	1.32 (U)	1.33
3/26/2020		0.855 (U)		
3/30/2020	1.08 (U)		0.288 (U)	
3/31/2020				0.591 (U)
9/16/2020				0.295 (U)
9/17/2020		0.395 (U)	1.1 (U)	
9/18/2020	1.8 (U)			
2/10/2021			0.773 (U)	
2/11/2021	0.73 (U)			0.831 (U)
2/12/2021		1.65		
3/16/2021		0.801 (U)		
3/17/2021	1.84		0.228 (U)	
3/18/2021				0.856 (U)
8/18/2021	0.858 (U)			0.548 (U)
8/19/2021		0.527 (U)	0.668 (U)	
2/8/2022		0.0242 (U)	0.168 (U)	1 (U)
2/9/2022	0.346 (U)			
8/11/2022	1.31	0.656 (U)	0.249 (U)	0.361 (U)
1/30/2023				0.5 (U)
2/1/2023	1.13	0.626 (U)	0.757 (U)	
8/13/2023	0.801 (U)	0.785 (U)	0.281 (U)	0.678 (U)
2/17/2024	0.439 (U)	0.576 (U)		0.633 (U)
2/18/2024			0.248 (U)	
Mean	1.272	0.6701	0.6819	0.8034
Std. Dev.	0.4713	0.3791	0.4018	0.3148
Upper Lim.	1.507	0.8591	0.8822	0.9603
Lower Lim.	1.037	0.4811	0.4816	0.6466

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-18	MW-21D	MW-22	MW-23D
5/24/2016	1.82			
7/12/2016	1.76			
9/1/2016	1.51			
10/25/2016	2.69			
12/8/2016	2.21			
1/26/2017	2.26			
3/23/2017	1.81			
5/25/2017	1.63			
4/3/2018	2.53			
6/5/2018	1.91			
10/3/2018	2.22			
3/14/2019	1.37 (U)			0.872 (U)
3/15/2019		0.972 (U)	0.977	
4/4/2019		0.791 (U)		
4/5/2019	2.22		1.06 (U)	0.932 (U)
9/25/2019	2.77	0.751 (U)		
9/26/2019				1.25
9/27/2019			1.44 (U)	
3/2/2020			0.872 (U)	0.964 (U)
3/3/2020	2.35	1.94		
3/27/2020			0.96 (U)	
3/31/2020	2.7			
4/1/2020		0.758 (U)		0.914 (U)
6/17/2020		0.691 (U)		
9/15/2020	1.65			
9/17/2020			0.0879 (U)	0.32 (U)
9/21/2020		0.436 (U)		
2/11/2021	1.11	0.317 (U)		
2/12/2021				1.21 (U)
2/15/2021			0.215 (U)	
3/17/2021			0.981 (U)	0.579 (U)
3/18/2021	1.63	0.5 (U)		
8/19/2021	1.45	1.17	0.689 (U)	0.69 (U)
2/8/2022	0.93 (U)	0.463 (U)	0.0657 (U)	
2/10/2022				0.919 (U)
8/11/2022	1.46	0.691 (U)	0.789 (U)	0.39 (U)
1/27/2023		0.256 (U)		
1/30/2023			0.621 (U)	
2/1/2023	0.871			0.406 (U)
8/12/2023		0.297 (U)		
8/13/2023	1.03		0.361 (U)	0.0608 (U)
2/18/2024	0.757 (U)	0.127 (U)	0.471 (U)	0.339 (U)
Mean	1.786	0.6773	0.685	0.7033
Std. Dev.	0.5946	0.4504	0.4039	0.3605
Upper Lim.	2.082	0.9196	0.9711	0.9587
Lower Lim.	1.49	0.3722	0.3989	0.4479

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-33	MW-34D	MW-35	MW-37D
4/1/2020	2.57			
6/17/2020	1.43 (U)			
6/18/2020		1.36	2.02	1.79
9/21/2020	2.53		3.85	
9/23/2020		0.563 (U)		0.98 (U)
2/11/2021				0.12 (U)
2/12/2021	2.26			
2/15/2021			1.52	
3/12/2021				0.578 (U)
3/18/2021	0.733 (U)			
3/19/2021			0.524 (U)	
8/16/2021		0.693 (U)		
8/18/2021	1.77		1.67	1.31
2/8/2022	0.967 (U)		1.38	0.345 (U)
2/9/2022		0.297 (U)		
8/11/2022	1.52	1.05	1.71	0.505 (U)
1/27/2023	1.44 (U)			
1/30/2023		0.689 (U)		0.309 (U)
2/1/2023			1.24	
8/12/2023		0.676 (U)	0.897 (U)	
8/13/2023	0.773 (U)			0.308 (U)
2/18/2024	0.552 (U)	0.515 (U)		0.535 (U)
2/19/2024			1.43	
Mean	1.504	0.7304	1.624	0.678
Std. Dev.	0.7187	0.331	0.8892	0.5252
Upper Lim.	2.103	1.081	2.325	1.147
Lower Lim.	0.9052	0.3795	0.9014	0.2094

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

MW-51

8/18/2021	0.973 (U)
2/8/2022	0.431 (U)
8/11/2022	1.02
2/1/2023	0.82 (U)
8/12/2023	0.484 (U)
2/19/2024	0.995 (U)
Mean	0.7872
Std. Dev.	0.2652
Upper Lim.	1.099
Lower Lim.	0.3869

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17
5/23/2016	<0.1	<0.1	0.038 (J)	<0.3
7/12/2016	0.2 (J)	0.09 (J)	0.26 (J)	0.09 (J)
9/1/2016	0.08 (J)	0.22 (J)	0.42	0.03 (J)
10/24/2016	0.04 (J)	0.07 (J)		
10/25/2016			0.25 (J)	0.07 (J)
12/7/2016	0.11 (J)	0.23 (J)	0.23 (J)	0.54
1/26/2017	0.13 (J)	<0.1	0.02 (J)	<0.3
3/22/2017			0.3	0.07 (J)
3/23/2017	0.28 (J)	0.12 (J)		
5/24/2017	0.32	0.31	0.46	
5/25/2017				0.42
10/4/2017	0.52	0.6	<0.1	0.93
4/3/2018		<0.1	<0.1	<0.3
4/4/2018	<0.1			
6/6/2018	0.25 (J)	0.17 (J)	<0.1	0.23 (J)
10/3/2018	0.21 (J)	<0.1	<0.1	<0.3
3/14/2019	0.24 (J)	<0.1		
3/15/2019			<0.1	<0.3
4/4/2019		0.066 (J)	<0.1	
4/5/2019	0.66			0.16 (J)
9/24/2019	0.053 (J)	0.12 (J)		
9/25/2019			<0.1	0.081 (J)
3/3/2020	<0.1	0.064 (J)	<0.1	<0.3
3/26/2020		<0.1		
3/30/2020	0.092 (J)		0.059 (J)	
3/31/2020				<0.3
9/16/2020				0.058 (J)
9/17/2020		<0.1	<0.1	
9/18/2020	<0.1			
2/10/2021			0.21	
2/11/2021	0.059 (J)			0.058 (J)
2/12/2021		0.053 (J)		
3/16/2021		<0.1		
3/17/2021	0.076 (J)		<0.1	
3/18/2021				0.057 (J)
8/18/2021	<0.1			0.062 (J)
8/19/2021		<0.1	<0.1	
2/8/2022		<0.1	<0.1	0.055 (J)
2/9/2022	0.053 (J)			
8/10/2022			0.054 (J)	0.086 (J)
8/11/2022	0.085 (J)	0.097 (J)		
1/30/2023				0.097 (J)
2/1/2023	0.094 (J)	0.086 (J)	0.053 (J)	
8/13/2023	0.1	0.12	0.053 (J)	0.081 (J)
2/17/2024	0.065 (J)	0.064 (J)		0.057 (J)
2/18/2024			<0.1	
Mean	0.1622	0.1338	0.1426	0.2051
Std. Dev.	0.148	0.1112	0.1132	0.2017
Upper Lim.	0.1626	0.12	0.1078	0.1331
Lower Lim.	0.07728	0.09	0.04179	0.05794

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-18	MW-21D	MW-22	MW-23D
5/24/2016	<0.3			
7/12/2016	0.54			
9/1/2016	0.49			
10/25/2016	0.58			
12/8/2016	0.63			
1/26/2017	0.71			
3/23/2017	0.57			
5/25/2017	0.54			
10/4/2017	0.95			
4/3/2018	0.33			
6/5/2018	0.66			
10/3/2018	0.32			
3/14/2019	0.88			<0.1
3/15/2019		<0.1	<0.1	
4/4/2019		0.1 (J)		
4/5/2019	0.37		0.13 (J)	0.14 (J)
9/25/2019	0.73	<0.1		
9/26/2019				0.16 (J)
9/27/2019			0.28 (J)	
3/2/2020			<0.1	<0.1
3/3/2020	0.34	<0.1		
3/27/2020			<0.1	
3/31/2020	0.45			
4/1/2020		<0.1		<0.1
6/17/2020		<0.1		
9/15/2020	0.31			
9/17/2020			<0.1	<0.1
9/21/2020		<0.1		
2/11/2021	0.71	<0.1		
2/12/2021				<0.1
2/15/2021			<0.1	
3/17/2021			<0.1	<0.1
3/18/2021	0.64	<0.1		
8/19/2021	0.31	<0.1	<0.1	<0.1
2/8/2022	0.19	<0.1	<0.1	
2/10/2022				<0.1
8/10/2022	0.3			
8/11/2022		0.056 (J)	0.063 (J)	0.06 (J)
1/27/2023		0.05 (J)		
1/30/2023			0.064 (J)	
2/1/2023	0.21			0.074 (J)
8/12/2023		<0.1		
8/13/2023	0.25		0.057 (J)	0.061 (J)
2/18/2024	0.17	<0.1	<0.1	<0.1
Mean	0.4742	0.09373	0.1067	0.09964
Std. Dev.	0.2227	0.01658	0.05348	0.0263
Upper Lim.	0.5828	0.1	0.13	0.14
Lower Lim.	0.3657	0.1	0.064	0.074

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-33	MW-34D	MW-35	MW-37D
1/22/2020	0.18 (J)			
4/1/2020	0.15 (J)			
6/17/2020	0.25			
6/18/2020		0.082 (J)	0.053 (J)	0.1
9/21/2020	0.14		<0.1	
9/23/2020		<0.1		0.065 (J)
2/11/2021				0.077 (J)
2/12/2021	0.25			
2/15/2021			0.093 (J)	
3/12/2021				0.061 (J)
3/18/2021	0.4			
3/19/2021			0.082 (J)	
8/16/2021		0.066 (J)		
8/18/2021	0.16		0.052 (J)	0.05 (J)
2/8/2022	0.14		0.065 (J)	0.055 (J)
2/9/2022		0.051 (J)		
8/10/2022	0.21	0.081 (J)		0.084 (J)
8/11/2022			0.088 (J)	
1/27/2023	0.087 (J)			
1/30/2023		0.089 (J)		0.092 (J)
2/1/2023			0.1	
8/12/2023		0.062 (J)	0.077 (J)	
8/13/2023	0.22			0.11
2/18/2024	0.088 (J)	<0.1		0.05 (J)
2/19/2024			0.16	
Mean	0.1896	0.07888	0.082	0.0744
Std. Dev.	0.08592	0.01788	0.03273	0.02152
Upper Lim.	0.257	0.08583	0.1112	0.0936
Lower Lim.	0.1222	0.05783	0.05279	0.0552

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

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8/18/2021	0.072 (J)
2/8/2022	0.078 (J)
8/11/2022	0.11
2/1/2023	0.18
8/12/2023	0.1
2/19/2024	0.12
Mean	0.11
Std. Dev.	0.03891
Upper Lim.	0.1634
Lower Lim.	0.05656

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17
5/23/2016	0.00182 (J)	<0.001	<0.001	<0.001
7/12/2016	0.0015 (J)	<0.001	<0.001	<0.001
9/1/2016	0.0016 (J)	<0.001	<0.001	<0.001
10/24/2016	0.0016 (J)	<0.001		
10/25/2016			<0.001	<0.001
12/7/2016	0.0018 (J)	<0.001	<0.001	<0.001
1/26/2017	0.002 (J)	<0.001	0.0001 (J)	<0.001
3/22/2017			0.0002 (J)	0.0001 (J)
3/23/2017	0.0019 (J)	0.001 (J)		
5/24/2017	0.0016 (J)	0.0001 (J)	0.0001 (J)	
5/25/2017				<0.001
4/3/2018		<0.001	<0.001	<0.001
4/4/2018	<0.001			
3/14/2019	0.0014 (J)	<0.001		
3/15/2019			<0.001	<0.001
4/4/2019		7.2E-05 (J)	0.00016 (J)	
4/5/2019	0.0012 (J)			7.6E-05 (J)
9/24/2019	0.0013 (J)	0.0002 (J)		
9/25/2019			<0.001	8.9E-05 (J)
3/3/2020	0.0017 (J)	5.3E-05 (J)	0.00016 (J)	0.00013 (J)
3/26/2020		<0.001		
3/30/2020	0.0015 (J)		7.3E-05 (J)	
3/31/2020				7.7E-05 (J)
9/16/2020				6.5E-05 (J)
9/17/2020		<0.001	7.8E-05 (J)	
9/18/2020	0.0012 (J)			
2/10/2021			9.4E-05 (J)	
2/11/2021	0.0015 (J)			0.00018 (J)
2/12/2021		<0.001		
3/16/2021		<0.001		
3/17/2021	0.0019		5.8E-05 (J)	
3/18/2021				8.8E-05 (J)
8/18/2021	0.0015			<0.001
8/19/2021		<0.001	<0.001	
2/8/2022		<0.001	<0.001	<0.001
2/9/2022	0.0014			
8/10/2022			<0.001	<0.001
8/11/2022	<0.001	<0.001		
1/30/2023				<0.001
2/1/2023	0.0011	<0.001	<0.001	
8/13/2023	0.00079 (J)	<0.001	<0.001	0.00049 (J)
2/17/2024	0.0012	<0.001		<0.001
2/18/2024			<0.001	
Mean	0.001413	0.0008446	0.0006532	0.000665
Std. Dev.	0.0004076	0.0003472	0.0004432	0.0004348
Upper Lim.	0.001627	0.001	0.001	0.001
Lower Lim.	0.0012	0.001	0.0001	0.0001

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-18	MW-21D	MW-22	MW-23D
5/24/2016	0.00154 (J)			
7/12/2016	0.0012 (J)			
9/1/2016	0.0014 (J)			
10/25/2016	0.0015 (J)			
12/8/2016	0.0017 (J)			
1/26/2017	0.0013 (J)			
3/23/2017	0.001 (J)			
5/25/2017	0.0012 (J)			
4/3/2018	<0.001			
3/14/2019	0.0015 (J)			<0.001
3/15/2019		<0.001	<0.001	
4/4/2019		<0.001		
4/5/2019	0.0015 (J)		<0.001	<0.001
9/25/2019	0.0015 (J)	<0.001		
9/26/2019				<0.001
9/27/2019			0.0001 (J)	
3/2/2020			9.4E-05 (J)	5.1E-05 (J)
3/3/2020	0.0013 (J)	4.7E-05 (J)		
3/27/2020			<0.001	
3/31/2020	0.0014 (J)			
4/1/2020		4.8E-05 (J)		<0.001
6/17/2020		<0.001		
9/15/2020	0.0014 (J)			
9/17/2020			<0.001	0.00016 (J)
9/21/2020		<0.001		
2/11/2021	0.00098 (J)	0.00066 (J)		
2/12/2021				<0.001
2/15/2021			3.6E-05 (J)	
3/17/2021			<0.001	<0.001
3/18/2021	0.00096 (J)	7.3E-05 (J)		
8/19/2021	0.0013	<0.001	<0.001	<0.001
2/8/2022	0.0009 (J)	<0.001	<0.001	
2/10/2022				<0.001
8/10/2022	0.0011			
8/11/2022		<0.001	<0.001	<0.001
1/27/2023		<0.001		
1/30/2023			<0.001	
2/1/2023	<0.001			<0.001
8/12/2023		<0.001		
8/13/2023	0.00075 (J)		<0.001	<0.001
2/18/2024	0.0011	<0.001	<0.001	<0.001
Mean	0.001197	0.0007885	0.0008021	0.0008722
Std. Dev.	0.0003243	0.000389	0.0003934	0.0003255
Upper Lim.	0.001367	0.001	0.001	0.001
Lower Lim.	0.001027	7.3E-05	0.0001	0.00016

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-33	MW-34D	MW-35	MW-37D
4/1/2020	0.0017 (J)			
6/17/2020	0.0017 (J)			
6/18/2020		0.00087 (J)	0.00016 (J)	0.0017 (J)
9/21/2020	0.0017 (J)		0.00099 (J)	
9/23/2020		<0.001		8.2E-05 (J)
2/11/2021				0.00039 (J)
2/12/2021	0.0018 (J)			
2/15/2021			0.00055 (J)	
3/12/2021				<0.001
3/18/2021	0.0017			
3/19/2021			0.00066 (J)	
8/16/2021		<0.001		
8/18/2021	0.0016		<0.001	<0.001
2/8/2022	0.0014		<0.001	<0.001
2/9/2022		<0.001		
8/10/2022	<0.001	<0.001		<0.001
8/11/2022			<0.001	
1/27/2023	<0.001			
1/30/2023		<0.001		<0.001
2/1/2023			<0.001	
8/12/2023		<0.001	0.00035 (J)	
8/13/2023	0.0011			<0.001
2/18/2024	0.00084 (J)	<0.001		<0.001
2/19/2024			0.0006 (J)	
Mean	0.001413	0.0009838	0.000731	0.0009172
Std. Dev.	0.000358	4.596E-05	0.0003132	0.0004264
Upper Lim.	0.001623	0.001	0.001	0.001
Lower Lim.	0	0.00087	0.00035	0.00039

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17
5/23/2016	<0.03	<0.03	<0.03	<0.03
7/12/2016	<0.03	<0.03	0.0037 (J)	<0.03
9/1/2016	<0.03	0.0021 (J)	0.0033 (J)	<0.03
10/24/2016	<0.03	<0.03		
10/25/2016			0.0029 (J)	<0.03
12/7/2016	<0.03	<0.03	0.0029 (J)	<0.03
1/26/2017	<0.03	<0.03	0.0028 (J)	<0.03
3/22/2017			0.0025 (J)	<0.03
3/23/2017	<0.03	0.0016 (J)		
5/24/2017	<0.03	0.0029 (J)	0.0029 (J)	
5/25/2017				0.0011 (J)
4/3/2018		0.0026 (J)	0.0028 (J)	<0.03
4/4/2018	<0.03			
6/6/2018	<0.03	0.0013 (J)	0.0031 (J)	<0.03
10/3/2018	<0.03	0.0017 (J)	0.0026 (J)	<0.03
3/14/2019	<0.03	<0.03		
3/15/2019			0.0041 (J)	0.0011 (J)
4/4/2019		0.0009 (J)	0.0032 (J)	
4/5/2019	<0.03			0.00074 (J)
9/24/2019	<0.03	0.0012 (J)		
9/25/2019			0.0038 (J)	0.0011 (J)
3/3/2020	<0.03	0.0084 (J)	0.0047 (J)	0.0012 (J)
3/26/2020		0.0061 (J)		
3/30/2020	<0.03		0.0041 (J)	
3/31/2020				0.0009 (J)
9/16/2020				0.0012 (J)
9/17/2020		0.0094 (J)	0.0043 (J)	
9/18/2020	<0.03			
2/10/2021			0.0038 (J)	
2/11/2021	<0.03			0.0013 (J)
2/12/2021		0.036		
3/16/2021		0.032		
3/17/2021	<0.03		0.0048 (J)	
3/18/2021				0.0014 (J)
8/18/2021	<0.03			0.0012 (J)
8/19/2021		0.0058 (J)	0.0042 (J)	
2/8/2022		0.014 (J)	0.0034 (J)	0.0014 (J)
2/9/2022	<0.03			
8/11/2022	<0.03	0.0025 (J)		
1/30/2023				0.0014 (J)
2/1/2023	<0.03	0.016 (J)	0.0036 (J)	
8/13/2023	<0.03	0.0047 (J)	0.003 (J)	0.0018 (J)
2/17/2024	0.0029 (J)	0.014 (J)		<0.03
2/18/2024			0.003 (J)	
Mean	0.02892	0.01373	0.003937	0.01441
Std. Dev.	0.00542	0.01282	0.002445	0.01465
Upper Lim.	0.03	0.006913	0.0041	0.03
Lower Lim.	0.0029	0.002454	0.0029	0.0012

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-18	MW-21D	MW-22	MW-23D
5/24/2016	0.0142 (J)			
7/12/2016	0.0141 (J)			
9/1/2016	0.0158 (J)			
10/25/2016	0.016 (J)			
12/8/2016	0.0144 (J)			
1/26/2017	0.0136 (J)			
3/23/2017	0.0151 (J)			
5/25/2017	0.0154 (J)			
4/3/2018	0.013 (J)			
6/5/2018	0.013 (J)			
10/3/2018	0.015 (J)			
3/14/2019	0.011 (J)			0.0028 (J)
3/15/2019		0.025 (J)	0.002 (J)	
4/4/2019		0.019 (J)		
4/5/2019	0.0084 (J)		0.0013 (J)	0.0021 (J)
9/25/2019	0.015 (J)	0.024 (J)		
9/26/2019				0.0023 (J)
9/27/2019			0.0013 (J)	
3/2/2020			0.0015 (J)	0.0025 (J)
3/3/2020	0.012 (J)	0.026 (J)		
3/27/2020			0.0013 (J)	
3/31/2020	0.012 (J)			
4/1/2020		0.026 (J)		0.0024 (J)
6/17/2020		0.023 (J)		
9/15/2020	0.014 (J)			
9/17/2020			0.0011 (J)	0.0021 (J)
9/21/2020		0.022 (J)		
2/11/2021	0.011 (J)	0.021 (J)		
2/12/2021				0.0023 (J)
2/15/2021			0.0011 (J)	
3/17/2021			0.0012 (J)	0.0024 (J)
3/18/2021	0.013 (J)	0.026 (J)		
8/19/2021	0.013 (J)	0.022 (J)	0.0012 (J)	0.0022 (J)
2/8/2022	0.01 (J)	0.022 (J)	0.0011 (J)	
2/10/2022				0.0029 (J)
8/11/2022		0.022 (J)	0.0011 (J)	0.002 (J)
1/27/2023		0.018 (J)		
1/30/2023			0.0011 (J)	
2/1/2023	0.0093 (J)			0.0019 (J)
8/12/2023		0.015 (J)		
8/13/2023	0.012 (J)		0.0014 (J)	0.0017 (J)
2/18/2024	0.0098 (J)	0.012 (J)	<0.03	0.0016 (J)
Mean	0.01292	0.02153	0.002264	0.002229
Std. Dev.	0.002146	0.004086	0.003674	0.0003709
Upper Lim.	0.01402	0.0243	0.0015	0.002491
Lower Lim.	0.01183	0.01876	0.0011	0.001966

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-33	MW-34D	MW-35	MW-37D
4/1/2020	0.0011 (J)			
6/17/2020	0.00097 (J)			
6/18/2020		0.0021 (J)	0.0046 (J)	0.038 (J)
9/21/2020	0.00086 (J)		0.0036 (J)	
9/23/2020		0.0011 (J)		0.031
2/11/2021				0.034
2/12/2021	0.0011 (J)			
2/15/2021			0.0043 (J)	
3/12/2021				0.035
3/18/2021	0.0012 (J)			
3/19/2021			0.0045 (J)	
8/16/2021		0.001 (J)		
8/18/2021	0.00097 (J)		0.0036 (J)	0.03
2/8/2022	0.001 (J)		0.0039 (J)	0.029 (J)
2/9/2022		0.0022 (J)		
8/11/2022			<0.03	
1/27/2023	<0.03			
1/30/2023		0.0013 (J)		0.021 (J)
2/1/2023			0.0034 (J)	
8/12/2023		0.0013 (J)	0.0031 (J)	
8/13/2023	0.00077 (J)			0.02 (J)
2/18/2024	<0.03	<0.03		0.021 (J)
2/19/2024			0.0031 (J)	
Mean	0.006797	0.003429	0.00491	0.02878
Std. Dev.	0.01223	0.005124	0.003586	0.006667
Upper Lim.	0.03	0.015	0.0046	0.03521
Lower Lim.	0.00086	0.001	0.0031	0.02234

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

MW-51

8/18/2021	0.0022 (J)
2/8/2022	0.001 (J)
8/11/2022	0.0014 (J)
2/1/2023	0.0015 (J)
8/12/2023	0.00098 (J)
2/19/2024	0.0017 (J)
Mean	0.001463
Std. Dev.	0.0004588
Upper Lim.	0.002094
Lower Lim.	0.0008331

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-18	MW-22	MW-23D	MW-35
5/24/2016	<0.0002			
7/12/2016	<0.0002			
9/1/2016	6E-05 (J)			
10/25/2016	4E-05 (J)			
12/8/2016	<0.0002			
1/26/2017	8E-05 (J)			
3/23/2017	9E-05 (J)			
5/25/2017	8E-05 (J)			
4/3/2018	<0.0002			
3/14/2019	<0.0002		<0.0002	
3/15/2019		<0.0002		
3/2/2020		<0.0002	<0.0002	
3/3/2020	<0.0002			
2/11/2021	<0.0002			
2/12/2021			<0.0002	
2/15/2021		<0.0002		<0.0002
2/8/2022	<0.0002	<0.0002		0.00014 (J)
2/10/2022			<0.0002	
8/11/2022		0.00016 (J)	0.00017 (J)	0.00014 (J)
1/30/2023		<0.0002		
2/1/2023	<0.0002		<0.0002	0.00084
8/12/2023				<0.0002
8/13/2023	<0.0002	<0.0002	<0.0002	
2/18/2024	<0.0002	<0.0002	<0.0002	
2/19/2024				<0.0002
Mean	0.0001594	0.000195	0.0001962	0.0002867
Std. Dev.	6.308E-05	1.414E-05	1.061E-05	0.0002727
Upper Lim.	0.0002	0.0002	0.0002	0.00084
Lower Lim.	8E-05	0.00016	0.00017	0.00014

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-51
2/8/2022	<0.0002
8/11/2022	0.00013 (J)
2/1/2023	<0.0002
8/12/2023	<0.0002
2/19/2024	<0.0002
Mean	0.000186
Std. Dev.	3.13E-05
Upper Lim.	0.0002
Lower Lim.	0.00013

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-15	MW-21D	MW-22	MW-23D
5/23/2016	<0.01			
7/12/2016	0.0007 (J)			
9/1/2016	<0.01			
10/24/2016	<0.01			
12/7/2016	<0.01			
1/26/2017	<0.01			
3/23/2017	<0.01			
5/24/2017	<0.01			
4/3/2018	<0.01			
3/14/2019	<0.01			<0.01
3/15/2019		0.045	<0.01	
4/4/2019	<0.01	0.033		
4/5/2019			0.00013 (J)	0.0014 (J)
9/24/2019	<0.01			
9/25/2019		0.038		
9/26/2019				0.0025 (J)
9/27/2019			<0.01	
3/2/2020			<0.01	0.003 (J)
3/3/2020	<0.01	0.025		
3/26/2020	<0.01			
3/27/2020			<0.01	
4/1/2020		0.024		0.0032 (J)
6/17/2020		0.019		
9/17/2020	<0.01		<0.01	0.0026 (J)
9/21/2020		0.017		
2/11/2021		0.016		
2/12/2021	<0.01			0.0039 (J)
2/15/2021			<0.01	
3/16/2021	<0.01			
3/17/2021			<0.01	0.0034 (J)
3/18/2021		0.016		
8/19/2021	<0.01	0.018	<0.01	0.0034 (J)
2/8/2022	<0.01	0.016	<0.01	
2/10/2022				0.0034 (J)
8/11/2022	<0.01	0.023	<0.01	0.0039 (J)
1/27/2023		0.028		
1/30/2023			<0.01	
2/1/2023	<0.01			0.0041 (J)
8/12/2023		0.021		
8/13/2023	<0.01		<0.01	0.0041 (J)
2/17/2024	<0.01			
2/18/2024		0.015	<0.01	0.0047 (J)
Mean	0.009596	0.0236	0.009295	0.003471
Std. Dev.	0.001939	0.008967	0.002638	0.0009327
Upper Lim.	0.01	0.02886	0.01	0.004132
Lower Lim.	0.0007	0.01764	0.00013	0.002811

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

MW-37D

6/18/2020	0.023
9/23/2020	0.015
2/11/2021	0.019
3/12/2021	0.014
8/18/2021	0.0083 (J)
2/8/2022	0.007 (J)
1/30/2023	0.0063 (J)
8/13/2023	0.0029 (J)
2/18/2024	0.0016 (J)
Mean	0.01079
Std. Dev.	0.007348
Upper Lim.	0.01788
Lower Lim.	0.003694

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17
5/23/2016	0.017	<0.005	<0.005	<0.005
7/12/2016	0.0146	<0.005	<0.005	<0.005
9/1/2016	0.0137	<0.005	<0.005	0.0014 (J)
10/24/2016	0.0135	0.0012 (J)		
10/25/2016			<0.005	<0.005
12/7/2016	0.01 (J)	0.0041 (J)	<0.005	0.0023 (J)
1/26/2017	0.0214	<0.005	<0.005	<0.005
3/22/2017			<0.005	<0.005
3/23/2017	0.0167	0.0016 (J)		
5/24/2017	0.0083 (J)	<0.005	<0.005	
5/25/2017				<0.005
4/3/2018		<0.005	<0.005	<0.005
4/4/2018	0.012			
6/6/2018	0.014	<0.005	<0.005	<0.005
10/3/2018	0.0056 (J)	<0.005	<0.005	<0.005
3/14/2019	0.0048 (J)	<0.005		
3/15/2019			<0.005	<0.005
4/4/2019		0.00021 (J)	8.9E-05 (J)	
4/5/2019	0.00091 (J)			9.3E-05 (J)
9/24/2019	0.0064 (J)	<0.005		
9/25/2019			<0.005	<0.005
3/3/2020	0.0045 (J)	<0.005	<0.005	<0.005
3/26/2020		<0.005		
3/30/2020	0.0049 (J)		<0.005	
3/31/2020				<0.005
9/16/2020				<0.005
9/17/2020		<0.005	<0.005	
9/18/2020	0.0045 (J)			
2/10/2021			<0.005	
2/11/2021	0.0072 (J)			<0.005
2/12/2021		<0.005		
3/16/2021		<0.005		
3/17/2021	0.01 (J)		<0.005	
3/18/2021				<0.005
8/18/2021	0.0077			<0.005
8/19/2021		<0.005	<0.005	
2/8/2022		<0.005	<0.005	<0.005
2/9/2022	0.0047 (J)			
8/10/2022			<0.005	<0.005
8/11/2022	0.0037 (J)	<0.005		
1/30/2023				<0.005
2/1/2023	0.0036 (J)	<0.005	<0.005	
8/13/2023	0.0038 (J)	<0.005	<0.005	<0.005
2/17/2024	0.0056	<0.005		<0.005
2/18/2024			<0.005	
Mean	0.008764	0.004484	0.004804	0.004552
Std. Dev.	0.005259	0.00134	0.0009822	0.00128
Upper Lim.	0.01139	0.005	0.005	0.005
Lower Lim.	0.006143	0.0041	8.9E-05	0.0023

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-18	MW-22	MW-33	MW-34D
5/24/2016	<0.2			
7/12/2016	0.036			
9/1/2016	0.0347			
10/25/2016	0.0282			
12/8/2016	0.0373			
1/26/2017	0.0385			
3/23/2017	0.0414			
5/25/2017	0.019			
4/3/2018	0.029			
6/5/2018	0.038			
10/3/2018	0.017			
3/14/2019	0.016			
3/15/2019		<0.005		
4/5/2019	0.0018 (J)	<0.005		
9/25/2019	0.02			
9/27/2019		<0.005		
3/2/2020		<0.005		
3/3/2020	0.014			
3/27/2020		<0.005		
3/31/2020	0.019			
4/1/2020			0.011	
6/17/2020			0.014	
6/18/2020				0.0025 (J)
9/15/2020	0.059			
9/17/2020		0.002 (J)		
9/21/2020			0.041	
9/23/2020				<0.005
2/11/2021	0.023			
2/12/2021			0.011	
2/15/2021		<0.005		
3/17/2021		<0.005		
3/18/2021	0.019 (J)		0.028	
8/16/2021				<0.005
8/18/2021			0.014	
8/19/2021	0.01	<0.005		
2/8/2022	0.0082	<0.005	0.0078	
2/9/2022				<0.005
8/10/2022	0.0096		0.007 (J)	<0.005
8/11/2022		<0.005		
1/27/2023			0.015	
1/30/2023		<0.005		0.0016 (J)
2/1/2023	0.0054			
8/12/2023				<0.005
8/13/2023	0.0085	<0.005	0.0065	
2/18/2024	0.013	<0.005	0.011	<0.005
Mean	0.02582	0.004786	0.01512	0.004262
Std. Dev.	0.02068	0.0008018	0.01041	0.001387
Upper Lim.	0.03214	0.005	0.02152	0.005
Lower Lim.	0.01464	0.002	0.0078	0.0016

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-35	MW-51
6/18/2020	0.014	
9/21/2020	0.037	
2/15/2021	0.01	
3/19/2021	0.016 (J)	
8/18/2021	0.014	0.004 (J)
2/8/2022	0.0083	<0.005
8/11/2022	0.0089 (J)	0.0023 (J)
2/1/2023	0.0063	0.0021 (J)
8/12/2023	0.0058	<0.005
2/19/2024	0.0057	0.0019 (J)
Mean	0.0126	0.003383
Std. Dev.	0.009329	0.001458
Upper Lim.	0.01866	0.003691
Lower Lim.	0.006011	0.001565

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-17	HGWC-18
5/23/2016	0.000306 (J)	<0.001	<0.001	
5/24/2016				<0.001
7/12/2016	0.0003 (J)	<0.001	0.0001 (J)	0.0002 (J)
9/1/2016	0.0003 (J)	<0.001	<0.001	<0.001
10/24/2016	0.0004	<0.001		
10/25/2016			<0.001	<0.001
12/7/2016	0.0003 (J)	<0.001	<0.001	
12/8/2016				<0.001
1/26/2017	0.0003 (J)	<0.001	<0.001	<0.001
3/22/2017			0.0001 (J)	
3/23/2017	0.0003 (J)	<0.001		0.0002 (J)
5/24/2017	0.0003 (J)	<0.001		
5/25/2017			0.0001 (J)	0.0002 (J)
4/3/2018		<0.001	<0.001	0.00014 (J)
4/4/2018	0.00028 (J)			
6/5/2018				0.00016 (J)
6/6/2018	0.00029 (J)	<0.001	<0.001	
10/3/2018	0.00029 (J)	<0.001	<0.001	<0.001
3/14/2019	0.00028 (J)	<0.001		<0.001
3/15/2019			<0.001	
4/4/2019		<0.001		
4/5/2019	0.00028 (J)		0.00013 (J)	0.00014 (J)
9/24/2019	0.0003 (J)	<0.001		
9/25/2019			0.00012 (J)	0.00019 (J)
3/3/2020	0.00026 (J)	<0.001	0.00011 (J)	0.00013 (J)
3/26/2020		<0.001		
3/30/2020	0.00028 (J)			
3/31/2020			0.00014 (J)	0.00015 (J)
9/15/2020				0.00016 (J)
9/16/2020			<0.001	
9/17/2020		<0.001		
9/18/2020	0.00028 (J)			
2/11/2021	0.00026 (J)		<0.001	<0.001
2/12/2021		<0.001		
3/16/2021		<0.001		
3/17/2021	0.00034 (J)			
3/18/2021			<0.001	0.00016 (J)
8/18/2021	0.00027 (J)		<0.001	
8/19/2021		<0.001		0.0002 (J)
2/8/2022		<0.001	<0.001	<0.001
2/9/2022	0.00025 (J)			
8/10/2022			<0.001	<0.001
8/11/2022	0.00024 (J)	<0.001		
1/30/2023			0.00025 (J)	
2/1/2023	0.00047 (J)	0.00022 (J)		<0.001
8/13/2023	0.00026 (J)	<0.001	<0.001	<0.001
2/17/2024	<0.001	<0.001	<0.001	
2/18/2024				<0.001
Mean	0.0003054	0.0009688	0.000722	0.0006012
Std. Dev.	6.252E-05	0.000156	0.0004145	0.000424
Upper Lim.	0.000306	0.001	0.001	0.001
Lower Lim.	0.00027	0.00022	0.00014	0.00016

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 5/21/2024 8:28 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-33	MW-34D	MW-35
4/1/2020	0.00029 (J)		
6/17/2020	0.00028 (J)		
6/18/2020		0.00015 (J)	0.00013 (J)
9/21/2020	0.00029 (J)		<0.001
9/23/2020		<0.001	
2/12/2021	0.00025 (J)		
2/15/2021			<0.001
3/18/2021	0.00031 (J)		
3/19/2021			<0.001
8/16/2021		<0.001	
8/18/2021	0.0004 (J)		<0.001
2/8/2022	0.00025 (J)		<0.001
2/9/2022		<0.001	
8/10/2022	<0.001	<0.001	
8/11/2022			<0.001
1/27/2023	0.00021 (J)		
1/30/2023		<0.001	
2/1/2023			<0.001
8/12/2023		<0.001	<0.001
8/13/2023	0.00022 (J)		
2/18/2024	<0.001	<0.001	
2/19/2024			<0.001
Mean	0.0004091	0.0008938	0.000913
Std. Dev.	0.0002965	0.0003005	0.0002751
Upper Lim.	0.001	0.001	0.001
Lower Lim.	0.00022	0.00015	0.001

FIGURE I.

Appendix IV Trend Tests - Confidence Interval Exceedances - Significant Results

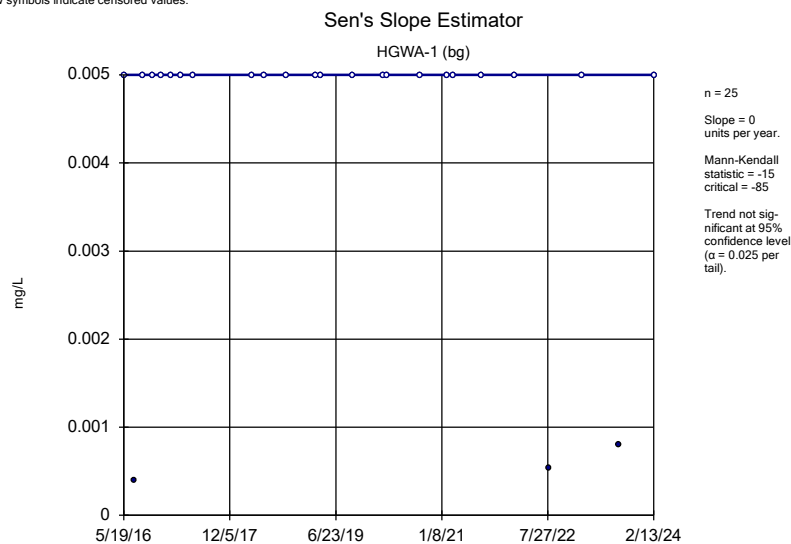
Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 4/25/2024, 9:36 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	HGWA-4 (bg)	-0.000465	-161	-85	Yes	25	60	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWC-18	-0.007543	-147	-85	Yes	25	0	n/a	n/a	0.05	NP

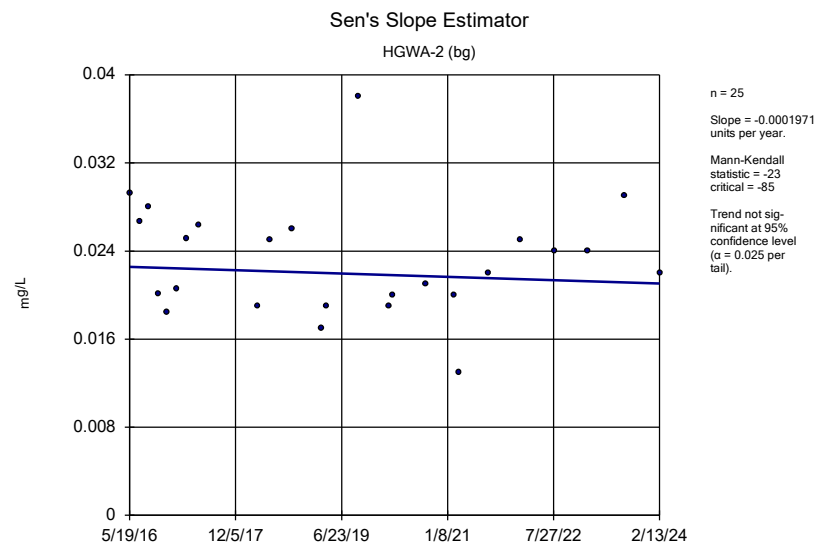
Appendix IV Trend Tests - Confidence Interval Exceedances - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 4/25/2024, 9:36 AM

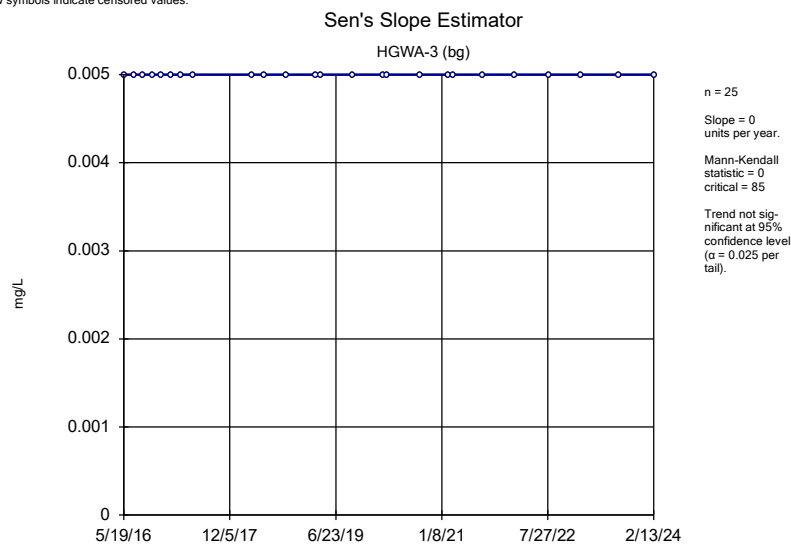
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	HGWA-1 (bg)	0	-15	-85	No	25	88	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-2 (bg)	-0.0001971	-23	-85	No	25	0	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-3 (bg)	0	0	85	No	25	100	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-4 (bg)	-0.000465	-161	-85	Yes	25	60	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-42D (bg)	0	7	30	No	12	91.67	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-43D (bg)	0	0	30	No	12	100	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-44D (bg)	0	0	30	No	12	100	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-5 (bg)	0	-16	-85	No	25	28	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-6 (bg)	0	0	85	No	25	100	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWC-18	-0.007543	-147	-85	Yes	25	0	n/a	n/a	0.05	NP
Cobalt (mg/L)	MW-33	-0.002928	-18	-30	No	12	0	n/a	n/a	0.05	NP
Cobalt (mg/L)	MW-35	-0.002039	-17	-23	No	10	0	n/a	n/a	0.05	NP



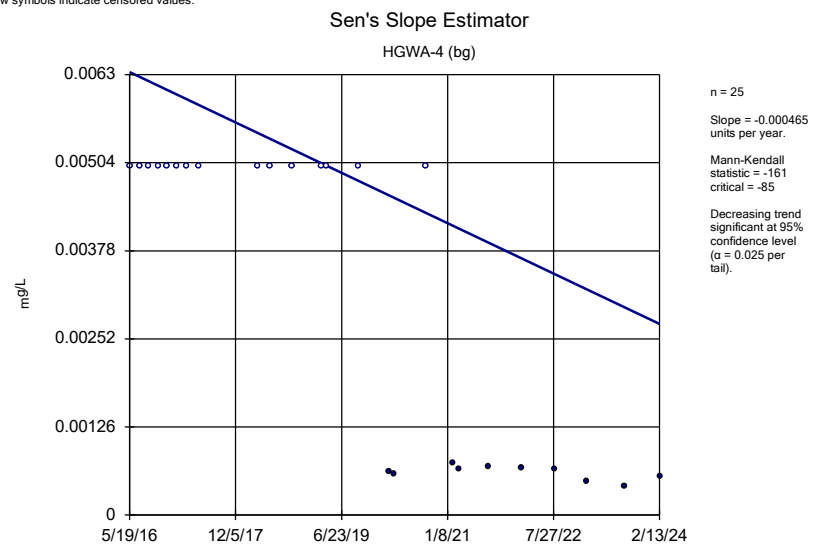
Constituent: Cobalt Analysis Run 4/25/2024 9:35 AM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-2



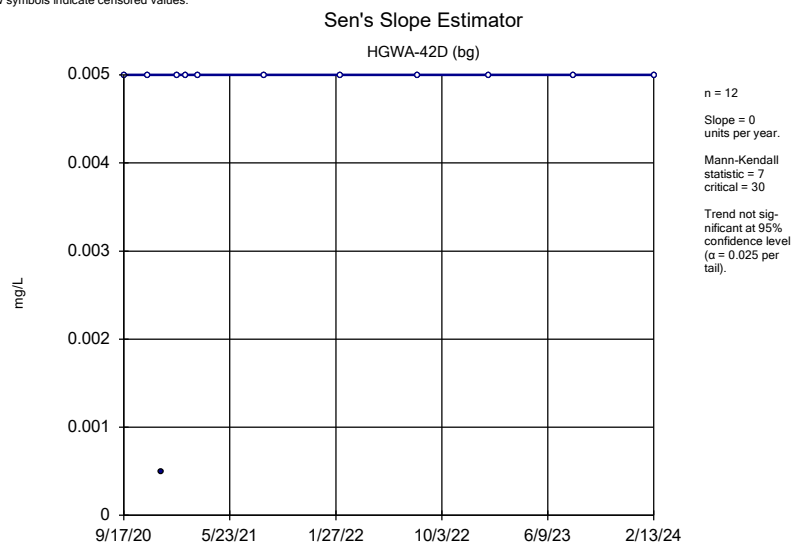
Constituent: Cobalt Analysis Run 4/25/2024 9:35 AM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-2



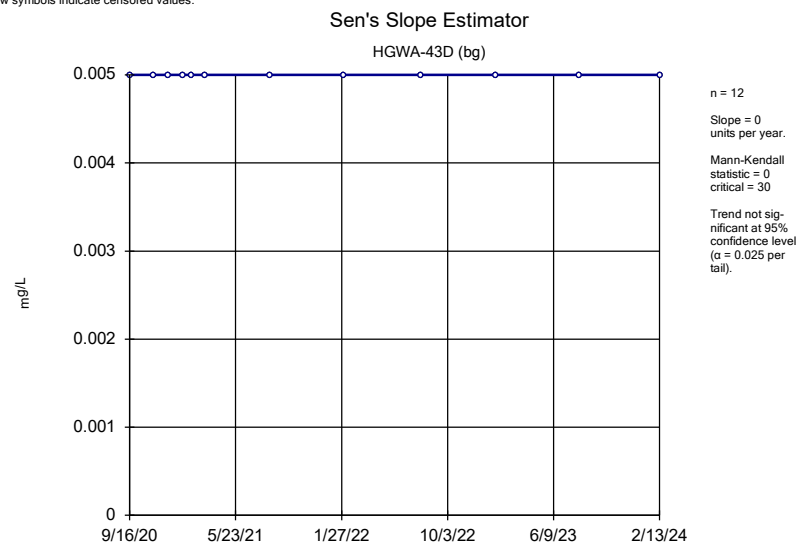
Constituent: Cobalt Analysis Run 4/25/2024 9:35 AM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-2



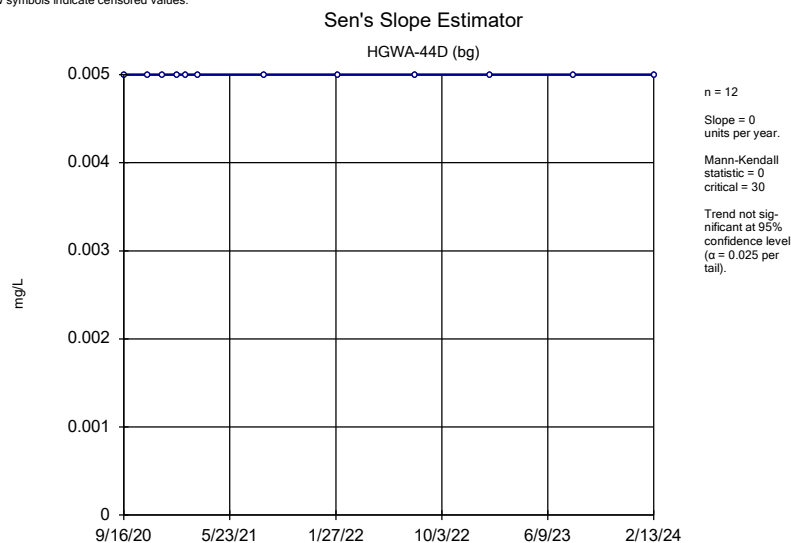
Constituent: Cobalt Analysis Run 4/25/2024 9:35 AM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-2



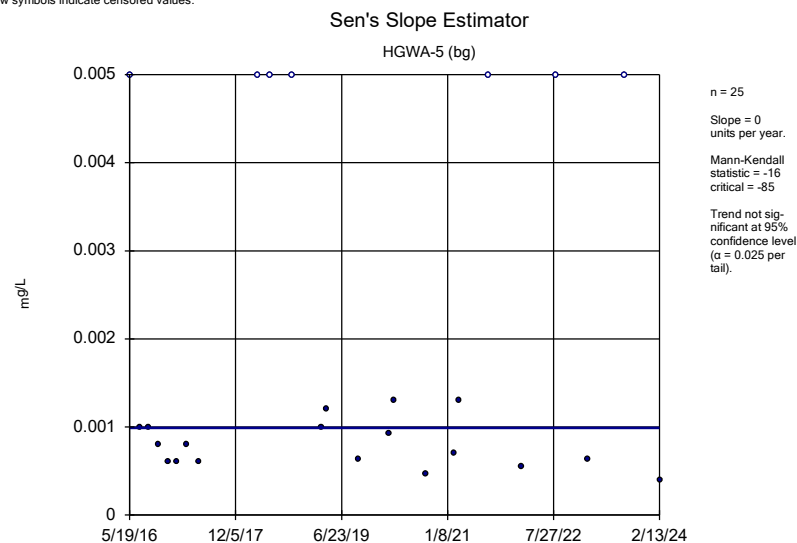
Constituent: Cobalt Analysis Run 4/25/2024 9:35 AM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-2



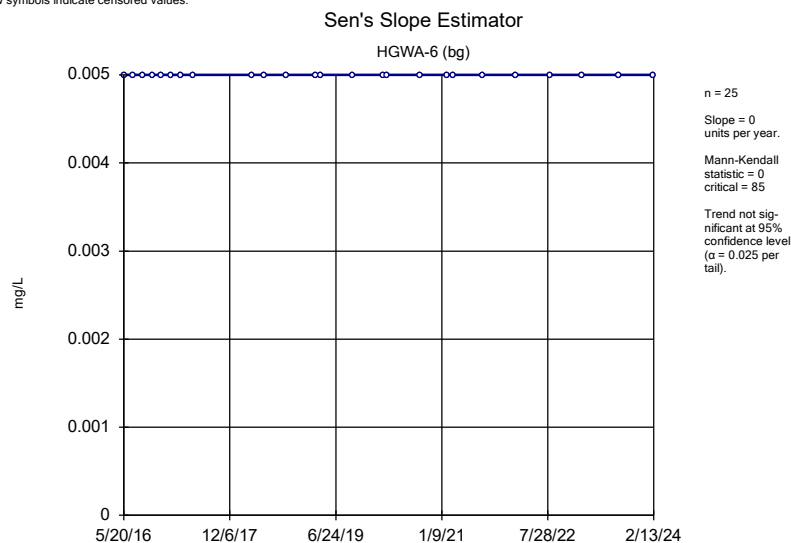
Constituent: Cobalt Analysis Run 4/25/2024 9:35 AM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-2



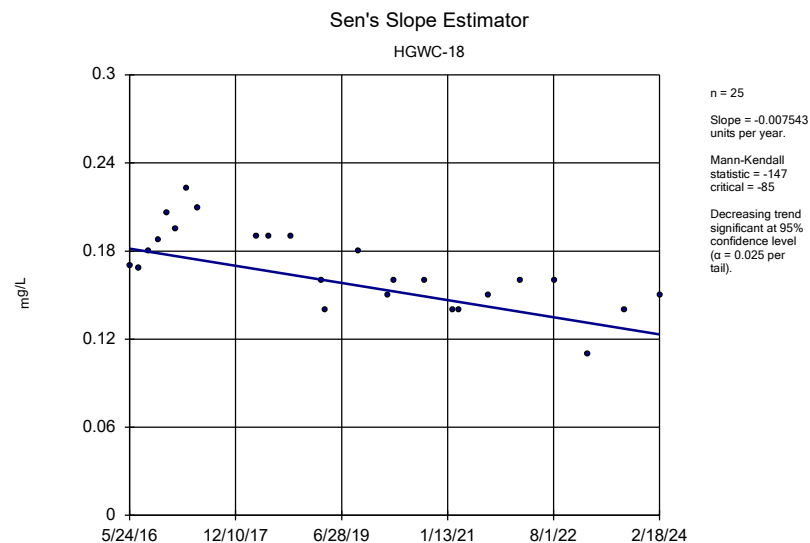
Constituent: Cobalt Analysis Run 4/25/2024 9:35 AM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-2



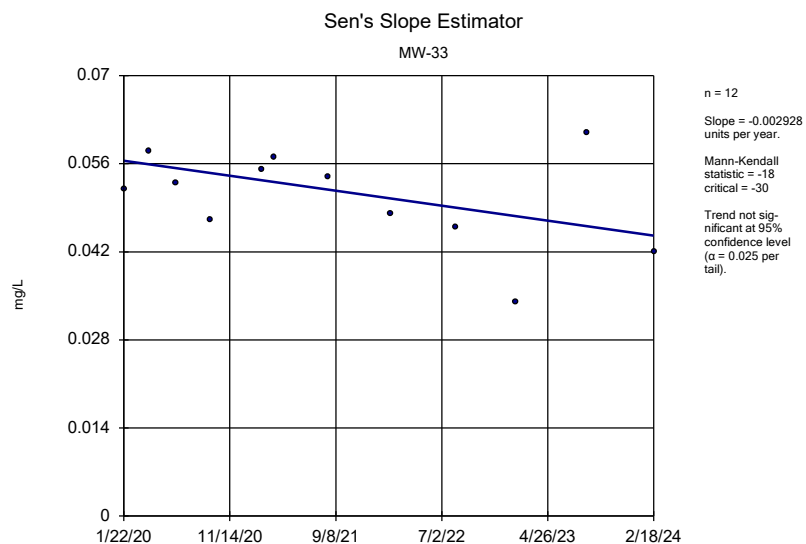
Constituent: Cobalt Analysis Run 4/25/2024 9:35 AM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-2



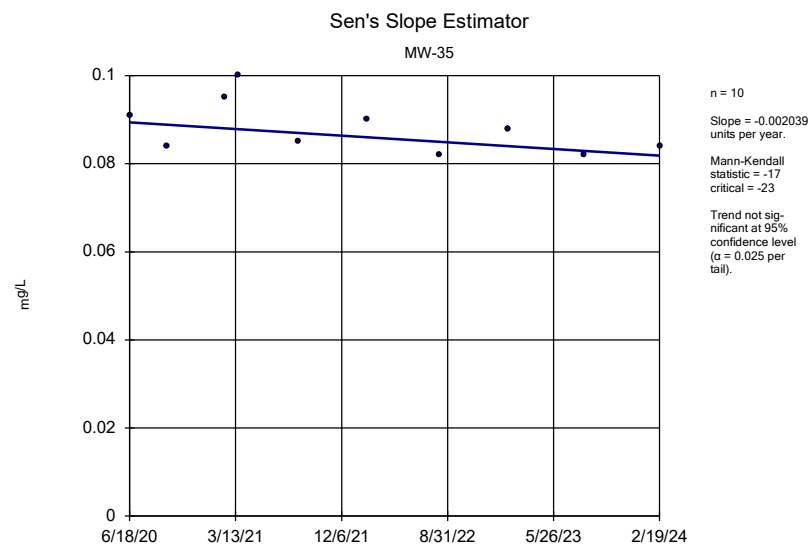
Constituent: Cobalt Analysis Run 4/25/2024 9:35 AM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-2



Constituent: Cobalt Analysis Run 4/25/2024 9:35 AM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-2



Constituent: Cobalt Analysis Run 4/25/2024 9:35 AM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-2



Constituent: Cobalt Analysis Run 4/25/2024 9:35 AM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-2

APPENDIX D

Pilot Study Documentation

December 2023

LABORATORY ANALYTICAL RESULTS



January 10, 2024

Kristen Jurinko
Southern Company
241 Ralph McGill Blvd NE
Bin 10160
Atlanta, GA 30308

RE: Project: Hammond AP-2
Pace Project No.: 92705294

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on December 21, 2023. 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 - Asheville
- Pace Analytical Services - Peachtree Corners, GA

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

Sincerely,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Kip Gray, Geosyntec
Christine Hug, Geosyntec Consultants, Inc.
Thomas Kessler, Geosyntec Consultants
Whitney Law, Geosyntec Consultants
Laura Midkiff, Southern Company
Caroline Nelson, Geosyntec
Anthony Szwast, Geosyntec Consultants



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Hammond AP-2

Pace Project No.: 92705294

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Laboratory ID: 99030

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Hammond AP-2

Pace Project No.: 92705294

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92705294001	HAM-PT-01	Water	12/20/23 11:57	12/21/23 14:45
92705294002	HAM-PT-02	Water	12/20/23 13:40	12/21/23 14:45
92705294003	HAM-PT-03	Water	12/20/23 10:20	12/21/23 14:45
92705294004	HAM-PT-04	Water	12/20/23 10:05	12/21/23 14:45
92705294005	HAM-PT-05	Water	12/20/23 11:20	12/21/23 14:45
92705294006	HAM-PT-06	Water	12/20/23 12:02	12/21/23 14:45
92705294007	HAM-AP2-EB-01	Water	12/20/23 12:20	12/21/23 14:45
92705294008	HAM-AP2-FB-01	Water	12/20/23 12:15	12/21/23 14:45
92705294009	HAM-AP2-FD-01	Water	12/20/23 00:00	12/21/23 14:45

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Hammond AP-2

Pace Project No.: 92705294

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92705294001	HAM-PT-01	EPA 6020B	MT1	2
		SM 2320B-2011	YEG	2
92705294002	HAM-PT-02	EPA 6020B	CW1, MT1	2
		SM 2320B-2011	YEG	2
92705294003	HAM-PT-03	EPA 6020B	CW1, MT1	2
		SM 2320B-2011	YEG	2
92705294004	HAM-PT-04	EPA 6020B	CW1, MT1	2
		SM 2320B-2011	YEG	2
92705294005	HAM-PT-05	EPA 6020B	MT1	2
		SM 2320B-2011	YEG	2
92705294006	HAM-PT-06	EPA 6020B	CW1, MT1	2
		SM 2320B-2011	YEG	2
92705294007	HAM-AP2-EB-01	EPA 6020B	CW1, MT1	2
		SM 2320B-2011	YEG	2
92705294008	HAM-AP2-FB-01	EPA 6020B	CW1	2
		SM 2320B-2011	YEG	2
92705294009	HAM-AP2-FD-01	EPA 6020B	CW1, MT1	2
		SM 2320B-2011	YEG	2

PASI-A = Pace Analytical Services - Asheville

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92705294

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92705294001	HAM-PT-01					
EPA 6020B	Boron	6.8	mg/L	0.040	01/09/24 14:42	
EPA 6020B	Cobalt	0.020	mg/L	0.0050	01/09/24 14:42	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	859	mg/L	5.0	01/02/24 21:34	
SM 2320B-2011	Alkalinity, Total as CaCO3	859	mg/L	5.0	01/02/24 21:34	
92705294002	HAM-PT-02					
EPA 6020B	Boron	4.2	mg/L	0.040	01/08/24 18:47	
EPA 6020B	Cobalt	0.012	mg/L	0.0050	01/09/24 15:06	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	1290	mg/L	5.0	01/02/24 21:44	
SM 2320B-2011	Alkalinity, Total as CaCO3	1290	mg/L	5.0	01/02/24 21:44	
92705294003	HAM-PT-03					
EPA 6020B	Boron	7.0	mg/L	0.040	01/08/24 18:52	
EPA 6020B	Cobalt	0.14	mg/L	0.0050	01/09/24 15:10	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	13.5	mg/L	5.0	01/02/24 16:05	
SM 2320B-2011	Alkalinity, Total as CaCO3	13.5	mg/L	5.0	01/02/24 16:05	
92705294004	HAM-PT-04					
EPA 6020B	Boron	5.5	mg/L	0.040	01/08/24 18:56	
EPA 6020B	Cobalt	0.031	mg/L	0.0050	01/09/24 15:14	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	551	mg/L	5.0	01/02/24 22:05	
SM 2320B-2011	Alkalinity, Total as CaCO3	551	mg/L	5.0	01/02/24 22:05	
92705294005	HAM-PT-05					
EPA 6020B	Boron	4.5	mg/L	0.040	01/09/24 15:17	
EPA 6020B	Cobalt	0.0066	mg/L	0.0050	01/09/24 15:17	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	1260	mg/L	5.0	01/02/24 22:14	
SM 2320B-2011	Alkalinity, Total as CaCO3	1260	mg/L	5.0	01/02/24 22:14	
92705294006	HAM-PT-06					
EPA 6020B	Boron	4.9	mg/L	0.040	01/08/24 19:04	
EPA 6020B	Cobalt	0.020	mg/L	0.0050	01/09/24 15:21	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	827	mg/L	5.0	01/02/24 22:25	
SM 2320B-2011	Alkalinity, Total as CaCO3	827	mg/L	5.0	01/02/24 22:25	
92705294008	HAM-AP2-FB-01					
EPA 6020B	Boron	0.034J	mg/L	0.040	01/08/24 19:12	
92705294009	HAM-AP2-FD-01					
EPA 6020B	Boron	5.4	mg/L	0.040	01/08/24 19:25	
EPA 6020B	Cobalt	0.030	mg/L	0.0050	01/09/24 15:25	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	527	mg/L	5.0	01/02/24 22:34	
SM 2320B-2011	Alkalinity, Total as CaCO3	527	mg/L	5.0	01/02/24 22:34	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92705294

Sample: HAM-PT-01		Lab ID: 92705294001		Collected: 12/20/23 11:57		Received: 12/21/23 14:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	6.8	mg/L	0.040	0.012	1	01/08/24 10:18	01/09/24 14:42	7440-42-8	
Cobalt	0.020	mg/L	0.0050	0.00032	1	01/08/24 10:18	01/09/24 14:42	7440-48-4	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO ₃)	859	mg/L	5.0	5.0	1		01/02/24 21:34		
Alkalinity, Total as CaCO ₃	859	mg/L	5.0	5.0	1		01/02/24 21:34		

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92705294

Sample: HAM-PT-02		Lab ID: 92705294002		Collected: 12/20/23 13:40		Received: 12/21/23 14:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	4.2	mg/L	0.040	0.012	1	01/08/24 10:18	01/08/24 18:47	7440-42-8	
Cobalt	0.012	mg/L	0.0050	0.00032	1	01/08/24 10:18	01/09/24 15:06	7440-48-4	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO ₃)	1290	mg/L	5.0	5.0	1		01/02/24 21:44		
Alkalinity, Total as CaCO ₃	1290	mg/L	5.0	5.0	1		01/02/24 21:44		

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92705294

Sample: HAM-PT-03		Lab ID: 92705294003		Collected: 12/20/23 10:20		Received: 12/21/23 14:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	7.0	mg/L	0.040	0.012	1	01/08/24 10:18	01/08/24 18:52	7440-42-8	
Cobalt	0.14	mg/L	0.0050	0.00032	1	01/08/24 10:18	01/09/24 15:10	7440-48-4	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO ₃)	13.5	mg/L	5.0	5.0	1		01/02/24 16:05		
Alkalinity, Total as CaCO ₃	13.5	mg/L	5.0	5.0	1		01/02/24 16:05		

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92705294

Sample: HAM-PT-04		Lab ID: 92705294004		Collected: 12/20/23 10:05		Received: 12/21/23 14:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	5.5	mg/L	0.040	0.012	1	01/08/24 10:18	01/08/24 18:56	7440-42-8	
Cobalt	0.031	mg/L	0.0050	0.00032	1	01/08/24 10:18	01/09/24 15:14	7440-48-4	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO ₃)	551	mg/L	5.0	5.0	1		01/02/24 22:05		
Alkalinity, Total as CaCO ₃	551	mg/L	5.0	5.0	1		01/02/24 22:05		

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92705294

Sample: HAM-PT-05		Lab ID: 92705294005		Collected: 12/20/23 11:20		Received: 12/21/23 14:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	4.5	mg/L	0.040	0.012	1	01/08/24 10:18	01/09/24 15:17	7440-42-8	
Cobalt	0.0066	mg/L	0.0050	0.00032	1	01/08/24 10:18	01/09/24 15:17	7440-48-4	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO ₃)	1260	mg/L	5.0	5.0	1		01/02/24 22:14		
Alkalinity, Total as CaCO ₃	1260	mg/L	5.0	5.0	1		01/02/24 22:14		

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92705294

Sample: HAM-PT-06		Lab ID: 92705294006		Collected: 12/20/23 12:02		Received: 12/21/23 14:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	4.9	mg/L	0.040	0.012	1	01/08/24 10:18	01/08/24 19:04	7440-42-8	
Cobalt	0.020	mg/L	0.0050	0.00032	1	01/08/24 10:18	01/09/24 15:21	7440-48-4	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO ₃)	827	mg/L	5.0	5.0	1		01/02/24 22:25		
Alkalinity, Total as CaCO ₃	827	mg/L	5.0	5.0	1		01/02/24 22:25		

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92705294

Sample: HAM-AP2-EB-01		Lab ID: 92705294007		Collected: 12/20/23 12:20		Received: 12/21/23 14:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	0.012	1	01/08/24 10:18	01/09/24 17:37	7440-42-8	
Cobalt	ND	mg/L	0.0050	0.00032	1	01/08/24 10:18	01/08/24 19:08	7440-48-4	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO ₃)	ND	mg/L	5.0	5.0	1		01/02/24 16:34		
Alkalinity, Total as CaCO ₃	ND	mg/L	5.0	5.0	1		01/02/24 16:34		

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92705294

Sample: HAM-AP2-FB-01		Lab ID: 92705294008		Collected: 12/20/23 12:15		Received: 12/21/23 14:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	0.034J	mg/L	0.040	0.012	1	01/08/24 10:18	01/08/24 19:12	7440-42-8	
Cobalt	ND	mg/L	0.0050	0.00032	1	01/08/24 10:18	01/08/24 19:12	7440-48-4	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO ₃)	ND	mg/L	5.0	5.0	1		01/02/24 16:38		
Alkalinity, Total as CaCO ₃	ND	mg/L	5.0	5.0	1		01/02/24 16:38		

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92705294

Sample: HAM-AP2-FD-01		Lab ID: 92705294009		Collected: 12/20/23 00:00		Received: 12/21/23 14:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	5.4	mg/L	0.040	0.012	1	01/08/24 10:18	01/08/24 19:25	7440-42-8	
Cobalt	0.030	mg/L	0.0050	0.00032	1	01/08/24 10:18	01/09/24 15:25	7440-48-4	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO ₃)	527	mg/L	5.0	5.0	1		01/02/24 22:34		
Alkalinity, Total as CaCO ₃	527	mg/L	5.0	5.0	1		01/02/24 22:34		

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QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92705294

QC Batch:	823797	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92705294001, 92705294002, 92705294003, 92705294004, 92705294005, 92705294006, 92705294007, 92705294008, 92705294009		

METHOD BLANK:	4261574	Matrix:	Water
Associated Lab Samples:	92705294001, 92705294002, 92705294003, 92705294004, 92705294005, 92705294006, 92705294007, 92705294008, 92705294009		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	0.012	01/08/24 17:45	
Cobalt	mg/L	ND	0.0050	0.00032	01/08/24 17:45	

LABORATORY CONTROL SAMPLE:	4261575					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	1.0	100	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	4261576			4261577								
Parameter	Units	92705258001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	1.0	1	1	1.8	1.7	76	73	75-125	2	20	M1
Cobalt	mg/L	0.036	0.1	0.1	0.13	0.13	90	92	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.

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QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92705294

QC Batch: 822803

Analysis Method: SM 2320B-2011

QC Batch Method: SM 2320B-2011

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92705294001, 92705294002, 92705294003, 92705294004, 92705294005, 92705294006, 92705294007, 92705294008, 92705294009

METHOD BLANK: 4257005

Matrix: Water

Associated Lab Samples: 92705294001, 92705294002, 92705294003, 92705294004, 92705294005, 92705294006, 92705294007, 92705294008, 92705294009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	ND	5.0	5.0	01/02/24 13:21	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	5.0	5.0	01/02/24 13:21	

LABORATORY CONTROL SAMPLE: 4257006

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	53.8	108	80-120	

LABORATORY CONTROL SAMPLE: 4257007

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	53.2	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4257008 4257009

Parameter	Units	92704837006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	26.7	50	50	74.0	73.4	95	93	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4257010 4257011

Parameter	Units	92704837007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	38.2	50	50	88.2	89.1	100	102	80-120	1	25	

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.

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QUALIFIERS

Project: Hammond AP-2
Pace Project No.: 92705294

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 adjusted reporting limit.
TNTC - Too Numerous To Count
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
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.
Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.
A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2

Pace Project No.: 92705294

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92705294001	HAM-PT-01	EPA 3005A	823797	EPA 6020B	824118
92705294002	HAM-PT-02	EPA 3005A	823797	EPA 6020B	824118
92705294003	HAM-PT-03	EPA 3005A	823797	EPA 6020B	824118
92705294004	HAM-PT-04	EPA 3005A	823797	EPA 6020B	824118
92705294005	HAM-PT-05	EPA 3005A	823797	EPA 6020B	824118
92705294006	HAM-PT-06	EPA 3005A	823797	EPA 6020B	824118
92705294007	HAM-AP2-EB-01	EPA 3005A	823797	EPA 6020B	824118
92705294008	HAM-AP2-FB-01	EPA 3005A	823797	EPA 6020B	824118
92705294009	HAM-AP2-FD-01	EPA 3005A	823797	EPA 6020B	824118
92705294001	HAM-PT-01	SM 2320B-2011	822803		
92705294002	HAM-PT-02	SM 2320B-2011	822803		
92705294003	HAM-PT-03	SM 2320B-2011	822803		
92705294004	HAM-PT-04	SM 2320B-2011	822803		
92705294005	HAM-PT-05	SM 2320B-2011	822803		
92705294006	HAM-PT-06	SM 2320B-2011	822803		
92705294007	HAM-AP2-EB-01	SM 2320B-2011	822803		
92705294008	HAM-AP2-FB-01	SM 2320B-2011	822803		
92705294009	HAM-AP2-FD-01	SM 2320B-2011	822803		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: <u>1</u> of <u>1</u>	
Company: GA Power		Report To: SCS Contacts		Attention: Southern Co.		REGULATORY AGENCY <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> CCR	
Address: Atlanta, GA		Copy To: Geosyntec Contacts		Company Name:			
Email To: SCS Contacts		Purchase Order No.: GPC82474-0001		Address:		Site Location: <u>GA</u>	
Phone: Fax:		Project Name: Hammond AP-2		Pace Quote Reference:		STATE: <u>GA</u>	
Requested Due Date/TAT: 10 Day		Project Number:		Pace Project Manager: Bonnie Vang			
				Pace Profile #: 10839			

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/SOLID OL OIL OL WIPE WP AIR AR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Y/N Analysis Test Bicarbonate Alk., Total Alk. Boron and Cobalt	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
					COMPOSITE		COMPOSITE				Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																</

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-CA-20231220	<i>Andrew Smith / Geosyntec</i>	12/21/23	1037	<i>Bylg - Paul</i>	12/21/23	1034	
	<i>Bylg - Paul</i>	12/21/23	1045	<i>Bylg - Paul</i>	12/21/23	1045	

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Jacob Tracy, Alex Brown / Geosyntec Consultants, Inc.				
SIGNATURE of SAMPLER:	<i>Jacob Tracy, Alex Brown</i> DATE Signed (MM/DD/YY): 12/20/23				



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒ Kernersville ☐Sample Condition
Upon Receipt

Client Name:

Project #:

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client
☐ Commercial ☒ Pace ☐ Other: _____Custody Seal Present? ☒ Yes ☐ No Seals Intact? ☒ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: 12/21/23 JCC

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen?

☐ Yes ☐ No ☐ N/A

Thermometer:

☒ IR Gun ID:

230

Type of Ice:

☒ Wet☐ Blue☐ None

Cooler Temp:

3.3

Correction Factor:

Add/Subtract (°C)

6.4

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

3.3

USDA Regulated Soil (☐ N/A, water sample)Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ NoDid samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: 2			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project #

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	V5GU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1																												
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
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11																												
12																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers).

CALIBRATION REPORTS

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 12/20/2023

Calibrated By: Jacob Truay

Field Conditions: Clear

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>1N Site</u>	<u>SN 966105</u>
Turbidity Meter	<u>Lumotek</u>	<u>1126-2023</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (μS/cm)	4,490	<u>24000044</u>	<u>05/24</u>	<u>AFR</u>
pH (SU)	4.00	<u>24000044</u>	<u>05/24</u>	<u>AFR</u>
pH (SU)	7.00	<u>22290139</u>	<u>04/24</u>	<u>AFR</u>
pH (SU)	10.00	<u>2211030</u>	<u>04/24</u>	<u>AFR</u>
D.O. (%)	N/A	<u>24002258</u>	<u>06/24</u>	<u>AFR</u>
ORP (mV)	228.0	<u>24002258</u>	<u>06/24</u>	<u>AFR</u>

Calibration					
Time Start <u>730</u>		Time Finish <u>806</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (μS/cm)	4,490	<u>4469</u>	<u>27.7</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>3.94</u>	<u>27.7</u>	± 0.1	GWMP
pH (SU)	7.00	<u>6.96</u>	<u>27.7</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.09</u>	<u>27.7</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>99.31</u>	<u>27.7</u>	± 10%	NA
ORP (mV)	228.0	<u>228</u>	<u>4.16</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0</u>	<u>0.0</u>	± 10% of standard	EPA 2023
	<u>1</u>	<u>0.94</u>		
	<u>10</u>	<u>10.4</u>		
	<u>10</u>	<u>10.4</u>		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (μS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
			± 10% of standard	EPA 2023

Notes:

Site Name: Hammond

Field Instrumentation Calibration Form

Date: 12/20/23

Calibrated By: A. Brown

Field Conditions: 24°F Clear

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>Aqua Troll 400</u>	<u>850767</u>
Turbidity Meter	<u>LaMotte</u>	<u>—</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4.490	<u>24000044</u>	<u>5/24</u>	<u>AIR</u>
pH (SU)	4.00	<u>24000044</u>	<u>5/24</u>	<u>↓</u>
pH (SU)	7.00	<u>22290139</u>	<u>4/24</u>	<u>↓</u>
pH (SU)	10.00	<u>22110130</u>	<u>4/24</u>	<u>↓</u>
D.O. (%)	N/A	<u>—</u>	<u>—</u>	<u>—</u>
ORP (mV)	228.0	<u>2400254</u>	<u>6/24</u>	<u>AIR</u>

Calibration					
Time Start <u>0748</u>		Time Finish <u>0805</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4490</u>	<u>7.99</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.00</u>	<u>8.09</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>8.74</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>9.42</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100</u>	<u>AS 4.64 9.02</u>	± 10%	NA
ORP (mV)	228.0	<u>228</u>	<u>9.64</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0.0</u>	<u>0.0</u>	± 10% of standard	EPA 2023
	<u>1.0</u>	<u>1.0</u>		
	<u>10.0</u>	<u>10.0</u>		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>—</u>	<u>—</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>—</u>	<u>—</u>	± 0.1	GWMP
pH (SU)	7.00	<u>—</u>	<u>—</u>	± 0.1	GWMP
pH (SU)	10.00	<u>—</u>	<u>—</u>	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>—</u>	<u>—</u>	± 10% of standard	EPA 2023
	<u>—</u>	<u>—</u>		
	<u>—</u>	<u>—</u>		

Notes:

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 12/27/2023Calibrated By: Thomas NestorField Conditions: foggy, 45°

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>insitu/sonotek</u>	<u>655546</u>
Turbidity Meter	<u>Loansciffe</u>	<u>41212627</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	<u>2400044</u>	<u>5/2024</u>	<u>insitu</u>
pH (SU)	4.00	<u>24000044</u>	<u>5/2024</u>	
pH (SU)	7.00	<u>22290139</u>	<u>4/2024</u>	
pH (SU)	10.00	<u>22110139</u>	<u>04/2024</u>	
D.O. (%)	N/A			
ORP (mV)	228.0	<u>24002258</u>	<u>06/2024</u>	<u>insitu</u>

Calibration					
Time Start	Time Finish		Calibration Solution	Acceptance Criteria	Reference
<u>07:10</u>	<u>08:40</u>		Temperature (°C)		
Parameter	Standard	Calibration Value	Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	<u>4490</u>	<u>14.20</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.00</u>	<u>14.20</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>14.28</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.0</u>	<u>14.60</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100</u>	<u>14.38</u>	± 10%	NA
ORP (mV)	228.0	<u>228</u>	<u>14.71</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0</u>	<u>0</u>	± 10% of standard	EPA 2023
	<u>1</u>	<u>1.98</u>		
	<u>10</u>	<u>9.95</u>		

Calibration Check					
Time Start	Time Finish		Calibration Solution	Acceptance Criteria	Reference
			Temperature (°C)		
Parameter	Standard	Calibration Value	Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0</u>	<u>0</u>	± 10% of standard	EPA 2023
	<u>1</u>	<u>1.98</u>		
	<u>10</u>	<u>9.95</u>		

Notes: connection issue, cal 10 pH out 1pt.
large amt. of con. error - cable no 865770

FIELD SAMPLING REPORTS

Low-Flow Test Report:

Test Date / Time: 12/27/2023 1:01:30 PM
Project: Plant Hammond
Operator Name: Thomas Kessler

Location Name: INW-01 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 13.16 ft Total Depth: 23.16 ft Initial Depth to Water: 11.0 ft	Pump Type: Bailer Tubing Type: N/A Estimated Total Volume Pumped: 23.0 liter Flow Cell Volume: 90 ml	Instrument Used: Aqua TROLL 400 Serial Number: 883546
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Test Notes:
Parameter testing.

Weather Conditions:
Clear, 50 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
12/27/2023 1:01 PM	00:00	6.52 pH	19.48 °C	2,060.7 µS/cm	4.18 mg/L	4.34 NTU	88.0 mV	--	100.00 ml/min
12/27/2023 1:06 PM	05:00	6.46 pH	18.47 °C	2,058.8 µS/cm	3.39 mg/L	6.90 NTU	123.9 mV	--	100.00 ml/min
12/27/2023 1:11 PM	10:00	6.43 pH	18.44 °C	2,069.8 µS/cm	3.57 mg/L	75.00 NTU	113.1 mV	--	100.00 ml/min

Samples

Sample ID:	Description:
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GROUNDWATER SAMPLING LOG SHEET

Client:	SCS
Site:	AP-2
Well ID:	INW-02
Total Depth (ft):	35.08
Depth to Water (ft):	14.75
Well Diameter (in):	2
Well Volume (gal) = $0.041d^2h$:	3.33
Well Volume (L) = gal * 3.785:	12.6

Project No.: GW6581
Location: Plant Hammond
Pump Type/Model: per / Alexis
Tubing Material: poly
Pump Intake Depth (ft): 30
Start/Stop Purge Time: 1015
Purge Rate (mL/min): 200
Total Purge Volume (L): 3.0

Sampling Date: 12-20-2023
 Sampler's Name: A. Brown
 Sample Collection Time:
 Sample Purge Rate (mL/min):
 Sample ID:
 Laboratory Analyses:

d = well diameter (inches); h = length of water column (feet)

Well Type: ☒ Flush ☐ Stick UpWell Lock: Yes ☒ No ☐Well Cap Condition: ☒ Good ☐ Replace

Well Tag Present: ☒ Yes ☐ No

Purge Method: Low-Flow Well Volume Other:

Sampling Method: Pump Discharge Other:

QA/QC Collected?

QA/QC I.D.

All sample containers requiring chemical preservation properly preserved prior to demob from well?	Yes	No	NA
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[illegible]

Low-Flow Test Report:

Test Date / Time: 12/20/2023 11:26:33 AM
Project: Plant Hammond
Operator Name: Jacob Tracy

Location Name: PT-01 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 13.19 ft Total Depth: 23.19 ft Initial Depth to Water: 13.6 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 18.19 ft Estimated Total Volume Pumped: 8.5 liter Flow Cell Volume: 90 ml Final Flow Rate: 250 ml/min Final Draw Down: 0.15 ft	Instrument Used: Aqua TROLL 400 Serial Number: 966105
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Test Notes:
Two bottles: Metals and Alk.

Weather Conditions:
Clear, 42 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
12/20/2023 11:26 AM	00:00	6.49 pH	17.59 °C	2,842.8 µS/cm	1.27 mg/L	0.86 NTU	443.0 mV	13.60 ft	250.00 ml/min
12/20/2023 11:31 AM	05:00	6.55 pH	17.74 °C	2,979.3 µS/cm	0.67 mg/L	0.38 NTU	49.9 mV	13.65 ft	250.00 ml/min
12/20/2023 11:36 AM	10:00	6.59 pH	17.90 °C	3,166.2 µS/cm	0.39 mg/L	0.00 NTU	-80.8 mV	13.67 ft	250.00 ml/min
12/20/2023 11:41 AM	15:00	6.61 pH	17.89 °C	3,250.1 µS/cm	0.25 mg/L	0.26 NTU	-86.2 mV	13.69 ft	250.00 ml/min
12/20/2023 11:46 AM	20:00	6.64 pH	17.93 °C	3,393.8 µS/cm	0.20 mg/L	1.02 NTU	-80.7 mV	13.69 ft	250.00 ml/min
12/20/2023 11:51 AM	25:00	6.66 pH	18.03 °C	3,505.8 µS/cm	0.16 mg/L	1.38 NTU	-89.2 mV	13.72 ft	250.00 ml/min
12/20/2023 11:56 AM	30:00	6.67 pH	18.11 °C	3,572.2 µS/cm	0.16 mg/L	0.64 NTU	-88.4 mV	13.75 ft	250.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-01	Grab.

Low-Flow Test Report:

Test Date / Time: 12/20/2023 12:45:46 PM
Project: Plant Hammond
Operator Name: Jacob Tracy

Location Name: PT-02 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 13.26 ft Total Depth: 23.26 ft Initial Depth to Water: 12.69 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 18.5 ft Estimated Total Volume Pumped: 14.75 liter Flow Cell Volume: 90 ml Final Flow Rate: 250 ml/min Final Draw Down: 2.82 ft	Instrument Used: Aqua TROLL 400 Serial Number: 966105
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Test Notes:
Two bottles: Metals and Alk.

Weather Conditions:
Clear, 42 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
12/20/2023 12:45 PM	00:00	6.34 pH	17.94 °C	2,657.1 µS/cm	3.45 mg/L	3.63 NTU	97.0 mV	14.26 ft	250.00 ml/min
12/20/2023 12:50 PM	05:00	6.72 pH	17.63 °C	4,127.4 µS/cm	3.70 mg/L	0.45 NTU	-100.8 mV	14.59 ft	250.00 ml/min
12/20/2023 12:55 PM	10:00	6.49 pH	17.93 °C	3,377.7 µS/cm	0.86 mg/L	3.72 NTU	-74.1 mV	15.10 ft	250.00 ml/min
12/20/2023 1:00 PM	15:00	6.66 pH	18.04 °C	3,886.5 µS/cm	1.09 mg/L	1.72 NTU	-104.1 mV	15.52 ft	250.00 ml/min
12/20/2023 1:05 PM	20:00	6.81 pH	17.50 °C	4,096.7 µS/cm	1.33 mg/L	0.91 NTU	-130.7 mV	15.73 ft	250.00 ml/min
12/20/2023 1:10 PM	25:00	6.79 pH	17.95 °C	4,170.4 µS/cm	0.41 mg/L	0.46 NTU	-130.4 mV	15.62 ft	250.00 ml/min
12/20/2023 1:15 PM	30:00	6.79 pH	17.65 °C	4,107.4 µS/cm	0.97 mg/L	0.33 NTU	-135.8 mV	15.63 ft	250.00 ml/min
12/20/2023 1:20 PM	35:00	6.80 pH	17.49 °C	4,136.2 µS/cm	0.85 mg/L	0.31 NTU	-125.9 mV	15.60 ft	250.00 ml/min
12/20/2023 1:25 PM	40:00	6.78 pH	17.14 °C	4,063.8 µS/cm	0.57 mg/L	0.35 NTU	-130.3 mV	15.61 ft	250.00 ml/min
12/20/2023 1:30 PM	45:00	6.78 pH	17.04 °C	4,044.0 µS/cm	0.34 mg/L	0.42 NTU	-129.8 mV	15.55 ft	250.00 ml/min
12/20/2023 1:35 PM	50:00	6.79 pH	17.06 °C	4,017.4 µS/cm	0.25 mg/L	0.25 NTU	-129.1 mV	15.51 ft	250.00 ml/min
12/20/2023 1:40 PM	55:00	6.78 pH	17.14 °C	4,002.1 µS/cm	0.22 mg/L	0.22 NTU	-121.2 mV	15.51 ft	250.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-02	Grab.

Low-Flow Test Report:

Test Date / Time: 12/20/2023 10:00:13 AM
Project: Plant Hammond
Operator Name: Jacob Tracy

Location Name: PT-03 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 15.29 ft Total Depth: 25.29 ft Initial Depth to Water: 12.69 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 20.29 ft Estimated Total Volume Pumped: 4.75 liter Flow Cell Volume: 90 ml Final Flow Rate: 250 ml/min Final Draw Down: 0.13 ft	Instrument Used: Aqua TROLL 400 Serial Number: 966105
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Test Notes:
Two bottles: Metals and Alk.

Weather Conditions:
Clear, 31 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
12/20/2023 10:00 AM	00:00	5.11 pH	16.60 °C	2,349.2 µS/cm	0.29 mg/L	1.16 NTU	208.9 mV	12.85 ft	250.00 ml/min
12/20/2023 10:01 AM	01:41	5.13 pH	16.83 °C	2,364.6 µS/cm	0.25 mg/L	1.16 NTU	245.3 mV	12.85 ft	250.00 ml/min
12/20/2023 10:06 AM	06:41	5.16 pH	16.83 °C	2,335.5 µS/cm	0.20 mg/L	1.01 NTU	191.6 mV	12.84 ft	250.00 ml/min
12/20/2023 10:11 AM	11:41	5.19 pH	16.89 °C	2,358.7 µS/cm	0.16 mg/L	1.09 NTU	226.5 mV	12.82 ft	250.00 ml/min
12/20/2023 10:16 AM	16:41	5.18 pH	17.01 °C	2,356.7 µS/cm	0.15 mg/L	1.38 NTU	177.6 mV	12.82 ft	250.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-03	Grab.

Low-Flow Test Report:

Test Date / Time: 12/20/2023 9:42:06 AM
Project: Plant Hammond
Operator Name: Alex Brown

Location Name: PT-04 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 23.87 ft Total Depth: 33.87 ft Initial Depth to Water: 14.43 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 28.87 ft Estimated Total Volume Pumped: 4.0 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.08 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850767
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Test Notes:
Two bottles: Metals and Alk.

Weather Conditions:
Clear, 31 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
12/20/2023 9:42 AM	00:00	6.71 pH	15.39 °C	2,256.4 µS/cm	0.77 mg/L	6.22 NTU	-53.6 mV	14.51 ft	200.00 ml/min
12/20/2023 9:47 AM	05:00	6.66 pH	16.48 °C	2,185.4 µS/cm	4.97 mg/L	4.13 NTU	-68.4 mV	14.51 ft	200.00 ml/min
12/20/2023 9:52 AM	10:00	6.70 pH	16.61 °C	2,196.6 µS/cm	0.27 mg/L	3.68 NTU	-75.3 mV	14.51ft	200.00 ml/min
12/20/2023 9:57 AM	15:00	6.70 pH	16.92 °C	2,174.8 µS/cm	0.14 mg/L	1.41 NTU	-114.4 mV	14.51 ft	200.00 ml/min
12/20/2023 10:02 AM	20:00	6.68 pH	17.42 °C	2,140.0 µS/cm	0.12 mg/L	1.31 NTU	-101.8 mV	14.51 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-04	Grab.
HAM-AP2-FD-01	Grab.

Low-Flow Test Report:

Test Date / Time: 12/20/2023 10:46:48 AM
Project: Plant Hammond
Operator Name: Alex Brown

Location Name: PT-05 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 25.11 ft Total Depth: 35.11 ft Initial Depth to Water: 14.73 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 30.0 ft Estimated Total Volume Pumped: 7.0 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.09 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850767
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Test Notes:
Two bottles: Metals and Alk.

Weather Conditions:
Clear, 38 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
12/20/2023 10:46 AM	00:00	7.03 pH	16.71 °C	3,352.0 µS/cm	3.61 mg/L	30.80 NTU	-126.4 mV	14.82 ft	200.00 ml/min
12/20/2023 10:51 AM	05:00	6.97 pH	17.45 °C	3,057.3 µS/cm	2.21 mg/L	21.30 NTU	-146.2 mV	14.82 ft	200.00 ml/min
12/20/2023 10:56 AM	10:00	6.99 pH	17.23 °C	3,404.3 µS/cm	1.97 mg/L	12.65 NTU	-98.9 mV	14.82 ft	200.00 ml/min
12/20/2023 11:01 AM	15:00	7.00 pH	17.16 °C	2,666.7 µS/cm	1.94 mg/L	4.65 NTU	-123.6 mV	14.82 ft	200.00 ml/min
12/20/2023 11:06 AM	20:00	6.99 pH	17.29 °C	3,179.4 µS/cm	1.39 mg/L	2.27 NTU	-96.4 mV	14.82 ft	200.00 ml/min
12/20/2023 11:11 AM	25:00	7.00 pH	17.42 °C	3,175.3 µS/cm	1.31 mg/L	2.28 NTU	-127.4 mV	14.82 ft	200.00 ml/min
12/20/2023 11:16 AM	30:00	7.00 pH	17.36 °C	3,170.4 µS/cm	1.34 mg/L	1.14 NTU	-97.5 mV	14.82 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-05	Grab.

Low-Flow Test Report:

Test Date / Time: 12/20/2023 11:43:05 AM
Project: Plant Hammond
Operator Name: Alex Brown

Location Name: PT-06 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 25.48 ft Total Depth: 35.48 ft Initial Depth to Water: 14.56 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 30.5 ft Estimated Total Volume Pumped: 4.0 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.12 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850767
--	---	--

Test Notes:
Two bottles: Metals and Alk.

Weather Conditions:
Clear, 42 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
12/20/2023 11:43 AM	00:00	6.77 pH	17.77 °C	2,590.7 µS/cm	1.42 mg/L	0.85 NTU	-71.1 mV	14.67 ft	200.00 ml/min
12/20/2023 11:48 AM	05:00	6.78 pH	17.61 °C	2,559.6 µS/cm	1.44 mg/L	0.40 NTU	-84.1 mV	14.68 ft	200.00 ml/min
12/20/2023 11:53 AM	10:00	6.78 pH	17.61 °C	2,542.5 µS/cm	1.54 mg/L	0.52 NTU	-81.7 mV	14.68 ft	200.00 ml/min
12/20/2023 11:58 AM	15:00	6.79 pH	17.73 °C	2,548.2 µS/cm	1.61 mg/L	0.25 NTU	-81.5 mV	14.68 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-06	Grab.

January 2024

LABORATORY ANALYTICAL RESULTS



February 06, 2024

Kristen Jurinko
Southern Company
241 Ralph McGill Blvd NE
Bin 10160
Atlanta, GA 30308

RE: Project: Hammond AP-2
Pace Project No.: 92710201

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on January 25, 2024. 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 - Asheville
- Pace Analytical Services - Peachtree Corners, GA

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

Sincerely,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Kip Gray, Geosyntec
Christine Hug, Geosyntec Consultants, Inc.
Thomas Kessler, Geosyntec Consultants
Whitney Law, Geosyntec Consultants
Laura Midkiff, Southern Company
Caroline Nelson, Geosyntec Consultants, Inc
Anthony Szwast, Geosyntec Consultants



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Hammond AP-2

Pace Project No.: 92710201

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Laboratory ID: 99030

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

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SAMPLE SUMMARY

Project: Hammond AP-2

Pace Project No.: 92710201

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92710201001	HAM-PT-01	Water	01/24/24 11:36	01/25/24 12:05
92710201002	HAM-PT-02	Water	01/24/24 13:26	01/25/24 12:05
92710201003	HAM-PT-03	Water	01/24/24 10:08	01/25/24 12:05
92710201004	HAM-PT-04	Water	01/24/24 12:50	01/25/24 12:05
92710201005	HAM-PT-05	Water	01/24/24 11:15	01/25/24 12:05
92710201006	HAM-PT-06	Water	01/24/24 10:25	01/25/24 12:05
92710201007	HAM-AP2-EB-01	Water	01/24/24 14:15	01/25/24 12:05
92710201008	HAM-AP2-FB-01	Water	01/24/24 14:10	01/25/24 12:05
92710201009	HAM-AP2-FD-01	Water	01/24/24 00:00	01/25/24 12:05

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SAMPLE ANALYTE COUNT

Project: Hammond AP-2

Pace Project No.: 92710201

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92710201001	HAM-PT-01	EPA 6020B	MT1	2
		SM 2320B-2011	SMS	2
92710201002	HAM-PT-02	EPA 6020B	MT1	2
		SM 2320B-2011	SMS	2
92710201003	HAM-PT-03	EPA 6020B	MT1	2
		SM 2320B-2011	SMS	2
92710201004	HAM-PT-04	EPA 6020B	MT1	2
		SM 2320B-2011	SMS	2
92710201005	HAM-PT-05	EPA 6020B	MT1	2
		SM 2320B-2011	SMS	2
92710201006	HAM-PT-06	EPA 6020B	MT1	2
		SM 2320B-2011	SMS	2
92710201007	HAM-AP2-EB-01	EPA 6020B	MT1	2
		SM 2320B-2011	SMS	2
92710201008	HAM-AP2-FB-01	EPA 6020B	MT1	2
		SM 2320B-2011	SMS	2
92710201009	HAM-AP2-FD-01	EPA 6020B	MT1	2
		SM 2320B-2011	SMS	2

PASI-A = Pace Analytical Services - Asheville

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92710201

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92710201001	HAM-PT-01					
EPA 6020B	Boron	3.5	mg/L	0.40	01/30/24 13:07	
EPA 6020B	Cobalt	0.0045J	mg/L	0.0050	01/29/24 17:12	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	243	mg/L	5.0	02/02/24 16:02	
SM 2320B-2011	Alkalinity, Total as CaCO3	243	mg/L	5.0	02/02/24 16:02	
92710201002	HAM-PT-02					
EPA 6020B	Boron	5.3	mg/L	0.040	01/29/24 17:27	
EPA 6020B	Cobalt	0.0078	mg/L	0.0050	01/29/24 17:27	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	680	mg/L	5.0	02/02/24 16:11	
SM 2320B-2011	Alkalinity, Total as CaCO3	680	mg/L	5.0	02/02/24 16:11	
92710201003	HAM-PT-03					
EPA 6020B	Boron	7.8	mg/L	0.040	01/29/24 17:30	
EPA 6020B	Cobalt	0.11	mg/L	0.0050	01/29/24 17:30	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	11.3	mg/L	5.0	02/01/24 14:14	
SM 2320B-2011	Alkalinity, Total as CaCO3	11.3	mg/L	5.0	02/01/24 14:14	
92710201004	HAM-PT-04					
EPA 6020B	Boron	6.8	mg/L	0.040	01/29/24 17:34	
EPA 6020B	Cobalt	0.031	mg/L	0.0050	01/29/24 17:34	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	462	mg/L	5.0	02/02/24 16:20	
SM 2320B-2011	Alkalinity, Total as CaCO3	462	mg/L	5.0	02/02/24 16:20	
92710201005	HAM-PT-05					
EPA 6020B	Boron	4.9	mg/L	0.040	01/29/24 17:38	
EPA 6020B	Cobalt	0.0069	mg/L	0.0050	01/29/24 17:38	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	1060	mg/L	5.0	02/02/24 16:29	
SM 2320B-2011	Alkalinity, Total as CaCO3	1060	mg/L	5.0	02/02/24 16:29	
92710201006	HAM-PT-06					
EPA 6020B	Boron	6.4	mg/L	0.040	01/29/24 17:49	
EPA 6020B	Cobalt	0.020	mg/L	0.0050	01/29/24 17:49	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	610	mg/L	5.0	02/02/24 16:40	
SM 2320B-2011	Alkalinity, Total as CaCO3	610	mg/L	5.0	02/02/24 16:40	
92710201007	HAM-AP2-EB-01					
EPA 6020B	Boron	0.032J	mg/L	0.040	01/29/24 17:57	
92710201008	HAM-AP2-FB-01					
EPA 6020B	Boron	0.026J	mg/L	0.040	01/29/24 18:00	
92710201009	HAM-AP2-FD-01					
EPA 6020B	Boron	8.0	mg/L	0.040	01/29/24 18:04	
EPA 6020B	Cobalt	0.11	mg/L	0.0050	01/29/24 18:04	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	11.2	mg/L	5.0	02/01/24 15:44	
SM 2320B-2011	Alkalinity, Total as CaCO3	11.2	mg/L	5.0	02/01/24 15:44	

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92710201

Sample: HAM-PT-01		Lab ID: 92710201001		Collected: 01/24/24 11:36		Received: 01/25/24 12:05		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	3.5	mg/L	0.40	0.12	10	01/29/24 10:11	01/30/24 13:07	7440-42-8	
Cobalt	0.0045J	mg/L	0.0050	0.00032	1	01/29/24 10:11	01/29/24 17:12	7440-48-4	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO ₃)	243	mg/L	5.0	5.0	1		02/02/24 16:02		
Alkalinity, Total as CaCO ₃	243	mg/L	5.0	5.0	1		02/02/24 16:02		

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92710201

Sample: HAM-PT-02		Lab ID: 92710201002		Collected: 01/24/24 13:26		Received: 01/25/24 12:05		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	5.3	mg/L	0.040	0.012	1	01/29/24 10:11	01/29/24 17:27	7440-42-8	
Cobalt	0.0078	mg/L	0.0050	0.00032	1	01/29/24 10:11	01/29/24 17:27	7440-48-4	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO ₃)	680	mg/L	5.0	5.0	1		02/02/24 16:11		
Alkalinity, Total as CaCO ₃	680	mg/L	5.0	5.0	1		02/02/24 16:11		

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92710201

Sample: HAM-PT-03		Lab ID: 92710201003		Collected: 01/24/24 10:08		Received: 01/25/24 12:05		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	7.8	mg/L	0.040	0.012	1	01/29/24 10:11	01/29/24 17:30	7440-42-8	
Cobalt	0.11	mg/L	0.0050	0.00032	1	01/29/24 10:11	01/29/24 17:30	7440-48-4	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO ₃)	11.3	mg/L	5.0	5.0	1		02/01/24 14:14		
Alkalinity, Total as CaCO ₃	11.3	mg/L	5.0	5.0	1		02/01/24 14:14		

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92710201

Sample: HAM-PT-04		Lab ID: 92710201004		Collected: 01/24/24 12:50		Received: 01/25/24 12:05		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	6.8	mg/L	0.040	0.012	1	01/29/24 10:11	01/29/24 17:34	7440-42-8	
Cobalt	0.031	mg/L	0.0050	0.00032	1	01/29/24 10:11	01/29/24 17:34	7440-48-4	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO ₃)	462	mg/L	5.0	5.0	1		02/02/24 16:20		
Alkalinity, Total as CaCO ₃	462	mg/L	5.0	5.0	1		02/02/24 16:20		

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92710201

Sample: HAM-PT-05		Lab ID: 92710201005		Collected: 01/24/24 11:15		Received: 01/25/24 12:05		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	4.9	mg/L	0.040	0.012	1	01/29/24 10:11	01/29/24 17:38	7440-42-8	
Cobalt	0.0069	mg/L	0.0050	0.00032	1	01/29/24 10:11	01/29/24 17:38	7440-48-4	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO ₃)	1060	mg/L	5.0	5.0	1		02/02/24 16:29		
Alkalinity, Total as CaCO ₃	1060	mg/L	5.0	5.0	1		02/02/24 16:29		

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92710201

Sample: HAM-PT-06		Lab ID: 92710201006		Collected: 01/24/24 10:25		Received: 01/25/24 12:05		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	6.4	mg/L	0.040	0.012	1	01/29/24 10:11	01/29/24 17:49	7440-42-8	
Cobalt	0.020	mg/L	0.0050	0.00032	1	01/29/24 10:11	01/29/24 17:49	7440-48-4	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO ₃)	610	mg/L	5.0	5.0	1		02/02/24 16:40		
Alkalinity, Total as CaCO ₃	610	mg/L	5.0	5.0	1		02/02/24 16:40		

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92710201

Sample: HAM-AP2-EB-01		Lab ID: 92710201007		Collected: 01/24/24 14:15		Received: 01/25/24 12:05		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	0.032J	mg/L	0.040	0.012	1	01/29/24 10:11	01/29/24 17:57	7440-42-8	
Cobalt	ND	mg/L	0.0050	0.00032	1	01/29/24 10:11	01/29/24 17:57	7440-48-4	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO ₃)	ND	mg/L	5.0	5.0	1		02/01/24 15:34		
Alkalinity, Total as CaCO ₃	ND	mg/L	5.0	5.0	1		02/01/24 15:34		

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92710201

Sample: HAM-AP2-FB-01		Lab ID: 92710201008		Collected: 01/24/24 14:10		Received: 01/25/24 12:05		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	0.026J	mg/L	0.040	0.012	1	01/29/24 10:11	01/29/24 18:00	7440-42-8	
Cobalt	ND	mg/L	0.0050	0.00032	1	01/29/24 10:11	01/29/24 18:00	7440-48-4	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO ₃)	ND	mg/L	5.0	5.0	1		02/01/24 15:39		
Alkalinity, Total as CaCO ₃	ND	mg/L	5.0	5.0	1		02/01/24 15:39		

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92710201

Sample: HAM-AP2-FD-01		Lab ID: 92710201009		Collected: 01/24/24 00:00		Received: 01/25/24 12:05		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	8.0	mg/L	0.040	0.012	1	01/29/24 10:11	01/29/24 18:04	7440-42-8	
Cobalt	0.11	mg/L	0.0050	0.00032	1	01/29/24 10:11	01/29/24 18:04	7440-48-4	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO ₃)	11.2	mg/L	5.0	5.0	1		02/01/24 15:44		
Alkalinity, Total as CaCO ₃	11.2	mg/L	5.0	5.0	1		02/01/24 15:44		

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QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92710201

QC Batch:	828477	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92710201001, 92710201002, 92710201003, 92710201004, 92710201005, 92710201006, 92710201007, 92710201008, 92710201009		

METHOD BLANK:	4282973	Matrix:	Water
Associated Lab Samples:	92710201001, 92710201002, 92710201003, 92710201004, 92710201005, 92710201006, 92710201007, 92710201008, 92710201009		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	0.012	01/29/24 17:04	
Cobalt	mg/L	ND	0.0050	0.00032	01/29/24 17:04	

LABORATORY CONTROL SAMPLE:	4282974					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	1.1	105	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	4282975			4282976								
Parameter	Units	92710201001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	3.5	1	1	4.5	4.3	107	82	75-125	6	20	
Cobalt	mg/L	0.0045J	0.1	0.1	0.10	0.10	99	97	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92710201

QC Batch: 829216

Analysis Method: SM 2320B-2011

QC Batch Method: SM 2320B-2011

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92710201003

METHOD BLANK: 4286184

Matrix: Water

Associated Lab Samples: 92710201003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	ND	5.0	5.0	02/01/24 10:56	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	5.0	5.0	02/01/24 10:56	

LABORATORY CONTROL SAMPLE: 4286185

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	49.2	98	80-120	

LABORATORY CONTROL SAMPLE: 4286186

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	51.5	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286187 4286188

Parameter	Units	92709974010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	65.0	50	50	114	115	98	99	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286189 4286190

Parameter	Units	92709974011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	443	50	50	472	492	59	99	80-120	4	25	M1

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92710201

QC Batch: 829217

Analysis Method: SM 2320B-2011

QC Batch Method: SM 2320B-2011

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92710201007, 92710201008, 92710201009

METHOD BLANK: 4286199

Matrix: Water

Associated Lab Samples: 92710201007, 92710201008, 92710201009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	ND	5.0	5.0	02/01/24 15:16	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	5.0	5.0	02/01/24 15:16	

LABORATORY CONTROL SAMPLE: 4286200

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	49.8	100	80-120	

LABORATORY CONTROL SAMPLE: 4286201

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	49.7	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286202 4286203

Parameter	Units	92710406008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	ND	50	50	54.9	54.8	102	102	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286204 4286205

Parameter	Units	92710406009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	25.8	50	50	74.7	74.7	98	98	80-120	0	25	

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QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92710201

QC Batch: 829765

Analysis Method: SM 2320B-2011

QC Batch Method: SM 2320B-2011

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92710201001, 92710201002, 92710201004, 92710201005, 92710201006

METHOD BLANK: 4288419

Matrix: Water

Associated Lab Samples: 92710201001, 92710201002, 92710201004, 92710201005, 92710201006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	ND	5.0	5.0	02/02/24 15:36	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	5.0	5.0	02/02/24 15:36	

LABORATORY CONTROL SAMPLE: 4288420

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	50.3	101	80-120	

LABORATORY CONTROL SAMPLE: 4288421

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	53.0	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4288422 4288423

Parameter	Units	92711030008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	17.6	50	50	68.9	68.7	103	102	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4288424 4288425

Parameter	Units	92711030009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	17.1	50	50	68.6	68.3	103	102	80-120	0	25	

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

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Hammond AP-2

Pace Project No.: 92710201

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 adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2

Pace Project No.: 92710201

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92710201001	HAM-PT-01	EPA 3005A	828477	EPA 6020B	828609
92710201002	HAM-PT-02	EPA 3005A	828477	EPA 6020B	828609
92710201003	HAM-PT-03	EPA 3005A	828477	EPA 6020B	828609
92710201004	HAM-PT-04	EPA 3005A	828477	EPA 6020B	828609
92710201005	HAM-PT-05	EPA 3005A	828477	EPA 6020B	828609
92710201006	HAM-PT-06	EPA 3005A	828477	EPA 6020B	828609
92710201007	HAM-AP2-EB-01	EPA 3005A	828477	EPA 6020B	828609
92710201008	HAM-AP2-FB-01	EPA 3005A	828477	EPA 6020B	828609
92710201009	HAM-AP2-FD-01	EPA 3005A	828477	EPA 6020B	828609
92710201001	HAM-PT-01	SM 2320B-2011	829765		
92710201002	HAM-PT-02	SM 2320B-2011	829765		
92710201003	HAM-PT-03	SM 2320B-2011	829216		
92710201004	HAM-PT-04	SM 2320B-2011	829765		
92710201005	HAM-PT-05	SM 2320B-2011	829765		
92710201006	HAM-PT-06	SM 2320B-2011	829765		
92710201007	HAM-AP2-EB-01	SM 2320B-2011	829217		
92710201008	HAM-AP2-FB-01	SM 2320B-2011	829217		
92710201009	HAM-AP2-FD-01	SM 2320B-2011	829217		

REPORT OF LABORATORY ANALYSIS

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DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒ Kernersville ☐Sample Condition
Upon Receipt

Client Name:

Project #:

WO#: 92710201

Courier:

☐ Commercial☐ Fed Ex☒ Pace☐ UPS☐ USPS☐ Other:☐ Client

92710201

Custody Seal Present?

☒ Yes☐ No

Seals Intact?

☒ Yes☐ No☐ N/A

Date/Initials Person Examining Contents: 11/25/24 JVA

Packing Material:

☒ Bubble Wrap☐ Bubble Bags☐ None☐ Other

Biological Tissue Frozen?

☐ Yes☐ No☒ N/A

Thermometer:

☒ IR Gun ID:

230

Type of Ice:

☒ Wet☐ Blue☐ None

Cooler Temp:

2.2

Correction Factor:

Add/Subtract (°C)

+0.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

2.3

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC

(check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally,

including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: 12				
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project #

WO#: 92710201

PM: BV

Due Date: 02/08/24

CLIENT: 92- GP-HAM

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFW-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	V5GU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1																												
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers).



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately

F-011-00000000 07 15-Feb-2007

CALIBRATION REPORTS

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 1/24/2024Calibrated By: Thomas KesslerField Conditions: Rainy, 50 °F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	insitu	584187
Turbidity Meter	LaMotte	1603-4411

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000044	5/24	insitu
pH (SU)	4.00	24000041	5/24	insitu
pH (SU)	7.00	22790139	4/24	insitu
pH (SU)	10.00	22110130	4/24	insitu
D.O. (%)	N/A			
ORP (mV)	228.0	24002258	6/24	insitu

Calibration					
Time Start <u>0715</u>		Time Finish <u>0750</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	<u>4490</u>	<u>12.87</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.01</u>	<u>12.98</u>	± 0.1	GWMP
pH (SU)	7.00	<u>6.96</u>	<u>13.34</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>13.73</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100</u>	<u>13.96</u>	± 10%	NA
ORP (mV)	228.0	<u>227.9</u>	<u>13.89</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	0	0	± 10% of standard	EPA 2023
	1	<u>1.01</u>		
	10	<u>9.99</u>		

Calibration Check					
Time Start <u>1330</u>		Time Finish <u>1337</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	<u>4400</u>	<u>16.28</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>7.09</u>	<u>16.28</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.61</u>	<u>16.30</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.05</u>	<u>16.80</u>	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	0	0	± 10% of standard	EPA 2023
	1	<u>0.1</u>		
	10	<u>9.80</u>		

Notes:

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 1-24-24Calibrated By: Zain WebbField Conditions: Rain, 50°F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	AquaTroll 400	861413
Turbidity Meter	LaMotte 2090t	4126-2623

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	2400004	05/24	AIR
pH (SU)	4.00	↓	↓	↓
pH (SU)	7.00	22250139	04/24	↓
pH (SU)	10.00	22110130	04/24	↓
D.O. (%)	N/A			
ORP (mV)	228.0	24002258	06/24	↓

Calibration					
Time Start <u>0736</u>		Time Finish <u>0807</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	14.02	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	14.24	± 0.1	GWMP
pH (SU)	7.00	7.00	14.80	± 0.1	GWMP
pH (SU)	10.00	10.00	15.56	± 0.1	GWMP
D.O. (%)	N/A	100%	15.84	± 10%	NA
ORP (mV)	228.0	228.0	15.48	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	0	0	± 10% of standard	EPA 2023
	1	1		
	10	10		

Calibration Check					
Time Start <u>1152</u>		Time Finish <u>1209</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	15.99	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	16.01	± 0.1	GWMP
pH (SU)	7.00	7.00	16.09	± 0.1	GWMP
pH (SU)	10.00	10.00	16.27	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	0	0	± 10% of standard	EPA 2023
	1	1		
	10	10		

Notes:

FIELD SAMPLING REPORTS

Low-Flow Test Report:

Test Date / Time: 1/24/2024 1:50:07 PM
Project: Plant Hammond
Operator Name: Zain Webb

Location Name: INW-01 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 13.16 ft Total Depth: 23.16 ft Initial Depth to Water: 10.12 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 18.16 ft Estimated Total Volume Pumped: 3 liter Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 1.79 ft	Instrument Used: Aqua TROLL 400 Serial Number: 851413
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Test Notes:
No Sample - Parameter Testing.

Weather Conditions:
Cloudy, 50 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
1/24/2024 1:50 PM	00:00	7.44 pH	17.62 °C	3.53 µS/cm	8.80 mg/L	--	170.7 mV	10.91 ft	150.00 ml/min
1/24/2024 1:52 PM	02:42	7.24 pH	17.58 °C	3.60 µS/cm	8.83 mg/L	19.50 NTU	151.2 mV	10.91 ft	150.00 ml/min
1/24/2024 1:57 PM	07:42	6.61 pH	17.01 °C	1,772.7 µS/cm	3.79 mg/L	16.40 NTU	183.5 mV	11.65 ft	150.00 ml/min
1/24/2024 2:02 PM	12:42	6.48 pH	17.09 °C	1,782.4 µS/cm	3.42 mg/L	10.40 NTU	183.9 mV	11.80 ft	150.00 ml/min
1/24/2024 2:07 PM	17:42	6.39 pH	17.16 °C	1,802.7 µS/cm	2.87 mg/L	8.74 NTU	216.8 mV	11.91 ft	150.00 ml/min

Samples

Sample ID:	Description:
------------	--------------

Low-Flow Test Report:

Test Date / Time: 1/24/2024 1:04:01 PM
Project: Plant Hammond
Operator Name: Thomas Kessler

Location Name: INW-02 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 25.08 ft Total Depth: 35.08 ft Initial Depth to Water: 14.46 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 30.08 ft Estimated Total Volume Pumped: 4 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0 ft	Instrument Used: Aqua TROLL 400 Serial Number: 884187
--	--	--

Test Notes:
No Sample - Parameter Testing.

Weather Conditions:
Rainy, 50 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
1/24/2024 1:04 PM	00:00	6.79 pH	16.76 °C	1,978.0 µS/cm	0.32 mg/L	2.21 NTU	-58.9 mV	14.46 ft	200.00 ml/min
1/24/2024 1:09 PM	05:00	6.80 pH	16.74 °C	1,976.2 µS/cm	0.21 mg/L	3.05 NTU	-87.6 mV	14.46 ft	200.00 ml/min
1/24/2024 1:14 PM	10:00	6.83 pH	16.76 °C	1,906.9 µS/cm	0.23 mg/L	3.11 NTU	-88.9 mV	14.46 ft	200.00 ml/min
1/24/2024 1:19 PM	15:00	6.84 pH	16.86 °C	1,875.5 µS/cm	0.26 mg/L	2.06 NTU	-67.6 mV	14.46 ft	200.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 1/24/2024 10:46:17 AM
Project: Plant Hammond
Operator Name: Zain Webb

Location Name: PT-01 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 13.19 ft Total Depth: 23.19 ft Initial Depth to Water: 10.37 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 18.19 ft Estimated Total Volume Pumped: 7.5 liter Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 1.33 ft	Instrument Used: Aqua TROLL 400 Serial Number: 851413
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Test Notes:
Two Bottles: Metals and Alkalinity.

Weather Conditions:
Cloudy, 50 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
1/24/2024 10:46 AM	00:00	6.46 pH	16.42 °C	1,340.8 µS/cm	2.49 mg/L	2.32 NTU	256.6 mV	11.56 ft	150.00 ml/min
1/24/2024 10:51 AM	05:00	6.50 pH	16.61 °C	1,333.4 µS/cm	2.13 mg/L	0.65 NTU	198.2 mV	11.72 ft	150.00 ml/min
1/24/2024 10:56 AM	10:00	6.50 pH	16.74 °C	1,363.1 µS/cm	1.67 mg/L	0.52 NTU	181.5 mV	11.67 ft	150.00 ml/min
1/24/2024 11:01 AM	15:00	6.51 pH	16.78 °C	1,398.5 µS/cm	1.30 mg/L	1.67 NTU	201.7 mV	11.70 ft	150.00 ml/min
1/24/2024 11:06 AM	20:00	6.53 pH	16.83 °C	1,414.5 µS/cm	1.19 mg/L	0.43 NTU	197.2 mV	11.70 ft	150.00 ml/min
1/24/2024 11:11 AM	25:00	6.55 pH	16.87 °C	1,417.0 µS/cm	1.04 mg/L	0.37 NTU	161.5 mV	11.70 ft	150.00 ml/min
1/24/2024 11:16 AM	30:00	6.56 pH	16.93 °C	1,432.7 µS/cm	0.93 mg/L	0.28 NTU	184.6 mV	11.70 ft	150.00 ml/min
1/24/2024 11:21 AM	35:00	6.58 pH	16.96 °C	1,457.5 µS/cm	0.75 mg/L	0.12 NTU	181.4 mV	11.70 ft	150.00 ml/min
1/24/2024 11:26 AM	40:00	6.59 pH	16.96 °C	1,470.3 µS/cm	0.65 mg/L	0.42 NTU	177.8 mV	11.70 ft	150.00 ml/min
1/24/2024 11:31 AM	45:00	6.60 pH	16.95 °C	1,483.4 µS/cm	0.56 mg/L	0.38 NTU	174.4 mV	11.70 ft	150.00 ml/min

Samples

Sample ID:	Description:
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HAM-PT-01	Grab.
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Low-Flow Test Report:

Test Date / Time: 1/24/2024 12:30:49 PM
Project: Plant Hammond
Operator Name: Zain Webb

Location Name: PT-02 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 13.26 ft Total Depth: 23.26 ft Initial Depth to Water: 10.29 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 18.26 ft Estimated Total Volume Pumped: 8.25 liter Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 3.86 ft	Instrument Used: Aqua TROLL 400 Serial Number: 851413
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Test Notes:
Two Bottles: Metals and Alkalinity.

Weather Conditions:
Cloudy, 50 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
1/24/2024 12:30 PM	00:00	6.63 pH	16.45 °C	2,544.5 µS/cm	3.33 mg/L	2.10 NTU	227.5 mV	12.77 ft	150.00 ml/min
1/24/2024 12:35 PM	05:00	6.59 pH	16.49 °C	2,457.8 µS/cm	3.14 mg/L	1.39 NTU	181.2 mV	13.43 ft	150.00 ml/min
1/24/2024 12:40 PM	10:00	6.59 pH	16.65 °C	2,262.0 µS/cm	3.06 mg/L	1.21 NTU	167.2 mV	13.65 ft	150.00 ml/min
1/24/2024 12:45 PM	15:00	6.57 pH	16.78 °C	2,249.7 µS/cm	2.88 mg/L	0.85 NTU	190.5 mV	13.88 ft	150.00 ml/min
1/24/2024 12:50 PM	20:00	6.53 pH	16.75 °C	2,287.4 µS/cm	2.20 mg/L	0.96 NTU	148.2 mV	13.92 ft	150.00 ml/min
1/24/2024 12:55 PM	25:00	6.51 pH	16.95 °C	2,458.7 µS/cm	1.00 mg/L	0.19 NTU	152.4 mV	14.01 ft	150.00 ml/min
1/24/2024 1:00 PM	30:00	6.52 pH	17.08 °C	2,632.4 µS/cm	0.66 mg/L	0.60 NTU	140.9 mV	14.05 ft	150.00 ml/min
1/24/2024 1:05 PM	35:00	6.55 pH	17.10 °C	2,758.5 µS/cm	0.55 mg/L	0.65 NTU	132.5 mV	14.06 ft	150.00 ml/min
1/24/2024 1:10 PM	40:00	6.56 pH	17.19 °C	2,933.5 µS/cm	0.46 mg/L	0.34 NTU	93.4 mV	14.09 ft	150.00 ml/min
1/24/2024 1:15 PM	45:00	6.56 pH	17.20 °C	2,898.5 µS/cm	0.60 mg/L	0.22 NTU	78.9 mV	14.13 ft	150.00 ml/min
1/24/2024 1:20 PM	50:00	6.57 pH	17.28 °C	2,959.6 µS/cm	0.49 mg/L	0.16 NTU	70.1 mV	14.15 ft	150.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-02	Grab.

Low-Flow Test Report:

Test Date / Time: 1/24/2024 9:33:29 AM
Project: Plant Hammond
Operator Name: Zain Webb

Location Name: PT-03 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 15.29 ft Total Depth: 25.29 ft Initial Depth to Water: 10.39 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 20.29 ft Estimated Total Volume Pumped: 5.25 liter Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 0.2 ft	Instrument Used: Aqua TROLL 400 Serial Number: 851413
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Test Notes:
Two Bottles: Metals and Alkalinity.

Weather Conditions:
Cloudy, 50 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
1/24/2024 9:33 AM	00:00	4.99 pH	16.51 °C	1,859.4 µS/cm	0.78 mg/L	5.67 NTU	268.0 mV	10.57 ft	150.00 ml/min
1/24/2024 9:38 AM	05:00	4.98 pH	16.56 °C	1,931.9 µS/cm	0.21 mg/L	5.38 NTU	244.9 mV	10.57 ft	150.00 ml/min
1/24/2024 9:43 AM	10:00	4.98 pH	16.62 °C	1,925.1 µS/cm	0.15 mg/L	5.15 NTU	276.4 mV	10.59 ft	150.00 ml/min
1/24/2024 9:48 AM	15:00	4.96 pH	16.51 °C	1,941.1 µS/cm	0.13 mg/L	4.99 NTU	281.6 mV	10.59 ft	150.00 ml/min
1/24/2024 9:53 AM	20:00	4.96 pH	16.51 °C	1,945.2 µS/cm	0.14 mg/L	4.55 NTU	285.7 mV	10.59 ft	150.00 ml/min
1/24/2024 9:58 AM	25:00	4.94 pH	16.56 °C	1,959.8 µS/cm	0.15 mg/L	3.66 NTU	290.1 mV	10.59 ft	150.00 ml/min
1/24/2024 10:03 AM	30:00	4.94 pH	16.56 °C	1,964.0 µS/cm	0.13 mg/L	4.32 NTU	291.1 mV	10.59 ft	150.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-03	Grab.
HAM-AP2-FD-01	Grab.

Low-Flow Test Report:

Test Date / Time: 1/24/2024 11:30:37 AM
Project: Plant Hammond
Operator Name: Thomas Kessler

Location Name: PT-04 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 23.87 ft Total Depth: 33.87 ft Initial Depth to Water: 14.18 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 28.87 ft Estimated Total Volume Pumped: 16 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.02 ft	Instrument Used: Aqua TROLL 400 Serial Number: 884187
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Test Notes:
Two Bottles: Metals and Alkalinity.

Weather Conditions:
Rainy, 50 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
1/24/2024 11:30 AM	00:00	6.67 pH	16.50 °C	1,888.0 µS/cm	0.36 mg/L	13.75 NTU	-14.7 mV	14.20 ft	200.00 ml/min
1/24/2024 11:35 AM	05:00	6.67 pH	16.55 °C	1,874.4 µS/cm	0.28 mg/L	13.75 NTU	-29.6 mV	14.20 ft	200.00 ml/min
1/24/2024 11:40 AM	10:00	6.67 pH	16.54 °C	1,860.7 µS/cm	0.23 mg/L	10.95 NTU	-34.7 mV	14.20 ft	200.00 ml/min
1/24/2024 11:45 AM	15:00	6.67 pH	16.59 °C	1,840.9 µS/cm	0.24 mg/L	9.13 NTU	-38.5 mV	14.20 ft	200.00 ml/min
1/24/2024 11:50 AM	20:00	6.68 pH	16.66 °C	1,826.0 µS/cm	0.23 mg/L	10.11 NTU	-44.9 mV	14.20 ft	200.00 ml/min
1/24/2024 11:55 AM	25:00	6.67 pH	16.61 °C	1,824.2 µS/cm	0.24 mg/L	8.17 NTU	-49.1 mV	14.20 ft	200.00 ml/min
1/24/2024 12:00 PM	30:00	6.68 pH	16.67 °C	1,814.3 µS/cm	0.24 mg/L	7.40 NTU	-38.3 mV	14.20 ft	200.00 ml/min
1/24/2024 12:05 PM	35:00	6.68 pH	16.53 °C	1,808.8 µS/cm	0.21 mg/L	7.11 NTU	-55.4 mV	14.20 ft	200.00 ml/min
1/24/2024 12:10 PM	40:00	6.68 pH	16.67 °C	1,800.1 µS/cm	0.22 mg/L	6.99 NTU	-56.2 mV	14.20 ft	200.00 ml/min
1/24/2024 12:15 PM	45:00	6.69 pH	16.67 °C	1,801.6 µS/cm	0.25 mg/L	6.64 NTU	-58.6 mV	14.20 ft	200.00 ml/min
1/24/2024 12:20 PM	50:00	6.69 pH	16.62 °C	1,812.3 µS/cm	0.19 mg/L	6.19 NTU	-59.9 mV	14.20 ft	200.00 ml/min
1/24/2024 12:25 PM	55:00	6.69 pH	16.68 °C	1,806.6 µS/cm	0.20 mg/L	5.92 NTU	-60.9 mV	14.20 ft	200.00 ml/min
1/24/2024 12:30 PM	01:00:00	6.69 pH	16.69 °C	1,803.6 µS/cm	0.20 mg/L	5.97 NTU	-61.4 mV	14.20 ft	200.00 ml/min

1/24/2024 12:35 PM	01:05:00	6.69 pH	16.72 °C	1,798.4 µS/cm	0.22 mg/L	5.61 NTU	-63.7 mV	14.20 ft	200.00 ml/min
1/24/2024 12:40 PM	01:10:00	6.68 pH	16.75 °C	1,797.3 µS/cm	0.19 mg/L	5.43 NTU	-65.0 mV	14.20 ft	200.00 ml/min
1/24/2024 12:45 PM	01:15:00	6.69 pH	16.73 °C	1,797.4 µS/cm	0.19 mg/L	4.08 NTU	-67.1 mV	14.20 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-04	Grab.

Low-Flow Test Report:

Test Date / Time: 1/24/2024 10:39:48 AM
Project: Plant Hammond
Operator Name: Thomas Kessler

Location Name: PT-05 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 25.11 ft Total Depth: 35.11 ft Initial Depth to Water: 14.45 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 30.11 ft Estimated Total Volume Pumped: 7 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.05 ft	Instrument Used: Aqua TROLL 400 Serial Number: 884187
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Test Notes:
Two Bottles: Metals and Alkalinity.

Weather Conditions:
Rainy, 50 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
1/24/2024 10:39 AM	00:00	6.64 pH	16.02 °C	2,150.2 µS/cm	0.87 mg/L	1.85 NTU	18.2 mV	14.50 ft	200.00 ml/min
1/24/2024 10:44 AM	05:00	6.62 pH	16.48 °C	2,262.4 µS/cm	0.24 mg/L	2.13 NTU	13.5 mV	14.50 ft	200.00 ml/min
1/24/2024 10:49 AM	10:00	6.74 pH	16.57 °C	2,459.3 µS/cm	0.16 mg/L	1.34 NTU	18.5 mV	14.50 ft	200.00 ml/min
1/24/2024 10:54 AM	15:00	6.79 pH	16.51 °C	2,491.6 µS/cm	0.14 mg/L	1.52 NTU	15.1 mV	14.50 ft	200.00 ml/min
1/24/2024 10:59 AM	20:00	6.83 pH	16.48 °C	2,516.6 µS/cm	0.14 mg/L	1.31 NTU	8.6 mV	14.50 ft	200.00 ml/min
1/24/2024 11:04 AM	25:00	6.84 pH	16.48 °C	2,519.4 µS/cm	0.14 mg/L	1.07 NTU	5.3 mV	14.50 ft	200.00 ml/min
1/24/2024 11:09 AM	30:00	6.84 pH	16.50 °C	2,508.6 µS/cm	0.15 mg/L	0.73 NTU	0.1 mV	14.50 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-05	Grab.

Low-Flow Test Report:

Test Date / Time: 1/24/2024 9:27:54 AM
Project: Plant Hammond
Operator Name: Thomas Kessler

Location Name: PT-06 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 25.48 ft Total Depth: 35.48 ft Initial Depth to Water: 14.30 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 30.48 ft Estimated Total Volume Pumped: 8.2 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.05 ft	Instrument Used: Aqua TROLL 400 Serial Number: 884187
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Test Notes:
Two Bottles: Metals and Alkalinity.

Weather Conditions:
Rainy, 50 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
1/24/2024 9:27 AM	00:00	6.62 pH	15.53 °C	2,094.7 µS/cm	0.37 mg/L	3.13 NTU	44.4 mV	14.30 ft	100.00 ml/min
1/24/2024 9:32 AM	05:00	6.62 pH	15.31 °C	2,107.8 µS/cm	0.28 mg/L	3.50 NTU	43.3 mV	14.30 ft	100.00 ml/min
1/24/2024 9:37 AM	10:00	6.63 pH	15.50 °C	2,096.1 µS/cm	0.25 mg/L	2.87 NTU	34.9 mV	14.30 ft	100.00 ml/min
1/24/2024 9:42 AM	15:00	6.63 pH	15.49 °C	2,098.3 µS/cm	0.24 mg/L	10.95 NTU	33.1 mV	14.30 ft	100.00 ml/min
1/24/2024 9:43 AM	15:39	6.64 pH	15.59 °C	2,094.1 µS/cm	0.23 mg/L	10.95 NTU	33.1 mV	14.30 ft	100.00 ml/min
1/24/2024 9:48 AM	20:39	6.63 pH	15.32 °C	2,085.5 µS/cm	0.23 mg/L	13.10 NTU	31.5 mV	14.30 ft	100.00 ml/min
1/24/2024 9:50 AM	22:45	6.64 pH	15.34 °C	2,081.8 µS/cm	0.23 mg/L	13.10 NTU	32.3 mV	14.30 ft	100.00 ml/min
1/24/2024 9:55 AM	27:45	6.64 pH	14.82 °C	2,083.9 µS/cm	0.24 mg/L	12.20 NTU	33.9 mV	14.30 ft	100.00 ml/min
1/24/2024 10:00 AM	32:45	6.68 pH	14.55 °C	2,093.4 µS/cm	0.27 mg/L	13.20 NTU	33.5 mV	14.30 ft	100.00 ml/min
1/24/2024 10:05 AM	37:45	6.65 pH	14.82 °C	2,130.7 µS/cm	0.24 mg/L	14.50 NTU	32.2 mV	14.35 ft	100.00 ml/min
1/24/2024 10:10 AM	42:45	6.64 pH	16.14 °C	2,118.1 µS/cm	0.15 mg/L	7.57 NTU	29.5 mV	14.35 ft	200.00 ml/min
1/24/2024 10:15 AM	47:45	6.64 pH	16.42 °C	2,100.6 µS/cm	0.12 mg/L	6.13 NTU	27.9 mV	14.35 ft	200.00 ml/min
1/24/2024 10:20 AM	52:45	6.64 pH	16.60 °C	2,095.3 µS/cm	0.11 mg/L	4.39 NTU	25.9 mV	14.35 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-06	Grab.

February 2024

LABORATORY ANALYTICAL RESULTS



March 07, 2024

Kristen Jurinko
Southern Company
241 Ralph McGill Blvd NE
Bin 10160
Atlanta, GA 30308

RE: Project: Plant Hammond AP-2 (CA)
Pace Project No.: 92714999

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on February 22, 2024. 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 - Asheville
- Pace Analytical Services - Peachtree Corners, GA

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

Sincerely,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Kip Gray, Geosyntec
Christine Hug, Geosyntec Consultants, Inc.
Thomas Kessler, Geosyntec Consultants
Whitney Law, Geosyntec Consultants
Laura Midkiff, Southern Company
Caroline Nelson, Geosyntec Consultants, Inc
Anthony Szwast, Geosyntec Consultants



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Laboratory ID: 99030

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92714999001	HAM-PT-01	Water	02/19/24 17:08	02/22/24 11:10
92714999002	HAM-PT-02	Water	02/20/24 12:07	02/22/24 11:10
92714999003	HAM-PT-03	Water	02/20/24 10:30	02/22/24 11:10
92714999004	HAM-PT-04	Water	02/21/24 10:30	02/22/24 11:10
92714999005	HAM-PT-05	Water	02/20/24 15:40	02/22/24 11:10
92714999006	HAM-PT-06	Water	02/20/24 17:42	02/22/24 11:10
92714999007	HAM-AP2-EB-01	Water	02/21/24 10:40	02/22/24 11:10
92714999008	HAM-AP2-FB-01	Water	02/21/24 10:45	02/22/24 11:10
92714999009	HAM-AP2-FD-01	Water	02/20/24 00:00	02/22/24 11:10

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92714999001	HAM-PT-01	EPA 6010D	DRB	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92714999002	HAM-PT-02	EPA 6010D	DRB	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92714999003	HAM-PT-03	EPA 6010D	DRB	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92714999004	HAM-PT-04	EPA 6010D	DRB	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92714999005	HAM-PT-05	EPA 6010D	DRB	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92714999006	HAM-PT-06	EPA 6010D	DRB	6
		EPA 6020B	MT1	13

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92714999007	HAM-AP2-EB-01	EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	MT1	13
92714999008	HAM-AP2-FB-01	EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	MT1	13
92714999009	HAM-AP2-FD-01	EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	MT1	13

PASI-A = Pace Analytical Services - Asheville

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92714999001	HAM-PT-01					
EPA 6010D	Iron	10.1	mg/L	0.040	03/02/24 09:20	
EPA 6010D	Manganese	6.6	mg/L	0.040	03/02/24 09:20	
EPA 6010D	Potassium	15.2	mg/L	0.50	03/02/24 09:20	
EPA 6010D	Sodium	145	mg/L	1.0	03/02/24 09:20	
EPA 6010D	Calcium	96.6	mg/L	1.0	03/02/24 09:20	
EPA 6010D	Magnesium	11.3	mg/L	0.050	03/02/24 09:20	
EPA 6020B	Arsenic	0.0033J	mg/L	0.010	02/29/24 18:19	
EPA 6020B	Barium	0.036	mg/L	0.0050	02/29/24 18:19	
EPA 6020B	Boron	2.3	mg/L	0.040	02/29/24 18:19	
EPA 6020B	Cobalt	0.014	mg/L	0.0050	02/29/24 18:19	
EPA 6020B	Lead	0.00020J	mg/L	0.0010	02/29/24 18:19	
SM 2540C-2015	Total Dissolved Solids	810	mg/L	25.0	02/26/24 14:44	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	253	mg/L	5.0	02/29/24 16:23	
SM 2320B-2011	Alkalinity, Total as CaCO3	253	mg/L	5.0	02/29/24 16:23	
EPA 300.0 Rev 2.1 1993	Chloride	53.0	mg/L	1.0	02/24/24 17:43	
EPA 300.0 Rev 2.1 1993	Fluoride	0.24	mg/L	0.10	02/24/24 17:43	
EPA 300.0 Rev 2.1 1993	Sulfate	279	mg/L	6.0	02/25/24 06:05	
92714999002	HAM-PT-02					
EPA 6010D	Iron	13.2	mg/L	0.040	03/02/24 09:22	
EPA 6010D	Manganese	9.6	mg/L	0.040	03/02/24 09:22	
EPA 6010D	Potassium	7.3	mg/L	0.50	03/02/24 09:22	
EPA 6010D	Sodium	256	mg/L	1.0	03/02/24 09:22	
EPA 6010D	Calcium	158	mg/L	1.0	03/02/24 09:22	
EPA 6010D	Magnesium	18.4	mg/L	0.050	03/02/24 09:22	
EPA 6020B	Antimony	0.00060J	mg/L	0.0030	02/29/24 18:34	
EPA 6020B	Arsenic	0.0036J	mg/L	0.010	02/29/24 18:34	
EPA 6020B	Barium	0.042	mg/L	0.0050	02/29/24 18:34	
EPA 6020B	Boron	4.0	mg/L	0.040	02/29/24 18:34	
EPA 6020B	Cobalt	0.029	mg/L	0.0050	02/29/24 18:34	
SM 2540C-2015	Total Dissolved Solids	1820	mg/L	500	02/26/24 17:50	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	355	mg/L	5.0	02/27/24 18:54	
SM 2320B-2011	Alkalinity, Total as CaCO3	355	mg/L	5.0	02/27/24 18:54	
EPA 300.0 Rev 2.1 1993	Chloride	87.3	mg/L	12.0	02/25/24 06:20	
EPA 300.0 Rev 2.1 1993	Fluoride	0.15	mg/L	0.10	02/24/24 17:57	
EPA 300.0 Rev 2.1 1993	Sulfate	516	mg/L	12.0	02/25/24 06:20	
92714999003	HAM-PT-03					
EPA 6010D	Iron	0.075	mg/L	0.040	03/02/24 09:25	
EPA 6010D	Manganese	5.4	mg/L	0.040	03/02/24 09:25	
EPA 6010D	Potassium	5.6	mg/L	0.50	03/02/24 09:25	
EPA 6010D	Sodium	44.6	mg/L	1.0	03/02/24 09:25	
EPA 6010D	Calcium	275	mg/L	1.0	03/02/24 09:25	
EPA 6010D	Magnesium	27.0	mg/L	0.050	03/02/24 09:25	
EPA 6020B	Arsenic	0.0067J	mg/L	0.010	02/29/24 18:38	
EPA 6020B	Barium	0.024	mg/L	0.0050	02/29/24 18:38	
EPA 6020B	Beryllium	0.0017	mg/L	0.00050	02/29/24 18:38	
EPA 6020B	Boron	6.0	mg/L	0.040	02/29/24 18:38	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92714999003	HAM-PT-03					
EPA 6020B	Cadmium	0.00058	mg/L	0.00050	02/29/24 18:38	
EPA 6020B	Cobalt	0.092	mg/L	0.0050	02/29/24 18:38	
EPA 6020B	Lead	0.0012	mg/L	0.0010	02/29/24 18:38	
EPA 6020B	Selenium	0.0085	mg/L	0.0050	02/29/24 18:38	
SM 2540C-2015	Total Dissolved Solids	1480	mg/L	25.0	02/26/24 17:50	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	9.8	mg/L	5.0	02/27/24 18:11	
SM 2320B-2011	Alkalinity, Total as CaCO3	9.8	mg/L	5.0	02/27/24 18:11	
EPA 300.0 Rev 2.1 1993	Chloride	96.0	mg/L	17.0	02/25/24 06:35	M1
EPA 300.0 Rev 2.1 1993	Fluoride	0.57	mg/L	0.10	02/24/24 18:12	
EPA 300.0 Rev 2.1 1993	Sulfate	758	mg/L	17.0	02/25/24 06:35	M1
92714999004	HAM-PT-04					
EPA 6010D	Iron	4.6	mg/L	0.040	03/02/24 09:28	
EPA 6010D	Manganese	11.1	mg/L	0.040	03/02/24 09:28	
EPA 6010D	Potassium	8.6	mg/L	0.50	03/02/24 09:28	
EPA 6010D	Sodium	163	mg/L	1.0	03/02/24 09:28	
EPA 6010D	Calcium	244	mg/L	1.0	03/02/24 09:28	
EPA 6010D	Magnesium	20.2	mg/L	0.050	03/02/24 09:28	
EPA 6020B	Arsenic	0.0086J	mg/L	0.010	02/29/24 18:41	
EPA 6020B	Barium	0.045	mg/L	0.0050	02/29/24 18:41	
EPA 6020B	Boron	6.2	mg/L	0.040	02/29/24 18:41	
EPA 6020B	Cobalt	0.039	mg/L	0.0050	02/29/24 18:41	
EPA 6020B	Lithium	0.0031J	mg/L	0.030	02/29/24 18:41	
EPA 6020B	Molybdenum	0.0011J	mg/L	0.010	02/29/24 18:41	
EPA 6020B	Thallium	0.00053J	mg/L	0.0010	02/29/24 18:41	
SM 2540C-2015	Total Dissolved Solids	1370	mg/L	25.0	02/28/24 11:56	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	412	mg/L	5.0	02/29/24 19:38	
SM 2320B-2011	Alkalinity, Total as CaCO3	412	mg/L	5.0	02/29/24 19:38	
EPA 300.0 Rev 2.1 1993	Chloride	113	mg/L	10.0	02/25/24 07:48	
EPA 300.0 Rev 2.1 1993	Fluoride	0.13	mg/L	0.10	02/24/24 18:57	
EPA 300.0 Rev 2.1 1993	Sulfate	451	mg/L	10.0	02/25/24 07:48	
92714999005	HAM-PT-05					
EPA 6010D	Sodium	458	mg/L	5.0	03/04/24 09:04	
EPA 6010D	Iron	0.21	mg/L	0.040	03/02/24 09:30	
EPA 6010D	Manganese	3.5	mg/L	0.040	03/02/24 09:30	
EPA 6010D	Potassium	4.3	mg/L	0.50	03/02/24 09:30	
EPA 6010D	Calcium	186	mg/L	1.0	03/02/24 09:30	
EPA 6010D	Magnesium	19.5	mg/L	0.050	03/02/24 09:30	
EPA 6020B	Arsenic	0.0025J	mg/L	0.010	02/29/24 18:45	
EPA 6020B	Barium	0.042	mg/L	0.0050	02/29/24 18:45	
EPA 6020B	Boron	5.1	mg/L	0.040	02/29/24 18:45	
EPA 6020B	Cadmium	0.00021J	mg/L	0.00050	02/29/24 18:45	
EPA 6020B	Cobalt	0.014	mg/L	0.0050	02/29/24 18:45	
EPA 6020B	Lithium	0.0031J	mg/L	0.030	02/29/24 18:45	
EPA 6020B	Molybdenum	0.00097J	mg/L	0.010	02/29/24 18:45	
SM 2540C-2015	Total Dissolved Solids	1740	mg/L	25.0	02/26/24 17:51	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	795	mg/L	5.0	02/27/24 19:01	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92714999005	HAM-PT-05					
SM 2320B-2011	Alkalinity, Total as CaCO ₃	795	mg/L	5.0	02/27/24 19:01	
EPA 300.0 Rev 2.1 1993	Chloride	99.1	mg/L	10.0	02/25/24 08:03	
EPA 300.0 Rev 2.1 1993	Fluoride	0.060J	mg/L	0.10	02/24/24 19:12	
EPA 300.0 Rev 2.1 1993	Sulfate	460	mg/L	10.0	02/25/24 08:03	
92714999006	HAM-PT-06					
EPA 6010D	Iron	1.4	mg/L	0.040	03/02/24 09:43	
EPA 6010D	Manganese	10.5	mg/L	0.040	03/02/24 09:43	
EPA 6010D	Potassium	6.3	mg/L	0.50	03/02/24 09:43	
EPA 6010D	Sodium	225	mg/L	1.0	03/02/24 09:43	
EPA 6010D	Calcium	226	mg/L	1.0	03/02/24 09:43	
EPA 6010D	Magnesium	18.7	mg/L	0.050	03/02/24 09:43	
EPA 6020B	Arsenic	0.0052J	mg/L	0.010	02/29/24 18:56	
EPA 6020B	Barium	0.036	mg/L	0.0050	02/29/24 18:56	
EPA 6020B	Boron	6.6	mg/L	0.040	02/29/24 18:56	
EPA 6020B	Cadmium	0.00018J	mg/L	0.00050	02/29/24 18:56	
EPA 6020B	Cobalt	0.028	mg/L	0.0050	02/29/24 18:56	
EPA 6020B	Lithium	0.0040J	mg/L	0.030	02/29/24 18:56	
EPA 6020B	Thallium	0.00046J	mg/L	0.0010	02/29/24 18:56	
SM 2540C-2015	Total Dissolved Solids	1530	mg/L	25.0	02/26/24 17:51	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO ₃)	451	mg/L	5.0	02/28/24 10:15	
SM 2320B-2011	Alkalinity, Total as CaCO ₃	451	mg/L	5.0	02/28/24 10:15	
EPA 300.0 Rev 2.1 1993	Chloride	125	mg/L	11.0	02/25/24 08:18	
EPA 300.0 Rev 2.1 1993	Sulfate	498	mg/L	11.0	02/25/24 08:18	
92714999007	HAM-AP2-EB-01					
EPA 6020B	Boron	0.034J	mg/L	0.040	02/29/24 19:00	
SM 2540C-2015	Total Dissolved Solids	41.0	mg/L	25.0	02/28/24 11:57	
92714999008	HAM-AP2-FB-01					
EPA 6020B	Boron	0.013J	mg/L	0.040	02/29/24 19:04	
92714999009	HAM-AP2-FD-01					
EPA 6010D	Iron	12.4	mg/L	0.040	03/02/24 09:51	
EPA 6010D	Manganese	10.5	mg/L	0.040	03/02/24 09:51	
EPA 6010D	Potassium	7.6	mg/L	0.50	03/02/24 09:51	
EPA 6010D	Sodium	265	mg/L	1.0	03/02/24 09:51	
EPA 6010D	Calcium	186	mg/L	1.0	03/02/24 09:51	
EPA 6010D	Magnesium	21.8	mg/L	0.050	03/02/24 09:51	
EPA 6020B	Arsenic	0.0042J	mg/L	0.010	02/29/24 19:07	
EPA 6020B	Barium	0.047	mg/L	0.0050	02/29/24 19:07	
EPA 6020B	Boron	4.5	mg/L	0.040	02/29/24 19:07	
EPA 6020B	Cobalt	0.031	mg/L	0.0050	02/29/24 19:07	
EPA 6020B	Selenium	0.0012J	mg/L	0.0050	02/29/24 19:07	
SM 2540C-2015	Total Dissolved Solids	1410	mg/L	25.0	02/26/24 17:51	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO ₃)	334	mg/L	5.0	02/28/24 10:23	
SM 2320B-2011	Alkalinity, Total as CaCO ₃	334	mg/L	5.0	02/28/24 10:23	
EPA 300.0 Rev 2.1 1993	Chloride	91.7	mg/L	12.0	02/25/24 08:32	
EPA 300.0 Rev 2.1 1993	Fluoride	0.13	mg/L	0.10	02/24/24 20:12	

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SUMMARY OF DETECTION

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92714999009	HAM-AP2-FD-01					
EPA 300.0 Rev 2.1 1993	Sulfate	541	mg/L	12.0	02/25/24 08:32	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

Sample: HAM-PT-01		Lab ID: 92714999001		Collected: 02/19/24 17:08		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Iron	10.1	mg/L	0.040	0.025	1	02/28/24 18:17	03/02/24 09:20	7439-89-6	
Manganese	6.6	mg/L	0.040	0.011	1	02/28/24 18:17	03/02/24 09:20	7439-96-5	
Potassium	15.2	mg/L	0.50	0.15	1	02/28/24 18:17	03/02/24 09:20	7440-09-7	
Sodium	145	mg/L	1.0	0.58	1	02/28/24 18:17	03/02/24 09:20	7440-23-5	
Calcium	96.6	mg/L	1.0	0.12	1	02/28/24 18:17	03/02/24 09:20	7440-70-2	
Magnesium	11.3	mg/L	0.050	0.012	1	02/28/24 18:17	03/02/24 09:20	7439-95-4	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/27/24 11:00	02/29/24 18:19	7440-36-0	
Arsenic	0.0033J	mg/L	0.010	0.00084	1	02/27/24 11:00	02/29/24 18:19	7440-38-2	
Barium	0.036	mg/L	0.0050	0.00047	1	02/27/24 11:00	02/29/24 18:19	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/27/24 11:00	02/29/24 18:19	7440-41-7	
Boron	2.3	mg/L	0.040	0.012	1	02/27/24 11:00	02/29/24 18:19	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/27/24 11:00	02/29/24 18:19	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/27/24 11:00	02/29/24 18:19	7440-47-3	
Cobalt	0.014	mg/L	0.0050	0.00032	1	02/27/24 11:00	02/29/24 18:19	7440-48-4	
Lead	0.00020J	mg/L	0.0010	0.00016	1	02/27/24 11:00	02/29/24 18:19	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/27/24 11:00	02/29/24 18:19	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/27/24 11:00	02/29/24 18:19	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/27/24 11:00	02/29/24 18:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/27/24 11:00	02/29/24 18:19	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	03/04/24 13:00	03/04/24 16:00	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	810	mg/L	25.0	25.0	1		02/26/24 14:44		
2320B Alkalinity									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	253	mg/L	5.0	5.0	1		02/29/24 16:23		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/29/24 16:23		
Alkalinity, Total as CaCO3	253	mg/L	5.0	5.0	1		02/29/24 16:23		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/24/24 03:28	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	53.0	mg/L	1.0	0.60	1		02/24/24 17:43	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

Sample: HAM-PT-01		Lab ID: 92714999001		Collected: 02/19/24 17:08		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.24	mg/L	0.10	0.050	1		02/24/24 17:43	16984-48-8	
Sulfate	279	mg/L	6.0	3.0	6		02/25/24 06:05	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2 (CA)
Pace Project No.: 92714999

Sample: HAM-PT-02		Lab ID: 92714999002		Collected: 02/20/24 12:07		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	13.2	mg/L	0.040	0.025	1	02/28/24 18:17	03/02/24 09:22	7439-89-6	
Manganese	9.6	mg/L	0.040	0.011	1	02/28/24 18:17	03/02/24 09:22	7439-96-5	
Potassium	7.3	mg/L	0.50	0.15	1	02/28/24 18:17	03/02/24 09:22	7440-09-7	
Sodium	256	mg/L	1.0	0.58	1	02/28/24 18:17	03/02/24 09:22	7440-23-5	
Calcium	158	mg/L	1.0	0.12	1	02/28/24 18:17	03/02/24 09:22	7440-70-2	
Magnesium	18.4	mg/L	0.050	0.012	1	02/28/24 18:17	03/02/24 09:22	7439-95-4	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	0.00060J	mg/L	0.0030	0.00054	1	02/27/24 11:00	02/29/24 18:34	7440-36-0	
Arsenic	0.0036J	mg/L	0.010	0.00084	1	02/27/24 11:00	02/29/24 18:34	7440-38-2	
Barium	0.042	mg/L	0.0050	0.00047	1	02/27/24 11:00	02/29/24 18:34	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/27/24 11:00	02/29/24 18:34	7440-41-7	
Boron	4.0	mg/L	0.040	0.012	1	02/27/24 11:00	02/29/24 18:34	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/27/24 11:00	02/29/24 18:34	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/27/24 11:00	02/29/24 18:34	7440-47-3	
Cobalt	0.029	mg/L	0.0050	0.00032	1	02/27/24 11:00	02/29/24 18:34	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/27/24 11:00	02/29/24 18:34	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/27/24 11:00	02/29/24 18:34	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/27/24 11:00	02/29/24 18:34	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/27/24 11:00	02/29/24 18:34	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/27/24 11:00	02/29/24 18:34	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	03/04/24 13:00	03/04/24 16:11	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1820	mg/L	500	500	1		02/26/24 17:50		
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	355	mg/L	5.0	5.0	1		02/27/24 18:54		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/27/24 18:54		
Alkalinity, Total as CaCO3	355	mg/L	5.0	5.0	1		02/27/24 18:54		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/24/24 03:43	18496-25-8	M1
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	87.3	mg/L	12.0	7.2	12		02/25/24 06:20	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2 (CA)
Pace Project No.: 92714999

Sample: HAM-PT-02		Lab ID: 92714999002		Collected: 02/20/24 12:07		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.15	mg/L	0.10	0.050	1		02/24/24 17:57	16984-48-8	
Sulfate	516	mg/L	12.0	6.0	12		02/25/24 06:20	14808-79-8	

REPORT OF LABORATORY ANALYSIS



ANALYTICAL RESULTS

Project: Plant Hammond AP-2 (CA)
Pace Project No.: 92714999

Sample: HAM-PT-03		Lab ID: 92714999003		Collected: 02/20/24 10:30		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	0.075	mg/L	0.040	0.025	1	02/28/24 18:17	03/02/24 09:25	7439-89-6	
Manganese	5.4	mg/L	0.040	0.011	1	02/28/24 18:17	03/02/24 09:25	7439-96-5	
Potassium	5.6	mg/L	0.50	0.15	1	02/28/24 18:17	03/02/24 09:25	7440-09-7	
Sodium	44.6	mg/L	1.0	0.58	1	02/28/24 18:17	03/02/24 09:25	7440-23-5	
Calcium	275	mg/L	1.0	0.12	1	02/28/24 18:17	03/02/24 09:25	7440-70-2	
Magnesium	27.0	mg/L	0.050	0.012	1	02/28/24 18:17	03/02/24 09:25	7439-95-4	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/27/24 11:00	02/29/24 18:38	7440-36-0	
Arsenic	0.0067J	mg/L	0.010	0.00084	1	02/27/24 11:00	02/29/24 18:38	7440-38-2	
Barium	0.024	mg/L	0.0050	0.00047	1	02/27/24 11:00	02/29/24 18:38	7440-39-3	
Beryllium	0.0017	mg/L	0.00050	0.000094	1	02/27/24 11:00	02/29/24 18:38	7440-41-7	
Boron	6.0	mg/L	0.040	0.012	1	02/27/24 11:00	02/29/24 18:38	7440-42-8	
Cadmium	0.00058	mg/L	0.00050	0.00010	1	02/27/24 11:00	02/29/24 18:38	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/27/24 11:00	02/29/24 18:38	7440-47-3	
Cobalt	0.092	mg/L	0.0050	0.00032	1	02/27/24 11:00	02/29/24 18:38	7440-48-4	
Lead	0.0012	mg/L	0.0010	0.00016	1	02/27/24 11:00	02/29/24 18:38	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/27/24 11:00	02/29/24 18:38	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/27/24 11:00	02/29/24 18:38	7439-98-7	
Selenium	0.0085	mg/L	0.0050	0.00096	1	02/27/24 11:00	02/29/24 18:38	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/27/24 11:00	02/29/24 18:38	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	03/04/24 13:00	03/04/24 16:13	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1480	mg/L	25.0	25.0	1		02/26/24 17:50		
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	9.8	mg/L	5.0	5.0	1		02/27/24 18:11		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/27/24 18:11		
Alkalinity, Total as CaCO3	9.8	mg/L	5.0	5.0	1		02/27/24 18:11		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/24/24 03:45	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	96.0	mg/L	17.0	10.2	17		02/25/24 06:35	16887-00-6	M1

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

Sample: HAM-PT-03		Lab ID: 92714999003		Collected: 02/20/24 10:30		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.57	mg/L	0.10	0.050	1		02/24/24 18:12	16984-48-8	
Sulfate	758	mg/L	17.0	8.5	17		02/25/24 06:35	14808-79-8	M1

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

Sample: HAM-PT-04		Lab ID: 92714999004		Collected: 02/21/24 10:30		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Iron	4.6	mg/L	0.040	0.025	1	02/28/24 18:17	03/02/24 09:28	7439-89-6	
Manganese	11.1	mg/L	0.040	0.011	1	02/28/24 18:17	03/02/24 09:28	7439-96-5	
Potassium	8.6	mg/L	0.50	0.15	1	02/28/24 18:17	03/02/24 09:28	7440-09-7	
Sodium	163	mg/L	1.0	0.58	1	02/28/24 18:17	03/02/24 09:28	7440-23-5	
Calcium	244	mg/L	1.0	0.12	1	02/28/24 18:17	03/02/24 09:28	7440-70-2	
Magnesium	20.2	mg/L	0.050	0.012	1	02/28/24 18:17	03/02/24 09:28	7439-95-4	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/27/24 11:00	02/29/24 18:41	7440-36-0	
Arsenic	0.0086J	mg/L	0.010	0.00084	1	02/27/24 11:00	02/29/24 18:41	7440-38-2	
Barium	0.045	mg/L	0.0050	0.00047	1	02/27/24 11:00	02/29/24 18:41	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/27/24 11:00	02/29/24 18:41	7440-41-7	
Boron	6.2	mg/L	0.040	0.012	1	02/27/24 11:00	02/29/24 18:41	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/27/24 11:00	02/29/24 18:41	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/27/24 11:00	02/29/24 18:41	7440-47-3	
Cobalt	0.039	mg/L	0.0050	0.00032	1	02/27/24 11:00	02/29/24 18:41	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/27/24 11:00	02/29/24 18:41	7439-92-1	
Lithium	0.0031J	mg/L	0.030	0.0016	1	02/27/24 11:00	02/29/24 18:41	7439-93-2	
Molybdenum	0.0011J	mg/L	0.010	0.00062	1	02/27/24 11:00	02/29/24 18:41	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/27/24 11:00	02/29/24 18:41	7782-49-2	
Thallium	0.00053J	mg/L	0.0010	0.00038	1	02/27/24 11:00	02/29/24 18:41	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	03/04/24 13:00	03/04/24 16:21	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1370	mg/L	25.0	25.0	1		02/28/24 11:56		
2320B Alkalinity									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	412	mg/L	5.0	5.0	1		02/29/24 19:38		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/29/24 19:38		
Alkalinity, Total as CaCO3	412	mg/L	5.0	5.0	1		02/29/24 19:38		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/24/24 03:53	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	113	mg/L	10.0	6.0	10		02/25/24 07:48	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2 (CA)
Pace Project No.: 92714999

Sample: HAM-PT-04		Lab ID: 92714999004		Collected: 02/21/24 10:30		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.13	mg/L	0.10	0.050	1		02/24/24 18:57	16984-48-8	
Sulfate	451	mg/L	10.0	5.0	10		02/25/24 07:48	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2 (CA)
Pace Project No.: 92714999

Sample: HAM-PT-05		Lab ID: 92714999005		Collected: 02/20/24 15:40		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Sodium	458	mg/L	5.0	2.9	5	02/28/24 18:17	03/04/24 09:04	7440-23-5	
Iron	0.21	mg/L	0.040	0.025	1	02/28/24 18:17	03/02/24 09:30	7439-89-6	
Manganese	3.5	mg/L	0.040	0.011	1	02/28/24 18:17	03/02/24 09:30	7439-96-5	
Potassium	4.3	mg/L	0.50	0.15	1	02/28/24 18:17	03/02/24 09:30	7440-09-7	
Calcium	186	mg/L	1.0	0.12	1	02/28/24 18:17	03/02/24 09:30	7440-70-2	
Magnesium	19.5	mg/L	0.050	0.012	1	02/28/24 18:17	03/02/24 09:30	7439-95-4	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/27/24 11:00	02/29/24 18:45	7440-36-0	
Arsenic	0.0025J	mg/L	0.010	0.00084	1	02/27/24 11:00	02/29/24 18:45	7440-38-2	
Barium	0.042	mg/L	0.0050	0.00047	1	02/27/24 11:00	02/29/24 18:45	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/27/24 11:00	02/29/24 18:45	7440-41-7	
Boron	5.1	mg/L	0.040	0.012	1	02/27/24 11:00	02/29/24 18:45	7440-42-8	
Cadmium	0.00021J	mg/L	0.00050	0.00010	1	02/27/24 11:00	02/29/24 18:45	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/27/24 11:00	02/29/24 18:45	7440-47-3	
Cobalt	0.014	mg/L	0.0050	0.00032	1	02/27/24 11:00	02/29/24 18:45	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/27/24 11:00	02/29/24 18:45	7439-92-1	
Lithium	0.0031J	mg/L	0.030	0.0016	1	02/27/24 11:00	02/29/24 18:45	7439-93-2	
Molybdenum	0.00097J	mg/L	0.010	0.00062	1	02/27/24 11:00	02/29/24 18:45	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/27/24 11:00	02/29/24 18:45	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/27/24 11:00	02/29/24 18:45	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	03/04/24 13:00	03/04/24 16:24	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1740	mg/L	25.0	25.0	1		02/26/24 17:51		
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	795	mg/L	5.0	5.0	1		02/27/24 19:01		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/27/24 19:01		
Alkalinity, Total as CaCO3	795	mg/L	5.0	5.0	1		02/27/24 19:01		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/24/24 03:45	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	99.1	mg/L	10.0	6.0	10		02/25/24 08:03	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

Sample: HAM-PT-05		Lab ID: 92714999005		Collected: 02/20/24 15:40		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.060J	mg/L	0.10	0.050	1		02/24/24 19:12	16984-48-8	
Sulfate	460	mg/L	10.0	5.0	10		02/25/24 08:03	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2 (CA)
Pace Project No.: 92714999

Sample: HAM-PT-06		Lab ID: 92714999006		Collected: 02/20/24 17:42		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	1.4	mg/L	0.040	0.025	1	02/28/24 18:17	03/02/24 09:43	7439-89-6	
Manganese	10.5	mg/L	0.040	0.011	1	02/28/24 18:17	03/02/24 09:43	7439-96-5	
Potassium	6.3	mg/L	0.50	0.15	1	02/28/24 18:17	03/02/24 09:43	7440-09-7	
Sodium	225	mg/L	1.0	0.58	1	02/28/24 18:17	03/02/24 09:43	7440-23-5	
Calcium	226	mg/L	1.0	0.12	1	02/28/24 18:17	03/02/24 09:43	7440-70-2	
Magnesium	18.7	mg/L	0.050	0.012	1	02/28/24 18:17	03/02/24 09:43	7439-95-4	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/27/24 11:00	02/29/24 18:56	7440-36-0	
Arsenic	0.0052J	mg/L	0.010	0.00084	1	02/27/24 11:00	02/29/24 18:56	7440-38-2	
Barium	0.036	mg/L	0.0050	0.00047	1	02/27/24 11:00	02/29/24 18:56	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/27/24 11:00	02/29/24 18:56	7440-41-7	
Boron	6.6	mg/L	0.040	0.012	1	02/27/24 11:00	02/29/24 18:56	7440-42-8	
Cadmium	0.00018J	mg/L	0.00050	0.00010	1	02/27/24 11:00	02/29/24 18:56	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/27/24 11:00	02/29/24 18:56	7440-47-3	
Cobalt	0.028	mg/L	0.0050	0.00032	1	02/27/24 11:00	02/29/24 18:56	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/27/24 11:00	02/29/24 18:56	7439-92-1	
Lithium	0.0040J	mg/L	0.030	0.0016	1	02/27/24 11:00	02/29/24 18:56	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/27/24 11:00	02/29/24 18:56	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/27/24 11:00	02/29/24 18:56	7782-49-2	
Thallium	0.00046J	mg/L	0.0010	0.00038	1	02/27/24 11:00	02/29/24 18:56	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	03/04/24 13:00	03/04/24 16:26	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1530	mg/L	25.0	25.0	1		02/26/24 17:51		
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	451	mg/L	5.0	5.0	1		02/28/24 10:15		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/28/24 10:15		
Alkalinity, Total as CaCO3	451	mg/L	5.0	5.0	1		02/28/24 10:15		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/24/24 03:45	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	125	mg/L	11.0	6.6	11		02/25/24 08:18	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

Sample: HAM-PT-06		Lab ID: 92714999006		Collected: 02/20/24 17:42		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	ND	mg/L	0.10	0.050	1		02/24/24 19:57	16984-48-8	
Sulfate	498	mg/L	11.0	5.5	11		02/25/24 08:18	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2 (CA)
Pace Project No.: 92714999

Sample: HAM-AP2-EB-01 Lab ID: 92714999007 Collected: 02/21/24 10:40 Received: 02/22/24 11:10 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	ND	mg/L	0.040	0.025	1	02/28/24 18:17	03/02/24 09:45	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	02/28/24 18:17	03/02/24 09:45	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	02/28/24 18:17	03/02/24 09:45	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	02/28/24 18:17	03/02/24 09:45	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	02/28/24 18:17	03/02/24 09:45	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	02/28/24 18:17	03/02/24 09:45	7439-95-4	
6020 MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/27/24 11:00	02/29/24 19:00	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	02/27/24 11:00	02/29/24 19:00	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	02/27/24 11:00	02/29/24 19:00	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/27/24 11:00	02/29/24 19:00	7440-41-7	
Boron	0.034J	mg/L	0.040	0.012	1	02/27/24 11:00	02/29/24 19:00	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/27/24 11:00	02/29/24 19:00	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/27/24 11:00	02/29/24 19:00	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/27/24 11:00	02/29/24 19:00	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/27/24 11:00	02/29/24 19:00	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/27/24 11:00	02/29/24 19:00	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/27/24 11:00	02/29/24 19:00	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/27/24 11:00	02/29/24 19:00	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/27/24 11:00	02/29/24 19:00	7440-28-0	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	03/04/24 13:00	03/04/24 16:29	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	41.0	mg/L	25.0	25.0	1		02/28/24 11:57		
2320B Alkalinity Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/29/24 13:53		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/29/24 13:53		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		02/29/24 13:53		
4500S2D Sulfide Water Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/24/24 03:54	18496-25-8	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	ND	mg/L	1.0	0.60	1		02/24/24 14:28	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2 (CA)
Pace Project No.: 92714999

Sample: HAM-AP2-EB-01		Lab ID: 92714999007		Collected: 02/21/24 10:40		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	ND	mg/L	0.10	0.050	1		02/24/24 14:28	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/24/24 14:28	14808-79-8	

REPORT OF LABORATORY ANALYSIS



ANALYTICAL RESULTS

Project: Plant Hammond AP-2 (CA)
Pace Project No.: 92714999

Sample: HAM-AP2-FB-01 Lab ID: 92714999008 Collected: 02/21/24 10:45 Received: 02/22/24 11:10 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	ND	mg/L	0.040	0.025	1	02/28/24 18:17	03/02/24 09:48	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	02/28/24 18:17	03/02/24 09:48	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	02/28/24 18:17	03/02/24 09:48	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	02/28/24 18:17	03/02/24 09:48	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	02/28/24 18:17	03/02/24 09:48	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	02/28/24 18:17	03/02/24 09:48	7439-95-4	
6020 MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/27/24 11:00	02/29/24 19:04	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	02/27/24 11:00	02/29/24 19:04	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	02/27/24 11:00	02/29/24 19:04	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/27/24 11:00	02/29/24 19:04	7440-41-7	
Boron	0.013J	mg/L	0.040	0.012	1	02/27/24 11:00	02/29/24 19:04	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/27/24 11:00	02/29/24 19:04	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/27/24 11:00	02/29/24 19:04	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/27/24 11:00	02/29/24 19:04	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/27/24 11:00	02/29/24 19:04	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/27/24 11:00	02/29/24 19:04	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/27/24 11:00	02/29/24 19:04	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/27/24 11:00	02/29/24 19:04	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/27/24 11:00	02/29/24 19:04	7440-28-0	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	03/04/24 13:00	03/04/24 16:32	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		02/28/24 11:57		
2320B Alkalinity Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/29/24 14:08		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/29/24 14:08		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		02/29/24 14:08		
4500S2D Sulfide Water Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/24/24 03:56	18496-25-8	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	ND	mg/L	1.0	0.60	1		02/24/24 14:43	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

Sample: HAM-AP2-FB-01		Lab ID: 92714999008		Collected: 02/21/24 10:45		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	ND	mg/L	0.10	0.050	1		02/24/24 14:43	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/24/24 14:43	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

Sample: HAM-AP2-FD-01		Lab ID: 92714999009		Collected: 02/20/24 00:00		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Iron	12.4	mg/L	0.040	0.025	1	02/28/24 18:17	03/02/24 09:51	7439-89-6	
Manganese	10.5	mg/L	0.040	0.011	1	02/28/24 18:17	03/02/24 09:51	7439-96-5	
Potassium	7.6	mg/L	0.50	0.15	1	02/28/24 18:17	03/02/24 09:51	7440-09-7	
Sodium	265	mg/L	1.0	0.58	1	02/28/24 18:17	03/02/24 09:51	7440-23-5	
Calcium	186	mg/L	1.0	0.12	1	02/28/24 18:17	03/02/24 09:51	7440-70-2	
Magnesium	21.8	mg/L	0.050	0.012	1	02/28/24 18:17	03/02/24 09:51	7439-95-4	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	02/27/24 11:00	02/29/24 19:07	7440-36-0	
Arsenic	0.0042J	mg/L	0.010	0.00084	1	02/27/24 11:00	02/29/24 19:07	7440-38-2	
Barium	0.047	mg/L	0.0050	0.00047	1	02/27/24 11:00	02/29/24 19:07	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/27/24 11:00	02/29/24 19:07	7440-41-7	
Boron	4.5	mg/L	0.040	0.012	1	02/27/24 11:00	02/29/24 19:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/27/24 11:00	02/29/24 19:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/27/24 11:00	02/29/24 19:07	7440-47-3	
Cobalt	0.031	mg/L	0.0050	0.00032	1	02/27/24 11:00	02/29/24 19:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/27/24 11:00	02/29/24 19:07	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/27/24 11:00	02/29/24 19:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/27/24 11:00	02/29/24 19:07	7439-98-7	
Selenium	0.0012J	mg/L	0.0050	0.00096	1	02/27/24 11:00	02/29/24 19:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/27/24 11:00	02/29/24 19:07	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	03/04/24 13:00	03/04/24 16:34	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1410	mg/L	25.0	25.0	1		02/26/24 17:51		
2320B Alkalinity									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	334	mg/L	5.0	5.0	1		02/28/24 10:23		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/28/24 10:23		
Alkalinity, Total as CaCO3	334	mg/L	5.0	5.0	1		02/28/24 10:23		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/24/24 03:46	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	91.7	mg/L	12.0	7.2	12		02/25/24 08:32	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

Sample: HAM-AP2-FD-01		Lab ID: 92714999009		Collected: 02/20/24 00:00		Received: 02/22/24 11:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.13	mg/L	0.10	0.050	1		02/24/24 20:12	16984-48-8	
Sulfate	541	mg/L	12.0	6.0	12		02/25/24 08:32	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

QC Batch: 835638 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92714999001, 92714999002, 92714999003, 92714999004, 92714999005, 92714999006, 92714999007, 92714999008, 92714999009

METHOD BLANK: 4317188 Matrix: Water
Associated Lab Samples: 92714999001, 92714999002, 92714999003, 92714999004, 92714999005, 92714999006, 92714999007, 92714999008, 92714999009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	03/02/24 08:40	
Iron	mg/L	ND	0.040	0.025	03/02/24 08:40	
Magnesium	mg/L	ND	0.050	0.012	03/02/24 08:40	
Manganese	mg/L	ND	0.040	0.011	03/02/24 08:40	
Potassium	mg/L	ND	0.50	0.15	03/02/24 08:40	
Sodium	mg/L	ND	1.0	0.58	03/02/24 08:40	

LABORATORY CONTROL SAMPLE: 4317189

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.99J	99	80-120	
Iron	mg/L	1	0.98	98	80-120	
Magnesium	mg/L	1	1.0	100	80-120	
Manganese	mg/L	1	0.95	95	80-120	
Potassium	mg/L	1	0.91	91	80-120	
Sodium	mg/L	1	0.97J	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4317190 4317191

Parameter	Units	92714723021	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result										
Calcium	mg/L	2.2	1	1	3.2	3.2	100	101	75-125	0	20	
Iron	mg/L	0.69	1	1	1.7	1.7	101	102	75-125	1	20	
Magnesium	mg/L	1.0	1	1	2.0	2.1	100	104	75-125	2	20	
Manganese	mg/L	0.067	1	1	1.0	1.1	94	99	75-125	5	20	
Potassium	mg/L	2.2	1	1	3.1	3.2	97	106	75-125	3	20	
Sodium	mg/L	5.5	1	1	6.4	6.5	92	106	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.

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2 (CA)
Pace Project No.: 92714999

QC Batch:	835189	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92714999001, 92714999002, 92714999003, 92714999004, 92714999005, 92714999006, 92714999007, 92714999008, 92714999009		

METHOD BLANK: 4314690 Matrix: Water
Associated Lab Samples: 92714999001, 92714999002, 92714999003, 92714999004, 92714999005, 92714999006, 92714999007, 92714999008, 92714999009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	02/29/24 18:11	
Arsenic	mg/L	ND	0.010	0.00084	02/29/24 18:11	
Barium	mg/L	ND	0.0050	0.00047	02/29/24 18:11	
Beryllium	mg/L	ND	0.00050	0.000094	02/29/24 18:11	
Boron	mg/L	ND	0.040	0.012	02/29/24 18:11	
Cadmium	mg/L	ND	0.00050	0.00010	02/29/24 18:11	
Chromium	mg/L	ND	0.0050	0.0019	02/29/24 18:11	
Cobalt	mg/L	ND	0.0050	0.00032	02/29/24 18:11	
Lead	mg/L	ND	0.0010	0.00016	02/29/24 18:11	
Lithium	mg/L	ND	0.030	0.0016	02/29/24 18:11	
Molybdenum	mg/L	ND	0.010	0.00062	02/29/24 18:11	
Selenium	mg/L	ND	0.0050	0.00096	02/29/24 18:11	
Thallium	mg/L	ND	0.0010	0.00038	02/29/24 18:11	

LABORATORY CONTROL SAMPLE: 4314691

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	107	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	102	80-120	
Beryllium	mg/L	0.1	0.10	103	80-120	
Boron	mg/L	1	0.96	96	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.10	104	80-120	
Lithium	mg/L	0.1	0.10	100	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.10	100	80-120	
Thallium	mg/L	0.1	0.10	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4314692 4314693

Parameter	Units	92714999001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	107	107	75-125	0	20	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4314692 4314693											
Parameter	Units	92714999001	MS	MSD	MS	MSD	MS	MSD	% Rec	Limits	Max
		Result	Spike	Spike							
			Conc.	Conc.	Result	Result	% Rec	% Rec			RPD
Arsenic	mg/L	0.0033J	0.1	0.1	0.11	0.11	108	109	75-125	1	20
Barium	mg/L	0.036	0.1	0.1	0.14	0.14	106	105	75-125	1	20
Beryllium	mg/L	ND	0.1	0.1	0.093	0.094	93	94	75-125	1	20
Boron	mg/L	2.3	1	1	3.3	3.3	91	98	75-125	2	20
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	1	20
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	1	20
Cobalt	mg/L	0.014	0.1	0.1	0.11	0.11	101	101	75-125	0	20
Lead	mg/L	0.00020J	0.1	0.1	0.097	0.097	96	97	75-125	0	20
Lithium	mg/L	ND	0.1	0.1	0.092	0.095	92	94	75-125	3	20
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	103	104	75-125	1	20
Selenium	mg/L	ND	0.1	0.1	0.11	0.11	107	106	75-125	1	20
Thallium	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	0	20

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

QC Batch:	836469	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92714999001, 92714999002, 92714999003, 92714999004, 92714999005, 92714999006, 92714999007, 92714999008, 92714999009		

METHOD BLANK:	4320726	Matrix:	Water
Associated Lab Samples:	92714999001, 92714999002, 92714999003, 92714999004, 92714999005, 92714999006, 92714999007, 92714999008, 92714999009		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	03/04/24 15:55	

LABORATORY CONTROL SAMPLE: 4320727						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:					4320728	4320729							
Parameter	Units	92714999001	MS	MSD	MS	MSD	MS	MSD	% Rec	RPD	Max	Qual	
		Result	Spike Conc.	Spike Conc.									Result
Mercury	mg/L	ND	0.0025	0.0025	0.0025	0.0024	98	97	75-125	1	20		

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2 (CA)
Pace Project No.: 92714999

QC Batch:	834938	Analysis Method:	SM 2540C-2015
QC Batch Method:	SM 2540C-2015	Analysis Description:	2540C Total Dissolved Solids
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92714999001

METHOD BLANK: 4313586 Matrix: Water
Associated Lab Samples: 92714999001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/26/24 14:42	

LABORATORY CONTROL SAMPLE: 4313587

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	379	95	80-120	

SAMPLE DUPLICATE: 4313588

Parameter	Units	92714128003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	73.0	80.0	9	10	

SAMPLE DUPLICATE: 4313589

Parameter	Units	92715006001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	107	103	4	10	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

QC Batch: 835037

Analysis Method: SM 2540C-2015

QC Batch Method: SM 2540C-2015

Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92714999002, 92714999003, 92714999005, 92714999006, 92714999009

METHOD BLANK: 4314052

Matrix: Water

Associated Lab Samples: 92714999002, 92714999003, 92714999005, 92714999006, 92714999009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/26/24 17:48	

LABORATORY CONTROL SAMPLE: 4314053

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	398	100	80-120	

SAMPLE DUPLICATE: 4314054

Parameter	Units	92714723022 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	130	204	44	10	D6

SAMPLE DUPLICATE: 4314055

Parameter	Units	92715006008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	301	315	5	10	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

QC Batch: 835492

Analysis Method: SM 2540C-2015

QC Batch Method: SM 2540C-2015

Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92714999004, 92714999007, 92714999008

METHOD BLANK: 4316131

Matrix: Water

Associated Lab Samples: 92714999004, 92714999007, 92714999008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/28/24 11:55	

LABORATORY CONTROL SAMPLE: 4316132

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	395	99	80-120	

SAMPLE DUPLICATE: 4316133

Parameter	Units	92714999004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1370	1380	0	10	

SAMPLE DUPLICATE: 4316134

Parameter	Units	92715026002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	309	323	4	10	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2 (CA)
Pace Project No.: 92714999

QC Batch: 835154 Analysis Method: SM 2320B-2011
QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92714999002, 92714999003, 92714999005, 92714999006, 92714999009

METHOD BLANK: 4314543 Matrix: Water
Associated Lab Samples: 92714999002, 92714999003, 92714999005, 92714999006, 92714999009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	ND	5.0	5.0	02/27/24 14:12	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	5.0	5.0	02/27/24 14:12	
Alkalinity,Carbonate (CaCO ₃)	mg/L	ND	5.0	5.0	02/27/24 14:12	

LABORATORY CONTROL SAMPLE: 4314544

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	51.4	103	80-120	

LABORATORY CONTROL SAMPLE: 4314545

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	50.5	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4314546 4314547

Parameter	Units	92715006001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	75.0	50	50	128	127	105	105	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4314548 4314549

Parameter	Units	92715006002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	222	50	50	269	276	94	108	80-120	3	25	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

QC Batch: 835303

Analysis Method: SM 2320B-2011

QC Batch Method: SM 2320B-2011

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92714999001, 92714999007, 92714999008

METHOD BLANK: 4315450

Matrix: Water

Associated Lab Samples: 92714999001, 92714999007, 92714999008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	ND	5.0	5.0	02/29/24 13:34	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	5.0	5.0	02/29/24 13:34	
Alkalinity,Carbonate (CaCO ₃)	mg/L	ND	5.0	5.0	02/29/24 13:34	

LABORATORY CONTROL SAMPLE: 4315451

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	50.6	101	80-120	

LABORATORY CONTROL SAMPLE: 4315452

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	52.5	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4315453 4315454

Parameter	Units	92714999007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	ND	50	50	49.9	50.3	99	100	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4315455 4315456

Parameter	Units	92714999008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	ND	50	50	49.9	50.6	100	101	80-120	1	25	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2 (CA)
Pace Project No.: 92714999

QC Batch: 835849 Analysis Method: SM 2320B-2011
QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92714999004

METHOD BLANK: 4318153 Matrix: Water

Associated Lab Samples: 92714999004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	ND	5.0	5.0	02/29/24 17:02	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	5.0	5.0	02/29/24 17:02	
Alkalinity,Carbonate (CaCO ₃)	mg/L	ND	5.0	5.0	02/29/24 17:02	

LABORATORY CONTROL SAMPLE: 4318154

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	49.1	98	80-120	

LABORATORY CONTROL SAMPLE: 4318155

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	50.1	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4318156 4318157

Parameter	Units	92715028003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	178	50	50	226	226	95	96	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4318158 4318159

Parameter	Units	92715028004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	152	50	50	199	198	95	92	80-120	1	25	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2 (CA)
Pace Project No.: 92714999

QC Batch:	834777	Analysis Method:	SM 4500-S2D-2011
QC Batch Method:	SM 4500-S2D-2011	Analysis Description:	4500S2D Sulfide Water
		Laboratory:	Pace Analytical Services - Asheville

Associated Lab Samples: 92714999001

METHOD BLANK: 4313100 Matrix: Water
Associated Lab Samples: 92714999001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/24/24 03:24	

LABORATORY CONTROL SAMPLE: 4313101

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.52	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4313102 4313103

Parameter	Units	92713565020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.47	0.47	93	94	80-120	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4313118 4313119

Parameter	Units	92714717002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.50	0.52	101	105	80-120	4	10	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2 (CA)
Pace Project No.: 92714999

QC Batch: 834778 Analysis Method: SM 4500-S2D-2011
QC Batch Method: SM 4500-S2D-2011 Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92714999002, 92714999003, 92714999004, 92714999005, 92714999006, 92714999007, 92714999009

METHOD BLANK: 4313106 Matrix: Water
Associated Lab Samples: 92714999002, 92714999003, 92714999004, 92714999005, 92714999006, 92714999007, 92714999009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/24/24 03:42	

LABORATORY CONTROL SAMPLE: 4313107

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.53	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4313108 4313109

Parameter	Units	92714999002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	ND	ND	4	1	80-120		10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4313110 4313111

Parameter	Units	92715006013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.54	0.55	108	109	80-120	1	10	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2 (CA)
Pace Project No.: 92714999

QC Batch:	834779	Analysis Method:	SM 4500-S2D-2011
QC Batch Method:	SM 4500-S2D-2011	Analysis Description:	4500S2D Sulfide Water
		Laboratory:	Pace Analytical Services - Asheville

Associated Lab Samples: 92714999008

METHOD BLANK: 4313112 Matrix: Water
Associated Lab Samples: 92714999008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/24/24 03:55	

LABORATORY CONTROL SAMPLE: 4313113

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.52	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4313114 4313115

Parameter	Units	92714999008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.51	0.52	103	105	80-120	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4313116 4313117

Parameter	Units	92715135007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.58	0.60	116	120	80-120	3	10	

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QUALITY CONTROL DATA

Project: Plant Hammond AP-2 (CA)
Pace Project No.: 92714999

QC Batch:	834798	Analysis Method:	EPA 300.0 Rev 2.1 1993
QC Batch Method:	EPA 300.0 Rev 2.1 1993	Analysis Description:	300.0 IC Anions
		Laboratory:	Pace Analytical Services - Asheville
Associated Lab Samples:	92714999001, 92714999002, 92714999003, 92714999004, 92714999005, 92714999006, 92714999007, 92714999008, 92714999009		

METHOD BLANK:	4313142	Matrix:	Water
Associated Lab Samples:	92714999001, 92714999002, 92714999003, 92714999004, 92714999005, 92714999006, 92714999007, 92714999008, 92714999009		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/24/24 12:59	
Fluoride	mg/L	ND	0.10	0.050	02/24/24 12:59	
Sulfate	mg/L	ND	1.0	0.50	02/24/24 12:59	

LABORATORY CONTROL SAMPLE: 4313143						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.8	98	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	49.5	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4313144 4313145												
Parameter	Units	92713565020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	150	50	50	190	191	80	81	90-110	1	10	M1
Fluoride	mg/L	0.16	2.5	2.5	2.8	2.7	104	103	90-110	1	10	
Sulfate	mg/L	1060	50	50	1100	1100	85	89	90-110	0	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4313146 4313147												
Parameter	Units	92714999003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	96.0	50	50	136	135	79	79	90-110	0	10	M1
Fluoride	mg/L	0.57	2.5	2.5	3.1	3.2	102	105	90-110	2	10	
Sulfate	mg/L	758	50	50	787	780	58	45	90-110	1	10	M1

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QUALIFIERS

Project: Plant Hammond AP-2 (CA)
Pace Project No.: 92714999

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 adjusted reporting limit.
TNTC - Too Numerous To Count
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
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.
Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.
A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.
M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92714999001	HAM-PT-01	EPA 3010A	835638	EPA 6010D	835688
92714999002	HAM-PT-02	EPA 3010A	835638	EPA 6010D	835688
92714999003	HAM-PT-03	EPA 3010A	835638	EPA 6010D	835688
92714999004	HAM-PT-04	EPA 3010A	835638	EPA 6010D	835688
92714999005	HAM-PT-05	EPA 3010A	835638	EPA 6010D	835688
92714999006	HAM-PT-06	EPA 3010A	835638	EPA 6010D	835688
92714999007	HAM-AP2-EB-01	EPA 3010A	835638	EPA 6010D	835688
92714999008	HAM-AP2-FB-01	EPA 3010A	835638	EPA 6010D	835688
92714999009	HAM-AP2-FD-01	EPA 3010A	835638	EPA 6010D	835688
92714999001	HAM-PT-01	EPA 3005A	835189	EPA 6020B	835295
92714999002	HAM-PT-02	EPA 3005A	835189	EPA 6020B	835295
92714999003	HAM-PT-03	EPA 3005A	835189	EPA 6020B	835295
92714999004	HAM-PT-04	EPA 3005A	835189	EPA 6020B	835295
92714999005	HAM-PT-05	EPA 3005A	835189	EPA 6020B	835295
92714999006	HAM-PT-06	EPA 3005A	835189	EPA 6020B	835295
92714999007	HAM-AP2-EB-01	EPA 3005A	835189	EPA 6020B	835295
92714999008	HAM-AP2-FB-01	EPA 3005A	835189	EPA 6020B	835295
92714999009	HAM-AP2-FD-01	EPA 3005A	835189	EPA 6020B	835295
92714999001	HAM-PT-01	EPA 7470A	836469	EPA 7470A	836556
92714999002	HAM-PT-02	EPA 7470A	836469	EPA 7470A	836556
92714999003	HAM-PT-03	EPA 7470A	836469	EPA 7470A	836556
92714999004	HAM-PT-04	EPA 7470A	836469	EPA 7470A	836556
92714999005	HAM-PT-05	EPA 7470A	836469	EPA 7470A	836556
92714999006	HAM-PT-06	EPA 7470A	836469	EPA 7470A	836556
92714999007	HAM-AP2-EB-01	EPA 7470A	836469	EPA 7470A	836556
92714999008	HAM-AP2-FB-01	EPA 7470A	836469	EPA 7470A	836556
92714999009	HAM-AP2-FD-01	EPA 7470A	836469	EPA 7470A	836556
92714999001	HAM-PT-01	SM 2540C-2015	834938		
92714999002	HAM-PT-02	SM 2540C-2015	835037		
92714999003	HAM-PT-03	SM 2540C-2015	835037		
92714999004	HAM-PT-04	SM 2540C-2015	835492		
92714999005	HAM-PT-05	SM 2540C-2015	835037		
92714999006	HAM-PT-06	SM 2540C-2015	835037		
92714999007	HAM-AP2-EB-01	SM 2540C-2015	835492		
92714999008	HAM-AP2-FB-01	SM 2540C-2015	835492		
92714999009	HAM-AP2-FD-01	SM 2540C-2015	835037		
92714999001	HAM-PT-01	SM 2320B-2011	835303		
92714999002	HAM-PT-02	SM 2320B-2011	835154		
92714999003	HAM-PT-03	SM 2320B-2011	835154		
92714999004	HAM-PT-04	SM 2320B-2011	835849		
92714999005	HAM-PT-05	SM 2320B-2011	835154		
92714999006	HAM-PT-06	SM 2320B-2011	835154		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Hammond AP-2 (CA)

Pace Project No.: 92714999

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92714999007	HAM-AP2-EB-01	SM 2320B-2011	835303		
92714999008	HAM-AP2-FB-01	SM 2320B-2011	835303		
92714999009	HAM-AP2-FD-01	SM 2320B-2011	835154		
92714999001	HAM-PT-01	SM 4500-S2D-2011	834777		
92714999002	HAM-PT-02	SM 4500-S2D-2011	834778		
92714999003	HAM-PT-03	SM 4500-S2D-2011	834778		
92714999004	HAM-PT-04	SM 4500-S2D-2011	834778		
92714999005	HAM-PT-05	SM 4500-S2D-2011	834778		
92714999006	HAM-PT-06	SM 4500-S2D-2011	834778		
92714999007	HAM-AP2-EB-01	SM 4500-S2D-2011	834778		
92714999008	HAM-AP2-FB-01	SM 4500-S2D-2011	834779		
92714999009	HAM-AP2-FD-01	SM 4500-S2D-2011	834778		
92714999001	HAM-PT-01	EPA 300.0 Rev 2.1 1993	834798		
92714999002	HAM-PT-02	EPA 300.0 Rev 2.1 1993	834798		
92714999003	HAM-PT-03	EPA 300.0 Rev 2.1 1993	834798		
92714999004	HAM-PT-04	EPA 300.0 Rev 2.1 1993	834798		
92714999005	HAM-PT-05	EPA 300.0 Rev 2.1 1993	834798		
92714999006	HAM-PT-06	EPA 300.0 Rev 2.1 1993	834798		
92714999007	HAM-AP2-EB-01	EPA 300.0 Rev 2.1 1993	834798		
92714999008	HAM-AP2-FB-01	EPA 300.0 Rev 2.1 1993	834798		
92714999009	HAM-AP2-FD-01	EPA 300.0 Rev 2.1 1993	834798		

REPORT OF LABORATORY ANALYSIS

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DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒ Kernersville ☐Sample Condition
Upon Receipt

Client Name:

Project #:

WO#: 92714999



92714999

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client
☐ Commercial ☒ Pace ☐ Other:Custody Seal Present? ☒ Yes ☐ No Seals Intact? ☒ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: 7/22/24 SM

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen?

☐ Yes ☐ No ☒ N/A

Thermometer:

☒ IR Gun ID:

730

Type of Ice:

☒ Wet☐ Blue☐ None

Cooler Temp:

3.1

Correction Factor:

Add/Subtract (°C)

0.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

3.7

USDA Regulated Soil (☐ N/A, water sample)Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ NoDid samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

Comments/Discrepancy:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: 7/22/24		
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project #

WO#: 92714999

PM: BV

Due Date: 03/07/24

CLIENT: 92- GP-HAM

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2SO3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1		2	1			✓	✓	✓																					
2		2	1			✓	✓	✓																					
3		2	1			✓	✓	✓																					
4		2	1			✓	✓	✓																					
5		2	1			✓	✓	✓																					
6		2	1			✓	✓	✓																					
7		2	1			✓	✓	✓																					
8		2	1			✓	✓	✓																					
9		2	1			✓	✓	✓																					
10						✓	✓	✓																					
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A

Required Client Information:

Company: GA Power

Address: Atlanta, GA

Email To: SCS Contacts

Phone: _____

Requested Due Date/TAT: 10 Day

Section B

Required Project Information:

Report To: SCS Contacts

Copy To: Geosyntec Contacts

Purchase Order No: GPC82474-0001

Project Name: Hammond AP-2

Project Number: _____

Section C

Invoice Information:

Attention: Southern Co.

Company Name: _____

Address: _____

Place Order Reference: _____

Place Project Manager: Bonnie Vang

Place Profile #: 10839

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
 ☐ UST ☐ RCRA ☐ OTHER CCR

Site Location

STATE: GA

Valid Matrix Codes

MATRIX CODE

DRINKING WATER DW
 WATER WT
 WASTE WATER WW
 PRODUCT P
 SOIL/SOLID SL
 OIL OL
 WASTE WP
 OTHER OT
 TISSUE TS

Section D

Required Client Information

SAMPLE ID

(A-Z, 0-9, /, -)

Sample IDs MUST BE UNIQUE

COLLECTED

COMPOSITE

DATE

TIME

DATE

TIME

MATRIX CODE

(see valid codes to left)

SAMPLE TYPE (G=GRAB C=COMP)

SAMPLE TEMP AT COLLECTION

OF CONTAINERS

PRESERVATIVES

Unpreserved

H₂SO₄

HNO₃

HCl

NaOH

Na₂S₂O₃

Methanol

Other

Analysis Test

Y/N

Chloride, Fluoride, Sulfate

Full App III and IV metals

Major Ions (Profile 10839-2)

TDS

Requested Analysis Filtered (Y/N)

Residual Chlorine (Y/N)

9271499

Place Project No./ Lab I.D.

001

002

003

004

005

006

007

008

009

010

011

012

RELINQUISHED BY / AFFILIATION

DATE

TIME

ACCEPTED BY / AFFILIATION

DATE

TIME

SAMPLE CONDITIONS

ADDITIONAL COMMENTS

Thommas Hessler/Geosyntec

2/12/2024

1110

Ryan Williams / Pace

2/12/2024

1110

Charles Hessler / Pace

2/12/2024

1545

Task Code: HAM-CCR-GA-20240221

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: T. Hessler, J. Hessler

SIGNATURE of SAMPLER: _____

DATE Signed (MM/DD/YY): 02/12/2024

Received on

Custody

Sealed Cooler

Samples Intact

Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-Feb-2007

CALIBRATION REPORTS

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 02/19/2024Calibrated By: Jacob TracyField Conditions: Sunny, 18°C

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>11-SIU</u>	<u>968302</u>
Turbidity Meter	<u>HACH</u>	<u>220960006239</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance ($\mu\text{S}/\text{cm}$)	4,490	<u>24006044</u>	<u>05/24</u>	<u>AJR</u>
pH (SU)	4.00	<u>+</u>	<u>✓</u>	
pH (SU)	7.00	<u>22290139</u>	<u>04/24</u>	<u>450</u>
pH (SU)	10.00	<u>2210130</u>	<u>04/24</u>	<u>450</u>
D.O. (%)	N/A			
ORP (mV)	228.0	<u>34002258</u>	<u>06/24</u>	<u>AJR</u>

Calibration					
Time Start <u>8:30</u>		Time Finish <u>8:45</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature ($^{\circ}\text{C}$)	Acceptance Criteria	Reference
Specific Conductance ($\mu\text{S}/\text{cm}$)	4,490	<u>4490</u>	<u>1.68</u>	$\pm 10\%$ of standard	EPA 2023
pH (SU)	4.00	<u>4.0</u>	<u>1.58</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.0</u>	<u>2.00</u>	± 0.1	GWMP
pH (SU)	10.00	<u>7.0</u>	<u>2.13</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100%</u>	<u>2.24</u>	$\pm 10\%$	NA
ORP (mV)	228.0	<u>228.0</u>	<u>2.14</u>	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	<u>2.0</u>	<u>2.14</u>	$\pm 10\%$ of standard	EPA 2023
	<u>1.0</u>	<u>1.05</u>		
	<u>0.1</u>	<u>0.1</u>		
	<u>0.0</u>	<u>0.0</u>		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature ($^{\circ}\text{C}$)	Acceptance Criteria	Reference
Specific Conductance ($\mu\text{S}/\text{cm}$)	4,490			$\pm 10\%$ of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)			$\pm 10\%$ of standard	EPA 2023

Notes:

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 2-20-2024Calibrated By: A. StewartField Conditions: Sunny, 60°F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>Dynascan AT400</u>	<u>843285</u>
Turbidity Meter	<u>2600A HACH</u>	<u>14080002447</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	<u>24000044</u>	<u>05/2024</u>	<u>AIR</u>
pH (SU)	4.00	<u>24000044</u>	<u>05/2024</u>	<u>AIR</u>
pH (SU)	7.00	<u>22290139</u>	<u>04/2024</u>	<u>AIR</u>
pH (SU)	10.00	<u>22110130</u>	<u>04/2024</u>	<u>AIR</u>
D.O. (%)	N/A	<u>-</u>	<u>-</u>	<u>-</u>
ORP (mV)	228.0	<u>24000288</u>	<u>06/2024</u>	<u>AIR</u>

Calibration					
Time Start <u>1645</u>		Time Finish <u>1710</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	<u>4620.6</u>	<u>19.04</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>3.95</u>	<u>19.17</u>	± 0.1	GWMP
pH (SU)	7.00	<u>6.96</u>	<u>20.23</u>	± 0.1	GWMP
pH (SU)	10.00	<u>9.94</u>	<u>18.95</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>800.0</u>	<u>17.19</u>	± 10%	NA
ORP (mV)	228.0	<u>208.8</u>	<u>19.17</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>20</u>	<u>20.0</u>	± 10% of standard	EPA 2023
	<u>100</u>	<u>100</u>		
	<u>300</u>	<u>299</u>		
	<u>10.0</u>	<u>9.89</u>		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
			± 10% of standard	EPA 2023

Notes:

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 02/26/24Calibrated By: Jacob TracyField Conditions: Sunny, clear

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>HACH</u>	<u>468 202</u>
Turbidity Meter	<u>HACH</u>	<u>220902000239</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance ($\mu\text{S}/\text{cm}$)	4,490	<u>24000044</u>	<u>05/24</u>	<u>AIR</u>
pH (SU)	4.00	<u>22290139</u>	<u>04/24</u>	<u>AIR</u>
pH (SU)	7.00	<u>22110130</u>	<u>04/2024</u>	<u>AIR</u>
pH (SU)	10.00	<u>22090130</u>	<u>04/2024</u>	<u>AIR</u>
D.O. (%)	N/A	<u>22090130</u>	<u>04/2024</u>	<u>AIR</u>
ORP (mV)	228.0	<u>2400258</u>	<u>06/24</u>	<u>AIR</u>

Calibration					
Time Start <u>8:15</u>		Time Finish <u>8:45</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature ($^{\circ}\text{C}$)	Acceptance Criteria	Reference
Specific Conductance ($\mu\text{S}/\text{cm}$)	4,490	<u>4490</u>	<u>8.86</u>	$\pm 10\%$ of standard	EPA 2023
pH (SU)	4.00	<u>4.0</u>	<u>8.84</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.0</u>	<u>8.45</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.0</u>	<u>8.15</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100</u>	<u>7.52</u>	$\pm 10\%$	NA
ORP (mV)	228.0	<u>228</u>	<u>7.98</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>2.0</u>	<u>2.7</u>	$\pm 10\%$ of standard	EPA 2023
	<u>10.0</u>	<u>10.8</u>		
	<u>80.0</u>	<u>84.5</u>		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature ($^{\circ}\text{C}$)	Acceptance Criteria	Reference
Specific Conductance ($\mu\text{S}/\text{cm}$)	4,490			$\pm 10\%$ of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
			$\pm 10\%$ of standard	EPA 2023

Notes:

Site Name: Plant Hammond
 Calibrated By: Jacob Truitt

Field Instrumentation Calibration Form

Date: 02/21/2024
 Field Conditions: Sunny, Clear

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>17-SITU</u>	<u>968 202</u>
Turbidity Meter	<u>Hach</u>	<u>220901000239</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	<u>24000044</u>	<u>05/24</u>	<u>AFC</u>
pH (SU)	4.00	<u>22290139</u>	<u>04/24</u>	<u>J</u>
pH (SU)	7.00	<u>22110130</u>	<u>04/24</u>	<u>J</u>
pH (SU)	10.00			
D.O. (%)	N/A			
ORP (mV)	228.0	<u>24000255</u>	<u>06/24</u>	<u>J</u>

Calibration					
Time Start <u>815</u>		Time Finish <u>845</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	<u>4440</u>	<u>7.31</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.07</u>	<u>7.36</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.0</u>	<u>7.63</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>7.74</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100.00</u>	<u>6.53</u>	± 10%	NA
ORP (mV)	228.0	<u>228</u>	<u>7.51</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>20</u>	<u>22</u>	± 10% of standard	EPA 2023
	<u>100</u>	<u>90.9</u>		
	<u>800</u>	<u>799</u>		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
			± 10% of standard	EPA 2023

Notes:

FIELD SAMPLING REPORTS

Low-Flow Test Report:

Test Date / Time: 2/20/2024 1:08:29 PM
Project: Plant Hammond
Operator Name: Jacob Tracy

Location Name: INW-01 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 13.50 ft Total Depth: 23.50 ft Initial Depth to Water: 9.90 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 18.50 ft Estimated Total Volume Pumped: 4 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 2.69 ft	Instrument Used: Aqua TROLL 400 Serial Number: 968202
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Test Notes:
No Sample - Parameter Testing.

Weather Conditions:
Sunny, clear.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/20/2024 1:08 PM	00:00	6.98 pH	17.73 °C	732.92 µS/cm	6.61 mg/L	--	-112.0 mV	9.90 ft	200.00 ml/min
2/20/2024 1:09 PM	00:58	6.84 pH	17.27 °C	747.48 µS/cm	3.23 mg/L	--	-106.3 mV	9.90 ft	200.00 ml/min
2/20/2024 1:14 PM	05:58	6.76 pH	16.92 °C	759.19 µS/cm	0.50 mg/L	4.71 NTU	-98.1 mV	11.81 ft	200.00 ml/min
2/20/2024 1:19 PM	10:58	6.74 pH	17.27 °C	777.15 µS/cm	0.42 mg/L	5.48 NTU	-103.2 mV	12.31 ft	200.00 ml/min
2/20/2024 1:24 PM	15:58	6.71 pH	17.56 °C	798.79 µS/cm	0.60 mg/L	6.74 NTU	-107.1 mV	12.59 ft	200.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/20/2024 5:32:31 PM
Project: Plant Hammond
Operator Name: Anthony Szwast

Location Name: INW-02 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 25.08 ft Total Depth: 35.08 ft Initial Depth to Water: 14.23 ft	Pump Type: Bailer Tubing Type: Polyethylene Pump Intake From TOC: 30.08 ft Estimated Total Volume Pumped: 3 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.03 ft	Instrument Used: Aqua TROLL 400 Serial Number: 843285
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Test Notes:
No Sample - Parameters Testing.

Weather Conditions:
Sunny, 60 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/20/2024 5:32 PM	00:00	7.43 pH	15.34 °C	1,565.3 µS/cm	5.44 mg/L	14.00 NTU	108.3 mV	14.20 ft	200.00 ml/min
2/20/2024 5:37 PM	05:00	7.02 pH	15.83 °C	1,473.1 µS/cm	2.33 mg/L	24.70 NTU	101.1 mV	14.23 ft	200.00 ml/min
2/20/2024 5:42 PM	10:00	7.00 pH	15.96 °C	1,514.2 µS/cm	2.17 mg/L	24.40 NTU	47.5 mV	14.26 ft	200.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 2/19/2024 2:37:51 PM
Project: Plant Hammond
Operator Name: Jacob Tracy

Location Name: PT-01 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 13.49 ft Total Depth: 23.49 ft Initial Depth to Water: 9.59 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 18.49 ft Estimated Total Volume Pumped: 32 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 2.57 ft	Instrument Used: Aqua TROLL 400 Serial Number: 968202
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Test Notes:
Five bottles: Full App.III and IV (No RADs) and Major Ions.

Weather Conditions:
Sunny, clear.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/19/2024 2:37 PM	00:00	6.86 pH	17.22 °C	639.65 µS/cm	1.33 mg/L	26.50 NTU	-130.5 mV	10.98 ft	200.00 ml/min
2/19/2024 2:42 PM	05:00	6.85 pH	16.90 °C	668.22 µS/cm	1.01 mg/L	22.30 NTU	-129.0 mV	11.49 ft	200.00 ml/min
2/19/2024 2:47 PM	10:00	6.85 pH	17.10 °C	674.72 µS/cm	0.85 mg/L	20.80 NTU	-127.3 mV	11.78 ft	200.00 ml/min
2/19/2024 2:52 PM	15:00	6.85 pH	17.37 °C	691.82 µS/cm	0.99 mg/L	19.70 NTU	-163.1 mV	11.91 ft	200.00 ml/min
2/19/2024 2:57 PM	20:00	6.85 pH	17.58 °C	710.66 µS/cm	0.92 mg/L	16.20 NTU	-139.2 mV	12.03 ft	200.00 ml/min
2/19/2024 3:02 PM	25:00	6.84 pH	17.62 °C	729.15 µS/cm	0.56 mg/L	12.60 NTU	-142.5 mV	12.13 ft	200.00 ml/min
2/19/2024 3:07 PM	30:00	6.84 pH	17.76 °C	737.70 µS/cm	0.63 mg/L	10.80 NTU	-141.7 mV	12.14 ft	200.00 ml/min
2/19/2024 3:12 PM	35:00	6.85 pH	17.72 °C	744.98 µS/cm	0.89 mg/L	10.10 NTU	-120.2 mV	12.09 ft	200.00 ml/min
2/19/2024 3:17 PM	40:00	6.85 pH	17.62 °C	746.72 µS/cm	0.73 mg/L	8.98 NTU	-115.5 mV	12.06 ft	200.00 ml/min
2/19/2024 3:22 PM	45:00	6.85 pH	17.80 °C	748.69 µS/cm	0.75 mg/L	8.05 NTU	-133.8 mV	12.05 ft	200.00 ml/min
2/19/2024 3:27 PM	50:00	6.87 pH	17.81 °C	746.10 µS/cm	0.65 mg/L	7.36 NTU	-125.5 mV	12.05 ft	200.00 ml/min
2/19/2024 3:32 PM	55:00	6.87 pH	17.85 °C	756.18 µS/cm	1.13 mg/L	7.55 NTU	-139.9 mV	12.06 ft	200.00 ml/min
2/19/2024 3:37 PM	01:00:00	6.88 pH	17.89 °C	771.63 µS/cm	0.75 mg/L	6.68 NTU	-139.2 mV	12.06 ft	200.00 ml/min

2/19/2024 3:42 PM	01:05:00	6.88 pH	17.90 °C	783.08 µS/cm	0.98 mg/L	7.00 NTU	-133.4 mV	12.06 ft	200.00 ml/min
2/19/2024 3:47 PM	01:10:00	6.88 pH	17.89 °C	787.04 µS/cm	0.54 mg/L	5.76 NTU	-126.1 mV	12.06 ft	200.00 ml/min
2/19/2024 3:52 PM	01:15:00	6.87 pH	17.58 °C	807.57 µS/cm	0.52 mg/L	6.10 NTU	-112.0 mV	12.06 ft	200.00 ml/min
2/19/2024 3:57 PM	01:20:00	6.87 pH	17.20 °C	830.90 µS/cm	1.25 mg/L	5.01 NTU	-124.4 mV	12.06 ft	200.00 ml/min
2/19/2024 4:02 PM	01:25:00	6.88 pH	17.05 °C	839.93 µS/cm	1.11 mg/L	5.16 NTU	-128.6 mV	12.06 ft	200.00 ml/min
2/19/2024 4:07 PM	01:30:00	6.87 pH	17.00 °C	870.51 µS/cm	1.32 mg/L	4.40 NTU	-133.1 mV	12.10 ft	200.00 ml/min
2/19/2024 4:12 PM	01:35:00	6.88 pH	16.90 °C	891.81 µS/cm	1.42 mg/L	4.04 NTU	-133.7 mV	12.11 ft	200.00 ml/min
2/19/2024 4:17 PM	01:40:00	6.87 pH	16.88 °C	910.70 µS/cm	1.22 mg/L	3.41 NTU	-128.7 mV	12.13 ft	200.00 ml/min
2/19/2024 4:22 PM	01:45:00	6.87 pH	17.31 °C	926.68 µS/cm	0.99 mg/L	3.30 NTU	-151.9 mV	12.14 ft	200.00 ml/min
2/19/2024 4:27 PM	01:50:00	6.87 pH	17.27 °C	937.29 µS/cm	0.77 mg/L	2.63 NTU	-127.8 mV	12.14 ft	200.00 ml/min
2/19/2024 4:32 PM	01:55:00	6.85 pH	17.38 °C	976.22 µS/cm	1.16 mg/L	3.14 NTU	-126.8 mV	12.14 ft	200.00 ml/min
2/19/2024 4:37 PM	02:00:00	6.85 pH	17.29 °C	996.27 µS/cm	1.39 mg/L	2.46 NTU	-152.9 mV	12.15 ft	200.00 ml/min
2/19/2024 4:42 PM	02:05:00	6.85 pH	17.00 °C	1,032.5 µS/cm	0.52 mg/L	2.75 NTU	-135.9 mV	12.16 ft	200.00 ml/min
2/19/2024 4:47 PM	02:10:00	6.85 pH	17.18 °C	1,057.4 µS/cm	0.46 mg/L	2.60 NTU	-119.4 mV	12.16 ft	200.00 ml/min
2/19/2024 4:52 PM	02:15:00	6.84 pH	17.16 °C	1,079.6 µS/cm	0.67 mg/L	2.30 NTU	-115.6 mV	12.16 ft	200.00 ml/min
2/19/2024 4:57 PM	02:20:00	6.83 pH	17.04 °C	1,116.7 µS/cm	0.35 mg/L	2.14 NTU	-142.0 mV	12.16 ft	200.00 ml/min
2/19/2024 5:02 PM	02:25:00	6.84 pH	16.96 °C	1,134.9 µS/cm	0.28 mg/L	2.10 NTU	-115.9 mV	12.16 ft	200.00 ml/min
2/19/2024 5:07 PM	02:30:00	6.83 pH	16.87 °C	1,082.8 µS/cm	0.26 mg/L	2.12 NTU	-117.2 mV	12.16 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-01	Grab.

Low-Flow Test Report:

Test Date / Time: 2/20/2024 11:13:00 AM
Project: Plant Hammond
Operator Name: Jacob Tracy

Location Name: PT-02 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 13.40 ft Total Depth: 23.40 ft Initial Depth to Water: 9.96 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 18.40 ft Estimated Total Volume Pumped: 12 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 4.09 ft	Instrument Used: Aqua TROLL 400 Serial Number: 968202
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Test Notes:
Five bottles: Full App.III and IV (No RADs) and Major Ions.

Weather Conditions:
Sunny, clear.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/20/2024 11:13 AM	00:00	6.68 pH	14.75 °C	1,553.3 µS/cm	0.43 mg/L	23.30 NTU	-112.3 mV	11.80 ft	200.00 ml/min
2/20/2024 11:18 AM	05:00	6.68 pH	14.85 °C	1,550.6 µS/cm	0.50 mg/L	22.60 NTU	-110.8 mV	12.65 ft	200.00 ml/min
2/20/2024 11:23 AM	10:00	6.68 pH	15.16 °C	1,552.3 µS/cm	0.46 mg/L	23.20 NTU	-112.2 mV	13.24 ft	200.00 ml/min
2/20/2024 11:28 AM	15:00	6.69 pH	15.46 °C	1,561.3 µS/cm	1.52 mg/L	22.10 NTU	-107.1 mV	13.55 ft	200.00 ml/min
2/20/2024 11:33 AM	20:00	6.80 pH	15.37 °C	1,561.8 µS/cm	5.57 mg/L	19.50 NTU	-96.4 mV	13.64 ft	200.00 ml/min
2/20/2024 11:38 AM	25:00	6.65 pH	15.83 °C	1,574.3 µS/cm	0.55 mg/L	15.20 NTU	-110.4 mV	13.70 ft	200.00 ml/min
2/20/2024 11:43 AM	30:00	6.69 pH	15.74 °C	1,592.1 µS/cm	3.22 mg/L	11.30 NTU	-107.8 mV	13.79 ft	200.00 ml/min
2/20/2024 11:48 AM	35:00	6.70 pH	15.83 °C	1,632.8 µS/cm	3.64 mg/L	6.54 NTU	-85.3 mV	13.81 ft	200.00 ml/min
2/20/2024 11:53 AM	40:00	6.63 pH	16.23 °C	1,750.3 µS/cm	0.47 mg/L	2.07 NTU	-98.1 mV	13.81 ft	200.00 ml/min
2/20/2024 11:58 AM	45:00	6.63 pH	16.31 °C	1,829.6 µS/cm	0.45 mg/L	1.38 NTU	-119.2 mV	13.91 ft	200.00 ml/min
2/20/2024 12:03 PM	50:00	6.63 pH	16.46 °C	1,851.4 µS/cm	0.46 mg/L	1.46 NTU	-98.5 mV	14.00 ft	200.00 ml/min
2/20/2024 12:08 PM	55:00	6.63 pH	16.57 °C	1,873.4 µS/cm	0.45 mg/L	1.95 NTU	-117.1 mV	14.05 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-02	Grab.
HAM-AP2-FD-01	Grab.

Low-Flow Test Report:

Test Date / Time: 2/20/2024 9:59:57 AM
Project: Plant Hammond
Operator Name: Jacob Tracy

Location Name: PT-03 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 13.62 ft Total Depth: 23.62 ft Initial Depth to Water: 9.98 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 18.62 ft Estimated Total Volume Pumped: 7 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.37 ft	Instrument Used: Aqua TROLL 400 Serial Number: 968202
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Test Notes:
Five bottles: Full App.III and IV (No RADs) and Major Ions.

Weather Conditions:
Sunny, clear.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/20/2024 9:59 AM	00:00	5.34 pH	14.97 °C	1,569.8 µS/cm	0.43 mg/L	4.48 NTU	143.5 mV	10.28 ft	200.00 ml/min
2/20/2024 10:04 AM	05:00	5.30 pH	15.02 °C	1,588.1 µS/cm	0.36 mg/L	1.03 NTU	137.2 mV	10.34 ft	200.00 ml/min
2/20/2024 10:09 AM	10:00	5.25 pH	15.20 °C	1,640.1 µS/cm	0.31 mg/L	1.34 NTU	89.0 mV	10.36 ft	200.00 ml/min
2/20/2024 10:14 AM	15:00	5.22 pH	15.29 °C	1,669.8 µS/cm	0.31 mg/L	1.65 NTU	78.5 mV	10.35 ft	200.00 ml/min
2/20/2024 10:19 AM	20:00	5.20 pH	15.39 °C	1,695.7 µS/cm	0.33 mg/L	0.92 NTU	72.5 mV	10.35 ft	200.00 ml/min
2/20/2024 10:24 AM	25:00	5.18 pH	15.43 °C	1,714.6 µS/cm	0.30 mg/L	1.41 NTU	96.5 mV	10.35 ft	200.00 ml/min
2/20/2024 10:29 AM	30:00	5.15 pH	15.48 °C	1,765.2 µS/cm	0.28 mg/L	0.88 NTU	69.2 mV	10.35 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-03	Grab.

Low-Flow Test Report:

Test Date / Time: 2/21/2024 9:59:30 AM
Project: Plant Hammond
Operator Name: Jacob Tracy

Location Name: PT-04 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 24.07 ft Total Depth: 34.07 ft Initial Depth to Water: 13.96 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 29.07 ft Estimated Total Volume Pumped: 7 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.06 ft	Instrument Used: Aqua TROLL 400 Serial Number: 968202
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Test Notes:
Five bottles: Full App.III and IV (No RADs) and Major Ions.

Weather Conditions:
Sunny, clear.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/21/2024 9:59 AM	00:00	6.83 pH	16.92 °C	1,310.5 µS/cm	0.61 mg/L	14.60 NTU	-14.1 mV	14.02 ft	200.00 ml/min
2/21/2024 10:04 AM	05:00	6.76 pH	17.47 °C	1,369.1 µS/cm	0.44 mg/L	9.68 NTU	-10.2 mV	14.02 ft	200.00 ml/min
2/21/2024 10:09 AM	10:00	6.66 pH	17.67 °C	1,637.9 µS/cm	0.31 mg/L	5.09 NTU	-31.0 mV	14.02 ft	200.00 ml/min
2/21/2024 10:14 AM	15:00	6.68 pH	17.98 °C	1,843.7 µS/cm	0.28 mg/L	2.59 NTU	-50.1 mV	14.02 ft	200.00 ml/min
2/21/2024 10:19 AM	20:00	6.67 pH	18.16 °C	1,853.5 µS/cm	0.30 mg/L	1.93 NTU	-51.4 mV	14.02 ft	200.00 ml/min
2/21/2024 10:24 AM	25:00	6.67 pH	18.19 °C	1,857.6 µS/cm	0.29 mg/L	2.05 NTU	-51.8 mV	14.02 ft	200.00 ml/min
2/21/2024 10:29 AM	30:00	6.67 pH	18.29 °C	1,855.7 µS/cm	0.28 mg/L	1.54 NTU	-42.8 mV	14.02 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-04	Grab.

Low-Flow Test Report:

Test Date / Time: 2/20/2024 3:01:15 PM
Project: Plant Hammond
Operator Name: Jacob Tracy

Location Name: PT-05 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 25.39 ft Total Depth: 35.39 ft Initial Depth to Water: 14.21 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 30.39 ft Estimated Total Volume Pumped: 10 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.04 ft	Instrument Used: Aqua TROLL 400 Serial Number: 968202
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Test Notes:
Five bottles: Full App.III and IV (No RADs) and Major Ions.

Weather Conditions:
Sunny, clear.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/20/2024 3:01 PM	00:00	6.52 pH	19.15 °C	2,085.5 µS/cm	1.48 mg/L	3.73 NTU	113.2 mV	14.25 ft	200.00 ml/min
2/20/2024 3:06 PM	05:00	6.50 pH	19.06 °C	2,116.4 µS/cm	1.18 mg/L	3.52 NTU	119.1 mV	14.25 ft	200.00 ml/min
2/20/2024 3:11 PM	10:00	6.52 pH	19.18 °C	1,976.3 µS/cm	1.28 mg/L	2.52 NTU	107.4 mV	14.25 ft	200.00 ml/min
2/20/2024 3:16 PM	15:00	6.58 pH	19.27 °C	2,270.2 µS/cm	1.01 mg/L	2.75 NTU	42.6 mV	14.25 ft	200.00 ml/min
2/20/2024 3:21 PM	20:00	6.59 pH	19.05 °C	2,285.3 µS/cm	0.88 mg/L	0.75 NTU	31.0 mV	14.25 ft	200.00 ml/min
2/20/2024 3:26 PM	25:00	6.60 pH	19.25 °C	2,301.0 µS/cm	1.14 mg/L	1.52 NTU	27.1 mV	14.25 ft	200.00 ml/min
2/20/2024 3:31 PM	30:00	6.64 pH	18.83 °C	2,377.9 µS/cm	0.31 mg/L	1.71 NTU	30.4 mV	14.25 ft	200.00 ml/min
2/20/2024 3:36 PM	35:00	6.68 pH	18.82 °C	2,455.2 µS/cm	0.33 mg/L	1.63 NTU	15.1 mV	14.25 ft	200.00 ml/min
2/20/2024 3:41 PM	40:00	6.70 pH	18.87 °C	2,483.4 µS/cm	0.33 mg/L	0.75 NTU	14.9 mV	14.25 ft	200.00 ml/min

Samples

Sample ID:	Description:
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HAM-PT-05	Grab.
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Low-Flow Test Report:

Test Date / Time: 2/20/2024 5:02:06 PM
Project: Plant Hammond
Operator Name: Jacob Tracy

Location Name: PT-06 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 25.22 ft Total Depth: 35.22 ft Initial Depth to Water: 14.02 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 30.22 ft Estimated Total Volume Pumped: 9 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.08 ft	Instrument Used: Aqua TROLL 400 Serial Number: 968202
---	---	--

Test Notes:
Five bottles: Full App.III and IV (No RADs) and Major Ions.

Weather Conditions:
Sunny, clear.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/20/2024 5:02 PM	00:00	6.46 pH	17.13 °C	1,900.4 µS/cm	0.56 mg/L	50.00 NTU	41.8 mV	14.02 ft	200.00 ml/min
2/20/2024 5:07 PM	05:00	6.47 pH	17.09 °C	1,817.0 µS/cm	0.43 mg/L	42.70 NTU	47.0 mV	14.02 ft	200.00 ml/min
2/20/2024 5:12 PM	10:00	6.49 pH	17.03 °C	1,850.5 µS/cm	0.36 mg/L	26.50 NTU	53.5 mV	14.02 ft	200.00 ml/min
2/20/2024 5:17 PM	15:00	6.57 pH	17.09 °C	2,001.2 µS/cm	0.27 mg/L	13.90 NTU	16.0 mV	14.02 ft	200.00 ml/min
2/20/2024 5:22 PM	20:00	6.62 pH	17.26 °C	2,088.5 µS/cm	0.36 mg/L	6.10 NTU	-3.0 mV	14.02 ft	200.00 ml/min
2/20/2024 5:27 PM	25:00	6.62 pH	17.30 °C	2,101.1 µS/cm	0.25 mg/L	5.72 NTU	-6.3 mV	14.02 ft	200.00 ml/min
2/20/2024 5:32 PM	30:00	6.62 pH	17.22 °C	2,093.7 µS/cm	0.24 mg/L	7.30 NTU	-5.0 mV	14.02 ft	200.00 ml/min
2/20/2024 5:37 PM	35:00	6.63 pH	17.26 °C	2,101.5 µS/cm	0.25 mg/L	6.42 NTU	-5.7 mV	14.10 ft	200.00 ml/min
2/20/2024 5:42 PM	40:00	6.63 pH	17.19 °C	2,121.6 µS/cm	0.25 mg/L	4.46 NTU	-9.1 mV	14.10 ft	200.00 ml/min

Samples

Sample ID:	Description:
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HAM-PT-06	Grab.
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May 2024

LABORATORY ANALYTICAL RESULTS



May 24, 2024

Kristen Jurinko
Southern Company
241 Ralph McGill Blvd NE
Bin 10160
Atlanta, GA 30308

RE: Project: Hammond AP-2
Pace Project No.: 92730671

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on May 14, 2024. 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 - Asheville
- Pace Analytical Services - Peachtree Corners, GA

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

Sincerely,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Kip Gray, Geosyntec
Christine Hug, Geosyntec Consultants, Inc.
Thomas Kessler, Geosyntec Consultants
Whitney Law, Geosyntec Consultants
Laura Midkiff, Southern Company
Caroline Nelson, Geosyntec Consultants, Inc
Anthony Szwast, Geosyntec Consultants



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Hammond AP-2

Pace Project No.: 92730671

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Laboratory ID: 99030

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Hammond AP-2

Pace Project No.: 92730671

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92730671001	HAM-PT-01	Water	05/13/24 09:54	05/14/24 12:45
92730671002	HAM-PT-02	Water	05/13/24 11:07	05/14/24 12:45
92730671003	HAM-PT-03	Water	05/13/24 12:24	05/14/24 12:45
92730671004	HAM-PT-04	Water	05/13/24 14:45	05/14/24 12:45
92730671005	HAM-PT-05	Water	05/13/24 15:54	05/14/24 12:45
92730671006	HAM-PT-06	Water	05/13/24 17:18	05/14/24 12:45
92730671007	HAM-AP2-EB-01	Water	05/13/24 17:45	05/14/24 12:45
92730671008	HAM-AP2-FB-01	Water	05/13/24 17:37	05/14/24 12:45
92730671009	HAM-AP2-FD-01	Water	05/13/24 00:00	05/14/24 12:45

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Hammond AP-2

Pace Project No.: 92730671

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92730671001	HAM-PT-01	EPA 6010D	AJM	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92730671002	HAM-PT-02	EPA 6010D	AJM	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92730671003	HAM-PT-03	EPA 6010D	AJM	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92730671004	HAM-PT-04	EPA 6010D	AJM	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92730671005	HAM-PT-05	EPA 6010D	AJM	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92730671006	HAM-PT-06	EPA 6010D	AJM	6
		EPA 6020B	CW1	13

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Hammond AP-2

Pace Project No.: 92730671

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92730671007	HAM-AP2-EB-01	EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	AJM	6
		EPA 6020B	CW1, MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92730671008	HAM-AP2-FB-01	EPA 6010D	AJM	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	AJM	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
92730671009	HAM-AP2-FD-01	SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	AJM	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	AJM	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1

PASI-A = Pace Analytical Services - Asheville

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92730671

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92730671001	HAM-PT-01					
EPA 6010D	Potassium	19.2	mg/L	0.50	05/20/24 22:19	
EPA 6010D	Calcium	63.3	mg/L	1.0	05/20/24 22:19	
EPA 6010D	Magnesium	7.6	mg/L	0.050	05/20/24 22:19	
EPA 6010D	Iron	4.1	mg/L	0.040	05/22/24 18:39	
EPA 6010D	Manganese	1.4	mg/L	0.040	05/22/24 18:39	
EPA 6010D	Sodium	41.0	mg/L	1.0	05/22/24 18:39	
EPA 6020B	Arsenic	0.0017J	mg/L	0.0050	05/21/24 15:40	B
EPA 6020B	Barium	0.027	mg/L	0.0050	05/21/24 15:40	
EPA 6020B	Boron	1.8	mg/L	0.040	05/21/24 15:40	
EPA 6020B	Cobalt	0.0051	mg/L	0.0050	05/21/24 15:40	
SM 2540C-2015	Total Dissolved Solids	399	mg/L	25.0	05/15/24 12:29	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	143	mg/L	5.0	05/22/24 16:01	
SM 2320B-2011	Alkalinity, Total as CaCO3	143	mg/L	5.0	05/22/24 16:01	
SM 4500-S2D-2011	Sulfide	0.044J	mg/L	0.10	05/16/24 06:01	
EPA 300.0 Rev 2.1 1993	Chloride	13.5	mg/L	1.0	05/15/24 03:52	
EPA 300.0 Rev 2.1 1993	Fluoride	0.20	mg/L	0.10	05/15/24 03:52	
EPA 300.0 Rev 2.1 1993	Sulfate	134	mg/L	3.0	05/15/24 12:31	
92730671002	HAM-PT-02					
EPA 6010D	Potassium	5.3	mg/L	0.50	05/20/24 22:22	M1
EPA 6010D	Calcium	218	mg/L	1.0	05/20/24 22:22	M1
EPA 6010D	Magnesium	23.8	mg/L	0.050	05/20/24 22:22	M1
EPA 6010D	Iron	7.9	mg/L	0.040	05/22/24 18:42	M1
EPA 6010D	Manganese	9.2	mg/L	0.040	05/22/24 18:42	M1
EPA 6010D	Sodium	209	mg/L	1.0	05/22/24 18:42	M1
EPA 6020B	Antimony	0.0011J	mg/L	0.0030	05/21/24 15:54	
EPA 6020B	Arsenic	0.0016J	mg/L	0.0050	05/21/24 15:54	B
EPA 6020B	Barium	0.040	mg/L	0.0050	05/21/24 15:54	
EPA 6020B	Boron	5.4	mg/L	0.040	05/21/24 15:54	
EPA 6020B	Cobalt	0.027	mg/L	0.0050	05/21/24 15:54	
SM 2540C-2015	Total Dissolved Solids	1460	mg/L	50.0	05/15/24 12:30	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	263	mg/L	5.0	05/22/24 16:09	
SM 2320B-2011	Alkalinity, Total as CaCO3	263	mg/L	5.0	05/22/24 16:09	
EPA 300.0 Rev 2.1 1993	Chloride	112	mg/L	14.0	05/15/24 12:46	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	05/15/24 04:07	
EPA 300.0 Rev 2.1 1993	Sulfate	690	mg/L	14.0	05/15/24 12:46	
92730671003	HAM-PT-03					
EPA 6010D	Potassium	5.4	mg/L	0.50	05/20/24 22:36	
EPA 6010D	Calcium	242	mg/L	1.0	05/20/24 22:36	
EPA 6010D	Magnesium	24.0	mg/L	0.050	05/20/24 22:36	
EPA 6010D	Manganese	4.7	mg/L	0.040	05/22/24 18:53	
EPA 6010D	Sodium	42.9	mg/L	1.0	05/22/24 18:53	
EPA 6020B	Arsenic	0.0028J	mg/L	0.0050	05/21/24 15:58	B
EPA 6020B	Barium	0.019	mg/L	0.0050	05/21/24 15:58	
EPA 6020B	Beryllium	0.0015	mg/L	0.00050	05/21/24 15:58	
EPA 6020B	Boron	5.9	mg/L	0.040	05/21/24 15:58	
EPA 6020B	Cadmium	0.00051	mg/L	0.00050	05/21/24 15:58	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92730671

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92730671003	HAM-PT-03					
EPA 6020B	Cobalt	0.075	mg/L	0.0050	05/21/24 15:58	
EPA 6020B	Lead	0.0012	mg/L	0.0010	05/21/24 15:58	
EPA 6020B	Selenium	0.0078	mg/L	0.0050	05/21/24 15:58	
SM 2540C-2015	Total Dissolved Solids	1230	mg/L	50.0	05/15/24 12:30	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	9.2	mg/L	5.0	05/22/24 16:18	
SM 2320B-2011	Alkalinity, Total as CaCO3	9.2	mg/L	5.0	05/22/24 16:18	
EPA 300.0 Rev 2.1 1993	Chloride	91.0	mg/L	1.0	05/15/24 04:21	
EPA 300.0 Rev 2.1 1993	Fluoride	0.48	mg/L	0.10	05/15/24 04:21	
EPA 300.0 Rev 2.1 1993	Sulfate	656	mg/L	13.0	05/15/24 13:01	
92730671004	HAM-PT-04					
EPA 6010D	Potassium	7.6	mg/L	0.50	05/20/24 22:40	
EPA 6010D	Calcium	257	mg/L	1.0	05/20/24 22:40	
EPA 6010D	Magnesium	21.1	mg/L	0.050	05/20/24 22:40	
EPA 6010D	Iron	5.2	mg/L	0.040	05/22/24 18:57	
EPA 6010D	Manganese	13.3	mg/L	0.040	05/22/24 18:57	
EPA 6010D	Sodium	125	mg/L	1.0	05/22/24 18:57	
EPA 6020B	Arsenic	0.0058	mg/L	0.0050	05/21/24 16:02	B
EPA 6020B	Barium	0.035	mg/L	0.0050	05/21/24 16:02	
EPA 6020B	Boron	6.6	mg/L	0.040	05/21/24 16:02	
EPA 6020B	Cobalt	0.039	mg/L	0.0050	05/21/24 16:02	
EPA 6020B	Lithium	0.0028J	mg/L	0.030	05/21/24 16:02	
EPA 6020B	Molybdenum	0.00072J	mg/L	0.010	05/21/24 16:02	
EPA 6020B	Thallium	0.00046J	mg/L	0.0010	05/21/24 16:02	
SM 2540C-2015	Total Dissolved Solids	1320	mg/L	50.0	05/15/24 12:30	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	343	mg/L	5.0	05/22/24 16:24	
SM 2320B-2011	Alkalinity, Total as CaCO3	343	mg/L	5.0	05/22/24 16:24	
EPA 300.0 Rev 2.1 1993	Chloride	123	mg/L	10.0	05/15/24 13:15	
EPA 300.0 Rev 2.1 1993	Fluoride	0.081J	mg/L	0.10	05/15/24 05:45	
EPA 300.0 Rev 2.1 1993	Sulfate	462	mg/L	10.0	05/15/24 13:15	
92730671005	HAM-PT-05					
EPA 6010D	Sodium	389	mg/L	5.0	05/21/24 19:42	
EPA 6010D	Iron	0.40	mg/L	0.040	05/22/24 19:00	
EPA 6010D	Manganese	3.1	mg/L	0.040	05/22/24 19:00	
EPA 6010D	Potassium	4.7	mg/L	0.50	05/20/24 22:44	
EPA 6010D	Calcium	167	mg/L	1.0	05/20/24 22:44	
EPA 6010D	Magnesium	17.3	mg/L	0.050	05/20/24 22:44	
EPA 6020B	Barium	0.034	mg/L	0.0050	05/21/24 16:06	
EPA 6020B	Boron	5.3	mg/L	0.040	05/21/24 16:06	
EPA 6020B	Cadmium	0.00010J	mg/L	0.00050	05/21/24 16:06	
EPA 6020B	Cobalt	0.012	mg/L	0.0050	05/21/24 16:06	
EPA 6020B	Lithium	0.0032J	mg/L	0.030	05/21/24 16:06	
EPA 6020B	Molybdenum	0.00086J	mg/L	0.010	05/21/24 16:06	
SM 2540C-2015	Total Dissolved Solids	1600	mg/L	50.0	05/15/24 12:30	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	766	mg/L	5.0	05/22/24 18:57	
SM 2320B-2011	Alkalinity, Total as CaCO3	766	mg/L	5.0	05/22/24 18:57	
EPA 300.0 Rev 2.1 1993	Chloride	104	mg/L	9.0	05/15/24 13:30	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92730671

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92730671005	HAM-PT-05					
EPA 300.0 Rev 2.1 1993	Fluoride	0.079J	mg/L	0.10	05/15/24 06:00	
EPA 300.0 Rev 2.1 1993	Sulfate	452	mg/L	9.0	05/15/24 13:30	
92730671006	HAM-PT-06					
EPA 6010D	Sodium	146	mg/L	1.0	05/21/24 19:46	
EPA 6010D	Iron	0.94	mg/L	0.040	05/22/24 19:03	
EPA 6010D	Manganese	12.3	mg/L	0.040	05/22/24 19:03	
EPA 6010D	Potassium	6.2	mg/L	0.50	05/20/24 22:54	
EPA 6010D	Calcium	244	mg/L	1.0	05/20/24 22:54	
EPA 6010D	Magnesium	20.3	mg/L	0.050	05/20/24 22:54	
EPA 6020B	Arsenic	0.0021J	mg/L	0.0050	05/21/24 16:22	B
EPA 6020B	Barium	0.030	mg/L	0.0050	05/21/24 16:22	
EPA 6020B	Boron	6.9	mg/L	0.040	05/21/24 16:22	
EPA 6020B	Cadmium	0.00015J	mg/L	0.00050	05/21/24 16:22	
EPA 6020B	Cobalt	0.028	mg/L	0.0050	05/21/24 16:22	
EPA 6020B	Lithium	0.0038J	mg/L	0.030	05/21/24 16:22	
SM 2540C-2015	Total Dissolved Solids	1420	mg/L	50.0	05/15/24 12:30	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	342	mg/L	5.0	05/22/24 19:06	
SM 2320B-2011	Alkalinity, Total as CaCO3	342	mg/L	5.0	05/22/24 19:06	
EPA 300.0 Rev 2.1 1993	Chloride	136	mg/L	10.0	05/15/24 13:44	
EPA 300.0 Rev 2.1 1993	Fluoride	0.063J	mg/L	0.10	05/15/24 06:15	
EPA 300.0 Rev 2.1 1993	Sulfate	505	mg/L	10.0	05/15/24 13:44	
92730671007	HAM-AP2-EB-01					
EPA 6010D	Potassium	0.18J	mg/L	0.50	05/20/24 22:58	
92730671008	HAM-AP2-FB-01					
EPA 6020B	Boron	0.018J	mg/L	0.040	05/21/24 16:29	
SM 2540C-2015	Total Dissolved Solids	53.0	mg/L	25.0	05/15/24 12:31	
92730671009	HAM-AP2-FD-01					
EPA 6010D	Potassium	18.9	mg/L	0.50	05/20/24 23:06	
EPA 6010D	Calcium	63.2	mg/L	1.0	05/20/24 23:06	
EPA 6010D	Magnesium	7.6	mg/L	0.050	05/20/24 23:06	
EPA 6010D	Iron	4.1	mg/L	0.040	05/22/24 19:22	
EPA 6010D	Manganese	1.4	mg/L	0.040	05/22/24 19:22	
EPA 6010D	Sodium	41.7	mg/L	1.0	05/22/24 19:22	
EPA 6020B	Barium	0.027	mg/L	0.0050	05/21/24 16:33	
EPA 6020B	Boron	1.7	mg/L	0.040	05/21/24 16:33	
EPA 6020B	Cobalt	0.0050	mg/L	0.0050	05/21/24 16:33	
SM 2540C-2015	Total Dissolved Solids	399	mg/L	25.0	05/15/24 12:31	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	144	mg/L	5.0	05/22/24 17:04	
SM 2320B-2011	Alkalinity, Total as CaCO3	144	mg/L	5.0	05/22/24 17:04	
EPA 300.0 Rev 2.1 1993	Chloride	13.5	mg/L	1.0	05/15/24 06:30	
EPA 300.0 Rev 2.1 1993	Fluoride	0.17	mg/L	0.10	05/15/24 06:30	
EPA 300.0 Rev 2.1 1993	Sulfate	136	mg/L	3.0	05/15/24 13:59	M1

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ANALYTICAL RESULTS

Project: Hammond AP-2
Pace Project No.: 92730671

Sample: HAM-PT-01		Lab ID: 92730671001		Collected: 05/13/24 09:54		Received: 05/14/24 12:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Potassium	19.2	mg/L	0.50	0.15	1	05/15/24 14:33	05/20/24 22:19	7440-09-7	
Calcium	63.3	mg/L	1.0	0.12	1	05/15/24 14:33	05/20/24 22:19	7440-70-2	
Magnesium	7.6	mg/L	0.050	0.012	1	05/15/24 14:33	05/20/24 22:19	7439-95-4	
Iron	4.1	mg/L	0.040	0.025	1	05/15/24 14:33	05/22/24 18:39	7439-89-6	
Manganese	1.4	mg/L	0.040	0.011	1	05/15/24 14:33	05/22/24 18:39	7439-96-5	
Sodium	41.0	mg/L	1.0	0.58	1	05/15/24 14:33	05/22/24 18:39	7440-23-5	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	05/15/24 14:21	05/21/24 15:40	7440-36-0	
Arsenic	0.0017J	mg/L	0.0050	0.00084	1	05/15/24 14:21	05/21/24 15:40	7440-38-2	B
Barium	0.027	mg/L	0.0050	0.00047	1	05/15/24 14:21	05/21/24 15:40	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	05/15/24 14:21	05/21/24 15:40	7440-41-7	
Boron	1.8	mg/L	0.040	0.012	1	05/15/24 14:21	05/21/24 15:40	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	05/15/24 14:21	05/21/24 15:40	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	05/15/24 14:21	05/21/24 15:40	7440-47-3	
Cobalt	0.0051	mg/L	0.0050	0.00032	1	05/15/24 14:21	05/21/24 15:40	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	05/15/24 14:21	05/21/24 15:40	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	05/15/24 14:21	05/21/24 15:40	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	05/15/24 14:21	05/21/24 15:40	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	05/15/24 14:21	05/21/24 15:40	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	05/15/24 14:21	05/21/24 15:40	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	05/20/24 11:30	05/20/24 14:14	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	399	mg/L	25.0	25.0	1		05/15/24 12:29		
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	143	mg/L	5.0	5.0	1		05/22/24 16:01		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		05/22/24 16:01		
Alkalinity, Total as CaCO3	143	mg/L	5.0	5.0	1		05/22/24 16:01		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	0.044J	mg/L	0.10	0.022	1		05/16/24 06:01	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	13.5	mg/L	1.0	0.60	1		05/15/24 03:52	16887-00-6	

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92730671

Sample: HAM-PT-01		Lab ID: 92730671001		Collected: 05/13/24 09:54		Received: 05/14/24 12:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.20	mg/L	0.10	0.050	1		05/15/24 03:52	16984-48-8	
Sulfate	134	mg/L	3.0	1.5	3		05/15/24 12:31	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-2
Pace Project No.: 92730671

Sample: HAM-PT-02		Lab ID: 92730671002		Collected: 05/13/24 11:07		Received: 05/14/24 12:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Potassium	5.3	mg/L	0.50	0.15	1	05/15/24 14:33	05/20/24 22:22	7440-09-7	M1
Calcium	218	mg/L	1.0	0.12	1	05/15/24 14:33	05/20/24 22:22	7440-70-2	M1
Magnesium	23.8	mg/L	0.050	0.012	1	05/15/24 14:33	05/20/24 22:22	7439-95-4	M1
Iron	7.9	mg/L	0.040	0.025	1	05/15/24 14:33	05/22/24 18:42	7439-89-6	M1
Manganese	9.2	mg/L	0.040	0.011	1	05/15/24 14:33	05/22/24 18:42	7439-96-5	M1
Sodium	209	mg/L	1.0	0.58	1	05/15/24 14:33	05/22/24 18:42	7440-23-5	M1
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	0.0011J	mg/L	0.0030	0.00054	1	05/15/24 14:21	05/21/24 15:54	7440-36-0	B
Arsenic	0.0016J	mg/L	0.0050	0.00084	1	05/15/24 14:21	05/21/24 15:54	7440-38-2	
Barium	0.040	mg/L	0.0050	0.00047	1	05/15/24 14:21	05/21/24 15:54	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	05/15/24 14:21	05/21/24 15:54	7440-41-7	
Boron	5.4	mg/L	0.040	0.012	1	05/15/24 14:21	05/21/24 15:54	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	05/15/24 14:21	05/21/24 15:54	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	05/15/24 14:21	05/21/24 15:54	7440-47-3	
Cobalt	0.027	mg/L	0.0050	0.00032	1	05/15/24 14:21	05/21/24 15:54	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	05/15/24 14:21	05/21/24 15:54	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	05/15/24 14:21	05/21/24 15:54	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	05/15/24 14:21	05/21/24 15:54	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	05/15/24 14:21	05/21/24 15:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	05/15/24 14:21	05/21/24 15:54	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	05/20/24 11:30	05/20/24 14:21	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1460	mg/L	50.0	50.0	1		05/15/24 12:30		
2320B Alkalinity									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	263	mg/L	5.0	5.0	1		05/22/24 16:09		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		05/22/24 16:09		
Alkalinity, Total as CaCO3	263	mg/L	5.0	5.0	1		05/22/24 16:09		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		05/16/24 06:02	18496-25-8	M1
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	112	mg/L	14.0	8.4	14		05/15/24 12:46	16887-00-6	

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92730671

Sample: HAM-PT-02		Lab ID: 92730671002		Collected: 05/13/24 11:07		Received: 05/14/24 12:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.12	mg/L	0.10	0.050	1		05/15/24 04:07	16984-48-8	
Sulfate	690	mg/L	14.0	7.0	14		05/15/24 12:46	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-2
Pace Project No.: 92730671

Sample: HAM-PT-03		Lab ID: 92730671003		Collected: 05/13/24 12:24		Received: 05/14/24 12:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Potassium	5.4	mg/L	0.50	0.15	1	05/15/24 14:33	05/20/24 22:36	7440-09-7	
Calcium	242	mg/L	1.0	0.12	1	05/15/24 14:33	05/20/24 22:36	7440-70-2	
Magnesium	24.0	mg/L	0.050	0.012	1	05/15/24 14:33	05/20/24 22:36	7439-95-4	
Iron	ND	mg/L	0.040	0.025	1	05/15/24 14:33	05/22/24 18:53	7439-89-6	
Manganese	4.7	mg/L	0.040	0.011	1	05/15/24 14:33	05/22/24 18:53	7439-96-5	
Sodium	42.9	mg/L	1.0	0.58	1	05/15/24 14:33	05/22/24 18:53	7440-23-5	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	05/15/24 14:21	05/21/24 15:58	7440-36-0	
Arsenic	0.0028J	mg/L	0.0050	0.00084	1	05/15/24 14:21	05/21/24 15:58	7440-38-2	B
Barium	0.019	mg/L	0.0050	0.00047	1	05/15/24 14:21	05/21/24 15:58	7440-39-3	
Beryllium	0.0015	mg/L	0.00050	0.000094	1	05/15/24 14:21	05/21/24 15:58	7440-41-7	
Boron	5.9	mg/L	0.040	0.012	1	05/15/24 14:21	05/21/24 15:58	7440-42-8	
Cadmium	0.00051	mg/L	0.00050	0.00010	1	05/15/24 14:21	05/21/24 15:58	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	05/15/24 14:21	05/21/24 15:58	7440-47-3	
Cobalt	0.075	mg/L	0.0050	0.00032	1	05/15/24 14:21	05/21/24 15:58	7440-48-4	
Lead	0.0012	mg/L	0.0010	0.00016	1	05/15/24 14:21	05/21/24 15:58	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	05/15/24 14:21	05/21/24 15:58	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	05/15/24 14:21	05/21/24 15:58	7439-98-7	
Selenium	0.0078	mg/L	0.0050	0.00096	1	05/15/24 14:21	05/21/24 15:58	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	05/15/24 14:21	05/21/24 15:58	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	05/20/24 11:30	05/20/24 14:24	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1230	mg/L	50.0	50.0	1		05/15/24 12:30		
2320B Alkalinity									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	9.2	mg/L	5.0	5.0	1		05/22/24 16:18		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		05/22/24 16:18		
Alkalinity, Total as CaCO3	9.2	mg/L	5.0	5.0	1		05/22/24 16:18		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		05/16/24 06:03	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	91.0	mg/L	1.0	0.60	1		05/15/24 04:21	16887-00-6	

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ANALYTICAL RESULTS

Project: Hammond AP-2
Pace Project No.: 92730671

Sample: HAM-PT-03		Lab ID: 92730671003		Collected: 05/13/24 12:24		Received: 05/14/24 12:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.48	mg/L	0.10	0.050	1		05/15/24 04:21	16984-48-8	
Sulfate	656	mg/L	13.0	6.5	13		05/15/24 13:01	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-2
Pace Project No.: 92730671

Sample: HAM-PT-04		Lab ID: 92730671004		Collected: 05/13/24 14:45		Received: 05/14/24 12:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Potassium	7.6	mg/L	0.50	0.15	1	05/15/24 14:33	05/20/24 22:40	7440-09-7	
Calcium	257	mg/L	1.0	0.12	1	05/15/24 14:33	05/20/24 22:40	7440-70-2	
Magnesium	21.1	mg/L	0.050	0.012	1	05/15/24 14:33	05/20/24 22:40	7439-95-4	
Iron	5.2	mg/L	0.040	0.025	1	05/15/24 14:33	05/22/24 18:57	7439-89-6	
Manganese	13.3	mg/L	0.040	0.011	1	05/15/24 14:33	05/22/24 18:57	7439-96-5	
Sodium	125	mg/L	1.0	0.58	1	05/15/24 14:33	05/22/24 18:57	7440-23-5	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	05/15/24 14:21	05/21/24 16:02	7440-36-0	
Arsenic	0.0058	mg/L	0.0050	0.00084	1	05/15/24 14:21	05/21/24 16:02	7440-38-2	B
Barium	0.035	mg/L	0.0050	0.00047	1	05/15/24 14:21	05/21/24 16:02	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	05/15/24 14:21	05/21/24 16:02	7440-41-7	
Boron	6.6	mg/L	0.040	0.012	1	05/15/24 14:21	05/21/24 16:02	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	05/15/24 14:21	05/21/24 16:02	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	05/15/24 14:21	05/21/24 16:02	7440-47-3	
Cobalt	0.039	mg/L	0.0050	0.00032	1	05/15/24 14:21	05/21/24 16:02	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	05/15/24 14:21	05/21/24 16:02	7439-92-1	
Lithium	0.0028J	mg/L	0.030	0.0016	1	05/15/24 14:21	05/21/24 16:02	7439-93-2	
Molybdenum	0.00072J	mg/L	0.010	0.00062	1	05/15/24 14:21	05/21/24 16:02	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	05/15/24 14:21	05/21/24 16:02	7782-49-2	
Thallium	0.00046J	mg/L	0.0010	0.00038	1	05/15/24 14:21	05/21/24 16:02	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	05/20/24 11:30	05/20/24 14:35	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1320	mg/L	50.0	50.0	1		05/15/24 12:30		
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	343	mg/L	5.0	5.0	1		05/22/24 16:24		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		05/22/24 16:24		
Alkalinity, Total as CaCO3	343	mg/L	5.0	5.0	1		05/22/24 16:24		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		05/16/24 06:03	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	123	mg/L	10.0	6.0	10		05/15/24 13:15	16887-00-6	

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92730671

Sample: HAM-PT-04		Lab ID: 92730671004		Collected: 05/13/24 14:45		Received: 05/14/24 12:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.081J	mg/L	0.10	0.050	1		05/15/24 05:45	16984-48-8	
Sulfate	462	mg/L	10.0	5.0	10		05/15/24 13:15	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-2
Pace Project No.: 92730671

Sample: HAM-PT-05		Lab ID: 92730671005		Collected: 05/13/24 15:54		Received: 05/14/24 12:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Sodium	389	mg/L	5.0	2.9	5	05/15/24 14:33	05/21/24 19:42	7440-23-5	
Iron	0.40	mg/L	0.040	0.025	1	05/15/24 14:33	05/22/24 19:00	7439-89-6	
Manganese	3.1	mg/L	0.040	0.011	1	05/15/24 14:33	05/22/24 19:00	7439-96-5	
Potassium	4.7	mg/L	0.50	0.15	1	05/15/24 14:33	05/20/24 22:44	7440-09-7	
Calcium	167	mg/L	1.0	0.12	1	05/15/24 14:33	05/20/24 22:44	7440-70-2	
Magnesium	17.3	mg/L	0.050	0.012	1	05/15/24 14:33	05/20/24 22:44	7439-95-4	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	05/15/24 14:21	05/21/24 16:06	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	05/15/24 14:21	05/21/24 16:06	7440-38-2	
Barium	0.034	mg/L	0.0050	0.00047	1	05/15/24 14:21	05/21/24 16:06	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	05/15/24 14:21	05/21/24 16:06	7440-41-7	
Boron	5.3	mg/L	0.040	0.012	1	05/15/24 14:21	05/21/24 16:06	7440-42-8	
Cadmium	0.00010J	mg/L	0.00050	0.00010	1	05/15/24 14:21	05/21/24 16:06	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	05/15/24 14:21	05/21/24 16:06	7440-47-3	
Cobalt	0.012	mg/L	0.0050	0.00032	1	05/15/24 14:21	05/21/24 16:06	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	05/15/24 14:21	05/21/24 16:06	7439-92-1	
Lithium	0.0032J	mg/L	0.030	0.0016	1	05/15/24 14:21	05/21/24 16:06	7439-93-2	
Molybdenum	0.00086J	mg/L	0.010	0.00062	1	05/15/24 14:21	05/21/24 16:06	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	05/15/24 14:21	05/21/24 16:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	05/15/24 14:21	05/21/24 16:06	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	05/20/24 11:30	05/20/24 14:37	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1600	mg/L	50.0	50.0	1		05/15/24 12:30		
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	766	mg/L	5.0	5.0	1		05/22/24 18:57		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		05/22/24 18:57		
Alkalinity, Total as CaCO3	766	mg/L	5.0	5.0	1		05/22/24 18:57		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		05/16/24 06:04	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	104	mg/L	9.0	5.4	9		05/15/24 13:30	16887-00-6	

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92730671

Sample: HAM-PT-05		Lab ID: 92730671005		Collected: 05/13/24 15:54		Received: 05/14/24 12:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.079J	mg/L	0.10	0.050	1		05/15/24 06:00	16984-48-8	
Sulfate	452	mg/L	9.0	4.5	9		05/15/24 13:30	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-2
Pace Project No.: 92730671

Sample: HAM-PT-06 Lab ID: 92730671006 Collected: 05/13/24 17:18 Received: 05/14/24 12:45 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Sodium	146	mg/L	1.0	0.58	1	05/15/24 14:33	05/21/24 19:46	7440-23-5	
Iron	0.94	mg/L	0.040	0.025	1	05/15/24 14:33	05/22/24 19:03	7439-89-6	
Manganese	12.3	mg/L	0.040	0.011	1	05/15/24 14:33	05/22/24 19:03	7439-96-5	
Potassium	6.2	mg/L	0.50	0.15	1	05/15/24 14:33	05/20/24 22:54	7440-09-7	
Calcium	244	mg/L	1.0	0.12	1	05/15/24 14:33	05/20/24 22:54	7440-70-2	
Magnesium	20.3	mg/L	0.050	0.012	1	05/15/24 14:33	05/20/24 22:54	7439-95-4	
6020 MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	05/15/24 14:21	05/21/24 16:22	7440-36-0	
Arsenic	0.0021J	mg/L	0.0050	0.00084	1	05/15/24 14:21	05/21/24 16:22	7440-38-2	B
Barium	0.030	mg/L	0.0050	0.00047	1	05/15/24 14:21	05/21/24 16:22	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	05/15/24 14:21	05/21/24 16:22	7440-41-7	
Boron	6.9	mg/L	0.040	0.012	1	05/15/24 14:21	05/21/24 16:22	7440-42-8	
Cadmium	0.00015J	mg/L	0.00050	0.00010	1	05/15/24 14:21	05/21/24 16:22	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	05/15/24 14:21	05/21/24 16:22	7440-47-3	
Cobalt	0.028	mg/L	0.0050	0.00032	1	05/15/24 14:21	05/21/24 16:22	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	05/15/24 14:21	05/21/24 16:22	7439-92-1	
Lithium	0.0038J	mg/L	0.030	0.0016	1	05/15/24 14:21	05/21/24 16:22	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	05/15/24 14:21	05/21/24 16:22	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	05/15/24 14:21	05/21/24 16:22	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	05/15/24 14:21	05/21/24 16:22	7440-28-0	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	05/20/24 11:30	05/20/24 14:40	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1420	mg/L	50.0	50.0	1		05/15/24 12:30		
2320B Alkalinity Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	342	mg/L	5.0	5.0	1		05/22/24 19:06		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		05/22/24 19:06		
Alkalinity, Total as CaCO3	342	mg/L	5.0	5.0	1		05/22/24 19:06		
4500S2D Sulfide Water Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		05/16/24 06:04	18496-25-8	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	136	mg/L	10.0	6.0	10		05/15/24 13:44	16887-00-6	

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ANALYTICAL RESULTS

Project: Hammond AP-2
Pace Project No.: 92730671

Sample: HAM-PT-06		Lab ID: 92730671006		Collected: 05/13/24 17:18		Received: 05/14/24 12:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.063J	mg/L	0.10	0.050	1		05/15/24 06:15	16984-48-8	
Sulfate	505	mg/L	10.0	5.0	10		05/15/24 13:44	14808-79-8	

REPORT OF LABORATORY ANALYSIS



ANALYTICAL RESULTS

Project: Hammond AP-2
Pace Project No.: 92730671

Sample: HAM-AP2-EB-01		Lab ID: 92730671007		Collected: 05/13/24 17:45		Received: 05/14/24 12:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Manganese	ND	mg/L	0.040	0.011	1	05/15/24 14:33	05/20/24 22:58	7439-96-5	
Potassium	0.18J	mg/L	0.50	0.15	1	05/15/24 14:33	05/20/24 22:58	7440-09-7	
Calcium	ND	mg/L	1.0	0.12	1	05/15/24 14:33	05/20/24 22:58	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	05/15/24 14:33	05/20/24 22:58	7439-95-4	
Iron	ND	mg/L	0.040	0.025	1	05/15/24 14:33	05/22/24 19:14	7439-89-6	
Sodium	ND	mg/L	1.0	0.58	1	05/15/24 14:33	05/22/24 19:14	7440-23-5	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	05/15/24 14:21	05/21/24 16:26	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	05/15/24 14:21	05/21/24 16:26	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	05/15/24 14:21	05/21/24 16:26	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	05/15/24 14:21	05/21/24 16:26	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	05/15/24 14:21	05/22/24 12:23	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	05/15/24 14:21	05/21/24 16:26	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	05/15/24 14:21	05/21/24 16:26	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	05/15/24 14:21	05/21/24 16:26	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	05/15/24 14:21	05/21/24 16:26	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	05/15/24 14:21	05/21/24 16:26	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	05/15/24 14:21	05/21/24 16:26	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	05/15/24 14:21	05/21/24 16:26	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	05/15/24 14:21	05/21/24 16:26	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	05/20/24 11:30	05/20/24 14:42	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		05/15/24 12:31		
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		05/22/24 16:47		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		05/22/24 16:47		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		05/22/24 16:47		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		05/16/24 06:04	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	ND	mg/L	1.0	0.60	1		05/15/24 00:58	16887-00-6	

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92730671

Sample: HAM-AP2-EB-01		Lab ID: 92730671007		Collected: 05/13/24 17:45		Received: 05/14/24 12:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	ND	mg/L	0.10	0.050	1		05/15/24 00:58	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		05/15/24 00:58	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-2
Pace Project No.: 92730671

Sample: HAM-AP2-FB-01		Lab ID: 92730671008		Collected: 05/13/24 17:37		Received: 05/14/24 12:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	ND	mg/L	0.040	0.025	1	05/15/24 14:33	05/22/24 19:18	7439-89-6	
Sodium	ND	mg/L	1.0	0.58	1	05/15/24 14:33	05/22/24 19:18	7440-23-5	
Manganese	ND	mg/L	0.040	0.011	1	05/15/24 14:33	05/20/24 23:02	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	05/15/24 14:33	05/20/24 23:02	7440-09-7	
Calcium	ND	mg/L	1.0	0.12	1	05/15/24 14:33	05/20/24 23:02	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	05/15/24 14:33	05/20/24 23:02	7439-95-4	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	05/15/24 14:21	05/21/24 16:29	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	05/15/24 14:21	05/21/24 16:29	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	05/15/24 14:21	05/21/24 16:29	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	05/15/24 14:21	05/21/24 16:29	7440-41-7	
Boron	0.018J	mg/L	0.040	0.012	1	05/15/24 14:21	05/21/24 16:29	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	05/15/24 14:21	05/21/24 16:29	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	05/15/24 14:21	05/21/24 16:29	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	05/15/24 14:21	05/21/24 16:29	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	05/15/24 14:21	05/21/24 16:29	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	05/15/24 14:21	05/21/24 16:29	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	05/15/24 14:21	05/21/24 16:29	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	05/15/24 14:21	05/21/24 16:29	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	05/15/24 14:21	05/21/24 16:29	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	05/20/24 11:30	05/20/24 14:50	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	53.0	mg/L	25.0	25.0	1		05/15/24 12:31		
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		05/22/24 17:00		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		05/22/24 17:00		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		05/22/24 17:00		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		05/16/24 06:06	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	ND	mg/L	1.0	0.60	1		05/15/24 02:37	16887-00-6	

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92730671

Sample: HAM-AP2-FB-01		Lab ID: 92730671008		Collected: 05/13/24 17:37		Received: 05/14/24 12:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	ND	mg/L	0.10	0.050	1		05/15/24 02:37	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		05/15/24 02:37	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-2
Pace Project No.: 92730671

Sample: HAM-AP2-FD-01		Lab ID: 92730671009		Collected: 05/13/24 00:00		Received: 05/14/24 12:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Potassium	18.9	mg/L	0.50	0.15	1	05/15/24 14:33	05/20/24 23:06	7440-09-7	
Calcium	63.2	mg/L	1.0	0.12	1	05/15/24 14:33	05/20/24 23:06	7440-70-2	
Magnesium	7.6	mg/L	0.050	0.012	1	05/15/24 14:33	05/20/24 23:06	7439-95-4	
Iron	4.1	mg/L	0.040	0.025	1	05/15/24 14:33	05/22/24 19:22	7439-89-6	
Manganese	1.4	mg/L	0.040	0.011	1	05/15/24 14:33	05/22/24 19:22	7439-96-5	
Sodium	41.7	mg/L	1.0	0.58	1	05/15/24 14:33	05/22/24 19:22	7440-23-5	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00054	1	05/15/24 14:21	05/21/24 16:33	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	05/15/24 14:21	05/21/24 16:33	7440-38-2	
Barium	0.027	mg/L	0.0050	0.00047	1	05/15/24 14:21	05/21/24 16:33	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	05/15/24 14:21	05/21/24 16:33	7440-41-7	
Boron	1.7	mg/L	0.040	0.012	1	05/15/24 14:21	05/21/24 16:33	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	05/15/24 14:21	05/21/24 16:33	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	05/15/24 14:21	05/21/24 16:33	7440-47-3	
Cobalt	0.0050	mg/L	0.0050	0.00032	1	05/15/24 14:21	05/21/24 16:33	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	05/15/24 14:21	05/21/24 16:33	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	05/15/24 14:21	05/21/24 16:33	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	05/15/24 14:21	05/21/24 16:33	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	05/15/24 14:21	05/21/24 16:33	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	05/15/24 14:21	05/21/24 16:33	7440-28-0	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	05/20/24 11:30	05/20/24 14:53	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	399	mg/L	25.0	25.0	1		05/15/24 12:31		
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO ₃)	144	mg/L	5.0	5.0	1		05/22/24 17:04		
Alkalinity,Carbonate (CaCO ₃)	ND	mg/L	5.0	5.0	1		05/22/24 17:04		
Alkalinity, Total as CaCO ₃	144	mg/L	5.0	5.0	1		05/22/24 17:04		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		05/16/24 06:06	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	13.5	mg/L	1.0	0.60	1		05/15/24 06:30	16887-00-6	

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ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92730671

Sample: HAM-AP2-FD-01		Lab ID: 92730671009		Collected: 05/13/24 00:00		Received: 05/14/24 12:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	0.17	mg/L	0.10	0.050	1		05/15/24 06:30	16984-48-8	
Sulfate	136	mg/L	3.0	1.5	3		05/15/24 13:59	14808-79-8	M1

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QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92730671

QC Batch: 854790

Analysis Method: EPA 6010D

QC Batch Method: EPA 3010A

Analysis Description: 6010D ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92730671001, 92730671002, 92730671003, 92730671004, 92730671005, 92730671006, 92730671007, 92730671008, 92730671009

METHOD BLANK: 4410396

Matrix: Water

Associated Lab Samples: 92730671001, 92730671002, 92730671003, 92730671004, 92730671005, 92730671006, 92730671007, 92730671008, 92730671009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	05/20/24 22:12	
Iron	mg/L	ND	0.040	0.025	05/22/24 18:32	
Magnesium	mg/L	ND	0.050	0.012	05/20/24 22:12	
Manganese	mg/L	ND	0.040	0.011	05/20/24 22:12	
Potassium	mg/L	ND	0.50	0.15	05/20/24 22:12	
Sodium	mg/L	ND	1.0	0.58	05/22/24 18:32	

LABORATORY CONTROL SAMPLE: 4410397

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	
Iron	mg/L	1	1.0	103	80-120	
Magnesium	mg/L	1	1.1	105	80-120	
Manganese	mg/L	1	1.0	100	80-120	
Potassium	mg/L	1	1.0	103	80-120	
Sodium	mg/L	1	1.1	109	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4410398 4410399

Parameter	Units	92730671002	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result										
Calcium	mg/L	218	1	1	222	227	357	866	75-125	2	20	M1
Iron	mg/L	7.9	1	1	9.0	9.3	111	131	75-125	2	20	M1
Magnesium	mg/L	23.8	1	1	25.4	25.9	164	217	75-125	2	20	M1
Manganese	mg/L	9.2	1	1	9.7	10	47	76	75-125	3	20	M1
Potassium	mg/L	5.3	1	1	6.6	6.8	131	148	75-125	3	20	M1
Sodium	mg/L	209	1	1	211	216	198	768	75-125	3	20	M1

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QUALITY CONTROL DATA

Project: Hammond AP-2
Pace Project No.: 92730671

QC Batch: 854789 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92730671001, 92730671002, 92730671003, 92730671004, 92730671005, 92730671006, 92730671007, 92730671008, 92730671009

METHOD BLANK: 4410392 Matrix: Water
Associated Lab Samples: 92730671001, 92730671002, 92730671003, 92730671004, 92730671005, 92730671006, 92730671007, 92730671008, 92730671009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	05/21/24 15:32	
Arsenic	mg/L	0.0011J	0.0050	0.00084	05/21/24 15:32	
Barium	mg/L	ND	0.0050	0.00047	05/21/24 15:32	
Beryllium	mg/L	ND	0.00050	0.000094	05/21/24 15:32	
Boron	mg/L	ND	0.040	0.012	05/21/24 15:32	
Cadmium	mg/L	ND	0.00050	0.00010	05/21/24 15:32	
Chromium	mg/L	ND	0.0050	0.0019	05/21/24 15:32	
Cobalt	mg/L	ND	0.0050	0.00032	05/21/24 15:32	
Lead	mg/L	ND	0.0010	0.00016	05/21/24 15:32	
Lithium	mg/L	ND	0.030	0.0016	05/21/24 15:32	
Molybdenum	mg/L	ND	0.010	0.00062	05/21/24 15:32	
Selenium	mg/L	ND	0.0050	0.00096	05/21/24 15:32	
Thallium	mg/L	ND	0.0010	0.00038	05/21/24 15:32	

LABORATORY CONTROL SAMPLE: 4410393

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	103	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.1	0.11	108	80-120	
Boron	mg/L	1	1.1	106	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.11	108	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.10	100	80-120	
Thallium	mg/L	0.1	0.097	97	80-120	

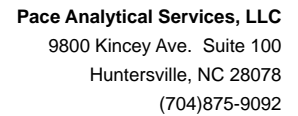
MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4410394 4410395

Parameter	Units	92730671001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	103	104	75-125	1	20	

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Project: Hammond AP-2
Pace Project No.: 92730671

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QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92730671

QC Batch:	855735	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92730671001, 92730671002, 92730671003, 92730671004, 92730671005, 92730671006, 92730671007, 92730671008, 92730671009		

METHOD BLANK:	4415100	Matrix:	Water
Associated Lab Samples:	92730671001, 92730671002, 92730671003, 92730671004, 92730671005, 92730671006, 92730671007, 92730671008, 92730671009		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	05/20/24 14:08	

LABORATORY CONTROL SAMPLE: 4415101						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0029	115	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:												
4415102					4415103							
		92730671003	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Parameter	Units	Result										
Mercury	mg/L	ND	0.0025	0.0025	0.0022	0.0023	89	90	75-125	1	20	

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QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92730671

QC Batch: 854678 Analysis Method: SM 2540C-2015
QC Batch Method: SM 2540C-2015 Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92730671001, 92730671002, 92730671003, 92730671004, 92730671005, 92730671006, 92730671007, 92730671008, 92730671009

METHOD BLANK: 4409845 Matrix: Water
Associated Lab Samples: 92730671001, 92730671002, 92730671003, 92730671004, 92730671005, 92730671006, 92730671007, 92730671008, 92730671009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	05/15/24 12:28	

LABORATORY CONTROL SAMPLE: 4409846

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	380	95	80-120	

SAMPLE DUPLICATE: 4409847

Parameter	Units	92730671001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	399	381	5	10	

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QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92730671

QC Batch:	856335	Analysis Method:	SM 2320B-2011
QC Batch Method:	SM 2320B-2011	Analysis Description:	2320B Alkalinity
		Laboratory:	Pace Analytical Services - Asheville
Associated Lab Samples:	92730671001, 92730671002, 92730671003, 92730671004, 92730671005, 92730671006, 92730671007, 92730671008, 92730671009		

METHOD BLANK:	4417944	Matrix:	Water
Associated Lab Samples:	92730671001, 92730671002, 92730671003, 92730671004, 92730671005, 92730671006, 92730671007, 92730671008, 92730671009		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	ND	5.0	5.0	05/22/24 15:43	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	5.0	5.0	05/22/24 15:43	
Alkalinity,Carbonate (CaCO ₃)	mg/L	ND	5.0	5.0	05/22/24 15:43	

LABORATORY CONTROL SAMPLE:		4417945				
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	51.1	102	80-120	

LABORATORY CONTROL SAMPLE:		4417946				
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	50.6	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		4417947			4417948							
Parameter	Units	92731542007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	33.5	50	50	84.4	83.6	102	100	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		4417949			4417950							
Parameter	Units	92731542008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	51.0	50	50	102	103	103	103	80-120	0	25	

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QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92730671

QC Batch: 854607

Analysis Method: SM 4500-S2D-2011

QC Batch Method: SM 4500-S2D-2011

Analysis Description: 4500S2D Sulfide Water

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92730671001, 92730671002, 92730671003, 92730671004, 92730671005, 92730671006, 92730671007, 92730671008, 92730671009

METHOD BLANK: 4409627

Matrix: Water

Associated Lab Samples: 92730671001, 92730671002, 92730671003, 92730671004, 92730671005, 92730671006, 92730671007, 92730671008, 92730671009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	05/16/24 05:56	

LABORATORY CONTROL SAMPLE: 4409628

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.53	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4409629 4409630

Parameter	Units	92730671002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.086J	0.064J	17	13	80-120		10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4409631 4409632

Parameter	Units	92730671007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.54	0.54	108	108	80-120	0	10	

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QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92730671

QC Batch:	854545	Analysis Method:	EPA 300.0 Rev 2.1 1993
QC Batch Method:	EPA 300.0 Rev 2.1 1993	Analysis Description:	300.0 IC Anions
		Laboratory:	Pace Analytical Services - Asheville
Associated Lab Samples:	92730671001, 92730671002, 92730671003, 92730671004, 92730671005, 92730671006, 92730671007, 92730671008, 92730671009		

METHOD BLANK:	4409395	Matrix:	Water
Associated Lab Samples:	92730671001, 92730671002, 92730671003, 92730671004, 92730671005, 92730671006, 92730671007, 92730671008, 92730671009		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	05/14/24 20:45	
Fluoride	mg/L	ND	0.10	0.050	05/14/24 20:45	
Sulfate	mg/L	ND	1.0	0.50	05/14/24 20:45	

LABORATORY CONTROL SAMPLE: 4409396						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.7	103	90-110	
Fluoride	mg/L	2.5	2.7	108	90-110	
Sulfate	mg/L	50	52.7	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4409397 4409398												
Parameter	Units	92730545001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	62.5	50	50	108	108	90	92	90-110	1	10	
Fluoride	mg/L	0.93	2.5	2.5	3.4	3.4	101	97	90-110	3	10	
Sulfate	mg/L	15.7	50	50	62.3	61.6	93	92	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4409399 4409400												
Parameter	Units	92730671009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	13.5	50	50	65.0	66.9	103	107	90-110	3	10	
Fluoride	mg/L	0.17	2.5	2.5	2.6	2.7	98	103	90-110	5	10	
Sulfate	mg/L	136	50	50	180	186	89	101	90-110	3	10 M1	

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QUALIFIERS

Project: Hammond AP-2
Pace Project No.: 92730671

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 adjusted reporting limit.
TNTC - Too Numerous To Count
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
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.
Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.
A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.
M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2

Pace Project No.: 92730671

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92730671001	HAM-PT-01	EPA 3010A	854790	EPA 6010D	854842
92730671002	HAM-PT-02	EPA 3010A	854790	EPA 6010D	854842
92730671003	HAM-PT-03	EPA 3010A	854790	EPA 6010D	854842
92730671004	HAM-PT-04	EPA 3010A	854790	EPA 6010D	854842
92730671005	HAM-PT-05	EPA 3010A	854790	EPA 6010D	854842
92730671006	HAM-PT-06	EPA 3010A	854790	EPA 6010D	854842
92730671007	HAM-AP2-EB-01	EPA 3010A	854790	EPA 6010D	854842
92730671008	HAM-AP2-FB-01	EPA 3010A	854790	EPA 6010D	854842
92730671009	HAM-AP2-FD-01	EPA 3010A	854790	EPA 6010D	854842
92730671001	HAM-PT-01	EPA 3005A	854789	EPA 6020B	854915
92730671002	HAM-PT-02	EPA 3005A	854789	EPA 6020B	854915
92730671003	HAM-PT-03	EPA 3005A	854789	EPA 6020B	854915
92730671004	HAM-PT-04	EPA 3005A	854789	EPA 6020B	854915
92730671005	HAM-PT-05	EPA 3005A	854789	EPA 6020B	854915
92730671006	HAM-PT-06	EPA 3005A	854789	EPA 6020B	854915
92730671007	HAM-AP2-EB-01	EPA 3005A	854789	EPA 6020B	854915
92730671008	HAM-AP2-FB-01	EPA 3005A	854789	EPA 6020B	854915
92730671009	HAM-AP2-FD-01	EPA 3005A	854789	EPA 6020B	854915
92730671001	HAM-PT-01	EPA 7470A	855735	EPA 7470A	855836
92730671002	HAM-PT-02	EPA 7470A	855735	EPA 7470A	855836
92730671003	HAM-PT-03	EPA 7470A	855735	EPA 7470A	855836
92730671004	HAM-PT-04	EPA 7470A	855735	EPA 7470A	855836
92730671005	HAM-PT-05	EPA 7470A	855735	EPA 7470A	855836
92730671006	HAM-PT-06	EPA 7470A	855735	EPA 7470A	855836
92730671007	HAM-AP2-EB-01	EPA 7470A	855735	EPA 7470A	855836
92730671008	HAM-AP2-FB-01	EPA 7470A	855735	EPA 7470A	855836
92730671009	HAM-AP2-FD-01	EPA 7470A	855735	EPA 7470A	855836
92730671001	HAM-PT-01	SM 2540C-2015	854678		
92730671002	HAM-PT-02	SM 2540C-2015	854678		
92730671003	HAM-PT-03	SM 2540C-2015	854678		
92730671004	HAM-PT-04	SM 2540C-2015	854678		
92730671005	HAM-PT-05	SM 2540C-2015	854678		
92730671006	HAM-PT-06	SM 2540C-2015	854678		
92730671007	HAM-AP2-EB-01	SM 2540C-2015	854678		
92730671008	HAM-AP2-FB-01	SM 2540C-2015	854678		
92730671009	HAM-AP2-FD-01	SM 2540C-2015	854678		
92730671001	HAM-PT-01	SM 2320B-2011	856335		
92730671002	HAM-PT-02	SM 2320B-2011	856335		
92730671003	HAM-PT-03	SM 2320B-2011	856335		
92730671004	HAM-PT-04	SM 2320B-2011	856335		
92730671005	HAM-PT-05	SM 2320B-2011	856335		
92730671006	HAM-PT-06	SM 2320B-2011	856335		
92730671007	HAM-AP2-EB-01	SM 2320B-2011	856335		
92730671008	HAM-AP2-FB-01	SM 2320B-2011	856335		
92730671009	HAM-AP2-FD-01	SM 2320B-2011	856335		
92730671001	HAM-PT-01	SM 4500-S2D-2011	854607		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2

Pace Project No.: 92730671

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92730671002	HAM-PT-02	SM 4500-S2D-2011	854607		
92730671003	HAM-PT-03	SM 4500-S2D-2011	854607		
92730671004	HAM-PT-04	SM 4500-S2D-2011	854607		
92730671005	HAM-PT-05	SM 4500-S2D-2011	854607		
92730671006	HAM-PT-06	SM 4500-S2D-2011	854607		
92730671007	HAM-AP2-EB-01	SM 4500-S2D-2011	854607		
92730671008	HAM-AP2-FB-01	SM 4500-S2D-2011	854607		
92730671009	HAM-AP2-FD-01	SM 4500-S2D-2011	854607		
92730671001	HAM-PT-01	EPA 300.0 Rev 2.1 1993	854545		
92730671002	HAM-PT-02	EPA 300.0 Rev 2.1 1993	854545		
92730671003	HAM-PT-03	EPA 300.0 Rev 2.1 1993	854545		
92730671004	HAM-PT-04	EPA 300.0 Rev 2.1 1993	854545		
92730671005	HAM-PT-05	EPA 300.0 Rev 2.1 1993	854545		
92730671006	HAM-PT-06	EPA 300.0 Rev 2.1 1993	854545		
92730671007	HAM-AP2-EB-01	EPA 300.0 Rev 2.1 1993	854545		
92730671008	HAM-AP2-FB-01	EPA 300.0 Rev 2.1 1993	854545		
92730671009	HAM-AP2-FD-01	EPA 300.0 Rev 2.1 1993	854545		

REPORT OF LABORATORY ANALYSIS

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DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒ Kernersville ☐Sample Condition
Upon Receipt

Client Name:

GA Power

Project #:

WO#: 92730671



Courier:

☐ Commercial☐ Fed Ex☒ Pace☐ UPS☐ USPS☐ Other: _____☐ Client

Custody Seal Present?

☒ Yes☐ No

Seals Intact?

☒ Yes☐ No☐ N/A

Date/Initials Person Examining Contents: 5/17/21 DW

Packing Material:

☒ Bubble Wrap☐ Bubble Bags☐ None☐ Other

Biological Tissue Frozen?

☐ Yes☐ No☒ N/A

Thermometer:

☐ IR Gun ID:

214

Type of Ice:

☒ Wet☐ Blue☐ None

Cooler Temp:

4.0

Correction Factor:

Add/Subtract (°C)

+ 0.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

4.1

USDA Regulated Soil (☐ N/A, water sample)Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ NoDid samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WG	
Headspace in VOA Vials (>5.6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Field Data Required? ☐ Yes ☐ No

COMMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

Project #

WO#: 92730671

PM: BV

Due Date: 05/29/24

CLIENT: 92- GP-HAM

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1		2	1																									
2		2	1																									
3		2	1																									
4		2	1																									
5		2	1																									
6		2	1																									
7		2	1																									
8		2	1																									
9		2	1																									
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A

Required Client Information:

Company: GA Power

Address: Atlanta, GA

Email To: SCS Contacts

Phone: Fax:

Requested Due Date/TAT: 10 Day

Section B

Required Project Information:

Report To: SCS Contacts

Copy To: Geosyntec Contacts

Purchase Order No.: GPC82474-0001

Project Name: Hammond AP-2

Project Number:

Section C

Invoice Information:

Attention: Southern Co.

Company Name:

Address:

Pace Card Reference:

Pace Project Manager:

Pace Profile #: 10839

REGULATORY AGENCY

NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐

UST ☐ RCRA ☐ OTHER ☐

Site Location: GA

Page: 1 of 1

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analysis Test	Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	HAM-PT-01	DRINKING WATER DW	WG	G	5/13/2024	0954				17	5	3	1	1		912736671
2	HAM-PT-02	WASTE WATER WW	WG	G	5/13/2024	1107				16	5	3	1	1		002
3	HAM-PT-03	PRODUCT F	WG	G	5/13/2024	1224				15	5	3	1	1		003
4	HAM-PT-04	SOIL/SOLID	WG	G	5/13/2024	1445				18	5	3	1	1		004
5	HAM-PT-05	OIL	WG	G	5/13/2024	1554				18	5	3	1	1		005
6	HAM-PT-06	WIRE	WG	G	5/13/2024	1718				18	5	3	1	1		006
7	HAM-AP2-EB-01	AIR	WG	G	5/13/2024	1745				17	5	3	1	1		007
8	HAM-AP2-FB-01	OTHER	WG	G	5/13/2024	1737				17	5	3	1	1		008
9	HAM-AP2-FD-01	TISSUE	WG	G	5/13/2024	0000				17	5	3	1	1		009
10																
11																
12																

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS	
1	HAM-PT-01	WIG	G	5/13/2024	0954										N 001
2	HAM-PT-02	WIG	G	5/13/2024	1107										N 002
3	HAM-PT-03	WIG	G	5/13/2024	1224										N 003
4	HAM-PT-04	WIG	G	5/13/2024	1445										N 004
5	HAM-PT-05	WIG	G	5/13/2024	1554										N 005
6	HAM-PT-06	WIG	G	5/13/2024	1718										N 006
7	HAM-AP2-EB-01	WIG	G	5/13/2024	1745										N 007
8	HAM-AP2-FB-01	WIG	G	5/13/2024	1737										N 008
9	HAM-AP2-FD-01	WIG	G	5/13/2024	0000										N 009
10															
11															
12															

CALIBRATION REPORTS

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 5-13-2024Calibrated By: A. SwastField Conditions: Cloudy, 67°F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	AquaTron 1100	850751
Turbidity Meter	LaMotte 2000	7009-1416

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (μS/cm)	4,490	24005593	12/2024	AKR
pH (SU)	4.00	24005593	12/2024	Alp
pH (SU)	7.00	24005593	12/2024	Alp
pH (SU)	10.00	24006996	11/2024	Alp
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24006903	11/2024	Alp

Calibration					
Time Start <u>815</u>		Time Finish <u>835</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (μS/cm)	4,490	4440.00	18.26	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	18.26	± 0.1	GWMP
pH (SU)	7.00	7.00	19.24	± 0.1	GWMP
pH (SU)	10.00	10.00	19.45	± 0.1	GWMP
D.O. (%)	N/A	100.00	17.26	± 10%	NA
ORP (mV)	228.0	228.0	19.41	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	0	0.00	± 10% of standard	EPA 2023
	1	0.79		
	10	10.05		
	—	—		

Calibration Check					
Time Start <u>1305</u>		Time Finish <u>1315</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (μS/cm)	4,490	4440.0	18.20	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	18.39	± 0.1	GWMP
pH (SU)	7.00	7.00	18.44	± 0.1	GWMP
pH (SU)	10.00	10.00	18.41	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	0	0.00	± 10% of standard	EPA 2023
	1	0.79		
	10	10.05		
	—	—		

Notes:

Site Name: GP Plant Hammond

Field Instrumentation Calibration Form

Date: 5/13/24Calibrated By: J. NewsomeField Conditions: Light Rain, 60°F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	Aquatroll	9164105
Turbidity Meter	LaMotte 2020R	7111-1411

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (μS/cm)	4,490	24005593	12/24	AIR
pH (SU)	4.00	24005593	12/24	AIR
pH (SU)	7.00	24004517	12/24	AIR
pH (SU)	10.00	24000085	12/24	AIR
D.O. (%)	N/A			
ORP (mV)	228.0	24001903	12/24	AIR

Calibration					
Time Start	0800	Time Finish	0830		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (μS/cm)	4,490	4708.2	18.9	± 10% of standard	EPA 2023
pH (SU)	4.00	4.02	19.23	± 0.1	GWMP
pH (SU)	7.00	6.93	19.41	± 0.1	GWMP
pH (SU)	10.00	10.05	19.83	± 0.1	GWMP
D.O. (%)	N/A	99.28%	18.78	± 10%	NA
ORP (mV)	228.0	238.2	19.77	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	0	0.23	± 10% of standard	EPA 2023
	10	1.01		
	10	10.00		

Calibration Check					
Time Start	1235	Time Finish	1247		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (μS/cm)	4,490	4617.9	19.43	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	19.43	± 0.1	GWMP
pH (SU)	7.00	7.03	18.67	± 0.1	GWMP
pH (SU)	10.00	7.98	18.74	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	0	0.01	± 10% of standard	EPA 2023
	1	1.0		
	10	10.07		

Notes:

FIELD SAMPLING REPORTS

Low-Flow Test Report:

Test Date / Time: 5/13/2024 12:49:54 PM
Project: Plant Hammond
Operator Name: Anthony Szwast

Location Name: INW-01 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 13.16 ft Total Depth: 23.16 ft Initial Depth to Water: 5.9 ft	Pump Type: Peri Tubing Type: Poly Pump Intake From TOC: 18.16 ft Estimated Total Volume Pumped: 2 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 1.95 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850751
---	---	--

Test Notes:
Field parameters.

Weather Conditions:
Cloud, 65 deg. F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
5/13/2024 12:49 PM	00:00	6.26 pH	18.39 °C	469.75 µS/cm	0.93 mg/L	10.78 NTU	-45.3 mV	6.60 ft	200.00 ml/min
5/13/2024 12:54 PM	05:00	6.42 pH	17.41 °C	487.13 µS/cm	0.17 mg/L	8.54 NTU	-62.2 mV	7.38 ft	200.00 ml/min
5/13/2024 12:59 PM	10:00	6.44 pH	17.31 °C	492.41 µS/cm	0.11 mg/L	8.20 NTU	-59.4 mV	7.85 ft	200.00 ml/min

Samples

Sample ID:	Description:
------------	--------------

Low-Flow Test Report:

Test Date / Time: 5/13/2024 5:26:40 PM
Project: Plant Hammond
Operator Name: Jamie Newsome

Location Name: INW-02 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 25.08 ft Total Depth: 35.08 ft Initial Depth to Water: 12.85 ft	Pump Type: Peri Tubing Type: Poly Pump Intake From TOC: 30.08 ft Estimated Total Volume Pumped: 2 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.08 ft	Instrument Used: Aqua TROLL 400 Serial Number: 966105
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Test Notes:
Field parameters.

Weather Conditions:
Cloudy, 65F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 3 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
5/13/2024 5:26 PM	00:00	6.85 pH	17.98 °C	1,607.2 µS/cm	0.42 mg/L	3.08 NTU	-65.0 mV	12.85 ft	200.00 ml/min
5/13/2024 5:31 PM	05:00	6.84 pH	17.87 °C	1,715.6 µS/cm	0.27 mg/L	3.94 NTU	-82.2 mV	12.90 ft	200.00 ml/min
5/13/2024 5:36 PM	10:00	6.83 pH	17.86 °C	1,759.3 µS/cm	0.23 mg/L	4.24 NTU	-80.5 mV	12.93 ft	200.00 ml/min

Samples

Sample ID:	Description:
------------	--------------

Low-Flow Test Report:

Test Date / Time: 5/13/2024 9:19:08 AM
Project: Plant Hammond
Operator Name: Anthony Szwast

Location Name: PT-01 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 13.19 ft Total Depth: 23.19 ft Initial Depth to Water: 6.09 ft	Pump Type: Peri Tubing Type: Poly Pump Intake From TOC: 18.19 ft Estimated Total Volume Pumped: 7 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 2.22 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850751
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Test Notes:
Full App. III and IV and Major Ions (no RADs).

Weather Conditions:
Cloudy, 68 deg. F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
5/13/2024 9:19 AM	00:00	6.47 pH	16.88 °C	571.29 µS/cm	0.48 mg/L	13.80 NTU	-46.2 mV	7.62 ft	200.00 ml/min
5/13/2024 9:24 AM	05:00	6.45 pH	16.65 °C	584.63 µS/cm	0.36 mg/L	9.20 NTU	-53.8 mV	8.02 ft	200.00 ml/min
5/13/2024 9:29 AM	10:00	6.43 pH	16.65 °C	586.65 µS/cm	0.32 mg/L	5.12 NTU	-51.0 mV	8.16 ft	200.00 ml/min
5/13/2024 9:34 AM	15:00	6.43 pH	16.65 °C	586.52 µS/cm	0.20 mg/L	5.29 NTU	-53.7 mV	8.24 ft	200.00 ml/min
5/13/2024 9:39 AM	20:00	6.43 pH	16.60 °C	589.63 µS/cm	0.17 mg/L	5.05 NTU	-56.5 mV	8.27 ft	200.00 ml/min
5/13/2024 9:44 AM	25:00	6.43 pH	16.54 °C	595.18 µS/cm	0.14 mg/L	3.26 NTU	-58.4 mV	8.30 ft	200.00 ml/min
5/13/2024 9:49 AM	30:00	6.44 pH	16.52 °C	598.86 µS/cm	0.12 mg/L	1.62 NTU	-60.1 mV	8.31 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-01	Grab.
HAM-AP2-FD-01	Grab.

Low-Flow Test Report:

Test Date / Time: 5/13/2024 10:27:46 AM
Project: Plant Hammond
Operator Name: Anthony Szwast

Location Name: PT-02 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 13.26 ft Total Depth: 23.26 ft Initial Depth to Water: 6.23 ft	Pump Type: Peri Tubing Type: Poly Pump Intake From TOC: 18.26 ft Estimated Total Volume Pumped: 7.4 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 3.82 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850751
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Test Notes:
Full App. III and IV and Major Ions (no RADs).

Weather Conditions:
Cloudy and rainy, 70 deg. F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
5/13/2024 10:27 AM	00:00	6.36 pH	16.61 °C	1,948.3 µS/cm	0.46 mg/L	1.29 NTU	-29.7 mV	7.33 ft	200.00 ml/min
5/13/2024 10:32 AM	05:00	6.35 pH	16.43 °C	1,835.1 µS/cm	0.17 mg/L	3.41 NTU	-29.3 mV	8.45 ft	200.00 ml/min
5/13/2024 10:37 AM	10:00	6.35 pH	16.38 °C	1,817.2 µS/cm	0.11 mg/L	4.35 NTU	-29.6 mV	8.99 ft	200.00 ml/min
5/13/2024 10:42 AM	15:00	6.35 pH	16.38 °C	1,866.8 µS/cm	0.09 mg/L	2.04 NTU	-34.9 mV	9.32 ft	200.00 ml/min
5/13/2024 10:47 AM	20:00	6.36 pH	16.39 °C	1,892.6 µS/cm	0.07 mg/L	2.40 NTU	-42.5 mV	9.66 ft	200.00 ml/min
5/13/2024 10:52 AM	25:00	6.39 pH	16.42 °C	1,934.2 µS/cm	0.06 mg/L	2.16 NTU	-49.0 mV	9.88 ft	200.00 ml/min
5/13/2024 10:57 AM	30:00	6.39 pH	16.45 °C	1,983.3 µS/cm	0.07 mg/L	2.29 NTU	-52.5 mV	9.98 ft	200.00 ml/min
5/13/2024 11:02 AM	35:00	6.39 pH	16.47 °C	2,000.4 µS/cm	0.06 mg/L	2.10 NTU	-51.7 mV	10.05 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-02	Grab.

Low-Flow Test Report:

Test Date / Time: 5/13/2024 11:39:09 AM
Project: Plant Hammond
Operator Name: Anthony Szwast

Location Name: PT-03 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 15.29 ft Total Depth: 25.29 ft Initial Depth to Water: 6.35 ft	Pump Type: Peri Tubing Type: Poly Pump Intake From TOC: 20.29 ft Estimated Total Volume Pumped: 9 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.15 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850751
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Test Notes:
Full App. III and IV and Major Ions (no RADs).

Weather Conditions:
Cloudy, 61 deg. F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
5/13/2024 11:39 AM	00:00	5.42 pH	16.35 °C	1,214.2 µS/cm	0.33 mg/L	2.40 NTU	145.5 mV	6.53 ft	200.00 ml/min
5/13/2024 11:44 AM	05:00	5.36 pH	16.23 °C	1,212.7 µS/cm	0.20 mg/L	2.67 NTU	163.8 mV	6.53 ft	200.00 ml/min
5/13/2024 11:49 AM	10:00	5.31 pH	16.25 °C	1,252.2 µS/cm	0.15 mg/L	2.11 NTU	127.3 mV	6.52 ft	200.00 ml/min
5/13/2024 11:54 AM	15:00	5.28 pH	16.25 °C	1,297.9 µS/cm	0.11 mg/L	4.03 NTU	123.2 mV	6.52 ft	200.00 ml/min
5/13/2024 11:59 AM	20:00	5.26 pH	16.31 °C	1,338.9 µS/cm	0.09 mg/L	0.71 NTU	120.9 mV	6.52 ft	200.00 ml/min
5/13/2024 12:04 PM	25:00	5.25 pH	16.29 °C	1,365.3 µS/cm	0.07 mg/L	0.77 NTU	118.5 mV	6.52 ft	200.00 ml/min
5/13/2024 12:09 PM	30:00	5.19 pH	16.30 °C	1,434.3 µS/cm	0.06 mg/L	0.83 NTU	118.6 mV	6.52 ft	200.00 ml/min
5/13/2024 12:14 PM	35:00	5.18 pH	16.38 °C	1,443.3 µS/cm	0.06 mg/L	0.50 NTU	116.9 mV	6.51 ft	200.00 ml/min
5/13/2024 12:19 PM	40:00	5.14 pH	16.48 °C	1,482.5 µS/cm	0.05 mg/L	2.56 NTU	116.6 mV	6.50 ft	200.00 ml/min

Samples

Sample ID:	Description:
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HAM-PT-03	Grab.
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Low-Flow Test Report:

Test Date / Time: 5/13/2024 1:55:33 PM
Project: Plant Hammond
Operator Name: Anthony Szwast

Location Name: PT-04 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 23.87 ft Total Depth: 33.87 ft Initial Depth to Water: 12.42 ft	Pump Type: Peri Tubing Type: Poly Pump Intake From TOC: 28.87 ft Estimated Total Volume Pumped: 10.2 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.07 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850751
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Test Notes:
Full App. III and IV and Major Ions (no RADs).

Weather Conditions:
Cloudy, 65 deg. F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
5/13/2024 1:55 PM	00:00	6.49 pH	17.90 °C	1,730.9 µS/cm	0.18 mg/L	11.59 NTU	-35.4 mV	12.47 ft	200.00 ml/min
5/13/2024 2:00 PM	05:00	6.50 pH	17.81 °C	1,723.6 µS/cm	0.13 mg/L	16.20 NTU	-39.9 mV	12.47 ft	200.00 ml/min
5/13/2024 2:05 PM	10:00	6.50 pH	17.84 °C	1,715.5 µS/cm	0.11 mg/L	12.90 NTU	-35.7 mV	12.47 ft	200.00 ml/min
5/13/2024 2:10 PM	15:00	6.51 pH	17.94 °C	1,727.5 µS/cm	0.09 mg/L	16.80 NTU	-36.9 mV	12.47 ft	200.00 ml/min
5/13/2024 2:15 PM	20:00	6.51 pH	18.02 °C	1,735.7 µS/cm	0.09 mg/L	11.50 NTU	-38.0 mV	12.47 ft	200.00 ml/min
5/13/2024 2:20 PM	25:00	6.51 pH	18.29 °C	1,740.6 µS/cm	0.08 mg/L	12.39 NTU	-39.6 mV	12.47 ft	200.00 ml/min
5/13/2024 2:25 PM	30:00	6.51 pH	18.21 °C	1,747.2 µS/cm	0.08 mg/L	8.48 NTU	-40.7 mV	12.48 ft	200.00 ml/min
5/13/2024 2:30 PM	35:00	6.52 pH	18.22 °C	1,754.2 µS/cm	0.08 mg/L	7.74 NTU	-41.5 mV	12.48 ft	200.00 ml/min
5/13/2024 2:35 PM	40:00	6.52 pH	18.26 °C	1,761.9 µS/cm	0.08 mg/L	6.06 NTU	-42.4 mV	12.48 ft	200.00 ml/min
5/13/2024 2:40 PM	45:00	6.53 pH	18.21 °C	1,759.2 µS/cm	0.09 mg/L	4.96 NTU	-41.8 mV	12.49 ft	200.00 ml/min

Samples

Sample ID:	Description:
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HAM-PT-04	Grab.
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Low-Flow Test Report:

Test Date / Time: 5/13/2024 3:19:12 PM
Project: Plant Hammond
Operator Name: Anthony Szwast

Location Name: PT-05 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 25.11 ft Total Depth: 35.11 ft Initial Depth to Water: 12.74 ft	Pump Type: Peri Tubing Type: Poly Pump Intake From TOC: 30.11 ft Estimated Total Volume Pumped: 7 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.1 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850751
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Test Notes:
Full App. III and IV and Major Ions (no RADs).

Weather Conditions:
Cloudy, 65 deg. F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
5/13/2024 3:19 PM	00:00	6.46 pH	18.26 °C	2,208.7 µS/cm	0.34 mg/L	6.10 NTU	11.3 mV	12.79 ft	200.00 ml/min
5/13/2024 3:24 PM	05:00	6.52 pH	18.04 °C	2,291.4 µS/cm	0.29 mg/L	5.55 NTU	7.9 mV	12.81 ft	200.00 ml/min
5/13/2024 3:29 PM	10:00	6.60 pH	17.99 °C	2,401.3 µS/cm	0.29 mg/L	3.62 NTU	12.1 mV	12.83 ft	200.00 ml/min
5/13/2024 3:34 PM	15:00	6.61 pH	18.04 °C	2,389.5 µS/cm	0.31 mg/L	2.87 NTU	17.1 mV	12.82 ft	200.00 ml/min
5/13/2024 3:39 PM	20:00	6.61 pH	18.04 °C	2,444.6 µS/cm	0.32 mg/L	2.42 NTU	22.1 mV	12.84 ft	200.00 ml/min
5/13/2024 3:44 PM	25:00	6.61 pH	18.01 °C	2,398.0 µS/cm	0.29 mg/L	2.22 NTU	23.5 mV	12.84 ft	200.00 ml/min
5/13/2024 3:49 PM	30:00	6.62 pH	18.07 °C	2,445.0 µS/cm	0.29 mg/L	2.11 NTU	23.9 mV	12.84 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-05	Grab.

Low-Flow Test Report:

Test Date / Time: 5/13/2024 4:28:08 PM
Project: Plant Hammond
Operator Name: Anthony Szwast

Location Name: PT-06 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 25.48 ft Total Depth: 35.48 ft Initial Depth to Water: 12.61 ft	Pump Type: Peri Tubing Type: Poly Pump Intake From TOC: 30.48 ft Estimated Total Volume Pumped: 10 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.11 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850751
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Test Notes:
Full App. III and IV and Major Ions (no RADs).

Weather Conditions:
Cloudy, 68 deg. F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
5/13/2024 4:28 PM	00:00	6.43 pH	18.43 °C	1,903.4 µS/cm	0.22 mg/L	12.39 NTU	26.7 mV	12.68 ft	200.00 ml/min
5/13/2024 4:33 PM	05:00	6.43 pH	18.13 °C	1,918.0 µS/cm	0.13 mg/L	11.08 NTU	27.0 mV	12.69 ft	200.00 ml/min
5/13/2024 4:38 PM	10:00	6.43 pH	18.08 °C	1,933.6 µS/cm	0.11 mg/L	6.42 NTU	25.4 mV	12.69 ft	200.00 ml/min
5/13/2024 4:43 PM	15:00	6.43 pH	18.02 °C	1,927.4 µS/cm	0.09 mg/L	5.30 NTU	25.0 mV	12.70 ft	200.00 ml/min
5/13/2024 4:48 PM	20:00	6.43 pH	18.12 °C	1,919.6 µS/cm	0.08 mg/L	5.21 NTU	25.1 mV	12.70 ft	200.00 ml/min
5/13/2024 4:53 PM	25:00	6.43 pH	18.13 °C	1,923.4 µS/cm	0.08 mg/L	6.10 NTU	24.3 mV	12.71 ft	200.00 ml/min
5/13/2024 4:58 PM	30:00	6.43 pH	18.18 °C	1,931.5 µS/cm	0.07 mg/L	5.75 NTU	24.3 mV	12.71 ft	200.00 ml/min
5/13/2024 5:03 PM	35:00	6.43 pH	18.09 °C	1,921.2 µS/cm	0.07 mg/L	6.00 NTU	24.0 mV	12.72 ft	200.00 ml/min
5/13/2024 5:08 PM	40:00	6.43 pH	17.94 °C	1,942.2 µS/cm	0.06 mg/L	6.00 NTU	24.0 mV	12.72 ft	200.00 ml/min
5/13/2024 5:13 PM	45:00	6.43 pH	17.94 °C	1,933.6 µS/cm	0.06 mg/L	2.06 NTU	23.8 mV	12.72 ft	200.00 ml/min

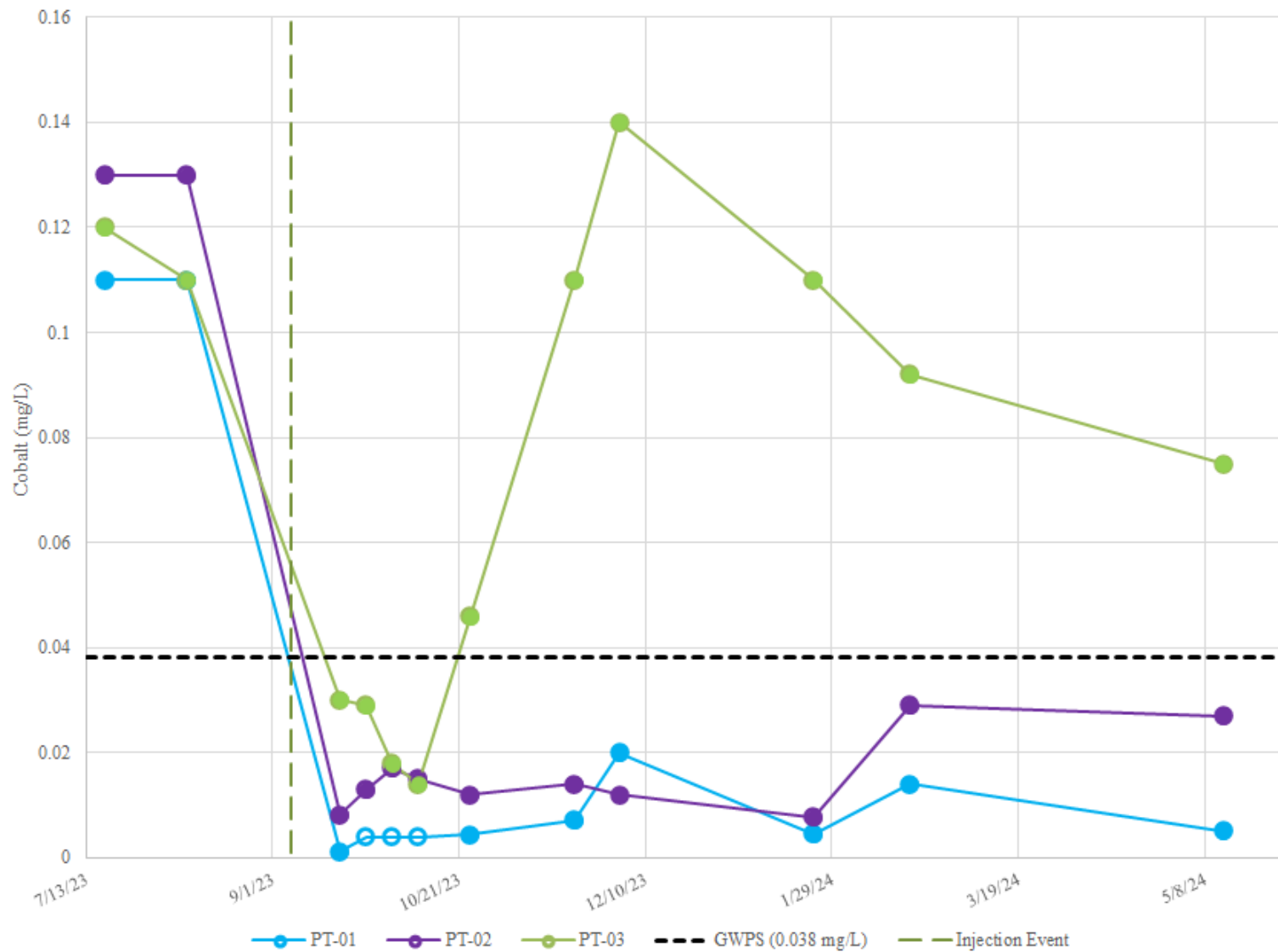
Samples

Sample ID:	Description:
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HAM-PT-06	Grab.
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TIME SERIES GRAPHS

Time Series



Notes:

1. mg/L = milligrams per liter
2. GWPS = Groundwater Protection Standard
3. Open symbols are not detected above, and are reported at the method detection limit.

TIME SERIES – MW-33/35 PILOT STUDY AREA

GEORGIA POWER COMPANY
PLANT HAMMOND AP-2
ROME, FLOYD COUNTY, GEORGIA

Prepared For:



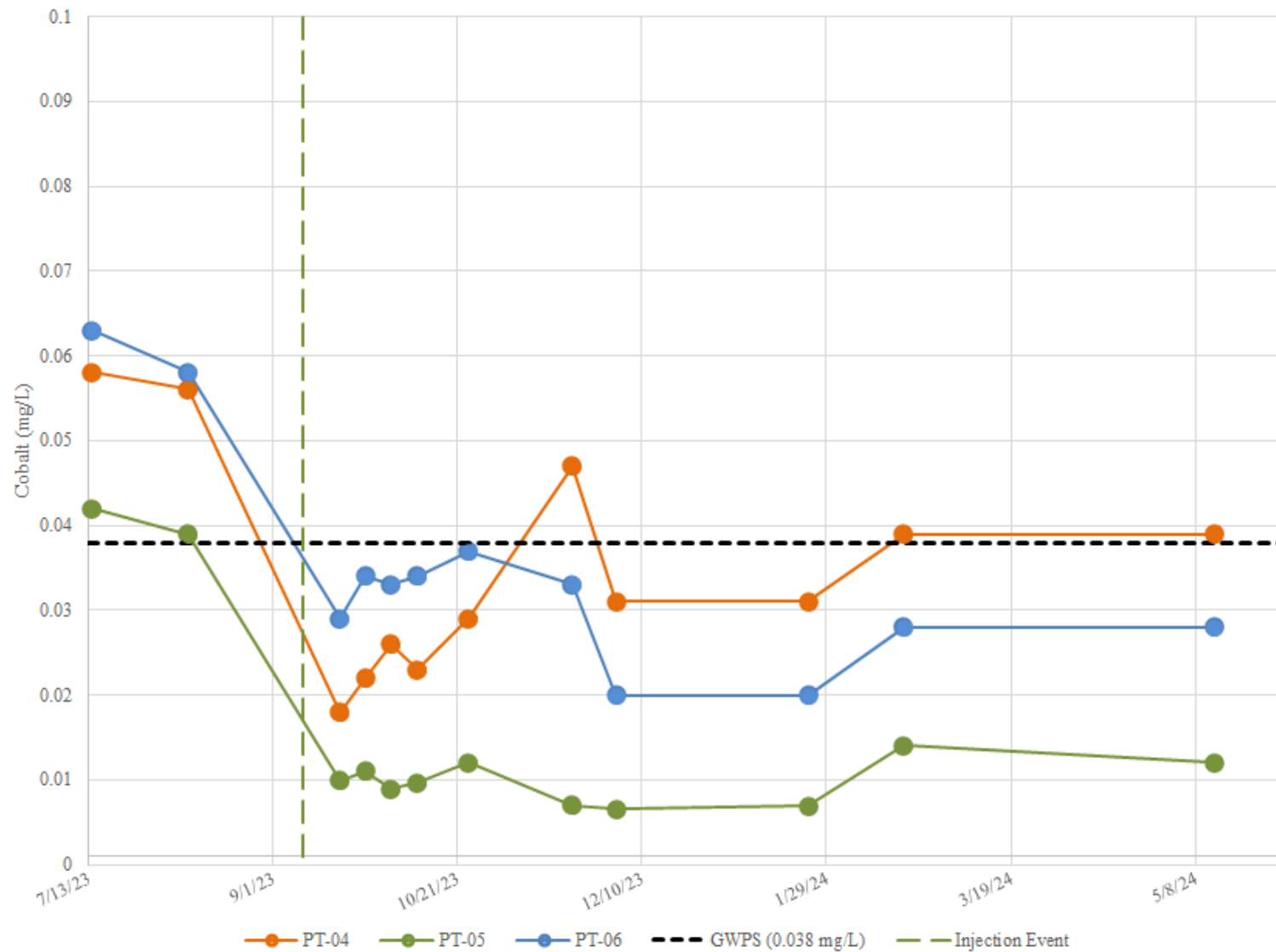
Prepared By:



KENNESAW, GA

AUGUST 2024

Time Series



Notes:

1. mg/L = milligrams per liter
2. GWPS = Groundwater Protection Standard

TIME SERIES – HGWC-18 PILOT STUDY AREA

GEORGIA POWER COMPANY
PLANT HAMMOND AP-2
ROME, FLOYD COUNTY, GEORGIA

Prepared For:



Prepared By:



KENNESAW, GA

AUGUST 2024