



Prepared for

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2025 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

PLANT HAMMOND ASH POND 4 (AP-4)

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CERTIFICATION STATEMENT

This 2025 Annual Groundwater Monitoring and Corrective Action Report, Plant Hammond – Ash Pond 4 (AP-4) has been prepared in compliance with 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.



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July 31, 2025

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SUMMARY

This summary of the *2025 Annual Groundwater Monitoring and Corrective Action Report* provides the status of groundwater monitoring and corrective action program for the reporting period of July 2024 through June 2025 (referred herein as the “annual reporting period”) at the Georgia Power Company (Georgia Power) Plant Hammond Ash Pond 4 (AP-4) (the Site). This summary was prepared by Geosyntec Consultants, Inc. (Geosyntec) on behalf of Georgia Power to meet the requirements listed in Georgia Environmental Protection Division (GA EPD) Rules for Solid Waste Management 391-3-4-.10, and by reference, 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. Dry ash stacking operations in AP-4 began in 1994 and continued until 2010; AP-4 received both fly ash and bottom ash during this period. AP-4 was capped in place in 2011 and 2012 in accordance with the GA EPD regulations for landfill closures. The GA EPD monitoring requirements incorporates by reference the federal regulations on this matter. As such, the federal CCR Rule is referenced in lieu of the GA EPD CCR regulations when discussing aspects of the groundwater monitoring program established for the Site. The Site is located on the western portion of the Plant Hammond property. The GA EPD approved closure permit no. 057-025D(CCR) for AP-4 on January 27, 2021. Georgia Power plans to perform closure by removal of CCR from AP- 4.



Plant Hammond and the Site

Groundwater at the Site is monitored using a comprehensive monitoring network that meets federal and state monitoring requirements. Groundwater monitoring-related activities have been performed at AP-4 since August 2016. During the annual reporting period, Geosyntec conducted two groundwater sampling events: one in August 2024, and

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

one in February 2025. Groundwater samples were submitted to Pace Analytical Services, LLC, for analysis. Groundwater data for the event were evaluated in accordance with the certified statistical methods. Statistically significant increases of Appendix III² constituents above background were observed in select monitoring wells following the August 2024 and February 2025 events, as summarized in the table below.

<i>Appendix III Constituent</i>	<i>August 2024</i>	<i>February 2025</i>
Boron	HGWC-101, HGWC-102, HGWC-103, HGWC-105, HGWC-107, HGWC-109, HGWC-117A, HGWC-118	HGWC-101, HGWC-102, HGWC-103, HGWC-105, HGWC-107, HGWC-109, HGWC-118
Calcium	HGWC-102, HGWC-103, HGWC-105, HGWC-118	HGWC-102, HGWC-103, HGWC-105, HGWC-117A, HGWC-118
Chloride	HGWC-102, HGWC-103, HGWC-105	HGWC-102, HGWC-103, HGWC-105
pH	HGWC-101	--
Sulfate	HGWC-101, HGWC-102, HGWC-103, HGWC-105, HGWC-107, HGWC-117A, HGWC-118	HGWC-101, HGWC-102, HGWC-103, HGWC-105, HGWC-107, HGWC-109, HGWC-117A, HGWC-118
Total Dissolved Solids	HGWC-102, HGWC-103, HGWC-105	HGWC-102, HGWC-103, HGWC-105

No statistically significant levels (SSLs) were identified for Appendix IV groundwater data from the August 2024 or February 2025 events³.

Based on review of the Appendix III and Appendix IV statistical results completed for the annual 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 radium 226 + 228. A statistically increased level (SSL)-related constituent is determined by comparing the confidence intervals developed to either the constituent’s maximum contaminant level (MCL), if available, the USEPA Rule Specified Level, if no MCL is available, or the calculated background interwell tolerance limit.

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LIST OF ACRONYMS AND ABBREVIATIONS

AP-4	Ash Pond 4
ASD	alternate source demonstration
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 EPD	Georgia Environmental Protection Division
GCL	geosynthetic clay liner
Georgia Power	Georgia Power Company
Geosyntec	Geosyntec Consultants, Inc.
GSC	Groundwater Stats Consulting
GWPS	Groundwater Protection Standard
HAR	Hydrogeologic Assessment Report
<i>i</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
TDS	total dissolved solids
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 *2025 Annual Groundwater Monitoring and Corrective Action Report* to document groundwater monitoring activities conducted at Georgia Power Company (Georgia Power) Plant Hammond (Site) Ash Pond 4 (AP-4) for the reporting period of July 2024 through June 2025 (referred to herein as the “annual reporting period”).

Groundwater monitoring and reporting for the CCR unit is performed in accordance with the monitoring requirements of the GA EPD Rules for Solid Waste Management 391-3-4-.10(6), but also in accordance with the federal CCR Rule, specifically § 257.90 through § 257.95. 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 rules are cited within this report, in lieu of citing both sets of regulations. Also, the closure permit issued by GA EPD (i.e., no. 057-025D(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.

A permit application for AP-4 was submitted to GA EPD in November 2018. GA EPD approved closure permit no. 057-025D(CCR) for AP-4 on January 27, 2021.

Due to statistically significant increases (SSIs) of Appendix III constituents identified in the *2019 Annual Groundwater Monitoring and Corrective Action Report* (Geosyntec, 2019), Georgia Power initiated an assessment monitoring program for AP-4 in August 2019. Since then, Georgia Power has routinely sampled the AP-4 monitoring well network in accordance with the assessment monitoring program as outlined in § 257.95. This report includes the results of the annual assessment monitoring events conducted in August 2024 and February 2025.

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 in July 2019 and no longer produce electricity.

AP-4 was commissioned in 1986 as a surface impoundment with a corresponding surface area of approximately 54 acres. Dry ash stacking operations in AP-4 began in 1994 and continued until 2010; AP-4 received both fly ash and bottom ash during this period. AP-4 was capped in place in 2011-2012 in accordance with the GA EPD regulations regarding landfill closures. AP-4 was graded, engineered with drainage, and capped with a geosynthetic clay liner (GCL) and soil cover. Georgia Power plans to perform closure by removal of CCR from AP-4. The Closure Plan submitted to GA EPD as part of the closure permit application package describes the closure activities and requirements in accordance with GA EPD rules 391-3-4-.10(7)(a)2. and 391-3-4.10(9)(c)8. Closure permit no. 057-025D(CCR) was approved by GA EPD on January 27, 2021.

1.2 Regional Geology and Hydrogeologic Setting

The following section summarizes the geologic and hydrogeologic conditions at AP-4 as described in the *Hydrogeologic Assessment Report (Revision 01) – Ash Pond 4, Plant Hammond* (HAR Rev 01) submitted to GA EPD under separate cover in support of the AP-4 closure permit application (Geosyntec, 2020).

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-4 is underlain by the lower units of the Cambrian age Conasauga Formation, consisting of mostly calcareous shale. Based on review of subsurface investigations, the bedrock underneath AP-4 was described as predominantly shale. AP-4 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 the presence of angular fragments of rocks/materials not expected in the lower units of the Conasauga, such as chert, sandstone, limestone, or coal. 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 AP-4. 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-4 is a regional groundwater aquifer that occurs primarily in the alluvium, colluvium, and residuum, but also to some degree within the weathered and fractured bedrock. Based on observations of alluvium, colluvium, and residuum soil types and horizontal conductivity values, the movement of groundwater in the soil can be characterized as low-to moderate permeability, porous media flow. The groundwater flow in the shallow underlying bedrock is characterized as fracture flow, and due to the preponderance of shale beneath AP-4, is expected to be very low permeability. Groundwater flow direction is generally from north to south.

1.3 Groundwater Monitoring Well Network

In accordance with § 257.91, a groundwater monitoring system was installed at AP-4 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 unit (i.e., background conditions) and passing the waste boundary of the unit. The number, spacing, and depths of the groundwater monitoring wells were selected based on the characterization of site specific hydrogeologic conditions.

A network of piezometers has been installed at the Site that are used to gauge water levels to define groundwater flow direction and gradients. The locations of the detection monitoring well network and piezometers associated with AP-4 are shown on **Figure 2**; well construction details are listed in **Table 1**.

2.0 GROUNDWATER MONITORING ACTIVITIES

In accordance with § 257.90(e), the following describes groundwater monitoring-related activities performed during the annual 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

The well and piezometer networks are inspected semiannually to determine 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 August 2024 and February 2025, the networks were inspected and 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-4 in August 2019. No SSLs of Appendix IV constituents were identified during this annual reporting period. Groundwater at AP-4 will continue to be managed under the assessment monitoring program stipulated by § 257.95.

For the annual reporting period, two semiannual assessment monitoring events were conducted in August 2024 and February 2025. The AP-4 wells sampled during this event and the dates associated with them are summarized in **Table 2**. The laboratory reports associated with the August 2024 and February 2025 groundwater sampling events are provided in **Appendix B**. Details of the event and analytical results are discussed in Section 3, while details of the statistical analyses performed are provided in Section 4 of this report.

2.3 Additional Groundwater Evaluations

Supplemental groundwater samples were collected from the entire AP-4 monitoring well network during the February 2025 monitoring events and were analyzed for major ions [magnesium, potassium, sodium, and alkalinity (bicarbonate, carbonate, total)] as well as iron, manganese, and sulfide. The data were collected in support of evaluating, as

necessary, the geochemical composition of the groundwater at the Site. The laboratory reports associated with the data are provided in **Appendix B**.

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-4 during the annual reporting period.

3.1 Groundwater and Surface Water Level Measurement

A synoptic round of depth-to-groundwater-level measurements was recorded from the AP-4 wells and piezometers during the August 2024 and February 2025 assessment monitoring events and used to calculate the corresponding groundwater elevations, which are presented in **Table 3**. The August 2024 and February 2025 elevations reported are generally representative of the groundwater elevations reported for prior monitoring events.

A surface water elevation was recorded from the surveyed gauging point located along Unnamed Creek east of AP-4, as shown on **Figure 2**.

The groundwater and surface water elevation data presented in **Table 3** were used to prepare potentiometric surface contour maps for the August 2024 and February 2024 events, which are presented on **Figure 3** and **Figure 4**, respectively. Groundwater in the AP-4 area flows under the influence of topography from slightly higher ground surface elevations on the northern side of AP-4 toward lower elevations to the south of AP-4 along the Coosa River.

3.2 Groundwater Gradient and Flow Velocity

The horizontal groundwater hydraulic gradients within the uppermost aquifer beneath AP-4 were calculated using the groundwater elevation data from the August 2024 and February 2025 event. The 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. Given the surface area covered by AP-4, horizontal hydraulic gradients were calculated along the eastern, central, and western portions of the unit. The well pairs correlating to these flow areas for August 2024 are: GWA-14 and HGWC-118; HGWA- 113 and HGWC-102; and HGWA-111 and HGWC-107. For the February 2025 event, the well pairs correlating to the flow areas are: GWA-14 and GWC-19;

HGWA- 112 and GWC-4; and HGWA-111 and GWC-6. The supporting calculations are presented in **Table 4**. The general trajectory of the flow paths used in the calculations and associated potentiometric contour lines are shown on **Figure 3** and **Figure 4**, respectively. The presented hydraulic gradients from the three portions were averaged for the annual reporting period to provide a representative gradient of 0.016 feet per foot (ft/ft) across AP-4.

The approximate horizontal flow velocity associated with AP-4 groundwater was calculated using the following derivative of Darcy's Law. The calculations are 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

Aquifer testing was conducted by Southern Company Services in 2013 to evaluate hydraulic conditions in the vicinity of AP-4. Results of these field events are discussed in detail in the HAR Rev 01 (Geosyntec, 2020).

The groundwater flow velocity calculation is performed using the geometric mean for K_h of 1.67 ft/day. An estimated effective porosity (n_e) of 0.15 is used to represent average conditions for the silty clay alluvium/colluvium, derived based on review of literature, observed site lithology, and professional judgement. With these variables assigned, and accounting for the representative hydraulic gradient discussed above, the representative groundwater flow velocity underneath AP-4 was calculated to be 0.17 ft/day for the annual reporting period.

3.3 Groundwater Sampling Procedures

Groundwater samples were collected from the monitoring network using low-flow sampling procedures in accordance with § 257.93(a). Purging and sampling was performed using dedicated bladder pumps with dedicated tubing and peristaltic pumps. For wells sampled with peristaltic pumps, the pump intake was lowered to the midpoint of the well screen (or as appropriate based on the groundwater level). 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 milligrams per 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), following chain-of-custody protocol. The field sampling and equipment calibration forms generated during the August 2024 and February 2025 assessment monitoring events are provided in **Appendix B**.

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 sample analysis, and the associated results, are listed in the analytical laboratory reports included in **Appendix B**. The groundwater analytical results from the August 2024 and February 2025 sampling events are summarized in **Table 5**.

3.5 Quality Assurance and Quality Control Summary

Quality assurance/quality control (QA/QC) samples were collected during the groundwater monitoring event in accordance with the Site's *Groundwater Monitoring Plan* (Geosyntec, 2023), 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 for both semiannual events 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 monitoring constituents and completed statistical analyses of the Appendix IV groundwater monitoring data obtained during the annual reporting period. The data were analyzed by Groundwater Stats Consulting (GSC); the reports generated from the analyses are provided in **Appendix C**.

4.1 Statistical Methods

Groundwater data from the annual reporting period were statistically analyzed in accordance with the Professional Engineer-certified (PE-certified) Statistical Analysis Method Certification (October 2017, revised January 2020). The Sanitas groundwater statistical software was used to perform the statistical analyses. Sanitas is a decision-support software package, which 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 determine if Appendix III constituents have returned to background levels. Appendix IV constituents were evaluated to determine if concentrations statistically exceeded the established GWPS. Detailed statistical methods used for Appendix III and Appendix IV constituents are discussed in statistical analysis packages 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 6**.

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 determine whether there are 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 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 SSL for Appendix IV constituents.

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.

GWPS have been established for statistical comparison of Appendix IV constituents and are presented in **Table 6**.

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. No SSLs of Appendix IV constituents were identified following statistical analyses of the August 2024 and February 2025 data sets.

5.0 MONITORING PROGRAM STATUS

Based on the statistical evaluation results presented for the annual reporting period, SSIs of Appendix III constituents have not returned to background levels. Pursuant to § 257.96(b), Georgia Power will continue to monitor the groundwater at AP-4 in accordance with the assessment monitoring program regulations of § 257.95.

6.0 CONCLUSIONS AND FUTURE ACTIONS

This *2025 Annual Groundwater Monitoring and Corrective Action Report* for Plant Hammond AP-4 was prepared to fulfill the requirements of the GA EPD Rules for Solid Waste Management 391-3-4-.10, and indirectly by reference the federal CCR Rule.

Statistical analyses of the groundwater monitoring data for AP-4 for the annual reporting period did not identify any SSLs of Appendix IV constituents and the site will remain in assessment monitoring.

The next routine semiannual assessment monitoring event for AP-4 is scheduled to begin in August 2025.

7.0 REFERENCES

- Geosyntec, 2019. *2019 Annual Groundwater Monitoring & Corrective Action Report – Georgia Power Company, Plant Hammond Ash Pond 4 (AP-4)*. July 2019.
- Geosyntec, 2020. *Hydrogeologic Assessment Report (Revision 01) – Ash Pond 4 (AP-4), Plant Hammond*. May 2020.
- Geosyntec, 2021a. *2021 Annual Groundwater Monitoring and Corrective Action Report – Plant Hammond Ash Pond 4 (AP-4)*. July 2021.
- Geosyntec, 2021b. *Alternate Source Demonstration – Cobalt, Georgia Power Company, Plant Hammond Ash Pond 4*. October 2021.
- Geosyntec, 2023. *Groundwater Monitoring Plan, Plant Hammond – Ash Pond 4 (AP-4), Floyd County, Georgia*. September 2020, Revision 1 – March 2023 (minor permit mod).
- Golder, 2018. *Geologic and Hydrogeologic Report – Plant Hammond*. November 2018.
- Sanitas[™]: Groundwater Statistical Software, v. 9.6.05, 2018. Sanitas Technologies©, Boulder, CO.
- 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 1
Monitoring Well Network Summary
Georgia Power Company
Plant Hammond - Ash Pond 4
Floyd County, GA

Well ID	Well Designation	Hydraulic Location	Northing ⁽¹⁾	Easting ⁽²⁾	Ground Surface Elevation ⁽¹⁾ (feet)	Top of Casing Elevation ⁽¹⁾ (feet)	Top of Screen Elevation ⁽¹⁾ (feet)	Bottom of Screen Elevation ⁽¹⁾ (feet)	Total Well Depth from ⁽²⁾ (Feet Below Top of Casing)	Groundwater Zone Screened	Installation Date
HGWA-47	Detection	Upgradient	1548990.96	1934171.84	577.39	580.33	546.84	536.84	43.74	Overburden/PWR	08/21/2020
HGWA-48D	Detection	Upgradient	1548989.39	1934178.15	577.29	580.26	517.54	507.54	72.97	Bedrock	08/20/2020
HGWC-101	Detection	Downgradient	1547725.50	1936369.58	575.91	578.85	551.31	541.31	37.94	Overburden	08/07/2012
HGWC-102	Detection	Downgradient	1547713.50	1936033.33	574.54	577.54	550.51	540.51	37.43	Overburden	08/07/2012
HGWC-103	Detection	Downgradient	1547848.88	1935732.96	577.76	580.79	553.51	543.51	37.68	Overburden	08/08/2012
HGWC-105	Detection	Downgradient	1547855.56	1935110.36	579.08	582.09	547.72	537.72	44.67	Overburden	08/08/2012
HGWC-107	Detection	Downgradient	1547909.99	1934442.24	576.43	579.31	551.51	541.51	38.20	Overburden	08/08/2012
HGWC-109	Detection	Downgradient	1548627.41	1934362.77	573.66	576.77	555.81	545.81	31.36	Overburden	08/15/2012
HGWA-111	Detection	Upgradient	1548834.26	1935222.81	588.79	591.75	558.48	548.48	43.67	Overburden	08/21/2012
HGWA-112	Detection	Upgradient	1548885.63	1935647.00	593.46	596.27	566.52	556.52	40.15	Overburden	08/21/2012
HGWA-113	Detection	Upgradient	1548944.62	1935990.09	592.07	594.58	568.87	558.87	36.11	Overburden	10/02/2012
HGWC-118	Detection	Downgradient	1547980.56	1936946.37	576.52	579.02	548.51	538.51	40.91	Overburden	10/01/2012
HGWC-117A	Detection	Downgradient	1548082.04	1937157.25	578.85	581.76	551.85	541.85	40.31	Overburden	07/21/2021
GWC-4	Piezometer	Downgradient	1547898.31	1935398.70	577.73	580.65	543.47	533.47	47.58	Overburden/PWR	08/08/2012
GWC-6	Piezometer	Downgradient	1547843.93	1934800.45	578.55	581.63	553.90	543.90	38.13	Overburden	08/13/2012
GWC-8	Piezometer	Downgradient	1548167.13	1934342.94	577.13	579.99	549.47	539.47	40.92	Overburden	08/09/2012
MW-12	Piezometer	Downgradient	1547853.78	1937525.46	580.59	583.27	555.84	545.84	37.83	Overburden	10/21/2014
GWA-14	Piezometer	Upgradient	1548982.59	1936642.58	589.70	592.14	561.40	551.40	41.14	Overburden	10/02/2012
GWA-15	Piezometer	Upgradient	1548766.17	1936808.47	588.37	591.56	571.44	561.44	30.52	Overburden	08/22/2012
GWA-16	Piezometer	Upgradient	1548592.74	1937210.99	579.58	582.55	569.94	559.94	23.01	Overburden	08/21/2012
GWC-19	Piezometer	Downgradient	1547892.89	1936572.97	576.90	579.83	554.04	544.04	36.19	Overburden	08/14/2012

Notes:

PWR = Partially weathered rock.

(1) Coordinates shown are in North American Datum (NAD) 1983, State Plane, Georgia-West, feet. Elevations shown are referenced to datum NAVD88, which indicates feet (ft) in elevation referenced to the North American Vertical Datum 1988. Survey completed by GEL solutions dated May 10, 2020, September 10, 2020 (for HGWA-47 and HGWA-48D), and September 8, 2021 (for HGWA-117A).

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

Table 2
Groundwater Sampling Event Summary
Georgia Power Company
Plant Hammond - Ash Pond 4
Floyd County, GA

Well ID	Hydraulic Location	Well Designation	August 06 2024 - August 10 2024	February 12 2025 - February 16 2025
			Assessment Event	Assessment Event
Georgia Power Company - Plant Hammond Ash Pond 4				
HGWA-47	Upgradient	Detection	X	X
HGWA-48D	Upgradient	Detection	X	X
HGWC-101	Downgradient	Detection	X	X
HGWC-102	Downgradient	Detection	X	X
HGWC-103	Downgradient	Detection	X	X
HGWC-105	Downgradient	Detection	X	X
HGWC-107	Downgradient	Detection	X	X
HGWC-109	Downgradient	Detection	X	X
HGWA-111	Upgradient	Detection	X	X
HGWA-112	Upgradient	Detection	X	X
HGWA-113	Upgradient	Detection	X	X
HGWC-118	Downgradient	Detection	X	X
HGWC-117A	Downgradient	Detection	X	X

Notes:

X - Indicates well sampled during event.

Assessment Event includes Appendix III and Appendix IV analytes.

Table 3
 Summary of Groundwater and Surface Water Elevations
 Georgia Power Company
 Plant Hammond - Ash Pond 4
 Floyd County, GA

Well ID	Top of Casing Elevation ⁽¹⁾ (feet)	August 2024		February 2025	
		Depth to Water (feet)	Groundwater Elevation ⁽¹⁾ (feet)	Depth to Water (feet)	Groundwater Elevation ⁽¹⁾ (feet)
HGWA-47	580.33	7.70	572.63	6.88	573.45
HGWA-48D	580.26	7.59	572.67	6.78	573.48
HGWC-101	578.85	13.42	565.43	14.78	564.07
HGWC-102	577.54	13.19	564.35	15.31	562.23
HGWC-103	580.79	13.82	566.97	13.35	567.44
HGWC-105	582.09	18.05	564.04	20.14	561.95
HGWC-107	579.31	15.24	564.07	17.25	562.06
HGWC-109	576.77	8.65	568.12	7.81	568.96
HGWA-111	591.75	12.37	579.38	11.90	579.85
HGWA-112	596.27	12.54	583.73	11.91	584.36
HGWA-113	594.58	12.15	582.43	10.02	584.56
HGWC-118	579.02	13.80	565.22	14.83	564.19
GWC-4	580.65	13.58	567.07	13.06	567.59
GWC-6	581.63	17.39	564.24	19.19	562.44
GWC-8	579.99	13.65	566.34	12.53	567.46
MW-12	583.27	19.01	564.26	20.73	562.54
GWA-14	592.14	8.47	583.67	6.69	585.45
GWA-15	591.56	9.68	581.88	7.98	583.58
GWA-16	582.55	5.88	576.67	8.22	574.33
GWC-19	579.83	13.20	566.63	13.20	566.63
HGWC-117A	581.76	17.17	564.59	18.72	563.04
Unnamed Creek	580.14	15.98	564.16	16.67	563.47

Notes:

(1) Elevations shown are referenced to datum NAVD88, which indicates feet in elevation referenced to the North American Vertical Datum 1988.

Table 4
Horizontal Groundwater Gradient and Flow Velocity Calculations
Georgia Power Company
Plant Hammond Ash Pond 4
Floyd County, GA

Gauging Event	Well Pair	Groundwater Elevations in Well Pairs ⁽¹⁾ (ft)		Change in Elevation (ft)	Distance Between Well 1 and Well 2 (L) (ft)	Hydraulic Gradient (i) (ft/ft)	Average Hydraulic Conductivity (K _h) (ft/day)	Estimated Effective Porosity (n _e)	Calculated Groundwater Flow Velocity (V) (ft/day)	Calculated Groundwater Flow Velocity (V) (ft/year)	Average Hydraulic Gradient (i) (ft/ft)	Average Groundwater Flow Velocity (V) (ft/day)
August 2024	GWA-14 to HGWC-118	583.67	565.22	18.45	1052	0.018	1.67	0.15	0.20	71.3	0.016	0.17
August 2024	HGWA-113 to HGWC-102	582.43	564.35	18.08	1235	0.015	1.67	0.15	0.16	59.5		
August 2024	HGWA-111 to HGWC-107	579.38	564.07	15.31	1258	0.012	1.67	0.15	0.14	49.5		
February 2025	GWA-14 to GWC-19	585.45	566.63	18.82	1090	0.017	1.67	0.15	0.19	70.2		
February 2025	HGWA-112 to GWC-4	584.36	567.59	16.77	1018	0.016	1.67	0.15	0.18	66.9		
February 2025	HGWA-111 to GWC-6	579.85	562.44	17.41	1077	0.016	1.67	0.15	0.18	65.7		

Notes:
ft = feet
ft/day = feet per day
ft/ft = feet per foot
ft/year = feet per year
K_h = Average horizontal hydraulic conductivity
Average horizontal hydraulic conductivity (K_h) of 1.67 feet per day (ft/day) was computed from slug test data derived from AP-4.
n_e = effective porosity
V = groundwater flow velocity
Groundwater flow velocity equation: $V = (K_h * i) / n_e$
 $i = h_1 - h_2 / L$ = horizontal hydraulic gradient (h₁ and h₂ = groundwater elevation at location 1 and 2)
L = distance between location 1 and 2 along the flow path. See Figure 3 and Figure 4 for illustrated flow paths.
(1) Elevations shown are referenced to datum NAVD88, which indicates feet in elevation referenced to the North American Vertical Datum 1988.

Table 5
Summary of Groundwater Analytical Data
Georgia Power Company
Plant Hammond - Ash Pond 4
Floyd County, GA

Sample Location	HGWA-47	HGWA-47	HGWA-48D	HGWA-48D	HGWC-101	HGWC-101	HGWC-102	HGWC-102	HGWC-103	HGWC-103	HGWC-105	HGWC-105	
Sample Date	08/06/2024	02/12/2025	08/06/2024	02/12/2025	08/10/2024	02/15/2025	08/09/2024	02/15/2025	08/09/2024	02/15/2025	08/10/2024	02/16/2025	
ANALYTE	UNITS												
APPENDIX III													
Boron	mg/L	< 0.012	0.011 J	< 0.012	0.013 J	0.15	0.21	3.0	3.9	4.5	5.8	1.4	1.8
Calcium	mg/L	71.1	70.7	58.8	57.2	24.2	24.8	142	154	146	170	156	170
Chloride	mg/L	2.9	2.6	2.7	2.4	5.4	5.6	8.0	9.0	8.8	9.3	7.7	8.5
Fluoride	mg/L	0.094 J	0.099 J	0.10	0.10	0.068 J	< 0.050	0.067 J	< 0.050	0.077 J	< 0.050	0.066 J	< 0.050
pH, Field	SU	7.46	7.40	7.40	7.48	5.38	5.50	5.86	5.90	5.74	5.73	6.38	6.46
Sulfate	mg/L	2.3	2.0	2.7	2.2	104	98.7	359	357	393	425	258	271
TDS	mg/L	253	229	240	222	263	241	746	782	809	866	658	704
APPENDIX IV													
Antimony	mg/L	< 0.00054	< 0.00050	< 0.00054	< 0.00050	< 0.00054	< 0.00050	< 0.00054	< 0.00050	< 0.00054	< 0.00050	< 0.00054	< 0.00050
Arsenic	mg/L	< 0.00084	< 0.0012	< 0.00084	< 0.0012	< 0.00084	< 0.0012	0.0011 J	< 0.0012	0.0015 J	< 0.0012	< 0.00084	< 0.0012
Barium	mg/L	0.025	0.030	0.11	0.11	0.033	0.037	0.029	0.034	0.032	0.043	0.083	0.087
Beryllium	mg/L	< 0.000094	< 0.00015	< 0.000094	< 0.00015	< 0.000094	< 0.00015	< 0.000094	< 0.00015	< 0.000094	< 0.00015	< 0.000094	< 0.00015
Cadmium	mg/L	< 0.00010	< 0.00012	< 0.00010	< 0.00012	0.00014 J	0.00015 J	0.00043 J	0.0016	0.00078	0.00085	< 0.00010	< 0.00012
Chromium	mg/L	< 0.0019	< 0.0012	< 0.0019	< 0.0012	< 0.0019	< 0.0012	< 0.0019	< 0.0012	< 0.0019	< 0.0012	< 0.0019	< 0.0012
Cobalt	mg/L	< 0.00032	< 0.0012	< 0.00032	< 0.0012	0.0025 J	0.0027 J	0.00094 J	< 0.0012	0.0020 J	0.0023 J	0.00052 J	< 0.0012
Fluoride	mg/L	0.094 J	0.099 J	0.10	0.10	0.068 J	< 0.050	0.067 J	< 0.050	0.077 J	< 0.050	0.066 J	< 0.050
Lead	mg/L	< 0.00016	< 0.00025	< 0.00016	< 0.00025	< 0.00016	< 0.00025	< 0.00016	< 0.00025	< 0.00016	< 0.00025	< 0.00016	< 0.00025
Lithium	mg/L	0.0026 J	0.00358 J	0.0042 J	0.00628 J	< 0.0016	0.000781 J	< 0.0016	0.00139 J	< 0.0016	0.00158 J	0.0047 J	0.00570 J
Mercury	mg/L	< 0.00013	< 0.00012	< 0.00013	< 0.00012	< 0.00013	< 0.00012	< 0.00013	< 0.00012	< 0.00013	0.00014 J	< 0.00013	< 0.00012
Molybdenum	mg/L	< 0.00062	< 0.0025	0.00071 J	< 0.0025	< 0.00062	< 0.0025	< 0.00062	< 0.0025	< 0.00062	< 0.0025	< 0.00062	< 0.0025
Combined Radium 226 + 228	pCi/L	0.973	0.876 U	0.501 U	1.33 U	0.817 U	0.312 U	0.604 U	0.783 U	0.378 U	0.284 U	0.693 U	0.372 U
Selenium	mg/L	< 0.00096	< 0.0012	< 0.00096	< 0.0012	< 0.00096	< 0.0012	< 0.00096	< 0.025	< 0.00096	< 0.025	< 0.00096	0.0049 J
Thallium	mg/L	< 0.00038	< 0.00015	< 0.00038	< 0.00015	< 0.00038	< 0.00015	< 0.00038	< 0.00015	< 0.00038	< 0.00015	< 0.00038	< 0.00015
Additional Parameters													
Bicarbonate Alkalinity as CaCO3	mg/L	NA	204	NA	215	NA	15.9	NA	115	NA	91.9	NA	174
Carbonate Alkalinity as CaCO3	mg/L	NA	< 5.0	NA	< 5.0								
Total Alkalinity as CaCO3	mg/L	NA	204	NA	215	NA	15.9	NA	115	NA	91.9	NA	174
Iron	mg/L	NA	0.099	NA	0.37	NA	8.0	NA	1.3	NA	1.6	NA	8.4
Magnesium	mg/L	NA	5.6	NA	11.6	NA	13.9	NA	39.5	NA	47.3	NA	17.1
Manganese	mg/L	NA	0.037 J	NA	0.0097 J	NA	2.8	NA	2.4	NA	2.8	NA	0.53
Potassium	mg/L	NA	0.80	NA	0.51	NA	0.75	NA	3.2	NA	4.0	NA	1.2
Sodium	mg/L	NA	3.9	NA	10.5	NA	11.0	NA	19.7	NA	25.3	NA	17.3
Sulfide	mg/L	NA	< 0.022	NA	0.023 J	NA	< 0.022	NA	< 0.022	NA	< 0.022	NA	< 0.022

Notes:

mg/L - milligrams per liter

pCi/L - picocuries per liter

NA - Indicates not analyzed

SU - Standard Units

TDS - Total Dissolved Solids

< indicates the substance was not detected above the method detection limit (MDL). The value displayed is the MDL.

J - The result is an estimated concentration. "J" qualifiers are applied by the laboratory when the concentration reported is above the method detection limit, but below the laboratory reporting limit.

Radium data are a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.

Table 5
 Summary of Groundwater Analytical Data
 Georgia Power Company
 Plant Hammond - Ash Pond 4
 Floyd County, GA

Sample Location	HGWC-107	HGWC-107	HGWC-109	HGWC-109	HGWA-111	HGWA-111	HGWA-112	HGWA-112	HGWA-113	HGWA-113	HGWC-118	HGWC-118	HGWC-117A	HGWC-117A	
Sample Date	08/10/2024	02/16/2025	08/10/2024	02/16/2025	08/06/2024	02/13/2025	08/09/2024	02/13/2025	08/08/2024	02/13/2025	08/09/2024	02/16/2025	08/10/2024	02/16/2025	
ANALYTE	UNITS														
APPENDIX III															
Boron	mg/L	0.84	1.0	0.20	0.22	< 0.012	0.0082 J	0.029 J	0.0072 J	< 0.012	0.010 J	0.59	0.76	0.28	0.39 J
Calcium	mg/L	61.4	67.9	53.7	48.4	46.2	53.9	7.1	7.2	8.4	8.5	85.2	94.9	64.5	78.3
Chloride	mg/L	3.1	3.3	4.0	4.2	2.8	2.8	5.2	4.9	1.5	1.4	4.2	4.3	4.5	5.2
Fluoride	mg/L	0.069 J	< 0.050	0.13	0.086 J	0.089 J	0.093 J	0.075 J	0.067 J	0.17	0.20	0.11	0.065 J	0.10	0.057 J
pH, Field	SU	6.22	6.27	7.03	6.82	6.99	6.92	5.65	5.64	5.98	6.15	7.07	7.12	6.61	7.03
Sulfate	mg/L	114	110	19.7	20.8	1.3	1.1	0.76 J	< 0.50	4.6	4.4	66.5	66.8	72.6	69.8
TDS	mg/L	299	275	227	187	163	172	90.0	63.0	85.0	90.0	338	323	284	284
APPENDIX IV															
Antimony	mg/L	< 0.00054	< 0.00050	< 0.00054	< 0.00050	< 0.00054	< 0.00050	< 0.00054	< 0.00050	< 0.00054	< 0.00050	< 0.00054	< 0.00050	< 0.00054	< 0.00050
Arsenic	mg/L	< 0.00084	< 0.0012	0.00091 J	0.0014 J	< 0.00084	< 0.0012	< 0.00084	< 0.0012	< 0.00084	< 0.0012	< 0.00084	< 0.0012	< 0.00084	< 0.0012
Barium	mg/L	0.033	0.039	0.076	0.080	0.027	0.030	0.026	0.028	0.029	0.032	0.037	0.048	0.042	0.049
Beryllium	mg/L	< 0.000094	< 0.00015	< 0.000094	< 0.00015	< 0.000094	< 0.00015	< 0.000094	< 0.00015	< 0.000094	< 0.00015	< 0.000094	< 0.00015	< 0.000094	< 0.00015
Cadmium	mg/L	< 0.00010	< 0.00012	< 0.00010	< 0.00012	< 0.00010	< 0.00012	< 0.00010	< 0.00012	< 0.00010	< 0.00012	< 0.00010	< 0.00012	< 0.00010	< 0.00012
Chromium	mg/L	< 0.0019	< 0.0012	< 0.0019	< 0.0012	< 0.0019	< 0.0012	0.0029 J	0.0043 J	< 0.0019	0.0024 J	< 0.0019	< 0.0012	< 0.0019	< 0.0012
Cobalt	mg/L	< 0.00032	< 0.0012	0.00050 J	< 0.0012	< 0.00032	< 0.0012	< 0.00032	< 0.0012	< 0.00032	< 0.0012	< 0.00032	< 0.0012	0.00081 J	< 0.0012
Fluoride	mg/L	0.069 J	< 0.050	0.13	0.086 J	0.089 J	0.093 J	0.075 J	0.067 J	0.17	0.20	0.11	0.065 J	0.10	0.057 J
Lead	mg/L	< 0.00016	< 0.00025	< 0.00016	< 0.00025	< 0.00016	< 0.00025	< 0.00016	< 0.00025	< 0.00016	< 0.00025	< 0.00016	< 0.00025	< 0.00016	< 0.00025
Lithium	mg/L	< 0.0016	0.00113 J	< 0.0016	0.000977 J	0.0019 J	0.00250 J	< 0.0016	0.000808 J	< 0.0016	0.00128 J	0.0019 J	0.00215 J	0.0041 J	0.00512 J
Mercury	mg/L	< 0.00013	< 0.00012	< 0.00013	< 0.00012	< 0.00013	< 0.00012	< 0.00013	< 0.00012	< 0.00013	< 0.00012	< 0.00013	< 0.00012	< 0.00013	< 0.00012
Molybdenum	mg/L	< 0.00062	< 0.0025	< 0.00062	< 0.0025	< 0.00062	< 0.0025	< 0.00062	< 0.0025	< 0.00062	< 0.0025	< 0.00062	< 0.0025	< 0.00062	< 0.0025
Combined Radium 226 + 228	pCi/L	0.223 U	0.352 U	0.500 U	0.852 U	0.0994 U	0.518 U	0.976 U	0.0591 U	0.181 U	0.437 U	0.421 U	0.909 U	0.723 U	0.615 U
Selenium	mg/L	< 0.00096	< 0.0012	< 0.00096	< 0.0012	< 0.00096	< 0.0012	< 0.00096	< 0.0012	0.0025 J	0.0027 J	< 0.00096	< 0.0012	< 0.00096	< 0.0012
Thallium	mg/L	< 0.00038	< 0.00015	< 0.00038	< 0.00015	< 0.00038	< 0.00015	< 0.00038	< 0.00015	< 0.00038	< 0.00015	< 0.00038	< 0.00015	< 0.00038	< 0.00015
Additional Parameters															
Bicarbonate Alkalinity as CaCO3	mg/L	NA	77.0	NA	149	NA	143	NA	22.6	NA	43.5	NA	220	NA	160
Carbonate Alkalinity as CaCO3	mg/L	NA	< 5.0	NA	< 5.0										
Total Alkalinity as CaCO3	mg/L	NA	77.0	NA	149	NA	143	NA	22.6	NA	43.5	NA	220	NA	160
Iron	mg/L	NA	0.51	NA	3.6	NA	< 0.012	NA	0.16	NA	0.042	NA	0.036 J	NA	0.049
Magnesium	mg/L	NA	11.6	NA	11.1	NA	5.9	NA	2.8	NA	3.8	NA	13.2	NA	10.7
Manganese	mg/L	NA	0.26	NA	0.61	NA	< 0.0012	NA	0.0018 J	NA	0.0055 J	NA	0.16	NA	0.054
Potassium	mg/L	NA	2.6	NA	0.46 J	NA	0.76	NA	0.89	NA	0.21 J	NA	0.75	NA	0.68
Sodium	mg/L	NA	8.7	NA	9.2	NA	4.7	NA	3.6	NA	9.0	NA	9.0	NA	8.5
Sulfide	mg/L	NA	< 0.022	NA	< 0.022										

Table 6
Summary of Background Concentrations and Groundwater Protection Standards
Georgia Power Company
Plant Hammond Ash Pond 4
Floyd County, GA

Analyte	Units	MCL	Federal CCR Rules Specified GWPS ⁽¹⁾	Background ⁽²⁾	GWPS ^(3,4)
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	0.12	2
Beryllium	mg/L	0.004	N/A	0.0019	0.004
Cadmium	mg/L	0.005	N/A	0.0005	0.005
Chromium	mg/L	0.1	N/A	0.0061	0.1
Cobalt	mg/L	N/A	0.006	0.005	0.006
Combined Radium 226 + 228	pCi/L	5	N/A	1.29, 1.30	5
Fluoride	mg/L	4	N/A	0.23	4
Lead	mg/L	N/A	0.015	0.0016	0.015
Lithium	mg/L	N/A	0.04	0.03	0.04
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

Notes:

CCR = Coal Combustion Residuals

EPA = Environmental Protection Agency

GWPS- Groundwater Protection Standard

MCL - Maximum Contaminant Level

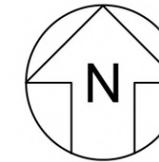
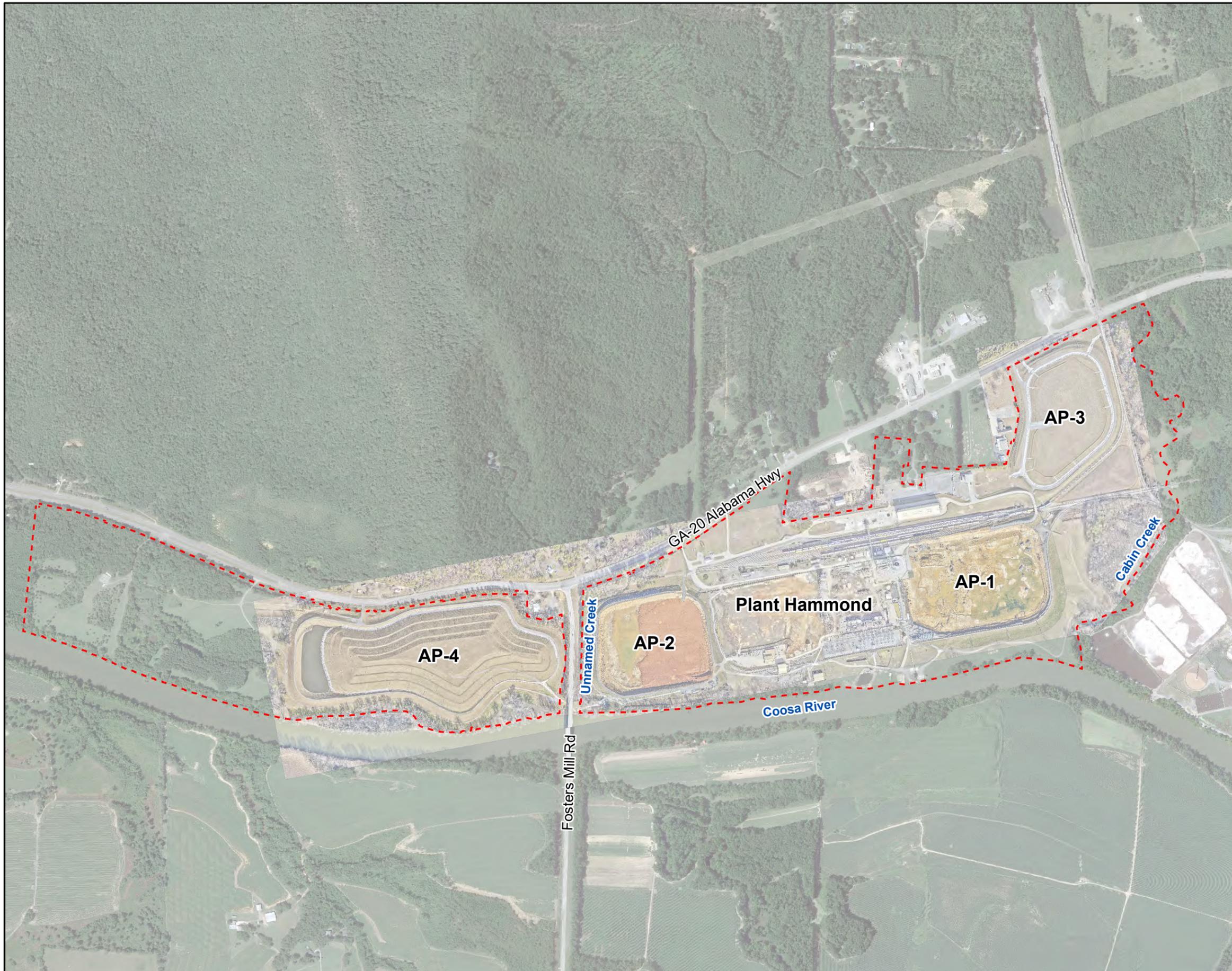
mg/L = milligrams per liter

N/A = Not Applicable

pCi/L = picocuries per liter

- (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). A cell with two values denotes that different background concentrations were calculated per semiannual event, presented in the order of the events (August 2024, February 2025).
- (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.
- (4) The GWPS apply to the August 2024 and February 2025 sampling events.

FIGURES

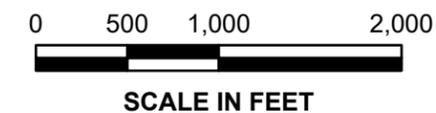


LEGEND

 Plant Hammond Property Boundary



Note:
 1. Aerial photograph source: Google Earth Pro August 2019 and Georgia Power Company, January 2024 and January 2025.



SITE LOCATION MAP

GEORGIA POWER COMPANY
 PLANT HAMMOND AP-4
 ROME, FLOYD COUNTY, GEORGIA

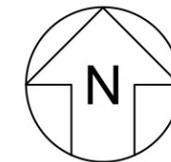
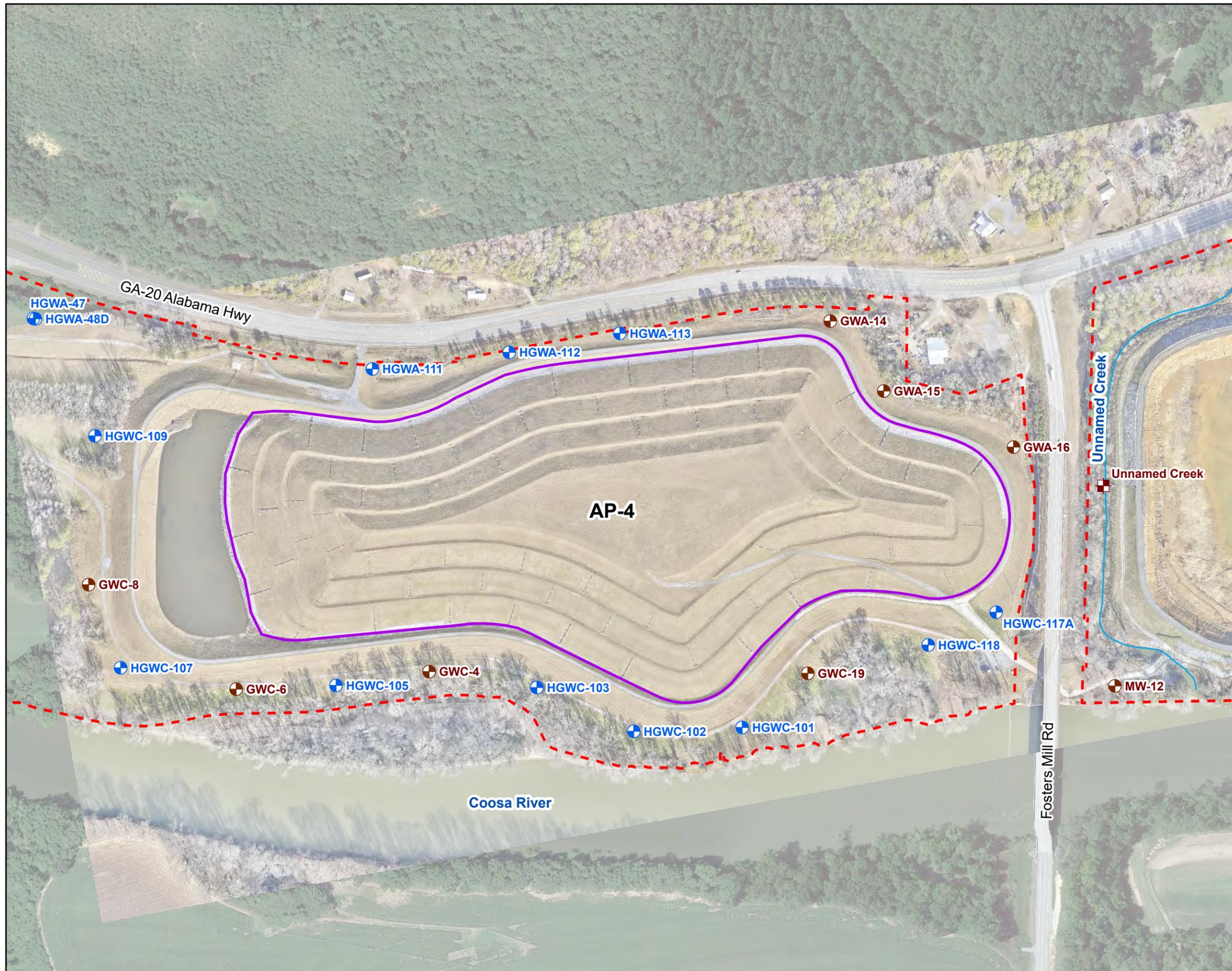
Prepared For:  Georgia Power

Prepared By:  Geosyntec
 consultants

KENNESAW, GA

JULY 2025

FIGURE
1



- LEGEND**
- ⊕ Detection Monitoring Well
 - ⊕ Piezometer
 - ⊕ Surface Water Level Gauge Point
 - Unnamed Creek
 - Approximate AP-4 Boundary
 - Plant Hammond Property Boundary

Note:
 1. Aerial photograph source: Google Earth Pro August 2019 and Georgia Power Company, January 2024 and January 2025.



**MONITORING WELL NETWORK
AND SAMPLING LOCATION MAP**

GEORGIA POWER COMPANY
 PLANT HAMMOND AP-4
 ROME, FLOYD COUNTY, GEORGIA

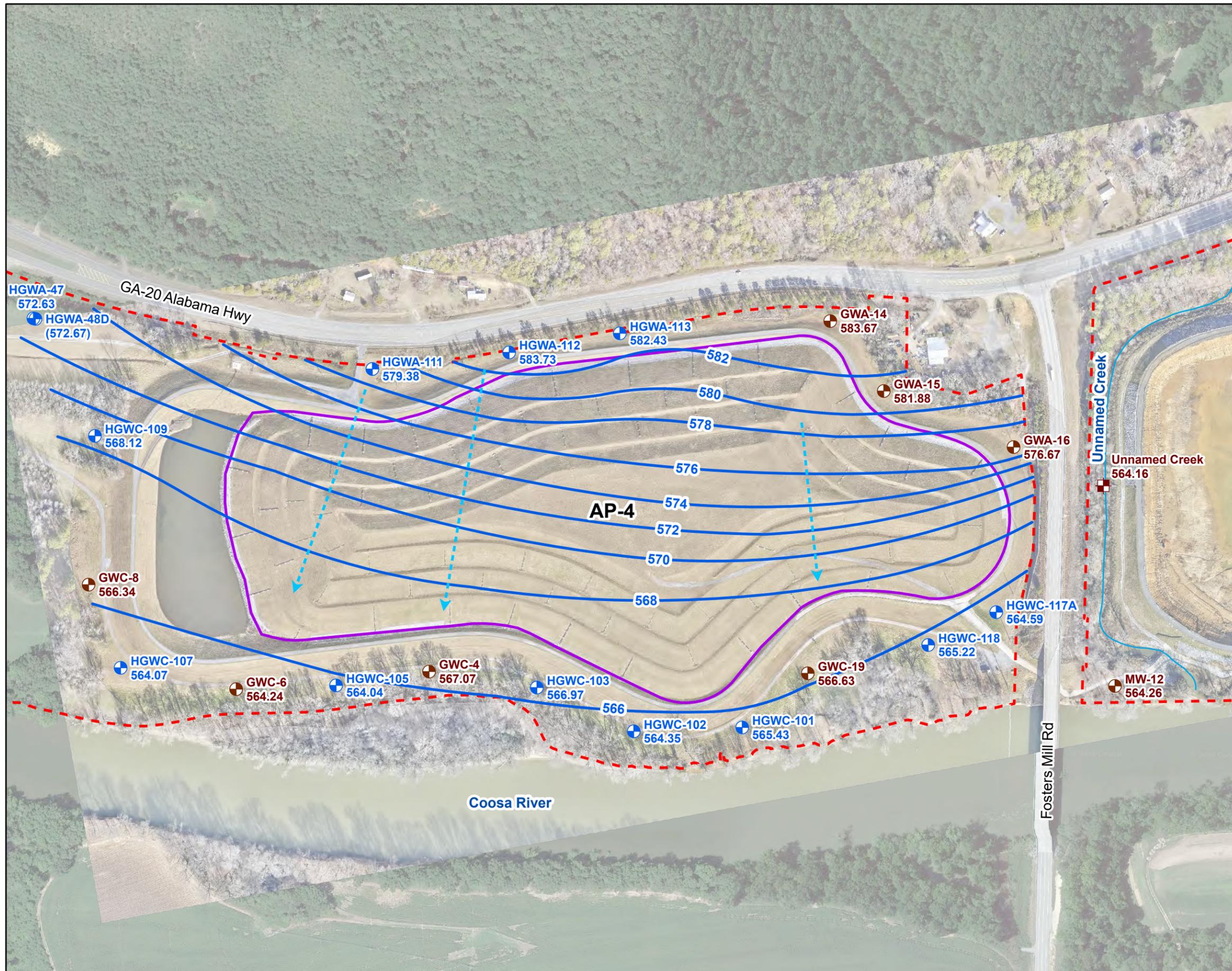
Prepared For: Georgia Power

Prepared By: Geosyntec
consultants

KENNESAW, GA

JULY 2025

**FIGURE
2**



- LEGEND**
- Detection Monitoring Well
 - Piezometer
 - Surface Water Level Gauge Point
 - Groundwater Elevation Contour
 - Approximate Groundwater Flow Direction
 - Unnamed Creek
 - Approximate AP-4 Boundary
 - Plant Hammond Property Boundary



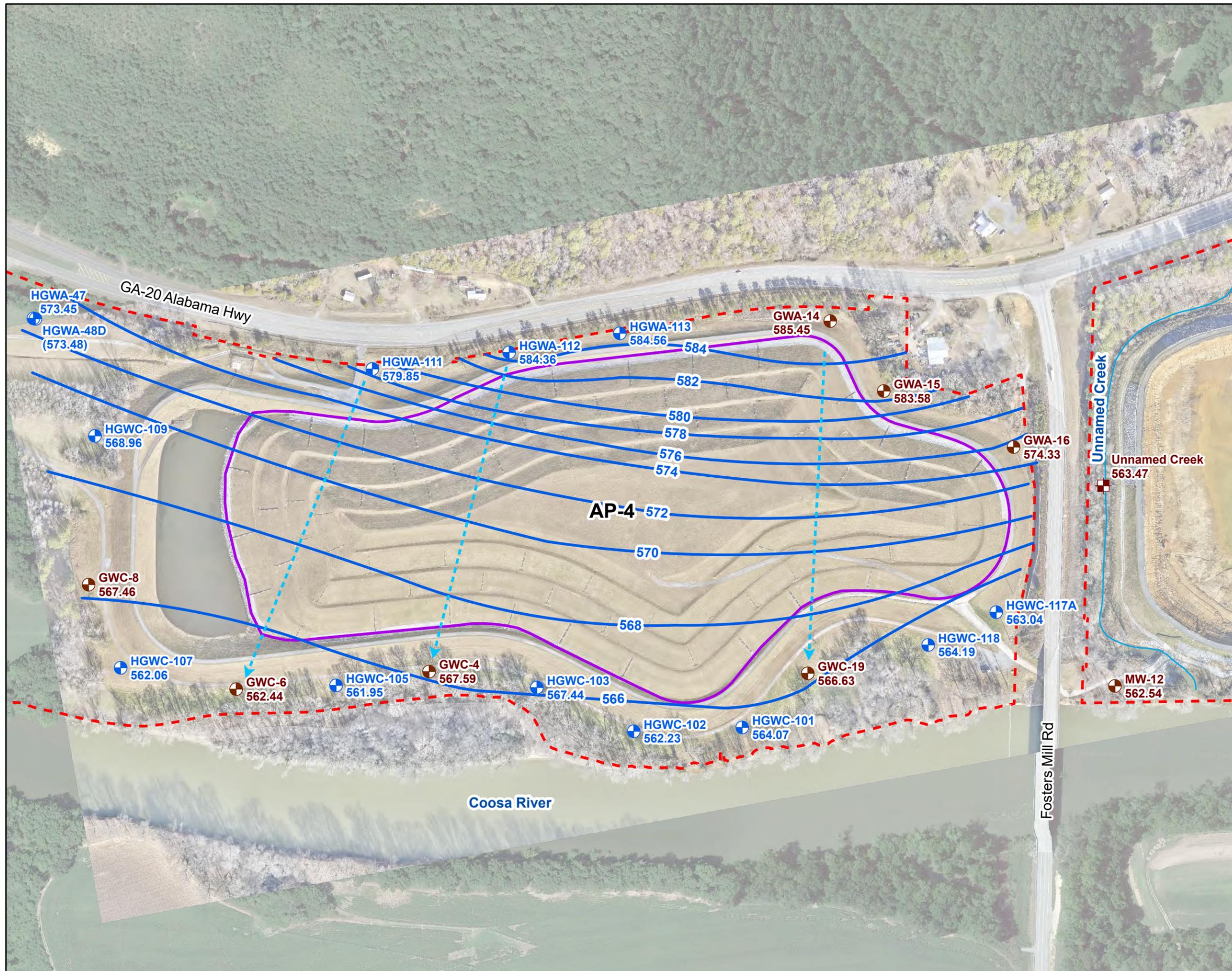
Notes:
 1. Water level elevation recorded on August 5, 2024. Elevation provided in feet (ft) referenced to the North American Vertical Datum of 1988 (NAVD 88).
 2. Groundwater elevations in parentheses were not used to make the groundwater contours because these wells are screened at a different elevation in the formation/aquifer.
 3. Aerial photograph source: Google Earth Pro August 2019 and Georgia Power Company, January 2024 and January 2025.



**POTENTIOMETRIC SURFACE
 CONTOUR MAP - AUGUST 2024**

GEORGIA POWER COMPANY
 PLANT HAMMOND AP-4
 ROME, FLOYD COUNTY, GEORGIA

Prepared For:	FIGURE 3
Prepared By:	
KENNESAW, GA	JULY 2025



- LEGEND**
- Detection Monitoring Well
 - Piezometer
 - Surface Water Level Gauge Point
 - Groundwater Elevation Contour
 - Approximate Groundwater Flow Direction
 - Unnamed Creek
 - Approximate AP-4 Boundary
 - Plant Hammond Property Boundary



- Notes:
1. Water level elevation recorded on February 10, 2025. 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: Google Earth Pro August 2019 and Georgia Power Company, January 2024 and January 2025.



**POTENTIOMETRIC SURFACE
CONTOUR MAP - FEBRUARY 2025**

GEORGIA POWER COMPANY
PLANT HAMMOND AP-4
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec
consultants

KENNESAW, GA

JULY 2025

**FIGURE
4**

APPENDIX A

Well Maintenance and Repair Documentation Memoranda

August 2024

MEMORANDUM

DATE: December 10, 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 4 (AP-4) – 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 4 (AP-4) during the August 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-4	8/05/2024	All Wells	Checked and cleared weep holes of debris.

Attachment

Well Inspection Summary Table

Well Inspection

Site Name: Plant Hammond AP-4

Date: 08/05/2024

Permit Number: 057-025D (CCR)

Field Conditions: Sunny, 80° F

	Location/Identification			
	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)
Well ID:				
HGWA-47	Yes	Yes	No	Yes
HGWA-48D	Yes	Yes	No	Yes
HGWA-111	Yes	Yes	No	Yes
HGWA-112	Yes	Yes	No	Yes
HGWA-113	Yes	Yes	No	Yes
HGWC-101	Yes	Yes	No	Yes
HGWC-102	Yes	Yes	No	Yes
HGWC-103	Yes	Yes	No	Yes
HGWC-105	Yes	Yes	No	Yes
HGWC-107	Yes	Yes	No	Yes
HGWC-109	Yes	Yes	No	Yes
HGWC-117A	Yes	Yes	No	Yes
HGWC-118	Yes	Yes	No	Yes
GWC-4	Yes	Yes	No	Yes
GWC-6	Yes	Yes	No	Yes
GWC-8	Yes	Yes	No	Yes
GWA-14	Yes	Yes	No	Yes
GWA-15	Yes	Yes	No	Yes
GWC-16	Yes	Yes	No	Yes
GWC-19	Yes	Yes	No	Yes
MW-12	Yes	Yes	No	Yes

Well Inspection

Site Name: Plant Hammond AP-4

Date: 08/05/2024

Permit Number: 057-025D (CCR)

Field Conditions: Sunny, 80° F

Well ID:	Protective Casing				
	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-47	Yes	Yes	Yes	Yes	Yes
HGWA-48D	Yes	Yes	Yes	Yes	Yes
HGWA-111	Yes	Yes	Yes	Yes	Yes
HGWA-112	Yes	Yes	Yes	Yes	Yes
HGWA-113	Yes	Yes	Yes	Yes	Yes
HGWC-101	Yes	Yes	Yes	Yes	Yes
HGWC-102	Yes	Yes	Yes	Yes	Yes
HGWC-103	Yes	Yes	Yes	Yes	Yes
HGWC-105	Yes	Yes	Yes	Yes	Yes
HGWC-107	Yes	Yes	Yes	Yes	Yes
HGWC-109	Yes	Yes	Yes	Yes	Yes
HGWC-117A	Yes	Yes	Yes	Yes	Yes
HGWC-118	Yes	Yes	Yes	Yes	Yes
GWC-4	Yes	Yes	Yes	Yes	Yes
GWC-6	Yes	Yes	Yes	Yes	Yes
GWC-8	Yes	Yes	Yes	Yes	Yes
GWA-14	Yes	Yes	Yes	Yes	Yes
GWA-15	Yes	Yes	Yes	Yes	Yes
GWC-16	Yes	Yes	Yes	Yes	Yes
GWC-19	Yes	Yes	Yes	Yes	Yes
MW-12	Yes	Yes	Yes	Yes	Yes

Well Inspection

Site Name: Plant Hammond AP-4

Date: 08/05/2024

Permit Number: 057-025D (CCR)

Field Conditions: Sunny, 80° F

Well ID:	Surface Pad			Internal Casing		
	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-47	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-48D	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-111	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-112	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-113	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-101	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-102	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-103	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-105	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-107	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-109	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-117A	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-118	Yes	Yes	Yes	Yes	Yes	Yes
GWC-4	Yes	Yes	Yes	Yes	Yes	Yes
GWC-6	Yes	Yes	Yes	Yes	Yes	Yes
GWC-8	Yes	Yes	Yes	Yes	Yes	Yes
GWA-14	Yes	Yes	Yes	Yes	Yes	Yes
GWA-15	Yes	Yes	Yes	Yes	Yes	Yes
GWC-16	Yes	Yes	Yes	Yes	Yes	Yes
GWC-19	Yes	Yes	Yes	Yes	Yes	Yes
MW-12	Yes	Yes	Yes	Yes	Yes	Yes

Well Inspection

Site Name: Plant Hammond AP-4

Date: 08/05/2024

Permit Number: 057-025D (CCR)

Field Conditions: Sunny, 80° F

Well ID:	Corrective actions as needed, by date:
HGWA-47	None
HGWA-48D	None
HGWA-111	None
HGWA-112	None
HGWA-113	None
HGWC-101	None
HGWC-102	None
HGWC-103	None
HGWC-105	None
HGWC-107	None
HGWC-109	None
HGWC-117A	None
HGWC-118	None
GWC-4	None
GWC-6	None
GWC-8	None
GWA-14	None
GWA-15	None
GWC-16	None
GWC-19	None
MW-12	None

February 2025

MEMORANDUM

DATE: May 19, 2025

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 4 (AP-4) – 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 4 (AP-4) during the February 2025 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-4	2/10/2025	All Wells	Checked and cleared weep holes of debris.

Attachment

Well Inspection Summary Table

Well Inspection

Site Name: Plant Hammond AP-4

Date: 02/10/2025

Permit Number: 057-025D (CCR)

Field Conditions: Cloudy, 50° F

Well ID:	Location/Identification			
	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-47	Yes	Yes	No	Yes
HGWA-48D	Yes	Yes	No	Yes
HGWA-111	Yes	Yes	No	Yes
HGWA-112	Yes	Yes	No	Yes
HGWA-113	Yes	Yes	No	Yes
HGWC-101	Yes	Yes	No	Yes
HGWC-102	Yes	Yes	No	Yes
HGWC-103	Yes	Yes	No	Yes
HGWC-105	Yes	Yes	No	Yes
HGWC-107	Yes	Yes	No	Yes
HGWC-109	Yes	Yes	No	Yes
HGWC-117A	Yes	Yes	No	Yes
HGWC-118	Yes	Yes	No	Yes
GWC-4	Yes	Yes	No	Yes
GWC-6	Yes	Yes	No	Yes
GWC-8	Yes	Yes	No	Yes
GWA-14	Yes	Yes	No	Yes
GWA-15	Yes	Yes	No	Yes
GWC-16	Yes	Yes	No	Yes
GWC-19	Yes	Yes	No	Yes
MW-12	Yes	Yes	No	Yes

Well Inspection

Site Name: Plant Hammond AP-4

Date: 02/10/2025

Permit Number: 057-025D (CCR)

Field Conditions: Cloudy, 50° F

Well ID:	Protective Casing				
	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-47	Yes	Yes	Yes	Yes	Yes
HGWA-48D	Yes	Yes	Yes	Yes	Yes
HGWA-111	Yes	Yes	Yes	Yes	Yes
HGWA-112	Yes	Yes	Yes	Yes	Yes
HGWA-113	Yes	Yes	Yes	Yes	Yes
HGWC-101	Yes	Yes	Yes	Yes	Yes
HGWC-102	Yes	Yes	Yes	Yes	Yes
HGWC-103	Yes	Yes	Yes	Yes	Yes
HGWC-105	Yes	Yes	Yes	Yes	Yes
HGWC-107	Yes	Yes	Yes	Yes	Yes
HGWC-109	Yes	Yes	Yes	Yes	Yes
HGWC-117A	Yes	Yes	Yes	Yes	Yes
HGWC-118	Yes	Yes	Yes	Yes	Yes
GWC-4	Yes	Yes	Yes	Yes	Yes
GWC-6	Yes	Yes	Yes	Yes	Yes
GWC-8	Yes	Yes	Yes	Yes	Yes
GWA-14	Yes	Yes	Yes	Yes	Yes
GWA-15	Yes	Yes	Yes	Yes	Yes
GWC-16	Yes	Yes	Yes	Yes	Yes
GWC-19	Yes	Yes	Yes	Yes	Yes
MW-12	Yes	Yes	Yes	Yes	Yes

Well Inspection

Site Name: Plant Hammond AP-4

Date: 02/10/2025

Permit Number: 057-025D (CCR)

Field Conditions: Cloudy, 50° F

Well ID:	Surface Pad			Internal Casing		
	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-47	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-48D	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-111	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-112	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-113	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-101	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-102	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-103	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-105	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-107	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-109	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-117A	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-118	Yes	Yes	Yes	Yes	Yes	Yes
GWC-4	Yes	Yes	Yes	Yes	Yes	Yes
GWC-6	Yes	Yes	Yes	Yes	Yes	Yes
GWC-8	Yes	Yes	Yes	Yes	Yes	Yes
GWA-14	Yes	Yes	Yes	Yes	Yes	Yes
GWA-15	Yes	Yes	Yes	Yes	Yes	Yes
GWC-16	Yes	Yes	Yes	Yes	Yes	Yes
GWC-19	Yes	Yes	Yes	Yes	Yes	Yes
MW-12	Yes	Yes	Yes	Yes	Yes	Yes

Well Inspection

Site Name: Plant Hammond AP-4

Date: 02/10/2025

Permit Number: 057-025D (CCR)

Field Conditions: Cloudy, 50° F

Well ID:	Corrective actions as needed, by date:
HGWA-47	None
HGWA-48D	None
HGWA-111	None
HGWA-112	None
HGWA-113	None
HGWC-101	None
HGWC-102	None
HGWC-103	None
HGWC-105	None
HGWC-107	None
HGWC-109	None
HGWC-117A	None
HGWC-118	None
GWC-4	None
GWC-6	None
GWC-8	None
GWA-14	None
GWA-15	None
GWC-16	None
GWC-19	None
MW-12	None

APPENDIX B

Laboratory Analytical and Field Sampling Reports

LABORATORY ANALYTICAL RESULTS

August 2024



August 26, 2024

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

RE: Project: Hammond AP-4
Pace Project No.: 92746288

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory between August 07, 2024 and August 12, 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
Jamie Newsome, Geosyntec Consultants
Zain Webb, Geosyntec Consultants



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Hammond AP-4

Pace Project No.: 92746288

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-4

Pace Project No.: 92746288

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92746288001	HAM-HGWA-47	Water	08/06/24 14:45	08/07/24 12:25
92746288002	HAM-HGWA-48D	Water	08/06/24 12:25	08/07/24 12:25
92746288003	HAM-HGWA-111	Water	08/06/24 17:05	08/07/24 12:25
92746288004	HAM-HGWA-113	Water	08/08/24 15:48	08/09/24 14:15
92746288005	HAM-HGWC-102	Water	08/09/24 13:27	08/12/24 12:10
92746288006	HAM-HGWC-103	Water	08/09/24 11:21	08/12/24 12:10
92746288007	HAM-HGWA-112	Water	08/09/24 09:36	08/12/24 12:10
92746288008	HAM-HGWC-118	Water	08/09/24 15:38	08/12/24 12:10
92746288009	HAM-AP4-FD-02	Water	08/09/24 00:00	08/12/24 12:10
92746288010	HAM-AP4-EB-01	Water	08/09/24 17:00	08/12/24 12:10
92746288011	HAM-AP4-FB-01	Water	08/09/24 16:55	08/12/24 12:10
92746288012	HAM-HGWC-101	Water	08/10/24 10:32	08/12/24 12:10
92746288013	HAM-HGWC-105	Water	08/10/24 11:44	08/12/24 12:10
92746288014	HAM-HGWC-107	Water	08/10/24 13:17	08/12/24 12:10
92746288015	HAM-HGWC-109	Water	08/10/24 11:10	08/12/24 12:10
92746288016	HAM-HGWC-117A	Water	08/10/24 14:25	08/12/24 12:10
92746288017	HAM-AP4-FD-01	Water	08/10/24 00:00	08/12/24 12:10
92746288018	HAM-AP4-EB-02	Water	08/10/24 12:35	08/12/24 12:10
92746288019	HAM-AP4-FB-02	Water	08/10/24 12:30	08/12/24 12:10

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Hammond AP-4

Pace Project No.: 92746288

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92746288001	HAM-HGWA-47	EPA 6010D	MJS2	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92746288002	HAM-HGWA-48D	EPA 6010D	MJS2	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92746288003	HAM-HGWA-111	EPA 6010D	MJS2	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92746288004	HAM-HGWA-113	EPA 6010D	MT1	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92746288005	HAM-HGWC-102	EPA 6010D	AJM	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92746288006	HAM-HGWC-103	EPA 6010D	AJM	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92746288007	HAM-HGWA-112	EPA 6010D	AJM	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92746288008	HAM-HGWC-118	EPA 6010D	AJM	1
		EPA 6020B	CW1	13

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Hammond AP-4

Pace Project No.: 92746288

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92746288009	HAM-AP4-FD-02	EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	AJM	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
92746288010	HAM-AP4-EB-01	SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	AJM	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
92746288011	HAM-AP4-FB-01	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	AJM	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92746288012	HAM-HGWC-101	EPA 6010D	AJM	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	AJM	1
92746288013	HAM-HGWC-105	EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	AJM	1
		EPA 6020B	CW1	13
92746288014	HAM-HGWC-107	EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	AJM	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
92746288015	HAM-HGWC-109	SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	AJM	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Hammond AP-4

Pace Project No.: 92746288

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92746288016	HAM-HGWC-117A	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	AJM	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
92746288017	HAM-AP4-FD-01	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	AJM	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
92746288018	HAM-AP4-EB-02	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	AJM	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
92746288019	HAM-AP4-FB-02	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	AJM	1
		EPA 6020B	CW1	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

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SUMMARY OF DETECTION

Project: Hammond AP-4

Pace Project No.: 92746288

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92746288001	HAM-HGWA-47					
EPA 6010D	Calcium	71.1	mg/L	1.0	08/15/24 23:25	
EPA 6020B	Barium	0.025	mg/L	0.0050	08/09/24 18:57	
EPA 6020B	Lithium	0.0026J	mg/L	0.030	08/09/24 18:57	
SM 2540C-2015	Total Dissolved Solids	253	mg/L	25.0	08/09/24 11:42	
EPA 300.0 Rev 2.1 1993	Chloride	2.9	mg/L	1.0	08/09/24 04:22	
EPA 300.0 Rev 2.1 1993	Fluoride	0.094J	mg/L	0.10	08/09/24 04:22	
EPA 300.0 Rev 2.1 1993	Sulfate	2.3	mg/L	1.0	08/09/24 04:22	
92746288002	HAM-HGWA-48D					
EPA 6010D	Calcium	58.8	mg/L	1.0	08/15/24 23:29	
EPA 6020B	Barium	0.11	mg/L	0.0050	08/09/24 19:01	
EPA 6020B	Lithium	0.0042J	mg/L	0.030	08/09/24 19:01	
EPA 6020B	Molybdenum	0.00071J	mg/L	0.010	08/09/24 19:01	
SM 2540C-2015	Total Dissolved Solids	240	mg/L	25.0	08/09/24 11:43	
EPA 300.0 Rev 2.1 1993	Chloride	2.7	mg/L	1.0	08/09/24 04:36	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	08/09/24 04:36	
EPA 300.0 Rev 2.1 1993	Sulfate	2.7	mg/L	1.0	08/09/24 04:36	
92746288003	HAM-HGWA-111					
EPA 6010D	Calcium	46.2	mg/L	1.0	08/15/24 23:33	
EPA 6020B	Barium	0.027	mg/L	0.0050	08/13/24 12:39	
EPA 6020B	Lithium	0.0019J	mg/L	0.030	08/13/24 12:39	
SM 2540C-2015	Total Dissolved Solids	163	mg/L	25.0	08/09/24 11:43	
EPA 300.0 Rev 2.1 1993	Chloride	2.8	mg/L	1.0	08/09/24 04:51	
EPA 300.0 Rev 2.1 1993	Fluoride	0.089J	mg/L	0.10	08/09/24 04:51	
EPA 300.0 Rev 2.1 1993	Sulfate	1.3	mg/L	1.0	08/09/24 04:51	
92746288004	HAM-HGWA-113					
EPA 6010D	Calcium	8.4	mg/L	1.0	08/16/24 17:19	
EPA 6020B	Barium	0.029	mg/L	0.0050	08/15/24 18:40	
EPA 6020B	Selenium	0.0025J	mg/L	0.0050	08/15/24 18:40	
SM 2540C-2015	Total Dissolved Solids	85.0	mg/L	25.0	08/14/24 12:07	
EPA 300.0 Rev 2.1 1993	Chloride	1.5	mg/L	1.0	08/13/24 20:25	
EPA 300.0 Rev 2.1 1993	Fluoride	0.17	mg/L	0.10	08/13/24 20:25	
EPA 300.0 Rev 2.1 1993	Sulfate	4.6	mg/L	1.0	08/13/24 20:25	
92746288005	HAM-HGWC-102					
EPA 6010D	Calcium	142	mg/L	1.0	08/18/24 18:41	M1
EPA 6020B	Arsenic	0.0011J	mg/L	0.0050	08/16/24 19:32	
EPA 6020B	Barium	0.029	mg/L	0.0050	08/16/24 19:32	
EPA 6020B	Boron	3.0	mg/L	0.040	08/16/24 19:32	
EPA 6020B	Cadmium	0.00043J	mg/L	0.00050	08/16/24 19:32	
EPA 6020B	Cobalt	0.00094J	mg/L	0.0050	08/16/24 19:32	
SM 2540C-2015	Total Dissolved Solids	746	mg/L	25.0	08/14/24 11:36	
EPA 300.0 Rev 2.1 1993	Chloride	8.0	mg/L	1.0	08/14/24 08:38	
EPA 300.0 Rev 2.1 1993	Fluoride	0.067J	mg/L	0.10	08/14/24 08:38	M1
EPA 300.0 Rev 2.1 1993	Sulfate	359	mg/L	8.0	08/14/24 20:04	M1

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-4

Pace Project No.: 92746288

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92746288006	HAM-HGWC-103					
EPA 6010D	Calcium	146	mg/L	1.0	08/18/24 18:53	
EPA 6020B	Arsenic	0.0015J	mg/L	0.0050	08/16/24 19:36	
EPA 6020B	Barium	0.032	mg/L	0.0050	08/16/24 19:36	
EPA 6020B	Boron	4.5	mg/L	0.040	08/16/24 19:36	
EPA 6020B	Cadmium	0.00078	mg/L	0.00050	08/16/24 19:36	
EPA 6020B	Cobalt	0.0020J	mg/L	0.0050	08/16/24 19:36	
SM 2540C-2015	Total Dissolved Solids	809	mg/L	25.0	08/14/24 11:37	
EPA 300.0 Rev 2.1 1993	Chloride	8.8	mg/L	1.0	08/14/24 09:21	
EPA 300.0 Rev 2.1 1993	Fluoride	0.077J	mg/L	0.10	08/14/24 09:21	
EPA 300.0 Rev 2.1 1993	Sulfate	393	mg/L	9.0	08/14/24 20:46	
92746288007	HAM-HGWA-112					
EPA 6010D	Calcium	7.1	mg/L	1.0	08/18/24 18:56	
EPA 6020B	Barium	0.026	mg/L	0.0050	08/16/24 19:40	
EPA 6020B	Boron	0.029J	mg/L	0.040	08/16/24 19:40	
EPA 6020B	Chromium	0.0029J	mg/L	0.0050	08/16/24 19:40	
SM 2540C-2015	Total Dissolved Solids	90.0	mg/L	25.0	08/14/24 11:37	
EPA 300.0 Rev 2.1 1993	Chloride	5.2	mg/L	1.0	08/14/24 09:36	
EPA 300.0 Rev 2.1 1993	Fluoride	0.075J	mg/L	0.10	08/14/24 09:36	
EPA 300.0 Rev 2.1 1993	Sulfate	0.76J	mg/L	1.0	08/14/24 09:36	
92746288008	HAM-HGWC-118					
EPA 6010D	Calcium	85.2	mg/L	1.0	08/18/24 19:00	
EPA 6020B	Barium	0.037	mg/L	0.0050	08/16/24 19:43	
EPA 6020B	Boron	0.59	mg/L	0.040	08/16/24 19:43	
EPA 6020B	Lithium	0.0019J	mg/L	0.030	08/16/24 19:43	
SM 2540C-2015	Total Dissolved Solids	338	mg/L	25.0	08/14/24 11:37	
EPA 300.0 Rev 2.1 1993	Chloride	4.2	mg/L	1.0	08/14/24 09:50	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	08/14/24 09:50	
EPA 300.0 Rev 2.1 1993	Sulfate	66.5	mg/L	1.0	08/14/24 09:50	
92746288009	HAM-AP4-FD-02					
EPA 6010D	Calcium	84.7	mg/L	1.0	08/18/24 19:04	
EPA 6020B	Barium	0.034	mg/L	0.0050	08/19/24 15:42	
EPA 6020B	Boron	0.59	mg/L	0.040	08/19/24 15:42	
EPA 6020B	Lithium	0.0021J	mg/L	0.030	08/19/24 15:42	
SM 2540C-2015	Total Dissolved Solids	330	mg/L	25.0	08/14/24 11:38	
EPA 300.0 Rev 2.1 1993	Chloride	4.2	mg/L	1.0	08/14/24 10:47	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	08/14/24 10:47	
EPA 300.0 Rev 2.1 1993	Sulfate	67.2	mg/L	1.0	08/14/24 10:47	
92746288010	HAM-AP4-EB-01					
EPA 6020B	Antimony	0.00086J	mg/L	0.0030	08/19/24 15:57	
SM 2540C-2015	Total Dissolved Solids	107	mg/L	25.0	08/14/24 11:38	
92746288011	HAM-AP4-FB-01					
SM 2540C-2015	Total Dissolved Solids	59.0	mg/L	25.0	08/14/24 11:38	
92746288012	HAM-HGWC-101					
EPA 6010D	Calcium	24.2	mg/L	1.0	08/18/24 19:22	

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SUMMARY OF DETECTION

Project: Hammond AP-4

Pace Project No.: 92746288

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92746288012	HAM-HGWC-101					
EPA 6020B	Barium	0.033	mg/L	0.0050	08/19/24 16:04	
EPA 6020B	Boron	0.15	mg/L	0.040	08/19/24 16:04	
EPA 6020B	Cadmium	0.00014J	mg/L	0.00050	08/19/24 16:04	
EPA 6020B	Cobalt	0.0025J	mg/L	0.0050	08/19/24 16:04	
SM 2540C-2015	Total Dissolved Solids	263	mg/L	25.0	08/15/24 10:35	
EPA 300.0 Rev 2.1 1993	Chloride	5.4	mg/L	1.0	08/14/24 11:02	
EPA 300.0 Rev 2.1 1993	Fluoride	0.068J	mg/L	0.10	08/14/24 11:02	
EPA 300.0 Rev 2.1 1993	Sulfate	104	mg/L	2.0	08/14/24 21:01	
92746288013	HAM-HGWC-105					
EPA 6010D	Calcium	156	mg/L	1.0	08/18/24 19:26	
EPA 6020B	Barium	0.083	mg/L	0.0050	08/19/24 16:08	
EPA 6020B	Boron	1.4	mg/L	0.040	08/19/24 16:08	
EPA 6020B	Cobalt	0.00052J	mg/L	0.0050	08/19/24 16:08	
EPA 6020B	Lithium	0.0047J	mg/L	0.030	08/19/24 16:08	
SM 2540C-2015	Total Dissolved Solids	658	mg/L	25.0	08/15/24 10:35	
EPA 300.0 Rev 2.1 1993	Chloride	7.7	mg/L	1.0	08/14/24 11:16	
EPA 300.0 Rev 2.1 1993	Fluoride	0.066J	mg/L	0.10	08/14/24 11:16	
EPA 300.0 Rev 2.1 1993	Sulfate	258	mg/L	6.0	08/14/24 21:15	
92746288014	HAM-HGWC-107					
EPA 6010D	Calcium	61.4	mg/L	1.0	08/18/24 19:29	
EPA 6020B	Barium	0.033	mg/L	0.0050	08/19/24 16:34	
EPA 6020B	Boron	0.84	mg/L	0.040	08/19/24 16:34	
SM 2540C-2015	Total Dissolved Solids	299	mg/L	25.0	08/15/24 10:36	
EPA 300.0 Rev 2.1 1993	Chloride	3.1	mg/L	1.0	08/14/24 11:30	
EPA 300.0 Rev 2.1 1993	Fluoride	0.069J	mg/L	0.10	08/14/24 11:30	
EPA 300.0 Rev 2.1 1993	Sulfate	114	mg/L	3.0	08/14/24 21:29	
92746288015	HAM-HGWC-109					
EPA 6010D	Calcium	53.7	mg/L	1.0	08/18/24 19:33	
EPA 6020B	Arsenic	0.00091J	mg/L	0.0050	08/19/24 16:38	
EPA 6020B	Barium	0.076	mg/L	0.0050	08/19/24 16:38	
EPA 6020B	Boron	0.20	mg/L	0.040	08/19/24 16:38	
EPA 6020B	Cobalt	0.00050J	mg/L	0.0050	08/19/24 16:38	
SM 2540C-2015	Total Dissolved Solids	227	mg/L	25.0	08/15/24 10:36	
EPA 300.0 Rev 2.1 1993	Chloride	4.0	mg/L	1.0	08/14/24 11:45	
EPA 300.0 Rev 2.1 1993	Fluoride	0.13	mg/L	0.10	08/14/24 11:45	
EPA 300.0 Rev 2.1 1993	Sulfate	19.7	mg/L	1.0	08/14/24 11:45	
92746288016	HAM-HGWC-117A					
EPA 6010D	Calcium	64.5	mg/L	1.0	08/18/24 19:37	
EPA 6020B	Barium	0.042	mg/L	0.0050	08/19/24 16:42	
EPA 6020B	Boron	0.28	mg/L	0.040	08/19/24 16:42	
EPA 6020B	Cobalt	0.00081J	mg/L	0.0050	08/19/24 16:42	
EPA 6020B	Lithium	0.0041J	mg/L	0.030	08/19/24 16:42	
SM 2540C-2015	Total Dissolved Solids	284	mg/L	25.0	08/15/24 10:36	
EPA 300.0 Rev 2.1 1993	Chloride	4.5	mg/L	1.0	08/14/24 12:28	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	08/14/24 12:28	

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SUMMARY OF DETECTION

Project: Hammond AP-4

Pace Project No.: 92746288

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92746288016	HAM-HGWC-117A					
EPA 300.0 Rev 2.1 1993	Sulfate	72.6	mg/L	1.0	08/14/24 12:28	
92746288017	HAM-AP4-FD-01					
EPA 6010D	Calcium	60.3	mg/L	1.0	08/18/24 19:40	
EPA 6020B	Barium	0.032	mg/L	0.0050	08/19/24 16:45	
EPA 6020B	Boron	0.82	mg/L	0.040	08/19/24 16:45	
SM 2540C-2015	Total Dissolved Solids	321	mg/L	25.0	08/15/24 10:36	
EPA 300.0 Rev 2.1 1993	Chloride	3.1	mg/L	1.0	08/14/24 12:42	
EPA 300.0 Rev 2.1 1993	Fluoride	0.071J	mg/L	0.10	08/14/24 12:42	
EPA 300.0 Rev 2.1 1993	Sulfate	115	mg/L	3.0	08/14/24 21:44	
92746288018	HAM-AP4-EB-02					
SM 2540C-2015	Total Dissolved Solids	28.0	mg/L	25.0	08/15/24 10:36	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92746288

Sample: HAM-HGWA-47 **Lab ID: 92746288001** Collected: 08/06/24 14:45 Received: 08/07/24 12:25 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	71.1	mg/L	1.0	0.12	1	08/09/24 11:23	08/15/24 23:25	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	08/08/24 10:21	08/09/24 18:57	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/08/24 10:21	08/09/24 18:57	7440-38-2	
Barium	0.025	mg/L	0.0050	0.00047	1	08/08/24 10:21	08/09/24 18:57	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/08/24 10:21	08/09/24 18:57	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	08/08/24 10:21	08/09/24 18:57	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/08/24 10:21	08/09/24 18:57	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/08/24 10:21	08/09/24 18:57	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/08/24 10:21	08/09/24 18:57	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/08/24 10:21	08/09/24 18:57	7439-92-1	
Lithium	0.0026J	mg/L	0.030	0.0016	1	08/08/24 10:21	08/09/24 18:57	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/08/24 10:21	08/09/24 18:57	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/08/24 10:21	08/09/24 18:57	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/08/24 10:21	08/09/24 18:57	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	08/20/24 08:00	08/20/24 12:23	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	253	mg/L	25.0	25.0	1		08/09/24 11:42		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	2.9	mg/L	1.0	0.60	1		08/09/24 04:22	16887-00-6	
Fluoride	0.094J	mg/L	0.10	0.050	1		08/09/24 04:22	16984-48-8	
Sulfate	2.3	mg/L	1.0	0.50	1		08/09/24 04:22	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92746288

Sample: HAM-HGWA-48D Lab ID: 92746288002 Collected: 08/06/24 12:25 Received: 08/07/24 12:25 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	58.8	mg/L	1.0	0.12	1	08/09/24 11:23	08/15/24 23:29	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	08/08/24 10:21	08/09/24 19:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/08/24 10:21	08/09/24 19:01	7440-38-2	
Barium	0.11	mg/L	0.0050	0.00047	1	08/08/24 10:21	08/09/24 19:01	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/08/24 10:21	08/09/24 19:01	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	08/08/24 10:21	08/09/24 19:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/08/24 10:21	08/09/24 19:01	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/08/24 10:21	08/09/24 19:01	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/08/24 10:21	08/09/24 19:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/08/24 10:21	08/09/24 19:01	7439-92-1	
Lithium	0.0042J	mg/L	0.030	0.0016	1	08/08/24 10:21	08/09/24 19:01	7439-93-2	
Molybdenum	0.00071J	mg/L	0.010	0.00062	1	08/08/24 10:21	08/09/24 19:01	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/08/24 10:21	08/09/24 19:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/08/24 10:21	08/09/24 19:01	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	08/20/24 08:00	08/20/24 12:33	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	240	mg/L	25.0	25.0	1		08/09/24 11:43		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	2.7	mg/L	1.0	0.60	1		08/09/24 04:36	16887-00-6	
Fluoride	0.10	mg/L	0.10	0.050	1		08/09/24 04:36	16984-48-8	
Sulfate	2.7	mg/L	1.0	0.50	1		08/09/24 04:36	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92746288

Sample: HAM-HGWA-111 **Lab ID: 92746288003** Collected: 08/06/24 17:05 Received: 08/07/24 12:25 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	46.2	mg/L	1.0	0.12	1	08/09/24 11:23	08/15/24 23:33	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	08/08/24 10:21	08/09/24 19:14	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/08/24 10:21	08/09/24 19:14	7440-38-2	
Barium	0.027	mg/L	0.0050	0.00047	1	08/08/24 10:21	08/13/24 12:39	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/08/24 10:21	08/13/24 12:39	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	08/08/24 10:21	08/13/24 12:39	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/08/24 10:21	08/09/24 19:14	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/08/24 10:21	08/09/24 19:14	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/08/24 10:21	08/09/24 19:14	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/08/24 10:21	08/09/24 19:14	7439-92-1	
Lithium	0.0019J	mg/L	0.030	0.0016	1	08/08/24 10:21	08/13/24 12:39	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/08/24 10:21	08/09/24 19:14	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/08/24 10:21	08/09/24 19:14	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/08/24 10:21	08/13/24 12:39	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	08/20/24 08:00	08/20/24 12:36	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	163	mg/L	25.0	25.0	1		08/09/24 11:43		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	2.8	mg/L	1.0	0.60	1		08/09/24 04:51	16887-00-6	
Fluoride	0.089J	mg/L	0.10	0.050	1		08/09/24 04:51	16984-48-8	
Sulfate	1.3	mg/L	1.0	0.50	1		08/09/24 04:51	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92746288

Sample: HAM-HGWA-113 Lab ID: 92746288004 Collected: 08/08/24 15:48 Received: 08/09/24 14:15 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	8.4	mg/L	1.0	0.12	1	08/15/24 17:37	08/16/24 17:19	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	08/15/24 12:41	08/15/24 18:40	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/15/24 12:41	08/15/24 18:40	7440-38-2	
Barium	0.029	mg/L	0.0050	0.00047	1	08/15/24 12:41	08/15/24 18:40	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 12:41	08/15/24 18:40	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	08/15/24 12:41	08/15/24 18:40	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 12:41	08/15/24 18:40	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 12:41	08/15/24 18:40	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/15/24 12:41	08/15/24 18:40	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 12:41	08/15/24 18:40	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/15/24 12:41	08/15/24 18:40	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/15/24 12:41	08/15/24 18:40	7439-98-7	
Selenium	0.0025J	mg/L	0.0050	0.00096	1	08/15/24 12:41	08/15/24 18:40	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 12:41	08/15/24 18:40	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	08/20/24 08:00	08/20/24 12:38	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	85.0	mg/L	25.0	25.0	1		08/14/24 12:07		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	1.5	mg/L	1.0	0.60	1		08/13/24 20:25	16887-00-6	
Fluoride	0.17	mg/L	0.10	0.050	1		08/13/24 20:25	16984-48-8	
Sulfate	4.6	mg/L	1.0	0.50	1		08/13/24 20:25	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92746288

Sample: HAM-HGWC-102 Lab ID: 92746288005 Collected: 08/09/24 13:27 Received: 08/12/24 12:10 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	142	mg/L	1.0	0.12	1	08/16/24 15:57	08/18/24 18:41	7440-70-2	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	08/15/24 13:11	08/16/24 19:32	7440-36-0	
Arsenic	0.0011J	mg/L	0.0050	0.00084	1	08/15/24 13:11	08/16/24 19:32	7440-38-2	
Barium	0.029	mg/L	0.0050	0.00047	1	08/15/24 13:11	08/16/24 19:32	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 13:11	08/16/24 19:32	7440-41-7	
Boron	3.0	mg/L	0.040	0.012	1	08/15/24 13:11	08/16/24 19:32	7440-42-8	
Cadmium	0.00043J	mg/L	0.00050	0.00010	1	08/15/24 13:11	08/16/24 19:32	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 13:11	08/16/24 19:32	7440-47-3	
Cobalt	0.00094J	mg/L	0.0050	0.00032	1	08/15/24 13:11	08/16/24 19:32	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 13:11	08/16/24 19:32	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/15/24 13:11	08/16/24 19:32	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/15/24 13:11	08/16/24 19:32	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 13:11	08/16/24 19:32	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 13:11	08/16/24 19:32	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	08/20/24 08:00	08/20/24 12:41	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	746	mg/L	25.0	25.0	1		08/14/24 11:36		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	8.0	mg/L	1.0	0.60	1		08/14/24 08:38	16887-00-6	
Fluoride	0.067J	mg/L	0.10	0.050	1		08/14/24 08:38	16984-48-8	M1
Sulfate	359	mg/L	8.0	4.0	8		08/14/24 20:04	14808-79-8	M1

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92746288

Sample: HAM-HGWC-103 Lab ID: 92746288006 Collected: 08/09/24 11:21 Received: 08/12/24 12:10 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	146	mg/L	1.0	0.12	1	08/16/24 15:57	08/18/24 18:53	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	08/15/24 13:11	08/16/24 19:36	7440-36-0	
Arsenic	0.0015J	mg/L	0.0050	0.00084	1	08/15/24 13:11	08/16/24 19:36	7440-38-2	
Barium	0.032	mg/L	0.0050	0.00047	1	08/15/24 13:11	08/16/24 19:36	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 13:11	08/16/24 19:36	7440-41-7	
Boron	4.5	mg/L	0.040	0.012	1	08/15/24 13:11	08/16/24 19:36	7440-42-8	
Cadmium	0.00078	mg/L	0.00050	0.00010	1	08/15/24 13:11	08/16/24 19:36	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 13:11	08/16/24 19:36	7440-47-3	
Cobalt	0.0020J	mg/L	0.0050	0.00032	1	08/15/24 13:11	08/16/24 19:36	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 13:11	08/16/24 19:36	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/15/24 13:11	08/16/24 19:36	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/15/24 13:11	08/16/24 19:36	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 13:11	08/16/24 19:36	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 13:11	08/16/24 19:36	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	08/20/24 08:00	08/20/24 12:58	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	809	mg/L	25.0	25.0	1		08/14/24 11:37		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	8.8	mg/L	1.0	0.60	1		08/14/24 09:21	16887-00-6	
Fluoride	0.077J	mg/L	0.10	0.050	1		08/14/24 09:21	16984-48-8	
Sulfate	393	mg/L	9.0	4.5	9		08/14/24 20:46	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92746288

Sample: HAM-HGWA-112 **Lab ID: 92746288007** Collected: 08/09/24 09:36 Received: 08/12/24 12:10 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	7.1	mg/L	1.0	0.12	1	08/16/24 15:57	08/18/24 18:56	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	08/15/24 13:11	08/16/24 19:40	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/15/24 13:11	08/16/24 19:40	7440-38-2	
Barium	0.026	mg/L	0.0050	0.00047	1	08/15/24 13:11	08/16/24 19:40	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 13:11	08/16/24 19:40	7440-41-7	
Boron	0.029J	mg/L	0.040	0.012	1	08/15/24 13:11	08/16/24 19:40	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 13:11	08/16/24 19:40	7440-43-9	
Chromium	0.0029J	mg/L	0.0050	0.0019	1	08/15/24 13:11	08/16/24 19:40	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/15/24 13:11	08/16/24 19:40	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 13:11	08/16/24 19:40	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/15/24 13:11	08/16/24 19:40	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/15/24 13:11	08/16/24 19:40	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 13:11	08/16/24 19:40	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 13:11	08/16/24 19:40	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	08/20/24 08:00	08/20/24 13:00	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	90.0	mg/L	25.0	25.0	1		08/14/24 11:37		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	5.2	mg/L	1.0	0.60	1		08/14/24 09:36	16887-00-6	
Fluoride	0.075J	mg/L	0.10	0.050	1		08/14/24 09:36	16984-48-8	
Sulfate	0.76J	mg/L	1.0	0.50	1		08/14/24 09:36	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92746288

Sample: HAM-HGWC-118 **Lab ID: 92746288008** Collected: 08/09/24 15:38 Received: 08/12/24 12:10 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	85.2	mg/L	1.0	0.12	1	08/16/24 15:57	08/18/24 19:00	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	08/15/24 13:11	08/16/24 19:43	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/15/24 13:11	08/16/24 19:43	7440-38-2	
Barium	0.037	mg/L	0.0050	0.00047	1	08/15/24 13:11	08/16/24 19:43	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 13:11	08/16/24 19:43	7440-41-7	
Boron	0.59	mg/L	0.040	0.012	1	08/15/24 13:11	08/16/24 19:43	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 13:11	08/16/24 19:43	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 13:11	08/16/24 19:43	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/15/24 13:11	08/16/24 19:43	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 13:11	08/16/24 19:43	7439-92-1	
Lithium	0.0019J	mg/L	0.030	0.0016	1	08/15/24 13:11	08/16/24 19:43	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/15/24 13:11	08/16/24 19:43	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 13:11	08/16/24 19:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 13:11	08/16/24 19:43	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	08/20/24 08:00	08/20/24 13:03	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	338	mg/L	25.0	25.0	1		08/14/24 11:37		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	4.2	mg/L	1.0	0.60	1		08/14/24 09:50	16887-00-6	
Fluoride	0.11	mg/L	0.10	0.050	1		08/14/24 09:50	16984-48-8	
Sulfate	66.5	mg/L	1.0	0.50	1		08/14/24 09:50	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92746288

Sample: HAM-AP4-FD-02 **Lab ID: 92746288009** Collected: 08/09/24 00:00 Received: 08/12/24 12:10 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	84.7	mg/L	1.0	0.12	1	08/16/24 15:57	08/18/24 19:04	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	08/15/24 13:30	08/19/24 15:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/15/24 13:30	08/19/24 15:42	7440-38-2	
Barium	0.034	mg/L	0.0050	0.00047	1	08/15/24 13:30	08/19/24 15:42	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 13:30	08/19/24 15:42	7440-41-7	
Boron	0.59	mg/L	0.040	0.012	1	08/15/24 13:30	08/19/24 15:42	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 13:30	08/19/24 15:42	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 13:30	08/19/24 15:42	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/15/24 13:30	08/19/24 15:42	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 13:30	08/19/24 15:42	7439-92-1	
Lithium	0.0021J	mg/L	0.030	0.0016	1	08/15/24 13:30	08/19/24 15:42	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/15/24 13:30	08/19/24 15:42	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 13:30	08/19/24 15:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 13:30	08/19/24 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	08/20/24 08:00	08/20/24 13:06	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	330	mg/L	25.0	25.0	1		08/14/24 11:38		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	4.2	mg/L	1.0	0.60	1		08/14/24 10:47	16887-00-6	
Fluoride	0.11	mg/L	0.10	0.050	1		08/14/24 10:47	16984-48-8	
Sulfate	67.2	mg/L	1.0	0.50	1		08/14/24 10:47	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92746288

Sample: HAM-AP4-EB-01		Lab ID: 92746288010		Collected: 08/09/24 17:00		Received: 08/12/24 12:10		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	08/16/24 15:57	08/18/24 19:08	7440-70-2	
6020 MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	0.00086J	mg/L	0.0030	0.00054	1	08/15/24 13:30	08/19/24 15:57	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/15/24 13:30	08/19/24 15:57	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	08/15/24 13:30	08/19/24 15:57	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 13:30	08/19/24 15:57	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	08/15/24 13:30	08/19/24 15:57	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 13:30	08/19/24 15:57	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 13:30	08/19/24 15:57	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/15/24 13:30	08/19/24 15:57	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 13:30	08/19/24 15:57	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/15/24 13:30	08/19/24 15:57	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/15/24 13:30	08/19/24 15:57	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 13:30	08/19/24 15:57	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 13:30	08/19/24 15:57	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	08/20/24 08:00	08/20/24 13:08	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	107	mg/L	25.0	25.0	1		08/14/24 11:38		
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		08/14/24 00:07	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/14/24 00:07	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/14/24 00:07	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92746288

Sample: HAM-AP4-FB-01 **Lab ID: 92746288011** Collected: 08/09/24 16:55 Received: 08/12/24 12:10 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
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	08/16/24 15:57	08/18/24 19:18	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	08/15/24 13:30	08/19/24 16:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/15/24 13:30	08/19/24 16:01	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	08/15/24 13:30	08/19/24 16:01	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 13:30	08/19/24 16:01	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	08/15/24 13:30	08/19/24 16:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 13:30	08/19/24 16:01	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 13:30	08/19/24 16:01	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/15/24 13:30	08/19/24 16:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 13:30	08/19/24 16:01	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/15/24 13:30	08/19/24 16:01	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/15/24 13:30	08/19/24 16:01	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 13:30	08/19/24 16:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 13:30	08/19/24 16:01	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	08/20/24 08:00	08/20/24 13:11	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	59.0	mg/L	25.0	25.0	1		08/14/24 11:38		
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		08/14/24 00:21	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/14/24 00:21	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/14/24 00:21	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92746288

Sample: HAM-HGWC-101 **Lab ID: 92746288012** Collected: 08/10/24 10:32 Received: 08/12/24 12:10 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	24.2	mg/L	1.0	0.12	1	08/16/24 15:57	08/18/24 19:22	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	08/15/24 13:30	08/19/24 16:04	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/15/24 13:30	08/19/24 16:04	7440-38-2	
Barium	0.033	mg/L	0.0050	0.00047	1	08/15/24 13:30	08/19/24 16:04	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 13:30	08/19/24 16:04	7440-41-7	
Boron	0.15	mg/L	0.040	0.012	1	08/15/24 13:30	08/19/24 16:04	7440-42-8	
Cadmium	0.00014J	mg/L	0.00050	0.00010	1	08/15/24 13:30	08/19/24 16:04	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 13:30	08/19/24 16:04	7440-47-3	
Cobalt	0.0025J	mg/L	0.0050	0.00032	1	08/15/24 13:30	08/19/24 16:04	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 13:30	08/19/24 16:04	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/15/24 13:30	08/19/24 16:04	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/15/24 13:30	08/19/24 16:04	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 13:30	08/19/24 16:04	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 13:30	08/19/24 16:04	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	08/20/24 08:00	08/20/24 13:13	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	263	mg/L	25.0	25.0	1		08/15/24 10:35		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	5.4	mg/L	1.0	0.60	1		08/14/24 11:02	16887-00-6	
Fluoride	0.068J	mg/L	0.10	0.050	1		08/14/24 11:02	16984-48-8	
Sulfate	104	mg/L	2.0	1.0	2		08/14/24 21:01	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92746288

Sample: HAM-HGWC-105 Lab ID: 92746288013 Collected: 08/10/24 11:44 Received: 08/12/24 12:10 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	156	mg/L	1.0	0.12	1	08/16/24 15:57	08/18/24 19:26	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	08/15/24 13:30	08/19/24 16:08	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/15/24 13:30	08/19/24 16:08	7440-38-2	
Barium	0.083	mg/L	0.0050	0.00047	1	08/15/24 13:30	08/19/24 16:08	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 13:30	08/19/24 16:08	7440-41-7	
Boron	1.4	mg/L	0.040	0.012	1	08/15/24 13:30	08/19/24 16:08	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 13:30	08/19/24 16:08	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 13:30	08/19/24 16:08	7440-47-3	
Cobalt	0.00052J	mg/L	0.0050	0.00032	1	08/15/24 13:30	08/19/24 16:08	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 13:30	08/19/24 16:08	7439-92-1	
Lithium	0.0047J	mg/L	0.030	0.0016	1	08/15/24 13:30	08/19/24 16:08	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/15/24 13:30	08/19/24 16:08	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 13:30	08/19/24 16:08	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 13:30	08/19/24 16:08	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	08/20/24 08:00	08/20/24 13:16	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	658	mg/L	25.0	25.0	1		08/15/24 10:35		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	7.7	mg/L	1.0	0.60	1		08/14/24 11:16	16887-00-6	
Fluoride	0.066J	mg/L	0.10	0.050	1		08/14/24 11:16	16984-48-8	
Sulfate	258	mg/L	6.0	3.0	6		08/14/24 21:15	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92746288

Sample: HAM-HGWC-107 **Lab ID: 92746288014** Collected: 08/10/24 13:17 Received: 08/12/24 12:10 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	61.4	mg/L	1.0	0.12	1	08/16/24 15:57	08/18/24 19:29	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	08/15/24 13:30	08/19/24 16:34	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/15/24 13:30	08/19/24 16:34	7440-38-2	
Barium	0.033	mg/L	0.0050	0.00047	1	08/15/24 13:30	08/19/24 16:34	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 13:30	08/19/24 16:34	7440-41-7	
Boron	0.84	mg/L	0.040	0.012	1	08/15/24 13:30	08/19/24 16:34	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 13:30	08/19/24 16:34	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 13:30	08/19/24 16:34	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/15/24 13:30	08/19/24 16:34	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 13:30	08/19/24 16:34	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/15/24 13:30	08/19/24 16:34	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/15/24 13:30	08/19/24 16:34	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 13:30	08/19/24 16:34	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 13:30	08/19/24 16:34	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	08/20/24 08:00	08/20/24 13:19	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	299	mg/L	25.0	25.0	1		08/15/24 10:36		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	3.1	mg/L	1.0	0.60	1		08/14/24 11:30	16887-00-6	
Fluoride	0.069J	mg/L	0.10	0.050	1		08/14/24 11:30	16984-48-8	
Sulfate	114	mg/L	3.0	1.5	3		08/14/24 21:29	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92746288

Sample: HAM-HGWC-109 **Lab ID: 92746288015** Collected: 08/10/24 11:10 Received: 08/12/24 12:10 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	53.7	mg/L	1.0	0.12	1	08/16/24 15:57	08/18/24 19:33	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	08/15/24 13:30	08/19/24 16:38	7440-36-0	
Arsenic	0.00091J	mg/L	0.0050	0.00084	1	08/15/24 13:30	08/19/24 16:38	7440-38-2	
Barium	0.076	mg/L	0.0050	0.00047	1	08/15/24 13:30	08/19/24 16:38	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 13:30	08/19/24 16:38	7440-41-7	
Boron	0.20	mg/L	0.040	0.012	1	08/15/24 13:30	08/19/24 16:38	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 13:30	08/19/24 16:38	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 13:30	08/19/24 16:38	7440-47-3	
Cobalt	0.00050J	mg/L	0.0050	0.00032	1	08/15/24 13:30	08/19/24 16:38	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 13:30	08/19/24 16:38	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/15/24 13:30	08/19/24 16:38	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/15/24 13:30	08/19/24 16:38	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 13:30	08/19/24 16:38	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 13:30	08/19/24 16:38	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	08/20/24 08:00	08/20/24 13:21	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	227	mg/L	25.0	25.0	1		08/15/24 10:36		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	4.0	mg/L	1.0	0.60	1		08/14/24 11:45	16887-00-6	
Fluoride	0.13	mg/L	0.10	0.050	1		08/14/24 11:45	16984-48-8	
Sulfate	19.7	mg/L	1.0	0.50	1		08/14/24 11:45	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92746288

Sample: HAM-HGWC-117A **Lab ID: 92746288016** Collected: 08/10/24 14:25 Received: 08/12/24 12:10 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	64.5	mg/L	1.0	0.12	1	08/16/24 15:57	08/18/24 19:37	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	08/15/24 13:30	08/19/24 16:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/15/24 13:30	08/19/24 16:42	7440-38-2	
Barium	0.042	mg/L	0.0050	0.00047	1	08/15/24 13:30	08/19/24 16:42	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 13:30	08/19/24 16:42	7440-41-7	
Boron	0.28	mg/L	0.040	0.012	1	08/15/24 13:30	08/19/24 16:42	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 13:30	08/19/24 16:42	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 13:30	08/19/24 16:42	7440-47-3	
Cobalt	0.00081J	mg/L	0.0050	0.00032	1	08/15/24 13:30	08/19/24 16:42	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 13:30	08/19/24 16:42	7439-92-1	
Lithium	0.0041J	mg/L	0.030	0.0016	1	08/15/24 13:30	08/19/24 16:42	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/15/24 13:30	08/19/24 16:42	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 13:30	08/19/24 16:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 13:30	08/19/24 16:42	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	08/20/24 08:00	08/20/24 13:29	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	284	mg/L	25.0	25.0	1		08/15/24 10:36		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	4.5	mg/L	1.0	0.60	1		08/14/24 12:28	16887-00-6	
Fluoride	0.10	mg/L	0.10	0.050	1		08/14/24 12:28	16984-48-8	
Sulfate	72.6	mg/L	1.0	0.50	1		08/14/24 12:28	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92746288

Sample: HAM-AP4-FD-01 **Lab ID: 92746288017** Collected: 08/10/24 00:00 Received: 08/12/24 12:10 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6010D ATL ICP									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	60.3	mg/L	1.0	0.12	1	08/16/24 15:57	08/18/24 19:40	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	08/15/24 13:30	08/19/24 16:45	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/15/24 13:30	08/19/24 16:45	7440-38-2	
Barium	0.032	mg/L	0.0050	0.00047	1	08/15/24 13:30	08/19/24 16:45	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 13:30	08/19/24 16:45	7440-41-7	
Boron	0.82	mg/L	0.040	0.012	1	08/15/24 13:30	08/19/24 16:45	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 13:30	08/19/24 16:45	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 13:30	08/19/24 16:45	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/15/24 13:30	08/19/24 16:45	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 13:30	08/19/24 16:45	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/15/24 13:30	08/19/24 16:45	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/15/24 13:30	08/19/24 16:45	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 13:30	08/19/24 16:45	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 13:30	08/19/24 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	08/20/24 08:00	08/20/24 13:32	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	321	mg/L	25.0	25.0	1		08/15/24 10:36		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	3.1	mg/L	1.0	0.60	1		08/14/24 12:42	16887-00-6	
Fluoride	0.071J	mg/L	0.10	0.050	1		08/14/24 12:42	16984-48-8	
Sulfate	115	mg/L	3.0	1.5	3		08/14/24 21:44	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92746288

Sample: HAM-AP4-EB-02 **Lab ID: 92746288018** Collected: 08/10/24 12:35 Received: 08/12/24 12:10 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
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	08/16/24 15:57	08/18/24 19:44	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	08/15/24 13:30	08/19/24 16:49	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/15/24 13:30	08/19/24 16:49	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	08/15/24 13:30	08/19/24 16:49	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 13:30	08/19/24 16:49	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	08/15/24 13:30	08/19/24 16:49	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 13:30	08/19/24 16:49	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 13:30	08/19/24 16:49	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/15/24 13:30	08/19/24 16:49	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 13:30	08/19/24 16:49	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/15/24 13:30	08/19/24 16:49	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/15/24 13:30	08/19/24 16:49	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 13:30	08/19/24 16:49	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 13:30	08/19/24 16:49	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	08/20/24 08:00	08/20/24 13:34	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	28.0	mg/L	25.0	25.0	1		08/15/24 10:36		
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		08/14/24 01:18	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/14/24 01:18	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/14/24 01:18	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92746288

Sample: HAM-AP4-FB-02 **Lab ID: 92746288019** Collected: 08/10/24 12:30 Received: 08/12/24 12:10 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
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	08/16/24 15:57	08/18/24 19:48	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	08/15/24 13:30	08/19/24 16:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/15/24 13:30	08/19/24 16:53	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	08/15/24 13:30	08/19/24 16:53	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 13:30	08/19/24 16:53	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	08/15/24 13:30	08/19/24 16:53	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 13:30	08/19/24 16:53	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 13:30	08/19/24 16:53	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/15/24 13:30	08/19/24 16:53	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 13:30	08/19/24 16:53	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/15/24 13:30	08/19/24 16:53	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/15/24 13:30	08/19/24 16:53	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 13:30	08/19/24 16:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 13:30	08/19/24 16:53	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	08/20/24 08:00	08/20/24 13:37	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		08/15/24 10:37		
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		08/14/24 01:33	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/14/24 01:33	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/14/24 01:33	14808-79-8	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92746288

QC Batch:	874538	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92746288001, 92746288002, 92746288003		

METHOD BLANK: 4505177 Matrix: Water

Associated Lab Samples: 92746288001, 92746288002, 92746288003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/15/24 21:56	

LABORATORY CONTROL SAMPLE: 4505178

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4505179 4505180

Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec						
Calcium	mg/L	211000 ug/L	1	1	207	205	-381	-564	75-125	1	20	M1	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92746288

QC Batch: 875958	Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A	Analysis Description: 6010D ATL
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92746288004

METHOD BLANK: 4512108 Matrix: Water

Associated Lab Samples: 92746288004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/16/24 15:49	

LABORATORY CONTROL SAMPLE: 4512109

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.98J	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4512110 4512111

Parameter	Units	4512110		4512111		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92746891009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Calcium	mg/L	124	1	1	127	119	231	-563	75-125	6	20 M1

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92746288

QC Batch:	876300	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92746288005, 92746288006, 92746288007, 92746288008, 92746288009, 92746288010, 92746288011, 92746288012, 92746288013, 92746288014, 92746288015, 92746288016, 92746288017, 92746288018, 92746288019		

METHOD BLANK:	4514148	Matrix:	Water
Associated Lab Samples:	92746288005, 92746288006, 92746288007, 92746288008, 92746288009, 92746288010, 92746288011, 92746288012, 92746288013, 92746288014, 92746288015, 92746288016, 92746288017, 92746288018, 92746288019		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/18/24 18:19	

LABORATORY CONTROL SAMPLE:	4514149					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	4514150			4514151								
Parameter	Units	92746288005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	142	1	1	140	148	-213	560	75-125	5	20	M1

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92746288

QC Batch:	874205	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92746288001, 92746288002, 92746288003

METHOD BLANK: 4503459 Matrix: Water

Associated Lab Samples: 92746288001, 92746288002, 92746288003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	08/09/24 18:24	
Arsenic	mg/L	ND	0.0050	0.00084	08/09/24 18:24	
Barium	mg/L	ND	0.0050	0.00047	08/09/24 18:24	
Beryllium	mg/L	ND	0.00050	0.000094	08/09/24 18:24	
Boron	mg/L	ND	0.040	0.012	08/09/24 18:24	
Cadmium	mg/L	ND	0.00050	0.00010	08/09/24 18:24	
Chromium	mg/L	ND	0.0050	0.0019	08/09/24 18:24	
Cobalt	mg/L	ND	0.0050	0.00032	08/09/24 18:24	
Lead	mg/L	ND	0.0010	0.00016	08/09/24 18:24	
Lithium	mg/L	ND	0.030	0.0016	08/09/24 18:24	
Molybdenum	mg/L	ND	0.010	0.00062	08/09/24 18:24	
Selenium	mg/L	ND	0.0050	0.00096	08/09/24 18:24	
Thallium	mg/L	ND	0.0010	0.00038	08/09/24 18:24	

LABORATORY CONTROL SAMPLE: 4503460

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.094	94	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.093	93	80-120	
Beryllium	mg/L	0.1	0.11	106	80-120	
Boron	mg/L	1	1.1	105	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.096	96	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.096	96	80-120	
Lithium	mg/L	0.1	0.10	104	80-120	
Molybdenum	mg/L	0.1	0.093	93	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Thallium	mg/L	0.1	0.087	87	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4503461 4503462

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92746286001	Result	Conc.	Conc.								
Antimony	mg/L	ND	0.1	0.1	0.099	0.096	99	96	75-125	2	20		
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	102	103	75-125	1	20		

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92746288

Parameter	Units	4503461		4503462		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92746286001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.50	0.1	0.1	0.62	0.63	120	128	75-125	1	20	M1	
Beryllium	mg/L	ND	0.1	0.1	0.099	0.096	99	96	75-125	3	20		
Boron	mg/L	0.16	1	1	1.2	1.1	100	99	75-125	1	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	1	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20		
Lead	mg/L	ND	0.1	0.1	0.093	0.093	93	93	75-125	0	20		
Lithium	mg/L	0.0048J	0.1	0.1	0.10	0.11	98	100	75-125	2	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.098	99	97	75-125	2	20		
Selenium	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20		
Thallium	mg/L	ND	0.1	0.1	0.088	0.086	88	86	75-125	2	20		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92746288

QC Batch: 875890

Analysis Method: EPA 6020B

QC Batch Method: EPA 3005A

Analysis Description: 6020 MET

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92746288004

METHOD BLANK: 4511665

Matrix: Water

Associated Lab Samples: 92746288004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	08/15/24 17:33	
Arsenic	mg/L	ND	0.0050	0.00084	08/15/24 17:33	
Barium	mg/L	ND	0.0050	0.00047	08/15/24 17:33	
Beryllium	mg/L	ND	0.00050	0.000094	08/15/24 17:33	
Boron	mg/L	ND	0.040	0.012	08/15/24 17:33	
Cadmium	mg/L	ND	0.00050	0.00010	08/15/24 17:33	
Chromium	mg/L	ND	0.0050	0.0019	08/15/24 17:33	
Cobalt	mg/L	ND	0.0050	0.00032	08/15/24 17:33	
Lead	mg/L	ND	0.0010	0.00016	08/15/24 17:33	
Lithium	mg/L	ND	0.030	0.0016	08/15/24 17:33	
Molybdenum	mg/L	ND	0.010	0.00062	08/15/24 17:33	
Selenium	mg/L	ND	0.0050	0.00096	08/15/24 17:33	
Thallium	mg/L	ND	0.0010	0.00038	08/15/24 17:33	

LABORATORY CONTROL SAMPLE: 4511666

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	102	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.095	95	80-120	
Beryllium	mg/L	0.1	0.10	100	80-120	
Boron	mg/L	1	0.95	95	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.099	99	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.10	102	80-120	
Lithium	mg/L	0.1	0.10	103	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4511667 4511668

Parameter	Units	92746891014 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Spike Conc.	MSD Spike Conc.	MS Result						
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20	
Arsenic	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92746288

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4511667 4511668													
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92746891014 Result	Spike Conc.	Spike Conc.	MS Result								
Barium	mg/L	0.031	0.1	0.1	0.13	0.13	97	100	75-125	2	20		
Beryllium	mg/L	ND	0.1	0.1	0.094	0.096	94	96	75-125	2	20		
Boron	mg/L	0.61	1	1	1.6	1.6	99	100	75-125	1	20		
Cadmium	mg/L	0.00017J	0.1	0.1	0.098	0.10	98	100	75-125	2	20		
Chromium	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20		
Cobalt	mg/L	0.020	0.1	0.1	0.11	0.12	95	98	75-125	2	20		
Lead	mg/L	ND	0.1	0.1	0.094	0.095	94	95	75-125	1	20		
Lithium	mg/L	0.011J	0.1	0.1	0.11	0.11	96	98	75-125	2	20		
Molybdenum	mg/L	0.046	0.1	0.1	0.14	0.14	99	99	75-125	0	20		
Selenium	mg/L	0.0034J	0.1	0.1	0.10	0.10	99	101	75-125	2	20		
Thallium	mg/L	0.00043J	0.1	0.1	0.097	0.098	97	98	75-125	1	20		

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92746288

QC Batch:	875891	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92746288005, 92746288006, 92746288007, 92746288008

METHOD BLANK: 4511669 Matrix: Water

Associated Lab Samples: 92746288005, 92746288006, 92746288007, 92746288008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	08/16/24 18:00	
Arsenic	mg/L	ND	0.0050	0.00084	08/16/24 18:00	
Barium	mg/L	ND	0.0050	0.00047	08/16/24 18:00	
Beryllium	mg/L	ND	0.00050	0.000094	08/16/24 18:00	
Boron	mg/L	ND	0.040	0.012	08/16/24 18:00	
Cadmium	mg/L	ND	0.00050	0.00010	08/16/24 18:00	
Chromium	mg/L	ND	0.0050	0.0019	08/16/24 18:00	
Cobalt	mg/L	ND	0.0050	0.00032	08/16/24 18:00	
Lead	mg/L	ND	0.0010	0.00016	08/16/24 18:00	
Lithium	mg/L	ND	0.030	0.0016	08/16/24 18:00	
Molybdenum	mg/L	ND	0.010	0.00062	08/16/24 18:00	
Selenium	mg/L	ND	0.0050	0.00096	08/16/24 18:00	
Thallium	mg/L	ND	0.0010	0.00038	08/16/24 18:00	

LABORATORY CONTROL SAMPLE: 4511670

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.099	99	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.095	95	80-120	
Beryllium	mg/L	0.1	0.099	99	80-120	
Boron	mg/L	1	0.94	94	80-120	
Cadmium	mg/L	0.1	0.098	98	80-120	
Chromium	mg/L	0.1	0.099	99	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.097	97	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	0.097	97	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4511671 4511672

Parameter	Units	92746285008 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	Spike Conc.	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	2	20	
Arsenic	mg/L	0.00092J	0.1	0.1	0.10	0.10	104	101	75-125	3	20	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92746288

Parameter	Units	4511671		4511672		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92746285008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.021	0.1	0.1	0.12	0.12	95	94	75-125	1	20		
Beryllium	mg/L	0.0021	0.1	0.1	0.10	0.096	97	94	75-125	3	20		
Boron	mg/L	4.2	1	1	5.2	5.2	95	94	75-125	0	20		
Cadmium	mg/L	0.00096	0.1	0.1	0.10	0.099	100	98	75-125	2	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.098	102	98	75-125	4	20		
Cobalt	mg/L	0.091	0.1	0.1	0.19	0.19	104	98	75-125	3	20		
Lead	mg/L	0.00070J	0.1	0.1	0.093	0.092	92	91	75-125	1	20		
Lithium	mg/L	0.011J	0.1	0.1	0.11	0.11	97	97	75-125	1	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	2	20		
Selenium	mg/L	0.0022J	0.1	0.1	0.10	0.10	103	102	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.094	0.093	93	93	75-125	0	20		

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92746288

QC Batch:	875892	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92746288009, 92746288010, 92746288011, 92746288012, 92746288013, 92746288014, 92746288015, 92746288016, 92746288017, 92746288018, 92746288019		

METHOD BLANK:	4511675	Matrix:	Water
Associated Lab Samples:	92746288009, 92746288010, 92746288011, 92746288012, 92746288013, 92746288014, 92746288015, 92746288016, 92746288017, 92746288018, 92746288019		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	08/19/24 15:35	
Arsenic	mg/L	ND	0.0050	0.00084	08/19/24 15:35	
Barium	mg/L	ND	0.0050	0.00047	08/19/24 15:35	
Beryllium	mg/L	ND	0.00050	0.000094	08/19/24 15:35	
Boron	mg/L	ND	0.040	0.012	08/19/24 15:35	
Cadmium	mg/L	ND	0.00050	0.00010	08/19/24 15:35	
Chromium	mg/L	ND	0.0050	0.0019	08/19/24 15:35	
Cobalt	mg/L	ND	0.0050	0.00032	08/19/24 15:35	
Lead	mg/L	ND	0.0010	0.00016	08/19/24 15:35	
Lithium	mg/L	ND	0.030	0.0016	08/19/24 15:35	
Molybdenum	mg/L	ND	0.010	0.00062	08/19/24 15:35	
Selenium	mg/L	ND	0.0050	0.00096	08/19/24 15:35	
Thallium	mg/L	ND	0.0010	0.00038	08/19/24 15:35	

LABORATORY CONTROL SAMPLE: 4511676						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	102	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.10	101	80-120	
Boron	mg/L	1	0.96	96	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.10	102	80-120	
Molybdenum	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4511677 4511678												
Parameter	Units	92746288009 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	MSD Result							
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	103	103	75-125	0	20	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92746288

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4511677 4511678												
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		92746288009 Result	Spike Conc.	Spike Conc.	MS Result							
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	101	103	75-125	2	20	
Barium	mg/L	0.034	0.1	0.1	0.13	0.14	100	101	75-125	0	20	
Beryllium	mg/L	ND	0.1	0.1	0.098	0.10	98	101	75-125	2	20	
Boron	mg/L	0.59	1	1	1.6	1.6	101	105	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.097	0.10	97	101	75-125	4	20	
Cobalt	mg/L	ND	0.1	0.1	0.096	0.099	96	99	75-125	3	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.097	95	97	75-125	2	20	
Lithium	mg/L	0.0021J	0.1	0.1	0.10	0.10	98	100	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	104	102	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.099	0.10	98	101	75-125	3	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.097	95	97	75-125	2	20	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92746288

QC Batch:	876671	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92746288001, 92746288002, 92746288003, 92746288004, 92746288005, 92746288006, 92746288007, 92746288008, 92746288009, 92746288010, 92746288011, 92746288012, 92746288013, 92746288014, 92746288015, 92746288016, 92746288017, 92746288018, 92746288019		

METHOD BLANK:	4515798	Matrix:	Water
Associated Lab Samples:	92746288001, 92746288002, 92746288003, 92746288004, 92746288005, 92746288006, 92746288007, 92746288008, 92746288009, 92746288010, 92746288011, 92746288012, 92746288013, 92746288014, 92746288015, 92746288016, 92746288017, 92746288018, 92746288019		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/20/24 12:17	

LABORATORY CONTROL SAMPLE:	4515799					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	91	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	4515800			4515801								
Parameter	Units	92746288001 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	0.0022	0.0022	86	86	75-125	0	20	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92746288

QC Batch:	874243	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: 92746288001, 92746288002, 92746288003

METHOD BLANK: 4503653 Matrix: Water

Associated Lab Samples: 92746288001, 92746288002, 92746288003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/09/24 11:40	

LABORATORY CONTROL SAMPLE: 4503654

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	418	104	80-120	

SAMPLE DUPLICATE: 4503655

Parameter	Units	92746285004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	191	191	0	10	

SAMPLE DUPLICATE: 4503656

Parameter	Units	92746292004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	41.0	36.0	13	10	D6

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92746288

QC Batch:	875540	Analysis Method:	SM 2540C-2015
QC Batch Method:	SM 2540C-2015	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	92746288004	Laboratory:	Pace Analytical Services - Peachtree Corners, GA

METHOD BLANK: 4509816 Matrix: Water
 Associated Lab Samples: 92746288004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/14/24 12:00	

LABORATORY CONTROL SAMPLE: 4509817

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	395	99	80-120	

SAMPLE DUPLICATE: 4509818

Parameter	Units	92746285006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	768	769	0	10	

SAMPLE DUPLICATE: 4509819

Parameter	Units	92746891021 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	52.0	102	65	10	D6

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92746288

QC Batch:	875545	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:	92746288005, 92746288006, 92746288007, 92746288008, 92746288009, 92746288010, 92746288011		

METHOD BLANK:	4509836	Matrix:	Water
Associated Lab Samples:	92746288005, 92746288006, 92746288007, 92746288008, 92746288009, 92746288010, 92746288011		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/14/24 11:33	

LABORATORY CONTROL SAMPLE: 4509837						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	412	103	80-120	

SAMPLE DUPLICATE: 4509838						
Parameter	Units	92746285011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1670	1680	1	10	

SAMPLE DUPLICATE: 4509839						
Parameter	Units	92746288009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	330	337	2	10	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92746288

QC Batch:	875847	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: 92746288012, 92746288013, 92746288014, 92746288015, 92746288016, 92746288017, 92746288018, 92746288019

METHOD BLANK: 4511518 Matrix: Water

Associated Lab Samples: 92746288012, 92746288013, 92746288014, 92746288015, 92746288016, 92746288017, 92746288018, 92746288019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/15/24 10:34	

LABORATORY CONTROL SAMPLE: 4511519

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	396	99	80-120	

SAMPLE DUPLICATE: 4511520

Parameter	Units	92746288012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	263	263	0	10	

SAMPLE DUPLICATE: 4511521

Parameter	Units	92747047003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	419	418	0	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92746288

QC Batch: 874380 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: 92746288001, 92746288002, 92746288003

METHOD BLANK: 4504473 Matrix: Water
 Associated Lab Samples: 92746288001, 92746288002, 92746288003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/08/24 21:45	
Fluoride	mg/L	ND	0.10	0.050	08/08/24 21:45	
Sulfate	mg/L	ND	1.0	0.50	08/08/24 21:45	

LABORATORY CONTROL SAMPLE: 4504474

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.4	103	90-110	
Fluoride	mg/L	2.5	2.7	106	90-110	
Sulfate	mg/L	50	51.3	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4504475 4504476

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92746012001 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	5.1	50	50	55.2	56.8	100	103	90-110	3	10		
Fluoride	mg/L	0.54	2.5	2.5	3.6	3.7	123	125	90-110	2	10	M1	
Sulfate	mg/L	4.5	50	50	54.6	56.4	100	104	90-110	3	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4504477 4504478

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92746286002 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	11.6	50	50	61.5	62.9	100	103	90-110	2	10		
Fluoride	mg/L	0.20	2.5	2.5	2.7	2.8	102	105	90-110	3	10		
Sulfate	mg/L	127	50	50	170	173	87	93	90-110	2	10	M1	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92746288

QC Batch: 875049	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: 92746288004

METHOD BLANK: 4507403 Matrix: Water

Associated Lab Samples: 92746288004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/13/24 16:42	
Fluoride	mg/L	ND	0.10	0.050	08/13/24 16:42	
Sulfate	mg/L	ND	1.0	0.50	08/13/24 16:42	

LABORATORY CONTROL SAMPLE: 4507404

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.5	105	90-110	
Fluoride	mg/L	2.5	2.7	108	90-110	
Sulfate	mg/L	50	53.1	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4507405 4507406

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92746891011 Result	Spike Conc.	Spike Conc.	Result								
Chloride	mg/L	12.4	50	50	63.3	64.6	102	104	90-110	2	10		
Fluoride	mg/L	0.079J	2.5	2.5	2.5	2.6	98	101	90-110	3	10		
Sulfate	mg/L	112	50	50	155	155	84	86	90-110	1	10 M1		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4507407 4507408

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92746891021 Result	Spike Conc.	Spike Conc.	Result								
Chloride	mg/L	ND	50	50	51.7	50.4	103	101	90-110	3	10		
Fluoride	mg/L	ND	2.5	2.5	2.5	2.4	100	97	90-110	3	10		
Sulfate	mg/L	ND	50	50	51.7	50.4	103	101	90-110	2	10		

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92746288

QC Batch:	875381	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:	92746288005, 92746288006, 92746288007, 92746288008, 92746288009, 92746288010, 92746288011, 92746288012, 92746288013, 92746288014, 92746288015, 92746288016, 92746288017, 92746288018, 92746288019		

METHOD BLANK:	4509356	Matrix:	Water
Associated Lab Samples:	92746288005, 92746288006, 92746288007, 92746288008, 92746288009, 92746288010, 92746288011, 92746288012, 92746288013, 92746288014, 92746288015, 92746288016, 92746288017, 92746288018, 92746288019		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/13/24 22:40	
Fluoride	mg/L	ND	0.10	0.050	08/13/24 22:40	
Sulfate	mg/L	ND	1.0	0.50	08/13/24 22:40	

LABORATORY CONTROL SAMPLE:	4509357					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.1	102	90-110	
Fluoride	mg/L	2.5	2.6	104	90-110	
Sulfate	mg/L	50	51.1	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	4509358			4509359								
Parameter	Units	92746288005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.067J	2.5	2.5	2.9	2.9	113	114	90-110	0	10	M1
Sulfate	mg/L	359	50	50	392	393	67	68	90-110	0	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	4509360			4509361								
Parameter	Units	92746288015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.13	2.5	2.5	2.6	2.7	100	103	90-110	3	10	
Sulfate	mg/L	19.7	50	50	70.6	71.3	102	103	90-110	1	10	

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QUALIFIERS

Project: Hammond AP-4

Pace Project No.: 92746288

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: Hammond AP-4

Pace Project No.: 92746288

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92746288001	HAM-HGWA-47	EPA 3010A	874538	EPA 6010D	874645
92746288002	HAM-HGWA-48D	EPA 3010A	874538	EPA 6010D	874645
92746288003	HAM-HGWA-111	EPA 3010A	874538	EPA 6010D	874645
92746288004	HAM-HGWA-113	EPA 3010A	875958	EPA 6010D	876036
92746288005	HAM-HGWC-102	EPA 3010A	876300	EPA 6010D	876355
92746288006	HAM-HGWC-103	EPA 3010A	876300	EPA 6010D	876355
92746288007	HAM-HGWA-112	EPA 3010A	876300	EPA 6010D	876355
92746288008	HAM-HGWC-118	EPA 3010A	876300	EPA 6010D	876355
92746288009	HAM-AP4-FD-02	EPA 3010A	876300	EPA 6010D	876355
92746288010	HAM-AP4-EB-01	EPA 3010A	876300	EPA 6010D	876355
92746288011	HAM-AP4-FB-01	EPA 3010A	876300	EPA 6010D	876355
92746288012	HAM-HGWC-101	EPA 3010A	876300	EPA 6010D	876355
92746288013	HAM-HGWC-105	EPA 3010A	876300	EPA 6010D	876355
92746288014	HAM-HGWC-107	EPA 3010A	876300	EPA 6010D	876355
92746288015	HAM-HGWC-109	EPA 3010A	876300	EPA 6010D	876355
92746288016	HAM-HGWC-117A	EPA 3010A	876300	EPA 6010D	876355
92746288017	HAM-AP4-FD-01	EPA 3010A	876300	EPA 6010D	876355
92746288018	HAM-AP4-EB-02	EPA 3010A	876300	EPA 6010D	876355
92746288019	HAM-AP4-FB-02	EPA 3010A	876300	EPA 6010D	876355
92746288001	HAM-HGWA-47	EPA 3005A	874205	EPA 6020B	874325
92746288002	HAM-HGWA-48D	EPA 3005A	874205	EPA 6020B	874325
92746288003	HAM-HGWA-111	EPA 3005A	874205	EPA 6020B	874325
92746288004	HAM-HGWA-113	EPA 3005A	875890	EPA 6020B	876009
92746288005	HAM-HGWC-102	EPA 3005A	875891	EPA 6020B	876018
92746288006	HAM-HGWC-103	EPA 3005A	875891	EPA 6020B	876018
92746288007	HAM-HGWA-112	EPA 3005A	875891	EPA 6020B	876018
92746288008	HAM-HGWC-118	EPA 3005A	875891	EPA 6020B	876018
92746288009	HAM-AP4-FD-02	EPA 3005A	875892	EPA 6020B	876017
92746288010	HAM-AP4-EB-01	EPA 3005A	875892	EPA 6020B	876017
92746288011	HAM-AP4-FB-01	EPA 3005A	875892	EPA 6020B	876017
92746288012	HAM-HGWC-101	EPA 3005A	875892	EPA 6020B	876017
92746288013	HAM-HGWC-105	EPA 3005A	875892	EPA 6020B	876017
92746288014	HAM-HGWC-107	EPA 3005A	875892	EPA 6020B	876017
92746288015	HAM-HGWC-109	EPA 3005A	875892	EPA 6020B	876017
92746288016	HAM-HGWC-117A	EPA 3005A	875892	EPA 6020B	876017
92746288017	HAM-AP4-FD-01	EPA 3005A	875892	EPA 6020B	876017
92746288018	HAM-AP4-EB-02	EPA 3005A	875892	EPA 6020B	876017
92746288019	HAM-AP4-FB-02	EPA 3005A	875892	EPA 6020B	876017
92746288001	HAM-HGWA-47	EPA 7470A	876671	EPA 7470A	876771
92746288002	HAM-HGWA-48D	EPA 7470A	876671	EPA 7470A	876771
92746288003	HAM-HGWA-111	EPA 7470A	876671	EPA 7470A	876771
92746288004	HAM-HGWA-113	EPA 7470A	876671	EPA 7470A	876771
92746288005	HAM-HGWC-102	EPA 7470A	876671	EPA 7470A	876771
92746288006	HAM-HGWC-103	EPA 7470A	876671	EPA 7470A	876771
92746288007	HAM-HGWA-112	EPA 7470A	876671	EPA 7470A	876771

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-4

Pace Project No.: 92746288

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92746288008	HAM-HGWC-118	EPA 7470A	876671	EPA 7470A	876771
92746288009	HAM-AP4-FD-02	EPA 7470A	876671	EPA 7470A	876771
92746288010	HAM-AP4-EB-01	EPA 7470A	876671	EPA 7470A	876771
92746288011	HAM-AP4-FB-01	EPA 7470A	876671	EPA 7470A	876771
92746288012	HAM-HGWC-101	EPA 7470A	876671	EPA 7470A	876771
92746288013	HAM-HGWC-105	EPA 7470A	876671	EPA 7470A	876771
92746288014	HAM-HGWC-107	EPA 7470A	876671	EPA 7470A	876771
92746288015	HAM-HGWC-109	EPA 7470A	876671	EPA 7470A	876771
92746288016	HAM-HGWC-117A	EPA 7470A	876671	EPA 7470A	876771
92746288017	HAM-AP4-FD-01	EPA 7470A	876671	EPA 7470A	876771
92746288018	HAM-AP4-EB-02	EPA 7470A	876671	EPA 7470A	876771
92746288019	HAM-AP4-FB-02	EPA 7470A	876671	EPA 7470A	876771
92746288001	HAM-HGWA-47	SM 2540C-2015	874243		
92746288002	HAM-HGWA-48D	SM 2540C-2015	874243		
92746288003	HAM-HGWA-111	SM 2540C-2015	874243		
92746288004	HAM-HGWA-113	SM 2540C-2015	875540		
92746288005	HAM-HGWC-102	SM 2540C-2015	875545		
92746288006	HAM-HGWC-103	SM 2540C-2015	875545		
92746288007	HAM-HGWA-112	SM 2540C-2015	875545		
92746288008	HAM-HGWC-118	SM 2540C-2015	875545		
92746288009	HAM-AP4-FD-02	SM 2540C-2015	875545		
92746288010	HAM-AP4-EB-01	SM 2540C-2015	875545		
92746288011	HAM-AP4-FB-01	SM 2540C-2015	875545		
92746288012	HAM-HGWC-101	SM 2540C-2015	875847		
92746288013	HAM-HGWC-105	SM 2540C-2015	875847		
92746288014	HAM-HGWC-107	SM 2540C-2015	875847		
92746288015	HAM-HGWC-109	SM 2540C-2015	875847		
92746288016	HAM-HGWC-117A	SM 2540C-2015	875847		
92746288017	HAM-AP4-FD-01	SM 2540C-2015	875847		
92746288018	HAM-AP4-EB-02	SM 2540C-2015	875847		
92746288019	HAM-AP4-FB-02	SM 2540C-2015	875847		
92746288001	HAM-HGWA-47	EPA 300.0 Rev 2.1 1993	874380		
92746288002	HAM-HGWA-48D	EPA 300.0 Rev 2.1 1993	874380		
92746288003	HAM-HGWA-111	EPA 300.0 Rev 2.1 1993	874380		
92746288004	HAM-HGWA-113	EPA 300.0 Rev 2.1 1993	875049		
92746288005	HAM-HGWC-102	EPA 300.0 Rev 2.1 1993	875381		
92746288006	HAM-HGWC-103	EPA 300.0 Rev 2.1 1993	875381		
92746288007	HAM-HGWA-112	EPA 300.0 Rev 2.1 1993	875381		
92746288008	HAM-HGWC-118	EPA 300.0 Rev 2.1 1993	875381		
92746288009	HAM-AP4-FD-02	EPA 300.0 Rev 2.1 1993	875381		
92746288010	HAM-AP4-EB-01	EPA 300.0 Rev 2.1 1993	875381		
92746288011	HAM-AP4-FB-01	EPA 300.0 Rev 2.1 1993	875381		
92746288012	HAM-HGWC-101	EPA 300.0 Rev 2.1 1993	875381		
92746288013	HAM-HGWC-105	EPA 300.0 Rev 2.1 1993	875381		
92746288014	HAM-HGWC-107	EPA 300.0 Rev 2.1 1993	875381		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-4
Pace Project No.: 92746288

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92746288015	HAM-HGWC-109	EPA 300.0 Rev 2.1 1993	875381		
92746288016	HAM-HGWC-117A	EPA 300.0 Rev 2.1 1993	875381		
92746288017	HAM-AP4-FD-01	EPA 300.0 Rev 2.1 1993	875381		
92746288018	HAM-AP4-EB-02	EPA 300.0 Rev 2.1 1993	875381		
92746288019	HAM-AP4-FB-02	EPA 300.0 Rev 2.1 1993	875381		

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DC#_TITLE: ENV-FRM-HUNT-0083 V05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name:

GA Power

Project #:

WO#: 92746288



Courier: Fed Ex UPS USPS Client Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No N/A

Date/Initials Person Examining Contents: 8/17/24 CS4

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: 2.3 Correction Factor: Add/Subtract (°C) 2.3

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 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:	W		
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 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

WO#: 92746288

Project #

PM: BV

Due Date: 08/21/24

CLIENT: 92- GP-HAM

*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

Laboratory Receiving Location: Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Client _____ Profile/EZ (Circle one) _____ Notes _____

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)	VG5T-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)	
CC																												
1	/	1	1	2	/	2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
2	/	1	1	2	/	2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
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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.



DC#_Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name: GA Power

Project #: 92746288

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: 5/24/24 [initials]

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: 2.1 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.1

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 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: W			
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 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

*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 #

Empty box for Project #

Laboratory Receiving Location: Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Client _____ Profile/EZ (Circle one) _____ Notes _____

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 (pH)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFL-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 HC (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	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
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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.



DC#_Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta

WO#: 92746288

PM: BV Due Date: 08/21/24
CLIENT: 92- GP-HAM

Sample Condition Upon Receipt

Client Name:

Georgia Power

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: 8/13/24

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: 2.1 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.1

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 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: W			
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: _____



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

Section B Required Project Information: Report To: SCS Contacts Copy To: Geosynthetic Contacts

Section C Invoice Information: Attention: Southern Co. Company Name: Address: Project Name: Hammond AP-4 Project Number: GW6581D

REGULATORY AGENCY: NPDES GROUND WATER DRINKING WATER UST RCRA OTHER COR: Site Location: GA STATE: GA

ITEM #	Section D Required Client Information	Valid Matrix Codes	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				Residual Chlorine (Y/N)	Page Project No./ Lab I.D.	
											UNPRESERVED	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228			TDS
1	HAM-HGWC-102	WATER	WG	G	08/09/2024	1337	TK 08/09/2024	22	22	5	2	2	3	3	X	X	X	X	X	X	X	X	N	005
2	HAM-HGWC-103	WATER	WG	G	08/09/2024	1121		20	20	5	2	2	3	3	X	X	X	X	X	X	X	X	N	006
3	HAM-HGWA-112	WASTE WATER	WG	G	08/09/2024	0936		22	22	5	2	2	3	3	X	X	X	X	X	X	X	X	N	007
4	HAM-HGWC-118	WASTE WATER	WG	G	08/09/2024	1530		23	23	5	2	2	3	3	X	X	X	X	X	X	X	X	N	008
5	HAM-AP4-FD-02	WASTE WATER	WG	G	08/09/2024	0000		23	23	5	2	2	3	3	X	X	X	X	X	X	X	X	N	009
6	HAM-AP4-EB-01	WASTE WATER	WG	G	08/09/2024	1700		22	22	5	2	2	3	3	X	X	X	X	X	X	X	X	N	010
7	HAM-AP4-FB-01	WASTE WATER	WG	G	08/09/2024	1655	TK 08/09/2024	22	22	5	2	2	3	3	X	X	X	X	X	X	X	X	N	011

Task Code: HAM-HCR-ASSM1-2024S2

RELINQUISHED BY / AFFILIATION: *Andrew Vesel / Geosynthetic* DATE: *08/12/2024* TIME: *6:15*

ACCEPTED BY / AFFILIATION: *Lynn Williams / Pace* DATE: *8/12/2024* TIME: *1352*

SAMPLER NAME AND SIGNATURE: *Lynn Williams / Pace* DATE SIGNED: *8/12/2024*

PRINT Name of SAMPLER: *Andrew Vesel / Geosynthetic* DATE SIGNED: *8/12/2024*

SIGNATURE OF SAMPLER: *[Signature]* DATE SIGNED: *8/12/2024*

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



DC#_Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name:

Georgia Power

Project #:

WO#: 92746288

PM: BV

Due Date: 08/21/24

CLIENT: 92- GP-HAM

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: *8/13/24*

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: 2.1

Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 2.1

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 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 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: <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: _____

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.: _____
Project Name: **Hammond AP-4**
Project Number: **GW6581D**

Section C
Invoice Information:

Attention: **Southern Co.**
Company Name: _____
Address: _____
Purchase Order Reference: _____
Project Manager: **Bonnie Vang**
Phone/Fax #: **10639**

REGULATORY AGENCY
 NPDES GROUND WATER DRINKING WATER
 UST RCRA OTHER CCR
 Site Location: _____
 STATE: **GA**

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Requested Analysis Filtered (Y/N)				Residual Chlorine (Y/N)	Pace Project No./ Lab ID.
											Chloride, Fluoride Sulfate	Full App. III and IV metals	RAD 226/228	TDS		
1	HAM-HGWC-101	WG	G	08/10/2024	1032			21	5	2	3	X	X	X	X	012
2	HAM-HGWC-105	WG	G	08/10/2024	1144			20	5	2	3	X	X	X	X	013
3	HAM-HGWC-107	WG	G	08/10/2024	1317			22	5	2	3	X	X	X	X	014
4	HAM-HGWC-109	WG	G	08/10/2024	1110			21	5	2	3	X	X	X	X	015
5	HAM-HGWC-117A	WG	G	08/10/2024	1425			23	5	2	3	X	X	X	X	016
6	HAM-AP4-FD-01	WG	G	08/10/2024	0000			22	5	2	3	X	X	X	X	017
7	HAM-AP4-EB-02	WG	G	08/10/2024	1235			22	5	2	3	X	X	X	X	018
8	HAM-AP4-FB-02	WG	G	08/10/2024	1230			22	5	2	3	X	X	X	X	019
9																
10																
11																
12																

ADDITIONAL COMMENTS: _____

RELINQUISHED BY / AFFILIATION: **Andrew Austin / Geosyntec** DATE: **08/10/2024** TIME: **0745**

ACCEPTED BY / AFFILIATION: **Sarah Tracy / Geosyntec** DATE: **08/10/2024** TIME: **0745**

RELINQUISHED BY / AFFILIATION: **Sarah Tracy / Geosyntec** DATE: **08/12/2024** TIME: **12:10**

ACCEPTED BY / AFFILIATION: **Byron Williams / Pace** DATE: **8/12/2024** TIME: **1352**

RELINQUISHED BY / AFFILIATION: **Byron Williams / Pace** DATE: **8/12/2024** TIME: **1810**

ACCEPTED BY / AFFILIATION: **Byron Williams / Pace** DATE: **8/12/2024** TIME: **1352**

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: **Andrew Austin** / Geosyntec Consultants, Inc
 SIGNATURE of SAMPLER: _____ DATE Signed (MM/DD/YY): **08/10/24**

PRINT Name of SAMPLER: **Sarah Tracy** / Geosyntec Consultants, Inc
 SIGNATURE of SAMPLER: _____ DATE Signed (MM/DD/YY): **08/10/24**

PRINT Name of SAMPLER: **Sarah Tracy** / Geosyntec Consultants, Inc
 SIGNATURE of SAMPLER: _____ DATE Signed (MM/DD/YY): **08/10/24**

PRINT Name of SAMPLER: **Byron Williams** / Pace
 SIGNATURE of SAMPLER: _____ DATE Signed (MM/DD/YY): **08/12/24**

PRINT Name of SAMPLER: **Byron Williams** / Pace
 SIGNATURE of SAMPLER: _____ DATE Signed (MM/DD/YY): **08/12/24**

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



September 10, 2024

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

RE: Project: Hammond AP-4- RADs
Pace Project No.: 92746296

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory between August 07, 2024 and August 12, 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
Jamie Newsome, Geosyntec Consultants
Zain Webb, Geosyntec Consultants



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

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: Hammond AP-4- RADs

Pace Project No.: 92746296

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92746296001	HAM-HGWA-47	Water	08/06/24 14:45	08/07/24 12:25
92746296002	HAM-HGWA-48D	Water	08/06/24 12:25	08/07/24 12:25
92746296003	HAM-HGWA-111	Water	08/06/24 17:05	08/07/24 12:25
92746296004	HAM-HGWA-113	Water	08/08/24 15:48	08/09/24 14:15
92746296005	HAM-HGWC-102	Water	08/09/24 13:27	08/12/24 12:10
92746296006	HAM-HGWC-103	Water	08/09/24 11:21	08/12/24 12:10
92746296007	HAM-HGWA-112	Water	08/09/24 09:36	08/12/24 12:10
92746296008	HAM-HGWC-118	Water	08/09/24 15:38	08/12/24 12:10
92746296009	HAM-AP4-FD-02	Water	08/09/24 00:00	08/12/24 12:10
92746296010	HAM-AP4-EB-01	Water	08/09/24 17:00	08/12/24 12:10
92746296011	HAM-AP4-FB-01	Water	08/09/24 16:55	08/12/24 12:10
92746296012	HAM-HGWC-101	Water	08/10/24 10:32	08/12/24 12:10
92746296013	HAM-HGWC-105	Water	08/10/24 11:44	08/12/24 12:10
92746296014	HAM-HGWC-107	Water	08/10/24 13:17	08/12/24 12:10
92746296015	HAM-HGWC-109	Water	08/10/24 11:10	08/12/24 12:10
92746296016	HAM-HGWC-117A	Water	08/10/24 14:25	08/12/24 12:10
92746296017	HAM-AP4-FD-01	Water	08/10/24 00:00	08/12/24 12:10
92746296018	HAM-AP4-EB-02	Water	08/10/24 12:35	08/12/24 12:10
92746296019	HAM-AP4-FB-02	Water	08/10/24 12:30	08/12/24 12:10

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92746296001	HAM-HGWA-47	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746296002	HAM-HGWA-48D	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746296003	HAM-HGWA-111	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746296004	HAM-HGWA-113	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746296005	HAM-HGWC-102	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746296006	HAM-HGWC-103	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746296007	HAM-HGWA-112	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746296008	HAM-HGWC-118	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746296009	HAM-AP4-FD-02	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746296010	HAM-AP4-EB-01	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746296011	HAM-AP4-FB-01	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746296012	HAM-HGWC-101	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746296013	HAM-HGWC-105	EPA 9315	SLC	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92746296014	HAM-HGWC-107	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92746296015	HAM-HGWC-109	Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746296016	HAM-HGWC-117A	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
92746296017	HAM-AP4-FD-01	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
92746296018	HAM-AP4-EB-02	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
92746296019	HAM-AP4-FB-02	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92746296001	HAM-HGWA-47					
EPA 9315	Radium-226	0.0870U ± 0.139 (0.307)	pCi/L		08/29/24 10:15	
EPA 9320	Radium-228	C:93% T:NA 0.886 ± 0.406 (0.659)	pCi/L		08/26/24 11:36	
Total Radium Calculation	Total Radium	C:79% T:87% 0.973 ± 0.545 (0.966)	pCi/L		08/30/24 12:32	
92746296002	HAM-HGWA-48D					
EPA 9315	Radium-226	0.182U ± 0.188 (0.374)	pCi/L		08/29/24 08:41	
EPA 9320	Radium-228	C:97% T:NA 0.319U ± 0.326 (0.669)	pCi/L		08/26/24 11:35	
Total Radium Calculation	Total Radium	C:75% T:84% 0.501U ± 0.514 (1.04)	pCi/L		08/30/24 12:32	
92746296003	HAM-HGWA-111					
EPA 9315	Radium-226	0.0420U ± 0.135 (0.336)	pCi/L		08/29/24 08:42	
EPA 9320	Radium-228	C:93% T:NA 0.0574U ± 0.319 (0.729)	pCi/L		08/26/24 11:35	
Total Radium Calculation	Total Radium	C:80% T:87% 0.0994U ± 0.454 (1.07)	pCi/L		08/30/24 12:32	
92746296004	HAM-HGWA-113					
EPA 9315	Radium-226	0.113U ± 0.144 (0.310)	pCi/L		09/03/24 08:24	
EPA 9320	Radium-228	C:94% T:NA 0.0683U ± 0.350 (0.796)	pCi/L		08/27/24 15:41	
Total Radium Calculation	Total Radium	C:84% T:87% 0.181U ± 0.494 (1.11)	pCi/L		09/03/24 16:40	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92746296005 HAM-HGWC-102						
EPA 9315	Radium-226	-0.0417U ± 0.114 (0.390) C:79% T:NA	pCi/L		09/04/24 09:14	
EPA 9320	Radium-228	0.604U ± 0.373 (0.688) C:84% T:84%	pCi/L		08/28/24 14:37	
Total Radium Calculation	Total Radium	0.604U ± 0.487 (1.08)	pCi/L		09/05/24 15:42	
92746296006 HAM-HGWC-103						
EPA 9315	Radium-226	0.0404U ± 0.152 (0.391) C:84% T:NA	pCi/L		09/04/24 09:14	
EPA 9320	Radium-228	0.338U ± 0.340 (0.701) C:81% T:91%	pCi/L		08/28/24 14:37	
Total Radium Calculation	Total Radium	0.378U ± 0.492 (1.09)	pCi/L		09/05/24 15:42	
92746296007 HAM-HGWA-112						
EPA 9315	Radium-226	0.0715U ± 0.242 (0.589) C:92% T:NA	pCi/L		09/04/24 08:16	
EPA 9320	Radium-228	0.904 ± 0.387 (0.616) C:83% T:87%	pCi/L		08/28/24 12:26	
Total Radium Calculation	Total Radium	0.976U ± 0.629 (1.21)	pCi/L		09/05/24 15:42	
92746296008 HAM-HGWC-118						
EPA 9315	Radium-226	0.0850U ± 0.243 (0.587) C:84% T:NA	pCi/L		09/04/24 08:16	
EPA 9320	Radium-228	0.336U ± 0.294 (0.586) C:79% T:88%	pCi/L		08/28/24 12:26	
Total Radium Calculation	Total Radium	0.421U ± 0.537 (1.17)	pCi/L		09/05/24 15:42	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92746296009	HAM-AP4-FD-02					
EPA 9315	Radium-226	0.182U ± 0.276 (0.609) C:81% T:NA	pCi/L		09/04/24 08:16	
EPA 9320	Radium-228	0.297U ± 0.284 (0.579) C:82% T:88%	pCi/L		08/28/24 12:26	
Total Radium Calculation	Total Radium	0.479U ± 0.560 (1.19)	pCi/L		09/05/24 15:42	
92746296010	HAM-AP4-EB-01					
EPA 9315	Radium-226	-0.000339U ± 0.286 (0.741) C:79% T:NA	pCi/L		09/04/24 08:16	
EPA 9320	Radium-228	0.820 ± 0.376 (0.622) C:81% T:88%	pCi/L		08/28/24 12:26	
Total Radium Calculation	Total Radium	0.820U ± 0.662 (1.36)	pCi/L		09/05/24 15:42	
92746296011	HAM-AP4-FB-01					
EPA 9315	Radium-226	0.125U ± 0.238 (0.546) C:85% T:NA	pCi/L		09/04/24 08:19	
EPA 9320	Radium-228	0.392U ± 0.370 (0.762) C:83% T:88%	pCi/L		08/28/24 12:27	
Total Radium Calculation	Total Radium	0.517U ± 0.608 (1.31)	pCi/L		09/05/24 15:42	
92746296012	HAM-HGWC-101					
EPA 9315	Radium-226	0.0371U ± 0.286 (0.725) C:80% T:NA	pCi/L		09/04/24 09:52	
EPA 9320	Radium-228	0.780 ± 0.406 (0.726) C:83% T:90%	pCi/L		08/28/24 12:27	
Total Radium Calculation	Total Radium	0.817U ± 0.692 (1.45)	pCi/L		09/05/24 15:42	

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SUMMARY OF DETECTION

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92746296013	HAM-HGWC-105					
EPA 9315	Radium-226	0.551 ± 0.339 (0.536) C:83% T:NA	pCi/L		09/04/24 09:52	
EPA 9320	Radium-228	0.142U ± 0.314 (0.696) C:90% T:85%	pCi/L		08/28/24 15:37	
Total Radium Calculation	Total Radium	0.693U ± 0.653 (1.23)	pCi/L		09/05/24 15:42	
92746296014	HAM-HGWC-107					
EPA 9315	Radium-226	0.0939U ± 0.283 (0.684) C:85% T:NA	pCi/L		09/04/24 09:52	
EPA 9320	Radium-228	0.129U ± 0.260 (0.576) C:91% T:85%	pCi/L		08/28/24 15:37	
Total Radium Calculation	Total Radium	0.223U ± 0.543 (1.26)	pCi/L		09/05/24 15:42	
92746296015	HAM-HGWC-109					
EPA 9315	Radium-226	0.444U ± 0.349 (0.659) C:85% T:NA	pCi/L		09/04/24 09:53	
EPA 9320	Radium-228	0.0564U ± 0.245 (0.564) C:87% T:88%	pCi/L		08/28/24 15:37	
Total Radium Calculation	Total Radium	0.500U ± 0.594 (1.22)	pCi/L		09/05/24 15:42	
92746296016	HAM-HGWC-117A					
EPA 9315	Radium-226	0.250U ± 0.296 (0.621) C:77% T:NA	pCi/L		09/04/24 09:53	
EPA 9320	Radium-228	0.473U ± 0.308 (0.572) C:86% T:89%	pCi/L		08/28/24 15:37	
Total Radium Calculation	Total Radium	0.723U ± 0.604 (1.19)	pCi/L		09/05/24 15:39	

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SUMMARY OF DETECTION

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92746296017	HAM-AP4-FD-01					
EPA 9315	Radium-226	0.293U ± 0.338 (0.714) C:81% T:NA	pCi/L		09/04/24 09:53	
EPA 9320	Radium-228	0.402U ± 0.341 (0.678) C:84% T:80%	pCi/L		08/28/24 15:37	
Total Radium Calculation	Total Radium	0.695U ± 0.679 (1.39)	pCi/L		09/05/24 15:39	
92746296018	HAM-AP4-EB-02					
EPA 9315	Radium-226	0.181U ± 0.247 (0.533) C:91% T:NA	pCi/L		09/04/24 09:55	
EPA 9320	Radium-228	0.565U ± 0.345 (0.637) C:82% T:92%	pCi/L		08/28/24 15:37	
Total Radium Calculation	Total Radium	0.746U ± 0.592 (1.17)	pCi/L		09/05/24 15:39	
92746296019	HAM-AP4-FB-02					
EPA 9315	Radium-226	0.0256U ± 0.166 (0.435) C:94% T:NA	pCi/L		09/04/24 09:58	
EPA 9320	Radium-228	0.715U ± 0.452 (0.859) C:82% T:84%	pCi/L		08/28/24 15:37	
Total Radium Calculation	Total Radium	0.741U ± 0.618 (1.29)	pCi/L		09/05/24 15:39	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Sample: HAM-HGWA-47 Lab ID: 92746296001 Collected: 08/06/24 14:45 Received: 08/07/24 12:25 Matrix: Water

PWS: Site ID: Sample Type:

Comments: • The sampler's name and signature were not listed on the COC.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	0.0870U ± 0.139 (0.307) C:93% T:NA	pCi/L	08/29/24 10:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.886 ± 0.406 (0.659) C:79% T:87%	pCi/L	08/26/24 11:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.973 ± 0.545 (0.966)	pCi/L	08/30/24 12:32	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Sample: HAM-HGWA-48D **Lab ID: 92746296002** Collected: 08/06/24 12:25 Received: 08/07/24 12:25 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	0.182U ± 0.188 (0.374) C:97% T:NA	pCi/L	08/29/24 08:41	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.319U ± 0.326 (0.669) C:75% T:84%	pCi/L	08/26/24 11:35	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.501U ± 0.514 (1.04)	pCi/L	08/30/24 12:32	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: HAM-HGWA-111 Lab ID: 92746296003 Collected: 08/06/24 17:05 Received: 08/07/24 12:25 Matrix: Water PWS: Site ID: Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	0.0420U ± 0.135 (0.336) C:93% T:NA	pCi/L	08/29/24 08:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.0574U ± 0.319 (0.729) C:80% T:87%	pCi/L	08/26/24 11:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.0994U ± 0.454 (1.07)	pCi/L	08/30/24 12:32	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Sample: HAM-HGWA-113 **Lab ID: 92746296004** Collected: 08/08/24 15:48 Received: 08/09/24 14:15 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	0.113U ± 0.144 (0.310) C:94% T:NA	pCi/L	09/03/24 08:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.0683U ± 0.350 (0.796) C:84% T:87%	pCi/L	08/27/24 15:41	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.181U ± 0.494 (1.11)	pCi/L	09/03/24 16:40	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: HAM-HGWC-102 Lab ID: 92746296005 Collected: 08/09/24 13:27 Received: 08/12/24 12:10 Matrix: Water PWS: Site ID: Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	-0.0417U ± 0.114 (0.390) C:79% T:NA	pCi/L	09/04/24 09:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.604U ± 0.373 (0.688) C:84% T:84%	pCi/L	08/28/24 14:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.604U ± 0.487 (1.08)	pCi/L	09/05/24 15:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: HAM-HGWC-103 Lab ID: 92746296006 Collected: 08/09/24 11:21 Received: 08/12/24 12:10 Matrix: Water PWS: Site ID: Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	0.0404U ± 0.152 (0.391) C:84% T:NA	pCi/L	09/04/24 09:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.338U ± 0.340 (0.701) C:81% T:91%	pCi/L	08/28/24 14:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.378U ± 0.492 (1.09)	pCi/L	09/05/24 15:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Sample: HAM-HGWA-112 **Lab ID: 92746296007** Collected: 08/09/24 09:36 Received: 08/12/24 12:10 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	0.0715U ± 0.242 (0.589) C:92% T:NA	pCi/L	09/04/24 08:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.904 ± 0.387 (0.616) C:83% T:87%	pCi/L	08/28/24 12:26	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.976U ± 0.629 (1.21)	pCi/L	09/05/24 15:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Sample: HAM-HGWC-118 **Lab ID: 92746296008** Collected: 08/09/24 15:38 Received: 08/12/24 12:10 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	0.0850U ± 0.243 (0.587) C:84% T:NA	pCi/L	09/04/24 08:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.336U ± 0.294 (0.586) C:79% T:88%	pCi/L	08/28/24 12:26	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.421U ± 0.537 (1.17)	pCi/L	09/05/24 15:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Sample: HAM-AP4-FD-02 **Lab ID: 92746296009** Collected: 08/09/24 00:00 Received: 08/12/24 12:10 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	0.182U ± 0.276 (0.609) C:81% T:NA	pCi/L	09/04/24 08:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.297U ± 0.284 (0.579) C:82% T:88%	pCi/L	08/28/24 12:26	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.479U ± 0.560 (1.19)	pCi/L	09/05/24 15:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: HAM-AP4-EB-01 Lab ID: 92746296010 Collected: 08/09/24 17:00 Received: 08/12/24 12:10 Matrix: Water PWS: Site ID: Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	-0.000339U ± 0.286 (0.741) C:79% T:NA	pCi/L	09/04/24 08:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.820 ± 0.376 (0.622) C:81% T:88%	pCi/L	08/28/24 12:26	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.820U ± 0.662 (1.36)	pCi/L	09/05/24 15:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Sample: HAM-AP4-FB-01 **Lab ID: 92746296011** Collected: 08/09/24 16:55 Received: 08/12/24 12:10 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	0.125U ± 0.238 (0.546) C:85% T:NA	pCi/L	09/04/24 08:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.392U ± 0.370 (0.762) C:83% T:88%	pCi/L	08/28/24 12:27	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.517U ± 0.608 (1.31)	pCi/L	09/05/24 15:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Sample: HAM-HGWC-101 **Lab ID: 92746296012** Collected: 08/10/24 10:32 Received: 08/12/24 12:10 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	0.0371U ± 0.286 (0.725) C:80% T:NA	pCi/L	09/04/24 09:52	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.780 ± 0.406 (0.726) C:83% T:90%	pCi/L	08/28/24 12:27	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.817U ± 0.692 (1.45)	pCi/L	09/05/24 15:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Sample: HAM-HGWC-105 **Lab ID: 92746296013** Collected: 08/10/24 11:44 Received: 08/12/24 12:10 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	0.551 ± 0.339 (0.536) C:83% T:NA	pCi/L	09/04/24 09:52	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.142U ± 0.314 (0.696) C:90% T:85%	pCi/L	08/28/24 15:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.693U ± 0.653 (1.23)	pCi/L	09/05/24 15:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Sample: HAM-HGWC-107 **Lab ID: 92746296014** Collected: 08/10/24 13:17 Received: 08/12/24 12:10 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	0.0939U ± 0.283 (0.684) C:85% T:NA	pCi/L	09/04/24 09:52	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.129U ± 0.260 (0.576) C:91% T:85%	pCi/L	08/28/24 15:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.223U ± 0.543 (1.26)	pCi/L	09/05/24 15:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: HAM-HGWC-109 Lab ID: 92746296015 Collected: 08/10/24 11:10 Received: 08/12/24 12:10 Matrix: Water PWS: Site ID: Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	0.444U ± 0.349 (0.659) C:85% T:NA	pCi/L	09/04/24 09:53	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.0564U ± 0.245 (0.564) C:87% T:88%	pCi/L	08/28/24 15:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.500U ± 0.594 (1.22)	pCi/L	09/05/24 15:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Sample: HAM-HGWC-117A **Lab ID: 92746296016** Collected: 08/10/24 14:25 Received: 08/12/24 12:10 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	0.250U ± 0.296 (0.621) C:77% T:NA	pCi/L	09/04/24 09:53	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.473U ± 0.308 (0.572) C:86% T:89%	pCi/L	08/28/24 15:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.723U ± 0.604 (1.19)	pCi/L	09/05/24 15:39	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Sample: HAM-AP4-FD-01 **Lab ID: 92746296017** Collected: 08/10/24 00:00 Received: 08/12/24 12:10 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	0.293U ± 0.338 (0.714) C:81% T:NA	pCi/L	09/04/24 09:53	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.402U ± 0.341 (0.678) C:84% T:80%	pCi/L	08/28/24 15:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.695U ± 0.679 (1.39)	pCi/L	09/05/24 15:39	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.181U ± 0.247 (0.533) C:91% T:NA	pCi/L	09/04/24 09:55	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.565U ± 0.345 (0.637) C:82% T:92%	pCi/L	08/28/24 15:37	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.746U ± 0.592 (1.17)	pCi/L	09/05/24 15:39	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Sample: HAM-AP4-FB-02 **Lab ID: 92746296019** Collected: 08/10/24 12:30 Received: 08/12/24 12:10 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	0.0256U ± 0.166 (0.435) C:94% T:NA	pCi/L	09/04/24 09:58	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.715U ± 0.452 (0.859) C:82% T:84%	pCi/L	08/28/24 15:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.741U ± 0.618 (1.29)	pCi/L	09/05/24 15:39	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

QC Batch: 690237

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92746296001, 92746296002, 92746296003

METHOD BLANK: 3361203

Matrix: Water

Associated Lab Samples: 92746296001, 92746296002, 92746296003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0537 ± 0.120 (0.379) C:96% T:NA	pCi/L	08/29/24 08:40	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

QC Batch:	690241	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92746296005, 92746296006, 92746296007, 92746296008, 92746296009, 92746296010, 92746296011, 92746296012, 92746296013, 92746296014, 92746296015

METHOD BLANK:	3361208	Matrix:	Water
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Associated Lab Samples: 92746296005, 92746296006, 92746296007, 92746296008, 92746296009, 92746296010, 92746296011, 92746296012, 92746296013, 92746296014, 92746296015

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.159 ± 0.232 (0.507) C:86% T:NA	pCi/L	09/04/24 09:12	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

QC Batch: 690810

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92746296016, 92746296017, 92746296018, 92746296019

METHOD BLANK: 3363812

Matrix: Water

Associated Lab Samples: 92746296016, 92746296017, 92746296018, 92746296019

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.480 ± 0.328 (0.623) C:86% T:90%	pCi/L	08/28/24 15:37	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

QC Batch: 689874

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92746296004

METHOD BLANK: 3359344

Matrix: Water

Associated Lab Samples: 92746296004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.277 ± 0.305 (0.635) C:86% T:88%	pCi/L	08/27/24 15:38	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

QC Batch: 689870

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92746296001, 92746296002, 92746296003

METHOD BLANK: 3359338

Matrix: Water

Associated Lab Samples: 92746296001, 92746296002, 92746296003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.622 ± 0.413 (0.764) C:58% T:84%	pCi/L	08/26/24 11:33	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

QC Batch: 690239

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92746296004

METHOD BLANK: 3361205

Matrix: Water

Associated Lab Samples: 92746296004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0785 ± 0.121 (0.267) C:85% T:NA	pCi/L	09/02/24 14:39	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

QC Batch:	690583	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92746296005, 92746296006, 92746296007, 92746296008, 92746296009, 92746296010, 92746296011, 92746296012, 92746296013, 92746296014, 92746296015

METHOD BLANK:	3362585	Matrix:	Water
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Associated Lab Samples: 92746296005, 92746296006, 92746296007, 92746296008, 92746296009, 92746296010, 92746296011, 92746296012, 92746296013, 92746296014, 92746296015

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.164 ± 0.321 (0.708) C:85% T:89%	pCi/L	08/28/24 14:36	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

QC Batch: 690694

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92746296016, 92746296017, 92746296018, 92746296019

METHOD BLANK: 3363058

Matrix: Water

Associated Lab Samples: 92746296016, 92746296017, 92746296018, 92746296019

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.108 ± 0.233 (0.544) C:90% T:NA	pCi/L	09/04/24 09:53	

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QUALIFIERS

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

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: Hammond AP-4- RADs

Pace Project No.: 92746296

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92746296001	HAM-HGWA-47	EPA 9315	690237		
92746296002	HAM-HGWA-48D	EPA 9315	690237		
92746296003	HAM-HGWA-111	EPA 9315	690237		
92746296004	HAM-HGWA-113	EPA 9315	690239		
92746296005	HAM-HGWC-102	EPA 9315	690241		
92746296006	HAM-HGWC-103	EPA 9315	690241		
92746296007	HAM-HGWA-112	EPA 9315	690241		
92746296008	HAM-HGWC-118	EPA 9315	690241		
92746296009	HAM-AP4-FD-02	EPA 9315	690241		
92746296010	HAM-AP4-EB-01	EPA 9315	690241		
92746296011	HAM-AP4-FB-01	EPA 9315	690241		
92746296012	HAM-HGWC-101	EPA 9315	690241		
92746296013	HAM-HGWC-105	EPA 9315	690241		
92746296014	HAM-HGWC-107	EPA 9315	690241		
92746296015	HAM-HGWC-109	EPA 9315	690241		
92746296016	HAM-HGWC-117A	EPA 9315	690694		
92746296017	HAM-AP4-FD-01	EPA 9315	690694		
92746296018	HAM-AP4-EB-02	EPA 9315	690694		
92746296019	HAM-AP4-FB-02	EPA 9315	690694		
92746296001	HAM-HGWA-47	EPA 9320	689870		
92746296002	HAM-HGWA-48D	EPA 9320	689870		
92746296003	HAM-HGWA-111	EPA 9320	689870		
92746296004	HAM-HGWA-113	EPA 9320	689874		
92746296005	HAM-HGWC-102	EPA 9320	690583		
92746296006	HAM-HGWC-103	EPA 9320	690583		
92746296007	HAM-HGWA-112	EPA 9320	690583		
92746296008	HAM-HGWC-118	EPA 9320	690583		
92746296009	HAM-AP4-FD-02	EPA 9320	690583		
92746296010	HAM-AP4-EB-01	EPA 9320	690583		
92746296011	HAM-AP4-FB-01	EPA 9320	690583		
92746296012	HAM-HGWC-101	EPA 9320	690583		
92746296013	HAM-HGWC-105	EPA 9320	690583		
92746296014	HAM-HGWC-107	EPA 9320	690583		
92746296015	HAM-HGWC-109	EPA 9320	690583		
92746296016	HAM-HGWC-117A	EPA 9320	690810		
92746296017	HAM-AP4-FD-01	EPA 9320	690810		
92746296018	HAM-AP4-EB-02	EPA 9320	690810		
92746296019	HAM-AP4-FB-02	EPA 9320	690810		
92746296001	HAM-HGWA-47	Total Radium Calculation	693014		
92746296002	HAM-HGWA-48D	Total Radium Calculation	693014		
92746296003	HAM-HGWA-111	Total Radium Calculation	693014		
92746296004	HAM-HGWA-113	Total Radium Calculation	693459		
92746296005	HAM-HGWC-102	Total Radium Calculation	694076		
92746296006	HAM-HGWC-103	Total Radium Calculation	694076		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-4- RADs

Pace Project No.: 92746296

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92746296007	HAM-HGWA-112	Total Radium Calculation	694076		
92746296008	HAM-HGWC-118	Total Radium Calculation	694076		
92746296009	HAM-AP4-FD-02	Total Radium Calculation	694076		
92746296010	HAM-AP4-EB-01	Total Radium Calculation	694076		
92746296011	HAM-AP4-FB-01	Total Radium Calculation	694076		
92746296012	HAM-HGWC-101	Total Radium Calculation	694076		
92746296013	HAM-HGWC-105	Total Radium Calculation	694076		
92746296014	HAM-HGWC-107	Total Radium Calculation	694076		
92746296015	HAM-HGWC-109	Total Radium Calculation	694076		
92746296016	HAM-HGWC-117A	Total Radium Calculation	694073		
92746296017	HAM-AP4-FD-01	Total Radium Calculation	694073		
92746296018	HAM-AP4-EB-02	Total Radium Calculation	694073		
92746296019	HAM-AP4-FB-02	Total Radium Calculation	694073		

REPORT OF LABORATORY ANALYSIS

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



DC# TITLE: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name:

GA Power

Project #:

WO#: 92746296



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: 5/17/24 CSY

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: 2.3 Correction Factor: Add/Subtract (°C) 2.3

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

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? 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 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:	W		
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 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

WO#: 92746296

Project #

PM: BV

Due Date: 08/28/24

CLIENT: 92- GP-HAM

*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

Laboratory Receiving Location: Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Client _____ Profile/EZ (Circle one) _____ Notes _____

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)	
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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.



DC#_Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name: GA Power

Project #: 92749296

Courier: Fed Ex UPS USPS Client Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No N/A

Date/Initials Person Examining Contents: 5/24/24 [Signature]

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: 2.1 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.1

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 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 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:	W	
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 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 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

*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 #

Laboratory Receiving Location: Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Client _____ Profile/EZ (Circle one) _____ Notes _____

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 2N Acetate & NaOH (pH)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFLU-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)	DG9H-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)-UPH/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)	AG6U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)		
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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).



DC#_Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta

Sample Condition Upon Receipt

Client Name:

Georgia Power

Project #:

WO#: 92746296

PM: BV

Due Date: 08/28/24

CLIENT: 92- GP-HAM

Courier: FedEx UPS USPS Client Commercial Pace Other:

Custody Seal Present? Yes No Seals Intact? Yes No N/A

Date/Initials Person Examining Contents: 8/12/24 CDJ

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: 2.1 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.1

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 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 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: W	
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 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

WO#: 92746296

Project #

PM: BV

Due Date: 08/28/24

CLIENT: 92- GP-HAM

*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

Laboratory Receiving Location: Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Client Profile/E7 (Circle one) Notes

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 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)2SC4 (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)		
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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.

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: Hammond AP-4
 Project Number: GW6581D

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 CCE

Site Location
 STATE: GA

ITEM #	Section D Required Client Information SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test	Requested Analysis Filtered (Y/N)				Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.			
		MATRIX	CODE			COMPOSITE		Unpreserved	H ₂ SO ₄			HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	Chloride, Fluoride, Sulfate		Full App. III and IV metals	RAD 226/228	TDS	N			N	N	N
		DRINKING WATER	W1			START	END/GRAB																					
1	HAM-HGWC-102	WG	G	08/09/2024	1327	TK 08/09/2024	22	5	2	3								X	X	X	X	N	005					
2	HAM-HGWC-103	WG	G	08/09/2024	1121		20	5	2	3								X	X	X	X	N	006					
3	HAM-HGWA-112	WG	G	08/09/2024	0936		22	5	2	3								X	X	X	X	N	007					
4	HAM-HGWC-118	WG	G	08/09/2024	1530		23	5	2	3								X	X	X	X	N	008					
5	HAM-AP4-FD-02	WG	G	08/09/2024	0000		23	5	2	3								X	X	X	X	N	009					
6	HAM-AP4-EB-01	WQ	G	08/09/2024	1700		22	5	2	3								X	X	X	X	N	010					
7	HAM-AP4-FB-01	WQ	G	08/09/2024	1655		22	5	2	3								X	X	X	X	N	011					
8						TK 08/09/2024												X	X	X	X	N						
9																												
10																												
11																												
12																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2024S2	Thomas Kessler / Geosyntec	08/09/2024	0715	Jacob Tracy / Geosyntec	08/12/2024	0745	
	Thomas Kessler / Geosyntec	08/12/2024	12:10	Lyan Williams / Pace	08/12/24	12:10	
	Lyan Williams / Pace	9/12/2024	1352	Charles Harris	8/12/24	1352	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Kessler / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: *[Signature]* DATE Signed (MM/DD/YY): 08/09/24

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 full liability payment terms and our liability coverage of \$1.5 million for any losses. For more information, see our website.



DC#_Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name: George Power

Project #: **WO# : 92746296**
PM: BV Due Date: 08/28/24
CLIENT: 92- GP-HAM

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: 8/13/24
CDJ

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: 2.1 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.1

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 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 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: <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 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

Project #

WO#: 92746296

PM: BV

Due Date: 08/28/24

CLIENT: 92- GP-HAM

*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

Laboratory Receiving Location: Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Client _____ Profile/EZ (Circle one) _____ Notes _____

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)	RP7U-50 mL Plastic Unpreserved (N/A)	VJGK (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)	AG9U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)		
CC																													
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
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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.)



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: 1 of 1	
Company: GA Power		Report To: SCS Contacts		Attention: Southern Co.		REGULATORY AGENCY	
Address: Atlanta, GA		Copy To: Geosyntec Contacts		Company Name:			
Email To: SCS Contacts		Purchase Order No.:		Address:		<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 _____	
Phone: Fax:		Project Name: Hammond AP-4		Face Quote Reference:		Site Location	
Requested Due Date/TAT: 10 Day		Project Number: GW6581D		Face Project Manager: Bonnie Vang			
				Face Profile #: 10839		STATE: GA	

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	MATRIX TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	Face Project No./ Lab I.D.				
				COMPOSITE START		COMPOSITE END/GRAB				Preservatives															
				DATE	TIME	DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	Analysis Test	Chloride, Fluoride, Sulfate			Full App. III and IV metals	RAD 226/228	TDS	
1	HAM-HGWC-101	WG	G	08/10/2024	1032			21	5	2	3													N	012
2	HAM-HGWC-105	WG	G	08/10/2024	1144			20	5	2	3													N	013
3	HAM-HGWC-107	WG	G	08/10/2024	1317			22	5	2	3													N	014
4	HAM-HGWC-109	WG	G	08/10/2024	1110			21	5	2	3													N	015
5	HAM-HGWC-117A	WG	G	08/10/2024	1425			23	5	2	3													N	016
6	HAM-AP4-FD-01	WG	G	08/10/2024	0000			22	5	2	3													N	017
7	HAM-AP4-EB-02	WG	G	08/10/2024	1235			22	5	2	3													N	018
8	HAM-AP4-FB-02	WG	G	08/10/2024	1230			22	5	2	3													N	019 last sample
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2024S2	Thomas Messler / Geosyntec	08/10/2024	0745	Jacob Tracy / Geosyntec	08/12/2024	0745	
	Jacob Tracy / Geosyntec	08/12/2024	12:10	Ryan Williams / Pace	08/12/2024	12:10	
	Ryan Williams / Pace	8/12/2024	1352	Charles Acosta	8/12/2024	1352	

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: Thomas Messler / Connor Carn / Geosyntec Consultants, Inc.					
SIGNATURE of SAMPLER:					
DATE Signed (MM/DD/YY): 08/10/24					

*Important Note: By signing this form you are accepting Face's MLT 20 day payment terms and agreeing to the charges of 1.5% per month for late fees - not past due 30 days.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: VAL
Date: 8/21/2024
Worklist: 80821
Matrix: WT

Method Blank Assessment	
MB Sample ID	3359344
MB concentration:	0.277
M/B 2 Sigma CSU:	0.305
MB MDC:	0.635
MB Numerical Performance Indicator:	1.78
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCS/D (Y or N)?	
	LCS80821	Y
Count Date:	8/27/2024	LCSB080821
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	35.504	35.504
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.819	0.819
Target Conc. (pCi/L, g, F):	4.352	4.333
Uncertainty (Calculated):	0.213	0.212
Result (pCi/L, g, F):	2.977	3.745
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.725	0.869
Numerical Performance Indicator:	-3.57	-1.29
Percent Recovery:	68.41%	86.43%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	
Duplicate Sample I.D.:	
Sample Result (pCi/L, g, F):	2.977
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.725
Sample Duplicate Result (pCi/L, g, F):	3.745
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.869
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	-1.330
Duplicate (Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	23.28%
Duplicate Status vs Numerical Indicator:	Pass
Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

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

Comments:

VAL
8/28/24
57
8-29-24

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

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: VAL
Date: 8/26/2024
Worklist: 80863
Matrix: WT

Method Blank Assessment	
MB Sample ID	3362585
MB concentration:	0.164
M/B 2 Sigma CSU:	0.321
MB MDC:	0.708
MB Numerical Performance Indicator:	1.00
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCS/D (Y or N)?	
	LCS08063	Y
Count Date:	8/28/2024	LCS08063
Spike I.D.:	23-043	8/28/2024
Decay Corrected Spike Concentration (pCi/mL):	35.493	23-043
Volume Used (mL):	0.10	35.493
Aliquot Volume (L, g, F):	0.816	0.10
Target Conc. (pCi/L, g, F):	4.347	0.816
Uncertainty (Calculated):	0.213	4.344
Result (pCi/L, g, F):	3.718	0.213
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	2.992	3.718
Numerical Performance Indicator:	0.866	2.992
Percent Recovery:	-1.38	0.722
Status vs Numerical Indicator:	85.52%	-3.52
Upper % Recovery Limits:	N/A	68.89%
Lower % Recovery Limits:	Pass	N/A
	135%	Pass
	60%	60%

Duplicate Sample Assessment	Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample I.D.:	Sample I.D.
Duplicate Sample I.D.:	Sample MS I.D.
Sample Result (pCi/L, g, F):	Sample MSD I.D.
Sample Duplicate Result (pCi/L, g, F):	Sample Matrix Spike Result:
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	Sample Spike Result 2 Sigma CSU (pCi/L, g, F):
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	Sample Matrix Spike Duplicate Result:
Are sample and/or duplicate results below RL?	Sample Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):
Duplicate Numerical Performance Indicator:	Duplicate Numerical Performance Indicator:
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:
Duplicate Status vs Numerical Indicator:	MS/ MSD Duplicate Status vs Numerical Indicator:
Duplicate Status vs RPD:	MS/ MSD Duplicate Status vs RPD:
% RPD Limit:	% RPD Limit:
36%	

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

Comments:

Handwritten signature

VAL
8/29/24

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JJS1
Date: 8/26/2024
Worklist: 80889
Matrix: WT

Method Blank Assessment	
MB Sample ID	3363812
MB concentration:	0.480
M/B 2 Sigma CSU:	0.328
MB MDC:	0.623
MB Numerical Performance Indicator:	2.87
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment		LCSD (Y or N)?	Y
Count Date:	8/28/2024	LCSD80889	8/28/2024
Spike I.D.:	23-043		23-043
Decay Corrected Spike Concentration (pCi/mL):	35.492		35.492
Volume Used (mL):	0.10		0.10
Aliquot Volume (L, g, F):	0.815		0.818
Target Conc. (pCi/L, g, F):	4.353		4.337
Uncertainty (Calculated):	0.213		0.212
Result (pCi/L, g, F):	3.493		3.713
LCSD/LCSD 2 Sigma CSU (pCi/L, g, F):	0.808		0.861
Numerical Performance Indicator:	-2.02		-1.38
Percent Recovery:	80.23%		85.62%
Status vs Numerical Indicator:	N/A		N/A
Status vs Recovery:	Pass		Pass
Upper % Recovery Limits:	135%		135%
Lower % Recovery Limits:	60%		60%

Duplicate Sample Assessment	
Sample I.D.:	LCSD80889
Duplicate Sample I.D.:	LCSD80889
Sample Result (pCi/L, g, F):	3.493
Sample Duplicate Result (pCi/L, g, F):	0.808
Sample Result 2 Sigma CSU (pCi/L, g, F):	3.713
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.861
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	-0.366
(Based on the LCSD/LCSD Percent Recoveries) Duplicate RPD:	6.50%
Duplicate Status vs Numerical Indicator:	Pass
Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

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

Comments:

VAC
8/29/24

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: 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: 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:

Quality Control Sample Performance Assessment

Analyt Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: SLC
Date: 1/7/1900
Worklist: 80838
Matrix: W



Method Blank Assessment	
MB Sample ID	3361203
MB concentration:	-0.054
MB 2 Sigma CSU:	0.120
MB MDC:	0.379
MB Numerical Performance Indicator:	-0.88
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment		LCS (Y or N)?	Y
Count Date:		LCS#080838	LCS#080838
Spike I.D.:		8/29/2024	8/29/2024
Decay Corrected Spike Concentration (pCi/mL):		23-014	23-014
Volume Used (mL):		25.020	25.020
Aliquot Volume (L, g, F):		0.10	0.10
Target Conc. (pCi/L, g, F):		0.508	0.510
Uncertainty (Calculated):		4.923	4.910
Result (pCi/L, g, F):		4.245	3.953
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):		0.897	0.854
Numerical Performance Indicator:		-1.44	-2.12
Percent Recovery:		86.22%	80.50%
Status vs Numerical Indicator:		Pass	Warning
Status vs Recovery:		N/A	N/A
Upper % Recovery Limits:		125%	125%
Lower % Recovery Limits:		75%	75%

Duplicate Sample Assessment		LCS#080838	92746901002DUP
Sample I.D.:		LCS#080838	92746901002DUP
Duplicate Sample I.D.:		4.245	0.164
Sample Result (pCi/L, g, F):		0.897	0.200
Sample Duplicate Result (pCi/L, g, F):		3.953	0.244
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		0.854	0.199
Are sample and/or duplicate results below RL?		NO	See Below #
Duplicate Numerical Performance Indicator:		0.462	-0.556
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:		6.88%	39.19%
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:

67
8-30-24

AM 8/30/24

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):			
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:	

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: SLC
Date: 8/27/2024
Worklist: 80840
Matrix: W



Method Blank Assessment	
MB Sample ID	3361205
MB concentration:	0.078
MIB 2 Sigma CSU:	0.121
MB MDC:	0.267
MB Numerical Performance Indicator:	1.27
MB Status vs Numerical Indicator:	Pass
MB Status vs MDC:	N/A

Laboratory Control Sample Assessment		LCSD (Y or N)?	Y
Count Date:		9/2/2024	LCSD080840
Spike I.D.:		23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):		25.020	25.020
Volume Used (mL):		0.10	0.10
Aliquot Volume (L, g, F):		0.503	0.503
Target Conc. (pCi/L, g, F):		4.977	4.969
Uncertainty (Calculated):		0.234	0.234
Result (pCi/L, g, F):		4.300	4.998
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):		0.822	0.914
Numerical Performance Indicator:		-1.55	0.06
Percent Recovery:		86.40%	100.57%
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		LCSD080840	92746293013
Sample I.D.:		LCSD080840	92746293013DUP
Duplicate Sample I.D.:		4.300	0.038
Sample Result (pCi/L, g, F):		0.822	0.117
Sample Result 2 Sigma CSU (pCi/L, g, F):		4.998	0.096
Sample Duplicate Result (pCi/L, g, F):		0.914	0.130
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		NO	See Below #
Are sample and/or duplicate results below RL?		-1.113	-0.656
Duplicate Numerical Performance Indicator:		15.16%	87.10%
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:		Pass	Pass
Duplicate Status vs Numerical Indicator:		N/A	N/A
Duplicate Status vs RPD:		25%	25%
% RPD Limit:			

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

Comments:

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):			
MSD Aliquot (L, g, F):			
MS Target Conc. (pCi/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:			
Sample 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:	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	
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:	

9/3/24

67
9-3-24

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.



Test: Ra-226
Analyst: SLC
Date: 9/3/2024
Worklist: 80842
Matrix: W

Method Blank Assessment	
MB Sample ID	3361208
MB concentration:	0.159
M/B 2 Sigma CSU:	0.232
MB MDC:	0.507
MB Numerical Performance Indicator:	1.34
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

	LCS/D (Y or N)?		Y
	LCS80842	LCS/D80842	
Count Date:	9/4/2024	9/4/2024	
Spike I.D.:	23-014	23-014	
Decay Corrected Spike Concentration (pCi/mL):	25.020	25.020	
Volume Used (mL):	0.10	0.10	
Aliquot Volume (L, g, F):	0.506	0.505	
Target Conc. (pCi/L, g, F):	4.943	4.951	
Uncertainty (Calculated):	0.232	0.233	
Result (pCi/L, g, F):	4.107	4.527	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.937	0.986	
Numerical Performance Indicator:	-1.70	-0.82	
Percent Recovery:	83.09%	91.43%	
Status vs Numerical Indicator:	Pass	Pass	
Status vs Recovery:	N/A	N/A	
Upper % Recovery Limits:	125%	125%	
Lower % Recovery Limits:	75%	75%	

	LCS/D (Y or N)?		Y
	LCS80842	LCS/D80842	
Sample I.D.:	92746296015	92746296015	
Duplicate Sample I.D.:	92746296015	92746296015	
Sample Result (pCi/L, g, F):	0.444	0.444	
Sample Duplicate Result (pCi/L, g, F):	0.349	0.349	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.368	0.368	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.328	0.328	
Are sample and/or duplicate results below RL?	NO	See Below #	
Duplicate Numerical Performance Indicator:	-0.604	0.310	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	9.56%	18.66%	
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:

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): 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.:
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Sample Matrix Spike Duplicate Result: 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:

MAN 9/15/24

MAN 9/15/24

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: SLC
Date: 9/3/2024
Worklist: 80879
Matrix: WT

Method Blank Assessment	
MB Sample ID	3363058
MB concentration:	0.108
MB 2 Sigma CSU:	0.233
MB MDC:	0.544
MB Numerical Performance Indicator:	0.91
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment		LCSD (Y or N)?	Y
Count Date:	9/4/2024	LCSD80879	9/4/2024
Spike I.D.:	23-014		23-014
Decay Corrected Spike Concentration (pCi/mL):	25.020		25.020
Volume Used (mL):	0.10		0.10
Aliquot Volume (L, g, F):	0.509		0.503
Target Conc. (pCi/L, g, F):	4.914		4.971
Uncertainty (Calculated):	0.231		0.234
Result (pCi/L, g, F):	5.088		4.885
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.042		1.033
Numerical Performance Indicator:	0.32		-0.16
Percent Recovery:	103.55%		96.28%
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		LCSD (Y or N)?	Y
Sample I.D.:	92747805004	LCSD80879	92747805004DUP
Duplicate Sample I.D.:	92747805004DUP		92747805004DUP
Sample Result (pCi/L, g, F):	5.088		0.344
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.042		0.245
Sample Duplicate Result (pCi/L, g, F):	4.885		0.347
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.033		0.248
Are sample and/or duplicate results below RL?	NO		See Below #
Duplicate Numerical Performance Indicator:	0.272		-0.014
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	5.22%		0.72%
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:

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

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

MPH
9-5-24

LAM 9/5/24

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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Test: Ra-228
Analyst: JJS1
Date: 8/21/2024
Worklist: 80819
Matrix: WT

Method Blank Assessment	
MB Sample ID	3359338
MB concentration:	0.622
M/B 2 Sigma CSU:	0.413
MB MDC:	0.764
MB Numerical Performance Indicator:	2.95
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCS/D (Y or N)?	
	LCS/D80819	YCS/D80819
Count Date:	8/26/2024	8/26/2024
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	35.518	35.518
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.822	0.817
Target Conc. (pCi/L, g, F):	4.321	4.350
Uncertainty (Calculated):	0.212	0.213
Result (pCi/L, g, F):	3.208	3.585
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.810	0.863
Numerical Performance Indicator:	-2.61	-1.69
Percent Recovery:	74.25%	82.41%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	LCS/D80819
Duplicate Sample I.D.:	LCS/D80819
Sample Result (pCi/L, g, F):	3.208
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.810
Sample Duplicate Result (pCi/L, g, F):	3.585
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.863
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	-0.624
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	10.43%
Duplicate Status vs Numerical Indicator:	Pass
Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

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

Comments:

VAL
8/27/24

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

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

February 2025



March 13, 2025

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

RE: Project: Hammond AP-4-RAD
Pace Project No.: 92779988

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory between February 14, 2025 and February 17, 2025. 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
Jamie Newsome, Geosyntec Consultants
Zain Webb, Geosyntec Consultants



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

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: Hammond AP-4-RAD

Pace Project No.: 92779988

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92779988001	HAM-HGWA-47	Water	02/12/25 16:31	02/14/25 16:10
92779988002	HAM-HGWA-48D	Water	02/12/25 17:02	02/14/25 16:10
92779988003	HAM-HGWA-111	Water	02/13/25 09:54	02/14/25 16:10
92779988004	HAM-HGWA-112	Water	02/13/25 15:57	02/14/25 16:10
92779988005	HAM-HGWA-113	Water	02/13/25 13:31	02/14/25 16:10
92779988006	HAM-HGWC-101	Water	02/15/25 10:34	02/17/25 14:45
92779988007	HAM-HGWC-102	Water	02/15/25 11:49	02/17/25 14:45
92779988008	HAM-HGWC-103	Water	02/15/25 16:13	02/17/25 14:45
92779988009	HAM-HGWC-105	Water	02/16/25 09:30	02/17/25 14:45
92779988010	HAM-HGWC-107	Water	02/16/25 11:59	02/17/25 14:45
92779988011	HAM-HGWC-109	Water	02/16/25 14:31	02/17/25 14:45
92779988012	HAM-HGWC-117A	Water	02/16/25 09:33	02/17/25 14:45
92779988013	HAM-HGWC-118	Water	02/16/25 11:55	02/17/25 14:45
92779988014	HAM-AP4-EB-01	Water	02/16/25 10:10	02/17/25 14:45
92779988015	HAM-AP4-FB-01	Water	02/16/25 10:05	02/17/25 14:45
92779988016	HAM-AP4-FD-01	Water	02/15/25 00:00	02/17/25 14:45
92779988017	HAM-AP4-EB-02	Water	02/16/25 13:00	02/17/25 14:45
92779988018	HAM-AP4-FB-02	Water	02/16/25 12:55	02/17/25 14:45
92779988019	HAM-AP4-FD-02	Water	02/16/25 00:00	02/17/25 14:45

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92779988001	HAM-HGWA-47	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779988002	HAM-HGWA-48D	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779988003	HAM-HGWA-111	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779988004	HAM-HGWA-112	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779988005	HAM-HGWA-113	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779988006	HAM-HGWC-101	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779988007	HAM-HGWC-102	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779988008	HAM-HGWC-103	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779988009	HAM-HGWC-105	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779988010	HAM-HGWC-107	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779988011	HAM-HGWC-109	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779988012	HAM-HGWC-117A	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779988013	HAM-HGWC-118	EPA 9315	SLC	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92779988014	HAM-AP4-EB-01	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
92779988015	HAM-AP4-FB-01	Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779988016	HAM-AP4-FD-01	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
92779988017	HAM-AP4-EB-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
92779988018	HAM-AP4-FB-02	Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779988019	HAM-AP4-FD-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

PASI-PA = Pace Analytical Services - Greensburg

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SUMMARY OF DETECTION

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92779988001 HAM-HGWA-47						
EPA 9315	Radium-226	-0.0149U ± 0.169 (0.470) C:83% T:NA	pCi/L		03/10/25 10:05	
EPA 9320	Radium-228	0.876U ± 0.514 (0.964) C:83% T:81%	pCi/L		03/07/25 14:27	
Total Radium Calculation	Total Radium	0.876U ± 0.683 (1.43)	pCi/L		03/10/25 15:52	
92779988002 HAM-HGWA-48D						
EPA 9315	Radium-226	0.390U ± 0.285 (0.500) C:70% T:NA	pCi/L		03/10/25 10:05	
EPA 9320	Radium-228	0.941U ± 0.572 (1.09) C:79% T:81%	pCi/L		03/07/25 14:27	
Total Radium Calculation	Total Radium	1.33U ± 0.857 (1.59)	pCi/L		03/10/25 15:52	
92779988003 HAM-HGWA-111						
EPA 9315	Radium-226	0.328U ± 0.320 (0.651) C:73% T:NA	pCi/L		03/10/25 10:05	
EPA 9320	Radium-228	0.190U ± 0.453 (1.00) C:75% T:89%	pCi/L		03/07/25 14:27	
Total Radium Calculation	Total Radium	0.518U ± 0.773 (1.65)	pCi/L		03/10/25 15:52	
92779988004 HAM-HGWA-112						
EPA 9315	Radium-226	-0.0382U ± 0.247 (0.647) C:84% T:NA	pCi/L		03/10/25 10:06	
EPA 9320	Radium-228	0.0591U ± 0.394 (0.900) C:78% T:82%	pCi/L		03/07/25 14:27	
Total Radium Calculation	Total Radium	0.0591U ± 0.641 (1.55)	pCi/L		03/10/25 15:52	

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SUMMARY OF DETECTION

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92779988005						
HAM-HGWA-113						
EPA 9315	Radium-226	0.0698U ± 0.207 (0.501)	pCi/L		03/10/25 10:06	
EPA 9320	Radium-228	C:78% T:NA 0.367U ± 0.432 (0.912)	pCi/L		03/07/25 14:27	
Total Radium Calculation	Total Radium	C:76% T:85% 0.437U ± 0.639 (1.41)	pCi/L		03/10/25 15:52	
92779988006						
HAM-HGWC-101						
EPA 9315	Radium-226	0.237U ± 0.251 (0.507)	pCi/L		03/10/25 10:06	
EPA 9320	Radium-228	C:68% T:NA 0.0754U ± 0.379 (0.861)	pCi/L		03/07/25 14:27	
Total Radium Calculation	Total Radium	C:78% T:85% 0.312U ± 0.630 (1.37)	pCi/L		03/10/25 15:52	
92779988007						
HAM-HGWC-102						
EPA 9315	Radium-226	0.0848U ± 0.163 (0.376)	pCi/L		03/10/25 10:06	
EPA 9320	Radium-228	C:79% T:NA 0.698U ± 0.460 (0.883)	pCi/L		03/07/25 14:27	
Total Radium Calculation	Total Radium	C:80% T:81% 0.783U ± 0.623 (1.26)	pCi/L		03/10/25 15:52	
92779988008						
HAM-HGWC-103						
EPA 9315	Radium-226	0.0595U ± 0.244 (0.596)	pCi/L		03/10/25 10:06	
EPA 9320	Radium-228	C:80% T:NA 0.224U ± 0.397 (0.869)	pCi/L		03/07/25 14:28	
Total Radium Calculation	Total Radium	C:76% T:83% 0.284U ± 0.641 (1.47)	pCi/L		03/10/25 15:52	

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SUMMARY OF DETECTION

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92779988009	HAM-HGWC-105					
EPA 9315	Radium-226	-0.0965U ± 0.221 (0.621) C:78% T:NA	pCi/L		03/10/25 10:06	
EPA 9320	Radium-228	0.372U ± 0.401 (0.831) C:75% T:84%	pCi/L		03/07/25 14:28	
Total Radium Calculation	Total Radium	0.372U ± 0.622 (1.45)	pCi/L		03/10/25 15:52	
92779988010	HAM-HGWC-107					
EPA 9315	Radium-226	-0.00740U ± 0.261 (0.666) C:79% T:NA	pCi/L		03/10/25 10:06	
EPA 9320	Radium-228	0.352U ± 0.475 (1.02) C:76% T:79%	pCi/L		03/07/25 14:28	
Total Radium Calculation	Total Radium	0.352U ± 0.736 (1.69)	pCi/L		03/10/25 15:52	
92779988011	HAM-HGWC-109					
EPA 9315	Radium-226	0.0784U ± 0.232 (0.556) C:84% T:NA	pCi/L		03/10/25 10:06	
EPA 9320	Radium-228	0.774 ± 0.418 (0.755) C:80% T:88%	pCi/L		03/07/25 14:28	
Total Radium Calculation	Total Radium	0.852U ± 0.650 (1.31)	pCi/L		03/10/25 15:52	
92779988012	HAM-HGWC-117A					
EPA 9315	Radium-226	0.107U ± 0.218 (0.507) C:68% T:NA	pCi/L		03/10/25 10:11	
EPA 9320	Radium-228	0.508U ± 0.371 (0.717) C:77% T:85%	pCi/L		03/07/25 14:28	
Total Radium Calculation	Total Radium	0.615U ± 0.589 (1.22)	pCi/L		03/10/25 15:52	

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SUMMARY OF DETECTION

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92779988013	HAM-HGWC-118					
EPA 9315	Radium-226	0.0413U ± 0.156 (0.399) C:73% T:NA	pCi/L		03/10/25 10:11	
EPA 9320	Radium-228	0.868 ± 0.455 (0.802) C:78% T:78%	pCi/L		03/07/25 14:28	
Total Radium Calculation	Total Radium	0.909U ± 0.611 (1.20)	pCi/L		03/10/25 15:52	
92779988014	HAM-AP4-EB-01					
EPA 9315	Radium-226	-0.0342U ± 0.166 (0.469) C:85% T:NA	pCi/L		03/10/25 10:11	
EPA 9320	Radium-228	0.333U ± 0.392 (0.824) C:73% T:85%	pCi/L		03/07/25 14:28	
Total Radium Calculation	Total Radium	0.333U ± 0.558 (1.29)	pCi/L		03/10/25 15:52	
92779988015	HAM-AP4-FB-01					
EPA 9315	Radium-226	0.101U ± 0.184 (0.420) C:84% T:NA	pCi/L		03/10/25 10:12	
EPA 9320	Radium-228	-0.00776U ± 0.390 (0.911) C:74% T:90%	pCi/L		03/07/25 14:28	
Total Radium Calculation	Total Radium	0.101U ± 0.574 (1.33)	pCi/L		03/10/25 15:52	
92779988016	HAM-AP4-FD-01					
EPA 9315	Radium-226	0.415 ± 0.253 (0.391) C:78% T:NA	pCi/L		03/10/25 10:12	
EPA 9320	Radium-228	0.489U ± 0.441 (0.896) C:76% T:80%	pCi/L		03/07/25 14:29	
Total Radium Calculation	Total Radium	0.904U ± 0.694 (1.29)	pCi/L		03/10/25 15:52	

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SUMMARY OF DETECTION

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92779988017	HAM-AP4-EB-02					
EPA 9315	Radium-226	-0.0372U ± 0.248 (0.661)	pCi/L		03/10/25 10:12	
EPA 9320	Radium-228	C:73% T:NA 0.847 ± 0.416 (0.694)	pCi/L		03/07/25 14:29	
Total Radium Calculation	Total Radium	C:75% T:87% 0.847U ± 0.664 (1.36)	pCi/L		03/10/25 15:52	
92779988018	HAM-AP4-FB-02					
EPA 9315	Radium-226	0.0691U ± 0.215 (0.521)	pCi/L		03/10/25 10:12	
EPA 9320	Radium-228	C:82% T:NA 0.503U ± 0.391 (0.772)	pCi/L		03/07/25 14:29	
Total Radium Calculation	Total Radium	C:82% T:83% 0.572U ± 0.606 (1.29)	pCi/L		03/10/25 15:52	
92779988019	HAM-AP4-FD-02					
EPA 9315	Radium-226	0.00329U ± 0.194 (0.514)	pCi/L		03/10/25 10:12	
EPA 9320	Radium-228	C:74% T:NA 0.103U ± 0.304 (0.683)	pCi/L		03/07/25 14:29	
Total Radium Calculation	Total Radium	C:82% T:93% 0.106U ± 0.498 (1.20)	pCi/L		03/10/25 15:52	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: HAM-HGWA-47 Lab ID: 92779988001 Collected: 02/12/25 16:31 Received: 02/14/25 16:10 Matrix: Water PWS: Site ID: Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	-0.0149U ± 0.169 (0.470) C:83% T:NA	pCi/L	03/10/25 10:05	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.876U ± 0.514 (0.964) C:83% T:81%	pCi/L	03/07/25 14:27	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.876U ± 0.683 (1.43)	pCi/L	03/10/25 15:52	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Sample: HAM-HGWA-48D **Lab ID: 92779988002** Collected: 02/12/25 17:02 Received: 02/14/25 16:10 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	0.390U ± 0.285 (0.500) C:70% T:NA	pCi/L	03/10/25 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.941U ± 0.572 (1.09) C:79% T:81%	pCi/L	03/07/25 14:27	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.33U ± 0.857 (1.59)	pCi/L	03/10/25 15:52	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Sample: HAM-HGWA-111 **Lab ID: 92779988003** Collected: 02/13/25 09:54 Received: 02/14/25 16:10 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	0.328U ± 0.320 (0.651) C:73% T:NA	pCi/L	03/10/25 10:05	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.190U ± 0.453 (1.00) C:75% T:89%	pCi/L	03/07/25 14:27	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.518U ± 0.773 (1.65)	pCi/L	03/10/25 15:52	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Sample: HAM-HGWA-112 **Lab ID: 92779988004** Collected: 02/13/25 15:57 Received: 02/14/25 16:10 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	-0.0382U ± 0.247 (0.647) C:84% T:NA	pCi/L	03/10/25 10:06	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.0591U ± 0.394 (0.900) C:78% T:82%	pCi/L	03/07/25 14:27	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.0591U ± 0.641 (1.55)	pCi/L	03/10/25 15:52	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Sample: HAM-HGWA-113 **Lab ID: 92779988005** Collected: 02/13/25 13:31 Received: 02/14/25 16:10 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	0.0698U ± 0.207 (0.501) C:78% T:NA	pCi/L	03/10/25 10:06	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.367U ± 0.432 (0.912) C:76% T:85%	pCi/L	03/07/25 14:27	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.437U ± 0.639 (1.41)	pCi/L	03/10/25 15:52	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Sample: HAM-HGWC-101 **Lab ID: 92779988006** Collected: 02/15/25 10:34 Received: 02/17/25 14:45 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	0.237U ± 0.251 (0.507) C:68% T:NA	pCi/L	03/10/25 10:06	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.0754U ± 0.379 (0.861) C:78% T:85%	pCi/L	03/07/25 14:27	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.312U ± 0.630 (1.37)	pCi/L	03/10/25 15:52	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: HAM-HGWC-102 Lab ID: 92779988007 Collected: 02/15/25 11:49 Received: 02/17/25 14:45 Matrix: Water PWS: Site ID: Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.0848U ± 0.163 (0.376) C:79% T:NA	pCi/L	03/10/25 10:06	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.698U ± 0.460 (0.883) C:80% T:81%	pCi/L	03/07/25 14:27	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.783U ± 0.623 (1.26)	pCi/L	03/10/25 15:52	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: HAM-HGWC-103 Lab ID: 92779988008 Collected: 02/15/25 16:13 Received: 02/17/25 14:45 Matrix: Water PWS: Site ID: Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.0595U ± 0.244 (0.596) C:80% T:NA	pCi/L	03/10/25 10:06	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.224U ± 0.397 (0.869) C:76% T:83%	pCi/L	03/07/25 14:28	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.284U ± 0.641 (1.47)	pCi/L	03/10/25 15:52	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: HAM-HGWC-105 Lab ID: 92779988009 Collected: 02/16/25 09:30 Received: 02/17/25 14:45 Matrix: Water PWS: Site ID: Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	-0.0965U ± 0.221 (0.621) C:78% T:NA	pCi/L	03/10/25 10:06	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.372U ± 0.401 (0.831) C:75% T:84%	pCi/L	03/07/25 14:28	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.372U ± 0.622 (1.45)	pCi/L	03/10/25 15:52	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: HAM-HGWC-107 Lab ID: 92779988010 Collected: 02/16/25 11:59 Received: 02/17/25 14:45 Matrix: Water PWS: Site ID: Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	-0.00740U ± 0.261 (0.666) C:79% T:NA	pCi/L	03/10/25 10:06	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.352U ± 0.475 (1.02) C:76% T:79%	pCi/L	03/07/25 14:28	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.352U ± 0.736 (1.69)	pCi/L	03/10/25 15:52	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Sample: HAM-HGWC-109 **Lab ID: 92779988011** Collected: 02/16/25 14:31 Received: 02/17/25 14:45 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	0.0784U ± 0.232 (0.556) C:84% T:NA	pCi/L	03/10/25 10:06	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.774 ± 0.418 (0.755) C:80% T:88%	pCi/L	03/07/25 14:28	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.852U ± 0.650 (1.31)	pCi/L	03/10/25 15:52	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Sample: HAM-HGWC-117A **Lab ID: 92779988012** Collected: 02/16/25 09:33 Received: 02/17/25 14:45 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	0.107U ± 0.218 (0.507) C:68% T:NA	pCi/L	03/10/25 10:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.508U ± 0.371 (0.717) C:77% T:85%	pCi/L	03/07/25 14:28	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.615U ± 0.589 (1.22)	pCi/L	03/10/25 15:52	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Sample: HAM-HGWC-118 **Lab ID: 92779988013** Collected: 02/16/25 11:55 Received: 02/17/25 14:45 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	0.0413U ± 0.156 (0.399) C:73% T:NA	pCi/L	03/10/25 10:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.868 ± 0.455 (0.802) C:78% T:78%	pCi/L	03/07/25 14:28	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.909U ± 0.611 (1.20)	pCi/L	03/10/25 15:52	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Sample: HAM-AP4-EB-01 **Lab ID: 92779988014** Collected: 02/16/25 10:10 Received: 02/17/25 14:45 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	-0.0342U ± 0.166 (0.469) C:85% T:NA	pCi/L	03/10/25 10:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.333U ± 0.392 (0.824) C:73% T:85%	pCi/L	03/07/25 14:28	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.333U ± 0.558 (1.29)	pCi/L	03/10/25 15:52	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: HAM-AP4-FB-01 Lab ID: 92779988015 Collected: 02/16/25 10:05 Received: 02/17/25 14:45 Matrix: Water PWS: Site ID: Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.101U ± 0.184 (0.420) C:84% T:NA	pCi/L	03/10/25 10:12	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	-0.00776U ± 0.390 (0.911) C:74% T:90%	pCi/L	03/07/25 14:28	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.101U ± 0.574 (1.33)	pCi/L	03/10/25 15:52	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Sample: HAM-AP4-FD-01 **Lab ID: 92779988016** Collected: 02/15/25 00:00 Received: 02/17/25 14:45 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	0.415 ± 0.253 (0.391) C:78% T:NA	pCi/L	03/10/25 10:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.489U ± 0.441 (0.896) C:76% T:80%	pCi/L	03/07/25 14:29	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.904U ± 0.694 (1.29)	pCi/L	03/10/25 15:52	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Sample: HAM-AP4-EB-02 **Lab ID: 92779988017** Collected: 02/16/25 13:00 Received: 02/17/25 14:45 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	-0.0372U ± 0.248 (0.661) C:73% T:NA	pCi/L	03/10/25 10:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.847 ± 0.416 (0.694) C:75% T:87%	pCi/L	03/07/25 14:29	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.847U ± 0.664 (1.36)	pCi/L	03/10/25 15:52	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Sample: HAM-AP4-FB-02 **Lab ID: 92779988018** Collected: 02/16/25 12:55 Received: 02/17/25 14:45 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	0.0691U ± 0.215 (0.521) C:82% T:NA	pCi/L	03/10/25 10:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.503U ± 0.391 (0.772) C:82% T:83%	pCi/L	03/07/25 14:29	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.572U ± 0.606 (1.29)	pCi/L	03/10/25 15:52	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Sample: HAM-AP4-FD-02 Lab ID: 92779988019 Collected: 02/16/25 00:00 Received: 02/17/25 14:45 Matrix: Water PWS: Site ID: Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.00329U ± 0.194 (0.514) C:74% T:NA	pCi/L	03/10/25 10:12	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.103U ± 0.304 (0.683) C:82% T:93%	pCi/L	03/07/25 14:29	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.106U ± 0.498 (1.20)	pCi/L	03/10/25 15:52	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

QC Batch:	728164	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92779988001, 92779988002, 92779988003, 92779988004, 92779988005, 92779988006, 92779988007, 92779988008, 92779988009, 92779988010, 92779988011, 92779988012, 92779988013, 92779988014, 92779988015, 92779988016, 92779988017, 92779988018, 92779988019

METHOD BLANK:	3544473	Matrix:	Water
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Associated Lab Samples: 92779988001, 92779988002, 92779988003, 92779988004, 92779988005, 92779988006, 92779988007, 92779988008, 92779988009, 92779988010, 92779988011, 92779988012, 92779988013, 92779988014, 92779988015, 92779988016, 92779988017, 92779988018, 92779988019

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.636 ± 0.471 (0.938) C:78% T:90%	pCi/L	03/07/25 14:27	

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: Hammond AP-4-RAD

Pace Project No.: 92779988

QC Batch:	728163	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92779988001, 92779988002, 92779988003, 92779988004, 92779988005, 92779988006, 92779988007, 92779988008, 92779988009, 92779988010, 92779988011, 92779988012, 92779988013, 92779988014, 92779988015, 92779988016, 92779988017, 92779988018, 92779988019

METHOD BLANK:	3544469	Matrix:	Water
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Associated Lab Samples: 92779988001, 92779988002, 92779988003, 92779988004, 92779988005, 92779988006, 92779988007, 92779988008, 92779988009, 92779988010, 92779988011, 92779988012, 92779988013, 92779988014, 92779988015, 92779988016, 92779988017, 92779988018, 92779988019

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0429 ± 0.143 (0.428) C:85% T:NA	pCi/L	03/10/25 10:05	

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-4-RAD

Pace Project No.: 92779988

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: Hammond AP-4-RAD

Pace Project No.: 92779988

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92779988001	HAM-HGWA-47	EPA 9315	728163		
92779988002	HAM-HGWA-48D	EPA 9315	728163		
92779988003	HAM-HGWA-111	EPA 9315	728163		
92779988004	HAM-HGWA-112	EPA 9315	728163		
92779988005	HAM-HGWA-113	EPA 9315	728163		
92779988006	HAM-HGWC-101	EPA 9315	728163		
92779988007	HAM-HGWC-102	EPA 9315	728163		
92779988008	HAM-HGWC-103	EPA 9315	728163		
92779988009	HAM-HGWC-105	EPA 9315	728163		
92779988010	HAM-HGWC-107	EPA 9315	728163		
92779988011	HAM-HGWC-109	EPA 9315	728163		
92779988012	HAM-HGWC-117A	EPA 9315	728163		
92779988013	HAM-HGWC-118	EPA 9315	728163		
92779988014	HAM-AP4-EB-01	EPA 9315	728163		
92779988015	HAM-AP4-FB-01	EPA 9315	728163		
92779988016	HAM-AP4-FD-01	EPA 9315	728163		
92779988017	HAM-AP4-EB-02	EPA 9315	728163		
92779988018	HAM-AP4-FB-02	EPA 9315	728163		
92779988019	HAM-AP4-FD-02	EPA 9315	728163		
92779988001	HAM-HGWA-47	EPA 9320	728164		
92779988002	HAM-HGWA-48D	EPA 9320	728164		
92779988003	HAM-HGWA-111	EPA 9320	728164		
92779988004	HAM-HGWA-112	EPA 9320	728164		
92779988005	HAM-HGWA-113	EPA 9320	728164		
92779988006	HAM-HGWC-101	EPA 9320	728164		
92779988007	HAM-HGWC-102	EPA 9320	728164		
92779988008	HAM-HGWC-103	EPA 9320	728164		
92779988009	HAM-HGWC-105	EPA 9320	728164		
92779988010	HAM-HGWC-107	EPA 9320	728164		
92779988011	HAM-HGWC-109	EPA 9320	728164		
92779988012	HAM-HGWC-117A	EPA 9320	728164		
92779988013	HAM-HGWC-118	EPA 9320	728164		
92779988014	HAM-AP4-EB-01	EPA 9320	728164		
92779988015	HAM-AP4-FB-01	EPA 9320	728164		
92779988016	HAM-AP4-FD-01	EPA 9320	728164		
92779988017	HAM-AP4-EB-02	EPA 9320	728164		
92779988018	HAM-AP4-FB-02	EPA 9320	728164		
92779988019	HAM-AP4-FD-02	EPA 9320	728164		
92779988001	HAM-HGWA-47	Total Radium Calculation	731764		
92779988002	HAM-HGWA-48D	Total Radium Calculation	731764		
92779988003	HAM-HGWA-111	Total Radium Calculation	731764		
92779988004	HAM-HGWA-112	Total Radium Calculation	731764		
92779988005	HAM-HGWA-113	Total Radium Calculation	731764		
92779988006	HAM-HGWC-101	Total Radium Calculation	731764		
92779988007	HAM-HGWC-102	Total Radium Calculation	731764		
92779988008	HAM-HGWC-103	Total Radium Calculation	731764		
92779988009	HAM-HGWC-105	Total Radium Calculation	731764		
92779988010	HAM-HGWC-107	Total Radium Calculation	731764		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-4-RAD

Pace Project No.: 92779988

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92779988011	HAM-HGWC-109	Total Radium Calculation	731764		
92779988012	HAM-HGWC-117A	Total Radium Calculation	731764		
92779988013	HAM-HGWC-118	Total Radium Calculation	731764		
92779988014	HAM-AP4-EB-01	Total Radium Calculation	731764		
92779988015	HAM-AP4-FB-01	Total Radium Calculation	731764		
92779988016	HAM-AP4-FD-01	Total Radium Calculation	731764		
92779988017	HAM-AP4-EB-02	Total Radium Calculation	731764		
92779988018	HAM-AP4-FB-02	Total Radium Calculation	731764		
92779988019	HAM-AP4-FD-02	Total Radium Calculation	731764		

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DC#_Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mer

Sample Condition Upon Receipt

Client Name: C & A Power

Project #:

WO#: 92779988



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: 2/14/25 LTV

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen? Yes No N/A

Thermometer:

IR Gun ID: 083

Type of Ice: Wet Blue None

Cooler Temp: 2.8 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): 2.9

JSDA 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 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:	W		
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		

MENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

Lot ID of split containers:

NT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____



DC#_ Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

WO#: 92779988

PM: BV Due Date: 03/10/25
CLIENT: 92- GP-HAM

Project #

- *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

laboratory Receiving Location: Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Client Profile/EZ (Circle one) Notes

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)	BP6S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic 2N Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WG7U-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)	VG8T-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)		
CC																													
1		2	1	<p style="text-align: center;"><i>BRN</i></p>																									
2		2	1																										
3		2	1																										
4		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.

MO#: 92779988
PM: BV Due Date: **03/10/25**
CLIENT: 92- GP-HAM

Section A Required Client Information:		Section B Report To: SCS Contacts		Section C Invoice Information:	
Company: GA Power	Address: Atlanta, GA	Report To: SCS Contacts	Copy To: Geosynthetic Contacts	Attention: Southern Co.	Company Name: Southern Co.
Address: Atlanta, GA	City: Atlanta, GA	Project Name: Hammond AP-4	Project Number: 10839	Address: 10839	Reference: Bonnie Vang
Email To: SCS Contacts	Phone: [blank]	Purchase Order No: [blank]	Requested Due Date/TAT: 10 Day	Site Location: GA	Requested Analysis Filtered (Y/N)
Requested Due Date/TAT: 10 Day	Project Number: 10839	Company Name: Southern Co.	Address: 10839	Reference: Bonnie Vang	Reference: Bonnie Vang
Requested Due Date/TAT: 10 Day	Project Number: 10839	Company Name: Southern Co.	Address: 10839	Reference: Bonnie Vang	Reference: Bonnie Vang

ITEM #	Section D Required Client Information	Valid Matrix Codes	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECT ON	# OF CONTAINERS	Preservatives						Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
					DATE	TIME			UNPRESERVED	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃				
1	HAM-HGWA-47	DRINKING WATER WATER WASTE WATER PRODUCT SOIL/SOLID OTHER AIR OTHER TISSUE	WG G	2/12/2025	1631	1702	16	8	3	4	1	X	X	X	X	X	001	
2	HAM-HGWA-48D		WG G	2/12/2025	1702	1702	17	8	3	4	1	X	X	X	X	X	002	
3	HAM-HGWA-111		WG G	2/13/2025	0954	2/13/2025	17	8	3	4	1	X	X	X	X	X	003	
4	HAM-HGWA-112		WG G	2/13/2025	1657	1657	18	8	3	4	1	X	X	X	X	X	004	
5	HAM-HGWA-113		WG G	2/13/2025	1331	1331	16	8	3	4	1	X	X	X	X	X	005	
6																		
7																		
8																		
9																		
10																		
11																		
12																		

SAMPLER NAME AND SIGNATURE		DATE		TIME		DATE		TIME	
PRINT Name of SAMPLER: Amanda Tomlinson, Zain Webb, Thomas Kessler / Geosynthetic Consultants, I		2-14-25		1340		2/14/25		1340	
SIGNATURE of SAMPLER: [Signature]		2/14/25		1610		2/14/25		1610	

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



DC#_Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name: G.A. Power

Project #: [Empty Box]

Courier: Fed Ex UPS USPS Client Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No N/A

Date/Initials Person Examining Contents: 2/17/25 [Signature]

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen? Yes No N/A

Thermometer: IR Gun ID: 083 Type of Ice: Wet Blue None

Cooler Temp: 1.5 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): 1.6

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 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	7.	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" 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: W			
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:

ENT NOTIFICATION/RESOLUTION

erson contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____



DC#_Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

*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 #

Laboratory Receiving Location: Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Client _____ Profile/EZ (Circle one) _____ Notes _____

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)	BP2Z-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 Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	VJ6K (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			2	2	1																					
2	2	1			2	2	1																					
3	2	1			2	2	1																					
4	2	1			2	2	1																					
5	2	1			2	2	1																					
6	2	1			2	2	1																					
7	2	1			2	2	1																					
8	2	1			2	2	1																					
9	1	1			2	2	1																					
10	1	1			2	2	1																					
11	1	1			2	2	1																					
12	1	1			2	2	1																					

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.



DC#_Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

*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 #

laboratory Receiving Location: Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Client _____ Profile/EZ (Circle one) _____ Notes _____

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 2N 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 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)	SP3T-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)		
CC																													
1	/	1	1		2	2																							
2	/	1	1		2	2																							
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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 DFNR 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: Geosyntec Contacts	Company Name:
Email To: SCS Contacts	Purchase Order No.:	Address:
Phone: Fax:	Project Name: Hammond AP-4	Page Quote Reference:
Requested Due Date/TAT: 10 Day	Project Number:	Page Project Manager:
		Page Profile #: 10839

REGULATORY AGENCY	NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/>
	UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER <input type="checkbox"/>
Site Location	STATE: GA

ITEM #	Section D Required Client Information	Valid Matrix Codes MATERIALS WASTEWATER WASTE WATER PRODUCT SOLID OIL WIRE OTHER ISSUE	DDCODE DW WT 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	Analysis Test	Requested Analysis Filtered (Y/N)		Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.	
						COLLECTIVE START	COMPOSITE					DATE	TIME			DATE
1	HAM-AP4-FB-02			WG	G	2/16/2025	1255	16	6	2	4	X	X	X	X	018
2	HAM-AP4-FD-02			WG	G	2/18/2025	0000	16	6	2	4	X	X	X	X	019
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																

Task Code: HAM-COR-ASSMT-2025311	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Donna White/Geosyntec	2/17/25	1445	Keon Williams/Pace	2/19/25	1230	Temp in °C
	Keon Williams/Pace	2/19/25	1445	Keon Williams/Pace	2/19/25	1445	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.

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	Amanda Tomlinson, Zain Webb, Thomas Kessler
SIGNATURE of SAMPLER:	<i>[Signature]</i>
DATE Signed (MM/DD/YYYY):	2-17-25

PRINT Name of SAMPLER:	Amanda Tomlinson, Zain Webb, Thomas Kessler
SIGNATURE of SAMPLER:	<i>[Signature]</i>
DATE Signed (MM/DD/YYYY):	2-17-25

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: ZPC
Date: 3/3/2025
Worklist: 83716
Matrix: WT

Method Blank Assessment	
MB Sample ID	3544473
MB concentration:	0.636
MB 2 Sigma CSU:	0.471
MB MDC:	0.938
MB Numerical Performance Indicator:	2.65
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCS (Y or N)?	
	LCS83716	Y
Count Date:	3/7/2025	3/7/2025
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	33.325	33.325
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.822	0.817
Target Conc. (pCi/L, g, F):	4.055	4.079
Uncertainty (Calculated):	0.199	0.200
Result (pCi/L, g, F):	3.423	3.297
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.860	0.830
Numerical Performance Indicator:	-1.40	-1.80
Percent Recovery:	84.40%	80.82%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment	
Sample I.D.:	LCS83716
Duplicate Sample I.D.:	LCS83716
Sample Result (pCi/L, g, F):	3.423
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.860
Sample Duplicate Result (pCi/L, g, F):	3.297
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.830
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	0.206
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	4.34%
Duplicate Status vs Numerical Indicator:	Pass
Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

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

Comments:

Mus/10/25

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: Sample Matrix Spike Duplicate Result: Sample Matrix Spike Duplicate Result: 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: Sample Matrix Spike Duplicate Result: Sample Matrix Spike Duplicate Result: Sample Matrix Spike Duplicate Result: 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:	

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

www.paceanalytical.com

Test: Ra-226
Analyst: SLC
Date: 3/8/2025
Worklist: 83715
Matrix: W

Method Blank Assessment	
MB Sample ID	3644469
MB concentration:	-0.043
M/B 2 Sigma CSU:	0.143
MB MDC:	0.428
MB Numerical Performance Indicator:	-0.59
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCS/D (Y or N)?	
	LCS83715	Y
Count Date:	3/10/2025	LCS83715
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.015	25.015
Volume Used (L, g, F):	0.10	0.10
Aliquot Volume (L, g, F):	0.500	0.501
Target Conc. (pCi/L, g, F):	5.001	4.993
Uncertainty (Calculated):	0.235	0.235
Result (pCi/L, g, F):	5.025	5.383
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.072	1.084
Numerical Performance Indicator:	0.04	0.69
Percent Recovery:	100.48%	107.80%
Status vs Numerical Indicator:	Pass	Pass
Upper % Recovery Limits:	N/A	N/A
Lower % Recovery Limits:	125%	125%

Duplicate Sample Assessment	92779979001	92779979001/DUP
Sample I.D.:	LCS83715	LCS83715
Duplicate Sample I.D.:	5.025	5.025
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.072	1.072
Sample Duplicate Result (pCi/L, g, F):	5.383	5.383
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.084	1.084
Are sample and/or duplicate results below RL?	NO	NO
Duplicate Numerical Performance Indicator:	-0.460	-0.233
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	7.03%	26.19%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	25%

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):		
MSD Aliquot (L, g, F):		
MS Target Conc. (pCi/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:		
Sample 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.:
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):
Sample Matrix Spike Duplicate Result:
Sample 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:

VAM 3/10/25

ST
3-10-25



March 27, 2025

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

RE: Project: Hammond AP-4
Pace Project No.: 92779987

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory between February 14, 2025 and February 17, 2025. 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 National - Mt. Juliet
- Pace Analytical Services - Asheville
- Pace Analytical Services - West Columbia

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
Jamie Newsome, Geosyntec Consultants
Zain Webb, Geosyntec Consultants



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: Hammond AP-4

Pace Project No.: 92779987

Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122

Alabama Certification #: 40660

Alaska Certification 17-026

Arizona Certification #: AZ0612

Arkansas Certification #: 88-0469

California Certification #: 2932

Canada Certification #: 1461.01

Colorado Certification #: TN00003

Connecticut Certification #: PH-0197

DOD Certification: #1461.01

EPA# TN00003

Florida Certification #: E87487

Georgia DW Certification #: 923

Georgia Certification: NELAP

Idaho Certification #: TN00003

Illinois Certification #: 200008

Indiana Certification #: C-TN-01

Iowa Certification #: 364

Kansas Certification #: E-10277

Kentucky UST Certification #: 16

Kentucky Certification #: 90010

Louisiana Certification #: AI30792

Louisiana DW Certification #: LA180010

Maine Certification #: TN0002

Maryland Certification #: 324

Massachusetts Certification #: M-TN003

Michigan Certification #: 9958

Minnesota Certification #: 047-999-395

Mississippi Certification #: TN00003

Missouri Certification #: 340

Montana Certification #: CERT0086

Nebraska Certification #: NE-OS-15-05

Nevada Certification #: TN-03-2002-34

New Hampshire Certification #: 2975

New Jersey Certification #: TN002

New Mexico DW Certification

New York Certification #: 11742

North Carolina Aquatic Toxicity Certification #: 41

North Carolina Drinking Water Certification #: 21704

North Carolina Environmental Certificate #: 375

North Dakota Certification #: R-140

Ohio VAP Certification #: CL0069

Oklahoma Certification #: 9915

Oregon Certification #: TN200002

Pennsylvania Certification #: 68-02979

Rhode Island Certification #: LAO00356

South Carolina Certification #: 84004

South Dakota Certification

Tennessee DW/Chem/Micro Certification #: 2006

Texas Mold Certification #: LAB0152

Texas Certification #: T 104704245-17-14

USDA Soil Permit #: P330-15-00234

Utah Certification #: TN00003

Vermont Dept. of Health: ID# VT-2006

Virginia Certification #: VT2006

Virginia Certification #: 460132

Washington Certification #: C847

West Virginia Certification #: 233

Wisconsin Certification #: 998093910

Wyoming UST Certification #: via A2LA 2926.01

A2LA-ISO 17025 Certification #: 1461.01

A2LA-ISO 17025 Certification #: 1461.02

AIHA-LAP/LLC EMLAP Certification #:100789

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 West Columbia

106 Vantage Point Drive, West Columbia, SC 29172

Alaska Dept. of Energy Conservation, Cert# 20-002

California ELAP, cert# 3049

DoD, DoD QSM V5.4, cert# I.2224

DOE, DoD/DOE QSM V5.4, cert# I.2224.01

Florida, Dept. of Health, cert# E87653-70

Georgia, Env. Protection Division, cert# E87653

Illinois, EPA NELAP, cert# 2000552024-9

Kansas, Dept. of Health and Environment, cert# E-10417

Kentucky, Dept. for Env. Protection, UST, cert# 103582

Kentucky, Dept. for Env. Protection, cert# 98037

Louisiana, Dept. of Environmental Quality, cert# 5125

North Carolina, DEQ, Water Resources, cert# 329

New Jersey, Dept. of Env. Protection, cert# NLC 240005

Oklahoma, Dept. of Env. Quality, cert# 2023-175

Oregon, ELAP, cert# 4181-006

Pennsylvania, Dept. of Env. Protection, cert# 003

South Carolina, Dept. of Env. Services, cert# 32010001

Texas, Commission on Env. Quality, cert# TX-C24-00083

Virginia, Dept. of General Services, cert# 13080

Wisconsin, Dept. of Natural Resources, cert# 399136100

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Hammond AP-4

Pace Project No.: 92779987

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92779987001	HAM-HGWA-47	Water	02/12/25 16:31	02/14/25 16:10
92779987002	HAM-HGWA-48D	Water	02/12/25 17:02	02/14/25 16:10
92779987003	HAM-HGWA-111	Water	02/13/25 09:54	02/14/25 16:10
92779987004	HAM-HGWA-112	Water	02/13/25 15:57	02/14/25 16:10
92779987005	HAM-HGWA-113	Water	02/13/25 13:31	02/14/25 16:10
92779987006	HAM-HGWC-101	Water	02/15/25 10:34	02/17/25 14:45
92779987007	HAM-HGWC-102	Water	02/15/25 11:49	02/17/25 14:45
92779987008	HAM-HGWC-103	Water	02/15/25 16:13	02/17/25 14:45
92779987009	HAM-HGWC-105	Water	02/16/25 09:30	02/17/25 14:45
92779987010	HAM-HGWC-107	Water	02/16/25 11:59	02/17/25 14:45
92779987011	HAM-HGWC-109	Water	02/16/25 14:31	02/17/25 14:45
92779987012	HAM-HGWC-117A	Water	02/16/25 09:33	02/17/25 14:45
92779987013	HAM-HGWC-118	Water	02/16/25 11:55	02/17/25 14:45
92779987014	HAM-AP4-EB-01	Water	02/16/25 10:10	02/17/25 14:45
92779987015	HAM-AP4-FB-01	Water	02/16/25 10:05	02/17/25 14:45
92779987016	HAM-AP4-FD-01	Water	02/15/25 00:00	02/17/25 14:45
92779987017	HAM-AP4-EB-02	Water	02/16/25 13:00	02/17/25 14:45
92779987018	HAM-AP4-FB-02	Water	02/16/25 12:55	02/17/25 14:45
92779987019	HAM-AP4-FD-02	Water	02/16/25 00:00	02/17/25 14:45

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Hammond AP-4

Pace Project No.: 92779987

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92779987001	HAM-HGWA-47	EPA 6020B	JPD	1	PAN
		EPA 7470A	TMM	1	PASI-A
		SM 2320B-2011	SMS	3	PASI-A
		SM 2540C-2015	CMW1	1	PASI-A
		SM 4500-S2D-2011	JP1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	18	PASI-WC
92779987002	HAM-HGWA-48D	EPA 6020B	JPD	1	PAN
		EPA 7470A	TMM	1	PASI-A
		SM 2320B-2011	SMS	3	PASI-A
		SM 2540C-2015	CMW1	1	PASI-A
		SM 4500-S2D-2011	JP1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	18	PASI-WC
92779987003	HAM-HGWA-111	EPA 6020B	JPD	1	PAN
		EPA 7470A	TMM	1	PASI-A
		SM 2320B-2011	YEG	3	PASI-A
		SM 2540C-2015	HCH	1	PASI-A
		SM 4500-S2D-2011	JP1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	18	PASI-WC
92779987004	HAM-HGWA-112	EPA 6020B	JPD	1	PAN
		EPA 7470A	TMM	1	PASI-A
		SM 2320B-2011	YEG	3	PASI-A
		SM 2540C-2015	HCH	1	PASI-A
		SM 4500-S2D-2011	JP1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	18	PASI-WC
92779987005	HAM-HGWA-113	EPA 6020B	JPD	1	PAN
		EPA 7470A	TMM	1	PASI-A
		SM 2320B-2011	YEG	3	PASI-A
		SM 2540C-2015	HCH	1	PASI-A
		SM 4500-S2D-2011	JP1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	18	PASI-WC
92779987006	HAM-HGWC-101	EPA 6020B	JPD	1	PAN
		EPA 7470A	MAB2	1	PASI-A

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Hammond AP-4

Pace Project No.: 92779987

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92779987007	HAM-HGWC-102	SM 2320B-2011	YEG	3	PASI-A
		SM 2540C-2015	CDM	1	PASI-A
		SM 4500-S2D-2011	JP1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	18	PASI-WC
		EPA 6020B	JPD	1	PAN
		EPA 7470A	MAB2	1	PASI-A
		SM 2320B-2011	YEG	3	PASI-A
		SM 2540C-2015	CDM	1	PASI-A
		SM 4500-S2D-2011	JP1	1	PASI-A
92779987008	HAM-HGWC-103	EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	18	PASI-WC
		EPA 6020B	JPD	1	PAN
		EPA 7470A	MAB2	1	PASI-A
		SM 2320B-2011	YEG	3	PASI-A
		SM 2540C-2015	CDM	1	PASI-A
		SM 4500-S2D-2011	JP1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	18	PASI-WC
		EPA 6020B	JPD	1	PAN
92779987009	HAM-HGWC-105	EPA 7470A	MAB2	1	PASI-A
		SM 2320B-2011	YEG	3	PASI-A
		SM 2540C-2015	CMW1	1	PASI-A
		SM 4500-S2D-2011	JP1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	18	PASI-WC
		EPA 6020B	JPD	1	PAN
		EPA 7470A	MAB2	1	PASI-A
		SM 2320B-2011	YEG	3	PASI-A
		SM 2540C-2015	CMW1	1	PASI-A
92779987010	HAM-HGWC-107	SM 4500-S2D-2011	JP1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	18	PASI-WC
		EPA 6020B	JPD	1	PAN
		EPA 7470A	MAB2	1	PASI-A
		SM 2320B-2011	YEG	3	PASI-A
		SM 2540C-2015	CMW1	1	PASI-A
		SM 4500-S2D-2011	JP1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	18	PASI-WC
92779987011	HAM-HGWC-109	EPA 6020B	JPD	1	PAN
		EPA 7470A	MAB2	1	PASI-A
		SM 2320B-2011	YEG	3	PASI-A
		SM 2540C-2015	CMW1	1	PASI-A

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Hammond AP-4
 Pace Project No.: 92779987

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92779987012	HAM-HGWC-117A	SM 4500-S2D-2011	JP1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	18	PASI-WC
		EPA 6020B	JPD	1	PAN
		EPA 7470A	MAB2	1	PASI-A
		SM 2320B-2011	YEG	3	PASI-A
		SM 2540C-2015	CMW1	1	PASI-A
		SM 4500-S2D-2011	JP1	1	PASI-A
92779987013	HAM-HGWC-118	EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	18	PASI-WC
		EPA 6020B	JPD	1	PAN
		EPA 7470A	MAB2	1	PASI-A
		SM 2320B-2011	YEG	3	PASI-A
		SM 2540C-2015	CMW1	1	PASI-A
		SM 4500-S2D-2011	JP1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92779987014	HAM-AP4-EB-01	EPA 6020B	BK1	18	PASI-WC
		EPA 6020B	JPD	1	PAN
		EPA 7470A	MAB2	1	PASI-A
		SM 2540C-2015	CMW1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	13	PASI-WC
92779987015	HAM-AP4-FB-01	EPA 6020B	JPD	1	PAN
		EPA 7470A	MAB2	1	PASI-A
		SM 2540C-2015	CMW1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	13	PASI-WC
92779987016	HAM-AP4-FD-01	EPA 6020B	JPD	1	PAN
		EPA 7470A	MAB2	1	PASI-A
		SM 2540C-2015	CDM	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	13	PASI-WC
92779987017	HAM-AP4-EB-02	EPA 6020B	JPD	1	PAN
		EPA 7470A	MAB2	1	PASI-A
		SM 2540C-2015	CMW1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	13	PASI-WC

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Hammond AP-4

Pace Project No.: 92779987

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92779987018	HAM-AP4-FB-02	EPA 6020B	JPD	1	PAN
		EPA 7470A	MAB2	1	PASI-A
		SM 2540C-2015	CMW1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	13	PASI-WC
92779987019	HAM-AP4-FD-02	EPA 6020B	JPD	1	PAN
		EPA 7470A	MAB2	1	PASI-A
		SM 2540C-2015	CMW1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	13	PASI-WC

PAN = Pace National - Mt. Juliet

PASI-A = Pace Analytical Services - Asheville

PASI-WC = Pace Analytical Services - West Columbia

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-4

Pace Project No.: 92779987

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92779987001	HAM-HGWA-47					
EPA 6020B	Lithium	0.00358J	mg/L	0.0300	03/12/25 11:10	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	204	mg/L	5.0	02/20/25 14:18	
SM 2320B-2011	Alkalinity, Total as CaCO3	204	mg/L	5.0	02/20/25 14:18	
SM 2540C-2015	Total Dissolved Solids	229	mg/L	25.0	02/18/25 17:54	
EPA 300.0 Rev 2.1 1993	Chloride	2.6	mg/L	1.0	02/18/25 12:10	
EPA 300.0 Rev 2.1 1993	Fluoride	0.099J	mg/L	0.10	02/18/25 12:10	
EPA 300.0 Rev 2.1 1993	Sulfate	2.0	mg/L	1.0	02/18/25 12:10	
EPA 6020B	Barium	0.030	mg/L	0.0050	03/22/25 01:10	
EPA 6020B	Boron	0.011J	mg/L	0.040	03/22/25 01:10	
EPA 6020B	Calcium	70.7	mg/L	10.0	03/24/25 16:13	
EPA 6020B	Iron	0.099	mg/L	0.040	03/22/25 01:10	B
EPA 6020B	Magnesium	5.6	mg/L	0.050	03/22/25 01:10	
EPA 6020B	Manganese	0.037J	mg/L	0.040	03/22/25 01:10	
EPA 6020B	Potassium	0.80	mg/L	0.50	03/22/25 01:10	
EPA 6020B	Sodium	3.9	mg/L	1.0	03/22/25 01:10	
92779987002	HAM-HGWA-48D					
EPA 6020B	Lithium	0.00628J	mg/L	0.0300	03/12/25 11:13	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	215	mg/L	5.0	02/20/25 14:30	
SM 2320B-2011	Alkalinity, Total as CaCO3	215	mg/L	5.0	02/20/25 14:30	
SM 2540C-2015	Total Dissolved Solids	222	mg/L	25.0	02/18/25 17:54	
SM 4500-S2D-2011	Sulfide	0.023J	mg/L	0.10	02/19/25 01:48	
EPA 300.0 Rev 2.1 1993	Chloride	2.4	mg/L	1.0	02/18/25 12:26	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	02/18/25 12:26	
EPA 300.0 Rev 2.1 1993	Sulfate	2.2	mg/L	1.0	02/18/25 12:26	
EPA 6020B	Barium	0.11	mg/L	0.0050	03/22/25 01:19	
EPA 6020B	Boron	0.013J	mg/L	0.040	03/22/25 01:19	
EPA 6020B	Calcium	57.2	mg/L	10.0	03/24/25 16:22	
EPA 6020B	Iron	0.37	mg/L	0.040	03/22/25 01:19	
EPA 6020B	Magnesium	11.6	mg/L	0.050	03/22/25 01:19	
EPA 6020B	Manganese	0.0097J	mg/L	0.040	03/22/25 01:19	
EPA 6020B	Potassium	0.51	mg/L	0.50	03/22/25 01:19	
EPA 6020B	Sodium	10.5	mg/L	1.0	03/22/25 01:19	
92779987003	HAM-HGWA-111					
EPA 6020B	Lithium	0.00250J	mg/L	0.0300	03/12/25 11:17	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	143	mg/L	5.0	02/25/25 12:32	
SM 2320B-2011	Alkalinity, Total as CaCO3	143	mg/L	5.0	02/25/25 12:32	
SM 2540C-2015	Total Dissolved Solids	172	mg/L	25.0	02/20/25 13:07	
EPA 300.0 Rev 2.1 1993	Chloride	2.8	mg/L	1.0	02/18/25 12:42	
EPA 300.0 Rev 2.1 1993	Fluoride	0.093J	mg/L	0.10	02/18/25 12:42	M1
EPA 300.0 Rev 2.1 1993	Sulfate	1.1	mg/L	1.0	02/18/25 12:42	
EPA 6020B	Barium	0.030	mg/L	0.0050	03/11/25 22:42	
EPA 6020B	Boron	0.0082J	mg/L	0.040	03/11/25 22:42	
EPA 6020B	Calcium	53.9	mg/L	10.0	03/12/25 14:11	
EPA 6020B	Magnesium	5.9	mg/L	0.050	03/11/25 22:42	
EPA 6020B	Potassium	0.76	mg/L	0.50	03/11/25 22:42	
EPA 6020B	Sodium	4.7	mg/L	1.0	03/11/25 22:42	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-4

Pace Project No.: 92779987

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92779987004	HAM-HGWA-112					
EPA 6020B	Lithium	0.000808J	mg/L	0.0300	03/12/25 11:20	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	22.6	mg/L	5.0	02/25/25 12:41	
SM 2320B-2011	Alkalinity, Total as CaCO3	22.6	mg/L	5.0	02/25/25 12:41	
SM 2540C-2015	Total Dissolved Solids	63.0	mg/L	25.0	02/20/25 13:07	
EPA 300.0 Rev 2.1 1993	Chloride	4.9	mg/L	1.0	02/18/25 13:29	
EPA 300.0 Rev 2.1 1993	Fluoride	0.067J	mg/L	0.10	02/18/25 13:29	
EPA 6020B	Barium	0.028	mg/L	0.0050	03/11/25 22:51	
EPA 6020B	Boron	0.0072J	mg/L	0.040	03/11/25 22:51	
EPA 6020B	Calcium	7.2	mg/L	1.0	03/11/25 22:51	
EPA 6020B	Chromium	0.0043J	mg/L	0.0050	03/11/25 22:51	
EPA 6020B	Iron	0.16	mg/L	0.040	03/11/25 22:51	
EPA 6020B	Magnesium	2.8	mg/L	0.050	03/11/25 22:51	
EPA 6020B	Manganese	0.0018J	mg/L	0.040	03/11/25 22:51	
EPA 6020B	Potassium	0.89	mg/L	0.50	03/11/25 22:51	
EPA 6020B	Sodium	3.6	mg/L	1.0	03/11/25 22:51	
92779987005	HAM-HGWA-113					
EPA 6020B	Lithium	0.00128J	mg/L	0.0300	03/12/25 11:23	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	43.5	mg/L	5.0	02/25/25 12:46	
SM 2320B-2011	Alkalinity, Total as CaCO3	43.5	mg/L	5.0	02/25/25 12:46	
SM 2540C-2015	Total Dissolved Solids	90.0	mg/L	25.0	02/20/25 13:07	
EPA 300.0 Rev 2.1 1993	Chloride	1.4	mg/L	1.0	02/18/25 14:17	
EPA 300.0 Rev 2.1 1993	Fluoride	0.20	mg/L	0.10	02/18/25 14:17	
EPA 300.0 Rev 2.1 1993	Sulfate	4.4	mg/L	1.0	02/18/25 14:17	
EPA 6020B	Barium	0.032	mg/L	0.0050	03/11/25 23:18	
EPA 6020B	Boron	0.010J	mg/L	0.040	03/11/25 23:18	
EPA 6020B	Calcium	8.5	mg/L	1.0	03/11/25 23:18	
EPA 6020B	Chromium	0.0024J	mg/L	0.0050	03/11/25 23:18	
EPA 6020B	Iron	0.042	mg/L	0.040	03/11/25 23:18	
EPA 6020B	Magnesium	3.8	mg/L	0.050	03/11/25 23:18	
EPA 6020B	Manganese	0.0055J	mg/L	0.040	03/11/25 23:18	
EPA 6020B	Potassium	0.21J	mg/L	0.50	03/11/25 23:18	
EPA 6020B	Selenium	0.0027J	mg/L	0.0050	03/11/25 23:18	
EPA 6020B	Sodium	9.0	mg/L	1.0	03/11/25 23:18	
92779987006	HAM-HGWC-101					
EPA 6020B	Lithium	0.000781J	mg/L	0.0300	03/12/25 11:26	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	15.9	mg/L	5.0	02/25/25 19:06	
SM 2320B-2011	Alkalinity, Total as CaCO3	15.9	mg/L	5.0	02/25/25 19:06	
SM 2540C-2015	Total Dissolved Solids	241	mg/L	25.0	02/21/25 12:18	
EPA 300.0 Rev 2.1 1993	Chloride	5.6	mg/L	1.0	02/18/25 10:12	
EPA 300.0 Rev 2.1 1993	Sulfate	98.7	mg/L	2.0	02/18/25 18:48	
EPA 6020B	Barium	0.037	mg/L	0.0050	03/11/25 23:36	
EPA 6020B	Boron	0.21	mg/L	0.040	03/11/25 23:36	
EPA 6020B	Cadmium	0.00015J	mg/L	0.00050	03/11/25 23:36	
EPA 6020B	Calcium	24.8	mg/L	1.0	03/11/25 23:36	
EPA 6020B	Cobalt	0.0027J	mg/L	0.0050	03/11/25 23:36	
EPA 6020B	Iron	8.0	mg/L	0.040	03/11/25 23:36	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-4

Pace Project No.: 92779987

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92779987006 HAM-HGWC-101						
EPA 6020B	Magnesium	13.9	mg/L	0.050	03/11/25 23:36	
EPA 6020B	Manganese	2.8	mg/L	0.40	03/12/25 14:30	
EPA 6020B	Potassium	0.75	mg/L	0.50	03/11/25 23:36	
EPA 6020B	Sodium	11.0	mg/L	1.0	03/11/25 23:36	
92779987007 HAM-HGWC-102						
EPA 6020B	Lithium	0.00139J	mg/L	0.0300	03/12/25 11:30	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	115	mg/L	5.0	02/25/25 19:35	
SM 2320B-2011	Alkalinity, Total as CaCO3	115	mg/L	5.0	02/25/25 19:35	
SM 2540C-2015	Total Dissolved Solids	782	mg/L	25.0	02/21/25 12:18	
EPA 300.0 Rev 2.1 1993	Chloride	9.0	mg/L	1.0	02/18/25 10:25	
EPA 300.0 Rev 2.1 1993	Sulfate	357	mg/L	8.0	02/18/25 19:01	
EPA 6020B	Barium	0.034	mg/L	0.0050	03/11/25 23:45	
EPA 6020B	Boron	3.9	mg/L	0.80	03/12/25 14:57	
EPA 6020B	Cadmium	0.0016	mg/L	0.00050	03/11/25 23:45	
EPA 6020B	Calcium	154	mg/L	20.0	03/12/25 14:57	
EPA 6020B	Iron	1.3	mg/L	0.040	03/11/25 23:45	
EPA 6020B	Magnesium	39.5	mg/L	1.0	03/12/25 14:57	
EPA 6020B	Manganese	2.4	mg/L	0.80	03/12/25 14:57	
EPA 6020B	Potassium	3.2	mg/L	0.50	03/11/25 23:45	
EPA 6020B	Sodium	19.7	mg/L	1.0	03/11/25 23:45	
92779987008 HAM-HGWC-103						
EPA 6020B	Lithium	0.00158J	mg/L	0.0300	03/12/25 11:33	J
EPA 7470A	Mercury	0.00014J	mg/L	0.00020	02/24/25 11:49	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	91.9	mg/L	5.0	02/25/25 19:46	
SM 2320B-2011	Alkalinity, Total as CaCO3	91.9	mg/L	5.0	02/25/25 19:46	
SM 2540C-2015	Total Dissolved Solids	866	mg/L	50.0	02/21/25 12:18	
EPA 300.0 Rev 2.1 1993	Chloride	9.3	mg/L	1.0	02/18/25 10:39	
EPA 300.0 Rev 2.1 1993	Sulfate	425	mg/L	10.0	02/18/25 19:15	
EPA 6020B	Barium	0.043	mg/L	0.0050	03/11/25 23:54	
EPA 6020B	Boron	5.8	mg/L	0.80	03/12/25 15:06	
EPA 6020B	Cadmium	0.00085	mg/L	0.00050	03/11/25 23:54	
EPA 6020B	Calcium	170	mg/L	20.0	03/12/25 15:06	
EPA 6020B	Cobalt	0.0023J	mg/L	0.0050	03/11/25 23:54	
EPA 6020B	Iron	1.6	mg/L	0.040	03/11/25 23:54	
EPA 6020B	Magnesium	47.3	mg/L	1.0	03/12/25 15:06	
EPA 6020B	Manganese	2.8	mg/L	0.80	03/12/25 15:06	
EPA 6020B	Potassium	4.0	mg/L	0.50	03/11/25 23:54	
EPA 6020B	Sodium	25.3	mg/L	1.0	03/11/25 23:54	
92779987009 HAM-HGWC-105						
EPA 6020B	Lithium	0.00570J	mg/L	0.0300	03/12/25 11:46	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	174	mg/L	5.0	02/25/25 21:00	
SM 2320B-2011	Alkalinity, Total as CaCO3	174	mg/L	5.0	02/25/25 21:00	
SM 2540C-2015	Total Dissolved Solids	704	mg/L	25.0	02/21/25 16:59	
EPA 300.0 Rev 2.1 1993	Chloride	8.5	mg/L	1.0	02/18/25 10:52	
EPA 300.0 Rev 2.1 1993	Sulfate	271	mg/L	6.0	02/18/25 19:29	
EPA 6020B	Barium	0.087	mg/L	0.0050	03/12/25 00:03	

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SUMMARY OF DETECTION

Project: Hammond AP-4

Pace Project No.: 92779987

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
92779987009	HAM-HGWC-105					
EPA 6020B	Boron	1.8	mg/L	0.40	03/12/25 15:15	
EPA 6020B	Calcium	170	mg/L	10.0	03/12/25 15:15	
EPA 6020B	Iron	8.4	mg/L	0.040	03/12/25 00:03	
EPA 6020B	Magnesium	17.1	mg/L	0.050	03/12/25 00:03	
EPA 6020B	Manganese	0.53	mg/L	0.40	03/12/25 15:15	
EPA 6020B	Potassium	1.2	mg/L	0.50	03/12/25 00:03	
EPA 6020B	Selenium	0.0049J	mg/L	0.0050	03/12/25 00:03	
EPA 6020B	Sodium	17.3	mg/L	1.0	03/12/25 00:03	
92779987010	HAM-HGWC-107					
EPA 6020B	Lithium	0.00113J	mg/L	0.0300	03/12/25 11:49	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	77.0	mg/L	5.0	02/25/25 21:16	
SM 2320B-2011	Alkalinity, Total as CaCO3	77.0	mg/L	5.0	02/25/25 21:16	
SM 2540C-2015	Total Dissolved Solids	275	mg/L	25.0	02/21/25 16:59	
EPA 300.0 Rev 2.1 1993	Chloride	3.3	mg/L	1.0	02/18/25 11:06	
EPA 300.0 Rev 2.1 1993	Sulfate	110	mg/L	3.0	02/18/25 19:43	
EPA 6020B	Barium	0.039	mg/L	0.0050	03/12/25 00:12	
EPA 6020B	Boron	1.0	mg/L	0.40	03/12/25 15:24	
EPA 6020B	Calcium	67.9	mg/L	10.0	03/12/25 15:24	
EPA 6020B	Iron	0.51	mg/L	0.040	03/12/25 00:12	
EPA 6020B	Magnesium	11.6	mg/L	0.050	03/12/25 00:12	
EPA 6020B	Manganese	0.26	mg/L	0.040	03/12/25 00:12	
EPA 6020B	Potassium	2.6	mg/L	0.50	03/12/25 00:12	
EPA 6020B	Sodium	8.7	mg/L	1.0	03/12/25 00:12	
92779987011	HAM-HGWC-109					
EPA 6020B	Lithium	0.000977J	mg/L	0.0300	03/12/25 11:52	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	149	mg/L	5.0	02/25/25 21:23	
SM 2320B-2011	Alkalinity, Total as CaCO3	149	mg/L	5.0	02/25/25 21:23	
SM 2540C-2015	Total Dissolved Solids	187	mg/L	25.0	02/21/25 16:59	
EPA 300.0 Rev 2.1 1993	Chloride	4.2	mg/L	1.0	02/18/25 11:19	
EPA 300.0 Rev 2.1 1993	Fluoride	0.086J	mg/L	0.10	02/18/25 11:19	
EPA 300.0 Rev 2.1 1993	Sulfate	20.8	mg/L	1.0	02/18/25 11:19	
EPA 6020B	Arsenic	0.0014J	mg/L	0.0050	03/12/25 00:21	
EPA 6020B	Barium	0.080	mg/L	0.0050	03/12/25 00:21	
EPA 6020B	Boron	0.22	mg/L	0.040	03/12/25 00:21	
EPA 6020B	Calcium	48.4	mg/L	10.0	03/12/25 15:33	
EPA 6020B	Iron	3.6	mg/L	0.040	03/12/25 00:21	
EPA 6020B	Magnesium	11.1	mg/L	0.050	03/12/25 00:21	
EPA 6020B	Manganese	0.61	mg/L	0.40	03/12/25 15:33	
EPA 6020B	Potassium	0.46J	mg/L	0.50	03/12/25 00:21	
EPA 6020B	Sodium	9.2	mg/L	1.0	03/12/25 00:21	
92779987012	HAM-HGWC-117A					
EPA 6020B	Lithium	0.00512J	mg/L	0.0300	03/12/25 11:55	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	160	mg/L	5.0	02/25/25 21:33	
SM 2320B-2011	Alkalinity, Total as CaCO3	160	mg/L	5.0	02/25/25 21:33	
SM 2540C-2015	Total Dissolved Solids	284	mg/L	25.0	02/21/25 16:59	
EPA 300.0 Rev 2.1 1993	Chloride	5.2	mg/L	1.0	02/18/25 11:33	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-4

Pace Project No.: 92779987

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
92779987012	HAM-HGWC-117A					
EPA 300.0 Rev 2.1 1993	Fluoride	0.057J	mg/L	0.10	02/18/25 11:33	
EPA 300.0 Rev 2.1 1993	Sulfate	69.8	mg/L	1.0	02/18/25 11:33	
EPA 6020B	Barium	0.049	mg/L	0.0050	03/12/25 00:30	
EPA 6020B	Boron	0.39J	mg/L	0.40	03/12/25 15:42	ED
EPA 6020B	Calcium	78.3	mg/L	10.0	03/12/25 15:42	
EPA 6020B	Iron	0.049	mg/L	0.040	03/12/25 00:30	
EPA 6020B	Magnesium	10.7	mg/L	0.050	03/12/25 00:30	
EPA 6020B	Manganese	0.054	mg/L	0.040	03/12/25 00:30	
EPA 6020B	Potassium	0.68	mg/L	0.50	03/12/25 00:30	
EPA 6020B	Sodium	8.5	mg/L	1.0	03/12/25 00:30	
92779987013	HAM-HGWC-118					
EPA 6020B	Lithium	0.00215J	mg/L	0.0300	03/12/25 11:59	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	220	mg/L	5.0	02/25/25 21:43	
SM 2320B-2011	Alkalinity, Total as CaCO3	220	mg/L	5.0	02/25/25 21:43	
SM 2540C-2015	Total Dissolved Solids	323	mg/L	25.0	02/21/25 16:59	
EPA 300.0 Rev 2.1 1993	Chloride	4.3	mg/L	1.0	02/18/25 11:46	
EPA 300.0 Rev 2.1 1993	Fluoride	0.065J	mg/L	0.10	02/18/25 11:46	
EPA 300.0 Rev 2.1 1993	Sulfate	66.8	mg/L	1.0	02/18/25 11:46	
EPA 6020B	Barium	0.048	mg/L	0.0050	03/12/25 00:39	
EPA 6020B	Boron	0.76	mg/L	0.40	03/12/25 15:51	
EPA 6020B	Calcium	94.9	mg/L	10.0	03/12/25 15:51	
EPA 6020B	Iron	0.036J	mg/L	0.040	03/12/25 00:39	
EPA 6020B	Magnesium	13.2	mg/L	0.050	03/12/25 00:39	
EPA 6020B	Manganese	0.16	mg/L	0.040	03/12/25 00:39	
EPA 6020B	Potassium	0.75	mg/L	0.50	03/12/25 00:39	
EPA 6020B	Sodium	9.0	mg/L	1.0	03/12/25 00:39	
92779987016	HAM-AP4-FD-01					
EPA 6020B	Lithium	0.00263J	mg/L	0.0300	03/12/25 12:42	J
SM 2540C-2015	Total Dissolved Solids	788	mg/L	25.0	02/21/25 12:18	
EPA 300.0 Rev 2.1 1993	Chloride	9.1	mg/L	1.0	02/18/25 13:20	
EPA 300.0 Rev 2.1 1993	Sulfate	354	mg/L	8.0	02/18/25 19:57	
EPA 6020B	Barium	0.033	mg/L	0.0050	03/12/25 01:24	
EPA 6020B	Boron	4.2	mg/L	0.80	03/12/25 16:00	M1
EPA 6020B	Cadmium	0.0015	mg/L	0.00050	03/12/25 01:24	
EPA 6020B	Calcium	159	mg/L	20.0	03/12/25 16:00	M1
92779987019	HAM-AP4-FD-02					
EPA 6020B	Lithium	0.000775J	mg/L	0.0300	03/12/25 12:52	J
SM 2540C-2015	Total Dissolved Solids	197	mg/L	25.0	02/21/25 16:59	
EPA 300.0 Rev 2.1 1993	Chloride	4.3	mg/L	1.0	02/18/25 13:47	
EPA 300.0 Rev 2.1 1993	Fluoride	0.090J	mg/L	0.10	02/18/25 13:47	
EPA 300.0 Rev 2.1 1993	Sulfate	20.8	mg/L	1.0	02/18/25 13:47	
EPA 6020B	Arsenic	0.0014J	mg/L	0.0050	03/12/25 02:28	
EPA 6020B	Barium	0.080	mg/L	0.0050	03/12/25 02:28	
EPA 6020B	Boron	0.23	mg/L	0.040	03/12/25 02:28	
EPA 6020B	Calcium	51.5	mg/L	10.0	03/12/25 17:21	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWA-47		Lab ID: 92779987001		Collected: 02/12/25 16:31		Received: 02/14/25 16:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Metals (ICPMS) 6020B		Analytical Method: EPA 6020B Preparation Method: 3015 Pace National - Mt. Juliet							
Lithium	0.00358J	mg/L	0.0300	0.000600	1	03/12/25 08:27	03/12/25 11:10	7439-93-2	J
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville							
Mercury	ND	mg/L	0.00020	0.00012	1	02/18/25 17:23	02/21/25 16:19	7439-97-6	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	204	mg/L	5.0	5.0	1		02/20/25 14:18		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/20/25 14:18		
Alkalinity, Total as CaCO3	204	mg/L	5.0	5.0	1		02/20/25 14:18		
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville							
Total Dissolved Solids	229	mg/L	25.0	25.0	1		02/18/25 17:54		
4500S2D Sulfide Water		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		02/19/25 01:48	18496-25-8	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	2.6	mg/L	1.0	0.60	1		02/18/25 12:10	16887-00-6	
Fluoride	0.099J	mg/L	0.10	0.050	1		02/18/25 12:10	16984-48-8	
Sulfate	2.0	mg/L	1.0	0.50	1		02/18/25 12:10	14808-79-8	
WC 6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - West Columbia							
Antimony	ND	mg/L	0.0030	0.00050	1	03/20/25 07:00	03/22/25 01:10	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/20/25 07:00	03/22/25 01:10	7440-38-2	
Barium	0.030	mg/L	0.0050	0.0012	1	03/20/25 07:00	03/22/25 01:10	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/20/25 07:00	03/22/25 01:10	7440-41-7	
Boron	0.011J	mg/L	0.040	0.0062	1	03/20/25 07:00	03/22/25 01:10	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/20/25 07:00	03/22/25 01:10	7440-43-9	
Calcium	70.7	mg/L	10.0	1.0	10	03/20/25 07:00	03/24/25 16:13	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/20/25 07:00	03/22/25 01:10	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/20/25 07:00	03/22/25 01:10	7440-48-4	
Iron	0.099	mg/L	0.040	0.012	1	03/20/25 07:00	03/22/25 01:10	7439-89-6	B
Lead	ND	mg/L	0.0010	0.00025	1	03/20/25 07:00	03/22/25 01:10	7439-92-1	
Magnesium	5.6	mg/L	0.050	0.010	1	03/20/25 07:00	03/22/25 01:10	7439-95-4	
Manganese	0.037J	mg/L	0.040	0.0012	1	03/20/25 07:00	03/22/25 01:10	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/20/25 07:00	03/22/25 01:10	7439-98-7	
Potassium	0.80	mg/L	0.50	0.10	1	03/20/25 07:00	03/22/25 01:10	7440-09-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/20/25 07:00	03/22/25 01:10	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWA-47 Lab ID: 92779987001 Collected: 02/12/25 16:31 Received: 02/14/25 16:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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WC 6020B MET ICPMS

Analytical Method: EPA 6020B Preparation Method: EPA 3005A
Pace Analytical Services - West Columbia

Sodium	3.9	mg/L	1.0	0.15	1	03/20/25 07:00	03/22/25 01:10	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/20/25 07:00	03/22/25 01:10	7440-28-0	2g

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWA-48D **Lab ID: 92779987002** Collected: 02/12/25 17:02 Received: 02/14/25 16:10 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
Metals (ICPMS) 6020B									
Analytical Method: EPA 6020B Preparation Method: 3015 Pace National - Mt. Juliet									
Lithium	0.00628J	mg/L	0.0300	0.000600	1	03/12/25 08:27	03/12/25 11:13	7439-93-2	J
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville									
Mercury	ND	mg/L	0.00020	0.00012	1	02/18/25 17:23	02/21/25 16:25	7439-97-6	
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	215	mg/L	5.0	5.0	1		02/20/25 14:30		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/20/25 14:30		
Alkalinity, Total as CaCO3	215	mg/L	5.0	5.0	1		02/20/25 14:30		
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville									
Total Dissolved Solids	222	mg/L	25.0	25.0	1		02/18/25 17:54		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	0.023J	mg/L	0.10	0.022	1		02/19/25 01:48	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	2.4	mg/L	1.0	0.60	1		02/18/25 12:26	16887-00-6	
Fluoride	0.10	mg/L	0.10	0.050	1		02/18/25 12:26	16984-48-8	
Sulfate	2.2	mg/L	1.0	0.50	1		02/18/25 12:26	14808-79-8	
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - West Columbia									
Antimony	ND	mg/L	0.0030	0.00050	1	03/20/25 07:00	03/22/25 01:19	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/20/25 07:00	03/22/25 01:19	7440-38-2	
Barium	0.11	mg/L	0.0050	0.0012	1	03/20/25 07:00	03/22/25 01:19	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/20/25 07:00	03/22/25 01:19	7440-41-7	
Boron	0.013J	mg/L	0.040	0.0062	1	03/20/25 07:00	03/22/25 01:19	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/20/25 07:00	03/22/25 01:19	7440-43-9	
Calcium	57.2	mg/L	10.0	1.0	10	03/20/25 07:00	03/24/25 16:22	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/20/25 07:00	03/22/25 01:19	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/20/25 07:00	03/22/25 01:19	7440-48-4	
Iron	0.37	mg/L	0.040	0.012	1	03/20/25 07:00	03/22/25 01:19	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/20/25 07:00	03/22/25 01:19	7439-92-1	
Magnesium	11.6	mg/L	0.050	0.010	1	03/20/25 07:00	03/22/25 01:19	7439-95-4	
Manganese	0.0097J	mg/L	0.040	0.0012	1	03/20/25 07:00	03/22/25 01:19	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/20/25 07:00	03/22/25 01:19	7439-98-7	
Potassium	0.51	mg/L	0.50	0.10	1	03/20/25 07:00	03/22/25 01:19	7440-09-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/20/25 07:00	03/22/25 01:19	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWA-48D Lab ID: 92779987002 Collected: 02/12/25 17:02 Received: 02/14/25 16:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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WC 6020B MET ICPMS

Analytical Method: EPA 6020B Preparation Method: EPA 3005A
Pace Analytical Services - West Columbia

Sodium	10.5	mg/L	1.0	0.15	1	03/20/25 07:00	03/22/25 01:19	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/20/25 07:00	03/22/25 01:19	7440-28-0	2g

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWA-111 **Lab ID: 92779987003** Collected: 02/13/25 09:54 Received: 02/14/25 16:10 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
Metals (ICPMS) 6020B									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Lithium	0.00250J	mg/L	0.0300	0.000600	1	03/12/25 08:27	03/12/25 11:17	7439-93-2	J
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Asheville									
Mercury	ND	mg/L	0.00020	0.00012	1	02/18/25 17:23	02/21/25 16:27	7439-97-6	
2320B Alkalinity									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	143	mg/L	5.0	5.0	1		02/25/25 12:32		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/25/25 12:32		
Alkalinity, Total as CaCO3	143	mg/L	5.0	5.0	1		02/25/25 12:32		
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Asheville									
Total Dissolved Solids	172	mg/L	25.0	25.0	1		02/20/25 13:07		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/19/25 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	2.8	mg/L	1.0	0.60	1		02/18/25 12:42	16887-00-6	
Fluoride	0.093J	mg/L	0.10	0.050	1		02/18/25 12:42	16984-48-8	M1
Sulfate	1.1	mg/L	1.0	0.50	1		02/18/25 12:42	14808-79-8	
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - West Columbia									
Antimony	ND	mg/L	0.0030	0.00050	1	03/10/25 10:48	03/11/25 22:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:42	7440-38-2	
Barium	0.030	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:42	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/11/25 22:42	7440-41-7	
Boron	0.0082J	mg/L	0.040	0.0062	1	03/10/25 10:48	03/11/25 22:42	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/11/25 22:42	7440-43-9	
Calcium	53.9	mg/L	10.0	1.0	10	03/10/25 10:48	03/12/25 14:11	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:42	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:42	7440-48-4	
Iron	ND	mg/L	0.040	0.012	1	03/10/25 10:48	03/11/25 22:42	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/11/25 22:42	7439-92-1	
Magnesium	5.9	mg/L	0.050	0.010	1	03/10/25 10:48	03/11/25 22:42	7439-95-4	
Manganese	ND	mg/L	0.040	0.0012	1	03/10/25 10:48	03/11/25 22:42	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/11/25 22:42	7439-98-7	
Potassium	0.76	mg/L	0.50	0.10	1	03/10/25 10:48	03/11/25 22:42	7440-09-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:42	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWA-111 Lab ID: 92779987003 Collected: 02/13/25 09:54 Received: 02/14/25 16:10 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - West Columbia									
Sodium	4.7	mg/L	1.0	0.15	1	03/10/25 10:48	03/11/25 22:42	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/11/25 22:42	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWA-112 **Lab ID: 92779987004** Collected: 02/13/25 15:57 Received: 02/14/25 16:10 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
Metals (ICPMS) 6020B									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Lithium	0.000808J	mg/L	0.0300	0.000600	1	03/12/25 08:27	03/12/25 11:20	7439-93-2	J
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Asheville									
Mercury	ND	mg/L	0.00020	0.00012	1	02/18/25 17:23	02/21/25 16:29	7439-97-6	
2320B Alkalinity									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	22.6	mg/L	5.0	5.0	1		02/25/25 12:41		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/25/25 12:41		
Alkalinity, Total as CaCO3	22.6	mg/L	5.0	5.0	1		02/25/25 12:41		
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Asheville									
Total Dissolved Solids	63.0	mg/L	25.0	25.0	1		02/20/25 13:07		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/19/25 01:59	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	4.9	mg/L	1.0	0.60	1		02/18/25 13:29	16887-00-6	
Fluoride	0.067J	mg/L	0.10	0.050	1		02/18/25 13:29	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/18/25 13:29	14808-79-8	
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - West Columbia									
Antimony	ND	mg/L	0.0030	0.00050	1	03/10/25 10:48	03/11/25 22:51	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:51	7440-38-2	
Barium	0.028	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:51	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/11/25 22:51	7440-41-7	
Boron	0.0072J	mg/L	0.040	0.0062	1	03/10/25 10:48	03/11/25 22:51	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/11/25 22:51	7440-43-9	
Calcium	7.2	mg/L	1.0	0.10	1	03/10/25 10:48	03/11/25 22:51	7440-70-2	
Chromium	0.0043J	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:51	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:51	7440-48-4	
Iron	0.16	mg/L	0.040	0.012	1	03/10/25 10:48	03/11/25 22:51	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/11/25 22:51	7439-92-1	
Magnesium	2.8	mg/L	0.050	0.010	1	03/10/25 10:48	03/11/25 22:51	7439-95-4	
Manganese	0.0018J	mg/L	0.040	0.0012	1	03/10/25 10:48	03/11/25 22:51	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/11/25 22:51	7439-98-7	
Potassium	0.89	mg/L	0.50	0.10	1	03/10/25 10:48	03/11/25 22:51	7440-09-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:51	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWA-112 Lab ID: 92779987004 Collected: 02/13/25 15:57 Received: 02/14/25 16:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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WC 6020B MET ICPMS

Analytical Method: EPA 6020B Preparation Method: EPA 3005A
Pace Analytical Services - West Columbia

Sodium	3.6	mg/L	1.0	0.15	1	03/10/25 10:48	03/11/25 22:51	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/11/25 22:51	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWA-113		Lab ID: 92779987005		Collected: 02/13/25 13:31		Received: 02/14/25 16:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Metals (ICPMS) 6020B		Analytical Method: EPA 6020B Preparation Method: 3015 Pace National - Mt. Juliet							
Lithium	0.00128J	mg/L	0.0300	0.000600	1	03/12/25 08:27	03/12/25 11:23	7439-93-2	J
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville							
Mercury	ND	mg/L	0.00020	0.00012	1	02/18/25 17:23	02/21/25 16:31	7439-97-6	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO ₃)	43.5	mg/L	5.0	5.0	1		02/25/25 12:46		
Alkalinity,Carbonate (CaCO ₃)	ND	mg/L	5.0	5.0	1		02/25/25 12:46		
Alkalinity, Total as CaCO ₃	43.5	mg/L	5.0	5.0	1		02/25/25 12:46		
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville							
Total Dissolved Solids	90.0	mg/L	25.0	25.0	1		02/20/25 13:07		
4500S2D Sulfide Water		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		02/19/25 02:00	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		02/18/25 14:17	16887-00-6	
Fluoride	0.20	mg/L	0.10	0.050	1		02/18/25 14:17	16984-48-8	
Sulfate	4.4	mg/L	1.0	0.50	1		02/18/25 14:17	14808-79-8	
WC 6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - West Columbia							
Antimony	ND	mg/L	0.0030	0.00050	1	03/10/25 10:48	03/11/25 23:18	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:18	7440-38-2	
Barium	0.032	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:18	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/11/25 23:18	7440-41-7	
Boron	0.010J	mg/L	0.040	0.0062	1	03/10/25 10:48	03/11/25 23:18	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/11/25 23:18	7440-43-9	
Calcium	8.5	mg/L	1.0	0.10	1	03/10/25 10:48	03/11/25 23:18	7440-70-2	
Chromium	0.0024J	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:18	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:18	7440-48-4	
Iron	0.042	mg/L	0.040	0.012	1	03/10/25 10:48	03/11/25 23:18	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/11/25 23:18	7439-92-1	
Magnesium	3.8	mg/L	0.050	0.010	1	03/10/25 10:48	03/11/25 23:18	7439-95-4	
Manganese	0.0055J	mg/L	0.040	0.0012	1	03/10/25 10:48	03/11/25 23:18	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/11/25 23:18	7439-98-7	
Potassium	0.21J	mg/L	0.50	0.10	1	03/10/25 10:48	03/11/25 23:18	7440-09-7	
Selenium	0.0027J	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:18	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWA-113 Lab ID: 92779987005 Collected: 02/13/25 13:31 Received: 02/14/25 16:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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WC 6020B MET ICPMS

Analytical Method: EPA 6020B Preparation Method: EPA 3005A
Pace Analytical Services - West Columbia

Sodium	9.0	mg/L	1.0	0.15	1	03/10/25 10:48	03/11/25 23:18	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/11/25 23:18	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWC-101		Lab ID: 92779987006		Collected: 02/15/25 10:34		Received: 02/17/25 14:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Metals (ICPMS) 6020B		Analytical Method: EPA 6020B Preparation Method: 3015 Pace National - Mt. Juliet							
Lithium	0.000781J	mg/L	0.0300	0.000600	1	03/12/25 08:27	03/12/25 11:26	7439-93-2	J
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville							
Mercury	ND	mg/L	0.00020	0.00012	1	02/20/25 19:10	02/24/25 11:40	7439-97-6	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	15.9	mg/L	5.0	5.0	1		02/25/25 19:06		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/25/25 19:06		
Alkalinity, Total as CaCO3	15.9	mg/L	5.0	5.0	1		02/25/25 19:06		
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville							
Total Dissolved Solids	241	mg/L	25.0	25.0	1		02/21/25 12:18		
4500S2D Sulfide Water		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		02/19/25 02:10	18496-25-8	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	5.6	mg/L	1.0	0.60	1		02/18/25 10:12	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/18/25 10:12	16984-48-8	
Sulfate	98.7	mg/L	2.0	1.0	2		02/18/25 18:48	14808-79-8	
WC 6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - West Columbia							
Antimony	ND	mg/L	0.0030	0.00050	1	03/10/25 10:48	03/11/25 23:36	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:36	7440-38-2	
Barium	0.037	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:36	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/11/25 23:36	7440-41-7	
Boron	0.21	mg/L	0.040	0.0062	1	03/10/25 10:48	03/11/25 23:36	7440-42-8	
Cadmium	0.00015J	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/11/25 23:36	7440-43-9	
Calcium	24.8	mg/L	1.0	0.10	1	03/10/25 10:48	03/11/25 23:36	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:36	7440-47-3	
Cobalt	0.0027J	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:36	7440-48-4	
Iron	8.0	mg/L	0.040	0.012	1	03/10/25 10:48	03/11/25 23:36	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/11/25 23:36	7439-92-1	
Magnesium	13.9	mg/L	0.050	0.010	1	03/10/25 10:48	03/11/25 23:36	7439-95-4	
Manganese	2.8	mg/L	0.40	0.012	10	03/10/25 10:48	03/12/25 14:30	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/11/25 23:36	7439-98-7	
Potassium	0.75	mg/L	0.50	0.10	1	03/10/25 10:48	03/11/25 23:36	7440-09-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:36	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWC-101 Lab ID: 92779987006 Collected: 02/15/25 10:34 Received: 02/17/25 14:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - West Columbia									
Sodium	11.0	mg/L	1.0	0.15	1	03/10/25 10:48	03/11/25 23:36	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/11/25 23:36	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWC-102 **Lab ID: 92779987007** Collected: 02/15/25 11:49 Received: 02/17/25 14:45 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
Metals (ICPMS) 6020B									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Lithium	0.00139J	mg/L	0.0300	0.000600	1	03/12/25 08:27	03/12/25 11:30	7439-93-2	J
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Asheville									
Mercury	ND	mg/L	0.00020	0.00012	1	02/20/25 19:10	02/24/25 11:47	7439-97-6	
2320B Alkalinity									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	115	mg/L	5.0	5.0	1		02/25/25 19:35		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/25/25 19:35		
Alkalinity, Total as CaCO3	115	mg/L	5.0	5.0	1		02/25/25 19:35		
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Asheville									
Total Dissolved Solids	782	mg/L	25.0	25.0	1		02/21/25 12:18		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/19/25 02:12	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	9.0	mg/L	1.0	0.60	1		02/18/25 10:25	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/18/25 10:25	16984-48-8	
Sulfate	357	mg/L	8.0	4.0	8		02/18/25 19:01	14808-79-8	
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - West Columbia									
Antimony	ND	mg/L	0.0030	0.00050	1	03/10/25 10:48	03/11/25 23:45	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:45	7440-38-2	
Barium	0.034	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:45	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/11/25 23:45	7440-41-7	
Boron	3.9	mg/L	0.80	0.12	20	03/10/25 10:48	03/12/25 14:57	7440-42-8	
Cadmium	0.0016	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/11/25 23:45	7440-43-9	
Calcium	154	mg/L	20.0	2.0	20	03/10/25 10:48	03/12/25 14:57	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:45	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:45	7440-48-4	
Iron	1.3	mg/L	0.040	0.012	1	03/10/25 10:48	03/11/25 23:45	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/11/25 23:45	7439-92-1	
Magnesium	39.5	mg/L	1.0	0.20	20	03/10/25 10:48	03/12/25 14:57	7439-95-4	
Manganese	2.4	mg/L	0.80	0.025	20	03/10/25 10:48	03/12/25 14:57	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/11/25 23:45	7439-98-7	
Potassium	3.2	mg/L	0.50	0.10	1	03/10/25 10:48	03/11/25 23:45	7440-09-7	
Selenium	ND	mg/L	0.10	0.025	20	03/10/25 10:48	03/12/25 14:57	7782-49-2	1g

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWC-102 Lab ID: 92779987007 Collected: 02/15/25 11:49 Received: 02/17/25 14:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - West Columbia									
Sodium	19.7	mg/L	1.0	0.15	1	03/10/25 10:48	03/11/25 23:45	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/11/25 23:45	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWC-103 **Lab ID: 92779987008** Collected: 02/15/25 16:13 Received: 02/17/25 14:45 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
Metals (ICPMS) 6020B									
Analytical Method: EPA 6020B Preparation Method: 3015 Pace National - Mt. Juliet									
Lithium	0.00158J	mg/L	0.0300	0.000600	1	03/12/25 08:27	03/12/25 11:33	7439-93-2	J
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville									
Mercury	0.00014J	mg/L	0.00020	0.00012	1	02/20/25 19:10	02/24/25 11:49	7439-97-6	
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	91.9	mg/L	5.0	5.0	1		02/25/25 19:46		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/25/25 19:46		
Alkalinity, Total as CaCO3	91.9	mg/L	5.0	5.0	1		02/25/25 19:46		
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville									
Total Dissolved Solids	866	mg/L	50.0	50.0	1		02/21/25 12:18		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/19/25 02:14	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	9.3	mg/L	1.0	0.60	1		02/18/25 10:39	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/18/25 10:39	16984-48-8	
Sulfate	425	mg/L	10.0	5.0	10		02/18/25 19:15	14808-79-8	
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - West Columbia									
Antimony	ND	mg/L	0.0030	0.00050	1	03/10/25 10:48	03/11/25 23:54	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:54	7440-38-2	
Barium	0.043	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:54	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/11/25 23:54	7440-41-7	
Boron	5.8	mg/L	0.80	0.12	20	03/10/25 10:48	03/12/25 15:06	7440-42-8	
Cadmium	0.00085	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/11/25 23:54	7440-43-9	
Calcium	170	mg/L	20.0	2.0	20	03/10/25 10:48	03/12/25 15:06	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:54	7440-47-3	
Cobalt	0.0023J	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:54	7440-48-4	
Iron	1.6	mg/L	0.040	0.012	1	03/10/25 10:48	03/11/25 23:54	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/11/25 23:54	7439-92-1	
Magnesium	47.3	mg/L	1.0	0.20	20	03/10/25 10:48	03/12/25 15:06	7439-95-4	
Manganese	2.8	mg/L	0.80	0.025	20	03/10/25 10:48	03/12/25 15:06	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/11/25 23:54	7439-98-7	
Potassium	4.0	mg/L	0.50	0.10	1	03/10/25 10:48	03/11/25 23:54	7440-09-7	
Selenium	ND	mg/L	0.10	0.025	20	03/10/25 10:48	03/12/25 15:06	7782-49-2	1g

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWC-103 **Lab ID: 92779987008** Collected: 02/15/25 16:13 Received: 02/17/25 14:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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WC 6020B MET ICPMS

Analytical Method: EPA 6020B Preparation Method: EPA 3005A
Pace Analytical Services - West Columbia

Sodium	25.3	mg/L	1.0	0.15	1	03/10/25 10:48	03/11/25 23:54	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/11/25 23:54	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWC-105		Lab ID: 92779987009		Collected: 02/16/25 09:30		Received: 02/17/25 14:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Metals (ICPMS) 6020B									
Analytical Method: EPA 6020B Preparation Method: 3015 Pace National - Mt. Juliet									
Lithium	0.00570J	mg/L	0.0300	0.000600	1	03/12/25 08:27	03/12/25 11:46	7439-93-2	J
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville									
Mercury	ND	mg/L	0.00020	0.00012	1	02/20/25 19:10	02/24/25 11:51	7439-97-6	
2320B Alkalinity									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	174	mg/L	5.0	5.0	1		02/25/25 21:00		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/25/25 21:00		
Alkalinity, Total as CaCO3	174	mg/L	5.0	5.0	1		02/25/25 21:00		
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville									
Total Dissolved Solids	704	mg/L	25.0	25.0	1		02/21/25 16:59		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/19/25 02:17	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	8.5	mg/L	1.0	0.60	1		02/18/25 10:52	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/18/25 10:52	16984-48-8	
Sulfate	271	mg/L	6.0	3.0	6		02/18/25 19:29	14808-79-8	
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - West Columbia									
Antimony	ND	mg/L	0.0030	0.00050	1	03/10/25 10:48	03/12/25 00:03	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:03	7440-38-2	
Barium	0.087	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:03	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/12/25 00:03	7440-41-7	
Boron	1.8	mg/L	0.40	0.062	10	03/10/25 10:48	03/12/25 15:15	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/12/25 00:03	7440-43-9	
Calcium	170	mg/L	10.0	1.0	10	03/10/25 10:48	03/12/25 15:15	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:03	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:03	7440-48-4	
Iron	8.4	mg/L	0.040	0.012	1	03/10/25 10:48	03/12/25 00:03	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/12/25 00:03	7439-92-1	
Magnesium	17.1	mg/L	0.050	0.010	1	03/10/25 10:48	03/12/25 00:03	7439-95-4	
Manganese	0.53	mg/L	0.40	0.012	10	03/10/25 10:48	03/12/25 15:15	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/12/25 00:03	7439-98-7	
Potassium	1.2	mg/L	0.50	0.10	1	03/10/25 10:48	03/12/25 00:03	7440-09-7	
Selenium	0.0049J	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:03	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWC-105 Lab ID: 92779987009 Collected: 02/16/25 09:30 Received: 02/17/25 14:45 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - West Columbia									
Sodium	17.3	mg/L	1.0	0.15	1	03/10/25 10:48	03/12/25 00:03	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/12/25 00:03	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWC-107 **Lab ID: 92779987010** Collected: 02/16/25 11:59 Received: 02/17/25 14:45 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
Metals (ICPMS) 6020B									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Lithium	0.00113J	mg/L	0.0300	0.000600	1	03/12/25 08:27	03/12/25 11:49	7439-93-2	J
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Asheville									
Mercury	ND	mg/L	0.00020	0.00012	1	02/20/25 19:10	02/24/25 11:53	7439-97-6	
2320B Alkalinity									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	77.0	mg/L	5.0	5.0	1		02/25/25 21:16		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/25/25 21:16		
Alkalinity, Total as CaCO3	77.0	mg/L	5.0	5.0	1		02/25/25 21:16		
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Asheville									
Total Dissolved Solids	275	mg/L	25.0	25.0	1		02/21/25 16:59		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/19/25 02:18	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	3.3	mg/L	1.0	0.60	1		02/18/25 11:06	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/18/25 11:06	16984-48-8	
Sulfate	110	mg/L	3.0	1.5	3		02/18/25 19:43	14808-79-8	
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - West Columbia									
Antimony	ND	mg/L	0.0030	0.00050	1	03/10/25 10:48	03/12/25 00:12	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:12	7440-38-2	
Barium	0.039	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:12	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/12/25 00:12	7440-41-7	
Boron	1.0	mg/L	0.40	0.062	10	03/10/25 10:48	03/12/25 15:24	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/12/25 00:12	7440-43-9	
Calcium	67.9	mg/L	10.0	1.0	10	03/10/25 10:48	03/12/25 15:24	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:12	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:12	7440-48-4	
Iron	0.51	mg/L	0.040	0.012	1	03/10/25 10:48	03/12/25 00:12	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/12/25 00:12	7439-92-1	
Magnesium	11.6	mg/L	0.050	0.010	1	03/10/25 10:48	03/12/25 00:12	7439-95-4	
Manganese	0.26	mg/L	0.040	0.0012	1	03/10/25 10:48	03/12/25 00:12	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/12/25 00:12	7439-98-7	
Potassium	2.6	mg/L	0.50	0.10	1	03/10/25 10:48	03/12/25 00:12	7440-09-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:12	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWC-107 Lab ID: 92779987010 Collected: 02/16/25 11:59 Received: 02/17/25 14:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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WC 6020B MET ICPMS

Analytical Method: EPA 6020B Preparation Method: EPA 3005A
Pace Analytical Services - West Columbia

Sodium	8.7	mg/L	1.0	0.15	1	03/10/25 10:48	03/12/25 00:12	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/12/25 00:12	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWC-109		Lab ID: 92779987011		Collected: 02/16/25 14:31		Received: 02/17/25 14:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Metals (ICPMS) 6020B		Analytical Method: EPA 6020B Preparation Method: 3015 Pace National - Mt. Juliet							
Lithium	0.000977J	mg/L	0.0300	0.000600	1	03/12/25 08:27	03/12/25 11:52	7439-93-2	J
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville							
Mercury	ND	mg/L	0.00020	0.00012	1	02/20/25 19:10	02/24/25 11:55	7439-97-6	
2320B Alkalinity		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	149	mg/L	5.0	5.0	1		02/25/25 21:23		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/25/25 21:23		
Alkalinity, Total as CaCO3	149	mg/L	5.0	5.0	1		02/25/25 21:23		
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville							
Total Dissolved Solids	187	mg/L	25.0	25.0	1		02/21/25 16:59		
4500S2D Sulfide Water		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		02/19/25 02:18	18496-25-8	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	4.2	mg/L	1.0	0.60	1		02/18/25 11:19	16887-00-6	
Fluoride	0.086J	mg/L	0.10	0.050	1		02/18/25 11:19	16984-48-8	
Sulfate	20.8	mg/L	1.0	0.50	1		02/18/25 11:19	14808-79-8	
WC 6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - West Columbia							
Antimony	ND	mg/L	0.0030	0.00050	1	03/10/25 10:48	03/12/25 00:21	7440-36-0	
Arsenic	0.0014J	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:21	7440-38-2	
Barium	0.080	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:21	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/12/25 00:21	7440-41-7	
Boron	0.22	mg/L	0.040	0.0062	1	03/10/25 10:48	03/12/25 00:21	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/12/25 00:21	7440-43-9	
Calcium	48.4	mg/L	10.0	1.0	10	03/10/25 10:48	03/12/25 15:33	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:21	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:21	7440-48-4	
Iron	3.6	mg/L	0.040	0.012	1	03/10/25 10:48	03/12/25 00:21	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/12/25 00:21	7439-92-1	
Magnesium	11.1	mg/L	0.050	0.010	1	03/10/25 10:48	03/12/25 00:21	7439-95-4	
Manganese	0.61	mg/L	0.40	0.012	10	03/10/25 10:48	03/12/25 15:33	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/12/25 00:21	7439-98-7	
Potassium	0.46J	mg/L	0.50	0.10	1	03/10/25 10:48	03/12/25 00:21	7440-09-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:21	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWC-109 Lab ID: 92779987011 Collected: 02/16/25 14:31 Received: 02/17/25 14:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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WC 6020B MET ICPMS

Analytical Method: EPA 6020B Preparation Method: EPA 3005A
Pace Analytical Services - West Columbia

Sodium	9.2	mg/L	1.0	0.15	1	03/10/25 10:48	03/12/25 00:21	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/12/25 00:21	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWC-117A **Lab ID: 92779987012** Collected: 02/16/25 09:33 Received: 02/17/25 14:45 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
Metals (ICPMS) 6020B									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Lithium	0.00512J	mg/L	0.0300	0.000600	1	03/12/25 08:27	03/12/25 11:55	7439-93-2	J
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Asheville									
Mercury	ND	mg/L	0.00020	0.00012	1	02/20/25 19:10	02/24/25 12:01	7439-97-6	
2320B Alkalinity									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	160	mg/L	5.0	5.0	1		02/25/25 21:33		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/25/25 21:33		
Alkalinity, Total as CaCO3	160	mg/L	5.0	5.0	1		02/25/25 21:33		
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Asheville									
Total Dissolved Solids	284	mg/L	25.0	25.0	1		02/21/25 16:59		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/19/25 02:20	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	5.2	mg/L	1.0	0.60	1		02/18/25 11:33	16887-00-6	
Fluoride	0.057J	mg/L	0.10	0.050	1		02/18/25 11:33	16984-48-8	
Sulfate	69.8	mg/L	1.0	0.50	1		02/18/25 11:33	14808-79-8	
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - West Columbia									
Antimony	ND	mg/L	0.0030	0.00050	1	03/10/25 10:48	03/12/25 00:30	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:30	7440-38-2	
Barium	0.049	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:30	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/12/25 00:30	7440-41-7	
Boron	0.39J	mg/L	0.40	0.062	10	03/10/25 10:48	03/12/25 15:42	7440-42-8	ED
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/12/25 00:30	7440-43-9	
Calcium	78.3	mg/L	10.0	1.0	10	03/10/25 10:48	03/12/25 15:42	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:30	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:30	7440-48-4	
Iron	0.049	mg/L	0.040	0.012	1	03/10/25 10:48	03/12/25 00:30	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/12/25 00:30	7439-92-1	
Magnesium	10.7	mg/L	0.050	0.010	1	03/10/25 10:48	03/12/25 00:30	7439-95-4	
Manganese	0.054	mg/L	0.040	0.0012	1	03/10/25 10:48	03/12/25 00:30	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/12/25 00:30	7439-98-7	
Potassium	0.68	mg/L	0.50	0.10	1	03/10/25 10:48	03/12/25 00:30	7440-09-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:30	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWC-117A Lab ID: 92779987012 Collected: 02/16/25 09:33 Received: 02/17/25 14:45 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - West Columbia									
Sodium	8.5	mg/L	1.0	0.15	1	03/10/25 10:48	03/12/25 00:30	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/12/25 00:30	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWC-118 **Lab ID: 92779987013** Collected: 02/16/25 11:55 Received: 02/17/25 14:45 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
Metals (ICPMS) 6020B									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Lithium	0.00215J	mg/L	0.0300	0.000600	1	03/12/25 08:27	03/12/25 11:59	7439-93-2	J
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Asheville									
Mercury	ND	mg/L	0.00020	0.00012	1	02/20/25 19:10	02/24/25 12:03	7439-97-6	
2320B Alkalinity									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	220	mg/L	5.0	5.0	1		02/25/25 21:43		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/25/25 21:43		
Alkalinity, Total as CaCO3	220	mg/L	5.0	5.0	1		02/25/25 21:43		
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Asheville									
Total Dissolved Solids	323	mg/L	25.0	25.0	1		02/21/25 16:59		
4500S2D Sulfide Water									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/19/25 02:20	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	4.3	mg/L	1.0	0.60	1		02/18/25 11:46	16887-00-6	
Fluoride	0.065J	mg/L	0.10	0.050	1		02/18/25 11:46	16984-48-8	
Sulfate	66.8	mg/L	1.0	0.50	1		02/18/25 11:46	14808-79-8	
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - West Columbia									
Antimony	ND	mg/L	0.0030	0.00050	1	03/10/25 10:48	03/12/25 00:39	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:39	7440-38-2	
Barium	0.048	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:39	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/12/25 00:39	7440-41-7	
Boron	0.76	mg/L	0.40	0.062	10	03/10/25 10:48	03/12/25 15:51	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/12/25 00:39	7440-43-9	
Calcium	94.9	mg/L	10.0	1.0	10	03/10/25 10:48	03/12/25 15:51	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:39	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:39	7440-48-4	
Iron	0.036J	mg/L	0.040	0.012	1	03/10/25 10:48	03/12/25 00:39	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/12/25 00:39	7439-92-1	
Magnesium	13.2	mg/L	0.050	0.010	1	03/10/25 10:48	03/12/25 00:39	7439-95-4	
Manganese	0.16	mg/L	0.040	0.0012	1	03/10/25 10:48	03/12/25 00:39	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/12/25 00:39	7439-98-7	
Potassium	0.75	mg/L	0.50	0.10	1	03/10/25 10:48	03/12/25 00:39	7440-09-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 00:39	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-HGWC-118 Lab ID: 92779987013 Collected: 02/16/25 11:55 Received: 02/17/25 14:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - West Columbia									
Sodium	9.0	mg/L	1.0	0.15	1	03/10/25 10:48	03/12/25 00:39	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/12/25 00:39	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-AP4-EB-01 **Lab ID: 92779987014** Collected: 02/16/25 10:10 Received: 02/17/25 14:45 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
Metals (ICPMS) 6020B									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Lithium	ND	mg/L	0.0300	0.000600	1	03/12/25 08:27	03/12/25 12:02	7439-93-2	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Asheville									
Mercury	ND	mg/L	0.00020	0.00012	1	02/20/25 19:10	02/24/25 12:05	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		02/21/25 16:59		
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		02/18/25 04:18	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/18/25 04:18	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/18/25 04:18	14808-79-8	
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - West Columbia									
Antimony	ND	mg/L	0.0030	0.00050	1	03/10/25 10:48	03/12/25 01:06	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 01:06	7440-38-2	
Barium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 01:06	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/12/25 01:06	7440-41-7	
Boron	ND	mg/L	0.040	0.0062	1	03/10/25 10:48	03/12/25 01:06	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/12/25 01:06	7440-43-9	
Calcium	ND	mg/L	1.0	0.10	1	03/10/25 10:48	03/12/25 01:06	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 01:06	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 01:06	7440-48-4	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/12/25 01:06	7439-92-1	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/12/25 01:06	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 01:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/12/25 01:06	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-AP4-FB-01 **Lab ID: 92779987015** Collected: 02/16/25 10:05 Received: 02/17/25 14:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Metals (ICPMS) 6020B									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Lithium	ND	mg/L	0.0300	0.000600	1	03/12/25 08:51	03/12/25 12:29	7439-93-2	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Asheville									
Mercury	ND	mg/L	0.00020	0.00012	1	02/20/25 19:10	02/24/25 12:07	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		02/21/25 16:59		
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		02/18/25 04:58	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/18/25 04:58	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/18/25 04:58	14808-79-8	
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - West Columbia									
Antimony	ND	mg/L	0.0030	0.00050	1	03/10/25 10:48	03/12/25 01:15	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 01:15	7440-38-2	
Barium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 01:15	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/12/25 01:15	7440-41-7	
Boron	ND	mg/L	0.040	0.0062	1	03/10/25 10:48	03/12/25 01:15	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/12/25 01:15	7440-43-9	
Calcium	ND	mg/L	1.0	0.10	1	03/10/25 10:48	03/12/25 01:15	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 01:15	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 01:15	7440-48-4	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/12/25 01:15	7439-92-1	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/12/25 01:15	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 01:15	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/12/25 01:15	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-AP4-FD-01 **Lab ID: 92779987016** Collected: 02/15/25 00:00 Received: 02/17/25 14:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Metals (ICPMS) 6020B									
Analytical Method: EPA 6020B Preparation Method: 3015 Pace National - Mt. Juliet									
Lithium	0.00263J	mg/L	0.0300	0.000600	1	03/12/25 08:51	03/12/25 12:42	7439-93-2	J
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville									
Mercury	ND	mg/L	0.00020	0.00012	1	02/20/25 19:10	02/24/25 12:09	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville									
Total Dissolved Solids	788	mg/L	25.0	25.0	1		02/21/25 12:18		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	9.1	mg/L	1.0	0.60	1		02/18/25 13:20	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/18/25 13:20	16984-48-8	
Sulfate	354	mg/L	8.0	4.0	8		02/18/25 19:57	14808-79-8	
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - West Columbia									
Antimony	ND	mg/L	0.0030	0.00050	1	03/10/25 10:48	03/12/25 01:24	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 01:24	7440-38-2	
Barium	0.033	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 01:24	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/12/25 01:24	7440-41-7	
Boron	4.2	mg/L	0.80	0.12	20	03/10/25 10:48	03/12/25 16:00	7440-42-8	M1
Cadmium	0.0015	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/12/25 01:24	7440-43-9	
Calcium	159	mg/L	20.0	2.0	20	03/10/25 10:48	03/12/25 16:00	7440-70-2	M1
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 01:24	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 01:24	7440-48-4	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/12/25 01:24	7439-92-1	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/12/25 01:24	7439-98-7	
Selenium	ND	mg/L	0.10	0.025	20	03/10/25 10:48	03/12/25 16:00	7782-49-2	1g
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/12/25 01:24	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-AP4-EB-02 **Lab ID: 92779987017** Collected: 02/16/25 13:00 Received: 02/17/25 14:45 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
Metals (ICPMS) 6020B									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Lithium	ND	mg/L	0.0300	0.000600	1	03/12/25 08:51	03/12/25 12:45	7439-93-2	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Asheville									
Mercury	ND	mg/L	0.00020	0.00012	1	02/20/25 19:10	02/24/25 12:11	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		02/21/25 16:59		
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		02/18/25 05:11	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/18/25 05:11	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/18/25 05:11	14808-79-8	
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - West Columbia									
Antimony	ND	mg/L	0.0030	0.00050	1	03/10/25 10:48	03/12/25 02:10	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 02:10	7440-38-2	
Barium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 02:10	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00075	5	03/10/25 10:48	03/12/25 17:03	7440-41-7	1g
Boron	ND	mg/L	0.20	0.031	5	03/10/25 10:48	03/12/25 17:03	7440-42-8	1g
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/12/25 02:10	7440-43-9	
Calcium	ND	mg/L	1.0	0.10	1	03/10/25 10:48	03/12/25 02:10	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 02:10	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 02:10	7440-48-4	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/12/25 02:10	7439-92-1	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/12/25 02:10	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 02:10	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/12/25 02:10	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-AP4-FB-02 **Lab ID: 92779987018** Collected: 02/16/25 12:55 Received: 02/17/25 14:45 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
Metals (ICPMS) 6020B									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Lithium	ND	mg/L	0.0300	0.000600	1	03/12/25 08:51	03/12/25 12:49	7439-93-2	
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Asheville									
Mercury	ND	mg/L	0.00020	0.00012	1	02/20/25 19:10	02/24/25 12:13	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		02/21/25 16:59		
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		02/18/25 13:34	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/18/25 13:34	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/18/25 13:34	14808-79-8	
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - West Columbia									
Antimony	ND	mg/L	0.0030	0.00050	1	03/10/25 10:48	03/12/25 02:19	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 02:19	7440-38-2	
Barium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 02:19	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00075	5	03/10/25 10:48	03/12/25 17:12	7440-41-7	1g
Boron	ND	mg/L	0.20	0.031	5	03/10/25 10:48	03/12/25 17:12	7440-42-8	1g
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/12/25 02:19	7440-43-9	
Calcium	ND	mg/L	1.0	0.10	1	03/10/25 10:48	03/12/25 02:19	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 02:19	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 02:19	7440-48-4	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/12/25 02:19	7439-92-1	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/12/25 02:19	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 02:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/12/25 02:19	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-4

Pace Project No.: 92779987

Sample: HAM-AP4-FD-02 **Lab ID: 92779987019** Collected: 02/16/25 00:00 Received: 02/17/25 14:45 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
Metals (ICPMS) 6020B									
Analytical Method: EPA 6020B Preparation Method: 3015									
Pace National - Mt. Juliet									
Lithium	0.000775J	mg/L	0.0300	0.000600	1	03/12/25 08:51	03/12/25 12:52	7439-93-2	J
7470 Mercury									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Asheville									
Mercury	ND	mg/L	0.00020	0.00012	1	02/20/25 19:10	02/24/25 12:15	7439-97-6	
2540C Total Dissolved Solids									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Asheville									
Total Dissolved Solids	197	mg/L	25.0	25.0	1		02/21/25 16:59		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	4.3	mg/L	1.0	0.60	1		02/18/25 13:47	16887-00-6	
Fluoride	0.090J	mg/L	0.10	0.050	1		02/18/25 13:47	16984-48-8	
Sulfate	20.8	mg/L	1.0	0.50	1		02/18/25 13:47	14808-79-8	
WC 6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - West Columbia									
Antimony	ND	mg/L	0.0030	0.00050	1	03/10/25 10:48	03/12/25 02:28	7440-36-0	
Arsenic	0.0014J	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 02:28	7440-38-2	
Barium	0.080	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 02:28	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/12/25 02:28	7440-41-7	
Boron	0.23	mg/L	0.040	0.0062	1	03/10/25 10:48	03/12/25 02:28	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/12/25 02:28	7440-43-9	
Calcium	51.5	mg/L	10.0	1.0	10	03/10/25 10:48	03/12/25 17:21	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 02:28	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 02:28	7440-48-4	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/12/25 02:28	7439-92-1	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/12/25 02:28	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/12/25 02:28	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/12/25 02:28	7440-28-0	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch:	2467116	Analysis Method:	EPA 6020B
QC Batch Method:	3015	Analysis Description:	Metals (ICPMS) 6020B
		Laboratory:	Pace National - Mt. Juliet
Associated Lab Samples:	92779987001, 92779987002, 92779987003, 92779987004, 92779987005, 92779987006, 92779987007, 92779987008, 92779987009, 92779987010, 92779987011, 92779987012, 92779987013, 92779987014		

METHOD BLANK:	R4185429-1	Matrix:	Water
Associated Lab Samples:	92779987001, 92779987002, 92779987003, 92779987004, 92779987005, 92779987006, 92779987007, 92779987008, 92779987009, 92779987010, 92779987011, 92779987012, 92779987013, 92779987014		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lithium	mg/L	ND	0.0300	0.000600	03/12/25 10:23	

LABORATORY CONTROL SAMPLE:	R4185429-2					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lithium	mg/L	0.0500	0.0497	99.5	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	R4185429-4			R4185429-5								
Parameter	Units	L1834697-14 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lithium	mg/L	0.00197	0.0500	0.0500	0.0512	0.0517	98.4	99.4	75.0-125	0.992	20	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch: 2467118 Analysis Method: EPA 6020B
 QC Batch Method: 3015 Analysis Description: Metals (ICPMS) 6020B
 Laboratory: Pace National - Mt. Juliet
 Associated Lab Samples: 92779987015, 92779987016, 92779987017, 92779987018, 92779987019

METHOD BLANK: R4185481-1 Matrix: Water
 Associated Lab Samples: 92779987015, 92779987016, 92779987017, 92779987018, 92779987019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lithium	mg/L	ND	0.0300	0.000600	03/12/25 12:22	

LABORATORY CONTROL SAMPLE: R4185481-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lithium	mg/L	0.0500	0.0498	99.6	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4185481-4 R4185481-5

Parameter	Units	R4185481-4		R4185481-5		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Lithium	mg/L	ND	0.0500	0.0511	0.0506	102	101	75.0-125	1.10	20	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch:	916870	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Asheville

Associated Lab Samples: 92779987001, 92779987002, 92779987003, 92779987004, 92779987005

METHOD BLANK: 4711924 Matrix: Water
 Associated Lab Samples: 92779987001, 92779987002, 92779987003, 92779987004, 92779987005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00012	02/21/25 15:35	

LABORATORY CONTROL SAMPLE: 4711925

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4711926 4711927

Parameter	Units	4711926		4711927		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92779246001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Mercury	mg/L	ND	0.0025	0.0025	0.0025	0.0025	97	97	75-125	0	25

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch:	917537	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Asheville
Associated Lab Samples:	92779987006, 92779987007, 92779987008, 92779987009, 92779987010, 92779987011, 92779987012, 92779987013, 92779987014, 92779987015, 92779987016, 92779987017, 92779987018, 92779987019		

METHOD BLANK:	4715919	Matrix:	Water
Associated Lab Samples:	92779987006, 92779987007, 92779987008, 92779987009, 92779987010, 92779987011, 92779987012, 92779987013, 92779987014, 92779987015, 92779987016, 92779987017, 92779987018, 92779987019		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00012	02/24/25 11:36	

LABORATORY CONTROL SAMPLE: 4715920						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4715921												4715922	
Parameter	Units	92779987006 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	0.0023	0.0023	92	93	75-125	2	25		

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch: 917443

Analysis Method: SM 2320B-2011

QC Batch Method: SM 2320B-2011

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92779987001, 92779987002

METHOD BLANK: 4715340

Matrix: Water

Associated Lab Samples: 92779987001, 92779987002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/20/25 11:31	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/20/25 11:31	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/20/25 11:31	

LABORATORY CONTROL SAMPLE: 4715341

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.4	103	80-120	

LABORATORY CONTROL SAMPLE: 4715342

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.6	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4715343 4715344

Parameter	Units	4715343		4715344		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Alkalinity, Total as CaCO3	mg/L	102	50	148	50	91	92	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4715345 4715346

Parameter	Units	4715345		4715346		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Alkalinity, Total as CaCO3	mg/L	166	50	208	50	83	90	80-120	2	25	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch: 918322

Analysis Method: SM 2320B-2011

QC Batch Method: SM 2320B-2011

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92779987003, 92779987004, 92779987005

METHOD BLANK: 4719398

Matrix: Water

Associated Lab Samples: 92779987003, 92779987004, 92779987005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/25/25 11:20	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/25/25 11:20	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/25/25 11:20	

LABORATORY CONTROL SAMPLE: 4719399

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.1	104	80-120	

LABORATORY CONTROL SAMPLE: 4719400

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.2	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4719401 4719402

Parameter	Units	4719401		4719402		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Alkalinity, Total as CaCO3	mg/L	35.9	50	50	84.4	85.3	97	99	80-120	1	25

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4719403 4719404

Parameter	Units	4719403		4719404		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Alkalinity, Total as CaCO3	mg/L	35.4	50	50	85.8	85.6	101	100	80-120	0	25

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch: 918325

Analysis Method: SM 2320B-2011

QC Batch Method: SM 2320B-2011

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92779987006

METHOD BLANK: 4719412

Matrix: Water

Associated Lab Samples: 92779987006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/25/25 14:59	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/25/25 14:59	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/25/25 14:59	

LABORATORY CONTROL SAMPLE: 4719413

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.8	104	80-120	

LABORATORY CONTROL SAMPLE: 4719414

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.0	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4719415 4719416

Parameter	Units	4719415		4719416		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Alkalinity, Total as CaCO3	mg/L	143	50	50	191	193	97	100	80-120	1	25

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4719417 4719418

Parameter	Units	4719417		4719418		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Alkalinity, Total as CaCO3	mg/L	ND	50	50	51.6	51.6	102	102	80-120	0	25

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch: 918376 Analysis Method: SM 2320B-2011
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity
 Laboratory: Pace Analytical Services - Asheville
 Associated Lab Samples: 92779987007, 92779987008, 92779987009, 92779987010, 92779987011, 92779987012, 92779987013

METHOD BLANK: 4719836 Matrix: Water
 Associated Lab Samples: 92779987007, 92779987008, 92779987009, 92779987010, 92779987011, 92779987012, 92779987013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/25/25 19:19	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/25/25 19:19	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/25/25 19:19	

LABORATORY CONTROL SAMPLE: 4719837

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.8	104	80-120	

LABORATORY CONTROL SAMPLE: 4719838

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.1	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4719839 4719840

Parameter	Units	92780133001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	48.5	50	50	88.4	99.6	80	102	80-120	12	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4719841 4719842

Parameter	Units	92780133002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	48.3	50	50	97.7	98.1	99	100	80-120	0	25	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch: 917012

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: 92779987001, 92779987002

METHOD BLANK: 4712793

Matrix: Water

Associated Lab Samples: 92779987001, 92779987002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/18/25 17:54	

LABORATORY CONTROL SAMPLE: 4712794

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	244	98	90-110	

SAMPLE DUPLICATE: 4712795

Parameter	Units	92779374018 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	341	348	2	25	

SAMPLE DUPLICATE: 4712796

Parameter	Units	92779989003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	273	273	0	25	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch:	917325	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:	92779987003, 92779987004, 92779987005		

METHOD BLANK: 4714805 Matrix: Water

Associated Lab Samples: 92779987003, 92779987004, 92779987005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/20/25 13:06	

LABORATORY CONTROL SAMPLE: 4714806

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	236	94	90-110	

SAMPLE DUPLICATE: 4714807

Parameter	Units	92779890006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	60.0	52.0	14	25	

SAMPLE DUPLICATE: 4714808

Parameter	Units	92779987005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	90.0	89.0	1	25	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch: 917626

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: 92779987006, 92779987007, 92779987008, 92779987016

METHOD BLANK: 4716350

Matrix: Water

Associated Lab Samples: 92779987006, 92779987007, 92779987008, 92779987016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/21/25 12:15	

LABORATORY CONTROL SAMPLE: 4716351

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	246	98	90-110	

SAMPLE DUPLICATE: 4716352

Parameter	Units	92779981004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	192	196	2	25	

SAMPLE DUPLICATE: 4716353

Parameter	Units	92779985006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	640	650	2	25	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch:	917627	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: 92779987009, 92779987010, 92779987011, 92779987012, 92779987013, 92779987014, 92779987015, 92779987017, 92779987018, 92779987019

METHOD BLANK: 4716354 Matrix: Water

Associated Lab Samples: 92779987009, 92779987010, 92779987011, 92779987012, 92779987013, 92779987014, 92779987015, 92779987017, 92779987018, 92779987019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/21/25 16:57	

LABORATORY CONTROL SAMPLE: 4716355

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	240	96	90-110	

SAMPLE DUPLICATE: 4716356

Parameter	Units	92779977013 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	301	302	0	25	

SAMPLE DUPLICATE: 4716357

Parameter	Units	92779987010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	275	287	4	25	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch: 916812

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: 92779987001, 92779987002, 92779987003

METHOD BLANK: 4711805

Matrix: Water

Associated Lab Samples: 92779987001, 92779987002, 92779987003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/19/25 01:43	

LABORATORY CONTROL SAMPLE: 4711806

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.55	109	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4711807 4711808

Parameter	Units	92779374016		4711808		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Sulfide	mg/L	ND	0.5	0.55	0.55	110	110	80-120	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4711809 4711810

Parameter	Units	92779989003		4711810		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Sulfide	mg/L	0.025J	0.5	0.55	0.57	104	109	80-120	4	10	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch: 916813 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: 92779987004, 92779987005, 92779987006

METHOD BLANK: 4711811 Matrix: Water
 Associated Lab Samples: 92779987004, 92779987005, 92779987006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/19/25 01:58	

LABORATORY CONTROL SAMPLE: 4711812

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.55	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4711813 4711814

Parameter	Units	92779987004		4711814		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Sulfide	mg/L	ND	0.5	0.54	0.53	107	107	80-120	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4711815 4711816

Parameter	Units	92779977007		4711816		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Sulfide	mg/L	ND	0.5	0.52	0.55	104	110	80-120	6	10	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch: 916814 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: 92779987007, 92779987008, 92779987009, 92779987010, 92779987011, 92779987012, 92779987013

METHOD BLANK: 4711817 Matrix: Water
 Associated Lab Samples: 92779987007, 92779987008, 92779987009, 92779987010, 92779987011, 92779987012, 92779987013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/19/25 02:11	

LABORATORY CONTROL SAMPLE: 4711818

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.54	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4711819 4711820

Parameter	Units	92779987007		4711820		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Sulfide	mg/L	ND	0.5	0.48	0.51	96	103	80-120	7	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4711821 4711822

Parameter	Units	92779987011		4711822		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Sulfide	mg/L	ND	0.5	0.53	0.55	107	111	80-120	3	10	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch: 916738 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: 92779987001, 92779987002, 92779987003, 92779987004, 92779987005

METHOD BLANK: 4711421 Matrix: Water
 Associated Lab Samples: 92779987001, 92779987002, 92779987003, 92779987004, 92779987005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/17/25 22:58	
Fluoride	mg/L	ND	0.10	0.050	02/17/25 22:58	
Sulfate	mg/L	ND	1.0	0.50	02/17/25 22:58	

LABORATORY CONTROL SAMPLE: 4711422

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.3	101	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	50.4	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4711423 4711424

Parameter	Units	92779977001		4711424		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result								
Chloride	mg/L	11.7	50	50	63.0	64.7	103	106	90-110	3	10		
Fluoride	mg/L	0.30	2.5	2.5	3.1	3.2	111	116	90-110	4	10	M1	
Sulfate	mg/L	155	50	50	190	191	70	70	90-110	0	10	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4711425 4711426

Parameter	Units	92779987003		4711426		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result								
Chloride	mg/L	2.8	50	50	53.8	56.7	102	108	90-110	5	10		
Fluoride	mg/L	0.093J	2.5	2.5	2.7	2.9	105	112	90-110	6	10	M1	
Sulfate	mg/L	1.1	50	50	52.1	55.1	102	108	90-110	5	10		

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch:	916791	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:	92779987006, 92779987007, 92779987008, 92779987009, 92779987010, 92779987011, 92779987012, 92779987013		

METHOD BLANK:	4711726	Matrix:	Water
Associated Lab Samples:	92779987006, 92779987007, 92779987008, 92779987009, 92779987010, 92779987011, 92779987012, 92779987013		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/18/25 01:36	
Fluoride	mg/L	ND	0.10	0.050	02/18/25 01:36	
Sulfate	mg/L	ND	1.0	0.50	02/18/25 01:36	

LABORATORY CONTROL SAMPLE: 4711727						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.8	102	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	50.5	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4711728												4711729	
Parameter	Units	92779981005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Chloride	mg/L	77.7	50	50	106	110	57	64	90-110	3	10	M1	
Fluoride	mg/L	0.050J	2.5	2.5	2.4	2.4	95	95	90-110	0	10		
Sulfate	mg/L	224	50	50	264	272	80	96	90-110	3	10	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4711730												4711731	
Parameter	Units	92779985009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Chloride	mg/L	ND	50	50	57.4	52.4	115	105	90-110	9	10	M1	
Fluoride	mg/L	ND	2.5	2.5	3.0	2.5	122	98	90-110	21	10	M1,R1	
Sulfate	mg/L	ND	50	50	54.5	51.7	109	103	90-110	5	10		

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch: 916792 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: 92779987014, 92779987015, 92779987016, 92779987017, 92779987018, 92779987019

METHOD BLANK: 4711732 Matrix: Water
 Associated Lab Samples: 92779987014, 92779987015, 92779987016, 92779987017, 92779987018, 92779987019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/18/25 02:03	
Fluoride	mg/L	ND	0.10	0.050	02/18/25 02:03	
Sulfate	mg/L	ND	1.0	0.50	02/18/25 02:03	

LABORATORY CONTROL SAMPLE: 4711733

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.6	101	90-110	
Fluoride	mg/L	2.5	2.5	98	90-110	
Sulfate	mg/L	50	50.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4711736 4711737

Parameter	Units	92779987014		4711737		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Chloride	mg/L	ND	50	50	51.2	52.1	102	104	90-110	2	10		
Fluoride	mg/L	ND	2.5	2.5	2.6	2.5	105	100	90-110	5	10		
Sulfate	mg/L	ND	50	50	50.5	51.4	101	103	90-110	2	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4711738 4711739

Parameter	Units	92779989007		4711739		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Chloride	mg/L	8.5	50	50	59.4	62.2	102	107	90-110	5	10		
Fluoride	mg/L	0.10	2.5	2.5	2.6	2.7	101	106	90-110	4	10		
Sulfate	mg/L	94.5	50	50	123	121	57	53	90-110	2	10 M1		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch: 921053 Analysis Method: EPA 6020B
 QC Batch Method: EPA 3005A Analysis Description: WC 6020B MET
 Laboratory: Pace Analytical Services - West Columbia
 Associated Lab Samples: 92779987003, 92779987004, 92779987005, 92779987006, 92779987007, 92779987008, 92779987009, 92779987010, 92779987011, 92779987012, 92779987013, 92779987014, 92779987015, 92779987016, 92779987017, 92779987018, 92779987019

METHOD BLANK: 4732992 Matrix: Water

Associated Lab Samples: 92779987003, 92779987004, 92779987005, 92779987006, 92779987007, 92779987008, 92779987009, 92779987010, 92779987011, 92779987012, 92779987013, 92779987014, 92779987015, 92779987016, 92779987017, 92779987018, 92779987019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00050	03/11/25 22:24	
Arsenic	mg/L	ND	0.0050	0.0012	03/11/25 22:24	
Barium	mg/L	ND	0.0050	0.0012	03/11/25 22:24	
Beryllium	mg/L	ND	0.00050	0.00015	03/11/25 22:24	
Boron	mg/L	ND	0.040	0.0062	03/11/25 22:24	
Cadmium	mg/L	ND	0.00050	0.00012	03/11/25 22:24	
Calcium	mg/L	ND	1.0	0.10	03/11/25 22:24	
Chromium	mg/L	ND	0.0050	0.0012	03/11/25 22:24	
Cobalt	mg/L	ND	0.0050	0.0012	03/11/25 22:24	
Iron	mg/L	ND	0.040	0.012	03/11/25 22:24	
Lead	mg/L	ND	0.0010	0.00025	03/11/25 22:24	
Magnesium	mg/L	ND	0.050	0.010	03/11/25 22:24	
Manganese	mg/L	ND	0.040	0.0012	03/11/25 22:24	
Molybdenum	mg/L	ND	0.010	0.0025	03/11/25 22:24	
Potassium	mg/L	ND	0.50	0.10	03/11/25 22:24	
Selenium	mg/L	ND	0.0050	0.0012	03/11/25 22:24	
Sodium	mg/L	ND	1.0	0.15	03/11/25 22:24	
Thallium	mg/L	ND	0.0010	0.00015	03/11/25 22:24	

LABORATORY CONTROL SAMPLE: 4732993

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.095	95	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.10	104	80-120	
Beryllium	mg/L	0.1	0.093	93	80-120	
Boron	mg/L	0.1	0.099	99	80-120	
Cadmium	mg/L	0.1	0.097	97	80-120	
Calcium	mg/L	1	1.1	112	80-120	
Chromium	mg/L	0.1	0.10	105	80-120	
Cobalt	mg/L	0.1	0.11	112	80-120	
Iron	mg/L	1	1.1	111	80-120	
Lead	mg/L	0.1	0.11	107	80-120	
Magnesium	mg/L	1	1.1	112	80-120	
Manganese	mg/L	0.1	0.091	91	80-120	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

LABORATORY CONTROL SAMPLE: 4732993

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Molybdenum	mg/L	0.1	0.095	95	80-120	
Potassium	mg/L	1	1.0	101	80-120	
Selenium	mg/L	0.1	0.090	90	80-120	
Sodium	mg/L	1	0.95J	95	80-120	
Thallium	mg/L	0.1	0.11	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4732994 4732995

Parameter	Units	MS 92779987016		MSD 4732995		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		Result	Spike Conc.	Spike Conc.	MS Result							MSD Result
Antimony	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.089	0.089	89	89	75-125	1	20	
Barium	mg/L	0.033	0.1	0.1	0.14	0.14	106	104	75-125	2	20	
Beryllium	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	1	20	
Boron	mg/L	4.2	0.1	0.1	4.2	4.3	31	77	75-125	1	20	M1
Cadmium	mg/L	0.0015	0.1	0.1	0.10	0.097	98	96	75-125	2	20	
Calcium	mg/L	159	1	1	158	156	-95	-298	75-125	1	20	M1
Chromium	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.098	0.098	97	97	75-125	0	20	
Iron	mg/L	1.2	1	1	2.2	2.2	100	100	75-125	0	20	
Lead	mg/L	ND	0.1	0.1	0.094	0.094	94	93	75-125	1	20	
Magnesium	mg/L	41.0	1	1	41.2	41.7	17	74	75-125	1	20	M1
Manganese	mg/L	2.5	0.1	0.1	2.5	2.5	50	47	75-125	0	20	M1
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Potassium	mg/L	3.3	1	1	4.3	4.3	102	108	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Sodium	mg/L	20.7	1	1	21.7	22.1	101	142	75-125	2	20	M1
Thallium	mg/L	ND	0.1	0.1	0.098	0.096	98	96	75-125	2	20	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

QC Batch: 923431

Analysis Method: EPA 6020B

QC Batch Method: EPA 3005A

Analysis Description: WC 6020B MET

Laboratory: Pace Analytical Services - West Columbia

Associated Lab Samples: 92779987001, 92779987002

METHOD BLANK: 4744500

Matrix: Water

Associated Lab Samples: 92779987001, 92779987002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00050	03/21/25 23:39	
Arsenic	mg/L	ND	0.0050	0.0012	03/21/25 23:39	
Barium	mg/L	ND	0.0050	0.0012	03/21/25 23:39	
Beryllium	mg/L	ND	0.00050	0.00015	03/21/25 23:39	
Boron	mg/L	ND	0.040	0.0062	03/21/25 23:39	
Cadmium	mg/L	ND	0.00050	0.00012	03/21/25 23:39	
Calcium	mg/L	ND	1.0	0.10	03/21/25 23:39	
Chromium	mg/L	ND	0.0050	0.0012	03/21/25 23:39	
Cobalt	mg/L	ND	0.0050	0.0012	03/21/25 23:39	
Iron	mg/L	0.036J	0.040	0.012	03/21/25 23:39	
Lead	mg/L	ND	0.0010	0.00025	03/21/25 23:39	
Magnesium	mg/L	ND	0.050	0.010	03/21/25 23:39	
Manganese	mg/L	ND	0.040	0.0012	03/21/25 23:39	
Molybdenum	mg/L	ND	0.010	0.0025	03/21/25 23:39	
Potassium	mg/L	ND	0.50	0.10	03/21/25 23:39	
Selenium	mg/L	ND	0.0050	0.0012	03/21/25 23:39	
Sodium	mg/L	ND	1.0	0.15	03/21/25 23:39	
Thallium	mg/L	ND	0.0010	0.00015	03/21/25 23:39	

LABORATORY CONTROL SAMPLE: 4744501

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	100	80-120	
Arsenic	mg/L	0.1	0.091	91	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.090	90	80-120	
Boron	mg/L	0.1	0.090	90	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Calcium	mg/L	1	1.1	106	80-120	
Chromium	mg/L	0.1	0.11	111	80-120	
Cobalt	mg/L	0.1	0.12	115	80-120	
Iron	mg/L	1	1.1	110	80-120	
Lead	mg/L	0.1	0.11	110	80-120	
Magnesium	mg/L	1	1.1	108	80-120	
Manganese	mg/L	0.1	0.11	109	80-120	
Molybdenum	mg/L	0.1	0.11	106	80-120	
Potassium	mg/L	1	1.1	108	80-120	
Selenium	mg/L	0.1	0.083	83	80-120	
Sodium	mg/L	1	0.88J	88	80-120	

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QUALITY CONTROL DATA

Project: Hammond AP-4

Pace Project No.: 92779987

LABORATORY CONTROL SAMPLE: 4744501

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Thallium	mg/L	0.1	0.11	111	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4744502 4744503

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Spike Conc.	Result	Spike Conc.	Result						
Antimony	mg/L	0.1	ND	0.1	0.11	107	105	75-125	2	20	
Arsenic	mg/L	0.1	ND	0.1	0.10	102	103	75-125	1	20	
Barium	mg/L	0.1	0.0045J	0.1	0.10	100	99	75-125	1	20	
Beryllium	mg/L	0.1	ND	0.1	0.096	96	97	75-125	0	20	
Boron	mg/L	0.1	0.26	0.1	0.36	93	100	75-125	2	20	
Cadmium	mg/L	0.1	ND	0.1	0.11	107	107	75-125	0	20	
Calcium	mg/L	1	25.4	1	25.8	41	93	75-125	2	20	M1
Chromium	mg/L	0.1	ND	0.1	0.11	111	108	75-125	2	20	
Cobalt	mg/L	0.1	ND	0.1	0.11	113	110	75-125	3	20	
Iron	mg/L	1	0.051	1	1.1	109	106	75-125	2	20	
Lead	mg/L	0.1	0.0037	0.1	0.11	106	107	75-125	1	20	
Magnesium	mg/L	1	8.4	1	9.5	116	112	75-125	0	20	
Manganese	mg/L	0.1	0.067	0.1	0.17	108	107	75-125	0	20	
Molybdenum	mg/L	0.1	0.028	0.1	0.14	107	107	75-125	0	20	
Potassium	mg/L	1	3.0	1	4.1	107	112	75-125	1	20	
Selenium	mg/L	0.1	ND	0.1	0.094	94	95	75-125	1	20	
Sodium	mg/L	1	12.2	1	12.9	70	136	75-125	5	20	M1
Thallium	mg/L	0.1	0.00016J	0.1	0.11	108	108	75-125	0	20	

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QUALIFIERS

Project: Hammond AP-4

Pace Project No.: 92779987

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	Due to the sample matrix effect on the associated internal standard, a dilution was required. The LOQ has been adjusted accordingly.
2g	The same analyte was detected in an associated instrument blank at a concentration above 1/2 the reporting limit but below the reporting limit. The concentration in the sample was non-detect.
B	Analyte was detected in the associated method blank.
ED	Due to the extract's physical characteristics, the analysis was performed at dilution.
J	Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.
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: Hammond AP-4

Pace Project No.: 92779987

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92779987001	HAM-HGWA-47	3015	2467116	EPA 6020B	2467116
92779987002	HAM-HGWA-48D	3015	2467116	EPA 6020B	2467116
92779987003	HAM-HGWA-111	3015	2467116	EPA 6020B	2467116
92779987004	HAM-HGWA-112	3015	2467116	EPA 6020B	2467116
92779987005	HAM-HGWA-113	3015	2467116	EPA 6020B	2467116
92779987006	HAM-HGWC-101	3015	2467116	EPA 6020B	2467116
92779987007	HAM-HGWC-102	3015	2467116	EPA 6020B	2467116
92779987008	HAM-HGWC-103	3015	2467116	EPA 6020B	2467116
92779987009	HAM-HGWC-105	3015	2467116	EPA 6020B	2467116
92779987010	HAM-HGWC-107	3015	2467116	EPA 6020B	2467116
92779987011	HAM-HGWC-109	3015	2467116	EPA 6020B	2467116
92779987012	HAM-HGWC-117A	3015	2467116	EPA 6020B	2467116
92779987013	HAM-HGWC-118	3015	2467116	EPA 6020B	2467116
92779987014	HAM-AP4-EB-01	3015	2467116	EPA 6020B	2467116
92779987015	HAM-AP4-FB-01	3015	2467118	EPA 6020B	2467118
92779987016	HAM-AP4-FD-01	3015	2467118	EPA 6020B	2467118
92779987017	HAM-AP4-EB-02	3015	2467118	EPA 6020B	2467118
92779987018	HAM-AP4-FB-02	3015	2467118	EPA 6020B	2467118
92779987019	HAM-AP4-FD-02	3015	2467118	EPA 6020B	2467118
92779987001	HAM-HGWA-47	EPA 7470A	916870	EPA 7470A	917066
92779987002	HAM-HGWA-48D	EPA 7470A	916870	EPA 7470A	917066
92779987003	HAM-HGWA-111	EPA 7470A	916870	EPA 7470A	917066
92779987004	HAM-HGWA-112	EPA 7470A	916870	EPA 7470A	917066
92779987005	HAM-HGWA-113	EPA 7470A	916870	EPA 7470A	917066
92779987006	HAM-HGWC-101	EPA 7470A	917537	EPA 7470A	917800
92779987007	HAM-HGWC-102	EPA 7470A	917537	EPA 7470A	917800
92779987008	HAM-HGWC-103	EPA 7470A	917537	EPA 7470A	917800
92779987009	HAM-HGWC-105	EPA 7470A	917537	EPA 7470A	917800
92779987010	HAM-HGWC-107	EPA 7470A	917537	EPA 7470A	917800
92779987011	HAM-HGWC-109	EPA 7470A	917537	EPA 7470A	917800
92779987012	HAM-HGWC-117A	EPA 7470A	917537	EPA 7470A	917800
92779987013	HAM-HGWC-118	EPA 7470A	917537	EPA 7470A	917800
92779987014	HAM-AP4-EB-01	EPA 7470A	917537	EPA 7470A	917800
92779987015	HAM-AP4-FB-01	EPA 7470A	917537	EPA 7470A	917800
92779987016	HAM-AP4-FD-01	EPA 7470A	917537	EPA 7470A	917800
92779987017	HAM-AP4-EB-02	EPA 7470A	917537	EPA 7470A	917800
92779987018	HAM-AP4-FB-02	EPA 7470A	917537	EPA 7470A	917800
92779987019	HAM-AP4-FD-02	EPA 7470A	917537	EPA 7470A	917800
92779987001	HAM-HGWA-47	SM 2320B-2011	917443		
92779987002	HAM-HGWA-48D	SM 2320B-2011	917443		
92779987003	HAM-HGWA-111	SM 2320B-2011	918322		
92779987004	HAM-HGWA-112	SM 2320B-2011	918322		
92779987005	HAM-HGWA-113	SM 2320B-2011	918322		
92779987006	HAM-HGWC-101	SM 2320B-2011	918325		
92779987007	HAM-HGWC-102	SM 2320B-2011	918376		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-4

Pace Project No.: 92779987

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92779987008	HAM-HGWC-103	SM 2320B-2011	918376		
92779987009	HAM-HGWC-105	SM 2320B-2011	918376		
92779987010	HAM-HGWC-107	SM 2320B-2011	918376		
92779987011	HAM-HGWC-109	SM 2320B-2011	918376		
92779987012	HAM-HGWC-117A	SM 2320B-2011	918376		
92779987013	HAM-HGWC-118	SM 2320B-2011	918376		
92779987001	HAM-HGWA-47	SM 2540C-2015	917012		
92779987002	HAM-HGWA-48D	SM 2540C-2015	917012		
92779987003	HAM-HGWA-111	SM 2540C-2015	917325		
92779987004	HAM-HGWA-112	SM 2540C-2015	917325		
92779987005	HAM-HGWA-113	SM 2540C-2015	917325		
92779987006	HAM-HGWC-101	SM 2540C-2015	917626		
92779987007	HAM-HGWC-102	SM 2540C-2015	917626		
92779987008	HAM-HGWC-103	SM 2540C-2015	917626		
92779987009	HAM-HGWC-105	SM 2540C-2015	917627		
92779987010	HAM-HGWC-107	SM 2540C-2015	917627		
92779987011	HAM-HGWC-109	SM 2540C-2015	917627		
92779987012	HAM-HGWC-117A	SM 2540C-2015	917627		
92779987013	HAM-HGWC-118	SM 2540C-2015	917627		
92779987014	HAM-AP4-EB-01	SM 2540C-2015	917627		
92779987015	HAM-AP4-FB-01	SM 2540C-2015	917627		
92779987016	HAM-AP4-FD-01	SM 2540C-2015	917626		
92779987017	HAM-AP4-EB-02	SM 2540C-2015	917627		
92779987018	HAM-AP4-FB-02	SM 2540C-2015	917627		
92779987019	HAM-AP4-FD-02	SM 2540C-2015	917627		
92779987001	HAM-HGWA-47	SM 4500-S2D-2011	916812		
92779987002	HAM-HGWA-48D	SM 4500-S2D-2011	916812		
92779987003	HAM-HGWA-111	SM 4500-S2D-2011	916812		
92779987004	HAM-HGWA-112	SM 4500-S2D-2011	916813		
92779987005	HAM-HGWA-113	SM 4500-S2D-2011	916813		
92779987006	HAM-HGWC-101	SM 4500-S2D-2011	916813		
92779987007	HAM-HGWC-102	SM 4500-S2D-2011	916814		
92779987008	HAM-HGWC-103	SM 4500-S2D-2011	916814		
92779987009	HAM-HGWC-105	SM 4500-S2D-2011	916814		
92779987010	HAM-HGWC-107	SM 4500-S2D-2011	916814		
92779987011	HAM-HGWC-109	SM 4500-S2D-2011	916814		
92779987012	HAM-HGWC-117A	SM 4500-S2D-2011	916814		
92779987013	HAM-HGWC-118	SM 4500-S2D-2011	916814		
92779987001	HAM-HGWA-47	EPA 300.0 Rev 2.1 1993	916738		
92779987002	HAM-HGWA-48D	EPA 300.0 Rev 2.1 1993	916738		
92779987003	HAM-HGWA-111	EPA 300.0 Rev 2.1 1993	916738		
92779987004	HAM-HGWA-112	EPA 300.0 Rev 2.1 1993	916738		
92779987005	HAM-HGWA-113	EPA 300.0 Rev 2.1 1993	916738		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-4

Pace Project No.: 92779987

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92779987006	HAM-HGWC-101	EPA 300.0 Rev 2.1 1993	916791		
92779987007	HAM-HGWC-102	EPA 300.0 Rev 2.1 1993	916791		
92779987008	HAM-HGWC-103	EPA 300.0 Rev 2.1 1993	916791		
92779987009	HAM-HGWC-105	EPA 300.0 Rev 2.1 1993	916791		
92779987010	HAM-HGWC-107	EPA 300.0 Rev 2.1 1993	916791		
92779987011	HAM-HGWC-109	EPA 300.0 Rev 2.1 1993	916791		
92779987012	HAM-HGWC-117A	EPA 300.0 Rev 2.1 1993	916791		
92779987013	HAM-HGWC-118	EPA 300.0 Rev 2.1 1993	916791		
92779987014	HAM-AP4-EB-01	EPA 300.0 Rev 2.1 1993	916792		
92779987015	HAM-AP4-FB-01	EPA 300.0 Rev 2.1 1993	916792		
92779987016	HAM-AP4-FD-01	EPA 300.0 Rev 2.1 1993	916792		
92779987017	HAM-AP4-EB-02	EPA 300.0 Rev 2.1 1993	916792		
92779987018	HAM-AP4-FB-02	EPA 300.0 Rev 2.1 1993	916792		
92779987019	HAM-AP4-FD-02	EPA 300.0 Rev 2.1 1993	916792		
92779987001	HAM-HGWA-47	EPA 3005A	923431	EPA 6020B	924138
92779987002	HAM-HGWA-48D	EPA 3005A	923431	EPA 6020B	924138
92779987003	HAM-HGWA-111	EPA 3005A	921053	EPA 6020B	921527
92779987004	HAM-HGWA-112	EPA 3005A	921053	EPA 6020B	921527
92779987005	HAM-HGWA-113	EPA 3005A	921053	EPA 6020B	921527
92779987006	HAM-HGWC-101	EPA 3005A	921053	EPA 6020B	921527
92779987007	HAM-HGWC-102	EPA 3005A	921053	EPA 6020B	921527
92779987008	HAM-HGWC-103	EPA 3005A	921053	EPA 6020B	921527
92779987009	HAM-HGWC-105	EPA 3005A	921053	EPA 6020B	921527
92779987010	HAM-HGWC-107	EPA 3005A	921053	EPA 6020B	921527
92779987011	HAM-HGWC-109	EPA 3005A	921053	EPA 6020B	921527
92779987012	HAM-HGWC-117A	EPA 3005A	921053	EPA 6020B	921527
92779987013	HAM-HGWC-118	EPA 3005A	921053	EPA 6020B	921527
92779987014	HAM-AP4-EB-01	EPA 3005A	921053	EPA 6020B	921527
92779987015	HAM-AP4-FB-01	EPA 3005A	921053	EPA 6020B	921527
92779987016	HAM-AP4-FD-01	EPA 3005A	921053	EPA 6020B	921527
92779987017	HAM-AP4-EB-02	EPA 3005A	921053	EPA 6020B	921527
92779987018	HAM-AP4-FB-02	EPA 3005A	921053	EPA 6020B	921527
92779987019	HAM-AP4-FD-02	EPA 3005A	921053	EPA 6020B	921527

REPORT OF LABORATORY ANALYSIS

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



DC#_Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mecklenburg Kernersville

Sample Condition Upon Receipt

Client Name: G & A Power

Project #:

WO#: 92779987



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: 2/14/25 LWH

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen? Yes No N/A

Thermometer:

IR Gun ID: 083

Type of Ice: Wet Blue None

Cooler Temp: 2.8 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): 2.9

JSDA 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 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: W			
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:

NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

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

MO# : 92779987
PM : BV Due Date: **03/03/2007**
CLIENT : 92- GP-HAM
 Page: 1 of 1

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-4	Rate Quote Reference:	Bonnie Yang
Requested Due Date/TAT:	10 Day	Project Number:		Rate Profile #:	10839
				Requested Analysis Filtered (Y/N) Chloride, Fluoride, Sulfate: N N N N N Full App. III and IV metals: N N N N N RAD 226/228: N N N N N TDS: N N N N N Major Ions (Profile 10839-2): N N N N N	
				REGULATORY AGENCY NPDES: <input type="checkbox"/> GROUND WATER: <input type="checkbox"/> DRINKING WATER UST: <input type="checkbox"/> RCRA: <input checked="" type="checkbox"/> OTHER: <input type="checkbox"/> CCR: <input type="checkbox"/> Site Location: <input type="checkbox"/> STATE: <input type="checkbox"/> GA	

ITEM #	Section D Required Client Information	Valid Matrix Codes CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives					Analysis Test	Residual Chlorine (Y/N)	Pace Project No./Lab I.D.	
					DATE	TIME			UNPRESERVED	H ₂ SO ₄	HNO ₃	HCl	NaOH				Na ₂ S ₂ O ₃
1	HAM-HGWA-47	W/G	G	2/12/2005	1631		18	8	3	4	4	1	X	X	X	X	001
2	HAM-HGWA-48D	W/G	G	2/12/2005	1702		17	8	3	4	4	1	X	X	X	X	002
3	HAM-HGWA-111	W/G	G	2/13/2005	0954		17	8	3	4	4	1	X	X	X	X	003
4	HAM-HGWA-112	W/G	G	2/13/2005	1657		18	8	3	4	4	1	X	X	X	X	004
5	HAM-HGWA-113	W/G	G	2/13/2005	1331		18	8	3	4	4	1	X	X	X	X	005
6																	
7																	
8																	
9																	
10																	
11																	
12																	

ADDITIONAL COMMENTS		REINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME	
Task Code: HAM-CCR-ASSWT-2025STL		John Webb/Kessler		2-14-05		1340		John Webb/Kessler		2/14/05		1340	
		John Webb/Kessler		2/14/05		1610		John Webb/Kessler		2/14/05		1610	

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



DC#_Title: ENV-FRM-HUNT-0083 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name: GA Power

Project #: [Redacted]

Courier: Fed Ex UPS USPS Client Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No N/A

Date/Initials Person Examining Contents: 2/17/25 [Signature]

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen? Yes No N/A

Thermometer: IR Gun ID: 083 Type of Ice: Wet Blue None

Cooler Temp: 1.5 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): 1.6

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 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	7.
Containers Intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	8.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" 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: W				
Headspace in VOA Vials (>5-Gmm)?	<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: _____

EVENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____



DC#_ Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

*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 #

laboratory Receiving Location: Asheville [] Eden [] Greenwood [] Huntersville [] Raleigh [] Mechanicsville [] Atlanta [] Kernersville []

Client Profile/EZ (Circle one) Notes

Table with columns for Item#, CC, and various container types (e.g., BP4U-125 mL Plastic Unpreserved (N/A) (Cl-), AG1U-1 liter Amber Unpreserved (N/A) (Cl-), etc.). The table contains handwritten data including numbers and checkmarks.

pH Adjustment Log for Preserved Samples

Table with 7 columns: 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.



DC#_Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

*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 #

laboratory Receiving Location: Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Client Profile/EZ (Circle one) Notes

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 2N 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 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 (9.9-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VG9U-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)		
CC																													
1	/	/	/	/	2	2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
2	/	/	/	/	2	2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
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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:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report For:	SCS Contacts	Address:	Southern Co.
Address:	Atlanta, GA	Copy To:	Geosynthetic Contacts	Company Name:	
Email To:	SCS Contacts	Purchase Order No.:		Address:	
Phone:		Project Name:	Hammond AP-4	Facility Name:	Bonnie Yang
Requested Due Date/TAT:	10 Day	Project Number:		Facility 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 <input type="checkbox"/> CCR		
			Site Location: _____ STATE: GA		

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		DATE	TIME	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Requested Analysis Filtered (Y/N)					Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.	
				COMPOSITE START	COMPOSITE							H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	Analysis Test	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS			Major Ions (Profile 10839-2)
1	HAM-HGWC-101	WG G	21/5/2025	1032	16	8	3	4	4	1	1	X	X	X	X	X	X	X	X	N	N	N	N	N	006	
2	HAM-HGWC-102	WG G	21/5/2025	1149	15	8	3	4	4	1	1	X	X	X	X	X	X	X	X	N	N	N	N	N	007	
3	HAM-HGWC-103	WG G	21/5/2025	1613	16	8	3	4	4	1	1	X	X	X	X	X	X	X	X	N	N	N	N	N	008	
4	HAM-HGWC-105	WG G	21/6/2025	0930	16	8	3	4	4	1	1	X	X	X	X	X	X	X	X	N	N	N	N	N	009	
5	HAM-HGWC-107	WG G	21/6/2025	1159	16	8	3	4	4	1	1	X	X	X	X	X	X	X	X	N	N	N	N	N	010	
6	HAM-HGWC-109	WG G	21/6/2025	1431	16	8	3	4	4	1	1	X	X	X	X	X	X	X	X	N	N	N	N	N	011	Lab Sample
7	HAM-HGWC-117A	WG G	21/6/2025	0933	17	8	3	4	4	1	1	X	X	X	X	X	X	X	X	N	N	N	N	N	012	
8	HAM-HGWC-118	WG G	21/6/2025	1155	18	8	3	4	4	1	1	X	X	X	X	X	X	X	X	N	N	N	N	N	013	
9	HAM-AP4-EB-01	WG G	21/6/2025	1010	16	6	2	4	4	1	1	X	X	X	X	X	X	X	X	N	N	N	N	N	014	
10	HAM-AP4-FB-01	WG G	21/6/2025	1005	16	6	2	4	4	1	1	X	X	X	X	X	X	X	X	N	N	N	N	N	015	
11	HAM-AP4-FD-01	WG G	21/6/2025	0000	15	6	2	4	4	1	1	X	X	X	X	X	X	X	X	N	N	N	N	N	016	
12	HAM-AP4-EB-02	WG G	21/6/2025	1300	16	6	2	4	4	1	1	X	X	X	X	X	X	X	X	N	N	N	N	N	017	

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME	
		Pace Analytical		21/1/2025		1445		Bonnie Yang		2/1/2025		1445	
		Pace Analytical		21/1/2025		1445		Bonnie Yang		2/1/2025		1445	

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	Amanda Tomlinson, Zain Webb, Thomas Kessler
SIGNATURE of SAMPLER:	<i>[Signature]</i>
DATE Signed (MM/DD/YYYY):	2-17-25

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.

F-ALL Q-020rev.07.15-Feb-2007

VALIDATION REPORTS

August 2024

Memorandum

Date: 6 December 2024
To: Caroline Nelson
Christine Hug
From: Ashley Wilson
CC: Kristoffer Henderson
Subject: **Stage 2A Data Validation - Level II Data Deliverable – Pace Analytical Project Services, Project Number: 92746288**

SITE: Plant Hammond AP-4

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of thirteen aqueous samples, two field duplicates, two field blanks and two equipment blanks, collected 6 and 8-10 August 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

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
92746288001	HAM-HGWA-47
92746288002	HAM-HGWA-48D
92746288003	HAM-HGWA-111
92746288004	HAM-HGWA-113
92746288005	HAM-HGWC-102
92746288006	HAM-HGWC-103
92746288007	HAM-HGWA-112
92746288008	HAM-HGWC-118
92746288009	HAM-AP4-FD-02
92746288010	HAM-AP4-EB-01

Laboratory IDs	Client IDs
92746288011	HAM-AP4-FB-01
92746288012	HAM-HGWC-101
92746288013	HAM-HGWC-105
92746288014	HAM-HGWC-107
92746288015	HAM-HGWC-109
92746288016	HAM-HGWC-117A
92746288017	HAM-AP4-FD-01
92746288018	HAM-AP4-EB-02
92746288019	HAM-AP4-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.

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 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%.

1.2 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-HGWC-102 and HAM-AP4-FD-02. The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria, with the following exceptions.

The recoveries of calcium in the MS/MSD pair using sample HAM-HGWC-102 were low and high and outside of laboratory specified acceptance criteria. Since the calcium concentration in sample HAM-HGWC-102 was greater than four times the spiked concentration, 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

Two equipment blanks were collected with the sample set, HAM-AP4-EB-01 and HAM-AP4-EB-02. Metals were not detected in the equipment blanks at or above the MDLs, with the following exceptions.

Antimony (0.00086 mg/L) was detected at an estimated concentration greater than the MDL and less than the RL in HAM-AP4-EB-01. Since the antimony was not detected in the associated samples, no additional qualifications were applied to the data.

1.7 Field Blank

Two field blanks were collected with the sample set, HAM-AP4-FB-01 and HAM-AP4-FB-02. Metals were not detected in the field blanks at or above the MDLs.

1.8 Field Duplicate

Two field duplicate samples were collected with the sample set, HAM-AP4-FD-01 and HAM-AP4-FD-02. Acceptable precision (RPD < 30%) was demonstrated between the field duplicate and the original samples, HAM-HGWC-107 and HAM-HGWC-118, respectively.

1.9 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were not reported.

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 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-47. The recovery and RPD results were within laboratory specified acceptance criteria.

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

Two equipment blanks were collected with the sample set, HAM-AP4-EB-01 and HAM-AP4-EB-02. Mercury was not detected in the equipment blanks at or above the MDLs.

2.7 Field Blank

Two field blanks were collected with the sample set, HAM-AP4-FB-01 and HAM-AP4-FB-02. Mercury not detected in the field blanks at or above the MDLs.

2.8 Field Duplicate

Two field duplicate samples were collected with the sample set, HAM-AP4-FD-01 and HAM-AP4-FD-02. Acceptable precision (RPD < 30%) was demonstrated between the field duplicate and the original samples, HAM-HGWC-107 and HAM-HGWC-118, 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 CaCO₃ (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 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**

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%.

3.2 **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 at or 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-HGWC-102 and HAM-HGWC-109. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

The recoveries of fluoride in the MS/MSD pair using sample HAM-HGWC-102 were high and outside of laboratory specified acceptance criteria. Therefore, the concentration of fluoride in sample HAM-HGWC-102 was J+ qualified as estimated with a high bias. Since the fluoride concentration for sample HAM-HGWC-102 was estimated greater than the MDL and less than the RL, the final concentration was J qualified as estimated.

The recoveries of sulfate in the MS/MSD pair using sample HAM-HGWC-102 were low and outside of laboratory specified acceptance criteria. Since the sulfate concentration in sample HAM-HGWC-102 was greater than four times the spiked concentration, no qualifications were applied to the data based on the MS/MSD recovery results.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
HAM-HGWC-102	Fluoride	0.067	J,M1	0.067	J	MS1

mg/L- milligram per liter

J-estimated concentration greater than the MDL and less than the RL

M1-matrix spike recovery exceeded QC limits

* 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

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

Two laboratory duplicates were reported for TDS using samples HAM-AP4-FD-02 and HAM-HGWC-101. The RPD results were within the laboratory specified acceptance criteria.

3.7 Equipment Blank

Two equipment blanks were collected with the sample set, HAM-AP4-EB-01 and HAM-AP4-EB-02. The wet chemistry parameters were not detected in the equipment blank at or above the MDLs, with the following exceptions.

TDS (107 mg/L and 28.0 mg/L) was detected in HAM-AP4-EB-01 and HAM-AP4-EB-02, respectively, at concentrations greater than the RL. Therefore, the concentrations of TDS greater than the equipment blank concentration and less than ten times the equipment blank concentration in samples HAM-AP4-FD-01, HAM-AP4-FD-02, HAM-HGWA-111, HAM-HGWA-47, HAM-HGWA-48D, HAM-HGWC-101, HAM-HGWC-102, HAM-HGWC-103, HAM-HGWC-105,

HAM-HGWC-107, HAM-HGWC-109, HAM-HGWC-117A and HAM-HGWC-118 were J+ qualified as estimated with high bias and the TDS concentrations for samples HAM-HGWA-112 and HAM-HGWA-113 were U qualified as not detected above the reported concentration.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
HAM-AP4-FD-01	TDS	321	NA	321	J+	BEH
HAM-AP4-FD-02	TDS	330	NA	330	J+	BEH
HAM-HGWA-111	TDS	163	NA	163	J+	BEH
HAM-HGWA-112	TDS	90.0	NA	90.0	U	BEH
HAM-HGWA-113	TDS	85.0	NA	85.0	U	BEH
HAM-HGWA-47	TDS	253	NA	253	J+	BEH
HAM-HGWA-48D	TDS	240	NA	240	J+	BEH
HAM-HGWC-101	TDS	263	NA	263	J+	BEH
HAM-HGWC-102	TDS	746	NA	746	J+	BEH
HAM-HGWC-103	TDS	809	NA	809	J+	BEH
HAM-HGWC-105	TDS	658	NA	658	J+	BEH
HAM-HGWC-107	TDS	299	NA	299	J+	BEH
HAM-HGWC-109	TDS	227	NA	227	J+	BEH
HAM-HGWC-117A	TDS	284	NA	284	J+	BEH
HAM-HGWC-118	TDS	338	NA	338	J+	BEH

mg/L- milligram per liter

NA-not applicable

3.8 Field Blank

Two field blanks were collected with the sample set, HAM-AP4-FB-01 and HAM-AP4-FB-02. The wet chemistry parameters were not detected in the field blank at or above the MDLs, with the following exception.

TDS (59.0 mg/L) was detected in HAM-AP4-FB-01 at a concentration greater than the RL. Since the concentration of TDS in the associated samples were previously qualified due to equipment blank contamination, and based on technical and professional judgment, no additional qualifications were applied to the data.

3.9 Field Duplicate

Two field duplicate samples were collected with the sample set, HAM-AP4-FD-01 and HAM-AP4-FD-02. Acceptable precision (RPD < 30%) was demonstrated between the field duplicate and the original samples, HAM-HGWC-107 and HAM-HGWC-118, respectively.

3.10 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were not reported.

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.

* * * * *

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: 13 December 2024
To: Whitney Law
From: Ashley Wilson
CC: Kristoffer Henderson
Subject: **Stage 2A Data Validation - Level II Data Deliverable – Pace Analytical Services, LLC Project Number 92746296**

SITE: Plant Hammond AP-4

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of thirteen aqueous samples, two field duplicate samples, two field blanks, and two equipment blanks, collected 6 and 8-10 August 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 9315
- Radium-228 by US EPA Method 9320
- 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 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 reports:

Laboratory IDs	Client IDs
92746296001	HAM-HGWA-47
92746296002	HAM-HGWA-48D
92746296003	HAM-HGWA-111
92746296004	HAM-HGWA-113
92746296005	HAM-HGWC-102
92746296006	HAM-HGWC-103
92746296007	HAM-HGWA-112
92746296008	HAM-HGWC-118
92746296009	HAM-AP4-FD-02
92746296010	HAM-AP4-EB-01
92746296011	HAM-AP4-FB-01
92746296012	HAM-HGWC-101
92746296013	HAM-HGWC-105
92746296014	HAM-HGWC-107
92746296015	HAM-HGWC-109
92746296016	HAM-HGWC-117A
92746296017	HAM-AP4-FD-01
92746296018	HAM-AP4-EB-02
92746296019	HAM-AP4-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 9315, radium-228 by US EPA method 9320 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

92746297: Total radium was reported at the minimum detectable concentration (MDC) for combined radium-226 and radium-228. Radium-226 was detected greater than the MDC in sample HAM-HGWC-105 and radium-228 was detected greater than the MDC in samples HAM-AP4-EB-01, HAM-HGWA-112 and HAM-HGWC-101. Since total radium is calculated from radium-

226 and radium-228, and based on professional and technical judgment, the MDC reported total radium concentrations for these samples were reported with no qualifications.

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier*	Reason Code**
HAM-AP4-EB-01	Combined Radium 226 + 228	0.820	U	0.820	NA	RO1
HAM-HGWA-112	Combined Radium 226 + 228	0.976	U	0.976	NA	RO1
HAM-HGWC-101	Combined Radium 226 + 228	0.817	U	0.817	NA	RO1
HAM-HGWC-105	Combined Radium 226 + 228	0.693	U	0.693	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 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

One sample set specific laboratory duplicate was reported for radium-226 using sample HAM-HGWC-109. The RERs were within the laboratory specified acceptance criteria.

Three batch laboratory duplicates were 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

Two equipment blanks, HAM-AP4-EB-01 and HAM-AP4-EB-02, were collected with the sample set. Radium-226 and radium-228 were not detected in the equipment blanks at or above the MDCs, with the following exception.

Radium-228 was detected at a concentration greater than the MDC in HAM-AP4-EB-01. Since the mean difference (MD) between the samples and the blank results were less than 2 and the samples were less than ten times the blank concentration, the detected concentrations of radium-228 and combined radium 226 + 228 in sample HAM-HGWA-47 were UJ qualified as sample not distinguishable from the blank. Since the combined radium 226 + 228 in samples HAM-HGWA-112 and HAM-HGWC-101 were previously qualified in section 1.1.1, only the radium-228 concentrations were UJ qualified as estimated in those samples.

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	Reason Code
HAM-HGWA-112	Radium 228	0.904	NA	0.904	UJ	BEH
HAM-HGWA-112	Combined Radium 226 + 228	0.976	U	0.976	UJ	BEH
HAM-HGWA-47	Radium 228	0.886	NA	0.886	UJ	BEH
HAM-HGWA-47	Combined Radium 226 + 228	0.973	NA	0.973	UJ	BEH
HAM-HGWC-101	Radium 228	0.780	NA	0.780	UJ	BEH
HAM-HGWC-101	Combined Radium 226 + 228	0.817	U	0.817	UJ	BEH

pCi/L-picocuries per liter

U-not detected at or above the MDC

NA-not applicable

1.9 Field Blank

Two field blank, HAM-AP4-FB-01 and HAM-AP4-FB-02, were collected with the sample set. Radium-226 and radium-228 were not detected in the field blanks at or above the MDCs.

1.10 Field Duplicate

Two field duplicate samples were collected with the sample set, HAM-AP4-FD-01 and HAM-AP4-FD-02. Acceptable precision ($RER (1\sigma) < 3$) was demonstrated between the field duplicates and the original samples, HAM-HGWC-102 and HAM-HGWC-117A, respectively.

1.11 Sensitivity

The samples were reported to the MDCs. No elevated non-detect results were reported.

1.12 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.

* * * * *

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
VSU3	NON-DEFAULT RESULT UNIT

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

February 2025

Memorandum

Date: 15 July 2025
To: Caroline Nelson
Christine Hug
From: Ashley Wilson
CC: Kristoffer Henderson
Subject: **Stage 2A Data Validation - Level II Data Deliverable – Pace Analytical Project Services, Project Numbers: 92779987**

SITE: Plant Hammond AP-4

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of thirteen groundwater samples, two field duplicates, two field blanks and two equipment blanks, collected 12-13 and 15-16 February 2025, as part of the Plant Hammond sampling event.

The samples were analyzed at Pace Analytical Services – National, Mt. Juliet, Tennessee, for the following analytical tests:

- Lithium by United States (US) Environmental Protection Agency (EPA) Methods 3015/6020B

The samples were analyzed at Pace Analytical Services - Asheville, Asheville, North Carolina, for the following analytical tests:

- Mercury by US EPA Method 7470A
- 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
- Total Dissolved Solids (TDS) by Standard Method (SM) 2540C-2015

The samples were analyzed at Pace Analytical Services – West Columbia, West Columbia, South Carolina, for the following analytical test:

- Metals by US EPA Method 3005A/6020B

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
- Field Sampling Plan – All Sites, Georgia Power Company, Southern Company, January 2024, Revised May 2024.

The following samples were analyzed and reported in the laboratory report:

Laboratory IDs	Client IDs
92779987001	HAM-HGWA-47
92779987002	HAM-HGWA-48D
92779987003	HAM-HGWA-111
92779987004	HAM-HGWA-112
92779987005	HAM-HGWA-113
92779987006	HAM-HGWC-101
92779987007	HAM-HGWC-102
92779987008	HAM-HGWC-103
92779987009	HAM-HGWC-105
92779987010	HAM-HGWC-107

Laboratory IDs	Client IDs
92779987011	HAM-HGWC-109
92779987012	HAM-HGWC-117A
92779987013	HAM-HGWC-118
92779987014	HAM-AP4-EB-01
92779987015	HAM-AP4-FB-01
92779987016	HAM-AP4-FD-01
92779987017	HAM-AP4-EB-02
92779987018	HAM-AP4-FB-02
92779987019	HAM-AP4-FD-02

The chain of custody (COC) indicates the samples were received between 0-6 °C. No preservation issues were noted by the laboratory.

The second sample *relinquished* by time was missing from page 2 of 2 on the COC.

Radium 226/228 was requested on the COC. However, this data was reported separately.

1.0 METALS

The samples were analyzed for metals by US EPA methods 3005A/6020B and 3015/6020B.

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%.

1.2 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), with the following exception.

Iron (0.036 mg/L) was detected in the method blank in batch 923431 at an estimated concentration greater than the MDL and less than the reporting limit (RL). Therefore, the concentration of iron in associated sample HAM-HGWA-47 was J+ qualified as estimated with a high bias.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	DQM Reason Code(s)**
HAM-HGWA-47	Iron	0.099	B	0.099	J+	LBC2

mg/L- milligram per liter

B-Analyte was detected in the associated method blank

* Validation qualifiers are defined in Attachment 1 at the end of this report

**DQM reason codes are defined in Attachment 2 at the end of this report

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 using samples HAM-AP4-FB-01 and HAM-AP4-FD-01. The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria, with the following exceptions.

The recoveries of boron, calcium, magnesium, manganese, and sodium in the MS/MSD pair using sample HAM-AP4-FD-01 were high or low and outside of laboratory specified acceptance criteria. Since the magnesium, manganese and sodium were not reported for sample HAM-AP4-FD-01 and the boron and calcium concentrations in sample HAM-AP4-FD-01 were greater than four times the spiked concentrations, no qualifications were applied to the data based on the MS/MSD recovery results.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	DQM Reason Code(s)
HAM-AP4-FD-01	Boron	4.2	M1	4.2	NA ^β	MS3
HAM-AP4-FD-01	Calcium	159	M1	159	NA ^β	MS3

mg/L- milligram per liter

M1-Laboratory flag indicating that the matrix spike recovery exceeded QC limits.

NA^β-Not applicable. The laboratory flag was removed and no qualifications were applied to the data based on this validation.

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

Two equipment blanks were collected with the sample set, HAM-AP4-EB-01 and HAM-AP4-EB-02. Metals were not detected in the equipment blanks at or above the MDLs.

1.7 Field Blank

Two field blanks were collected with the sample set, HAM-AP4-FB-01 and HAM-AP4-FB-02. Metals were not detected in the field blanks at or above the MDLs.

1.8 Field Duplicate

Two field duplicate samples were collected with the sample set, HAM-AP4-FD-01 and HAM-AP4-FD-02. Acceptable precision (RPD < 30%) was demonstrated between the field duplicates and the original samples, HAM-HGWC-102 and HAM-HGWC-109, respectively.

The field duplicates, HAM-AP4-FD-01 and HAM-AP4-FD-02, were not analyzed for iron, magnesium, manganese, potassium, or sodium, as specified on the COCs.

1.9 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported for boron and beryllium in samples HAM-AP4-EB-02 and HAM-AP4-FB-02, and selenium in samples HAM-AP4-FD-01, HAM-HGWC-102 and HAM-HGWC-103 due to dilutions because of matrix interference.

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-HGWC-101. The recovery and RPD results were within laboratory specified acceptance criteria.

Batch MS/MSDs 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.

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

Two equipment blanks were collected with the sample set, HAM-AP4-EB-01 and HAM-AP4-EB-02. Mercury was not detected in the equipment blanks at or above the MDLs.

2.7 Field Blank

Two field blanks were collected with the sample set, HAM-AP4-FB-01 and HAM-AP4-FB-02. Mercury not detected in the field blanks at or above the MDLs.

2.8 Field Duplicate

Two field duplicate samples were collected with the sample set, HAM-AP4-FD-01 and HAM-AP4-FD-02. Acceptable precision (RPD < 30%) was demonstrated between the field duplicates and the original samples, HAM-HGWC-102 and HAM-HGWC-109, 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 CaCO₃ (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**

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%.

3.2 **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 at or 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-111 and HAM-AP4-EB-01. Three sample set specific MS/MSD pairs were reported for sulfide using sample HAM-HGWA-112, HAM-HGWC-102 and HAM-HGWC-109. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

The MSD recovery of fluoride in the MS/MSD pair using sample HAM-HGWA-111 was high and outside of laboratory specified acceptance criteria. Therefore, the estimated concentration of fluoride in sample HAM-HGWA-111 was J+ qualified as estimated with a high bias. Since the

fluoride concentration for sample HAM-HGWA-111 was estimated greater than the MDL and less than the RL, the final qualifications for the fluoride concentration for sample HAM-HGWA-111 was J qualified as estimated.

Batch MS/MSD pairs were also reported for alkalinity, sulfide, and anions. 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	DQM Reason Code(s)
HAM-HGWA-111	Fluoride	0.093	J,M1	0.093	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

Two laboratory duplicates were reported for TDS using samples HAM-HGWA-113 and HAM-HGWC-107. The RPD result was 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

Two equipment blanks were collected with the sample set, HAM-AP4-EB-01 and HAM-AP4-EB-02. The wet chemistry parameters were not detected in the equipment blank at or above the MDLs.

3.8 Field Blank

Two field blanks were collected with the sample set, HAM-AP4-FB-01 and HAM-AP4-FB-02. The wet chemistry parameters were not detected in the field blank at or above the MDLs.

3.9 Field Duplicate

Two field duplicate samples were collected with the sample set, HAM-AP4-FD-01 and HAM-AP4-FD-02. Acceptable precision (RPD < 30%) was demonstrated between the field duplicates and the original samples, HAM-HGWC-102 and HAM-HGWC-109, respectively.

The field duplicates, HAM-AP4-FD-01 and HAM-AP4-FD-02, were not analyzed for alkalinity or sulfide, as specified on the COCs.

3.10 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were not reported.

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.

* * * * *

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
DQM 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: 16 July 2025
To: Christine Hug
From: Ashley Wilson
CC: Kristoffer Henderson
Subject: **Stage 2A Data Validation - Level II Data Deliverable – Pace Analytical Services, LLC Project Number 92779988**

SITE: Plant Hammond AP-4

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation thirteen groundwater samples, two field duplicates, two field blanks and two equipment blanks, collected 12-13 and 15-16 February 2025, 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 9315
- Radium-228 by US EPA Method 9320
- 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 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);

- Field Sampling Plan – All Sites, Georgia Power Company, Southern Company, January 2024, Revised May 2024; and
- Idaho National Engineering and Environmental Laboratory, RADIOANALYTICAL DATA VALIDATION, May 11, 2004 (GDE-205).

The following samples were analyzed and reported in the laboratory reports:

Laboratory IDs	Client IDs
92779988001	HAM-HGWA-47
92779988002	HAM-HGWA-48D
92779988003	HAM-HGWA-111
92779988004	HAM-HGWA-112
92779988005	HAM-HGWA-113
92779988006	HAM-HGWC-101
92779988007	HAM-HGWC-102
92779988008	HAM-HGWC-103
92779988009	HAM-HGWC-105
92779988010	HAM-HGWC-107

Laboratory IDs	Client IDs
92779988011	HAM-HGWC-109
92779988012	HAM-HGWC-117A
92779988013	HAM-HGWC-118
92779988014	HAM-AP4-EB-01
92779988015	HAM-AP4-FB-01
92779988016	HAM-AP4-FD-01
92779988017	HAM-AP4-EB-02
92779988018	HAM-AP4-FB-02
92779988019	HAM-AP4-FD-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 9315, radium-228 by US EPA method 9320 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
- ✓ Field Blank
- ✓ Equipment Blank
- ✓ Field Duplicate
- ✓ Sensitivity

1.1 Overall Assessment

1.1.1 Completeness

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%.

1.1.2 Analysis Anomaly

Radium-228 was detected in samples HAM-AP4-EB-02, HAM-HGWC-109 and HAM-HGWC-118 at concentrations greater than the minimum detectable concentration (MDC) and total radium was U flag as less than the MDC. Since total radium is calculated from the combined radium 226 and 228 concentrations, and radium-228 was detected, the total radium result should be considered a detection greater than the MDC. Therefore, the U flag was removed for the total radium results for samples HAM-AP4-EB-02, HAM-HGWC-109 and HAM-HGWC-118.

Radium-226 was detected in sample HAM-AP4-FD-01 at a concentration greater than the MDC and total radium was U flag as less than the MDC. Since total radium is calculated from the combined radium 226 and 228 concentrations, and radium-226 was detected, the total radium result should be considered a detection greater than the MDC. Therefore, the U flag was removed for the total radium result for sample HAM-AP4-FD-01.

Sample ID	Compound	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier*	DQM Reason Code**
HAM-AP4-EB-02	Combined Radium 226 + 228	0.847	U	0.847	NA	RO1
HAM-AP4-FD-01	Combined Radium 226 + 228	0.904	U	0.904	NA	RO1
HAM-HGWC-109	Combined Radium 226 + 228	0.852	U	0.852	NA	RO1
HAM-HGWC-118	Combined Radium 226 + 228	0.909	U	0.909	NA	RO1

pCi/L-picocuries per liter

U-not detected at or above the MDC

NA-not applicable

* Validation qualifiers are defined in Attachment 1 at the end of this report

**Data Quality Module (DQM) 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-226 and radium-228 data. Radium-226 and radium-228 were not detected in the method blanks at or above the measured 2σ uncertainty or the MDC, with the following exceptions.

Radium-228 (0.636 pCi/L) was detected in the method blank in batch 728164 at a concentration greater than the measured 2σ uncertainty. Therefore, the radium-228 concentration with a mean difference (MD) less than 2 in samples HAM-AP4-EB-02, HAM-HGWC-109 and HAM-HGWC-118 were UJ qualified as not statistically distinguishable from the blank. In addition, the combined radium 226 + 228 concentrations for samples HAM-AP4-EB-02, HAM-HGWC-109 and HAM-HGWC-118 were UJ qualified as not statistically distinguishable from the blank.

Sample ID	Compound	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	DQM Reason Code
HAM-AP4-EB-02	Radium-228	0.847	NA	0.847	UJ	LBC1
HAM-AP4-EB-02	Combined Radium 226 + 228	0.847	U	0.847	UJ	RO1 LBC1
HAM-HGWC-109	Radium-228	0.774	NA	0.774	UJ	LBC1
HAM-HGWC-109	Combined Radium 226 + 228	0.852	U	0.852	UJ	RO1 LBC1
HAM-HGWC-118	Radium-228	0.868	NA	0.868	UJ	LBC1
HAM-HGWC-118	Combined Radium 226 + 228	0.909	U	0.909	UJ	RO1 LBC1

pCi/L-picocuries per liter

U-not detected at or above the MDC

NA-not applicable

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Batch MS/MSD pairs were reported with the sample set. 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 for radium-226 and radium-228. The recovery results were within the laboratory specified acceptance criteria.

1.6 Laboratory Duplicate

A batch laboratory duplicate was reported with the sample set. 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 Field Blank

Two field blanks, HAM-AP4-FB-01 and HAM-AP4-FB-02, were collected with the sample set and analyzed for radium-226 and radium-228. Radium-226 and radium-228 were not detected in the field blanks at or above the measured 2σ uncertainty or the MDC, with the following exception.

Radium-228 (0.503 pCi/L) was detected in HAM-AP4-FB-02 at a concentration greater than the measured 2σ uncertainty. Since the radium-228 concentrations in the associated samples that were greater than the MDC were UJ qualified due to method blank contamination, no additional qualifications were applied to the data.

1.9 Equipment Blank

Two equipment blanks, HAM-AP4-EB-01 and HAM-AP4-EB-02, were collected with the sample set and analyzed for radium-226 and radium-228. Radium-226 and radium-228 were not detected in the field blanks at or above the measured 2σ uncertainty or the MDC, with the following exception.

Radium-228 (0.847 pCi/L) was detected in HAM-AP4-EB-02 at a concentration greater than the MDC. Since the radium-228 concentrations in the associated samples that were greater than the MDC were UJ qualified due to method blank contamination, no additional qualifications were applied to the data.

1.10 Field Duplicate

Two field duplicate samples, HAM-AP4-FD-01 and HAM-AP4-FD-02, were collected with the sample set. Acceptable precision [$MD \leq 3$, relative percent difference (RPD) $< 20\%$] was demonstrated between the field duplicates and the original samples, HAM-HGWC-102 and HAM-HGWC-109.

1.11 Sensitivity

The samples were reported to the MDCs. No elevated non-detect results were reported.

* * * * *

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

Plant Hammond AP Site Data Validation

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DQM Reason Code	Description
VSU1	INVALID SAMPLE UNIT TYPE
VSU2	MISSING SAMPLE UNIT TYPE

DQM Reason Code	Description
VSU3	NON-DEFAULT RESULT UNIT

- 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

FIELD SAMPLING REPORTS

August 2024

Low-Flow Test Report:

Test Date / Time: 8/6/2024 2:19:36 PM

Project: GP-Plant Hammond

Operator Name: J. Tracy

Location Name: HGWA-47 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 33.74 ft Total Depth: 43.74 ft Initial Depth to Water: 7.86 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 38.74 ft Estimated Total Volume Pumped: 6 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: 883530
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Test Notes:

5 bottles; full app. III and IV.

Weather Conditions:

Sunny, 95 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	
8/6/2024 2:19 PM	00:00	7.43 pH	23.26 °C	373.92 µS/cm	0.32 mg/L	0.01 NTU	451.3 mV	7.89 ft	200.00 ml/min
8/6/2024 2:24 PM	05:00	7.43 pH	23.18 °C	370.91 µS/cm	0.29 mg/L	0.00 NTU	861.3 mV	7.89 ft	200.00 ml/min
8/6/2024 2:28 PM	09:04	7.44 pH	22.99 °C	370.13 µS/cm	0.26 mg/L	0.00 NTU	726.4 mV	7.89 ft	200.00 ml/min
8/6/2024 2:33 PM	14:04	7.44 pH	22.80 °C	367.60 µS/cm	0.24 mg/L	0.01 NTU	858.0 mV	7.89 ft	200.00 ml/min
8/6/2024 2:38 PM	19:04	7.44 pH	22.56 °C	366.71 µS/cm	0.23 mg/L	0.00 NTU	1,031.2 mV	7.90 ft	200.00 ml/min
8/6/2024 2:43 PM	24:04	7.46 pH	22.58 °C	363.58 µS/cm	0.22 mg/L	0.00 NTU	982.9 mV	7.90 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWA-47	Grab.

Low-Flow Test Report:

Test Date / Time: 8/6/2024 12:00:06 PM

Project: GP-Plant Hammond

Operator Name: J. Tracy

Location Name: HGWA-48D Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 62.97 ft Total Depth: 72.97 ft Initial Depth to Water: 7.01 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 67.96 ft Estimated Total Volume Pumped: 8 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 5.51 ft	Instrument Used: Aqua TROLL 400 Serial Number: 883530
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Test Notes:

5 bottles; Full app. III and IV.

Weather Conditions:

Sunny, 90 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	
8/6/2024 12:00 PM	00:00	7.35 pH	21.69 °C	397.19 µS/cm	0.64 mg/L	2.46 NTU	147.5 mV	10.84 ft	200.00 ml/min
8/6/2024 12:05 PM	05:00	7.37 pH	21.68 °C	391.55 µS/cm	0.61 mg/L	1.34 NTU	500.3 mV	11.69 ft	200.00 ml/min
8/6/2024 12:10 PM	10:00	7.37 pH	21.56 °C	390.56 µS/cm	0.72 mg/L	1.01 NTU	660.5 mV	11.85 ft	200.00 ml/min
8/6/2024 12:15 PM	15:00	7.39 pH	21.52 °C	388.98 µS/cm	0.69 mg/L	0.96 NTU	677.9 mV	12.19 ft	200.00 ml/min
8/6/2024 12:20 PM	20:00	7.38 pH	21.56 °C	388.06 µS/cm	0.74 mg/L	3.24 NTU	824.6 mV	12.35 ft	200.00 ml/min
8/6/2024 12:25 PM	25:00	7.40 pH	21.50 °C	386.59 µS/cm	0.70 mg/L	3.16 NTU	888.9 mV	12.52 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWA-48D	Grab.

Low-Flow Test Report:

Test Date / Time: 8/6/2024 4:06:59 PM

Project: GP-Plant Hammond

Operator Name: J. Tracy

Location Name: HGWA-111 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 33.67 ft Total Depth: 43.67 ft Initial Depth to Water: 12.41 ft	Pump Type: Peri Tubing Type: Poly Pump Intake From TOC: 38.67 ft Estimated Total Volume Pumped: 13 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 1.04 ft	Instrument Used: Aqua TROLL 400 Serial Number: 883530
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Test Notes:

5 bottles; Full app. III and IV.

Weather Conditions:

Sunny, 90 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	
8/6/2024 4:06 PM	00:00	5.64 pH	22.67 °C	106.45 µS/cm	4.19 mg/L	0.00 NTU	497.1 mV	13.21 ft	200.00 ml/min
8/6/2024 4:11 PM	05:00	6.31 pH	22.38 °C	103.89 µS/cm	4.17 mg/L	0.25 NTU	868.0 mV	13.29 ft	200.00 ml/min
8/6/2024 4:16 PM	10:00	6.29 pH	22.45 °C	107.35 µS/cm	4.13 mg/L	0.20 NTU	818.6 mV	13.31 ft	200.00 ml/min
8/6/2024 4:21 PM	15:00	6.31 pH	22.23 °C	106.50 µS/cm	4.15 mg/L	0.40 NTU	921.3 mV	13.36 ft	200.00 ml/min
8/6/2024 4:26 PM	20:00	6.34 pH	22.06 °C	115.31 µS/cm	4.15 mg/L	0.00 NTU	1,029.2 mV	13.39 ft	200.00 ml/min
8/6/2024 4:31 PM	25:00	6.51 pH	22.05 °C	173.13 µS/cm	4.10 mg/L	0.33 NTU	1,021.2 mV	13.41 ft	200.00 ml/min
8/6/2024 4:36 PM	30:00	6.70 pH	22.09 °C	185.59 µS/cm	3.97 mg/L	0.22 NTU	880.3 mV	13.42 ft	200.00 ml/min
8/6/2024 4:41 PM	35:00	6.76 pH	22.09 °C	191.81 µS/cm	3.90 mg/L	0.17 NTU	926.0 mV	13.42 ft	200.00 ml/min
8/6/2024 4:46 PM	40:00	6.82 pH	21.94 °C	204.30 µS/cm	3.85 mg/L	0.22 NTU	885.2 mV	13.45 ft	200.00 ml/min
8/6/2024 4:51 PM	45:00	6.86 pH	21.82 °C	215.25 µS/cm	3.81 mg/L	0.00 NTU	920.9 mV	13.45 ft	200.00 ml/min
8/6/2024 4:56 PM	50:00	6.92 pH	21.93 °C	229.88 µS/cm	3.78 mg/L	0.12 NTU	891.9 mV	13.45 ft	200.00 ml/min
8/6/2024 5:01 PM	55:00	6.97 pH	21.91 °C	232.71 µS/cm	3.76 mg/L	0.00 NTU	859.7 mV	13.45 ft	200.00 ml/min
8/6/2024 5:06 PM	01:00:00	6.99 pH	21.92 °C	239.68 µS/cm	3.75 mg/L	0.11 NTU	925.9 mV	13.45 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWA-111	Grab.

Low-Flow Test Report:

Test Date / Time: 8/9/2024 9:01:31 AM

Project: GP-Plant Hammond

Operator Name: T. Kessler

Location Name: HGWA-112 Well Diameter: 2 in Casing type: PVC Screen Length: 10 ft Top of Screen: 30.15 ft Total Depth: 40.15 ft Initial Depth to Water: 12.47 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 35.15 ft Estimated Total Volume Pumped: 7 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 1.33 ft	Instrument Used: Aqua TROLL 400 Serial Number: 884189
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Test Notes:

5 bottles; Full app. III and IV.

Weather Conditions:

Sunny, 80 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	
8/9/2024 9:01 AM	00:00	6.04 pH	22.36 °C	73.05 µS/cm	1.23 mg/L	6.50 NTU	146.7 mV	13.35 ft	200.00 ml/min
8/9/2024 9:06 AM	05:00	5.77 pH	21.82 °C	71.49 µS/cm	0.99 mg/L	6.49 NTU	165.2 mV	13.55 ft	200.00 ml/min
8/9/2024 9:11 AM	10:00	5.70 pH	21.69 °C	71.15 µS/cm	0.81 mg/L	5.95 NTU	157.4 mV	13.70 ft	200.00 ml/min
8/9/2024 9:16 AM	15:00	5.67 pH	21.71 °C	71.02 µS/cm	0.72 mg/L	5.74 NTU	149.6 mV	13.75 ft	200.00 ml/min
8/9/2024 9:21 AM	20:00	5.66 pH	21.69 °C	70.84 µS/cm	0.66 mg/L	4.81 NTU	143.0 mV	13.80 ft	200.00 ml/min
8/9/2024 9:26 AM	25:00	5.65 pH	21.84 °C	70.63 µS/cm	0.65 mg/L	4.39 NTU	108.6 mV	13.80 ft	200.00 ml/min
8/9/2024 9:31 AM	30:00	5.65 pH	21.90 °C	70.77 µS/cm	0.65 mg/L	4.76 NTU	134.9 mV	13.80 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-112	Grab.

Low-Flow Test Report:

Test Date / Time: 8/8/2024 1:43:09 PM

Project: GP-Plant Hammond

Operator Name: T. Kessler

Location Name: HGWA-113 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 26.11 ft Total Depth: 36.11 ft Initial Depth to Water: 12.34 ft	Pump Type: Peristaltic Tubing Type: Poly Pump Intake From TOC: 31.11 ft Estimated Total Volume Pumped: 12.5 liter Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 8.71 ft	Instrument Used: Aqua TROLL 400 Serial Number: 884189
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Test Notes:

5 bottles; Full app. III and IV.

Weather Conditions:

Sunny, 92 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	
8/8/2024 1:43 PM	00:00	6.43 pH	27.99 °C	90.94 µS/cm	0.61 mg/L	1.23 NTU	108.8 mV	13.80 ft	200.00 ml/min
8/8/2024 1:48 PM	05:00	6.27 pH	27.83 °C	90.63 µS/cm	0.52 mg/L	0.66 NTU	97.6 mV	14.40 ft	200.00 ml/min
8/8/2024 1:53 PM	10:00	6.15 pH	26.61 °C	90.79 µS/cm	0.47 mg/L	0.59 NTU	118.9 mV	14.85 ft	200.00 ml/min
8/8/2024 1:58 PM	15:00	6.12 pH	26.57 °C	91.86 µS/cm	0.49 mg/L	0.93 NTU	115.7 mV	15.50 ft	200.00 ml/min
8/8/2024 2:03 PM	20:00	6.09 pH	27.25 °C	91.44 µS/cm	0.42 mg/L	0.15 NTU	113.2 mV	16.10 ft	200.00 ml/min
8/8/2024 2:08 PM	25:00	6.09 pH	27.94 °C	88.97 µS/cm	0.45 mg/L	1.25 NTU	110.1 mV	16.48 ft	200.00 ml/min
8/8/2024 2:13 PM	30:00	6.05 pH	27.80 °C	92.43 µS/cm	0.48 mg/L	1.04 NTU	108.5 mV	16.94 ft	200.00 ml/min
8/8/2024 2:18 PM	35:00	6.04 pH	28.45 °C	94.07 µS/cm	0.56 mg/L	1.81 NTU	107.9 mV	17.35 ft	200.00 ml/min
8/8/2024 2:23 PM	40:00	6.05 pH	28.50 °C	92.83 µS/cm	0.60 mg/L	1.72 NTU	106.0 mV	17.72 ft	200.00 ml/min
8/8/2024 2:28 PM	45:00	6.05 pH	27.76 °C	93.56 µS/cm	0.59 mg/L	1.33 NTU	102.7 mV	18.05 ft	200.00 ml/min
8/8/2024 2:33 PM	50:00	6.02 pH	28.21 °C	94.72 µS/cm	0.60 mg/L	1.55 NTU	102.5 mV	18.40 ft	200.00 ml/min
8/8/2024 2:38 PM	55:00	6.01 pH	27.07 °C	95.98 µS/cm	0.64 mg/L	1.14 NTU	99.2 mV	18.72 ft	200.00 ml/min
8/8/2024 2:43 PM	01:00:00	6.01 pH	27.73 °C	96.25 µS/cm	0.63 mg/L	1.37 NTU	80.0 mV	19.02 ft	200.00 ml/min

8/8/2024 2:48 PM	01:05:00	6.02 pH	28.64 °C	95.65 µS/cm	0.64 mg/L	0.87 NTU	95.3 mV	19.35 ft	200.00 ml/min
8/8/2024 2:53 PM	01:10:00	6.02 pH	28.06 °C	95.58 µS/cm	0.65 mg/L	0.79 NTU	94.4 mV	19.50 ft	200.00 ml/min
8/8/2024 2:58 PM	01:15:00	6.02 pH	27.53 °C	97.43 µS/cm	0.68 mg/L	2.15 NTU	93.4 mV	19.75 ft	200.00 ml/min
8/8/2024 3:03 PM	01:20:00	6.04 pH	28.35 °C	96.08 µS/cm	0.66 mg/L	1.49 NTU	91.3 mV	20.00 ft	200.00 ml/min
8/8/2024 3:08 PM	01:25:00	6.04 pH	29.36 °C	98.08 µS/cm	0.72 mg/L	0.95 NTU	75.3 mV	20.27 ft	200.00 ml/min
8/8/2024 3:13 PM	01:30:00	6.03 pH	28.21 °C	97.80 µS/cm	0.66 mg/L	0.83 NTU	87.8 mV	20.40 ft	200.00 ml/min
8/8/2024 3:18 PM	01:35:00	6.01 pH	28.68 °C	98.93 µS/cm	0.64 mg/L	0.99 NTU	88.9 mV	20.60 ft	200.00 ml/min
8/8/2024 3:23 PM	01:40:00	6.04 pH	28.29 °C	97.67 µS/cm	0.70 mg/L	1.35 NTU	86.7 mV	20.75 ft	200.00 ml/min
8/8/2024 3:28 PM	01:45:00	6.00 pH	26.96 °C	97.99 µS/cm	0.65 mg/L	2.87 NTU	86.9 mV	20.90 ft	200.00 ml/min
8/8/2024 3:33 PM	01:50:00	6.03 pH	26.21 °C	99.00 µS/cm	0.57 mg/L	1.82 NTU	86.9 mV	21.05 ft	200.00 ml/min
8/8/2024 3:38 PM	01:55:00	5.98 pH	25.11 °C	98.27 µS/cm	0.63 mg/L	1.61 NTU	87.8 mV	21.05 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-113	Grab.

Low-Flow Test Report:

Test Date / Time: 8/10/2024 9:26:59 AM

Project: GP-Plant Hammond

Operator Name: T. Kessler

Location Name: HGWC-101 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 27.94 ft Total Depth: 37.94 ft Initial Depth to Water: 13.4 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 32.94 ft Estimated Total Volume Pumped: 13 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 5.89 ft	Instrument Used: Aqua TROLL 400 Serial Number: 884189
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Test Notes:

5 bottles; Full app. III and IV.

Weather Conditions:

Sunny, 85 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	
8/10/2024 9:26 AM	00:00	5.71 pH	21.09 °C	254.71 µS/cm	0.77 mg/L	0.75 NTU	117.7 mV	15.35 ft	200.00 ml/min
8/10/2024 9:31 AM	05:00	5.45 pH	20.84 °C	254.10 µS/cm	0.81 mg/L	0.60 NTU	134.3 mV	16.05 ft	200.00 ml/min
8/10/2024 9:36 AM	10:00	5.36 pH	20.93 °C	257.79 µS/cm	0.81 mg/L	0.52 NTU	101.1 mV	16.70 ft	200.00 ml/min
8/10/2024 9:41 AM	15:00	5.32 pH	20.84 °C	272.57 µS/cm	0.68 mg/L	0.74 NTU	105.0 mV	17.25 ft	200.00 ml/min
8/10/2024 9:46 AM	20:00	5.35 pH	20.93 °C	281.98 µS/cm	0.62 mg/L	0.47 NTU	98.3 mV	17.60 ft	200.00 ml/min
8/10/2024 9:51 AM	25:00	5.34 pH	20.94 °C	287.28 µS/cm	0.56 mg/L	0.20 NTU	77.7 mV	17.90 ft	200.00 ml/min
8/10/2024 9:56 AM	30:00	5.33 pH	21.04 °C	292.25 µS/cm	0.50 mg/L	0.36 NTU	75.3 mV	18.20 ft	200.00 ml/min
8/10/2024 10:01 AM	35:00	5.36 pH	20.98 °C	294.84 µS/cm	0.47 mg/L	0.89 NTU	72.2 mV	18.45 ft	200.00 ml/min
8/10/2024 10:06 AM	40:00	5.37 pH	21.13 °C	296.78 µS/cm	0.45 mg/L	0.61 NTU	72.5 mV	18.65 ft	200.00 ml/min
8/10/2024 10:11 AM	45:00	5.37 pH	21.06 °C	298.24 µS/cm	0.43 mg/L	0.31 NTU	85.1 mV	18.85 ft	200.00 ml/min
8/10/2024 10:16 AM	50:00	5.37 pH	21.11 °C	296.38 µS/cm	0.42 mg/L	1.09 NTU	72.0 mV	19.00 ft	200.00 ml/min
8/10/2024 10:21 AM	55:00	5.37 pH	21.11 °C	295.01 µS/cm	0.46 mg/L	0.64 NTU	71.2 mV	19.15 ft	200.00 ml/min
8/10/2024 10:26 AM	01:00:00	5.38 pH	21.12 °C	296.23 µS/cm	0.47 mg/L	1.07 NTU	69.6 mV	19.29 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-101	Grab.

Low-Flow Test Report:

Test Date / Time: 8/9/2024 12:51:50 PM

Project: GP-Plant Hammond

Operator Name: T. Kessler

Location Name: HGWC-102 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 27.43 ft Total Depth: 37.43 ft Initial Depth to Water: 13.1 ft	Pump Type: Peristaltic Tubing Type: Poly Pump Intake From TOC: 32.43 ft Estimated Total Volume Pumped: 7 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.25 ft	Instrument Used: Aqua TROLL 400 Serial Number: 884189
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Test Notes:

5 bottles; Full app. III and IV.

Weather Conditions:

Sunny, 90 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	
8/9/2024 12:51 PM	00:00	5.76 pH	24.15 °C	585.97 µS/cm	1.11 mg/L	2.25 NTU	134.5 mV	13.35 ft	200.00 ml/min
8/9/2024 12:56 PM	05:00	5.70 pH	22.18 °C	575.74 µS/cm	0.66 mg/L	1.92 NTU	107.6 mV	13.35 ft	200.00 ml/min
8/9/2024 1:01 PM	10:00	5.75 pH	22.13 °C	813.15 µS/cm	0.42 mg/L	3.76 NTU	53.7 mV	13.35 ft	200.00 ml/min
8/9/2024 1:06 PM	15:00	5.84 pH	22.14 °C	842.35 µS/cm	0.52 mg/L	2.15 NTU	47.2 mV	13.35 ft	200.00 ml/min
8/9/2024 1:11 PM	20:00	5.85 pH	21.99 °C	843.11 µS/cm	0.49 mg/L	1.80 NTU	49.9 mV	13.35 ft	200.00 ml/min
8/9/2024 1:16 PM	25:00	5.85 pH	21.91 °C	855.00 µS/cm	0.33 mg/L	1.15 NTU	50.7 mV	13.35 ft	200.00 ml/min
8/9/2024 1:21 PM	30:00	5.86 pH	21.92 °C	847.08 µS/cm	0.43 mg/L	1.05 NTU	51.3 mV	13.35 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-102	Grab.

Low-Flow Test Report:

Test Date / Time: 8/9/2024 10:46:29 AM

Project: GP-Plant Hammond

Operator Name: T. Kessler

Location Name: HGWC-103 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 27.68 ft Total Depth: 37.68 ft Initial Depth to Water: 13.8 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 32.68 ft Estimated Total Volume Pumped: 7 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.2 ft	Instrument Used: Aqua TROLL 400 Serial Number: 884189
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Test Notes:

5 bottles; Full app. III and IV.

Weather Conditions:

Sunny, 85 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	
8/9/2024 10:46 AM	00:00	5.75 pH	20.73 °C	989.85 µS/cm	0.18 mg/L	10.40 NTU	100.0 mV	14.00 ft	200.00 ml/min
8/9/2024 10:51 AM	05:00	5.76 pH	20.66 °C	946.29 µS/cm	0.17 mg/L	6.72 NTU	131.5 mV	14.00 ft	200.00 ml/min
8/9/2024 10:56 AM	10:00	5.76 pH	20.54 °C	936.22 µS/cm	0.14 mg/L	5.12 NTU	132.3 mV	14.00 ft	200.00 ml/min
8/9/2024 11:01 AM	15:00	5.76 pH	20.42 °C	936.08 µS/cm	0.12 mg/L	5.11 NTU	105.8 mV	14.00 ft	200.00 ml/min
8/9/2024 11:06 AM	20:00	5.76 pH	20.60 °C	937.46 µS/cm	0.12 mg/L	4.57 NTU	107.4 mV	14.00 ft	200.00 ml/min
8/9/2024 11:11 AM	25:00	5.76 pH	20.40 °C	936.62 µS/cm	0.10 mg/L	4.21 NTU	107.6 mV	14.00 ft	200.00 ml/min
8/9/2024 11:16 AM	30:00	5.74 pH	20.30 °C	933.33 µS/cm	0.12 mg/L	3.89 NTU	111.2 mV	14.00 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-103	Grab.

Low-Flow Test Report:

Test Date / Time: 8/10/2024 11:09:21 AM

Project: GP-Plant Hammond

Operator Name: T. Kessler

Location Name: HGWC-105 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 34.67 ft Total Depth: 44.67 ft Initial Depth to Water: 18 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 39.67 ft Estimated Total Volume Pumped: 7 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.30 ft	Instrument Used: Aqua TROLL 400 Serial Number: 884189
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Test Notes:

5 bottles; Full app. III and IV.

Weather Conditions:

Sunny, 85 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	
8/10/2024 11:09 AM	00:00	6.37 pH	20.22 °C	801.53 µS/cm	0.89 mg/L	22.60 NTU	9.4 mV	18.25 ft	200.00 ml/min
8/10/2024 11:14 AM	05:00	6.38 pH	20.04 °C	816.80 µS/cm	0.55 mg/L	9.62 NTU	1.1 mV	18.30 ft	200.00 ml/min
8/10/2024 11:19 AM	10:00	6.38 pH	19.86 °C	818.38 µS/cm	0.39 mg/L	6.52 NTU	4.7 mV	18.30 ft	200.00 ml/min
8/10/2024 11:24 AM	15:00	6.37 pH	20.04 °C	819.52 µS/cm	0.28 mg/L	4.06 NTU	2.5 mV	18.30 ft	200.00 ml/min
8/10/2024 11:29 AM	20:00	6.38 pH	19.97 °C	813.05 µS/cm	0.23 mg/L	3.02 NTU	0.9 mV	18.30 ft	200.00 ml/min
8/10/2024 11:34 AM	25:00	6.38 pH	20.00 °C	809.95 µS/cm	0.20 mg/L	2.95 NTU	-0.2 mV	18.30 ft	200.00 ml/min
8/10/2024 11:39 AM	30:00	6.38 pH	20.03 °C	803.99 µS/cm	0.19 mg/L	2.16 NTU	-0.7 mV	18.30 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-105	Grab.

Low-Flow Test Report:

Test Date / Time: 8/10/2024 12:41:19 PM

Project: GP-Plant Hammond

Operator Name: T. Kessler

Location Name: HGWC-107 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 28.2 ft Total Depth: 38.2 ft Initial Depth to Water: 15.20 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 33.20 ft Estimated Total Volume Pumped: 7 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.00 ft	Instrument Used: Aqua TROLL 400 Serial Number: 884189
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Test Notes:

5 bottles; Full app. III and IV.

Weather Conditions:

Sunny, 85 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	
8/10/2024 12:41 PM	00:00	6.46 pH	22.37 °C	384.63 µS/cm	1.06 mg/L	2.18 NTU	104.5 mV	15.20 ft	200.00 ml/min
8/10/2024 12:46 PM	05:00	6.30 pH	21.82 °C	384.78 µS/cm	0.63 mg/L	3.01 NTU	94.3 mV	15.20 ft	200.00 ml/min
8/10/2024 12:51 PM	10:00	6.26 pH	21.77 °C	381.97 µS/cm	0.29 mg/L	2.66 NTU	113.3 mV	15.20 ft	200.00 ml/min
8/10/2024 12:56 PM	15:00	6.24 pH	21.69 °C	380.74 µS/cm	0.18 mg/L	2.91 NTU	87.4 mV	15.20 ft	200.00 ml/min
8/10/2024 1:01 PM	20:00	6.23 pH	21.67 °C	379.61 µS/cm	0.15 mg/L	2.73 NTU	84.4 mV	15.20 ft	200.00 ml/min
8/10/2024 1:06 PM	25:00	6.22 pH	21.74 °C	380.58 µS/cm	0.13 mg/L	2.89 NTU	83.2 mV	15.20 ft	200.00 ml/min
8/10/2024 1:11 PM	30:00	6.22 pH	21.73 °C	379.28 µS/cm	0.14 mg/L	2.28 NTU	81.6 mV	15.20 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-107	Grab.
HAM-AP4-FD-01	Grab.

Low-Flow Test Report:

Test Date / Time: 8/10/2024 10:00:08 AM

Project: HGWC-109

Operator Name: C. Cain

Location Name: HGWC-109 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 21.36 ft Total Depth: 31.36 ft Initial Depth to Water: 8.48 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 26.36 ft Estimated Total Volume Pumped: 14 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.00 ft	Instrument Used: Aqua TROLL 400 Serial Number: 1080293
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Test Notes:

5 bottles; Full app. III and IV.

Weather Conditions:

Sunny, 78 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	
8/10/2024 10:00 AM	00:00	7.08 pH	21.46 °C	352.68 µS/cm	0.56 mg/L	999.00 NTU	-91.2 mV	8.48 ft	200.00 ml/min
8/10/2024 10:05 AM	05:00	7.03 pH	20.40 °C	353.31 µS/cm	0.30 mg/L	102.50 NTU	-101.2 mV	8.48 ft	200.00 ml/min
8/10/2024 10:10 AM	10:00	7.04 pH	20.30 °C	354.18 µS/cm	0.23 mg/L	65.50 NTU	-98.9 mV	8.48 ft	200.00 ml/min
8/10/2024 10:15 AM	15:00	7.04 pH	20.21 °C	352.97 µS/cm	0.21 mg/L	43.10 NTU	-98.7 mV	8.48 ft	200.00 ml/min
8/10/2024 10:20 AM	20:00	7.04 pH	20.29 °C	353.21 µS/cm	0.19 mg/L	31.00 NTU	-98.8 mV	8.48 ft	200.00 ml/min
8/10/2024 10:25 AM	25:00	7.04 pH	20.34 °C	351.98 µS/cm	0.19 mg/L	24.10 NTU	-98.0 mV	8.48 ft	200.00 ml/min
8/10/2024 10:30 AM	30:00	7.05 pH	20.26 °C	352.04 µS/cm	0.19 mg/L	20.70 NTU	-97.6 mV	8.48 ft	200.00 ml/min
8/10/2024 10:35 AM	35:00	7.04 pH	20.31 °C	351.72 µS/cm	0.18 mg/L	16.90 NTU	-96.8 mV	8.48 ft	200.00 ml/min
8/10/2024 10:40 AM	40:00	7.04 pH	20.32 °C	351.82 µS/cm	0.18 mg/L	14.70 NTU	-96.0 mV	8.48 ft	200.00 ml/min
8/10/2024 10:45 AM	45:00	7.04 pH	20.31 °C	351.61 µS/cm	0.18 mg/L	11.80 NTU	-95.5 mV	8.48 ft	200.00 ml/min
8/10/2024 10:50 AM	50:00	7.04 pH	20.48 °C	351.20 µS/cm	0.18 mg/L	10.80 NTU	-94.7 mV	8.48 ft	200.00 ml/min
8/10/2024 10:55 AM	55:00	7.04 pH	20.54 °C	351.47 µS/cm	0.19 mg/L	10.04 NTU	-94.2 mV	8.48 ft	200.00 ml/min
8/10/2024 11:00 AM	01:00:00	7.03 pH	20.68 °C	350.22 µS/cm	0.19 mg/L	6.28 NTU	-93.2 mV	8.48 ft	200.00 ml/min

8/10/2024 11:05 AM	01:05:00	7.03 pH	20.67 °C	350.20 µS/cm	0.19 mg/L	4.23 NTU	-92.5 mV	8.48 ft	200.00 ml/min
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Samples

Sample ID:	Description:
HAM-HGWC-109	Grab.

Low-Flow Test Report:

Test Date / Time: 8/10/2024 1:25:04 PM

Project: HGWC-117A

Operator Name: C. Cain

Location Name: HGWC-117A Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 30.31 ft Total Depth: 40.31 ft Initial Depth to Water: 17.16 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 35.31 ft Estimated Total Volume Pumped: 11 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.00 ft	Instrument Used: Aqua TROLL 400 Serial Number: 1080293
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Test Notes:

5 bottles; Full app. III and IV.

Weather Conditions:

Sunny, 88 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	
8/10/2024 1:25 PM	00:00	5.65 pH	25.36 °C	225.65 µS/cm	0.38 mg/L	1.14 NTU	137.5 mV	17.16 ft	200.00 ml/min
8/10/2024 1:30 PM	05:00	5.58 pH	22.75 °C	235.17 µS/cm	0.21 mg/L	0.66 NTU	138.9 mV	17.16 ft	200.00 ml/min
8/10/2024 1:35 PM	10:00	5.59 pH	22.49 °C	237.25 µS/cm	0.19 mg/L	0.12 NTU	136.5 mV	17.16 ft	200.00 ml/min
8/10/2024 1:40 PM	15:00	5.64 pH	22.45 °C	240.37 µS/cm	0.19 mg/L	0.09 NTU	155.1 mV	17.16 ft	200.00 ml/min
8/10/2024 1:45 PM	20:00	5.79 pH	22.46 °C	251.80 µS/cm	0.18 mg/L	0.14 NTU	119.3 mV	17.16 ft	200.00 ml/min
8/10/2024 1:50 PM	25:00	5.99 pH	22.50 °C	270.89 µS/cm	0.14 mg/L	0.04 NTU	116.6 mV	17.16 ft	200.00 ml/min
8/10/2024 1:55 PM	30:00	6.19 pH	22.47 °C	297.31 µS/cm	0.14 mg/L	0.06 NTU	85.4 mV	17.16 ft	200.00 ml/min
8/10/2024 2:00 PM	35:00	6.32 pH	22.53 °C	322.50 µS/cm	0.12 mg/L	0.08 NTU	72.0 mV	17.16 ft	200.00 ml/min
8/10/2024 2:05 PM	40:00	6.43 pH	22.58 °C	336.06 µS/cm	0.10 mg/L	0.09 NTU	64.0 mV	17.16 ft	200.00 ml/min
8/10/2024 2:10 PM	45:00	6.51 pH	22.53 °C	348.88 µS/cm	0.09 mg/L	0.03 NTU	56.6 mV	17.16 ft	200.00 ml/min
8/10/2024 2:15 PM	50:00	6.57 pH	22.55 °C	357.12 µS/cm	0.09 mg/L	0.07 NTU	53.6 mV	17.16 ft	200.00 ml/min
8/10/2024 2:20 PM	55:00	6.61 pH	22.55 °C	363.98 µS/cm	0.08 mg/L	0.04 NTU	51.4 mV	17.16 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-117A	Grab.

Low-Flow Test Report:

Test Date / Time: 8/9/2024 3:03:28 PM

Project: GP-Plant Hammond

Operator Name: T. Kessler

Location Name: HGWC-118 Well Diameter: 2 in Casing Type: PVC Screen Length: 1010 ft Top of Screen: 30.91 ft Total Depth: 40.91 ft Initial Depth to Water: 13.45 ft	Pump Type: Peristaltic Tubing Type: Poly Pump Intake From TOC: 35.91 ft Estimated Total Volume Pumped: 7 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.35 ft	Instrument Used: Aqua TROLL 400 Serial Number: 884189
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Test Notes:

5 bottles; Full app. III and IV.

Weather Conditions:

Sunny, 90 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	
8/9/2024 3:03 PM	00:00	7.14 pH	24.38 °C	470.37 µS/cm	0.68 mg/L	1.56 NTU	46.4 mV	13.80 ft	200.00 ml/min
8/9/2024 3:08 PM	05:00	7.13 pH	23.79 °C	465.71 µS/cm	0.63 mg/L	2.34 NTU	39.8 mV	13.80 ft	200.00 ml/min
8/9/2024 3:13 PM	10:00	7.12 pH	23.52 °C	464.16 µS/cm	0.61 mg/L	1.09 NTU	38.9 mV	13.80 ft	200.00 ml/min
8/9/2024 3:18 PM	15:00	7.11 pH	23.01 °C	461.83 µS/cm	0.53 mg/L	1.22 NTU	37.7 mV	13.80 ft	200.00 ml/min
8/9/2024 3:23 PM	20:00	7.10 pH	23.27 °C	463.25 µS/cm	0.48 mg/L	0.97 NTU	37.4 mV	13.80 ft	200.00 ml/min
8/9/2024 3:28 PM	25:00	7.09 pH	23.06 °C	463.06 µS/cm	0.39 mg/L	1.21 NTU	37.4 mV	13.80 ft	200.00 ml/min
8/9/2024 3:33 PM	30:00	7.07 pH	22.94 °C	463.02 µS/cm	0.34 mg/L	0.87 NTU	37.1 mV	13.80 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-118	Grab.
HAM-AP4-FD-02	Grab.

February 2025

Low-Flow Test Report:

Test Date / Time: 2/12/2025 3:56:35 PM

Project: GP-Plant Hammond

Operator Name: Z. Webb

Location Name: HGWA-47 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 33.74 ft Total Depth: 43.74 ft Initial Depth to Water: 6.19 ft	Pump Type: Peri Tubing Type: Polyethylene Pump Intake From TOC: 38.74 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: 883530
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Test Notes:

Eight bottles: Full App. III & IV and Major Ions.

Weather Conditions:

Rain, 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	
2/12/2025 3:56 PM	00:00	7.58 pH	14.95 °C	384.64 µS/cm	0.30 mg/L	3.57 NTU	48.9 mV	6.19 ft	200.00 ml/min
2/12/2025 4:01 PM	05:00	7.46 pH	15.88 °C	382.84 µS/cm	0.18 mg/L	2.25 NTU	380.1 mV	6.24 ft	200.00 ml/min
2/12/2025 4:06 PM	10:00	7.42 pH	15.94 °C	390.17 µS/cm	0.14 mg/L	3.08 NTU	343.9 mV	6.24 ft	200.00 ml/min
2/12/2025 4:11 PM	15:00	7.41 pH	16.03 °C	384.66 µS/cm	0.12 mg/L	1.82 NTU	356.4 mV	6.24 ft	200.00 ml/min
2/12/2025 4:16 PM	20:00	7.40 pH	16.06 °C	386.44 µS/cm	0.11 mg/L	1.98 NTU	365.2 mV	6.24 ft	200.00 ml/min
2/12/2025 4:21 PM	25:00	7.40 pH	16.20 °C	385.42 µS/cm	0.11 mg/L	1.70 NTU	373.1 mV	6.24 ft	200.00 ml/min
2/12/2025 4:26 PM	30:00	7.40 pH	16.26 °C	385.53 µS/cm	0.10 mg/L	1.29 NTU	381.8 mV	6.24 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-47	Grab.

Low-Flow Test Report:

Test Date / Time: 2/12/2025 3:56:59 PM

Project: GP-Plant Hammond

Operator Name: T. Kessler

Location Name: HGWA-48D Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 62.97 ft Total Depth: 72.97 ft Initial Depth to Water: 6.11 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 67.97 ft Estimated Total Volume Pumped: 13 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 6.29 ft	Instrument Used: Aqua TROLL 400 Serial Number: 989630
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Test Notes:

Eight bottles: Full App. III & IV and Major Ions.

Weather Conditions:

Rainy, 43 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	
2/12/2025 3:56 PM	00:00	7.42 pH	16.46 °C	409.90 µS/cm	0.61 mg/L	4.99 NTU	-86.9 mV	7.56 ft	200.00 ml/min
2/12/2025 4:01 PM	05:00	7.43 pH	16.45 °C	409.54 µS/cm	0.46 mg/L	2.80 NTU	-92.1 mV	9.80 ft	200.00 ml/min
2/12/2025 4:06 PM	10:00	7.44 pH	16.51 °C	413.22 µS/cm	0.61 mg/L	1.47 NTU	-114.2 mV	10.10 ft	200.00 ml/min
2/12/2025 4:11 PM	15:00	7.44 pH	16.54 °C	367.61 µS/cm	0.56 mg/L	1.77 NTU	-114.8 mV	10.55 ft	200.00 ml/min
2/12/2025 4:16 PM	20:00	7.46 pH	16.59 °C	411.83 µS/cm	0.55 mg/L	1.46 NTU	-115.5 mV	10.95 ft	200.00 ml/min
2/12/2025 4:21 PM	25:00	7.46 pH	16.69 °C	412.10 µS/cm	0.59 mg/L	0.70 NTU	-115.5 mV	11.40 ft	200.00 ml/min
2/12/2025 4:26 PM	30:00	7.47 pH	16.74 °C	411.79 µS/cm	0.51 mg/L	0.55 NTU	-95.1 mV	11.65 ft	200.00 ml/min
2/12/2025 4:31 PM	35:00	7.46 pH	16.80 °C	376.12 µS/cm	0.61 mg/L	0.77 NTU	-112.5 mV	11.85 ft	200.00 ml/min
2/12/2025 4:36 PM	40:00	7.47 pH	16.82 °C	410.69 µS/cm	0.66 mg/L	11.95 NTU	-111.8 mV	11.85 ft	200.00 ml/min
2/12/2025 4:41 PM	45:00	7.48 pH	16.88 °C	363.11 µS/cm	0.55 mg/L	0.63 NTU	-90.7 mV	12.05 ft	200.00 ml/min
2/12/2025 4:46 PM	50:00	7.48 pH	16.89 °C	410.11 µS/cm	0.28 mg/L	0.64 NTU	-109.5 mV	12.20 ft	200.00 ml/min
2/12/2025 4:51 PM	55:00	7.47 pH	16.93 °C	410.04 µS/cm	0.22 mg/L	0.22 NTU	-107.8 mV	12.35 ft	200.00 ml/min
2/12/2025 4:56 PM	01:00:00	7.48 pH	16.96 °C	410.16 µS/cm	0.35 mg/L	0.38 NTU	-107.9 mV	12.40 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-48D	Grab.

Low-Flow Test Report:

Test Date / Time: 2/13/2025 9:04:01 AM

Project: GP-Plant Hammond

Operator Name: T. Kessler

Location Name: HGWA-111 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 33.67 ft Total Depth: 43.67 ft Initial Depth to Water: 10.7 ft	Pump Type: Peristaltic Tubing Type: Poly Pump Intake From TOC: 38.67 ft Estimated Total Volume Pumped: 10 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.7 ft	Instrument Used: Aqua TROLL 400 Serial Number: 989630
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Test Notes:

Eight bottles: Full App. III & 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	
2/13/2025 9:04 AM	00:00	6.72 pH	16.74 °C	234.59 µS/cm	4.21 mg/L	1.14 NTU	127.1 mV	11.30 ft	200.00 ml/min
2/13/2025 9:09 AM	05:00	6.71 pH	16.90 °C	229.19 µS/cm	4.09 mg/L	1.39 NTU	106.2 mV	11.40 ft	200.00 ml/min
2/13/2025 9:14 AM	10:00	6.73 pH	16.94 °C	238.09 µS/cm	4.06 mg/L	1.07 NTU	119.5 mV	11.40 ft	200.00 ml/min
2/13/2025 9:19 AM	15:00	6.76 pH	17.06 °C	242.55 µS/cm	4.01 mg/L	1.82 NTU	89.3 mV	11.40 ft	200.00 ml/min
2/13/2025 9:24 AM	20:00	6.78 pH	17.23 °C	246.39 µS/cm	3.97 mg/L	0.80 NTU	85.4 mV	11.40 ft	200.00 ml/min
2/13/2025 9:29 AM	25:00	6.82 pH	17.33 °C	256.87 µS/cm	3.92 mg/L	1.09 NTU	84.7 mV	11.40 ft	200.00 ml/min
2/13/2025 9:34 AM	30:00	6.83 pH	17.18 °C	164.17 µS/cm	3.84 mg/L	0.73 NTU	84.5 mV	11.40 ft	200.00 ml/min
2/13/2025 9:39 AM	35:00	6.87 pH	17.13 °C	270.34 µS/cm	3.83 mg/L	0.62 NTU	84.2 mV	11.40 ft	200.00 ml/min
2/13/2025 9:44 AM	40:00	6.89 pH	17.29 °C	278.64 µS/cm	3.80 mg/L	0.60 NTU	83.0 mV	11.40 ft	200.00 ml/min
2/13/2025 9:49 AM	45:00	6.92 pH	17.47 °C	283.79 µS/cm	3.83 mg/L	0.52 NTU	82.8 mV	11.40 ft	200.00 ml/min

Samples

Sample ID:	Description:
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HAM-HGWA-111

Grab.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/13/2025 3:22:28 PM

Project: GP-Plant Hammond

Operator Name: T. Kessler

Location Name: HGWA-112 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 30.15 ft Total Depth: 40.15 ft Initial Depth to Water: 8.5 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 35.15 ft Estimated Total Volume Pumped: 7 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 1.7 ft	Instrument Used: Aqua TROLL 400 Serial Number: 989630
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Test Notes:

Eight bottles: Full App. III & IV and Major Ions.

Weather Conditions:

Sunny, 48 degrees.

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	
2/13/2025 3:22 PM	00:00	5.70 pH	17.31 °C	79.24 µS/cm	1.64 mg/L	12.90 NTU	146.8 mV	9.65 ft	200.00 ml/min
2/13/2025 3:27 PM	05:00	5.67 pH	18.01 °C	78.85 µS/cm	1.09 mg/L	11.20 NTU	142.8 mV	9.65 ft	200.00 ml/min
2/13/2025 3:32 PM	10:00	5.64 pH	17.41 °C	78.69 µS/cm	0.83 mg/L	8.93 NTU	155.2 mV	10.00 ft	200.00 ml/min
2/13/2025 3:37 PM	15:00	5.65 pH	17.55 °C	78.48 µS/cm	0.73 mg/L	6.62 NTU	187.2 mV	10.10 ft	200.00 ml/min
2/13/2025 3:42 PM	20:00	5.63 pH	17.65 °C	78.54 µS/cm	0.68 mg/L	6.09 NTU	191.6 mV	10.20 ft	200.00 ml/min
2/13/2025 3:47 PM	25:00	5.63 pH	17.79 °C	78.50 µS/cm	0.66 mg/L	4.48 NTU	194.1 mV	10.20 ft	200.00 ml/min
2/13/2025 3:52 PM	30:00	5.64 pH	17.69 °C	78.34 µS/cm	0.63 mg/L	4.21 NTU	194.8 mV	10.20 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-112	Grab.

Low-Flow Test Report:

Test Date / Time: 2/13/2025 11:11:20 AM

Project: GP-Plant Hammond

Operator Name: T. Kessler

Location Name: HGWA-113 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 26.11 ft Total Depth: 36.11 ft Initial Depth to Water: 8.87 ft	Pump Type: Peristaltic Tubing Type: Poly Pump Intake From TOC: 31.11 ft Estimated Total Volume Pumped: 14 liter Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 9.82 ft	Instrument Used: Aqua TROLL 400 Serial Number: 989630
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Test Notes:

Eight bottles: Full App. III & 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	
2/13/2025 11:11 AM	00:00	6.28 pH	14.13 °C	100.45 µS/cm	1.99 mg/L	0.62 NTU	92.7 mV	10.00 ft	200.00 ml/min
2/13/2025 11:16 AM	05:00	6.20 pH	13.31 °C	101.10 µS/cm	1.95 mg/L	1.00 NTU	89.3 mV	10.48 ft	200.00 ml/min
2/13/2025 11:21 AM	10:00	6.18 pH	13.58 °C	101.44 µS/cm	1.92 mg/L	0.63 NTU	119.2 mV	10.80 ft	200.00 ml/min
2/13/2025 11:26 AM	15:00	6.19 pH	13.76 °C	100.82 µS/cm	1.87 mg/L	0.51 NTU	120.9 mV	11.20 ft	200.00 ml/min
2/13/2025 11:31 AM	20:00	6.16 pH	13.44 °C	101.54 µS/cm	1.86 mg/L	0.48 NTU	123.5 mV	11.80 ft	200.00 ml/min
2/13/2025 11:36 AM	25:00	6.16 pH	13.35 °C	102.20 µS/cm	1.86 mg/L	0.72 NTU	124.6 mV	12.40 ft	200.00 ml/min
2/13/2025 11:41 AM	30:00	6.16 pH	13.72 °C	102.43 µS/cm	1.84 mg/L	0.57 NTU	124.6 mV	12.80 ft	200.00 ml/min
2/13/2025 11:46 AM	35:00	6.16 pH	13.65 °C	101.89 µS/cm	1.82 mg/L	0.55 NTU	123.7 mV	13.25 ft	200.00 ml/min
2/13/2025 11:51 AM	40:00	6.16 pH	13.67 °C	102.20 µS/cm	1.82 mg/L	0.47 NTU	123.6 mV	13.62 ft	200.00 ml/min
2/13/2025 11:56 AM	45:00	6.16 pH	13.95 °C	102.70 µS/cm	1.81 mg/L	0.99 NTU	123.2 mV	14.00 ft	200.00 ml/min
2/13/2025 12:01 PM	50:00	6.16 pH	14.29 °C	102.47 µS/cm	1.76 mg/L	0.81 NTU	124.5 mV	14.45 ft	200.00 ml/min
2/13/2025 12:06 PM	55:00	6.15 pH	14.46 °C	103.72 µS/cm	1.79 mg/L	1.17 NTU	125.3 mV	14.80 ft	200.00 ml/min
2/13/2025 12:11 PM	01:00:00	6.15 pH	14.31 °C	103.21 µS/cm	1.77 mg/L	0.99 NTU	125.7 mV	15.15 ft	200.00 ml/min

2/13/2025 12:16 PM	01:05:00	6.15 pH	14.03 °C	103.50 µS/cm	1.77 mg/L	1.29 NTU	126.3 mV	15.54 ft	200.00 ml/min
2/13/2025 12:21 PM	01:10:00	6.15 pH	14.44 °C	103.85 µS/cm	1.76 mg/L	1.86 NTU	126.4 mV	15.85 ft	200.00 ml/min
2/13/2025 12:26 PM	01:15:00	6.16 pH	14.98 °C	104.11 µS/cm	1.73 mg/L	1.14 NTU	126.4 mV	16.14 ft	200.00 ml/min
2/13/2025 12:31 PM	01:20:00	6.15 pH	14.89 °C	104.58 µS/cm	1.73 mg/L	1.21 NTU	128.4 mV	16.45 ft	200.00 ml/min
2/13/2025 12:36 PM	01:25:00	6.15 pH	15.30 °C	104.63 µS/cm	1.73 mg/L	1.01 NTU	128.0 mV	16.75 ft	200.00 ml/min
2/13/2025 12:41 PM	01:30:00	6.14 pH	15.19 °C	105.46 µS/cm	1.74 mg/L	1.63 NTU	129.3 mV	17.05 ft	200.00 ml/min
2/13/2025 12:46 PM	01:35:00	6.15 pH	15.21 °C	105.44 µS/cm	1.74 mg/L	1.71 NTU	130.9 mV	17.30 ft	200.00 ml/min
2/13/2025 12:51 PM	01:40:00	6.15 pH	14.96 °C	105.53 µS/cm	1.71 mg/L	1.30 NTU	131.5 mV	17.53 ft	200.00 ml/min
2/13/2025 12:56 PM	01:45:00	6.13 pH	15.16 °C	105.31 µS/cm	1.69 mg/L	1.25 NTU	131.9 mV	17.72 ft	200.00 ml/min
2/13/2025 1:01 PM	01:50:00	6.15 pH	15.07 °C	105.19 µS/cm	1.72 mg/L	1.31 NTU	131.8 mV	17.90 ft	200.00 ml/min
2/13/2025 1:06 PM	01:55:00	6.15 pH	15.12 °C	105.77 µS/cm	1.70 mg/L	1.21 NTU	134.1 mV	18.10 ft	200.00 ml/min
2/13/2025 1:11 PM	02:00:00	6.15 pH	15.30 °C	105.94 µS/cm	1.69 mg/L	1.47 NTU	134.4 mV	18.30 ft	200.00 ml/min
2/13/2025 1:16 PM	02:05:00	6.14 pH	15.21 °C	105.61 µS/cm	1.67 mg/L	1.51 NTU	134.4 mV	18.45 ft	200.00 ml/min
2/13/2025 1:21 PM	02:10:00	6.15 pH	15.39 °C	105.94 µS/cm	1.69 mg/L	1.72 NTU	134.8 mV	18.58 ft	200.00 ml/min
2/13/2025 1:26 PM	02:15:00	6.15 pH	15.57 °C	106.21 µS/cm	1.68 mg/L	1.72 NTU	134.2 mV	18.69 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-113	Grab.

Low-Flow Test Report:

Test Date / Time: 2/15/2025 9:23:12 AM

Project: GP-Plant Hammond

Operator Name: T. Kessler

Location Name: HGWC-101 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 27.94 ft Total Depth: 37.94 ft Initial Depth to Water: 9.6 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 32.94 ft Estimated Total Volume Pumped: 14 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 5.85 ft	Instrument Used: Aqua TROLL 400 Serial Number: 989630
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Test Notes:

Eight bottles: Full app. III and IV and Major Ions.

Weather Conditions:

Rainy, 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	
2/15/2025 9:23 AM	00:00	5.45 pH	15.66 °C	301.91 µS/cm	1.09 mg/L	6.45 NTU	122.6 mV	11.10 ft	200.00 ml/min
2/15/2025 9:28 AM	05:00	5.46 pH	15.79 °C	281.41 µS/cm	2.85 mg/L	4.13 NTU	118.0 mV	12.10 ft	200.00 ml/min
2/15/2025 9:33 AM	10:00	5.45 pH	15.79 °C	286.72 µS/cm	2.78 mg/L	2.76 NTU	138.8 mV	12.70 ft	200.00 ml/min
2/15/2025 9:38 AM	15:00	5.42 pH	15.80 °C	298.15 µS/cm	2.48 mg/L	1.81 NTU	110.0 mV	13.25 ft	200.00 ml/min
2/15/2025 9:43 AM	20:00	5.46 pH	15.70 °C	317.02 µS/cm	2.21 mg/L	1.14 NTU	90.6 mV	13.65 ft	200.00 ml/min
2/15/2025 9:48 AM	25:00	5.50 pH	15.73 °C	331.49 µS/cm	1.98 mg/L	2.10 NTU	80.2 mV	13.90 ft	200.00 ml/min
2/15/2025 9:53 AM	30:00	5.53 pH	15.80 °C	341.33 µS/cm	1.84 mg/L	0.57 NTU	74.3 mV	14.35 ft	200.00 ml/min
2/15/2025 9:58 AM	35:00	5.52 pH	15.76 °C	344.44 µS/cm	1.69 mg/L	0.39 NTU	73.7 mV	14.65 ft	200.00 ml/min
2/15/2025 10:03 AM	40:00	5.53 pH	15.63 °C	347.17 µS/cm	1.54 mg/L	0.42 NTU	72.4 mV	14.85 ft	200.00 ml/min
2/15/2025 10:08 AM	45:00	5.53 pH	15.56 °C	349.14 µS/cm	1.40 mg/L	0.31 NTU	71.1 mV	15.00 ft	200.00 ml/min
2/15/2025 10:13 AM	50:00	5.52 pH	15.61 °C	350.19 µS/cm	1.37 mg/L	0.23 NTU	70.5 mV	15.15 ft	200.00 ml/min
2/15/2025 10:18 AM	55:00	5.52 pH	15.68 °C	349.59 µS/cm	1.25 mg/L	0.32 NTU	70.6 mV	15.30 ft	200.00 ml/min
2/15/2025 10:23 AM	01:00:00	5.52 pH	15.84 °C	349.72 µS/cm	1.14 mg/L	0.36 NTU	69.7 mV	15.40 ft	200.00 ml/min

2/15/2025 10:28 AM	01:05:00	5.50 pH	15.90 °C	347.50 µS/cm	1.08 mg/L	0.32 NTU	70.8 mV	15.45 ft	200.00 ml/min
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Samples

Sample ID:	Description:
HAM-HGWC-101	Grab.

Low-Flow Test Report:

Test Date / Time: 2/15/2025 11:13:53 AM

Project: GP-Plant Hammond

Operator Name: T. Kessler

Location Name: HGWC-102 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 27.43 ft Total Depth: 37.43 ft Initial Depth to Water: 5.91 ft	Pump Type: Peristaltic Tubing Type: Poly Pump Intake From TOC: 32.43 ft Estimated Total Volume Pumped: 7 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.29 ft	Instrument Used: Aqua TROLL 400 Serial Number: 989630
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Test Notes:

Eight bottles: Full App. III & IV and Major Ions.

Weather Conditions:

Rainy, 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	
2/15/2025 11:13 AM	00:00	5.90 pH	14.61 °C	1,029.4 µS/cm	0.41 mg/L	1.16 NTU	94.3 mV	6.18 ft	200.00 ml/min
2/15/2025 11:18 AM	05:00	5.90 pH	14.58 °C	1,010.6 µS/cm	0.21 mg/L	0.89 NTU	114.1 mV	6.20 ft	200.00 ml/min
2/15/2025 11:23 AM	10:00	5.90 pH	14.67 °C	1,003.3 µS/cm	0.14 mg/L	1.88 NTU	85.1 mV	6.20 ft	200.00 ml/min
2/15/2025 11:28 AM	15:00	5.90 pH	14.50 °C	1,002.1 µS/cm	0.12 mg/L	1.37 NTU	76.1 mV	6.20 ft	200.00 ml/min
2/15/2025 11:33 AM	20:00	5.90 pH	14.74 °C	1,003.2 µS/cm	0.11 mg/L	1.83 NTU	73.1 mV	6.20 ft	200.00 ml/min
2/15/2025 11:38 AM	25:00	5.90 pH	14.89 °C	1,003.9 µS/cm	0.10 mg/L	0.31 NTU	73.2 mV	6.20 ft	200.00 ml/min
2/15/2025 11:43 AM	30:00	5.90 pH	14.96 °C	1,004.1 µS/cm	0.09 mg/L	1.00 NTU	71.5 mV	6.20 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-102	Grab.
HAM-AP4-FD-01	Grab.

Low-Flow Test Report:

Test Date / Time: 2/15/2025 1:37:53 PM

Project: GP-Plant Hammond

Operator Name: T. Kessler

<p>Location Name: HGWC-103 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 27.68 ft Total Depth: 37.68 ft Initial Depth to Water: 11.44 ft</p>	<p>Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 32.68 ft Estimated Total Volume Pumped: 31 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.26 ft</p>	<p>Instrument Used: Aqua TROLL 400 Serial Number: 989630</p>
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Test Notes:

Eight bottles: Full App. III & 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	
2/15/2025 1:37 PM	00:00	5.75 pH	15.68 °C	1,114.0 µS/cm	0.68 mg/L	14.70 NTU	82.8 mV	11.70 ft	200.00 ml/min
2/15/2025 1:42 PM	05:00	5.73 pH	15.83 °C	1,102.6 µS/cm	0.36 mg/L	7.92 NTU	109.5 mV	11.70 ft	200.00 ml/min
2/15/2025 1:47 PM	10:00	5.73 pH	15.99 °C	1,105.9 µS/cm	0.35 mg/L	6.11 NTU	89.1 mV	11.70 ft	200.00 ml/min
2/15/2025 1:52 PM	15:00	5.73 pH	16.02 °C	1,104.0 µS/cm	0.35 mg/L	11.70 NTU	90.3 mV	11.70 ft	200.00 ml/min
2/15/2025 1:57 PM	20:00	5.73 pH	16.06 °C	1,108.5 µS/cm	0.28 mg/L	8.91 NTU	90.6 mV	11.70 ft	200.00 ml/min
2/15/2025 2:02 PM	25:00	5.73 pH	16.06 °C	1,110.6 µS/cm	0.22 mg/L	13.80 NTU	93.9 mV	11.70 ft	200.00 ml/min
2/15/2025 2:07 PM	30:00	5.73 pH	16.08 °C	1,109.1 µS/cm	0.20 mg/L	15.10 NTU	95.1 mV	11.70 ft	200.00 ml/min
2/15/2025 2:12 PM	35:00	5.73 pH	16.11 °C	1,112.0 µS/cm	0.16 mg/L	16.80 NTU	96.2 mV	11.70 ft	200.00 ml/min
2/15/2025 2:17 PM	40:00	5.73 pH	16.11 °C	1,112.1 µS/cm	0.15 mg/L	15.30 NTU	97.6 mV	11.70 ft	200.00 ml/min
2/15/2025 2:22 PM	45:00	5.73 pH	16.19 °C	1,110.9 µS/cm	0.14 mg/L	12.50 NTU	97.9 mV	11.70 ft	200.00 ml/min
2/15/2025 2:27 PM	50:00	5.73 pH	16.22 °C	1,112.9 µS/cm	0.14 mg/L	10.10 NTU	97.9 mV	11.70 ft	200.00 ml/min
2/15/2025 2:32 PM	55:00	5.72 pH	16.29 °C	1,111.9 µS/cm	0.14 mg/L	13.80 NTU	99.7 mV	11.70 ft	200.00 ml/min
2/15/2025 2:37 PM	01:00:00	5.73 pH	16.29 °C	1,112.2 µS/cm	0.13 mg/L	12.30 NTU	100.2 mV	11.70 ft	200.00 ml/min

2/15/2025 2:42 PM	01:05:00	5.73 pH	16.22 °C	1,112.4 µS/cm	0.13 mg/L	14.10 NTU	100.9 mV	11.70 ft	200.00 ml/min
2/15/2025 2:47 PM	01:10:00	5.72 pH	16.28 °C	1,113.4 µS/cm	0.12 mg/L	13.80 NTU	102.0 mV	11.70 ft	200.00 ml/min
2/15/2025 2:52 PM	01:15:00	5.73 pH	16.29 °C	1,115.2 µS/cm	0.13 mg/L	12.40 NTU	102.3 mV	11.70 ft	200.00 ml/min
2/15/2025 2:57 PM	01:20:00	5.73 pH	16.24 °C	1,113.0 µS/cm	0.12 mg/L	11.90 NTU	102.4 mV	11.70 ft	200.00 ml/min
2/15/2025 3:02 PM	01:25:00	5.72 pH	16.27 °C	1,113.9 µS/cm	0.12 mg/L	10.50 NTU	103.5 mV	11.70 ft	200.00 ml/min
2/15/2025 3:07 PM	01:30:00	5.73 pH	16.28 °C	1,112.3 µS/cm	0.11 mg/L	9.88 NTU	104.0 mV	11.70 ft	200.00 ml/min
2/15/2025 3:12 PM	01:35:00	5.73 pH	16.23 °C	1,113.0 µS/cm	0.11 mg/L	9.72 NTU	103.8 mV	11.70 ft	200.00 ml/min
2/15/2025 3:17 PM	01:40:00	5.72 pH	16.28 °C	1,114.8 µS/cm	0.11 mg/L	11.40 NTU	104.9 mV	11.70 ft	200.00 ml/min
2/15/2025 3:22 PM	01:45:00	5.73 pH	16.15 °C	1,111.9 µS/cm	0.11 mg/L	10.30 NTU	105.6 mV	11.70 ft	200.00 ml/min
2/15/2025 3:27 PM	01:50:00	5.73 pH	16.12 °C	1,114.8 µS/cm	0.10 mg/L	9.94 NTU	105.6 mV	11.70 ft	200.00 ml/min
2/15/2025 3:32 PM	01:55:00	5.73 pH	16.14 °C	1,113.9 µS/cm	0.11 mg/L	9.03 NTU	105.7 mV	11.70 ft	200.00 ml/min
2/15/2025 3:37 PM	02:00:00	5.73 pH	16.11 °C	1,115.0 µS/cm	0.11 mg/L	9.39 NTU	107.1 mV	11.70 ft	200.00 ml/min
2/15/2025 3:42 PM	02:05:00	5.73 pH	16.04 °C	1,114.0 µS/cm	0.10 mg/L	8.50 NTU	106.4 mV	11.70 ft	200.00 ml/min
2/15/2025 3:47 PM	02:10:00	5.73 pH	16.00 °C	1,114.4 µS/cm	0.10 mg/L	8.75 NTU	106.5 mV	11.70 ft	200.00 ml/min
2/15/2025 3:52 PM	02:15:00	5.73 pH	16.01 °C	1,114.5 µS/cm	0.10 mg/L	7.91 NTU	107.9 mV	11.70 ft	200.00 ml/min
2/15/2025 3:57 PM	02:20:00	5.73 pH	16.06 °C	1,115.4 µS/cm	0.10 mg/L	7.68 NTU	108.2 mV	11.70 ft	200.00 ml/min
2/15/2025 4:02 PM	02:25:00	5.73 pH	16.15 °C	1,115.8 µS/cm	0.10 mg/L	5.05 NTU	107.5 mV	11.70 ft	200.00 ml/min
2/15/2025 4:07 PM	02:30:00	5.73 pH	16.15 °C	1,114.9 µS/cm	0.10 mg/L	4.84 NTU	109.2 mV	11.70 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-103	Grab.

Low-Flow Test Report:

Test Date / Time: 2/16/2025 8:54:50 AM

Project: GP-Plant Hammond

Operator Name: T. Kessler

Location Name: HGWC-105 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 34.67 ft Total Depth: 44.67 ft Initial Depth to Water: 11.93 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 39.67 ft Estimated Total Volume Pumped: 7 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.29 ft	Instrument Used: Aqua TROLL 400 Serial Number: 989630
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Test Notes:

Eight bottles: Full App. III & 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	
2/16/2025 8:54 AM	00:00	6.51 pH	15.34 °C	897.23 µS/cm	1.02 mg/L	37.70 NTU	7.5 mV	12.22 ft	200.00 ml/min
2/16/2025 8:59 AM	05:00	6.47 pH	15.40 °C	918.39 µS/cm	0.44 mg/L	14.50 NTU	5.1 mV	12.22 ft	200.00 ml/min
2/16/2025 9:04 AM	10:00	6.48 pH	15.57 °C	925.77 µS/cm	0.37 mg/L	13.20 NTU	7.3 mV	12.22 ft	200.00 ml/min
2/16/2025 9:09 AM	15:00	6.47 pH	15.57 °C	928.93 µS/cm	0.31 mg/L	5.07 NTU	7.8 mV	12.22 ft	200.00 ml/min
2/16/2025 9:14 AM	20:00	6.48 pH	15.57 °C	929.11 µS/cm	0.27 mg/L	5.02 NTU	4.8 mV	12.22 ft	200.00 ml/min
2/16/2025 9:19 AM	25:00	6.47 pH	15.61 °C	927.11 µS/cm	0.23 mg/L	2.68 NTU	5.9 mV	12.22 ft	200.00 ml/min
2/16/2025 9:24 AM	30:00	6.46 pH	15.62 °C	923.82 µS/cm	0.19 mg/L	2.55 NTU	5.2 mV	12.22 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-105	Grab.

Low-Flow Test Report:

Test Date / Time: 2/16/2025 10:19:05 AM

Project: GP-Plant Hammond

Operator Name: T. Kessler

Location Name: HGWC-107 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 28.2 ft Total Depth: 38.2 ft Initial Depth to Water: 9.52 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 33.2 ft Estimated Total Volume Pumped: 20 liters Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0 ft	Instrument Used: Aqua TROLL 400 Serial Number: 989630
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Test Notes:

Eight bottles: Full App. III & IV and Major Ions.

Weather Conditions:

Cloudy, 49 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	
2/16/2025 10:19 AM	00:00	6.34 pH	15.83 °C	417.24 µS/cm	0.65 mg/L	5.29 NTU	92.0 mV	9.52 ft	200.00 ml/min
2/16/2025 10:24 AM	05:00	6.30 pH	16.11 °C	415.03 µS/cm	0.68 mg/L	4.91 NTU	118.7 mV	9.52 ft	200.00 ml/min
2/16/2025 10:29 AM	10:00	6.29 pH	16.11 °C	416.30 µS/cm	0.33 mg/L	6.66 NTU	92.1 mV	9.52 ft	200.00 ml/min
2/16/2025 10:34 AM	15:00	6.27 pH	16.24 °C	416.84 µS/cm	0.23 mg/L	5.81 NTU	91.7 mV	9.52 ft	200.00 ml/min
2/16/2025 10:39 AM	20:00	6.28 pH	16.33 °C	419.54 µS/cm	0.18 mg/L	40.20 NTU	89.8 mV	9.52 ft	200.00 ml/min
2/16/2025 10:44 AM	25:00	6.29 pH	16.43 °C	420.86 µS/cm	0.15 mg/L	50.00 NTU	87.2 mV	9.52 ft	200.00 ml/min
2/16/2025 10:49 AM	30:00	6.28 pH	16.06 °C	418.76 µS/cm	0.15 mg/L	43.70 NTU	86.4 mV	9.52 ft	200.00 ml/min
2/16/2025 10:54 AM	35:00	6.29 pH	16.01 °C	418.70 µS/cm	0.17 mg/L	45.10 NTU	85.2 mV	9.52 ft	200.00 ml/min
2/16/2025 10:59 AM	40:00	6.28 pH	15.98 °C	418.64 µS/cm	0.16 mg/L	36.10 NTU	84.8 mV	9.52 ft	200.00 ml/min
2/16/2025 11:04 AM	45:00	6.27 pH	16.33 °C	418.87 µS/cm	0.16 mg/L	31.50 NTU	85.2 mV	9.52 ft	200.00 ml/min
2/16/2025 11:09 AM	50:00	6.28 pH	16.20 °C	418.48 µS/cm	0.16 mg/L	25.30 NTU	85.2 mV	9.52 ft	200.00 ml/min
2/16/2025 11:14 AM	55:00	6.28 pH	16.15 °C	417.43 µS/cm	0.16 mg/L	19.50 NTU	85.6 mV	9.52 ft	200.00 ml/min
2/16/2025 11:19 AM	01:00:00	6.27 pH	16.12 °C	417.40 µS/cm	0.15 mg/L	15.80 NTU	85.9 mV	9.52 ft	200.00 ml/min

2/16/2025 11:24 AM	01:05:00	6.28 pH	16.06 °C	416.89 µS/cm	0.16 mg/L	15.80 NTU	85.8 mV	9.52 ft	200.00 ml/min
2/16/2025 11:29 AM	01:10:00	6.28 pH	15.97 °C	416.94 µS/cm	0.15 mg/L	11.00 NTU	85.5 mV	9.52 ft	200.00 ml/min
2/16/2025 11:34 AM	01:15:00	6.27 pH	15.97 °C	416.72 µS/cm	0.15 mg/L	9.00 NTU	86.2 mV	9.52 ft	200.00 ml/min
2/16/2025 11:39 AM	01:20:00	6.28 pH	16.02 °C	416.23 µS/cm	0.16 mg/L	7.38 NTU	85.8 mV	9.52 ft	200.00 ml/min
2/16/2025 11:44 AM	01:25:00	6.28 pH	16.41 °C	417.17 µS/cm	0.15 mg/L	6.95 NTU	85.7 mV	9.52 ft	200.00 ml/min
2/16/2025 11:49 AM	01:30:00	6.27 pH	16.60 °C	416.83 µS/cm	0.16 mg/L	5.94 NTU	87.8 mV	9.52 ft	200.00 ml/min
2/16/2025 11:54 AM	01:35:00	6.27 pH	16.36 °C	416.44 µS/cm	0.17 mg/L	4.74 NTU	89.4 mV	9.52 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-107	Grab.

Low-Flow Test Report:

Test Date / Time: 2/16/2025 1:01:19 PM

Project: GP-Plant Hammond

Operator Name: T. Kessler

Location Name: HGWC-109 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 21.36 ft Total Depth: 31.36 ft Initial Depth to Water: 5.7 ft	Pump Type: Bladder Tubing Type: Poly Pump Intake From TOC: 26.36 ft Estimated Total Volume Pumped: 18 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0 ft	Instrument Used: Aqua TROLL 400 Serial Number: 989630
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Test Notes:

Eight bottles: Full App. III & IV and Major Ions.

Weather Conditions:

Cloudy, 49 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	
2/16/2025 1:01 PM	00:00	6.88 pH	15.58 °C	273.87 µS/cm	0.58 mg/L	Overrange	33.1 mV	5.70 ft	200.00 ml/min
2/16/2025 1:06 PM	05:00	6.64 pH	15.57 °C	272.90 µS/cm	0.24 mg/L	Overrange	49.7 mV	5.70 ft	200.00 ml/min
2/16/2025 1:11 PM	10:00	6.60 pH	15.79 °C	274.63 µS/cm	0.25 mg/L	Overrange	37.6 mV	5.70 ft	200.00 ml/min
2/16/2025 1:16 PM	15:00	6.62 pH	15.79 °C	282.31 µS/cm	0.22 mg/L	62.40 NTU	19.5 mV	5.70 ft	200.00 ml/min
2/16/2025 1:21 PM	20:00	6.64 pH	15.77 °C	284.22 µS/cm	0.19 mg/L	45.10 NTU	17.3 mV	5.70 ft	200.00 ml/min
2/16/2025 1:26 PM	25:00	6.65 pH	15.75 °C	289.54 µS/cm	0.13 mg/L	35.20 NTU	13.0 mV	5.70 ft	200.00 ml/min
2/16/2025 1:31 PM	30:00	6.68 pH	15.77 °C	294.49 µS/cm	0.11 mg/L	25.50 NTU	8.3 mV	5.70 ft	200.00 ml/min
2/16/2025 1:36 PM	35:00	6.71 pH	15.74 °C	298.68 µS/cm	0.10 mg/L	17.60 NTU	3.8 mV	5.70 ft	200.00 ml/min
2/16/2025 1:41 PM	40:00	6.73 pH	15.79 °C	302.65 µS/cm	0.09 mg/L	14.90 NTU	-1.0 mV	5.70 ft	200.00 ml/min
2/16/2025 1:46 PM	45:00	6.74 pH	15.84 °C	306.14 µS/cm	0.07 mg/L	10.50 NTU	-4.9 mV	5.70 ft	200.00 ml/min
2/16/2025 1:51 PM	50:00	6.76 pH	15.74 °C	307.87 µS/cm	0.07 mg/L	10.00 NTU	-7.2 mV	5.70 ft	200.00 ml/min
2/16/2025 1:56 PM	55:00	6.78 pH	15.66 °C	311.40 µS/cm	0.07 mg/L	9.95 NTU	-11.1 mV	5.70 ft	200.00 ml/min
2/16/2025 2:01 PM	01:00:00	6.77 pH	15.84 °C	310.66 µS/cm	0.07 mg/L	9.50 NTU	-10.3 mV	5.70 ft	200.00 ml/min

2/16/2025 2:06 PM	01:05:00	6.79 pH	15.75 °C	313.86 µS/cm	0.07 mg/L	9.15 NTU	-14.7 mV	5.70 ft	200.00 ml/min
2/16/2025 2:11 PM	01:10:00	6.81 pH	15.84 °C	316.00 µS/cm	0.07 mg/L	9.99 NTU	-17.1 mV	5.70 ft	200.00 ml/min
2/16/2025 2:16 PM	01:15:00	6.80 pH	15.75 °C	319.28 µS/cm	0.07 mg/L	7.29 NTU	-19.1 mV	5.70 ft	200.00 ml/min
2/16/2025 2:21 PM	01:20:00	6.84 pH	15.70 °C	319.13 µS/cm	0.07 mg/L	5.06 NTU	-21.3 mV	5.70 ft	200.00 ml/min
2/16/2025 2:26 PM	01:25:00	6.82 pH	15.57 °C	314.52 µS/cm	0.07 mg/L	4.64 NTU	-17.0 mV	5.70 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-109	Grab.
HAM-AP4-FD-02	Grab.

Low-Flow Test Report:

Test Date / Time: 2/16/2025 8:53:13 AM

Project: GP-Plant Hammond

Operator Name: Z. Webb

Location Name: HGWC-117A Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 30.31 ft Total Depth: 40.31 ft Initial Depth to Water: 11.01 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 35.31 ft Estimated Total Volume Pumped: 8 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: 883530
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Test Notes:

Eight bottles: Full App. III & IV and Major Ions.

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	
2/16/2025 8:53 AM	00:00	6.51 pH	15.93 °C	441.75 µS/cm	0.47 mg/L	0.83 NTU	-174.8 mV	11.01 ft	200.00 ml/min
2/16/2025 8:58 AM	05:00	7.26 pH	16.56 °C	453.60 µS/cm	0.17 mg/L	0.82 NTU	253.2 mV	11.05 ft	200.00 ml/min
2/16/2025 9:03 AM	10:00	7.15 pH	16.61 °C	431.95 µS/cm	0.10 mg/L	0.57 NTU	366.7 mV	11.05 ft	200.00 ml/min
2/16/2025 9:08 AM	15:00	7.08 pH	16.69 °C	427.64 µS/cm	0.09 mg/L	0.63 NTU	306.2 mV	11.05 ft	200.00 ml/min
2/16/2025 9:13 AM	20:00	7.05 pH	16.83 °C	423.23 µS/cm	0.08 mg/L	0.31 NTU	314.1 mV	11.05 ft	200.00 ml/min
2/16/2025 9:18 AM	25:00	7.04 pH	16.67 °C	423.18 µS/cm	0.07 mg/L	0.44 NTU	398.7 mV	11.05 ft	200.00 ml/min
2/16/2025 9:23 AM	30:00	7.02 pH	16.60 °C	419.84 µS/cm	0.06 mg/L	0.42 NTU	404.4 mV	11.05 ft	200.00 ml/min
2/16/2025 9:28 AM	35:00	7.03 pH	16.60 °C	422.27 µS/cm	0.06 mg/L	0.35 NTU	320.2 mV	11.05 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-117A	Grab.

Low-Flow Test Report:

Test Date / Time: 2/16/2025 10:50:00 AM

Project: GP-Plant Hammond

Operator Name: Z. Webb

Location Name: HGWC-118 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 30.91 ft Total Depth: 40.91 ft Initial Depth to Water: 8.42 ft	Pump Type: Peristaltic Tubing Type: Polyethylene Pump Intake From TOC: 35.91 ft Estimated Total Volume Pumped: 13 liter Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.16 ft	Instrument Used: Aqua TROLL 400 Serial Number: 883530
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Test Notes:

Eight bottles: Full App. III & IV and Major Ions.

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	
2/16/2025 10:50 AM	00:00	6.67 pH	16.52 °C	496.45 µS/cm	0.28 mg/L	0.94 NTU	-277.9 mV	8.42 ft	200.00 ml/min
2/16/2025 10:55 AM	05:00	6.95 pH	16.74 °C	498.39 µS/cm	0.24 mg/L	0.73 NTU	72.6 mV	8.58 ft	200.00 ml/min
2/16/2025 11:00 AM	10:00	7.01 pH	16.64 °C	498.83 µS/cm	0.52 mg/L	0.85 NTU	201.3 mV	8.58 ft	200.00 ml/min
2/16/2025 11:05 AM	15:00	7.06 pH	16.22 °C	495.93 µS/cm	0.81 mg/L	1.04 NTU	289.7 mV	8.58 ft	200.00 ml/min
2/16/2025 11:10 AM	20:00	7.08 pH	15.91 °C	494.93 µS/cm	1.33 mg/L	1.13 NTU	338.9 mV	8.58 ft	200.00 ml/min
2/16/2025 11:15 AM	25:00	7.04 pH	15.10 °C	512.34 µS/cm	1.12 mg/L	—	363.7 mV	8.58 ft	200.00 ml/min
2/16/2025 11:20 AM	30:00	7.38 pH	16.55 °C	0.50 µS/cm	6.76 mg/L	—	-20.5 mV	8.58 ft	200.00 ml/min
2/16/2025 11:25 AM	35:00	7.37 pH	15.17 °C	516.03 µS/cm	2.54 mg/L	—	271.8 mV	8.58 ft	200.00 ml/min
2/16/2025 11:30 AM	40:00	7.09 pH	16.87 °C	504.52 µS/cm	0.19 mg/L	0.69 NTU	384.0 mV	8.58 ft	200.00 ml/min
2/16/2025 11:35 AM	45:00	7.11 pH	17.10 °C	509.31 µS/cm	0.17 mg/L	0.44 NTU	302.9 mV	8.58 ft	200.00 ml/min
2/16/2025 11:40 AM	50:00	7.11 pH	17.28 °C	507.70 µS/cm	0.17 mg/L	0.23 NTU	306.1 mV	8.58 ft	200.00 ml/min
2/16/2025 11:45 AM	55:00	7.11 pH	17.48 °C	506.14 µS/cm	0.25 mg/L	0.37 NTU	394.4 mV	8.58 ft	200.00 ml/min
2/16/2025 11:50 AM	01:00:00	7.12 pH	17.59 °C	501.46 µS/cm	0.29 mg/L	0.25 NTU	311.4 mV	8.58 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-118	Grab.

CALIBRATION REPORTS

August 2024

Site Name: Hammond
 Calibrated By: JNT

Field Instrumentation Calibration Form

Date: 08/06/24
 Field Conditions: Sunny Clear

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>EN-5.76</u>	<u>883530</u>
Turbidity Meter	<u>Hanna Lampfe</u>	<u>9123-268</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4.490	<u>24005513</u>	<u>11/24</u>	<u>AER</u>
pH (SU)	4.00	<u>↓</u>	<u>↓</u>	<u>↓</u>
pH (SU)	7.00	<u>24004517</u>	<u>12/24</u>	<u>↓</u>
pH (SU)	10.00	<u>24000083</u>	<u>12/24</u>	<u>↓</u>
D.O. (%)	N/A			
ORP (mV)	228.0	<u>24006903</u>	<u>12/24</u>	

Calibration <u>7:55 (P)</u>					
Time Start <u>7:35 (P)</u>		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4490</u>	<u>27.57</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.0</u>	<u>27.57</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>28.52</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>28.52</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>101.93</u>	<u>25.31</u>	± 10%	NA
ORP (mV)	228.0	<u>228</u>	<u>28.3</u>	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	<u>0</u>	<u>0</u>	± 10% of standard	EPA 2023
	<u>1</u>	<u>0.92</u>		
	<u>10</u>	<u>9.24</u>		

Calibration Check					
Time Start <u>14:10</u>		Time Finish <u>14:25 (P)</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4400</u>	<u>27.50</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>3.97</u>	<u>27.72</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.02</u>	<u>27.81</u>	± 0.1	GWMP
pH (SU)	10.00	<u>9.96</u>	<u>27.0</u>	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	<u>0</u>	<u>0</u>	± 10% of standard	EPA 2023
	<u>1</u>	<u>0.98</u>		
	<u>10</u>	<u>9.96</u>		

Notes:

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 8/8/2024

Calibrated By: F. Kessler

Field Conditions: Clear, 80°

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>Hanna HI9142</u>	<u>8841189</u>
Turbidity Meter	<u>Hanna HI9142</u>	<u>3123</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4.490	<u>24005593</u>	<u>11/24</u>	<u>rusitech</u>
pH (SU)	4.00	<u>↓</u>	<u>↓</u>	<u>↓</u>
pH (SU)	7.00	<u>24000517</u>	<u>12/24</u>	<u>↓</u>
pH (SU)	10.00	<u>24000008</u>	<u>12/24</u>	<u>↓</u>
D.O. (%)	N/A			
ORP (mV)	228.0	<u>24006903</u>	<u>12/24</u>	<u>↓</u>

Calibration					
Time Start	Time Finish				
<u>07:15 (JT)</u>	<u>08:10 (JT)</u>				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4490</u>	<u>27.53</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.0</u>	<u>27.57</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.0</u>	<u>27.57</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>27.53</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100</u>	<u>26.06</u>	± 10%	NA
ORP (mV)	228.0	<u>228</u>	<u>27.47</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>1.03</u>		
	<u>10</u>	<u>10.07</u>		

Calibration Check					
Time Start	Time Finish				
<u>12:10 (JT)</u>	<u>12:15 (JT)</u>				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4490</u>	<u>29.51</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4</u>	<u>29.31</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7</u>	<u>29.72</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10</u>	<u>28.99</u>	± 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>1.03</u>		
	<u>10</u>	<u>9.97</u>		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Hill, m... ..

Date: 8/9/2024

Calibrated By: L. Kessler

Field Conditions: clear, 80°F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>insitu</u>	<u>854189</u>
Turbidity Meter	<u>lumetta</u>	<u>3123</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4.490	<u>2405593</u>	<u>11/24</u>	<u>insitu</u>
pH (SU)	4.00	<u>↓</u>	<u>↓</u>	<u>↓</u>
pH (SU)	7.00	<u>24004517</u>	<u>11/24</u>	<u>↓</u>
pH (SU)	10.00	<u>2400085</u>	<u>12/24</u>	<u>↓</u>
D.O. (%)	N/A	<u>—</u>	<u>—</u>	<u>↓</u>
ORP (mV)	228.0	<u>2400903</u>	<u>12/24</u>	<u>↓</u>

Calibration					
Time Start <u>0745</u>		Time Finish <u>0810</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4.6190</u>	<u>25.79</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4</u>	<u>25.78</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7</u>	<u>25.97</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10</u>	<u>26.38</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100</u>	<u>25.91</u>	± 10%	NA
ORP (mV)	228.0	<u>228</u>	<u>26.57</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</u>		
	<u>10</u>	<u>9.99</u>		

Calibration Check					
Time Start <u>14:35 (JT)</u>		Time Finish <u>14:50 (JT)</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4.490</u>	<u>29.51</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.0</u>	<u>29.31</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.0</u>	<u>29.27</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.0</u>	<u>30.01</u>	± 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</u>		
	<u>10</u>	<u>9.95</u>		

Notes:

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 8/10/24

Calibrated By: T. Kessler

Field Conditions: Sunny, 80°

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>Agua Troll 400</u>	<u>884109</u>
Turbidity Meter	<u>LaMotte</u>	<u>3123</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	<u>24105593</u>	<u>7/1/24</u>	<u>7msity</u>
pH (SU)	4.00	<u>↓</u>	<u>↓</u>	
pH (SU)	7.00	<u>24004517</u>	<u>12/24</u>	
pH (SU)	10.00	<u>24000085</u>	<u>12/24</u>	
D.O. (%)	N/A			
ORP (mV)	228.0	<u>24000903</u>	<u>12/24</u>	

Calibration					
Time Start <u>8</u>		Time Finish <u>6:30</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	<u>4490</u>	<u>20.09</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.0</u>	<u>26.77</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.0</u>	<u>27.02</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10</u>	<u>27.15</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100</u>	<u>27.09</u>	± 10%	NA
ORP (mV)	228.0	<u>228</u>	<u>27.60</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	0	<u>0</u>	± 10% of standard	EPA 2023
	1	<u>.95</u>		
	10	<u>9.32</u>		

Calibration Check					
Time Start <u>1400</u>		Time Finish <u>1410</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	<u>4480</u>	<u>20.01</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.09</u>	<u>29.75</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.02</u>	<u>29.63</u>	± 0.1	GWMP
pH (SU)	10.00	<u>9.93</u>	<u>29.91</u>	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	0	<u>0</u>	± 10% of standard	EPA 2023
	1	<u>1</u>		
	10	<u>9.93</u>		

Notes:

Site Name: Plant Hammer

Field Instrumentation Calibration Form

Date: 8/11/24

Calibrated By: C. CHIN

Field Conditions: Sunny 73F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	Agua Troll 400	883530
Turbidity Meter	Lamotte 2070t	4123-2623

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4.490	24025M3	12/24	In-Site
pH (SU)	4.00	↓	↓	
pH (SU)	7.00	24024517	12/24	
pH (SU)	10.00	2402085	12/24	
D.O (%)	N/A	—	—	
ORP (mV)	228.0	24006903	12/24	↓

Calibration					
Time Start <u>0830</u>		Time Finish <u>0910</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	4.490	26.24	± 10% of standard	EPA 2023
pH (SU)	4.00	4.0	26.00	± 0.1	GWMP
pH (SU)	7.00	7.0	26.54	± 0.1	GWMP
pH (SU)	10.00	10.00	26.91	± 0.1	GWMP
D.O (%)	N/A	72.9%	26.74	± 10%	NA
ORP (mV)	228.0	228	26.65	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	0	0.02		
	1	0.94		
	10	9.94		
			± 10% of standard	EPA 2023

Calibration Check					
Time Start <u>14:35</u> (JD)		Time Finish <u>14:50</u> (JD)			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	4.490	34.38	± 10% of standard	EPA 2023
pH (SU)	4.00	3.94	34.40	± 0.1	GWMP
pH (SU)	7.00	7.03	34.62	± 0.1	GWMP
pH (SU)	10.00	9.94	33.98	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	0	0.02		
	1	1.03		
	10	10.04		
			± 10% of standard	EPA 2023

Notes:

February 2025

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 2/12/2025

Calibrated By: A. Kessler

Field Conditions: Rainy, 39°F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>insitu</u>	<u>489630</u>
Turbidity Meter	<u>Lemotte</u>	<u>7129-2023</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4.490	<u>24010943</u>	<u>05/2025</u>	<u>insitu</u>
pH (SU)	4.00	<u>24010943</u>	<u>05/2025</u>	<u>insitu</u>
pH (SU)	7.00	<u>24005587</u>	<u>06/2025</u>	<u>insitu</u>
pH (SU)	10.00	<u>24004886</u>	<u>06/2025</u>	<u>insitu</u>
D.O. (%)	N/A			
ORP (mV)	228.0	<u>2401172</u>	<u>06/2025</u>	<u>insitu</u>

Calibration					
Time Start	Time Finish				
<u>0753</u>	<u>0816</u>				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4.490</u>	<u>10.01</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.00</u>	<u>10.03</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>10.03</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>10.65</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100</u>	<u>11.74</u>	± 10%	NA
ORP (mV)	228.0	<u>228</u>	<u>10.82</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0</u>	<u>0</u>		
	<u>1</u>	<u>1.02</u>		
	<u>10</u>	<u>9.84</u>		
		± 10% of standard	EPA 2023	

Calibration Check					
Time Start	Time Finish				
<u>1200</u>	<u>1215</u>				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4525.2</u>	<u>15.88</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.04</u>	<u>15.85</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.04</u>	<u>15.16</u>	± 0.1	GWMP
pH (SU)	10.00	<u>9.95</u>	<u>15.35</u>	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0</u>	<u>0</u>		
	<u>1</u>	<u>1.05</u>		
	<u>10</u>	<u>9.95</u>		
		± 10% of standard	EPA 2023	

Notes:

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Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 2-12-25

Calibrated By: Zain W.

Field Conditions: Rain, 45°F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>AquaTroll400</u>	<u>883530</u>
Turbidity Meter	<u>LaMotte 2020</u>	<u>421-2623</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4.490	<u>24010942</u>	<u>05/2025</u>	<u>AIR</u>
pH (SU)	4.00	<u>24010943</u>	<u>05/2025</u>	<u>AIR</u>
pH (SU)	7.00	<u>24008587</u>	<u>06/2025</u>	<u>AIR</u>
pH (SU)	10.00	<u>24004996</u>	<u>06/2025</u>	<u>AIR</u>
D.O. (%)	N/A			<u>AIR</u>
ORP (mV)	228.0	<u>24011792</u>	<u>06/2025</u>	<u>AIR</u>

Calibration					
Time Start <u>0750</u>		Time Finish <u>0815</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4490</u>	<u>10.83</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.00</u>	<u>10.85</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>11.74</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>12.07</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100%</u>	<u>12.75</u>	± 10%	NA
ORP (mV)	228.0	<u>228.0</u>	<u>12.25</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</u>		
	<u>10</u>	<u>10</u>		
<u>-</u>	<u>-</u>			

Calibration Check					
Time Start <u>1500</u>		Time Finish <u>1527</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4490</u>	<u>15.98</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.00</u>	<u>16.43</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>16.52</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>16.56</u>	± 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</u>		
	<u>10</u>	<u>10</u>		
<u>-</u>	<u>-</u>			

Notes: Recalibrated ORP during midday

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 2/13/2025

Calibrated By: F. Kessler

Field Conditions: Cloudy, 45°F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>insitu</u>	<u>989630</u>
Turbidity Meter	<u>lanette</u>	<u>4131-223</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	<u>24010943</u>	<u>05/2025</u>	<u>insitu</u>
pH (SU)	4.00	<u>24010943</u>	<u>05/2025</u>	<u>insitu</u>
pH (SU)	7.00	<u>24008587</u>	<u>06/2025</u>	<u>insitu</u>
pH (SU)	10.00	<u>24009736</u>	<u>06/2025</u>	<u>insitu</u>
D.O. (%)	N/A			
ORP (mV)	228.0	<u>24011792</u>	<u>06/2025</u>	<u>insitu</u>

Calibration					
Time Start <u>0730</u>		Time Finish <u>0751</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	<u>4490</u>	<u>11.29</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.0</u>	<u>11.93</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.0</u>	<u>13.76</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.0</u>	<u>13.26</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100</u>	<u>13.46</u>	± 10%	NA
ORP (mV)	228.0	<u>228</u>	<u>13.49</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0</u>	<u>0</u>		
	<u>1</u>	<u>1.02</u>		
	<u>10</u>	<u>9.43</u>		
		± 10% of standard	EPA 2023	

Calibration Check					
Time Start <u>1345</u>		Time Finish <u>1355</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	<u>4266</u>	<u>13.76</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.07</u>	<u>13.76</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.02</u>	<u>13.03</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.03</u>	<u>14.85</u>	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0</u>	<u>0</u>		
	<u>1</u>	<u>1.02</u>		
	<u>10</u>	<u>9.88</u>		
		± 10% of standard	EPA 2023	

Notes:

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Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 2/15/2025

Calibrated By: L. Messter

Field Conditions: Rainy, 45°F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>insitu</u>	<u>98920</u>
Turbidity Meter	<u>Lemote</u>	<u>4154-2623</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	<u>240943</u>	<u>05/2025</u>	<u>insitu</u>
pH (SU)	4.00	<u>24010943</u>	<u>05/2025</u>	<u>insitu</u>
pH (SU)	7.00	<u>24008887</u>	<u>06/2025</u>	<u>insitu</u>
pH (SU)	10.00	<u>24009963</u>	<u>06/2025</u>	<u>insitu</u>
D.O. (%)	N/A			
ORP (mV)	228.0	<u>24011792</u>	<u>06/2025</u>	<u>insitu</u>

Calibration					
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>12.22</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.0</u>	<u>12.26</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.0</u>	<u>12.59</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.0</u>	<u>12.56</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>10.0</u>	<u>13.12</u>	± 10%	NA
ORP (mV)	228.0	<u>228</u>	<u>12.99</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>1.07</u>		
	<u>10</u>	<u>10.03</u>		
<u>-</u>	<u>-</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>4473.9</u>	<u>17.28</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>7.07</u>	<u>17.28</u>	± 0.1 ✓	GWMP
pH (SU)	7.00	<u>7.07</u>	<u>17.00</u>	± 0.1	GWMP
pH (SU)	10.00	<u>9.93</u>	<u>16.59</u>	± 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>0.99</u>		
	<u>0</u>	<u>0.93</u>		
<u>-</u>	<u>-</u>			

Notes:

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Site Name: GP Plant Hammond Field Instrumentation Calibration Form

Date: 7/16/2025

Calibrated By: J. Kessler

Field Conditions: Cloudy, 57°F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>insitu</u>	<u>989630</u>
Turbidity Meter	<u>Lemotek</u>	<u>4139-1003</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4.490	<u>24010943</u>	<u>05/2025</u>	<u>insitu</u>
pH (SU)	4.00	<u>24010943</u>	<u>05/2025</u>	<u>insitu</u>
pH (SU)	7.00	<u>24008587</u>	<u>06/2025</u>	<u>insitu</u>
pH (SU)	10.00	<u>24008586</u>	<u>06/2025</u>	<u>insitu</u>
D.O. (%)	N/A			
ORP (mV)	228.0	<u>24011742</u>	<u>06/2025</u>	<u>insitu</u>

Calibration					
Time Start <u>0739</u>		Time Finish <u>0803</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4.490</u>	<u>15.93</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>7.0</u>	<u>16.00</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.0</u>	<u>16.15</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.0</u>	<u>16.21</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100</u>	<u>16.29</u>	± 10%	NA
ORP (mV)	228.0	<u>228.0</u>	<u>16.35</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0</u>	<u>0</u>		
	<u>1</u>	<u>0.95</u>		
	<u>10</u>	<u>9.91</u>		

Calibration Check					
Time Start <u>1440</u>		Time Finish <u>1450</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4.5528</u>	<u>17.10</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.04</u>	<u>17.10</u>	± 0.1	GWMP
pH (SU)	7.00	<u>6.99</u>	<u>17.23</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.04</u>	<u>17.81</u>	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0</u>	<u>0</u>		
	<u>1</u>	<u>1.00</u>		
	<u>10</u>	<u>10.2</u>		

Notes:

(Large handwritten scribble/initials)

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 2-16-25

Calibrated By: Zain W.

Field Conditions: Cloudy 60°F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	AQUATROLL	883520
Turbidity Meter	LaMotte 2826	4121-2623

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4.490	24010943	05/2025	ATR
pH (SU)	4.00	24010943	05/2025	↓
pH (SU)	7.00	24008587	6/2025	
pH (SU)	10.00	24004996	6/2025	
D.O. (%)	N/A	N/A	N/A	
ORP (mV)	228.0	24011122	6/2025	

Calibration					
Time Start <u>0725</u>		Time Finish <u>0805</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	4.490	16.74	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	16.85	± 0.1	GWMP
pH (SU)	7.00	7.00	17.42	± 0.1	GWMP
pH (SU)	10.00	10.00	17.73	± 0.1	GWMP
D.O. (%)	N/A	100%	17.99	± 10%	NA
ORP (mV)	228.0	228.0	17.85	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	0	0		
	1	1		
	10	10		

± 10% of standard EPA 2023

Calibration Check					
Time Start <u>1220</u>		Time Finish <u>1240</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	4.490	16.72	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	16.74	± 0.1	GWMP
pH (SU)	7.00	7.00	17.10	± 0.1	GWMP
pH (SU)	10.00	10.00	17.55	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	0	0		
	1	1		
	10	10		

± 10% of standard EPA 2023

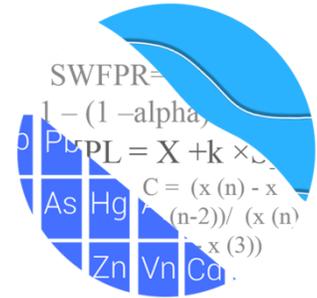
Notes:

APPENDIX C

Statistical Analyses Reports

August 2024

GROUNDWATER STATS CONSULTING



February 28, 2025

Southern Company Services
Attn: Ms. Kristen Jurinko
241 Ralph McGill Blvd. NE, Bin 10160
Atlanta, Georgia 30308

Re: Plant Hammond Ash Pond 4 (AP-4)
August 2024 Semi-Annual Statistical Analysis

Dear Ms. Jurinko,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the August 2024 Semi-Annual Groundwater Detection and Assessment Monitoring Statistical summary of groundwater data for Georgia Power Company's Plant Hammond AP-4. 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 Hammond AP-4 in 2016, and at least 8 background samples have been collected at each of the groundwater monitoring wells analyzed in this report. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient well:** HGWA-47, HGWA-48D, HGWA-111, HGWA-112, and HGWA-113
- **Downgradient wells:** HGWC-101, HGWC-102, HGWC-103, HGWC-105, HGWC-107, HGWC-109, HGWC-117A, and HGWC-118

Note that downgradient well HGWC-102 was first sampled in October 2019 and has at least 8 samples; therefore, data from this well are evaluated in this analysis. Upgradient wells HGWA-47 and HGWA-48D were first sampled in September 2020 and also have at

least 8 samples. Upgradient well data are included in construction of interwell prediction limits and upper tolerance limits when a minimum of 2 samples are available. Downgradient wells are evaluated with prediction limits for Appendix III constituents once the wells have a minimum of 8 samples, and with confidence intervals once a minimum of 8 samples is available.

Piezometer HGWC-117A was reclassified as a downgradient well and was first sampled in February 2021 and is evaluated in this analysis for Appendix III and IV constituents.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Andrew Collins, Project Manager of Groundwater Stats Consulting.

The Coal Combustion Residuals (CCR) program consists of the following constituents listed below. The terms "constituent" and "parameter" are interchangeable.

- **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **Appendix IV** (Assessment Monitoring) – antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, 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 Appendix IV downgradient well/constituent pairs with 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 limits of 0.030 mg/L, respectively, were 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. Values in background which have been flagged as outliers may be seen in a

lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

Data at all wells were initially evaluated during the background screening described below 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 with the screening and demonstrated that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests 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 a 1-of-2 resample plan 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.

Note that values shown on data pages reflect raw data and any non-detects that have been substituted with one-half of the reporting limit will be shown as the original reporting limit.

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. No records were adjusted at this time.

Summary of Background Screening Conducted in April 2019

Outlier Analysis

Time series plots were used to identify suspected outliers, or extreme values that would result in limits that are not representative of the current background data population. Suspected outliers at all wells for Appendix III and Appendix IV parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, a few outliers were identified. Often, when the most recent value is identified as an outlier, values are not flagged in the database at this time as they may represent a possible trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values are observed trace values (i.e., measurements reported by the laboratory between the Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

Of the outliers identified by Tukey's method, only one outlier was flagged as all other values are similar to remaining measurements within a given well or neighboring wells, or were reported non-detects.

Additionally, when any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages display the flagged value in a lighter font as well. A substitution of the most recent reporting limit was applied when varying detection limits existed in data.

Seasonality

No obvious seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

Trend Tests

While trends may be identified by visual inspection, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at each well to identify statistically significant increasing or decreasing trends. In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, all available data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. When any records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

The results of the trend analyses were included with the screening and showed a few statistically significant decreasing and increasing trends for the Appendix III parameters. Most trends noted were relatively low in magnitude when compared to average concentrations, and the background period is short; therefore, no adjustments were made to the data sets.

Appendix III – Determination of Spatial Variation

The Analysis of Variance (ANOVA) is typically used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach. However, interwell methods are currently implemented in accordance with the Georgia EPD regulations and are used to evaluate compliance samples in downgradient wells.

Statistical Evaluation of Appendix III Parameters – August 2024

All Appendix III parameters were analyzed using interwell prediction limits. Background (upgradient) well data were reassessed for potential outliers during this analysis. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. No additional values were flagged and a summary of previously flagged outliers follows this report (Figure C).

Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through August 2024 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The August 2024 sample from each downgradient well is compared to the background limit to determine whether 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 a resample confirms the initial exceedance, a statistically significant increase 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 and, therefore, no exceedance is noted and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance. A summary table of the interwell prediction limits follows this letter. Exceedances were identified for the following well/constituent pairs:

- Boron: HGWC-101, HGWC-102, HGWC-103, HGWC-105, HGWC-107, HGWC-109, HGWC-117A, and HGWC-118
- Calcium: HGWC-102, HGWC-103, HGWC-105, and HGWC-118
- Chloride: HGWC-102, HGWC-103, and HGWC-105
- pH: HGWC-101 (lower limit)
- Sulfate: HGWC-101, HGWC-102, HGWC-103, HGWC-105, HGWC-107, HGWC-117A, and HGWC-118
- TDS: HGWC-102, HGWC-103, and HGWC-105

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 to determine whether concentrations are statistically increasing, decreasing, or stable at the 99% confidence

level (Figure E). Upgradient wells 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. When trends are present in upgradient trends, it is 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: HGWC-101 and HGWC-103
- Calcium: HGWA-113 (upgradient), HGWC-103, and HGWC-105
- Chloride: HGWC-103 and HGWC-105
- TDS: HGWC-105

Decreasing trends:

- Boron: HGWC-109
- Sulfate: HGWA-113, HGWA-48D (both upgradient), and HGWC-118

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 (Maximum Containment Levels (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. The methods are described below.

Statistical Evaluation of Appendix IV Parameters – August 2024

For Appendix IV parameters, confidence intervals for each downgradient well/constituent pair were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Well/constituent pairs containing 100% non-detects do not require analysis. Data from upgradient wells for Appendix IV parameters are reassessed for outliers during each analysis. No additional values were flagged and a summary of previously flagged outliers follows this report (Figure C).

Interwell Upper Tolerance Limits

Interwell upper tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data through August 2024 for 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 constructed. 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 well (Figure H). As mentioned above, well/constituent pairs with 100% non-detects did not require statistics, which includes all downgradient wells for molybdenum.

The Sanitas software was used to calculate the confidence intervals. These intervals were constructed as either parametric or nonparametric confidence intervals 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 appropriate order

statistics, depending on the sample size, 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 achievable 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 downgradient 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. A summary of the confidence intervals follows this letter. When the entire records were evaluated, no exceedances were identified.

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. 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. Since no confidence interval exceedances were identified, no trend tests were required.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Hammond AP-4. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Abdul Diane
Groundwater Analyst



Andrew T. Collins
Project Manager

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Summary Tables

100% Non-Detects: Appendix IV Downgradient

Analysis Run 10/16/2024 3:10 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-4

Antimony (mg/L)

HGWC-101, HGWC-105, HGWC-109, HGWC-117A, HGWC-118

Arsenic (mg/L)

HGWC-105, HGWC-107, HGWC-117A

Beryllium (mg/L)

HGWC-102, HGWC-105, HGWC-107, HGWC-109, HGWC-117A

Cadmium (mg/L)

HGWC-105, HGWC-109, HGWC-118

Chromium (mg/L)

HGWC-117A

Cobalt (mg/L)

HGWC-107

Lead (mg/L)

HGWC-117A

Lithium (mg/L)

HGWC-101

Molybdenum (mg/L)

HGWC-101, HGWC-102, HGWC-103, HGWC-105, HGWC-107, HGWC-109, HGWC-117A, HGWC-118

Selenium (mg/L)

HGWC-101, HGWC-103, HGWC-105, HGWC-107, HGWC-109, HGWC-117A, HGWC-118

Thallium (mg/L)

HGWC-101, HGWC-103, HGWC-105, HGWC-107, HGWC-109, HGWC-117A, HGWC-118

Appendix III - Interwell Prediction Limits - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-4 Printed 10/17/2024, 12:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	HGWC-101	0.04	n/a	8/10/2024	0.15	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-102	0.04	n/a	8/9/2024	3	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-103	0.04	n/a	8/9/2024	4.5	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-105	0.04	n/a	8/10/2024	1.4	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-107	0.04	n/a	8/10/2024	0.84	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-109	0.04	n/a	8/10/2024	0.2	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-117A	0.04	n/a	8/10/2024	0.28	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-118	0.04	n/a	8/9/2024	0.59	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-102	73.8	n/a	8/9/2024	142	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-103	73.8	n/a	8/9/2024	146	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-105	73.8	n/a	8/10/2024	156	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-118	73.8	n/a	8/9/2024	85.2	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-102	5.7	n/a	8/9/2024	8	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-103	5.7	n/a	8/9/2024	8.8	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-105	5.7	n/a	8/10/2024	7.7	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
pH, Field (s.u.)	HGWC-101	7.93	5.43	8/10/2024	5.38	Yes	90	n/a	n/a	0	n/a	n/a	0.0004742	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-101	19.7	n/a	8/10/2024	104	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-102	19.7	n/a	8/9/2024	359	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-103	19.7	n/a	8/9/2024	393	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-105	19.7	n/a	8/10/2024	258	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-107	19.7	n/a	8/10/2024	114	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-117A	19.7	n/a	8/10/2024	72.6	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-118	19.7	n/a	8/9/2024	66.5	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-102	345	n/a	8/9/2024	746	Yes	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-103	345	n/a	8/9/2024	809	Yes	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-105	345	n/a	8/10/2024	658	Yes	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2

Appendix III - Interwell Prediction Limits - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-4 Printed 10/17/2024, 12:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	HGWC-101	0.04	n/a	8/10/2024	0.15	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-102	0.04	n/a	8/9/2024	3	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-103	0.04	n/a	8/9/2024	4.5	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-105	0.04	n/a	8/10/2024	1.4	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-107	0.04	n/a	8/10/2024	0.84	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-109	0.04	n/a	8/10/2024	0.2	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-117A	0.04	n/a	8/10/2024	0.28	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-118	0.04	n/a	8/9/2024	0.59	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-101	73.8	n/a	8/10/2024	24.2	No	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-102	73.8	n/a	8/9/2024	142	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-103	73.8	n/a	8/9/2024	146	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-105	73.8	n/a	8/10/2024	156	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-107	73.8	n/a	8/10/2024	61.4	No	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-109	73.8	n/a	8/10/2024	53.7	No	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-117A	73.8	n/a	8/10/2024	64.5	No	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-118	73.8	n/a	8/9/2024	85.2	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-101	5.7	n/a	8/10/2024	5.4	No	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-102	5.7	n/a	8/9/2024	8	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-103	5.7	n/a	8/9/2024	8.8	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-105	5.7	n/a	8/10/2024	7.7	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-107	5.7	n/a	8/10/2024	3.1	No	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-109	5.7	n/a	8/10/2024	4	No	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-117A	5.7	n/a	8/10/2024	4.5	No	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-118	5.7	n/a	8/9/2024	4.2	No	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	HGWC-101	0.23	n/a	8/10/2024	0.068J	No	90	n/a	n/a	20	n/a	n/a	0.0002371	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	HGWC-102	0.23	n/a	8/9/2024	0.067J	No	90	n/a	n/a	20	n/a	n/a	0.0002371	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	HGWC-103	0.23	n/a	8/9/2024	0.077J	No	90	n/a	n/a	20	n/a	n/a	0.0002371	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	HGWC-105	0.23	n/a	8/10/2024	0.066J	No	90	n/a	n/a	20	n/a	n/a	0.0002371	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	HGWC-107	0.23	n/a	8/10/2024	0.069J	No	90	n/a	n/a	20	n/a	n/a	0.0002371	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	HGWC-109	0.23	n/a	8/10/2024	0.13	No	90	n/a	n/a	20	n/a	n/a	0.0002371	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	HGWC-117A	0.23	n/a	8/10/2024	0.1	No	90	n/a	n/a	20	n/a	n/a	0.0002371	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	HGWC-118	0.23	n/a	8/9/2024	0.11	No	90	n/a	n/a	20	n/a	n/a	0.0002371	NP Inter (normality) 1 of 2
pH, Field (s.u.)	HGWC-101	7.93	5.43	8/10/2024	5.38	Yes	90	n/a	n/a	0	n/a	n/a	0.0004742	NP Inter (normality) 1 of 2
pH, Field (s.u.)	HGWC-102	7.93	5.43	8/9/2024	5.86	No	90	n/a	n/a	0	n/a	n/a	0.0004742	NP Inter (normality) 1 of 2
pH, Field (s.u.)	HGWC-103	7.93	5.43	8/9/2024	5.74	No	90	n/a	n/a	0	n/a	n/a	0.0004742	NP Inter (normality) 1 of 2
pH, Field (s.u.)	HGWC-105	7.93	5.43	8/10/2024	6.38	No	90	n/a	n/a	0	n/a	n/a	0.0004742	NP Inter (normality) 1 of 2
pH, Field (s.u.)	HGWC-107	7.93	5.43	8/10/2024	6.22	No	90	n/a	n/a	0	n/a	n/a	0.0004742	NP Inter (normality) 1 of 2
pH, Field (s.u.)	HGWC-109	7.93	5.43	8/10/2024	7.03	No	90	n/a	n/a	0	n/a	n/a	0.0004742	NP Inter (normality) 1 of 2
pH, Field (s.u.)	HGWC-117A	7.93	5.43	8/10/2024	6.61	No	90	n/a	n/a	0	n/a	n/a	0.0004742	NP Inter (normality) 1 of 2
pH, Field (s.u.)	HGWC-118	7.93	5.43	8/9/2024	7.07	No	90	n/a	n/a	0	n/a	n/a	0.0004742	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-101	19.7	n/a	8/10/2024	104	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-102	19.7	n/a	8/9/2024	359	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-103	19.7	n/a	8/9/2024	393	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-105	19.7	n/a	8/10/2024	258	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-107	19.7	n/a	8/10/2024	114	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-109	19.7	n/a	8/10/2024	19.7	No	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-117A	19.7	n/a	8/10/2024	72.6	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-118	19.7	n/a	8/9/2024	66.5	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-101	345	n/a	8/10/2024	263	No	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-102	345	n/a	8/9/2024	746	Yes	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-103	345	n/a	8/9/2024	809	Yes	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-105	345	n/a	8/10/2024	658	Yes	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-107	345	n/a	8/10/2024	299	No	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-109	345	n/a	8/10/2024	227	No	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-117A	345	n/a	8/10/2024	284	No	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-118	345	n/a	8/9/2024	338	No	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2

Appendix III - Trend Test Summary - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-4 Printed 10/17/2024, 12:55 PM

<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, total (mg/L)	HGWC-101	0.009487	115	81	Yes	20	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-103	0.1618	117	87	Yes	21	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-109	-0.02867	-156	-87	Yes	21	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWA-113 (bg)	0.2301	100	81	Yes	20	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWC-103	6.694	132	87	Yes	21	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWC-105	7.864	176	87	Yes	21	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWC-103	0.4	128	87	Yes	21	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWC-105	0.4372	139	81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWA-113 (bg)	-0.9378	-133	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWA-48D (bg)	-0.5856	-45	-38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWC-118	-2.164	-103	-87	Yes	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	HGWC-105	32.02	138	87	Yes	21	0	n/a	n/a	0.01	NP

Appendix III - Trend Test Summary - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-4 Printed 10/17/2024, 12:55 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron, total (mg/L)	HGWA-111 (bg)	0.0006873	57	81	No	20	40	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWA-112 (bg)	0.0003233	26	81	No	20	35	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWA-113 (bg)	0.0007673	51	81	No	20	25	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWA-47 (bg)	0.0009372	23	38	No	12	58.33	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWA-48D (bg)	0.006696	19	38	No	12	33.33	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-101	0.009487	115	81	Yes	20	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-102	-0.08338	-24	-58	No	16	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-103	0.1618	117	87	Yes	21	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-105	0.004582	40	81	No	20	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-107	0.01327	62	87	No	21	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-109	-0.02867	-156	-87	Yes	21	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-117A	-0.01989	-12	-21	No	8	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-118	-0.005415	-25	-81	No	20	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWA-111 (bg)	1.37	36	81	No	20	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWA-112 (bg)	0.05327	51	81	No	20	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWA-113 (bg)	0.2301	100	81	Yes	20	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWA-47 (bg)	-1.009	-16	-38	No	12	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWA-48D (bg)	-0.4558	-9	-38	No	12	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWC-102	3.183	26	58	No	16	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWC-103	6.694	132	87	Yes	21	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWC-105	7.864	176	87	Yes	21	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWC-118	0.754	72	87	No	21	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWA-111 (bg)	0	-5	-81	No	20	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWA-112 (bg)	-0.01551	-26	-81	No	20	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWA-113 (bg)	-0.03553	-76	-81	No	20	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWA-47 (bg)	0	0	38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWA-48D (bg)	0	6	38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWC-102	0.114	27	58	No	16	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWC-103	0.4	128	87	Yes	21	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWC-105	0.4372	139	81	Yes	20	0	n/a	n/a	0.01	NP
pH, Field (s.u.)	HGWA-111 (bg)	0.04142	50	92	No	22	0	n/a	n/a	0.01	NP
pH, Field (s.u.)	HGWA-112 (bg)	-0.007213	-22	-92	No	22	0	n/a	n/a	0.01	NP
pH, Field (s.u.)	HGWA-113 (bg)	0.02137	82	92	No	22	0	n/a	n/a	0.01	NP
pH, Field (s.u.)	HGWA-47 (bg)	0.01559	7	38	No	12	0	n/a	n/a	0.01	NP
pH, Field (s.u.)	HGWA-48D (bg)	0	1	38	No	12	0	n/a	n/a	0.01	NP
pH, Field (s.u.)	HGWC-101	0.01346	78	98	No	23	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWA-111 (bg)	-0.01755	-34	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWA-112 (bg)	0.01239	18	81	No	20	20	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWA-113 (bg)	-0.9378	-133	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWA-47 (bg)	-0.06495	-5	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWA-48D (bg)	-0.5856	-45	-38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWC-101	-0.7577	-32	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWC-102	-2.338	-5	-58	No	16	6.25	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWC-103	7.824	69	87	No	21	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWC-105	6.385	53	87	No	21	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWC-107	-1.685	-84	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWC-117A	1.132	3	21	No	8	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWC-118	-2.164	-103	-87	Yes	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	HGWA-111 (bg)	3.783	30	81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	HGWA-112 (bg)	0.7485	10	74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	HGWA-113 (bg)	0	-2	-81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	HGWA-47 (bg)	3.784	8	38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	HGWA-48D (bg)	2.281	15	38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	HGWC-102	6.292	11	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	HGWC-103	24.37	86	87	No	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	HGWC-105	32.02	138	87	Yes	21	0	n/a	n/a	0.01	NP

Upper Tolerance Limits Summary Table

Plant Hammond Client: Southern Company Data: Hammond AP-4 Printed 10/16/2024, 2:59 PM

<u>Constituent</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bq N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	0.003	n/a	n/a	n/a	n/a	73	94.52	n/a	0.02365	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	n/a	n/a	87	94.25	n/a	0.01153	NP Inter(NDs)
Barium (mg/L)	0.12	n/a	n/a	n/a	n/a	87	0	n/a	0.01153	NP Inter(normality)
Beryllium (mg/L)	0.0019	n/a	n/a	n/a	n/a	87	91.95	n/a	0.01153	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	n/a	n/a	n/a	87	100	n/a	0.01153	NP Inter(NDs)
Chromium (mg/L)	0.0061	n/a	n/a	n/a	n/a	87	42.53	n/a	0.01153	NP Inter(normality)
Cobalt (mg/L)	0.005	n/a	n/a	n/a	n/a	87	90.8	n/a	0.01153	NP Inter(NDs)
Combined Radium 226 & 228 (pCi/L)	1.29	n/a	n/a	n/a	n/a	87	0	No	0.05	Inter
Fluoride, total (mg/L)	0.23	n/a	n/a	n/a	n/a	90	20	n/a	0.009888	NP Inter(normality)
Lead (mg/L)	0.0016	n/a	n/a	n/a	n/a	87	74.71	n/a	0.01153	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	n/a	n/a	87	37.93	n/a	0.01153	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	n/a	n/a	73	83.56	n/a	0.02365	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	n/a	n/a	n/a	73	82.19	n/a	0.02365	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	n/a	n/a	73	79.45	n/a	0.02365	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	n/a	73	100	n/a	0.02365	NP Inter(NDs)

PLANT HAMMOND AP-4 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		0.12	2
Beryllium, Total (mg/L)	0.004		0.0019	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.0061	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.005	0.006
Combined Radium, Total (pCi/L)	5		1.29	5
Fluoride, Total (mg/L)	4		0.23	4
Lead, Total (mg/L)	n/a	0.015	0.0016	0.015
Lithium, Total (mg/L)	n/a	0.040	0.030	0.040
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

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Standard*

Confidence Intervals Summary Table - All Results (No Significant)

Plant Hammond Client: Southern Company Data: Hammond AP-4 Printed 10/16/2024, 3:12 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	HGWC-102	0.003	0.003	0.006	No	15	0.0005784	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-103	0.003	0.0022	0.006	No	17	0.000194	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-107	0.003	0.0011	0.006	No	17	0.0004608	94.12	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-101	0.005	0.00039	0.01	No	21	0.001006	95.24	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-102	0.005	0.00083	0.01	No	16	0.002029	68.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-103	0.005	0.0015	0.01	No	21	0.0007638	95.24	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-109	0.002537	0.001578	0.01	No	21	0.0008697	14.29	None	No	0.01	Param.
Arsenic (mg/L)	HGWC-118	0.005	0.001	0.01	No	21	0.0008729	95.24	None	No	0.01	NP (NDs)
Barium (mg/L)	HGWC-101	0.04409	0.03785	2	No	21	0.005658	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-102	0.03172	0.02716	2	No	16	0.003502	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-103	0.03924	0.03444	2	No	21	0.004352	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-105	0.085	0.0668	2	No	21	0.009941	0	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-107	0.03841	0.03535	2	No	21	0.002778	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-109	0.08611	0.07993	2	No	21	0.005601	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-117A	0.0658	0.042	2	No	8	0.01188	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	HGWC-118	0.05922	0.04855	2	No	21	0.00967	0	None	No	0.01	Param.
Beryllium (mg/L)	HGWC-101	0.0005	0.000062	0.004	No	21	0.0002238	52.38	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-103	0.0005	0.000088	0.004	No	21	0.0001735	80.95	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-118	0.0005	0.00093	0.004	No	21	0.0008881	95.24	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-101	0.0002048	0.0001433	0.005	No	21	0.00005571	14.29	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-102	0.0006287	0.0003438	0.005	No	16	0.000219	0	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-103	0.0007812	0.0006883	0.005	No	21	0.00008424	0	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-107	0.0005	0.00011	0.005	No	21	0.0001933	66.67	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-117A	0.0005	0.00016	0.005	No	8	0.0001202	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	HGWC-101	0.005	0.00098	0.1	No	21	0.001714	80.95	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-102	0.005	0.00063	0.1	No	16	0.001513	87.5	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-103	0.005	0.0013	0.1	No	21	0.001899	66.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-105	0.005	0.0013	0.1	No	21	0.001725	80.95	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-107	0.005	0.00074	0.1	No	21	0.0009296	95.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-109	0.005	0.0014	0.1	No	21	0.001206	90.48	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-118	0.005	0.0021	0.1	No	21	0.00166	76.19	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-101	0.002738	0.002186	0.006	No	21	0.0005005	4.762	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-102	0.0019	0.00098	0.006	No	16	0.0007443	0	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-103	0.002225	0.001842	0.006	No	21	0.0003469	0	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-105	0.005	0.00047	0.006	No	21	0.002036	28.57	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-109	0.001919	0.001161	0.006	No	21	0.0006876	0	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-117A	0.00155	0.0003807	0.006	No	8	0.0006479	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	HGWC-118	0.005	0.00045	0.006	No	21	0.002296	52.38	None	No	0.01	NP (NDs)
Combined Radium 226 & 228 (pCi/L)	HGWC-101	0.8314	0.4516	5	No	21	0.3443	0	None	No	0.01	Param.
Combined Radium 226 & 228 (pCi/L)	HGWC-102	1.088	0.5756	5	No	15	0.3784	0	None	No	0.01	Param.
Combined Radium 226 & 228 (pCi/L)	HGWC-103	0.8483	0.4709	5	No	21	0.3421	0	None	No	0.01	Param.
Combined Radium 226 & 228 (pCi/L)	HGWC-105	0.8398	0.5035	5	No	21	0.3048	0	None	No	0.01	Param.
Combined Radium 226 & 228 (pCi/L)	HGWC-107	0.9837	0.4954	5	No	21	0.4426	0	None	No	0.01	Param.
Combined Radium 226 & 228 (pCi/L)	HGWC-109	0.7311	0.4294	5	No	21	0.2735	0	None	No	0.01	Param.
Combined Radium 226 & 228 (pCi/L)	HGWC-117A	0.9243	0.1862	5	No	8	0.3482	0	None	No	0.01	Param.
Combined Radium 226 & 228 (pCi/L)	HGWC-118	1.037	0.4568	5	No	20	0.5107	0	None	No	0.01	Param.
Fluoride, total (mg/L)	HGWC-101	0.1	0.068	4	No	22	0.01959	81.82	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	HGWC-102	0.22	0.076	4	No	16	0.03247	81.25	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	HGWC-103	0.13	0.077	4	No	22	0.02128	72.73	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	HGWC-105	0.1	0.074	4	No	22	0.02809	54.55	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	HGWC-107	0.1	0.069	4	No	22	0.0331	54.55	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	HGWC-109	0.1245	0.08585	4	No	22	0.03602	9.091	None	No	0.01	Param.
Fluoride, total (mg/L)	HGWC-117A	0.102	0.05154	4	No	8	0.02513	25	Kaplan-Meier	No	0.01	Param.
Fluoride, total (mg/L)	HGWC-118	0.14	0.072	4	No	23	0.178	0	None	No	0.01	NP (normality)
Lead (mg/L)	HGWC-101	0.001	0.0009	0.015	No	21	0.00002182	95.24	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-102	0.001	0.00011	0.015	No	16	0.0002225	93.75	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-103	0.001	0.00028	0.015	No	21	0.0003539	71.43	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-105	0.001	0.000085	0.015	No	21	0.0003763	80.95	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-107	0.001	0.00034	0.015	No	21	0.0003333	80.95	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-109	0.001	0.000058	0.015	No	21	0.0002839	90.48	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-118	0.001	0.00088	0.015	No	21	0.0003099	76.19	None	No	0.01	NP (NDs)
Lithium (mg/L)	HGWC-102	0.015	0.0011	0.04	No	16	0.004724	12.5	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-103	0.002	0.0015	0.04	No	21	0.0124	23.81	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-105	0.004236	0.003897	0.04	No	21	0.0003071	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-107	0.03	0.00091	0.04	No	21	0.01488	47.62	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-109	0.03	0.0009	0.04	No	21	0.01483	52.38	None	No	0.01	NP (NDs)
Lithium (mg/L)	HGWC-117A	0.0051	0.0035	0.04	No	8	0.0005069	0	None	No	0.004	NP (normality)
Lithium (mg/L)	HGWC-118	0.03	0.0017	0.04	No	21	0.01357	33.33	None	No	0.01	NP (normality)

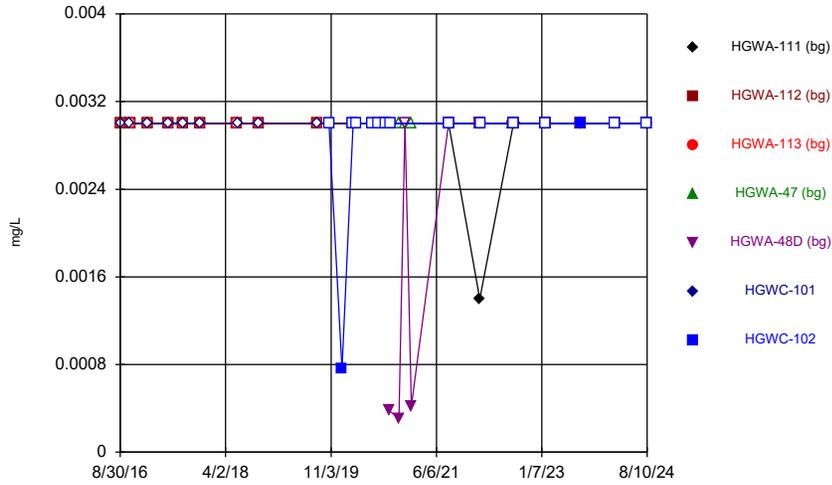
Confidence Intervals Summary Table - All Results (No Significant) ^{Page 2}

Plant Hammond Client: Southern Company Data: Hammond AP-4 Printed 10/16/2024, 3:12 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>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Mercury (mg/L)	HGWC-101	0.0002	0.000099	0.002	No	17	0.00003456	88.24	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-102	0.0002	0.0001	0.002	No	15	0.00002582	93.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-103	0.00025	0.00017	0.002	No	17	0.00003762	76.47	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-105	0.00022	0.0002	0.002	No	17	0.00004851	94.12	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-107	0.0002	0.000084	0.002	No	17	0.00002813	94.12	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-109	0.0002	0.00008	0.002	No	17	0.00003985	88.24	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-117A	0.0002	0.000094	0.002	No	8	0.00003748	87.5	None	No	0.004	NP (NDs)
Mercury (mg/L)	HGWC-118	0.0002	0.00009	0.002	No	17	0.00003806	88.24	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-102	0.005	0.0015	0.05	No	15	0.0009037	93.33	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-102	0.001	0.00008	0.002	No	15	0.0002375	93.33	None	No	0.01	NP (NDs)

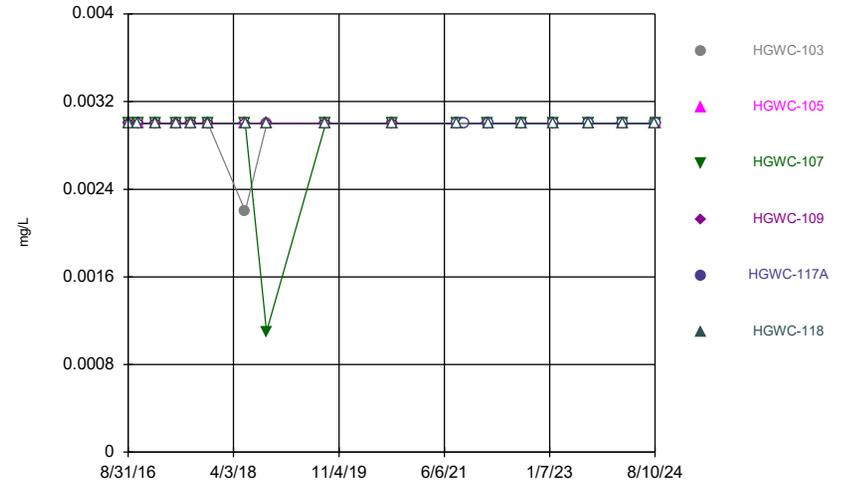
FIGURE A.

Time Series



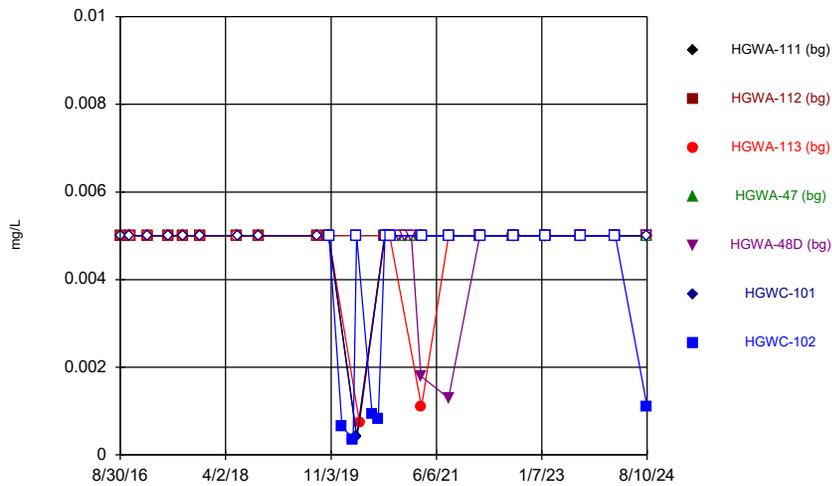
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Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



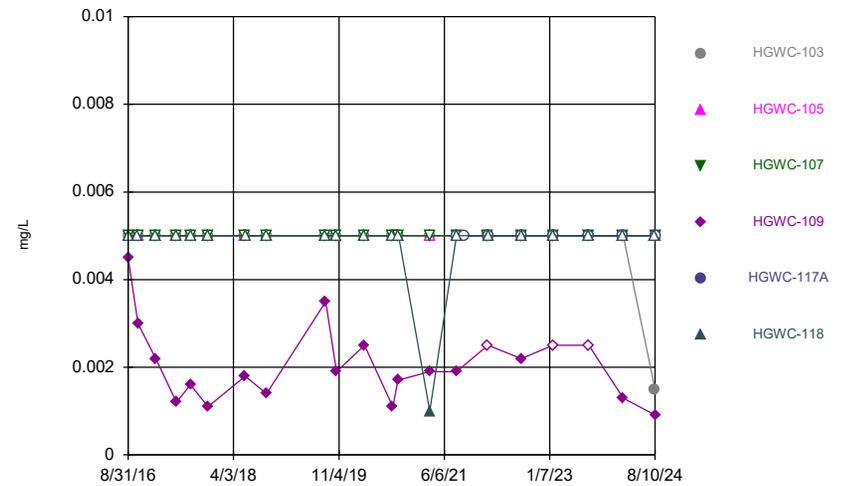
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Time Series



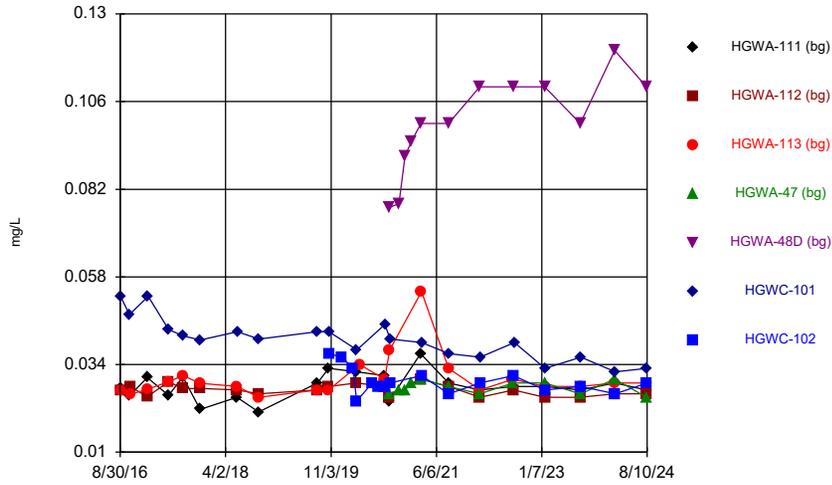
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Time Series



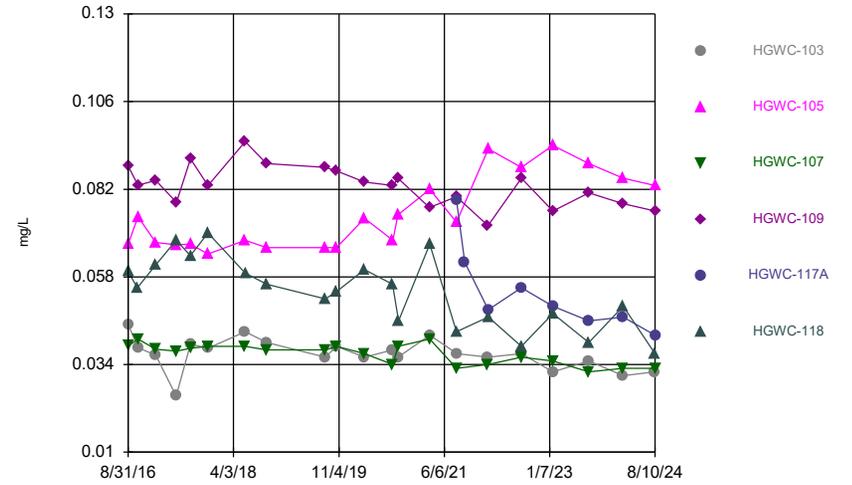
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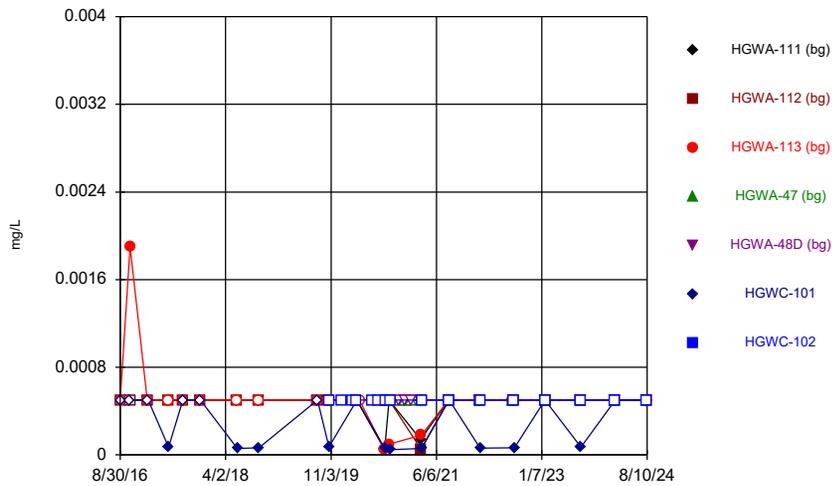
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Time Series



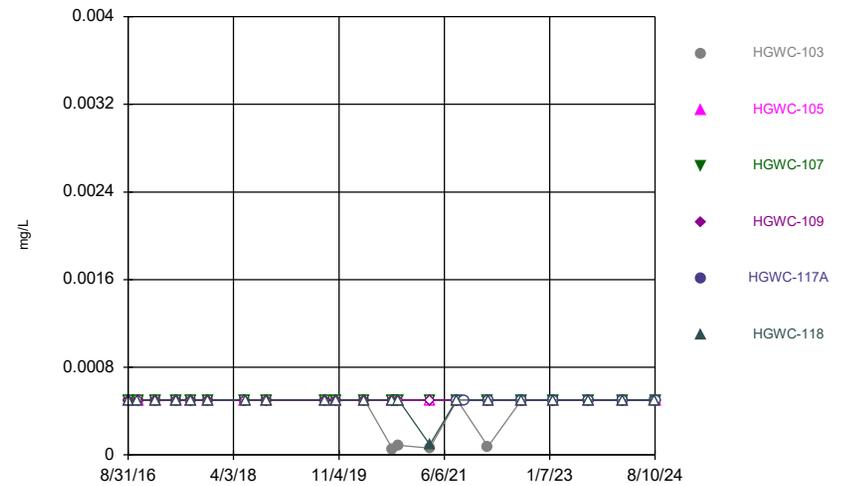
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Time Series



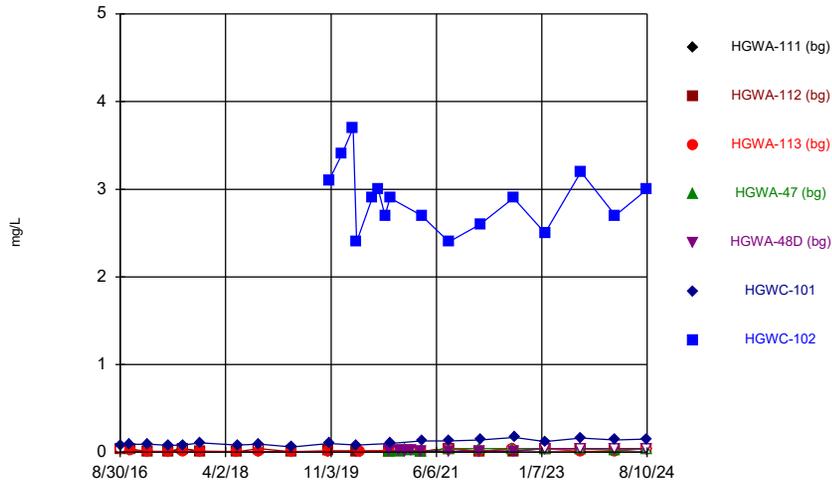
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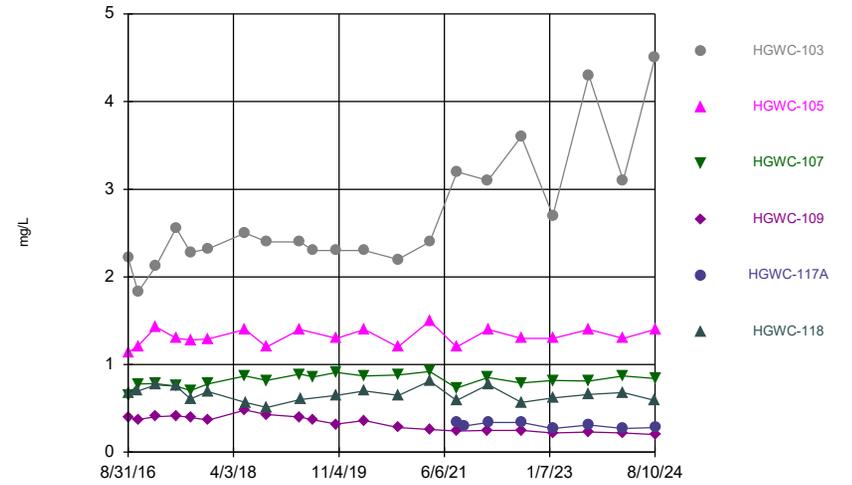
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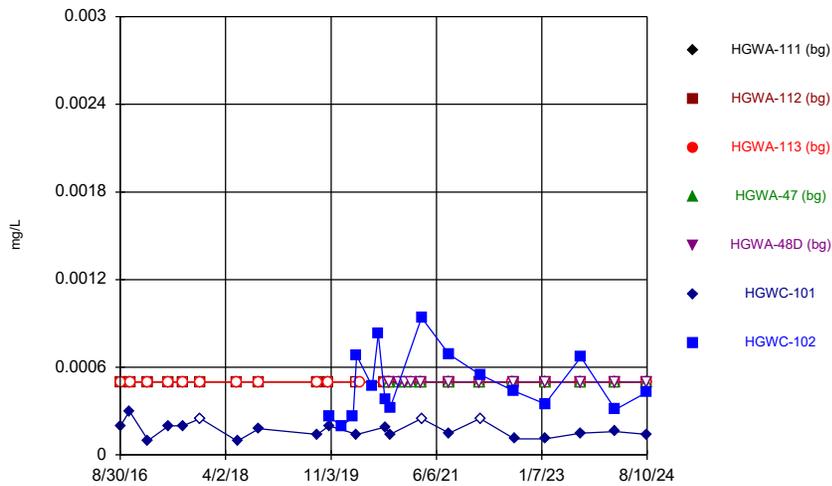
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Time Series



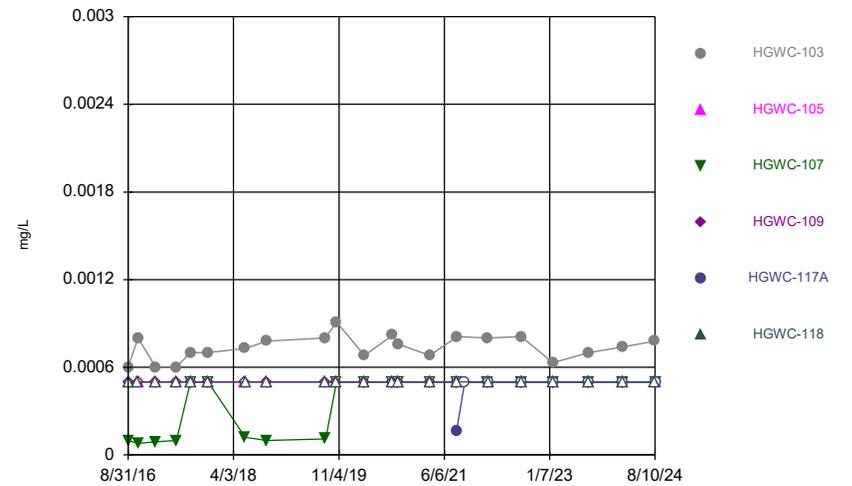
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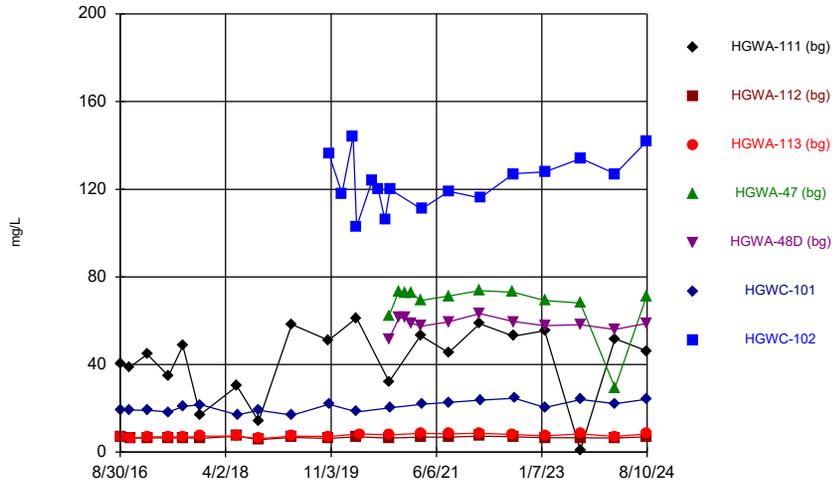
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Time Series



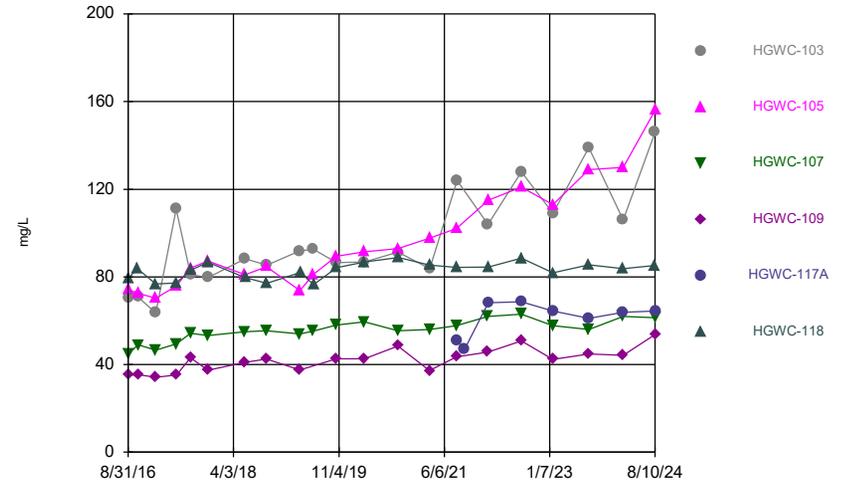
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Time Series



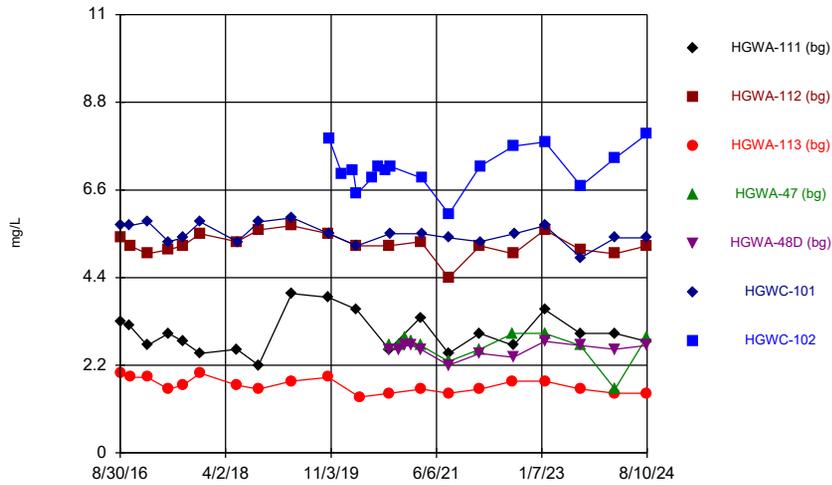
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Time Series



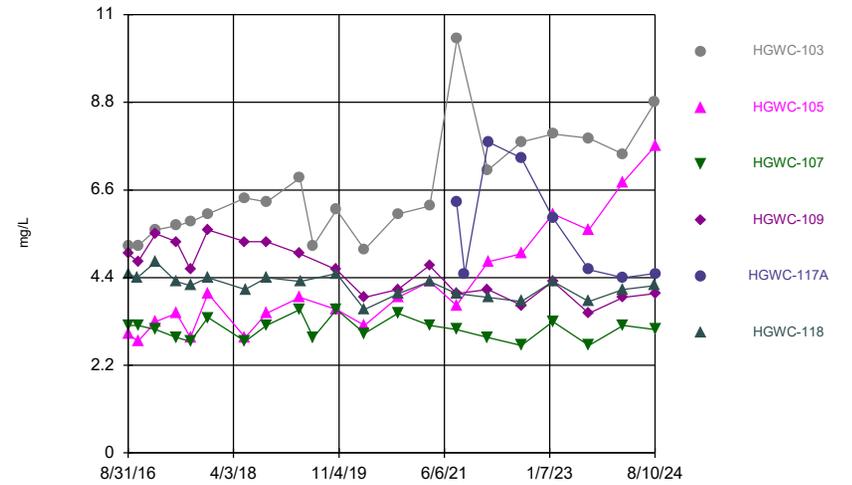
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Time Series



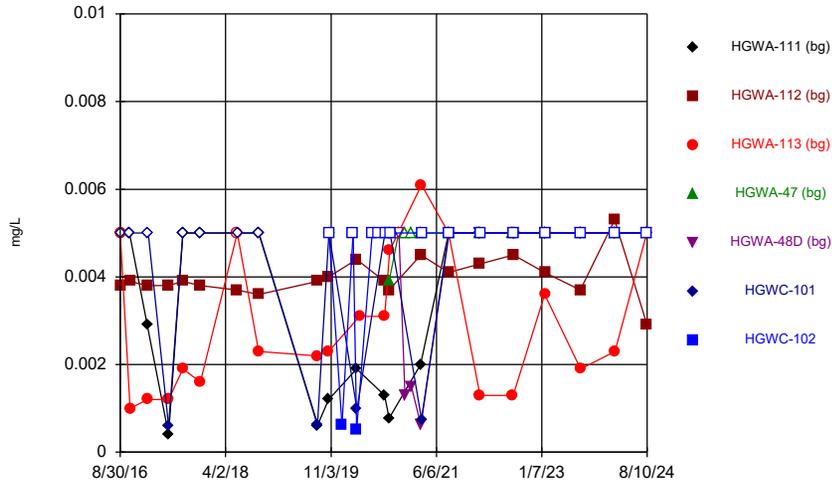
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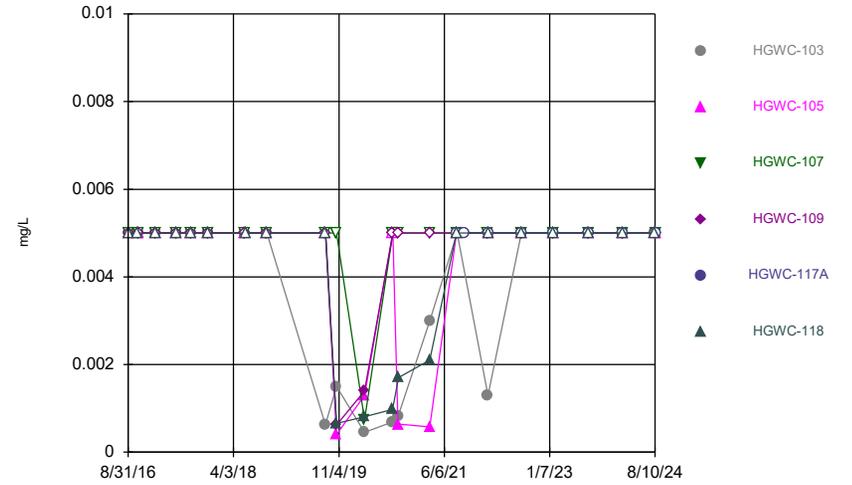
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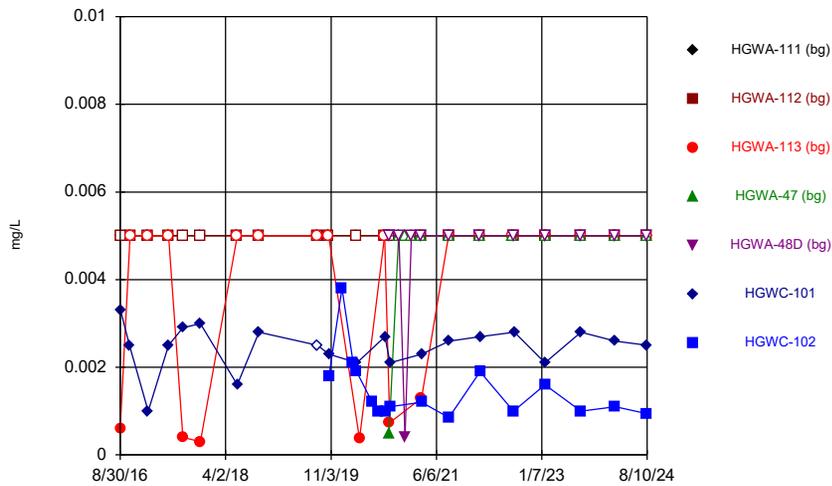
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Time Series



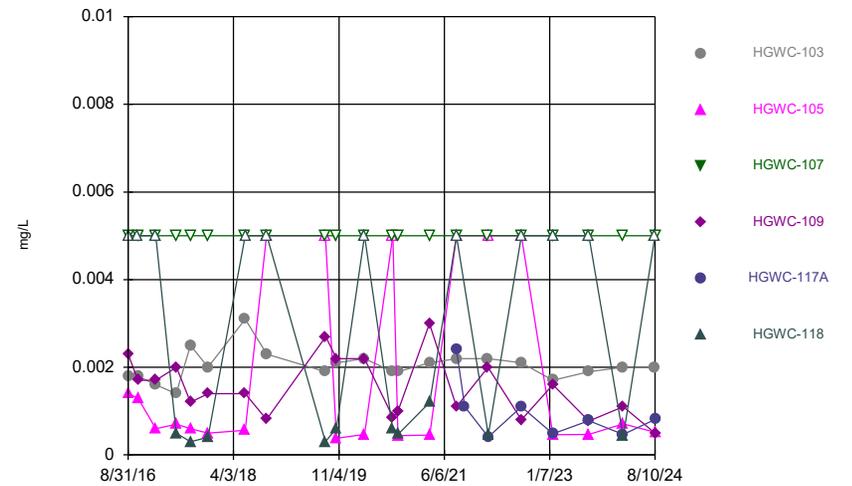
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Time Series



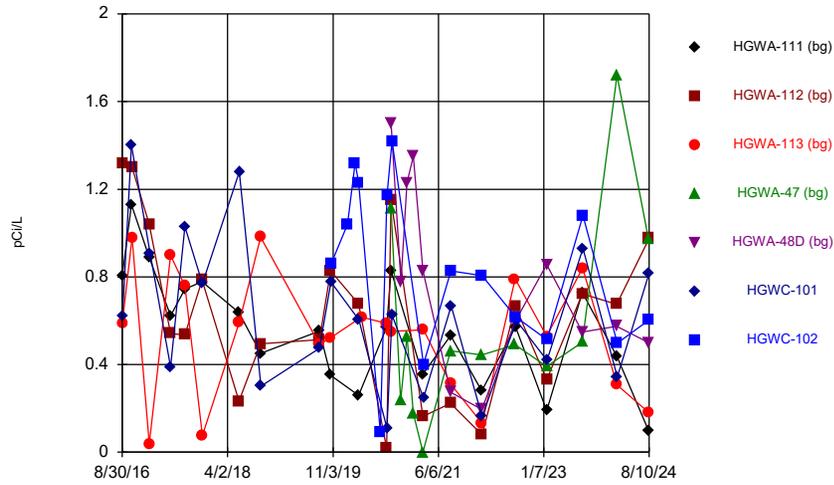
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Time Series



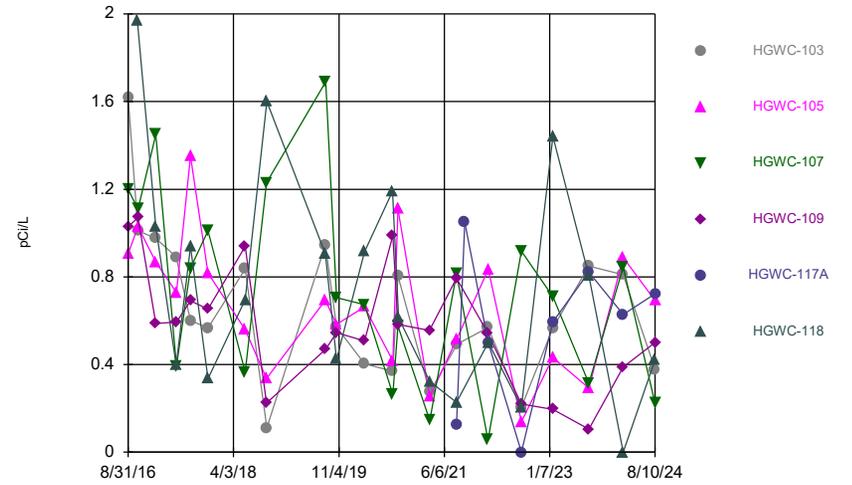
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Time Series



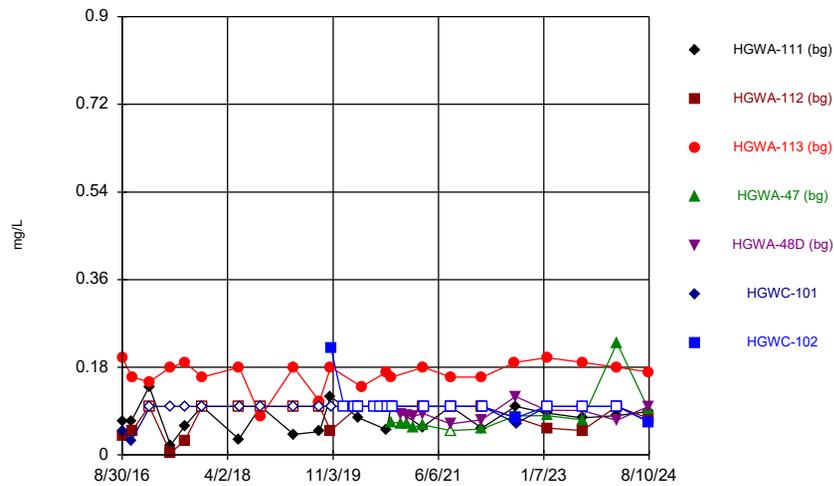
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Time Series



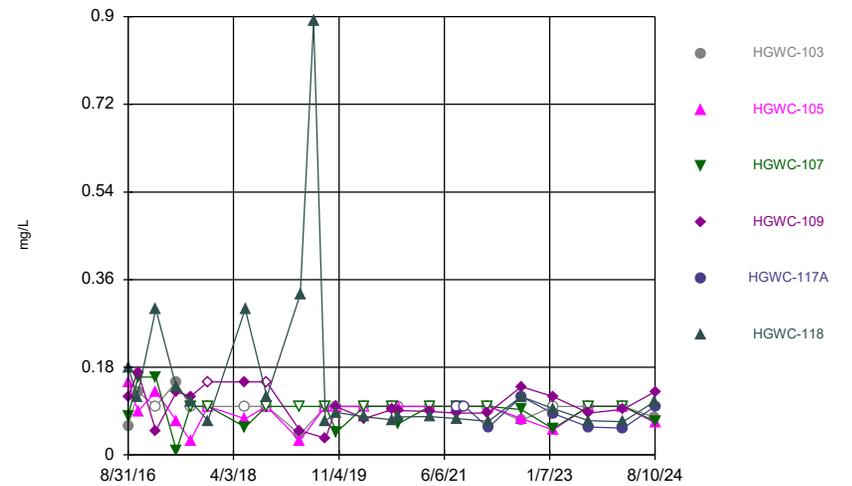
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Time Series



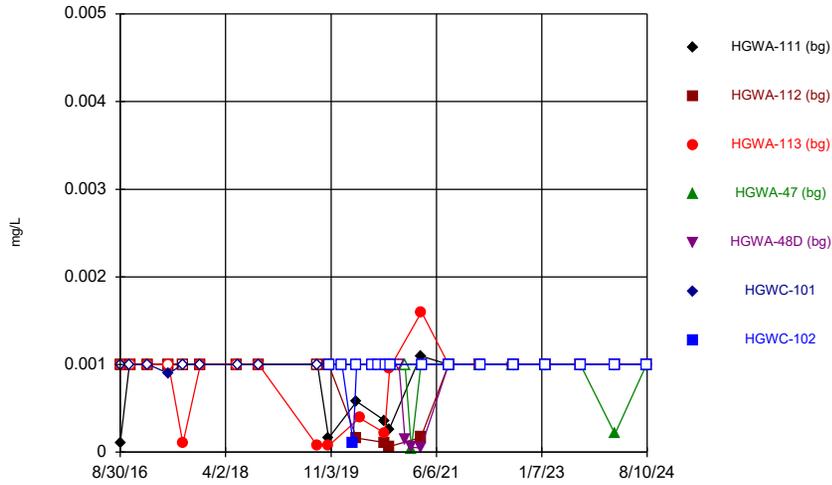
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Time Series



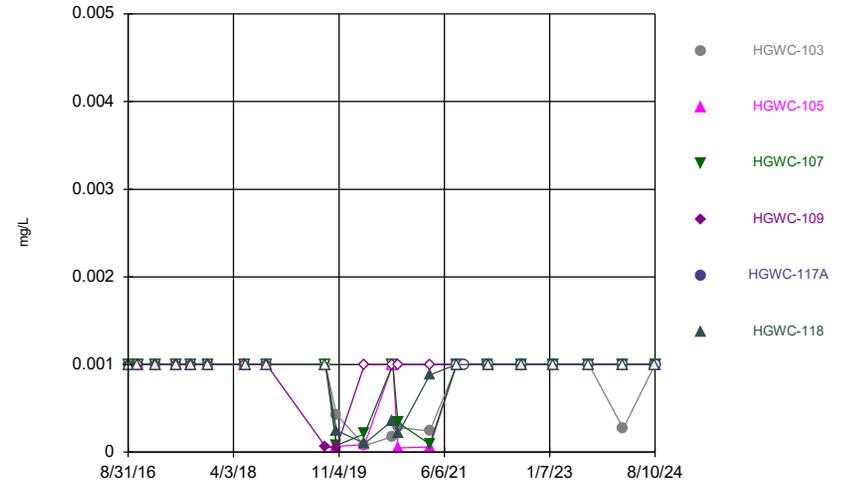
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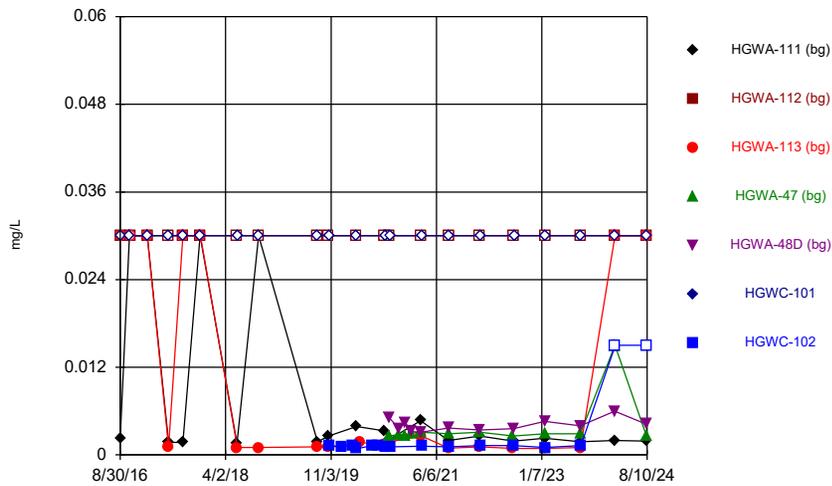
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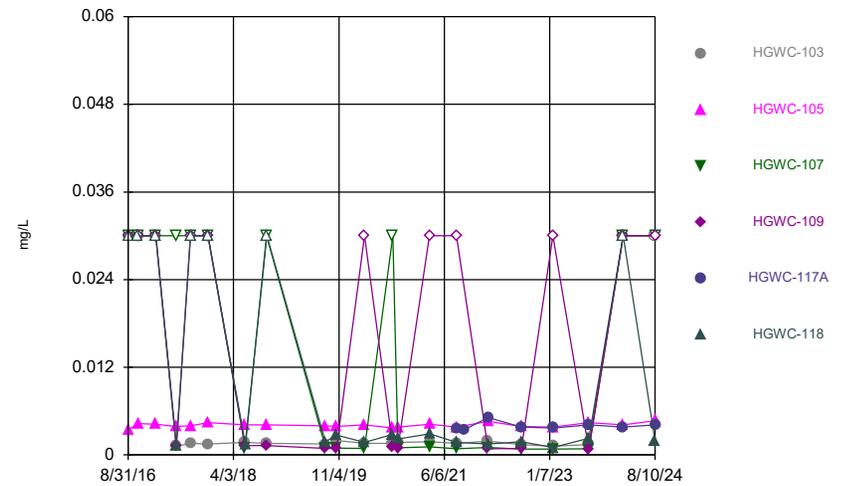
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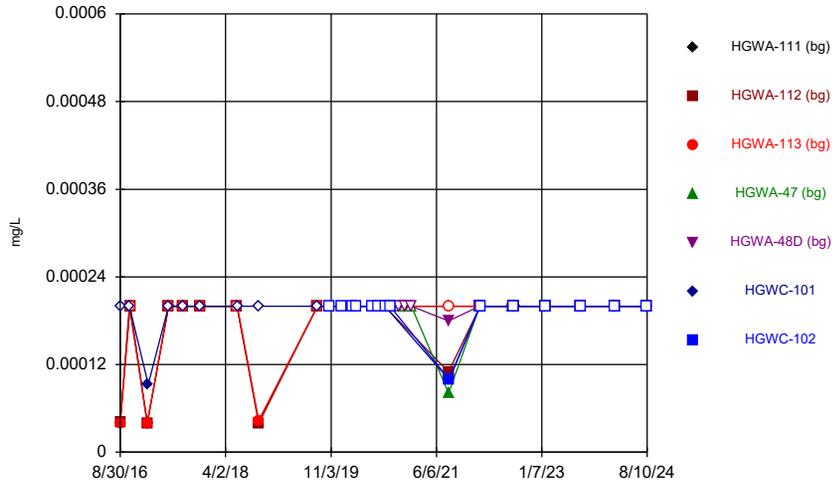
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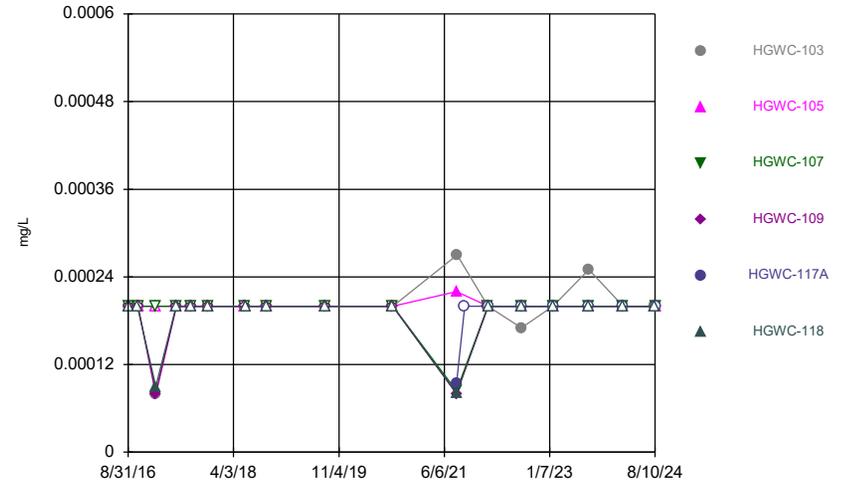
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Time Series



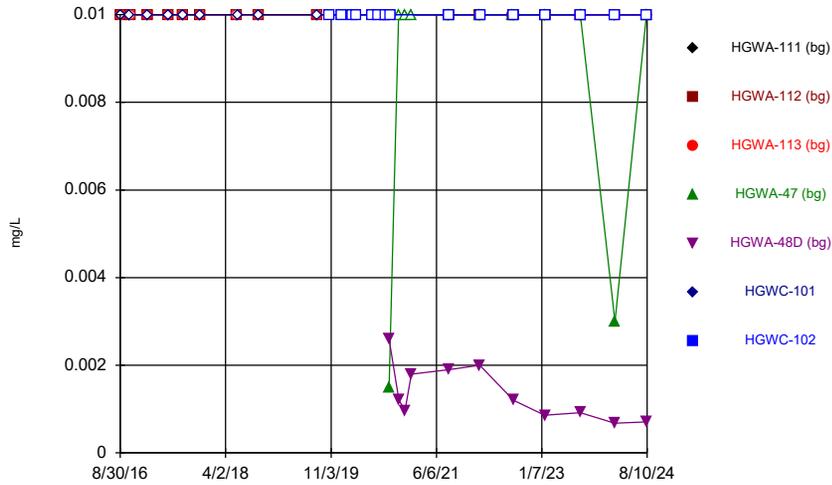
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Time Series



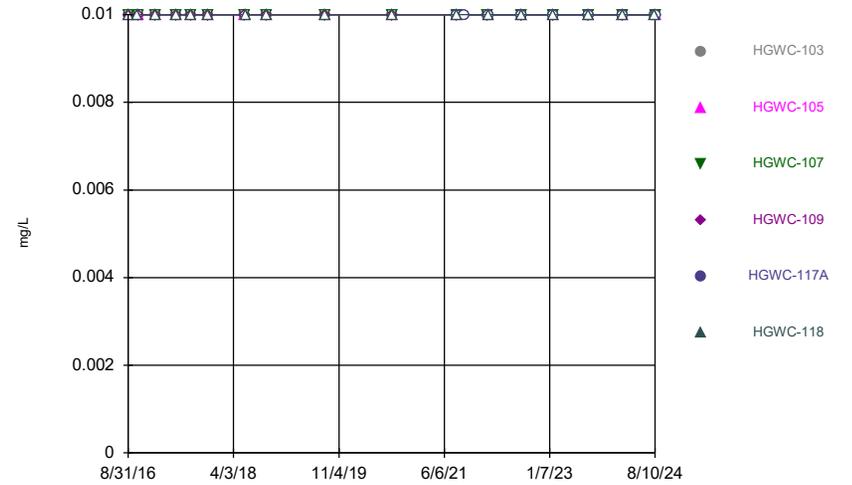
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Time Series



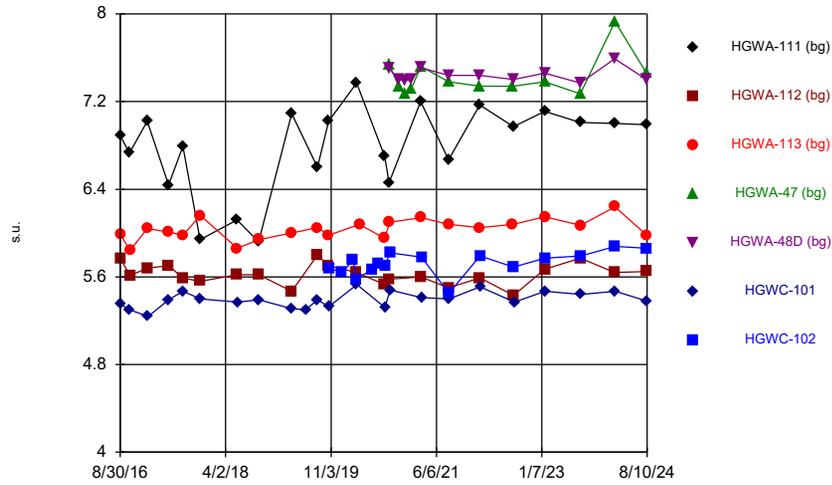
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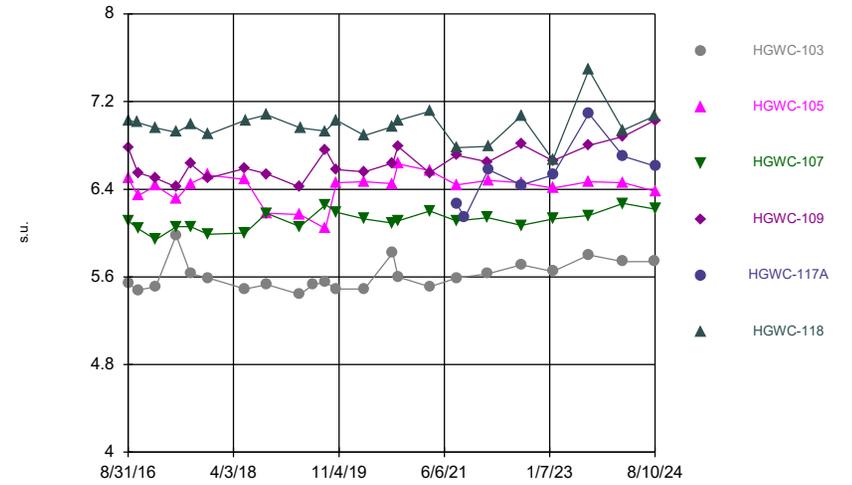
Constituent: Molybdenum Analysis Run 10/16/2024 2:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



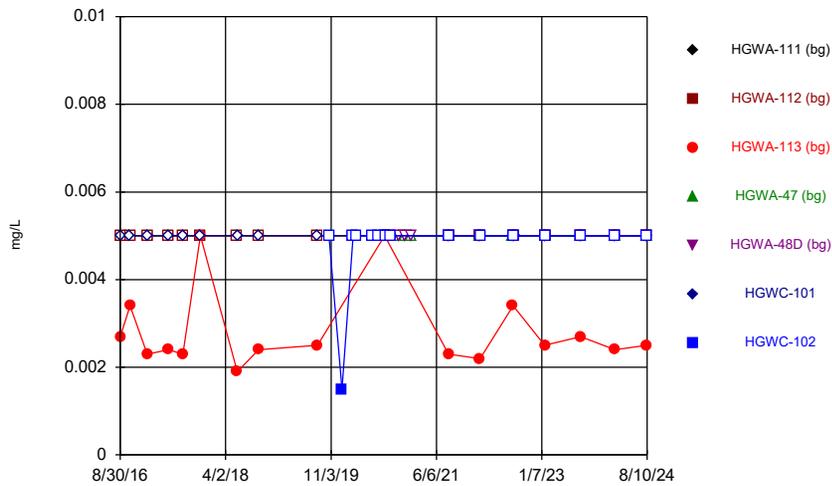
Constituent: pH, Field Analysis Run 10/16/2024 2:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



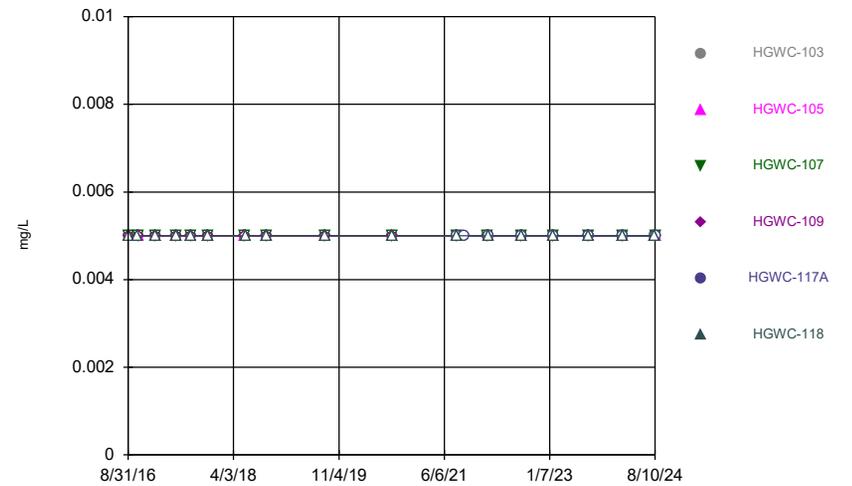
Constituent: pH, Field Analysis Run 10/16/2024 2:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



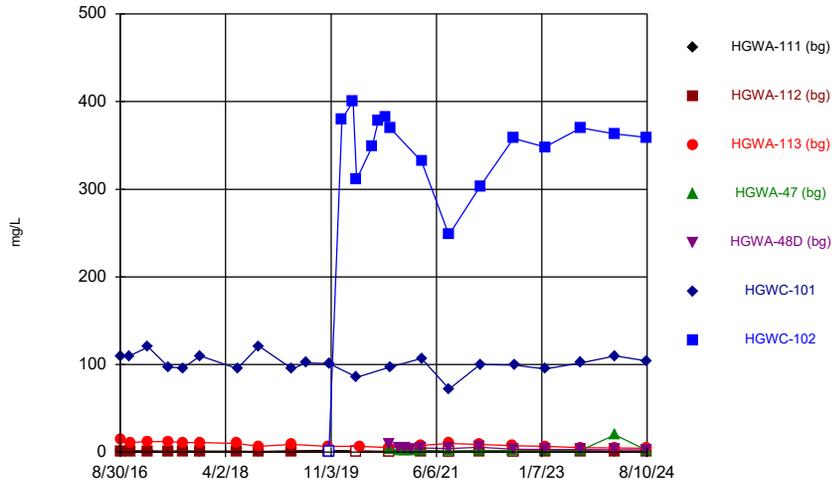
Constituent: Selenium Analysis Run 10/16/2024 2:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



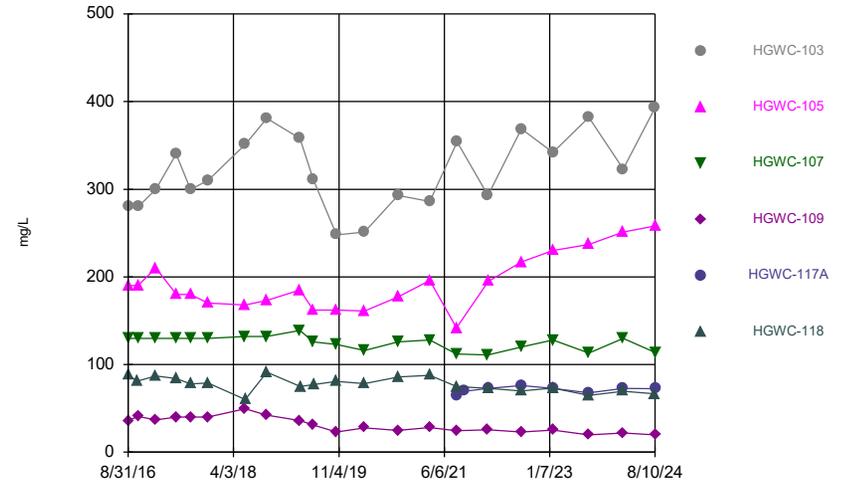
Constituent: Selenium Analysis Run 10/16/2024 2:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



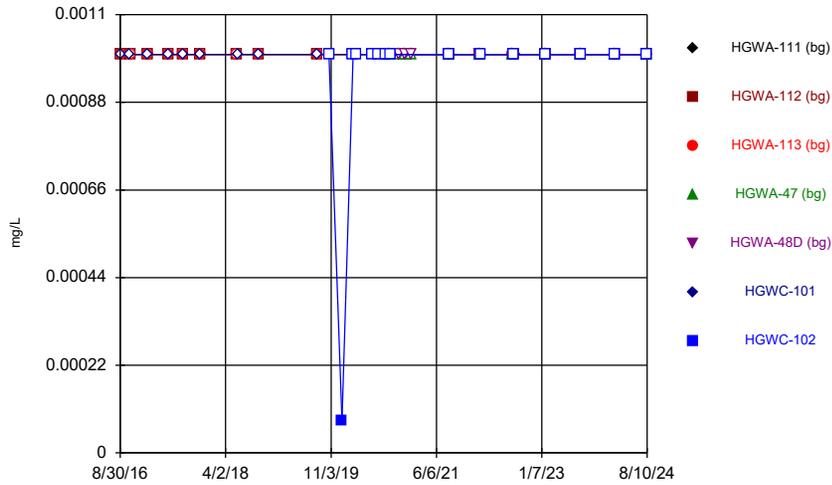
Constituent: Sulfate as SO4 Analysis Run 10/16/2024 2:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



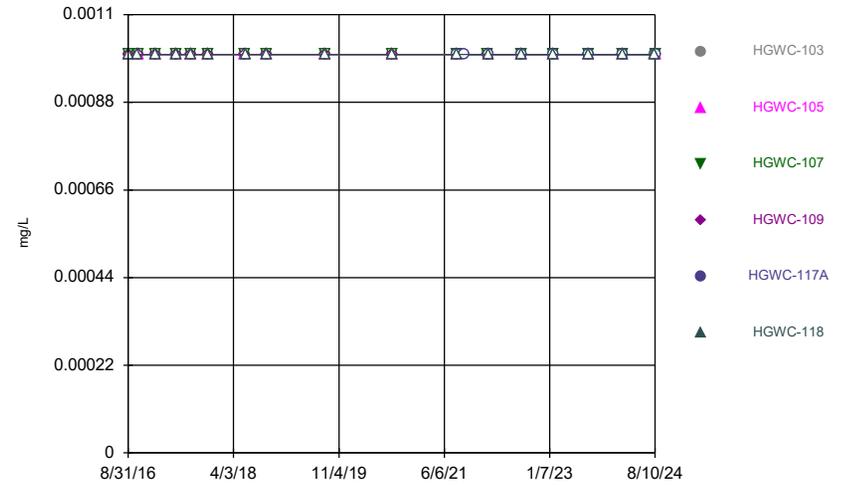
Constituent: Sulfate as SO4 Analysis Run 10/16/2024 2:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



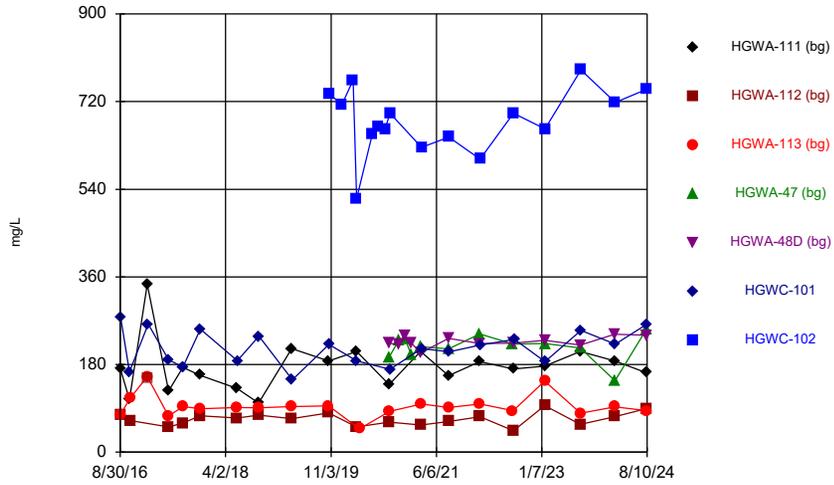
Constituent: Thallium Analysis Run 10/16/2024 2:28 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



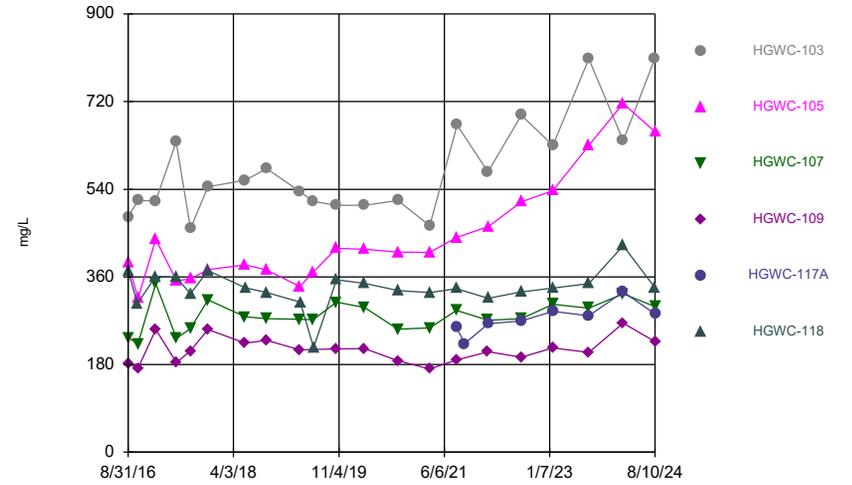
Constituent: Thallium Analysis Run 10/16/2024 2:28 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/16/2024 2:28 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/16/2024 2:28 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/16/2024 2:31 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	<0.003	<0.003	<0.003				
8/31/2016						<0.003	
10/20/2016	<0.003					<0.003	
10/24/2016		<0.003	<0.003				
1/25/2017	<0.003	<0.003	<0.003				
1/31/2017						<0.003	
5/23/2017		<0.003	<0.003			<0.003	
5/24/2017	<0.003						
8/10/2017	<0.003	<0.003	<0.003			<0.003	
11/13/2017	<0.003	<0.003					
11/14/2017			<0.003			<0.003	
6/4/2018	<0.003	<0.003					
6/5/2018			<0.003				
6/6/2018						<0.003	
10/1/2018	<0.003	<0.003	<0.003				
10/3/2018						<0.003	
8/21/2019	<0.003	<0.003	<0.003				
8/22/2019						<0.003	
10/23/2019							<0.003
1/3/2020							0.00076 (J)
3/4/2020							<0.003
3/24/2020							<0.003
6/18/2020							<0.003
7/21/2020							<0.003
8/25/2020	<0.003	<0.003	<0.003				
8/27/2020						<0.003	<0.003
9/18/2020				<0.003	0.00038 (J)		
9/24/2020							<0.003
11/10/2020				<0.003			
11/11/2020					0.00031 (J)		
12/15/2020				<0.003	<0.003		
1/19/2021				<0.003	0.00042 (J)		
8/12/2021	<0.003	<0.003	<0.003	<0.003	<0.003		
8/13/2021							<0.003
8/16/2021						<0.003	
1/31/2022	0.0014 (J)			<0.003	<0.003		
2/1/2022		<0.003	<0.003				
2/2/2022						<0.003	<0.003
8/2/2022			<0.003	<0.003			
8/5/2022	<0.003	<0.003			<0.003		<0.003
8/10/2022						<0.003	
1/24/2023	<0.003	<0.003	<0.003	<0.003	<0.003		
1/25/2023						<0.003	<0.003
8/8/2023	<0.003	<0.003		<0.003	<0.003		
8/10/2023			<0.003				
8/11/2023						<0.003	0.003
2/13/2024		<0.003			<0.003		
2/14/2024	<0.003		<0.003	<0.003			
2/16/2024						<0.003	<0.003
8/6/2024	<0.003			<0.003	<0.003		
8/8/2024			<0.003				
8/9/2024		<0.003					<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/10/2024						<0.003	

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.003	<0.003	<0.003	<0.003		<0.003
10/20/2016						<0.003
10/24/2016	<0.003					
10/25/2016		<0.003	<0.003	<0.003		
1/31/2017	<0.003	<0.003	<0.003	<0.003		<0.003
5/23/2017	<0.003					<0.003
5/24/2017		<0.003	<0.003	<0.003		
8/10/2017	<0.003	<0.003	<0.003	<0.003		<0.003
11/14/2017	<0.003	<0.003	<0.003	<0.003		<0.003
6/6/2018	0.0022 (J)	<0.003	<0.003	<0.003		
6/7/2018						<0.003
10/2/2018		<0.003	0.0011 (J)	<0.003		
10/3/2018	<0.003					<0.003
8/22/2019	<0.003	<0.003				<0.003
8/23/2019			<0.003	<0.003		
8/26/2020						<0.003
8/27/2020	<0.003	<0.003	<0.003	<0.003		
8/12/2021					<0.003	
8/13/2021		<0.003	<0.003	<0.003		<0.003
8/16/2021	<0.003					
9/27/2021					<0.003	
2/2/2022	<0.003		<0.003	<0.003		
2/3/2022		<0.003			<0.003	<0.003
8/5/2022	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1/25/2023	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
8/11/2023	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
2/16/2024	<0.003		<0.003			
2/17/2024		<0.003		<0.003	<0.003	<0.003
8/9/2024	<0.003					<0.003
8/10/2024		<0.003	<0.003	<0.003	<0.003	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/16/2024 2:31 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	<0.005	<0.005	<0.005				
8/31/2016						<0.005	
10/20/2016	<0.005					<0.005	
10/24/2016		<0.005	<0.005				
1/25/2017	<0.005	<0.005	<0.005				
1/31/2017						<0.005	
5/23/2017		<0.005	<0.005			<0.005	
5/24/2017	<0.005						
8/10/2017	<0.005	<0.005	<0.005			<0.005	
11/13/2017	<0.005	<0.005					
11/14/2017			<0.005			<0.005	
6/4/2018	<0.005	<0.005					
6/5/2018			<0.005				
6/6/2018						<0.005	
10/1/2018	<0.005	<0.005	<0.005				
10/3/2018						<0.005	
8/21/2019	<0.005	<0.005	<0.005				
8/22/2019						<0.005	
10/21/2019	<0.005						
10/22/2019		<0.005	<0.005				
10/23/2019						<0.005	<0.005
1/3/2020							0.00065 (J)
3/4/2020							0.00036 (J)
3/24/2020	0.00042 (J)	<0.005					<0.005
3/25/2020						0.00039 (J)	
4/9/2020			0.00074 (J)				
6/18/2020							0.00092 (J)
7/21/2020							0.00083 (J)
8/25/2020	<0.005	<0.005	<0.005				
8/27/2020						<0.005	<0.005
9/18/2020	<0.005	<0.005		<0.005	<0.005		
9/22/2020			<0.005				
9/24/2020						<0.005	<0.005
11/10/2020				<0.005			
11/11/2020					<0.005		
12/15/2020				<0.005	<0.005		
1/19/2021				<0.005	<0.005		
3/11/2021	<0.005						
3/12/2021		<0.005		<0.005	0.0018 (J)		
3/16/2021			0.0011 (J)				
3/17/2021						<0.005	<0.005
8/12/2021	<0.005	<0.005	<0.005	<0.005	0.0013 (J)		
8/13/2021							<0.005
8/16/2021						<0.005	
1/31/2022	<0.005			<0.005	<0.005		
2/1/2022		<0.005	<0.005				
2/2/2022						<0.005	<0.005
8/2/2022			<0.005	<0.005			
8/5/2022	<0.005	<0.005			<0.005		<0.005
8/10/2022						<0.005	
1/24/2023	<0.005	<0.005	<0.005	<0.005	<0.005		
1/25/2023						<0.005	<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/8/2023	<0.005	<0.005		<0.005	<0.005		
8/10/2023			<0.005				
8/11/2023						<0.005	<0.005
2/13/2024		<0.005			<0.005		
2/14/2024	<0.005		<0.005	<0.005			
2/16/2024						<0.005	<0.005
8/6/2024	<0.005			<0.005	<0.005		
8/8/2024			<0.005				
8/9/2024		<0.005					0.0011 (J)
8/10/2024						<0.005	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/16/2024 2:31 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.005	<0.005	<0.005	0.0045 (J)		<0.005
10/20/2016						<0.005
10/24/2016	<0.005					
10/25/2016		<0.005	<0.005	0.003 (J)		
1/31/2017	<0.005	<0.005	<0.005	0.0022 (J)		<0.005
5/23/2017	<0.005					<0.005
5/24/2017		<0.005	<0.005	0.0012 (J)		
8/10/2017	<0.005	<0.005	<0.005	0.0016 (J)		<0.005
11/14/2017	<0.005	<0.005	<0.005	0.0011 (J)		<0.005
6/6/2018	<0.005	<0.005	<0.005	0.0018 (J)		
6/7/2018						<0.005
10/2/2018		<0.005	<0.005	0.0014 (J)		
10/3/2018	<0.005					<0.005
8/22/2019	<0.005	<0.005				<0.005
8/23/2019			<0.005	0.0035 (J)		
10/22/2019			<0.005	0.0019 (J)		<0.005
10/23/2019	<0.005	<0.005				
3/25/2020	<0.005	<0.005	<0.005	0.0025 (J)		<0.005
8/26/2020						<0.005
8/27/2020	<0.005	<0.005	<0.005	0.0011 (J)		
9/24/2020	<0.005	<0.005	<0.005			
9/25/2020				0.0017 (J)		
9/28/2020						<0.005
3/17/2021				0.0019 (J)		
3/18/2021	<0.005	<0.005	<0.005			0.001 (J)
8/12/2021					<0.005	
8/13/2021		<0.005	<0.005	0.0019 (J)		<0.005
8/16/2021	<0.005					
9/27/2021					<0.005	
2/2/2022	<0.005		<0.005	<0.005		
2/3/2022		<0.005			<0.005	<0.005
8/5/2022	<0.005	<0.005	<0.005	0.0022 (J)	<0.005	<0.005
1/25/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/11/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2/16/2024	<0.005		<0.005			
2/17/2024		<0.005		0.0013 (J)	<0.005	<0.005
8/9/2024	0.0015 (J)					<0.005
8/10/2024		<0.005	<0.005	0.00091 (J)	<0.005	

Time Series

Constituent: Barium (mg/L) Analysis Run 10/16/2024 2:31 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	0.0275	0.0269	0.0269				
8/31/2016						0.0527	
10/20/2016	0.0255					0.0477	
10/24/2016		0.028	0.0258				
1/25/2017	0.0304	0.0252	0.0272				
1/31/2017						0.0527	
5/23/2017		0.0293	0.0293			0.0436	
5/24/2017	0.0256						
8/10/2017	0.0306	0.0274	0.031			0.0419	
11/13/2017	0.0217	0.0275					
11/14/2017			0.0289			0.0407	
6/4/2018	0.025	0.027					
6/5/2018			0.028				
6/6/2018						0.043	
10/1/2018	0.021	0.026	0.025				
10/3/2018						0.041	
8/21/2019	0.029	0.027	0.027				
8/22/2019						0.043	
10/21/2019	0.033						
10/22/2019		0.028	0.027				
10/23/2019						0.043	0.037
1/3/2020							0.036
3/4/2020							0.033
3/24/2020	0.032	0.029					0.024
3/25/2020						0.038	
4/9/2020			0.034				
6/18/2020							0.029
7/21/2020							0.028
8/25/2020	0.031	0.028	0.03				
8/27/2020						0.045	0.028
9/18/2020	0.024	0.025		0.026	0.077		
9/22/2020			0.038				
9/24/2020						0.041	0.029
11/10/2020				0.027			
11/11/2020					0.078		
12/15/2020				0.027	0.091		
1/19/2021				0.029	0.095		
3/11/2021	0.037						
3/12/2021		0.03		0.03	0.1		
3/16/2021			0.054				
3/17/2021						0.04	0.031
8/12/2021	0.029	0.028	0.033	0.028	0.1		
8/13/2021							0.026
8/16/2021						0.037	
1/31/2022	0.027			0.026	0.11		
2/1/2022		0.025	0.027				
2/2/2022						0.036	0.029
8/2/2022			0.03	0.029			
8/5/2022	0.028	0.027			0.11		0.031
8/10/2022						0.04	
1/24/2023	0.028	0.025	0.028	0.029	0.11		
1/25/2023						0.033	0.027

Time Series

Constituent: Barium (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/8/2023	0.027	0.025		0.026	0.1		
8/10/2023			0.028				
8/11/2023						0.036	0.028
2/13/2024		0.026			0.12		
2/14/2024	0.029		0.029	0.03			
2/16/2024						0.032	0.026
8/6/2024	0.027			0.025	0.11		
8/8/2024			0.029				
8/9/2024		0.026					0.029
8/10/2024						0.033	

Time Series

Constituent: Barium (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	0.045	0.067	0.0391	0.0883		0.0595
10/20/2016						0.055
10/24/2016	0.0386					
10/25/2016		0.0745	0.041	0.0831		
1/31/2017	0.0365	0.0674	0.0382	0.0844		0.0613
5/23/2017	0.0254					0.068
5/24/2017		0.0668	0.0377	0.0784		
8/10/2017	0.0396	0.067	0.0385	0.0903		0.0638
11/14/2017	0.0385	0.0643	0.039	0.083		0.07
6/6/2018	0.043	0.068	0.039	0.095		
6/7/2018						0.059
10/2/2018		0.066	0.038	0.089		
10/3/2018	0.04					0.056
8/22/2019	0.036	0.066				0.052
8/23/2019			0.038	0.088		
10/22/2019			0.039	0.087		0.054
10/23/2019	0.039	0.066				
3/25/2020	0.036	0.074	0.037	0.084		0.06
8/26/2020						0.056
8/27/2020	0.038	0.068	0.034	0.083		
9/24/2020	0.036	0.075	0.039			
9/25/2020				0.085		
9/28/2020						0.046
3/17/2021				0.077		
3/18/2021	0.042	0.082	0.041			0.067
8/12/2021					0.079	
8/13/2021		0.073	0.033	0.08		0.043
8/16/2021	0.037					
9/27/2021					0.062	
2/2/2022	0.036		0.034	0.072		
2/3/2022		0.093			0.049	0.047
8/5/2022	0.037	0.088	0.036	0.085	0.055	0.039
1/25/2023	0.032	0.094	0.035	0.076	0.05	0.048
8/11/2023	0.035	0.089	0.032	0.081	0.046	0.04
2/16/2024	0.031		0.033			
2/17/2024		0.085		0.078	0.047	0.05
8/9/2024	0.032					0.037
8/10/2024		0.083	0.033	0.076	0.042	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/16/2024 2:31 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	<0.0005	<0.0005	<0.0005				
8/31/2016						<0.0005	
10/20/2016	<0.0005					<0.0005	
10/24/2016		<0.0005	0.0019 (J)				
1/25/2017	<0.0005	<0.0005	<0.0005				
1/31/2017						<0.0005	
5/23/2017		<0.0005	<0.0005			7E-05 (J)	
5/24/2017	<0.0005						
8/10/2017	<0.0005	<0.0005	<0.0005			<0.0005	
11/13/2017	<0.0005	<0.0005					
11/14/2017			<0.0005			<0.0005	
6/4/2018	<0.0005	<0.0005					
6/5/2018			<0.0005				
6/6/2018						5.9E-05 (J)	
10/1/2018	<0.0005	<0.0005	<0.0005				
10/3/2018						6.5E-05 (J)	
8/21/2019	<0.0005	<0.0005	<0.0005				
8/22/2019						<0.0005	
10/21/2019	<0.0005						
10/22/2019		<0.0005	<0.0005				
10/23/2019						7.5E-05 (J)	<0.0005
1/3/2020							<0.0005
3/4/2020							<0.0005
3/24/2020	<0.0005	<0.0005					<0.0005
3/25/2020						<0.0005	
4/9/2020			<0.0005				
6/18/2020							<0.0005
7/21/2020							<0.0005
8/25/2020	4.7E-05 (J)	<0.0005	4.6E-05 (J)				
8/27/2020						5.7E-05 (J)	<0.0005
9/18/2020	<0.0005	<0.0005		<0.0005	<0.0005		
9/22/2020			9.9E-05 (J)				
9/24/2020						4.8E-05 (J)	<0.0005
11/10/2020				<0.0005			
11/11/2020					<0.0005		
12/15/2020				<0.0005	<0.0005		
1/19/2021				<0.0005	<0.0005		
3/11/2021	0.00014 (J)						
3/12/2021		5.4E-05 (J)		<0.0005	<0.0005		
3/16/2021			0.00018 (J)				
3/17/2021						5.9E-05 (J)	<0.0005
8/12/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
8/13/2021							<0.0005
8/16/2021						<0.0005	
1/31/2022	<0.0005			<0.0005	<0.0005		
2/1/2022		<0.0005	<0.0005				
2/2/2022						6.2E-05 (J)	<0.0005
8/2/2022			<0.0005	<0.0005			
8/5/2022	<0.0005	<0.0005			<0.0005		<0.0005
8/10/2022						6.4E-05 (J)	
1/24/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
1/25/2023						<0.0005	<0.0005

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/8/2023	<0.0005	<0.0005		<0.0005	<0.0005		
8/10/2023			<0.0005				
8/11/2023						7E-05 (J)	<0.0005
2/13/2024		<0.0005			<0.0005		
2/14/2024	<0.0005		<0.0005	<0.0005			
2/16/2024						<0.0005	<0.0005
8/6/2024	<0.0005			<0.0005	<0.0005		
8/8/2024			<0.0005				
8/9/2024		<0.0005					<0.0005
8/10/2024						<0.0005	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
10/20/2016						<0.0005
10/24/2016	<0.0005					
10/25/2016		<0.0005	<0.0005	<0.0005		
1/31/2017	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
5/23/2017	<0.0005					<0.0005
5/24/2017		<0.0005	<0.0005	<0.0005		
8/10/2017	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
11/14/2017	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
6/6/2018	<0.0005	<0.0005	<0.0005	<0.0005		
6/7/2018						<0.0005
10/2/2018		<0.0005	<0.0005	<0.0005		
10/3/2018	<0.0005					<0.0005
8/22/2019	<0.0005	<0.0005				<0.0005
8/23/2019			<0.0005	<0.0005		
10/22/2019			<0.0005	<0.0005		<0.0005
10/23/2019	<0.0005	<0.0005				
3/25/2020	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
8/26/2020						<0.0005
8/27/2020	5E-05 (J)	<0.0005	<0.0005	<0.0005		
9/24/2020	8.8E-05 (J)	<0.0005	<0.0005			
9/25/2020				<0.0005		
9/28/2020						<0.0005
3/17/2021				<0.0005		
3/18/2021	6.1E-05 (J)	<0.0005	<0.0005			9.3E-05 (J)
8/12/2021					<0.0005	
8/13/2021		<0.0005	<0.0005	<0.0005		<0.0005
8/16/2021	<0.0005					
9/27/2021					<0.0005	
2/2/2022	7.7E-05 (J)		<0.0005	<0.0005		
2/3/2022		<0.0005			<0.0005	<0.0005
8/5/2022	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1/25/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/11/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2/16/2024	<0.0005		<0.0005			
2/17/2024		<0.0005		<0.0005	<0.0005	<0.0005
8/9/2024	<0.0005					<0.0005
8/10/2024		<0.0005	<0.0005	<0.0005	<0.0005	

Time Series

Constituent: Boron, total (mg/L) Analysis Run 10/16/2024 2:31 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	<0.04	<0.04	<0.04				
8/31/2016						0.0724 (J)	
10/20/2016	0.016 (J)					0.0877 (J)	
10/24/2016		0.0367 (J)	0.0226 (J)				
1/25/2017	0.0095 (J)	0.0075 (J)	0.009 (J)				
1/31/2017						0.0928	
5/23/2017		0.0073 (J)	0.0082 (J)			0.0795	
5/24/2017	0.0094 (J)						
8/10/2017	<0.04	<0.04	0.0061 (J)			0.0814	
11/13/2017	0.0103 (J)	0.0089 (J)					
11/14/2017			0.012 (J)			0.108	
6/4/2018	0.0065 (J)	0.007 (J)					
6/5/2018			0.0085 (J)				
6/6/2018						0.081	
10/1/2018	0.0054 (J)	<0.04	0.0042 (J)				
10/3/2018						0.092	
4/1/2019	0.0076 (J)						
4/2/2019		0.0043 (J)	0.0059 (J)				
4/4/2019						0.06 (X)	
10/21/2019	0.0097 (J)						
10/22/2019		0.016 (J)	0.01 (J)				
10/23/2019						0.1	3.1
1/3/2020							3.4
3/4/2020							3.7
3/24/2020	0.011 (J)	0.012 (J)					2.4
3/25/2020						0.08 (J)	
4/9/2020			0.012 (J)				
6/18/2020							2.9
7/21/2020							3
8/27/2020							2.7
9/18/2020	0.011 (J)	0.008 (J)		0.0082 (J)	0.015 (J)		
9/22/2020			0.021 (J)				
9/24/2020						0.1	2.9
11/10/2020				0.0064 (J)			
11/11/2020					0.014 (J)		
12/15/2020				<0.04	0.0083 (J)		
1/19/2021				0.015 (J)	0.015 (J)		
3/11/2021	0.01 (J)						
3/12/2021		0.0061 (J)		0.0067 (J)	0.012 (J)		
3/16/2021			0.011 (J)				
3/17/2021						0.13	2.7
8/12/2021	<0.04	<0.04	<0.04	<0.04	0.012 (J)		
8/13/2021							2.4
8/16/2021						0.13	
1/31/2022	0.0099 (J)			<0.04	0.011 (J)		
2/1/2022		0.011 (J)	0.012 (J)				
2/2/2022						0.14	2.6
8/2/2022			<0.04	<0.04			
8/5/2022	<0.04	0.012 (J)			0.011 (J)		2.9
8/10/2022						0.17	
1/24/2023	<0.04	<0.04	<0.04	<0.04	<0.04		
1/25/2023						0.12	2.5

Time Series

Constituent: Boron, total (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/8/2023	<0.04	<0.04		<0.04	<0.04		
8/10/2023			0.0091 (J)				
8/11/2023						0.16	3.2
2/13/2024		<0.04			<0.04		
2/14/2024	<0.04		0.013 (J)	0.018 (J)			
2/16/2024						0.14	2.7
8/6/2024	<0.04			<0.04	<0.04		
8/8/2024			<0.04				
8/9/2024		0.029 (J)					3
8/10/2024						0.15	

Time Series

Constituent: Boron, total (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	2.22	1.14	0.651	0.402		0.681
10/20/2016						0.697
10/24/2016	1.83					
10/25/2016		1.21	0.778	0.372		
1/31/2017	2.12	1.43	0.782	0.404		0.768
5/23/2017	2.56					0.754
5/24/2017		1.3	0.753	0.415		
8/10/2017	2.28	1.28	0.702	0.397		0.608
11/14/2017	2.32	1.29	0.78	0.366		0.691
6/6/2018	2.5	1.4	0.87	0.48		
6/7/2018						0.57
10/2/2018		1.2	0.82	0.43		
10/3/2018	2.4					0.51
4/3/2019			0.89	0.4		
4/4/2019	2.4	1.4 (X)				
4/5/2019						0.6 (X)
6/17/2019	2.3		0.86	0.37		
10/22/2019			0.91	0.32		0.65
10/23/2019	2.3	1.3				
3/25/2020	2.3	1.4	0.87	0.36		0.7
9/24/2020	2.2	1.2	0.88			
9/25/2020				0.28		
9/28/2020						0.65
3/17/2021				0.26		
3/18/2021	2.4	1.5	0.92			0.81
8/12/2021					0.34	
8/13/2021		1.2	0.73	0.24		0.59
8/16/2021	3.2					
9/27/2021					0.3	
2/2/2022	3.1		0.85	0.25		
2/3/2022		1.4			0.34	0.77
8/5/2022	3.6	1.3	0.79	0.25	0.34	0.57
1/25/2023	2.7	1.3	0.82	0.22	0.27	0.62
8/11/2023	4.3	1.4	0.81	0.23	0.31	0.66
2/16/2024	3.1		0.87			
2/17/2024		1.3		0.22	0.27	0.68
8/9/2024	4.5					0.59
8/10/2024		1.4	0.84	0.2	0.28	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/16/2024 2:31 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	<0.0005	<0.0005	<0.0005				
8/31/2016						0.0002 (J)	
10/20/2016	<0.0005					0.0003 (J)	
10/24/2016		<0.0005	<0.0005				
1/25/2017	<0.0005	<0.0005	<0.0005				
1/31/2017						0.0001 (J)	
5/23/2017		<0.0005	<0.0005			0.0002 (J)	
5/24/2017	<0.0005						
8/10/2017	<0.0005	<0.0005	<0.0005			0.0002 (J)	
11/13/2017	<0.0005	<0.0005					
11/14/2017			<0.0005			<0.0005	
6/4/2018	<0.0005	<0.0005					
6/5/2018			<0.0005				
6/6/2018						9.5E-05 (J)	
10/1/2018	<0.0005	<0.0005	<0.0005				
10/3/2018						0.00018 (J)	
8/21/2019	<0.0005	<0.0005	<0.0005				
8/22/2019						0.00014 (J)	
10/21/2019	<0.0005						
10/22/2019		<0.0005	<0.0005				
10/23/2019						0.0002 (J)	0.00026 (J)
1/3/2020							0.0002 (J)
3/4/2020							0.00026 (J)
3/24/2020	<0.0005	<0.0005					0.00068 (J)
3/25/2020						0.00014 (J)	
4/9/2020			<0.0005				
6/18/2020							0.00047 (J)
7/21/2020							0.00083 (J)
8/25/2020	<0.0005	<0.0005	<0.0005				
8/27/2020						0.00019 (J)	0.00038 (J)
9/18/2020	<0.0005	<0.0005		<0.0005	<0.0005		
9/22/2020			<0.0005				
9/24/2020						0.00014 (J)	0.00032 (J)
11/10/2020				<0.0005			
11/11/2020					<0.0005		
12/15/2020				<0.0005	<0.0005		
1/19/2021				<0.0005	<0.0005		
3/11/2021	<0.0005						
3/12/2021		<0.0005		<0.0005	<0.0005		
3/16/2021			<0.0005				
3/17/2021						<0.0005	0.00094
8/12/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
8/13/2021							0.00069
8/16/2021						0.00015 (J)	
1/31/2022	<0.0005			<0.0005	<0.0005		
2/1/2022		<0.0005	<0.0005				
2/2/2022						<0.0005	0.00055
8/2/2022			<0.0005	<0.0005			
8/5/2022	<0.0005	<0.0005			<0.0005		0.00044 (J)
8/10/2022						0.00011 (J)	
1/24/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
1/25/2023						0.00011 (J)	0.00035 (J)

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/8/2023	<0.0005	<0.0005		<0.0005	<0.0005		
8/10/2023			<0.0005				
8/11/2023						0.00015 (J)	0.00067
2/13/2024		<0.0005			<0.0005		
2/14/2024	<0.0005		<0.0005	<0.0005			
2/16/2024						0.00016 (J)	0.00031 (J)
8/6/2024	<0.0005			<0.0005	<0.0005		
8/8/2024			<0.0005				
8/9/2024		<0.0005					0.00043 (J)
8/10/2024						0.00014 (J)	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	0.0006 (J)	<0.0005	0.0001 (J)	<0.0005		<0.0005
10/20/2016						<0.0005
10/24/2016	0.0008 (J)					
10/25/2016		<0.0005	8E-05 (J)	<0.0005		
1/31/2017	0.0006 (J)	<0.0005	9E-05 (J)	<0.0005		<0.0005
5/23/2017	0.0006 (J)					<0.0005
5/24/2017		<0.0005	0.0001 (J)	<0.0005		
8/10/2017	0.0007 (J)	<0.0005	<0.0005	<0.0005		<0.0005
11/14/2017	0.0007 (J)	<0.0005	<0.0005	<0.0005		<0.0005
6/6/2018	0.00073 (J)	<0.0005	0.00012 (J)	<0.0005		
6/7/2018						<0.0005
10/2/2018		<0.0005	0.0001 (J)	<0.0005		
10/3/2018	0.00078 (J)					<0.0005
8/22/2019	0.0008 (J)	<0.0005				<0.0005
8/23/2019			0.00011 (J)	<0.0005		
10/22/2019			<0.0005	<0.0005		<0.0005
10/23/2019	0.00091 (J)	<0.0005				
3/25/2020	0.00068 (J)	<0.0005	<0.0005	<0.0005		<0.0005
8/26/2020						<0.0005
8/27/2020	0.00082 (J)	<0.0005	<0.0005	<0.0005		
9/24/2020	0.00076 (J)	<0.0005	<0.0005			
9/25/2020				<0.0005		
9/28/2020						<0.0005
3/17/2021				<0.0005		
3/18/2021	0.00068	<0.0005	<0.0005			<0.0005
8/12/2021					0.00016 (J)	
8/13/2021		<0.0005	<0.0005	<0.0005		<0.0005
8/16/2021	0.00081					
9/27/2021					<0.0005	
2/2/2022	0.0008		<0.0005	<0.0005		
2/3/2022		<0.0005			<0.0005	<0.0005
8/5/2022	0.00081	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1/25/2023	0.00063	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/11/2023	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2/16/2024	0.00074		<0.0005			
2/17/2024		<0.0005		<0.0005	<0.0005	<0.0005
8/9/2024	0.00078					<0.0005
8/10/2024		<0.0005	<0.0005	<0.0005	<0.0005	

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 10/16/2024 2:31 PM

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	40.3	6.69	6.72				
8/31/2016						19.4	
10/20/2016	38.7					19.3	
10/24/2016		6.25	6.4				
1/25/2017	44.6	6.58	6.87				
1/31/2017						19.1	
5/23/2017		6.4	7.13			18.3	
5/24/2017	34.8						
8/10/2017	48.6	6.54	6.71			20.9	
11/13/2017	17.1	6.26					
11/14/2017			7.4			21.7	
6/4/2018	30.1	7.4					
6/5/2018			7.4				
6/6/2018						17	
10/1/2018	14.2 (J)	5.8	6.2				
10/3/2018						19.1 (J)	
4/1/2019	58.4						
4/2/2019		6.7	7.4				
4/4/2019						16.9	
10/21/2019	51						
10/22/2019		6.3	7.2				
10/23/2019						21.9	136
1/3/2020							118
3/4/2020							144
3/24/2020	61.2	7					103
3/25/2020						18.4	
4/9/2020			8.3				
6/18/2020							124
7/21/2020							120
8/27/2020							106
9/18/2020	32.2	6.5		62.2	51.8		
9/22/2020			7.9				
9/24/2020						20.3	120
11/10/2020				73.3			
11/11/2020					61.3		
12/15/2020				72.5	61.3		
1/19/2021				72.5	58.9		
3/11/2021	53.2						
3/12/2021		6.9		69.2	57.5		
3/16/2021			8.6				
3/17/2021						21.8	111
8/12/2021	45.4	6.9	8.4	71.2	59.5		
8/13/2021							119
8/16/2021						22.8	
1/31/2022	58.6			73.8	63.2		
2/1/2022		7.4	8.6				
2/2/2022						23.8	116
8/2/2022			8	73			
8/5/2022	53	7.1			59.6		127
8/10/2022						24.6	
1/24/2023	55.4	6.6	7.5	69.2	57.8		
1/25/2023						20.4	128

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/8/2023	0.94 (J)	6.6		68	58.2		
8/10/2023			8.4				
8/11/2023						24.1	134
2/13/2024		6.5			56		
2/14/2024	51.8		7.2	29.4			
2/16/2024						22.2	127
8/6/2024	46.2			71.1	58.8		
8/8/2024			8.4				
8/9/2024		7.1					142
8/10/2024						24.2	

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 10/16/2024 2:31 PM

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	70.4	74.2	44.7	35.1		79.3
10/20/2016						83.7
10/24/2016	70.9					
10/25/2016		72.5	49	35.4		
1/31/2017	63.6	70.3	46.6	34.2		76.8
5/23/2017	111					77.2
5/24/2017		75.9	49.5	35.3		
8/10/2017	81.2	84	54.2	43.1		83.1
11/14/2017	79.7	87.2	53.2	37.4		86.7
6/6/2018	88.3	81	55	41.1		
6/7/2018						79.7
10/2/2018		84.7	55.4	42.5		
10/3/2018	85.3					77.1
4/3/2019			54	37.5		
4/4/2019	91.9	73.8				
4/5/2019						82
6/17/2019	92.6	81.2	55.3			
6/18/2019						76.5
10/22/2019			58.1	42.6		84.2
10/23/2019	86.5	89.4				
3/25/2020	86.8	91.4	59.5	42.6		86.8
9/24/2020	91.3	92.9	55.4			
9/25/2020				48.5		
9/28/2020						88.9
3/17/2021				37.3		
3/18/2021	83.7	97.7	56			85.4
8/12/2021					50.7	
8/13/2021		102	57.8	43.5		84.3
8/16/2021	124					
9/27/2021					47.2	
2/2/2022	104		62	45.7		
2/3/2022		115			68.2	84.5
8/5/2022	128	121	63	50.8	68.6	88.5
1/25/2023	109	113	57.8	42.4	64.5	81.8
8/11/2023	139	129	56	44.8	61.1	85.5
2/16/2024	106		61.9			
2/17/2024		130		44.3	63.9	83.8
8/9/2024	146					85.2
8/10/2024		156	61.4	53.7	64.5	

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/8/2023	3	5.1		2.7	2.7		
8/10/2023			1.6				
8/11/2023						4.9	6.7
2/13/2024		5			2.6		
2/14/2024	3		1.5	1.6			
2/16/2024						5.4	7.4
8/6/2024	2.8			2.9	2.7		
8/8/2024			1.5				
8/9/2024		5.2					8
8/10/2024						5.4	

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 10/16/2024 2:31 PM

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	5.2	3	3.2	5		4.5
10/20/2016						4.4
10/24/2016	5.2					
10/25/2016		2.8	3.2	4.8		
1/31/2017	5.6	3.3	3.1	5.5		4.8
5/23/2017	5.7					4.3
5/24/2017		3.5	2.9	5.3		
8/10/2017	5.8	2.9	2.8	4.6		4.2
11/14/2017	6	4	3.4	5.6		4.4
6/6/2018	6.4	2.9	2.8	5.3		
6/7/2018						4.1
10/2/2018		3.5	3.2	5.3		
10/3/2018	6.3					4.4
4/3/2019			3.6	5		
4/4/2019	6.9	3.9				
4/5/2019						4.3
6/17/2019	5.2		2.9			
10/22/2019			3.6	4.6		4.5
10/23/2019	6.1	3.6				
3/25/2020	5.1	3.2	3	3.9		3.6
9/24/2020	6	3.9	3.5			
9/25/2020				4.1		
9/28/2020						4
3/17/2021				4.7		
3/18/2021	6.2	4.3	3.2			4.3
8/12/2021					6.3	
8/13/2021		3.7	3.1	4		4
8/16/2021	10.4					
9/27/2021					4.5	
2/2/2022	7.1		2.9	4.1		
2/3/2022		4.8			7.8	3.9
8/5/2022	7.8	5	2.7	3.7	7.4	3.8
1/25/2023	8	6	3.3	4.3	5.9	4.3
8/11/2023	7.9	5.6	2.7	3.5	4.6	3.8
2/16/2024	7.5		3.2			
2/17/2024		6.8		3.9	4.4	4.1
8/9/2024	8.8					4.2
8/10/2024		7.7	3.1	4	4.5	

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/16/2024 2:31 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	<0.005	0.0038 (J)	<0.005				
8/31/2016						<0.005	
10/20/2016	<0.005					<0.005	
10/24/2016		0.0039 (J)	0.001 (J)				
1/25/2017	0.0029 (J)	0.0038 (J)	0.0012 (J)				
1/31/2017						<0.005	
5/23/2017		0.0038 (J)	0.0012 (J)			0.0006 (J)	
5/24/2017	0.0004 (J)						
8/10/2017	<0.005	0.0039 (J)	0.0019 (J)			<0.005	
11/13/2017	<0.005	0.0038 (J)					
11/14/2017			0.0016 (J)			<0.005	
6/4/2018	<0.005	0.0037 (J)					
6/5/2018			<0.005				
6/6/2018						<0.005	
10/1/2018	<0.005	0.0036 (J)	0.0023 (J)				
10/3/2018						<0.005	
8/21/2019	0.00061 (J)	0.0039 (J)	0.0022 (J)				
8/22/2019						0.00064 (J)	
10/21/2019	0.0012 (J)						
10/22/2019		0.004 (J)	0.0023 (J)				
10/23/2019						<0.005	<0.005
1/3/2020							0.00063 (J)
3/4/2020							<0.005
3/24/2020	0.0019 (J)	0.0044 (J)					0.00051 (J)
3/25/2020						0.00098 (J)	
4/9/2020			0.0031 (J)				
6/18/2020							<0.005
7/21/2020							<0.005
8/25/2020	0.0013 (J)	0.0039 (J)	0.0031 (J)				
8/27/2020						<0.005	<0.005
9/18/2020	0.00077 (J)	0.0037 (J)		0.0039 (J)	<0.005		
9/22/2020			0.0046 (J)				
9/24/2020						<0.005	<0.005
11/10/2020				<0.005			
11/11/2020					<0.005		
12/15/2020				<0.005	0.0013 (J)		
1/19/2021				<0.005	0.0015 (J)		
3/11/2021	0.002 (J)						
3/12/2021		0.0045 (J)		<0.005	0.00062 (J)		
3/16/2021			0.0061				
3/17/2021						0.00075 (J)	<0.005
8/12/2021	<0.005	0.0041 (J)	<0.005	<0.005	<0.005		
8/13/2021							<0.005
8/16/2021						<0.005	
1/31/2022	<0.005			<0.005	<0.005		
2/1/2022		0.0043 (J)	0.0013 (J)				
2/2/2022						<0.005	<0.005
8/2/2022			0.0013 (J)	<0.005			
8/5/2022	<0.005	0.0045 (J)			<0.005		<0.005
8/10/2022						<0.005	
1/24/2023	<0.005	0.0041 (J)	0.0036 (J)	<0.005	<0.005		
1/25/2023						<0.005	<0.005

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/8/2023	<0.005	0.0037 (J)		<0.005	<0.005		
8/10/2023			0.0019 (J)				
8/11/2023						<0.005	<0.005
2/13/2024		0.0053			<0.005		
2/14/2024	<0.005		0.0023 (J)	<0.005			
2/16/2024						<0.005	<0.005
8/6/2024	<0.005			<0.005	<0.005		
8/8/2024			<0.005				
8/9/2024		0.0029 (J)					<0.005
8/10/2024						<0.005	

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/16/2024 2:31 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.005	<0.005	<0.005	<0.005		<0.005
10/20/2016						<0.005
10/24/2016	<0.005					
10/25/2016		<0.005	<0.005	<0.005		
1/31/2017	<0.005	<0.005	<0.005	<0.005		<0.005
5/23/2017	<0.005					<0.005
5/24/2017		<0.005	<0.005	<0.005		
8/10/2017	<0.005	<0.005	<0.005	<0.005		<0.005
11/14/2017	<0.005	<0.005	<0.005	<0.005		<0.005
6/6/2018	<0.005	<0.005	<0.005	<0.005		
6/7/2018						<0.005
10/2/2018		<0.005	<0.005	<0.005		
10/3/2018	<0.005					<0.005
8/22/2019	0.00063 (J)	<0.005				<0.005
8/23/2019			<0.005	<0.005		
10/22/2019			<0.005	0.00062 (J)		0.00066 (J)
10/23/2019	0.0015 (J)	0.0004 (J)				
3/25/2020	0.00045 (J)	0.0013 (J)	0.00074 (J)	0.0014 (J)		0.00081 (J)
8/26/2020						0.00098 (J)
8/27/2020	0.00069 (J)	<0.005	<0.005	<0.005		
9/24/2020	0.00081 (J)	0.00064 (J)	<0.005			
9/25/2020				<0.005		
9/28/2020						0.0017 (J)
3/17/2021				<0.005		
3/18/2021	0.003 (J)	0.00058 (J)	<0.005			0.0021 (J)
8/12/2021					<0.005	
8/13/2021		<0.005	<0.005	<0.005		<0.005
8/16/2021	<0.005					
9/27/2021					<0.005	
2/2/2022	0.0013 (J)		<0.005	<0.005		
2/3/2022		<0.005			<0.005	<0.005
8/5/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/25/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/11/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2/16/2024	<0.005		<0.005			
2/17/2024		<0.005		<0.005	<0.005	<0.005
8/9/2024	<0.005					<0.005
8/10/2024		<0.005	<0.005	<0.005	<0.005	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/16/2024 2:31 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	<0.005	<0.005	0.0006 (J)				
8/31/2016						0.0033 (J)	
10/20/2016	<0.005					0.0025 (J)	
10/24/2016		<0.005	<0.005				
1/25/2017	<0.005	<0.005	<0.005				
1/31/2017						0.001 (J)	
5/23/2017		<0.005	<0.005			0.0025 (J)	
5/24/2017	<0.005						
8/10/2017	<0.005	<0.005	0.0004 (J)			0.0029 (J)	
11/13/2017	<0.005	<0.005					
11/14/2017			0.0003 (J)			0.003 (J)	
6/4/2018	<0.005	<0.005					
6/5/2018			<0.005				
6/6/2018						0.0016 (J)	
10/1/2018	<0.005	<0.005	<0.005				
10/3/2018						0.0028 (J)	
8/21/2019	<0.005	<0.005	<0.005				
8/22/2019						<0.005	
10/21/2019	<0.005						
10/22/2019		<0.005	<0.005				
10/23/2019						0.0023 (J)	0.0018 (J)
1/3/2020							0.0038 (J)
3/4/2020							0.0021 (J)
3/24/2020	<0.005	<0.005					0.0019 (J)
3/25/2020						0.0021 (J)	
4/9/2020			0.00037 (J)				
6/18/2020							0.0012 (J)
7/21/2020							0.00098 (J)
8/25/2020	<0.005	<0.005	<0.005				
8/27/2020						0.0027 (J)	0.001 (J)
9/18/2020	<0.005	<0.005		0.00049 (J)	<0.005		
9/22/2020			0.00074 (J)				
9/24/2020						0.0021 (J)	0.0011 (J)
11/10/2020				<0.005			
11/11/2020					<0.005		
12/15/2020				<0.005	0.00039 (J)		
1/19/2021				<0.005	<0.005		
3/11/2021	<0.005						
3/12/2021		<0.005		<0.005	<0.005		
3/16/2021			0.0013 (J)				
3/17/2021						0.0023 (J)	0.0012 (J)
8/12/2021	<0.005	<0.005	<0.005	<0.005	<0.005		
8/13/2021							0.00085 (J)
8/16/2021						0.0026 (J)	
1/31/2022	<0.005			<0.005	<0.005		
2/1/2022		<0.005	<0.005				
2/2/2022						0.0027 (J)	0.0019 (J)
8/2/2022			<0.005	<0.005			
8/5/2022	<0.005	<0.005			<0.005		0.001 (J)
8/10/2022						0.0028 (J)	
1/24/2023	<0.005	<0.005	<0.005	<0.005	<0.005		
1/25/2023						0.0021 (J)	0.0016 (J)

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/8/2023	<0.005	<0.005		<0.005	<0.005		
8/10/2023			<0.005				
8/11/2023						0.0028 (J)	0.001 (J)
2/13/2024		<0.005			<0.005		
2/14/2024	<0.005		<0.005	<0.005			
2/16/2024						0.0026 (J)	0.0011 (J)
8/6/2024	<0.005			<0.005	<0.005		
8/8/2024			<0.005				
8/9/2024		<0.005					0.00094 (J)
8/10/2024						0.0025 (J)	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/16/2024 2:31 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	0.0018 (J)	0.0014 (J)	<0.005	0.0023 (J)		<0.005
10/20/2016						<0.005
10/24/2016	0.0018 (J)					
10/25/2016		0.0013 (J)	<0.005	0.0017 (J)		
1/31/2017	0.0016 (J)	0.0006 (J)	<0.005	0.0017 (J)		<0.005
5/23/2017	0.0014 (J)					0.0005 (J)
5/24/2017		0.0007 (J)	<0.005	0.002 (J)		
8/10/2017	0.0025 (J)	0.0006 (J)	<0.005	0.0012 (J)		0.0003 (J)
11/14/2017	0.002 (J)	0.0005 (J)	<0.005	0.0014 (J)		0.0004 (J)
6/6/2018	0.0031 (J)	0.00056 (J)	<0.005	0.0014 (J)		
6/7/2018						<0.005
10/2/2018		<0.005	<0.005	0.00081 (J)		
10/3/2018	0.0023 (J)					<0.005
8/22/2019	0.0019 (J)	<0.005				0.0003 (J)
8/23/2019			<0.005	0.0027 (J)		
10/22/2019			<0.005	0.0022 (J)		0.00061 (J)
10/23/2019	0.0021 (J)	0.00038 (J)				
3/25/2020	0.0022 (J)	0.00047 (J)	<0.005	0.0022 (J)		<0.005
8/26/2020						0.00061 (J)
8/27/2020	0.0019 (J)	<0.005	<0.005	0.00086 (J)		
9/24/2020	0.0019 (J)	0.00044 (J)	<0.005			
9/25/2020				0.001 (J)		
9/28/2020						0.00048 (J)
3/17/2021				0.003 (J)		
3/18/2021	0.0021 (J)	0.00045 (J)	<0.005			0.0012 (J)
8/12/2021					0.0024 (J)	
8/13/2021		<0.005	<0.005	0.0011 (J)		<0.005
8/16/2021	0.0022 (J)					
9/27/2021					0.0011 (J)	
2/2/2022	0.0022 (J)		<0.005	0.002 (J)		
2/3/2022		<0.005			0.00041 (J)	0.00045 (J)
8/5/2022	0.0021 (J)	<0.005	<0.005	0.0008 (J)	0.0011 (J)	<0.005
1/25/2023	0.0017 (J)	0.00046 (J)	<0.005	0.0016 (J)	0.00048 (J)	<0.005
8/11/2023	0.0019 (J)	0.00047 (J)	<0.005	0.00077 (J)	0.00078 (J)	<0.005
2/16/2024	0.002 (J)		<0.005			
2/17/2024		0.00071 (J)		0.0011 (J)	0.00047 (J)	0.00042 (J)
8/9/2024	0.002 (J)					<0.005
8/10/2024		0.00052 (J)	<0.005	0.0005 (J)	0.00081 (J)	

Time Series

Constituent: Combined Radium 226 & 228 (pCi/L) Analysis Run 10/16/2024 2:31 PM

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	0.804 (U)	1.32 (U)	0.587 (U)				
8/31/2016						0.621 (U)	
10/20/2016	1.13 (U)					1.4	
10/24/2016		1.3 (U)	0.979 (U)				
1/25/2017	0.888 (U)	1.04 (U)	0.038 (U)				
1/31/2017						0.906 (U)	
5/23/2017		0.541 (U)	0.898 (U)			0.388 (U)	
5/24/2017	0.622 (U)						
8/10/2017	0.745 (U)	0.536 (U)	0.759 (U)			1.03 (U)	
11/13/2017	0.778 (U)	0.786 (U)					
11/14/2017			0.0762 (U)			0.769 (U)	
6/4/2018	0.637 (U)	0.233 (U)					
6/5/2018			0.594 (U)				
6/6/2018						1.28 (U)	
10/1/2018	0.451 (U)	0.494 (U)	0.982				
10/3/2018						0.302 (U)	
8/21/2019	0.553 (U)	0.514 (U)	0.492 (U)				
8/22/2019						0.474 (U)	
10/21/2019	0.351 (U)						
10/22/2019		0.828 (U)	0.523 (U)				
10/23/2019						0.776 (U)	0.858 (U)
1/22/2020							1.04 (U)
3/4/2020							1.32
3/24/2020	0.26 (U)	0.677 (U)					1.23 (U)
3/25/2020						0.603 (U)	
4/9/2020			0.617 (U)				
7/21/2020							0.0938 (U)
8/25/2020	0.57 (U)	0.0182 (U)	0.587 (U)				
8/27/2020						0.109 (U)	1.17 (U)
9/18/2020	0.828 (U)	1.15 (U)		1.11 (U)	1.5 (U)		
9/22/2020			0.551 (U)				
9/24/2020						0.625 (U)	1.42
11/10/2020				0.234 (U)			
11/11/2020					0.776 (U)		
12/15/2020				0.529 (U)	1.23 (U)		
1/19/2021				0.176 (U)	1.35 (U)		
3/11/2021	0.354 (U)						
3/12/2021		0.164 (U)		0 (U)	0.829 (U)		
3/16/2021			0.559 (U)				
3/17/2021						0.248 (U)	0.401 (U)
8/12/2021	0.532 (U)	0.223 (U)	0.312 (U)	0.462 (U)	0.274 (U)		
8/13/2021							0.828 (U)
8/16/2021						0.667 (U)	
1/31/2022	0.279 (U)			0.444 (U)	0.196 (U)		
2/1/2022		0.0793 (U)	0.132 (U)			0.162 (U)	0.806 (U)
8/2/2022			0.791 (U)	0.491 (U)			
8/5/2022	0.573 (U)	0.665 (U)			0.599 (U)		0.618 (U)
8/10/2022						0.601 (U)	
1/24/2023	0.19 (U)	0.331 (U)	0.529 (U)	0.391 (U)	0.856		
1/25/2023						0.419 (U)	0.513 (U)
8/8/2023	0.728 (U)	0.723 (U)		0.502 (U)	0.549 (U)		
8/10/2023			0.841 (U)				

Time Series

Constituent: Combined Radium 226 & 228 (pCi/L) Analysis Run 10/16/2024 2:31 PM

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	1.62	0.906 (U)	1.2	1.03		
10/20/2016						1.97
10/24/2016	1.01 (U)					
10/25/2016		1.03	1.11 (U)	1.07		
1/31/2017	0.976 (U)	0.868 (U)	1.45	0.588 (U)		1.03
5/23/2017	0.891 (U)					0.398 (U)
5/24/2017		0.728 (U)	0.393 (U)	0.593 (U)		
8/10/2017	0.601 (U)	1.35	0.84 (U)	0.691 (U)		0.938 (U)
11/14/2017	0.567 (U)	0.817 (U)	1.01 (U)	0.653 (U)		0.335 (U)
6/6/2018	0.836 (U)	0.559 (U)	0.365 (U)	0.939 (U)		
6/7/2018						0.696 (U)
10/2/2018		0.336 (U)	1.23	0.225 (U)		
10/3/2018	0.111 (U)					1.6 (U)
8/22/2019	0.946 (U)	0.694 (U)				0.904 (U)
8/23/2019			1.69	0.47 (U)		
10/22/2019			0.705 (U)	0.545 (U)		0.424 (U)
10/23/2019	0.571 (U)	0.584 (U)				
3/25/2020	0.403 (U)	0.663 (U)	0.673 (U)	0.508 (U)		0.915 (U)
8/26/2020						1.19
8/27/2020	0.37 (U)	0.416 (U)	0.264 (U)	0.989 (U)		
9/24/2020	0.804 (U)	1.11 (U)	0.576 (U)			
9/25/2020				0.584 (U)		
9/28/2020						0.613 (U)
3/17/2021				0.556 (U)		
3/18/2021	0.274 (U)	0.252 (U)	0.145 (U)			0.323 (U)
8/12/2021					0.124 (U)	
8/13/2021		0.513 (U)	0.815 (U)	0.794 (U)		0.228 (U)
8/16/2021	0.493 (U)					
9/27/2021					1.05 (U)	
2/1/2022	0.569 (U)		0.0564 (U)	0.542 (U)		
2/3/2022		0.835			0.499 (U)	0.5 (U)
8/5/2022	0.205 (U)	0.139 (U)	0.917 (U)	0.22 (U)	0 (U)	0.206 (U)
1/25/2023	0.568 (U)	0.432 (U)	0.71 (U)	0.195 (U)	0.595 (U)	1.44
8/11/2023	0.849 (U)	0.292 (U)	0.314 (U)	0.105 (U)	0.822 (U)	0.806 (U)
2/16/2024	0.81 (U)		0.845 (U)			
2/17/2024		0.888 (U)		0.388 (U)	0.629 (U)	0 (U)
8/9/2024	0.378 (U)					0.421 (U)
8/10/2024		0.693 (U)	0.223 (U)	0.5 (U)	0.723 (U)	

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 10/16/2024 2:31 PM

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	0.07 (J)	0.04 (J)	0.2 (J)				
8/31/2016						0.05 (J)	
10/20/2016	0.07 (J)					0.03 (J)	
10/24/2016		0.05 (J)	0.16 (J)				
1/25/2017	0.14 (J)	<0.1	0.15 (J)				
1/31/2017						<0.1	
5/23/2017		0.004 (J)	0.18 (J)			<0.1	
5/24/2017	0.02 (J)						
8/10/2017	0.06 (J)	0.03 (J)	0.19 (J)			<0.1	
11/13/2017	<0.1	<0.1					
11/14/2017			0.16 (J)			<0.1	
6/4/2018	0.032 (J)	<0.1					
6/5/2018			0.18 (J)				
6/6/2018						<0.1	
10/1/2018	<0.1	<0.1	0.078 (J)				
10/3/2018						<0.1	
4/1/2019	0.042 (J)						
4/2/2019		<0.1	0.18 (J)				
4/4/2019						<0.1	
8/21/2019	0.048 (J)	<0.1	0.11 (J)				
8/22/2019						<0.1	
10/21/2019	0.12 (J)						
10/22/2019		0.05 (J)	0.18 (J)				
10/23/2019						<0.1	0.22 (J)
1/3/2020							<0.1
3/4/2020							<0.1
3/24/2020	0.076 (J)	<0.1					<0.1
3/25/2020						<0.1	
4/9/2020			0.14 (J)				
6/18/2020							<0.1
7/21/2020							<0.1
8/25/2020	0.052 (J)	<0.1	0.17				
8/27/2020						<0.1	<0.1
9/18/2020	<0.1	<0.1		0.067 (J)	0.098 (J)		
9/22/2020			0.16				
9/24/2020						<0.1	<0.1
11/10/2020				0.065 (J)			
11/11/2020					0.083 (J)		
12/15/2020				0.064 (J)	0.081 (J)		
1/19/2021				0.057 (J)	0.079 (J)		
3/11/2021	0.057 (J)						
3/12/2021		<0.1		0.062 (J)	0.085 (J)		
3/16/2021			0.18				
3/17/2021						<0.1	<0.1
8/12/2021	<0.1	<0.1	0.16	<0.1	0.064 (J)		
8/13/2021							<0.1
8/16/2021						<0.1	
1/31/2022	0.055 (J)			0.053 (J)	0.072 (J)		
2/1/2022		<0.1	0.16				
2/2/2022						<0.1	<0.1
8/2/2022			0.19	0.08 (J)			
8/5/2022	0.1	0.077 (J)			0.12		0.076 (J)

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/10/2022						0.065 (J)	
1/24/2023	0.086 (J)	0.055 (J)	0.2	0.081 (J)	0.092 (J)		
1/25/2023						<0.1	<0.1
8/8/2023	0.076 (J)	0.05 (J)		0.072 (J)	0.091 (J)		
8/10/2023			0.19				
8/11/2023						<0.1	<0.1
2/13/2024		<0.1			0.071 (J)		
2/14/2024	0.081 (J)		0.18	0.23			
2/16/2024						<0.1	<0.1
8/6/2024	0.089 (J)			0.094 (J)	0.1		
8/8/2024			0.17				
8/9/2024		0.075 (J)					0.067 (J)
8/10/2024						0.068 (J)	

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 10/16/2024 2:31 PM

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	0.06 (J)	0.15 (J)	0.08 (J)	0.12 (J)		0.18 (J)
10/20/2016						0.12 (J)
10/24/2016	0.13 (J)					
10/25/2016		0.09 (J)	0.16 (J)	0.17 (J)		
1/31/2017	<0.1	0.13 (J)	0.16 (J)	0.05 (J)		0.3
5/23/2017	0.15 (J)					0.14 (J)
5/24/2017		0.07 (J)	0.009 (J)	0.13 (J)		
8/10/2017	<0.1	0.03 (J)	<0.1	0.12 (J)		0.11 (J)
11/14/2017	<0.1	<0.1	<0.1	<0.3		0.07 (J)
6/6/2018	<0.1	0.074 (J)	0.057 (J)	0.15 (J)		
6/7/2018						0.3
10/2/2018		<0.1	<0.1	<0.3		
10/3/2018	<0.1					0.12 (J)
4/3/2019			<0.1	0.05 (J)		
4/4/2019	0.042 (J)	0.03 (J)				
4/5/2019						0.33
6/18/2019						0.89
8/22/2019	<0.1	<0.1				0.07 (J)
8/23/2019			<0.1	0.034 (J)		
10/22/2019			0.047 (J)	0.099 (J)		0.087 (J)
10/23/2019	<0.1	<0.1				
3/25/2020	<0.1	<0.1	<0.1	0.075 (J)		0.078 (J)
8/26/2020						0.072 (J)
8/27/2020	<0.1	<0.1	<0.1	0.094 (J)		
9/24/2020	<0.1	<0.1	0.064 (J)			
9/25/2020				0.091 (J)		
9/28/2020						0.078 (J)
3/17/2021				0.089 (J)		
3/18/2021	<0.1	<0.1	<0.1			0.079 (J)
8/12/2021					<0.1	
8/13/2021		<0.1	<0.1	0.086 (J)		0.075 (J)
8/16/2021	<0.1					
9/27/2021					<0.1	
2/2/2022	<0.1		<0.1	0.086 (J)		
2/3/2022		<0.1			0.056 (J)	0.069 (J)
8/5/2022	0.071 (J)	0.075 (J)	0.093 (J)	0.14	0.12	0.12
1/25/2023	<0.1	0.051 (J)	0.054 (J)	0.12	0.085 (J)	0.095 (J)
8/11/2023	<0.1	<0.1	<0.1	0.086 (J)	0.057 (J)	0.07 (J)
2/16/2024	<0.1		<0.1			
2/17/2024		<0.1		0.094 (J)	0.055 (J)	0.068 (J)
8/9/2024	0.077 (J)					0.11
8/10/2024		0.066 (J)	0.069 (J)	0.13	0.1	

Time Series

Constituent: Lead (mg/L) Analysis Run 10/16/2024 2:31 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	0.0001 (J)	<0.001	<0.001				
8/31/2016						<0.001	
10/20/2016	<0.001					<0.001	
10/24/2016		<0.001	<0.001				
1/25/2017	<0.001	<0.001	<0.001				
1/31/2017						<0.001	
5/23/2017		<0.001	<0.001			0.0009 (J)	
5/24/2017	<0.001						
8/10/2017	<0.001	<0.001	0.0001 (J)			<0.001	
11/13/2017	<0.001	<0.001					
11/14/2017			<0.001			<0.001	
6/4/2018	<0.001	<0.001					
6/5/2018			<0.001				
6/6/2018						<0.001	
10/1/2018	<0.001	<0.001	<0.001				
10/3/2018						<0.001	
8/21/2019	<0.001	<0.001	7.1E-05 (J)				
8/22/2019						<0.001	
10/21/2019	0.00016 (J)						
10/22/2019		<0.001	7.3E-05 (J)				
10/23/2019						<0.001	<0.001
1/3/2020							<0.001
3/4/2020							0.00011 (J)
3/24/2020	0.00058 (J)	0.00016 (J)					<0.001
3/25/2020						<0.001	
4/9/2020			0.00039 (J)				
6/18/2020							<0.001
7/21/2020							<0.001
8/25/2020	0.00036 (J)	0.00011 (J)	0.00022 (J)				
8/27/2020						<0.001	<0.001
9/18/2020	0.00026 (J)	6.5E-05 (J)		<0.001	<0.001		
9/22/2020			0.00096 (J)				
9/24/2020						<0.001	<0.001
11/10/2020				<0.001			
11/11/2020					<0.001		
12/15/2020				<0.001	0.00015 (J)		
1/19/2021				3.8E-05 (J)	5.6E-05 (J)		
3/11/2021	0.0011						
3/12/2021		0.00017 (J)		<0.001	4.8E-05 (J)		
3/16/2021			0.0016				
3/17/2021						<0.001	<0.001
8/12/2021	<0.001	<0.001	<0.001	<0.001	<0.001		
8/13/2021							<0.001
8/16/2021						<0.001	
1/31/2022	<0.001			<0.001	<0.001		
2/1/2022		<0.001	<0.001				
2/2/2022						<0.001	<0.001
8/2/2022			<0.001	<0.001			
8/5/2022	<0.001	<0.001			<0.001		<0.001
8/10/2022						<0.001	
1/24/2023	<0.001	<0.001	<0.001	<0.001	<0.001		
1/25/2023						<0.001	<0.001

Time Series

Constituent: Lead (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/8/2023	<0.001	<0.001		<0.001	<0.001		
8/10/2023			<0.001				
8/11/2023						<0.001	<0.001
2/13/2024		<0.001			<0.001		
2/14/2024	<0.001		<0.001	0.00021 (J)			
2/16/2024						<0.001	<0.001
8/6/2024	<0.001			<0.001	<0.001		
8/8/2024			<0.001				
8/9/2024		<0.001					<0.001
8/10/2024						<0.001	

Time Series

Constituent: Lead (mg/L) Analysis Run 10/16/2024 2:31 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.001	<0.001	<0.001	<0.001		<0.001
10/20/2016						<0.001
10/24/2016	<0.001					
10/25/2016		<0.001	<0.001	<0.001		
1/31/2017	<0.001	<0.001	<0.001	<0.001		<0.001
5/23/2017	<0.001					<0.001
5/24/2017		<0.001	<0.001	<0.001		
8/10/2017	<0.001	<0.001	<0.001	<0.001		<0.001
11/14/2017	<0.001	<0.001	<0.001	<0.001		<0.001
6/6/2018	<0.001	<0.001	<0.001	<0.001		
6/7/2018						<0.001
10/2/2018		<0.001	<0.001	<0.001		
10/3/2018	<0.001					<0.001
8/22/2019	<0.001	<0.001				<0.001
8/23/2019			<0.001	5.8E-05 (J)		
10/22/2019			7.9E-05 (J)	5.4E-05 (J)		0.00025 (J)
10/23/2019	0.00043 (J)	6.8E-05 (J)				
3/25/2020	7.6E-05 (J)	8.5E-05 (J)	0.00021 (J)	<0.001		0.0001 (J)
8/26/2020						0.00036 (J)
8/27/2020	0.00018 (J)	<0.001	<0.001	<0.001		
9/24/2020	0.00028 (J)	4.9E-05 (J)	0.00034 (J)			
9/25/2020				<0.001		
9/28/2020						0.00022 (J)
3/17/2021				<0.001		
3/18/2021	0.00024 (J)	5.8E-05 (J)	9.1E-05 (J)			0.00088 (J)
8/12/2021					<0.001	
8/13/2021		<0.001	<0.001	<0.001		<0.001
8/16/2021	<0.001					
9/27/2021					<0.001	
2/2/2022	<0.001		<0.001	<0.001		
2/3/2022		<0.001			<0.001	<0.001
8/5/2022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1/25/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/11/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2/16/2024	0.00027 (J)		<0.001			
2/17/2024		<0.001		<0.001	<0.001	<0.001
8/9/2024	<0.001					<0.001
8/10/2024		<0.001	<0.001	<0.001	<0.001	

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/16/2024 2:31 PM

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	0.0022 (J)	<0.03	<0.03				
8/31/2016						<0.03	
10/20/2016	<0.03					<0.03	
10/24/2016		<0.03	<0.03				
1/25/2017	<0.03	<0.03	<0.03				
1/31/2017						<0.03	
5/23/2017		<0.03	0.0011 (J)			<0.03	
5/24/2017	0.0017 (J)						
8/10/2017	0.0017 (J)	<0.03	<0.03			<0.03	
11/13/2017	<0.03	<0.03					
11/14/2017			<0.03			<0.03	
6/4/2018	0.0016 (J)	<0.03					
6/5/2018			0.001 (J)				
6/6/2018						<0.03	
10/1/2018	<0.03	<0.03	0.001 (J)				
10/3/2018						<0.03	
8/21/2019	0.0018 (J)	<0.03	0.0011 (J)				
8/22/2019						<0.03	
10/21/2019	0.0026 (J)						
10/22/2019		<0.03	0.0011 (J)				
10/23/2019						<0.03	0.0012 (J)
1/3/2020							0.0011 (J)
3/4/2020							0.0013 (J)
3/24/2020	0.0039 (J)	<0.03					0.00084 (J)
3/25/2020						<0.03	
4/9/2020			0.0017 (J)				
6/18/2020							0.0013 (J)
7/21/2020							0.0013 (J)
8/25/2020	0.0033 (J)	<0.03	0.0014 (J)				
8/27/2020						<0.03	0.0011 (J)
9/18/2020	0.0021 (J)	<0.03		0.0026 (J)	0.0051 (J)		
9/22/2020			0.0018 (J)				
9/24/2020						<0.03	0.0011 (J)
11/10/2020				0.0028 (J)			
11/11/2020					0.0036 (J)		
12/15/2020				0.0026 (J)	0.0045 (J)		
1/19/2021				0.003 (J)	0.0032 (J)		
3/11/2021	0.0047 (J)						
3/12/2021		<0.03		0.0031 (J)	0.0031 (J)		
3/16/2021			0.0026 (J)				
3/17/2021						<0.03	0.0012 (J)
8/12/2021	0.002 (J)	<0.03	0.00094 (J)	0.0029 (J)	0.0037 (J)		
8/13/2021							0.0011 (J)
8/16/2021						<0.03	
1/31/2022	0.0026 (J)			0.0031 (J)	0.0034 (J)		
2/1/2022		<0.03	0.0011 (J)				
2/2/2022						<0.03	0.0013 (J)
8/2/2022			0.00089 (J)	0.0026 (J)			
8/5/2022	0.0019 (J)	<0.03			0.0036 (J)		0.0013 (J)
8/10/2022						<0.03	
1/24/2023	0.0023 (J)	<0.03	0.00091 (J)	0.0029 (J)	0.0046 (J)		
1/25/2023						<0.03	0.001 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/8/2023	0.0018 (J)	<0.03		0.0029 (J)	0.004 (J)		
8/10/2023			0.001 (J)				
8/11/2023						<0.03	0.0013 (J)
2/13/2024		<0.03			0.006 (J)		
2/14/2024	0.002 (J)		<0.03	<0.03			
2/16/2024						<0.03	<0.03
8/6/2024	0.0019 (J)			0.0026 (J)	0.0042 (J)		
8/8/2024			<0.03				
8/9/2024		<0.03					<0.03
8/10/2024						<0.03	

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/16/2024 2:31 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.03	0.0034 (J)	<0.03	<0.03		<0.03
10/20/2016						<0.03
10/24/2016	<0.03					
10/25/2016		0.0043 (J)	<0.03	<0.03		
1/31/2017	<0.03	0.0042 (J)	<0.03	<0.03		<0.03
5/23/2017	0.0012 (J)					0.0012 (J)
5/24/2017		0.0039 (J)	<0.03	0.0012 (J)		
8/10/2017	0.0016 (J)	0.004 (J)	<0.03	<0.03		<0.03
11/14/2017	0.0015 (J)	0.0044 (J)	<0.03	<0.03		<0.03
6/6/2018	0.0017 (J)	0.0041 (J)	0.00099 (J)	0.0013 (J)		
6/7/2018						0.0015 (J)
10/2/2018		0.0041 (J)	<0.03	0.0013 (J)		
10/3/2018	0.0016 (J)					<0.03
8/22/2019	0.0015 (J)	0.004 (J)				0.0018 (J)
8/23/2019			0.00092 (J)	0.0009 (J)		
10/22/2019			0.00094 (J)	0.00088 (J)		0.0027 (J)
10/23/2019	0.002 (J)	0.0039 (J)				
3/25/2020	0.0016 (J)	0.0041 (J)	0.00091 (J)	<0.03		0.0017 (J)
8/26/2020						0.0028 (J)
8/27/2020	0.0016 (J)	0.0037 (J)	<0.03	0.0011 (J)		
9/24/2020	0.0017 (J)	0.0038 (J)	0.00098 (J)			
9/25/2020				0.001 (J)		
9/28/2020						0.0022 (J)
3/17/2021				<0.03		
3/18/2021	0.0018 (J)	0.0042 (J)	0.0011 (J)			0.0029 (J)
8/12/2021					0.0036 (J)	
8/13/2021		0.0038 (J)	0.00084 (J)	<0.03		0.0017 (J)
8/16/2021	0.0016 (J)					
9/27/2021					0.0035 (J)	
2/2/2022	0.0019 (J)		0.001 (J)	0.00084 (J)		
2/3/2022		0.0046 (J)			0.0051 (J)	0.0015 (J)
8/5/2022	0.0014 (J)	0.0039 (J)	0.00082 (J)	0.00087 (J)	0.0038 (J)	0.0018 (J)
1/25/2023	0.0012 (J)	0.0038 (J)	0.00081 (J)	<0.03	0.0037 (J)	0.001 (J)
8/11/2023	0.0014 (J)	0.0044 (J)	0.00083 (J)	0.00076 (J)	0.0041 (J)	0.0023 (J)
2/16/2024	<0.03		<0.03			
2/17/2024		0.0041 (J)		<0.03	0.0038 (J)	<0.03
8/9/2024	<0.03					0.0019 (J)
8/10/2024		0.0047 (J)	<0.03	<0.03	0.0041 (J)	

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/16/2024 2:31 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	4E-05 (J)	4.1E-05 (J)	4E-05 (J)				
8/31/2016						<0.0002	
10/20/2016	<0.0002					<0.0002	
10/24/2016		<0.0002	<0.0002				
1/25/2017	4E-05 (J)	4E-05 (J)	4E-05 (J)				
1/31/2017						9.3E-05 (J)	
5/23/2017		<0.0002	<0.0002			<0.0002	
5/24/2017	<0.0002						
8/10/2017	<0.0002	<0.0002	<0.0002			<0.0002	
11/13/2017	<0.0002	<0.0002					
11/14/2017			<0.0002			<0.0002	
6/4/2018	<0.0002	<0.0002					
6/5/2018			<0.0002				
6/6/2018						<0.0002	
10/1/2018	4.3E-05 (J)	3.9E-05 (J)	4.3E-05 (J)				
10/3/2018						<0.0002	
8/21/2019	<0.0002	<0.0002	<0.0002				
8/22/2019						<0.0002	
10/23/2019							<0.0002
1/3/2020							<0.0002
3/4/2020							<0.0002
3/24/2020							<0.0002
6/18/2020							<0.0002
7/21/2020							<0.0002
8/25/2020	<0.0002	<0.0002	<0.0002				
8/27/2020						<0.0002	<0.0002
9/18/2020				<0.0002	<0.0002		
9/24/2020							<0.0002
11/10/2020				<0.0002			
11/11/2020					<0.0002		
12/15/2020				<0.0002	<0.0002		
1/19/2021				<0.0002	<0.0002		
8/12/2021	<0.0002	0.00011 (J)	<0.0002	8.1E-05 (J)	0.00018 (J)		
8/13/2021							0.0001 (J)
8/16/2021						9.9E-05 (J)	
1/31/2022	<0.0002			<0.0002	<0.0002		
2/1/2022		<0.0002	<0.0002				
2/2/2022						<0.0002	<0.0002
8/2/2022			<0.0002	<0.0002			
8/5/2022	<0.0002	<0.0002			<0.0002		<0.0002
8/10/2022						<0.0002	
1/24/2023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
1/25/2023						<0.0002	<0.0002
8/8/2023	<0.0002	<0.0002		<0.0002	<0.0002		
8/10/2023			<0.0002				
8/11/2023						<0.0002	<0.0002
2/13/2024		<0.0002			<0.0002		
2/14/2024	<0.0002		<0.0002	<0.0002			
2/16/2024						<0.0002	<0.0002
8/6/2024	<0.0002			<0.0002	<0.0002		
8/8/2024			<0.0002				
8/9/2024		<0.0002					<0.0002

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

8/10/2024	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
						<0.0002	

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
10/20/2016						<0.0002
10/24/2016	<0.0002					
10/25/2016		<0.0002	<0.0002	<0.0002		
1/31/2017	8E-05 (J)	<0.0002	<0.0002	8E-05 (J)		9E-05 (J)
5/23/2017	<0.0002					<0.0002
5/24/2017		<0.0002	<0.0002	<0.0002		
8/10/2017	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
11/14/2017	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
6/6/2018	<0.0002	<0.0002	<0.0002	<0.0002		
6/7/2018						<0.0002
10/2/2018		<0.0002	<0.0002	<0.0002		
10/3/2018	<0.0002					<0.0002
8/22/2019	<0.0002	<0.0002				<0.0002
8/23/2019			<0.0002	<0.0002		
8/26/2020						<0.0002
8/27/2020	<0.0002	<0.0002	<0.0002	<0.0002		
8/12/2021					9.4E-05 (J)	
8/13/2021		0.00022	8.4E-05 (J)	8E-05 (J)		8.1E-05 (J)
8/16/2021	0.00027					
9/27/2021					<0.0002	
2/2/2022	<0.0002		<0.0002	<0.0002		
2/3/2022		<0.0002			<0.0002	<0.0002
8/5/2022	0.00017 (J)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1/25/2023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/11/2023	0.00025	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/16/2024	<0.0002		<0.0002			
2/17/2024		<0.0002		<0.0002	<0.0002	<0.0002
8/9/2024	<0.0002					<0.0002
8/10/2024		<0.0002	<0.0002	<0.0002	<0.0002	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/16/2024 2:31 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	<0.01	<0.01	<0.01				
8/31/2016						<0.01	
10/20/2016	<0.01					<0.01	
10/24/2016		<0.01	<0.01				
1/25/2017	<0.01	<0.01	<0.01				
1/31/2017						<0.01	
5/23/2017		<0.01	<0.01			<0.01	
5/24/2017	<0.01						
8/10/2017	<0.01	<0.01	<0.01			<0.01	
11/13/2017	<0.01	<0.01					
11/14/2017			<0.01			<0.01	
6/4/2018	<0.01	<0.01					
6/5/2018			<0.01				
6/6/2018						<0.01	
10/1/2018	<0.01	<0.01	<0.01				
10/3/2018						<0.01	
8/21/2019	<0.01	<0.01	<0.01				
8/22/2019						<0.01	
10/23/2019							<0.01
1/3/2020							<0.01
3/4/2020							<0.01
3/24/2020							<0.01
6/18/2020							<0.01
7/21/2020							<0.01
8/25/2020	<0.01	<0.01	<0.01				
8/27/2020						<0.01	<0.01
9/18/2020				0.0015 (J)	0.0026 (J)		
9/24/2020							<0.01
11/10/2020				<0.01			
11/11/2020					0.0012 (J)		
12/15/2020				<0.01	0.00097 (J)		
1/19/2021				<0.01	0.0018 (J)		
8/12/2021	<0.01	<0.01	<0.01	<0.01	0.0019 (J)		
8/13/2021							<0.01
8/16/2021						<0.01	
1/31/2022	<0.01			<0.01	0.002 (J)		
2/1/2022		<0.01	<0.01				
2/2/2022						<0.01	<0.01
8/2/2022			<0.01	<0.01			
8/5/2022	<0.01	<0.01			0.0012 (J)		<0.01
8/10/2022						<0.01	
1/24/2023	<0.01	<0.01	<0.01	<0.01	0.00086 (J)		
1/25/2023						<0.01	<0.01
8/8/2023	<0.01	<0.01		<0.01	0.00092 (J)		
8/10/2023			<0.01				
8/11/2023						<0.01	<0.01
2/13/2024		<0.01			0.00068 (J)		
2/14/2024	<0.01		<0.01	0.003 (J)			
2/16/2024						<0.01	<0.01
8/6/2024	<0.01			<0.01	0.00071 (J)		
8/8/2024			<0.01				
8/9/2024		<0.01					<0.01

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/10/2024						<0.01	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.01	<0.01	<0.01	<0.01		<0.01
10/20/2016						<0.01
10/24/2016	<0.01					
10/25/2016		<0.01	<0.01	<0.01		
1/31/2017	<0.01	<0.01	<0.01	<0.01		<0.01
5/23/2017	<0.01					<0.01
5/24/2017		<0.01	<0.01	<0.01		
8/10/2017	<0.01	<0.01	<0.01	<0.01		<0.01
11/14/2017	<0.01	<0.01	<0.01	<0.01		<0.01
6/6/2018	<0.01	<0.01	<0.01	<0.01		
6/7/2018						<0.01
10/2/2018		<0.01	<0.01	<0.01		
10/3/2018	<0.01					<0.01
8/22/2019	<0.01	<0.01				<0.01
8/23/2019			<0.01	<0.01		
8/26/2020						<0.01
8/27/2020	<0.01	<0.01	<0.01	<0.01		
8/12/2021					<0.01	
8/13/2021		<0.01	<0.01	<0.01		<0.01
8/16/2021	<0.01					
9/27/2021					<0.01	
2/2/2022	<0.01		<0.01	<0.01		
2/3/2022		<0.01			<0.01	<0.01
8/5/2022	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1/25/2023	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
8/11/2023	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2/16/2024	<0.01		<0.01			
2/17/2024		<0.01		<0.01	<0.01	<0.01
8/9/2024	<0.01					<0.01
8/10/2024		<0.01	<0.01	<0.01	<0.01	

Time Series

Constituent: pH, Field (s.u.) Analysis Run 10/16/2024 2:31 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	6.89	5.77	5.99				
8/31/2016						5.35	
10/20/2016	6.73					5.3	
10/24/2016		5.61	5.84				
1/25/2017	7.02	5.68	6.04				
1/31/2017						5.24	
5/23/2017		5.7	6.01			5.39	
5/24/2017	6.44						
8/10/2017	6.79	5.59	5.98			5.47	
11/13/2017	5.94	5.56					
11/14/2017			6.16			5.4	
6/4/2018	6.12	5.62					
6/5/2018			5.86				
6/6/2018						5.37	
10/1/2018	5.92	5.62	5.94				
10/3/2018						5.39	
4/1/2019	7.09						
4/2/2019		5.47	6				
4/4/2019						5.31	
6/18/2019						5.3	
8/21/2019	6.6	5.8	6.05				
8/22/2019						5.39	
10/21/2019	7.02						
10/22/2019		5.7	5.98				
10/23/2019						5.33	5.68
1/3/2020							5.64
3/4/2020							5.75
3/24/2020	7.37	5.64					5.58
3/25/2020						5.53	
4/9/2020			6.08				
6/18/2020							5.67
7/21/2020							5.72
8/25/2020	6.7	5.53	5.95				
8/27/2020						5.32	5.7
9/18/2020	6.46	5.58		7.54	7.5		
9/22/2020			6.1				
9/24/2020						5.48	5.82
11/10/2020				7.34			
11/11/2020					7.4		
12/15/2020				7.27	7.39		
1/19/2021				7.32	7.4		
3/11/2021	7.2						
3/12/2021		5.6		7.52	7.51		
3/16/2021			6.14				
3/17/2021						5.41	5.78
8/12/2021	6.67	5.5	6.08	7.38	7.44		
8/13/2021							5.45
8/16/2021						5.4	
1/31/2022	7.17			7.34	7.44		
2/1/2022		5.59	6.05				
2/2/2022						5.51	5.79
8/2/2022			6.08	7.34			

Time Series

Constituent: pH, Field (s.u.) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/5/2022	6.97	5.43			7.4		5.69
8/10/2022						5.37	
1/24/2023	7.11	5.67	6.15	7.38	7.46		
1/25/2023						5.47	5.77
8/8/2023	7.01	5.77		7.27	7.37		
8/10/2023			6.07				
8/11/2023						5.44	5.79
2/13/2024		5.64			7.59		
2/14/2024	7		6.24	7.93			
2/16/2024						5.47	5.88
8/6/2024	6.99	5.65		7.46	7.4		
8/8/2024			5.98				
8/9/2024							5.86
8/10/2024						5.38	

Time Series

Constituent: pH, Field (s.u.) Analysis Run 10/16/2024 2:31 PM

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	5.54	6.5	6.11	6.78		7.03
10/20/2016						7.01
10/24/2016	5.48					
10/25/2016		6.34	6.04	6.55		
1/31/2017	5.51	6.43	5.94	6.5		6.96
5/23/2017	5.98					6.92
5/24/2017		6.31	6.06	6.42		
8/10/2017	5.63	6.45	6.06	6.63		6.99
11/14/2017	5.59	6.53	5.99	6.5		6.9
6/6/2018	5.49	6.49	6	6.59		
6/7/2018						7.03
10/2/2018		6.18	6.18	6.54		
10/3/2018	5.53					7.08
4/3/2019			6.06	6.42		
4/4/2019	5.44	6.17				
4/5/2019						6.96
6/17/2019	5.53					
8/22/2019	5.55	6.04				6.93
8/23/2019			6.26	6.76		
10/22/2019			6.19	6.58		7.03
10/23/2019	5.49	6.46				
3/25/2020	5.49	6.47	6.13	6.56		6.89
8/26/2020						6.97
8/27/2020	5.82	6.45	6.09	6.64		
9/24/2020	5.6	6.63	6.11			
9/25/2020				6.79		
9/28/2020						7.03
3/17/2021				6.55		
3/18/2021	5.51	6.57	6.2			7.11
8/12/2021					6.27	
8/13/2021		6.44	6.11	6.71		6.78
8/16/2021	5.59					
9/27/2021					6.14	
2/2/2022	5.63		6.14	6.65		
2/3/2022		6.48			6.58	6.79
8/5/2022	5.71	6.46	6.07	6.81	6.44	7.07
1/25/2023	5.65	6.41	6.13	6.66	6.53	6.67
8/11/2023	5.8	6.47	6.16	6.8	7.09	7.49
2/16/2024	5.74		6.27			
2/17/2024		6.46		6.88	6.7	6.94
8/9/2024	5.74					7.07
8/10/2024		6.38	6.22	7.03	6.61	

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/16/2024 2:31 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	<0.005	<0.005	0.0027 (J)				
8/31/2016						<0.005	
10/20/2016	<0.005					<0.005	
10/24/2016		<0.005	0.0034 (J)				
1/25/2017	<0.005	<0.005	0.0023 (J)				
1/31/2017						<0.005	
5/23/2017		<0.005	0.0024 (J)			<0.005	
5/24/2017	<0.005						
8/10/2017	<0.005	<0.005	0.0023 (J)			<0.005	
11/13/2017	<0.005	<0.005					
11/14/2017			<0.01			<0.005	
6/4/2018	<0.005	<0.005					
6/5/2018			0.0019 (J)				
6/6/2018						<0.005	
10/1/2018	<0.005	<0.005	0.0024 (J)				
10/3/2018						<0.005	
8/21/2019	<0.005	<0.005	0.0025 (J)				
8/22/2019						<0.005	
10/23/2019							<0.005
1/3/2020							0.0015 (J)
3/4/2020							<0.005
3/24/2020							<0.005
6/18/2020							<0.005
7/21/2020							<0.005
8/25/2020	<0.005	<0.005	<0.01				
8/27/2020						<0.005	<0.005
9/18/2020				<0.005	<0.005		
9/24/2020							<0.005
11/10/2020				<0.005			
11/11/2020					<0.005		
12/15/2020				<0.005	<0.005		
1/19/2021				<0.005	<0.005		
8/12/2021	<0.005	<0.005	0.0023 (J)	<0.005	<0.005		
8/13/2021							<0.005
8/16/2021						<0.005	
1/31/2022	<0.005			<0.005	<0.005		
2/1/2022		<0.005	0.0022 (J)				
2/2/2022						<0.005	<0.005
8/2/2022			0.0034 (J)	<0.005			
8/5/2022	<0.005	<0.005			<0.005		<0.005
8/10/2022						<0.005	
1/24/2023	<0.005	<0.005	0.0025 (J)	<0.005	<0.005		
1/25/2023						<0.005	<0.005
8/8/2023	<0.005	<0.005		<0.005	<0.005		
8/10/2023			0.0027 (J)				
8/11/2023						<0.005	<0.005
2/13/2024		<0.005			<0.005		
2/14/2024	<0.005		0.0024 (J)	<0.005			
2/16/2024						<0.005	<0.005
8/6/2024	<0.005			<0.005	<0.005		
8/8/2024			0.0025 (J)				
8/9/2024		<0.005					<0.005

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/10/2024						<0.005	

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.005	<0.005	<0.005	<0.005		<0.005
10/20/2016						<0.005
10/24/2016	<0.005					
10/25/2016		<0.005	<0.005	<0.005		
1/31/2017	<0.005	<0.005	<0.005	<0.005		<0.005
5/23/2017	<0.005					<0.005
5/24/2017		<0.005	<0.005	<0.005		
8/10/2017	<0.005	<0.005	<0.005	<0.005		<0.005
11/14/2017	<0.005	<0.005	<0.005	<0.005		<0.005
6/6/2018	<0.005	<0.005	<0.005	<0.005		
6/7/2018						<0.005
10/2/2018		<0.005	<0.005	<0.005		
10/3/2018	<0.005					<0.005
8/22/2019	<0.005	<0.005				<0.005
8/23/2019			<0.005	<0.005		
8/26/2020						<0.005
8/27/2020	<0.005	<0.005	<0.005	<0.005		
8/12/2021					<0.005	
8/13/2021		<0.005	<0.005	<0.005		<0.005
8/16/2021	<0.005					
9/27/2021					<0.005	
2/2/2022	<0.005		<0.005	<0.005		
2/3/2022		<0.005			<0.005	<0.005
8/5/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/25/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/11/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2/16/2024	<0.005		<0.005			
2/17/2024		<0.005		<0.005	<0.005	<0.005
8/9/2024	<0.005					<0.005
8/10/2024		<0.005	<0.005	<0.005	<0.005	

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/16/2024 2:31 PM

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	1.6	0.63 (J)	14				
8/31/2016						110	
10/20/2016	1.6					110	
10/24/2016		0.62 (J)	11				
1/25/2017	1.6	0.62 (J)	12				
1/31/2017						120	
5/23/2017		0.55 (J)	12			97	
5/24/2017	1.4						
8/10/2017	1.6	0.66 (J)	11			96	
11/13/2017	1.3	0.61 (J)					
11/14/2017			11			110	
6/4/2018	1.4	0.73 (J)					
6/5/2018			9.9				
6/6/2018						95.5	
10/1/2018	1	0.52 (J)	6.7				
10/3/2018						121	
4/1/2019	1.7						
4/2/2019		0.78 (J)	8.7				
4/4/2019						95.1	
6/18/2019						102	
10/21/2019	1.8						
10/22/2019		0.6 (J)	6.8				
10/23/2019						101	<1
1/3/2020							380
3/4/2020							400
3/24/2020	1.6	<1					311
3/25/2020						85.5	
4/9/2020			6.6				
6/18/2020							349
7/21/2020							378
8/27/2020							382
9/18/2020	1	<1		3.5	9.5		
9/22/2020			5.3				
9/24/2020						97	370
11/10/2020				2.3			
11/11/2020					4.5		
12/15/2020				2.4	4.2		
1/19/2021				2.6	3.9		
3/11/2021	1.5						
3/12/2021		0.52 (J)		1.9	4.7		
3/16/2021			7.7				
3/17/2021						107	332
8/12/2021	1.3	<1	10	1.4	4.3		
8/13/2021							248
8/16/2021						72.1	
1/31/2022	1.5			1.7	5.6		
2/1/2022		0.5 (J)	8.9				
2/2/2022						100	303
8/2/2022			7.5	2.1			
8/5/2022	1.4	<1			3.4		358
8/10/2022						99.5	
1/24/2023	1.9	0.81 (J)	6.6	2.2	2.9		

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
1/25/2023						95	348
8/8/2023	1.5	0.71 (J)		2	2.9		
8/10/2023			5.1				
8/11/2023						102	370
2/13/2024		0.51 (J)			2.8		
2/14/2024	1.2		4.9	19.7			
2/16/2024						110	363
8/6/2024	1.3			2.3	2.7		
8/8/2024			4.6				
8/9/2024		0.76 (J)					359
8/10/2024						104	

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/16/2024 2:31 PM

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	280	190	130	36		88
10/20/2016						81
10/24/2016	280					
10/25/2016		190	130	41		
1/31/2017	300	210	130	37		87
5/23/2017	340					84
5/24/2017		180	130	40		
8/10/2017	300	180	130	40		78
11/14/2017	310	170	130	40		79
6/6/2018	351	168	132	49.7		
6/7/2018						60.1
10/2/2018		173	132	42.3		
10/3/2018	381					91.5
4/3/2019			139	36		
4/4/2019	358	185				
4/5/2019						75.1
6/17/2019	311	162	126	30.9		
6/18/2019						77
10/22/2019			123	23.2		80.9
10/23/2019	248	162				
3/25/2020	251	161	116	27.9		78.4
9/24/2020	293	177	126			
9/25/2020				24.7		
9/28/2020						86
3/17/2021				28.3		
3/18/2021	286	196	128			87.8
8/12/2021					64.6	
8/13/2021		142	112	24.4		75.1
8/16/2021	354					
9/27/2021					69.7	
2/2/2022	293		111	25.5		
2/3/2022		195			72.9	72.7
8/5/2022	369	217	120	23	76.1	69.8
1/25/2023	342	230	128	25.4	72.9	73
8/11/2023	382	237	113	19.8	67.7	64.9
2/16/2024	323		130			
2/17/2024		251		22	72.7	69.7
8/9/2024	393					66.5
8/10/2024		258	114	19.7	72.6	

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/16/2024 2:31 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	<0.001	<0.001	<0.001				
8/31/2016						<0.001	
10/20/2016	<0.001					<0.001	
10/24/2016		<0.001	<0.001				
1/25/2017	<0.001	<0.001	<0.001				
1/31/2017						<0.001	
5/23/2017		<0.001	<0.001			<0.001	
5/24/2017	<0.001						
8/10/2017	<0.001	<0.001	<0.001			<0.001	
11/13/2017	<0.001	<0.001					
11/14/2017			<0.001			<0.001	
6/4/2018	<0.001	<0.001					
6/5/2018			<0.001				
6/6/2018						<0.001	
10/1/2018	<0.001	<0.001	<0.001				
10/3/2018						<0.001	
8/21/2019	<0.001	<0.001	<0.001				
8/22/2019						<0.001	
10/23/2019							<0.001
1/3/2020							8E-05 (J)
3/4/2020							<0.001
3/24/2020							<0.001
6/18/2020							<0.001
7/21/2020							<0.001
8/25/2020	<0.001	<0.001	<0.001				
8/27/2020						<0.001	<0.001
9/18/2020				<0.001	<0.001		
9/24/2020							<0.001
11/10/2020				<0.001			
11/11/2020					<0.001		
12/15/2020				<0.001	<0.001		
1/19/2021				<0.001	<0.001		
8/12/2021	<0.001	<0.001	<0.001	<0.001	<0.001		
8/13/2021							<0.001
8/16/2021						<0.001	
1/31/2022	<0.001			<0.001	<0.001		
2/1/2022		<0.001	<0.001				
2/2/2022						<0.001	<0.001
8/2/2022			<0.001	<0.001			
8/5/2022	<0.001	<0.001			<0.001		<0.001
8/10/2022						<0.001	
1/24/2023	<0.001	<0.001	<0.001	<0.001	<0.001		
1/25/2023						<0.001	<0.001
8/8/2023	<0.001	<0.001		<0.001	<0.001		
8/10/2023			<0.001				
8/11/2023						<0.001	<0.001
2/13/2024		<0.001			<0.001		
2/14/2024	<0.001		<0.001	<0.001			
2/16/2024						<0.001	<0.001
8/6/2024	<0.001			<0.001	<0.001		
8/8/2024			<0.001				
8/9/2024		<0.001					<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/10/2024						<0.001	

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.001	<0.001	<0.001	<0.001		<0.001
10/20/2016						<0.001
10/24/2016	<0.001					
10/25/2016		<0.001	<0.001	<0.001		
1/31/2017	<0.001	<0.001	<0.001	<0.001		<0.001
5/23/2017	<0.001					<0.001
5/24/2017		<0.001	<0.001	<0.001		
8/10/2017	<0.001	<0.001	<0.001	<0.001		<0.001
11/14/2017	<0.001	<0.001	<0.001	<0.001		<0.001
6/6/2018	<0.001	<0.001	<0.001	<0.001		
6/7/2018						<0.001
10/2/2018		<0.001	<0.001	<0.001		
10/3/2018	<0.001					<0.001
8/22/2019	<0.001	<0.001				<0.001
8/23/2019			<0.001	<0.001		
8/26/2020						<0.001
8/27/2020	<0.001	<0.001	<0.001	<0.001		
8/12/2021					<0.001	
8/13/2021		<0.001	<0.001	<0.001		<0.001
8/16/2021	<0.001					
9/27/2021					<0.001	
2/2/2022	<0.001		<0.001	<0.001		
2/3/2022		<0.001			<0.001	<0.001
8/5/2022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1/25/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/11/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2/16/2024	<0.001		<0.001			
2/17/2024		<0.001		<0.001	<0.001	<0.001
8/9/2024	<0.001					<0.001
8/10/2024		<0.001	<0.001	<0.001	<0.001	

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/16/2024 2:31 PM

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/30/2016	172	76	77				
8/31/2016						278	
10/20/2016	108					165	
10/24/2016		65	111				
1/25/2017	345	152 (O)	155				
1/31/2017						263	
5/23/2017		52	74			190	
5/24/2017	126						
8/10/2017	174	60	94			175	
11/13/2017	158	75					
11/14/2017			89			253	
6/4/2018	131	70					
6/5/2018			92				
6/6/2018						188	
10/1/2018	101	76	91				
10/3/2018						238	
4/1/2019	213						
4/2/2019		69	94				
4/4/2019						149	
10/21/2019	187						
10/22/2019		81	95				
10/23/2019						221	736
1/3/2020							714
3/4/2020							764
3/24/2020	207	52					521
3/25/2020						187	
4/9/2020			48				
6/18/2020							652
7/21/2020							669
8/27/2020							663
9/18/2020	139	62		195	224		
9/22/2020			84				
9/24/2020						170	696
11/10/2020				229			
11/11/2020					221		
12/15/2020				233	239		
1/19/2021				199	224		
3/11/2021	207						
3/12/2021		56		217	204		
3/16/2021			99				
3/17/2021						213	626
8/12/2021	157	63	92	212	234		
8/13/2021							647
8/16/2021						206	
1/31/2022	186			243	223		
2/1/2022		73	99				
2/2/2022						220	602
8/2/2022			85	222			
8/5/2022	171	44			224		696
8/10/2022						232	
1/24/2023	177	96	146	223	230		
1/25/2023						186	664

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/16/2024 2:31 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-101	HGWC-102
8/8/2023	207	57		214	220		
8/10/2023			80				
8/11/2023						250	785
2/13/2024		73			242		
2/14/2024	187		93	147			
2/16/2024						222	718
8/6/2024	163			253	240		
8/8/2024			85				
8/9/2024		90					746
8/10/2024						263	

Time Series

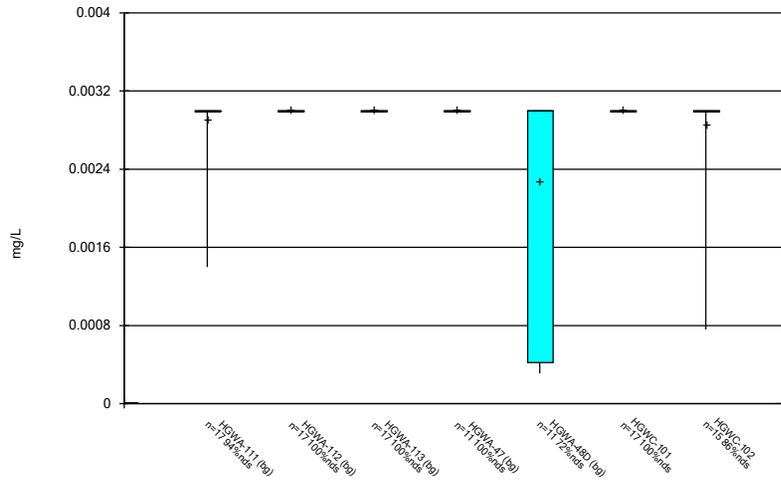
Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/16/2024 2:31 PM

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	483	389	235	182		373
10/20/2016						305
10/24/2016	517					
10/25/2016		316	223	172		
1/31/2017	516	437	346	252		361
5/23/2017	637					359
5/24/2017		352	234	184		
8/10/2017	459	356	254	208		325
11/14/2017	545	375	313	252		373
6/6/2018	559	385	278	224		
6/7/2018						338
10/2/2018		374	274	230		
10/3/2018	582					328
4/3/2019			273	210		
4/4/2019	535	340				
4/5/2019						308
6/17/2019	515	370	272			
6/18/2019						215
10/22/2019			308	212		354
10/23/2019	507	419				
3/25/2020	507	417	297	213		347
9/24/2020	517	411	253			
9/25/2020				188		
9/28/2020						332
3/17/2021				171		
3/18/2021	465	410	255			328
8/12/2021					256	
8/13/2021		441	291	189		336
8/16/2021	672					
9/27/2021					223	
2/2/2022	576		271	206		
2/3/2022		463			264	316
8/5/2022	692	514	274	195	270	329
1/25/2023	630	537	304	214	289	337
8/11/2023	808	630	296	205	280	346
2/16/2024	640		325			
2/17/2024		716		265	329	424
8/9/2024	809					338
8/10/2024		658	299	227	284	

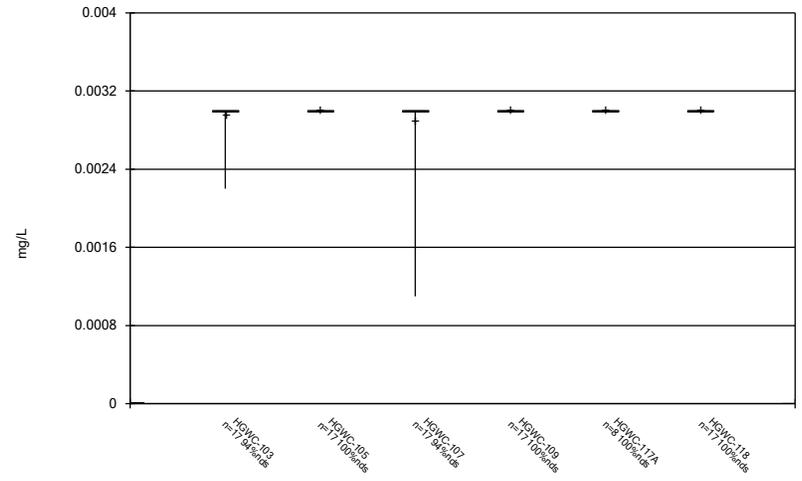
FIGURE B.

Box & Whiskers Plot



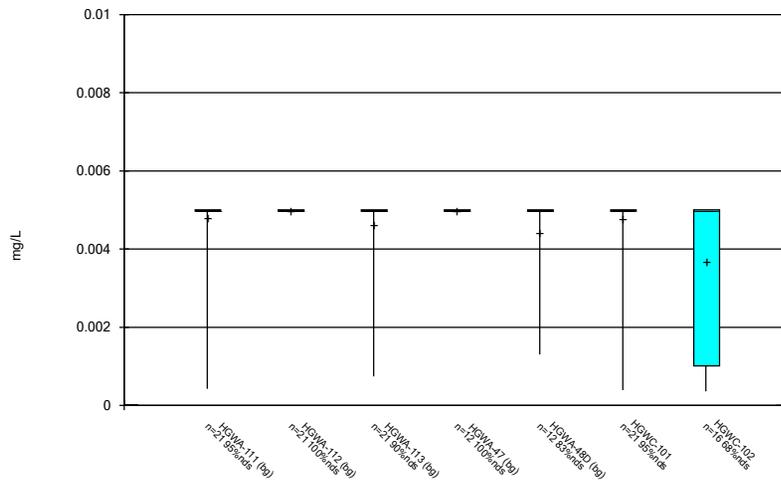
Constituent: Antimony Analysis Run 10/16/2024 2:32 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



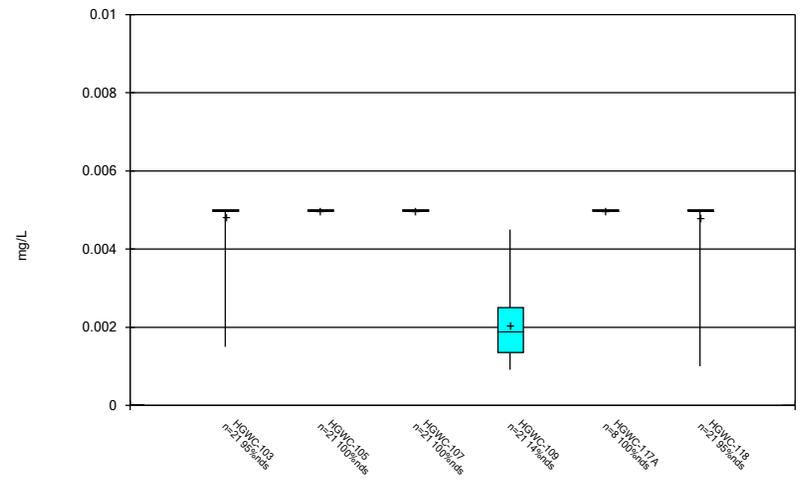
Constituent: Antimony Analysis Run 10/16/2024 2:32 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



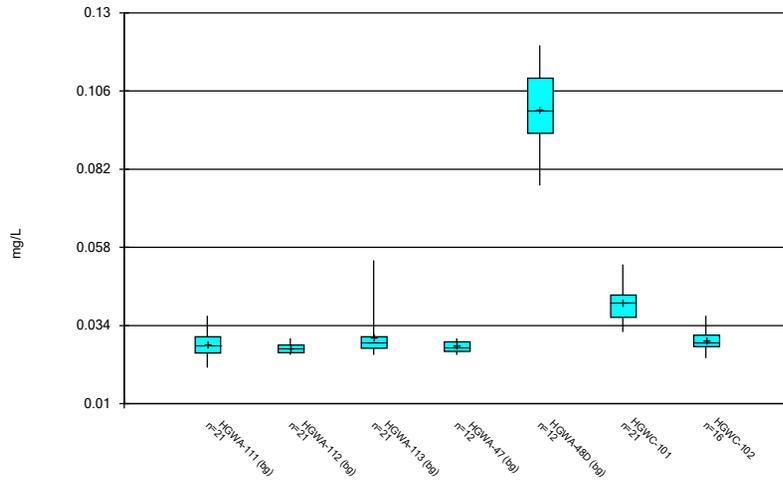
Constituent: Arsenic Analysis Run 10/16/2024 2:32 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



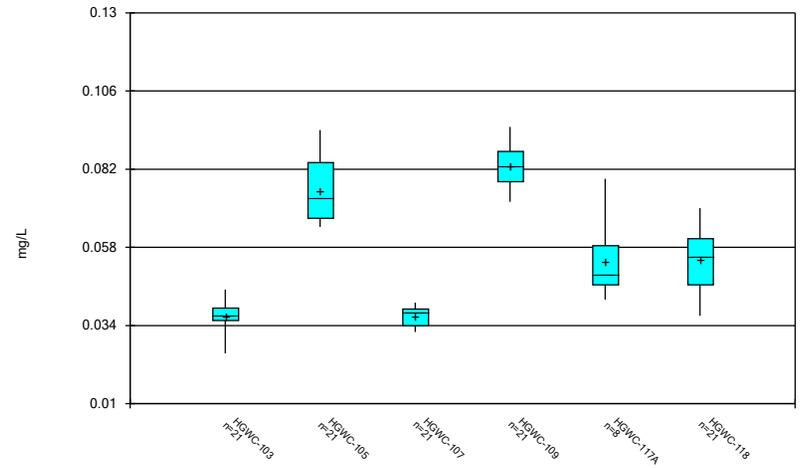
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Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



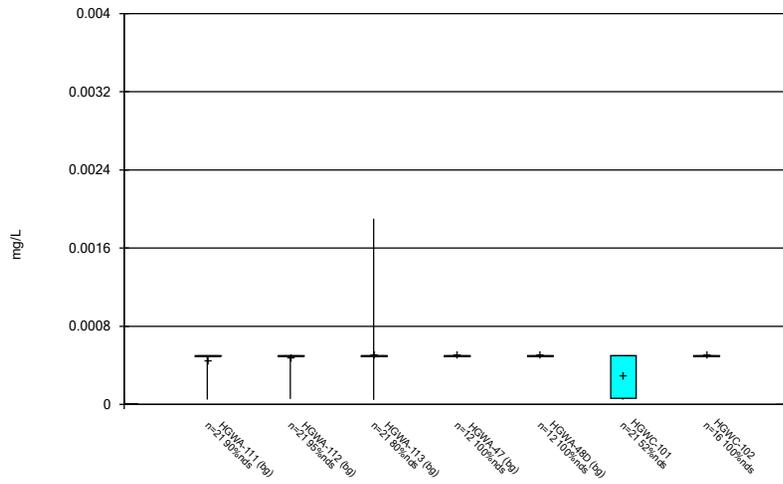
Constituent: Barium Analysis Run 10/16/2024 2:32 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



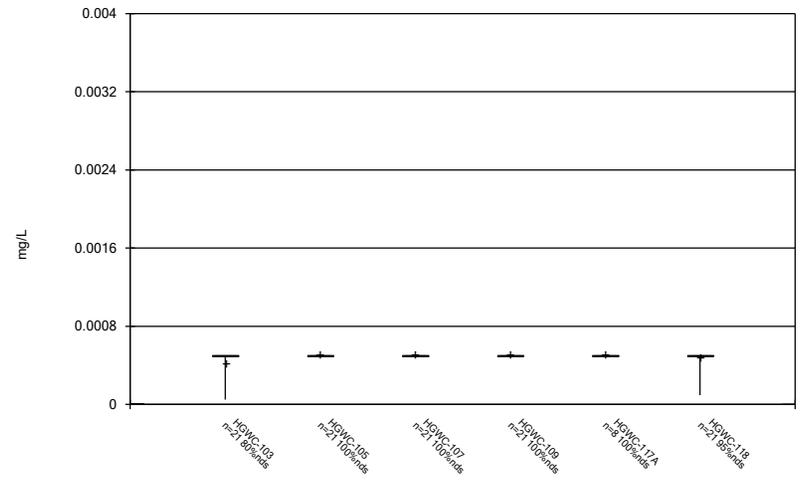
Constituent: Barium Analysis Run 10/16/2024 2:32 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



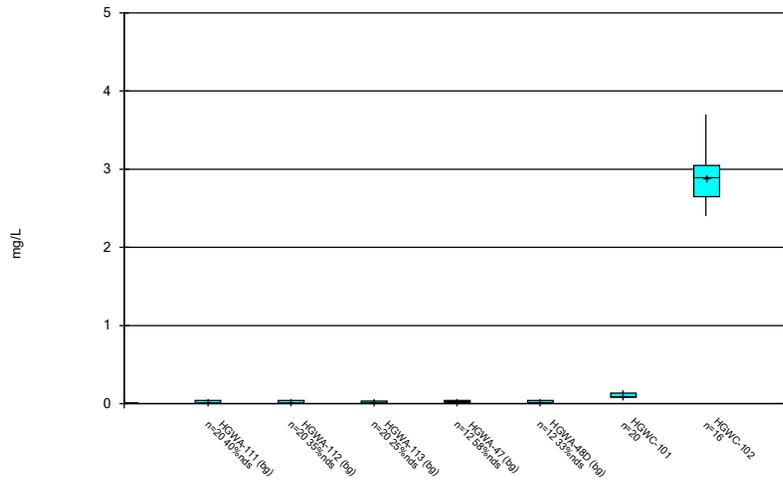
Constituent: Beryllium Analysis Run 10/16/2024 2:32 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



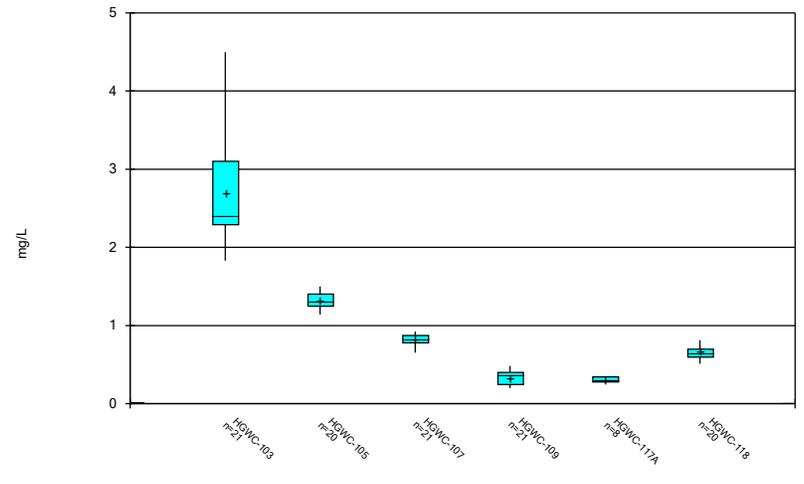
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 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



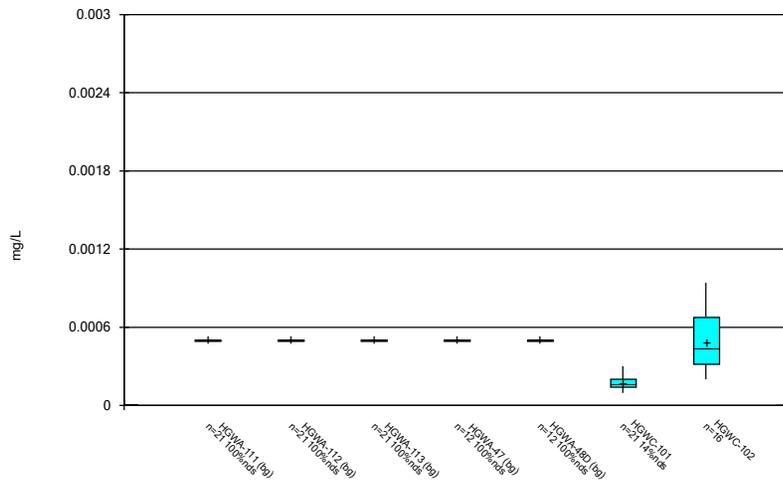
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Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



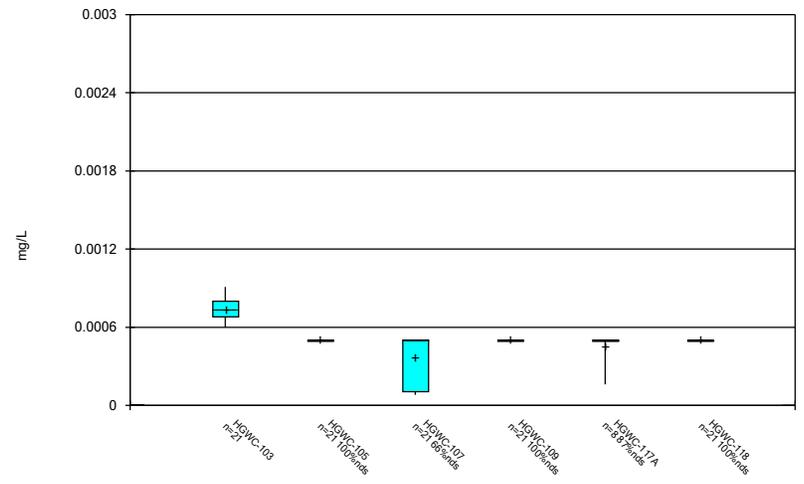
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Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



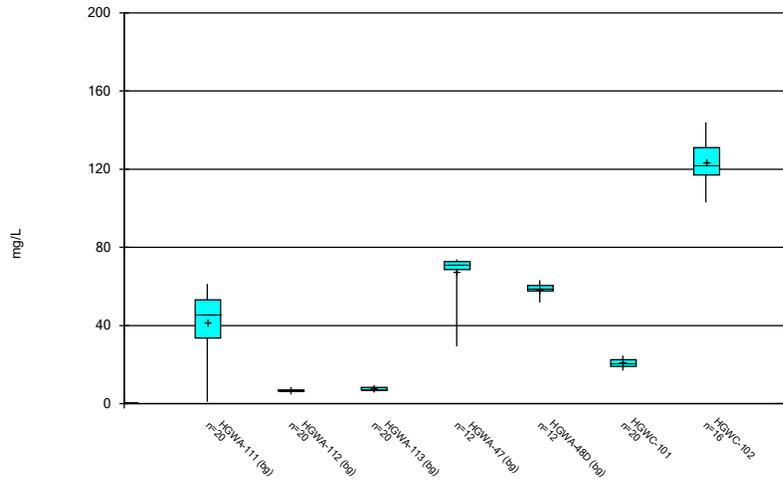
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Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



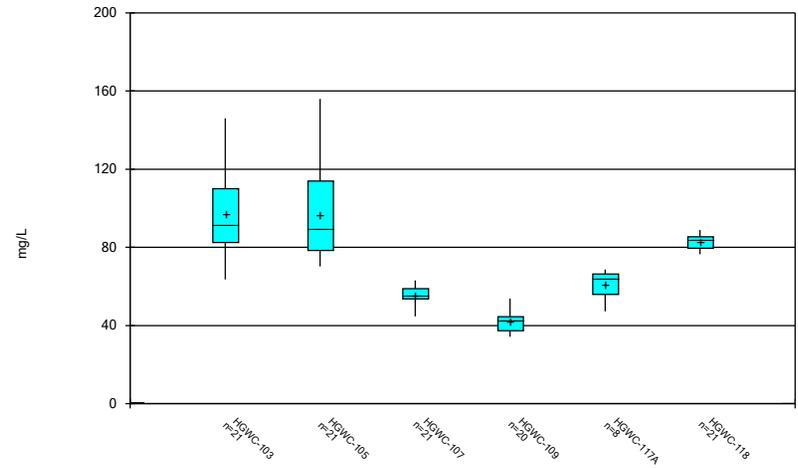
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Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



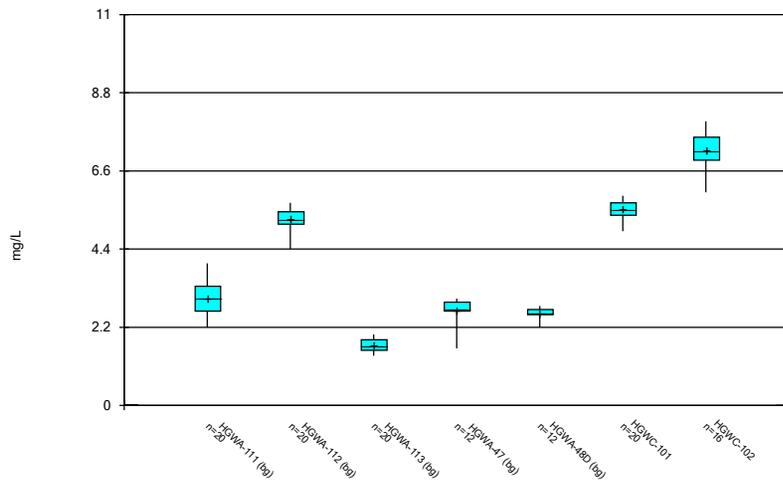
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Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



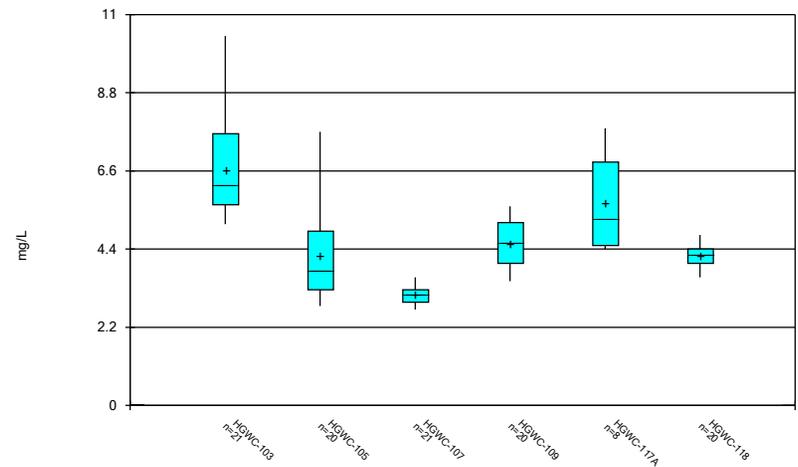
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Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



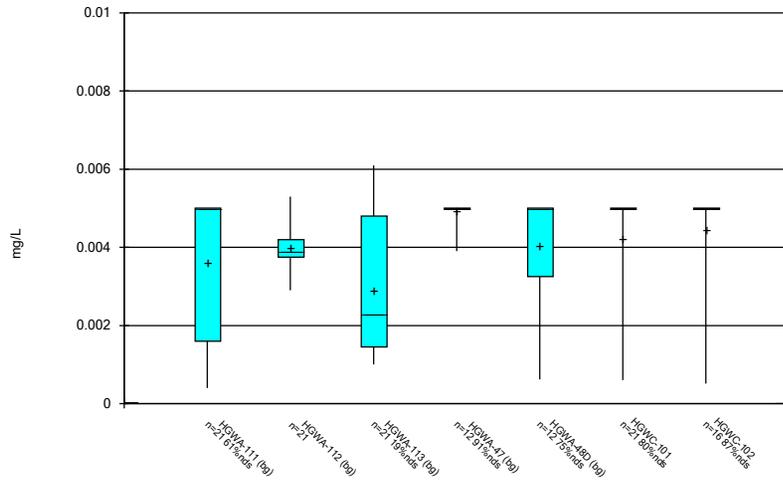
Constituent: Chloride, Total Analysis Run 10/16/2024 2:32 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



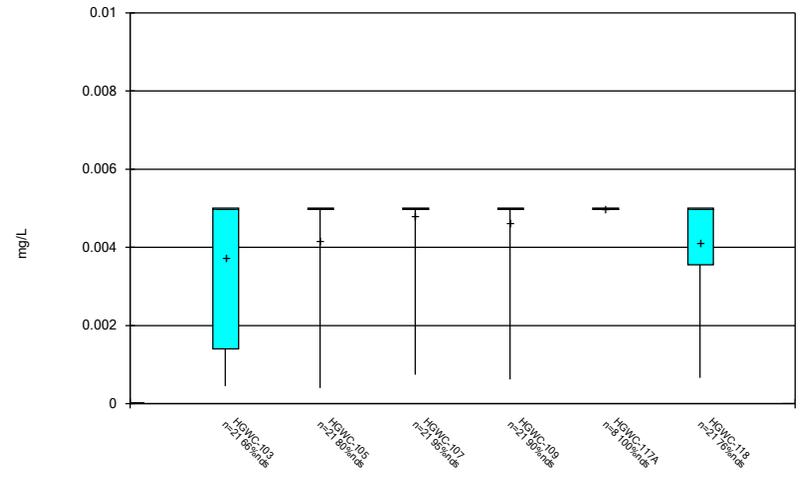
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Box & Whiskers Plot



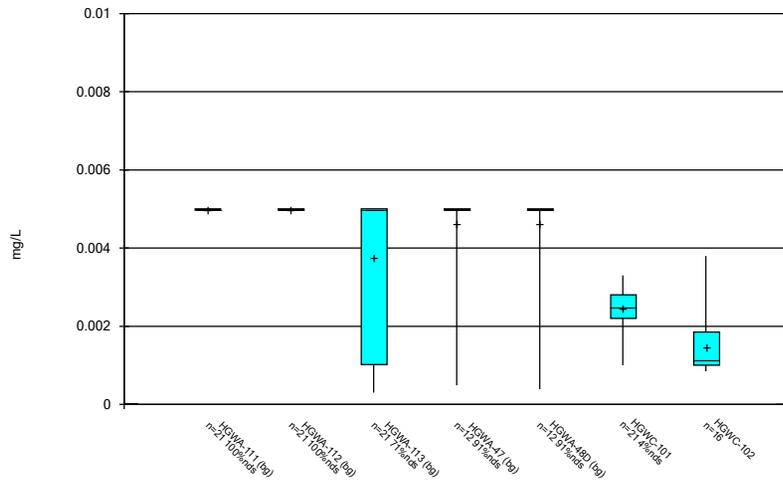
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 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



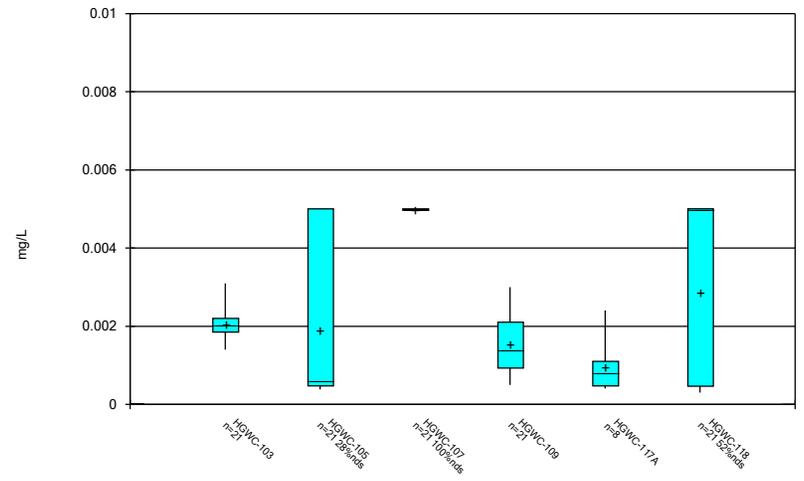
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Box & Whiskers Plot



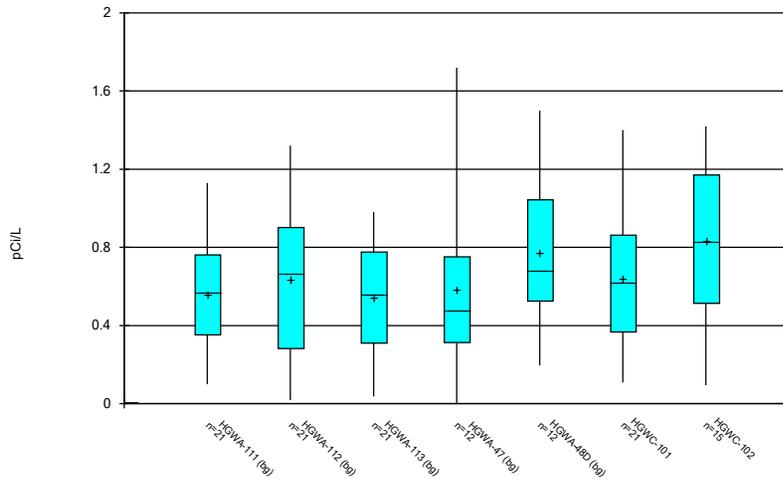
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 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



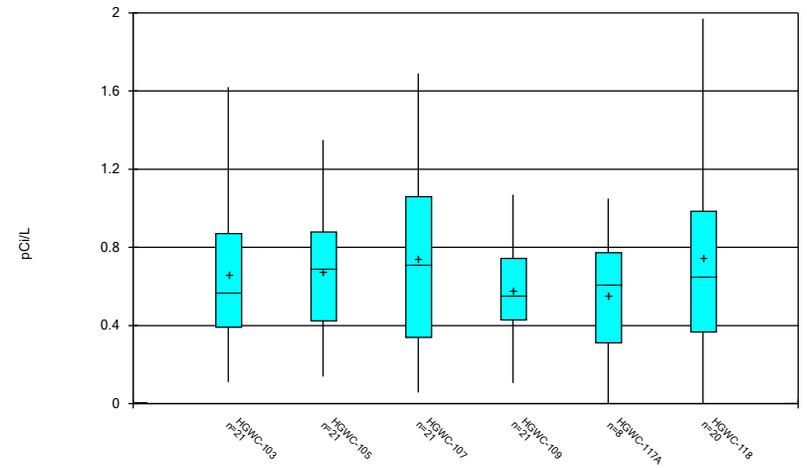
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 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



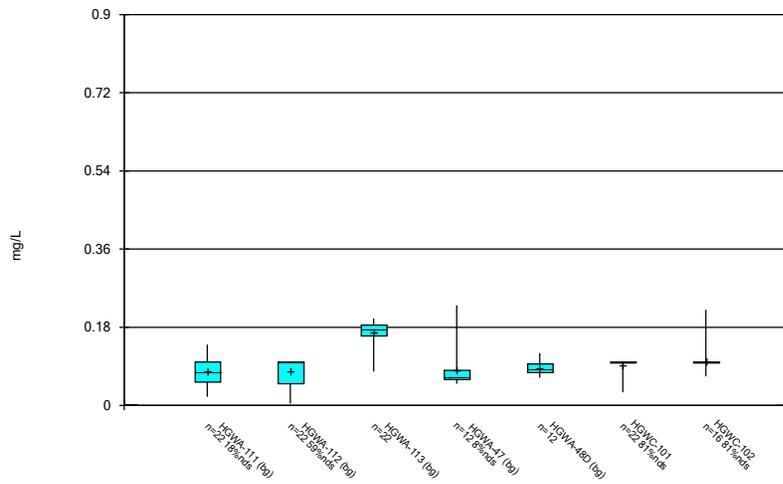
Constituent: Combined Radium 226 & 228 Analysis Run 10/16/2024 2:32 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



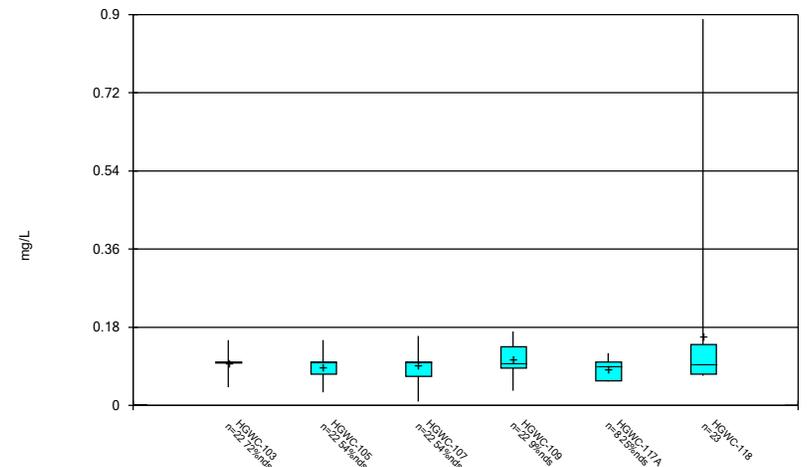
Constituent: Combined Radium 226 & 228 Analysis Run 10/16/2024 2:32 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



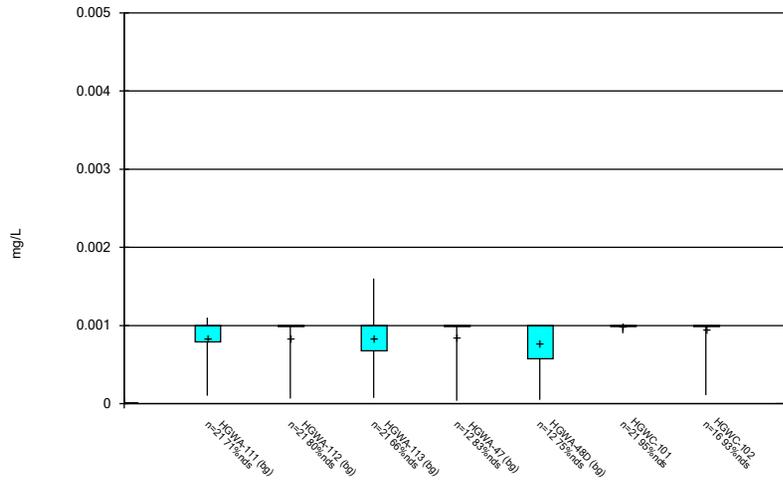
Constituent: Fluoride, total Analysis Run 10/16/2024 2:32 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



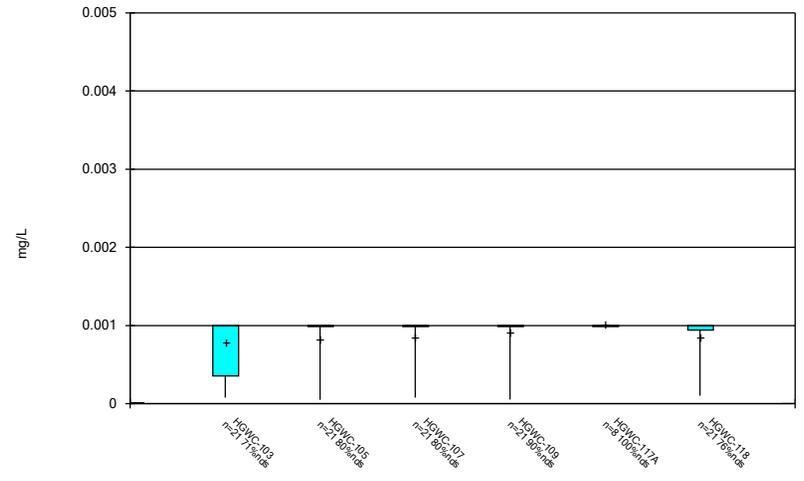
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 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



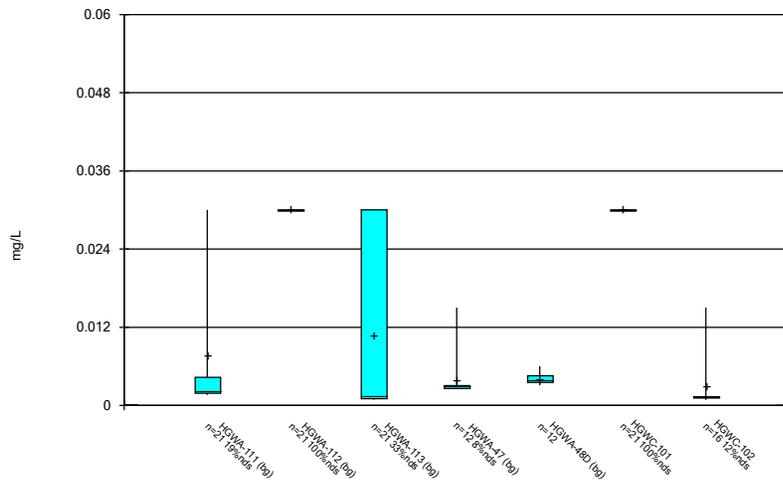
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Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



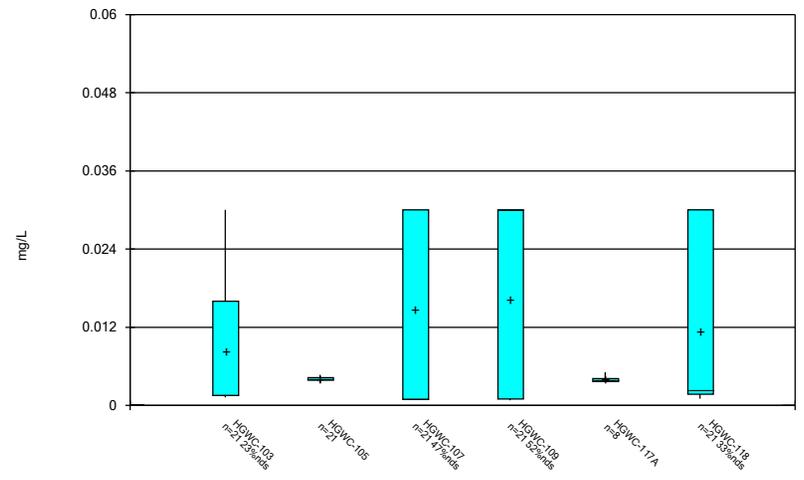
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Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



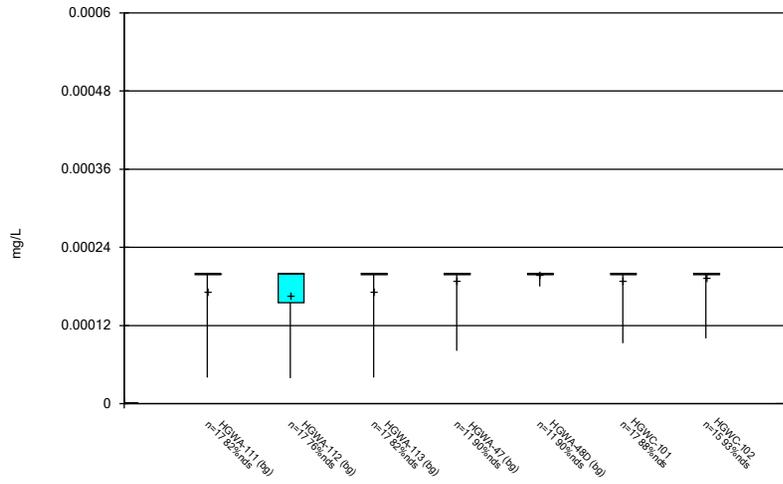
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Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



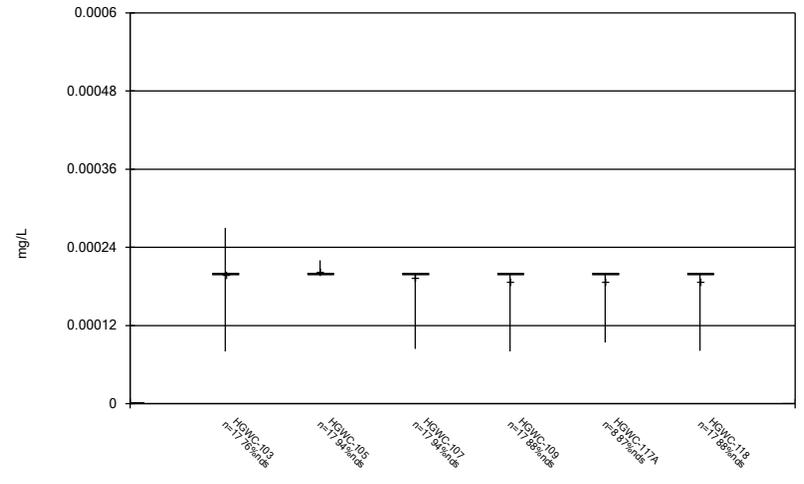
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Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



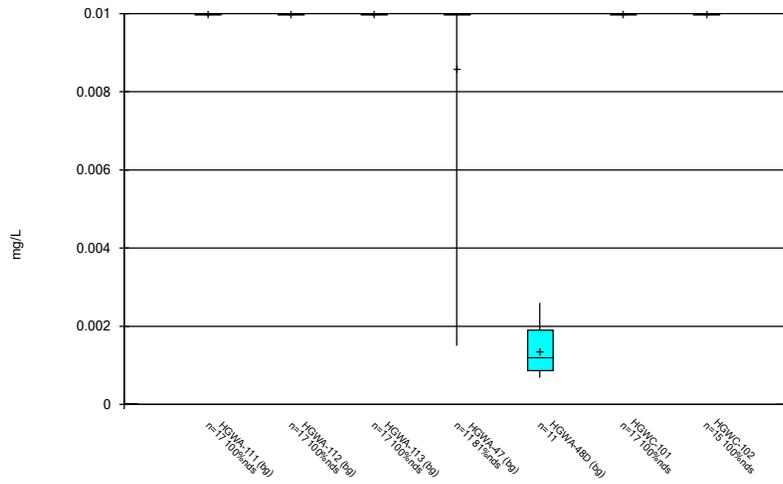
Constituent: Mercury Analysis Run 10/16/2024 2:32 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



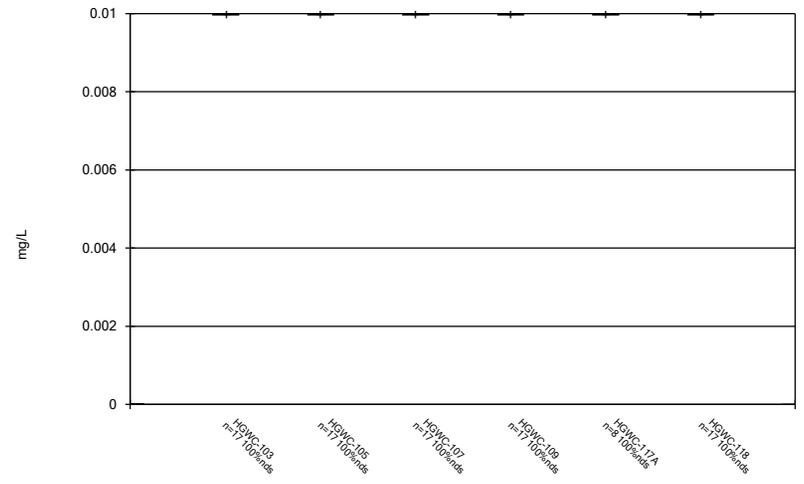
Constituent: Mercury Analysis Run 10/16/2024 2:32 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



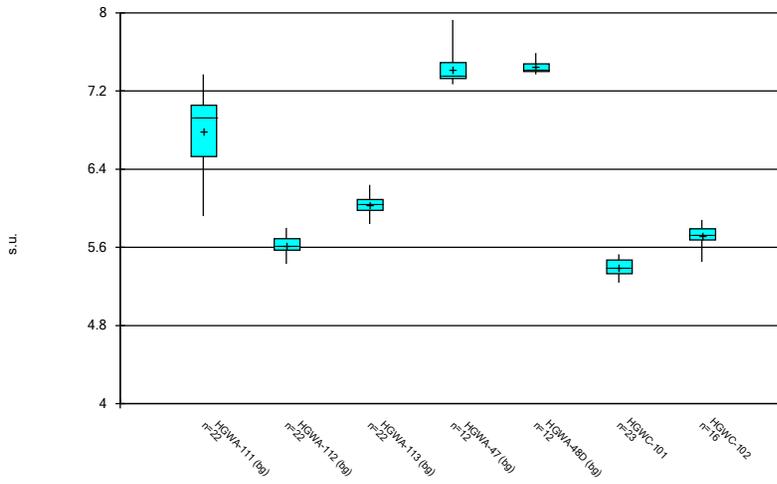
Constituent: Molybdenum Analysis Run 10/16/2024 2:32 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



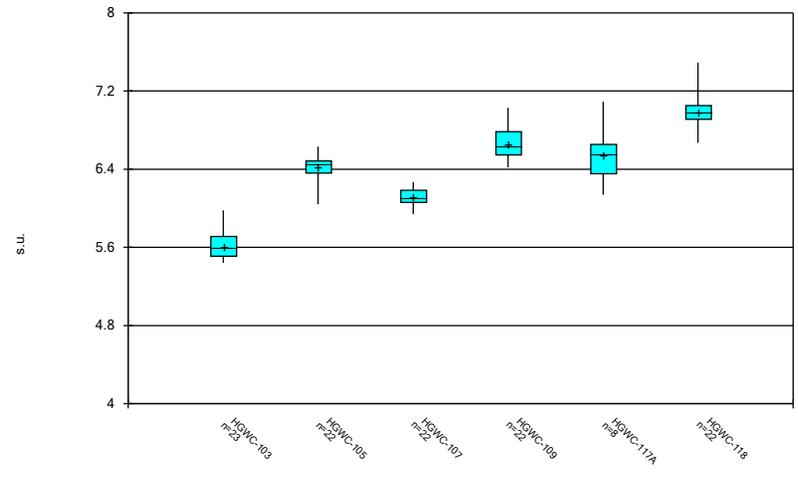
Constituent: Molybdenum Analysis Run 10/16/2024 2:32 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



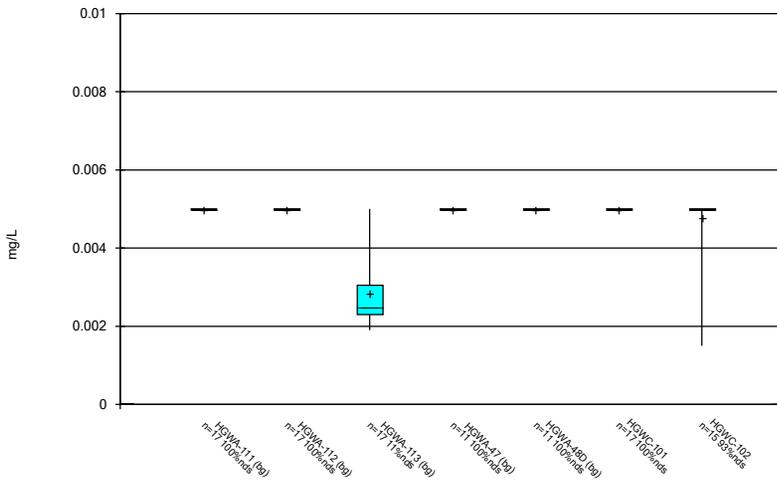
Constituent: pH, Field Analysis Run 10/16/2024 2:32 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



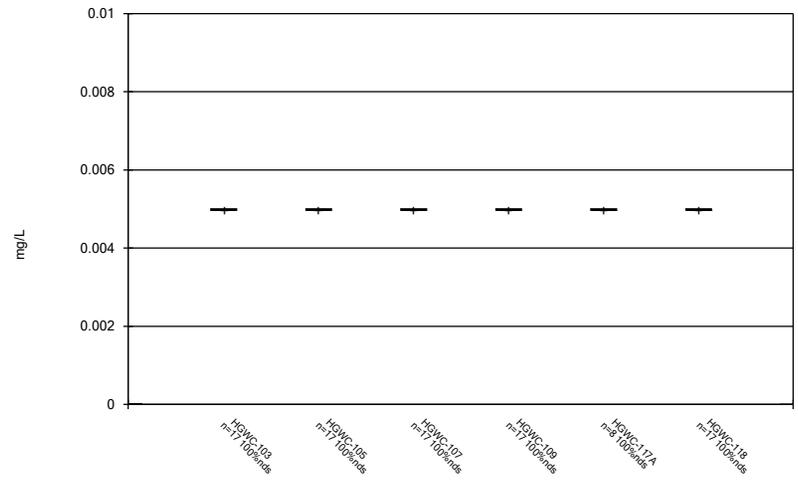
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 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



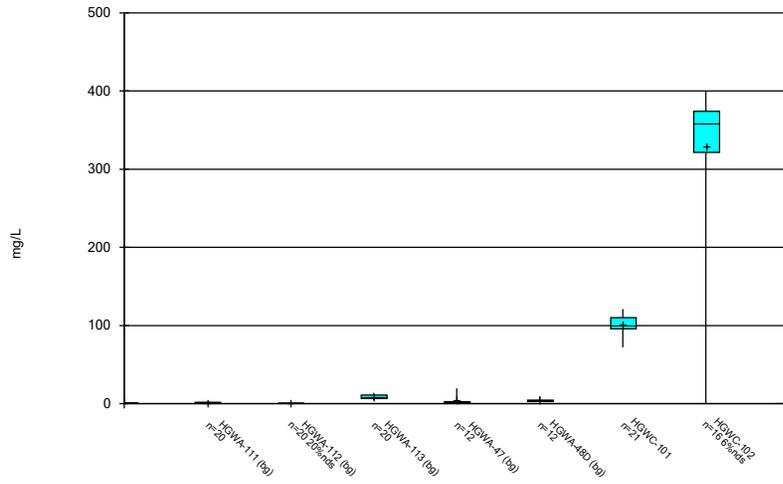
Constituent: Selenium Analysis Run 10/16/2024 2:32 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



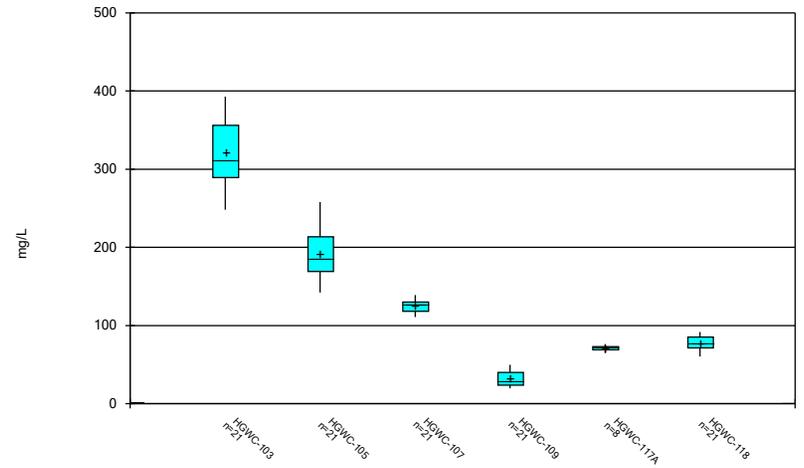
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 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



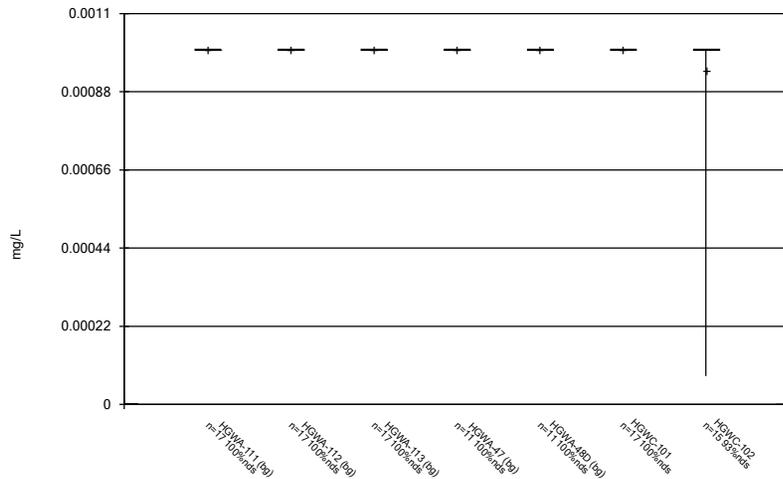
Constituent: Sulfate as SO4 Analysis Run 10/16/2024 2:32 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



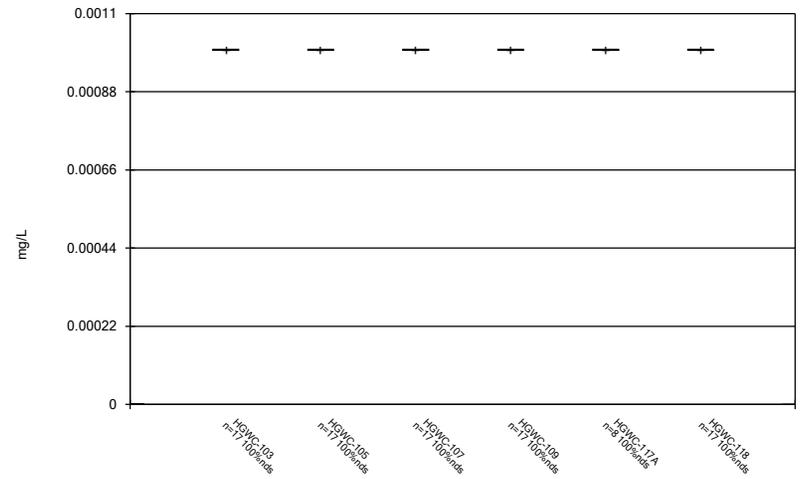
Constituent: Sulfate as SO4 Analysis Run 10/16/2024 2:32 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



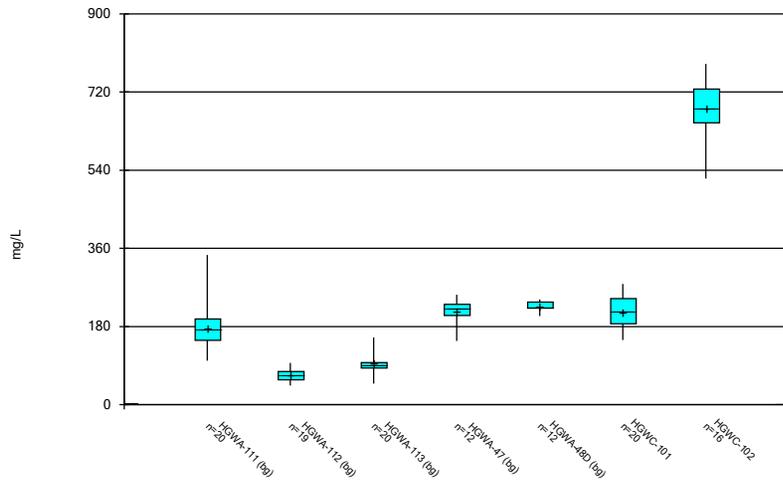
Constituent: Thallium Analysis Run 10/16/2024 2:32 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



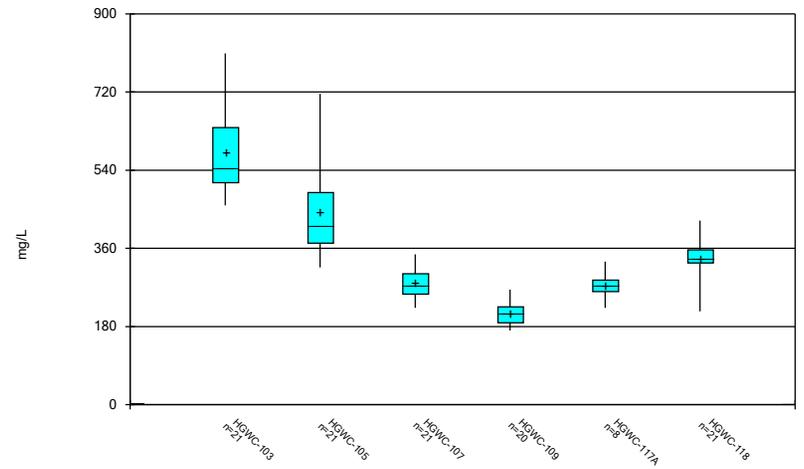
Constituent: Thallium Analysis Run 10/16/2024 2:32 PM
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/16/2024 2:32 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/16/2024 2:32 PM
Plant Hammond Client: Southern Company Data: Hammond AP-4

FIGURE C.

Outlier Summary

Plant Hammond Client: Southern Company Data: Hammond AP-4 Printed 10/16/2024, 2:33 PM

HGWA-112 Total Dissolved Solids [TDS] (mg/L)

1/25/2017

152 (O)

FIGURE D.

Appendix III - Interwell Prediction Limits - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-4 Printed 10/17/2024, 12:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	HGWC-101	0.04	n/a	8/10/2024	0.15	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-102	0.04	n/a	8/9/2024	3	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-103	0.04	n/a	8/9/2024	4.5	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-105	0.04	n/a	8/10/2024	1.4	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-107	0.04	n/a	8/10/2024	0.84	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-109	0.04	n/a	8/10/2024	0.2	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-117A	0.04	n/a	8/10/2024	0.28	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-118	0.04	n/a	8/9/2024	0.59	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-102	73.8	n/a	8/9/2024	142	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-103	73.8	n/a	8/9/2024	146	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-105	73.8	n/a	8/10/2024	156	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-118	73.8	n/a	8/9/2024	85.2	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-102	5.7	n/a	8/9/2024	8	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-103	5.7	n/a	8/9/2024	8.8	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-105	5.7	n/a	8/10/2024	7.7	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
pH, Field (s.u.)	HGWC-101	7.93	5.43	8/10/2024	5.38	Yes	90	n/a	n/a	0	n/a	n/a	0.0004742	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-101	19.7	n/a	8/10/2024	104	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-102	19.7	n/a	8/9/2024	359	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-103	19.7	n/a	8/9/2024	393	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-105	19.7	n/a	8/10/2024	258	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-107	19.7	n/a	8/10/2024	114	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-117A	19.7	n/a	8/10/2024	72.6	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-118	19.7	n/a	8/9/2024	66.5	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-102	345	n/a	8/9/2024	746	Yes	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-103	345	n/a	8/9/2024	809	Yes	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-105	345	n/a	8/10/2024	658	Yes	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2

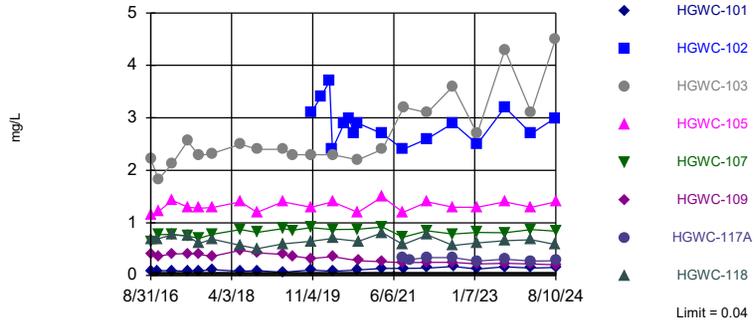
Appendix III - Interwell Prediction Limits - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-4 Printed 10/17/2024, 12:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	HGWC-101	0.04	n/a	8/10/2024	0.15	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-102	0.04	n/a	8/9/2024	3	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-103	0.04	n/a	8/9/2024	4.5	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-105	0.04	n/a	8/10/2024	1.4	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-107	0.04	n/a	8/10/2024	0.84	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-109	0.04	n/a	8/10/2024	0.2	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-117A	0.04	n/a	8/10/2024	0.28	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Boron, total (mg/L)	HGWC-118	0.04	n/a	8/9/2024	0.59	Yes	84	n/a	n/a	36.9	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-101	73.8	n/a	8/10/2024	24.2	No	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-102	73.8	n/a	8/9/2024	142	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-103	73.8	n/a	8/9/2024	146	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-105	73.8	n/a	8/10/2024	156	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-107	73.8	n/a	8/10/2024	61.4	No	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-109	73.8	n/a	8/10/2024	53.7	No	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-117A	73.8	n/a	8/10/2024	64.5	No	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	HGWC-118	73.8	n/a	8/9/2024	85.2	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-101	5.7	n/a	8/10/2024	5.4	No	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-102	5.7	n/a	8/9/2024	8	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-103	5.7	n/a	8/9/2024	8.8	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-105	5.7	n/a	8/10/2024	7.7	Yes	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-107	5.7	n/a	8/10/2024	3.1	No	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-109	5.7	n/a	8/10/2024	4	No	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-117A	5.7	n/a	8/10/2024	4.5	No	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	HGWC-118	5.7	n/a	8/9/2024	4.2	No	84	n/a	n/a	0	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	HGWC-101	0.23	n/a	8/10/2024	0.068J	No	90	n/a	n/a	20	n/a	n/a	0.0002371	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	HGWC-102	0.23	n/a	8/9/2024	0.067J	No	90	n/a	n/a	20	n/a	n/a	0.0002371	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	HGWC-103	0.23	n/a	8/9/2024	0.077J	No	90	n/a	n/a	20	n/a	n/a	0.0002371	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	HGWC-105	0.23	n/a	8/10/2024	0.066J	No	90	n/a	n/a	20	n/a	n/a	0.0002371	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	HGWC-107	0.23	n/a	8/10/2024	0.069J	No	90	n/a	n/a	20	n/a	n/a	0.0002371	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	HGWC-109	0.23	n/a	8/10/2024	0.13	No	90	n/a	n/a	20	n/a	n/a	0.0002371	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	HGWC-117A	0.23	n/a	8/10/2024	0.1	No	90	n/a	n/a	20	n/a	n/a	0.0002371	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	HGWC-118	0.23	n/a	8/9/2024	0.11	No	90	n/a	n/a	20	n/a	n/a	0.0002371	NP Inter (normality) 1 of 2
pH, Field (s.u.)	HGWC-101	7.93	5.43	8/10/2024	5.38	Yes	90	n/a	n/a	0	n/a	n/a	0.0004742	NP Inter (normality) 1 of 2
pH, Field (s.u.)	HGWC-102	7.93	5.43	8/9/2024	5.86	No	90	n/a	n/a	0	n/a	n/a	0.0004742	NP Inter (normality) 1 of 2
pH, Field (s.u.)	HGWC-103	7.93	5.43	8/9/2024	5.74	No	90	n/a	n/a	0	n/a	n/a	0.0004742	NP Inter (normality) 1 of 2
pH, Field (s.u.)	HGWC-105	7.93	5.43	8/10/2024	6.38	No	90	n/a	n/a	0	n/a	n/a	0.0004742	NP Inter (normality) 1 of 2
pH, Field (s.u.)	HGWC-107	7.93	5.43	8/10/2024	6.22	No	90	n/a	n/a	0	n/a	n/a	0.0004742	NP Inter (normality) 1 of 2
pH, Field (s.u.)	HGWC-109	7.93	5.43	8/10/2024	7.03	No	90	n/a	n/a	0	n/a	n/a	0.0004742	NP Inter (normality) 1 of 2
pH, Field (s.u.)	HGWC-117A	7.93	5.43	8/10/2024	6.61	No	90	n/a	n/a	0	n/a	n/a	0.0004742	NP Inter (normality) 1 of 2
pH, Field (s.u.)	HGWC-118	7.93	5.43	8/9/2024	7.07	No	90	n/a	n/a	0	n/a	n/a	0.0004742	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-101	19.7	n/a	8/10/2024	104	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-102	19.7	n/a	8/9/2024	359	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-103	19.7	n/a	8/9/2024	393	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-105	19.7	n/a	8/10/2024	258	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-107	19.7	n/a	8/10/2024	114	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-109	19.7	n/a	8/10/2024	19.7	No	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-117A	19.7	n/a	8/10/2024	72.6	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	HGWC-118	19.7	n/a	8/9/2024	66.5	Yes	84	n/a	n/a	4.762	n/a	n/a	0.0002738	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-101	345	n/a	8/10/2024	263	No	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-102	345	n/a	8/9/2024	746	Yes	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-103	345	n/a	8/9/2024	809	Yes	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-105	345	n/a	8/10/2024	658	Yes	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-107	345	n/a	8/10/2024	299	No	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-109	345	n/a	8/10/2024	227	No	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-117A	345	n/a	8/10/2024	284	No	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	HGWC-118	345	n/a	8/9/2024	338	No	83	n/a	n/a	0	n/a	n/a	0.00028	NP Inter (normality) 1 of 2

Exceeds Limit: HGWC-101, HGWC-102, HGWC-103, HGWC-105, HGWC-107, HGWC-109, HGWC-117A, HGWC-118

Prediction Limit
Interwell Non-parametric

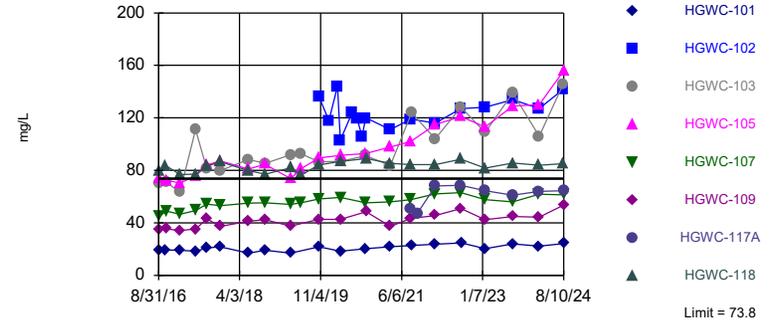


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level after cube root transformation. Limit is highest of 84 background values. 36.9% NDs. Annual per-constituent alpha = 0.003827. Individual comparison alpha = 0.0002738 (1 of 2). Comparing 8 points to limit.

Constituent: Boron, total Analysis Run 10/17/2024 12:49 PM View: Interwell PLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Exceeds Limit: HGWC-102, HGWC-103, HGWC-105, HGWC-118

Prediction Limit
Interwell Non-parametric

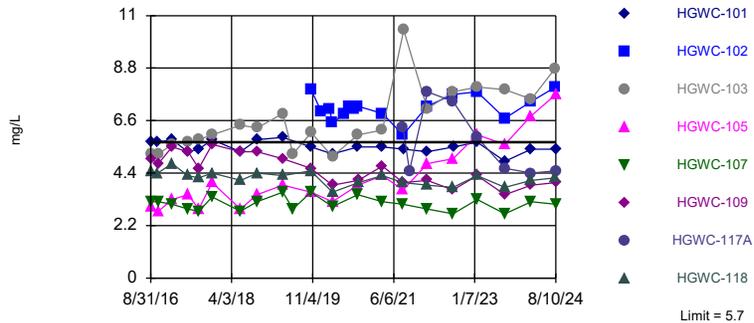


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level after cube root transformation. Limit is highest of 84 background values. Annual per-constituent alpha = 0.003827. Individual comparison alpha = 0.0002738 (1 of 2). Comparing 8 points to limit.

Constituent: Calcium, total Analysis Run 10/17/2024 12:49 PM View: Interwell PLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Exceeds Limit: HGWC-102, HGWC-103, HGWC-105

Prediction Limit
Interwell Non-parametric



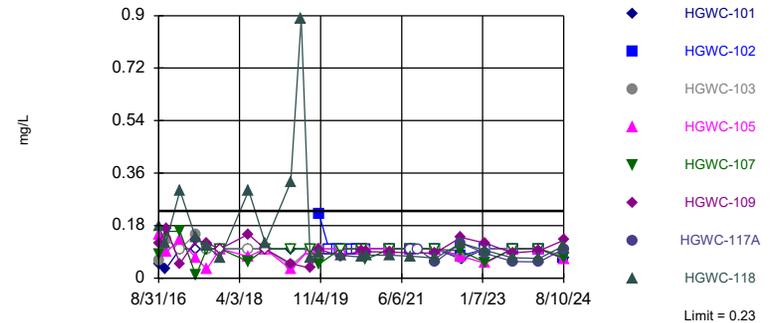
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level after cube root transformation. Limit is highest of 84 background values. Annual per-constituent alpha = 0.003827. Individual comparison alpha = 0.0002738 (1 of 2). Comparing 8 points to limit.

Constituent: Chloride, Total Analysis Run 10/17/2024 12:49 PM View: Interwell PLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Within Limit

Hollow symbols indicate censored values.

Prediction Limit
Interwell Non-parametric

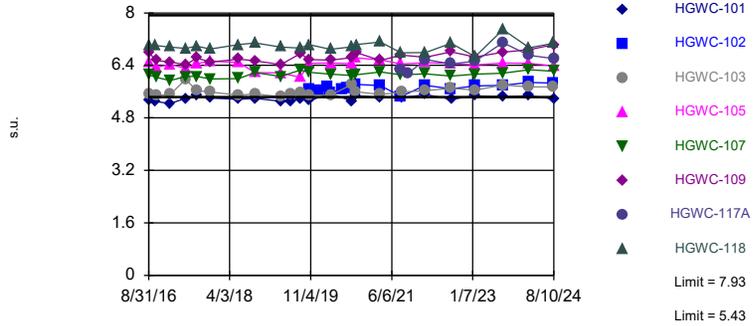


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level after cube root transformation. Limit is highest of 90 background values. 20% NDs. Annual per-constituent alpha = 0.003314. Individual comparison alpha = 0.0002371 (1 of 2). Comparing 8 points to limit.

Constituent: Fluoride, total Analysis Run 10/17/2024 12:49 PM View: Interwell PLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Exceeds Limits: HGWC-101

Prediction Limit
Interwell Non-parametric



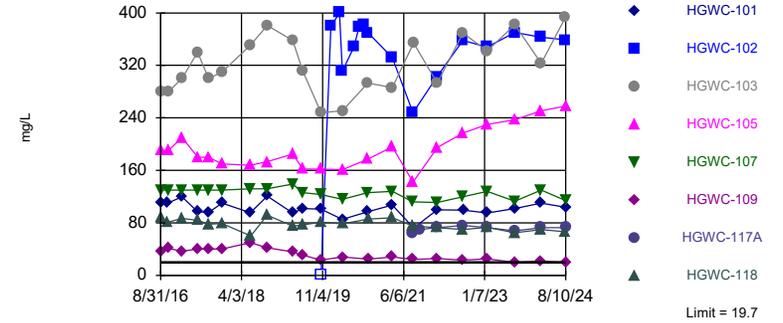
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level after cube root transformation. Limits are highest and lowest of 90 background values. Annual per-constituent alpha = 0.006629. Individual comparison alpha = 0.0004742 (1 of 2). Comparing 8 points to limit.

Constituent: pH, Field Analysis Run 10/17/2024 12:49 PM View: Interwell PLS
Plant Hammond Client: Southern Company Data: Hammond AP-4

Hollow symbols indicate censored values.

Exceeds Limit: HGWC-101, HGWC-102, HGWC-103, HGWC-105, HGWC-107, HGWC-117A, HGWC-118

Prediction Limit
Interwell Non-parametric

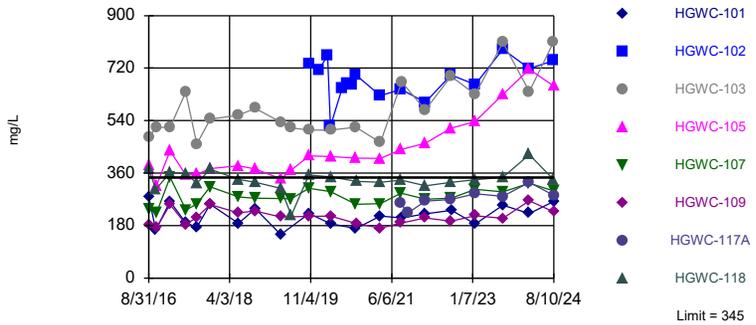


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level after cube root transformation. Limit is highest of 84 background values. 4.762% NDs. Annual per-constituent alpha = 0.003827. Individual comparison alpha = 0.0002738 (1 of 2). Comparing 8 points to limit.

Constituent: Sulfate as SO4 Analysis Run 10/17/2024 12:49 PM View: Interwell PLS
Plant Hammond Client: Southern Company Data: Hammond AP-4

Exceeds Limit: HGWC-102, HGWC-103, HGWC-105

Prediction Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level after cube root transformation. Limit is highest of 83 background values. Annual per-constituent alpha = 0.003912. Individual comparison alpha = 0.00028 (1 of 2). Comparing 8 points to limit.

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/17/2024 12:49 PM View: Interwell PLS
Plant Hammond Client: Southern Company Data: Hammond AP-4

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-113 (bg)	HGWA-112 (bg)	HGWC-107	HGWC-105	HGWC-109	HGWC-103	HGWC-101	HGWC-118
8/30/2016	<0.04	<0.04	<0.04						
8/31/2016				0.651	1.14	0.402	2.22	0.0724 (J)	0.681
10/20/2016	0.016 (J)							0.0877 (J)	0.697
10/24/2016		0.0226 (J)	0.0367 (J)				1.83		
10/25/2016				0.778	1.21	0.372			
1/25/2017	0.0095 (J)	0.009 (J)	0.0075 (J)						
1/31/2017				0.782	1.43	0.404	2.12	0.0928	0.768
5/23/2017		0.0082 (J)	0.0073 (J)				2.56	0.0795	0.754
5/24/2017	0.0094 (J)			0.753	1.3	0.415			
8/10/2017	<0.04	0.0061 (J)	<0.04	0.702	1.28	0.397	2.28	0.0814	0.608
11/13/2017	0.0103 (J)		0.0089 (J)						
11/14/2017		0.012 (J)		0.78	1.29	0.366	2.32	0.108	0.691
6/4/2018	0.0065 (J)		0.007 (J)						
6/5/2018		0.0085 (J)							
6/6/2018				0.87	1.4	0.48	2.5	0.081	
6/7/2018									0.57
10/1/2018	0.0054 (J)	0.0042 (J)	<0.04						
10/2/2018				0.82	1.2	0.43			
10/3/2018							2.4	0.092	0.51
4/1/2019	0.0076 (J)								
4/2/2019		0.0059 (J)	0.0043 (J)						
4/3/2019				0.89		0.4			
4/4/2019					1.4 (X)		2.4	0.06 (X)	
4/5/2019									0.6 (X)
6/17/2019				0.86		0.37	2.3		
10/21/2019	0.0097 (J)								
10/22/2019		0.01 (J)	0.016 (J)	0.91		0.32			0.65
10/23/2019					1.3		2.3	0.1	
1/3/2020									
3/4/2020									
3/24/2020	0.011 (J)		0.012 (J)						
3/25/2020				0.87	1.4	0.36	2.3	0.08 (J)	0.7
4/9/2020		0.012 (J)							
6/18/2020									
7/21/2020									
8/27/2020									
9/18/2020	0.011 (J)		0.008 (J)						
9/22/2020		0.021 (J)							
9/24/2020				0.88	1.2		2.2	0.1	
9/25/2020						0.28			
9/28/2020									0.65
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
3/11/2021	0.01 (J)								
3/12/2021			0.0061 (J)						
3/16/2021		0.011 (J)							
3/17/2021						0.26		0.13	
3/18/2021				0.92	1.5		2.4		0.81
8/12/2021	<0.04	<0.04	<0.04						
8/13/2021				0.73	1.2	0.24			0.59

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-113 (bg)	HGWA-112 (bg)	HGWC-107	HGWC-105	HGWC-109	HGWC-103	HGWC-101	HGWC-118
8/16/2021							3.2	0.13	
9/27/2021									
1/31/2022	0.0099 (J)								
2/1/2022		0.012 (J)	0.011 (J)						
2/2/2022				0.85		0.25	3.1	0.14	
2/3/2022					1.4				0.77
8/2/2022		<0.04							
8/5/2022	<0.04		0.012 (J)	0.79	1.3	0.25	3.6		0.57
8/10/2022								0.17	
1/24/2023	<0.04	<0.04	<0.04						
1/25/2023				0.82	1.3	0.22	2.7	0.12	0.62
8/8/2023	<0.04		<0.04						
8/10/2023		0.0091 (J)							
8/11/2023				0.81	1.4	0.23	4.3	0.16	0.66
2/13/2024			<0.04						
2/14/2024	<0.04	0.013 (J)							
2/16/2024				0.87			3.1	0.14	
2/17/2024					1.3	0.22			0.68
8/6/2024	<0.04								
8/8/2024		<0.04							
8/9/2024			0.029 (J)				4.5		0.59
8/10/2024				0.84	1.4	0.2		0.15	

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-102	HGWA-48D (bg)	HGWA-47 (bg)	HGWC-117A
8/30/2016				
8/31/2016				
10/20/2016				
10/24/2016				
10/25/2016				
1/25/2017				
1/31/2017				
5/23/2017				
5/24/2017				
8/10/2017				
11/13/2017				
11/14/2017				
6/4/2018				
6/5/2018				
6/6/2018				
6/7/2018				
10/1/2018				
10/2/2018				
10/3/2018				
4/1/2019				
4/2/2019				
4/3/2019				
4/4/2019				
4/5/2019				
6/17/2019				
10/21/2019				
10/22/2019				
10/23/2019	3.1			
1/3/2020	3.4			
3/4/2020	3.7			
3/24/2020	2.4			
3/25/2020				
4/9/2020				
6/18/2020	2.9			
7/21/2020	3			
8/27/2020	2.7			
9/18/2020		0.015 (J)	0.0082 (J)	
9/22/2020				
9/24/2020	2.9			
9/25/2020				
9/28/2020				
11/10/2020			0.0064 (J)	
11/11/2020		0.014 (J)		
12/15/2020		0.0083 (J)	<0.04	
1/19/2021		0.015 (J)	0.015 (J)	
3/11/2021				
3/12/2021		0.012 (J)	0.0067 (J)	
3/16/2021				
3/17/2021	2.7			
3/18/2021				
8/12/2021		0.012 (J)	<0.04	0.34
8/13/2021	2.4			

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-102	HGWA-48D (bg)	HGWA-47 (bg)	HGWC-117A
8/16/2021				
9/27/2021				0.3
1/31/2022		0.011 (J)	<0.04	
2/1/2022				
2/2/2022	2.6			
2/3/2022				0.34
8/2/2022			<0.04	
8/5/2022	2.9	0.011 (J)		0.34
8/10/2022				
1/24/2023		<0.04	<0.04	
1/25/2023	2.5			0.27
8/8/2023		<0.04	<0.04	
8/10/2023				
8/11/2023	3.2			0.31
2/13/2024		<0.04		
2/14/2024			0.018 (J)	
2/16/2024	2.7			
2/17/2024				0.27
8/6/2024		<0.04	<0.04	
8/8/2024				
8/9/2024	3			
8/10/2024				0.28

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-103	HGWC-107	HGWC-118	HGWC-101	HGWC-105	HGWC-109
8/30/2016	40.3	6.69	6.72						
8/31/2016				70.4	44.7	79.3	19.4	74.2	35.1
10/20/2016	38.7					83.7	19.3		
10/24/2016		6.25	6.4	70.9					
10/25/2016					49			72.5	35.4
1/25/2017	44.6	6.58	6.87						
1/31/2017				63.6	46.6	76.8	19.1	70.3	34.2
5/23/2017		6.4	7.13	111		77.2	18.3		
5/24/2017	34.8				49.5			75.9	35.3
8/10/2017	48.6	6.54	6.71	81.2	54.2	83.1	20.9	84	43.1
11/13/2017	17.1	6.26							
11/14/2017			7.4	79.7	53.2	86.7	21.7	87.2	37.4
6/4/2018	30.1	7.4							
6/5/2018			7.4						
6/6/2018				88.3	55		17	81	41.1
6/7/2018						79.7			
10/1/2018	14.2 (J)	5.8	6.2						
10/2/2018					55.4			84.7	42.5
10/3/2018				85.3		77.1	19.1 (J)		
4/1/2019	58.4								
4/2/2019		6.7	7.4						
4/3/2019					54				37.5
4/4/2019				91.9			16.9	73.8	
4/5/2019						82			
6/17/2019				92.6	55.3			81.2	
6/18/2019						76.5			
10/21/2019	51								
10/22/2019		6.3	7.2		58.1	84.2			42.6
10/23/2019				86.5			21.9	89.4	
1/3/2020									
3/4/2020									
3/24/2020	61.2	7							
3/25/2020				86.8	59.5	86.8	18.4	91.4	42.6
4/9/2020			8.3						
6/18/2020									
7/21/2020									
8/27/2020									
9/18/2020	32.2	6.5							
9/22/2020			7.9						
9/24/2020				91.3	55.4		20.3	92.9	
9/25/2020									48.5
9/28/2020						88.9			
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
3/11/2021	53.2								
3/12/2021		6.9							
3/16/2021			8.6						
3/17/2021							21.8		37.3
3/18/2021				83.7	56	85.4		97.7	
8/12/2021	45.4	6.9	8.4						

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-103	HGWC-107	HGWC-118	HGWC-101	HGWC-105	HGWC-109
8/13/2021					57.8	84.3		102	43.5
8/16/2021				124			22.8		
9/27/2021									
1/31/2022	58.6								
2/1/2022		7.4	8.6						
2/2/2022				104	62		23.8		45.7
2/3/2022						84.5		115	
8/2/2022			8						
8/5/2022	53	7.1		128	63	88.5		121	50.8
8/10/2022							24.6		
1/24/2023	55.4	6.6	7.5						
1/25/2023				109	57.8	81.8	20.4	113	42.4
8/8/2023	0.94 (J)	6.6							
8/10/2023			8.4						
8/11/2023				139	56	85.5	24.1	129	44.8
2/13/2024		6.5							
2/14/2024	51.8		7.2						
2/16/2024				106	61.9		22.2		
2/17/2024						83.8		130	44.3
8/6/2024	46.2								
8/8/2024			8.4						
8/9/2024		7.1		146		85.2			
8/10/2024					61.4		24.2	156	53.7

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-102	HGWA-48D (bg)	HGWA-47 (bg)	HGWC-117A
8/30/2016				
8/31/2016				
10/20/2016				
10/24/2016				
10/25/2016				
1/25/2017				
1/31/2017				
5/23/2017				
5/24/2017				
8/10/2017				
11/13/2017				
11/14/2017				
6/4/2018				
6/5/2018				
6/6/2018				
6/7/2018				
10/1/2018				
10/2/2018				
10/3/2018				
4/1/2019				
4/2/2019				
4/3/2019				
4/4/2019				
4/5/2019				
6/17/2019				
6/18/2019				
10/21/2019				
10/22/2019				
10/23/2019	136			
1/3/2020	118			
3/4/2020	144			
3/24/2020	103			
3/25/2020				
4/9/2020				
6/18/2020	124			
7/21/2020	120			
8/27/2020	106			
9/18/2020		51.8	62.2	
9/22/2020				
9/24/2020	120			
9/25/2020				
9/28/2020				
11/10/2020			73.3	
11/11/2020		61.3		
12/15/2020		61.3	72.5	
1/19/2021		58.9	72.5	
3/11/2021				
3/12/2021		57.5	69.2	
3/16/2021				
3/17/2021	111			
3/18/2021				
8/12/2021		59.5	71.2	50.7

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-102	HGWA-48D (bg)	HGWA-47 (bg)	HGWC-117A
8/13/2021	119			
8/16/2021				
9/27/2021				47.2
1/31/2022		63.2	73.8	
2/1/2022				
2/2/2022	116			
2/3/2022				68.2
8/2/2022			73	
8/5/2022	127	59.6		68.6
8/10/2022				
1/24/2023		57.8	69.2	
1/25/2023	128			64.5
8/8/2023		58.2	68	
8/10/2023				
8/11/2023	134			61.1
2/13/2024		56		
2/14/2024			29.4	
2/16/2024	127			
2/17/2024				63.9
8/6/2024		58.8	71.1	
8/8/2024				
8/9/2024	142			
8/10/2024				64.5

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLS

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-113 (bg)	HGWA-112 (bg)	HGWC-105	HGWC-103	HGWC-109	HGWC-101	HGWC-118	HGWC-107
8/30/2016	3.3	2	5.4						
8/31/2016				3	5.2	5	5.7	4.5	3.2
10/20/2016	3.2						5.7	4.4	
10/24/2016		1.9	5.2		5.2				
10/25/2016				2.8		4.8			3.2
1/25/2017	2.7	1.9	5						
1/31/2017				3.3	5.6	5.5	5.8	4.8	3.1
5/23/2017		1.6	5.1		5.7		5.3	4.3	
5/24/2017	3			3.5		5.3			2.9
8/10/2017	2.8	1.7	5.2	2.9	5.8	4.6	5.4	4.2	2.8
11/13/2017	2.5		5.5						
11/14/2017		2		4	6	5.6	5.8	4.4	3.4
6/4/2018	2.6		5.3						
6/5/2018		1.7							
6/6/2018				2.9	6.4	5.3	5.3		2.8
6/7/2018								4.1	
10/1/2018	2.2	1.6	5.6						
10/2/2018				3.5		5.3			3.2
10/3/2018					6.3		5.8	4.4	
4/1/2019	4								
4/2/2019		1.8	5.7						
4/3/2019						5			3.6
4/4/2019				3.9	6.9		5.9		
4/5/2019								4.3	
6/17/2019					5.2				2.9
10/21/2019	3.9								
10/22/2019		1.9	5.5			4.6		4.5	3.6
10/23/2019				3.6	6.1		5.5		
1/3/2020									
3/4/2020									
3/24/2020	3.6		5.2						
3/25/2020				3.2	5.1	3.9	5.2	3.6	3
4/9/2020		1.4							
6/18/2020									
7/21/2020									
8/27/2020									
9/18/2020	2.6		5.2						
9/22/2020		1.5							
9/24/2020				3.9	6		5.5		3.5
9/25/2020						4.1			
9/28/2020								4	
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
3/11/2021	3.4								
3/12/2021			5.3						
3/16/2021		1.6							
3/17/2021						4.7	5.5		
3/18/2021				4.3	6.2			4.3	3.2
8/12/2021	2.5	1.5	4.4						
8/13/2021				3.7		4		4	3.1

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-113 (bg)	HGWA-112 (bg)	HGWC-105	HGWC-103	HGWC-109	HGWC-101	HGWC-118	HGWC-107
8/16/2021					10.4		5.4		
9/27/2021									
1/31/2022	3								
2/1/2022		1.6	5.2						
2/2/2022					7.1	4.1	5.3		2.9
2/3/2022				4.8				3.9	
8/2/2022		1.8							
8/5/2022	2.7		5	5	7.8	3.7		3.8	2.7
8/10/2022							5.5		
1/24/2023	3.6	1.8	5.6						
1/25/2023				6	8	4.3	5.7	4.3	3.3
8/8/2023	3		5.1						
8/10/2023		1.6							
8/11/2023				5.6	7.9	3.5	4.9	3.8	2.7
2/13/2024			5						
2/14/2024	3	1.5							
2/16/2024					7.5		5.4		3.2
2/17/2024				6.8		3.9		4.1	
8/6/2024	2.8								
8/8/2024		1.5							
8/9/2024			5.2		8.8			4.2	
8/10/2024				7.7		4	5.4		3.1

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLS
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-102	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-117A
8/30/2016				
8/31/2016				
10/20/2016				
10/24/2016				
10/25/2016				
1/25/2017				
1/31/2017				
5/23/2017				
5/24/2017				
8/10/2017				
11/13/2017				
11/14/2017				
6/4/2018				
6/5/2018				
6/6/2018				
6/7/2018				
10/1/2018				
10/2/2018				
10/3/2018				
4/1/2019				
4/2/2019				
4/3/2019				
4/4/2019				
4/5/2019				
6/17/2019				
10/21/2019				
10/22/2019				
10/23/2019	7.9			
1/3/2020	7			
3/4/2020	7.1			
3/24/2020	6.5			
3/25/2020				
4/9/2020				
6/18/2020	6.9			
7/21/2020	7.2			
8/27/2020	7.1			
9/18/2020		2.7	2.6	
9/22/2020				
9/24/2020	7.2			
9/25/2020				
9/28/2020				
11/10/2020		2.7		
11/11/2020			2.6	
12/15/2020		2.9	2.7	
1/19/2021		2.8	2.7	
3/11/2021				
3/12/2021		2.7	2.6	
3/16/2021				
3/17/2021	6.9			
3/18/2021				
8/12/2021		2.3	2.2	6.3
8/13/2021	6			

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLS
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-102	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-117A
8/16/2021				
9/27/2021				4.5
1/31/2022		2.6	2.5	
2/1/2022				
2/2/2022	7.2			
2/3/2022				7.8
8/2/2022		3		
8/5/2022	7.7		2.4	7.4
8/10/2022				
1/24/2023		3	2.8	
1/25/2023	7.8			5.9
8/8/2023		2.7	2.7	
8/10/2023				
8/11/2023	6.7			4.6
2/13/2024			2.6	
2/14/2024		1.6		
2/16/2024	7.4			
2/17/2024				4.4
8/6/2024		2.9	2.7	
8/8/2024				
8/9/2024	8			
8/10/2024				4.5

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-105	HGWC-101	HGWC-107	HGWC-109	HGWC-103	HGWC-118
8/30/2016	0.07 (J)	0.04 (J)	0.2 (J)						
8/31/2016				0.15 (J)	0.05 (J)	0.08 (J)	0.12 (J)	0.06 (J)	0.18 (J)
10/20/2016	0.07 (J)				0.03 (J)				0.12 (J)
10/24/2016		0.05 (J)	0.16 (J)					0.13 (J)	
10/25/2016				0.09 (J)		0.16 (J)	0.17 (J)		
1/25/2017	0.14 (J)	<0.1	0.15 (J)						
1/31/2017				0.13 (J)	<0.1	0.16 (J)	0.05 (J)	<0.1	0.3
5/23/2017		0.004 (J)	0.18 (J)		<0.1			0.15 (J)	0.14 (J)
5/24/2017	0.02 (J)			0.07 (J)		0.009 (J)	0.13 (J)		
8/10/2017	0.06 (J)	0.03 (J)	0.19 (J)	0.03 (J)	<0.1	<0.1	0.12 (J)	<0.1	0.11 (J)
11/13/2017	<0.1	<0.1							
11/14/2017			0.16 (J)	<0.1	<0.1	<0.1	<0.1	<0.1	0.07 (J)
6/4/2018	0.032 (J)	<0.1							
6/5/2018			0.18 (J)						
6/6/2018				0.074 (J)	<0.1	0.057 (J)	0.15 (J)	<0.1	
6/7/2018									0.3
10/1/2018	<0.1	<0.1	0.078 (J)						
10/2/2018				<0.1		<0.1	<0.1		
10/3/2018					<0.1			<0.1	0.12 (J)
4/1/2019	0.042 (J)								
4/2/2019		<0.1	0.18 (J)						
4/3/2019						<0.1	0.05 (J)		
4/4/2019				0.03 (J)	<0.1			0.042 (J)	
4/5/2019									0.33
6/18/2019									0.89
8/21/2019	0.048 (J)	<0.1	0.11 (J)						
8/22/2019				<0.1	<0.1			<0.1	0.07 (J)
8/23/2019						<0.1	0.034 (J)		
10/21/2019	0.12 (J)								
10/22/2019		0.05 (J)	0.18 (J)			0.047 (J)	0.099 (J)		0.087 (J)
10/23/2019				<0.1	<0.1			<0.1	
1/3/2020									
3/4/2020									
3/24/2020	0.076 (J)	<0.1							
3/25/2020				<0.1	<0.1	<0.1	0.075 (J)	<0.1	0.078 (J)
4/9/2020			0.14 (J)						
6/18/2020									
7/21/2020									
8/25/2020	0.052 (J)	<0.1	0.17						
8/26/2020									0.072 (J)
8/27/2020				<0.1	<0.1	<0.1	0.094 (J)	<0.1	
9/18/2020	<0.1	<0.1							
9/22/2020			0.16						
9/24/2020				<0.1	<0.1	0.064 (J)		<0.1	
9/25/2020							0.091 (J)		
9/28/2020									0.078 (J)
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
3/11/2021	0.057 (J)								
3/12/2021		<0.1							

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-105	HGWC-101	HGWC-107	HGWC-109	HGWC-103	HGWC-118
3/16/2021			0.18						
3/17/2021					<0.1		0.089 (J)		
3/18/2021				<0.1		<0.1		<0.1	0.079 (J)
8/12/2021	<0.1	<0.1	0.16						
8/13/2021				<0.1		<0.1	0.086 (J)		0.075 (J)
8/16/2021					<0.1			<0.1	
9/27/2021									
1/31/2022	0.055 (J)								
2/1/2022		<0.1	0.16						
2/2/2022					<0.1	<0.1	0.086 (J)	<0.1	
2/3/2022				<0.1					0.069 (J)
8/2/2022			0.19						
8/5/2022	0.1	0.077 (J)		0.075 (J)		0.093 (J)	0.14	0.071 (J)	0.12
8/10/2022					0.065 (J)				
1/24/2023	0.086 (J)	0.055 (J)	0.2						
1/25/2023				0.051 (J)	<0.1	0.054 (J)	0.12	<0.1	0.095 (J)
8/8/2023	0.076 (J)	0.05 (J)							
8/10/2023			0.19						
8/11/2023				<0.1	<0.1	<0.1	0.086 (J)	<0.1	0.07 (J)
2/13/2024		<0.1							
2/14/2024	0.081 (J)		0.18						
2/16/2024					<0.1	<0.1		<0.1	
2/17/2024				<0.1			0.094 (J)		0.068 (J)
8/6/2024	0.089 (J)								
8/8/2024			0.17						
8/9/2024		0.075 (J)						0.077 (J)	0.11
8/10/2024				0.066 (J)	0.068 (J)	0.069 (J)	0.13		

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-102	HGWA-48D (bg)	HGWA-47 (bg)	HGWC-117A
8/30/2016				
8/31/2016				
10/20/2016				
10/24/2016				
10/25/2016				
1/25/2017				
1/31/2017				
5/23/2017				
5/24/2017				
8/10/2017				
11/13/2017				
11/14/2017				
6/4/2018				
6/5/2018				
6/6/2018				
6/7/2018				
10/1/2018				
10/2/2018				
10/3/2018				
4/1/2019				
4/2/2019				
4/3/2019				
4/4/2019				
4/5/2019				
6/18/2019				
8/21/2019				
8/22/2019				
8/23/2019				
10/21/2019				
10/22/2019				
10/23/2019	0.22 (J)			
1/3/2020	<0.1			
3/4/2020	<0.1			
3/24/2020	<0.1			
3/25/2020				
4/9/2020				
6/18/2020	<0.1			
7/21/2020	<0.1			
8/25/2020				
8/26/2020				
8/27/2020	<0.1			
9/18/2020		0.098 (J)	0.067 (J)	
9/22/2020				
9/24/2020	<0.1			
9/25/2020				
9/28/2020				
11/10/2020			0.065 (J)	
11/11/2020		0.083 (J)		
12/15/2020		0.081 (J)	0.064 (J)	
1/19/2021		0.079 (J)	0.057 (J)	
3/11/2021				
3/12/2021		0.085 (J)	0.062 (J)	

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-102	HGWA-48D (bg)	HGWA-47 (bg)	HGWC-117A
3/16/2021				
3/17/2021	<0.1			
3/18/2021				
8/12/2021		0.064 (J)	<0.1	<0.1
8/13/2021	<0.1			
8/16/2021				
9/27/2021				<0.1
1/31/2022		0.072 (J)	0.053 (J)	
2/1/2022				
2/2/2022	<0.1			
2/3/2022				0.056 (J)
8/2/2022			0.08 (J)	
8/5/2022	0.076 (J)	0.12		0.12
8/10/2022				
1/24/2023		0.092 (J)	0.081 (J)	
1/25/2023	<0.1			0.085 (J)
8/8/2023		0.091 (J)	0.072 (J)	
8/10/2023				
8/11/2023	<0.1			0.057 (J)
2/13/2024		0.071 (J)		
2/14/2024			0.23	
2/16/2024	<0.1			
2/17/2024				0.055 (J)
8/6/2024		0.1	0.094 (J)	
8/8/2024				
8/9/2024	0.067 (J)			
8/10/2024				0.1

Prediction Limit

Constituent: pH, Field (s.u.) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-107	HGWC-105	HGWC-118	HGWC-101	HGWC-103	HGWC-109
3/12/2021		5.6							
3/16/2021			6.14						
3/17/2021							5.41		6.55
3/18/2021				6.2	6.57	7.11		5.51	
8/12/2021	6.67	5.5	6.08						
8/13/2021				6.11	6.44	6.78			6.71
8/16/2021							5.4	5.59	
9/27/2021									
1/31/2022	7.17								
2/1/2022		5.59	6.05						
2/2/2022				6.14			5.51	5.63	6.65
2/3/2022					6.48	6.79			
8/2/2022			6.08						
8/5/2022	6.97	5.43		6.07	6.46	7.07		5.71	6.81
8/10/2022							5.37		
1/24/2023	7.11	5.67	6.15						
1/25/2023				6.13	6.41	6.67	5.47	5.65	6.66
8/8/2023	7.01	5.77							
8/10/2023			6.07						
8/11/2023				6.16	6.47	7.49	5.44	5.8	6.8
2/13/2024		5.64							
2/14/2024	7		6.24						
2/16/2024				6.27			5.47	5.74	
2/17/2024					6.46	6.94			6.88
8/6/2024	6.99	5.65							
8/8/2024			5.98						
8/9/2024						7.07		5.74	
8/10/2024				6.22	6.38		5.38		7.03

Prediction Limit

Constituent: pH, Field (s.u.) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-102	HGWA-48D (bg)	HGWA-47 (bg)	HGWC-117A
8/30/2016				
8/31/2016				
10/20/2016				
10/24/2016				
10/25/2016				
1/25/2017				
1/31/2017				
5/23/2017				
5/24/2017				
8/10/2017				
11/13/2017				
11/14/2017				
6/4/2018				
6/5/2018				
6/6/2018				
6/7/2018				
10/1/2018				
10/2/2018				
10/3/2018				
4/1/2019				
4/2/2019				
4/3/2019				
4/4/2019				
4/5/2019				
6/17/2019				
6/18/2019				
8/21/2019				
8/22/2019				
8/23/2019				
10/21/2019				
10/22/2019				
10/23/2019	5.68			
1/3/2020	5.64			
3/4/2020	5.75			
3/24/2020	5.58			
3/25/2020				
4/9/2020				
6/18/2020	5.67			
7/21/2020	5.72			
8/25/2020				
8/26/2020				
8/27/2020	5.7			
9/18/2020		7.5	7.54	
9/22/2020				
9/24/2020	5.82			
9/25/2020				
9/28/2020				
11/10/2020			7.34	
11/11/2020		7.4		
12/15/2020		7.39	7.27	
1/19/2021		7.4	7.32	
3/11/2021				

Prediction Limit

Constituent: pH, Field (s.u.) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-102	HGWA-48D (bg)	HGWA-47 (bg)	HGWC-117A
3/12/2021		7.51	7.52	
3/16/2021				
3/17/2021	5.78			
3/18/2021				
8/12/2021		7.44	7.38	6.27
8/13/2021	5.45			
8/16/2021				
9/27/2021				6.14
1/31/2022		7.44	7.34	
2/1/2022				
2/2/2022	5.79			
2/3/2022				6.58
8/2/2022			7.34	
8/5/2022	5.69	7.4		6.44
8/10/2022				
1/24/2023		7.46	7.38	
1/25/2023	5.77			6.53
8/8/2023		7.37	7.27	
8/10/2023				
8/11/2023	5.79			7.09
2/13/2024		7.59		
2/14/2024			7.93	
2/16/2024	5.88			
2/17/2024				6.7
8/6/2024		7.4	7.46	
8/8/2024				
8/9/2024	5.86			
8/10/2024				6.61

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-118	HGWC-107	HGWC-101	HGWC-105	HGWC-109	HGWC-103
8/30/2016	1.6	0.63 (J)	14						
8/31/2016				88	130	110	190	36	280
10/20/2016	1.6			81		110			
10/24/2016		0.62 (J)	11						280
10/25/2016					130		190	41	
1/25/2017	1.6	0.62 (J)	12						
1/31/2017				87	130	120	210	37	300
5/23/2017		0.55 (J)	12	84		97			340
5/24/2017	1.4				130		180	40	
8/10/2017	1.6	0.66 (J)	11	78	130	96	180	40	300
11/13/2017	1.3	0.61 (J)							
11/14/2017			11	79	130	110	170	40	310
6/4/2018	1.4	0.73 (J)							
6/5/2018			9.9						
6/6/2018					132	95.5	168	49.7	351
6/7/2018				60.1					
10/1/2018	1	0.52 (J)	6.7						
10/2/2018					132		173	42.3	
10/3/2018				91.5		121			381
4/1/2019	1.7								
4/2/2019		0.78 (J)	8.7						
4/3/2019					139			36	
4/4/2019						95.1	185		358
4/5/2019				75.1					
6/17/2019					126		162	30.9	311
6/18/2019				77		102			
10/21/2019	1.8								
10/22/2019		0.6 (J)	6.8	80.9	123			23.2	
10/23/2019						101	162		248
1/3/2020									
3/4/2020									
3/24/2020	1.6	<1							
3/25/2020				78.4	116	85.5	161	27.9	251
4/9/2020			6.6						
6/18/2020									
7/21/2020									
8/27/2020									
9/18/2020	1	<1							
9/22/2020			5.3						
9/24/2020					126	97	177		293
9/25/2020								24.7	
9/28/2020				86					
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
3/11/2021	1.5								
3/12/2021		0.52 (J)							
3/16/2021			7.7						
3/17/2021						107		28.3	
3/18/2021				87.8	128		196		286
8/12/2021	1.3	<1	10						

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-118	HGWC-107	HGWC-101	HGWC-105	HGWC-109	HGWC-103
8/13/2021				75.1	112		142	24.4	
8/16/2021						72.1			354
9/27/2021									
1/31/2022	1.5								
2/1/2022		0.5 (J)	8.9						
2/2/2022					111	100		25.5	293
2/3/2022				72.7			195		
8/2/2022			7.5						
8/5/2022	1.4	<1		69.8	120		217	23	369
8/10/2022						99.5			
1/24/2023	1.9	0.81 (J)	6.6						
1/25/2023				73	128	95	230	25.4	342
8/8/2023	1.5	0.71 (J)							
8/10/2023			5.1						
8/11/2023				64.9	113	102	237	19.8	382
2/13/2024		0.51 (J)							
2/14/2024	1.2		4.9						
2/16/2024					130	110			323
2/17/2024				69.7			251	22	
8/6/2024	1.3								
8/8/2024			4.6						
8/9/2024		0.76 (J)		66.5					393
8/10/2024					114	104	258	19.7	

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-102	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-117A
8/30/2016				
8/31/2016				
10/20/2016				
10/24/2016				
10/25/2016				
1/25/2017				
1/31/2017				
5/23/2017				
5/24/2017				
8/10/2017				
11/13/2017				
11/14/2017				
6/4/2018				
6/5/2018				
6/6/2018				
6/7/2018				
10/1/2018				
10/2/2018				
10/3/2018				
4/1/2019				
4/2/2019				
4/3/2019				
4/4/2019				
4/5/2019				
6/17/2019				
6/18/2019				
10/21/2019				
10/22/2019				
10/23/2019	<1			
1/3/2020	380			
3/4/2020	400			
3/24/2020	311			
3/25/2020				
4/9/2020				
6/18/2020	349			
7/21/2020	378			
8/27/2020	382			
9/18/2020		3.5	9.5	
9/22/2020				
9/24/2020	370			
9/25/2020				
9/28/2020				
11/10/2020		2.3		
11/11/2020			4.5	
12/15/2020		2.4	4.2	
1/19/2021		2.6	3.9	
3/11/2021				
3/12/2021		1.9	4.7	
3/16/2021				
3/17/2021	332			
3/18/2021				
8/12/2021		1.4	4.3	64.6

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-102	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-117A
8/13/2021	248			
8/16/2021				
9/27/2021				69.7
1/31/2022		1.7	5.6	
2/1/2022				
2/2/2022	303			
2/3/2022				72.9
8/2/2022		2.1		
8/5/2022	358		3.4	76.1
8/10/2022				
1/24/2023		2.2	2.9	
1/25/2023	348			72.9
8/8/2023		2	2.9	
8/10/2023				
8/11/2023	370			67.7
2/13/2024			2.8	
2/14/2024		19.7		
2/16/2024	363			
2/17/2024				72.7
8/6/2024		2.3	2.7	
8/8/2024				
8/9/2024	359			
8/10/2024				72.6

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-113 (bg)	HGWA-112 (bg)	HGWC-101	HGWC-109	HGWC-118	HGWC-103	HGWC-107	HGWC-105
8/30/2016	172	77	76						
8/31/2016				278	182	373	483	235	389
10/20/2016	108			165		305			
10/24/2016		111	65				517		
10/25/2016					172			223	316
1/25/2017	345	155	152 (O)						
1/31/2017				263	252	361	516	346	437
5/23/2017		74	52	190		359	637		
5/24/2017	126				184			234	352
8/10/2017	174	94	60	175	208	325	459	254	356
11/13/2017	158		75						
11/14/2017		89		253	252	373	545	313	375
6/4/2018	131		70						
6/5/2018		92							
6/6/2018				188	224		559	278	385
6/7/2018						338			
10/1/2018	101	91	76						
10/2/2018					230			274	374
10/3/2018				238		328	582		
4/1/2019	213								
4/2/2019		94	69						
4/3/2019					210			273	
4/4/2019				149			535		340
4/5/2019						308			
6/17/2019							515	272	370
6/18/2019						215			
10/21/2019	187								
10/22/2019		95	81		212	354		308	
10/23/2019				221			507		419
1/3/2020									
3/4/2020									
3/24/2020	207		52						
3/25/2020				187	213	347	507	297	417
4/9/2020		48							
6/18/2020									
7/21/2020									
8/27/2020									
9/18/2020	139		62						
9/22/2020		84							
9/24/2020				170			517	253	411
9/25/2020					188				
9/28/2020						332			
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
3/11/2021	207								
3/12/2021			56						
3/16/2021		99							
3/17/2021				213	171				
3/18/2021						328	465	255	410
8/12/2021	157	92	63						

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWA-111 (bg)	HGWA-113 (bg)	HGWA-112 (bg)	HGWC-101	HGWC-109	HGWC-118	HGWC-103	HGWC-107	HGWC-105
8/13/2021					189	336		291	441
8/16/2021				206			672		
9/27/2021									
1/31/2022	186								
2/1/2022		99	73						
2/2/2022				220	206		576	271	
2/3/2022						316			463
8/2/2022		85							
8/5/2022	171		44		195	329	692	274	514
8/10/2022				232					
1/24/2023	177	146	96						
1/25/2023				186	214	337	630	304	537
8/8/2023	207		57						
8/10/2023		80							
8/11/2023				250	205	346	808	296	630
2/13/2024			73						
2/14/2024	187	93							
2/16/2024				222			640	325	
2/17/2024					265	424			716
8/6/2024	163								
8/8/2024		85							
8/9/2024			90			338	809		
8/10/2024				263	227			299	658

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-102	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-117A
8/30/2016				
8/31/2016				
10/20/2016				
10/24/2016				
10/25/2016				
1/25/2017				
1/31/2017				
5/23/2017				
5/24/2017				
8/10/2017				
11/13/2017				
11/14/2017				
6/4/2018				
6/5/2018				
6/6/2018				
6/7/2018				
10/1/2018				
10/2/2018				
10/3/2018				
4/1/2019				
4/2/2019				
4/3/2019				
4/4/2019				
4/5/2019				
6/17/2019				
6/18/2019				
10/21/2019				
10/22/2019				
10/23/2019	736			
1/3/2020	714			
3/4/2020	764			
3/24/2020	521			
3/25/2020				
4/9/2020				
6/18/2020	652			
7/21/2020	669			
8/27/2020	663			
9/18/2020		195	224	
9/22/2020				
9/24/2020	696			
9/25/2020				
9/28/2020				
11/10/2020		229		
11/11/2020			221	
12/15/2020		233	239	
1/19/2021		199	224	
3/11/2021				
3/12/2021		217	204	
3/16/2021				
3/17/2021	626			
3/18/2021				
8/12/2021		212	234	256

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/17/2024 12:50 PM View: Interwell PLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-102	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-117A
8/13/2021	647			
8/16/2021				
9/27/2021				223
1/31/2022		243	223	
2/1/2022				
2/2/2022	602			
2/3/2022				264
8/2/2022		222		
8/5/2022	696		224	270
8/10/2022				
1/24/2023		223	230	
1/25/2023	664			289
8/8/2023		214	220	
8/10/2023				
8/11/2023	785			280
2/13/2024			242	
2/14/2024		147		
2/16/2024	718			
2/17/2024				329
8/6/2024		253	240	
8/8/2024				
8/9/2024	746			
8/10/2024				284

FIGURE E.

Appendix III - Trend Test Summary - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-4 Printed 10/17/2024, 12:55 PM

<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, total (mg/L)	HGWC-101	0.009487	115	81	Yes	20	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-103	0.1618	117	87	Yes	21	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-109	-0.02867	-156	-87	Yes	21	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWA-113 (bg)	0.2301	100	81	Yes	20	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWC-103	6.694	132	87	Yes	21	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWC-105	7.864	176	87	Yes	21	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWC-103	0.4	128	87	Yes	21	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWC-105	0.4372	139	81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWA-113 (bg)	-0.9378	-133	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWA-48D (bg)	-0.5856	-45	-38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWC-118	-2.164	-103	-87	Yes	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	HGWC-105	32.02	138	87	Yes	21	0	n/a	n/a	0.01	NP

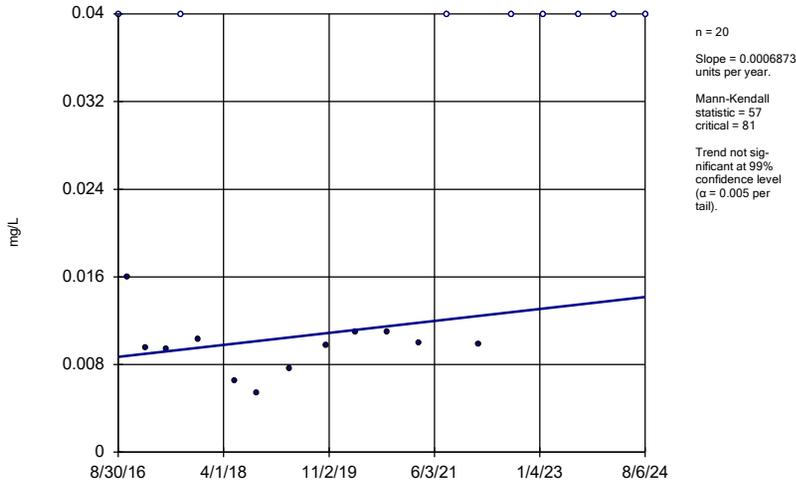
Appendix III - Trend Test Summary - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-4 Printed 10/17/2024, 12:55 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron, total (mg/L)	HGWA-111 (bg)	0.0006873	57	81	No	20	40	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWA-112 (bg)	0.0003233	26	81	No	20	35	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWA-113 (bg)	0.0007673	51	81	No	20	25	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWA-47 (bg)	0.0009372	23	38	No	12	58.33	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWA-48D (bg)	0.006696	19	38	No	12	33.33	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-101	0.009487	115	81	Yes	20	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-102	-0.08338	-24	-58	No	16	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-103	0.1618	117	87	Yes	21	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-105	0.004582	40	81	No	20	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-107	0.01327	62	87	No	21	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-109	-0.02867	-156	-87	Yes	21	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-117A	-0.01989	-12	-21	No	8	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	HGWC-118	-0.005415	-25	-81	No	20	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWA-111 (bg)	1.37	36	81	No	20	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWA-112 (bg)	0.05327	51	81	No	20	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWA-113 (bg)	0.2301	100	81	Yes	20	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWA-47 (bg)	-1.009	-16	-38	No	12	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWA-48D (bg)	-0.4558	-9	-38	No	12	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWC-102	3.183	26	58	No	16	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWC-103	6.694	132	87	Yes	21	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWC-105	7.864	176	87	Yes	21	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	HGWC-118	0.754	72	87	No	21	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWA-111 (bg)	0	-5	-81	No	20	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWA-112 (bg)	-0.01551	-26	-81	No	20	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWA-113 (bg)	-0.03553	-76	-81	No	20	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWA-47 (bg)	0	0	38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWA-48D (bg)	0	6	38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWC-102	0.114	27	58	No	16	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWC-103	0.4	128	87	Yes	21	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	HGWC-105	0.4372	139	81	Yes	20	0	n/a	n/a	0.01	NP
pH, Field (s.u.)	HGWA-111 (bg)	0.04142	50	92	No	22	0	n/a	n/a	0.01	NP
pH, Field (s.u.)	HGWA-112 (bg)	-0.007213	-22	-92	No	22	0	n/a	n/a	0.01	NP
pH, Field (s.u.)	HGWA-113 (bg)	0.02137	82	92	No	22	0	n/a	n/a	0.01	NP
pH, Field (s.u.)	HGWA-47 (bg)	0.01559	7	38	No	12	0	n/a	n/a	0.01	NP
pH, Field (s.u.)	HGWA-48D (bg)	0	1	38	No	12	0	n/a	n/a	0.01	NP
pH, Field (s.u.)	HGWC-101	0.01346	78	98	No	23	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWA-111 (bg)	-0.01755	-34	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWA-112 (bg)	0.01239	18	81	No	20	20	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWA-113 (bg)	-0.9378	-133	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWA-47 (bg)	-0.06495	-5	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWA-48D (bg)	-0.5856	-45	-38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWC-101	-0.7577	-32	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWC-102	-2.338	-5	-58	No	16	6.25	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWC-103	7.824	69	87	No	21	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWC-105	6.385	53	87	No	21	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWC-107	-1.685	-84	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWC-117A	1.132	3	21	No	8	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	HGWC-118	-2.164	-103	-87	Yes	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	HGWA-111 (bg)	3.783	30	81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	HGWA-112 (bg)	0.7485	10	74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	HGWA-113 (bg)	0	-2	-81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	HGWA-47 (bg)	3.784	8	38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	HGWA-48D (bg)	2.281	15	38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	HGWC-102	6.292	11	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	HGWC-103	24.37	86	87	No	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	HGWC-105	32.02	138	87	Yes	21	0	n/a	n/a	0.01	NP

Sen's Slope Estimator

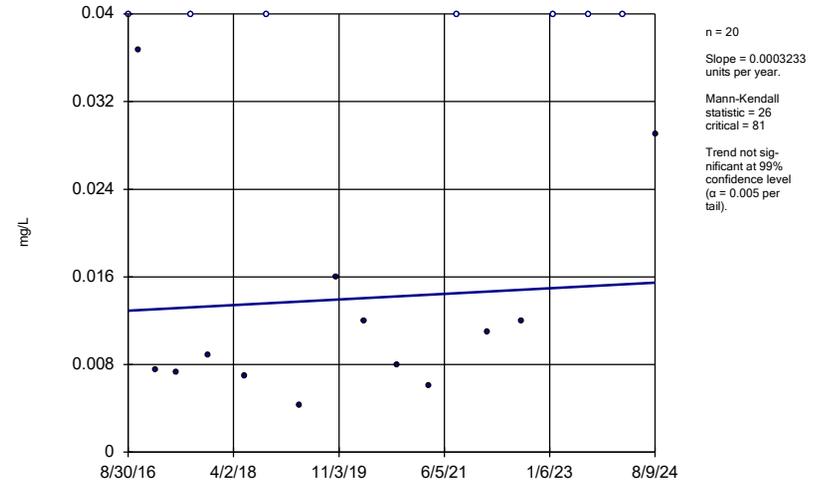
HGWA-111 (bg)



Constituent: Boron, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

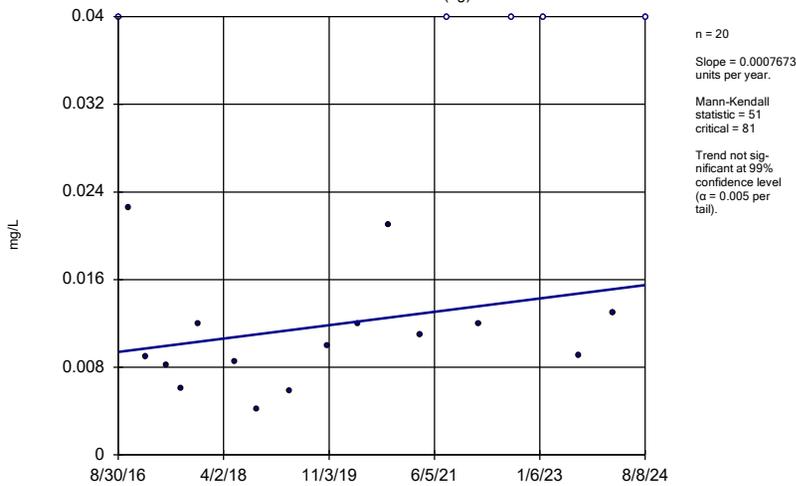
HGWA-112 (bg)



Constituent: Boron, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

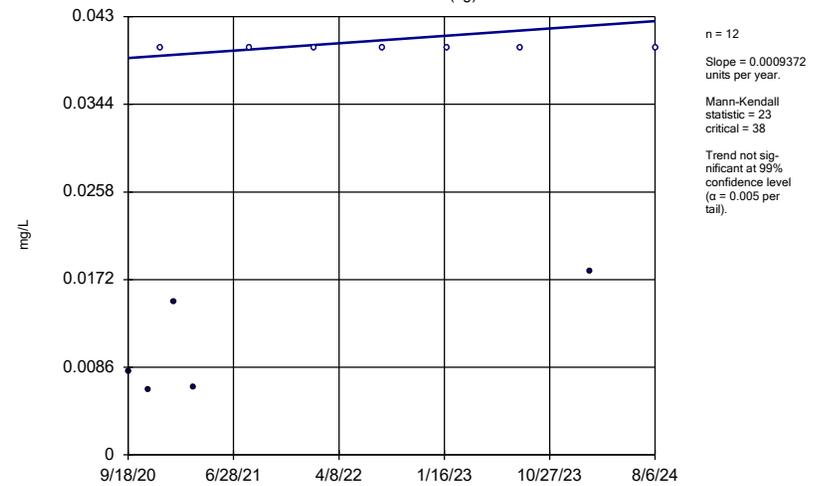
HGWA-113 (bg)



Constituent: Boron, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

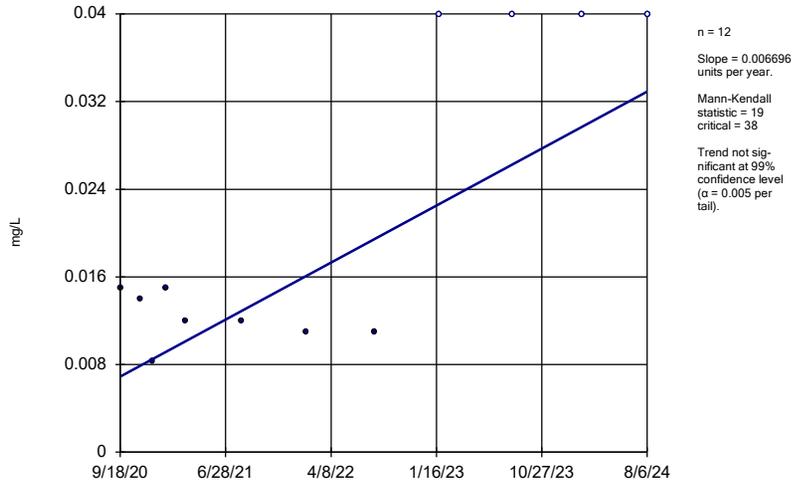
HGWA-47 (bg)



Constituent: Boron, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

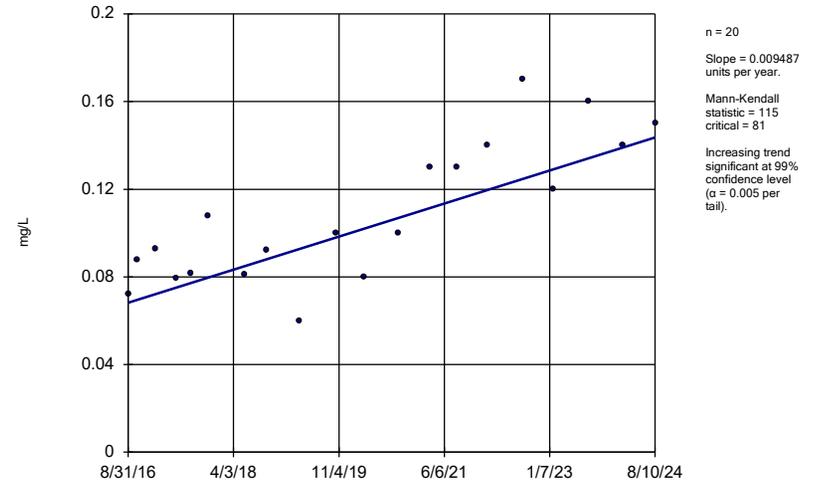
HGWA-48D (bg)



Constituent: Boron, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

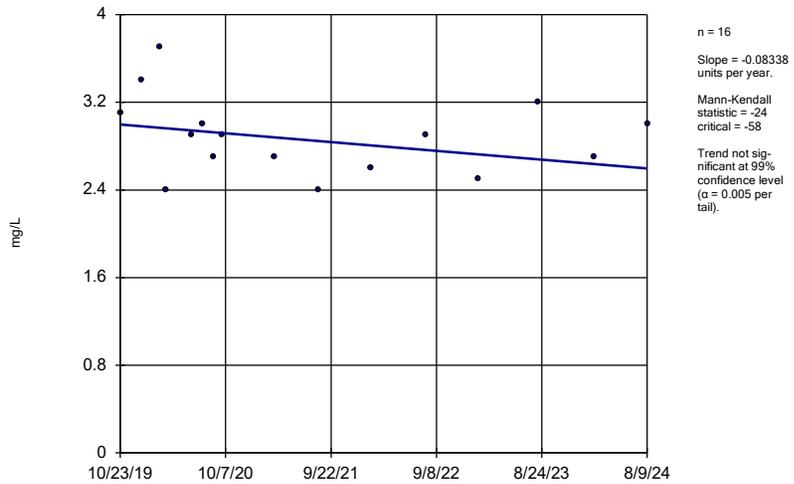
HGWC-101



Constituent: Boron, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

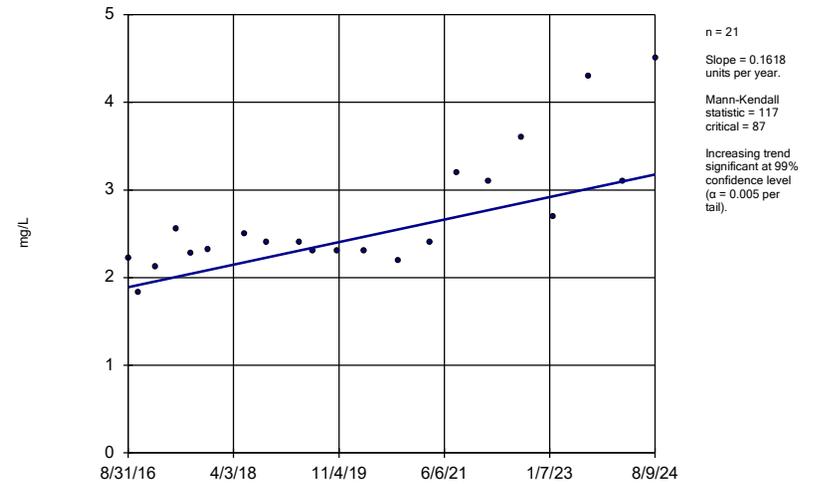
HGWC-102



Constituent: Boron, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

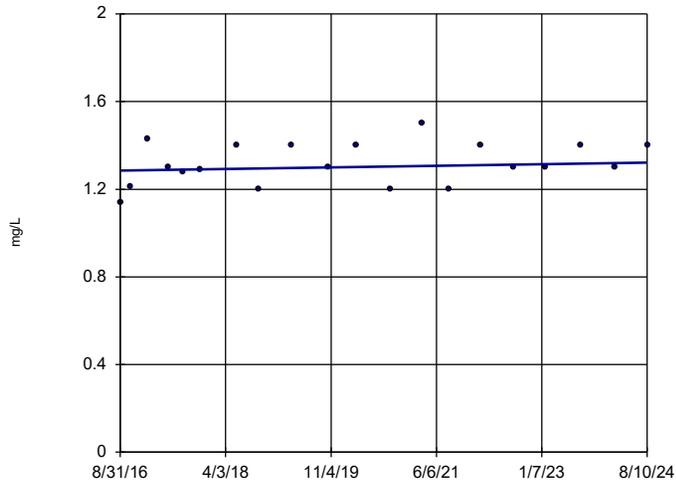
HGWC-103



Constituent: Boron, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

HGWC-105

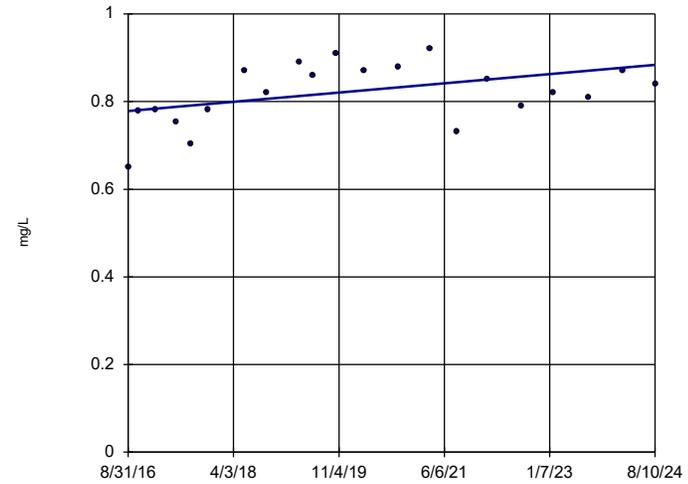


n = 20
 Slope = 0.004582
 units per year.
 Mann-Kendall
 statistic = 40
 critical = 81
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Boron, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

HGWC-107

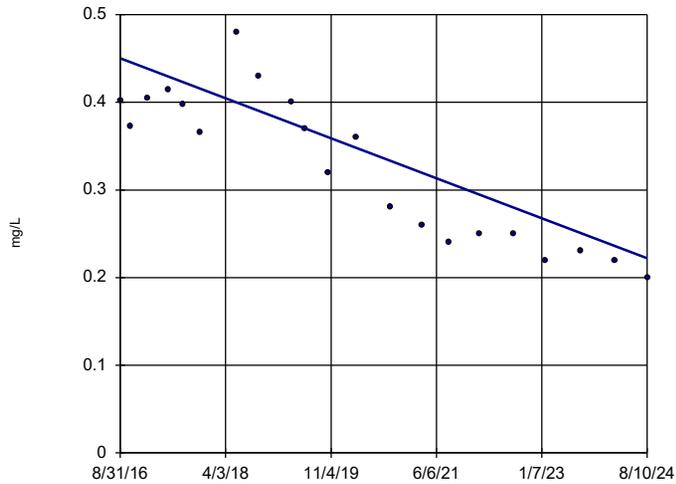


n = 21
 Slope = 0.01327
 units per year.
 Mann-Kendall
 statistic = 62
 critical = 87
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Boron, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

HGWC-109

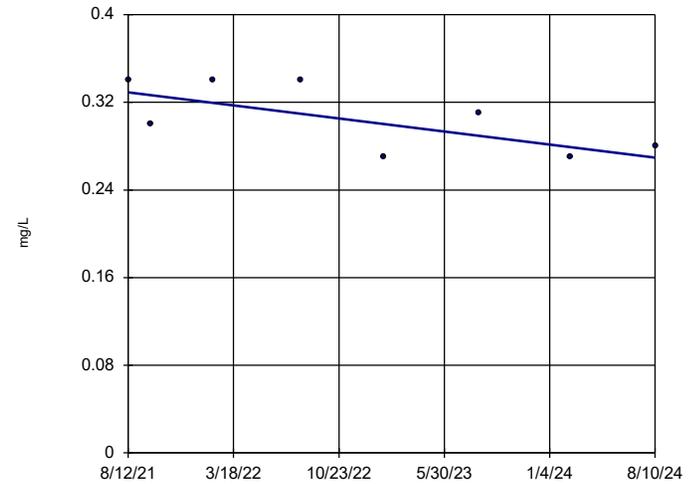


n = 21
 Slope = -0.02867
 units per year.
 Mann-Kendall
 statistic = -156
 critical = -87
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Boron, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

HGWC-117A

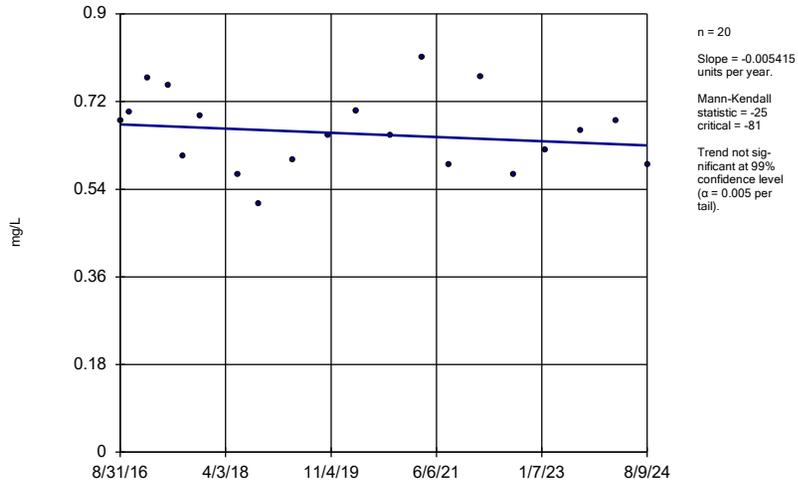


n = 8
 Slope = -0.01989
 units per year.
 Mann-Kendall
 statistic = -12
 critical = -21
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Boron, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

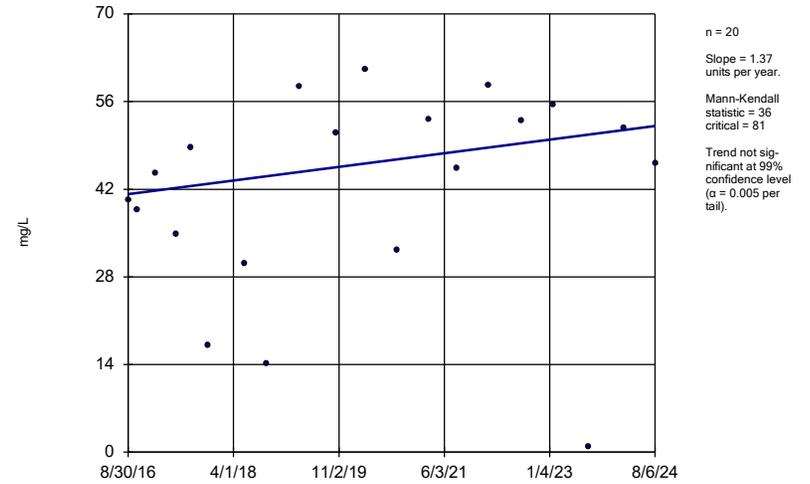
HGWC-118



Constituent: Boron, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

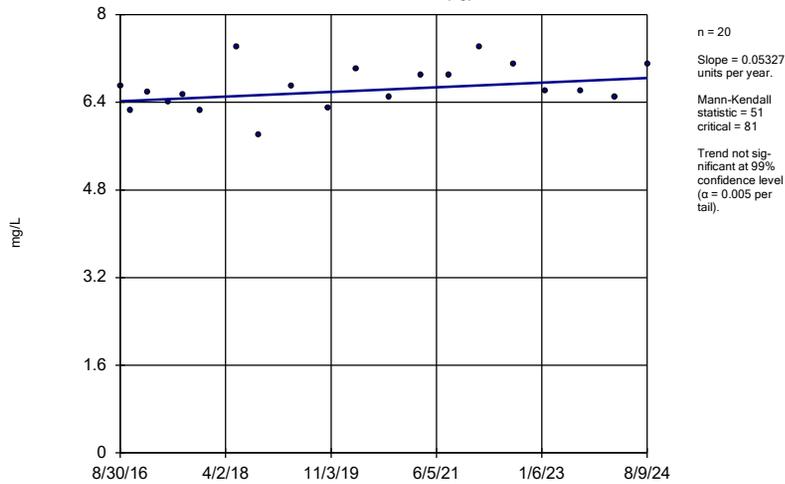
HGWA-111 (bg)



Constituent: Calcium, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

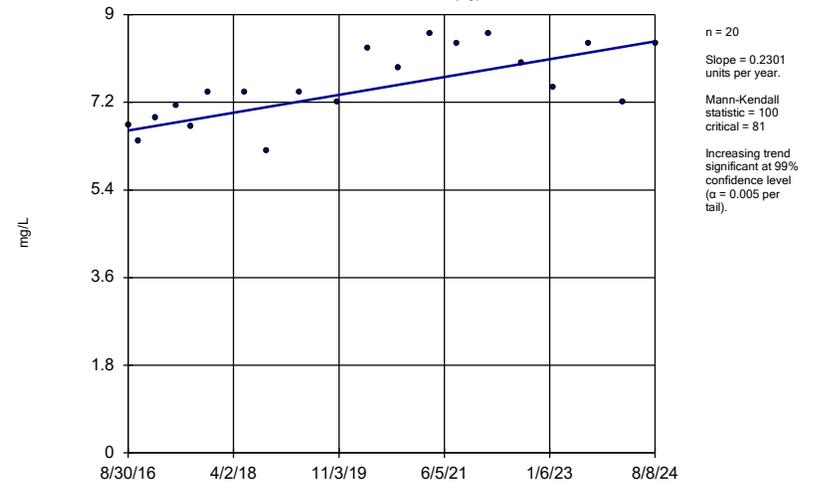
HGWA-112 (bg)



Constituent: Calcium, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

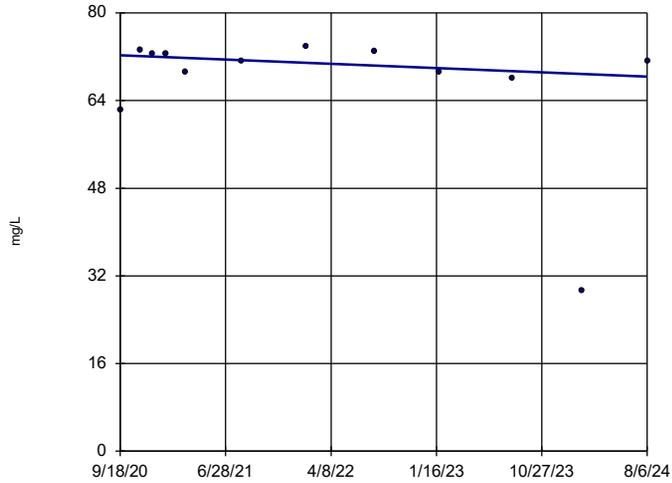
HGWA-113 (bg)



Constituent: Calcium, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

HGWA-47 (bg)

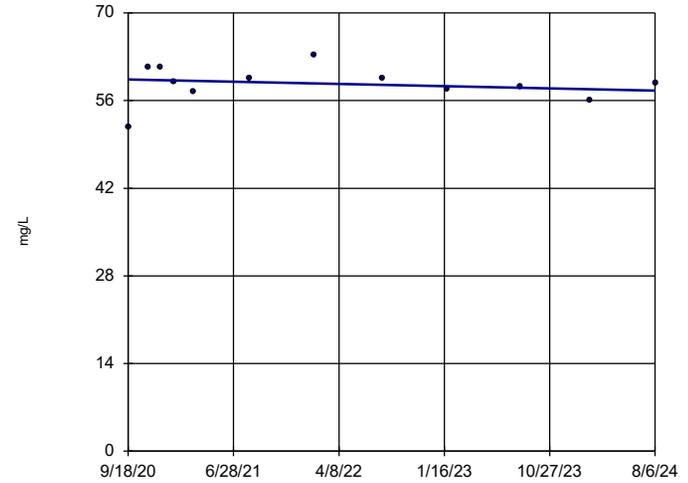


n = 12
 Slope = -1.009
 units per year.
 Mann-Kendall
 statistic = -16
 critical = -38
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

HGWA-48D (bg)

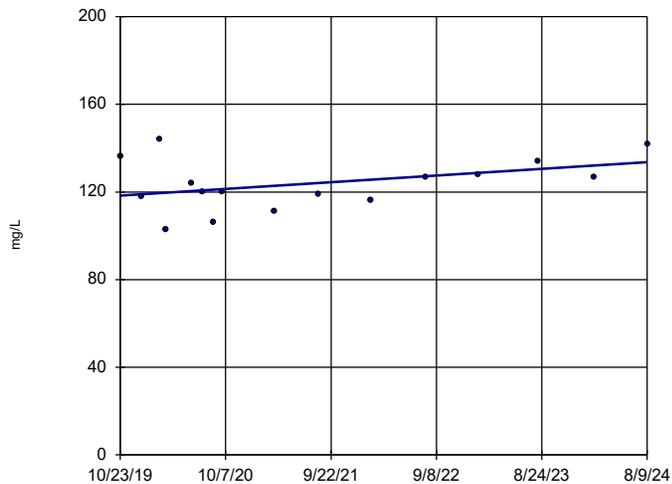


n = 12
 Slope = -0.4558
 units per year.
 Mann-Kendall
 statistic = -9
 critical = -38
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

HGWC-102

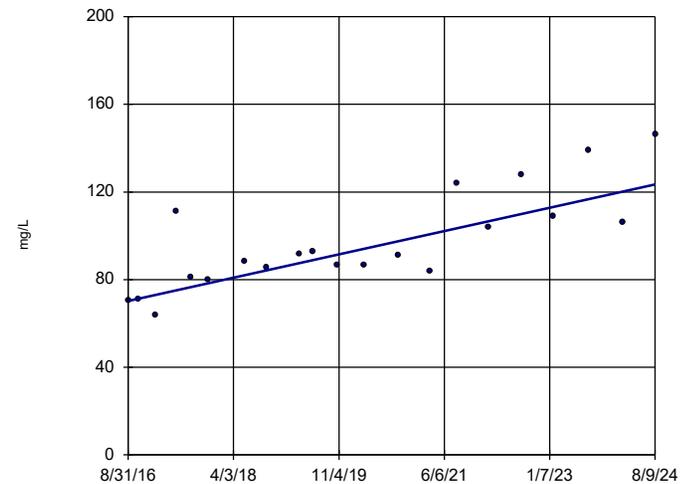


n = 16
 Slope = 3.183
 units per year.
 Mann-Kendall
 statistic = 26
 critical = 58
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

HGWC-103

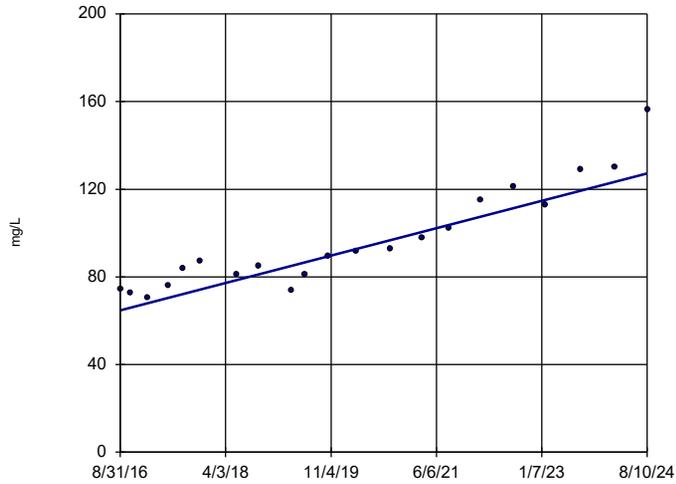


n = 21
 Slope = 6.694
 units per year.
 Mann-Kendall
 statistic = 132
 critical = 87
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

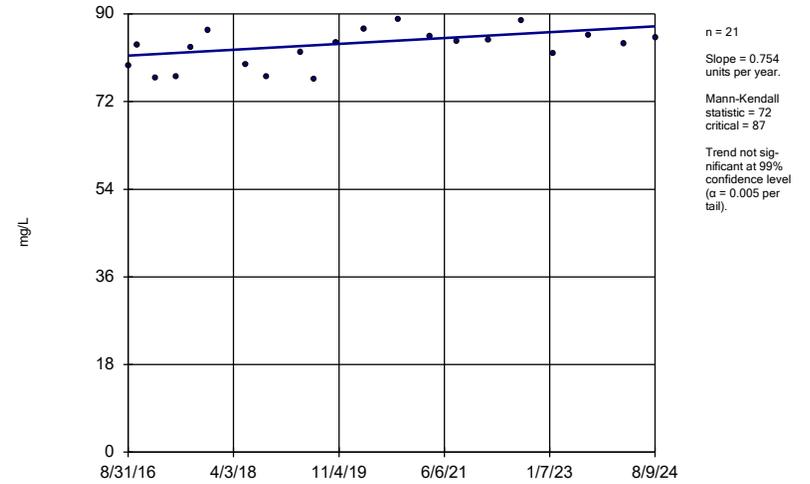
HGWC-105



Constituent: Calcium, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

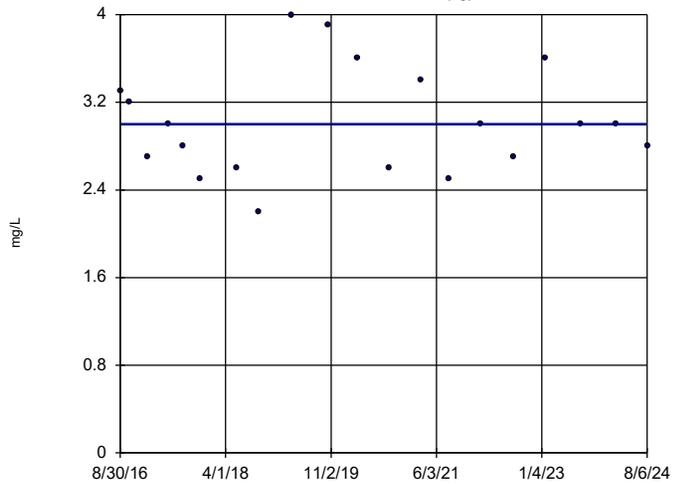
HGWC-118



Constituent: Calcium, total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

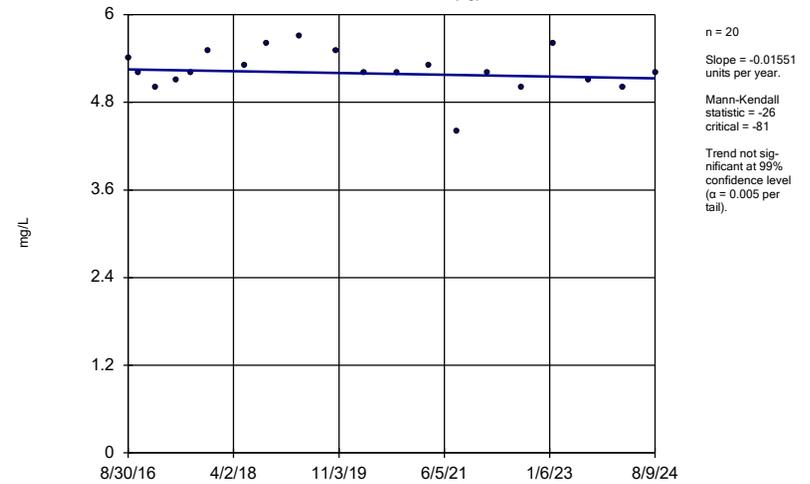
HGWA-111 (bg)



Constituent: Chloride, Total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

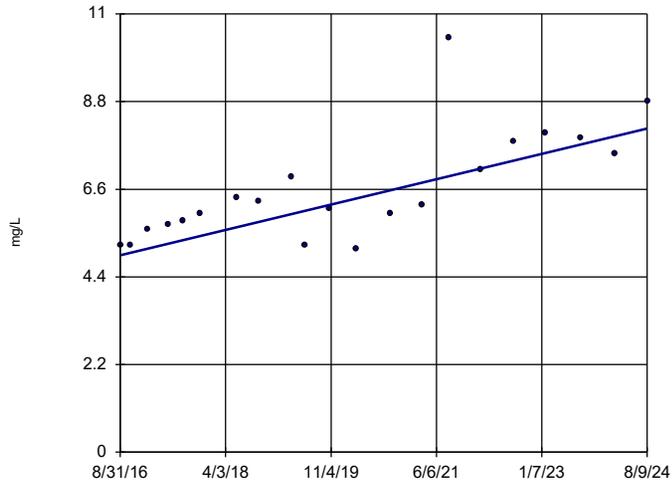
HGWA-112 (bg)



Constituent: Chloride, Total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

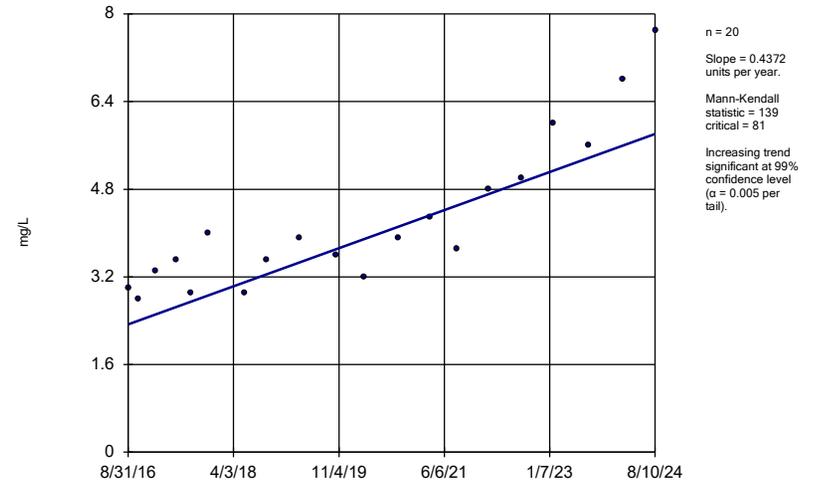
HGWC-103



Constituent: Chloride, Total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

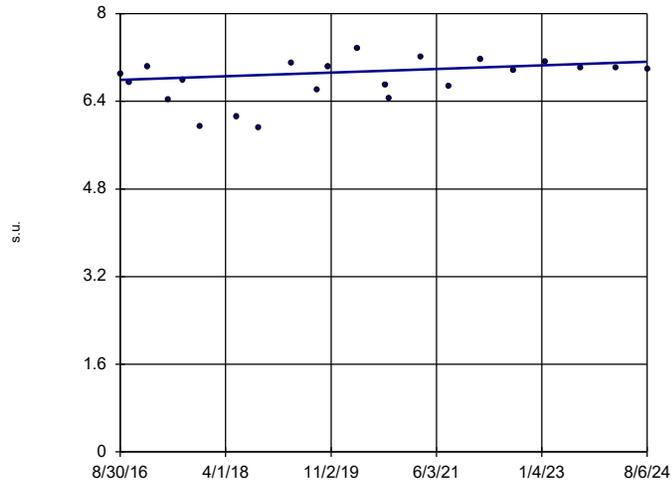
HGWC-105



Constituent: Chloride, Total Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

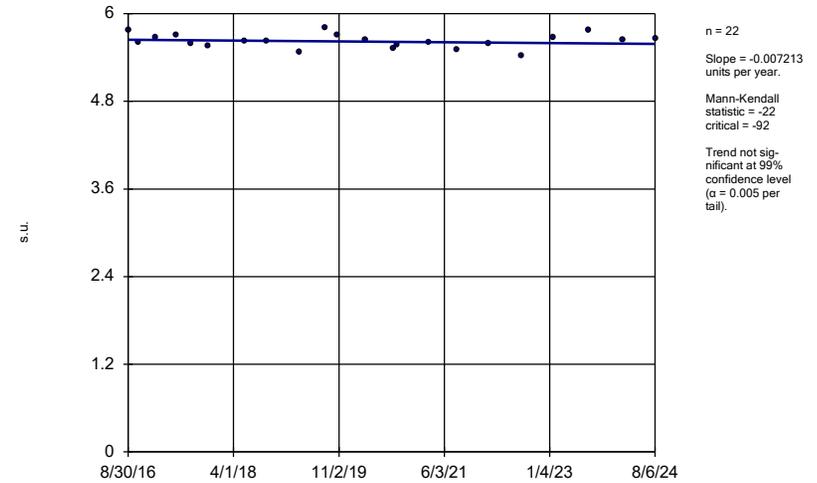
HGWA-111 (bg)



Constituent: pH, Field Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

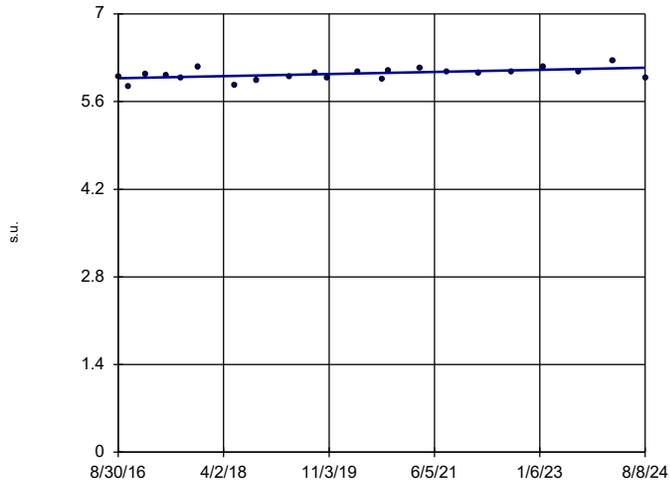
HGWA-112 (bg)



Constituent: pH, Field Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

HGWA-113 (bg)

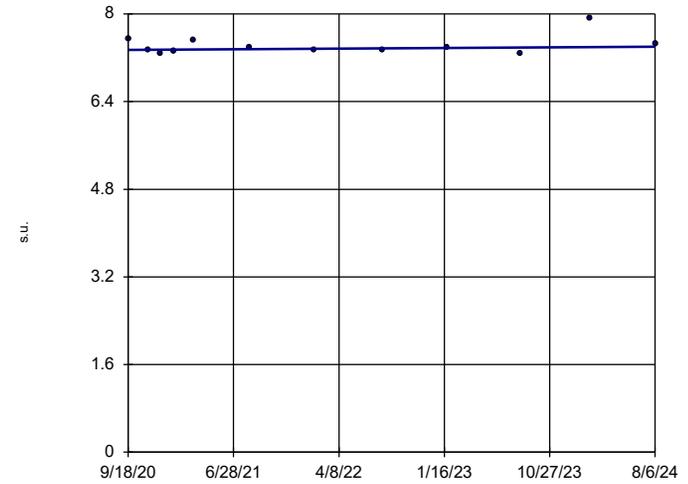


n = 22
 Slope = 0.02137 units per year.
 Mann-Kendall statistic = 82
 critical = 92
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 10/17/2024 12:51 PM View: Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

HGWA-47 (bg)

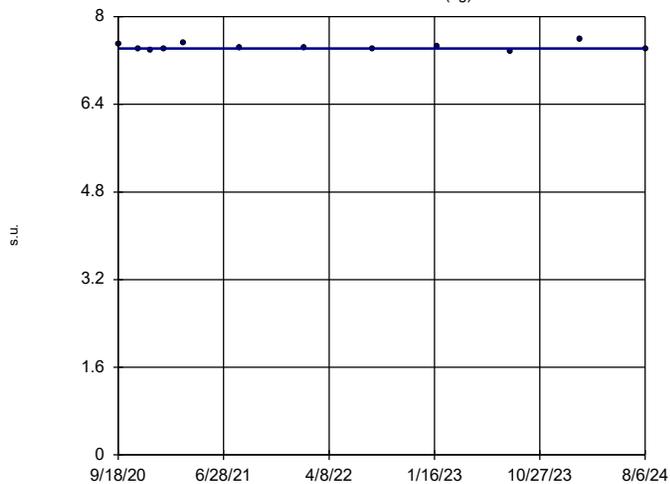


n = 12
 Slope = 0.01559 units per year.
 Mann-Kendall statistic = 7
 critical = 38
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 10/17/2024 12:51 PM View: Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

HGWA-48D (bg)

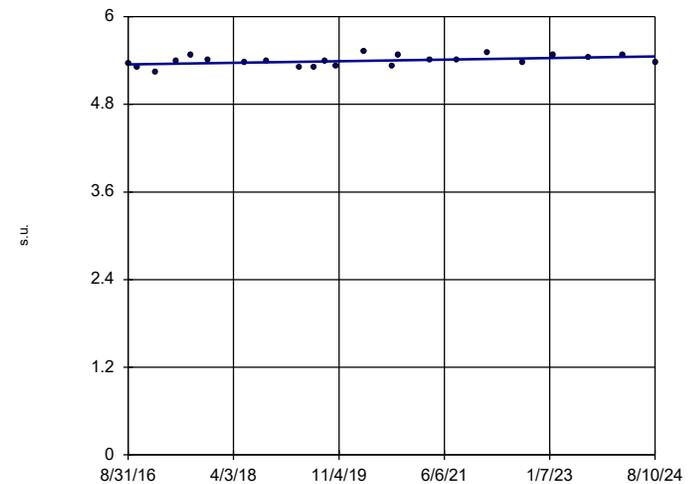


n = 12
 Slope = 0 units per year.
 Mann-Kendall statistic = 1
 critical = 38
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 10/17/2024 12:51 PM View: Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP-4

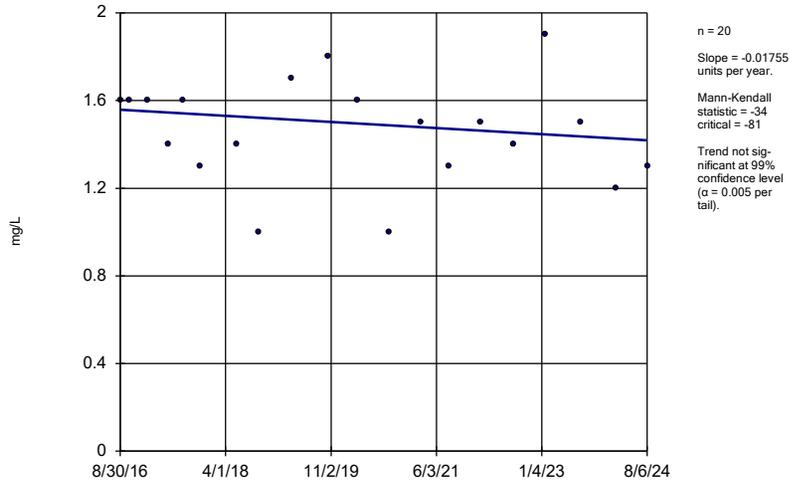
Sen's Slope Estimator

HGWC-101



Sen's Slope Estimator

HGWA-111 (bg)

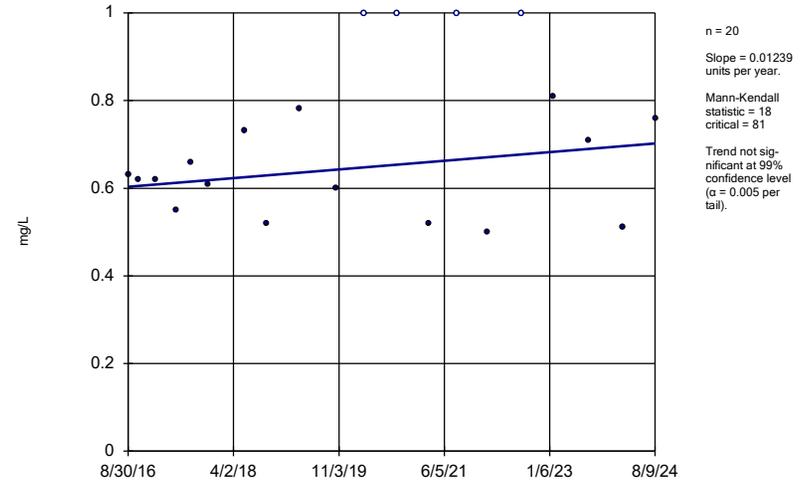


Constituent: Sulfate as SO4 Analysis Run 10/17/2024 12:51 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Hollow symbols indicate censored values.

Sen's Slope Estimator

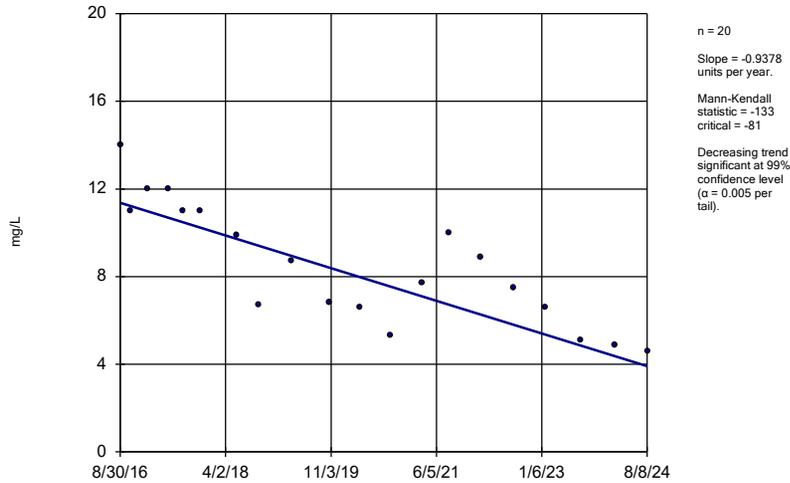
HGWA-112 (bg)



Constituent: Sulfate as SO4 Analysis Run 10/17/2024 12:52 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

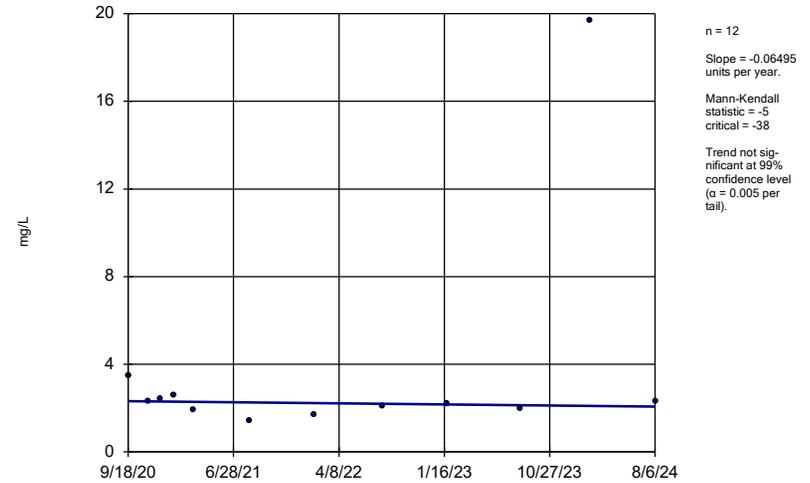
HGWA-113 (bg)



Constituent: Sulfate as SO4 Analysis Run 10/17/2024 12:52 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

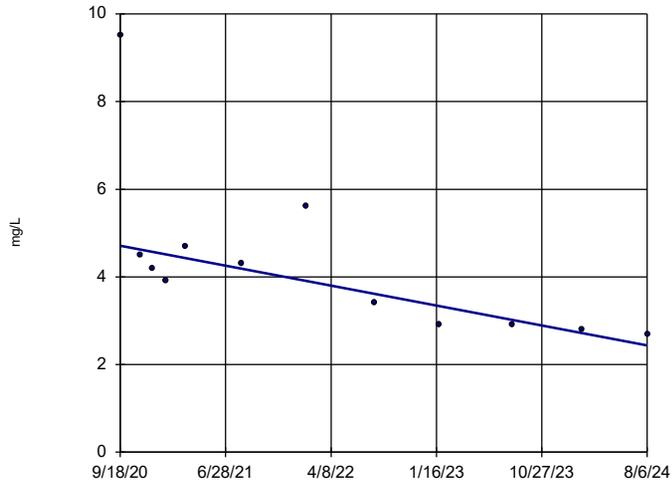
HGWA-47 (bg)



Constituent: Sulfate as SO4 Analysis Run 10/17/2024 12:52 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

HGWA-48D (bg)

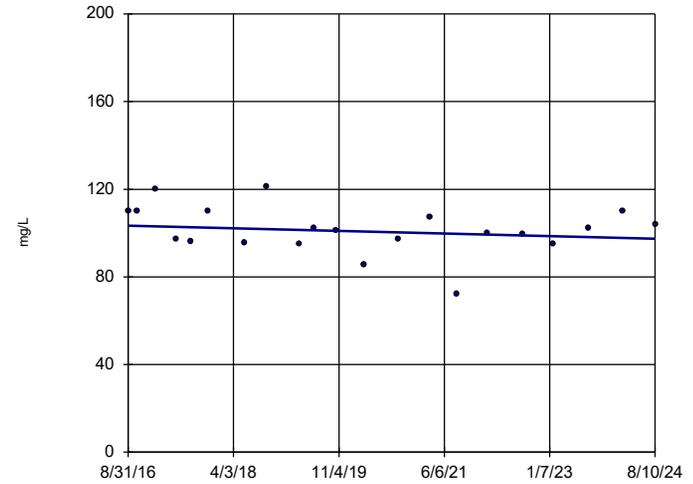


n = 12
 Slope = -0.5856
 units per year.
 Mann-Kendall
 statistic = -45
 critical = -38
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate as SO4 Analysis Run 10/17/2024 12:52 PM View: Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

HGWC-101

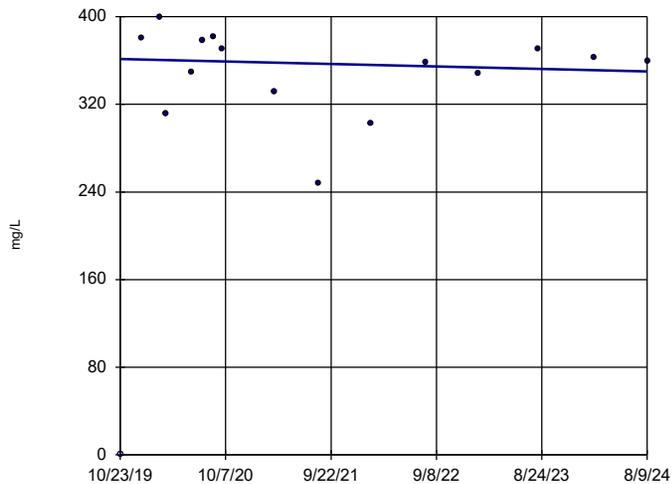


n = 21
 Slope = -0.7577
 units per year.
 Mann-Kendall
 statistic = -32
 critical = -87
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate as SO4 Analysis Run 10/17/2024 12:52 PM View: Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

HGWC-102

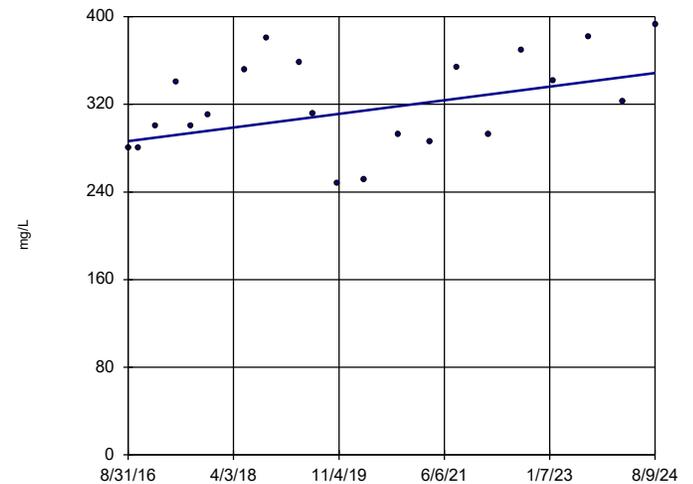


n = 16
 Slope = -2.338
 units per year.
 Mann-Kendall
 statistic = -5
 critical = -58
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate as SO4 Analysis Run 10/17/2024 12:52 PM View: Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

HGWC-103

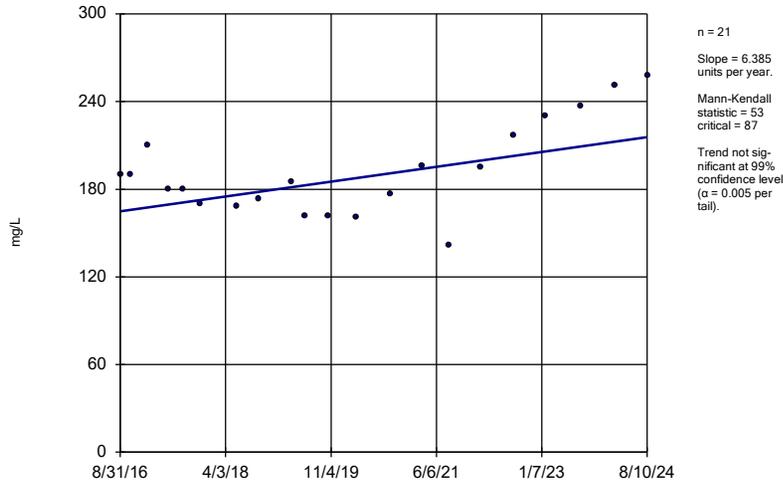


n = 21
 Slope = 7.824
 units per year.
 Mann-Kendall
 statistic = 69
 critical = 87
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate as SO4 Analysis Run 10/17/2024 12:52 PM View: Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

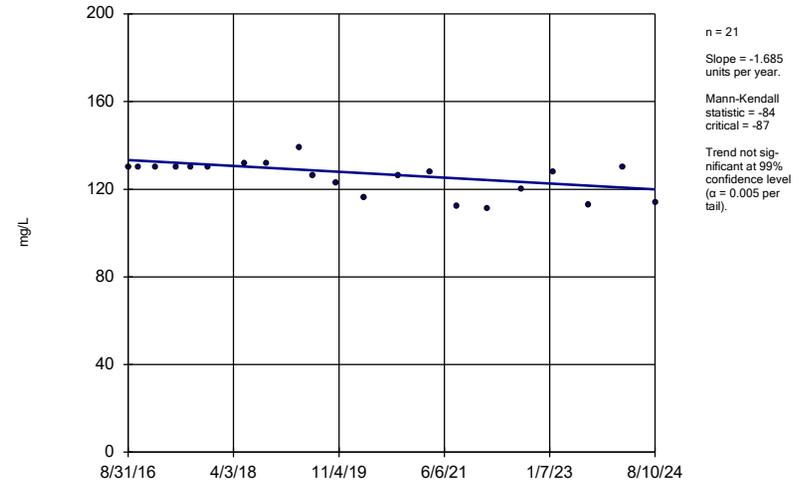
HGWC-105



Constituent: Sulfate as SO4 Analysis Run 10/17/2024 12:52 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

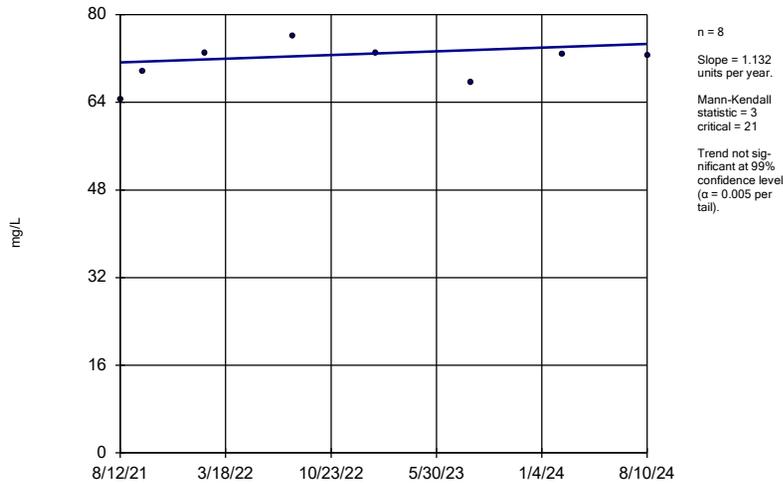
HGWC-107



Constituent: Sulfate as SO4 Analysis Run 10/17/2024 12:52 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

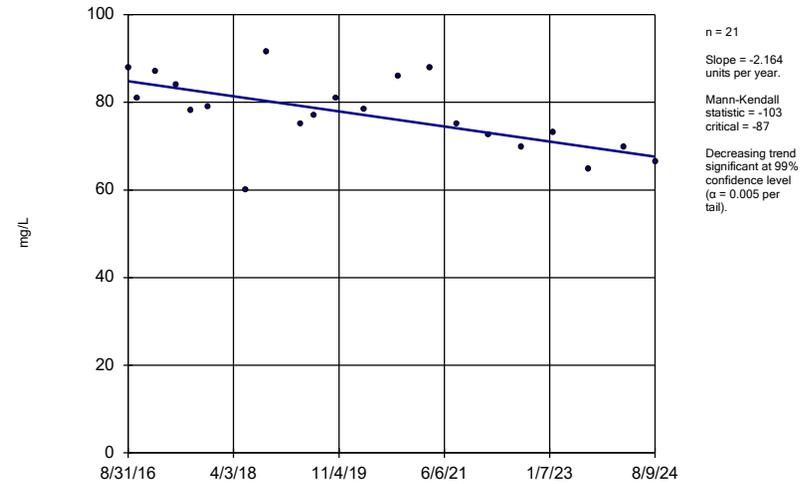
HGWC-117A



Constituent: Sulfate as SO4 Analysis Run 10/17/2024 12:52 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

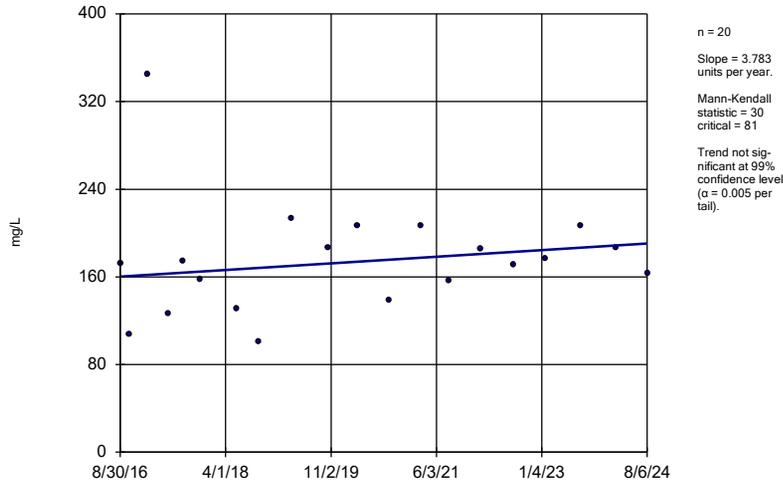
HGWC-118



Constituent: Sulfate as SO4 Analysis Run 10/17/2024 12:52 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

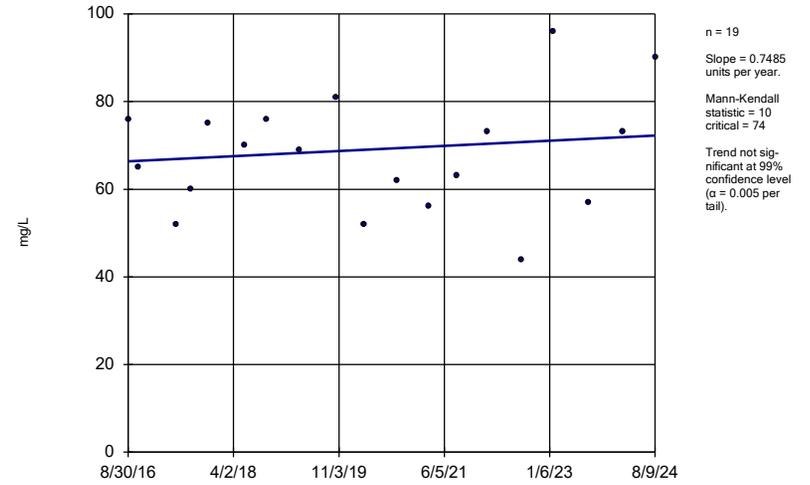
HGWA-111 (bg)



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/17/2024 12:52 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

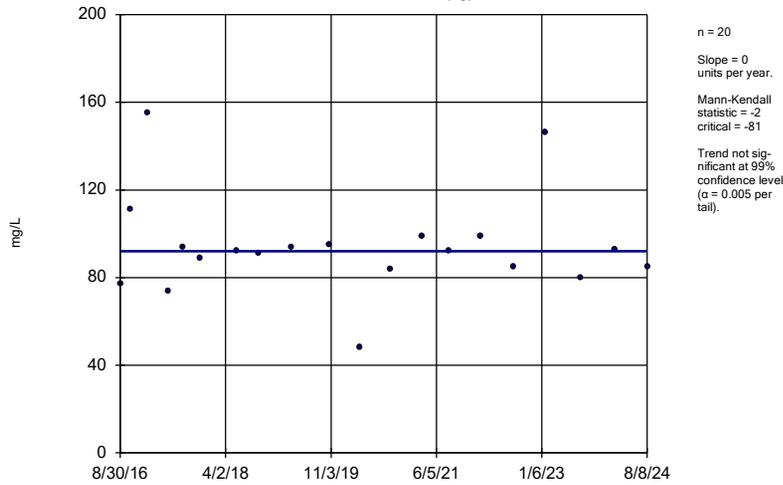
HGWA-112 (bg)



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/17/2024 12:52 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

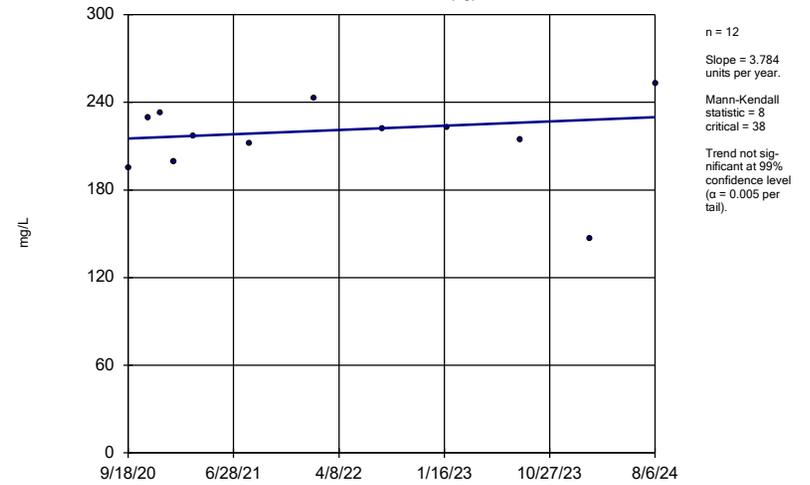
HGWA-113 (bg)



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/17/2024 12:52 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

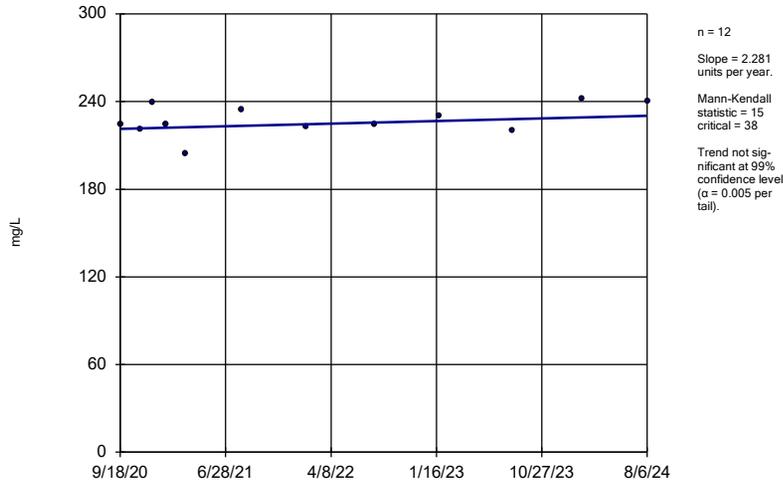
HGWA-47 (bg)



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/17/2024 12:52 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

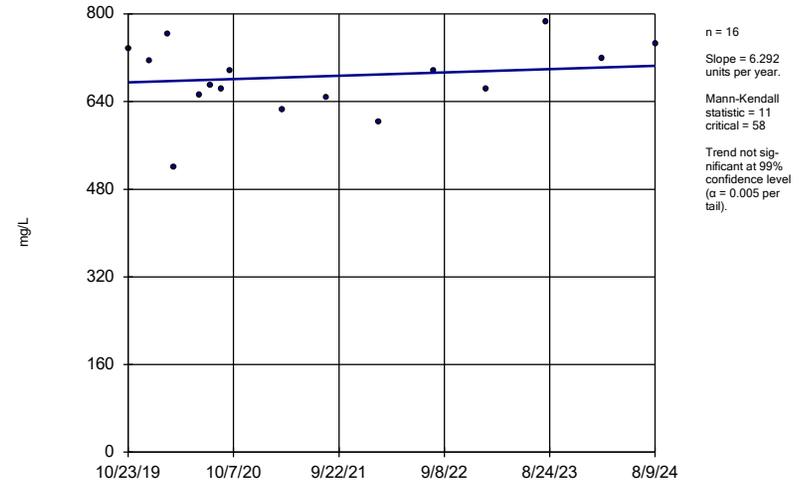
HGWA-48D (bg)



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/17/2024 12:52 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

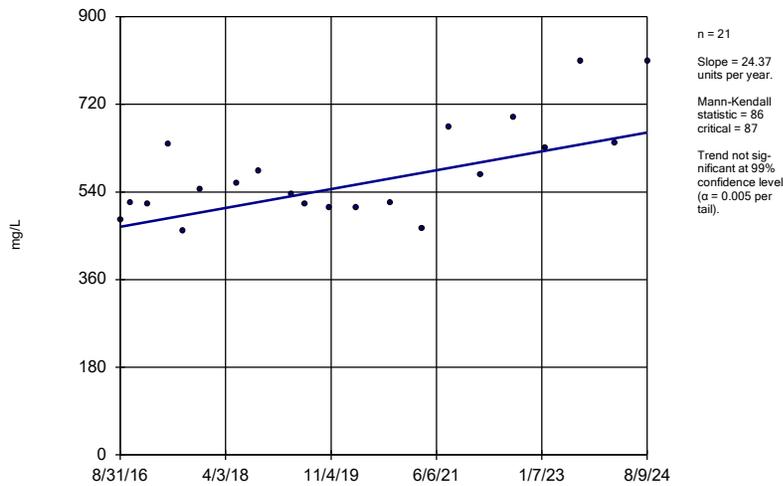
HGWC-102



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/17/2024 12:52 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

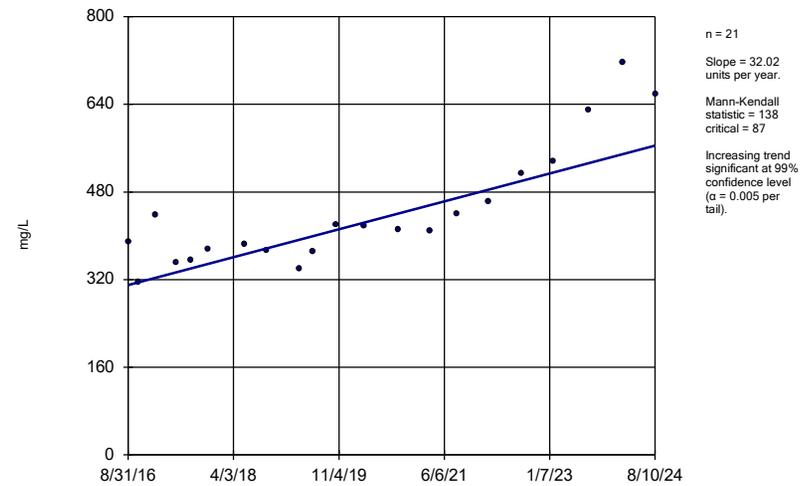
HGWC-103



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/17/2024 12:52 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

Sen's Slope Estimator

HGWC-105



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/17/2024 12:52 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-4

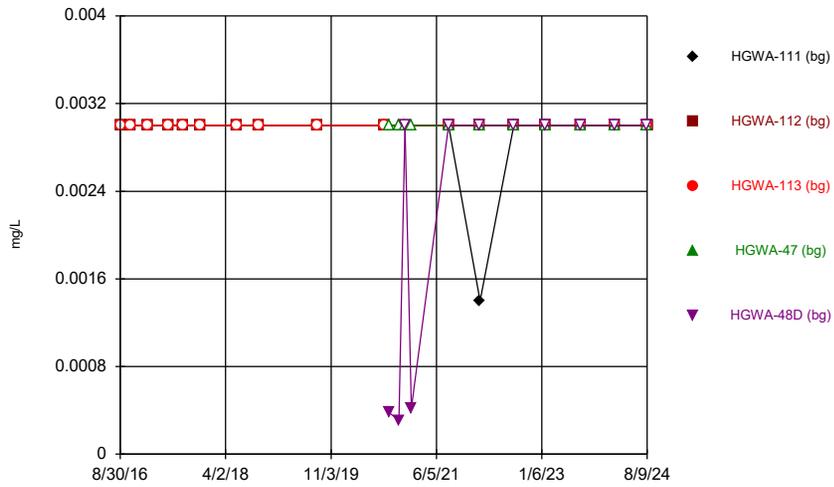
FIGURE F.

Upper Tolerance Limits Summary Table

Plant Hammond Client: Southern Company Data: Hammond AP-4 Printed 10/16/2024, 2:59 PM

<u>Constituent</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bq N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	0.003	n/a	n/a	n/a	n/a	73	94.52	n/a	0.02365	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	n/a	n/a	87	94.25	n/a	0.01153	NP Inter(NDs)
Barium (mg/L)	0.12	n/a	n/a	n/a	n/a	87	0	n/a	0.01153	NP Inter(normality)
Beryllium (mg/L)	0.0019	n/a	n/a	n/a	n/a	87	91.95	n/a	0.01153	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	n/a	n/a	n/a	87	100	n/a	0.01153	NP Inter(NDs)
Chromium (mg/L)	0.0061	n/a	n/a	n/a	n/a	87	42.53	n/a	0.01153	NP Inter(normality)
Cobalt (mg/L)	0.005	n/a	n/a	n/a	n/a	87	90.8	n/a	0.01153	NP Inter(NDs)
Combined Radium 226 & 228 (pCi/L)	1.29	n/a	n/a	n/a	n/a	87	0	No	0.05	Inter
Fluoride, total (mg/L)	0.23	n/a	n/a	n/a	n/a	90	20	n/a	0.009888	NP Inter(normality)
Lead (mg/L)	0.0016	n/a	n/a	n/a	n/a	87	74.71	n/a	0.01153	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	n/a	n/a	87	37.93	n/a	0.01153	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	n/a	n/a	73	83.56	n/a	0.02365	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	n/a	n/a	n/a	73	82.19	n/a	0.02365	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	n/a	n/a	73	79.45	n/a	0.02365	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	n/a	73	100	n/a	0.02365	NP Inter(NDs)

Time Series



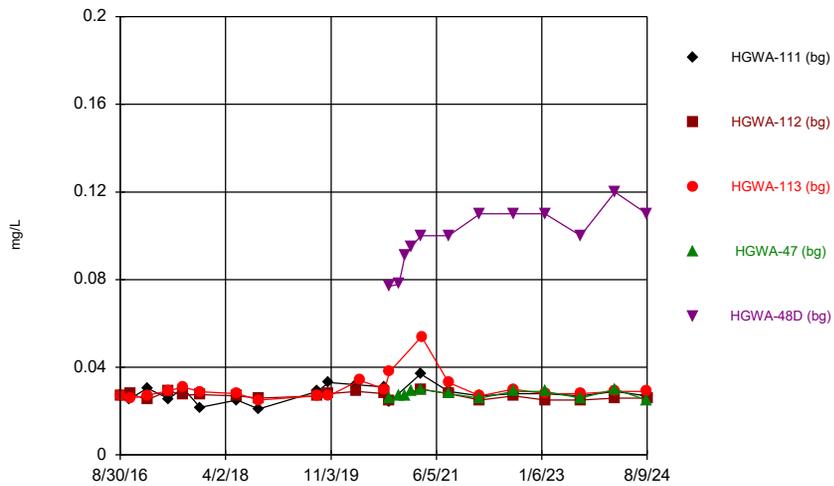
Constituent: Antimony Analysis Run 10/16/2024 2:56 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



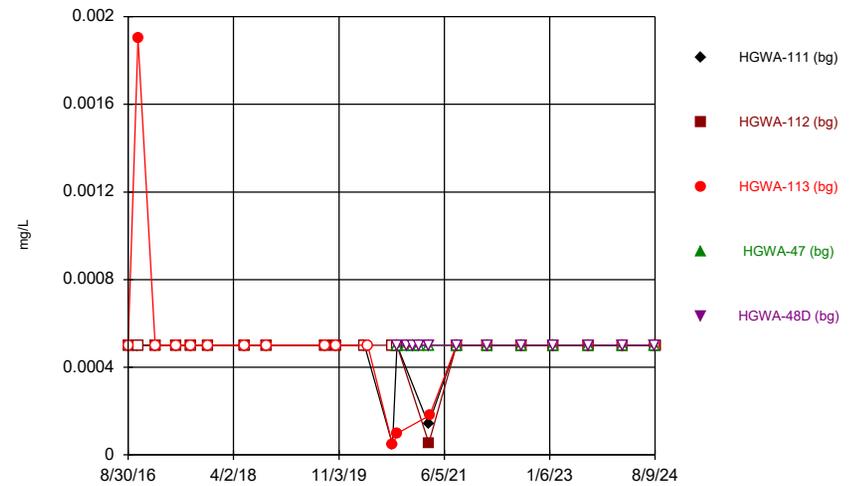
Constituent: Arsenic Analysis Run 10/16/2024 2:56 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



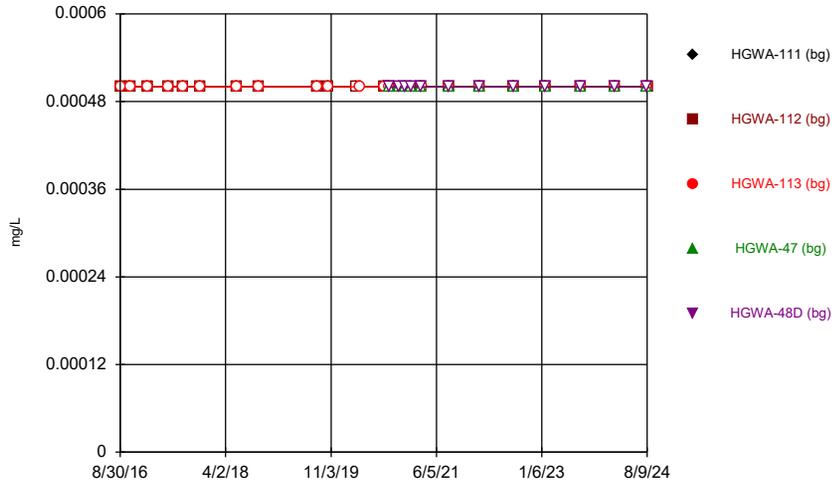
Constituent: Barium Analysis Run 10/16/2024 2:56 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



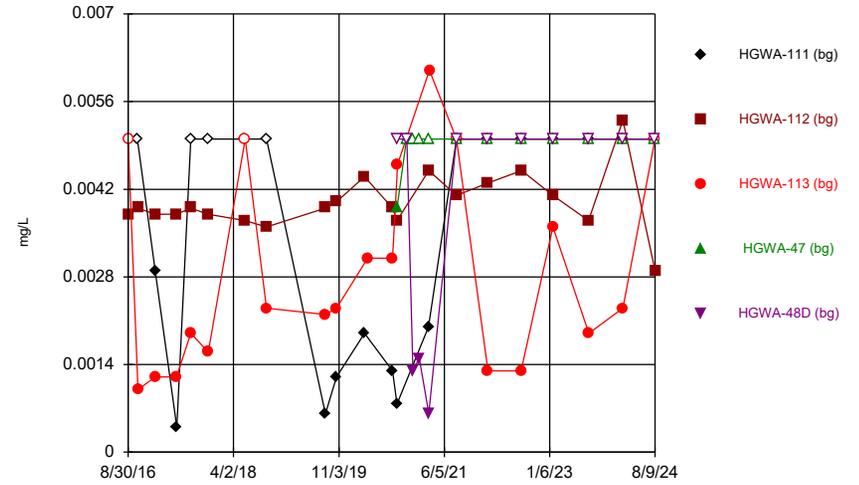
Constituent: Beryllium Analysis Run 10/16/2024 2:56 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



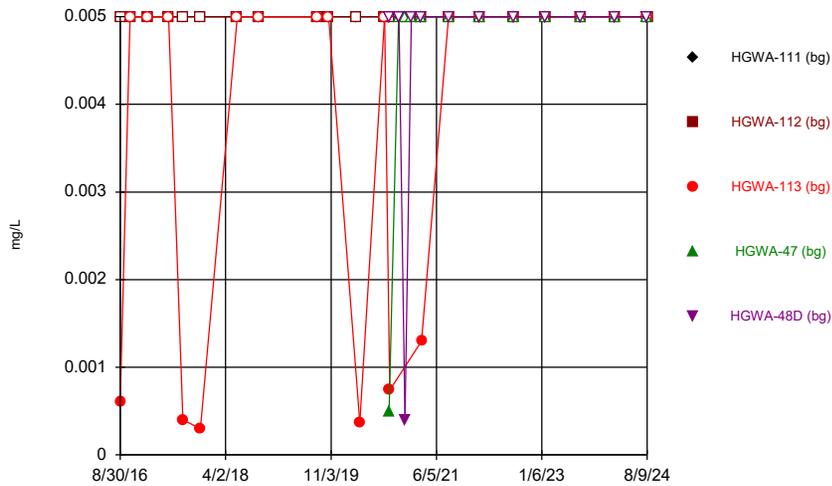
Constituent: Cadmium Analysis Run 10/16/2024 2:56 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



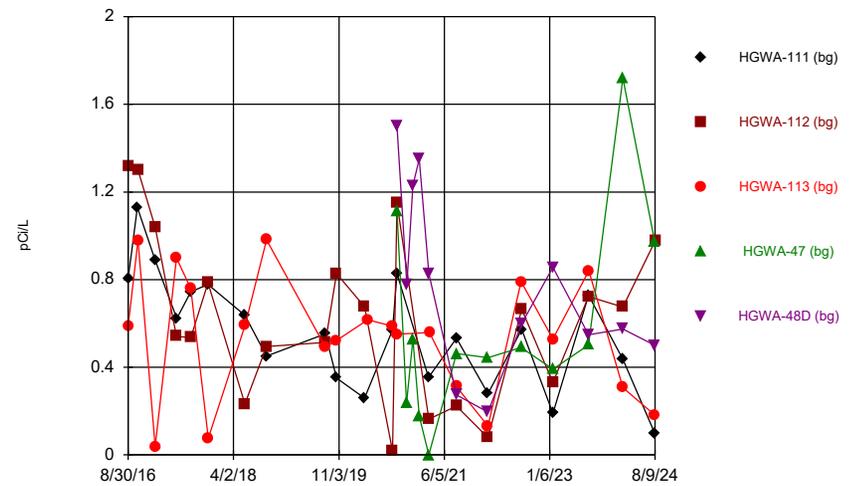
Constituent: Chromium Analysis Run 10/16/2024 2:56 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



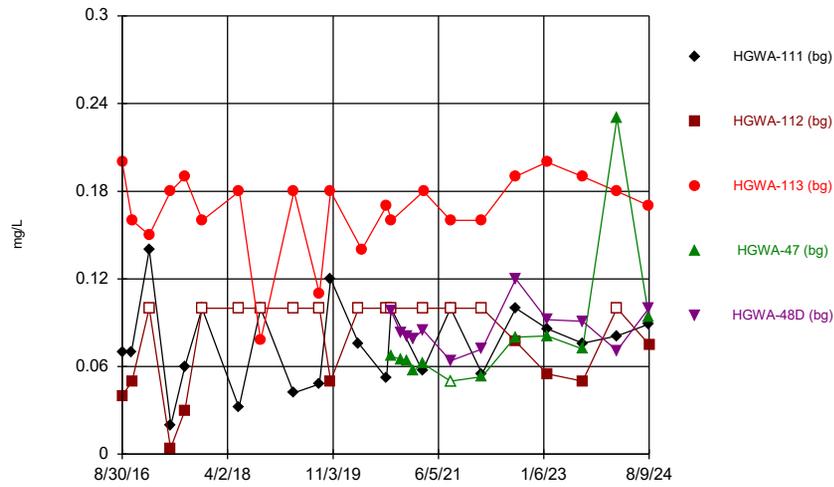
Constituent: Cobalt Analysis Run 10/16/2024 2:56 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



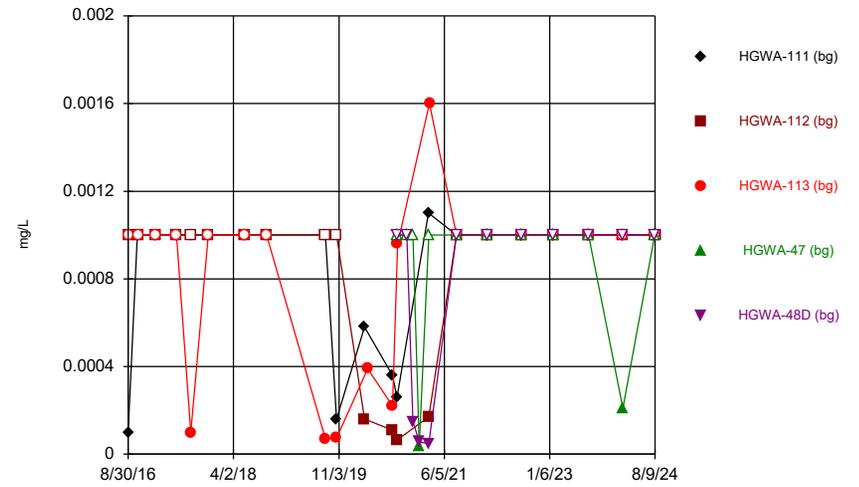
Constituent: Combined Radium 226 & 228 Analysis Run 10/16/2024 2:56 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



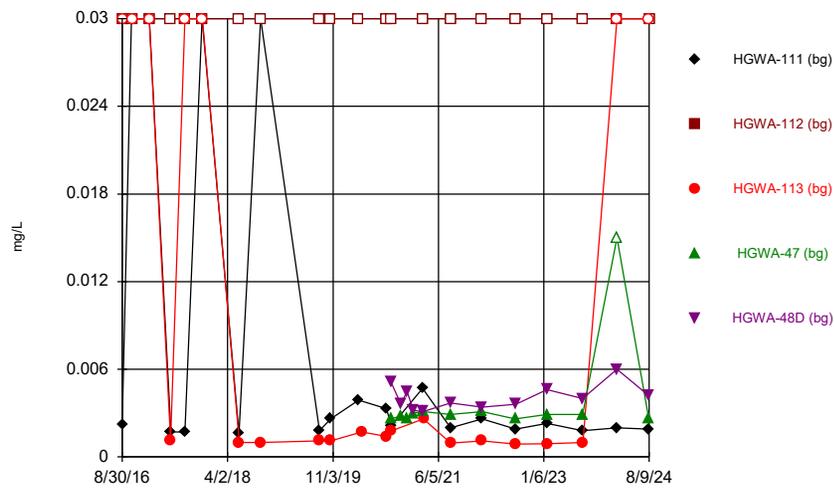
Constituent: Fluoride, total Analysis Run 10/16/2024 2:56 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



Constituent: Lead Analysis Run 10/16/2024 2:56 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



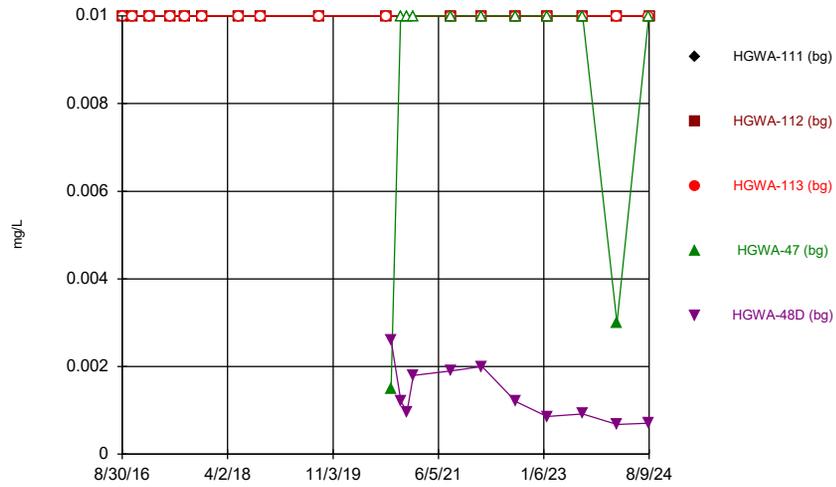
Constituent: Lithium Analysis Run 10/16/2024 2:56 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



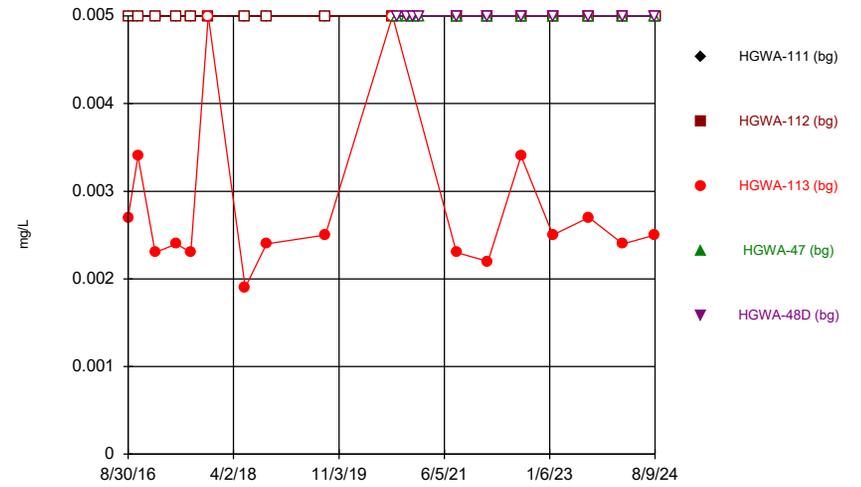
Constituent: Mercury Analysis Run 10/16/2024 2:56 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



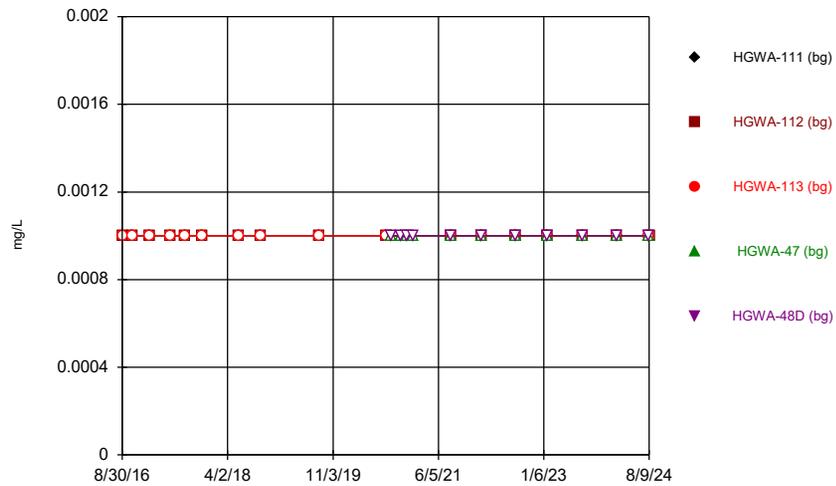
Constituent: Molybdenum Analysis Run 10/16/2024 2:56 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



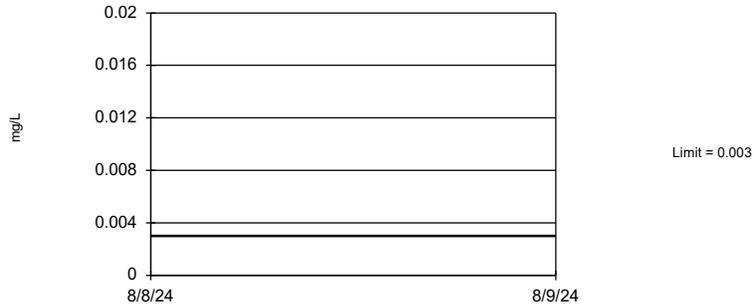
Constituent: Selenium Analysis Run 10/16/2024 2:56 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Time Series



Constituent: Thallium Analysis Run 10/16/2024 2:56 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

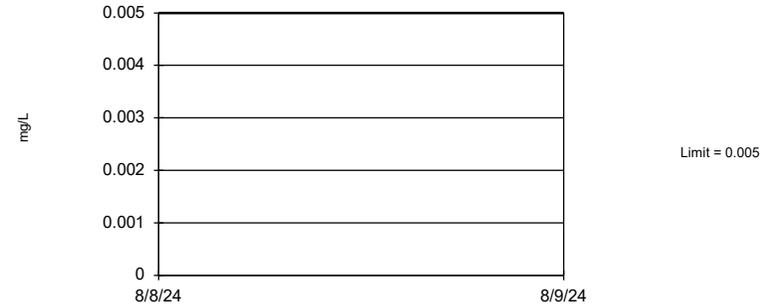
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 73 background values. 94.52% NDs. 93.95% coverage at alpha=0.01; 95.9% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.02365.

Constituent: Antimony Analysis Run 10/16/2024 2:58 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 87 background values. 94.25% NDs. 94.73% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01153.

Constituent: Arsenic Analysis Run 10/16/2024 2:58 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

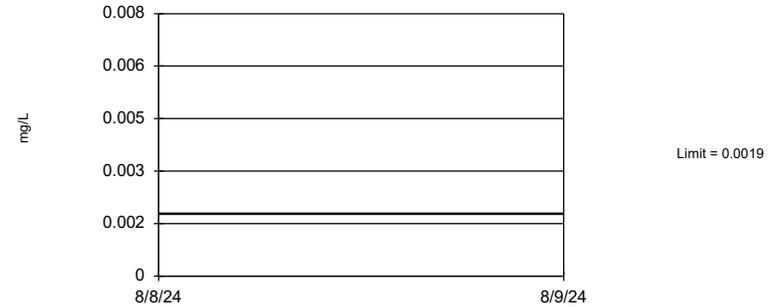
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 87 background values. 94.73% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01153.

Constituent: Barium Analysis Run 10/16/2024 2:58 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

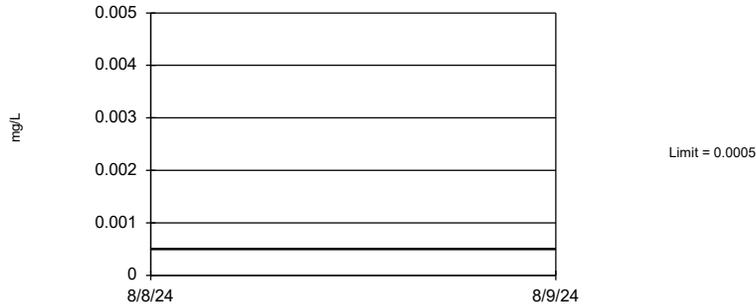
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 87 background values. 91.95% NDs. 94.73% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01153.

Constituent: Beryllium Analysis Run 10/16/2024 2:58 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

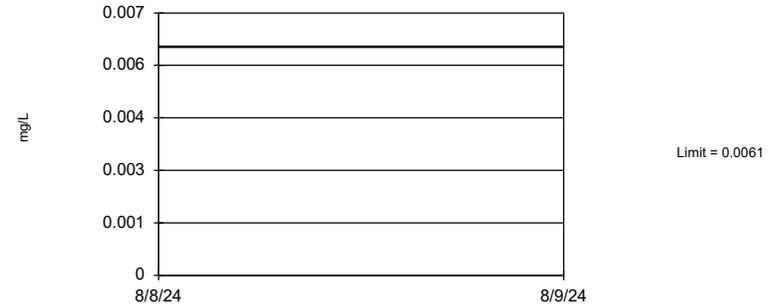
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. All background values were censored; limit is most recent reporting limit. 94.73% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01153.

Constituent: Cadmium Analysis Run 10/16/2024 2:58 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 87 background values. 42.53% NDs. 94.73% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01153.

Constituent: Chromium Analysis Run 10/16/2024 2:58 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 87 background values. 90.8% NDs. 94.73% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01153.

Constituent: Cobalt Analysis Run 10/16/2024 2:58 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

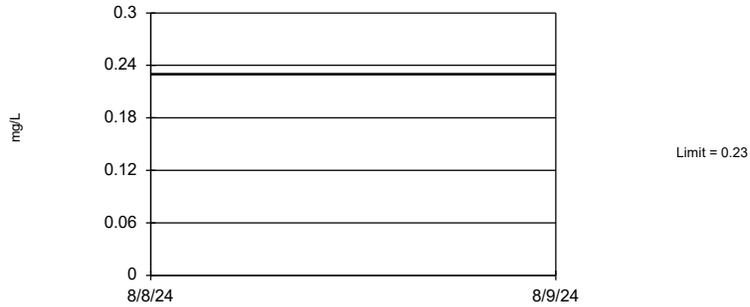
Tolerance Limit Interwell Parametric



95% coverage. Background Data Summary: Mean=0.6056, Std. Dev.=0.3511, n=87. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9665, critical = 0.961. Report alpha = 0.05.

Constituent: Combined Radium 226 & 228 Analysis Run 10/16/2024 2:58 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

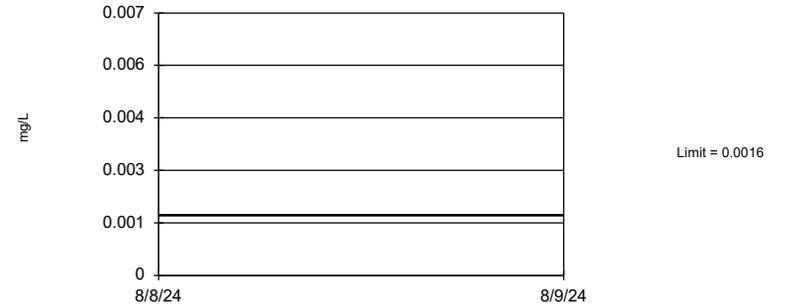
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 90 background values. 20% NDs. 95.12% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.009888.

Constituent: Fluoride, total Analysis Run 10/16/2024 2:58 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 87 background values. 74.71% NDs. 94.73% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01153.

Constituent: Lead Analysis Run 10/16/2024 2:58 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

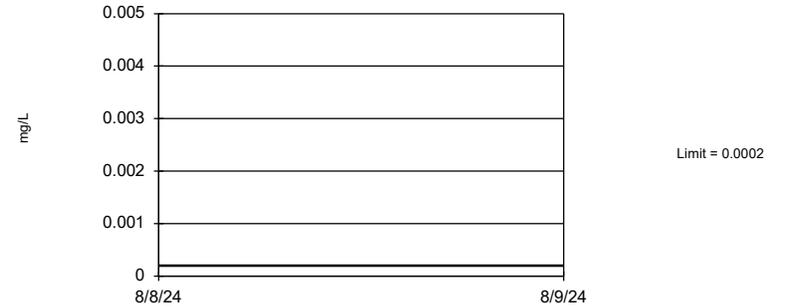
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 87 background values. 37.93% NDs. 94.73% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01153.

Constituent: Lithium Analysis Run 10/16/2024 2:58 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 73 background values. 83.56% NDs. 93.95% coverage at alpha=0.01; 95.9% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.02365.

Constituent: Mercury Analysis Run 10/16/2024 2:58 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 73 background values. 82.19% NDs. 93.95% coverage at alpha=0.01; 95.9% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.02365.

Constituent: Molybdenum Analysis Run 10/16/2024 2:58 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

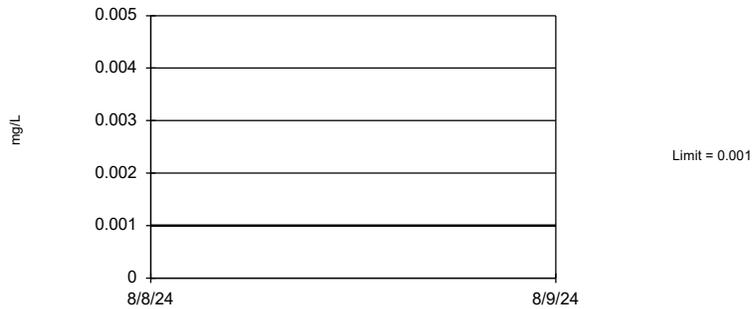
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 73 background values. 79.45% NDs. 93.95% coverage at alpha=0.01; 95.9% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.02365.

Constituent: Selenium Analysis Run 10/16/2024 2:58 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. All background values were censored; limit is most recent reporting limit. 93.95% coverage at alpha=0.01; 95.9% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.02365.

Constituent: Thallium Analysis Run 10/16/2024 2:58 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-4

FIGURE G.

PLANT HAMMOND AP-4 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		0.12	2
Beryllium, Total (mg/L)	0.004		0.0019	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.0061	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.005	0.006
Combined Radium, Total (pCi/L)	5		1.29	5
Fluoride, Total (mg/L)	4		0.23	4
Lead, Total (mg/L)	n/a	0.015	0.0016	0.015
Lithium, Total (mg/L)	n/a	0.040	0.030	0.040
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

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Standard*

FIGURE H.

Confidence Intervals Summary Table - All Results (No Significant)

Plant Hammond Client: Southern Company Data: Hammond AP-4 Printed 10/16/2024, 3:12 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	HGWC-102	0.003	0.003	0.006	No	15	0.0005784	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-103	0.003	0.0022	0.006	No	17	0.000194	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-107	0.003	0.0011	0.006	No	17	0.0004608	94.12	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-101	0.005	0.00039	0.01	No	21	0.001006	95.24	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-102	0.005	0.00083	0.01	No	16	0.002029	68.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-103	0.005	0.0015	0.01	No	21	0.0007638	95.24	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-109	0.002537	0.001578	0.01	No	21	0.0008697	14.29	None	No	0.01	Param.
Arsenic (mg/L)	HGWC-118	0.005	0.001	0.01	No	21	0.0008729	95.24	None	No	0.01	NP (NDs)
Barium (mg/L)	HGWC-101	0.04409	0.03785	2	No	21	0.005658	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-102	0.03172	0.02716	2	No	16	0.003502	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-103	0.03924	0.03444	2	No	21	0.004352	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-105	0.085	0.0668	2	No	21	0.009941	0	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-107	0.03841	0.03535	2	No	21	0.002778	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-109	0.08611	0.07993	2	No	21	0.005601	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-117A	0.0658	0.042	2	No	8	0.01188	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	HGWC-118	0.05922	0.04855	2	No	21	0.00967	0	None	No	0.01	Param.
Beryllium (mg/L)	HGWC-101	0.0005	0.000062	0.004	No	21	0.0002238	52.38	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-103	0.0005	0.000088	0.004	No	21	0.0001735	80.95	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-118	0.0005	0.000093	0.004	No	21	0.00008881	95.24	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-101	0.0002048	0.0001433	0.005	No	21	0.00005571	14.29	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-102	0.0006287	0.0003438	0.005	No	16	0.000219	0	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-103	0.0007812	0.0006883	0.005	No	21	0.00008424	0	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-107	0.0005	0.00011	0.005	No	21	0.0001933	66.67	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-117A	0.0005	0.00016	0.005	No	8	0.0001202	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	HGWC-101	0.005	0.00098	0.1	No	21	0.001714	80.95	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-102	0.005	0.00063	0.1	No	16	0.001513	87.5	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-103	0.005	0.0013	0.1	No	21	0.001899	66.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-105	0.005	0.0013	0.1	No	21	0.001725	80.95	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-107	0.005	0.00074	0.1	No	21	0.0009296	95.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-109	0.005	0.0014	0.1	No	21	0.001206	90.48	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-118	0.005	0.0021	0.1	No	21	0.00166	76.19	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-101	0.002738	0.002186	0.006	No	21	0.0005005	4.762	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-102	0.0019	0.00098	0.006	No	16	0.0007443	0	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-103	0.002225	0.001842	0.006	No	21	0.0003469	0	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-105	0.005	0.00047	0.006	No	21	0.002036	28.57	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-109	0.001919	0.001161	0.006	No	21	0.0006876	0	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-117A	0.00155	0.0003807	0.006	No	8	0.0006479	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	HGWC-118	0.005	0.00045	0.006	No	21	0.002296	52.38	None	No	0.01	NP (NDs)
Combined Radium 226 & 228 (pCi/L)	HGWC-101	0.8314	0.4516	5	No	21	0.3443	0	None	No	0.01	Param.
Combined Radium 226 & 228 (pCi/L)	HGWC-102	1.088	0.5756	5	No	15	0.3784	0	None	No	0.01	Param.
Combined Radium 226 & 228 (pCi/L)	HGWC-103	0.8483	0.4709	5	No	21	0.3421	0	None	No	0.01	Param.
Combined Radium 226 & 228 (pCi/L)	HGWC-105	0.8398	0.5035	5	No	21	0.3048	0	None	No	0.01	Param.
Combined Radium 226 & 228 (pCi/L)	HGWC-107	0.9837	0.4954	5	No	21	0.4426	0	None	No	0.01	Param.
Combined Radium 226 & 228 (pCi/L)	HGWC-109	0.7311	0.4294	5	No	21	0.2735	0	None	No	0.01	Param.
Combined Radium 226 & 228 (pCi/L)	HGWC-117A	0.9243	0.1862	5	No	8	0.3482	0	None	No	0.01	Param.
Combined Radium 226 & 228 (pCi/L)	HGWC-118	1.037	0.4568	5	No	20	0.5107	0	None	No	0.01	Param.
Fluoride, total (mg/L)	HGWC-101	0.1	0.068	4	No	22	0.01959	81.82	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	HGWC-102	0.22	0.076	4	No	16	0.03247	81.25	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	HGWC-103	0.13	0.077	4	No	22	0.02128	72.73	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	HGWC-105	0.1	0.074	4	No	22	0.02809	54.55	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	HGWC-107	0.1	0.069	4	No	22	0.0331	54.55	None	No	0.01	NP (NDs)
Fluoride, total (mg/L)	HGWC-109	0.1245	0.08585	4	No	22	0.03602	9.091	None	No	0.01	Param.
Fluoride, total (mg/L)	HGWC-117A	0.102	0.05154	4	No	8	0.02513	25	Kaplan-Meier	No	0.01	Param.
Fluoride, total (mg/L)	HGWC-118	0.14	0.072	4	No	23	0.178	0	None	No	0.01	NP (normality)
Lead (mg/L)	HGWC-101	0.001	0.0009	0.015	No	21	0.00002182	95.24	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-102	0.001	0.00011	0.015	No	16	0.0002225	93.75	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-103	0.001	0.00028	0.015	No	21	0.0003539	71.43	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-105	0.001	0.000085	0.015	No	21	0.0003763	80.95	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-107	0.001	0.00034	0.015	No	21	0.0003333	80.95	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-109	0.001	0.000058	0.015	No	21	0.0002839	90.48	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-118	0.001	0.00088	0.015	No	21	0.0003099	76.19	None	No	0.01	NP (NDs)
Lithium (mg/L)	HGWC-102	0.015	0.0011	0.04	No	16	0.004724	12.5	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-103	0.002	0.0015	0.04	No	21	0.0124	23.81	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-105	0.004236	0.003897	0.04	No	21	0.0003071	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-107	0.03	0.00091	0.04	No	21	0.01488	47.62	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-109	0.03	0.0009	0.04	No	21	0.01483	52.38	None	No	0.01	NP (NDs)
Lithium (mg/L)	HGWC-117A	0.0051	0.0035	0.04	No	8	0.0005069	0	None	No	0.004	NP (normality)
Lithium (mg/L)	HGWC-118	0.03	0.0017	0.04	No	21	0.01357	33.33	None	No	0.01	NP (normality)

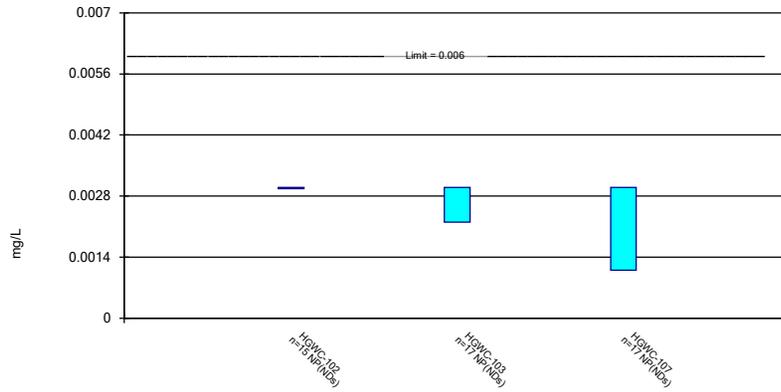
Confidence Intervals Summary Table - All Results (No Significant) ^{Page 2}

Plant Hammond Client: Southern Company Data: Hammond AP-4 Printed 10/16/2024, 3:12 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>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Mercury (mg/L)	HGWC-101	0.0002	0.000099	0.002	No	17	0.00003456	88.24	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-102	0.0002	0.0001	0.002	No	15	0.00002582	93.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-103	0.00025	0.00017	0.002	No	17	0.00003762	76.47	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-105	0.00022	0.0002	0.002	No	17	0.00004851	94.12	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-107	0.0002	0.000084	0.002	No	17	0.00002813	94.12	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-109	0.0002	0.00008	0.002	No	17	0.00003985	88.24	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-117A	0.0002	0.000094	0.002	No	8	0.00003748	87.5	None	No	0.004	NP (NDs)
Mercury (mg/L)	HGWC-118	0.0002	0.00009	0.002	No	17	0.00003806	88.24	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-102	0.005	0.0015	0.05	No	15	0.0009037	93.33	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-102	0.001	0.00008	0.002	No	15	0.0002375	93.33	None	No	0.01	NP (NDs)

Non-Parametric Confidence Interval

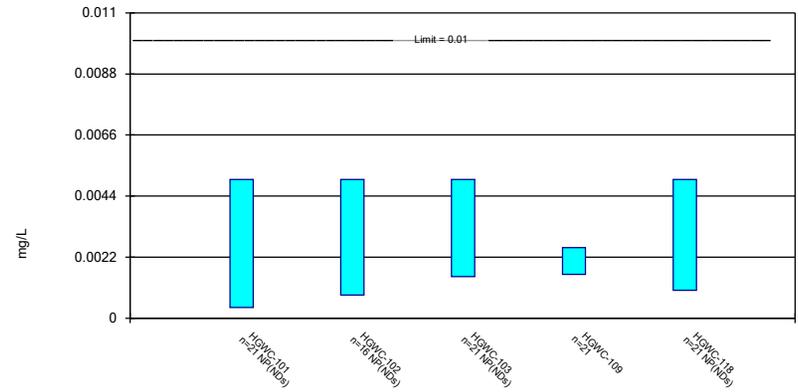
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Constituent: Antimony Analysis Run 10/16/2024 3:11 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-4

Parametric and Non-Parametric (NP) Confidence Interval

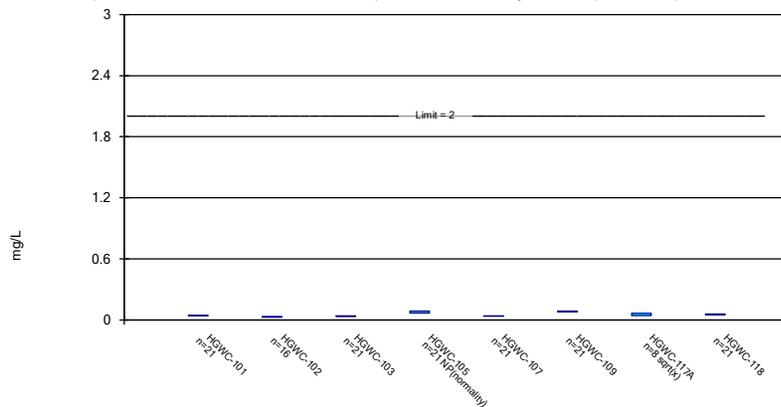
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 10/16/2024 3:11 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-4

Parametric and Non-Parametric (NP) Confidence Interval

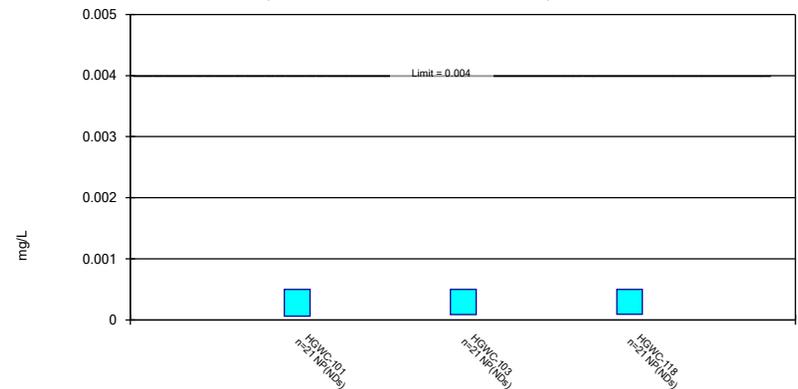
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Constituent: Barium Analysis Run 10/16/2024 3:11 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-4

Non-Parametric Confidence Interval

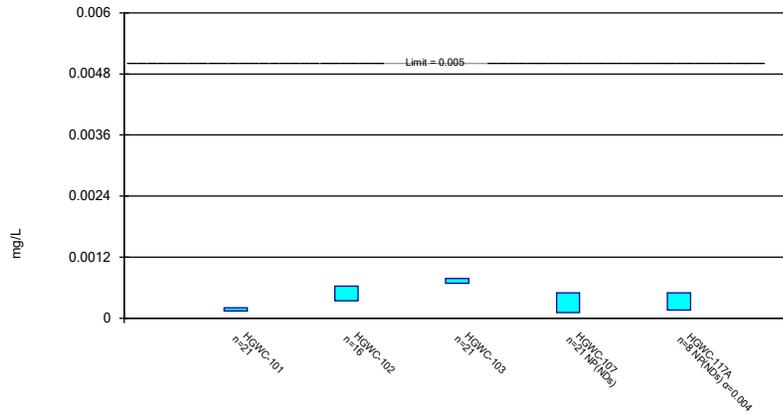
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Constituent: Beryllium Analysis Run 10/16/2024 3:11 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-4

Parametric and Non-Parametric (NP) Confidence Interval

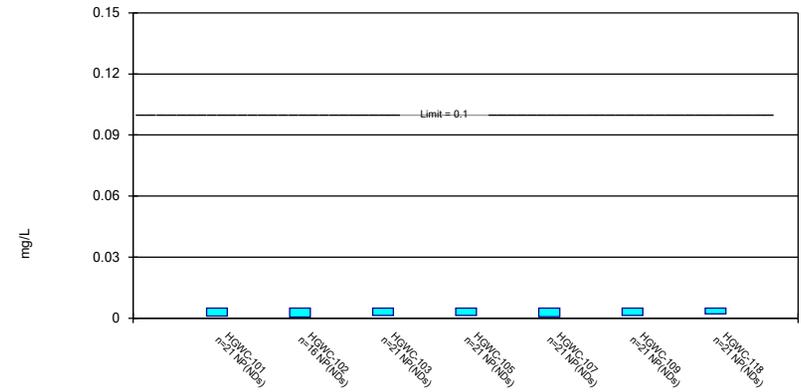
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Constituent: Cadmium Analysis Run 10/16/2024 3:11 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-4

Non-Parametric Confidence Interval

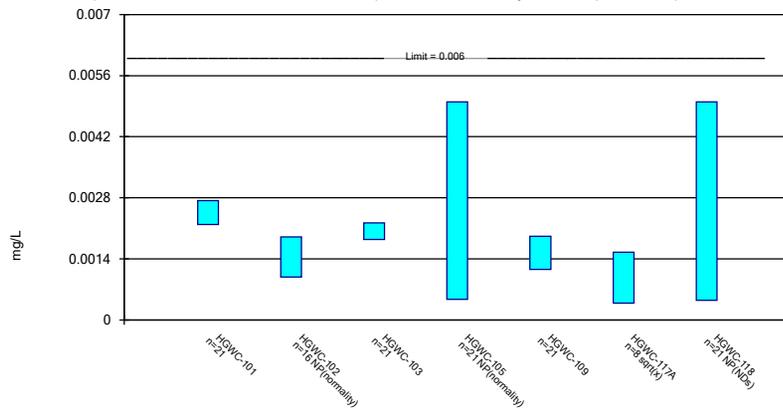
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Constituent: Chromium Analysis Run 10/16/2024 3:11 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-4

Parametric and Non-Parametric (NP) Confidence Interval

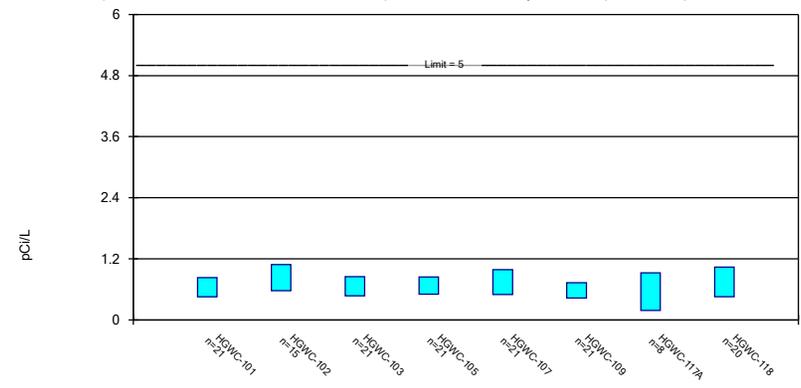
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Constituent: Cobalt Analysis Run 10/16/2024 3:11 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-4

Parametric Confidence Interval

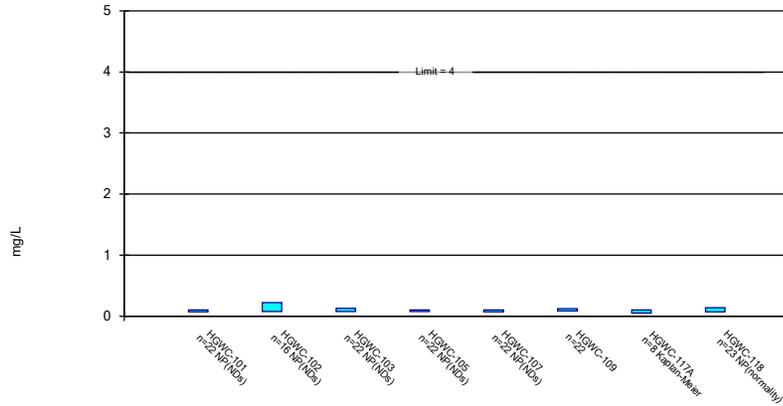
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Constituent: Combined Radium 226 & 228 Analysis Run 10/16/2024 3:11 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-4

Parametric and Non-Parametric (NP) Confidence Interval

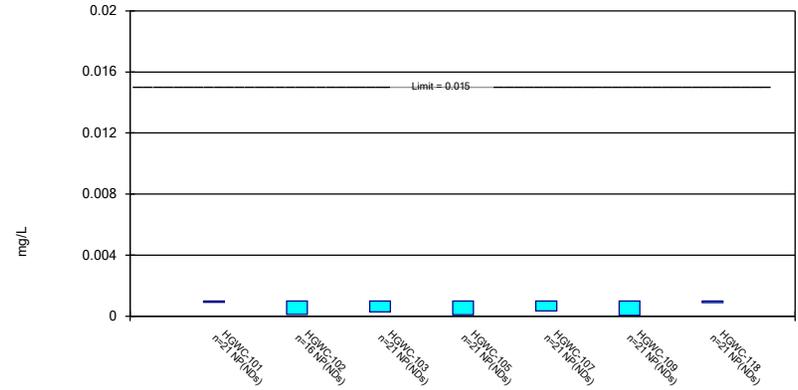
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride, total Analysis Run 10/16/2024 3:11 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-4

Non-Parametric Confidence Interval

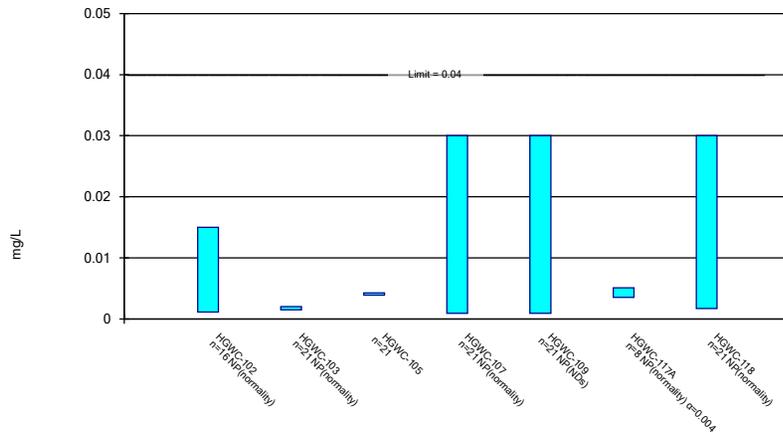
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 10/16/2024 3:12 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-4

Parametric and Non-Parametric (NP) Confidence Interval

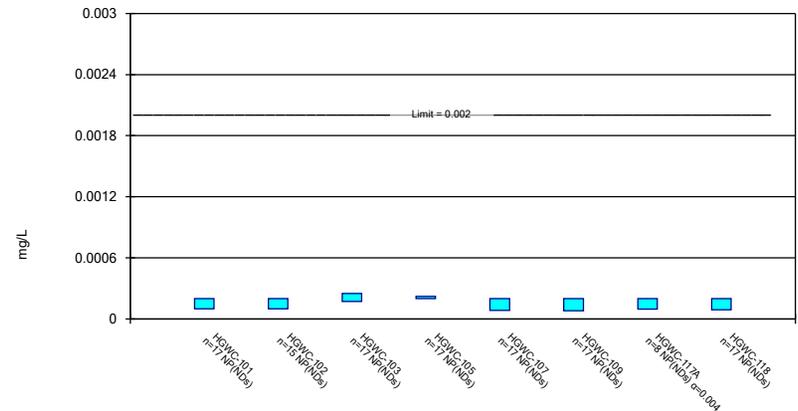
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 10/16/2024 3:12 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-4

Non-Parametric Confidence Interval

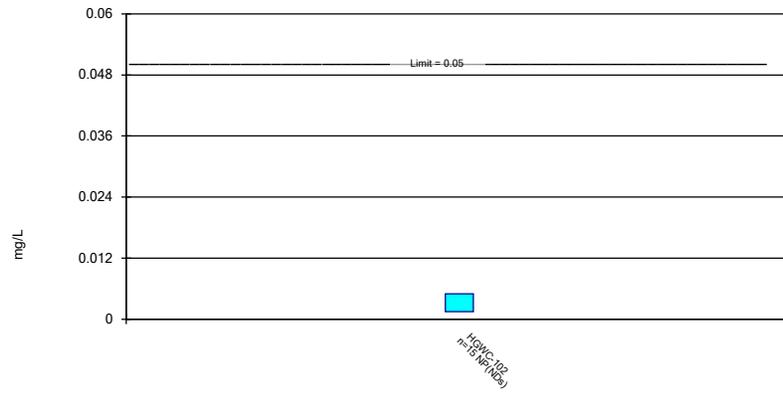
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Mercury Analysis Run 10/16/2024 3:12 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-4

Non-Parametric Confidence Interval

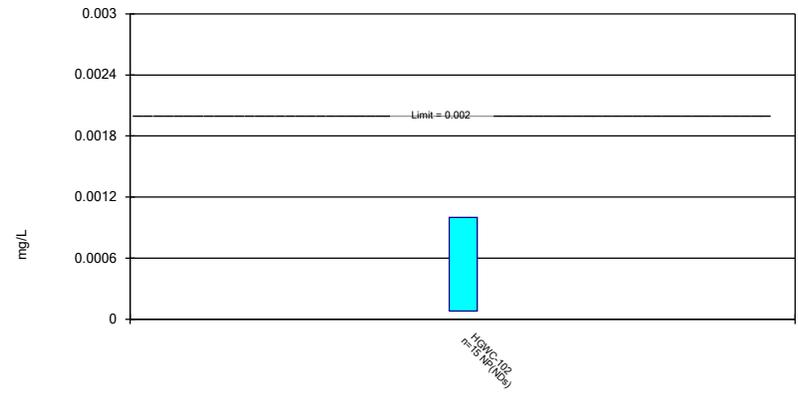
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 10/16/2024 3:12 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-4

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 10/16/2024 3:12 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-4

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 10/16/2024 3:12 PM View: Confidence Intervals
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-102	HGWC-103	HGWC-107
8/31/2016		<0.003	<0.003
10/24/2016		<0.003	
10/25/2016			<0.003
1/31/2017		<0.003	<0.003
5/23/2017		<0.003	
5/24/2017			<0.003
8/10/2017		<0.003	<0.003
11/14/2017		<0.003	<0.003
6/6/2018		0.0022 (J)	<0.003
10/2/2018			0.0011 (J)
10/3/2018		<0.003	
8/22/2019		<0.003	
8/23/2019			<0.003
10/23/2019	<0.003		
1/3/2020	0.00076 (J)		
3/4/2020	<0.003		
3/24/2020	<0.003		
6/18/2020	<0.003		
7/21/2020	<0.003		
8/27/2020	<0.003	<0.003	<0.003
9/24/2020	<0.003		
8/13/2021	<0.003		<0.003
8/16/2021		<0.003	
2/2/2022	<0.003	<0.003	<0.003
8/5/2022	<0.003	<0.003	<0.003
1/25/2023	<0.003	<0.003	<0.003
8/11/2023	0.003	<0.003	<0.003
2/16/2024	<0.003	<0.003	<0.003
8/9/2024	<0.003	<0.003	
8/10/2024			<0.003
Mean	0.002851	0.002953	0.002888
Std. Dev.	0.0005784	0.000194	0.0004608
Upper Lim.	0.003	0.003	0.003
Lower Lim.	0.003	0.0022	0.0011

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 10/16/2024 3:12 PM View: Confidence Intervals
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-101	HGWC-102	HGWC-103	HGWC-109	HGWC-118
8/31/2016	<0.005		<0.005	0.0045 (J)	<0.005
10/20/2016	<0.005				<0.005
10/24/2016			<0.005		
10/25/2016				0.003 (J)	
1/31/2017	<0.005		<0.005	0.0022 (J)	<0.005
5/23/2017	<0.005		<0.005		<0.005
5/24/2017				0.0012 (J)	
8/10/2017	<0.005		<0.005	0.0016 (J)	<0.005
11/14/2017	<0.005		<0.005	0.0011 (J)	<0.005
6/6/2018	<0.005		<0.005	0.0018 (J)	
6/7/2018					<0.005
10/2/2018				0.0014 (J)	
10/3/2018	<0.005		<0.005		<0.005
8/22/2019	<0.005		<0.005		<0.005
8/23/2019				0.0035 (J)	
10/22/2019				0.0019 (J)	<0.005
10/23/2019	<0.005	<0.005	<0.005		
1/3/2020		0.00065 (J)			
3/4/2020		0.00036 (J)			
3/24/2020		<0.005			
3/25/2020	0.00039 (J)		<0.005	0.0025 (J)	<0.005
6/18/2020		0.00092 (J)			
7/21/2020		0.00083 (J)			
8/26/2020					<0.005
8/27/2020	<0.005	<0.005	<0.005	0.0011 (J)	
9/24/2020	<0.005	<0.005	<0.005		
9/25/2020				0.0017 (J)	
9/28/2020					<0.005
3/17/2021	<0.005	<0.005		0.0019 (J)	
3/18/2021			<0.005		0.001 (J)
8/13/2021		<0.005		0.0019 (J)	<0.005
8/16/2021	<0.005		<0.005		
2/2/2022	<0.005	<0.005	<0.005	<0.005	
2/3/2022					<0.005
8/5/2022		<0.005	<0.005	0.0022 (J)	<0.005
8/10/2022	<0.005				
1/25/2023	<0.005	<0.005	<0.005	<0.005	<0.005
8/11/2023	<0.005	<0.005	<0.005	<0.005	<0.005
2/16/2024	<0.005	<0.005	<0.005		
2/17/2024				0.0013 (J)	<0.005
8/9/2024		0.0011 (J)	0.0015 (J)		<0.005
8/10/2024	<0.005			0.00091 (J)	
Mean	0.00478	0.003679	0.004833	0.002058	0.00481
Std. Dev.	0.001006	0.002029	0.0007638	0.0008697	0.0008729
Upper Lim.	0.005	0.005	0.005	0.002537	0.005
Lower Lim.	0.00039	0.00083	0.0015	0.001578	0.001

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 10/16/2024 3:12 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-101	HGWC-102	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	0.0527		0.045	0.067	0.0391	0.0883		0.0595
10/20/2016	0.0477							0.055
10/24/2016			0.0386					
10/25/2016				0.0745	0.041	0.0831		
1/31/2017	0.0527		0.0365	0.0674	0.0382	0.0844		0.0613
5/23/2017	0.0436		0.0254					0.068
5/24/2017				0.0668	0.0377	0.0784		
8/10/2017	0.0419		0.0396	0.067	0.0385	0.0903		0.0638
11/14/2017	0.0407		0.0385	0.0643	0.039	0.083		0.07
6/6/2018	0.043		0.043	0.068	0.039	0.095		
6/7/2018								0.059
10/2/2018				0.066	0.038	0.089		
10/3/2018	0.041		0.04					0.056
8/22/2019	0.043		0.036	0.066				0.052
8/23/2019					0.038	0.088		
10/22/2019					0.039	0.087		0.054
10/23/2019	0.043	0.037	0.039	0.066				
1/3/2020		0.036						
3/4/2020		0.033						
3/24/2020		0.024						
3/25/2020	0.038		0.036	0.074	0.037	0.084		0.06
6/18/2020		0.029						
7/21/2020		0.028						
8/26/2020								0.056
8/27/2020	0.045	0.028	0.038	0.068	0.034	0.083		
9/24/2020	0.041	0.029	0.036	0.075	0.039			
9/25/2020						0.085		
9/28/2020								0.046
3/17/2021	0.04	0.031				0.077		
3/18/2021			0.042	0.082	0.041			0.067
8/12/2021							0.079	
8/13/2021		0.026		0.073	0.033	0.08		0.043
8/16/2021	0.037		0.037					
9/27/2021							0.062	
2/2/2022	0.036	0.029	0.036		0.034	0.072		
2/3/2022				0.093			0.049	0.047
8/5/2022		0.031	0.037	0.088	0.036	0.085	0.055	0.039
8/10/2022	0.04							
1/25/2023	0.033	0.027	0.032	0.094	0.035	0.076	0.05	0.048
8/11/2023	0.036	0.028	0.035	0.089	0.032	0.081	0.046	0.04
2/16/2024	0.032	0.026	0.031		0.033			
2/17/2024				0.085		0.078	0.047	0.05
8/9/2024		0.029	0.032					0.037
8/10/2024	0.033			0.083	0.033	0.076	0.042	
Mean	0.04097	0.02944	0.03684	0.0751	0.03688	0.08302	0.05375	0.05389
Std. Dev.	0.005658	0.003502	0.004352	0.009941	0.002778	0.005601	0.01188	0.00967
Upper Lim.	0.04409	0.03172	0.03924	0.085	0.03841	0.08611	0.0658	0.05922
Lower Lim.	0.03785	0.02716	0.03444	0.0668	0.03535	0.07993	0.042	0.04855

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 10/16/2024 3:12 PM View: Confidence Intervals
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-101	HGWC-103	HGWC-118
8/31/2016	<0.0005	<0.0005	<0.0005
10/20/2016	<0.0005		<0.0005
10/24/2016		<0.0005	
1/31/2017	<0.0005	<0.0005	<0.0005
5/23/2017	7E-05 (J)	<0.0005	<0.0005
8/10/2017	<0.0005	<0.0005	<0.0005
11/14/2017	<0.0005	<0.0005	<0.0005
6/6/2018	5.9E-05 (J)	<0.0005	
6/7/2018			<0.0005
10/3/2018	6.5E-05 (J)	<0.0005	<0.0005
8/22/2019	<0.0005	<0.0005	<0.0005
10/22/2019			<0.0005
10/23/2019	7.5E-05 (J)	<0.0005	
3/25/2020	<0.0005	<0.0005	<0.0005
8/26/2020			<0.0005
8/27/2020	5.7E-05 (J)	5E-05 (J)	
9/24/2020	4.8E-05 (J)	8.8E-05 (J)	
9/28/2020			<0.0005
3/17/2021	5.9E-05 (J)		
3/18/2021		6.1E-05 (J)	9.3E-05 (J)
8/13/2021			<0.0005
8/16/2021	<0.0005	<0.0005	
2/2/2022	6.2E-05 (J)	7.7E-05 (J)	
2/3/2022			<0.0005
8/5/2022		<0.0005	<0.0005
8/10/2022	6.4E-05 (J)		
1/25/2023	<0.0005	<0.0005	<0.0005
8/11/2023	7E-05 (J)	<0.0005	<0.0005
2/16/2024	<0.0005	<0.0005	
2/17/2024			<0.0005
8/9/2024		<0.0005	<0.0005
8/10/2024	<0.0005		
Mean	0.0002919	0.0004179	0.0004806
Std. Dev.	0.0002238	0.0001735	8.881E-05
Upper Lim.	0.0005	0.0005	0.0005
Lower Lim.	6.2E-05	8.8E-05	9.3E-05

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 10/16/2024 3:12 PM View: Confidence Intervals
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-101	HGWC-102	HGWC-103	HGWC-107	HGWC-117A
8/31/2016	0.0002 (J)		0.0006 (J)	0.0001 (J)	
10/20/2016	0.0003 (J)				
10/24/2016			0.0008 (J)		
10/25/2016				8E-05 (J)	
1/31/2017	0.0001 (J)		0.0006 (J)	9E-05 (J)	
5/23/2017	0.0002 (J)		0.0006 (J)		
5/24/2017				0.0001 (J)	
8/10/2017	0.0002 (J)		0.0007 (J)	<0.0005	
11/14/2017	<0.0005		0.0007 (J)	<0.0005	
6/6/2018	9.5E-05 (J)		0.00073 (J)	0.00012 (J)	
10/2/2018				0.0001 (J)	
10/3/2018	0.00018 (J)		0.00078 (J)		
8/22/2019	0.00014 (J)		0.0008 (J)		
8/23/2019				0.00011 (J)	
10/22/2019				<0.0005	
10/23/2019	0.0002 (J)	0.00026 (J)	0.00091 (J)		
1/3/2020		0.0002 (J)			
3/4/2020		0.00026 (J)			
3/24/2020		0.00068 (J)			
3/25/2020	0.00014 (J)		0.00068 (J)	<0.0005	
6/18/2020		0.00047 (J)			
7/21/2020		0.00083 (J)			
8/27/2020	0.00019 (J)	0.00038 (J)	0.00082 (J)	<0.0005	
9/24/2020	0.00014 (J)	0.00032 (J)	0.00076 (J)	<0.0005	
3/17/2021	<0.0005	0.00094			
3/18/2021			0.00068	<0.0005	
8/12/2021					0.00016 (J)
8/13/2021		0.00069		<0.0005	
8/16/2021	0.00015 (J)		0.00081		
9/27/2021					<0.0005
2/2/2022	<0.0005	0.00055	0.0008	<0.0005	
2/3/2022					<0.0005
8/5/2022		0.00044 (J)	0.00081	<0.0005	<0.0005
8/10/2022	0.00011 (J)				
1/25/2023	0.00011 (J)	0.00035 (J)	0.00063	<0.0005	<0.0005
8/11/2023	0.00015 (J)	0.00067	0.0007	<0.0005	<0.0005
2/16/2024	0.00016 (J)	0.00031 (J)	0.00074	<0.0005	
2/17/2024					<0.0005
8/9/2024		0.00043 (J)	0.00078		
8/10/2024	0.00014 (J)			<0.0005	<0.0005
Mean	0.000174	0.0004863	0.0007348	0.0003667	0.0004575
Std. Dev.	5.571E-05	0.000219	8.424E-05	0.0001933	0.0001202
Upper Lim.	0.0002048	0.0006287	0.0007812	0.0005	0.0005
Lower Lim.	0.0001433	0.0003438	0.0006883	0.00011	0.00016

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 10/16/2024 3:12 PM View: Confidence Intervals
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-101	HGWC-102	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-118
8/31/2016	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
10/20/2016	<0.005						<0.005
10/24/2016			<0.005				
10/25/2016				<0.005	<0.005	<0.005	
1/31/2017	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
5/23/2017	0.0006 (J)		<0.005				<0.005
5/24/2017				<0.005	<0.005	<0.005	
8/10/2017	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
11/14/2017	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
6/6/2018	<0.005		<0.005	<0.005	<0.005	<0.005	
6/7/2018							<0.005
10/2/2018				<0.005	<0.005	<0.005	
10/3/2018	<0.005		<0.005				<0.005
8/22/2019	0.00064 (J)		0.00063 (J)	<0.005			<0.005
8/23/2019					<0.005	<0.005	
10/22/2019					<0.005	0.00062 (J)	0.00066 (J)
10/23/2019	<0.005	<0.005	0.0015 (J)	0.0004 (J)			
1/3/2020		0.00063 (J)					
3/4/2020		<0.005					
3/24/2020		0.00051 (J)					
3/25/2020	0.00098 (J)		0.00045 (J)	0.0013 (J)	0.00074 (J)	0.0014 (J)	0.00081 (J)
6/18/2020		<0.005					
7/21/2020		<0.005					
8/26/2020							0.00098 (J)
8/27/2020	<0.005	<0.005	0.00069 (J)	<0.005	<0.005	<0.005	
9/24/2020	<0.005	<0.005	0.00081 (J)	0.00064 (J)	<0.005		
9/25/2020						<0.005	
9/28/2020							0.0017 (J)
3/17/2021	0.00075 (J)	<0.005				<0.005	
3/18/2021			0.003 (J)	0.00058 (J)	<0.005		0.0021 (J)
8/13/2021		<0.005		<0.005	<0.005	<0.005	<0.005
8/16/2021	<0.005		<0.005				
2/2/2022	<0.005	<0.005	0.0013 (J)		<0.005	<0.005	
2/3/2022				<0.005			<0.005
8/5/2022		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/10/2022	<0.005						
1/25/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/11/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2/16/2024	<0.005	<0.005	<0.005		<0.005		
2/17/2024				<0.005		<0.005	<0.005
8/9/2024		<0.005	<0.005				<0.005
8/10/2024	<0.005			<0.005	<0.005	<0.005	
Mean	0.004189	0.004446	0.003732	0.004187	0.004797	0.00462	0.004107
Std. Dev.	0.001714	0.001513	0.001899	0.001725	0.0009296	0.001206	0.00166
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.00098	0.00063	0.0013	0.0013	0.00074	0.0014	0.0021

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 10/16/2024 3:12 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-101	HGWC-102	HGWC-103	HGWC-105	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	0.0033 (J)		0.0018 (J)	0.0014 (J)	0.0023 (J)		<0.005
10/20/2016	0.0025 (J)						<0.005
10/24/2016			0.0018 (J)				
10/25/2016				0.0013 (J)	0.0017 (J)		
1/31/2017	0.001 (J)		0.0016 (J)	0.0006 (J)	0.0017 (J)		<0.005
5/23/2017	0.0025 (J)		0.0014 (J)				0.0005 (J)
5/24/2017				0.0007 (J)	0.002 (J)		
8/10/2017	0.0029 (J)		0.0025 (J)	0.0006 (J)	0.0012 (J)		0.0003 (J)
11/14/2017	0.003 (J)		0.002 (J)	0.0005 (J)	0.0014 (J)		0.0004 (J)
6/6/2018	0.0016 (J)		0.0031 (J)	0.00056 (J)	0.0014 (J)		
6/7/2018							<0.005
10/2/2018				<0.005	0.00081 (J)		
10/3/2018	0.0028 (J)		0.0023 (J)				<0.005
8/22/2019	<0.005		0.0019 (J)	<0.005			0.0003 (J)
8/23/2019					0.0027 (J)		
10/22/2019					0.0022 (J)		0.00061 (J)
10/23/2019	0.0023 (J)	0.0018 (J)	0.0021 (J)	0.00038 (J)			
1/3/2020		0.0038 (J)					
3/4/2020		0.0021 (J)					
3/24/2020		0.0019 (J)					
3/25/2020	0.0021 (J)		0.0022 (J)	0.00047 (J)	0.0022 (J)		<0.005
6/18/2020		0.0012 (J)					
7/21/2020		0.00098 (J)					
8/26/2020							0.00061 (J)
8/27/2020	0.0027 (J)	0.001 (J)	0.0019 (J)	<0.005	0.00086 (J)		
9/24/2020	0.0021 (J)	0.0011 (J)	0.0019 (J)	0.00044 (J)			
9/25/2020					0.001 (J)		
9/28/2020							0.00048 (J)
3/17/2021	0.0023 (J)	0.0012 (J)			0.003 (J)		
3/18/2021			0.0021 (J)	0.00045 (J)			0.0012 (J)
8/12/2021						0.0024 (J)	
8/13/2021		0.00085 (J)		<0.005	0.0011 (J)		<0.005
8/16/2021	0.0026 (J)		0.0022 (J)				
9/27/2021						0.0011 (J)	
2/2/2022	0.0027 (J)	0.0019 (J)	0.0022 (J)		0.002 (J)		
2/3/2022				<0.005		0.00041 (J)	0.00045 (J)
8/5/2022		0.001 (J)	0.0021 (J)	<0.005	0.0008 (J)	0.0011 (J)	<0.005
8/10/2022	0.0028 (J)						
1/25/2023	0.0021 (J)	0.0016 (J)	0.0017 (J)	0.00046 (J)	0.0016 (J)	0.00048 (J)	<0.005
8/11/2023	0.0028 (J)	0.001 (J)	0.0019 (J)	0.00047 (J)	0.00077 (J)	0.00078 (J)	<0.005
2/16/2024	0.0026 (J)	0.0011 (J)	0.002 (J)				
2/17/2024				0.00071 (J)	0.0011 (J)	0.00047 (J)	0.00042 (J)
8/9/2024		0.00094 (J)	0.002 (J)				<0.005
8/10/2024	0.0025 (J)			0.00052 (J)	0.0005 (J)	0.00081 (J)	
Mean	0.002462	0.001467	0.002033	0.001884	0.00154	0.0009438	0.00287
Std. Dev.	0.0005005	0.0007443	0.0003469	0.002036	0.0006876	0.0006479	0.002296
Upper Lim.	0.002738	0.0019	0.002225	0.005	0.001919	0.00155	0.005
Lower Lim.	0.002186	0.00098	0.001842	0.00047	0.001161	0.0003807	0.00045

Confidence Interval

Constituent: Combined Radium 226 & 228 (pCi/L) Analysis Run 10/16/2024 3:12 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-101	HGWC-102	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	0.621 (U)		1.62	0.906 (U)	1.2	1.03		
10/20/2016	1.4							1.97
10/24/2016			1.01 (U)					
10/25/2016				1.03	1.11 (U)	1.07		
1/31/2017	0.906 (U)		0.976 (U)	0.868 (U)	1.45	0.588 (U)		1.03
5/23/2017	0.388 (U)		0.891 (U)					0.398 (U)
5/24/2017				0.728 (U)	0.393 (U)	0.593 (U)		
8/10/2017	1.03 (U)		0.601 (U)	1.35	0.84 (U)	0.691 (U)		0.938 (U)
11/14/2017	0.769 (U)		0.567 (U)	0.817 (U)	1.01 (U)	0.653 (U)		0.335 (U)
6/6/2018	1.28 (U)		0.836 (U)	0.559 (U)	0.365 (U)	0.939 (U)		
6/7/2018								0.696 (U)
10/2/2018				0.336 (U)	1.23	0.225 (U)		
10/3/2018	0.302 (U)		0.111 (U)					1.6 (U)
8/22/2019	0.474 (U)		0.946 (U)	0.694 (U)				0.904 (U)
8/23/2019					1.69	0.47 (U)		
10/22/2019					0.705 (U)	0.545 (U)		0.424 (U)
10/23/2019	0.776 (U)	0.858 (U)	0.571 (U)	0.584 (U)				
1/22/2020		1.04 (U)						
3/4/2020		1.32						
3/24/2020		1.23 (U)						
3/25/2020	0.603 (U)		0.403 (U)	0.663 (U)	0.673 (U)	0.508 (U)		0.915 (U)
7/21/2020		0.0938 (U)						
8/26/2020								1.19
8/27/2020	0.109 (U)	1.17 (U)	0.37 (U)	0.416 (U)	0.264 (U)	0.989 (U)		
9/24/2020	0.625 (U)	1.42	0.804 (U)	1.11 (U)	0.576 (U)			
9/25/2020						0.584 (U)		
9/28/2020								0.613 (U)
3/17/2021	0.248 (U)	0.401 (U)				0.556 (U)		
3/18/2021			0.274 (U)	0.252 (U)	0.145 (U)			0.323 (U)
8/12/2021							0.124 (U)	
8/13/2021		0.828 (U)		0.513 (U)	0.815 (U)	0.794 (U)		0.228 (U)
8/16/2021	0.667 (U)		0.493 (U)					
9/27/2021							1.05 (U)	
2/1/2022	0.162 (U)	0.806 (U)	0.569 (U)		0.0564 (U)	0.542 (U)		
2/3/2022				0.835			0.499 (U)	0.5 (U)
8/5/2022		0.618 (U)	0.205 (U)	0.139 (U)	0.917 (U)	0.22 (U)	0 (U)	0.206 (U)
8/10/2022	0.601 (U)							
1/25/2023	0.419 (U)	0.513 (U)	0.568 (U)	0.432 (U)	0.71 (U)	0.195 (U)	0.595 (U)	1.44
8/11/2023	0.93 (U)	1.08	0.849 (U)	0.292 (U)	0.314 (U)	0.105 (U)	0.822 (U)	0.806 (U)
2/16/2024	0.344 (U)	0.498 (U)	0.81 (U)		0.845 (U)			
2/17/2024				0.888 (U)		0.388 (U)	0.629 (U)	0 (U)
8/9/2024		0.604 (U)	0.378 (U)					0.421 (U)
8/10/2024	0.817 (U)			0.693 (U)	0.223 (U)	0.5 (U)	0.723 (U)	
Mean	0.6415	0.832	0.6596	0.6717	0.7396	0.5802	0.5553	0.7469
Std. Dev.	0.3443	0.3784	0.3421	0.3048	0.4426	0.2735	0.3482	0.5107
Upper Lim.	0.8314	1.088	0.8483	0.8398	0.9837	0.7311	0.9243	1.037
Lower Lim.	0.4516	0.5756	0.4709	0.5035	0.4954	0.4294	0.1862	0.4568

Confidence Interval

Constituent: Fluoride, total (mg/L) Analysis Run 10/16/2024 3:12 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-101	HGWC-102	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	0.05 (J)		0.06 (J)	0.15 (J)	0.08 (J)	0.12 (J)		0.18 (J)
10/20/2016	0.03 (J)							0.12 (J)
10/24/2016			0.13 (J)					
10/25/2016				0.09 (J)	0.16 (J)	0.17 (J)		
1/31/2017	<0.1		<0.1	0.13 (J)	0.16 (J)	0.05 (J)		0.3
5/23/2017	<0.1		0.15 (J)					0.14 (J)
5/24/2017				0.07 (J)	0.009 (J)	0.13 (J)		
8/10/2017	<0.1		<0.1	0.03 (J)	<0.1	0.12 (J)		0.11 (J)
11/14/2017	<0.1		<0.1	<0.1	<0.1	<0.3		0.07 (J)
6/6/2018	<0.1		<0.1	0.074 (J)	0.057 (J)	0.15 (J)		
6/7/2018								0.3
10/2/2018				<0.1	<0.1	<0.3		
10/3/2018	<0.1		<0.1					0.12 (J)
4/3/2019					<0.1	0.05 (J)		
4/4/2019	<0.1		0.042 (J)	0.03 (J)				
4/5/2019								0.33
6/18/2019								0.89
8/22/2019	<0.1		<0.1	<0.1				0.07 (J)
8/23/2019					<0.1	0.034 (J)		
10/22/2019					0.047 (J)	0.099 (J)		0.087 (J)
10/23/2019	<0.1	0.22 (J)	<0.1	<0.1				
1/3/2020		<0.1						
3/4/2020		<0.1						
3/24/2020		<0.1						
3/25/2020	<0.1		<0.1	<0.1	<0.1	0.075 (J)		0.078 (J)
6/18/2020		<0.1						
7/21/2020		<0.1						
8/26/2020								0.072 (J)
8/27/2020	<0.1	<0.1	<0.1	<0.1	<0.1	0.094 (J)		
9/24/2020	<0.1	<0.1	<0.1	<0.1	0.064 (J)			
9/25/2020						0.091 (J)		
9/28/2020								0.078 (J)
3/17/2021	<0.1	<0.1				0.089 (J)		
3/18/2021			<0.1	<0.1	<0.1			0.079 (J)
8/12/2021							<0.1	
8/13/2021		<0.1		<0.1	<0.1	0.086 (J)		0.075 (J)
8/16/2021	<0.1		<0.1					
9/27/2021							<0.1	
2/2/2022	<0.1	<0.1	<0.1		<0.1	0.086 (J)		
2/3/2022				<0.1			0.056 (J)	0.069 (J)
8/5/2022		0.076 (J)	0.071 (J)	0.075 (J)	0.093 (J)	0.14	0.12	0.12
8/10/2022	0.065 (J)							
1/25/2023	<0.1	<0.1	<0.1	0.051 (J)	0.054 (J)	0.12	0.085 (J)	0.095 (J)
8/11/2023	<0.1	<0.1	<0.1	<0.1	<0.1	0.086 (J)	0.057 (J)	0.07 (J)
2/16/2024	<0.1	<0.1	<0.1		<0.1			
2/17/2024				<0.1		0.094 (J)	0.055 (J)	0.068 (J)
8/9/2024		0.067 (J)	0.077 (J)					0.11
8/10/2024	0.068 (J)			0.066 (J)	0.069 (J)	0.13	0.1	
Mean	0.0915	0.1039	0.09682	0.08936	0.09059	0.1052	0.08413	0.1579
Std. Dev.	0.01959	0.03247	0.02128	0.02809	0.0331	0.03602	0.02513	0.178
Upper Lim.	0.1	0.22	0.13	0.1	0.1	0.1245	0.102	0.14
Lower Lim.	0.068	0.076	0.077	0.074	0.069	0.08585	0.05154	0.072

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 10/16/2024 3:12 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-101	HGWC-102	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-118
8/31/2016	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
10/20/2016	<0.001						<0.001
10/24/2016			<0.001				
10/25/2016				<0.001	<0.001	<0.001	
1/31/2017	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
5/23/2017	0.0009 (J)		<0.001				<0.001
5/24/2017				<0.001	<0.001	<0.001	
8/10/2017	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
11/14/2017	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
6/6/2018	<0.001		<0.001	<0.001	<0.001	<0.001	
6/7/2018							<0.001
10/2/2018				<0.001	<0.001	<0.001	
10/3/2018	<0.001		<0.001				<0.001
8/22/2019	<0.001		<0.001	<0.001			<0.001
8/23/2019					<0.001	5.8E-05 (J)	
10/22/2019					7.9E-05 (J)	5.4E-05 (J)	0.00025 (J)
10/23/2019	<0.001	<0.001	0.00043 (J)	6.8E-05 (J)			
1/3/2020		<0.001					
3/4/2020		0.00011 (J)					
3/24/2020		<0.001					
3/25/2020	<0.001		7.6E-05 (J)	8.5E-05 (J)	0.00021 (J)	<0.001	0.0001 (J)
6/18/2020		<0.001					
7/21/2020		<0.001					
8/26/2020							0.00036 (J)
8/27/2020	<0.001	<0.001	0.00018 (J)	<0.001	<0.001	<0.001	
9/24/2020	<0.001	<0.001	0.00028 (J)	4.9E-05 (J)	0.00034 (J)		
9/25/2020						<0.001	
9/28/2020							0.00022 (J)
3/17/2021	<0.001	<0.001				<0.001	
3/18/2021			0.00024 (J)	5.8E-05 (J)	9.1E-05 (J)		0.00088 (J)
8/13/2021		<0.001		<0.001	<0.001	<0.001	<0.001
8/16/2021	<0.001		<0.001				
2/2/2022	<0.001	<0.001	<0.001		<0.001	<0.001	
2/3/2022				<0.001			<0.001
8/5/2022		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/10/2022	<0.001						
1/25/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/11/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2/16/2024	<0.001	<0.001	0.00027 (J)		<0.001		
2/17/2024				<0.001		<0.001	<0.001
8/9/2024		<0.001	<0.001				<0.001
8/10/2024	<0.001			<0.001	<0.001	<0.001	
Mean	0.0009952	0.0009444	0.0007846	0.0008219	0.0008438	0.0009101	0.0008481
Std. Dev.	2.182E-05	0.0002225	0.0003539	0.0003763	0.0003333	0.0002839	0.0003099
Upper Lim.	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Lower Lim.	0.0009	0.00011	0.00028	8.5E-05	0.00034	5.8E-05	0.00088

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 10/16/2024 3:12 PM View: Confidence Intervals
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-102	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016		<0.03	0.0034 (J)	<0.03	<0.03		<0.03
10/20/2016							<0.03
10/24/2016		<0.03					
10/25/2016			0.0043 (J)	<0.03	<0.03		
1/31/2017		<0.03	0.0042 (J)	<0.03	<0.03		<0.03
5/23/2017		0.0012 (J)					0.0012 (J)
5/24/2017			0.0039 (J)	<0.03	0.0012 (J)		
8/10/2017		0.0016 (J)	0.004 (J)	<0.03	<0.03		<0.03
11/14/2017		0.0015 (J)	0.0044 (J)	<0.03	<0.03		<0.03
6/6/2018		0.0017 (J)	0.0041 (J)	0.00099 (J)	0.0013 (J)		
6/7/2018							0.0015 (J)
10/2/2018			0.0041 (J)	<0.03	0.0013 (J)		
10/3/2018		0.0016 (J)					<0.03
8/22/2019		0.0015 (J)	0.004 (J)				0.0018 (J)
8/23/2019				0.00092 (J)	0.0009 (J)		
10/22/2019				0.00094 (J)	0.00088 (J)		0.0027 (J)
10/23/2019	0.0012 (J)	0.002 (J)	0.0039 (J)				
1/3/2020	0.0011 (J)						
3/4/2020	0.0013 (J)						
3/24/2020	0.00084 (J)						
3/25/2020		0.0016 (J)	0.0041 (J)	0.00091 (J)	<0.03		0.0017 (J)
6/18/2020	0.0013 (J)						
7/21/2020	0.0013 (J)						
8/26/2020							0.0028 (J)
8/27/2020	0.0011 (J)	0.0016 (J)	0.0037 (J)	<0.03	0.0011 (J)		
9/24/2020	0.0011 (J)	0.0017 (J)	0.0038 (J)	0.00098 (J)			
9/25/2020					0.001 (J)		
9/28/2020							0.0022 (J)
3/17/2021	0.0012 (J)				<0.03		
3/18/2021		0.0018 (J)	0.0042 (J)	0.0011 (J)			0.0029 (J)
8/12/2021						0.0036 (J)	
8/13/2021	0.0011 (J)		0.0038 (J)	0.00084 (J)	<0.03		0.0017 (J)
8/16/2021		0.0016 (J)					
9/27/2021						0.0035 (J)	
2/2/2022	0.0013 (J)	0.0019 (J)		0.001 (J)	0.00084 (J)		
2/3/2022			0.0046 (J)			0.0051 (J)	0.0015 (J)
8/5/2022	0.0013 (J)	0.0014 (J)	0.0039 (J)	0.00082 (J)	0.00087 (J)	0.0038 (J)	0.0018 (J)
1/25/2023	0.001 (J)	0.0012 (J)	0.0038 (J)	0.00081 (J)	<0.03	0.0037 (J)	0.001 (J)
8/11/2023	0.0013 (J)	0.0014 (J)	0.0044 (J)	0.00083 (J)	0.00076 (J)	0.0041 (J)	0.0023 (J)
2/16/2024	<0.03	<0.03		<0.03			
2/17/2024			0.0041 (J)		<0.03	0.0038 (J)	<0.03
8/9/2024	<0.03	<0.03					0.0019 (J)
8/10/2024			0.0047 (J)	<0.03	<0.03	0.0041 (J)	
Mean	0.002902	0.008348	0.004067	0.01477	0.0162	0.003963	0.01129
Std. Dev.	0.004724	0.0124	0.0003071	0.01488	0.01483	0.0005069	0.01357
Upper Lim.	0.015	0.002	0.004236	0.03	0.03	0.0051	0.03
Lower Lim.	0.0011	0.0015	0.003897	0.00091	0.0009	0.0035	0.0017

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 10/16/2024 3:12 PM View: Confidence Intervals
 Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-101	HGWC-102	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
10/20/2016	<0.0002							<0.0002
10/24/2016			<0.0002					
10/25/2016				<0.0002	<0.0002	<0.0002		
1/31/2017	9.3E-05 (J)		8E-05 (J)	<0.0002	<0.0002	8E-05 (J)		9E-05 (J)
5/23/2017	<0.0002		<0.0002					<0.0002
5/24/2017				<0.0002	<0.0002	<0.0002		
8/10/2017	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
11/14/2017	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
6/6/2018	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		
6/7/2018								<0.0002
10/2/2018				<0.0002	<0.0002	<0.0002		
10/3/2018	<0.0002		<0.0002					<0.0002
8/22/2019	<0.0002		<0.0002	<0.0002				<0.0002
8/23/2019					<0.0002	<0.0002		
10/23/2019		<0.0002						
1/3/2020		<0.0002						
3/4/2020		<0.0002						
3/24/2020		<0.0002						
6/18/2020		<0.0002						
7/21/2020		<0.0002						
8/26/2020								<0.0002
8/27/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
9/24/2020		<0.0002						
8/12/2021							9.4E-05 (J)	
8/13/2021		0.0001 (J)		0.00022	8.4E-05 (J)	8E-05 (J)		8.1E-05 (J)
8/16/2021	9.9E-05 (J)		0.00027					
9/27/2021							<0.0002	
2/2/2022	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002		
2/3/2022				<0.0002			<0.0002	<0.0002
8/5/2022		<0.0002	0.00017 (J)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/10/2022	<0.0002							
1/25/2023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/11/2023	<0.0002	<0.0002	0.00025	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/16/2024	<0.0002	<0.0002	<0.0002		<0.0002			
2/17/2024				<0.0002		<0.0002	<0.0002	<0.0002
8/9/2024		<0.0002	<0.0002					<0.0002
8/10/2024	<0.0002			<0.0002	<0.0002	<0.0002	<0.0002	
Mean	0.0001878	0.0001933	0.0001982	0.0002012	0.0001932	0.0001859	0.0001867	0.0001865
Std. Dev.	3.456E-05	2.582E-05	3.762E-05	4.851E-06	2.813E-05	3.985E-05	3.748E-05	3.806E-05
Upper Lim.	0.0002	0.0002	0.00025	0.00022	0.0002	0.0002	0.0002	0.0002
Lower Lim.	9.9E-05	0.0001	0.00017	0.0002	8.4E-05	8E-05	9.4E-05	9E-05

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 10/16/2024 3:12 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-102
10/23/2019	<0.005
1/3/2020	0.0015 (J)
3/4/2020	<0.005
3/24/2020	<0.005
6/18/2020	<0.005
7/21/2020	<0.005
8/27/2020	<0.005
9/24/2020	<0.005
8/13/2021	<0.005
2/2/2022	<0.005
8/5/2022	<0.005
1/25/2023	<0.005
8/11/2023	<0.005
2/16/2024	<0.005
8/9/2024	<0.005
Mean	0.004767
Std. Dev.	0.0009037
Upper Lim.	0.005
Lower Lim.	0.0015

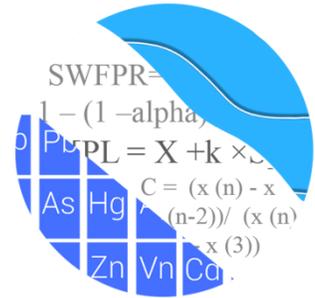
Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 10/16/2024 3:13 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-4

	HGWC-102
10/23/2019	<0.001
1/3/2020	8E-05 (J)
3/4/2020	<0.001
3/24/2020	<0.001
6/18/2020	<0.001
7/21/2020	<0.001
8/27/2020	<0.001
9/24/2020	<0.001
8/13/2021	<0.001
2/2/2022	<0.001
8/5/2022	<0.001
1/25/2023	<0.001
8/11/2023	<0.001
2/16/2024	<0.001
8/9/2024	<0.001
Mean	0.0009387
Std. Dev.	0.0002375
Upper Lim.	0.001
Lower Lim.	8E-05

February 2025

GROUNDWATER STATS CONSULTING



July 31, 2025

Southern Company Services
Attn: Ms. Kristen Jurinko
241 Ralph McGill Blvd. NE, Bin 10160
Atlanta, Georgia 30308

Re: Plant Hammond Ash Pond 4 (AP-4)
February 2025 Semi-Annual Statistical Analysis

Dear Ms. Jurinko,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the February 2025 Semi-Annual Groundwater Detection and Assessment Monitoring Statistical summary of groundwater data for Georgia Power Company's Plant Hammond AP-4. 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 Hammond AP-4 in 2016, and at least 8 background samples have been collected at each of the groundwater monitoring wells analyzed in this report. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient well:** HGWA-47, HGWA-48D, HGWA-111, HGWA-112, and HGWA-113
- **Downgradient wells:** HGWC-101, HGWC-102, HGWC-103, HGWC-105, HGWC-107, HGWC-109, HGWC-117A, and HGWC-118

Note that downgradient well HGWC-102 was first sampled in October 2019 and has at least 8 samples; therefore, data from this well are evaluated in this analysis. Upgradient wells HGWA-47 and HGWA-48D were first sampled in September 2020 and also have at

least 8 samples. Upgradient well data are included in construction of interwell prediction limits and upper tolerance limits when a minimum of 2 samples is available. Downgradient wells are evaluated with prediction limits for Appendix III constituents and with confidence intervals for Appendix IV constituents once a minimum of 8 samples is available.

Piezometer HGWC-117A was reclassified as a downgradient well and was first sampled in February 2021. This well is evaluated in this analysis for Appendix III and IV constituents.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Kristina Rayner, Founder and Senior Statistician of Groundwater Stats Consulting. In 2024, Georgia Power Company completed a data audit and migration of all CCR related groundwater data to the EarthSoft EQulS Database Management Program (EQulS). Data were then exported from EQulS to Groundwater Stats Consulting (GSC) for use in completing this statistical analysis. Georgia Power Company contracted an independent third-party consultant, Environmental Resources Management (ERM), to support the data audit and migration to EQulS. Based on the results of the audit and statistical analysis results from GSC, EQulS will now be used by Georgia Power Company and its third-party geologists and engineers for management of data imported by independent third-party laboratories and data exported by Georgia Power Company and its Consultants. The data will be used in preparation of report submittals, modeling, strategic planning, and other purposes appropriate and consistent with EQulS's data management and reporting tools and capabilities.

The Coal Combustion Residuals (CCR) program consists of the following constituents listed below. The terms "constituent" and "parameter" are interchangeable.

- **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **Appendix IV** (Assessment Monitoring) – antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, 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 Appendix IV downgradient well/constituent pairs with 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 limits of 0.030 mg/L, respectively, were substituted across all wells, which is the most recent reporting limit provided by the laboratory. In the case of selenium, varying

reporting limits were recorded for the February 2025 event; therefore, the most recent reporting limit of 0.005 mg/L was substituted across all wells.

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. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

Data at all wells were initially evaluated during the background screening described below 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 with the screening and demonstrated that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests 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 a 1-of-2 resample plan 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.

Note that values shown on data pages reflect raw data and any non-detects that have been substituted with one-half of the reporting limit will be shown as the original reporting limit.

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. No records were adjusted at this time.

Summary of Background Screening Conducted in April 2019

Outlier Analysis

Time series plots were used to identify suspected outliers or extreme values that would result in limits that are not representative of the current background data population. Suspected outliers at all wells for Appendix III and Appendix IV parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, a few outliers were identified. Often, when the most recent value is identified as an outlier, values are not flagged in the database at this time as they may represent a possible trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Several low values

exist in the data sets and appear on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values are observed trace values (i.e., measurements reported by the laboratory between the Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

Of the outliers identified by Tukey's method, only one outlier was flagged as all other values are similar to remaining measurements within a given well or neighboring wells, or were reported non-detects.

Additionally, when any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages display the flagged value in a lighter font as well. A substitution of the most recent reporting limit was applied when varying detection limits existed in data.

Seasonality

No obvious seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

Trend Tests

While trends may be identified by visual inspection, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at each well to identify statistically significant increasing or decreasing trends. In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, all available data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. When any records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

The results of the trend analyses were included with the screening and showed a few statistically significant decreasing and increasing trends for the Appendix III parameters. Because the noted trends were relatively low in magnitude when compared to average

concentrations and the background period was short, no adjustments were made to the datasets.

Appendix III – Determination of Spatial Variation

The Analysis of Variance (ANOVA) is typically used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach. However, interwell methods are currently implemented in accordance with the Georgia EPD regulations and are used to evaluate compliance samples in downgradient wells.

Statistical Evaluation of Appendix III Parameters – February 2025

All Appendix III parameters were analyzed using interwell prediction limits. Background (upgradient) well data were reassessed for potential outliers during this analysis. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. No additional values were flagged and a summary of previously flagged outliers follows this report (Figure C).

Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through February 2025 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The February 2025 sample from each downgradient well is compared to the background limit to determine whether 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 a resample confirms the initial exceedance, a statistically significant increase 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 and, therefore, no exceedance is noted and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance. A summary table of the interwell prediction limits follows this letter. Exceedances were identified for the following well/constituent pairs:

- Boron: HGWC-101, HGWC-102, HGWC-103, HGWC-105, HGWC-107, HGWC-109, and HGWC-118

- Calcium: HGWC-102, HGWC-103, HGWC-105, HGWC-117A, and HGWC-118
- Chloride: HGWC-102, HGWC-103, and HGWC-105
- Sulfate: HGWC-101, HGWC-102, HGWC-103, HGWC-105, HGWC-107, HGWC-109, HGWC-117A, and HGWC-118
- TDS: HGWC-102, HGWC-103, and HGWC-105

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 to determine whether concentrations are statistically increasing, decreasing, or stable at the 99% confidence level (Figure E). Upgradient wells 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. When trends are present in upgradient trends, it is 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: HGWC-101 and HGWC-103
- Calcium: HGWA-113 (upgradient), HGWC-103, HGWC-105, and HGWC-118
- Chloride: HGWC-103 and HGWC-105
- TDS: HGWC-103 and HGWC-105

Decreasing trends:

- Boron: HGWC-109
- Chloride: HGWA-113 (upgradient)
- Sulfate: HGWA-48D, HGWA-113 (both upgradient), HGWC-107, HGWC-109, and HGWC-118

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 (Maximum Containment Levels (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. The methods are described below.

Statistical Evaluation of Appendix IV Parameters – February 2025

For Appendix IV parameters, confidence intervals for each downgradient well/constituent pair were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Well/constituent pairs containing 100% non-detects do not require analysis. Data from upgradient wells for Appendix IV parameters are reassessed for outliers during each analysis. No additional values were flagged and a summary of previously flagged outliers follows this report (Figure C).

Interwell Upper Tolerance Limits

Interwell upper tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data through February 2025 for 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 constructed. As mentioned above, reporting limits of 0.030 mg/L and 0.005 mg/L and were substituted across all wells for lithium and selenium, 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 well (Figure H). As mentioned above, well/constituent pairs with 100% non-detects did not require statistics, which includes all downgradient wells for molybdenum.

The Sanitas software was used to calculate the confidence intervals. These intervals were constructed as either parametric or nonparametric confidence intervals 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 appropriate order statistics depending on the sample size, 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 achievable 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 downgradient 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. A summary of the confidence intervals follows this letter. When the entire records were evaluated, no exceedances were identified.

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. 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. Since no confidence interval exceedances were identified, no trend tests were required.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Hammond AP-4. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Andrew T. Collins
Project Manager



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Summary Tables

100% Non-Detects: Appendix IV Downgradient

Analysis Run 4/22/2025 7:54 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP4

Antimony (mg/L)

HGWC-101, HGWC-105, HGWC-109, HGWC-117A, HGWC-118

Arsenic (mg/L)

HGWC-105, HGWC-107, HGWC-117A

Beryllium (mg/L)

HGWC-102, HGWC-105, HGWC-107, HGWC-109, HGWC-117A

Cadmium (mg/L)

HGWC-105, HGWC-109, HGWC-118

Chromium (mg/L)

HGWC-117A

Cobalt (mg/L)

HGWC-107

Lead (mg/L)

HGWC-117A

Molybdenum (mg/L)

HGWC-101, HGWC-102, HGWC-103, HGWC-105, HGWC-107, HGWC-109, HGWC-117A, HGWC-118

Selenium (mg/L)

HGWC-101, HGWC-103, HGWC-107, HGWC-109, HGWC-117A, HGWC-118

Thallium (mg/L)

HGWC-101, HGWC-103, HGWC-105, HGWC-107, HGWC-109, HGWC-117A, HGWC-118

Appendix III Interwell Prediction Limits - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP4 Printed 4/22/2025, 7:46 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg	NB	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	HGWC-101	0.04	n/a	2/15/2025	0.21	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-102	0.04	n/a	2/15/2025	3.9	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-103	0.04	n/a	2/15/2025	5.8	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-105	0.04	n/a	2/16/2025	1.8	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-107	0.04	n/a	2/16/2025	1	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-109	0.04	n/a	2/16/2025	0.22	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-118	0.04	n/a	2/16/2025	0.76	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-102	73.8	n/a	2/15/2025	154	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-103	73.8	n/a	2/15/2025	170	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-105	73.8	n/a	2/16/2025	170	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-117A	73.8	n/a	2/16/2025	78.3	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-118	73.8	n/a	2/16/2025	94.9	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-102	5.7	n/a	2/15/2025	9	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-103	5.7	n/a	2/15/2025	9.3	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-105	5.7	n/a	2/16/2025	8.5	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-101	19.7	n/a	2/15/2025	98.7	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-102	19.7	n/a	2/15/2025	357	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-103	19.7	n/a	2/15/2025	425	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-105	19.7	n/a	2/16/2025	271	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-107	19.7	n/a	2/16/2025	110	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-109	19.7	n/a	2/16/2025	20.8	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-117A	19.7	n/a	2/16/2025	69.8	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-118	19.7	n/a	2/16/2025	66.8	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-102	345	n/a	2/15/2025	782	Yes	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-103	345	n/a	2/15/2025	866	Yes	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-105	345	n/a	2/16/2025	704	Yes	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2

Appendix III Interwell Prediction Limits - All Results

Plant Hammond Client: Southern Company Data: Hammond AP4 Printed 4/22/2025, 7:46 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg	NBq	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	HGWC-101	0.04	n/a	2/15/2025	0.21	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-102	0.04	n/a	2/15/2025	3.9	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-103	0.04	n/a	2/15/2025	5.8	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-105	0.04	n/a	2/16/2025	1.8	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-107	0.04	n/a	2/16/2025	1	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-109	0.04	n/a	2/16/2025	0.22	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-117A	0.04	n/a	2/16/2025	0.39J	No	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-118	0.04	n/a	2/16/2025	0.76	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-101	73.8	n/a	2/15/2025	24.8	No	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-102	73.8	n/a	2/15/2025	154	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-103	73.8	n/a	2/15/2025	170	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-105	73.8	n/a	2/16/2025	170	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-107	73.8	n/a	2/16/2025	67.9	No	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-109	73.8	n/a	2/16/2025	48.4	No	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-117A	73.8	n/a	2/16/2025	78.3	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-118	73.8	n/a	2/16/2025	94.9	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-101	5.7	n/a	2/15/2025	5.6	No	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-102	5.7	n/a	2/15/2025	9	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-103	5.7	n/a	2/15/2025	9.3	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-105	5.7	n/a	2/16/2025	8.5	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-107	5.7	n/a	2/16/2025	3.3	No	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-109	5.7	n/a	2/16/2025	4.2	No	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-117A	5.7	n/a	2/16/2025	5.2	No	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-118	5.7	n/a	2/16/2025	4.3	No	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-101	0.23	n/a	2/15/2025	0.1ND	No	95	n/a	n/a	n/a	18.95	n/a	n/a	0.0002148	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-102	0.23	n/a	2/15/2025	0.1ND	No	95	n/a	n/a	n/a	18.95	n/a	n/a	0.0002148	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-103	0.23	n/a	2/15/2025	0.1ND	No	95	n/a	n/a	n/a	18.95	n/a	n/a	0.0002148	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-105	0.23	n/a	2/16/2025	0.1ND	No	95	n/a	n/a	n/a	18.95	n/a	n/a	0.0002148	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-107	0.23	n/a	2/16/2025	0.1ND	No	95	n/a	n/a	n/a	18.95	n/a	n/a	0.0002148	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-109	0.23	n/a	2/16/2025	0.086J	No	95	n/a	n/a	n/a	18.95	n/a	n/a	0.0002148	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-117A	0.23	n/a	2/16/2025	0.057J	No	95	n/a	n/a	n/a	18.95	n/a	n/a	0.0002148	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-118	0.23	n/a	2/16/2025	0.065J	No	95	n/a	n/a	n/a	18.95	n/a	n/a	0.0002148	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-101	7.93	5.43	2/15/2025	5.5	No	96	n/a	n/a	n/a	0	n/a	n/a	0.0004208	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-102	7.93	5.43	2/15/2025	5.9	No	96	n/a	n/a	n/a	0	n/a	n/a	0.0004208	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-103	7.93	5.43	2/15/2025	5.73	No	96	n/a	n/a	n/a	0	n/a	n/a	0.0004208	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-105	7.93	5.43	2/16/2025	6.46	No	96	n/a	n/a	n/a	0	n/a	n/a	0.0004208	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-107	7.93	5.43	2/16/2025	6.27	No	96	n/a	n/a	n/a	0	n/a	n/a	0.0004208	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-109	7.93	5.43	2/16/2025	6.82	No	96	n/a	n/a	n/a	0	n/a	n/a	0.0004208	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-117A	7.93	5.43	2/16/2025	7.03	No	96	n/a	n/a	n/a	0	n/a	n/a	0.0004208	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-118	7.93	5.43	2/16/2025	7.12	No	96	n/a	n/a	n/a	0	n/a	n/a	0.0004208	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-101	19.7	n/a	2/15/2025	98.7	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-102	19.7	n/a	2/15/2025	357	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-103	19.7	n/a	2/15/2025	425	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-105	19.7	n/a	2/16/2025	271	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-107	19.7	n/a	2/16/2025	110	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-109	19.7	n/a	2/16/2025	20.8	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-117A	19.7	n/a	2/16/2025	69.8	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-118	19.7	n/a	2/16/2025	66.8	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-101	345	n/a	2/15/2025	241	No	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-102	345	n/a	2/15/2025	782	Yes	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-103	345	n/a	2/15/2025	866	Yes	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-105	345	n/a	2/16/2025	704	Yes	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-107	345	n/a	2/16/2025	275	No	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-109	345	n/a	2/16/2025	187	No	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-117A	345	n/a	2/16/2025	284	No	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-118	345	n/a	2/16/2025	323	No	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP4 Printed 4/22/2025, 7:51 PM

<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>Alpha</u>	<u>Method</u>
Boron (mg/L)	HGWC-101	0.01038	135	87	Yes	21	0	n/a	0.01	NP
Boron (mg/L)	HGWC-103	0.1975	138	92	Yes	22	0	n/a	0.01	NP
Boron (mg/L)	HGWC-109	-0.02748	-173	-92	Yes	22	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-113 (bg)	0.2137	116	87	Yes	21	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-103	7.623	153	92	Yes	22	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-105	8.419	197	92	Yes	22	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-118	0.9576	93	92	Yes	22	0	n/a	0.01	NP
Chloride (mg/L)	HGWA-113 (bg)	-0.04046	-95	-87	Yes	21	0	n/a	0.01	NP
Chloride (mg/L)	HGWC-103	0.422	147	92	Yes	22	0	n/a	0.01	NP
Chloride (mg/L)	HGWC-105	0.5027	159	87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	HGWA-48D (bg)	-0.5856	-57	-43	Yes	13	0	n/a	0.01	NP
Sulfate (mg/L)	HGWA-113 (bg)	-0.9155	-153	-87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-107	-1.936	-105	-92	Yes	22	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-109	-2.572	-155	-92	Yes	22	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-118	-2.181	-118	-92	Yes	22	0	n/a	0.01	NP
TDS (mg/L)	HGWC-103	30.23	107	92	Yes	22	0	n/a	0.01	NP
TDS (mg/L)	HGWC-105	34.25	157	92	Yes	22	0	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Hammond Client: Southern Company Data: Hammond AP4 Printed 4/22/2025, 7:51 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	HGWA-47 (bg)	0	17	43	No	13	53.85	n/a	0.01	NP
Boron (mg/L)	HGWA-48D (bg)	0.0009602	17	43	No	13	30.77	n/a	0.01	NP
Boron (mg/L)	HGWA-111 (bg)	0.0001412	43	87	No	21	38.1	n/a	0.01	NP
Boron (mg/L)	HGWA-112 (bg)	0	12	87	No	21	33.33	n/a	0.01	NP
Boron (mg/L)	HGWA-113 (bg)	0.0005957	46	87	No	21	23.81	n/a	0.01	NP
Boron (mg/L)	HGWC-101	0.01038	135	87	Yes	21	0	n/a	0.01	NP
Boron (mg/L)	HGWC-102	-0.01042	-8	-63	No	17	0	n/a	0.01	NP
Boron (mg/L)	HGWC-103	0.1975	138	92	Yes	22	0	n/a	0.01	NP
Boron (mg/L)	HGWC-105	0.01663	60	87	No	21	0	n/a	0.01	NP
Boron (mg/L)	HGWC-107	0.01764	83	92	No	22	0	n/a	0.01	NP
Boron (mg/L)	HGWC-109	-0.02748	-173	-92	Yes	22	0	n/a	0.01	NP
Boron (mg/L)	HGWC-118	-0.002094	-11	-87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-47 (bg)	-0.5433	-18	-43	No	13	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-48D (bg)	-0.5294	-17	-43	No	13	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-111 (bg)	1.456	48	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-112 (bg)	0.06471	67	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-113 (bg)	0.2137	116	87	Yes	21	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-102	3.704	42	63	No	17	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-103	7.623	153	92	Yes	22	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-105	8.419	197	92	Yes	22	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-117A	4.906	13	25	No	9	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-118	0.9576	93	92	Yes	22	0	n/a	0.01	NP
Chloride (mg/L)	HGWA-47 (bg)	0	-7	-43	No	13	0	n/a	0.01	NP
Chloride (mg/L)	HGWA-48D (bg)	0	-3	-43	No	13	0	n/a	0.01	NP
Chloride (mg/L)	HGWA-111 (bg)	0	-9	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	HGWA-112 (bg)	-0.02732	-44	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	HGWA-113 (bg)	-0.04046	-95	-87	Yes	21	0	n/a	0.01	NP
Chloride (mg/L)	HGWC-102	0.2001	43	63	No	17	0	n/a	0.01	NP
Chloride (mg/L)	HGWC-103	0.422	147	92	Yes	22	0	n/a	0.01	NP
Chloride (mg/L)	HGWC-105	0.5027	159	87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	HGWA-47 (bg)	-0.07749	-10	-43	No	13	0	n/a	0.01	NP
Sulfate (mg/L)	HGWA-48D (bg)	-0.5856	-57	-43	Yes	13	0	n/a	0.01	NP
Sulfate (mg/L)	HGWA-111 (bg)	-0.0259	-50	-87	No	21	0	n/a	0.01	NP
Sulfate (mg/L)	HGWA-112 (bg)	0.01769	34	87	No	21	23.81	n/a	0.01	NP
Sulfate (mg/L)	HGWA-113 (bg)	-0.9155	-153	-87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-101	-0.6805	-37	-92	No	22	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-102	-2.338	-7	-63	No	17	5.882	n/a	0.01	NP
Sulfate (mg/L)	HGWC-103	11.03	90	92	No	22	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-105	8.336	74	92	No	22	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-107	-1.936	-105	-92	Yes	22	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-109	-2.572	-155	-92	Yes	22	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-117A	0.01474	1	25	No	9	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-118	-2.181	-118	-92	Yes	22	0	n/a	0.01	NP
TDS (mg/L)	HGWA-47 (bg)	3.399	13	43	No	13	0	n/a	0.01	NP
TDS (mg/L)	HGWA-48D (bg)	1.133	9	43	No	13	0	n/a	0.01	NP
TDS (mg/L)	HGWA-111 (bg)	2.714	29	87	No	21	0	n/a	0.01	NP
TDS (mg/L)	HGWA-112 (bg)	0.313	6	81	No	20	0	n/a	0.01	NP
TDS (mg/L)	HGWA-113 (bg)	-0.1551	-6	-87	No	21	0	n/a	0.01	NP
TDS (mg/L)	HGWC-102	13.06	25	63	No	17	0	n/a	0.01	NP
TDS (mg/L)	HGWC-103	30.23	107	92	Yes	22	0	n/a	0.01	NP
TDS (mg/L)	HGWC-105	34.25	157	92	Yes	22	0	n/a	0.01	NP

Upper Tolerance Limits Summary Table

Plant Hammond Client: Southern Company Data: Hammond AP4 Printed 4/22/2025, 7:53 PM

<u>Constituent</u>	<u>Upper 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	78	n/a	n/a	94.87	n/a	n/a	0.0183	NP Inter(NDs)
Arsenic (mg/L)	0.005	92	n/a	n/a	94.57	n/a	n/a	0.008924	NP Inter(NDs)
Barium (mg/L)	0.12	92	n/a	n/a	0	n/a	n/a	0.008924	NP Inter(normality)
Beryllium (mg/L)	0.0019	92	n/a	n/a	92.39	n/a	n/a	0.008924	NP Inter(NDs)
Cadmium (mg/L)	0.0005	92	n/a	n/a	100	n/a	n/a	0.008924	NP Inter(NDs)
Chromium (mg/L)	0.0061	92	n/a	n/a	43.48	n/a	n/a	0.008924	NP Inter(normality)
Cobalt (mg/L)	0.005	92	n/a	n/a	91.3	n/a	n/a	0.008924	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.298	92	0.6077	0.356	0	None	No	0.05	Inter
Fluoride (mg/L)	0.23	95	n/a	n/a	18.95	n/a	n/a	0.007651	NP Inter(normality)
Lead (mg/L)	0.0016	92	n/a	n/a	76.09	n/a	n/a	0.008924	NP Inter(NDs)
Lithium (mg/L)	0.03	92	n/a	n/a	35.87	n/a	n/a	0.008924	NP Inter(normality)
Mercury (mg/L)	0.0002	78	n/a	n/a	84.62	n/a	n/a	0.0183	NP Inter(NDs)
Molybdenum (mg/L)	0.01	78	n/a	n/a	83.33	n/a	n/a	0.0183	NP Inter(NDs)
Selenium (mg/L)	0.005	78	n/a	n/a	79.49	n/a	n/a	0.0183	NP Inter(NDs)
Thallium (mg/L)	0.001	78	n/a	n/a	100	n/a	n/a	0.0183	NP Inter(NDs)

PLANT HAMMOND AP-4 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		0.12	2
Beryllium, Total (mg/L)	0.004		0.0019	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.0061	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.005	0.006
Combined Radium, Total (pCi/L)	5		1.30	5
Fluoride, Total (mg/L)	4		0.23	4
Lead, Total (mg/L)	n/a	0.015	0.0016	0.015
Lithium, Total (mg/L)	n/a	0.040	0.030	0.040
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

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Standard*

Appendix IV Confidence Intervals - All Results (No Significant)

Plant Hammond Client: Southern Company Data: Hammond AP4 Printed 4/22/2025, 7:59 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	HGWC-102	0.003	0.003	0.006	No 16	0.00286	0.00056	87.5	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-103	0.003	0.0022	0.006	No 18	0.002956	0.0001886	94.44	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-107	0.003	0.0011	0.006	No 18	0.002894	0.0004478	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-101	0.005	0.00039	0.01	No 22	0.00479	0.0009829	95.45	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-102	0.005	0.00092	0.01	No 17	0.003756	0.001991	70.59	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-103	0.005	0.0015	0.01	No 22	0.004841	0.0007462	95.45	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-109	0.002913	0.001598	0.01	No 22	0.002369	0.00136	13.64	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	HGWC-118	0.005	0.001	0.01	No 22	0.004818	0.0008528	95.45	None	No	0.01	NP (NDs)
Barium (mg/L)	HGWC-101	0.04378	0.03779	2	No 22	0.04079	0.005586	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-102	0.03194	0.02747	2	No 17	0.02971	0.003567	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-103	0.0395	0.03473	2	No 22	0.03712	0.004446	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-105	0.085	0.0668	2	No 22	0.07564	0.01003	0	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-107	0.03845	0.0355	2	No 22	0.03698	0.002748	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-109	0.08584	0.07993	2	No 22	0.08289	0.005504	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-117A	0.06284	0.04356	2	No 9	0.05322	0.01122	0	None	ln(x)	0.01	Param.
Barium (mg/L)	HGWC-118	0.05873	0.04851	2	No 22	0.05362	0.00952	0	None	No	0.01	Param.
Beryllium (mg/L)	HGWC-101	0.0005	0.000064	0.004	No 22	0.0003013	0.0002228	54.55	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-103	0.0005	0.000088	0.004	No 22	0.0004216	0.0001703	81.82	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-118	0.0005	0.000093	0.004	No 22	0.0004815	0.00008677	95.45	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-101	0.0002023	0.0001436	0.005	No 22	0.000173	0.00005461	13.64	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-102	0.000713	0.000344	0.005	No 17	0.0005518	0.0003434	0	None	sqrt(x)	0.01	Param.
Cadmium (mg/L)	HGWC-103	0.0007861	0.0006939	0.005	No 22	0.00074	0.0000858	0	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-107	0.0005	0.00011	0.005	No 22	0.0003727	0.0001908	68.18	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-117A	0.0005	0.00016	0.005	No 9	0.0004622	0.0001133	88.89	None	No	0.002	NP (NDs)
Chromium (mg/L)	HGWC-101	0.005	0.00098	0.1	No 22	0.004226	0.001682	81.82	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-102	0.005	0.00063	0.1	No 17	0.004479	0.001471	88.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-103	0.005	0.0015	0.1	No 22	0.00379	0.001873	68.18	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-105	0.005	0.0013	0.1	No 22	0.004224	0.001692	81.82	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-107	0.005	0.00074	0.1	No 22	0.004806	0.0009082	95.45	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-109	0.005	0.0014	0.1	No 22	0.004637	0.00118	90.91	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-118	0.005	0.0021	0.1	No 22	0.004148	0.001631	77.27	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-101	0.002736	0.002209	0.006	No 22	0.002473	0.000491	4.545	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-102	0.0021	0.00098	0.006	No 17	0.001528	0.000763	5.882	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-103	0.00223	0.001861	0.006	No 22	0.002045	0.0003433	0	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-105	0.005	0.00047	0.006	No 22	0.002025	0.002095	31.82	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-109	0.00196	0.001207	0.006	No 22	0.001584	0.0007015	4.545	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-117A	0.001777	0.0004569	0.006	No 9	0.001117	0.0007978	11.11	None	x^(1/3)	0.01	Param.
Cobalt (mg/L)	HGWC-118	0.005	0.00048	0.006	No 22	0.002967	0.002286	54.55	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	HGWC-101	0.8107	0.4423	5	No 22	0.6265	0.3433	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-102	1.043	0.5972	5	No 17	0.8202	0.356	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-103	0.8268	0.4583	5	No 22	0.6425	0.3433	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-105	0.8213	0.4947	5	No 22	0.658	0.3042	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-107	0.958	0.4859	5	No 22	0.722	0.4397	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-109	0.7392	0.446	5	No 22	0.5926	0.2731	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-117A	0.8769	0.2469	5	No 9	0.5619	0.3263	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-118	1.03	0.4793	5	No 21	0.7546	0.4991	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-101	0.1	0.068	4	No 23	0.09187	0.01922	82.61	None	No	0.01	NP (NDs)
Fluoride (mg/L)	HGWC-102	0.22	0.076	4	No 17	0.1037	0.03146	82.35	None	No	0.01	NP (NDs)
Fluoride (mg/L)	HGWC-103	0.13	0.077	4	No 23	0.09696	0.0208	73.91	None	No	0.01	NP (NDs)
Fluoride (mg/L)	HGWC-105	0.1	0.074	4	No 23	0.08983	0.02753	56.52	None	No	0.01	NP (NDs)
Fluoride (mg/L)	HGWC-107	0.1	0.069	4	No 23	0.091	0.0324	56.52	None	No	0.01	NP (NDs)
Fluoride (mg/L)	HGWC-109	0.1229	0.08582	4	No 23	0.1043	0.03542	8.696	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-117A	0.12	0.055	4	No 9	0.08111	0.02518	22.22	None	No	0.002	NP (normality)
Fluoride (mg/L)	HGWC-118	0.14	0.072	4	No 24	0.154	0.1751	0	None	No	0.01	NP (normality)

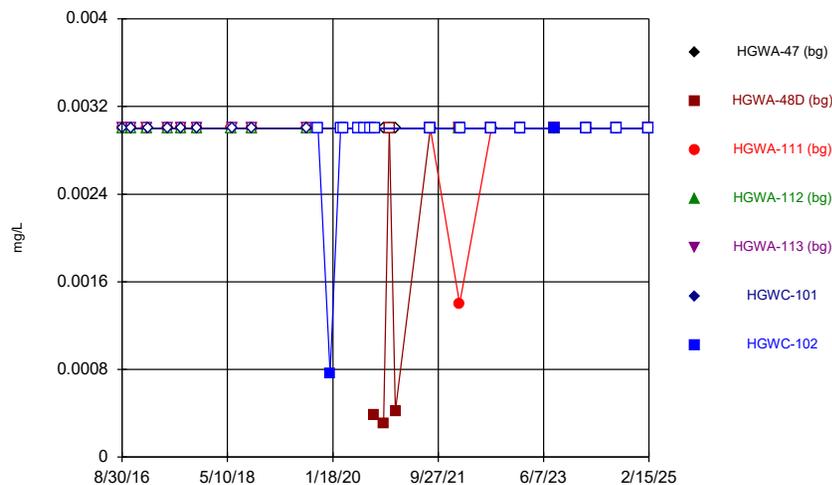
Appendix IV Confidence Intervals - All Results (No Significant)

Plant Hammond Client: Southern Company Data: Hammond AP4 Printed 4/22/2025, 7:59 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lead (mg/L)	HGWC-101	0.001	0.0009	0.015	No 22	0.0009955	0.00002132	95.45	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-102	0.001	0.00011	0.015	No 17	0.0009476	0.0002159	94.12	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-103	0.001	0.00043	0.015	No 22	0.0007944	0.0003484	72.73	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-105	0.001	0.000085	0.015	No 22	0.00083	0.0003692	81.82	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-107	0.001	0.00034	0.015	No 22	0.0008509	0.000327	81.82	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-109	0.001	0.000058	0.015	No 22	0.0009142	0.0002778	90.91	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-118	0.001	0.00088	0.015	No 22	0.000855	0.0003041	77.27	None	No	0.01	NP (NDs)
Lithium (mg/L)	HGWC-101	0.03	0.000781	0.04	No 22	0.02867	0.00623	95.45	None	No	0.01	NP (NDs)
Lithium (mg/L)	HGWC-102	0.00139	0.0011	0.04	No 17	0.002814	0.004589	11.76	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-103	0.002	0.0015	0.04	No 22	0.00804	0.01219	22.73	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-105	0.004365	0.003896	0.04	No 22	0.004141	0.0004595	0	None	x^(1/3)	0.01	Param.
Lithium (mg/L)	HGWC-107	0.03	0.00092	0.04	No 22	0.01415	0.01481	45.45	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-109	0.03	0.000977	0.04	No 22	0.01551	0.01484	50	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-117A	0.00512	0.0035	0.04	No 9	0.004091	0.0006113	0	None	No	0.002	NP (normality)
Lithium (mg/L)	HGWC-118	0.03	0.0017	0.04	No 22	0.01087	0.01338	31.82	None	No	0.01	NP (normality)
Mercury (mg/L)	HGWC-101	0.0002	0.000099	0.002	No 18	0.0001884	0.00003365	88.89	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-102	0.0002	0.0001	0.002	No 16	0.0001937	0.000025	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-103	0.00025	0.00017	0.002	No 18	0.000195	0.00003899	72.22	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-105	0.00022	0.0002	0.002	No 18	0.0002011	0.000004714	94.44	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-107	0.0002	0.000084	0.002	No 18	0.0001936	0.00002734	94.44	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-109	0.0002	0.00008	0.002	No 18	0.0001867	0.00003881	88.89	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-117A	0.0002	0.000094	0.002	No 9	0.0001882	0.00003533	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	HGWC-118	0.0002	0.00009	0.002	No 18	0.0001873	0.00003706	88.89	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-102	0.005	0.0015	0.05	No 16	0.004781	0.000875	93.75	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-105	0.005	0.0049	0.05	No 18	0.004994	0.00002357	94.44	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-102	0.001	0.00008	0.002	No 16	0.0009425	0.00023	93.75	None	No	0.01	NP (NDs)

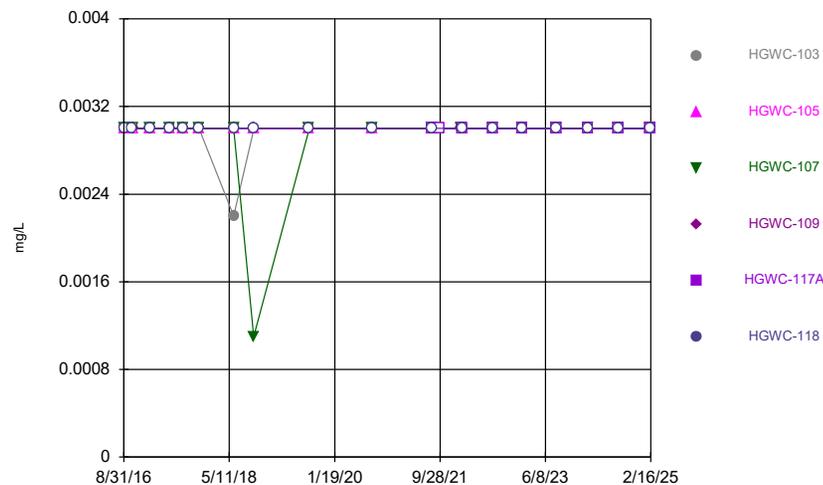
FIGURE A.

Time Series



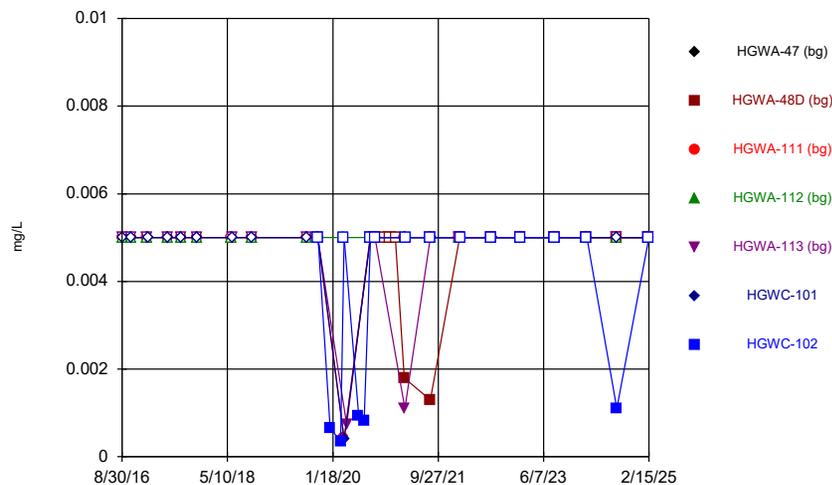
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Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



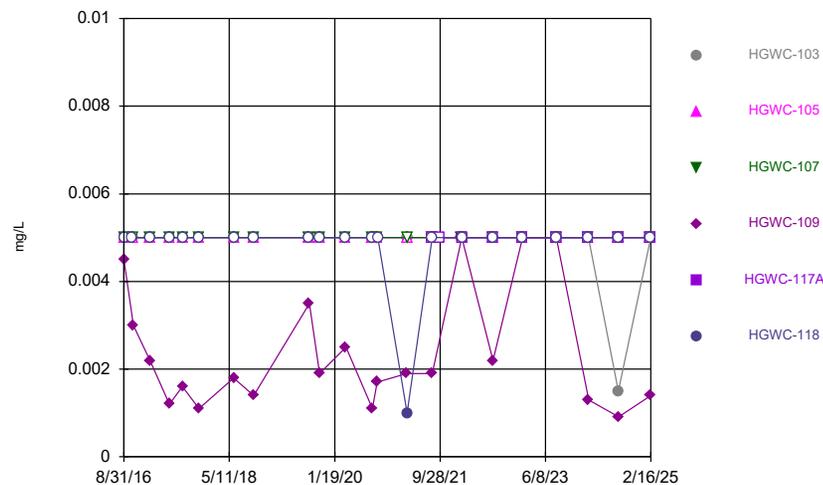
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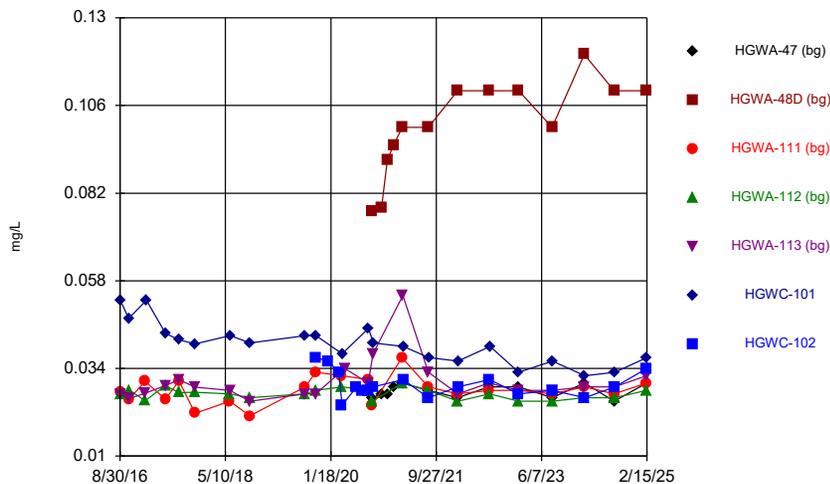
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Time Series



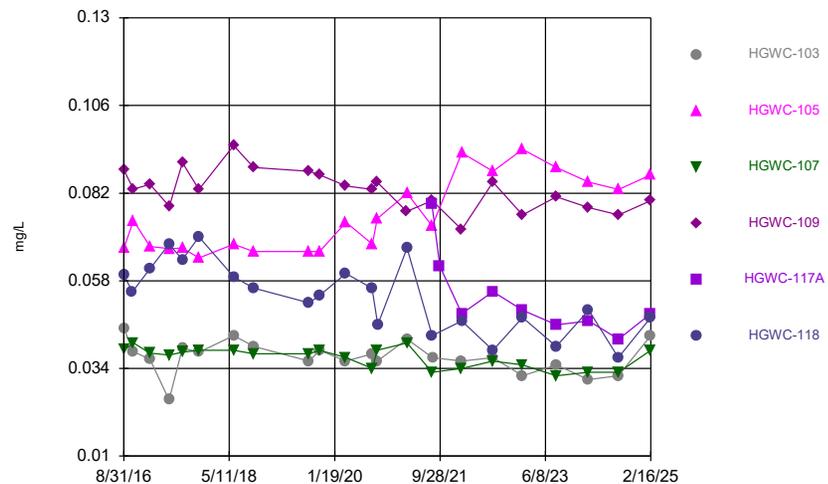
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Time Series



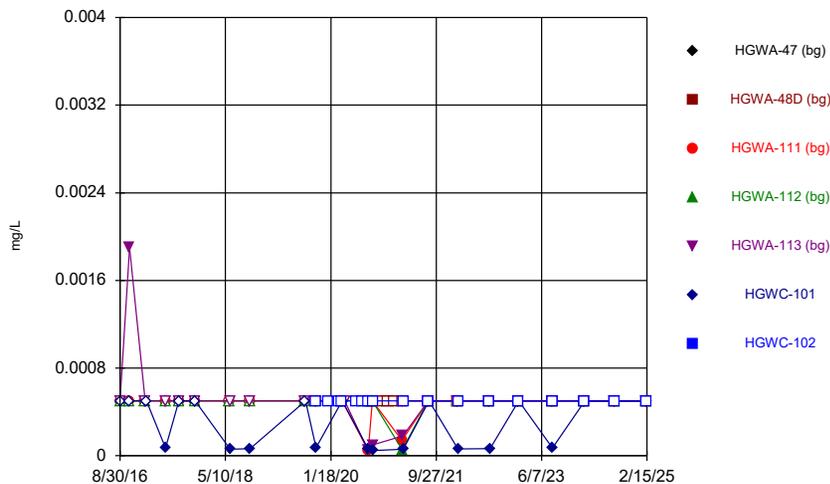
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Time Series



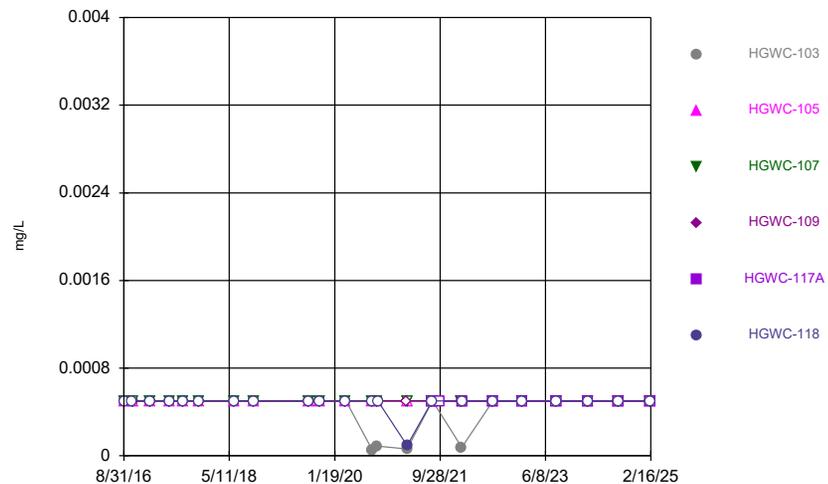
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Time Series



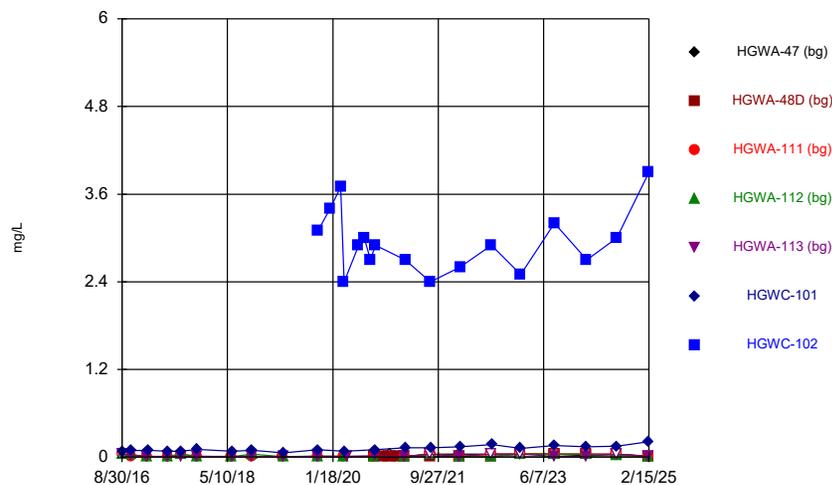
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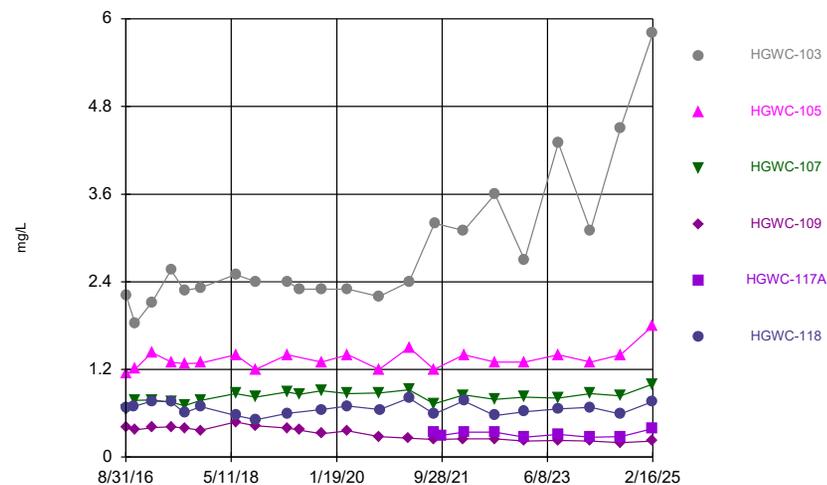
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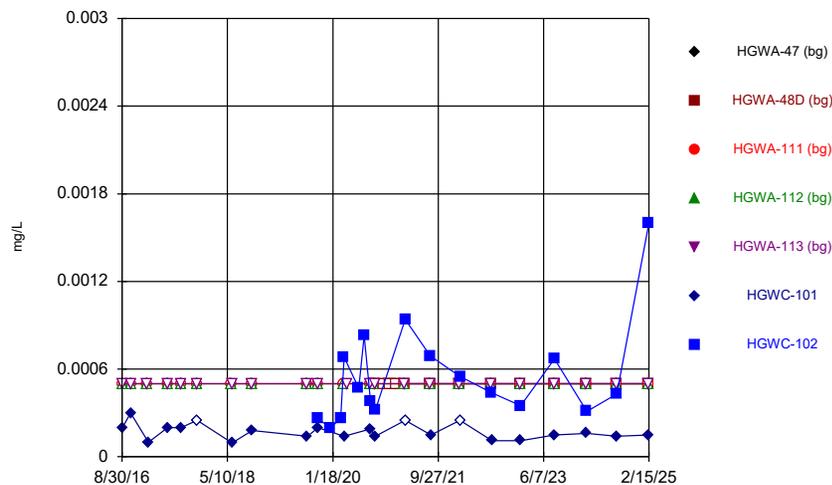
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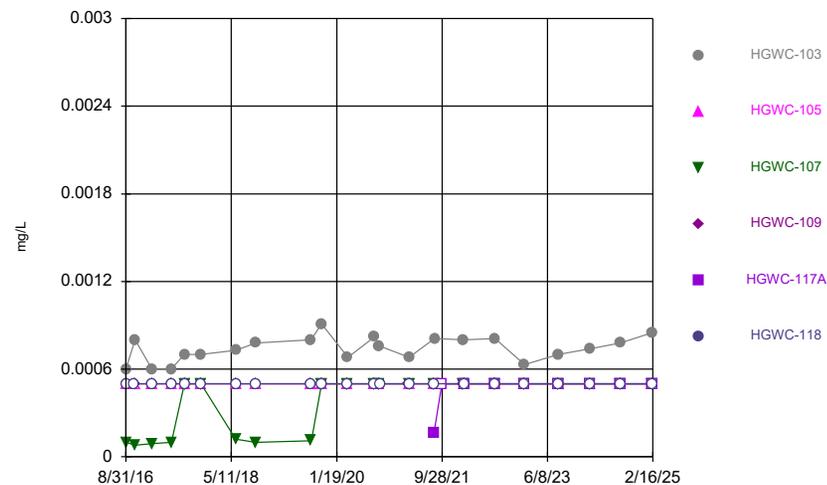
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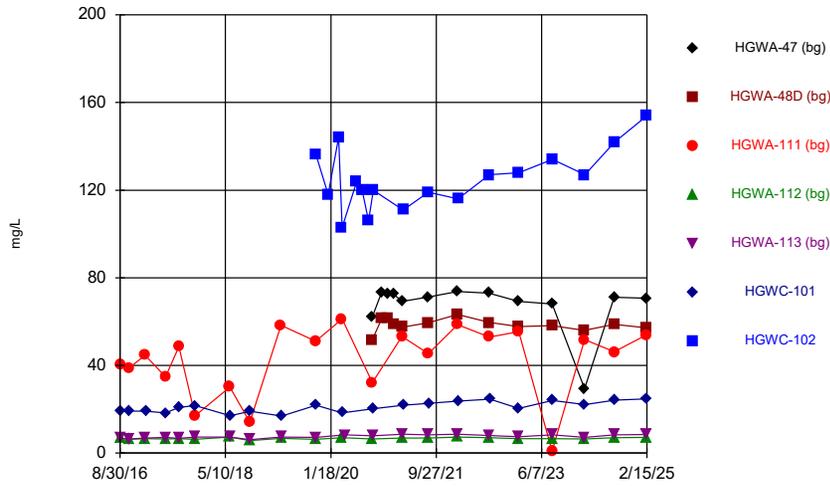
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Time Series



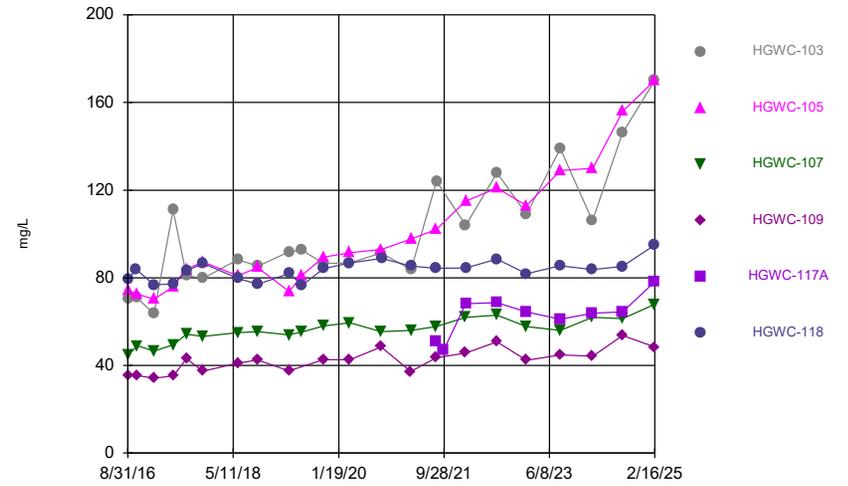
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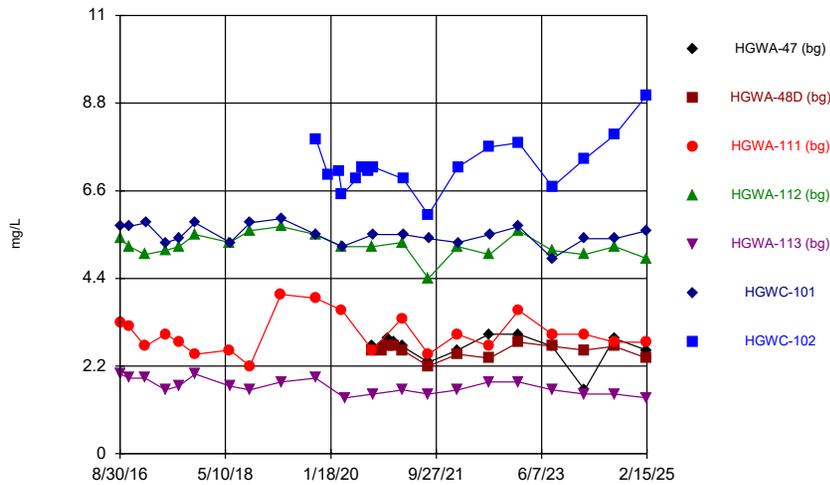
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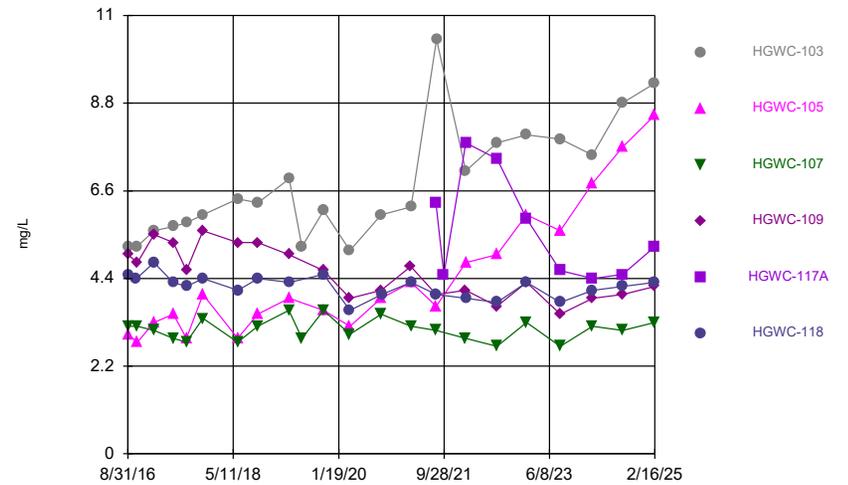
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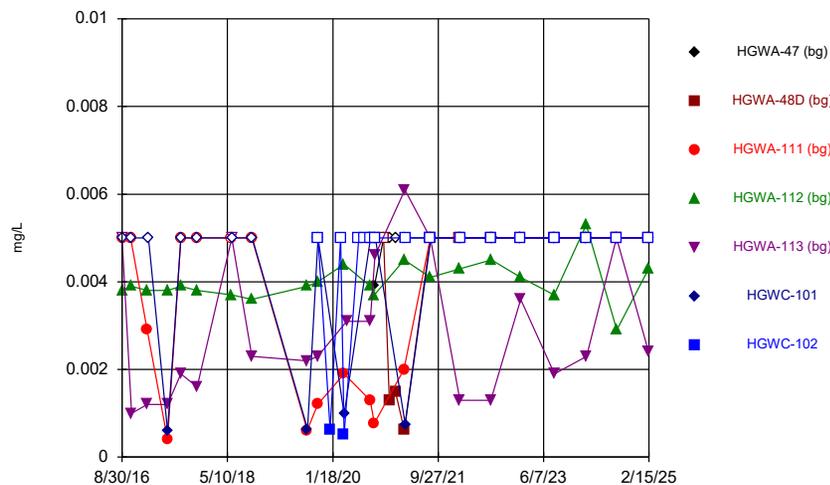
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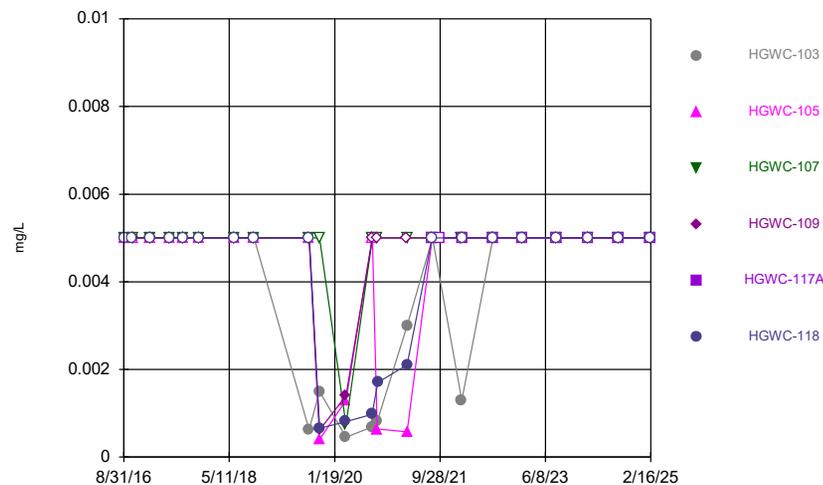
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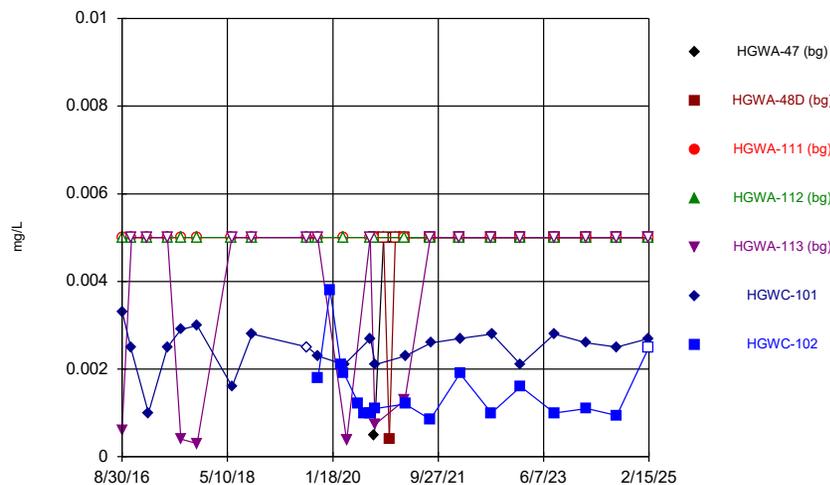
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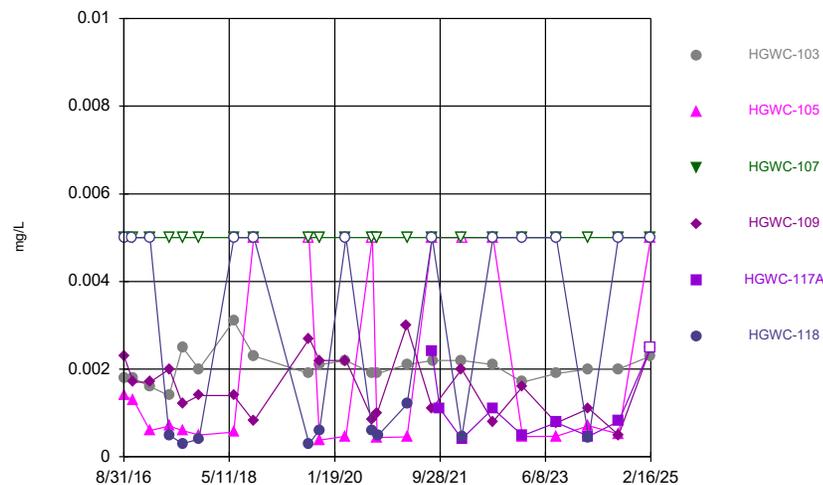
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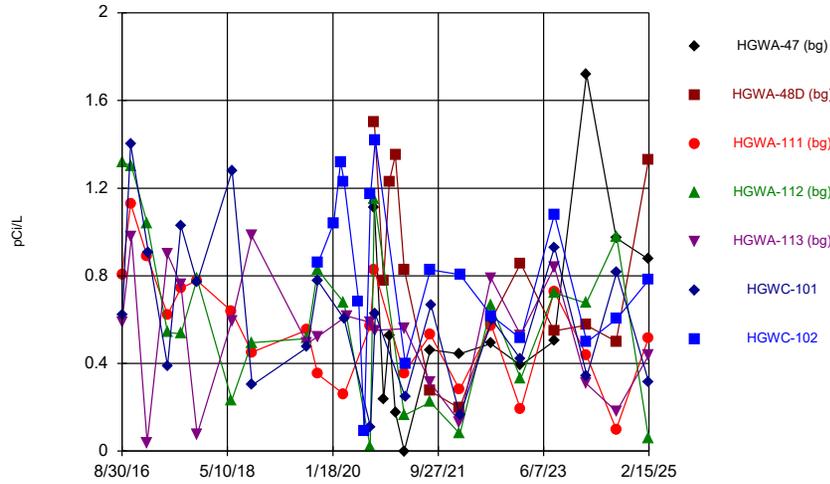
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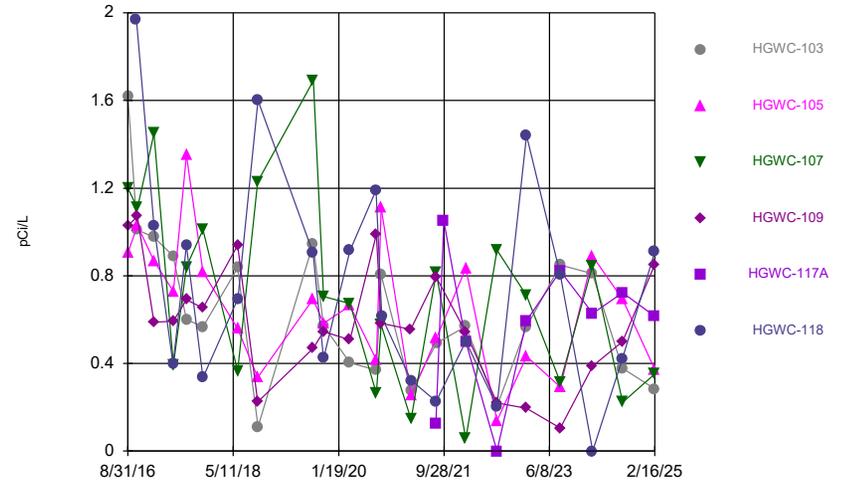
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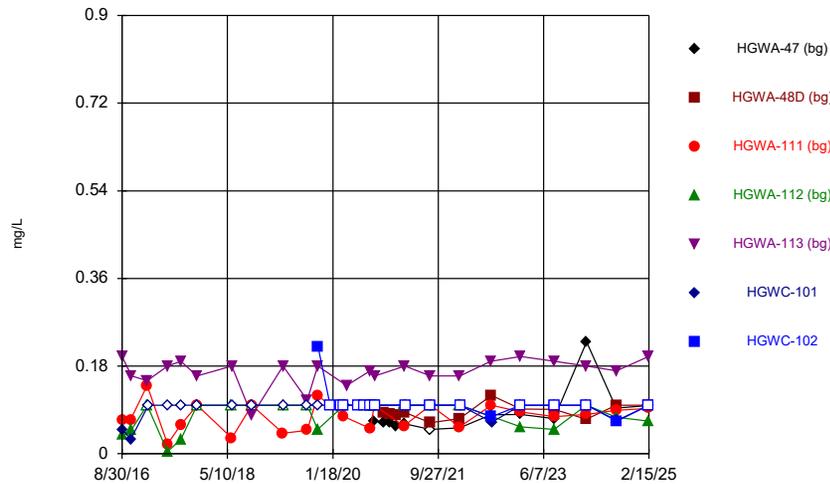
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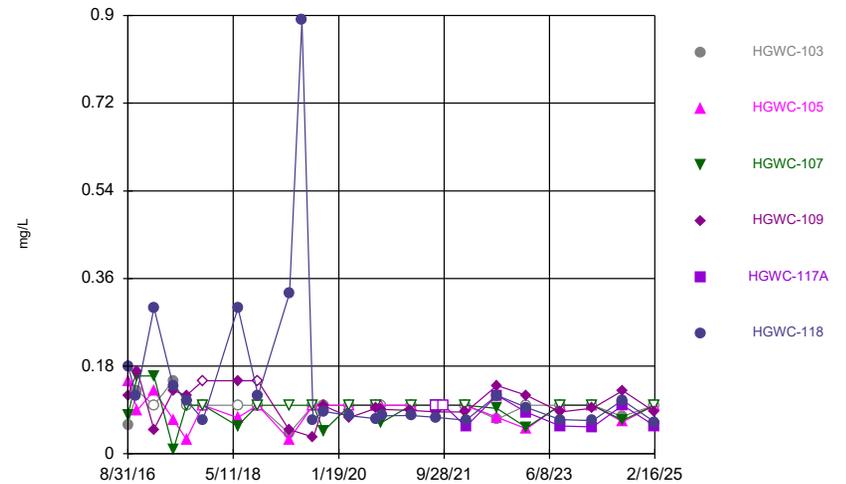
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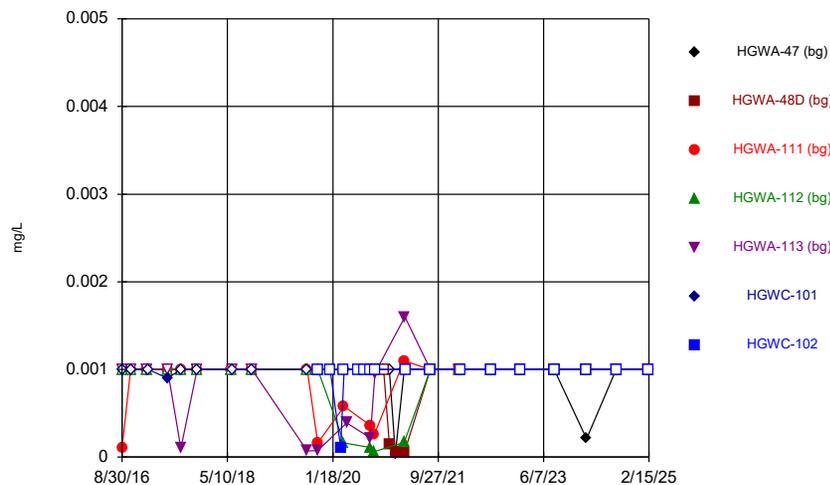
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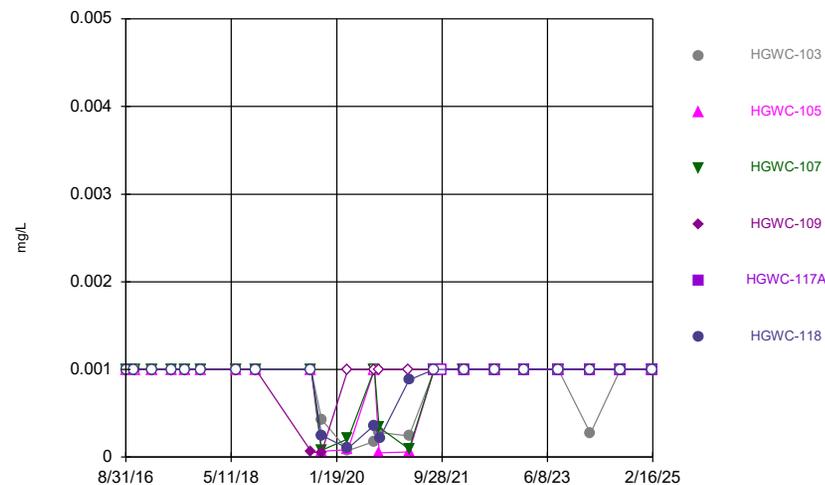
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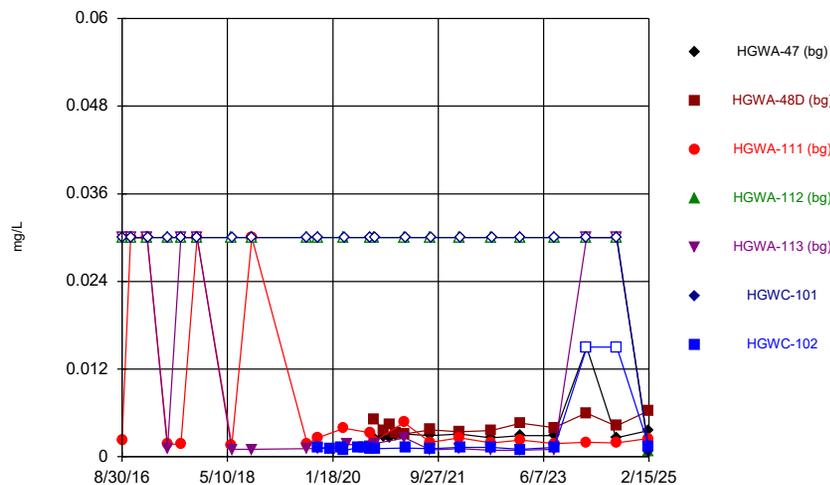
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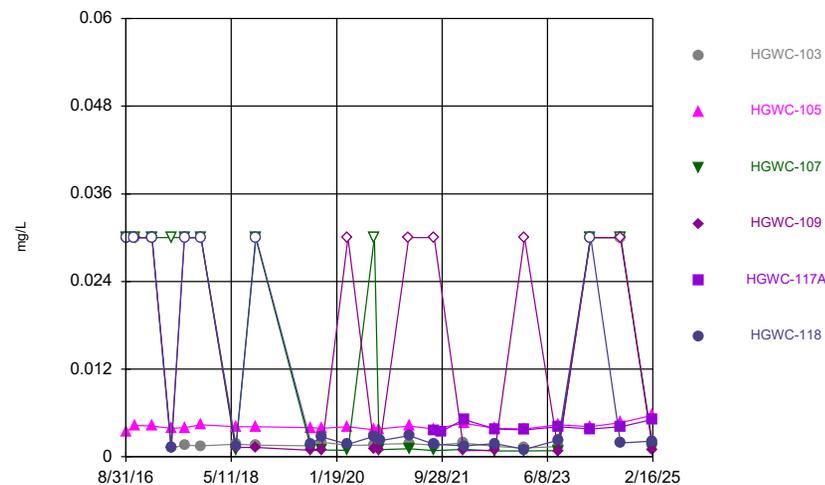
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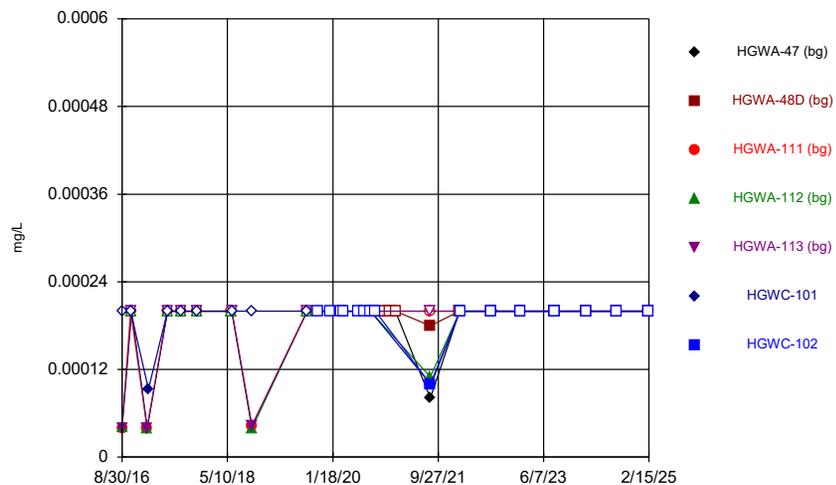
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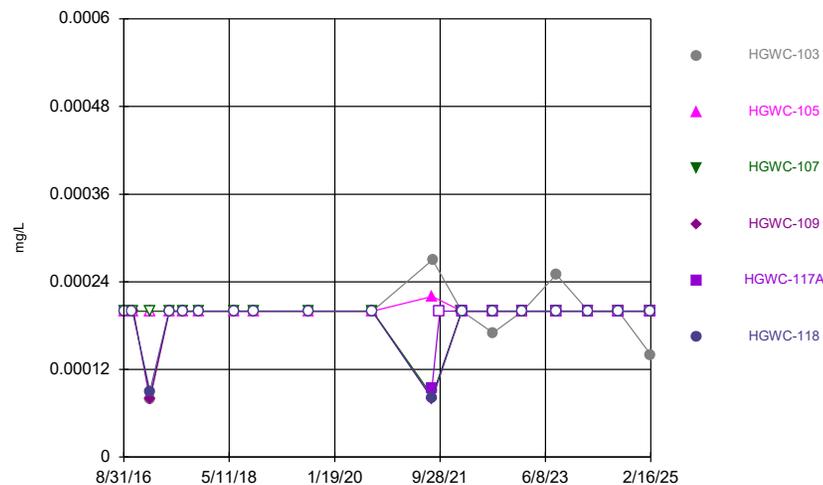
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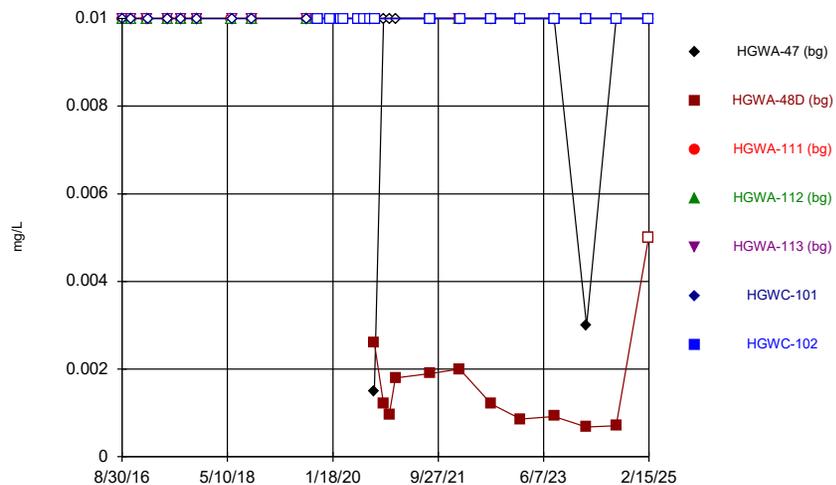
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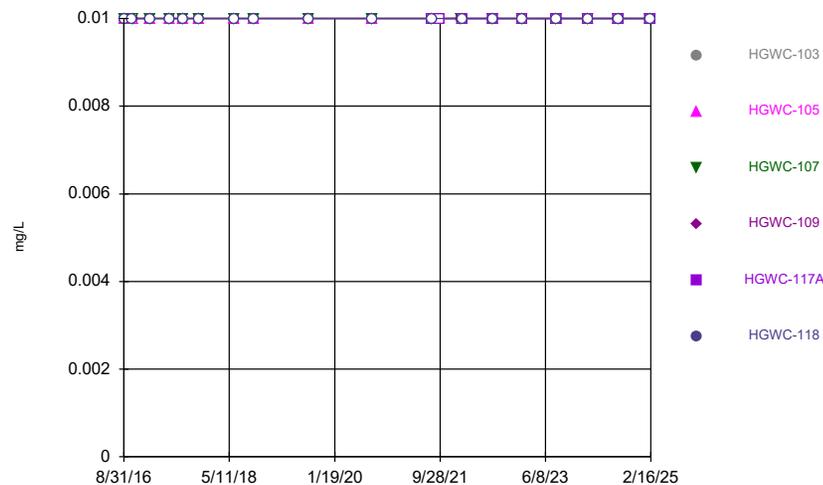
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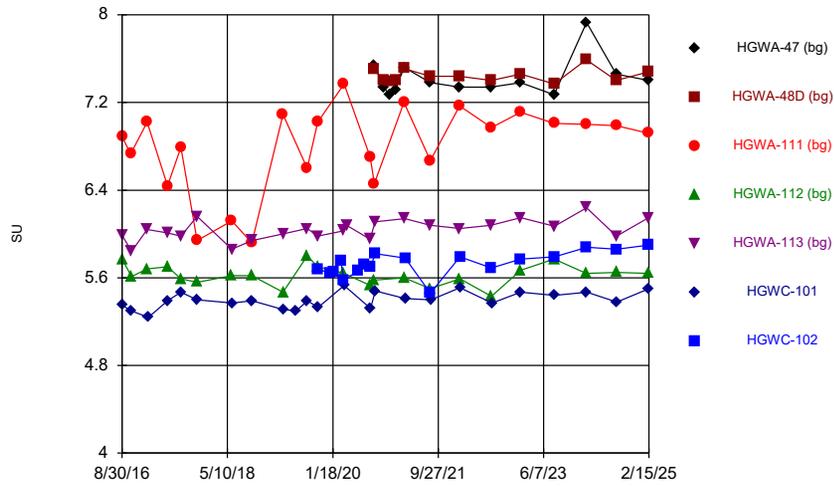
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Time Series



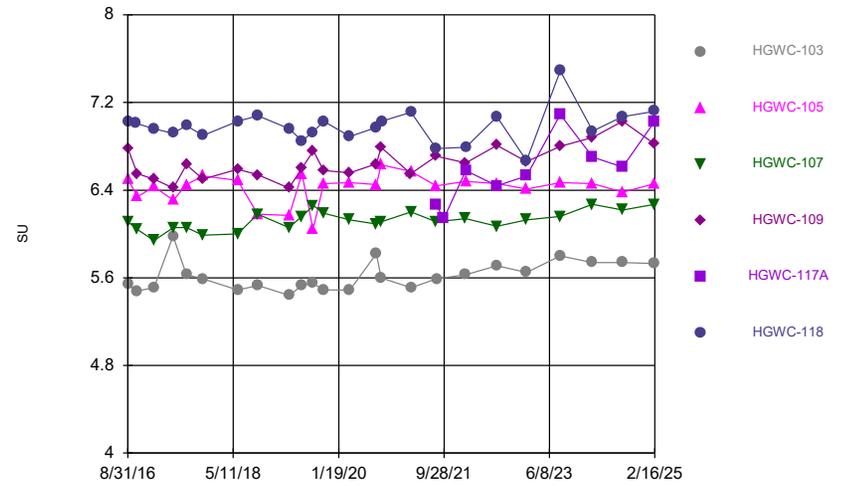
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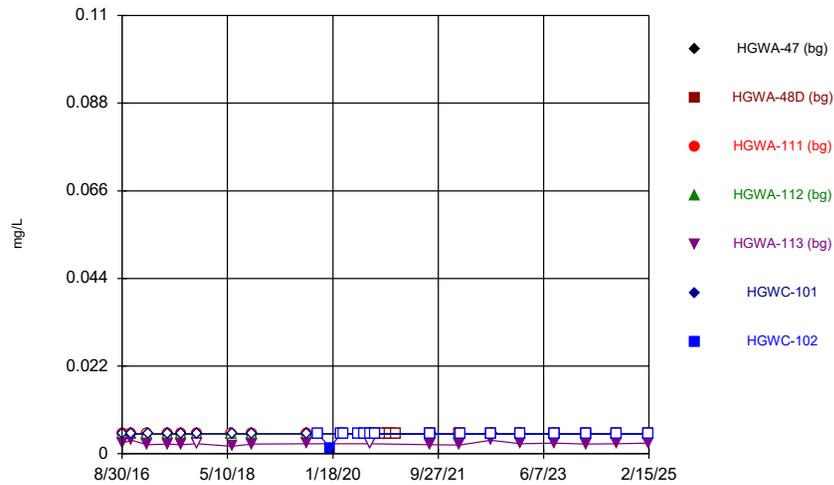
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Time Series



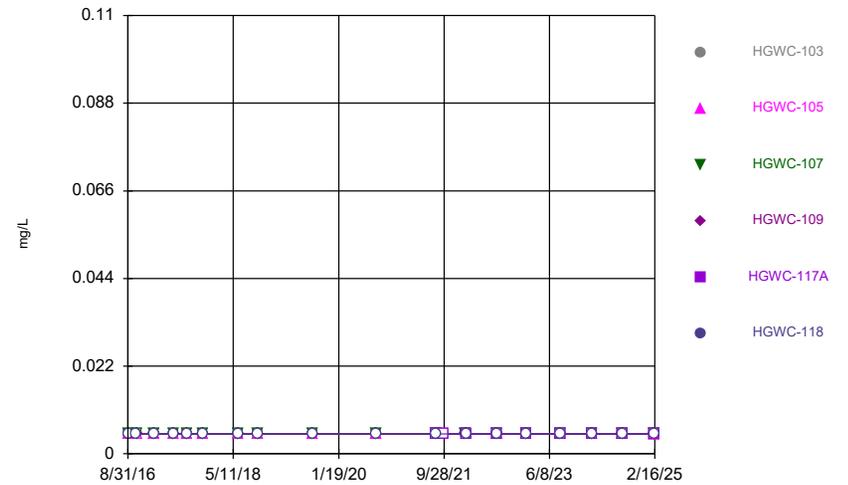
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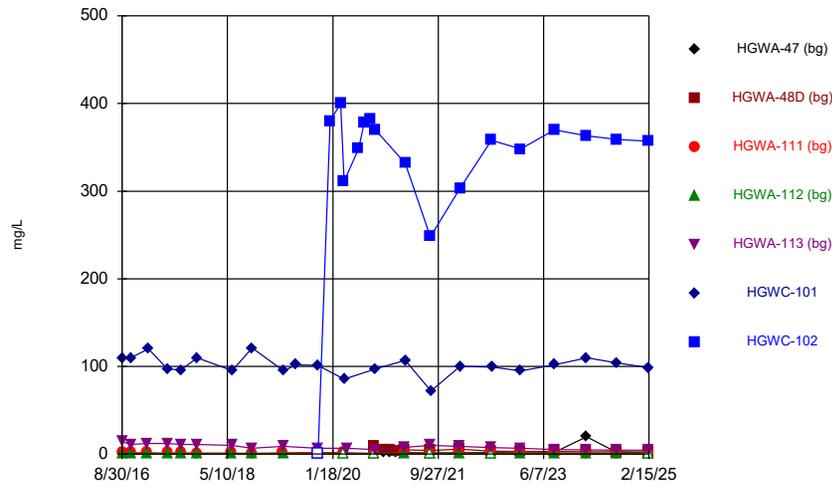
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Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



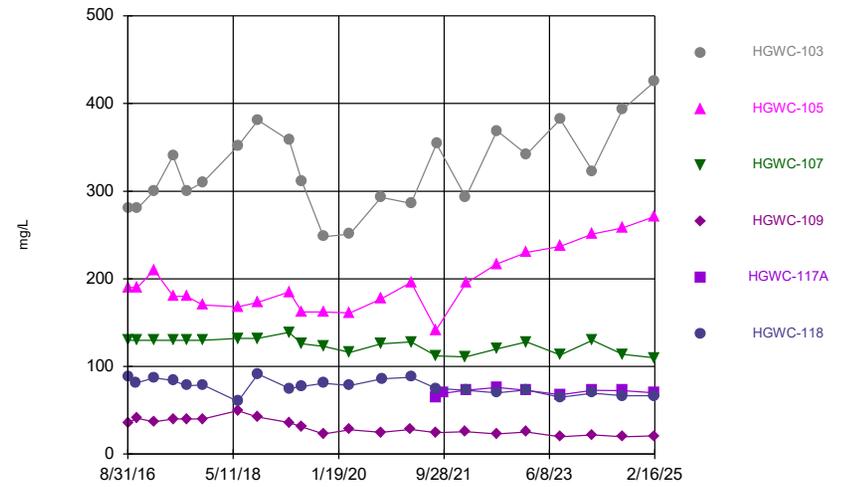
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Time Series



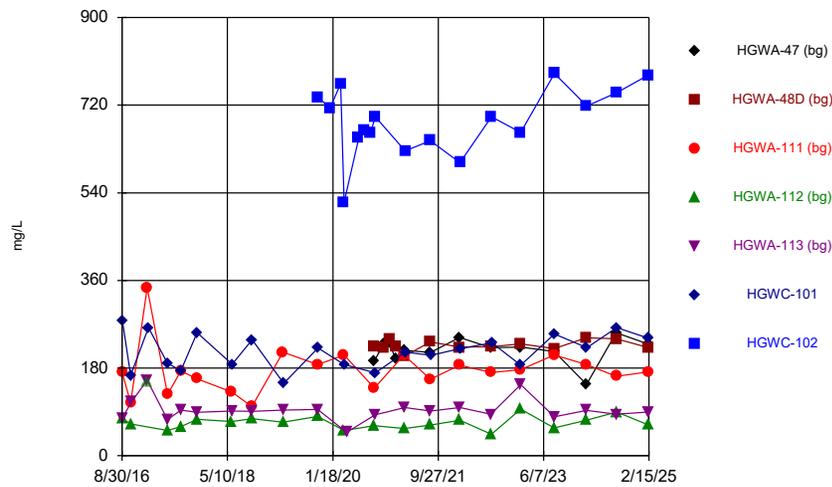
Constituent: Sulfate Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



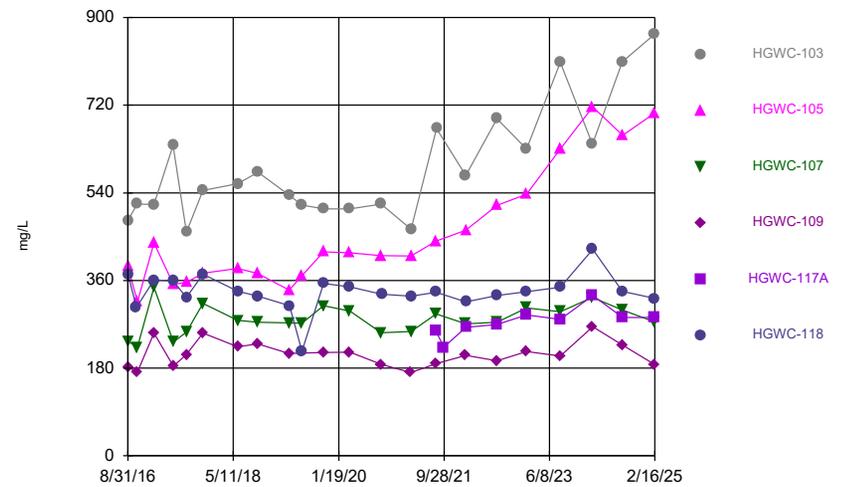
Constituent: Sulfate Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



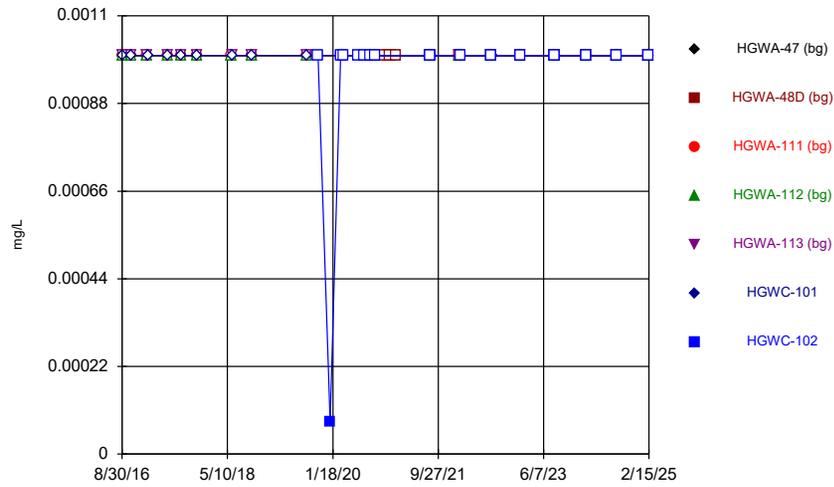
Constituent: TDS Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



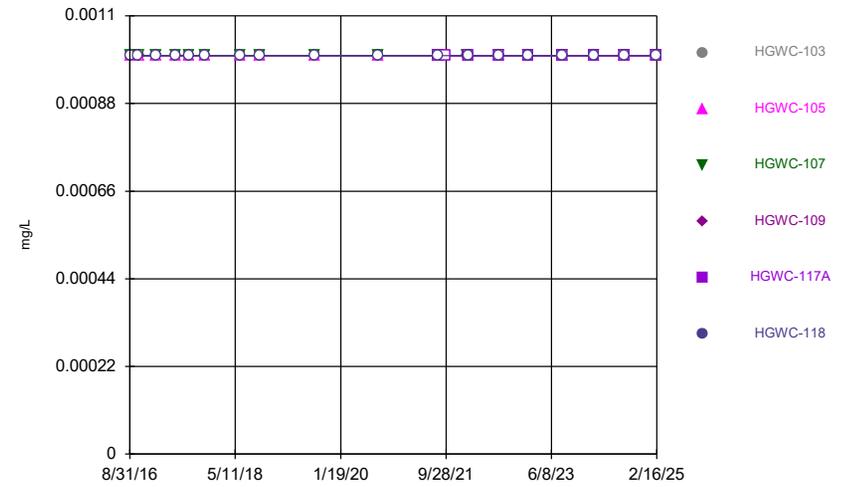
Constituent: TDS Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



Constituent: Thallium Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



Constituent: Thallium Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series

Constituent: Antimony (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/30/2016			<0.003	<0.003	<0.003		
8/31/2016						<0.003	
10/20/2016			<0.003			<0.003	
10/24/2016				<0.003	<0.003		
1/25/2017			<0.003	<0.003	<0.003		
1/31/2017						<0.003	
5/23/2017				<0.003	<0.003	<0.003	
5/24/2017			<0.003				
8/10/2017			<0.003	<0.003	<0.003	<0.003	
11/13/2017			<0.003	<0.003			
11/14/2017					<0.003	<0.003	
6/4/2018			<0.003	<0.003			
6/5/2018					<0.003		
6/6/2018						<0.003	
10/1/2018			<0.003	<0.003	<0.003		
10/3/2018						<0.003	
8/21/2019			<0.003	<0.003	<0.003		
8/22/2019						<0.003	
10/23/2019							<0.003
1/3/2020							0.00076 (J)
3/4/2020							<0.003
3/24/2020							<0.003
6/18/2020							<0.003
7/21/2020							<0.003
8/25/2020			<0.003	<0.003	<0.003		
8/27/2020						<0.003	<0.003
9/18/2020	<0.003	0.00038 (J)					
9/24/2020							<0.003
11/10/2020	<0.003						
11/11/2020		0.00031 (J)					
12/15/2020	<0.003	<0.003					
1/19/2021	<0.003	0.00042 (J)					
8/12/2021	<0.003	<0.003	<0.003	<0.003	<0.003		
8/13/2021							<0.003
8/16/2021						<0.003	
1/31/2022	<0.003	<0.003	0.0014 (J)				
2/1/2022				<0.003	<0.003		
2/2/2022						<0.003	<0.003
8/2/2022	<0.003				<0.003		
8/5/2022		<0.003	<0.003	<0.003			<0.003
8/10/2022						<0.003	
1/24/2023	<0.003	<0.003	<0.003	<0.003	<0.003		
1/25/2023						<0.003	<0.003
8/8/2023	<0.003	<0.003	<0.003	<0.003			
8/10/2023					<0.003		
8/11/2023						<0.003	0.003
2/13/2024		<0.003		<0.003			
2/14/2024	<0.003		<0.003		<0.003		
2/16/2024						<0.003	<0.003
8/6/2024	<0.003	<0.003	<0.003				
8/8/2024					<0.003		
8/9/2024				<0.003			<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/10/2024						<0.003	
2/12/2025	<0.003	<0.003					
2/13/2025			<0.003	<0.003	<0.003		
2/15/2025						<0.003	<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.003	<0.003	<0.003	<0.003		<0.003
10/20/2016						<0.003
10/24/2016	<0.003					
10/25/2016		<0.003	<0.003	<0.003		
1/31/2017	<0.003	<0.003	<0.003	<0.003		<0.003
5/23/2017	<0.003					<0.003
5/24/2017		<0.003	<0.003	<0.003		
8/10/2017	<0.003	<0.003	<0.003	<0.003		<0.003
11/14/2017	<0.003	<0.003	<0.003	<0.003		<0.003
6/6/2018	0.0022 (J)	<0.003	<0.003	<0.003		
6/7/2018						<0.003
10/2/2018		<0.003	0.0011 (J)	<0.003		
10/3/2018	<0.003					<0.003
8/22/2019	<0.003	<0.003				<0.003
8/23/2019			<0.003	<0.003		
8/26/2020						<0.003
8/27/2020	<0.003	<0.003	<0.003	<0.003		
8/12/2021					<0.003	
8/13/2021		<0.003	<0.003	<0.003		<0.003
8/16/2021	<0.003					
9/27/2021					<0.003	
2/2/2022	<0.003		<0.003	<0.003		
2/3/2022		<0.003			<0.003	<0.003
8/5/2022	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1/25/2023	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
8/11/2023	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
2/16/2024	<0.003		<0.003			
2/17/2024		<0.003		<0.003	<0.003	<0.003
8/9/2024	<0.003					<0.003
8/10/2024		<0.003	<0.003	<0.003	<0.003	
2/15/2025	<0.003					
2/16/2025		<0.003	<0.003	<0.003	<0.003	<0.003

Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/30/2016			<0.005	<0.005	<0.005		
8/31/2016						<0.005	
10/20/2016			<0.005			<0.005	
10/24/2016				<0.005	<0.005		
1/25/2017			<0.005	<0.005	<0.005		
1/31/2017						<0.005	
5/23/2017				<0.005	<0.005	<0.005	
5/24/2017			<0.005				
8/10/2017			<0.005	<0.005	<0.005	<0.005	
11/13/2017			<0.005	<0.005			
11/14/2017					<0.005	<0.005	
6/4/2018			<0.005	<0.005			
6/5/2018					<0.005		
6/6/2018						<0.005	
10/1/2018			<0.005	<0.005	<0.005		
10/3/2018						<0.005	
8/21/2019			<0.005	<0.005	<0.005		
8/22/2019						<0.005	
10/21/2019			<0.005				
10/22/2019				<0.005	<0.005		
10/23/2019						<0.005	<0.005
1/3/2020							0.00065 (J)
3/4/2020							0.00036 (J)
3/24/2020			0.00042 (J)	<0.005			<0.005
3/25/2020						0.00039 (J)	
4/9/2020					0.00074 (J)		
6/18/2020							0.00092 (J)
7/21/2020							0.00083 (J)
8/25/2020			<0.005	<0.005	<0.005		
8/27/2020						<0.005	<0.005
9/18/2020	<0.005	<0.005	<0.005	<0.005			
9/22/2020					<0.005		
9/24/2020						<0.005	<0.005
11/10/2020	<0.005						
11/11/2020		<0.005					
12/15/2020	<0.005	<0.005					
1/19/2021	<0.005	<0.005					
3/11/2021			<0.005				
3/12/2021	<0.005	0.0018 (J)		<0.005			
3/16/2021					0.0011 (J)		
3/17/2021						<0.005	<0.005
8/12/2021	<0.005	0.0013 (J)	<0.005	<0.005	<0.005		
8/13/2021							<0.005
8/16/2021						<0.005	
1/31/2022	<0.005	<0.005	<0.005				
2/1/2022				<0.005	<0.005		
2/2/2022						<0.005	<0.005
8/2/2022	<0.005				<0.005		
8/5/2022		<0.005	<0.005	<0.005			<0.005
8/10/2022						<0.005	
1/24/2023	<0.005	<0.005	<0.005	<0.005	<0.005		
1/25/2023						<0.005	<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/8/2023	<0.005	<0.005	<0.005	<0.005			
8/10/2023					<0.005		
8/11/2023						<0.005	<0.005
2/13/2024		<0.005		<0.005			
2/14/2024	<0.005		<0.005		<0.005		
2/16/2024						<0.005	<0.005
8/6/2024	<0.005	<0.005	<0.005				
8/8/2024					<0.005		
8/9/2024				<0.005			0.0011 (J)
8/10/2024						<0.005	
2/12/2025	<0.005	<0.005					
2/13/2025			<0.005	<0.005	<0.005		
2/15/2025						<0.005	<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.005	<0.005	<0.005	0.0045 (J)		<0.005
10/20/2016						<0.005
10/24/2016	<0.005					
10/25/2016		<0.005	<0.005	0.003 (J)		
1/31/2017	<0.005	<0.005	<0.005	0.0022 (J)		<0.005
5/23/2017	<0.005					<0.005
5/24/2017		<0.005	<0.005	0.0012 (J)		
8/10/2017	<0.005	<0.005	<0.005	0.0016 (J)		<0.005
11/14/2017	<0.005	<0.005	<0.005	0.0011 (J)		<0.005
6/6/2018	<0.005	<0.005	<0.005	0.0018 (J)		
6/7/2018						<0.005
10/2/2018		<0.005	<0.005	0.0014 (J)		
10/3/2018	<0.005					<0.005
8/22/2019	<0.005	<0.005				<0.005
8/23/2019			<0.005	0.0035 (J)		
10/22/2019			<0.005	0.0019 (J)		<0.005
10/23/2019	<0.005	<0.005				
3/25/2020	<0.005	<0.005	<0.005	0.0025 (J)		<0.005
8/26/2020						<0.005
8/27/2020	<0.005	<0.005	<0.005	0.0011 (J)		
9/24/2020	<0.005	<0.005	<0.005			
9/25/2020				0.0017 (J)		
9/28/2020						<0.005
3/17/2021				0.0019 (J)		
3/18/2021	<0.005	<0.005	<0.005			0.001 (J)
8/12/2021					<0.005	
8/13/2021		<0.005	<0.005	0.0019 (J)		<0.005
8/16/2021	<0.005					
9/27/2021					<0.005	
2/2/2022	<0.005		<0.005	<0.01		
2/3/2022		<0.005			<0.005	<0.005
8/5/2022	<0.005	<0.005	<0.005	0.0022 (J)	<0.005	<0.005
1/25/2023	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005
8/11/2023	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005
2/16/2024	<0.005		<0.005			
2/17/2024		<0.005		0.0013 (J)	<0.005	<0.005
8/9/2024	0.0015 (J)					<0.005
8/10/2024		<0.005	<0.005	0.00091 (J)	<0.005	
2/15/2025	<0.005					
2/16/2025		<0.005	<0.005	0.0014 (J)	<0.005	<0.005

Time Series

Constituent: Barium (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/30/2016			0.0275	0.0269	0.0269		
8/31/2016						0.0527	
10/20/2016			0.0255			0.0477	
10/24/2016				0.028	0.0258		
1/25/2017			0.0304	0.0252	0.0272		
1/31/2017						0.0527	
5/23/2017				0.0293	0.0293	0.0436	
5/24/2017			0.0256				
8/10/2017			0.0306	0.0274	0.031	0.0419	
11/13/2017			0.0217	0.0275			
11/14/2017					0.0289	0.0407	
6/4/2018			0.025	0.027			
6/5/2018					0.028		
6/6/2018						0.043	
10/1/2018			0.021	0.026	0.025		
10/3/2018						0.041	
8/21/2019			0.029	0.027	0.027		
8/22/2019						0.043	
10/21/2019			0.033				
10/22/2019				0.028	0.027		
10/23/2019						0.043	0.037
1/3/2020							0.036
3/4/2020							0.033
3/24/2020			0.032	0.029			0.024
3/25/2020						0.038	
4/9/2020					0.034		
6/18/2020							0.029
7/21/2020							0.028
8/25/2020			0.031	0.028	0.03		
8/27/2020						0.045	0.028
9/18/2020	0.026	0.077	0.024	0.025			
9/22/2020					0.038		
9/24/2020						0.041	0.029
11/10/2020	0.027						
11/11/2020		0.078					
12/15/2020	0.027	0.091					
1/19/2021	0.029	0.095					
3/11/2021			0.037				
3/12/2021	0.03	0.1		0.03			
3/16/2021					0.054		
3/17/2021						0.04	0.031
8/12/2021	0.028	0.1	0.029	0.028	0.033		
8/13/2021							0.026
8/16/2021						0.037	
1/31/2022	0.026	0.11	0.027				
2/1/2022				0.025	0.027		
2/2/2022						0.036	0.029
8/2/2022	0.029				0.03		
8/5/2022		0.11	0.028	0.027			0.031
8/10/2022						0.04	
1/24/2023	0.029	0.11	0.028	0.025	0.028		
1/25/2023						0.033	0.027

Time Series

Constituent: Barium (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/8/2023	0.026	0.1	0.027	0.025			
8/10/2023					0.028		
8/11/2023						0.036	0.028
2/13/2024		0.12		0.026			
2/14/2024	0.03		0.029		0.029		
2/16/2024						0.032	0.026
8/6/2024	0.025	0.11	0.027				
8/8/2024					0.029		
8/9/2024				0.026			0.029
8/10/2024						0.033	
2/12/2025	0.03	0.11					
2/13/2025			0.03	0.028	0.032		
2/15/2025						0.037	0.034

Time Series

Constituent: Barium (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	0.045	0.067	0.0391	0.0883		0.0595
10/20/2016						0.055
10/24/2016	0.0386					
10/25/2016		0.0745	0.041	0.0831		
1/31/2017	0.0365	0.0674	0.0382	0.0844		0.0613
5/23/2017	0.0254					0.068
5/24/2017		0.0668	0.0377	0.0784		
8/10/2017	0.0396	0.067	0.0385	0.0903		0.0638
11/14/2017	0.0385	0.0643	0.039	0.083		0.07
6/6/2018	0.043	0.068	0.039	0.095		
6/7/2018						0.059
10/2/2018		0.066	0.038	0.089		
10/3/2018	0.04					0.056
8/22/2019	0.036	0.066				0.052
8/23/2019			0.038	0.088		
10/22/2019			0.039	0.087		0.054
10/23/2019	0.039	0.066				
3/25/2020	0.036	0.074	0.037	0.084		0.06
8/26/2020						0.056
8/27/2020	0.038	0.068	0.034	0.083		
9/24/2020	0.036	0.075	0.039			
9/25/2020				0.085		
9/28/2020						0.046
3/17/2021				0.077		
3/18/2021	0.042	0.082	0.041			0.067
8/12/2021					0.079	
8/13/2021		0.073	0.033	0.08		0.043
8/16/2021	0.037					
9/27/2021					0.062	
2/2/2022	0.036		0.034	0.072		
2/3/2022		0.093			0.049	0.047
8/5/2022	0.037	0.088	0.036	0.085	0.055	0.039
1/25/2023	0.032	0.094	0.035	0.076	0.05	0.048
8/11/2023	0.035	0.089	0.032	0.081	0.046	0.04
2/16/2024	0.031		0.033			
2/17/2024		0.085		0.078	0.047	0.05
8/9/2024	0.032					0.037
8/10/2024		0.083	0.033	0.076	0.042	
2/15/2025	0.043					
2/16/2025		0.087	0.039	0.08	0.049	0.048

Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/30/2016			<0.0005	<0.0005	<0.0005		
8/31/2016						<0.0005	
10/20/2016			<0.0005			<0.0005	
10/24/2016				<0.0005	0.0019 (J)		
1/25/2017			<0.0005	<0.0005	<0.0005		
1/31/2017						<0.0005	
5/23/2017				<0.0005	<0.0005	7E-05 (J)	
5/24/2017			<0.0005				
8/10/2017			<0.0005	<0.0005	<0.0005	<0.0005	
11/13/2017			<0.0005	<0.0005			
11/14/2017					<0.0005	<0.0005	
6/4/2018			<0.0005	<0.0005			
6/5/2018					<0.0005		
6/6/2018						5.9E-05 (J)	
10/1/2018			<0.0005	<0.0005	<0.0005		
10/3/2018						6.5E-05 (J)	
8/21/2019			<0.0005	<0.0005	<0.0005		
8/22/2019						<0.0005	
10/21/2019			<0.0005				
10/22/2019				<0.0005	<0.0005		
10/23/2019						7.5E-05 (J)	<0.0005
1/3/2020							<0.0005
3/4/2020							<0.0005
3/24/2020			<0.0005	<0.0005			<0.0005
3/25/2020						<0.0005	
4/9/2020					<0.0005		
6/18/2020							<0.0005
7/21/2020							<0.0005
8/25/2020			4.7E-05 (J)	<0.0005	4.6E-05 (J)		
8/27/2020						5.7E-05 (J)	<0.0005
9/18/2020	<0.0005	<0.0005	<0.0005	<0.0005			
9/22/2020					9.9E-05 (J)		
9/24/2020						4.8E-05 (J)	<0.0005
11/10/2020	<0.0005						
11/11/2020		<0.0005					
12/15/2020	<0.0005	<0.0005					
1/19/2021	<0.0005	<0.0005					
3/11/2021			0.00014 (J)				
3/12/2021	<0.0005	<0.0005		5.4E-05 (J)			
3/16/2021					0.00018 (J)		
3/17/2021						5.9E-05 (J)	<0.0005
8/12/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
8/13/2021							<0.0005
8/16/2021						<0.0005	
1/31/2022	<0.0005	<0.0005	<0.0005				
2/1/2022				<0.0005	<0.0005		
2/2/2022						6.2E-05 (J)	<0.0005
8/2/2022	<0.0005				<0.0005		
8/5/2022		<0.0005	<0.0005	<0.0005			<0.0005
8/10/2022						6.4E-05 (J)	
1/24/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
1/25/2023						<0.0005	<0.0005

Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/8/2023	<0.0005	<0.0005	<0.0005	<0.0005			
8/10/2023					<0.0005		
8/11/2023						7E-05 (J)	<0.0005
2/13/2024		<0.0005		<0.0005			
2/14/2024	<0.0005		<0.0005		<0.0005		
2/16/2024						<0.0005	<0.0005
8/6/2024	<0.0005	<0.0005	<0.0005				
8/8/2024					<0.0005		
8/9/2024				<0.0005			<0.0005
8/10/2024						<0.0005	
2/12/2025	<0.0005	<0.0005					
2/13/2025			<0.0005	<0.0005	<0.0005		
2/15/2025						<0.0005	<0.0005

Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
10/20/2016						<0.0005
10/24/2016	<0.0005					
10/25/2016		<0.0005	<0.0005	<0.0005		
1/31/2017	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
5/23/2017	<0.0005					<0.0005
5/24/2017		<0.0005	<0.0005	<0.0005		
8/10/2017	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
11/14/2017	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
6/6/2018	<0.0005	<0.0005	<0.0005	<0.0005		
6/7/2018						<0.0005
10/2/2018		<0.0005	<0.0005	<0.0005		
10/3/2018	<0.0005					<0.0005
8/22/2019	<0.0005	<0.0005				<0.0005
8/23/2019			<0.0005	<0.0005		
10/22/2019			<0.0005	<0.0005		<0.0005
10/23/2019	<0.0005	<0.0005				
3/25/2020	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
8/26/2020						<0.0005
8/27/2020	5E-05 (J)	<0.0005	<0.0005	<0.0005		
9/24/2020	8.8E-05 (J)	<0.0005	<0.0005			
9/25/2020				<0.0005		
9/28/2020						<0.0005
3/17/2021				<0.0005		
3/18/2021	6.1E-05 (J)	<0.0005	<0.0005			9.3E-05 (J)
8/12/2021					<0.0005	
8/13/2021		<0.0005	<0.0005	<0.0005		<0.0005
8/16/2021	<0.0005					
9/27/2021					<0.0005	
2/2/2022	7.7E-05 (J)		<0.0005	<0.0005		
2/3/2022		<0.0005			<0.0005	<0.0005
8/5/2022	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1/25/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/11/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2/16/2024	<0.0005		<0.0005			
2/17/2024		<0.0005		<0.0005	<0.0005	<0.0005
8/9/2024	<0.0005					<0.0005
8/10/2024		<0.0005	<0.0005	<0.0005	<0.0005	
2/15/2025	<0.0005					
2/16/2025		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Time Series

Constituent: Boron (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/30/2016			<0.04	<0.04	<0.04		
8/31/2016						0.0724 (J)	
10/20/2016			0.016 (J)			0.0877 (J)	
10/24/2016				0.0367 (J)	0.0226 (J)		
1/25/2017			0.0095 (J)	0.0075 (J)	0.009 (J)		
1/31/2017						0.0928	
5/23/2017				0.0073 (J)	0.0082 (J)	0.0795	
5/24/2017			0.0094 (J)				
8/10/2017			<0.04	<0.04	0.0061 (J)	0.0814	
11/13/2017			0.0103 (J)	0.0089 (J)			
11/14/2017					0.012 (J)	0.108	
6/4/2018			0.0065 (J)	0.007 (J)			
6/5/2018					0.0085 (J)		
6/6/2018						0.081	
10/1/2018			0.0054 (J)	<0.04	0.0042 (J)		
10/3/2018						0.092	
4/1/2019			0.0076 (J)				
4/2/2019				0.0043 (J)	0.0059 (J)		
4/4/2019						0.06 (J)	
10/21/2019			0.0097 (J)				
10/22/2019				0.016 (J)	0.01 (J)		
10/23/2019						0.1	3.1
1/3/2020							3.4
3/4/2020							3.7
3/24/2020			0.011 (J)	0.012 (J)			2.4
3/25/2020						0.08 (J)	
4/9/2020					0.012 (J)		
6/18/2020							2.9
7/21/2020							3
8/27/2020							2.7
9/18/2020	0.0082 (J)	0.015 (J)	0.011 (J)	0.008 (J)			
9/22/2020					0.021 (J)		
9/24/2020						0.1	2.9
11/10/2020	0.0064 (J)						
11/11/2020		0.014 (J)					
12/15/2020	<0.04	0.0083 (J)					
1/19/2021	0.015 (J)	0.015 (J)					
3/11/2021			0.01 (J)				
3/12/2021	0.0067 (J)	0.012 (J)		0.0061 (J)			
3/16/2021					0.011 (J)		
3/17/2021						0.13	2.7
8/12/2021	<0.04	0.012 (J)	<0.04	<0.04	<0.04		
8/13/2021							2.4
8/16/2021						0.13	
1/31/2022	<0.04	0.011 (J)	0.0099 (J)				
2/1/2022				0.011 (J)	0.012 (J)		
2/2/2022						0.14	2.6
8/2/2022	<0.04				<0.04		
8/5/2022		0.011 (J)	<0.04	0.012 (J)			2.9
8/10/2022						0.17	
1/24/2023	<0.04	<0.04	<0.04	<0.04	<0.04		
1/25/2023						0.12	2.5

Time Series

Constituent: Boron (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/8/2023	<0.04	<0.04	<0.04	<0.04			
8/10/2023					0.0091 (J)		
8/11/2023						0.16	3.2
2/13/2024		<0.04		<0.04			
2/14/2024	0.018 (J)		<0.04		0.013 (J)		
2/16/2024						0.14	2.7
8/6/2024	<0.04	<0.04	<0.04				
8/8/2024					<0.04		
8/9/2024				0.029 (J)			3
8/10/2024						0.15	
2/12/2025	0.011 (J)	0.013 (J)					
2/13/2025			0.0082 (J)	0.0072 (J)	0.01 (J)		
2/15/2025						0.21	3.9

Time Series

Constituent: Boron (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	2.22	1.14	0.651	0.402		0.681
10/20/2016						0.697
10/24/2016	1.83					
10/25/2016		1.21	0.778	0.372		
1/31/2017	2.12	1.43	0.782	0.404		0.768
5/23/2017	2.56					0.754
5/24/2017		1.3	0.753	0.415		
8/10/2017	2.28	1.28	0.702	0.397		0.608
11/14/2017	2.32	1.29	0.78	0.366		0.691
6/6/2018	2.5	1.4	0.87	0.48		
6/7/2018						0.57
10/2/2018		1.2	0.82	0.43		
10/3/2018	2.4					0.51
4/3/2019			0.89	0.4		
4/4/2019	2.4	1.4 (J)				
4/5/2019						0.6 (J)
6/17/2019	2.3		0.86	0.37		
10/22/2019			0.91	0.32		0.65
10/23/2019	2.3	1.3				
3/25/2020	2.3	1.4	0.87	0.36		0.7
9/24/2020	2.2	1.2	0.88			
9/25/2020				0.28		
9/28/2020						0.65
3/17/2021				0.26		
3/18/2021	2.4	1.5	0.92			0.81
8/12/2021					0.34	
8/13/2021		1.2	0.73	0.24		0.59
8/16/2021	3.2					
9/27/2021					0.3	
2/2/2022	3.1		0.85	0.25		
2/3/2022		1.4			0.34	0.77
8/5/2022	3.6	1.3	0.79	0.25	0.34	0.57
1/25/2023	2.7	1.3	0.82	0.22	0.27	0.62
8/11/2023	4.3	1.4	0.81	0.23	0.31	0.66
2/16/2024	3.1		0.87			
2/17/2024		1.3		0.22	0.27	0.68
8/9/2024	4.5					0.59
8/10/2024		1.4	0.84	0.2	0.28	
2/15/2025	5.8					
2/16/2025		1.8	1	0.22	0.39 (J)	0.76

Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/30/2016			<0.0005	<0.0005	<0.0005		
8/31/2016						0.0002 (J)	
10/20/2016			<0.0005			0.0003 (J)	
10/24/2016				<0.0005	<0.0005		
1/25/2017			<0.0005	<0.0005	<0.0005		
1/31/2017						0.0001 (J)	
5/23/2017				<0.0005	<0.0005	0.0002 (J)	
5/24/2017			<0.0005				
8/10/2017			<0.0005	<0.0005	<0.0005	0.0002 (J)	
11/13/2017			<0.0005	<0.0005			
11/14/2017					<0.0005	<0.0005	
6/4/2018			<0.0005	<0.0005			
6/5/2018					<0.0005		
6/6/2018						9.5E-05 (J)	
10/1/2018			<0.0005	<0.0005	<0.0005		
10/3/2018						0.00018 (J)	
8/21/2019			<0.0005	<0.0005	<0.0005		
8/22/2019						0.00014 (J)	
10/21/2019			<0.0005				
10/22/2019				<0.0005	<0.0005		
10/23/2019						0.0002 (J)	0.00026 (J)
1/3/2020							0.0002 (J)
3/4/2020							0.00026 (J)
3/24/2020			<0.0005	<0.0005			0.00068 (J)
3/25/2020						0.00014 (J)	
4/9/2020					<0.0005		
6/18/2020							0.00047 (J)
7/21/2020							0.00083 (J)
8/25/2020			<0.0005	<0.0005	<0.0005		
8/27/2020						0.00019 (J)	0.00038 (J)
9/18/2020	<0.0005	<0.0005	<0.0005	<0.0005			
9/22/2020					<0.0005		
9/24/2020						0.00014 (J)	0.00032 (J)
11/10/2020	<0.0005						
11/11/2020		<0.0005					
12/15/2020	<0.0005	<0.0005					
1/19/2021	<0.0005	<0.0005					
3/11/2021			<0.0005				
3/12/2021	<0.0005	<0.0005		<0.0005			
3/16/2021					<0.0005		
3/17/2021						<0.0005	0.00094
8/12/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
8/13/2021							0.00069
8/16/2021						0.00015 (J)	
1/31/2022	<0.0005	<0.0005	<0.0005				
2/1/2022				<0.0005	<0.0005		
2/2/2022						<0.0005	0.00055
8/2/2022	<0.0005				<0.0005		
8/5/2022		<0.0005	<0.0005	<0.0005			0.00044 (J)
8/10/2022						0.00011 (J)	
1/24/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
1/25/2023						0.00011 (J)	0.00035 (J)

Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/8/2023	<0.0005	<0.0005	<0.0005	<0.0005			
8/10/2023					<0.0005		
8/11/2023						0.00015 (J)	0.00067
2/13/2024		<0.0005		<0.0005			
2/14/2024	<0.0005		<0.0005		<0.0005		
2/16/2024						0.00016 (J)	0.00031 (J)
8/6/2024	<0.0005	<0.0005	<0.0005				
8/8/2024					<0.0005		
8/9/2024				<0.0005			0.00043 (J)
8/10/2024						0.00014 (J)	
2/12/2025	<0.0005	<0.0005					
2/13/2025			<0.0005	<0.0005	<0.0005		
2/15/2025						0.00015 (J)	0.0016

Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	0.0006 (J)	<0.0005	0.0001 (J)	<0.0005		<0.0005
10/20/2016						<0.0005
10/24/2016	0.0008 (J)					
10/25/2016		<0.0005	8E-05 (J)	<0.0005		
1/31/2017	0.0006 (J)	<0.0005	9E-05 (J)	<0.0005		<0.0005
5/23/2017	0.0006 (J)					<0.0005
5/24/2017		<0.0005	0.0001 (J)	<0.0005		
8/10/2017	0.0007 (J)	<0.0005	<0.0005	<0.0005		<0.0005
11/14/2017	0.0007 (J)	<0.0005	<0.0005	<0.0005		<0.0005
6/6/2018	0.00073 (J)	<0.0005	0.00012 (J)	<0.0005		
6/7/2018						<0.0005
10/2/2018		<0.0005	0.0001 (J)	<0.0005		
10/3/2018	0.00078 (J)					<0.0005
8/22/2019	0.0008 (J)	<0.0005				<0.0005
8/23/2019			0.00011 (J)	<0.0005		
10/22/2019			<0.0005	<0.0005		<0.0005
10/23/2019	0.00091 (J)	<0.0005				
3/25/2020	0.00068 (J)	<0.0005	<0.0005	<0.0005		<0.0005
8/26/2020						<0.0005
8/27/2020	0.00082 (J)	<0.0005	<0.0005	<0.0005		
9/24/2020	0.00076 (J)	<0.0005	<0.0005			
9/25/2020				<0.0005		
9/28/2020						<0.0005
3/17/2021				<0.0005		
3/18/2021	0.00068	<0.0005	<0.0005			<0.0005
8/12/2021					0.00016 (J)	
8/13/2021		<0.0005	<0.0005	<0.0005		<0.0005
8/16/2021	0.00081					
9/27/2021					<0.0005	
2/2/2022	0.0008		<0.0005	<0.0005		
2/3/2022		<0.0005			<0.0005	<0.0005
8/5/2022	0.00081	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1/25/2023	0.00063	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/11/2023	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2/16/2024	0.00074		<0.0005			
2/17/2024		<0.0005		<0.0005	<0.0005	<0.0005
8/9/2024	0.00078					<0.0005
8/10/2024		<0.0005	<0.0005	<0.0005	<0.0005	
2/15/2025	0.00085					
2/16/2025		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Time Series

Constituent: Calcium (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/30/2016			40.3	6.69	6.72		
8/31/2016						19.4	
10/20/2016			38.7			19.3	
10/24/2016				6.25	6.4		
1/25/2017			44.6	6.58	6.87		
1/31/2017						19.1	
5/23/2017				6.4	7.13	18.3	
5/24/2017			34.8				
8/10/2017			48.6	6.54	6.71	20.9	
11/13/2017			17.1	6.26			
11/14/2017					7.4	21.7	
6/4/2018			30.1	7.4			
6/5/2018					7.4		
6/6/2018						17	
10/1/2018			14.2 (J)	5.8	6.2		
10/3/2018						19.1 (J)	
4/1/2019			58.4				
4/2/2019				6.7	7.4		
4/4/2019						16.9	
10/21/2019			51				
10/22/2019				6.3	7.2		
10/23/2019						21.9	136
1/3/2020							118
3/4/2020							144
3/24/2020			61.2	7			103
3/25/2020						18.4	
4/9/2020					8.3		
6/18/2020							124
7/21/2020							120
8/27/2020							106
9/18/2020	62.2	51.8	32.2	6.5			
9/22/2020					7.9		
9/24/2020						20.3	120
11/10/2020	73.3						
11/11/2020		61.3					
12/15/2020	72.5	61.3					
1/19/2021	72.5	58.9					
3/11/2021			53.2				
3/12/2021	69.2	57.5		6.9			
3/16/2021					8.6		
3/17/2021						21.8	111
8/12/2021	71.2	59.5	45.4	6.9	8.4		
8/13/2021							119
8/16/2021						22.8	
1/31/2022	73.8	63.2	58.6				
2/1/2022				7.4	8.6		
2/2/2022						23.8	116
8/2/2022	73				8		
8/5/2022		59.6	53	7.1			127
8/10/2022						24.6	
1/24/2023	69.2	57.8	55.4	6.6	7.5		
1/25/2023						20.4	128

Time Series

Constituent: Calcium (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/8/2023	68	58.2	0.94 (J)	6.6			
8/10/2023					8.4		
8/11/2023						24.1	134
2/13/2024		56		6.5			
2/14/2024	29.4		51.8		7.2		
2/16/2024						22.2	127
8/6/2024	71.1	58.8	46.2				
8/8/2024					8.4		
8/9/2024				7.1			142
8/10/2024						24.2	
2/12/2025	70.7	57.2					
2/13/2025			53.9	7.2	8.5		
2/15/2025						24.8	154

Time Series

Constituent: Calcium (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	70.4	74.2	44.7	35.1		79.3
10/20/2016						83.7
10/24/2016	70.9					
10/25/2016		72.5	49	35.4		
1/31/2017	63.6	70.3	46.6	34.2		76.8
5/23/2017	111					77.2
5/24/2017		75.9	49.5	35.3		
8/10/2017	81.2	84	54.2	43.1		83.1
11/14/2017	79.7	87.2	53.2	37.4		86.7
6/6/2018	88.3	81	55	41.1		
6/7/2018						79.7
10/2/2018		84.7	55.4	42.5		
10/3/2018	85.3					77.1
4/3/2019			54	37.5		
4/4/2019	91.9	73.8				
4/5/2019						82
6/17/2019	92.6	81.2	55.3			
6/18/2019						76.5
10/22/2019			58.1	42.6		84.2
10/23/2019	86.5	89.4				
3/25/2020	86.8	91.4	59.5	42.6		86.8
9/24/2020	91.3	92.9	55.4			
9/25/2020				48.5		
9/28/2020						88.9
3/17/2021				37.3		
3/18/2021	83.7	97.7	56			85.4
8/12/2021					50.7	
8/13/2021		102	57.8	43.5		84.3
8/16/2021	124					
9/27/2021					47.2	
2/2/2022	104		62	45.7		
2/3/2022		115			68.2	84.5
8/5/2022	128	121	63	50.8	68.6	88.5
1/25/2023	109	113	57.8	42.4	64.5	81.8
8/11/2023	139	129	56	44.8	61.1	85.5
2/16/2024	106		61.9			
2/17/2024		130		44.3	63.9	83.8
8/9/2024	146					85.2
8/10/2024		156	61.4	53.7	64.5	
2/15/2025	170					
2/16/2025		170	67.9	48.4	78.3	94.9

Time Series

Constituent: Chloride (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/8/2023	2.7	2.7	3	5.1			
8/10/2023					1.6		
8/11/2023						4.9	6.7
2/13/2024		2.6		5			
2/14/2024	1.6		3		1.5		
2/16/2024						5.4	7.4
8/6/2024	2.9	2.7	2.8				
8/8/2024					1.5		
8/9/2024				5.2			8
8/10/2024						5.4	
2/12/2025	2.6	2.4					
2/13/2025			2.8	4.9	1.4		
2/15/2025						5.6	9

Time Series

Constituent: Chloride (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	5.2	3	3.2	5		4.5
10/20/2016						4.4
10/24/2016	5.2					
10/25/2016		2.8	3.2	4.8		
1/31/2017	5.6	3.3	3.1	5.5		4.8
5/23/2017	5.7					4.3
5/24/2017		3.5	2.9	5.3		
8/10/2017	5.8	2.9	2.8	4.6		4.2
11/14/2017	6	4	3.4	5.6		4.4
6/6/2018	6.4	2.9	2.8	5.3		
6/7/2018						4.1
10/2/2018		3.5	3.2	5.3		
10/3/2018	6.3					4.4
4/3/2019			3.6	5		
4/4/2019	6.9	3.9				
4/5/2019						4.3
6/17/2019	5.2		2.9			
10/22/2019			3.6	4.6		4.5
10/23/2019	6.1	3.6				
3/25/2020	5.1	3.2	3	3.9		3.6
9/24/2020	6	3.9	3.5			
9/25/2020				4.1		
9/28/2020						4
3/17/2021				4.7		
3/18/2021	6.2	4.3	3.2			4.3
8/12/2021					6.3	
8/13/2021		3.7	3.1	4		4
8/16/2021	10.4					
9/27/2021					4.5	
2/2/2022	7.1		2.9	4.1		
2/3/2022		4.8			7.8	3.9
8/5/2022	7.8	5	2.7	3.7	7.4	3.8
1/25/2023	8	6	3.3	4.3	5.9	4.3
8/11/2023	7.9	5.6	2.7	3.5	4.6	3.8
2/16/2024	7.5		3.2			
2/17/2024		6.8		3.9	4.4	4.1
8/9/2024	8.8					4.2
8/10/2024		7.7	3.1	4	4.5	
2/15/2025	9.3					
2/16/2025		8.5	3.3	4.2	5.2	4.3

Time Series

Constituent: Chromium (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/30/2016			<0.005	0.0038 (J)	<0.005		
8/31/2016						<0.005	
10/20/2016			<0.005			<0.005	
10/24/2016				0.0039 (J)	0.001 (J)		
1/25/2017			0.0029 (J)	0.0038 (J)	0.0012 (J)		
1/31/2017						<0.005	
5/23/2017				0.0038 (J)	0.0012 (J)	0.0006 (J)	
5/24/2017			0.0004 (J)				
8/10/2017			<0.005	0.0039 (J)	0.0019 (J)	<0.005	
11/13/2017			<0.005	0.0038 (J)			
11/14/2017					0.0016 (J)	<0.005	
6/4/2018			<0.005	0.0037 (J)			
6/5/2018					<0.005		
6/6/2018						<0.005	
10/1/2018			<0.005	0.0036 (J)	0.0023 (J)		
10/3/2018						<0.005	
8/21/2019			0.00061 (J)	0.0039 (J)	0.0022 (J)		
8/22/2019						0.00064 (J)	
10/21/2019			0.0012 (J)				
10/22/2019				0.004 (J)	0.0023 (J)		
10/23/2019						<0.005	<0.005
1/3/2020							0.00063 (J)
3/4/2020							<0.005
3/24/2020			0.0019 (J)	0.0044 (J)			0.00051 (J)
3/25/2020						0.00098 (J)	
4/9/2020					0.0031 (J)		
6/18/2020							<0.005
7/21/2020							<0.005
8/25/2020			0.0013 (J)	0.0039 (J)	0.0031 (J)		
8/27/2020						<0.005	<0.005
9/18/2020	0.0039 (J)	<0.005	0.00077 (J)	0.0037 (J)			
9/22/2020					0.0046 (J)		
9/24/2020						<0.005	<0.005
11/10/2020	<0.005						
11/11/2020		<0.005					
12/15/2020	<0.005	0.0013 (J)					
1/19/2021	<0.005	0.0015 (J)					
3/11/2021			0.002 (J)				
3/12/2021	<0.005	0.00062 (J)		0.0045 (J)			
3/16/2021					0.0061		
3/17/2021						0.00075 (J)	<0.005
8/12/2021	<0.005	<0.005	<0.005	0.0041 (J)	<0.005		
8/13/2021							<0.005
8/16/2021						<0.005	
1/31/2022	<0.005	<0.005	<0.005				
2/1/2022				0.0043 (J)	0.0013 (J)		
2/2/2022						<0.005	<0.005
8/2/2022	<0.005				0.0013 (J)		
8/5/2022		<0.005	<0.005	0.0045 (J)			<0.005
8/10/2022						<0.005	
1/24/2023	<0.005	<0.005	<0.005	0.0041 (J)	0.0036 (J)		
1/25/2023						<0.005	<0.005

Time Series

Constituent: Chromium (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/8/2023	<0.005	<0.005	<0.005	0.0037 (J)			
8/10/2023					0.0019 (J)		
8/11/2023						<0.005	<0.005
2/13/2024		<0.005		0.0053			
2/14/2024	<0.005		<0.005		0.0023 (J)		
2/16/2024						<0.005	<0.005
8/6/2024	<0.005	<0.005	<0.005				
8/8/2024					<0.005		
8/9/2024				0.0029 (J)			<0.005
8/10/2024						<0.005	
2/12/2025	<0.005	<0.005					
2/13/2025			<0.005	0.0043 (J)	0.0024 (J)		
2/15/2025						<0.005	<0.005

Time Series

Constituent: Chromium (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.005	<0.005	<0.005	<0.005		<0.005
10/20/2016						<0.005
10/24/2016	<0.005					
10/25/2016		<0.005	<0.005	<0.005		
1/31/2017	<0.005	<0.005	<0.005	<0.005		<0.005
5/23/2017	<0.005					<0.005
5/24/2017		<0.005	<0.005	<0.005		
8/10/2017	<0.005	<0.005	<0.005	<0.005		<0.005
11/14/2017	<0.005	<0.005	<0.005	<0.005		<0.005
6/6/2018	<0.005	<0.005	<0.005	<0.005		
6/7/2018						<0.005
10/2/2018		<0.005	<0.005	<0.005		
10/3/2018	<0.005					<0.005
8/22/2019	0.00063 (J)	<0.005				<0.005
8/23/2019			<0.005	<0.005		
10/22/2019			<0.005	0.00062 (J)		0.00066 (J)
10/23/2019	0.0015 (J)	0.0004 (J)				
3/25/2020	0.00045 (J)	0.0013 (J)	0.00074 (J)	0.0014 (J)		0.00081 (J)
8/26/2020						0.00098 (J)
8/27/2020	0.00069 (J)	<0.005	<0.005	<0.005		
9/24/2020	0.00081 (J)	0.00064 (J)	<0.005			
9/25/2020				<0.005		
9/28/2020						0.0017 (J)
3/17/2021				<0.005		
3/18/2021	0.003 (J)	0.00058 (J)	<0.005			0.0021 (J)
8/12/2021					<0.005	
8/13/2021		<0.005	<0.005	<0.005		<0.005
8/16/2021	<0.005					
9/27/2021					<0.005	
2/2/2022	0.0013 (J)		<0.005	<0.005		
2/3/2022		<0.005			<0.005	<0.005
8/5/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/25/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/11/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2/16/2024	<0.005		<0.005			
2/17/2024		<0.005		<0.005	<0.005	<0.005
8/9/2024	<0.005					<0.005
8/10/2024		<0.005	<0.005	<0.005	<0.005	
2/15/2025	<0.005					
2/16/2025		<0.005	<0.005	<0.005	<0.005	<0.005

Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/30/2016			<0.005	<0.005	0.0006 (J)		
8/31/2016						0.0033 (J)	
10/20/2016			<0.005			0.0025 (J)	
10/24/2016				<0.005	<0.005		
1/25/2017			<0.005	<0.005	<0.005		
1/31/2017						0.001 (J)	
5/23/2017				<0.005	<0.005	0.0025 (J)	
5/24/2017			<0.005				
8/10/2017			<0.005	<0.005	0.0004 (J)	0.0029 (J)	
11/13/2017			<0.005	<0.005			
11/14/2017					0.0003 (J)	0.003 (J)	
6/4/2018			<0.005	<0.005			
6/5/2018					<0.005		
6/6/2018						0.0016 (J)	
10/1/2018			<0.005	<0.005	<0.005		
10/3/2018						0.0028 (J)	
8/21/2019			<0.005	<0.005	<0.005		
8/22/2019						<0.005	
10/21/2019			<0.005				
10/22/2019				<0.005	<0.005		
10/23/2019						0.0023 (J)	0.0018 (J)
1/3/2020							0.0038 (J)
3/4/2020							0.0021 (J)
3/24/2020			<0.005	<0.005			0.0019 (J)
3/25/2020						0.0021 (J)	
4/9/2020					0.00037 (J)		
6/18/2020							0.0012 (J)
7/21/2020							0.00098 (J)
8/25/2020			<0.005	<0.005	<0.005		
8/27/2020						0.0027 (J)	0.001 (J)
9/18/2020	0.00049 (J)	<0.005	<0.005	<0.005			
9/22/2020					0.00074 (J)		
9/24/2020						0.0021 (J)	0.0011 (J)
11/10/2020	<0.005						
11/11/2020		<0.005					
12/15/2020	<0.005	0.00039 (J)					
1/19/2021	<0.005	<0.005					
3/11/2021			<0.005				
3/12/2021	<0.005	<0.005		<0.005			
3/16/2021					0.0013 (J)		
3/17/2021						0.0023 (J)	0.0012 (J)
8/12/2021	<0.005	<0.005	<0.005	<0.005	<0.005		
8/13/2021							0.00085 (J)
8/16/2021						0.0026 (J)	
1/31/2022	<0.005	<0.005	<0.005				
2/1/2022				<0.005	<0.005		
2/2/2022						0.0027 (J)	0.0019 (J)
8/2/2022	<0.005				<0.005		
8/5/2022		<0.005	<0.005	<0.005			0.001 (J)
8/10/2022						0.0028 (J)	
1/24/2023	<0.005	<0.005	<0.005	<0.005	<0.005		
1/25/2023						0.0021 (J)	0.0016 (J)

Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/8/2023	<0.005	<0.005	<0.005	<0.005			
8/10/2023					<0.005		
8/11/2023						0.0028 (J)	0.001 (J)
2/13/2024		<0.005		<0.005			
2/14/2024	<0.005		<0.005		<0.005		
2/16/2024						0.0026 (J)	0.0011 (J)
8/6/2024	<0.005	<0.005	<0.005				
8/8/2024					<0.005		
8/9/2024				<0.005			0.00094 (J)
8/10/2024						0.0025 (J)	
2/12/2025	<0.005	<0.005					
2/13/2025			<0.005	<0.005	<0.005		
2/15/2025						0.0027 (J)	<0.005

Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	0.0018 (J)	0.0014 (J)	<0.005	0.0023 (J)		<0.005
10/20/2016						<0.005
10/24/2016	0.0018 (J)					
10/25/2016		0.0013 (J)	<0.005	0.0017 (J)		
1/31/2017	0.0016 (J)	0.0006 (J)	<0.005	0.0017 (J)		<0.005
5/23/2017	0.0014 (J)					0.0005 (J)
5/24/2017		0.0007 (J)	<0.005	0.002 (J)		
8/10/2017	0.0025 (J)	0.0006 (J)	<0.005	0.0012 (J)		0.0003 (J)
11/14/2017	0.002 (J)	0.0005 (J)	<0.005	0.0014 (J)		0.0004 (J)
6/6/2018	0.0031 (J)	0.00056 (J)	<0.005	0.0014 (J)		
6/7/2018						<0.005
10/2/2018		<0.005	<0.005	0.00081 (J)		
10/3/2018	0.0023 (J)					<0.005
8/22/2019	0.0019 (J)	<0.005				0.0003 (J)
8/23/2019			<0.005	0.0027 (J)		
10/22/2019			<0.005	0.0022 (J)		0.00061 (J)
10/23/2019	0.0021 (J)	0.00038 (J)				
3/25/2020	0.0022 (J)	0.00047 (J)	<0.005	0.0022 (J)		<0.005
8/26/2020						0.00061 (J)
8/27/2020	0.0019 (J)	<0.005	<0.005	0.00086 (J)		
9/24/2020	0.0019 (J)	0.00044 (J)	<0.005			
9/25/2020				0.001 (J)		
9/28/2020						0.00048 (J)
3/17/2021				0.003 (J)		
3/18/2021	0.0021 (J)	0.00045 (J)	<0.005			0.0012 (J)
8/12/2021					0.0024 (J)	
8/13/2021		<0.005	<0.005	0.0011 (J)		<0.005
8/16/2021	0.0022 (J)					
9/27/2021					0.0011 (J)	
2/2/2022	0.0022 (J)		<0.005	0.002 (J)		
2/3/2022		<0.005			0.00041 (J)	0.00045 (J)
8/5/2022	0.0021 (J)	<0.005	<0.005	0.0008 (J)	0.0011 (J)	<0.005
1/25/2023	0.0017 (J)	0.00046 (J)	<0.005	0.0016 (J)	0.00048 (J)	<0.005
8/11/2023	0.0019 (J)	0.00047 (J)	<0.005	0.00077 (J)	0.00078 (J)	<0.005
2/16/2024	0.002 (J)		<0.005			
2/17/2024		0.00071 (J)		0.0011 (J)	0.00047 (J)	0.00042 (J)
8/9/2024	0.002 (J)					<0.005
8/10/2024		0.00052 (J)	<0.005	0.0005 (J)	0.00081 (J)	
2/15/2025	0.0023 (J)					
2/16/2025		<0.005	<0.005	<0.005	<0.005	<0.005

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/22/2025 7:41 PM

Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/30/2016			0.804	1.32	0.587		
8/31/2016						0.621 (U)	
10/20/2016			1.13 (U)			1.4	
10/24/2016				1.3 (U)	0.979 (U)		
1/25/2017			0.888 (U)	1.04 (U)	0.038 (U)		
1/31/2017						0.906 (U)	
5/23/2017				0.541 (U)	0.898 (U)	0.388 (U)	
5/24/2017			0.622 (U)				
8/10/2017			0.745 (U)	0.536 (U)	0.759 (U)	1.03 (U)	
11/13/2017			0.778 (U)	0.786 (U)			
11/14/2017					0.0762 (U)	0.769 (U)	
6/4/2018			0.637 (U)	0.233 (U)			
6/5/2018					0.594 (U)		
6/6/2018						1.28	
10/1/2018			0.451 (U)	0.494 (U)	0.982		
10/3/2018						0.302 (U)	
8/21/2019			0.553 (U)	0.514 (U)	0.492 (U)		
8/22/2019						0.474 (U)	
10/21/2019			0.351 (U)				
10/22/2019				0.828 (U)	0.523 (U)		
10/23/2019						0.776 (U)	0.858 (U)
1/22/2020							1.04 (U)
3/4/2020							1.32
3/24/2020			0.26 (U)	0.677 (U)			1.23 (U)
3/25/2020						0.603 (U)	
4/9/2020					0.617 (U)		
6/18/2020							0.681 (U)
7/21/2020							0.0938 (U)
8/25/2020			0.57 (U)	0.0182 (U)	0.587 (U)		
8/27/2020						0.109 (U)	1.17 (U)
9/18/2020	1.11 (U)	1.5 (U)	0.828 (U)	1.15 (U)			
9/22/2020					0.551 (U)		
9/24/2020						0.625 (U)	1.42
11/10/2020	0.234 (U)						
11/11/2020		0.776 (U)					
12/15/2020	0.529 (U)	1.23 (U)					
1/19/2021	0.176 (U)	1.35 (U)					
3/11/2021			0.354 (U)				
3/12/2021	0 (U)	0.829 (U)		0.164 (U)			
3/16/2021					0.559 (U)		
3/17/2021						0.248 (U)	0.401 (U)
8/12/2021	0.462 (U)	0.274 (U)	0.532 (U)	0.223 (U)	0.312 (U)		
8/13/2021							0.828 (U)
8/16/2021						0.667 (U)	
1/31/2022	0.444 (U)	0.196 (U)	0.279 (U)				
2/1/2022				0.0793 (U)	0.132 (U)		
2/2/2022						0.162 (U)	0.806 (U)
8/2/2022	0.491 (U)				0.791 (U)		
8/5/2022		0.599 (U)	0.573 (U)	0.665 (U)			0.618 (U)
8/10/2022						0.601 (U)	
1/24/2023	0.391 (U)	0.856	0.19 (U)	0.331 (U)	0.529 (U)		
1/25/2023						0.419 (U)	0.513 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/8/2023	0.502 (U)	0.549 (U)	0.728 (U)	0.723 (U)			
8/10/2023					0.841 (U)		
8/11/2023						0.93 (U)	1.08
2/13/2024		0.575 (U)		0.675 (U)			
2/14/2024	1.72		0.436 (U)		0.307 (U)		
2/16/2024						0.344 (U)	0.498 (U)
8/6/2024	0.973	0.501 (U)	0.0994 (U)				
8/8/2024					0.181 (U)		
8/9/2024				0.976 (U)			0.604 (U)
8/10/2024						0.817 (U)	
2/12/2025	0.876 (U)	1.33 (U)					
2/13/2025			0.518 (U)	0.0591 (U)	0.437 (U)		
2/15/2025						0.312 (U)	0.783 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/22/2025 7:41 PM

Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	1.62	0.906 (U)	1.2	1.03		
10/20/2016						1.97
10/24/2016	1.01 (U)					
10/25/2016		1.03	1.11	1.07		
1/31/2017	0.976 (U)	0.868 (U)	1.45	0.588 (U)		1.03
5/23/2017	0.891 (U)					0.398 (U)
5/24/2017		0.728 (U)	0.393 (U)	0.593 (U)		
8/10/2017	0.601 (U)	1.35	0.84 (U)	0.691 (U)		0.938 (U)
11/14/2017	0.567 (U)	0.817 (U)	1.01 (U)	0.653 (U)		0.335 (U)
6/6/2018	0.836 (U)	0.559 (U)	0.365 (U)	0.939 (U)		
6/7/2018						0.696 (U)
10/2/2018		0.336 (U)	1.23	0.225 (U)		
10/3/2018	0.111 (U)					1.6 (U)
8/22/2019	0.946 (U)	0.694 (U)				0.904 (U)
8/23/2019			1.69	0.47 (U)		
10/22/2019			0.705 (U)	0.545 (U)		0.424 (U)
10/23/2019	0.571 (U)	0.584 (U)				
3/25/2020	0.403 (U)	0.663 (U)	0.673 (U)	0.508 (U)		0.915 (U)
8/26/2020						1.19
8/27/2020	0.37 (U)	0.416 (U)	0.264 (U)	0.989 (U)		
9/24/2020	0.804 (U)	1.11 (U)	0.576 (U)			
9/25/2020				0.584 (U)		
9/28/2020						0.613 (U)
3/17/2021				0.556 (U)		
3/18/2021	0.274 (U)	0.252 (U)	0.145 (U)			0.323 (U)
8/12/2021					0.124 (U)	
8/13/2021		0.513 (U)	0.815 (U)	0.794 (U)		0.228 (U)
8/16/2021	0.493 (U)					
9/27/2021					1.05 (U)	
2/2/2022	0.569 (U)		0.0564 (U)	0.542 (U)		
2/3/2022		0.835			0.499 (U)	0.5 (U)
8/5/2022	0.205 (U)	0.139 (U)	0.917 (U)	0.22 (U)	0 (U)	0.206 (U)
1/25/2023	0.568 (U)	0.432 (U)	0.71 (U)	0.195 (U)	0.595 (U)	1.44
8/11/2023	0.849 (U)	0.292 (U)	0.314 (U)	0.105 (U)	0.822 (U)	0.806 (U)
2/16/2024	0.81 (U)		0.845 (U)			
2/17/2024		0.888 (U)		0.388 (U)	0.629 (U)	0 (U)
8/9/2024	0.378 (U)					0.421 (U)
8/10/2024		0.693 (U)	0.223 (U)	0.5 (U)	0.723 (U)	
2/15/2025	0.284 (U)					
2/16/2025		0.372 (U)	0.352 (U)	0.852 (U)	0.615 (U)	0.909 (U)

Time Series

Constituent: Fluoride (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/30/2016			0.07 (J)	0.04 (J)	0.2 (J)		
8/31/2016						0.05 (J)	
10/20/2016			0.07 (J)			0.03 (J)	
10/24/2016				0.05 (J)	0.16 (J)		
1/25/2017			0.14 (J)	<0.1	0.15 (J)		
1/31/2017						<0.1	
5/23/2017				0.004 (J)	0.18 (J)	<0.1	
5/24/2017			0.02 (J)				
8/10/2017			0.06 (J)	0.03 (J)	0.19 (J)	<0.1	
11/13/2017			<0.1	<0.1			
11/14/2017					0.16 (J)	<0.1	
6/4/2018			0.032 (J)	<0.1			
6/5/2018					0.18 (J)		
6/6/2018						<0.1	
10/1/2018			<0.1	<0.1	0.078 (J)		
10/3/2018						<0.1	
4/1/2019			0.042 (J)				
4/2/2019				<0.1	0.18 (J)		
4/4/2019						<0.1	
8/21/2019			0.048 (J)	<0.1	0.11 (J)		
8/22/2019						<0.1	
10/21/2019			0.12 (J)				
10/22/2019				0.05 (J)	0.18 (J)		
10/23/2019						<0.1	0.22 (J)
1/3/2020							<0.1
3/4/2020							<0.1
3/24/2020			0.076 (J)	<0.1			<0.1
3/25/2020						<0.1	
4/9/2020					0.14 (J)		
6/18/2020							<0.1
7/21/2020							<0.1
8/25/2020			0.052 (J)	<0.1	0.17		
8/27/2020						<0.1	<0.1
9/18/2020	0.067 (J)	0.098 (J)	<0.1	<0.1			
9/22/2020					0.16		
9/24/2020						<0.1	<0.1
11/10/2020	0.065 (J)						
11/11/2020		0.083 (J)					
12/15/2020	0.064 (J)	0.081 (J)					
1/19/2021	0.057 (J)	0.079 (J)					
3/11/2021			0.057 (J)				
3/12/2021	0.062 (J)	0.085 (J)		<0.1			
3/16/2021					0.18		
3/17/2021						<0.1	<0.1
8/12/2021	<0.1	0.064 (J)	<0.1	<0.1	0.16		
8/13/2021							<0.1
8/16/2021						<0.1	
1/31/2022	0.053 (J)	0.072 (J)	0.055 (J)				
2/1/2022				<0.1	0.16		
2/2/2022						<0.1	<0.1
8/2/2022	0.08 (J)				0.19		
8/5/2022		0.12	0.1	0.077 (J)			0.076 (J)

Time Series

Constituent: Fluoride (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/10/2022						0.065 (J)	
1/24/2023	0.081 (J)	0.092 (J)	0.086 (J)	0.055 (J)	0.2		
1/25/2023						<0.1	<0.1
8/8/2023	0.072 (J)	0.091 (J)	0.076 (J)	0.05 (J)			
8/10/2023					0.19		
8/11/2023						<0.1	<0.1
2/13/2024		0.071 (J)		<0.1			
2/14/2024	0.23		0.081 (J)		0.18		
2/16/2024						<0.1	<0.1
8/6/2024	0.094 (J)	0.1	0.089 (J)				
8/8/2024					0.17		
8/9/2024				0.075 (J)			0.067 (J)
8/10/2024						0.068 (J)	
2/12/2025	0.099 (J)	0.1					
2/13/2025			0.093 (J)	0.067 (J)	0.2		
2/15/2025						<0.1	<0.1

Time Series

Constituent: Fluoride (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	0.06 (J)	0.15 (J)	0.08 (J)	0.12 (J)		0.18 (J)
10/20/2016						0.12 (J)
10/24/2016	0.13 (J)					
10/25/2016		0.09 (J)	0.16 (J)	0.17 (J)		
1/31/2017	<0.1	0.13 (J)	0.16 (J)	0.05 (J)		0.3
5/23/2017	0.15 (J)					0.14 (J)
5/24/2017		0.07 (J)	0.009 (J)	0.13 (J)		
8/10/2017	<0.1	0.03 (J)	<0.1	0.12 (J)		0.11 (J)
11/14/2017	<0.1	<0.1	<0.1	<0.3		0.07 (J)
6/6/2018	<0.1	0.074 (J)	0.057 (J)	0.15 (J)		
6/7/2018						0.3
10/2/2018		<0.1	<0.1	<0.3		
10/3/2018	<0.1					0.12 (J)
4/3/2019			<0.1	0.05 (J)		
4/4/2019	0.042 (J)	0.03 (J)				
4/5/2019						0.33
6/18/2019						0.89
8/22/2019	<0.1	<0.1				0.07 (J)
8/23/2019			<0.1	0.034 (J)		
10/22/2019			0.047 (J)	0.099 (J)		0.087 (J)
10/23/2019	<0.1	<0.1				
3/25/2020	<0.1	<0.1	<0.1	0.075 (J)		0.078 (J)
8/26/2020						0.072 (J)
8/27/2020	<0.1	<0.1	<0.1	0.094 (J)		
9/24/2020	<0.1	<0.1	0.064 (J)			
9/25/2020				0.091 (J)		
9/28/2020						0.078 (J)
3/17/2021				0.089 (J)		
3/18/2021	<0.1	<0.1	<0.1			0.079 (J)
8/12/2021					<0.1	
8/13/2021		<0.1	<0.1	0.086 (J)		0.075 (J)
8/16/2021	<0.1					
9/27/2021					<0.1	
2/2/2022	<0.1		<0.1	0.086 (J)		
2/3/2022		<0.1			0.056 (J)	0.069 (J)
8/5/2022	0.071 (J)	0.075 (J)	0.093 (J)	0.14	0.12	0.12
1/25/2023	<0.1	0.051 (J)	0.054 (J)	0.12	0.085 (J)	0.095 (J)
8/11/2023	<0.1	<0.1	<0.1	0.086 (J)	0.057 (J)	0.07 (J)
2/16/2024	<0.1		<0.1			
2/17/2024		<0.1		0.094 (J)	0.055 (J)	0.068 (J)
8/9/2024	0.077 (J)					0.11
8/10/2024		0.066 (J)	0.069 (J)	0.13	0.1	
2/15/2025	<0.1					
2/16/2025		<0.1	<0.1	0.086 (J)	0.057 (J)	0.065 (J)

Time Series

Constituent: Lead (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/30/2016			0.0001 (J)	<0.001	<0.001		
8/31/2016						<0.001	
10/20/2016			<0.001			<0.001	
10/24/2016				<0.001	<0.001		
1/25/2017			<0.001	<0.001	<0.001		
1/31/2017						<0.001	
5/23/2017				<0.001	<0.001	0.0009 (J)	
5/24/2017			<0.001				
8/10/2017			<0.001	<0.001	0.0001 (J)	<0.001	
11/13/2017			<0.001	<0.001			
11/14/2017					<0.001	<0.001	
6/4/2018			<0.001	<0.001			
6/5/2018					<0.001		
6/6/2018						<0.001	
10/1/2018			<0.001	<0.001	<0.001		
10/3/2018						<0.001	
8/21/2019			<0.001	<0.001	7.1E-05 (J)		
8/22/2019						<0.001	
10/21/2019			0.00016 (J)				
10/22/2019				<0.001	7.3E-05 (J)		
10/23/2019						<0.001	<0.001
1/3/2020							<0.001
3/4/2020							0.00011 (J)
3/24/2020			0.00058 (J)	0.00016 (J)			<0.001
3/25/2020						<0.001	
4/9/2020					0.00039 (J)		
6/18/2020							<0.001
7/21/2020							<0.001
8/25/2020			0.00036 (J)	0.00011 (J)	0.00022 (J)		
8/27/2020						<0.001	<0.001
9/18/2020	<0.001	<0.001	0.00026 (J)	6.5E-05 (J)			
9/22/2020					0.00096 (J)		
9/24/2020						<0.001	<0.001
11/10/2020	<0.001						
11/11/2020		<0.001					
12/15/2020	<0.001	0.00015 (J)					
1/19/2021	3.8E-05 (J)	5.6E-05 (J)					
3/11/2021			0.0011				
3/12/2021	<0.001	4.8E-05 (J)		0.00017 (J)			
3/16/2021					0.0016		
3/17/2021						<0.001	<0.001
8/12/2021	<0.001	<0.001	<0.001	<0.001	<0.001		
8/13/2021							<0.001
8/16/2021						<0.001	
1/31/2022	<0.001	<0.001	<0.001				
2/1/2022				<0.001	<0.001		
2/2/2022						<0.001	<0.001
8/2/2022	<0.001				<0.001		
8/5/2022		<0.001	<0.001	<0.001			<0.001
8/10/2022						<0.001	
1/24/2023	<0.001	<0.001	<0.001	<0.001	<0.001		
1/25/2023						<0.001	<0.001

Time Series

Constituent: Lead (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/8/2023	<0.001	<0.001	<0.001	<0.001			
8/10/2023					<0.001		
8/11/2023						<0.001	<0.001
2/13/2024		<0.001		<0.001			
2/14/2024	0.00021 (J)		<0.001		<0.001		
2/16/2024						<0.001	<0.001
8/6/2024	<0.001	<0.001	<0.001				
8/8/2024					<0.001		
8/9/2024				<0.001			<0.001
8/10/2024						<0.001	
2/12/2025	<0.001	<0.001					
2/13/2025			<0.001	<0.001	<0.001		
2/15/2025						<0.001	<0.001

Time Series

Constituent: Lead (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.001	<0.001	<0.001	<0.001		<0.001
10/20/2016						<0.001
10/24/2016	<0.001					
10/25/2016		<0.001	<0.001	<0.001		
1/31/2017	<0.001	<0.001	<0.001	<0.001		<0.001
5/23/2017	<0.001					<0.001
5/24/2017		<0.001	<0.001	<0.001		
8/10/2017	<0.001	<0.001	<0.001	<0.001		<0.001
11/14/2017	<0.001	<0.001	<0.001	<0.001		<0.001
6/6/2018	<0.001	<0.001	<0.001	<0.001		
6/7/2018						<0.001
10/2/2018		<0.001	<0.001	<0.001		
10/3/2018	<0.001					<0.001
8/22/2019	<0.001	<0.001				<0.001
8/23/2019			<0.001	5.8E-05 (J)		
10/22/2019			7.9E-05 (J)	5.4E-05 (J)		0.00025 (J)
10/23/2019	0.00043 (J)	6.8E-05 (J)				
3/25/2020	7.6E-05 (J)	8.5E-05 (J)	0.00021 (J)	<0.001		0.0001 (J)
8/26/2020						0.00036 (J)
8/27/2020	0.00018 (J)	<0.001	<0.001	<0.001		
9/24/2020	0.00028 (J)	4.9E-05 (J)	0.00034 (J)			
9/25/2020				<0.001		
9/28/2020						0.00022 (J)
3/17/2021				<0.001		
3/18/2021	0.00024 (J)	5.8E-05 (J)	9.1E-05 (J)			0.00088 (J)
8/12/2021					<0.001	
8/13/2021		<0.001	<0.001	<0.001		<0.001
8/16/2021	<0.001					
9/27/2021					<0.001	
2/2/2022	<0.001		<0.001	<0.001		
2/3/2022		<0.001			<0.001	<0.001
8/5/2022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1/25/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/11/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2/16/2024	0.00027 (J)		<0.001			
2/17/2024		<0.001		<0.001	<0.001	<0.001
8/9/2024	<0.001					<0.001
8/10/2024		<0.001	<0.001	<0.001	<0.001	
2/15/2025	<0.001					
2/16/2025		<0.001	<0.001	<0.001	<0.001	<0.001

Time Series

Constituent: Lithium (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/30/2016			0.0022 (J)	<0.03	<0.03		
8/31/2016						<0.03	
10/20/2016			<0.03			<0.03	
10/24/2016				<0.03	<0.03		
1/25/2017			<0.03	<0.03	<0.03		
1/31/2017						<0.03	
5/23/2017				<0.03	0.0011 (J)	<0.03	
5/24/2017			0.0017 (J)				
8/10/2017			0.0017 (J)	<0.03	<0.03	<0.03	
11/13/2017			<0.03	<0.03			
11/14/2017					<0.03	<0.03	
6/4/2018			0.0016 (J)	<0.03			
6/5/2018					0.001 (J)		
6/6/2018						<0.03	
10/1/2018			<0.03	<0.03	0.001 (J)		
10/3/2018						<0.03	
8/21/2019			0.0018 (J)	<0.03	0.0011 (J)		
8/22/2019						<0.03	
10/21/2019			0.0026 (J)				
10/22/2019				<0.03	0.0011 (J)		
10/23/2019						<0.03	0.0012 (J)
1/3/2020							0.0011 (J)
3/4/2020							0.0013 (J)
3/24/2020			0.0039 (J)	<0.03			0.00084 (J)
3/25/2020						<0.03	
4/9/2020					0.0017 (J)		
6/18/2020							0.0013 (J)
7/21/2020							0.0013 (J)
8/25/2020			0.0033 (J)	<0.03	0.0014 (J)		
8/27/2020						<0.03	0.0011 (J)
9/18/2020	0.0026 (J)	0.0051 (J)	0.0021 (J)	<0.03			
9/22/2020					0.0018 (J)		
9/24/2020						<0.03	0.0011 (J)
11/10/2020	0.0028 (J)						
11/11/2020		0.0036 (J)					
12/15/2020	0.0026 (J)	0.0045 (J)					
1/19/2021	0.003 (J)	0.0032 (J)					
3/11/2021			0.0047 (J)				
3/12/2021	0.0031 (J)	0.0031 (J)		<0.03			
3/16/2021					0.0026 (J)		
3/17/2021						<0.03	0.0012 (J)
8/12/2021	0.0029 (J)	0.0037 (J)	0.002 (J)	<0.03	0.00094 (J)		
8/13/2021							0.0011 (J)
8/16/2021						<0.03	
1/31/2022	0.0031 (J)	0.0034 (J)	0.0026 (J)				
2/1/2022				<0.03	0.0011 (J)		
2/2/2022						<0.03	0.0013 (J)
8/2/2022	0.0026 (J)				0.00089 (J)		
8/5/2022		0.0036 (J)	0.0019 (J)	<0.03			0.0013 (J)
8/10/2022						<0.03	
1/24/2023	0.0029 (J)	0.0046 (J)	0.0023 (J)	<0.03	0.00091 (J)		
1/25/2023						<0.03	0.001 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/8/2023	0.0029 (J)	0.004 (J)	0.0018 (J)	<0.03			
8/10/2023					0.001 (J)		
8/11/2023						<0.03	0.0013 (J)
2/13/2024		0.006 (J)		<0.03			
2/14/2024	<0.03		0.002 (J)		<0.03		
2/16/2024						<0.03	<0.03
8/6/2024	0.0026 (J)	0.0042 (J)	0.0019 (J)				
8/8/2024					<0.03		
8/9/2024				<0.03			<0.03
8/10/2024						<0.03	
2/12/2025	0.00358 (J)	0.00628 (J)					
2/13/2025			0.0025 (J)	0.000808 (J)	0.00128 (J)		
2/15/2025						0.000781 (J)	0.00139 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.03	0.0034 (J)	<0.03	<0.03		<0.03
10/20/2016						<0.03
10/24/2016	<0.03					
10/25/2016		0.0043 (J)	<0.03	<0.03		
1/31/2017	<0.03	0.0042 (J)	<0.03	<0.03		<0.03
5/23/2017	0.0012 (J)					0.0012 (J)
5/24/2017		0.0039 (J)	<0.03	0.0012 (J)		
8/10/2017	0.0016 (J)	0.004 (J)	<0.03	<0.03		<0.03
11/14/2017	0.0015 (J)	0.0044 (J)	<0.03	<0.03		<0.03
6/6/2018	0.0017 (J)	0.0041 (J)	0.00099 (J)	0.0013 (J)		
6/7/2018						0.0015 (J)
10/2/2018		0.0041 (J)	<0.03	0.0013 (J)		
10/3/2018	0.0016 (J)					<0.03
8/22/2019	0.0015 (J)	0.004 (J)				0.0018 (J)
8/23/2019			0.00092 (J)	0.0009 (J)		
10/22/2019			0.00094 (J)	0.00088 (J)		0.0027 (J)
10/23/2019	0.002 (J)	0.0039 (J)				
3/25/2020	0.0016 (J)	0.0041 (J)	0.00091 (J)	<0.03		0.0017 (J)
8/26/2020						0.0028 (J)
8/27/2020	0.0016 (J)	0.0037 (J)	<0.03	0.0011 (J)		
9/24/2020	0.0017 (J)	0.0038 (J)	0.00098 (J)			
9/25/2020				0.001 (J)		
9/28/2020						0.0022 (J)
3/17/2021				<0.03		
3/18/2021	0.0018 (J)	0.0042 (J)	0.0011 (J)			0.0029 (J)
8/12/2021					0.0036 (J)	
8/13/2021		0.0038 (J)	0.00084 (J)	<0.03		0.0017 (J)
8/16/2021	0.0016 (J)					
9/27/2021					0.0035 (J)	
2/2/2022	0.0019 (J)		0.001 (J)	0.00084 (J)		
2/3/2022		0.0046 (J)			0.0051 (J)	0.0015 (J)
8/5/2022	0.0014 (J)	0.0039 (J)	0.00082 (J)	0.00087 (J)	0.0038 (J)	0.0018 (J)
1/25/2023	0.0012 (J)	0.0038 (J)	0.00081 (J)	<0.03	0.0037 (J)	0.001 (J)
8/11/2023	0.0014 (J)	0.0044 (J)	0.00083 (J)	0.00076 (J)	0.0041 (J)	0.0023 (J)
2/16/2024	<0.03		<0.03			
2/17/2024		0.0041 (J)		<0.03	0.0038 (J)	<0.03
8/9/2024	<0.03					0.0019 (J)
8/10/2024		0.0047 (J)	<0.03	<0.03	0.0041 (J)	
2/15/2025	0.00158 (J)					
2/16/2025		0.0057 (J)	0.00113 (J)	0.000977 (J)	0.00512 (J)	0.00215 (J)

Time Series

Constituent: Mercury (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/30/2016			4E-05 (J)	4.1E-05 (J)	4E-05 (J)		
8/31/2016						<0.0002	
10/20/2016			<0.0002			<0.0002	
10/24/2016				<0.0002	<0.0002		
1/25/2017			4E-05 (J)	4E-05 (J)	4E-05 (J)		
1/31/2017						9.3E-05 (J)	
5/23/2017				<0.0002	<0.0002	<0.0002	
5/24/2017			<0.0002				
8/10/2017			<0.0002	<0.0002	<0.0002	<0.0002	
11/13/2017			<0.0002	<0.0002			
11/14/2017					<0.0002	<0.0002	
6/4/2018			<0.0002	<0.0002			
6/5/2018					<0.0002		
6/6/2018						<0.0002	
10/1/2018			4.3E-05 (J)	3.9E-05 (J)	4.3E-05 (J)		
10/3/2018						<0.0002	
8/21/2019			<0.0002	<0.0002	<0.0002		
8/22/2019						<0.0002	
10/23/2019							<0.0002
1/3/2020							<0.0002
3/4/2020							<0.0002
3/24/2020							<0.0002
6/18/2020							<0.0002
7/21/2020							<0.0002
8/25/2020			<0.0002	<0.0002	<0.0002		
8/27/2020						<0.0002	<0.0002
9/18/2020	<0.0002	<0.0002					
9/24/2020							<0.0002
11/10/2020	<0.0002						
11/11/2020		<0.0002					
12/15/2020	<0.0002	<0.0002					
1/19/2021	<0.0002	<0.0002					
8/12/2021	8.1E-05 (J)	0.00018 (J)	<0.0002	0.00011 (J)	<0.0002		
8/13/2021							0.0001 (J)
8/16/2021						9.9E-05 (J)	
1/31/2022	<0.0002	<0.0002	<0.0002				
2/1/2022				<0.0002	<0.0002		
2/2/2022						<0.0002	<0.0002
8/2/2022	<0.0002				<0.0002		
8/5/2022		<0.0002	<0.0002	<0.0002			<0.0002
8/10/2022						<0.0002	
1/24/2023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
1/25/2023						<0.0002	<0.0002
8/8/2023	<0.0002	<0.0002	<0.0002	<0.0002			
8/10/2023					<0.0002		
8/11/2023						<0.0002	<0.0002
2/13/2024		<0.0002		<0.0002			
2/14/2024	<0.0002		<0.0002		<0.0002		
2/16/2024						<0.0002	<0.0002
8/6/2024	<0.0002	<0.0002	<0.0002				
8/8/2024					<0.0002		
8/9/2024				<0.0002			<0.0002

Time Series

Constituent: Mercury (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/10/2024						<0.0002	
2/12/2025	<0.0002	<0.0002					
2/13/2025			<0.0002	<0.0002	<0.0002		
2/15/2025						<0.0002	<0.0002

Time Series

Constituent: Mercury (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
10/20/2016						<0.0002
10/24/2016	<0.0002					
10/25/2016		<0.0002	<0.0002	<0.0002		
1/31/2017	8E-05 (J)	<0.0002	<0.0002	8E-05 (J)		9E-05 (J)
5/23/2017	<0.0002					<0.0002
5/24/2017		<0.0002	<0.0002	<0.0002		
8/10/2017	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
11/14/2017	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
6/6/2018	<0.0002	<0.0002	<0.0002	<0.0002		
6/7/2018						<0.0002
10/2/2018		<0.0002	<0.0002	<0.0002		
10/3/2018	<0.0002					<0.0002
8/22/2019	<0.0002	<0.0002				<0.0002
8/23/2019			<0.0002	<0.0002		
8/26/2020						<0.0002
8/27/2020	<0.0002	<0.0002	<0.0002	<0.0002		
8/12/2021					9.4E-05 (J)	
8/13/2021		0.00022	8.4E-05 (J)	8E-05 (J)		8.1E-05 (J)
8/16/2021	0.00027					
9/27/2021					<0.0002	
2/2/2022	<0.0002		<0.0002	<0.0002		
2/3/2022		<0.0002			<0.0002	<0.0002
8/5/2022	0.00017 (J)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1/25/2023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/11/2023	0.00025	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/16/2024	<0.0002		<0.0002			
2/17/2024		<0.0002		<0.0002	<0.0002	<0.0002
8/9/2024	<0.0002					<0.0002
8/10/2024		<0.0002	<0.0002	<0.0002	<0.0002	
2/15/2025	0.00014 (J)					
2/16/2025		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/30/2016			<0.01	<0.01	<0.01		
8/31/2016						<0.01	
10/20/2016			<0.01			<0.01	
10/24/2016				<0.01	<0.01		
1/25/2017			<0.01	<0.01	<0.01		
1/31/2017						<0.01	
5/23/2017				<0.01	<0.01	<0.01	
5/24/2017			<0.01				
8/10/2017			<0.01	<0.01	<0.01	<0.01	
11/13/2017			<0.01	<0.01			
11/14/2017					<0.01	<0.01	
6/4/2018			<0.01	<0.01			
6/5/2018					<0.01		
6/6/2018						<0.01	
10/1/2018			<0.01	<0.01	<0.01		
10/3/2018						<0.01	
8/21/2019			<0.01	<0.01	<0.01		
8/22/2019						<0.01	
10/23/2019							<0.01
1/3/2020							<0.01
3/4/2020							<0.01
3/24/2020							<0.01
6/18/2020							<0.01
7/21/2020							<0.01
8/25/2020			<0.01	<0.01	<0.01		
8/27/2020						<0.01	<0.01
9/18/2020	0.0015 (J)	0.0026 (J)					
9/24/2020							<0.01
11/10/2020	<0.01						
11/11/2020		0.0012 (J)					
12/15/2020	<0.01	0.00097 (J)					
1/19/2021	<0.01	0.0018 (J)					
8/12/2021	<0.01	0.0019 (J)	<0.01	<0.01	<0.01		
8/13/2021							<0.01
8/16/2021						<0.01	
1/31/2022	<0.01	0.002 (J)	<0.01				
2/1/2022				<0.01	<0.01		
2/2/2022						<0.01	<0.01
8/2/2022	<0.01				<0.01		
8/5/2022		0.0012 (J)	<0.01	<0.01			<0.01
8/10/2022						<0.01	
1/24/2023	<0.01	0.00086 (J)	<0.01	<0.01	<0.01		
1/25/2023						<0.01	<0.01
8/8/2023	<0.01	0.00092 (J)	<0.01	<0.01			
8/10/2023					<0.01		
8/11/2023						<0.01	<0.01
2/13/2024		0.00068 (J)		<0.01			
2/14/2024	0.003 (J)		<0.01		<0.01		
2/16/2024						<0.01	<0.01
8/6/2024	<0.01	0.00071 (J)	<0.01				
8/8/2024					<0.01		
8/9/2024				<0.01			<0.01

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/10/2024						<0.01	
2/12/2025	<0.01	<0.01					
2/13/2025			<0.01	<0.01	<0.01		
2/15/2025						<0.01	<0.01

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.01	<0.01	<0.01	<0.01		<0.01
10/20/2016						<0.01
10/24/2016	<0.01					
10/25/2016		<0.01	<0.01	<0.01		
1/31/2017	<0.01	<0.01	<0.01	<0.01		<0.01
5/23/2017	<0.01					<0.01
5/24/2017		<0.01	<0.01	<0.01		
8/10/2017	<0.01	<0.01	<0.01	<0.01		<0.01
11/14/2017	<0.01	<0.01	<0.01	<0.01		<0.01
6/6/2018	<0.01	<0.01	<0.01	<0.01		
6/7/2018						<0.01
10/2/2018		<0.01	<0.01	<0.01		
10/3/2018	<0.01					<0.01
8/22/2019	<0.01	<0.01				<0.01
8/23/2019			<0.01	<0.01		
8/26/2020						<0.01
8/27/2020	<0.01	<0.01	<0.01	<0.01		
8/12/2021					<0.01	
8/13/2021		<0.01	<0.01	<0.01		<0.01
8/16/2021	<0.01					
9/27/2021					<0.01	
2/2/2022	<0.01		<0.01	<0.01		
2/3/2022		<0.01			<0.01	<0.01
8/5/2022	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1/25/2023	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
8/11/2023	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2/16/2024	<0.01		<0.01			
2/17/2024		<0.01		<0.01	<0.01	<0.01
8/9/2024	<0.01					<0.01
8/10/2024		<0.01	<0.01	<0.01	<0.01	
2/15/2025	<0.01					
2/16/2025		<0.01	<0.01	<0.01	<0.01	<0.01

Time Series

Constituent: pH, Field (SU) Analysis Run 4/22/2025 7:41 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/30/2016			6.89	5.77	5.99		
8/31/2016						5.35	
10/20/2016			6.73			5.3	
10/24/2016				5.61	5.84		
1/25/2017			7.02	5.68	6.04		
1/31/2017						5.24	
5/23/2017				5.7	6.01	5.39	
5/24/2017			6.44				
8/10/2017			6.79	5.59	5.98	5.47	
11/13/2017			5.94	5.56			
11/14/2017					6.16	5.4	
6/4/2018			6.12	5.62			
6/5/2018					5.86		
6/6/2018						5.37	
10/1/2018			5.92	5.62	5.94		
10/3/2018						5.39	
4/1/2019			7.09				
4/2/2019				5.47	6		
4/4/2019						5.31	
6/18/2019						5.3	
8/21/2019			6.6	5.8	6.05		
8/22/2019						5.39	
10/21/2019			7.02				
10/22/2019				5.7	5.98		
10/23/2019						5.33	5.68
1/3/2020							5.64
1/22/2020							5.66
3/4/2020							5.75
3/24/2020			7.37	5.64	6.03		5.58
3/25/2020						5.53	
4/9/2020					6.08		
6/18/2020							5.67
7/21/2020							5.72
8/25/2020			6.7	5.53	5.95		
8/27/2020						5.32	5.7
9/18/2020	7.54	7.5	6.46	5.58			
9/22/2020					6.11		
9/24/2020						5.48	5.82
11/10/2020	7.34						
11/11/2020		7.4					
12/15/2020	7.27	7.39					
1/19/2021	7.32	7.4					
3/11/2021			7.2				
3/12/2021	7.52	7.51		5.6			
3/16/2021					6.14		
3/17/2021						5.41	5.78
8/12/2021	7.38	7.44	6.67	5.5	6.08		
8/13/2021							5.46
8/16/2021						5.4	
1/31/2022	7.34	7.44	7.17				
2/1/2022				5.59	6.05		
2/2/2022						5.51	5.79

Time Series

Constituent: pH, Field (SU) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/2/2022	7.34				6.08		
8/5/2022		7.4	6.97	5.43			5.69
8/10/2022						5.37	
1/24/2023	7.38	7.46	7.11	5.67	6.15		
1/25/2023						5.47	5.77
8/8/2023	7.27	7.37	7.01	5.77			
8/10/2023					6.07		
8/11/2023						5.44	5.79
2/13/2024		7.59		5.64			
2/14/2024	7.93		7		6.24		
2/16/2024						5.47	5.88
8/6/2024	7.46	7.4	6.99				
8/8/2024					5.98		
8/9/2024				5.65			5.86
8/10/2024						5.38	
2/12/2025	7.4	7.48					
2/13/2025			6.92	5.64	6.15		
2/15/2025						5.5	5.9

Time Series

Constituent: pH, Field (SU) Analysis Run 4/22/2025 7:41 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	5.54	6.5	6.11	6.78		7.03
10/20/2016						7.01
10/24/2016	5.48					
10/25/2016		6.34	6.04	6.55		
1/31/2017	5.51	6.43	5.94	6.5		6.96
5/23/2017	5.98					6.92
5/24/2017		6.31	6.06	6.42		
8/10/2017	5.63	6.45	6.06	6.63		6.99
11/14/2017	5.59	6.53	5.99	6.5		6.9
6/6/2018	5.49	6.49	6	6.59		
6/7/2018						7.03
10/2/2018		6.18	6.18	6.54		
10/3/2018	5.53					7.08
4/3/2019			6.06	6.42		
4/4/2019	5.44	6.17				
4/5/2019						6.96
6/17/2019	5.53	6.55	6.16	6.6		
6/18/2019						6.85
8/22/2019	5.55	6.04				6.93
8/23/2019			6.26	6.76		
10/22/2019			6.19	6.58		7.03
10/23/2019	5.49	6.46				
3/25/2020	5.49	6.47	6.13	6.56		6.89
8/26/2020						6.97
8/27/2020	5.82	6.45	6.09	6.64		
9/24/2020	5.6	6.63	6.11			
9/25/2020				6.79		
9/28/2020						7.03
3/17/2021				6.55		
3/18/2021	5.51	6.57	6.2			7.11
8/12/2021					6.27	
8/13/2021		6.44	6.11	6.71		6.78
8/16/2021	5.59					
9/27/2021					6.14	
2/2/2022	5.63		6.14	6.65		
2/3/2022		6.48			6.58	6.79
8/5/2022	5.71	6.46	6.07	6.81	6.44	7.07
1/25/2023	5.65	6.41	6.13	6.66	6.53	6.67
8/11/2023	5.8	6.47	6.16	6.8	7.09	7.49
2/16/2024	5.74		6.27			
2/17/2024		6.46		6.88	6.7	6.94
8/9/2024	5.74					7.07
8/10/2024		6.38	6.22	7.03	6.61	
2/15/2025	5.73					
2/16/2025		6.46	6.27	6.82	7.03	7.12

Time Series

Constituent: Selenium (mg/L) Analysis Run 4/22/2025 7:42 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/30/2016			<0.005	<0.005	0.0027 (J)		
8/31/2016						<0.005	
10/20/2016			<0.005			<0.005	
10/24/2016				<0.005	0.0034 (J)		
1/25/2017			<0.005	<0.005	0.0023 (J)		
1/31/2017						<0.005	
5/23/2017				<0.005	0.0024 (J)	<0.005	
5/24/2017			<0.005				
8/10/2017			<0.005	<0.005	0.0023 (J)	<0.005	
11/13/2017			<0.005	<0.005			
11/14/2017					<0.005	<0.005	
6/4/2018			<0.005	<0.005			
6/5/2018					0.0019 (J)		
6/6/2018						<0.005	
10/1/2018			<0.005	<0.005	0.0024 (J)		
10/3/2018						<0.005	
8/21/2019			<0.005	<0.005	0.0025 (J)		
8/22/2019						<0.005	
10/23/2019							<0.005
1/3/2020							0.0015 (J)
3/4/2020							<0.005
3/24/2020							<0.005
6/18/2020							<0.005
7/21/2020							<0.005
8/25/2020			<0.005	<0.005	<0.005		
8/27/2020						<0.005	<0.005
9/18/2020	<0.005	<0.005					
9/24/2020							<0.005
11/10/2020	<0.005						
11/11/2020		<0.005					
12/15/2020	<0.005	<0.005					
1/19/2021	<0.005	<0.005					
8/12/2021	<0.005	<0.005	<0.005	<0.005	0.0023 (J)		
8/13/2021							<0.005
8/16/2021						<0.005	
1/31/2022	<0.005	<0.005	<0.005				
2/1/2022				<0.005	0.0022 (J)		
2/2/2022						<0.005	<0.005
8/2/2022	<0.005				0.0034 (J)		
8/5/2022		<0.005	<0.005	<0.005			<0.005
8/10/2022						<0.005	
1/24/2023	<0.005	<0.005	<0.005	<0.005	0.0025 (J)		
1/25/2023						<0.005	<0.005
8/8/2023	<0.005	<0.005	<0.005	<0.005			
8/10/2023					0.0027 (J)		
8/11/2023						<0.005	<0.005
2/13/2024		<0.005		<0.005			
2/14/2024	<0.005		<0.005		0.0024 (J)		
2/16/2024						<0.005	<0.005
8/6/2024	<0.005	<0.005	<0.005				
8/8/2024					0.0025 (J)		
8/9/2024				<0.005			<0.005

Time Series

Constituent: Selenium (mg/L) Analysis Run 4/22/2025 7:42 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/10/2024						<0.005	
2/12/2025	<0.005	<0.005					
2/13/2025			<0.005	<0.005	0.0027 (J)		
2/15/2025						<0.005	<0.005

Time Series

Constituent: Selenium (mg/L) Analysis Run 4/22/2025 7:42 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.005	<0.005	<0.005	<0.005		<0.005
10/20/2016						<0.005
10/24/2016	<0.005					
10/25/2016		<0.005	<0.005	<0.005		
1/31/2017	<0.005	<0.005	<0.005	<0.005		<0.005
5/23/2017	<0.005					<0.005
5/24/2017		<0.005	<0.005	<0.005		
8/10/2017	<0.005	<0.005	<0.005	<0.005		<0.005
11/14/2017	<0.005	<0.005	<0.005	<0.005		<0.005
6/6/2018	<0.005	<0.005	<0.005	<0.005		
6/7/2018						<0.005
10/2/2018		<0.005	<0.005	<0.005		
10/3/2018	<0.005					<0.005
8/22/2019	<0.005	<0.005				<0.005
8/23/2019			<0.005	<0.005		
8/26/2020						<0.005
8/27/2020	<0.005	<0.005	<0.005	<0.005		
8/12/2021					<0.005	
8/13/2021		<0.005	<0.005	<0.005		<0.005
8/16/2021	<0.005					
9/27/2021					<0.005	
2/2/2022	<0.005		<0.005	<0.005		
2/3/2022		<0.005			<0.005	<0.005
8/5/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/25/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/11/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2/16/2024	<0.005		<0.005			
2/17/2024		<0.005		<0.005	<0.005	<0.005
8/9/2024	<0.005					<0.005
8/10/2024		<0.005	<0.005	<0.005	<0.005	
2/15/2025	<0.005					
2/16/2025		0.0049 (J)	<0.005	<0.005	<0.005	<0.005

Time Series

Constituent: Sulfate (mg/L) Analysis Run 4/22/2025 7:42 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/30/2016			1.6	0.63 (J)	14		
8/31/2016						110	
10/20/2016			1.6			110	
10/24/2016				0.62 (J)	11		
1/25/2017			1.6	0.62 (J)	12		
1/31/2017						120	
5/23/2017				0.55 (J)	12	97	
5/24/2017			1.4				
8/10/2017			1.6	0.66 (J)	11	96	
11/13/2017			1.3	0.61 (J)			
11/14/2017					11	110	
6/4/2018			1.4	0.73 (J)			
6/5/2018					9.9		
6/6/2018						95.5	
10/1/2018			1	0.52 (J)	6.7		
10/3/2018						121	
4/1/2019			1.7				
4/2/2019				0.78 (J)	8.7		
4/4/2019						95.1	
6/18/2019						102	
10/21/2019			1.8				
10/22/2019				0.6 (J)	6.8		
10/23/2019						101	<1
1/3/2020							380
3/4/2020							400
3/24/2020			1.6	<1			311
3/25/2020						85.5	
4/9/2020					6.6		
6/18/2020							349
7/21/2020							378
8/27/2020							382
9/18/2020	3.5	9.5	1	<1			
9/22/2020					5.3		
9/24/2020						97	370
11/10/2020	2.3						
11/11/2020		4.5					
12/15/2020	2.4	4.2					
1/19/2021	2.6	3.9					
3/11/2021			1.5				
3/12/2021	1.9	4.7		0.52 (J)			
3/16/2021					7.7		
3/17/2021						107	332
8/12/2021	1.4	4.3	1.3	<1	10		
8/13/2021							248
8/16/2021						72.1	
1/31/2022	1.7	5.6	1.5				
2/1/2022				0.5 (J)	8.9		
2/2/2022						100	303
8/2/2022	2.1				7.5		
8/5/2022		3.4	1.4	<1			358
8/10/2022						99.5	
1/24/2023	2.2	2.9	1.9	0.81 (J)	6.6		

Time Series

Constituent: Sulfate (mg/L) Analysis Run 4/22/2025 7:42 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
1/25/2023						95	348
8/8/2023	2	2.9	1.5	0.71 (J)			
8/10/2023					5.1		
8/11/2023						102	370
2/13/2024		2.8		0.51 (J)			
2/14/2024	19.7		1.2		4.9		
2/16/2024						110	363
8/6/2024	2.3	2.7	1.3				
8/8/2024					4.6		
8/9/2024				0.76 (J)			359
8/10/2024						104	
2/12/2025	2	2.2					
2/13/2025			1.1	<1	4.4		
2/15/2025						98.7	357

Time Series

Constituent: Sulfate (mg/L) Analysis Run 4/22/2025 7:42 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	280	190	130	36		88
10/20/2016						81
10/24/2016	280					
10/25/2016		190	130	41		
1/31/2017	300	210	130	37		87
5/23/2017	340					84
5/24/2017		180	130	40		
8/10/2017	300	180	130	40		78
11/14/2017	310	170	130	40		79
6/6/2018	351	168	132	49.7		
6/7/2018						60.1
10/2/2018		173	132	42.3		
10/3/2018	381					91.5
4/3/2019			139	36		
4/4/2019	358	185				
4/5/2019						75.1
6/17/2019	311	162	126	30.9		
6/18/2019						77
10/22/2019			123	23.2		80.9
10/23/2019	248	162				
3/25/2020	251	161	116	27.9		78.4
9/24/2020	293	177	126			
9/25/2020				24.7		
9/28/2020						86
3/17/2021				28.3		
3/18/2021	286	196	128			87.8
8/12/2021					64.6	
8/13/2021		142	112	24.4		75.1
8/16/2021	354					
9/27/2021					69.7	
2/2/2022	293		111	25.5		
2/3/2022		195			72.9	72.7
8/5/2022	369	217	120	23	76.1	69.8
1/25/2023	342	230	128	25.4	72.9	73
8/11/2023	382	237	113	19.8	67.7	64.9
2/16/2024	323		130			
2/17/2024		251		22	72.7	69.7
8/9/2024	393					66.5
8/10/2024		258	114	19.7	72.6	
2/15/2025	425					
2/16/2025		271	110	20.8	69.8	66.8

Time Series

Constituent: TDS (mg/L) Analysis Run 4/22/2025 7:42 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/8/2023	214	220	207	57			
8/10/2023					80		
8/11/2023						250	785
2/13/2024		242		73			
2/14/2024	147		187		93		
2/16/2024						222	718
8/6/2024	253	240	163				
8/8/2024					85		
8/9/2024				90			746
8/10/2024						263	
2/12/2025	229	222					
2/13/2025			172	63	90		
2/15/2025						241	782

Time Series

Constituent: TDS (mg/L) Analysis Run 4/22/2025 7:42 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	483	389	235	182		373
10/20/2016						305
10/24/2016	517					
10/25/2016		316	223	172		
1/31/2017	516	437	346	252		361
5/23/2017	637					359
5/24/2017		352	234	184		
8/10/2017	459	356	254	208		325
11/14/2017	545	375	313	252		373
6/6/2018	559	385	278	224		
6/7/2018						338
10/2/2018		374	274	230		
10/3/2018	582					328
4/3/2019			273	210		
4/4/2019	535	340				
4/5/2019						308
6/17/2019	515	370	272			
6/18/2019						215
10/22/2019			308	212		354
10/23/2019	507	419				
3/25/2020	507	417	297	213		347
9/24/2020	517	411	253			
9/25/2020				188		
9/28/2020						332
3/17/2021				171		
3/18/2021	465	410	255			328
8/12/2021					256	
8/13/2021		441	291	189		336
8/16/2021	672					
9/27/2021					223	
2/2/2022	576		271	206		
2/3/2022		463			264	316
8/5/2022	692	514	274	195	270	329
1/25/2023	630	537	304	214	289	337
8/11/2023	808	630	296	205	280	346
2/16/2024	640		325			
2/17/2024		716		265	329	424
8/9/2024	809					338
8/10/2024		658	299	227	284	
2/15/2025	866					
2/16/2025		704	275	187	284	323

Time Series

Constituent: Thallium (mg/L) Analysis Run 4/22/2025 7:42 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/30/2016			<0.001	<0.001	<0.001		
8/31/2016						<0.001	
10/20/2016			<0.001			<0.001	
10/24/2016				<0.001	<0.001		
1/25/2017			<0.001	<0.001	<0.001		
1/31/2017						<0.001	
5/23/2017				<0.001	<0.001	<0.001	
5/24/2017			<0.001				
8/10/2017			<0.001	<0.001	<0.001	<0.001	
11/13/2017			<0.001	<0.001			
11/14/2017					<0.001	<0.001	
6/4/2018			<0.001	<0.001			
6/5/2018					<0.001		
6/6/2018						<0.001	
10/1/2018			<0.001	<0.001	<0.001		
10/3/2018						<0.001	
8/21/2019			<0.001	<0.001	<0.001		
8/22/2019						<0.001	
10/23/2019							<0.001
1/3/2020							8E-05 (J)
3/4/2020							<0.001
3/24/2020							<0.001
6/18/2020							<0.001
7/21/2020							<0.001
8/25/2020			<0.001	<0.001	<0.001		
8/27/2020						<0.001	<0.001
9/18/2020	<0.001	<0.001					
9/24/2020							<0.001
11/10/2020	<0.001						
11/11/2020		<0.001					
12/15/2020	<0.001	<0.001					
1/19/2021	<0.001	<0.001					
8/12/2021	<0.001	<0.001	<0.001	<0.001	<0.001		
8/13/2021							<0.001
8/16/2021						<0.001	
1/31/2022	<0.001	<0.001	<0.001				
2/1/2022				<0.001	<0.001		
2/2/2022						<0.001	<0.001
8/2/2022	<0.001				<0.001		
8/5/2022		<0.001	<0.001	<0.001			<0.001
8/10/2022						<0.001	
1/24/2023	<0.001	<0.001	<0.001	<0.001	<0.001		
1/25/2023						<0.001	<0.001
8/8/2023	<0.001	<0.001	<0.001	<0.001			
8/10/2023					<0.001		
8/11/2023						<0.001	<0.001
2/13/2024		<0.001		<0.001			
2/14/2024	<0.001		<0.001		<0.001		
2/16/2024						<0.001	<0.001
8/6/2024	<0.001	<0.001	<0.001				
8/8/2024					<0.001		
8/9/2024				<0.001			<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 4/22/2025 7:42 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-47 (bg)	HGWA-48D (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-101	HGWC-102
8/10/2024						<0.001	
2/12/2025	<0.001	<0.001					
2/13/2025			<0.001	<0.001	<0.001		
2/15/2025						<0.001	<0.001

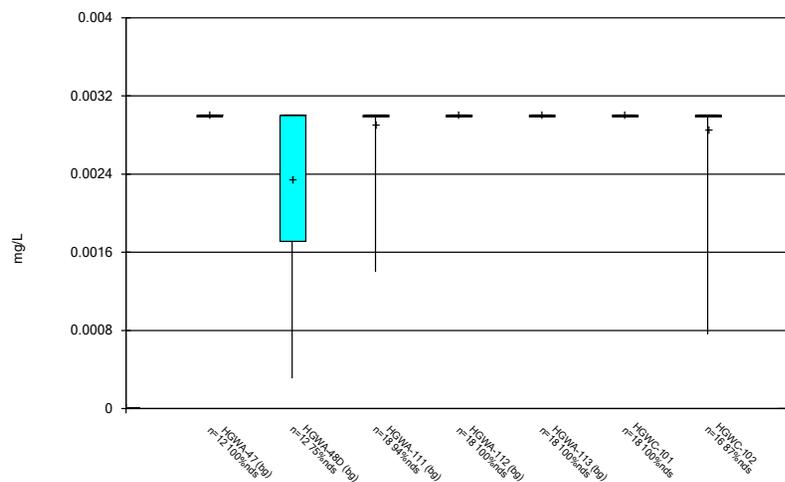
Time Series

Constituent: Thallium (mg/L) Analysis Run 4/22/2025 7:42 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.001	<0.001	<0.001	<0.001		<0.001
10/20/2016						<0.001
10/24/2016	<0.001					
10/25/2016		<0.001	<0.001	<0.001		
1/31/2017	<0.001	<0.001	<0.001	<0.001		<0.001
5/23/2017	<0.001					<0.001
5/24/2017		<0.001	<0.001	<0.001		
8/10/2017	<0.001	<0.001	<0.001	<0.001		<0.001
11/14/2017	<0.001	<0.001	<0.001	<0.001		<0.001
6/6/2018	<0.001	<0.001	<0.001	<0.001		
6/7/2018						<0.001
10/2/2018		<0.001	<0.001	<0.001		
10/3/2018	<0.001					<0.001
8/22/2019	<0.001	<0.001				<0.001
8/23/2019			<0.001	<0.001		
8/26/2020						<0.001
8/27/2020	<0.001	<0.001	<0.001	<0.001		
8/12/2021					<0.001	
8/13/2021		<0.001	<0.001	<0.001		<0.001
8/16/2021	<0.001					
9/27/2021					<0.001	
2/2/2022	<0.001		<0.001	<0.001		
2/3/2022		<0.001			<0.001	<0.001
8/5/2022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1/25/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/11/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2/16/2024	<0.001		<0.001			
2/17/2024		<0.001		<0.001	<0.001	<0.001
8/9/2024	<0.001					<0.001
8/10/2024		<0.001	<0.001	<0.001	<0.001	
2/15/2025	<0.001					
2/16/2025		<0.001	<0.001	<0.001	<0.001	<0.001

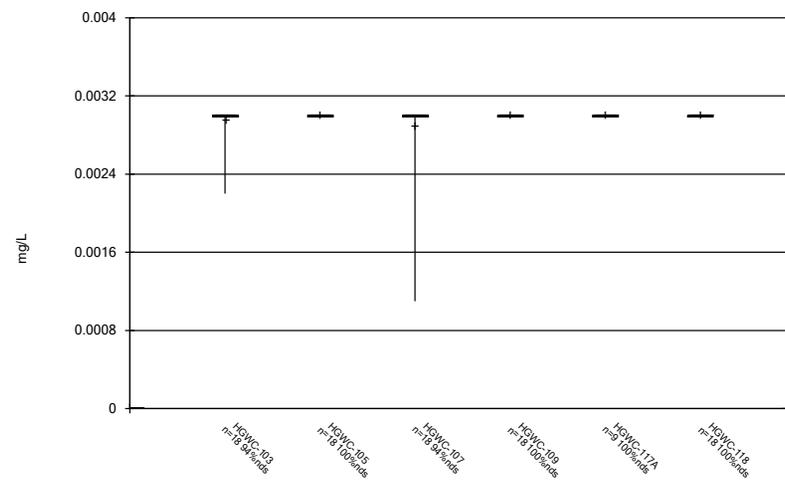
FIGURE B.

Box & Whiskers Plot



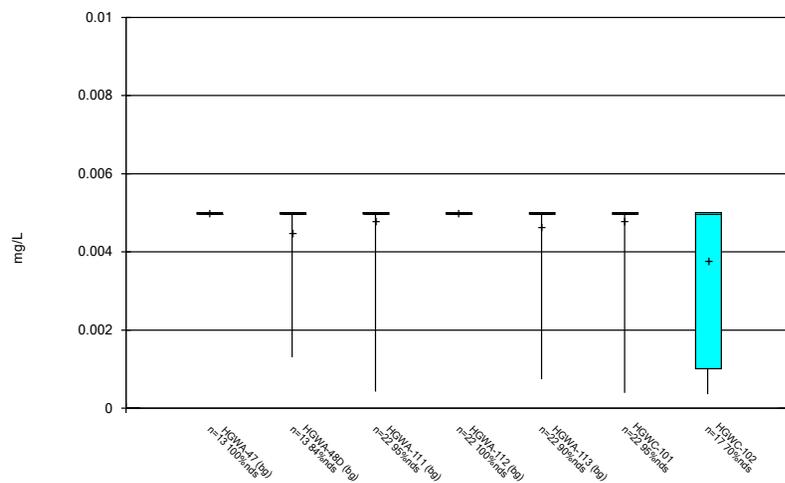
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



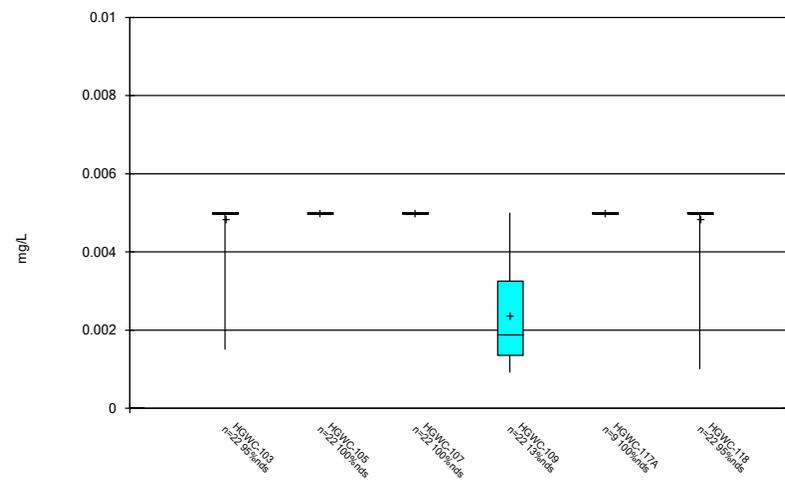
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



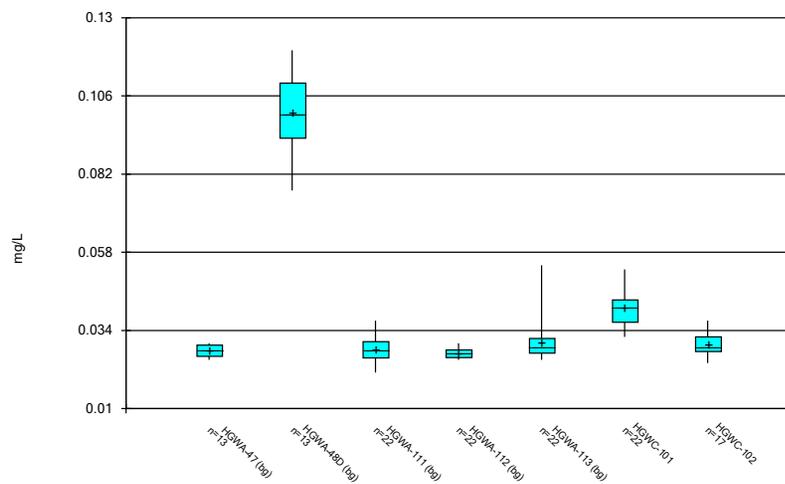
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



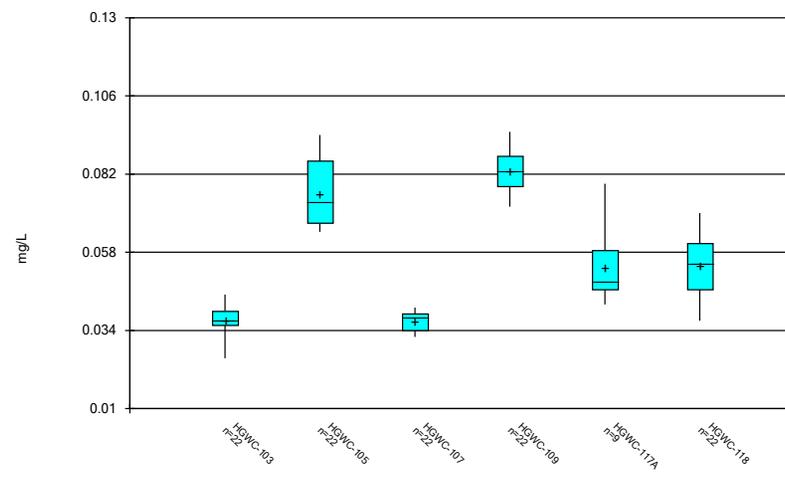
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



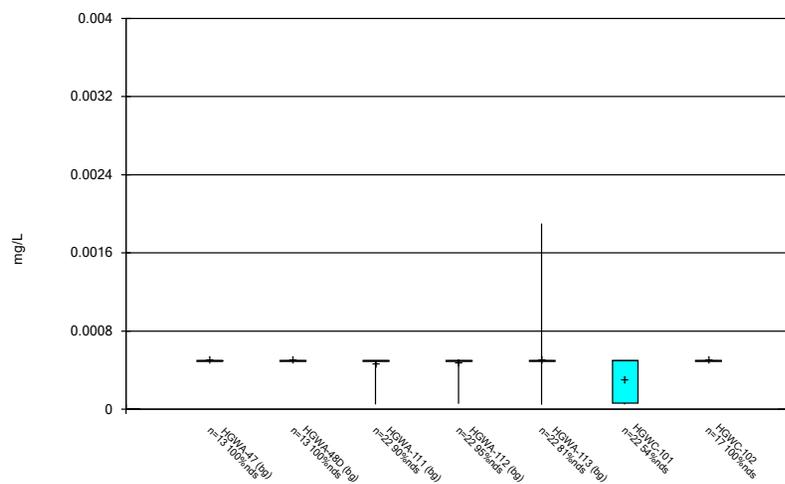
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



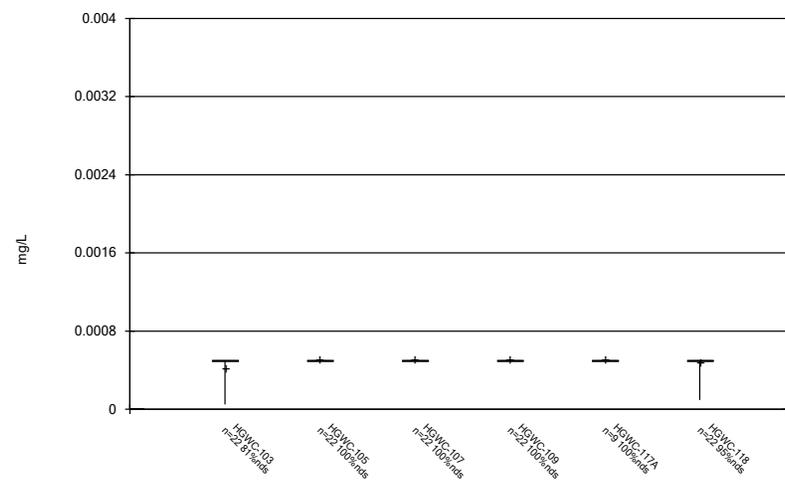
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



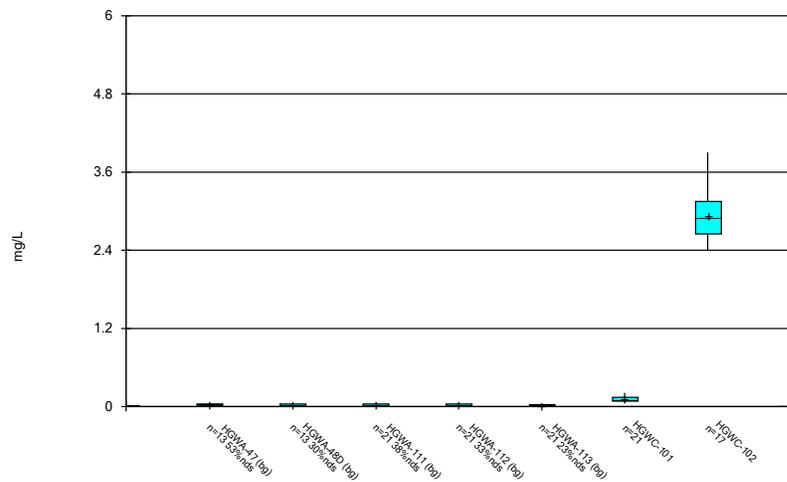
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



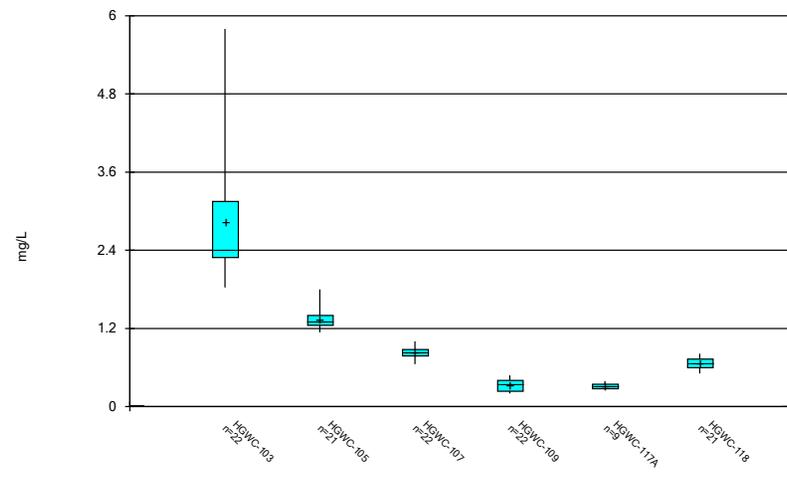
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



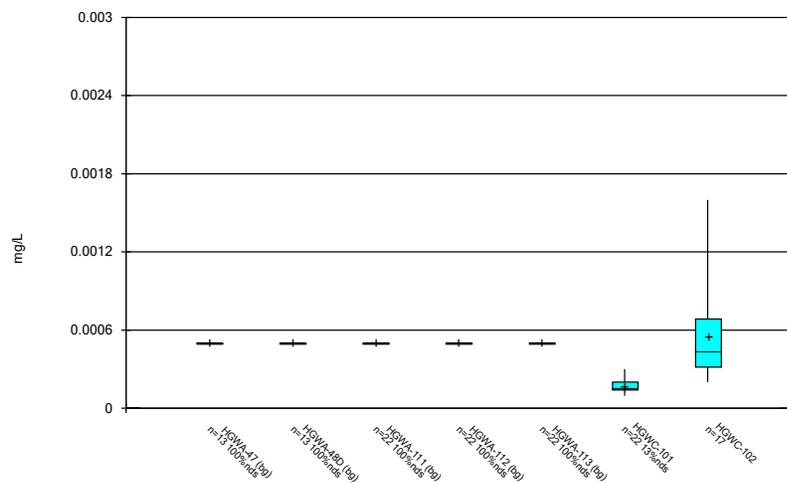
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



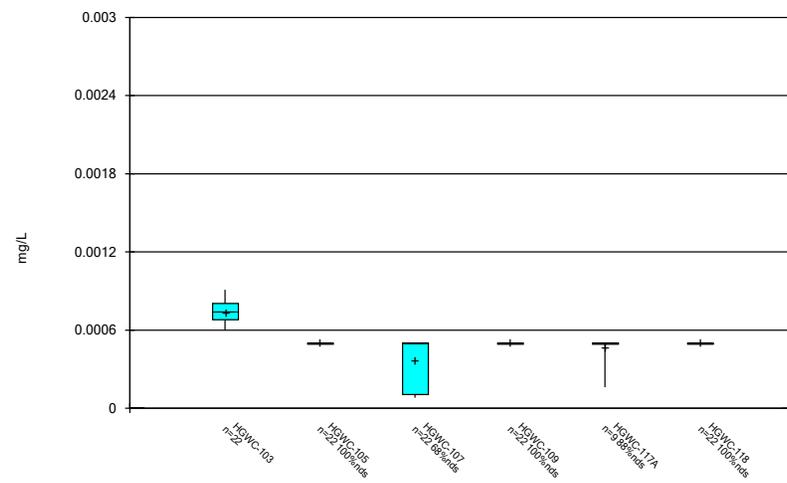
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Box & Whiskers Plot



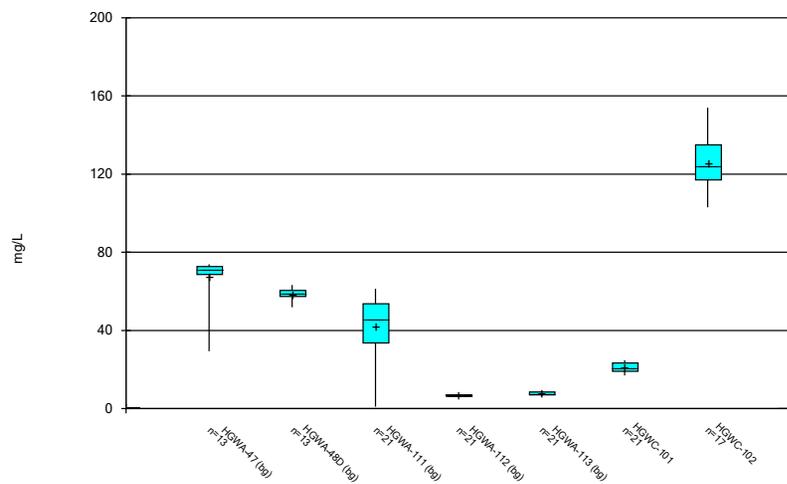
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



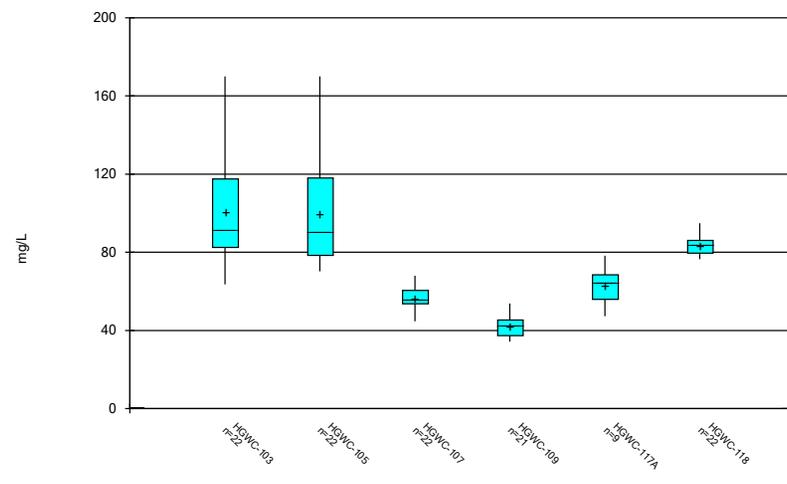
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Box & Whiskers Plot



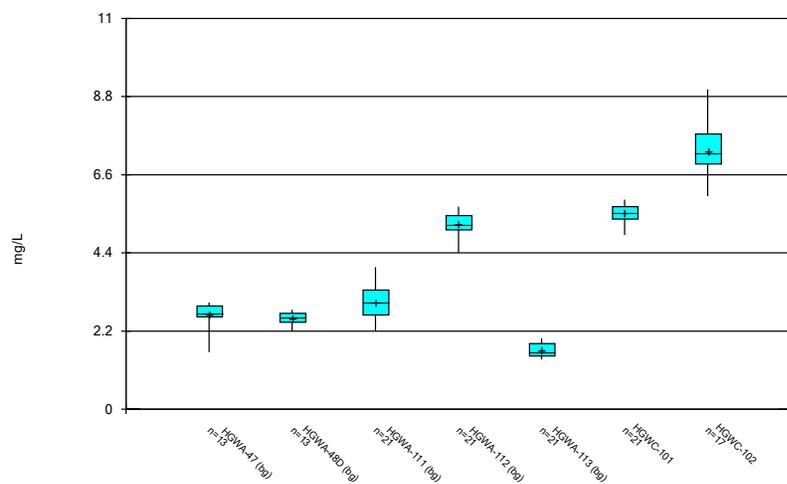
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



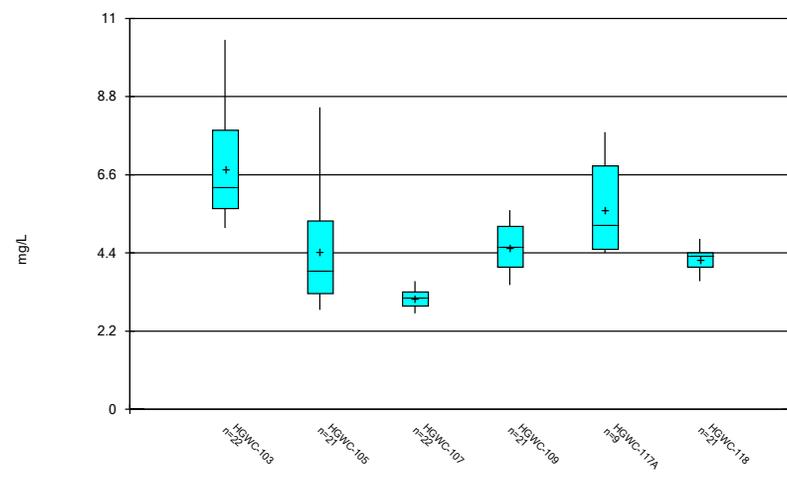
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



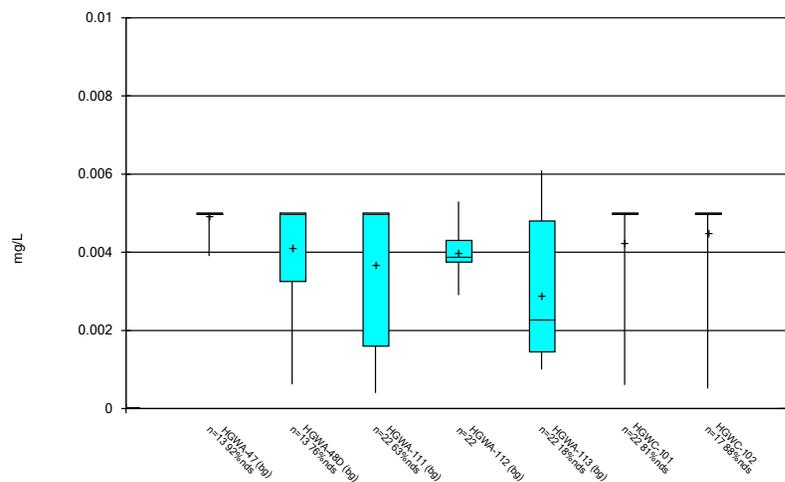
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



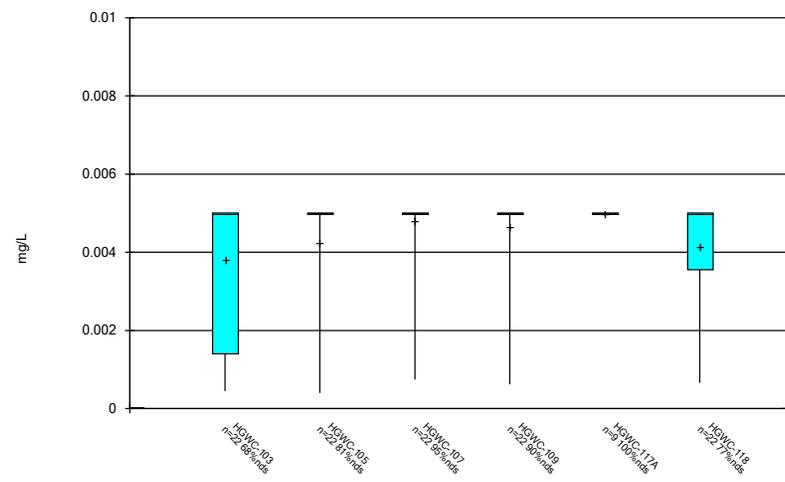
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



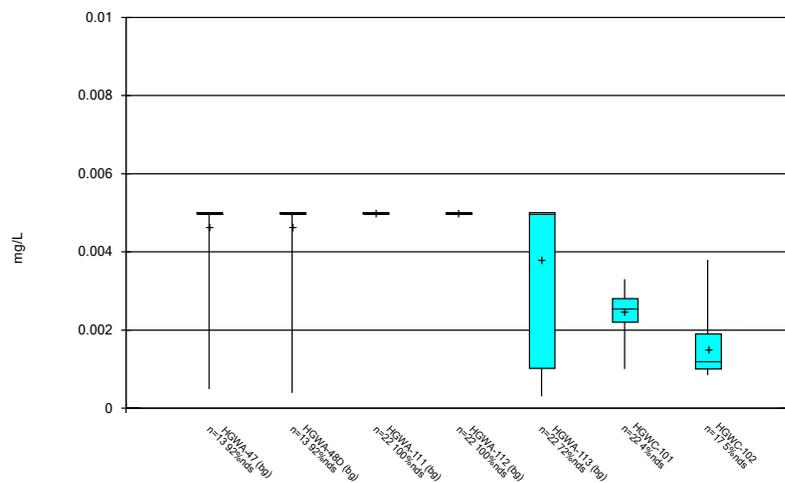
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



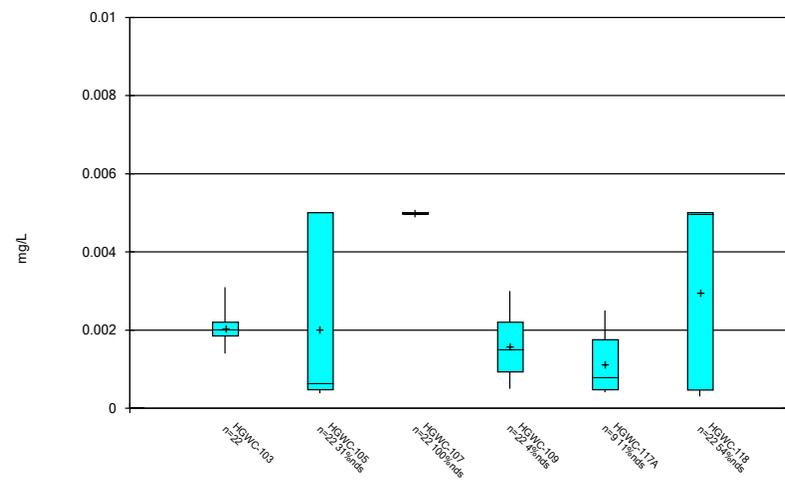
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Box & Whiskers Plot



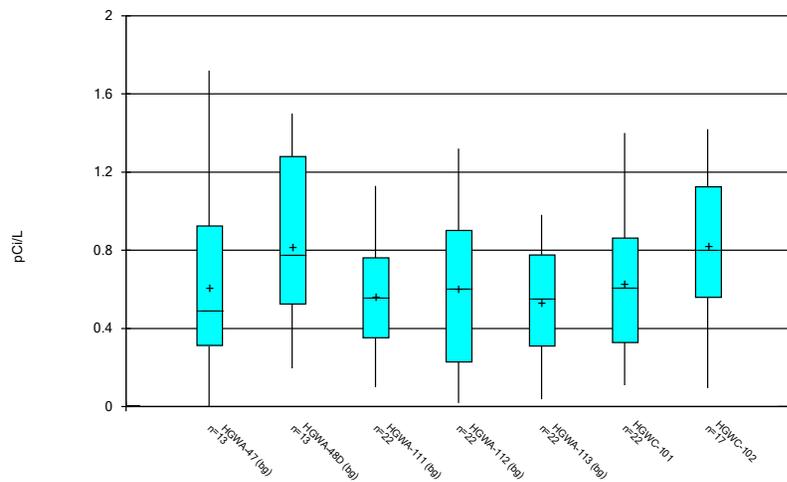
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



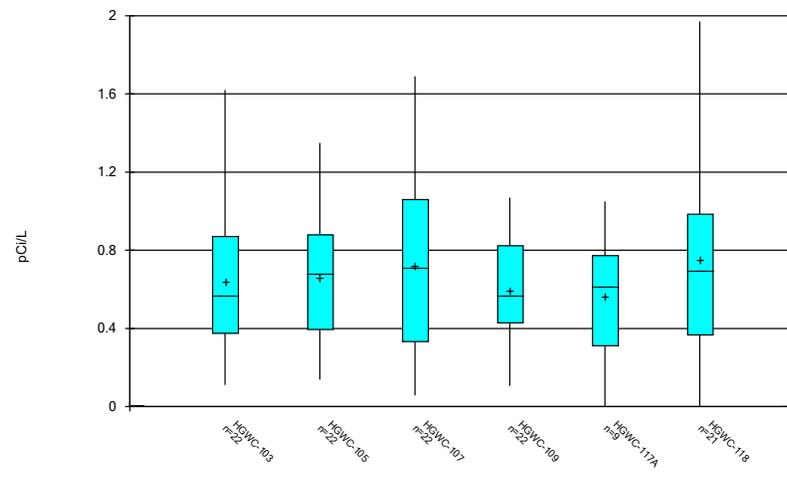
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



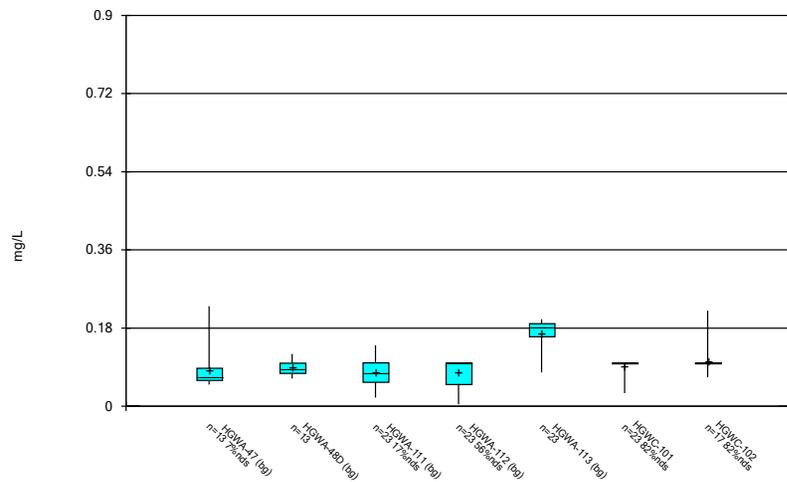
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



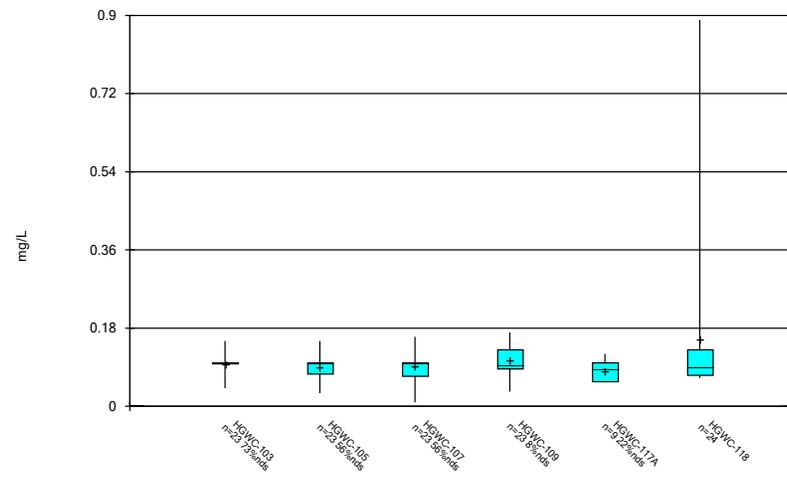
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



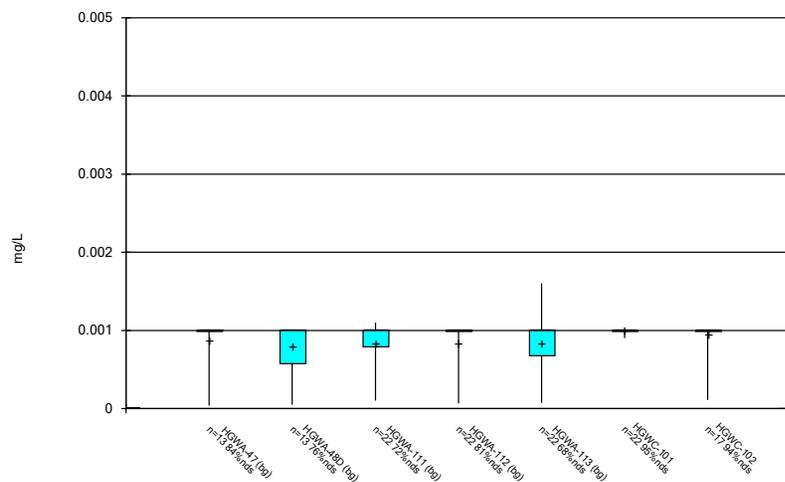
Constituent: Fluoride Analysis Run 4/22/2025 7:42 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



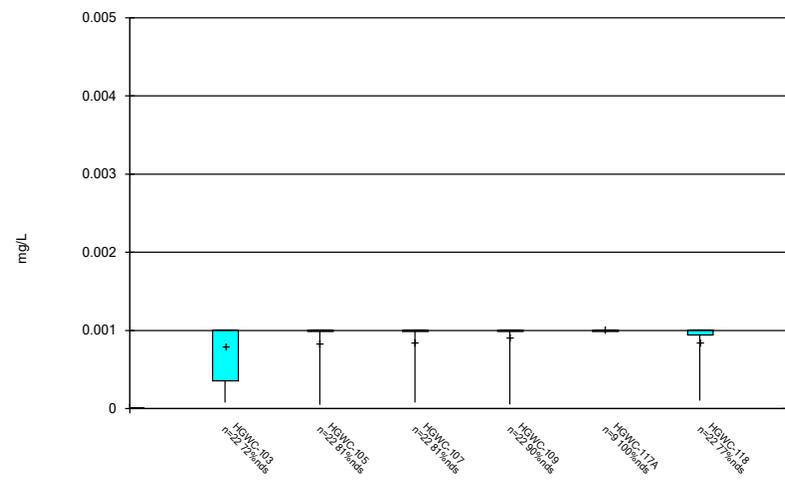
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



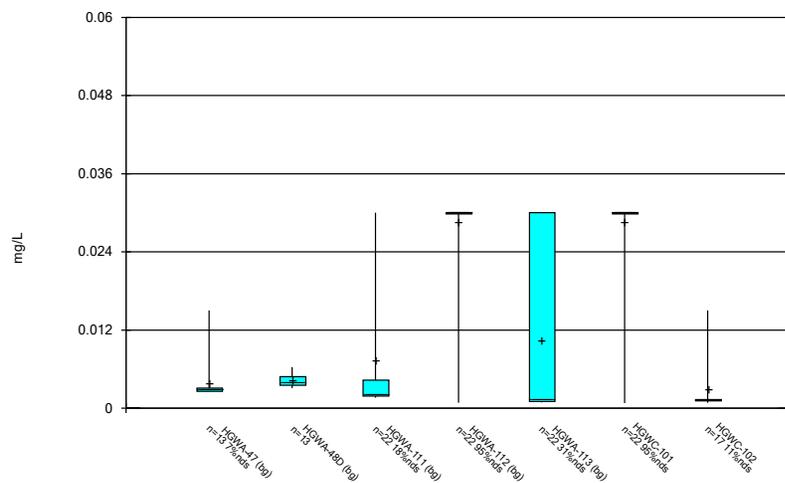
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



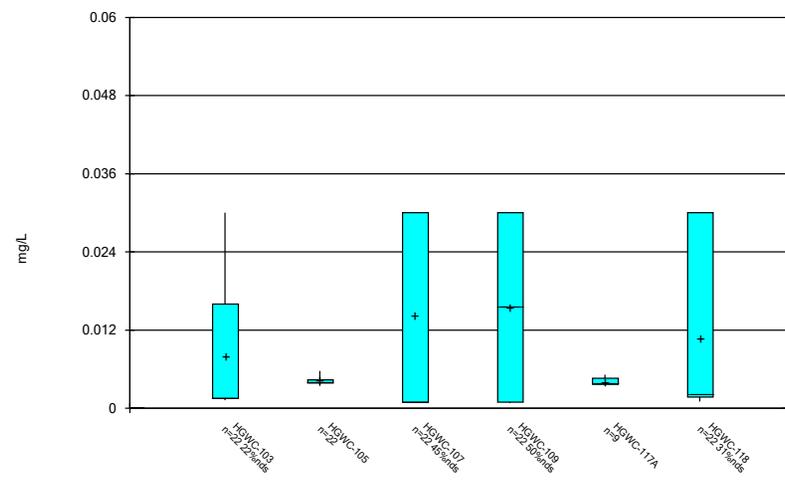
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



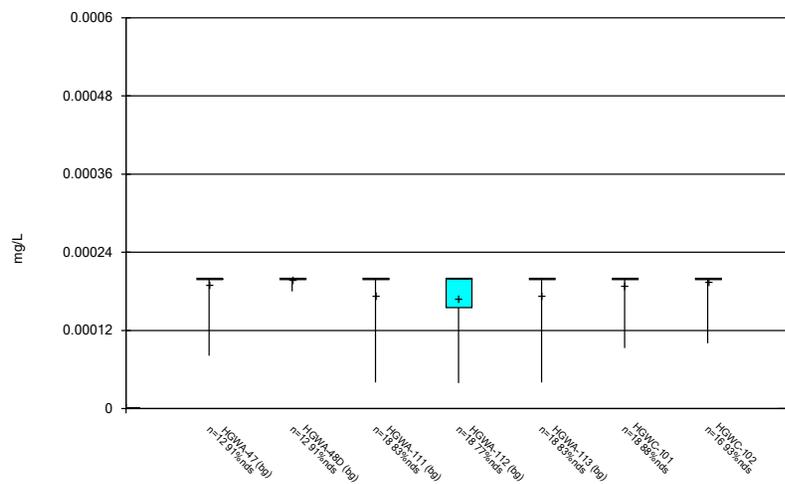
Constituent: Lithium Analysis Run 4/22/2025 7:42 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



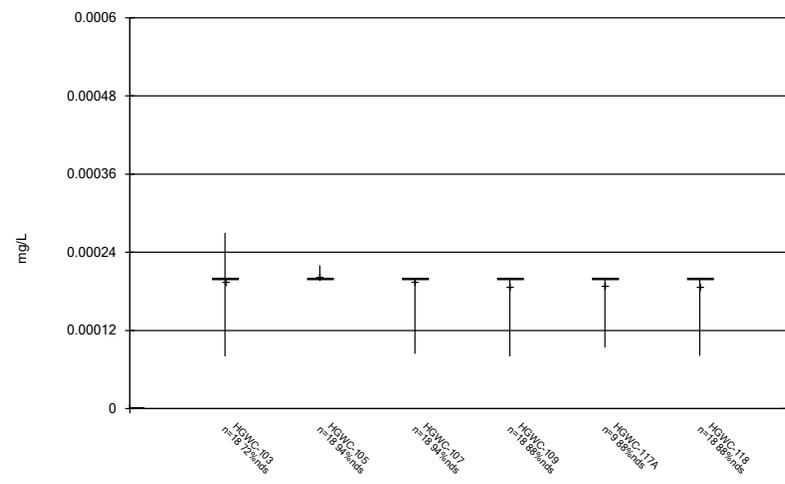
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Box & Whiskers Plot



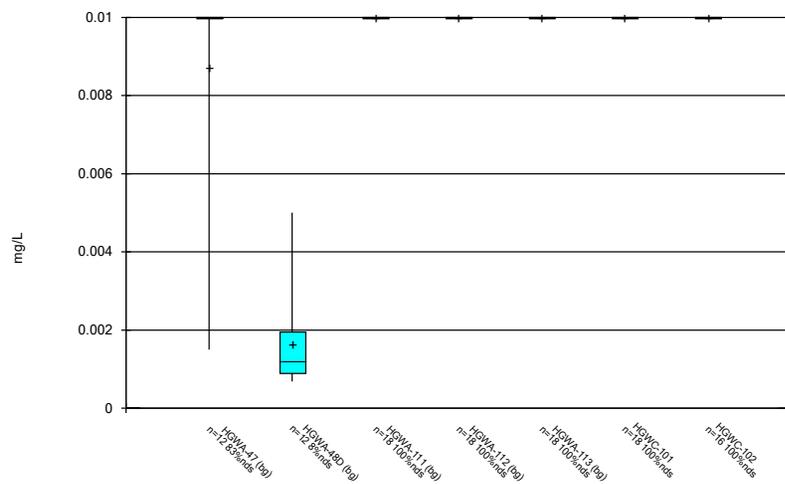
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



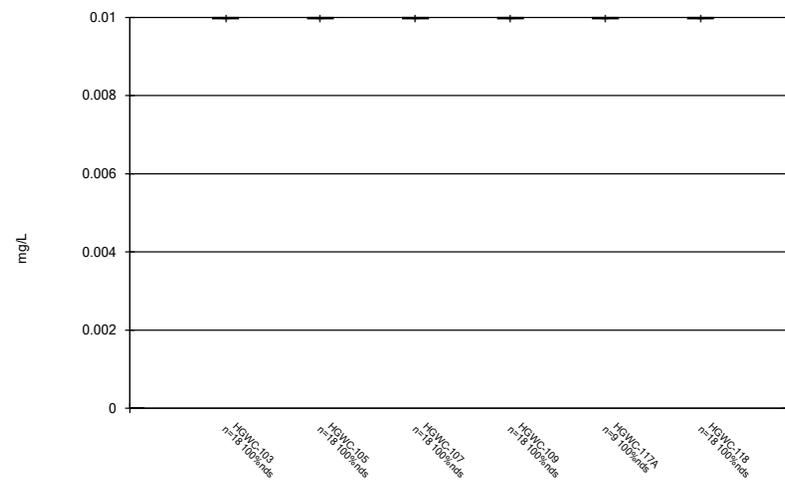
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Box & Whiskers Plot



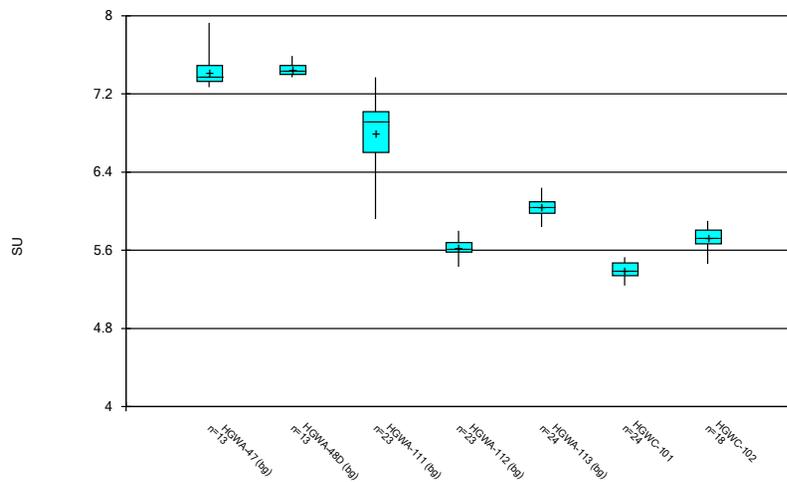
Constituent: Molybdenum Analysis Run 4/22/2025 7:42 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



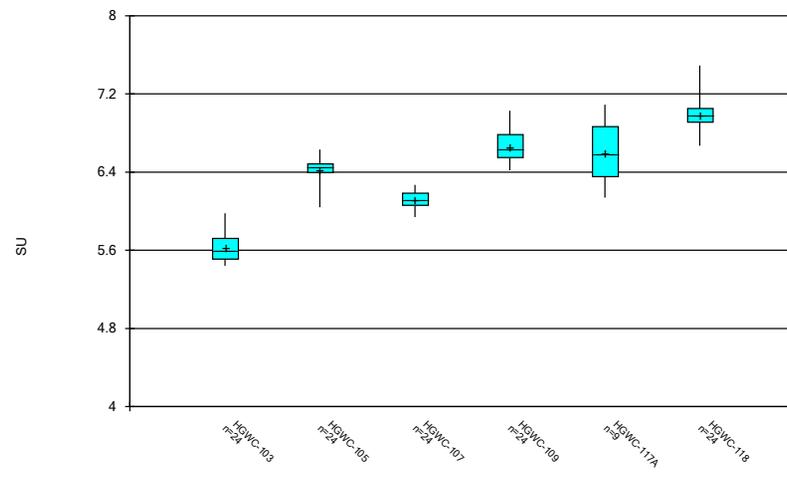
Constituent: Molybdenum Analysis Run 4/22/2025 7:43 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



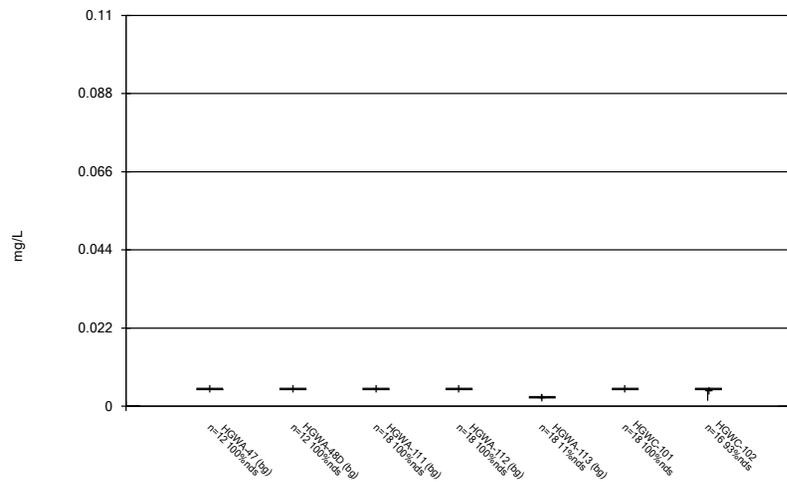
Constituent: pH, Field Analysis Run 4/22/2025 7:43 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



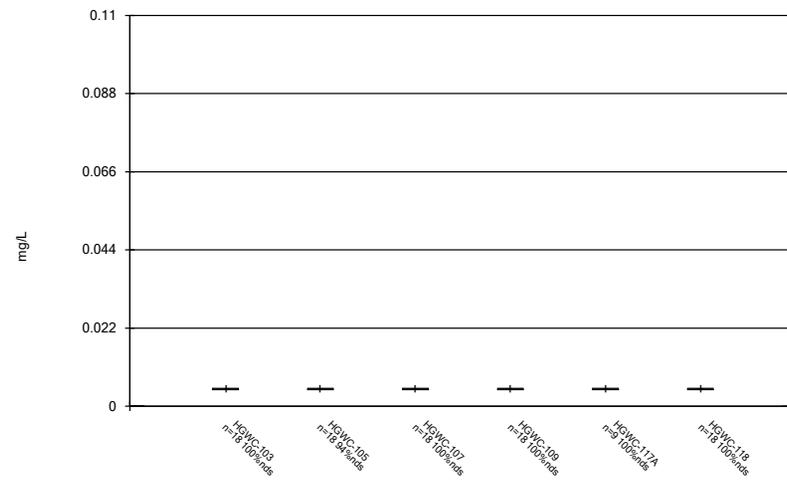
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



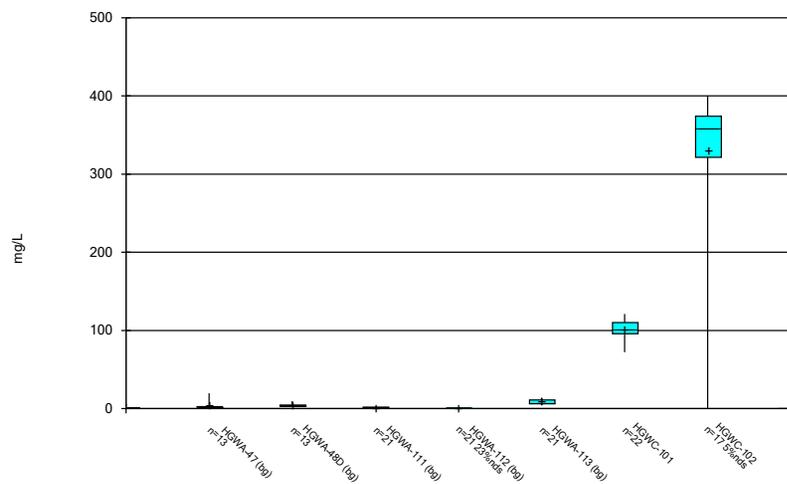
Constituent: Selenium Analysis Run 4/22/2025 7:43 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



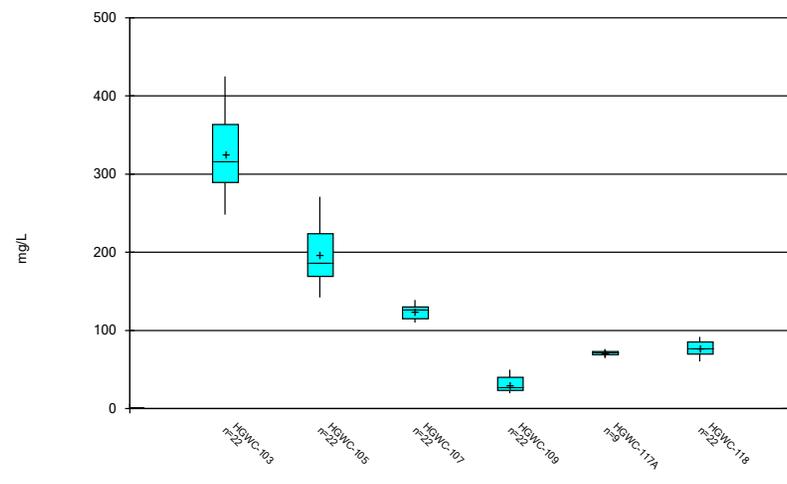
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



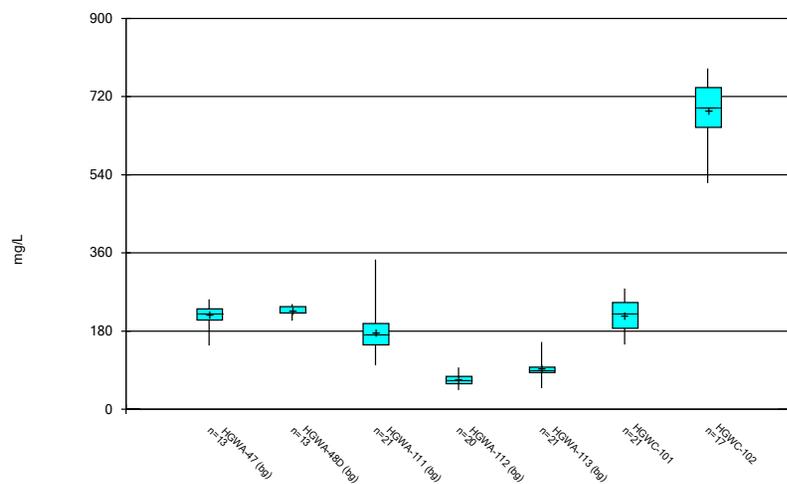
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



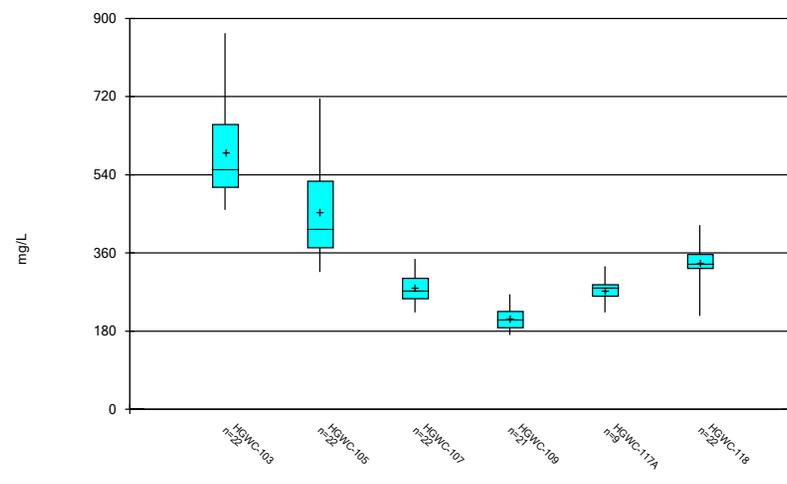
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Box & Whiskers Plot



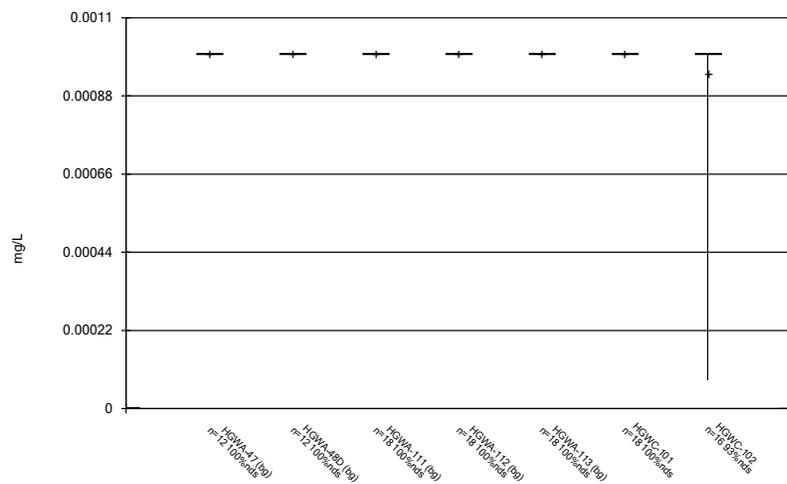
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



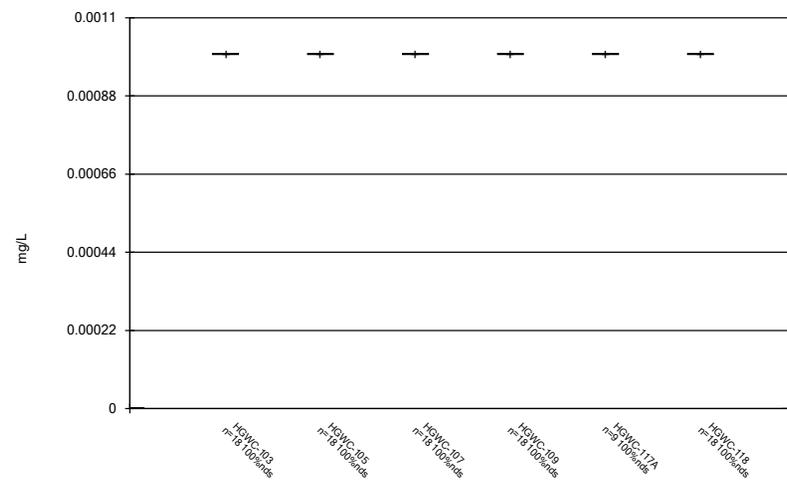
Constituent: TDS Analysis Run 4/22/2025 7:43 PM
 Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



Constituent: Thallium Analysis Run 4/22/2025 7:43 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

Box & Whiskers Plot



Constituent: Thallium Analysis Run 4/22/2025 7:43 PM
Plant Hammond Client: Southern Company Data: Hammond AP4

FIGURE C.

Outlier Summary

Plant Hammond Client: Southern Company Data: Hammond AP4 Printed 4/22/2025, 7:44 PM

HGWA-112 TDS (mg/L)

1/25/2017

152 (O)

FIGURE D.

Appendix III Interwell Prediction Limits - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP4 Printed 4/22/2025, 7:46 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg	NB	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	HGWC-101	0.04	n/a	2/15/2025	0.21	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-102	0.04	n/a	2/15/2025	3.9	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-103	0.04	n/a	2/15/2025	5.8	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-105	0.04	n/a	2/16/2025	1.8	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-107	0.04	n/a	2/16/2025	1	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-109	0.04	n/a	2/16/2025	0.22	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-118	0.04	n/a	2/16/2025	0.76	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-102	73.8	n/a	2/15/2025	154	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-103	73.8	n/a	2/15/2025	170	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-105	73.8	n/a	2/16/2025	170	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-117A	73.8	n/a	2/16/2025	78.3	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-118	73.8	n/a	2/16/2025	94.9	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-102	5.7	n/a	2/15/2025	9	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-103	5.7	n/a	2/15/2025	9.3	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-105	5.7	n/a	2/16/2025	8.5	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-101	19.7	n/a	2/15/2025	98.7	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-102	19.7	n/a	2/15/2025	357	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-103	19.7	n/a	2/15/2025	425	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-105	19.7	n/a	2/16/2025	271	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-107	19.7	n/a	2/16/2025	110	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-109	19.7	n/a	2/16/2025	20.8	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-117A	19.7	n/a	2/16/2025	69.8	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-118	19.7	n/a	2/16/2025	66.8	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-102	345	n/a	2/15/2025	782	Yes	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-103	345	n/a	2/15/2025	866	Yes	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-105	345	n/a	2/16/2025	704	Yes	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2

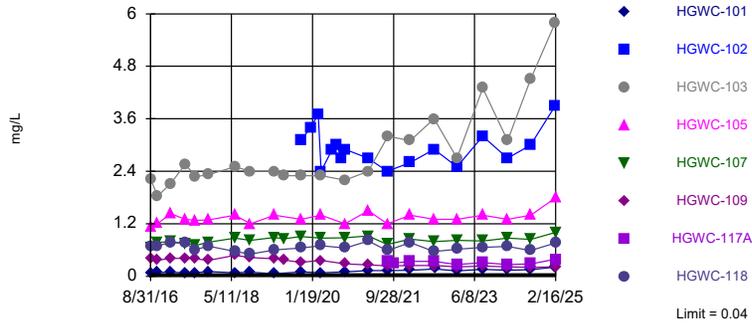
Appendix III Interwell Prediction Limits - All Results

Plant Hammond Client: Southern Company Data: Hammond AP4 Printed 4/22/2025, 7:46 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg	NBq	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	HGWC-101	0.04	n/a	2/15/2025	0.21	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-102	0.04	n/a	2/15/2025	3.9	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-103	0.04	n/a	2/15/2025	5.8	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-105	0.04	n/a	2/16/2025	1.8	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-107	0.04	n/a	2/16/2025	1	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-109	0.04	n/a	2/16/2025	0.22	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-117A	0.04	n/a	2/16/2025	0.39J	No	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-118	0.04	n/a	2/16/2025	0.76	Yes	89	n/a	n/a	n/a	34.83	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-101	73.8	n/a	2/15/2025	24.8	No	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-102	73.8	n/a	2/15/2025	154	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-103	73.8	n/a	2/15/2025	170	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-105	73.8	n/a	2/16/2025	170	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-107	73.8	n/a	2/16/2025	67.9	No	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-109	73.8	n/a	2/16/2025	48.4	No	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-117A	73.8	n/a	2/16/2025	78.3	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-118	73.8	n/a	2/16/2025	94.9	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-101	5.7	n/a	2/15/2025	5.6	No	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-102	5.7	n/a	2/15/2025	9	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-103	5.7	n/a	2/15/2025	9.3	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-105	5.7	n/a	2/16/2025	8.5	Yes	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-107	5.7	n/a	2/16/2025	3.3	No	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-109	5.7	n/a	2/16/2025	4.2	No	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-117A	5.7	n/a	2/16/2025	5.2	No	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-118	5.7	n/a	2/16/2025	4.3	No	89	n/a	n/a	n/a	0	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-101	0.23	n/a	2/15/2025	0.1ND	No	95	n/a	n/a	n/a	18.95	n/a	n/a	0.0002148	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-102	0.23	n/a	2/15/2025	0.1ND	No	95	n/a	n/a	n/a	18.95	n/a	n/a	0.0002148	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-103	0.23	n/a	2/15/2025	0.1ND	No	95	n/a	n/a	n/a	18.95	n/a	n/a	0.0002148	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-105	0.23	n/a	2/16/2025	0.1ND	No	95	n/a	n/a	n/a	18.95	n/a	n/a	0.0002148	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-107	0.23	n/a	2/16/2025	0.1ND	No	95	n/a	n/a	n/a	18.95	n/a	n/a	0.0002148	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-109	0.23	n/a	2/16/2025	0.086J	No	95	n/a	n/a	n/a	18.95	n/a	n/a	0.0002148	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-117A	0.23	n/a	2/16/2025	0.057J	No	95	n/a	n/a	n/a	18.95	n/a	n/a	0.0002148	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-118	0.23	n/a	2/16/2025	0.065J	No	95	n/a	n/a	n/a	18.95	n/a	n/a	0.0002148	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-101	7.93	5.43	2/15/2025	5.5	No	96	n/a	n/a	n/a	0	n/a	n/a	0.0004208	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-102	7.93	5.43	2/15/2025	5.9	No	96	n/a	n/a	n/a	0	n/a	n/a	0.0004208	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-103	7.93	5.43	2/15/2025	5.73	No	96	n/a	n/a	n/a	0	n/a	n/a	0.0004208	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-105	7.93	5.43	2/16/2025	6.46	No	96	n/a	n/a	n/a	0	n/a	n/a	0.0004208	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-107	7.93	5.43	2/16/2025	6.27	No	96	n/a	n/a	n/a	0	n/a	n/a	0.0004208	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-109	7.93	5.43	2/16/2025	6.82	No	96	n/a	n/a	n/a	0	n/a	n/a	0.0004208	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-117A	7.93	5.43	2/16/2025	7.03	No	96	n/a	n/a	n/a	0	n/a	n/a	0.0004208	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-118	7.93	5.43	2/16/2025	7.12	No	96	n/a	n/a	n/a	0	n/a	n/a	0.0004208	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-101	19.7	n/a	2/15/2025	98.7	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-102	19.7	n/a	2/15/2025	357	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-103	19.7	n/a	2/15/2025	425	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-105	19.7	n/a	2/16/2025	271	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-107	19.7	n/a	2/16/2025	110	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-109	19.7	n/a	2/16/2025	20.8	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-117A	19.7	n/a	2/16/2025	69.8	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-118	19.7	n/a	2/16/2025	66.8	Yes	89	n/a	n/a	n/a	5.618	n/a	n/a	0.0002429	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-101	345	n/a	2/15/2025	241	No	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-102	345	n/a	2/15/2025	782	Yes	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-103	345	n/a	2/15/2025	866	Yes	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-105	345	n/a	2/16/2025	704	Yes	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-107	345	n/a	2/16/2025	275	No	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-109	345	n/a	2/16/2025	187	No	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-117A	345	n/a	2/16/2025	284	No	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-118	345	n/a	2/16/2025	323	No	88	n/a	n/a	n/a	0	n/a	n/a	0.000249	NP Inter (normality) 1 of 2

Exceeds Limit: HGWC-101, HGWC-102, HGWC-103, HGWC-105, HGWC-107, HGWC-109, HGWC-118

Prediction Limit Interwell Non-parametric

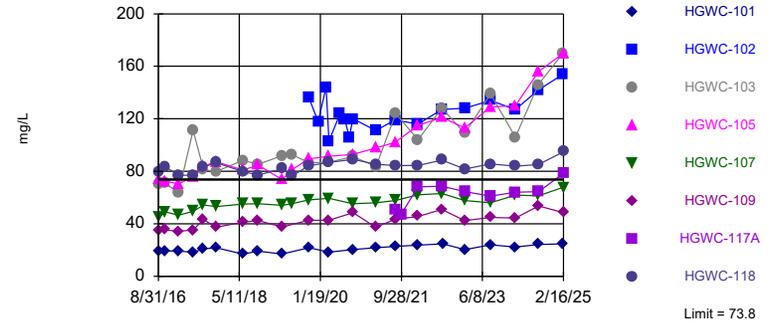


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level after cube root transformation. Limit is highest of 89 background values. 34.83% NDs. Annual per-constituent alpha = 0.00388. Individual comparison alpha = 0.0002429 (1 of 2). Comparing 8 points to limit.

Constituent: Boron Analysis Run 4/22/2025 7:45 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

Exceeds Limit: HGWC-102, HGWC-103, HGWC-105, HGWC-117A, HGWC-118

Prediction Limit Interwell Non-parametric

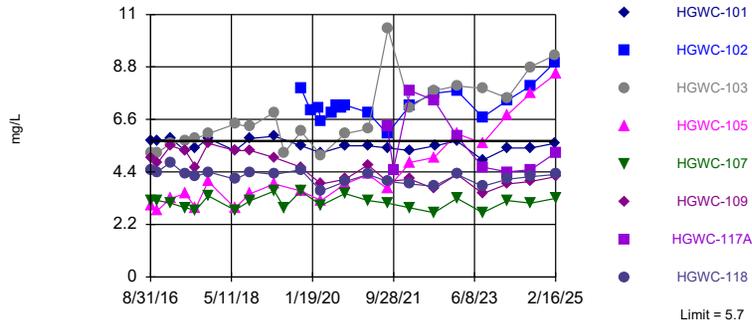


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level after cube root transformation. Limit is highest of 89 background values. Annual per-constituent alpha = 0.00388. Individual comparison alpha = 0.0002429 (1 of 2). Comparing 8 points to limit.

Constituent: Calcium Analysis Run 4/22/2025 7:45 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

Exceeds Limit: HGWC-102, HGWC-103, HGWC-105

Prediction Limit Interwell Non-parametric

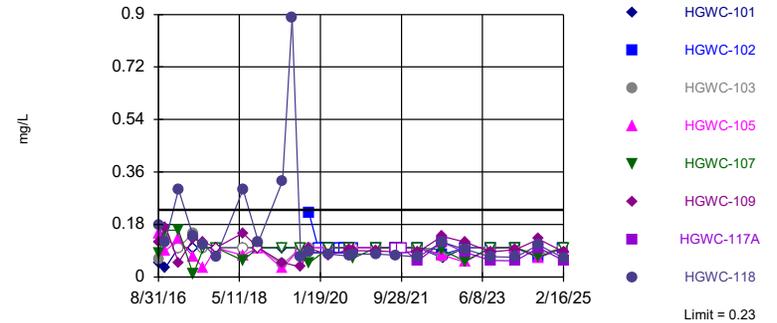


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level after cube root transformation. Limit is highest of 89 background values. Annual per-constituent alpha = 0.00388. Individual comparison alpha = 0.0002429 (1 of 2). Comparing 8 points to limit.

Constituent: Chloride Analysis Run 4/22/2025 7:45 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

Within Limit

Prediction Limit Interwell Non-parametric

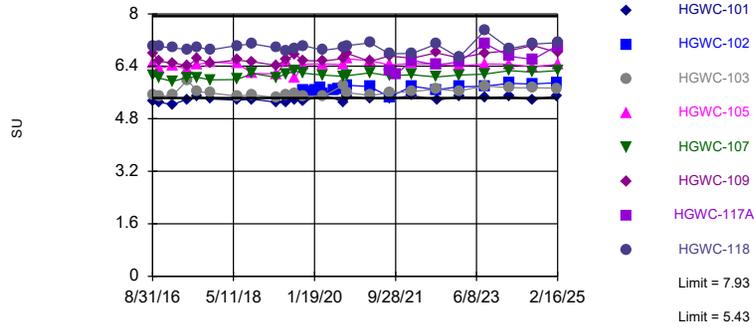


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level after cube root transformation. Limit is highest of 95 background values. 18.95% NDs. Annual per-constituent alpha = 0.003431. Individual comparison alpha = 0.0002148 (1 of 2). Comparing 8 points to limit.

Constituent: Fluoride Analysis Run 4/22/2025 7:45 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

Within Limits

Prediction Limit
Interwell Non-parametric

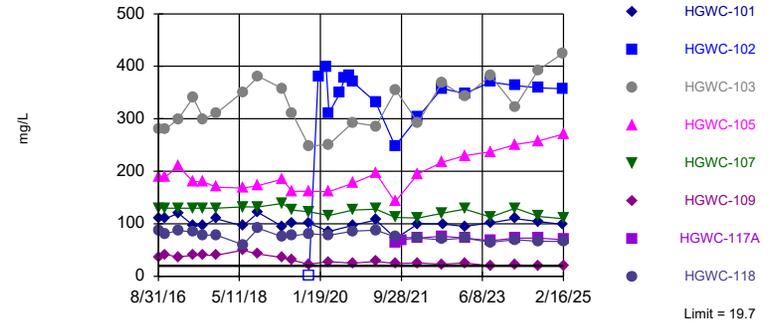


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level after cube root transformation. Limits are highest and lowest of 96 background values. Annual per-constituent alpha = 0.006722. Individual comparison alpha = 0.0004208 (1 of 2). Comparing 8 points to limit.

Constituent: pH, Field Analysis Run 4/22/2025 7:45 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

Exceeds Limit: HGWC-101, HGWC-102, HGWC-103, HGWC-105, HGWC-107, HGWC-109, HGWC-117A, HGWC-118

Prediction Limit
Interwell Non-parametric

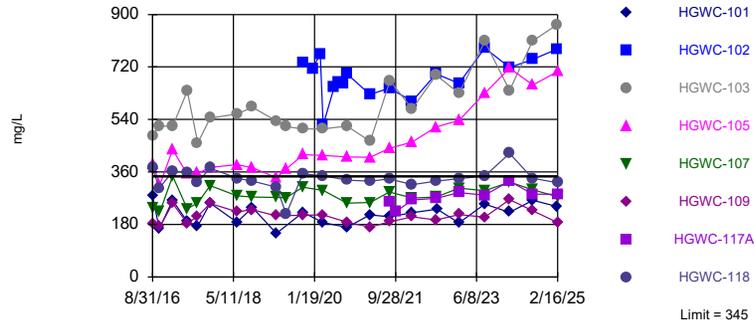


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level after cube root transformation. Limit is highest of 89 background values. 5.618% NDs. Annual per-constituent alpha = 0.00388. Individual comparison alpha = 0.0002429 (1 of 2). Comparing 8 points to limit.

Constituent: Sulfate Analysis Run 4/22/2025 7:45 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

Exceeds Limit: HGWC-102, HGWC-103, HGWC-105

Prediction Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level after cube root transformation. Limit is highest of 88 background values. Annual per-constituent alpha = 0.003977. Individual comparison alpha = 0.000249 (1 of 2). Comparing 8 points to limit.

Constituent: TDS Analysis Run 4/22/2025 7:45 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-113 (bg)	HGWA-112 (bg)	HGWA-111 (bg)	HGWC-118	HGWC-101	HGWC-107	HGWC-103	HGWC-109	HGWC-105
8/30/2016	<0.04	<0.04	<0.04						
8/31/2016				0.681	0.0724 (J)	0.651	2.22	0.402	1.14
10/20/2016			0.016 (J)	0.697	0.0877 (J)				
10/24/2016	0.0226 (J)	0.0367 (J)					1.83		
10/25/2016						0.778		0.372	1.21
1/25/2017	0.009 (J)	0.0075 (J)	0.0095 (J)						
1/31/2017				0.768	0.0928	0.782	2.12	0.404	1.43
5/23/2017	0.0082 (J)	0.0073 (J)		0.754	0.0795		2.56		
5/24/2017			0.0094 (J)			0.753		0.415	1.3
8/10/2017	0.0061 (J)	<0.04	<0.04	0.608	0.0814	0.702	2.28	0.397	1.28
11/13/2017		0.0089 (J)	0.0103 (J)						
11/14/2017	0.012 (J)			0.691	0.108	0.78	2.32	0.366	1.29
6/4/2018		0.007 (J)	0.0065 (J)						
6/5/2018	0.0085 (J)								
6/6/2018					0.081	0.87	2.5	0.48	1.4
6/7/2018				0.57					
10/1/2018	0.0042 (J)	<0.04	0.0054 (J)						
10/2/2018						0.82		0.43	1.2
10/3/2018				0.51	0.092		2.4		
4/1/2019			0.0076 (J)						
4/2/2019	0.0059 (J)	0.0043 (J)							
4/3/2019						0.89		0.4	
4/4/2019					0.06 (J)		2.4		1.4 (J)
4/5/2019				0.6 (J)					
6/17/2019						0.86	2.3	0.37	
10/21/2019			0.0097 (J)						
10/22/2019	0.01 (J)	0.016 (J)		0.65		0.91		0.32	
10/23/2019					0.1		2.3		1.3
1/3/2020									
3/4/2020									
3/24/2020		0.012 (J)	0.011 (J)						
3/25/2020				0.7	0.08 (J)	0.87	2.3	0.36	1.4
4/9/2020	0.012 (J)								
6/18/2020									
7/21/2020									
8/27/2020									
9/18/2020		0.008 (J)	0.011 (J)						
9/22/2020	0.021 (J)								
9/24/2020					0.1	0.88	2.2		1.2
9/25/2020								0.28	
9/28/2020				0.65					
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
3/11/2021			0.01 (J)						
3/12/2021		0.0061 (J)							
3/16/2021	0.011 (J)								
3/17/2021					0.13			0.26	
3/18/2021				0.81		0.92	2.4		1.5
8/12/2021	<0.04	<0.04	<0.04						
8/13/2021				0.59		0.73		0.24	1.2

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-113 (bg)	HGWA-112 (bg)	HGWA-111 (bg)	HGWC-118	HGWC-101	HGWC-107	HGWC-103	HGWC-109	HGWC-105
8/16/2021					0.13		3.2		
9/27/2021									
1/31/2022			0.0099 (J)						
2/1/2022	0.012 (J)	0.011 (J)							
2/2/2022					0.14	0.85	3.1	0.25	
2/3/2022				0.77					1.4
8/2/2022	<0.04								
8/5/2022		0.012 (J)	<0.04	0.57		0.79	3.6	0.25	1.3
8/10/2022					0.17				
1/24/2023	<0.04	<0.04	<0.04						
1/25/2023				0.62	0.12	0.82	2.7	0.22	1.3
8/8/2023		<0.04	<0.04						
8/10/2023	0.0091 (J)								
8/11/2023				0.66	0.16	0.81	4.3	0.23	1.4
2/13/2024		<0.04							
2/14/2024	0.013 (J)		<0.04						
2/16/2024					0.14	0.87	3.1		
2/17/2024				0.68				0.22	1.3
8/6/2024			<0.04						
8/8/2024	<0.04								
8/9/2024		0.029 (J)		0.59			4.5		
8/10/2024					0.15	0.84		0.2	1.4
2/12/2025									
2/13/2025	0.01 (J)	0.0072 (J)	0.0082 (J)						
2/15/2025					0.21		5.8		
2/16/2025				0.76		1		0.22	1.8

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-102	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-117A
8/30/2016				
8/31/2016				
10/20/2016				
10/24/2016				
10/25/2016				
1/25/2017				
1/31/2017				
5/23/2017				
5/24/2017				
8/10/2017				
11/13/2017				
11/14/2017				
6/4/2018				
6/5/2018				
6/6/2018				
6/7/2018				
10/1/2018				
10/2/2018				
10/3/2018				
4/1/2019				
4/2/2019				
4/3/2019				
4/4/2019				
4/5/2019				
6/17/2019				
10/21/2019				
10/22/2019				
10/23/2019	3.1			
1/3/2020	3.4			
3/4/2020	3.7			
3/24/2020	2.4			
3/25/2020				
4/9/2020				
6/18/2020	2.9			
7/21/2020	3			
8/27/2020	2.7			
9/18/2020		0.0082 (J)	0.015 (J)	
9/22/2020				
9/24/2020	2.9			
9/25/2020				
9/28/2020				
11/10/2020		0.0064 (J)		
11/11/2020			0.014 (J)	
12/15/2020		<0.04	0.0083 (J)	
1/19/2021		0.015 (J)	0.015 (J)	
3/11/2021				
3/12/2021		0.0067 (J)	0.012 (J)	
3/16/2021				
3/17/2021	2.7			
3/18/2021				
8/12/2021		<0.04	0.012 (J)	0.34
8/13/2021	2.4			

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-102	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-117A
8/16/2021				
9/27/2021				0.3
1/31/2022		<0.04	0.011 (J)	
2/1/2022				
2/2/2022	2.6			
2/3/2022				0.34
8/2/2022		<0.04		
8/5/2022	2.9		0.011 (J)	0.34
8/10/2022				
1/24/2023		<0.04	<0.04	
1/25/2023	2.5			0.27
8/8/2023		<0.04	<0.04	
8/10/2023				
8/11/2023	3.2			0.31
2/13/2024			<0.04	
2/14/2024		0.018 (J)		
2/16/2024	2.7			
2/17/2024				0.27
8/6/2024		<0.04	<0.04	
8/8/2024				
8/9/2024	3			
8/10/2024				0.28
2/12/2025		0.011 (J)	0.013 (J)	
2/13/2025				
2/15/2025	3.9			
2/16/2025				0.39 (J)

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-111 (bg)	HGWA-113 (bg)	HGWA-112 (bg)	HGWC-103	HGWC-118	HGWC-105	HGWC-101	HGWC-107	HGWC-109
8/30/2016	40.3	6.72	6.69						
8/31/2016				70.4	79.3	74.2	19.4	44.7	35.1
10/20/2016	38.7				83.7		19.3		
10/24/2016		6.4	6.25	70.9					
10/25/2016						72.5		49	35.4
1/25/2017	44.6	6.87	6.58						
1/31/2017				63.6	76.8	70.3	19.1	46.6	34.2
5/23/2017		7.13	6.4	111	77.2		18.3		
5/24/2017	34.8					75.9		49.5	35.3
8/10/2017	48.6	6.71	6.54	81.2	83.1	84	20.9	54.2	43.1
11/13/2017	17.1		6.26						
11/14/2017		7.4		79.7	86.7	87.2	21.7	53.2	37.4
6/4/2018	30.1		7.4						
6/5/2018		7.4							
6/6/2018				88.3		81	17	55	41.1
6/7/2018					79.7				
10/1/2018	14.2 (J)	6.2	5.8						
10/2/2018						84.7		55.4	42.5
10/3/2018				85.3	77.1		19.1 (J)		
4/1/2019	58.4								
4/2/2019		7.4	6.7						
4/3/2019								54	37.5
4/4/2019				91.9		73.8	16.9		
4/5/2019					82				
6/17/2019				92.6		81.2		55.3	
6/18/2019					76.5				
10/21/2019	51								
10/22/2019		7.2	6.3		84.2			58.1	42.6
10/23/2019				86.5		89.4	21.9		
1/3/2020									
3/4/2020									
3/24/2020	61.2		7						
3/25/2020				86.8	86.8	91.4	18.4	59.5	42.6
4/9/2020		8.3							
6/18/2020									
7/21/2020									
8/27/2020									
9/18/2020	32.2		6.5						
9/22/2020		7.9							
9/24/2020				91.3		92.9	20.3	55.4	
9/25/2020									48.5
9/28/2020					88.9				
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
3/11/2021	53.2								
3/12/2021			6.9						
3/16/2021		8.6							
3/17/2021							21.8		37.3
3/18/2021				83.7	85.4	97.7		56	
8/12/2021	45.4	8.4	6.9						

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-111 (bg)	HGWA-113 (bg)	HGWA-112 (bg)	HGWC-103	HGWC-118	HGWC-105	HGWC-101	HGWC-107	HGWC-109
8/13/2021					84.3	102		57.8	43.5
8/16/2021				124			22.8		
9/27/2021									
1/31/2022	58.6								
2/1/2022		8.6	7.4						
2/2/2022				104			23.8	62	45.7
2/3/2022					84.5	115			
8/2/2022		8							
8/5/2022	53		7.1	128	88.5	121		63	50.8
8/10/2022							24.6		
1/24/2023	55.4	7.5	6.6						
1/25/2023				109	81.8	113	20.4	57.8	42.4
8/8/2023	0.94 (J)		6.6						
8/10/2023		8.4							
8/11/2023				139	85.5	129	24.1	56	44.8
2/13/2024			6.5						
2/14/2024	51.8	7.2							
2/16/2024				106			22.2	61.9	
2/17/2024					83.8	130			44.3
8/6/2024	46.2								
8/8/2024		8.4							
8/9/2024			7.1	146	85.2				
8/10/2024						156	24.2	61.4	53.7
2/12/2025									
2/13/2025	53.9	8.5	7.2						
2/15/2025				170			24.8		
2/16/2025					94.9	170		67.9	48.4

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-102	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-117A
8/30/2016				
8/31/2016				
10/20/2016				
10/24/2016				
10/25/2016				
1/25/2017				
1/31/2017				
5/23/2017				
5/24/2017				
8/10/2017				
11/13/2017				
11/14/2017				
6/4/2018				
6/5/2018				
6/6/2018				
6/7/2018				
10/1/2018				
10/2/2018				
10/3/2018				
4/1/2019				
4/2/2019				
4/3/2019				
4/4/2019				
4/5/2019				
6/17/2019				
6/18/2019				
10/21/2019				
10/22/2019				
10/23/2019	136			
1/3/2020	118			
3/4/2020	144			
3/24/2020	103			
3/25/2020				
4/9/2020				
6/18/2020	124			
7/21/2020	120			
8/27/2020	106			
9/18/2020		62.2	51.8	
9/22/2020				
9/24/2020	120			
9/25/2020				
9/28/2020				
11/10/2020		73.3		
11/11/2020			61.3	
12/15/2020		72.5	61.3	
1/19/2021		72.5	58.9	
3/11/2021				
3/12/2021		69.2	57.5	
3/16/2021				
3/17/2021	111			
3/18/2021				
8/12/2021		71.2	59.5	50.7

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-102	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-117A
8/13/2021	119			
8/16/2021				
9/27/2021				47.2
1/31/2022		73.8	63.2	
2/1/2022				
2/2/2022	116			
2/3/2022				68.2
8/2/2022		73		
8/5/2022	127		59.6	68.6
8/10/2022				
1/24/2023		69.2	57.8	
1/25/2023	128			64.5
8/8/2023		68	58.2	
8/10/2023				
8/11/2023	134			61.1
2/13/2024			56	
2/14/2024		29.4		
2/16/2024	127			
2/17/2024				63.9
8/6/2024		71.1	58.8	
8/8/2024				
8/9/2024	142			
8/10/2024				64.5
2/12/2025		70.7	57.2	
2/13/2025				
2/15/2025	154			
2/16/2025				78.3

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-113 (bg)	HGWA-112 (bg)	HGWA-111 (bg)	HGWC-118	HGWC-103	HGWC-109	HGWC-105	HGWC-101	HGWC-107
8/30/2016	2	5.4	3.3						
8/31/2016				4.5	5.2	5	3	5.7	3.2
10/20/2016			3.2	4.4				5.7	
10/24/2016	1.9	5.2			5.2				
10/25/2016						4.8	2.8		3.2
1/25/2017	1.9	5	2.7						
1/31/2017				4.8	5.6	5.5	3.3	5.8	3.1
5/23/2017	1.6	5.1		4.3	5.7			5.3	
5/24/2017			3			5.3	3.5		2.9
8/10/2017	1.7	5.2	2.8	4.2	5.8	4.6	2.9	5.4	2.8
11/13/2017		5.5	2.5						
11/14/2017	2			4.4	6	5.6	4	5.8	3.4
6/4/2018		5.3	2.6						
6/5/2018	1.7								
6/6/2018					6.4	5.3	2.9	5.3	2.8
6/7/2018				4.1					
10/1/2018	1.6	5.6	2.2						
10/2/2018						5.3	3.5		3.2
10/3/2018				4.4	6.3			5.8	
4/1/2019			4						
4/2/2019	1.8	5.7							
4/3/2019						5			3.6
4/4/2019					6.9		3.9	5.9	
4/5/2019				4.3					
6/17/2019					5.2				2.9
10/21/2019			3.9						
10/22/2019	1.9	5.5		4.5		4.6			3.6
10/23/2019					6.1		3.6	5.5	
1/3/2020									
3/4/2020									
3/24/2020		5.2	3.6						
3/25/2020				3.6	5.1	3.9	3.2	5.2	3
4/9/2020	1.4								
6/18/2020									
7/21/2020									
8/27/2020									
9/18/2020		5.2	2.6						
9/22/2020	1.5								
9/24/2020					6		3.9	5.5	3.5
9/25/2020						4.1			
9/28/2020				4					
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
3/11/2021			3.4						
3/12/2021		5.3							
3/16/2021	1.6								
3/17/2021						4.7		5.5	
3/18/2021				4.3	6.2		4.3		3.2
8/12/2021	1.5	4.4	2.5						
8/13/2021				4		4	3.7		3.1

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-113 (bg)	HGWA-112 (bg)	HGWA-111 (bg)	HGWC-118	HGWC-103	HGWC-109	HGWC-105	HGWC-101	HGWC-107
8/16/2021					10.4			5.4	
9/27/2021									
1/31/2022			3						
2/1/2022	1.6	5.2							
2/2/2022					7.1	4.1		5.3	2.9
2/3/2022				3.9			4.8		
8/2/2022	1.8								
8/5/2022		5	2.7	3.8	7.8	3.7	5		2.7
8/10/2022								5.5	
1/24/2023	1.8	5.6	3.6						
1/25/2023				4.3	8	4.3	6	5.7	3.3
8/8/2023		5.1	3						
8/10/2023	1.6								
8/11/2023				3.8	7.9	3.5	5.6	4.9	2.7
2/13/2024		5							
2/14/2024	1.5		3						
2/16/2024					7.5			5.4	3.2
2/17/2024				4.1		3.9	6.8		
8/6/2024			2.8						
8/8/2024	1.5								
8/9/2024		5.2		4.2	8.8				
8/10/2024						4	7.7	5.4	3.1
2/12/2025									
2/13/2025	1.4	4.9	2.8						
2/15/2025					9.3			5.6	
2/16/2025				4.3		4.2	8.5		3.3

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-102	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-117A
8/30/2016				
8/31/2016				
10/20/2016				
10/24/2016				
10/25/2016				
1/25/2017				
1/31/2017				
5/23/2017				
5/24/2017				
8/10/2017				
11/13/2017				
11/14/2017				
6/4/2018				
6/5/2018				
6/6/2018				
6/7/2018				
10/1/2018				
10/2/2018				
10/3/2018				
4/1/2019				
4/2/2019				
4/3/2019				
4/4/2019				
4/5/2019				
6/17/2019				
10/21/2019				
10/22/2019				
10/23/2019	7.9			
1/3/2020	7			
3/4/2020	7.1			
3/24/2020	6.5			
3/25/2020				
4/9/2020				
6/18/2020	6.9			
7/21/2020	7.2			
8/27/2020	7.1			
9/18/2020		2.7	2.6	
9/22/2020				
9/24/2020	7.2			
9/25/2020				
9/28/2020				
11/10/2020		2.7		
11/11/2020			2.6	
12/15/2020		2.9	2.7	
1/19/2021		2.8	2.7	
3/11/2021				
3/12/2021		2.7	2.6	
3/16/2021				
3/17/2021	6.9			
3/18/2021				
8/12/2021		2.3	2.2	6.3
8/13/2021	6			

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-102	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-117A
8/16/2021				
9/27/2021				4.5
1/31/2022		2.6	2.5	
2/1/2022				
2/2/2022	7.2			
2/3/2022				7.8
8/2/2022		3		
8/5/2022	7.7		2.4	7.4
8/10/2022				
1/24/2023		3	2.8	
1/25/2023	7.8			5.9
8/8/2023		2.7	2.7	
8/10/2023				
8/11/2023	6.7			4.6
2/13/2024			2.6	
2/14/2024		1.6		
2/16/2024	7.4			
2/17/2024				4.4
8/6/2024		2.9	2.7	
8/8/2024				
8/9/2024	8			
8/10/2024				4.5
2/12/2025		2.6	2.4	
2/13/2025				
2/15/2025	9			
2/16/2025				5.2

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-113 (bg)	HGWA-112 (bg)	HGWA-111 (bg)	HGWC-105	HGWC-118	HGWC-103	HGWC-101	HGWC-109	HGWC-107
8/30/2016	0.2 (J)	0.04 (J)	0.07 (J)						
8/31/2016				0.15 (J)	0.18 (J)	0.06 (J)	0.05 (J)	0.12 (J)	0.08 (J)
10/20/2016			0.07 (J)		0.12 (J)		0.03 (J)		
10/24/2016	0.16 (J)	0.05 (J)				0.13 (J)			
10/25/2016				0.09 (J)				0.17 (J)	0.16 (J)
1/25/2017	0.15 (J)	<0.1	0.14 (J)						
1/31/2017				0.13 (J)	0.3	<0.1	<0.1	0.05 (J)	0.16 (J)
5/23/2017	0.18 (J)	0.004 (J)			0.14 (J)	0.15 (J)	<0.1		
5/24/2017			0.02 (J)	0.07 (J)				0.13 (J)	0.009 (J)
8/10/2017	0.19 (J)	0.03 (J)	0.06 (J)	0.03 (J)	0.11 (J)	<0.1	<0.1	0.12 (J)	<0.1
11/13/2017		<0.1	<0.1						
11/14/2017	0.16 (J)			<0.1	0.07 (J)	<0.1	<0.1	<0.1	<0.1
6/4/2018		<0.1	0.032 (J)						
6/5/2018	0.18 (J)								
6/6/2018				0.074 (J)		<0.1	<0.1	0.15 (J)	0.057 (J)
6/7/2018					0.3				
10/1/2018	0.078 (J)	<0.1	<0.1						
10/2/2018				<0.1				<0.1	<0.1
10/3/2018					0.12 (J)	<0.1	<0.1		
4/1/2019			0.042 (J)						
4/2/2019	0.18 (J)	<0.1							
4/3/2019								0.05 (J)	<0.1
4/4/2019				0.03 (J)		0.042 (J)	<0.1		
4/5/2019					0.33				
6/18/2019					0.89				
8/21/2019	0.11 (J)	<0.1	0.048 (J)						
8/22/2019				<0.1	0.07 (J)	<0.1	<0.1		
8/23/2019								0.034 (J)	<0.1
10/21/2019			0.12 (J)						
10/22/2019	0.18 (J)	0.05 (J)			0.087 (J)			0.099 (J)	0.047 (J)
10/23/2019				<0.1		<0.1	<0.1		
1/3/2020									
3/4/2020									
3/24/2020		<0.1	0.076 (J)						
3/25/2020				<0.1	0.078 (J)	<0.1	<0.1	0.075 (J)	<0.1
4/9/2020	0.14 (J)								
6/18/2020									
7/21/2020									
8/25/2020	0.17	<0.1	0.052 (J)						
8/26/2020					0.072 (J)				
8/27/2020				<0.1		<0.1	<0.1	0.094 (J)	<0.1
9/18/2020		<0.1	<0.1						
9/22/2020	0.16								
9/24/2020				<0.1		<0.1	<0.1		0.064 (J)
9/25/2020								0.091 (J)	
9/28/2020					0.078 (J)				
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
3/11/2021			0.057 (J)						
3/12/2021		<0.1							

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-113 (bg)	HGWA-112 (bg)	HGWA-111 (bg)	HGWC-105	HGWC-118	HGWC-103	HGWC-101	HGWC-109	HGWC-107
3/16/2021	0.18								
3/17/2021							<0.1	0.089 (J)	
3/18/2021				<0.1	0.079 (J)	<0.1			<0.1
8/12/2021	0.16	<0.1	<0.1						
8/13/2021				<0.1	0.075 (J)			0.086 (J)	<0.1
8/16/2021						<0.1	<0.1		
9/27/2021									
1/31/2022			0.055 (J)						
2/1/2022	0.16	<0.1							
2/2/2022						<0.1	<0.1	0.086 (J)	<0.1
2/3/2022				<0.1	0.069 (J)				
8/2/2022	0.19								
8/5/2022		0.077 (J)	0.1	0.075 (J)	0.12	0.071 (J)		0.14	0.093 (J)
8/10/2022							0.065 (J)		
1/24/2023	0.2	0.055 (J)	0.086 (J)						
1/25/2023				0.051 (J)	0.095 (J)	<0.1	<0.1	0.12	0.054 (J)
8/8/2023		0.05 (J)	0.076 (J)						
8/10/2023	0.19								
8/11/2023				<0.1	0.07 (J)	<0.1	<0.1	0.086 (J)	<0.1
2/13/2024		<0.1							
2/14/2024	0.18		0.081 (J)						
2/16/2024						<0.1	<0.1		<0.1
2/17/2024				<0.1	0.068 (J)			0.094 (J)	
8/6/2024			0.089 (J)						
8/8/2024	0.17								
8/9/2024		0.075 (J)			0.11	0.077 (J)			
8/10/2024				0.066 (J)			0.068 (J)	0.13	0.069 (J)
2/12/2025									
2/13/2025	0.2	0.067 (J)	0.093 (J)						
2/15/2025						<0.1	<0.1		
2/16/2025				<0.1	0.065 (J)			0.086 (J)	<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-102	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-117A
8/30/2016				
8/31/2016				
10/20/2016				
10/24/2016				
10/25/2016				
1/25/2017				
1/31/2017				
5/23/2017				
5/24/2017				
8/10/2017				
11/13/2017				
11/14/2017				
6/4/2018				
6/5/2018				
6/6/2018				
6/7/2018				
10/1/2018				
10/2/2018				
10/3/2018				
4/1/2019				
4/2/2019				
4/3/2019				
4/4/2019				
4/5/2019				
6/18/2019				
8/21/2019				
8/22/2019				
8/23/2019				
10/21/2019				
10/22/2019				
10/23/2019	0.22 (J)			
1/3/2020	<0.1			
3/4/2020	<0.1			
3/24/2020	<0.1			
3/25/2020				
4/9/2020				
6/18/2020	<0.1			
7/21/2020	<0.1			
8/25/2020				
8/26/2020				
8/27/2020	<0.1			
9/18/2020		0.067 (J)	0.098 (J)	
9/22/2020				
9/24/2020	<0.1			
9/25/2020				
9/28/2020				
11/10/2020		0.065 (J)		
11/11/2020			0.083 (J)	
12/15/2020		0.064 (J)	0.081 (J)	
1/19/2021		0.057 (J)	0.079 (J)	
3/11/2021				
3/12/2021		0.062 (J)	0.085 (J)	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-102	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-117A
3/16/2021				
3/17/2021	<0.1			
3/18/2021				
8/12/2021		<0.1	0.064 (J)	<0.1
8/13/2021	<0.1			
8/16/2021				
9/27/2021				<0.1
1/31/2022		0.053 (J)	0.072 (J)	
2/1/2022				
2/2/2022	<0.1			
2/3/2022				0.056 (J)
8/2/2022		0.08 (J)		
8/5/2022	0.076 (J)		0.12	0.12
8/10/2022				
1/24/2023		0.081 (J)	0.092 (J)	
1/25/2023	<0.1			0.085 (J)
8/8/2023		0.072 (J)	0.091 (J)	
8/10/2023				
8/11/2023	<0.1			0.057 (J)
2/13/2024			0.071 (J)	
2/14/2024		0.23		
2/16/2024	<0.1			
2/17/2024				0.055 (J)
8/6/2024		0.094 (J)	0.1	
8/8/2024				
8/9/2024	0.067 (J)			
8/10/2024				0.1
2/12/2025		0.099 (J)	0.1	
2/13/2025				
2/15/2025	<0.1			
2/16/2025				0.057 (J)

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-109	HGWC-107	HGWC-118	HGWC-101	HGWC-105	HGWC-103
3/11/2021	7.2								
3/12/2021		5.6							
3/16/2021			6.14						
3/17/2021				6.55			5.41		
3/18/2021					6.2	7.11		6.57	5.51
8/12/2021	6.67	5.5	6.08						
8/13/2021				6.71	6.11	6.78		6.44	
8/16/2021							5.4		5.59
9/27/2021									
1/31/2022	7.17								
2/1/2022		5.59	6.05						
2/2/2022				6.65	6.14		5.51		5.63
2/3/2022						6.79		6.48	
8/2/2022			6.08						
8/5/2022	6.97	5.43		6.81	6.07	7.07		6.46	5.71
8/10/2022							5.37		
1/24/2023	7.11	5.67	6.15						
1/25/2023				6.66	6.13	6.67	5.47	6.41	5.65
8/8/2023	7.01	5.77							
8/10/2023			6.07						
8/11/2023				6.8	6.16	7.49	5.44	6.47	5.8
2/13/2024		5.64							
2/14/2024	7		6.24						
2/16/2024					6.27		5.47		5.74
2/17/2024				6.88		6.94		6.46	
8/6/2024	6.99								
8/8/2024			5.98						
8/9/2024		5.65				7.07			5.74
8/10/2024				7.03	6.22		5.38	6.38	
2/12/2025									
2/13/2025	6.92	5.64	6.15						
2/15/2025							5.5		5.73
2/16/2025				6.82	6.27	7.12		6.46	

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-102	HGWA-48D (bg)	HGWA-47 (bg)	HGWC-117A
8/30/2016				
8/31/2016				
10/20/2016				
10/24/2016				
10/25/2016				
1/25/2017				
1/31/2017				
5/23/2017				
5/24/2017				
8/10/2017				
11/13/2017				
11/14/2017				
6/4/2018				
6/5/2018				
6/6/2018				
6/7/2018				
10/1/2018				
10/2/2018				
10/3/2018				
4/1/2019				
4/2/2019				
4/3/2019				
4/4/2019				
4/5/2019				
6/17/2019				
6/18/2019				
8/21/2019				
8/22/2019				
8/23/2019				
10/21/2019				
10/22/2019				
10/23/2019	5.68			
1/3/2020	5.64			
1/22/2020	5.66			
3/4/2020	5.75			
3/24/2020	5.58			
3/25/2020				
4/9/2020				
6/18/2020	5.67			
7/21/2020	5.72			
8/25/2020				
8/26/2020				
8/27/2020	5.7			
9/18/2020		7.5	7.54	
9/22/2020				
9/24/2020	5.82			
9/25/2020				
9/28/2020				
11/10/2020			7.34	
11/11/2020		7.4		
12/15/2020		7.39	7.27	
1/19/2021		7.4	7.32	

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-102	HGWA-48D (bg)	HGWA-47 (bg)	HGWC-117A
3/11/2021				
3/12/2021		7.51	7.52	
3/16/2021				
3/17/2021	5.78			
3/18/2021				
8/12/2021		7.44	7.38	6.27
8/13/2021	5.46			
8/16/2021				
9/27/2021				6.14
1/31/2022		7.44	7.34	
2/1/2022				
2/2/2022	5.79			
2/3/2022				6.58
8/2/2022			7.34	
8/5/2022	5.69	7.4		6.44
8/10/2022				
1/24/2023		7.46	7.38	
1/25/2023	5.77			6.53
8/8/2023		7.37	7.27	
8/10/2023				
8/11/2023	5.79			7.09
2/13/2024		7.59		
2/14/2024			7.93	
2/16/2024	5.88			
2/17/2024				6.7
8/6/2024		7.4	7.46	
8/8/2024				
8/9/2024	5.86			
8/10/2024				6.61
2/12/2025		7.48	7.4	
2/13/2025				
2/15/2025	5.9			
2/16/2025				7.03

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-118	HGWC-101	HGWC-103	HGWC-105	HGWC-109	HGWC-107
8/30/2016	1.6	0.63 (J)	14						
8/31/2016				88	110	280	190	36	130
10/20/2016	1.6			81	110				
10/24/2016		0.62 (J)	11			280			
10/25/2016							190	41	130
1/25/2017	1.6	0.62 (J)	12						
1/31/2017				87	120	300	210	37	130
5/23/2017		0.55 (J)	12	84	97	340			
5/24/2017	1.4						180	40	130
8/10/2017	1.6	0.66 (J)	11	78	96	300	180	40	130
11/13/2017	1.3	0.61 (J)							
11/14/2017			11	79	110	310	170	40	130
6/4/2018	1.4	0.73 (J)							
6/5/2018			9.9						
6/6/2018					95.5	351	168	49.7	132
6/7/2018				60.1					
10/1/2018	1	0.52 (J)	6.7						
10/2/2018							173	42.3	132
10/3/2018				91.5	121	381			
4/1/2019	1.7								
4/2/2019		0.78 (J)	8.7						
4/3/2019								36	139
4/4/2019					95.1	358	185		
4/5/2019				75.1					
6/17/2019						311	162	30.9	126
6/18/2019				77	102				
10/21/2019	1.8								
10/22/2019		0.6 (J)	6.8	80.9				23.2	123
10/23/2019					101	248	162		
1/3/2020									
3/4/2020									
3/24/2020	1.6	<1							
3/25/2020				78.4	85.5	251	161	27.9	116
4/9/2020			6.6						
6/18/2020									
7/21/2020									
8/27/2020									
9/18/2020	1	<1							
9/22/2020			5.3						
9/24/2020					97	293	177		126
9/25/2020								24.7	
9/28/2020				86					
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
3/11/2021	1.5								
3/12/2021		0.52 (J)							
3/16/2021			7.7						
3/17/2021					107			28.3	
3/18/2021				87.8		286	196		128
8/12/2021	1.3	<1	10						

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-111 (bg)	HGWA-112 (bg)	HGWA-113 (bg)	HGWC-118	HGWC-101	HGWC-103	HGWC-105	HGWC-109	HGWC-107
8/13/2021				75.1			142	24.4	112
8/16/2021					72.1	354			
9/27/2021									
1/31/2022	1.5								
2/1/2022		0.5 (J)	8.9						
2/2/2022					100	293		25.5	111
2/3/2022				72.7			195		
8/2/2022			7.5						
8/5/2022	1.4	<1		69.8		369	217	23	120
8/10/2022					99.5				
1/24/2023	1.9	0.81 (J)	6.6						
1/25/2023				73	95	342	230	25.4	128
8/8/2023	1.5	0.71 (J)							
8/10/2023			5.1						
8/11/2023				64.9	102	382	237	19.8	113
2/13/2024		0.51 (J)							
2/14/2024	1.2		4.9						
2/16/2024					110	323			130
2/17/2024				69.7			251	22	
8/6/2024	1.3								
8/8/2024			4.6						
8/9/2024		0.76 (J)		66.5		393			
8/10/2024					104		258	19.7	114
2/12/2025									
2/13/2025	1.1	<1	4.4						
2/15/2025					98.7	425			
2/16/2025				66.8			271	20.8	110

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-102	HGWA-48D (bg)	HGWA-47 (bg)	HGWC-117A
8/30/2016				
8/31/2016				
10/20/2016				
10/24/2016				
10/25/2016				
1/25/2017				
1/31/2017				
5/23/2017				
5/24/2017				
8/10/2017				
11/13/2017				
11/14/2017				
6/4/2018				
6/5/2018				
6/6/2018				
6/7/2018				
10/1/2018				
10/2/2018				
10/3/2018				
4/1/2019				
4/2/2019				
4/3/2019				
4/4/2019				
4/5/2019				
6/17/2019				
6/18/2019				
10/21/2019				
10/22/2019				
10/23/2019	<1			
1/3/2020	380			
3/4/2020	400			
3/24/2020	311			
3/25/2020				
4/9/2020				
6/18/2020	349			
7/21/2020	378			
8/27/2020	382			
9/18/2020		9.5	3.5	
9/22/2020				
9/24/2020	370			
9/25/2020				
9/28/2020				
11/10/2020			2.3	
11/11/2020		4.5		
12/15/2020		4.2	2.4	
1/19/2021		3.9	2.6	
3/11/2021				
3/12/2021		4.7	1.9	
3/16/2021				
3/17/2021	332			
3/18/2021				
8/12/2021		4.3	1.4	64.6

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-102	HGWA-48D (bg)	HGWA-47 (bg)	HGWC-117A
8/13/2021	248			
8/16/2021				
9/27/2021				69.7
1/31/2022		5.6	1.7	
2/1/2022				
2/2/2022	303			
2/3/2022				72.9
8/2/2022			2.1	
8/5/2022	358	3.4		76.1
8/10/2022				
1/24/2023		2.9	2.2	
1/25/2023	348			72.9
8/8/2023		2.9	2	
8/10/2023				
8/11/2023	370			67.7
2/13/2024		2.8		
2/14/2024			19.7	
2/16/2024	363			
2/17/2024				72.7
8/6/2024		2.7	2.3	
8/8/2024				
8/9/2024	359			
8/10/2024				72.6
2/12/2025		2.2	2	
2/13/2025				
2/15/2025	357			
2/16/2025				69.8

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-113 (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWC-103	HGWC-118	HGWC-105	HGWC-101	HGWC-109	HGWC-107
8/30/2016	77	172	76						
8/31/2016				483	373	389	278	182	235
10/20/2016		108			305		165		
10/24/2016	111		65	517					
10/25/2016						316		172	223
1/25/2017	155	345	152 (O)						
1/31/2017				516	361	437	263	252	346
5/23/2017	74		52	637	359		190		
5/24/2017		126				352		184	234
8/10/2017	94	174	60	459	325	356	175	208	254
11/13/2017		158	75						
11/14/2017	89			545	373	375	253	252	313
6/4/2018		131	70						
6/5/2018	92								
6/6/2018				559		385	188	224	278
6/7/2018					338				
10/1/2018	91	101	76						
10/2/2018						374		230	274
10/3/2018				582	328		238		
4/1/2019		213							
4/2/2019	94		69						
4/3/2019								210	273
4/4/2019				535		340	149		
4/5/2019					308				
6/17/2019				515		370			272
6/18/2019					215				
10/21/2019		187							
10/22/2019	95		81		354			212	308
10/23/2019				507		419	221		
1/3/2020									
3/4/2020									
3/24/2020		207	52						
3/25/2020				507	347	417	187	213	297
4/9/2020	48								
6/18/2020									
7/21/2020									
8/27/2020									
9/18/2020		139	62						
9/22/2020	84								
9/24/2020				517		411	170		253
9/25/2020								188	
9/28/2020					332				
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
3/11/2021		207							
3/12/2021			56						
3/16/2021	99								
3/17/2021							213	171	
3/18/2021				465	328	410			255
8/12/2021	92	157	63						

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWA-113 (bg)	HGWA-111 (bg)	HGWA-112 (bg)	HGWC-103	HGWC-118	HGWC-105	HGWC-101	HGWC-109	HGWC-107
8/13/2021					336	441		189	291
8/16/2021				672			206		
9/27/2021									
1/31/2022		186							
2/1/2022	99		73						
2/2/2022				576			220	206	271
2/3/2022					316	463			
8/2/2022	85								
8/5/2022		171	44	692	329	514		195	274
8/10/2022							232		
1/24/2023	146	177	96						
1/25/2023				630	337	537	186	214	304
8/8/2023		207	57						
8/10/2023	80								
8/11/2023				808	346	630	250	205	296
2/13/2024			73						
2/14/2024	93	187							
2/16/2024				640			222		325
2/17/2024					424	716		265	
8/6/2024		163							
8/8/2024	85								
8/9/2024			90	809	338				
8/10/2024						658	263	227	299
2/12/2025									
2/13/2025	90	172	63						
2/15/2025				866			241		
2/16/2025					323	704		187	275

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-102	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-117A
8/30/2016				
8/31/2016				
10/20/2016				
10/24/2016				
10/25/2016				
1/25/2017				
1/31/2017				
5/23/2017				
5/24/2017				
8/10/2017				
11/13/2017				
11/14/2017				
6/4/2018				
6/5/2018				
6/6/2018				
6/7/2018				
10/1/2018				
10/2/2018				
10/3/2018				
4/1/2019				
4/2/2019				
4/3/2019				
4/4/2019				
4/5/2019				
6/17/2019				
6/18/2019				
10/21/2019				
10/22/2019				
10/23/2019	736			
1/3/2020	714			
3/4/2020	764			
3/24/2020	521			
3/25/2020				
4/9/2020				
6/18/2020	652			
7/21/2020	669			
8/27/2020	663			
9/18/2020		195	224	
9/22/2020				
9/24/2020	696			
9/25/2020				
9/28/2020				
11/10/2020		229		
11/11/2020			221	
12/15/2020		233	239	
1/19/2021		199	224	
3/11/2021				
3/12/2021		217	204	
3/16/2021				
3/17/2021	626			
3/18/2021				
8/12/2021		212	234	256

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 4/22/2025 7:46 PM View: Appendix III Interwell
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-102	HGWA-47 (bg)	HGWA-48D (bg)	HGWC-117A
8/13/2021	647			
8/16/2021				
9/27/2021				223
1/31/2022		243	223	
2/1/2022				
2/2/2022	602			
2/3/2022				264
8/2/2022		222		
8/5/2022	696		224	270
8/10/2022				
1/24/2023		223	230	
1/25/2023	664			289
8/8/2023		214	220	
8/10/2023				
8/11/2023	785			280
2/13/2024			242	
2/14/2024		147		
2/16/2024	718			
2/17/2024				329
8/6/2024		253	240	
8/8/2024				
8/9/2024	746			
8/10/2024				284
2/12/2025		229	222	
2/13/2025				
2/15/2025	782			
2/16/2025				284

FIGURE E.

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP4 Printed 4/22/2025, 7:51 PM

<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>Alpha</u>	<u>Method</u>
Boron (mg/L)	HGWC-101	0.01038	135	87	Yes	21	0	n/a	0.01	NP
Boron (mg/L)	HGWC-103	0.1975	138	92	Yes	22	0	n/a	0.01	NP
Boron (mg/L)	HGWC-109	-0.02748	-173	-92	Yes	22	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-113 (bg)	0.2137	116	87	Yes	21	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-103	7.623	153	92	Yes	22	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-105	8.419	197	92	Yes	22	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-118	0.9576	93	92	Yes	22	0	n/a	0.01	NP
Chloride (mg/L)	HGWA-113 (bg)	-0.04046	-95	-87	Yes	21	0	n/a	0.01	NP
Chloride (mg/L)	HGWC-103	0.422	147	92	Yes	22	0	n/a	0.01	NP
Chloride (mg/L)	HGWC-105	0.5027	159	87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	HGWA-48D (bg)	-0.5856	-57	-43	Yes	13	0	n/a	0.01	NP
Sulfate (mg/L)	HGWA-113 (bg)	-0.9155	-153	-87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-107	-1.936	-105	-92	Yes	22	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-109	-2.572	-155	-92	Yes	22	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-118	-2.181	-118	-92	Yes	22	0	n/a	0.01	NP
TDS (mg/L)	HGWC-103	30.23	107	92	Yes	22	0	n/a	0.01	NP
TDS (mg/L)	HGWC-105	34.25	157	92	Yes	22	0	n/a	0.01	NP

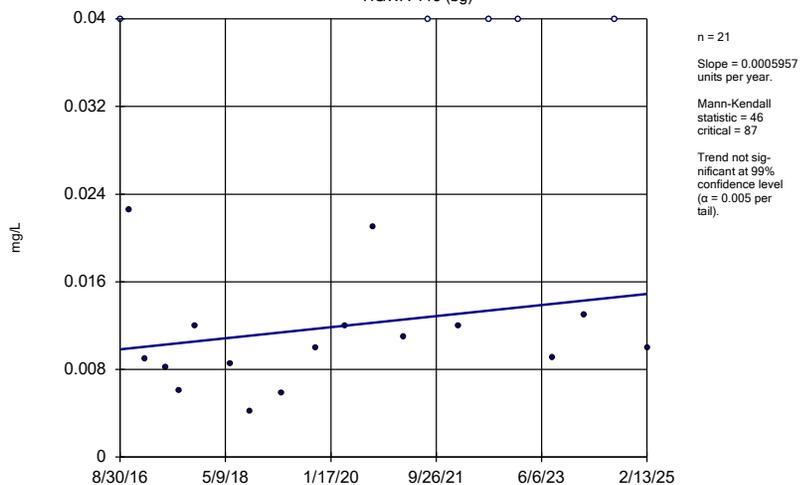
Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Hammond Client: Southern Company Data: Hammond AP4 Printed 4/22/2025, 7:51 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	HGWA-47 (bg)	0	17	43	No	13	53.85	n/a	0.01	NP
Boron (mg/L)	HGWA-48D (bg)	0.0009602	17	43	No	13	30.77	n/a	0.01	NP
Boron (mg/L)	HGWA-111 (bg)	0.0001412	43	87	No	21	38.1	n/a	0.01	NP
Boron (mg/L)	HGWA-112 (bg)	0	12	87	No	21	33.33	n/a	0.01	NP
Boron (mg/L)	HGWA-113 (bg)	0.0005957	46	87	No	21	23.81	n/a	0.01	NP
Boron (mg/L)	HGWC-101	0.01038	135	87	Yes	21	0	n/a	0.01	NP
Boron (mg/L)	HGWC-102	-0.01042	-8	-63	No	17	0	n/a	0.01	NP
Boron (mg/L)	HGWC-103	0.1975	138	92	Yes	22	0	n/a	0.01	NP
Boron (mg/L)	HGWC-105	0.01663	60	87	No	21	0	n/a	0.01	NP
Boron (mg/L)	HGWC-107	0.01764	83	92	No	22	0	n/a	0.01	NP
Boron (mg/L)	HGWC-109	-0.02748	-173	-92	Yes	22	0	n/a	0.01	NP
Boron (mg/L)	HGWC-118	-0.002094	-11	-87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-47 (bg)	-0.5433	-18	-43	No	13	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-48D (bg)	-0.5294	-17	-43	No	13	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-111 (bg)	1.456	48	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-112 (bg)	0.06471	67	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-113 (bg)	0.2137	116	87	Yes	21	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-102	3.704	42	63	No	17	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-103	7.623	153	92	Yes	22	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-105	8.419	197	92	Yes	22	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-117A	4.906	13	25	No	9	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-118	0.9576	93	92	Yes	22	0	n/a	0.01	NP
Chloride (mg/L)	HGWA-47 (bg)	0	-7	-43	No	13	0	n/a	0.01	NP
Chloride (mg/L)	HGWA-48D (bg)	0	-3	-43	No	13	0	n/a	0.01	NP
Chloride (mg/L)	HGWA-111 (bg)	0	-9	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	HGWA-112 (bg)	-0.02732	-44	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	HGWA-113 (bg)	-0.04046	-95	-87	Yes	21	0	n/a	0.01	NP
Chloride (mg/L)	HGWC-102	0.2001	43	63	No	17	0	n/a	0.01	NP
Chloride (mg/L)	HGWC-103	0.422	147	92	Yes	22	0	n/a	0.01	NP
Chloride (mg/L)	HGWC-105	0.5027	159	87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	HGWA-47 (bg)	-0.07749	-10	-43	No	13	0	n/a	0.01	NP
Sulfate (mg/L)	HGWA-48D (bg)	-0.5856	-57	-43	Yes	13	0	n/a	0.01	NP
Sulfate (mg/L)	HGWA-111 (bg)	-0.0259	-50	-87	No	21	0	n/a	0.01	NP
Sulfate (mg/L)	HGWA-112 (bg)	0.01769	34	87	No	21	23.81	n/a	0.01	NP
Sulfate (mg/L)	HGWA-113 (bg)	-0.9155	-153	-87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-101	-0.6805	-37	-92	No	22	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-102	-2.338	-7	-63	No	17	5.882	n/a	0.01	NP
Sulfate (mg/L)	HGWC-103	11.03	90	92	No	22	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-105	8.336	74	92	No	22	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-107	-1.936	-105	-92	Yes	22	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-109	-2.572	-155	-92	Yes	22	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-117A	0.01474	1	25	No	9	0	n/a	0.01	NP
Sulfate (mg/L)	HGWC-118	-2.181	-118	-92	Yes	22	0	n/a	0.01	NP
TDS (mg/L)	HGWA-47 (bg)	3.399	13	43	No	13	0	n/a	0.01	NP
TDS (mg/L)	HGWA-48D (bg)	1.133	9	43	No	13	0	n/a	0.01	NP
TDS (mg/L)	HGWA-111 (bg)	2.714	29	87	No	21	0	n/a	0.01	NP
TDS (mg/L)	HGWA-112 (bg)	0.313	6	81	No	20	0	n/a	0.01	NP
TDS (mg/L)	HGWA-113 (bg)	-0.1551	-6	-87	No	21	0	n/a	0.01	NP
TDS (mg/L)	HGWC-102	13.06	25	63	No	17	0	n/a	0.01	NP
TDS (mg/L)	HGWC-103	30.23	107	92	Yes	22	0	n/a	0.01	NP
TDS (mg/L)	HGWC-105	34.25	157	92	Yes	22	0	n/a	0.01	NP

Sen's Slope Estimator

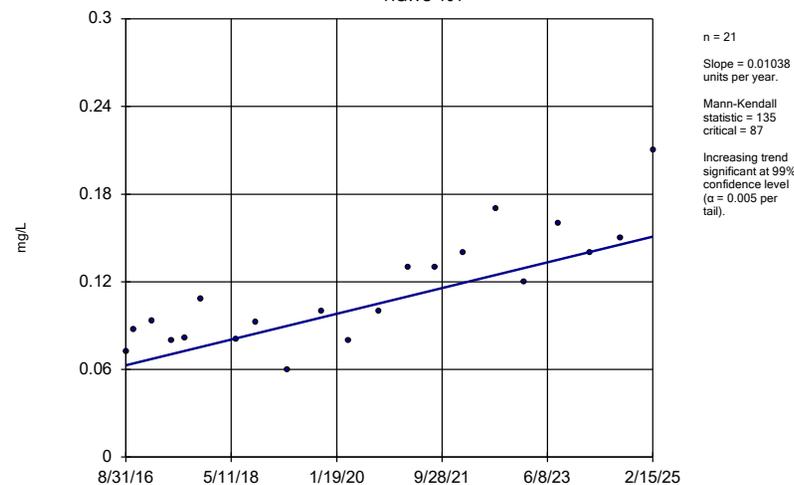
HGWA-113 (bg)



Constituent: Boron Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

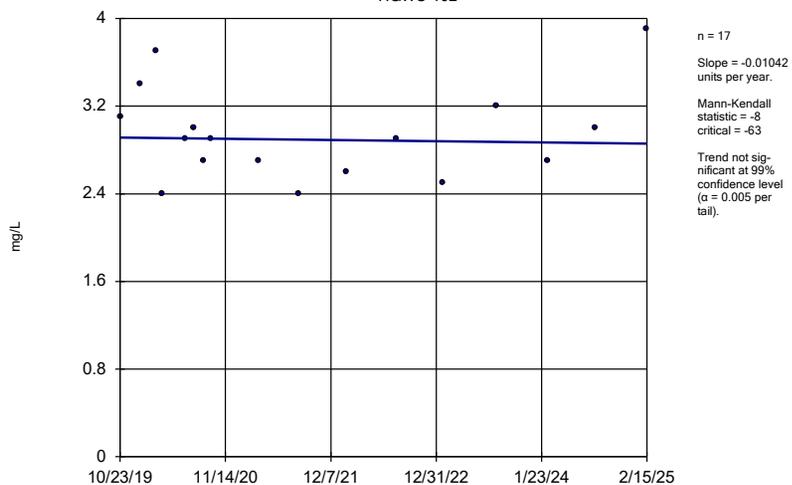
HGWC-101



Constituent: Boron Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

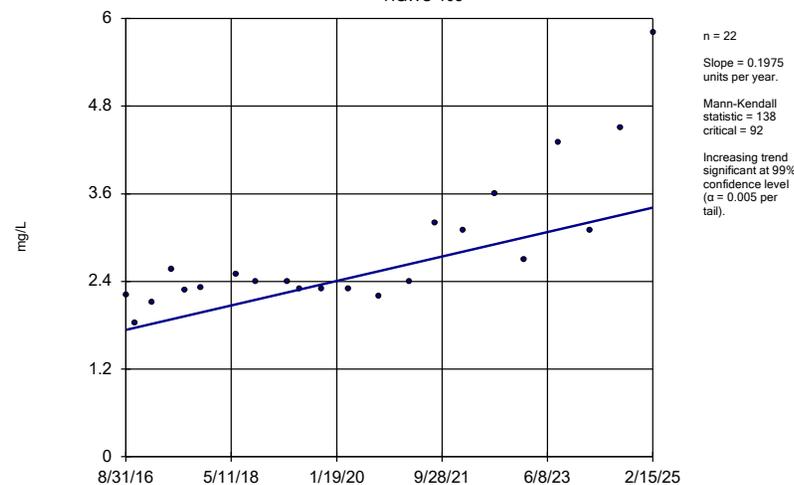
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

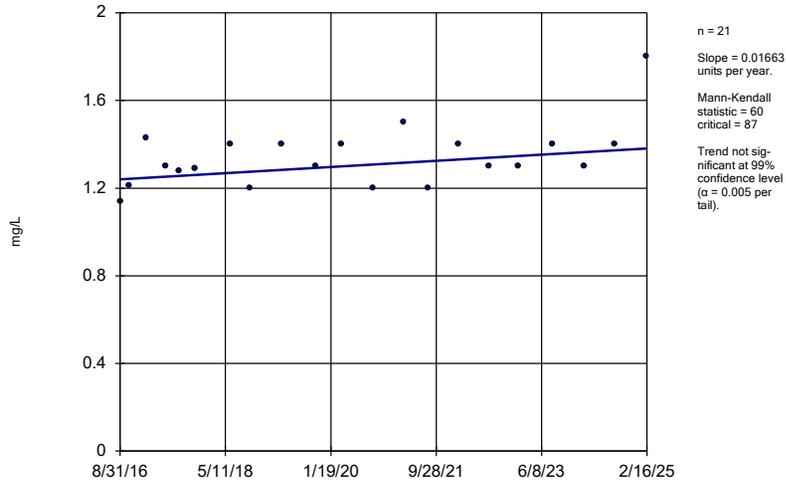
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

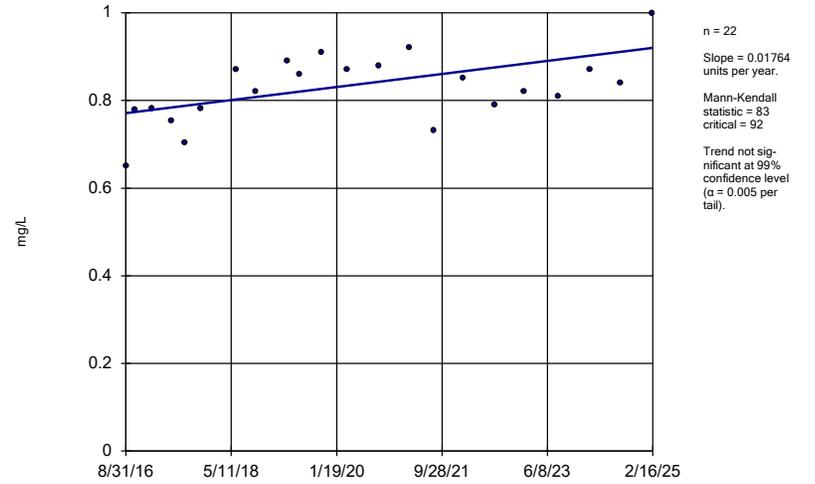
HGWC-105



Constituent: Boron Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

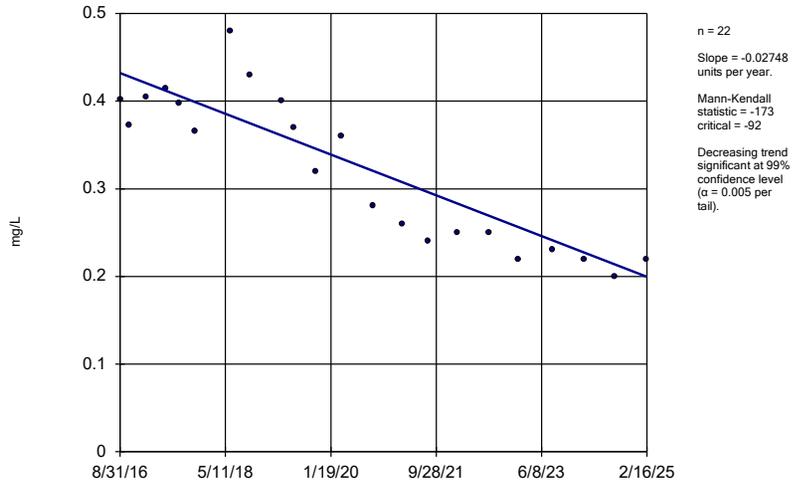
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 Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

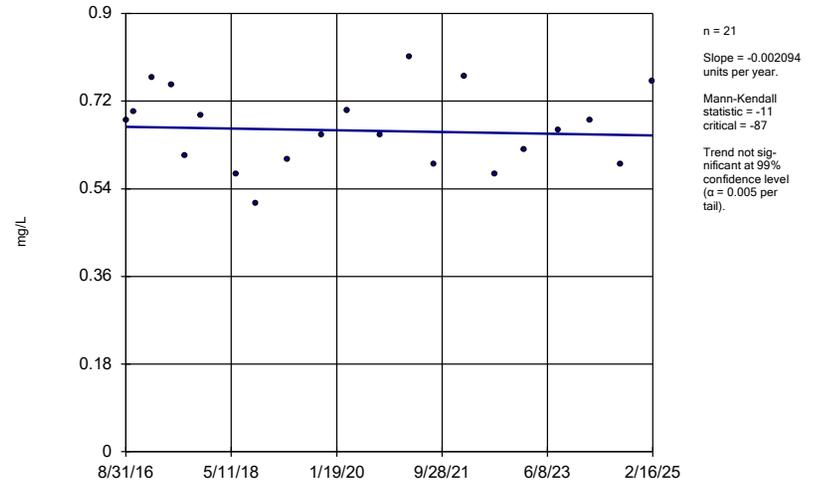
HGWC-109



Constituent: Boron Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

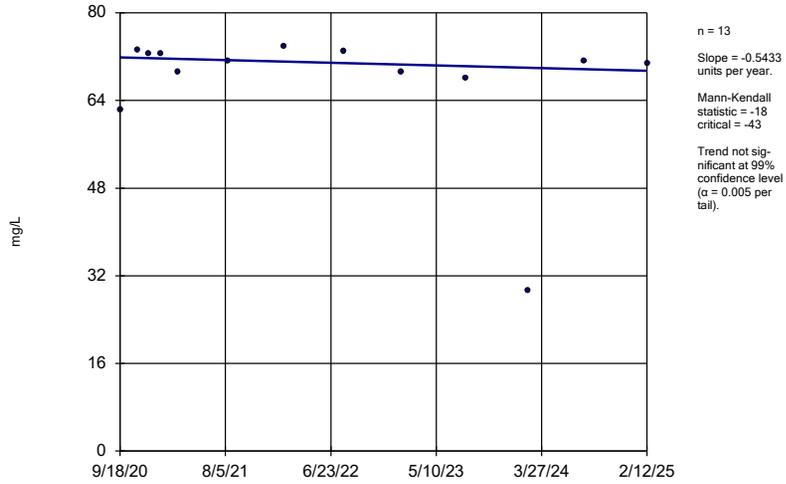
HGWC-118



Constituent: Boron Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

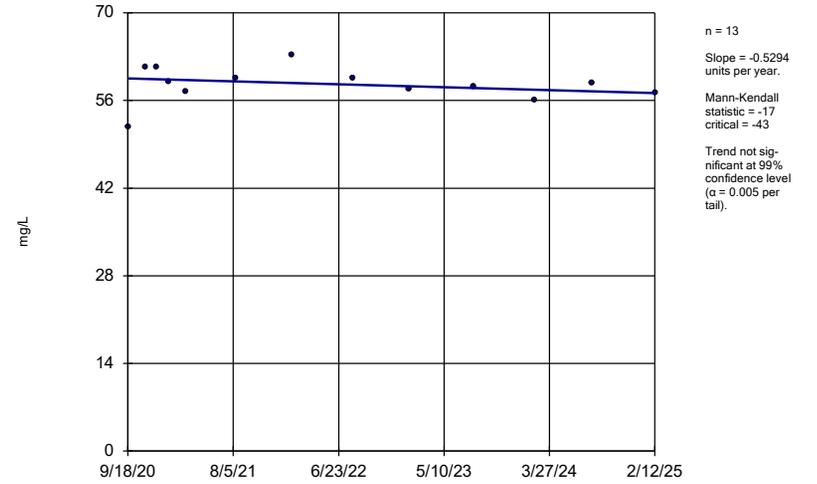
HGWA-47 (bg)



Constituent: Calcium Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

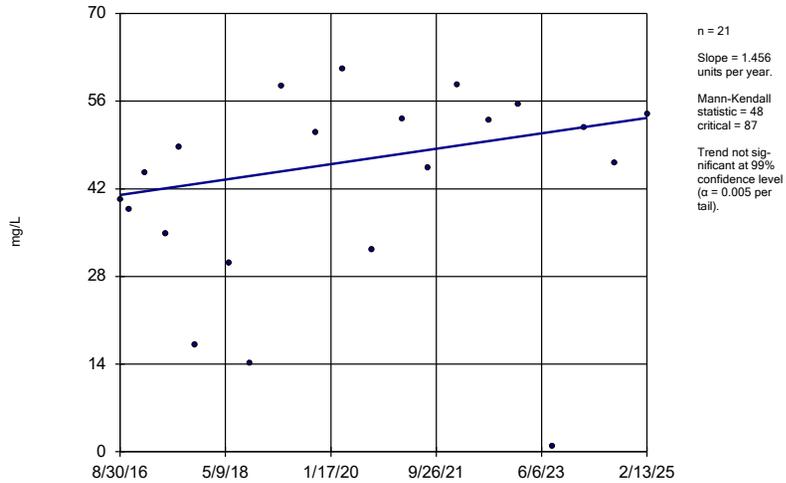
HGWA-48D (bg)



Constituent: Calcium Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

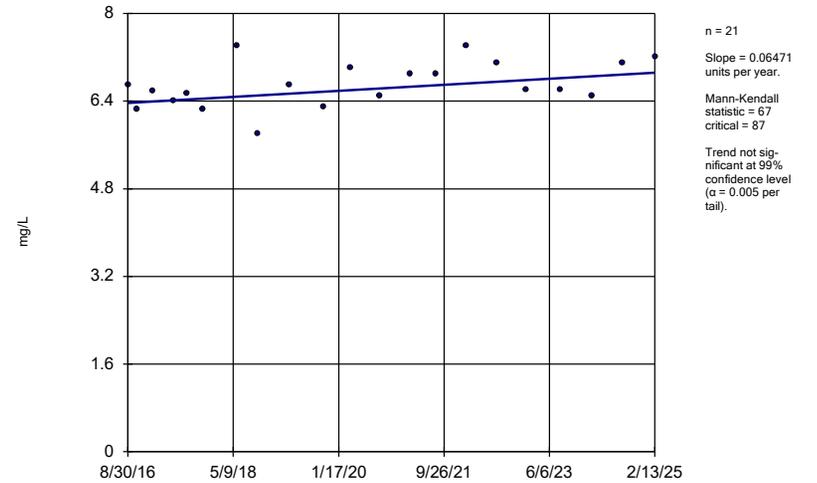
HGWA-111 (bg)



Constituent: Calcium Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

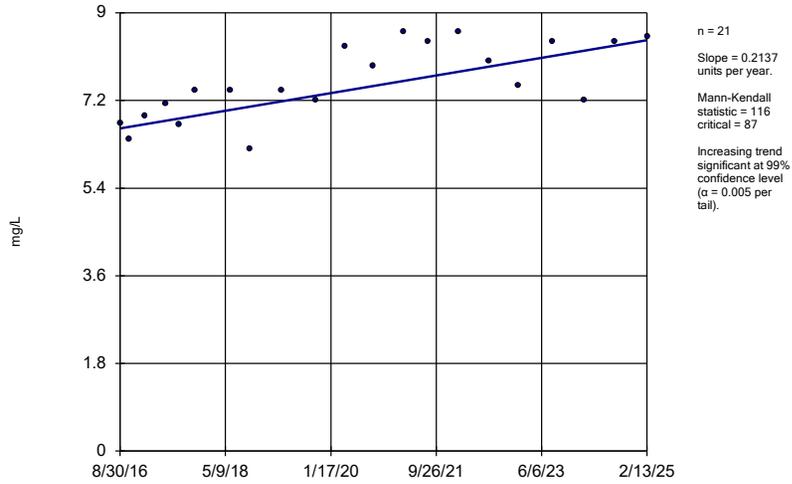
HGWA-112 (bg)



Constituent: Calcium Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

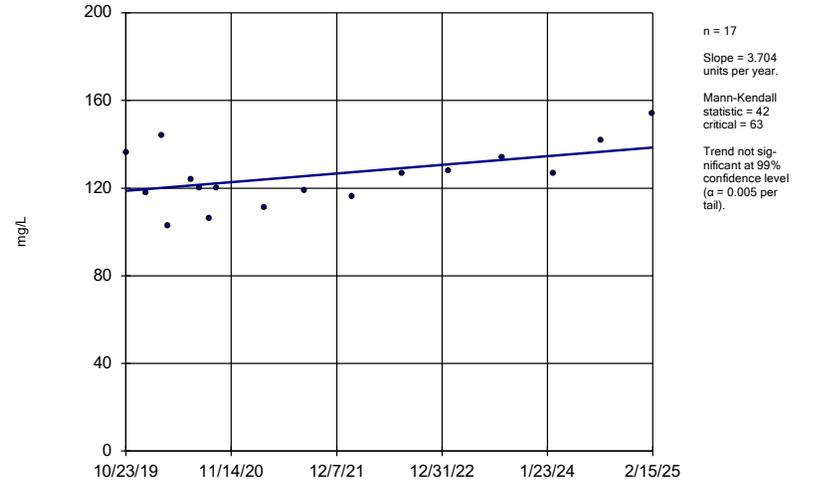
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Plant Hammond Client: Southern Company Data: Hammond AP4

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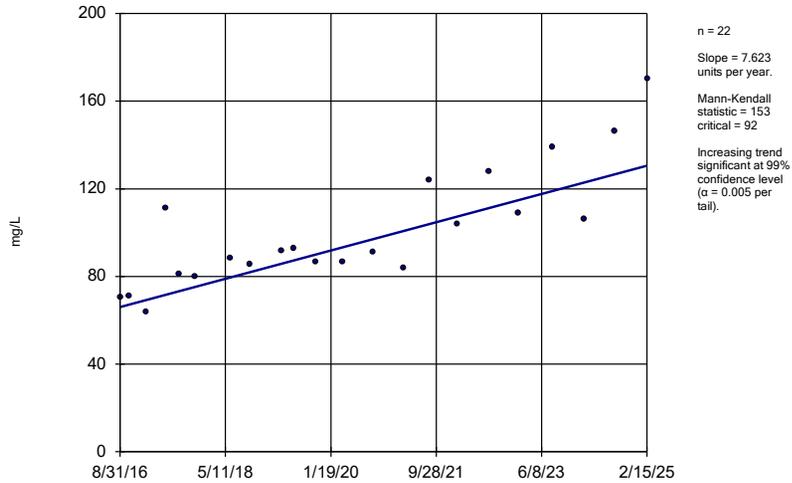
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Constituent: Calcium Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

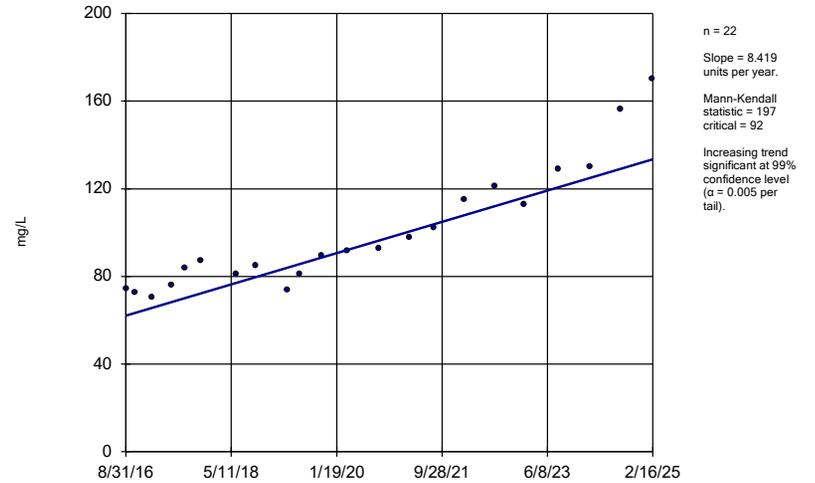
HGWC-103



Constituent: Calcium Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

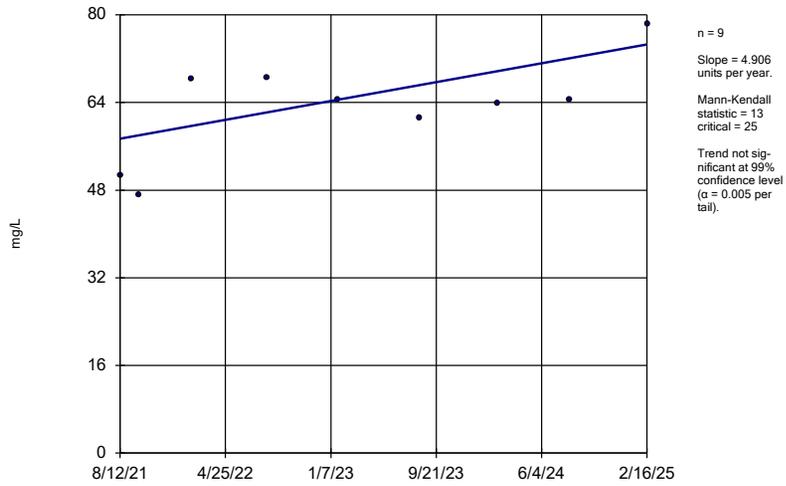
HGWC-105



Constituent: Calcium Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

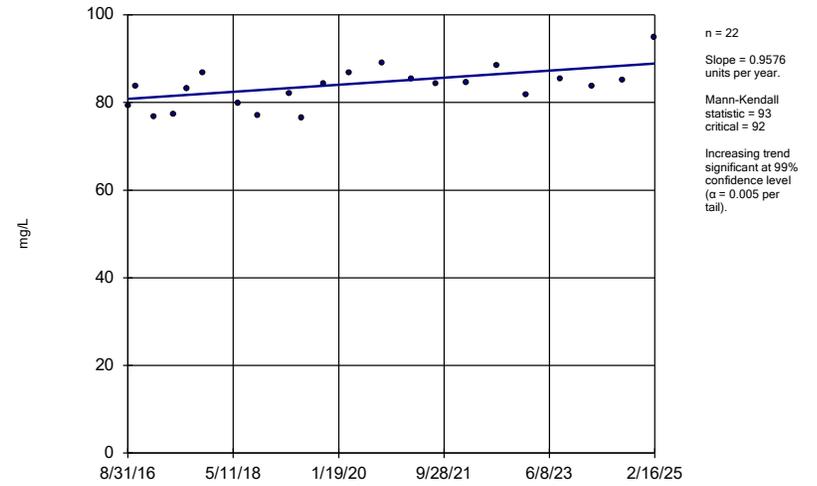
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Constituent: Calcium Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

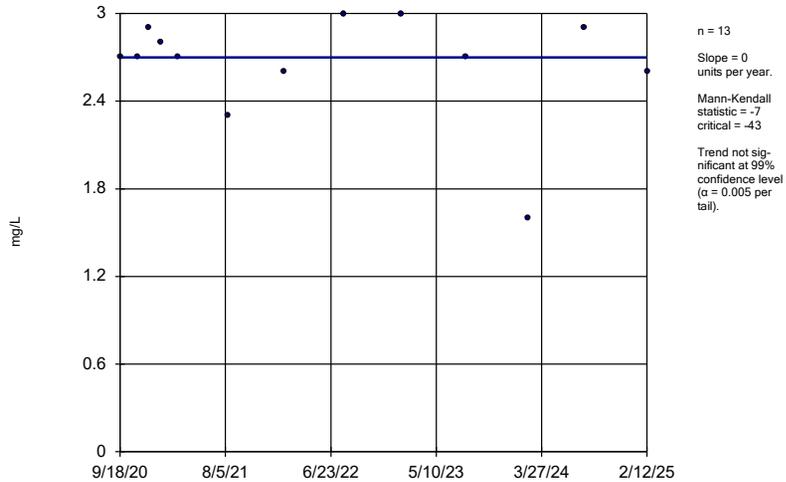
HGWC-118



Constituent: Calcium Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

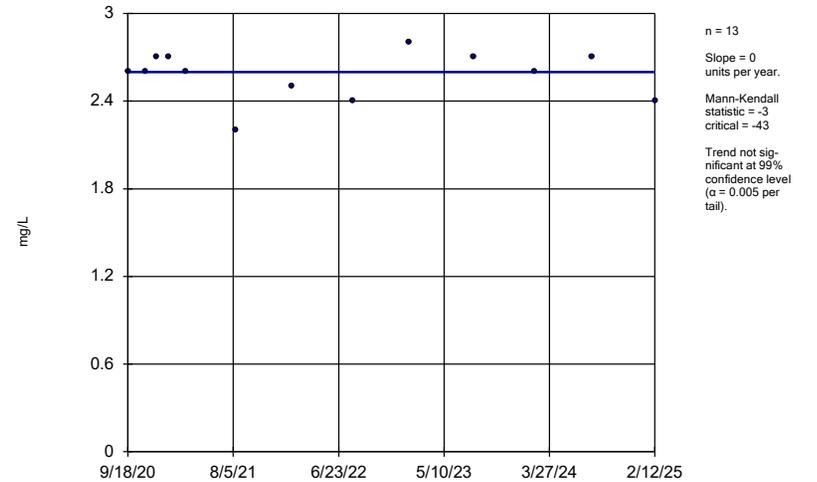
HGWA-47 (bg)



Constituent: Chloride Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

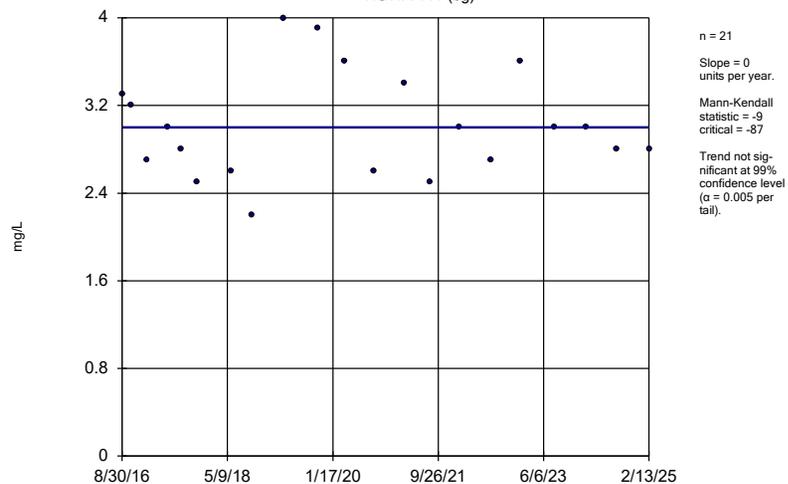
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Constituent: Chloride Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

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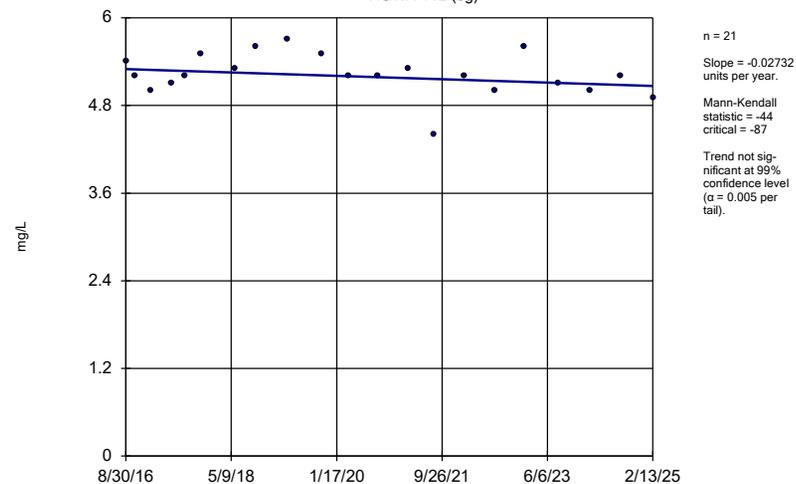
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Constituent: Chloride Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

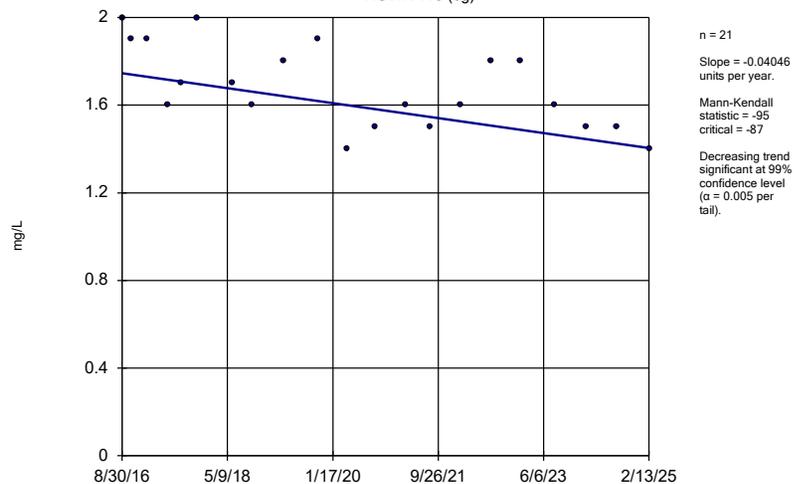
HGWA-112 (bg)



Constituent: Chloride Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

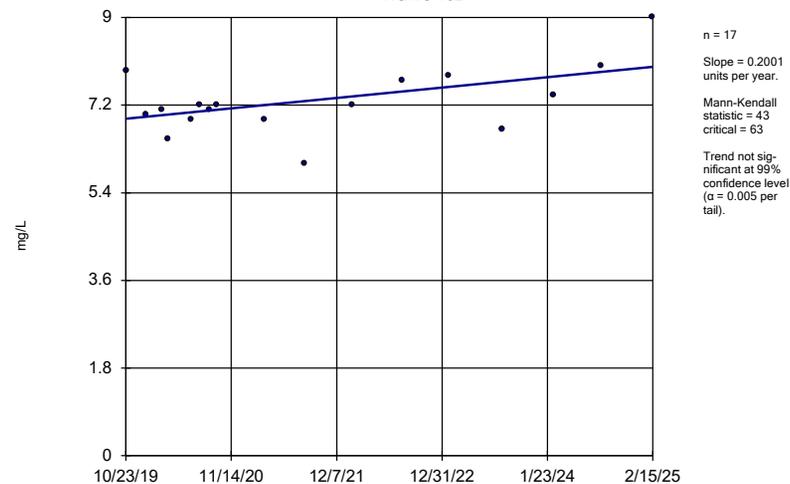
HGWA-113 (bg)



Constituent: Chloride Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

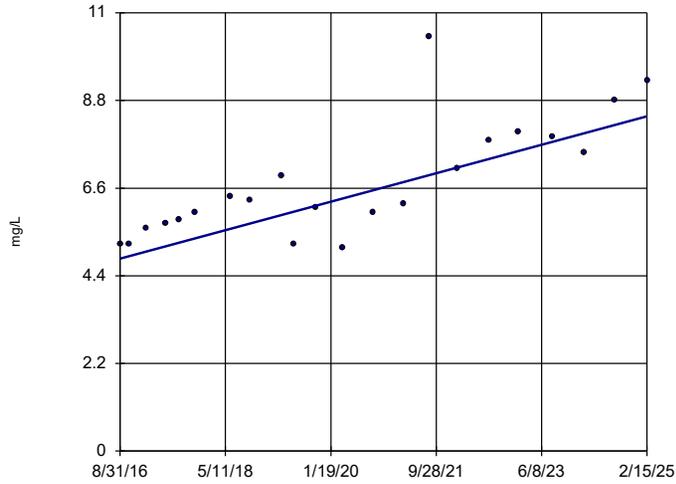
HGWC-102



Constituent: Chloride Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

HGWC-103

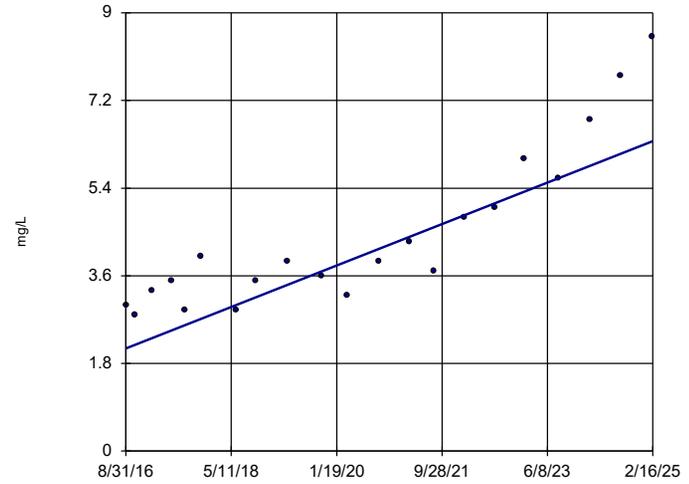


n = 22
 Slope = 0.422 units per year.
 Mann-Kendall statistic = 147
 critical = 92
 Increasing trend significant at 99% confidence level ($\alpha = 0.005$ per tail).

Constituent: Chloride Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

HGWC-105

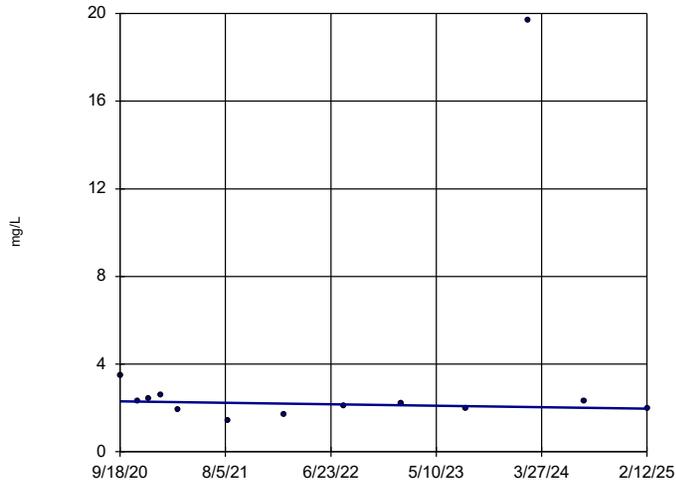


n = 21
 Slope = 0.5027 units per year.
 Mann-Kendall statistic = 159
 critical = 87
 Increasing trend significant at 99% confidence level ($\alpha = 0.005$ per tail).

Constituent: Chloride Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP4

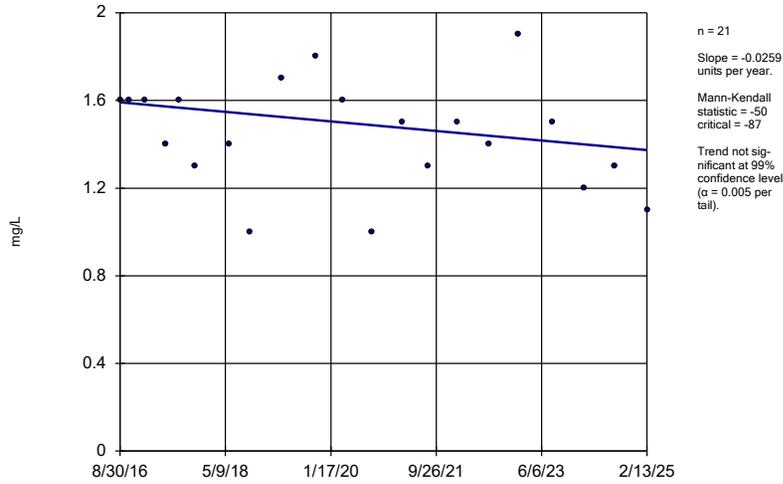
Sen's Slope Estimator

HGWA-47 (bg)



Sen's Slope Estimator

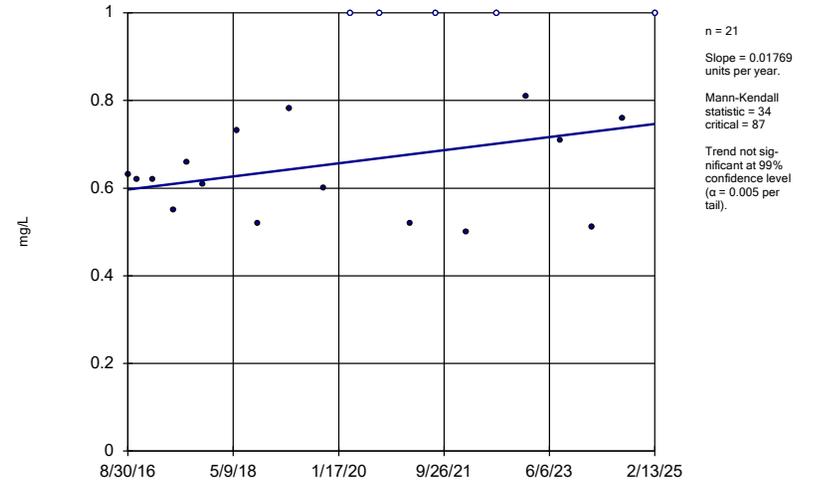
HGWA-111 (bg)



Constituent: Sulfate Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

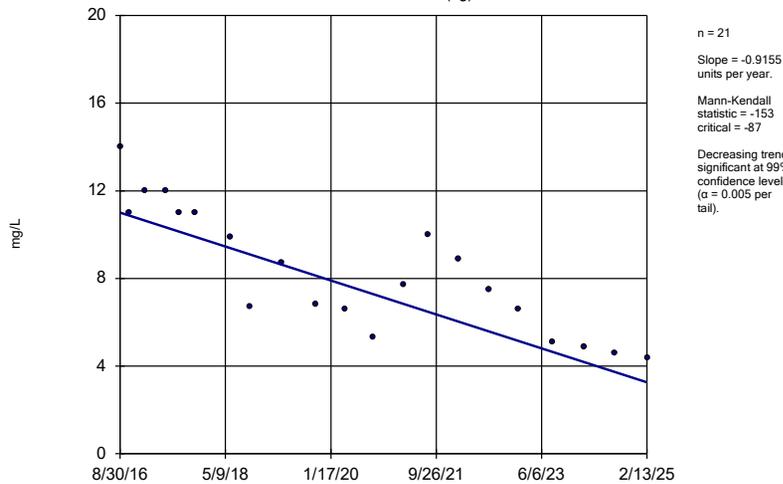
HGWA-112 (bg)



Constituent: Sulfate Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

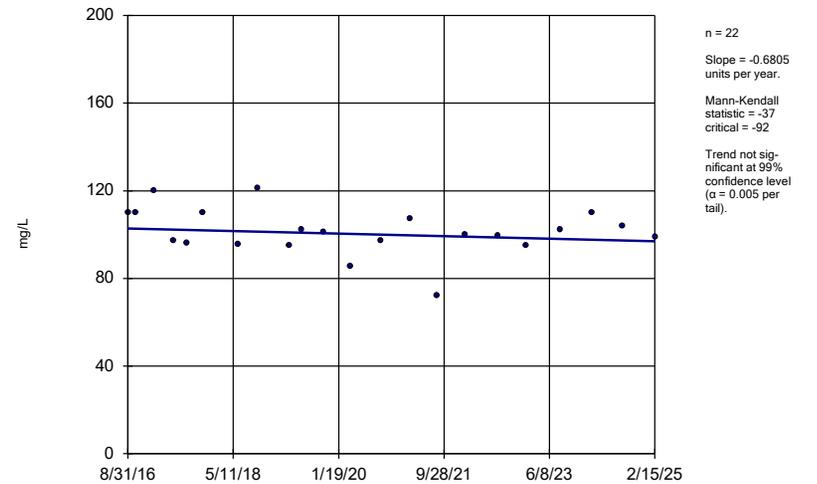
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Constituent: Sulfate Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

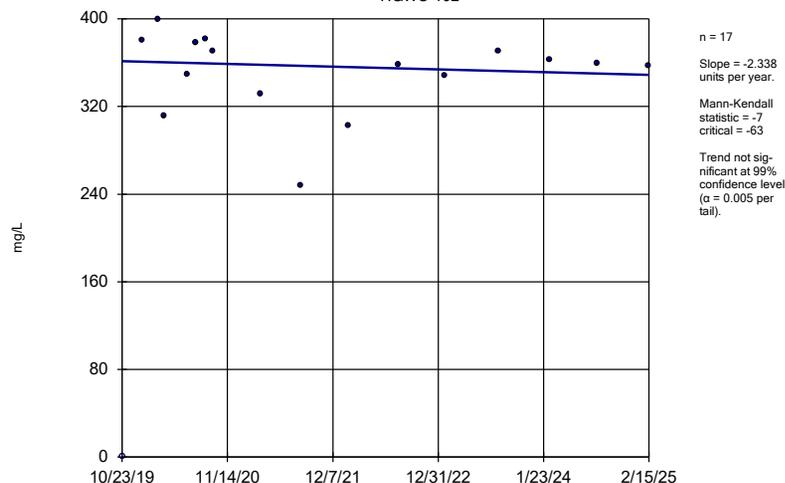
HGWC-101



Constituent: Sulfate Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

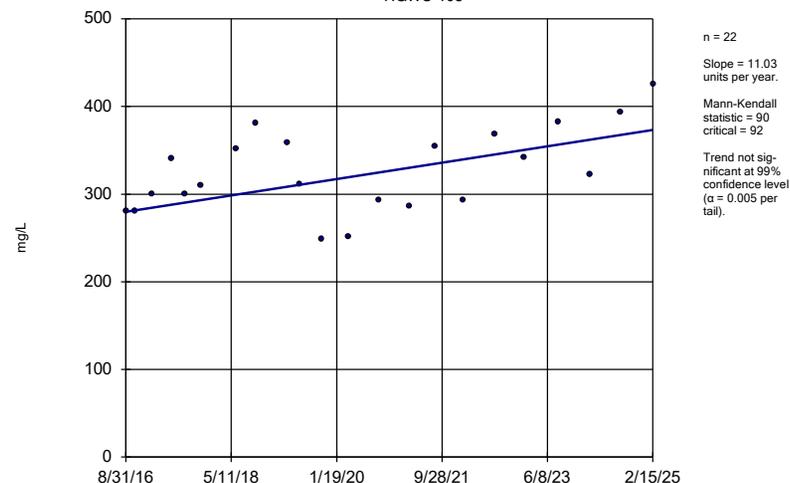
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Constituent: Sulfate Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

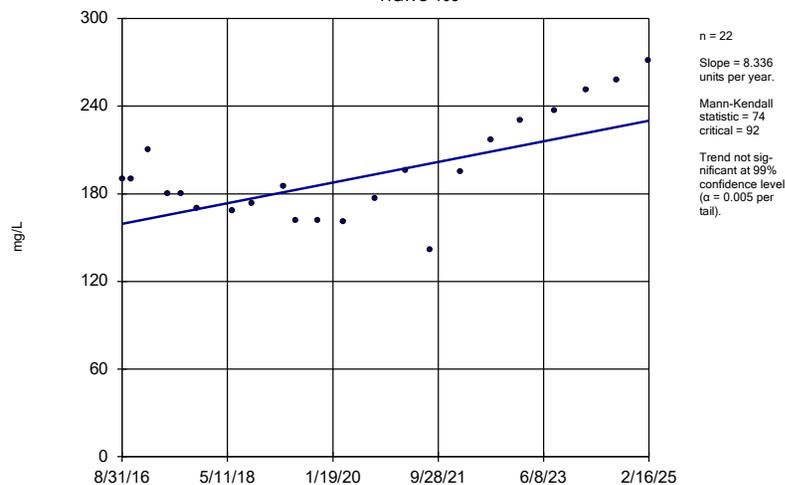
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Constituent: Sulfate Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

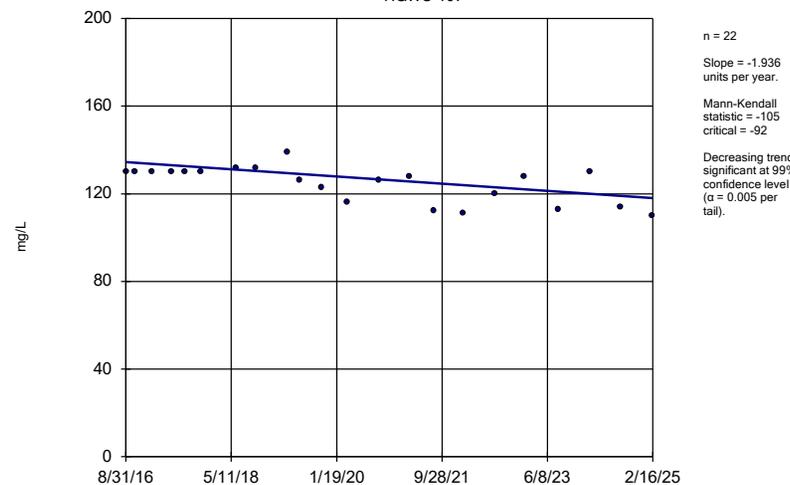
HGWC-105



Constituent: Sulfate Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

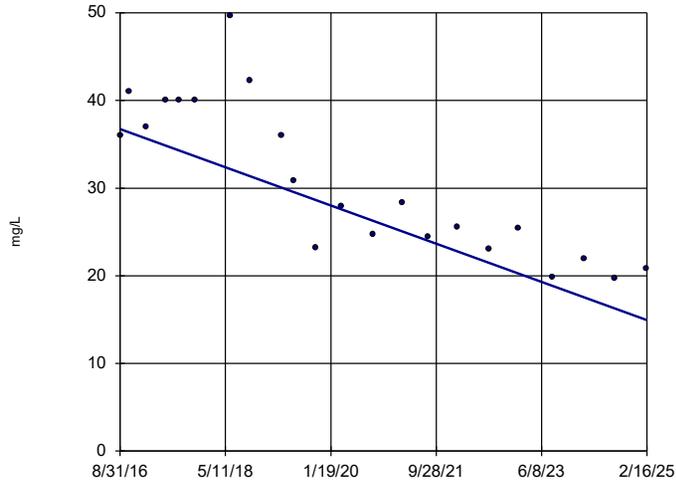
Sen's Slope Estimator

HGWC-107



Constituent: Sulfate Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

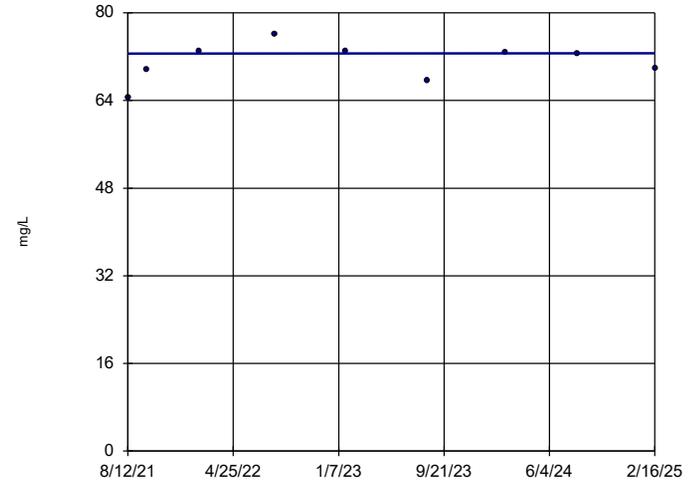
Sen's Slope Estimator
HGWC-109



n = 22
 Slope = -2.572
 units per year.
 Mann-Kendall
 statistic = -155
 critical = -92
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP4

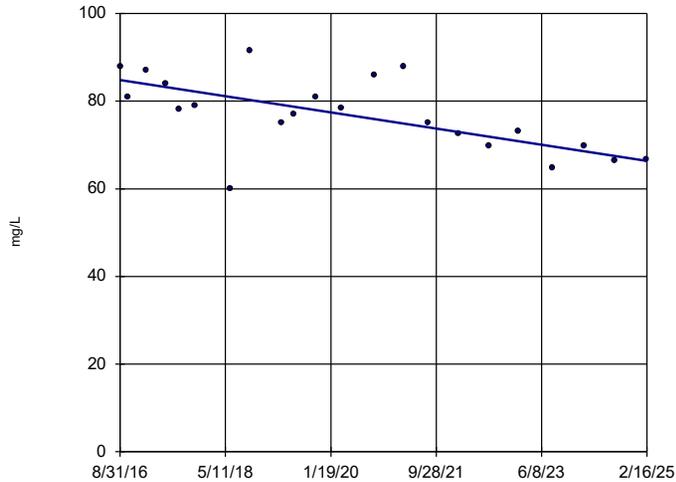
Sen's Slope Estimator
HGWC-117A



n = 9
 Slope = 0.01474
 units per year.
 Mann-Kendall
 statistic = 1
 critical = 25
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP4

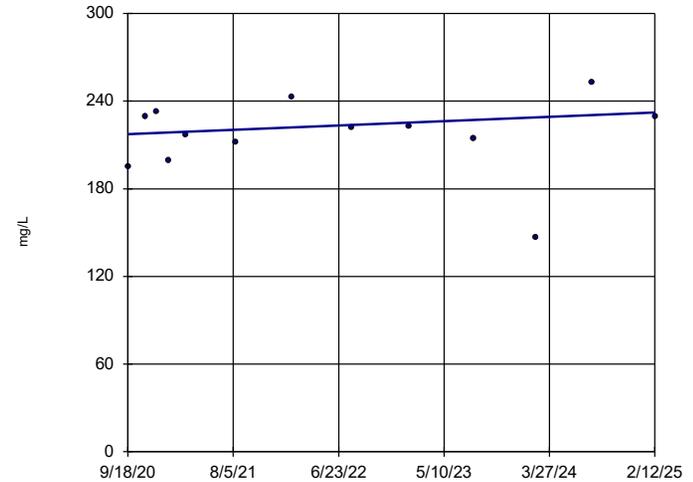
Sen's Slope Estimator
HGWC-118



n = 22
 Slope = -2.181
 units per year.
 Mann-Kendall
 statistic = -118
 critical = -92
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator
HGWA-47 (bg)

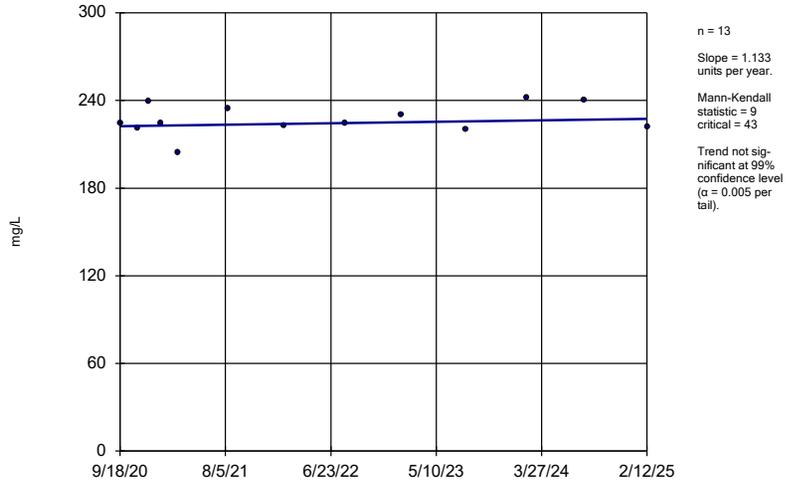


n = 13
 Slope = 3.399
 units per year.
 Mann-Kendall
 statistic = 13
 critical = 43
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: TDS Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
 Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

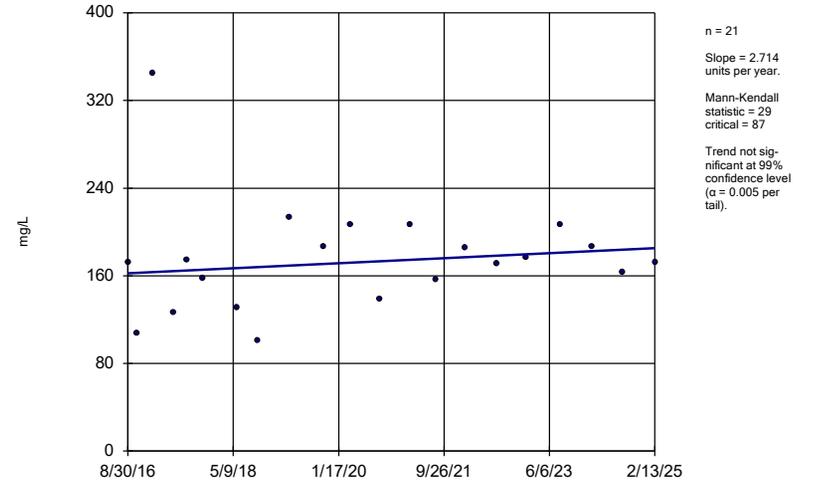
HGWA-48D (bg)



Constituent: TDS Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

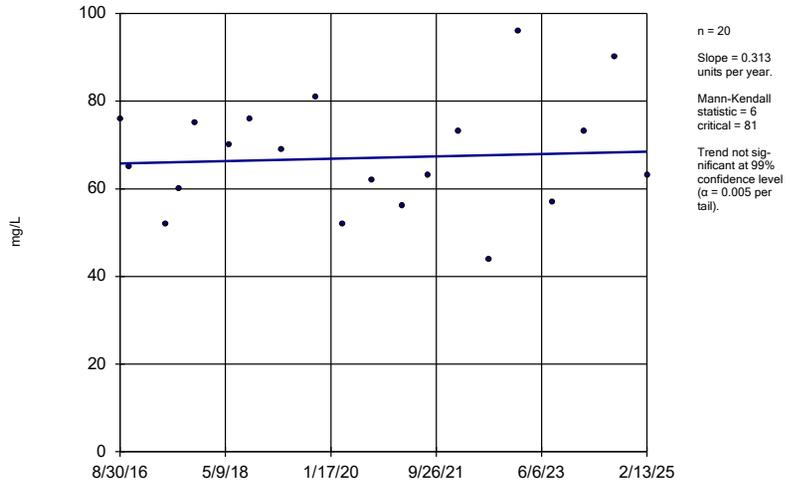
HGWA-111 (bg)



Constituent: TDS Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

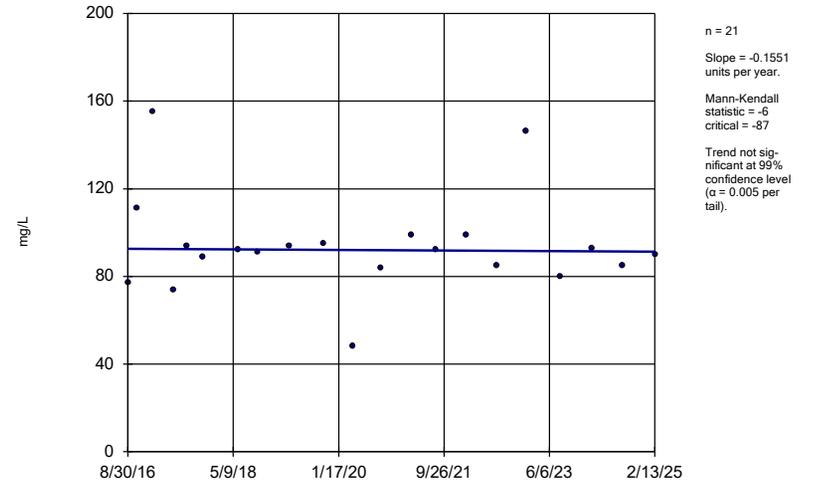
HGWA-112 (bg)



Constituent: TDS Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

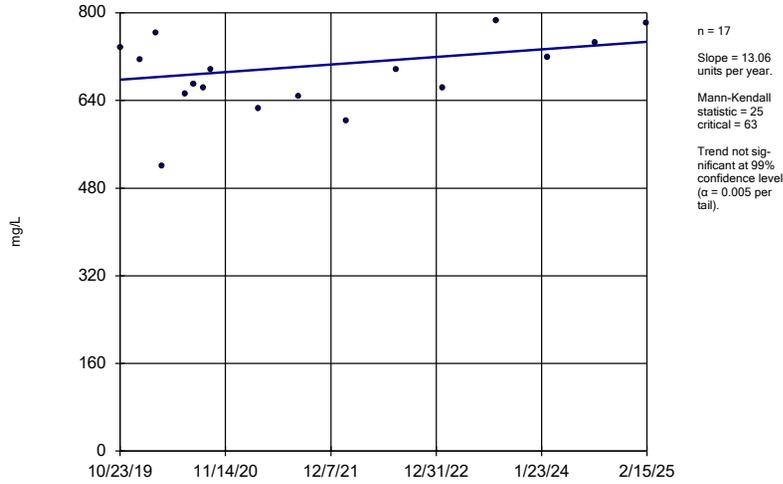
HGWA-113 (bg)



Constituent: TDS Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

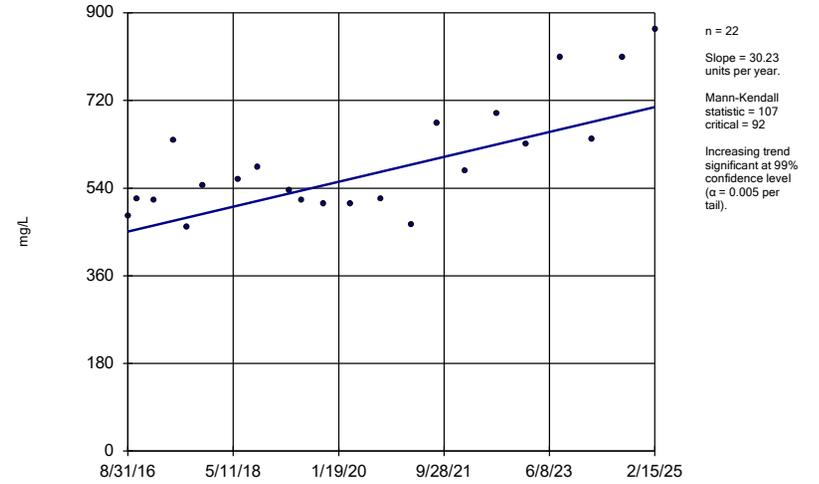
HGWC-102



Constituent: TDS Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

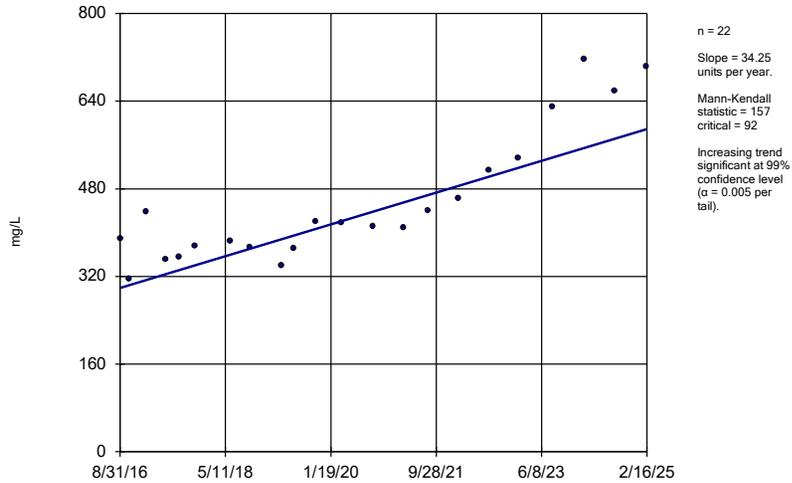
HGWC-103



Constituent: TDS Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

Sen's Slope Estimator

HGWC-105



Constituent: TDS Analysis Run 4/22/2025 7:49 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP4

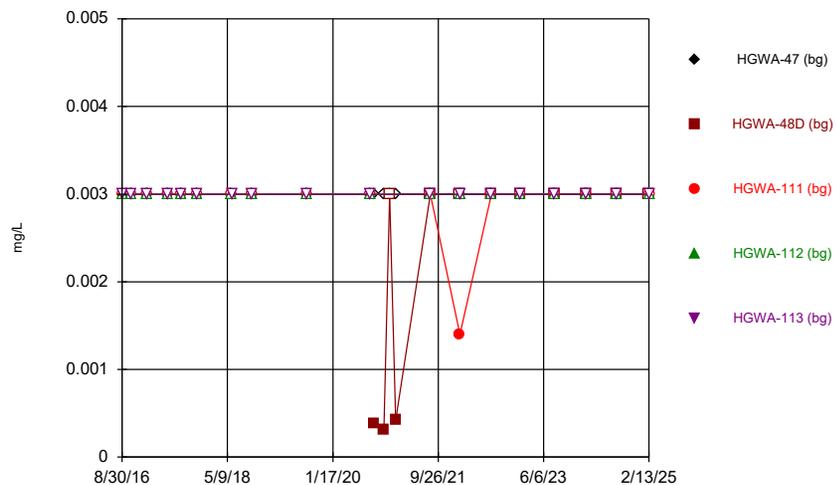
FIGURE F.

Upper Tolerance Limits Summary Table

Plant Hammond Client: Southern Company Data: Hammond AP4 Printed 4/22/2025, 7:53 PM

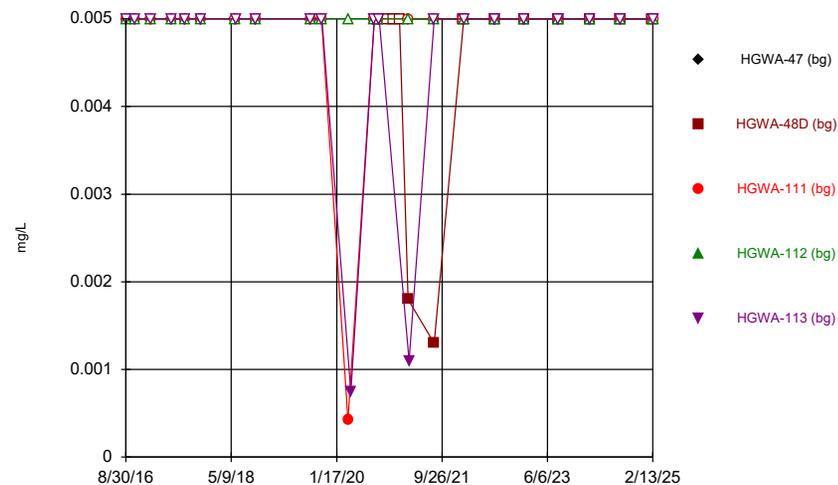
<u>Constituent</u>	<u>Upper Lim.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	0.003	78	n/a	n/a	94.87	n/a	n/a	0.0183	NP Inter(NDs)
Arsenic (mg/L)	0.005	92	n/a	n/a	94.57	n/a	n/a	0.008924	NP Inter(NDs)
Barium (mg/L)	0.12	92	n/a	n/a	0	n/a	n/a	0.008924	NP Inter(normality)
Beryllium (mg/L)	0.0019	92	n/a	n/a	92.39	n/a	n/a	0.008924	NP Inter(NDs)
Cadmium (mg/L)	0.0005	92	n/a	n/a	100	n/a	n/a	0.008924	NP Inter(NDs)
Chromium (mg/L)	0.0061	92	n/a	n/a	43.48	n/a	n/a	0.008924	NP Inter(normality)
Cobalt (mg/L)	0.005	92	n/a	n/a	91.3	n/a	n/a	0.008924	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.298	92	0.6077	0.356	0	None	No	0.05	Inter
Fluoride (mg/L)	0.23	95	n/a	n/a	18.95	n/a	n/a	0.007651	NP Inter(normality)
Lead (mg/L)	0.0016	92	n/a	n/a	76.09	n/a	n/a	0.008924	NP Inter(NDs)
Lithium (mg/L)	0.03	92	n/a	n/a	35.87	n/a	n/a	0.008924	NP Inter(normality)
Mercury (mg/L)	0.0002	78	n/a	n/a	84.62	n/a	n/a	0.0183	NP Inter(NDs)
Molybdenum (mg/L)	0.01	78	n/a	n/a	83.33	n/a	n/a	0.0183	NP Inter(NDs)
Selenium (mg/L)	0.005	78	n/a	n/a	79.49	n/a	n/a	0.0183	NP Inter(NDs)
Thallium (mg/L)	0.001	78	n/a	n/a	100	n/a	n/a	0.0183	NP Inter(NDs)

Time Series



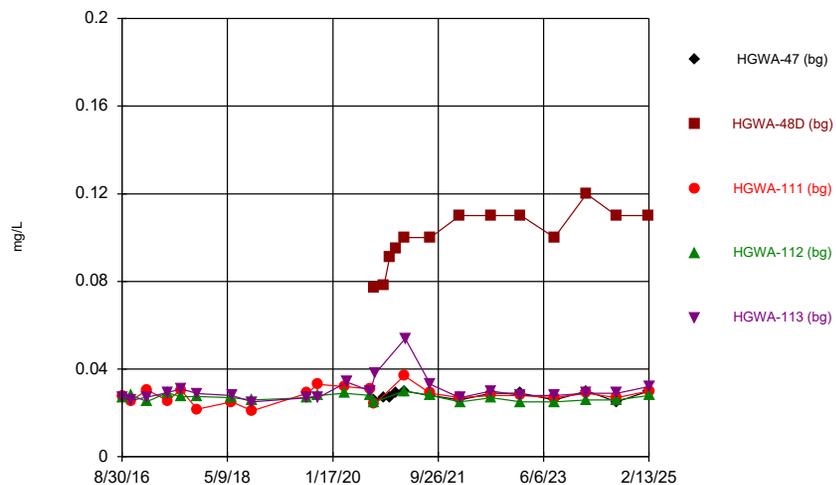
Constituent: Antimony Analysis Run 4/22/2025 7:51 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



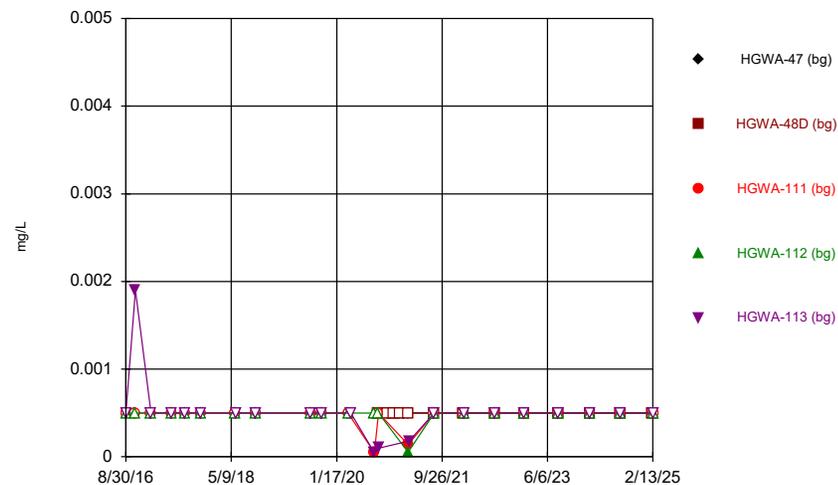
Constituent: Arsenic Analysis Run 4/22/2025 7:51 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



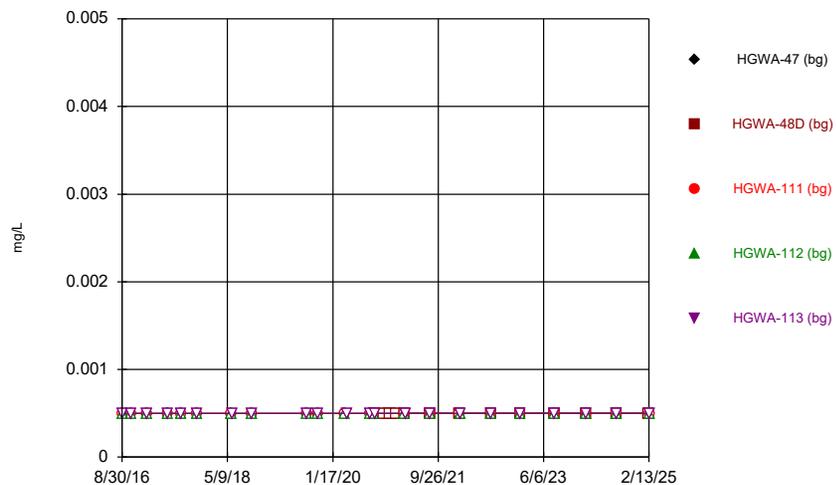
Constituent: Barium Analysis Run 4/22/2025 7:51 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



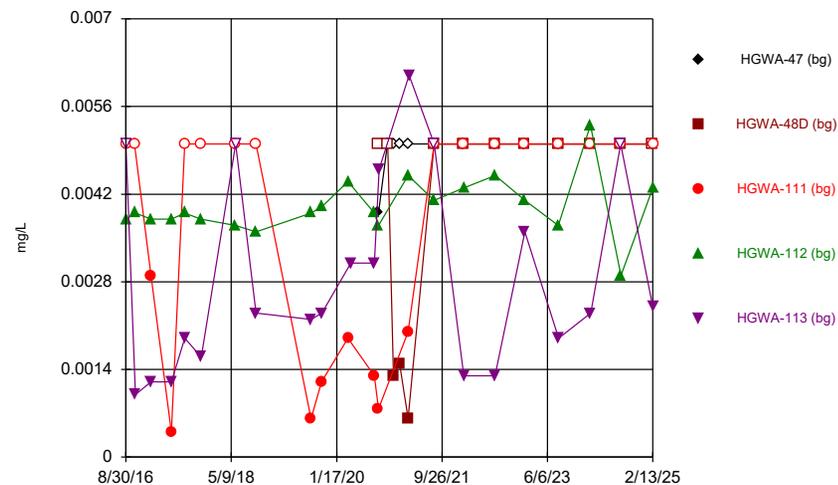
Constituent: Beryllium Analysis Run 4/22/2025 7:51 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



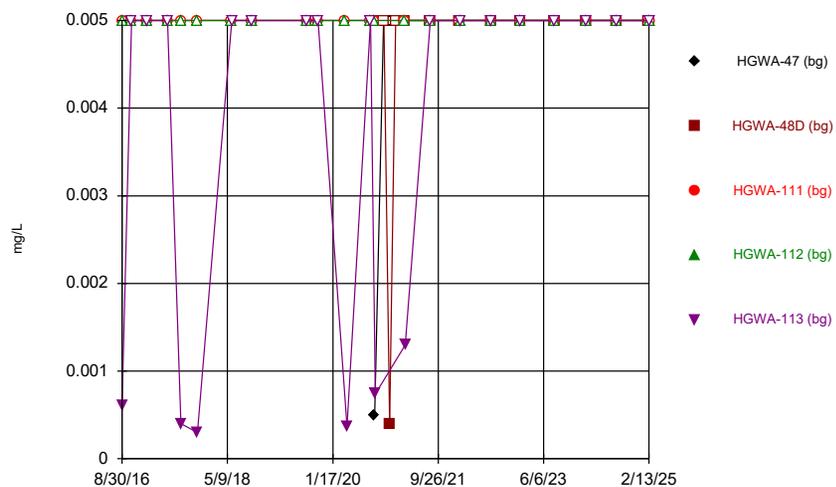
Constituent: Cadmium Analysis Run 4/22/2025 7:51 PM View: UTLs
 Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



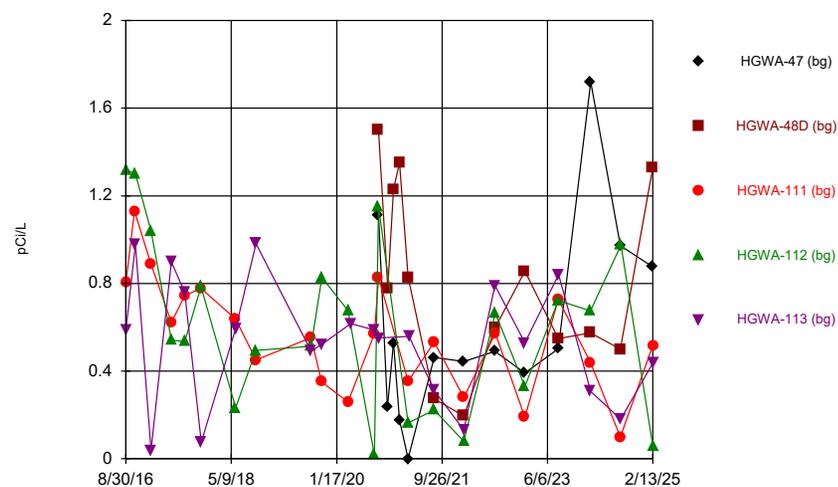
Constituent: Chromium Analysis Run 4/22/2025 7:51 PM View: UTLs
 Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



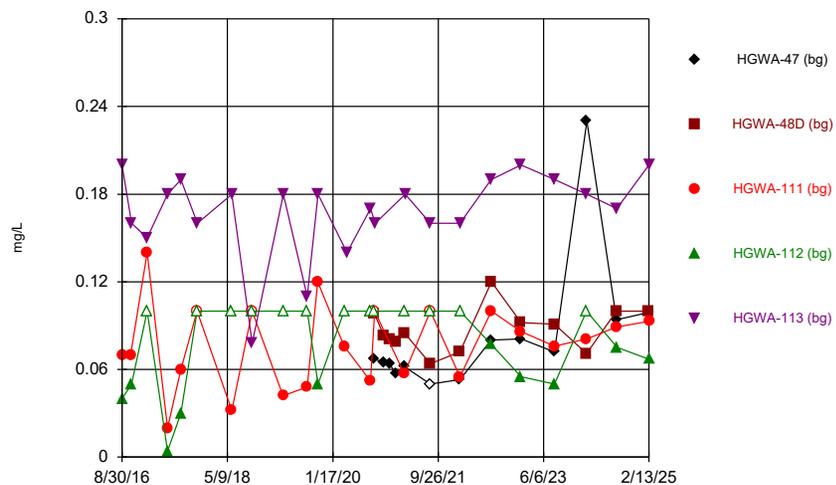
Constituent: Cobalt Analysis Run 4/22/2025 7:51 PM View: UTLs
 Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



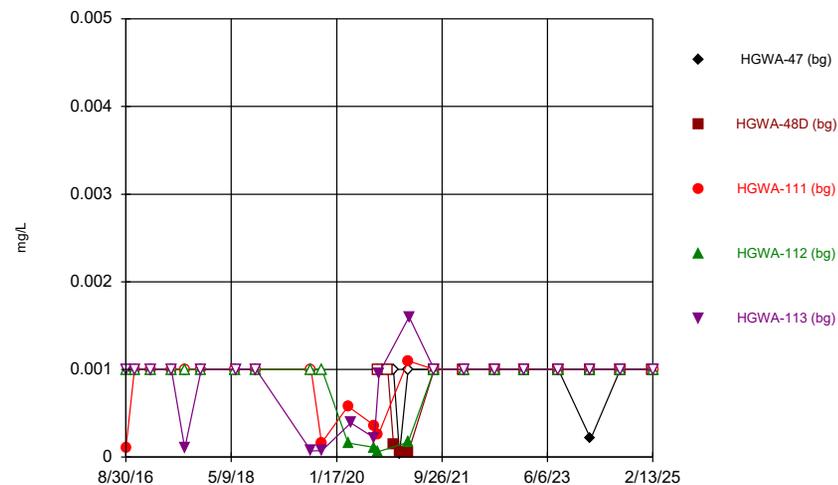
Constituent: Combined Radium 226 + 228 Analysis Run 4/22/2025 7:51 PM View: UTLs
 Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



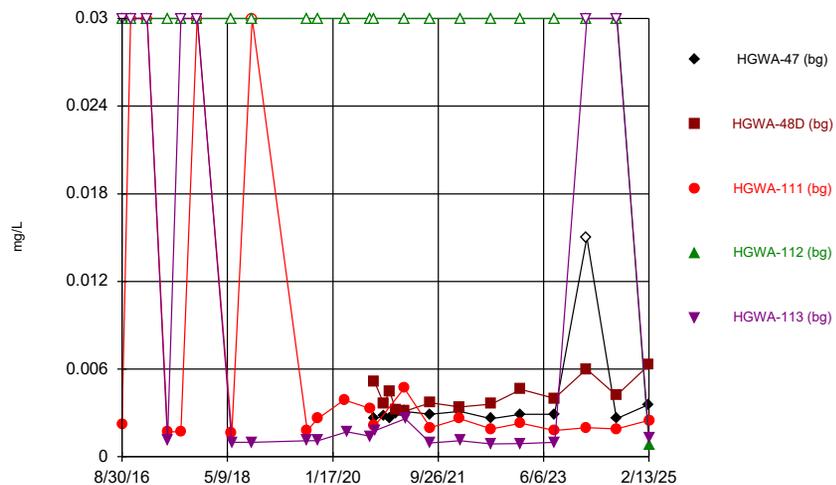
Constituent: Fluoride Analysis Run 4/22/2025 7:51 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



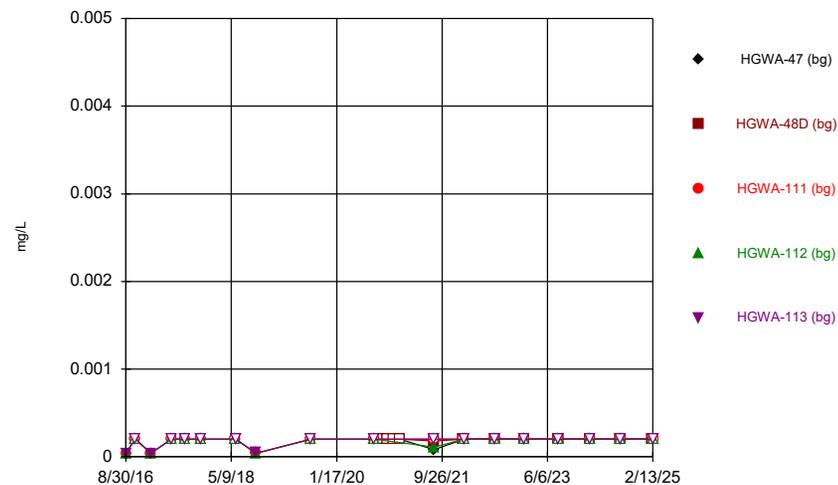
Constituent: Lead Analysis Run 4/22/2025 7:51 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



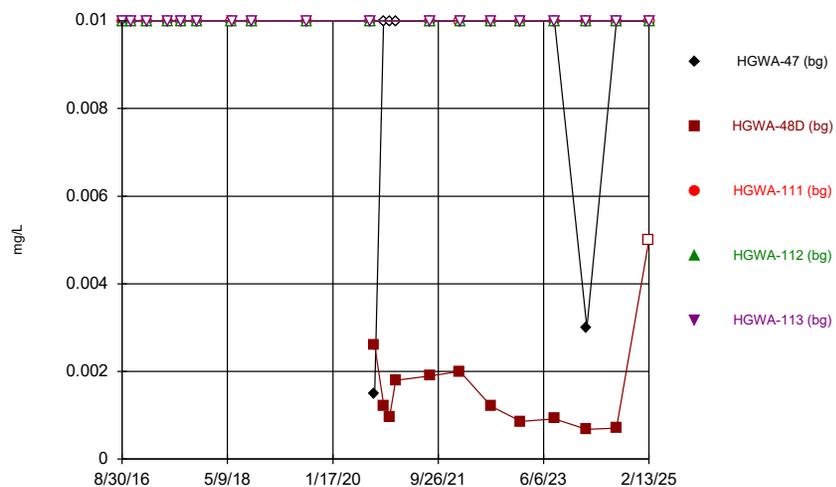
Constituent: Lithium Analysis Run 4/22/2025 7:52 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



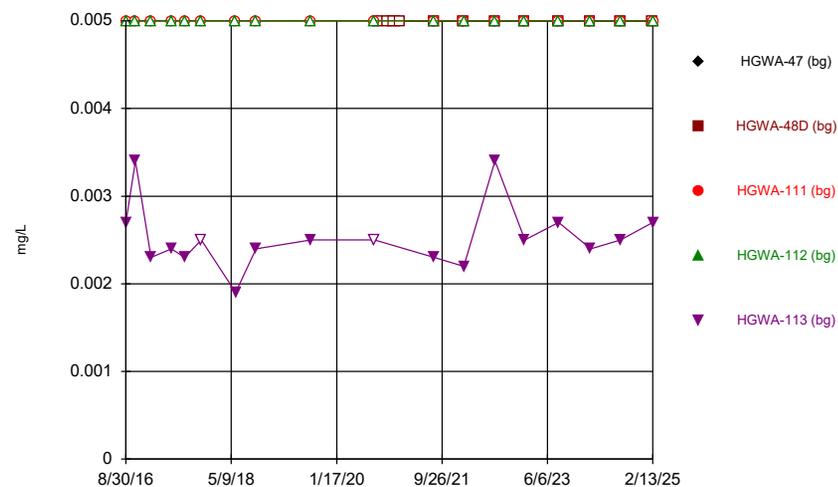
Constituent: Mercury Analysis Run 4/22/2025 7:52 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



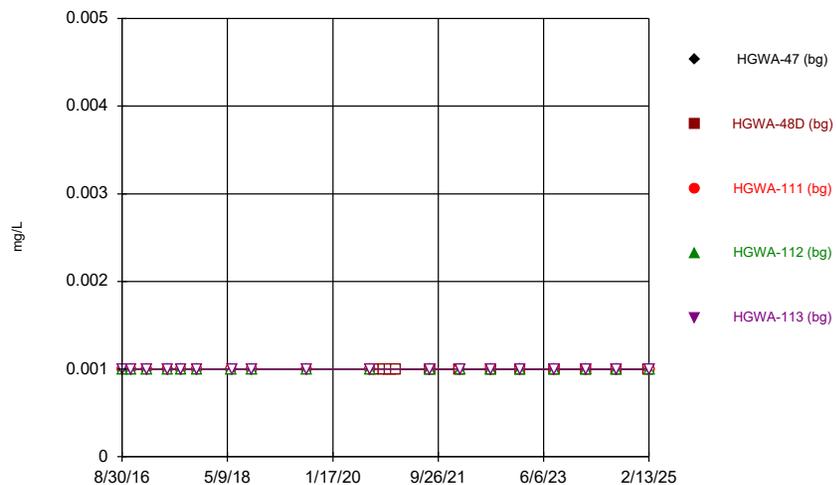
Constituent: Molybdenum Analysis Run 4/22/2025 7:52 PM View: UTLs
 Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



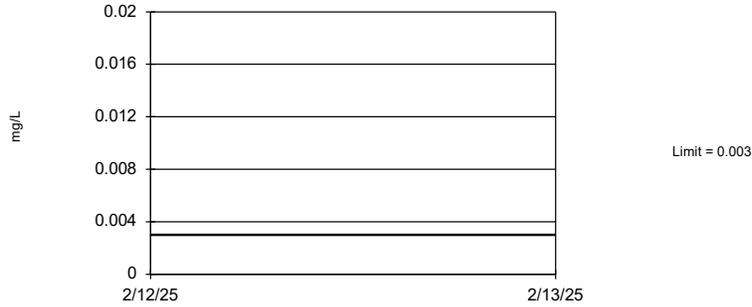
Constituent: Selenium Analysis Run 4/22/2025 7:52 PM View: UTLs
 Plant Hammond Client: Southern Company Data: Hammond AP4

Time Series



Constituent: Thallium Analysis Run 4/22/2025 7:52 PM View: UTLs
 Plant Hammond Client: Southern Company Data: Hammond AP4

Tolerance Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 78 background values. 94.87% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.0183.

Constituent: Antimony Analysis Run 4/22/2025 7:52 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

Tolerance Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 92 background values. 94.57% NDs. 95.12% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.008924.

Constituent: Arsenic Analysis Run 4/22/2025 7:52 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

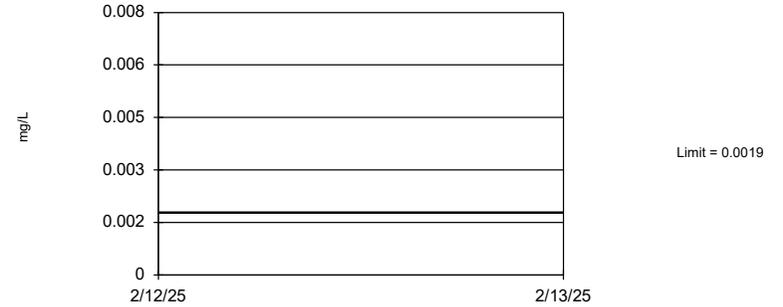
Tolerance Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 92 background values. 95.12% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.008924.

Constituent: Barium Analysis Run 4/22/2025 7:52 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

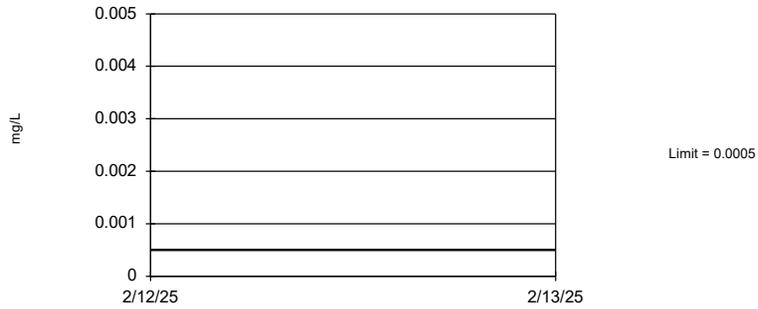
Tolerance Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 92 background values. 92.39% NDs. 95.12% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.008924.

Constituent: Beryllium Analysis Run 4/22/2025 7:52 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

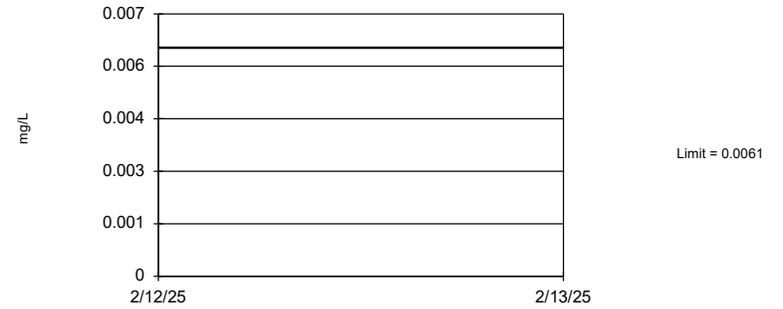
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. All background values were censored; limit is most recent reporting limit. 95.12% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.008924.

Constituent: Cadmium Analysis Run 4/22/2025 7:52 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 92 background values. 43.48% NDs. 95.12% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.008924.

Constituent: Chromium Analysis Run 4/22/2025 7:52 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

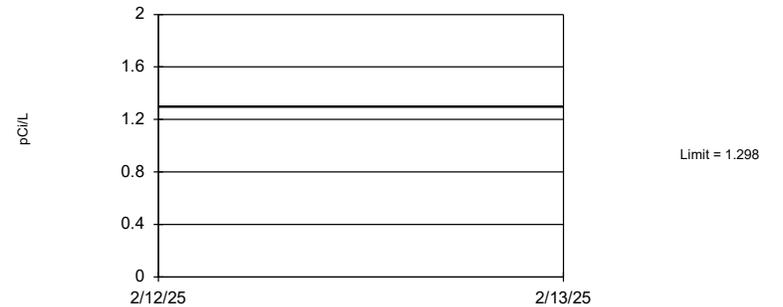
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 92 background values. 91.3% NDs. 95.12% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.008924.

Constituent: Cobalt Analysis Run 4/22/2025 7:52 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

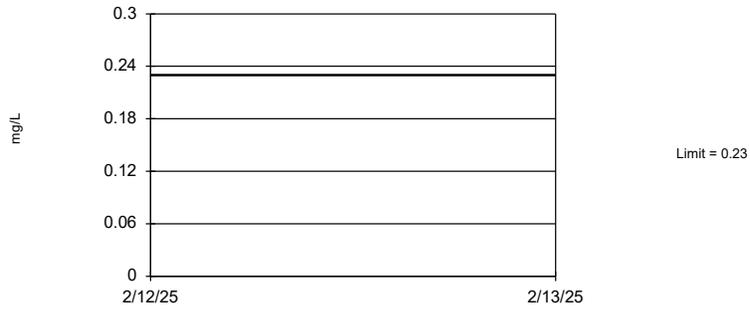
Tolerance Limit Interwell Parametric



95% coverage. Background Data Summary: Mean=0.6077, Std. Dev.=0.356, n=92. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9673, critical = 0.962. Report alpha = 0.05.

Constituent: Combined Radium 226 + 228 Analysis Run 4/22/2025 7:52 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

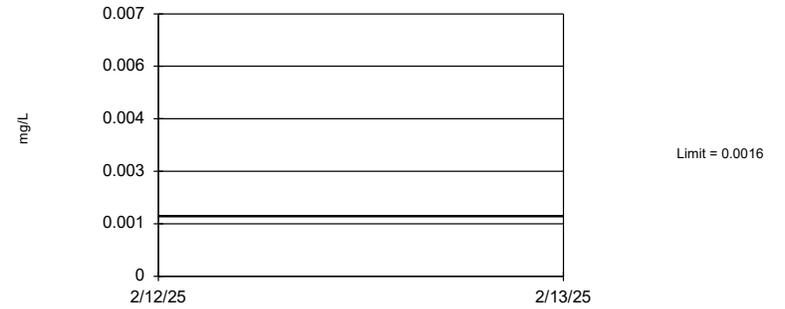
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 95 background values. 18.95% NDs. 95.12% coverage at alpha=0.01; 97.07% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.007651.

Constituent: Fluoride Analysis Run 4/22/2025 7:52 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 92 background values. 76.09% NDs. 95.12% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.008924.

Constituent: Lead Analysis Run 4/22/2025 7:52 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

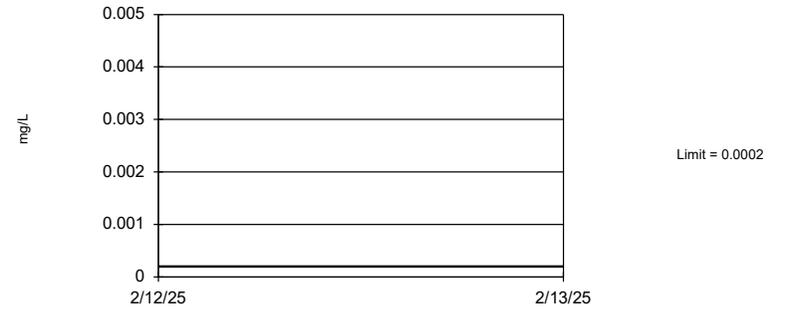
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 92 background values. 35.87% NDs. 95.12% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.008924.

Constituent: Lithium Analysis Run 4/22/2025 7:52 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 78 background values. 84.62% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.0183.

Constituent: Mercury Analysis Run 4/22/2025 7:52 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 78 background values. 83.33% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.0183.

Constituent: Molybdenum Analysis Run 4/22/2025 7:52 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 78 background values. 79.49% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.0183.

Constituent: Selenium Analysis Run 4/22/2025 7:52 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. All background values were censored; limit is most recent reporting limit. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.0183.

Constituent: Thallium Analysis Run 4/22/2025 7:52 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP4

FIGURE G.

PLANT HAMMOND AP-4 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		0.12	2
Beryllium, Total (mg/L)	0.004		0.0019	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.0061	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.005	0.006
Combined Radium, Total (pCi/L)	5		1.30	5
Fluoride, Total (mg/L)	4		0.23	4
Lead, Total (mg/L)	n/a	0.015	0.0016	0.015
Lithium, Total (mg/L)	n/a	0.040	0.030	0.040
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

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Standard*

FIGURE H.

Appendix IV Confidence Intervals - All Results (No Significant)

Plant Hammond Client: Southern Company Data: Hammond AP4 Printed 4/22/2025, 7:59 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	HGWC-102	0.003	0.003	0.006	No 16	0.00286	0.00056	87.5	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-103	0.003	0.0022	0.006	No 18	0.002956	0.0001886	94.44	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-107	0.003	0.0011	0.006	No 18	0.002894	0.0004478	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-101	0.005	0.00039	0.01	No 22	0.00479	0.0009829	95.45	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-102	0.005	0.00092	0.01	No 17	0.003756	0.001991	70.59	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-103	0.005	0.0015	0.01	No 22	0.004841	0.0007462	95.45	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-109	0.002913	0.001598	0.01	No 22	0.002369	0.00136	13.64	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	HGWC-118	0.005	0.001	0.01	No 22	0.004818	0.0008528	95.45	None	No	0.01	NP (NDs)
Barium (mg/L)	HGWC-101	0.04378	0.03779	2	No 22	0.04079	0.005586	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-102	0.03194	0.02747	2	No 17	0.02971	0.003567	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-103	0.0395	0.03473	2	No 22	0.03712	0.004446	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-105	0.085	0.0668	2	No 22	0.07564	0.01003	0	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-107	0.03845	0.0355	2	No 22	0.03698	0.002748	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-109	0.08584	0.07993	2	No 22	0.08289	0.005504	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-117A	0.06284	0.04356	2	No 9	0.05322	0.01122	0	None	ln(x)	0.01	Param.
Barium (mg/L)	HGWC-118	0.05873	0.04851	2	No 22	0.05362	0.00952	0	None	No	0.01	Param.
Beryllium (mg/L)	HGWC-101	0.0005	0.000064	0.004	No 22	0.0003013	0.0002228	54.55	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-103	0.0005	0.000088	0.004	No 22	0.0004216	0.0001703	81.82	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-118	0.0005	0.000093	0.004	No 22	0.0004815	0.00008677	95.45	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-101	0.0002023	0.0001436	0.005	No 22	0.000173	0.00005461	13.64	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-102	0.000713	0.000344	0.005	No 17	0.0005518	0.0003434	0	None	sqrt(x)	0.01	Param.
Cadmium (mg/L)	HGWC-103	0.0007861	0.0006939	0.005	No 22	0.00074	0.0000858	0	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-107	0.0005	0.00011	0.005	No 22	0.0003727	0.0001908	68.18	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-117A	0.0005	0.00016	0.005	No 9	0.0004622	0.0001133	88.89	None	No	0.002	NP (NDs)
Chromium (mg/L)	HGWC-101	0.005	0.00098	0.1	No 22	0.004226	0.001682	81.82	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-102	0.005	0.00063	0.1	No 17	0.004479	0.001471	88.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-103	0.005	0.0015	0.1	No 22	0.00379	0.001873	68.18	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-105	0.005	0.0013	0.1	No 22	0.004224	0.001692	81.82	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-107	0.005	0.00074	0.1	No 22	0.004806	0.0009082	95.45	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-109	0.005	0.0014	0.1	No 22	0.004637	0.00118	90.91	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-118	0.005	0.0021	0.1	No 22	0.004148	0.001631	77.27	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-101	0.002736	0.002209	0.006	No 22	0.002473	0.000491	4.545	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-102	0.0021	0.00098	0.006	No 17	0.001528	0.000763	5.882	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-103	0.00223	0.001861	0.006	No 22	0.002045	0.0003433	0	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-105	0.005	0.00047	0.006	No 22	0.002025	0.002095	31.82	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-109	0.00196	0.001207	0.006	No 22	0.001584	0.0007015	4.545	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-117A	0.001777	0.0004569	0.006	No 9	0.001117	0.0007978	11.11	None	x^(1/3)	0.01	Param.
Cobalt (mg/L)	HGWC-118	0.005	0.00048	0.006	No 22	0.002967	0.002286	54.55	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	HGWC-101	0.8107	0.4423	5	No 22	0.6265	0.3433	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-102	1.043	0.5972	5	No 17	0.8202	0.356	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-103	0.8268	0.4583	5	No 22	0.6425	0.3433	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-105	0.8213	0.4947	5	No 22	0.658	0.3042	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-107	0.958	0.4859	5	No 22	0.722	0.4397	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-109	0.7392	0.446	5	No 22	0.5926	0.2731	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-117A	0.8769	0.2469	5	No 9	0.5619	0.3263	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-118	1.03	0.4793	5	No 21	0.7546	0.4991	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-101	0.1	0.068	4	No 23	0.09187	0.01922	82.61	None	No	0.01	NP (NDs)
Fluoride (mg/L)	HGWC-102	0.22	0.076	4	No 17	0.1037	0.03146	82.35	None	No	0.01	NP (NDs)
Fluoride (mg/L)	HGWC-103	0.13	0.077	4	No 23	0.09696	0.0208	73.91	None	No	0.01	NP (NDs)
Fluoride (mg/L)	HGWC-105	0.1	0.074	4	No 23	0.08983	0.02753	56.52	None	No	0.01	NP (NDs)
Fluoride (mg/L)	HGWC-107	0.1	0.069	4	No 23	0.091	0.0324	56.52	None	No	0.01	NP (NDs)
Fluoride (mg/L)	HGWC-109	0.1229	0.08582	4	No 23	0.1043	0.03542	8.696	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-117A	0.12	0.055	4	No 9	0.08111	0.02518	22.22	None	No	0.002	NP (normality)
Fluoride (mg/L)	HGWC-118	0.14	0.072	4	No 24	0.154	0.1751	0	None	No	0.01	NP (normality)

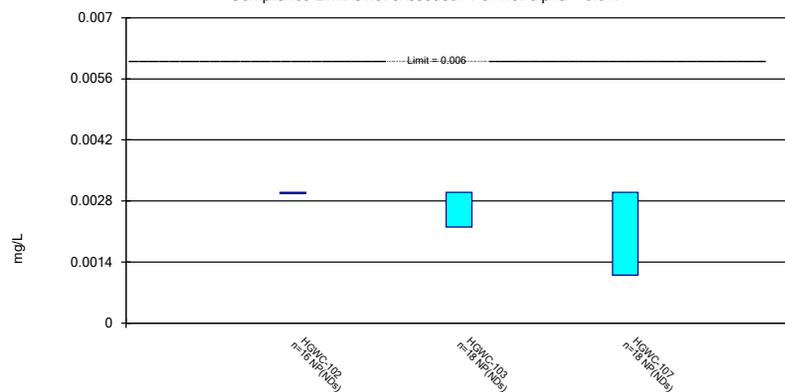
Appendix IV Confidence Intervals - All Results (No Significant)

Plant Hammond Client: Southern Company Data: Hammond AP4 Printed 4/22/2025, 7:59 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lead (mg/L)	HGWC-101	0.001	0.0009	0.015	No 22	0.0009955	0.00002132	95.45	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-102	0.001	0.00011	0.015	No 17	0.0009476	0.0002159	94.12	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-103	0.001	0.00043	0.015	No 22	0.0007944	0.0003484	72.73	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-105	0.001	0.000085	0.015	No 22	0.00083	0.0003692	81.82	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-107	0.001	0.00034	0.015	No 22	0.0008509	0.000327	81.82	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-109	0.001	0.000058	0.015	No 22	0.0009142	0.0002778	90.91	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-118	0.001	0.00088	0.015	No 22	0.000855	0.0003041	77.27	None	No	0.01	NP (NDs)
Lithium (mg/L)	HGWC-101	0.03	0.000781	0.04	No 22	0.02867	0.00623	95.45	None	No	0.01	NP (NDs)
Lithium (mg/L)	HGWC-102	0.00139	0.0011	0.04	No 17	0.002814	0.004589	11.76	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-103	0.002	0.0015	0.04	No 22	0.00804	0.01219	22.73	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-105	0.004365	0.003896	0.04	No 22	0.004141	0.0004595	0	None	x^(1/3)	0.01	Param.
Lithium (mg/L)	HGWC-107	0.03	0.00092	0.04	No 22	0.01415	0.01481	45.45	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-109	0.03	0.000977	0.04	No 22	0.01551	0.01484	50	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-117A	0.00512	0.0035	0.04	No 9	0.004091	0.0006113	0	None	No	0.002	NP (normality)
Lithium (mg/L)	HGWC-118	0.03	0.0017	0.04	No 22	0.01087	0.01338	31.82	None	No	0.01	NP (normality)
Mercury (mg/L)	HGWC-101	0.0002	0.000099	0.002	No 18	0.0001884	0.00003365	88.89	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-102	0.0002	0.0001	0.002	No 16	0.0001937	0.000025	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-103	0.00025	0.00017	0.002	No 18	0.000195	0.00003899	72.22	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-105	0.00022	0.0002	0.002	No 18	0.0002011	0.000004714	94.44	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-107	0.0002	0.000084	0.002	No 18	0.0001936	0.00002734	94.44	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-109	0.0002	0.00008	0.002	No 18	0.0001867	0.00003881	88.89	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-117A	0.0002	0.000094	0.002	No 9	0.0001882	0.00003533	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	HGWC-118	0.0002	0.00009	0.002	No 18	0.0001873	0.00003706	88.89	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-102	0.005	0.0015	0.05	No 16	0.004781	0.000875	93.75	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-105	0.005	0.0049	0.05	No 18	0.004994	0.00002357	94.44	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-102	0.001	0.00008	0.002	No 16	0.0009425	0.00023	93.75	None	No	0.01	NP (NDs)

Non-Parametric Confidence Interval

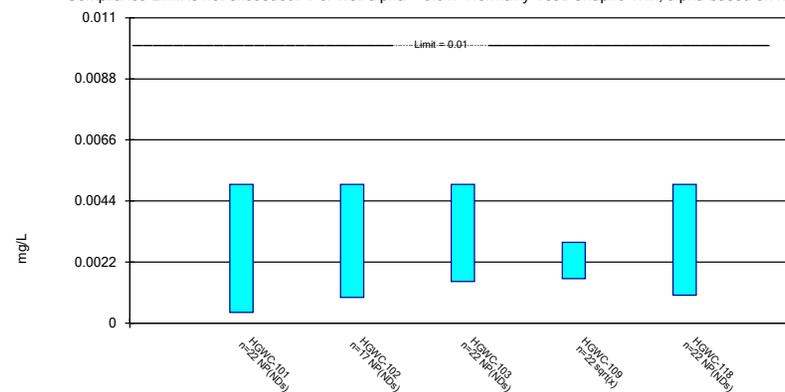
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Constituent: Antimony Analysis Run 4/22/2025 7:58 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP4

Parametric and Non-Parametric (NP) Confidence Interval

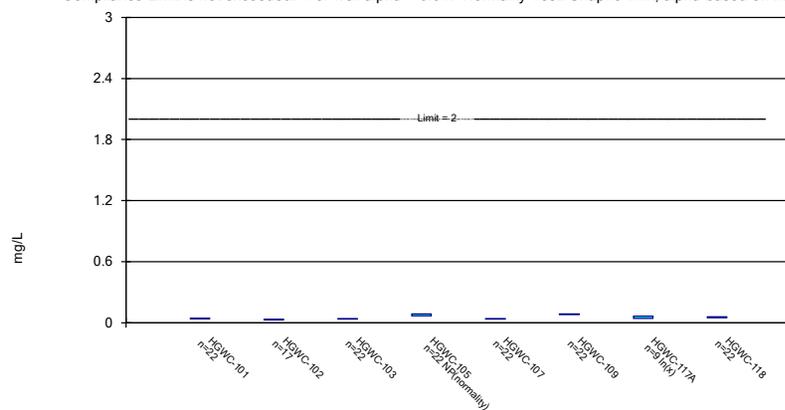
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Constituent: Arsenic Analysis Run 4/22/2025 7:58 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP4

Parametric and Non-Parametric (NP) Confidence Interval

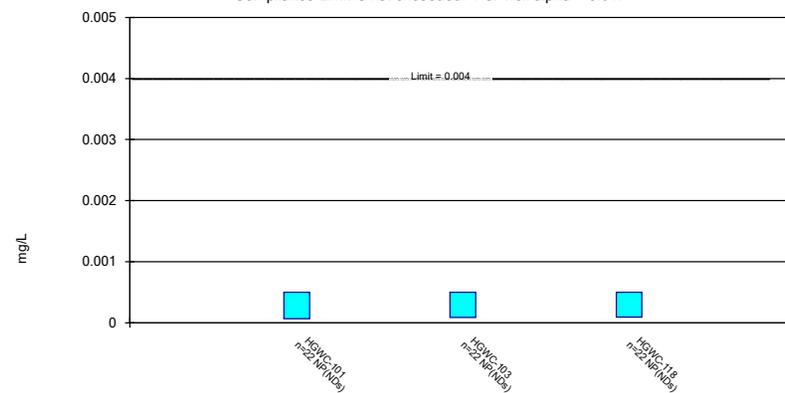
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Constituent: Barium Analysis Run 4/22/2025 7:58 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP4

Non-Parametric Confidence Interval

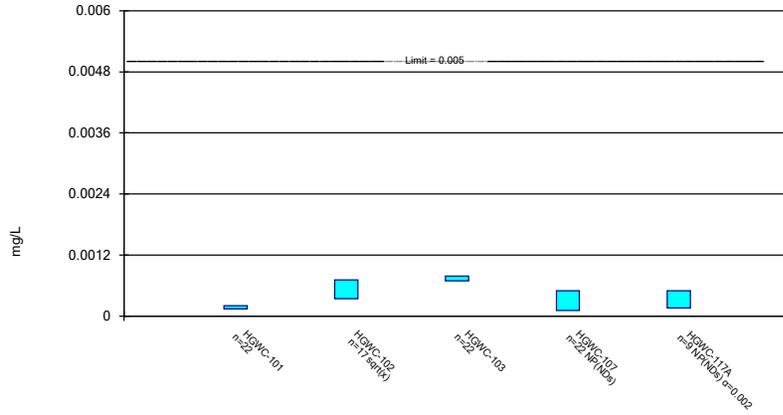
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Constituent: Beryllium Analysis Run 4/22/2025 7:58 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP4

Parametric and Non-Parametric (NP) Confidence Interval

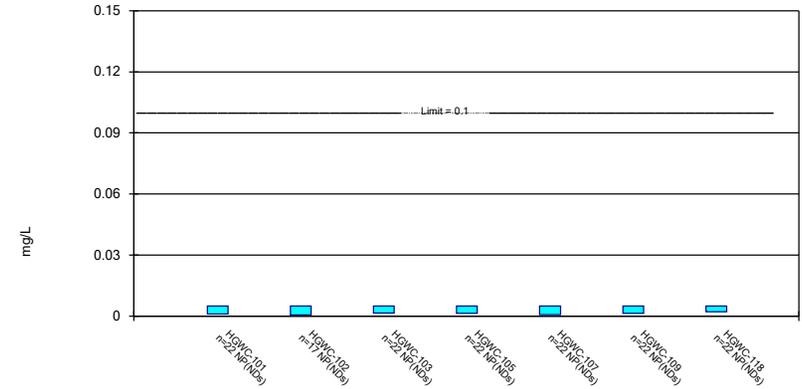
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Constituent: Cadmium Analysis Run 4/22/2025 7:58 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP4

Non-Parametric Confidence Interval

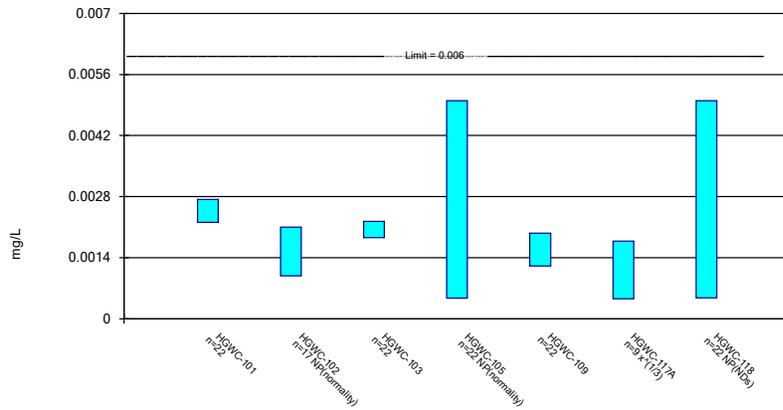
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Constituent: Chromium Analysis Run 4/22/2025 7:58 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP4

Parametric and Non-Parametric (NP) Confidence Interval

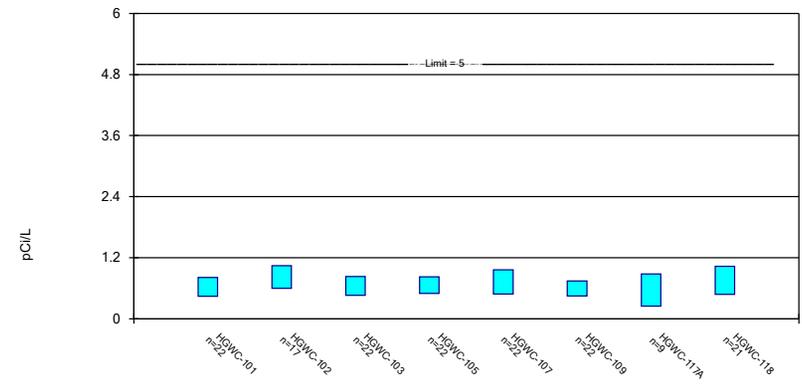
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Constituent: Cobalt Analysis Run 4/22/2025 7:58 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP4

Parametric Confidence Interval

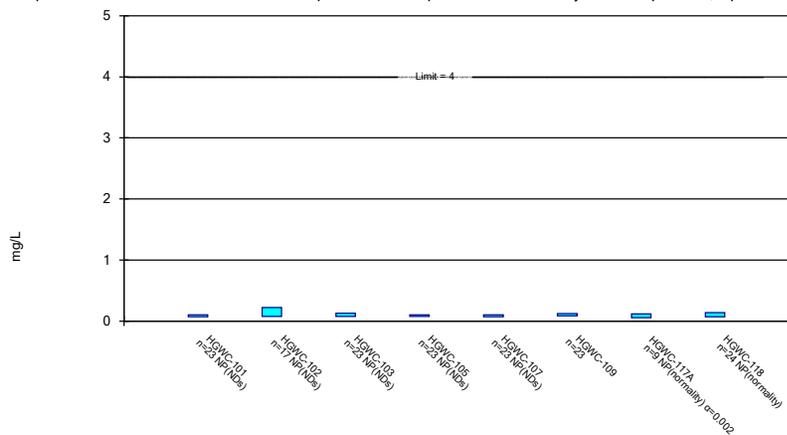
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Constituent: Combined Radium 226 + 228 Analysis Run 4/22/2025 7:58 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP4

Parametric and Non-Parametric (NP) Confidence Interval

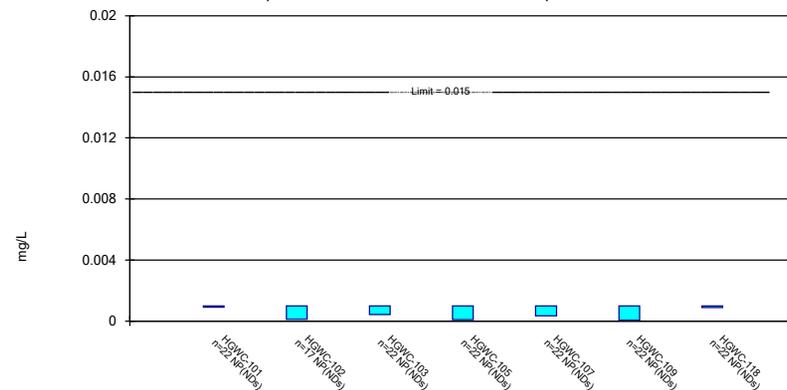
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Constituent: Fluoride Analysis Run 4/22/2025 7:58 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP4

Non-Parametric Confidence Interval

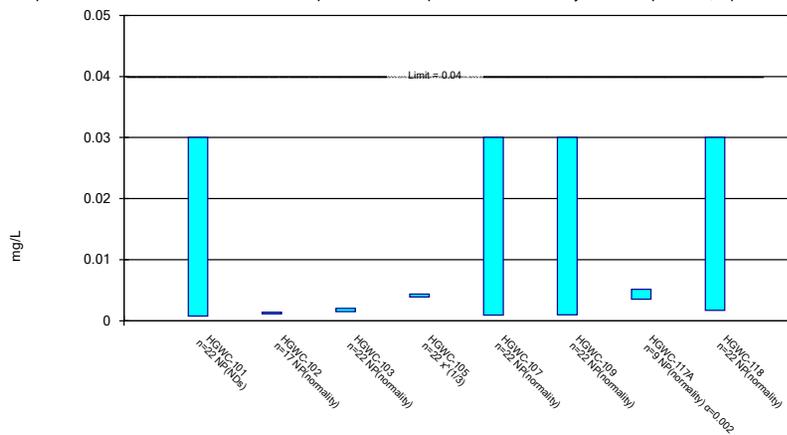
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Constituent: Lead Analysis Run 4/22/2025 7:58 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP4

Parametric and Non-Parametric (NP) Confidence Interval

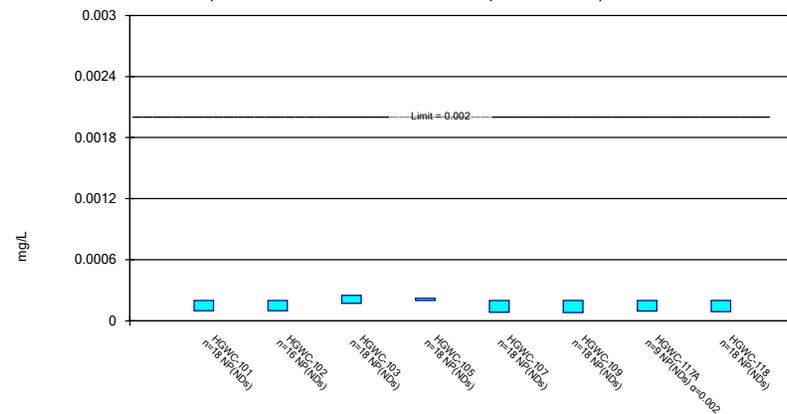
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 4/22/2025 7:58 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP4

Non-Parametric Confidence Interval

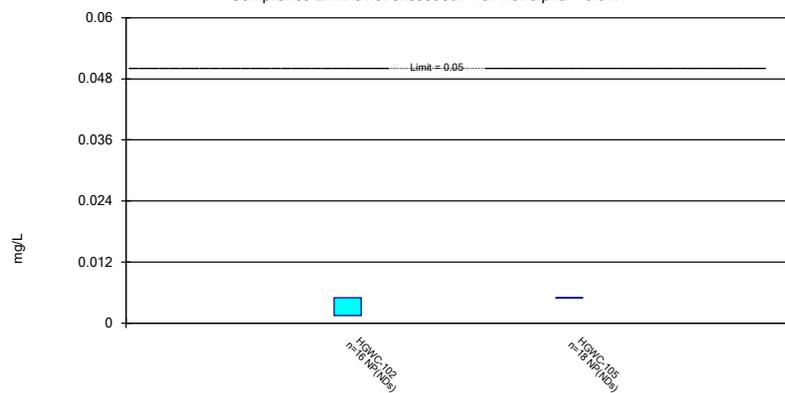
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Mercury Analysis Run 4/22/2025 7:58 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP4

Non-Parametric Confidence Interval

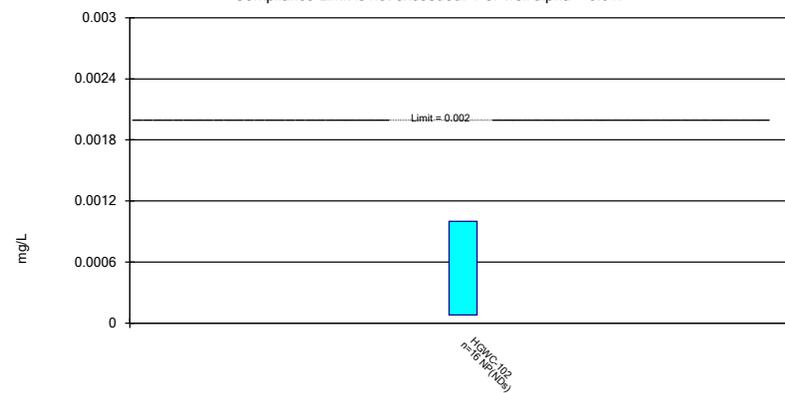
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 4/22/2025 7:58 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP4

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 4/22/2025 7:58 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP4

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 4/22/2025 7:59 PM View: Confidence Intervals
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-102	HGWC-103	HGWC-107
8/31/2016		<0.003	<0.003
10/24/2016		<0.003	
10/25/2016			<0.003
1/31/2017		<0.003	<0.003
5/23/2017		<0.003	
5/24/2017			<0.003
8/10/2017		<0.003	<0.003
11/14/2017		<0.003	<0.003
6/6/2018		0.0022 (J)	<0.003
10/2/2018			0.0011 (J)
10/3/2018		<0.003	
8/22/2019		<0.003	
8/23/2019			<0.003
10/23/2019	<0.003		
1/3/2020	0.00076 (J)		
3/4/2020	<0.003		
3/24/2020	<0.003		
6/18/2020	<0.003		
7/21/2020	<0.003		
8/27/2020	<0.003	<0.003	<0.003
9/24/2020	<0.003		
8/13/2021	<0.003		<0.003
8/16/2021		<0.003	
2/2/2022	<0.003	<0.003	<0.003
8/5/2022	<0.003	<0.003	<0.003
1/25/2023	<0.003	<0.003	<0.003
8/11/2023	0.003	<0.003	<0.003
2/16/2024	<0.003	<0.003	<0.003
8/9/2024	<0.003	<0.003	
8/10/2024			<0.003
2/15/2025	<0.003	<0.003	
2/16/2025			<0.003
Mean	0.00286	0.002956	0.002894
Std. Dev.	0.00056	0.0001886	0.0004478
Upper Lim.	0.003	0.003	0.003
Lower Lim.	0.003	0.0022	0.0011

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 4/22/2025 7:59 PM View: Confidence Intervals
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-101	HGWC-102	HGWC-103	HGWC-109	HGWC-118
8/31/2016	<0.005		<0.005	0.0045 (J)	<0.005
10/20/2016	<0.005				<0.005
10/24/2016			<0.005		
10/25/2016				0.003 (J)	
1/31/2017	<0.005		<0.005	0.0022 (J)	<0.005
5/23/2017	<0.005		<0.005		<0.005
5/24/2017				0.0012 (J)	
8/10/2017	<0.005		<0.005	0.0016 (J)	<0.005
11/14/2017	<0.005		<0.005	0.0011 (J)	<0.005
6/6/2018	<0.005		<0.005	0.0018 (J)	
6/7/2018					<0.005
10/2/2018				0.0014 (J)	
10/3/2018	<0.005		<0.005		<0.005
8/22/2019	<0.005		<0.005		<0.005
8/23/2019				0.0035 (J)	
10/22/2019				0.0019 (J)	<0.005
10/23/2019	<0.005	<0.005	<0.005		
1/3/2020		0.00065 (J)			
3/4/2020		0.00036 (J)			
3/24/2020		<0.005			
3/25/2020	0.00039 (J)		<0.005	0.0025 (J)	<0.005
6/18/2020		0.00092 (J)			
7/21/2020		0.00083 (J)			
8/26/2020					<0.005
8/27/2020	<0.005	<0.005	<0.005	0.0011 (J)	
9/24/2020	<0.005	<0.005	<0.005		
9/25/2020				0.0017 (J)	
9/28/2020					<0.005
3/17/2021	<0.005	<0.005		0.0019 (J)	
3/18/2021			<0.005		0.001 (J)
8/13/2021		<0.005		0.0019 (J)	<0.005
8/16/2021	<0.005		<0.005		
2/2/2022	<0.005	<0.005	<0.005	<0.01	
2/3/2022					<0.005
8/5/2022		<0.005	<0.005	0.0022 (J)	<0.005
8/10/2022	<0.005				
1/25/2023	<0.005	<0.005	<0.005	<0.01	<0.005
8/11/2023	<0.005	<0.005	<0.005	<0.01	<0.005
2/16/2024	<0.005	<0.005	<0.005		
2/17/2024				0.0013 (J)	<0.005
8/9/2024		0.0011 (J)	0.0015 (J)		<0.005
8/10/2024	<0.005			0.00091 (J)	
2/15/2025	<0.005	<0.005	<0.005		
2/16/2025				0.0014 (J)	<0.005
Mean	0.00479	0.003756	0.004841	0.002369	0.004818
Std. Dev.	0.0009829	0.001991	0.0007462	0.00136	0.0008528
Upper Lim.	0.005	0.005	0.005	0.002913	0.005
Lower Lim.	0.00039	0.00092	0.0015	0.001598	0.001

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 4/22/2025 7:59 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-101	HGWC-102	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	0.0527		0.045	0.067	0.0391	0.0883		0.0595
10/20/2016	0.0477							0.055
10/24/2016			0.0386					
10/25/2016				0.0745	0.041	0.0831		
1/31/2017	0.0527		0.0365	0.0674	0.0382	0.0844		0.0613
5/23/2017	0.0436		0.0254					0.068
5/24/2017				0.0668	0.0377	0.0784		
8/10/2017	0.0419		0.0396	0.067	0.0385	0.0903		0.0638
11/14/2017	0.0407		0.0385	0.0643	0.039	0.083		0.07
6/6/2018	0.043		0.043	0.068	0.039	0.095		
6/7/2018								0.059
10/2/2018				0.066	0.038	0.089		
10/3/2018	0.041		0.04					0.056
8/22/2019	0.043		0.036	0.066				0.052
8/23/2019					0.038	0.088		
10/22/2019					0.039	0.087		0.054
10/23/2019	0.043	0.037	0.039	0.066				
1/3/2020		0.036						
3/4/2020		0.033						
3/24/2020		0.024						
3/25/2020	0.038		0.036	0.074	0.037	0.084		0.06
6/18/2020		0.029						
7/21/2020		0.028						
8/26/2020								0.056
8/27/2020	0.045	0.028	0.038	0.068	0.034	0.083		
9/24/2020	0.041	0.029	0.036	0.075	0.039			
9/25/2020						0.085		
9/28/2020								0.046
3/17/2021	0.04	0.031				0.077		
3/18/2021			0.042	0.082	0.041			0.067
8/12/2021							0.079	
8/13/2021		0.026		0.073	0.033	0.08		0.043
8/16/2021	0.037		0.037					
9/27/2021							0.062	
2/2/2022	0.036	0.029	0.036		0.034	0.072		
2/3/2022				0.093			0.049	0.047
8/5/2022		0.031	0.037	0.088	0.036	0.085	0.055	0.039
8/10/2022	0.04							
1/25/2023	0.033	0.027	0.032	0.094	0.035	0.076	0.05	0.048
8/11/2023	0.036	0.028	0.035	0.089	0.032	0.081	0.046	0.04
2/16/2024	0.032	0.026	0.031		0.033			
2/17/2024				0.085		0.078	0.047	0.05
8/9/2024		0.029	0.032					0.037
8/10/2024	0.033			0.083	0.033	0.076	0.042	
2/15/2025	0.037	0.034	0.043					
2/16/2025				0.087	0.039	0.08	0.049	0.048
Mean	0.04079	0.02971	0.03712	0.07564	0.03698	0.08289	0.05322	0.05362
Std. Dev.	0.005586	0.003567	0.004446	0.01003	0.002748	0.005504	0.01122	0.00952
Upper Lim.	0.04378	0.03194	0.0395	0.085	0.03845	0.08584	0.06284	0.05873
Lower Lim.	0.03779	0.02747	0.03473	0.0668	0.0355	0.07993	0.04356	0.04851

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 4/22/2025 7:59 PM View: Confidence Intervals
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-101	HGWC-103	HGWC-118
8/31/2016	<0.0005	<0.0005	<0.0005
10/20/2016	<0.0005		<0.0005
10/24/2016		<0.0005	
1/31/2017	<0.0005	<0.0005	<0.0005
5/23/2017	7E-05 (J)	<0.0005	<0.0005
8/10/2017	<0.0005	<0.0005	<0.0005
11/14/2017	<0.0005	<0.0005	<0.0005
6/6/2018	5.9E-05 (J)	<0.0005	
6/7/2018			<0.0005
10/3/2018	6.5E-05 (J)	<0.0005	<0.0005
8/22/2019	<0.0005	<0.0005	<0.0005
10/22/2019			<0.0005
10/23/2019	7.5E-05 (J)	<0.0005	
3/25/2020	<0.0005	<0.0005	<0.0005
8/26/2020			<0.0005
8/27/2020	5.7E-05 (J)	5E-05 (J)	
9/24/2020	4.8E-05 (J)	8.8E-05 (J)	
9/28/2020			<0.0005
3/17/2021	5.9E-05 (J)		
3/18/2021		6.1E-05 (J)	9.3E-05 (J)
8/13/2021			<0.0005
8/16/2021	<0.0005	<0.0005	
2/2/2022	6.2E-05 (J)	7.7E-05 (J)	
2/3/2022			<0.0005
8/5/2022		<0.0005	<0.0005
8/10/2022	6.4E-05 (J)		
1/25/2023	<0.0005	<0.0005	<0.0005
8/11/2023	7E-05 (J)	<0.0005	<0.0005
2/16/2024	<0.0005	<0.0005	
2/17/2024			<0.0005
8/9/2024		<0.0005	<0.0005
8/10/2024	<0.0005		
2/15/2025	<0.0005	<0.0005	
2/16/2025			<0.0005
Mean	0.0003013	0.0004216	0.0004815
Std. Dev.	0.0002228	0.0001703	8.677E-05
Upper Lim.	0.0005	0.0005	0.0005
Lower Lim.	6.4E-05	8.8E-05	9.3E-05

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 4/22/2025 7:59 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-101	HGWC-102	HGWC-103	HGWC-107	HGWC-117A
8/31/2016	0.0002 (J)		0.0006 (J)	0.0001 (J)	
10/20/2016	0.0003 (J)				
10/24/2016			0.0008 (J)		
10/25/2016				8E-05 (J)	
1/31/2017	0.0001 (J)		0.0006 (J)	9E-05 (J)	
5/23/2017	0.0002 (J)		0.0006 (J)		
5/24/2017				0.0001 (J)	
8/10/2017	0.0002 (J)		0.0007 (J)	<0.0005	
11/14/2017	<0.0005		0.0007 (J)	<0.0005	
6/6/2018	9.5E-05 (J)		0.00073 (J)	0.00012 (J)	
10/2/2018				0.0001 (J)	
10/3/2018	0.00018 (J)		0.00078 (J)		
8/22/2019	0.00014 (J)		0.0008 (J)		
8/23/2019				0.00011 (J)	
10/22/2019				<0.0005	
10/23/2019	0.0002 (J)	0.00026 (J)	0.00091 (J)		
1/3/2020		0.0002 (J)			
3/4/2020		0.00026 (J)			
3/24/2020		0.00068 (J)			
3/25/2020	0.00014 (J)		0.00068 (J)	<0.0005	
6/18/2020		0.00047 (J)			
7/21/2020		0.00083 (J)			
8/27/2020	0.00019 (J)	0.00038 (J)	0.00082 (J)	<0.0005	
9/24/2020	0.00014 (J)	0.00032 (J)	0.00076 (J)	<0.0005	
3/17/2021	<0.0005	0.00094			
3/18/2021			0.00068	<0.0005	
8/12/2021					0.00016 (J)
8/13/2021		0.00069		<0.0005	
8/16/2021	0.00015 (J)		0.00081		
9/27/2021					<0.0005
2/2/2022	<0.0005	0.00055	0.0008	<0.0005	
2/3/2022					<0.0005
8/5/2022		0.00044 (J)	0.00081	<0.0005	<0.0005
8/10/2022	0.00011 (J)				
1/25/2023	0.00011 (J)	0.00035 (J)	0.00063	<0.0005	<0.0005
8/11/2023	0.00015 (J)	0.00067	0.0007	<0.0005	<0.0005
2/16/2024	0.00016 (J)	0.00031 (J)	0.00074	<0.0005	
2/17/2024					<0.0005
8/9/2024		0.00043 (J)	0.00078		
8/10/2024	0.00014 (J)			<0.0005	<0.0005
2/15/2025	0.00015 (J)	0.0016	0.00085		
2/16/2025				<0.0005	<0.0005
Mean	0.000173	0.0005518	0.00074	0.0003727	0.0004622
Std. Dev.	5.461E-05	0.0003434	8.58E-05	0.0001908	0.0001133
Upper Lim.	0.0002023	0.000713	0.0007861	0.0005	0.0005
Lower Lim.	0.0001436	0.000344	0.0006939	0.00011	0.00016

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 4/22/2025 7:59 PM View: Confidence Intervals
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-101	HGWC-102	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-118
8/31/2016	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
10/20/2016	<0.005						<0.005
10/24/2016			<0.005				
10/25/2016				<0.005	<0.005	<0.005	
1/31/2017	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
5/23/2017	0.0006 (J)		<0.005				<0.005
5/24/2017				<0.005	<0.005	<0.005	
8/10/2017	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
11/14/2017	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
6/6/2018	<0.005		<0.005	<0.005	<0.005	<0.005	
6/7/2018							<0.005
10/2/2018				<0.005	<0.005	<0.005	
10/3/2018	<0.005		<0.005				<0.005
8/22/2019	0.00064 (J)		0.00063 (J)	<0.005			<0.005
8/23/2019					<0.005	<0.005	
10/22/2019					<0.005	0.00062 (J)	0.00066 (J)
10/23/2019	<0.005	<0.005	0.0015 (J)	0.0004 (J)			
1/3/2020		0.00063 (J)					
3/4/2020		<0.005					
3/24/2020		0.00051 (J)					
3/25/2020	0.00098 (J)		0.00045 (J)	0.0013 (J)	0.00074 (J)	0.0014 (J)	0.00081 (J)
6/18/2020		<0.005					
7/21/2020		<0.005					
8/26/2020							0.00098 (J)
8/27/2020	<0.005	<0.005	0.00069 (J)	<0.005	<0.005	<0.005	
9/24/2020	<0.005	<0.005	0.00081 (J)	0.00064 (J)	<0.005		
9/25/2020						<0.005	
9/28/2020							0.0017 (J)
3/17/2021	0.00075 (J)	<0.005				<0.005	
3/18/2021			0.003 (J)	0.00058 (J)	<0.005		0.0021 (J)
8/13/2021		<0.005		<0.005	<0.005	<0.005	<0.005
8/16/2021	<0.005		<0.005				
2/2/2022	<0.005	<0.005	0.0013 (J)		<0.005	<0.005	
2/3/2022				<0.005			<0.005
8/5/2022		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/10/2022	<0.005						
1/25/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/11/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2/16/2024	<0.005	<0.005	<0.005		<0.005		
2/17/2024				<0.005		<0.005	<0.005
8/9/2024		<0.005	<0.005				<0.005
8/10/2024	<0.005			<0.005	<0.005	<0.005	
2/15/2025	<0.005	<0.005	<0.005				
2/16/2025				<0.005	<0.005	<0.005	<0.005
Mean	0.004226	0.004479	0.00379	0.004224	0.004806	0.004637	0.004148
Std. Dev.	0.001682	0.001471	0.001873	0.001692	0.0009082	0.00118	0.001631
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.00098	0.00063	0.0015	0.0013	0.00074	0.0014	0.0021

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 4/22/2025 7:59 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-101	HGWC-102	HGWC-103	HGWC-105	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	0.0033 (J)		0.0018 (J)	0.0014 (J)	0.0023 (J)		<0.005
10/20/2016	0.0025 (J)						<0.005
10/24/2016			0.0018 (J)				
10/25/2016				0.0013 (J)	0.0017 (J)		
1/31/2017	0.001 (J)		0.0016 (J)	0.0006 (J)	0.0017 (J)		<0.005
5/23/2017	0.0025 (J)		0.0014 (J)				0.0005 (J)
5/24/2017				0.0007 (J)	0.002 (J)		
8/10/2017	0.0029 (J)		0.0025 (J)	0.0006 (J)	0.0012 (J)		0.0003 (J)
11/14/2017	0.003 (J)		0.002 (J)	0.0005 (J)	0.0014 (J)		0.0004 (J)
6/6/2018	0.0016 (J)		0.0031 (J)	0.00056 (J)	0.0014 (J)		
6/7/2018							<0.005
10/2/2018				<0.005	0.00081 (J)		
10/3/2018	0.0028 (J)		0.0023 (J)				<0.005
8/22/2019	<0.005		0.0019 (J)	<0.005			0.0003 (J)
8/23/2019					0.0027 (J)		
10/22/2019					0.0022 (J)		0.00061 (J)
10/23/2019	0.0023 (J)	0.0018 (J)	0.0021 (J)	0.00038 (J)			
1/3/2020		0.0038 (J)					
3/4/2020		0.0021 (J)					
3/24/2020		0.0019 (J)					
3/25/2020	0.0021 (J)		0.0022 (J)	0.00047 (J)	0.0022 (J)		<0.005
6/18/2020		0.0012 (J)					
7/21/2020		0.00098 (J)					
8/26/2020							0.00061 (J)
8/27/2020	0.0027 (J)	0.001 (J)	0.0019 (J)	<0.005	0.00086 (J)		
9/24/2020	0.0021 (J)	0.0011 (J)	0.0019 (J)	0.00044 (J)			
9/25/2020					0.001 (J)		
9/28/2020							0.00048 (J)
3/17/2021	0.0023 (J)	0.0012 (J)			0.003 (J)		
3/18/2021			0.0021 (J)	0.00045 (J)			0.0012 (J)
8/12/2021						0.0024 (J)	
8/13/2021		0.00085 (J)		<0.005	0.0011 (J)		<0.005
8/16/2021	0.0026 (J)		0.0022 (J)				
9/27/2021						0.0011 (J)	
2/2/2022	0.0027 (J)	0.0019 (J)	0.0022 (J)		0.002 (J)		
2/3/2022				<0.005		0.00041 (J)	0.00045 (J)
8/5/2022		0.001 (J)	0.0021 (J)	<0.005	0.0008 (J)	0.0011 (J)	<0.005
8/10/2022	0.0028 (J)						
1/25/2023	0.0021 (J)	0.0016 (J)	0.0017 (J)	0.00046 (J)	0.0016 (J)	0.00048 (J)	<0.005
8/11/2023	0.0028 (J)	0.001 (J)	0.0019 (J)	0.00047 (J)	0.00077 (J)	0.00078 (J)	<0.005
2/16/2024	0.0026 (J)	0.0011 (J)	0.002 (J)				
2/17/2024				0.00071 (J)	0.0011 (J)	0.00047 (J)	0.00042 (J)
8/9/2024		0.00094 (J)	0.002 (J)				<0.005
8/10/2024	0.0025 (J)			0.00052 (J)	0.0005 (J)	0.00081 (J)	
2/15/2025	0.0027 (J)	<0.005	0.0023 (J)				
2/16/2025				<0.005	<0.005	<0.005	<0.005
Mean	0.002473	0.001528	0.002045	0.002025	0.001584	0.001117	0.002967
Std. Dev.	0.000491	0.000763	0.0003433	0.002095	0.0007015	0.0007978	0.002286
Upper Lim.	0.002736	0.0021	0.00223	0.005	0.00196	0.001777	0.005
Lower Lim.	0.002209	0.00098	0.001861	0.00047	0.001207	0.0004569	0.00048

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/22/2025 7:59 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-101	HGWC-102	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	0.621 (U)		1.62	0.906 (U)	1.2	1.03		
10/20/2016	1.4							1.97
10/24/2016			1.01 (U)					
10/25/2016				1.03	1.11	1.07		
1/31/2017	0.906 (U)		0.976 (U)	0.868 (U)	1.45	0.588 (U)		1.03
5/23/2017	0.388 (U)		0.891 (U)					0.398 (U)
5/24/2017				0.728 (U)	0.393 (U)	0.593 (U)		
8/10/2017	1.03 (U)		0.601 (U)	1.35	0.84 (U)	0.691 (U)		0.938 (U)
11/14/2017	0.769 (U)		0.567 (U)	0.817 (U)	1.01 (U)	0.653 (U)		0.335 (U)
6/6/2018	1.28		0.836 (U)	0.559 (U)	0.365 (U)	0.939 (U)		
6/7/2018								0.696 (U)
10/2/2018				0.336 (U)	1.23	0.225 (U)		
10/3/2018	0.302 (U)		0.111 (U)					1.6 (U)
8/22/2019	0.474 (U)		0.946 (U)	0.694 (U)				0.904 (U)
8/23/2019					1.69	0.47 (U)		
10/22/2019					0.705 (U)	0.545 (U)		0.424 (U)
10/23/2019	0.776 (U)	0.858 (U)	0.571 (U)	0.584 (U)				
1/22/2020		1.04 (U)						
3/4/2020		1.32						
3/24/2020		1.23 (U)						
3/25/2020	0.603 (U)		0.403 (U)	0.663 (U)	0.673 (U)	0.508 (U)		0.915 (U)
6/18/2020		0.681 (U)						
7/21/2020		0.0938 (U)						
8/26/2020								1.19
8/27/2020	0.109 (U)	1.17 (U)	0.37 (U)	0.416 (U)	0.264 (U)	0.989 (U)		
9/24/2020	0.625 (U)	1.42	0.804 (U)	1.11 (U)	0.576 (U)			
9/25/2020						0.584 (U)		
9/28/2020								0.613 (U)
3/17/2021	0.248 (U)	0.401 (U)				0.556 (U)		
3/18/2021			0.274 (U)	0.252 (U)	0.145 (U)			0.323 (U)
8/12/2021							0.124 (U)	
8/13/2021		0.828 (U)		0.513 (U)	0.815 (U)	0.794 (U)		0.228 (U)
8/16/2021	0.667 (U)		0.493 (U)					
9/27/2021							1.05 (U)	
2/2/2022	0.162 (U)	0.806 (U)	0.569 (U)		0.0564 (U)	0.542 (U)		
2/3/2022				0.835			0.499 (U)	0.5 (U)
8/5/2022		0.618 (U)	0.205 (U)	0.139 (U)	0.917 (U)	0.22 (U)	0 (U)	0.206 (U)
8/10/2022	0.601 (U)							
1/25/2023	0.419 (U)	0.513 (U)	0.568 (U)	0.432 (U)	0.71 (U)	0.195 (U)	0.595 (U)	1.44
8/11/2023	0.93 (U)	1.08	0.849 (U)	0.292 (U)	0.314 (U)	0.105 (U)	0.822 (U)	0.806 (U)
2/16/2024	0.344 (U)	0.498 (U)	0.81 (U)		0.845 (U)			
2/17/2024				0.888 (U)		0.388 (U)	0.629 (U)	0 (U)
8/9/2024		0.604 (U)	0.378 (U)					0.421 (U)
8/10/2024	0.817 (U)			0.693 (U)	0.223 (U)	0.5 (U)	0.723 (U)	
2/15/2025	0.312 (U)	0.783 (U)	0.284 (U)					
2/16/2025				0.372 (U)	0.352 (U)	0.852 (U)	0.615 (U)	0.909 (U)
Mean	0.6265	0.8202	0.6425	0.658	0.722	0.5926	0.5619	0.7546
Std. Dev.	0.3433	0.356	0.3433	0.3042	0.4397	0.2731	0.3263	0.4991
Upper Lim.	0.8107	1.043	0.8268	0.8213	0.958	0.7392	0.8769	1.03
Lower Lim.	0.4423	0.5972	0.4583	0.4947	0.4859	0.446	0.2469	0.4793

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 4/22/2025 7:59 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-101	HGWC-102	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	0.05 (J)		0.06 (J)	0.15 (J)	0.08 (J)	0.12 (J)		0.18 (J)
10/20/2016	0.03 (J)							0.12 (J)
10/24/2016			0.13 (J)					
10/25/2016				0.09 (J)	0.16 (J)	0.17 (J)		
1/31/2017	<0.1		<0.1	0.13 (J)	0.16 (J)	0.05 (J)		0.3
5/23/2017	<0.1		0.15 (J)					0.14 (J)
5/24/2017				0.07 (J)	0.009 (J)	0.13 (J)		
8/10/2017	<0.1		<0.1	0.03 (J)	<0.1	0.12 (J)		0.11 (J)
11/14/2017	<0.1		<0.1	<0.1	<0.1	<0.3		0.07 (J)
6/6/2018	<0.1		<0.1	0.074 (J)	0.057 (J)	0.15 (J)		
6/7/2018								0.3
10/2/2018				<0.1	<0.1	<0.3		
10/3/2018	<0.1		<0.1					0.12 (J)
4/3/2019					<0.1	0.05 (J)		
4/4/2019	<0.1		0.042 (J)	0.03 (J)				
4/5/2019								0.33
6/18/2019								0.89
8/22/2019	<0.1		<0.1	<0.1				0.07 (J)
8/23/2019					<0.1	0.034 (J)		
10/22/2019					0.047 (J)	0.099 (J)		0.087 (J)
10/23/2019	<0.1	0.22 (J)	<0.1	<0.1				
1/3/2020		<0.1						
3/4/2020		<0.1						
3/24/2020		<0.1						
3/25/2020	<0.1		<0.1	<0.1	<0.1	0.075 (J)		0.078 (J)
6/18/2020		<0.1						
7/21/2020		<0.1						
8/26/2020								0.072 (J)
8/27/2020	<0.1	<0.1	<0.1	<0.1	<0.1	0.094 (J)		
9/24/2020	<0.1	<0.1	<0.1	<0.1	0.064 (J)			
9/25/2020						0.091 (J)		
9/28/2020								0.078 (J)
3/17/2021	<0.1	<0.1				0.089 (J)		
3/18/2021			<0.1	<0.1	<0.1			0.079 (J)
8/12/2021							<0.1	
8/13/2021		<0.1		<0.1	<0.1	0.086 (J)		0.075 (J)
8/16/2021	<0.1		<0.1					
9/27/2021							<0.1	
2/2/2022	<0.1	<0.1	<0.1		<0.1	0.086 (J)		
2/3/2022				<0.1			0.056 (J)	0.069 (J)
8/5/2022		0.076 (J)	0.071 (J)	0.075 (J)	0.093 (J)	0.14	0.12	0.12
8/10/2022	0.065 (J)							
1/25/2023	<0.1	<0.1	<0.1	0.051 (J)	0.054 (J)	0.12	0.085 (J)	0.095 (J)
8/11/2023	<0.1	<0.1	<0.1	<0.1	<0.1	0.086 (J)	0.057 (J)	0.07 (J)
2/16/2024	<0.1	<0.1	<0.1		<0.1			
2/17/2024				<0.1		0.094 (J)	0.055 (J)	0.068 (J)
8/9/2024		0.067 (J)	0.077 (J)					0.11
8/10/2024	0.068 (J)			0.066 (J)	0.069 (J)	0.13	0.1	
2/15/2025	<0.1	<0.1	<0.1					
2/16/2025				<0.1	<0.1	0.086 (J)	0.057 (J)	0.065 (J)
Mean	0.09187	0.1037	0.09696	0.08983	0.091	0.1043	0.08111	0.154
Std. Dev.	0.01922	0.03146	0.0208	0.02753	0.0324	0.03542	0.02518	0.1751

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 4/22/2025 7:59 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-101	HGWC-102	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
Upper Lim.	0.1	0.22	0.13	0.1	0.1	0.1229	0.12	0.14
Lower Lim.	0.068	0.076	0.077	0.074	0.069	0.08582	0.055	0.072

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 4/22/2025 7:59 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-101	HGWC-102	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-118
8/31/2016	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
10/20/2016	<0.001						<0.001
10/24/2016			<0.001				
10/25/2016				<0.001	<0.001	<0.001	
1/31/2017	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
5/23/2017	0.0009 (J)		<0.001				<0.001
5/24/2017				<0.001	<0.001	<0.001	
8/10/2017	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
11/14/2017	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
6/6/2018	<0.001		<0.001	<0.001	<0.001	<0.001	
6/7/2018							<0.001
10/2/2018				<0.001	<0.001	<0.001	
10/3/2018	<0.001		<0.001				<0.001
8/22/2019	<0.001		<0.001	<0.001			<0.001
8/23/2019					<0.001	5.8E-05 (J)	
10/22/2019					7.9E-05 (J)	5.4E-05 (J)	0.00025 (J)
10/23/2019	<0.001	<0.001	0.00043 (J)	6.8E-05 (J)			
1/3/2020		<0.001					
3/4/2020		0.00011 (J)					
3/24/2020		<0.001					
3/25/2020	<0.001		7.6E-05 (J)	8.5E-05 (J)	0.00021 (J)	<0.001	0.0001 (J)
6/18/2020		<0.001					
7/21/2020		<0.001					
8/26/2020							0.00036 (J)
8/27/2020	<0.001	<0.001	0.00018 (J)	<0.001	<0.001	<0.001	
9/24/2020	<0.001	<0.001	0.00028 (J)	4.9E-05 (J)	0.00034 (J)		
9/25/2020						<0.001	
9/28/2020							0.00022 (J)
3/17/2021	<0.001	<0.001				<0.001	
3/18/2021			0.00024 (J)	5.8E-05 (J)	9.1E-05 (J)		0.00088 (J)
8/13/2021		<0.001		<0.001	<0.001	<0.001	<0.001
8/16/2021	<0.001		<0.001				
2/2/2022	<0.001	<0.001	<0.001		<0.001	<0.001	
2/3/2022				<0.001			<0.001
8/5/2022		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/10/2022	<0.001						
1/25/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/11/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2/16/2024	<0.001	<0.001	0.00027 (J)		<0.001		
2/17/2024				<0.001		<0.001	<0.001
8/9/2024		<0.001	<0.001				<0.001
8/10/2024	<0.001			<0.001	<0.001	<0.001	
2/15/2025	<0.001	<0.001	<0.001				
2/16/2025				<0.001	<0.001	<0.001	<0.001
Mean	0.0009955	0.0009476	0.0007944	0.00083	0.0008509	0.0009142	0.000855
Std. Dev.	2.132E-05	0.0002159	0.0003484	0.0003692	0.000327	0.0002778	0.0003041
Upper Lim.	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Lower Lim.	0.0009	0.00011	0.00043	8.5E-05	0.00034	5.8E-05	0.00088

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 4/22/2025 7:59 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-101	HGWC-102	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.03		<0.03	0.0034 (J)	<0.03	<0.03		<0.03
10/20/2016	<0.03							<0.03
10/24/2016			<0.03					
10/25/2016				0.0043 (J)	<0.03	<0.03		
1/31/2017	<0.03		<0.03	0.0042 (J)	<0.03	<0.03		<0.03
5/23/2017	<0.03		0.0012 (J)					0.0012 (J)
5/24/2017				0.0039 (J)	<0.03	0.0012 (J)		
8/10/2017	<0.03		0.0016 (J)	0.004 (J)	<0.03	<0.03		<0.03
11/14/2017	<0.03		0.0015 (J)	0.0044 (J)	<0.03	<0.03		<0.03
6/6/2018	<0.03		0.0017 (J)	0.0041 (J)	0.00099 (J)	0.0013 (J)		
6/7/2018								0.0015 (J)
10/2/2018				0.0041 (J)	<0.03	0.0013 (J)		
10/3/2018	<0.03		0.0016 (J)					<0.03
8/22/2019	<0.03		0.0015 (J)	0.004 (J)				0.0018 (J)
8/23/2019					0.00092 (J)	0.0009 (J)		
10/22/2019					0.00094 (J)	0.00088 (J)		0.0027 (J)
10/23/2019	<0.03	0.0012 (J)	0.002 (J)	0.0039 (J)				
1/3/2020		0.0011 (J)						
3/4/2020		0.0013 (J)						
3/24/2020		0.00084 (J)						
3/25/2020	<0.03		0.0016 (J)	0.0041 (J)	0.00091 (J)	<0.03		0.0017 (J)
6/18/2020		0.0013 (J)						
7/21/2020		0.0013 (J)						
8/26/2020								0.0028 (J)
8/27/2020	<0.03	0.0011 (J)	0.0016 (J)	0.0037 (J)	<0.03	0.0011 (J)		
9/24/2020	<0.03	0.0011 (J)	0.0017 (J)	0.0038 (J)	0.00098 (J)			
9/25/2020						0.001 (J)		
9/28/2020								0.0022 (J)
3/17/2021	<0.03	0.0012 (J)				<0.03		
3/18/2021			0.0018 (J)	0.0042 (J)	0.0011 (J)			0.0029 (J)
8/12/2021							0.0036 (J)	
8/13/2021		0.0011 (J)		0.0038 (J)	0.00084 (J)	<0.03		0.0017 (J)
8/16/2021	<0.03		0.0016 (J)					
9/27/2021							0.0035 (J)	
2/2/2022	<0.03	0.0013 (J)	0.0019 (J)		0.001 (J)	0.00084 (J)		
2/3/2022				0.0046 (J)			0.0051 (J)	0.0015 (J)
8/5/2022		0.0013 (J)	0.0014 (J)	0.0039 (J)	0.00082 (J)	0.00087 (J)	0.0038 (J)	0.0018 (J)
8/10/2022	<0.03							
1/25/2023	<0.03	0.001 (J)	0.0012 (J)	0.0038 (J)	0.00081 (J)	<0.03	0.0037 (J)	0.001 (J)
8/11/2023	<0.03	0.0013 (J)	0.0014 (J)	0.0044 (J)	0.00083 (J)	0.00076 (J)	0.0041 (J)	0.0023 (J)
2/16/2024	<0.03	<0.03	<0.03		<0.03			
2/17/2024				0.0041 (J)		<0.03	0.0038 (J)	<0.03
8/9/2024		<0.03	<0.03					0.0019 (J)
8/10/2024	<0.03			0.0047 (J)	<0.03	<0.03	0.0041 (J)	
2/15/2025	0.000781 (J)	0.00139 (J)	0.00158 (J)					
2/16/2025				0.0057 (J)	0.00113 (J)	0.000977 (J)	0.00512 (J)	0.00215 (J)
Mean	0.02867	0.002814	0.00804	0.004141	0.01415	0.01551	0.004091	0.01087
Std. Dev.	0.00623	0.004589	0.01219	0.0004595	0.01481	0.01484	0.0006113	0.01338
Upper Lim.	0.03	0.00139	0.002	0.004365	0.03	0.03	0.00512	0.03
Lower Lim.	0.000781	0.0011	0.0015	0.003896	0.00092	0.000977	0.0035	0.0017

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 4/22/2025 7:59 PM View: Confidence Intervals
 Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-101	HGWC-102	HGWC-103	HGWC-105	HGWC-107	HGWC-109	HGWC-117A	HGWC-118
8/31/2016	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
10/20/2016	<0.0002							<0.0002
10/24/2016			<0.0002					
10/25/2016				<0.0002	<0.0002	<0.0002		
1/31/2017	9.3E-05 (J)		8E-05 (J)	<0.0002	<0.0002	8E-05 (J)		9E-05 (J)
5/23/2017	<0.0002		<0.0002					<0.0002
5/24/2017				<0.0002	<0.0002	<0.0002		
8/10/2017	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
11/14/2017	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
6/6/2018	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		
6/7/2018								<0.0002
10/2/2018				<0.0002	<0.0002	<0.0002		
10/3/2018	<0.0002		<0.0002					<0.0002
8/22/2019	<0.0002		<0.0002	<0.0002				<0.0002
8/23/2019					<0.0002	<0.0002		
10/23/2019		<0.0002						
1/3/2020		<0.0002						
3/4/2020		<0.0002						
3/24/2020		<0.0002						
6/18/2020		<0.0002						
7/21/2020		<0.0002						
8/26/2020								<0.0002
8/27/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
9/24/2020		<0.0002						
8/12/2021							9.4E-05 (J)	
8/13/2021		0.0001 (J)		0.00022	8.4E-05 (J)	8E-05 (J)		8.1E-05 (J)
8/16/2021	9.9E-05 (J)		0.00027					
9/27/2021							<0.0002	
2/2/2022	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002		
2/3/2022				<0.0002			<0.0002	<0.0002
8/5/2022		<0.0002	0.00017 (J)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/10/2022	<0.0002							
1/25/2023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/11/2023	<0.0002	<0.0002	0.00025	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/16/2024	<0.0002	<0.0002	<0.0002		<0.0002			
2/17/2024				<0.0002		<0.0002	<0.0002	<0.0002
8/9/2024		<0.0002	<0.0002					<0.0002
8/10/2024	<0.0002			<0.0002	<0.0002	<0.0002	<0.0002	
2/15/2025	<0.0002	<0.0002	0.00014 (J)					
2/16/2025				<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mean	0.0001884	0.0001937	0.000195	0.0002011	0.0001936	0.0001867	0.0001882	0.0001873
Std. Dev.	3.365E-05	2.5E-05	3.899E-05	4.714E-06	2.734E-05	3.881E-05	3.533E-05	3.706E-05
Upper Lim.	0.0002	0.0002	0.00025	0.00022	0.0002	0.0002	0.0002	0.0002
Lower Lim.	9.9E-05	0.0001	0.00017	0.0002	8.4E-05	8E-05	9.4E-05	9E-05

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 4/22/2025 7:59 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-102	HGWC-105
8/31/2016		<0.005
10/25/2016		<0.005
1/31/2017		<0.005
5/24/2017		<0.005
8/10/2017		<0.005
11/14/2017		<0.005
6/6/2018		<0.005
10/2/2018		<0.005
8/22/2019		<0.005
10/23/2019	<0.005	
1/3/2020	0.0015 (J)	
3/4/2020	<0.005	
3/24/2020	<0.005	
6/18/2020	<0.005	
7/21/2020	<0.005	
8/27/2020	<0.005	<0.005
9/24/2020	<0.005	
8/13/2021	<0.005	<0.005
2/2/2022	<0.005	
2/3/2022		<0.005
8/5/2022	<0.005	<0.005
1/25/2023	<0.005	<0.005
8/11/2023	<0.005	<0.005
2/16/2024	<0.005	
2/17/2024		<0.005
8/9/2024	<0.005	
8/10/2024		<0.005
2/15/2025	<0.005	
2/16/2025		0.0049 (J)
Mean	0.004781	0.004994
Std. Dev.	0.000875	2.357E-05
Upper Lim.	0.005	0.005
Lower Lim.	0.0015	0.0049

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 4/22/2025 7:59 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP4

	HGWC-102
10/23/2019	<0.001
1/3/2020	8E-05 (J)
3/4/2020	<0.001
3/24/2020	<0.001
6/18/2020	<0.001
7/21/2020	<0.001
8/27/2020	<0.001
9/24/2020	<0.001
8/13/2021	<0.001
2/2/2022	<0.001
8/5/2022	<0.001
1/25/2023	<0.001
8/11/2023	<0.001
2/16/2024	<0.001
8/9/2024	<0.001
2/15/2025	<0.001
Mean	0.0009425
Std. Dev.	0.00023
Upper Lim.	0.001
Lower Lim.	8E-05